

Kinmel Bay Coastal Defence Improvements Scheme

Planning Statement

Final Report

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amey**consulting**

LDÄDESIGN

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This report describes work commissioned by Amey Consulting, on behalf of Conwy County Borough Council. Della Adams and Andrew Softley of JBA Consulting carried out this work.

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Abbreviations

AEP	Annual Exceedance Probability
BPM	Best Practicable Means
CEMP	Construction Environmental Management Plan
CCBC	Conwy County Borough Council
CIEEM	Chartered Institute of Ecology and Environmental Management
CFMP	Catchment Flood Management Plan
CPAT	Clwyd Powys Archaeological Trust
DEFRA	Department for Environment, Food and Rural Affairs
EcIA	Ecological Impact Assessment
EcOW	Ecological Clerk of Works
EIA	Environmental Impact Assessment
ES	Environmental Statement
FCERM	Flood & Coastal Erosion Risk Management
FBC	Full Business Case
GES	Good Ecological Status
HGV	Heavy Goods Vehicle
HER	Historic Environment Record
HMWB	Heavily Modified Water Body
HRA	Habitat Regulations Assessment
ICZM	Integrated Coastal Zone Management
IEMA	Institution of Environmental Management and Assessment
JBA	Jeremy Benn Associates
JNCC	Joint Nature Conservation Committee
LFRMS	Local Flood Risk Management Strategy
LDP	Local Development Plan
LNR	Local Nature Reserve
LVA	Landscape and Visual Assessment
NCN	The National Cycle Network
NTS	Non-Technical Summary
NRW	Natural Resources Wales
PPW	Planning Policy Wales
PRoW	Public Right of Way
SAC	Special Area of Conservation
SMP	Shoreline Management Plan
SoP	Standard of Protection
SPA	Special Protection Area
SPG	Supplementary Planning Guidance
SSSI	Site of Special Scientific Interest
TAN	Technical Advice Notes
WAG	Welsh Assembly Government
WBFGA	Well being & Future Generations Act
WFD	Water Framework Directive

1 Introduction

1.1 Synopsis

JBA Consulting has been appointed by Amey Consulting on behalf of Conwy County Borough Council (CCBC) to prepare a Planning Statement to support a planning application for a coastal defence improvements scheme. The scheme is proposed at the seaside resort of Kinmel Bay, on the North Wales coast. The application is submitted to CCBC's Planning Department as the determining Planning Authority.

1.2 Purpose of this Statement

This Planning Statement forms part of the planning application submission for full planning permission. It provides details of the proposal in relation to the site and setting. It assesses the proposals against relevant planning policy frameworks and other material considerations. Details of consultation and a summary of the discussions held with relevant stakeholders is set out within the accompanying Design and Access Statement.

An Environmental Impact Assessment (EIA), in accordance with the Town and Country Planning (Environmental Impact Assessment) (Wales) Regulations 2017, is required and an Environmental Statement (ES) forms part of the planning application submission. The Planning Statement should be read in conjunction with the documents and drawings submitted as part of the planning application.

1.3 Background to the Proposed Development

The coastal community of Kinmel Bay is currently threatened by increasing flood risk from the sea. Although existing coastal flood defences are in place, they are in varying condition and need upgrading to protect people, property, and infrastructure from flooding in current climate conditions, but also in the future, as flood events are expected to increase because of climate change.

CCBC is proposing to construct coastal flood protection improvements along a 2.3km stretch of the coastline from Towyn Revetment at the western end of the scheme to Kinmel Bay at the eastern end. The works comprise of improved rock armour, raised sea walls and a new flood gate to improve coastal defences along the coastline. Public realm improvements and ecological enhancements also form part of the scheme.

The scheme will help to protect properties and critical infrastructure at risk of flooding and has been designed in line with the following objectives (as stated in the Outline Business Case, 2021):

- Reduce flood damages to residential and non-residential properties
- Ensure community and stakeholder 'buy-in' for the scheme
- Develop a scheme that is deliverable within engineering time constraints
- Develop a scheme that is adaptable to change; and
- Sustain and /or improve the tourist and amenity benefits through continued operation of the beach and the North Wales Coastal route.

The design life of the scheme is 100 years.

CCBC will apply for funding from the Welsh Government Coastal Risk Management Programme to cover 85% of the construction costs of the scheme. CCBC will fund the remaining 15%.

1.4 Scheme Development

It should be noted that prior to the commencement of the current 2.3km scheme, a larger scheme approximately 11km long extending from Llanddulas to Kinmel Bay was being considered. Detailed design modelling was undertaken at the Full Business Case (FBC) stage (September 2022) to verify that the outline design of the larger scheme delivered the same

benefits of reduced flood risk to properties in Kinmel Bay, Towyn, Pensarn, Abergele and Llanddulas.

This detailed design modelling showed that the risk of flooding was not as severe as originally thought. Some locations:

- were not at risk until the future so interventions can be delayed
- are still at risk of flooding but for not as many properties as originally thought
- are not at risk now and in the future so interventions are not required

Working with Welsh Government, this new information allowed the business case to be refreshed and focus on the locations where there was most benefit and value for money now. This means that all the proposed schemes to the west of the Towyn Revetment have been removed from the application and the coastal defence proposals will focus on Kinmel Bay only and shown in Figure 1 below.



Figure 1-1: Site Location Plan and Scheme Boundary (including temporary and permanent works)

2 Site Location and Description

2.1 Description of the Development Site

The application site comprises the coastal frontage of Towyn and Kinmel Bay, approximately 1km west of the town of Rhyl, Denbighshire on the North Wales coast.

The site currently comprises the existing coastal defences made up of combination of rock armour, cobbled beaches, sea walls, flood gates and the existing coastal path that runs along the northern boundary of the site forms The Wales Coastal Path and The National Cycle Network (NCN) Route. The coastline is heavily developed, with holiday parks forming a large part of the land use immediately to the south of the site - tourism is a major element of the local economy.

Access to the beach is via the public highway A55 (North Wales Expressway) and road A548 (Towyn Road) which run alongside the beach from Towyn to Kinmel Bay. NCN Route 5 runs between Anglesey and Reading along the North Wales coastline and North Wales Coastal Path. NCN Route 84 joins NCN Route 5 in Kinmel Bay.

The scheme is 2.3km in length and extends from Towyn Revetment (at the frontage of Golden Sands Caravan Park National Grid Reference: SH 97190 79927) at the western end of the scheme, to Horton's Nose in Kinmel Bay East (NGR: SH 99462 80988) at the eastern end, including a section of the River Clywd (up to SJ 03317 76180).

The site location is shown in Figure 1-1 (above) and Figure 2-1 (below). The red line boundary is the application site boundary and includes land necessary to build the scheme including temporary works, such as proposed compounds and access to the permanent works. The area of the redline boundary is 89272m². The area of the permanent works is 35111m².

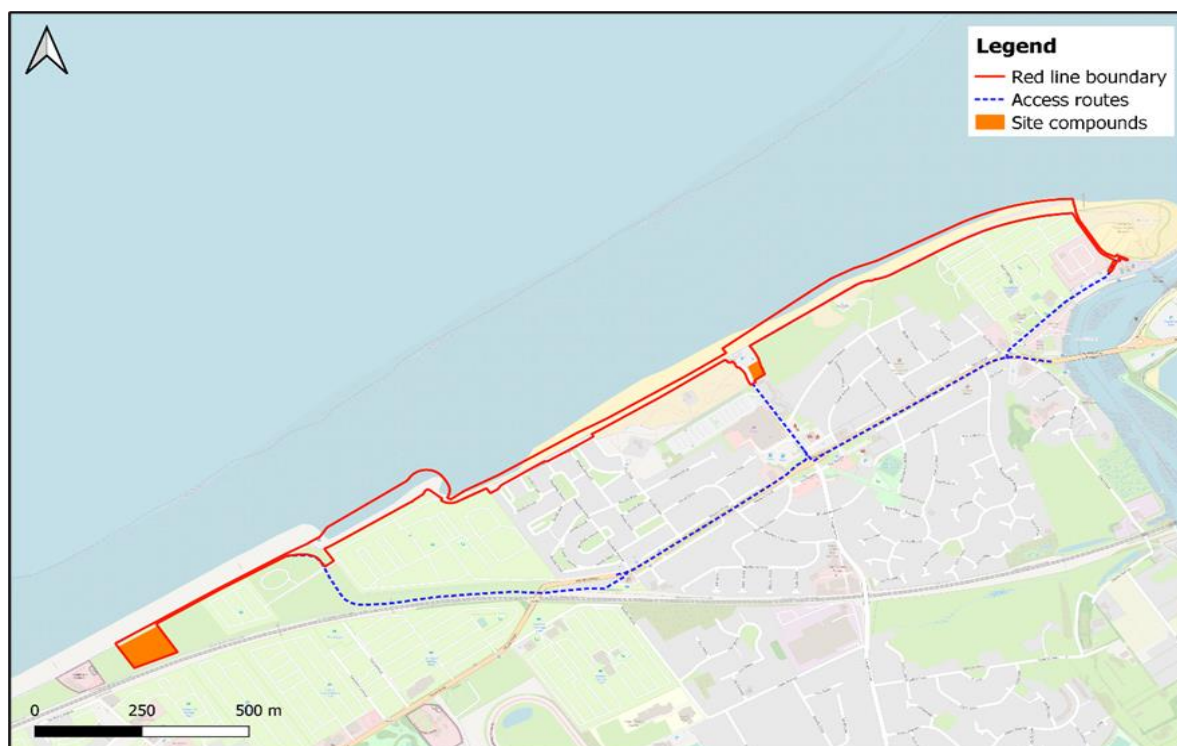


Figure 2-1: Access Routes and Construction Compounds

The statutory ecological designations associated with the application site are shown below in

. The offshore area to the north of the site is designated as Liverpool Bay (Bae Lerpwl) Special Protection Area (SPA). Pensarn Beach (Traeth Pensarn) Site of Special Scientific Interest (SSSI) is located within 2km of the application site. The Local Nature Reserve (LNR) of Kinnel Dunes, runs parallel along the southern boundary of the application site.

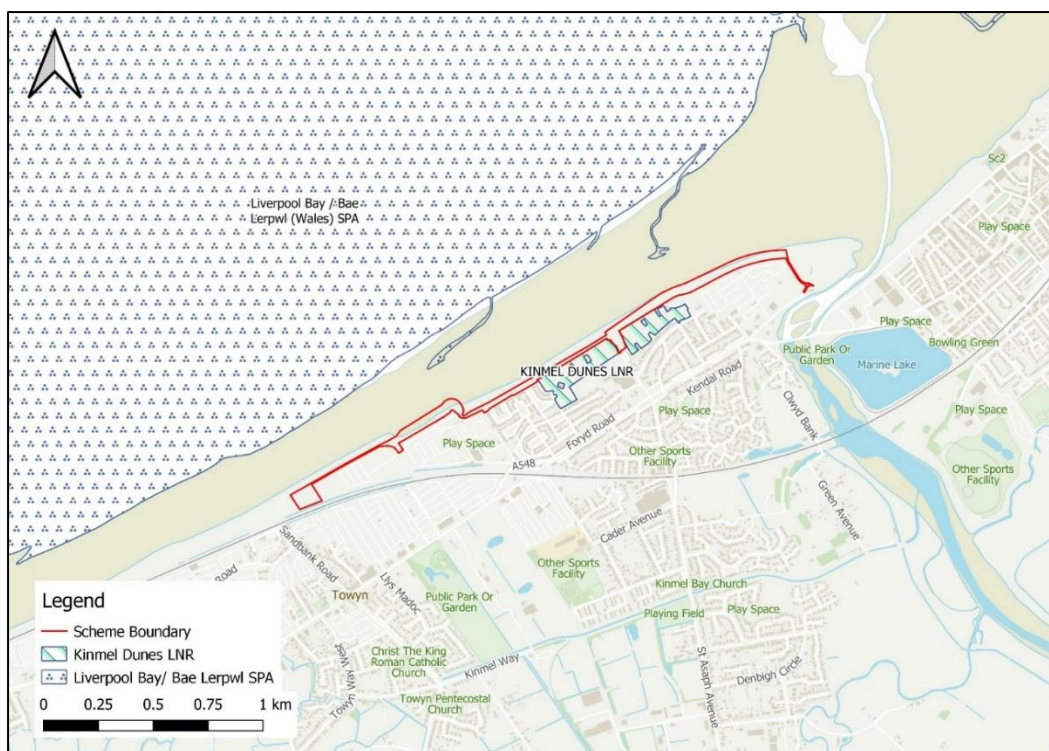


Figure 2-2: Statutory ecological designations

3 Proposed Development

3.1 Need for the Proposed Development

Kinmel Bay has an extensive history of coastal flooding. Flood extents recorded by Natural Resources Wales (NRW) are shown in Figure 3.1 below. CCBC Local Flood Risk Management Strategy (LFRMS) were consulted to identify significant flood events across the area. The LFRMS summarises the Catchment Flood Management Plan (CFMP) for the Conwy and Clwyd catchment. It identifies that the highest risk of flooding to the county is the risk of coastal flooding at Kinmel Bay, in combination with tidal flows from the River Clwyd. Climate change is projected to substantially increase flood risk to the area. The CFMP recommends that further action is taken to reduce flood risk in Kinmel Bay.

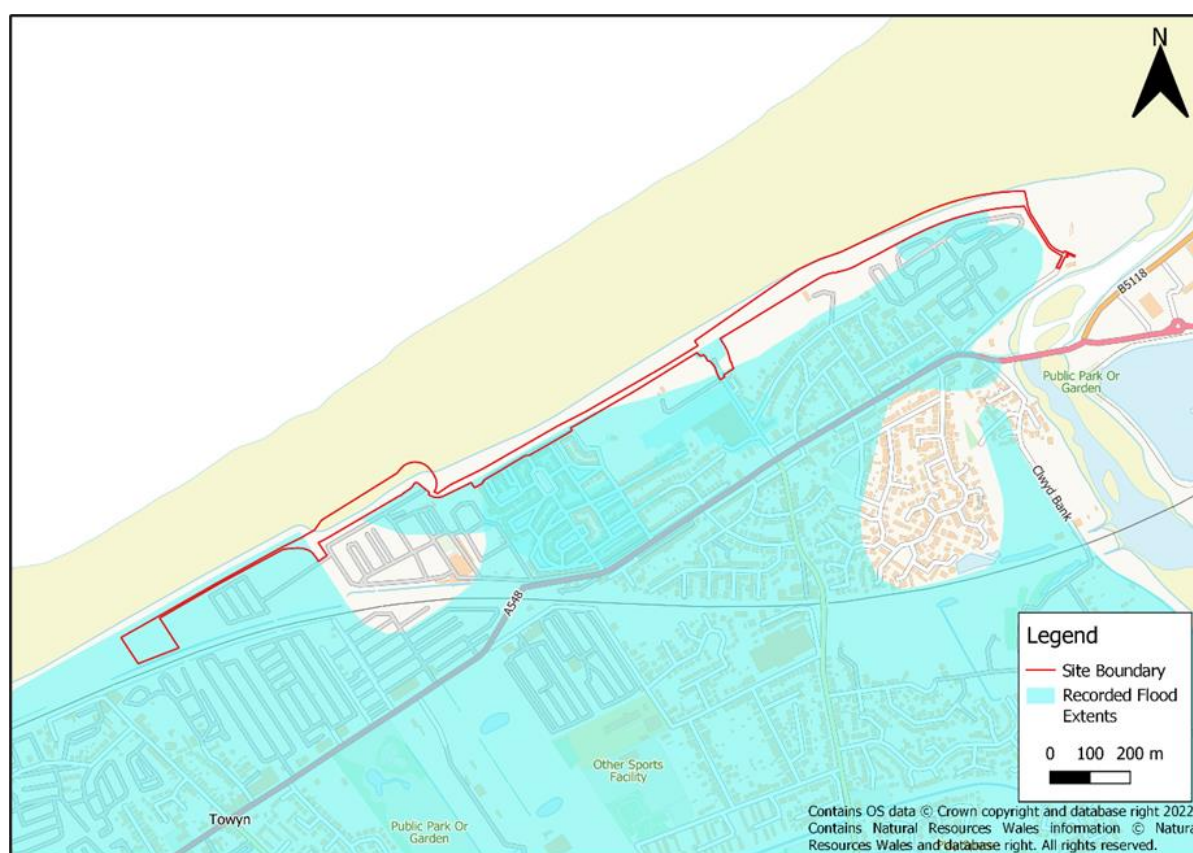


Figure 3-1: NRW Recorded Flood Events

The existing primary coastal defences at Kinmel Bay are subject to frequent wave over-topping, leading to flooding of nearby homes, businesses, and local infrastructure. This risk is expected to increase because of the effects of climate change.

Table 1 below shows the number of properties currently at risk of flooding in a 1 in 200 year flood event (Business as Usual Baseline) and how the number of properties increases in time as a result of climate change. For example, 892 properties are at risk of flooding in 2021. Without intervention this will increase to 3,335 properties by 2121 in these areas:

Table 1 - Properties benefitting from the scheme

Properties at risk from the 1 in 200-year event			
Year	Properties currently at risk of flooding	Properties at risk of flooding once the scheme is complete	Properties benefiting from the scheme
2021	892	166	726
2041	1211	212	999
2121	3335	1046	2289

Furthermore, CCBC is a hotspot for local and national tourism. This stretch of the coastline is home to a number of holiday parks and benefits from nearby visitor attractions, such as Gwrych Castle, Tan-yr-Ogof Caves (within twenty minutes' drive of Kinmel Bay), and the beach and coastal environment itself, which is served by the North Wales Coastal Path. As such, there is a need to improve beach access points, and update and refresh paths and seating to increase inclusivity and accessibility. Public realm improvements include parklets, street furniture and signage to improve facilities and the attractiveness of the area.

3.2 Description and Design of the Proposed Development

The proposed development includes coastal defence improvements divided by Coastal Management Units (CMU) from Towyn Revetment (CMU3-5B) to Kinmel Bay (CMU-35C), along with public realm improvements and ecological enhancements. The works are summarised below, with a full detailed description of the works set out within the Design Access Statement.

3.2.1 Towyn Revetment (CMU3-5B)

3.2.1.1 Coastal Improvements

The existing defences at Towyn Revetment, on the frontage at Golden Sand's caravan site, includes a large rock armour revetment and sea wall.

The proposals include raising and widening the rock armour and raising the sea wall. The rock armour will be raised to a height of 7.2mOD (to the height of existing sea wall), and the width increased to 6m. The new design will keep the 1 in 4 slope angle of the current rock armour. The increased crest width and height will ensure a 1 in 200 year standard of protection (SoP) up to the year 2041. The new design will make every effort to reuse and repurpose the current rock armour material.

In addition to the rock armour improvements the existing sea wall will be raised by 0.75m, up to 8mOD.

The proposed upgrades in CMU3-5B will increase the level of coastal flood protection offered by the current rock armour unit.

3.2.1.2 Public Realm Improvements

A parklet is proposed at the eastern end of the Towyn Revetment that will include lounging seats, picnic tables, decorative paving and cycle parking.

Improvements will be made to the existing access points adjacent to the Golden Sands Caravan Park for access to the coastal path and beach.

3.2.1.3 Ecological Enhancement

In addition to the coastal flood protection offered by the new rock armour design, consideration has been given to opportunities for environmental enhancements. These include:

- The enhancement of the areas of coastal grassland.
- Adding texture to the boulders within the intertidal zone to create niches and ecological opportunities for colonisation by intertidal species.

3.2.2 Kinmel Bay (CMU-5C)

3.2.2.1 Coastal Improvements

Kinmel Bay West

Sea walls form the existing coastal defence at Kinmel Bay East. This sea wall will be raised 0.5m to provide protection from rising sea levels and increased storminess.

It will be necessary to upgrade/replace the flood gate at the St Asaph Avenue car park so that it is at the same level as the wall. Works also include re-profiling the level of the entrance to the St Asaph Avenue car park (also known as Kinmel Bay car park). This localised change in elevation will provide flood protection landwards by preventing water entering the main town, with any flood water returned to the sea by flap gates.

Kinmel Bay East

Sea walls and or rock armour revetment form the existing coastal defence at Kinmel Bay West requires several actions.

The existing rock armour revetment at the eastern end of Kinmel Bay Beach will be enhanced and upgraded. The existing seawall behind the rock armour will be raised by 500mm and the rock armour in front will be reprofiled, raised and widened.

The new rock armour profile will have the same crest level as the raised wall, a crest width of 5.6m and a slope angle of 1 in 3. The length of the new rock armour will be approximately 420m, terminating at the sand dunes east of Kinmel caravan park.

The level of the new seawall crest will provide improved wave overtopping flood protection to Kinmel Bay, providing a 1 in 200 year standard of protection, taking into account projected Sea Level Rise up to 2041.

3.2.2.2 Public Realm Improvements

Kinmel Bay is where most of the public realm enhancements are proposed and include:

- A parklet at Kinmel Bay West that includes informal play equipment, cycle parking, maintenance and charging facilities, lounge seating, shelter for informal use and decorative paving.
- Widening over 1000 meters of the coastal path to 4.5m between Towyn Revetment and Baysville Grill.
- St Asaph Avenue car park will be enhanced to act as a beachside hub for the community. It will incorporate additional car parking, with rain gardens and electric car charging points. There will be a new toilet facility building which includes a shelter where Oriel Môr can programme art installations. There will also be cycle parking, maintenance and charging facilities, Oriel Môr signage, picnic tables and benches, play climbing equipment, lawn planting with two proposed trees, and decorative paving.
- Beach access improvements for Kinmel Bay beach. These works include upgrade of one flood gate access point, three enhanced access points to be fully accessible and (Disability Discrimination Act) DDA compliant, six enhanced access points with stepped access, ten access points in total (one retained, nine enhanced).
- Informal rest area near Baysview Coffee and Grill providing a bench and litter bin.
- Upgrade to the existing pedestrian crossing adjacent to Rhyl Harbour Café.

3.2.2.3 Ecological Enhancement

In addition, where gaps exist along the landward side of the foot/cycle path along the stretch to the east of the car park at the end of St Asaph Avenue, sand dunes will be re-instated where necessary.

Other proposed ecological enhancements set out in the Ecological Impact Assessment (EcIA) include:

- Scrub and habitat management to improve the diversity and biodiversity of the LNR.
- Coastal wildflower grassland planting adjacent to the coastal path for a range of pollinator species, such as bumblebees.
- Seeding a species-diverse grass and wildflower mix will encourage invertebrates and reptiles, which will provide new foraging habitat for birds.

3.2.3 Temporary Compounds & Access Routes

Temporary compounds have been sited on existing hardstanding where possible (one is on hardstanding; one is on grass) that link to the existing road network for access. The scheme will utilise existing access routes, with no new accesses proposed. Further design details are set out within the accompanying Design and Access Statement.

In terms of the public realm improvements, the Council could utilise their permitted development rights for some elements of the work proposed. However, all elements of the proposed works have been included in the planning application for completeness.

4 Planning History

4.1 EIA Screening and Scoping

A Screening Opinion was originally requested by CCBC for a wider 11km scheme extending from Llanddulas to Kinmel Bay. The local planning authority (LPA) concluded on 19 March 2021, that the scheme constituted Environmental Impact Assessment (EIA) development, under The Town and Country Planning (Environmental Impact Assessment) (Wales) Regulations 2017.

As the project is also relevant to the Marine Environment, it was concluded that an EIA would also be required under the Marine Works (Environmental Impact Assessment) Regulations 2007 (as amended), under Schedule 2. Regulation 69: Coastal work to combat erosion and maritime works capable of altering the coast through the construction of, for example, dykes, moles, jetties and other sea defence works, excluding the maintenance and reconstruction of such works. A subsequent ES Scoping Request was submitted, and a response was provided on 18 January 2022. The following matters were scoped into the ES:

- Biodiversity: biosecurity, enhancements, baseline surveys, Traeth Pensarn SSSI, ornithology, marine mammals, other Special Areas of Conservation, marine benthic ecology, fish
- Water resources
- Landscape and Visual
- Cultural Heritage
- Recreation and Amenity
- Traffic and Transport
- Social and Economic
- Air Quality, Noise and Vibration
- Climate Change, Greenhouse Gases and Major Accidents

Furthermore, the following developments listed within Table 2 were noted for their potential cumulative impacts, these are considered alongside planning applications listed in Table 3. Further details are also set out at Chapter 14 of the ES.

Table 2 - Schemes to be considered for cumulative impact

App. No.	Address	Description	Status
0/49272	Old Colwyn Coastal Defence & Active Travel Improvements: Porth Eirias In The West to Splash Point (By Old Colwyn Arches) In The East	Coastal and storm defence scheme including construction of a rock revetment and improved pedestrian and cycle access with associated public realm improvement works along Colwyn Bay. Construction and completion of works based on period of 20 months (two phases of 10 months). Material may be delivered by road and barge, but assuming all material is delivered by road, there will be approx. 36 return HGV trips per day, directly accessed from Junction 22 of the A55.	Approved 17/03/2022
0/49274	Penrhyn Bay Coastal Defence and Public Realm	Construction of coastal defences including a T-shaped rock groyne, eastern groyne raising, repairs to the existing seawall, beach nourishment and public realm	Approved 09/05/2022

	Improvements: Penrhyn Bay Conwy	improvements including pedestrian/cycle crossing, beach access ramp, re-located and extended car parking, street furniture, promenade resurfacing and soft landscaping. The scheme is being delivered over one year starting from in two phases: coastal works; and, public realm/land side works. Construction traffic will access the site via Junction 22 of the A55, leading onto West Promenade and Marine Drive to Penrhyn Bay. Deliveries may also take place by sea. There are estimated to be 65 return trips a day, peaking for 2 months during delivery of materials.	
0/49306	Beach and Promenade at Colwyn Bay between Colwyn Bay Station and Abbey Road	The Colwyn Bay Phase 2B: coastal works, public realm promenade improvements, and landscaping works. Construction is expected to take place by, and last around 14 months. There is one phase of works (potentially divided into three sub-phases). A large proportion of the beach recharge works will be delivered by the sea. Construction vehicles will take Junction 22 off the A55 and travel northwest on Promenade to the site. There will be 28 return trips a day.	Approved 15/03/2022
45/2022/0271	Central Rhyl Coastal Defence Scheme	New concrete stepped revetment and wall wave, with promenade raising/widening, and section with rock scour protection and concrete repairs to the existing sea defence structures. Construction works due to commence in late 2022 for a period of 2.5 years. The eastern section will take place over 1.5 years at the start of the main construction period and finishing first, while the western works will be ongoing throughout the construction period. There will be construction compounds in Quay Street, John Street, Central Access, and Marine Drive; access will come from the A55 following the A525, west onto Ffordd Abergele, then north on St Asaph Avenue (primary route), and from the east via the A548 (secondary route).	Permission granted on 13/07/2022
-	Awel-y-Mor (AyM) Offshore Windfarm	An 78km2 offshore wind farm 10.5km off the Welsh coast. Construction works are expected to start after 2025. AyM export cables will be	Development Consent Order application currently being

		installed using trenchless technology to pass under existing coastline infrastructure including North Wales Coast Line railway, Robin Hood Holiday Park, Rhyl Coast Road A548, Rhyl golf club fairway and the promenade. Access for construction vehicles is from Dyserth Road and either Garford Road or Ferguson Avenue. The construction period will last 7 months in total, potentially split into two discrete phases with a gap of many months in between. Most of the works will be during standard construction hours, but some critical activities will require 24-hour operation. Traffic generation (worst case scenario) will be maximum 73 return trips a day, but an average of 12 return trips a day.	considered by Planning Inspectorate
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4.2 EIA Status – Current Scheme

The current scheme (Kinmel Bay Coastal Defence Improvements Scheme) is a reduction in size and scope to the previous scheme screened and scoped the by the LPA, therefore a Teams meeting was held on 14 October 2022 with Ceri Thomas, CCBC Planning Officer to discuss the changes and determine whether the scheme would still require an EIA. Mr. Thomas advised that this would likely be the case. Due to time constraints to meet Welsh Government funding and insufficient time for re-screening and re-scoping, it was agreed that the scheme would progress based on the previous screening and scoping opinions, with all previous topics scoped into the EIA.

4.3 Relevant Planning Applications and Permissions

A review of applications submitted to the online planning portal in 2020 – 2022 has been undertaken for the electoral districts of Kinmel Bay and Towyn. Householder applications were omitted from the search, and the following further relevant applications were noted. However, they are not considered to create a significant cumulative impact.

Table 3 - Planning application considered for cumulative impact

App. No.	Address	Description	Status
0/50045	Stones Caravan Park San Remo Avenue Towyn LL22 9LA	Demolition of existing clubhouse and conservatory and erection of new reception, staff kitchenette and wc, service room and communal area	Registered
0/49712	Knightlys Fun Park Sandbank Road Towyn LL22 9LD	Extension to funfair to incorporate surfaced access area (Part Retrospective)	Approved
0/49580	Plot 1 Mathonwy Tir Llwyd Enterprise Park Kinmel Bay Conwy LL18 3JH	Proposed warehouse for storage and distribution of wines, spirits, beers and soft drinks. Included in the warehouse are offices, off-licence and services	Approved
0/49504	Baysville Roland Avenue Kinmel Bay LL18 5DN	Variation of condition no 4 (opening hours) of planning approval 0/49145 (Change of use of residential garden area to be mixed use comprising café/	Approved

		snack bar with retail sales and associated outdoor seating and toilet facilities and increase in front wall boundary wall to 400mm and provision of demountable flood barriers.) to allow for an extension to opening hours from 08:00 to 22:00 during the period 1st May to 30th September daily for a 2 year period commencing from the date of this consent . Thereafter, the hours of operation will revert to 08:00 to 20:00 all year.	
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5 Planning Policy Context

5.1 Background

The proposed coastal flood defence scheme lies within the administrative boundary of CCBC. This section provides a summary of the key national, regional, and local planning policies relevant to the scheme.

5.2 National Planning Policy

5.2.1 Planning Policy Wales Edition 11

Planning Policy Wales (PPW) is the Welsh Government's primary statement of planning policies, with Edition 11 published on 24 February 2021.

The primary objective of PPW is to ensure that the planning system contributes towards the delivery of sustainable development and improves the social, economic, environmental and cultural well-being of Wales, as required by the Planning (Wales) Act 2015, the Well-being of Future Generations (Wales) Act 2015 and other key legislation.

PPW makes clear that the purpose of planning is to help achieve sustainable development (Section 1), and that design (Section 2) and effects on the natural environment (Section 6) are important components of this.

Paragraph 1.22 sets out that in determining applications for development, developments that accord with an up-to-date development plan should be approved.

Section 2 sets out considerations in 'People and Places: Achieving Well-being Through Placemaking' and notes that 'in areas recognised for their particular landscape, townscape, cultural or historic character and value it can be appropriate to seek to promote or reinforce local distinctiveness. In those areas, the impact of development on the existing character, the scale and siting of new development, and the use of appropriate building materials (including where possible sustainably produced materials from local sources), will be particularly important.'

Section 6.4 recognises the planning system's role in helping to reverse the decline in biodiversity and increasing the resilience of ecosystems, at various scales, by ensuring appropriate mechanisms are in place to both protect against loss and to secure enhancement. Addressing the consequences of climate change should be a central part of any measures to conserve biodiversity and the resilience of ecosystems.

Section 6 provides guidance to the issues relating to water and flood risk. With regard to water services, the Welsh Government aims to secure the provision of water services whilst minimising adverse impacts on the environment, amenities, health, and communities, in light of the consequences of climate change. This should be achieved by ensuring the infrastructure upon which communities and businesses depend is adequate to accommodate proposed development, ensuring sustainable drainage systems are an integral part of the design approach for new development, and ensuring the protection of the quantity and quality of surface and ground water supplies is considered as part of development proposals.

Section 6.5 deals with coastal areas. The main planning principles for coastal places, reflect the principles of Integrated Coastal Zone Management. These principles are 'to support urban and rural development, whilst at the same time being aware of, and appropriately responsible to, the challenges resulting from the dynamic interaction of natural and development pressures in coastal areas.

Section 6.6.22 deals with Development and Flood Risk. The plan states that Government resources for flood and coastal defences are directed at protecting existing developments and are not available to provide defences in anticipation of future development. New or improved flood defences in coastal and/or riverside locations should be carefully planned, ensuring all potential environmental effects, both on and off-shore, and relevant SMP policies are taken into account. Flood defence works can provide opportunities to achieve wider social, economic and environmental benefits, which should be maximised where possible.

Section 6.6.6 'The ability of the planning system to protect water features and foster sustainable water management as key attributes of attractive and resilient places to live is closely aligned with securing the multiple benefits of green infrastructure. Embracing integrated approaches should contribute toward achieving the requirements imposed by the EU Water Framework Directive along with Welsh Government policy for the integrated planning and management of water both in urban and rural areas.'

Section 6.7 considers noise and states that planning authorities and developers must seek to incorporate measures which reduce overall exposure to air and noise pollution and create appropriate soundscapes in relation to new development.

Section 6.9 deals with Development and Contaminated Land and provides a framework with which unacceptable risks from pollution to human or environmental health must be accounted for, with remediation as appropriate

5.2.2 Technical Advice Notes

Technical Advice Notes (TANs) provide targeted advice and should be read alongside PPW. The TANs relevant to this scheme are:

- TAN 5 – Nature Conservation and Planning
- TAN 11 – Noise
- TAN 12 – Design
- TAN 13 – Tourism
- TAN 14 – Coastal Planning
- TAN 15 – Development and Flood Risk
- TAN 16 – Sport, Recreation and Open Space
- TAN 18 – Transport
- TAN 20 – Planning and the Welsh Language
- TAN 23 – Economic Development
- TAN 24 – The Historic Environment

TAN 14 and 15 are of particular relevance to this scheme. They provide advice on recreation development, heritage coasts and non-statutory coastal groupings, Shoreline Management Plans (TAN 14) and development advice maps to determine flood risk, assessing the flooding consequences of proposed development and development plans, and development control to mitigate flood risk (TAN 15).

5.2.3 Future Wales: The National Plan 2040

Future Wales is the Welsh Government's national development framework and forms part of the development plan, providing guidance for national and regional spatial issues up to 2040.

The plan covers key national priorities, including the economy, housing and environment. It shows where nationally significant developments should take place, where growth should happen, what infrastructure and services are needed and how Wales can help fight climate change.

Future Wales builds on PPW and the Natural Resources Policy by setting out specific policies that:

- safeguard areas for the purposes of improving the resilience of ecological networks and ecosystems services, to identify areas for the provision of green infrastructure and to secure biodiversity enhancement (net benefit);
- ensure resilient location and design choices by promoting a sustainable growth strategy, as well as ensuring the consideration of natural resources and health and well-being form part of site and design choices; and

- facilitate the decarbonisation of the economy, including energy and transport choices, and promote the principles of a circular economy.

Policy 8 – Flooding supports flood risk management that contributes to sustainable strategic growth and regeneration in National and Regional Growth Areas – such as the north of Wales. The Welsh Government will collaborate with Flood Risk Management Authorities and developers for new and improved infrastructure. As part of these infrastructure projects, opportunities for social, economic and environmental benefits are to be maximised, but there should not be any adverse impacts on designated sites or the features for which they have been designated.

5.2.4 National Strategy for Flood and Coastal Erosion Risk Management (FCERM) in Wales (2020)

The National Strategy for Flood and Coastal Erosion Risk Management (FCERM) in Wales 2020 is prepared under the terms of the Flood and Water Management Act 2010. The Strategy sets out how we intend to manage the risks from flooding and coastal erosion across Wales. It sets objectives and measures for all partners to work towards over the life of this document, which will be 10 years unless significant policy updates are required prior to that time. It outlines the new direction on sustainable drainage and a revised planning policy to complement the strategy and ensure a consistent national approach to the management of land and water.

5.2.5 Welsh Minister's Written Statement – Flood and Coastal Erosion Risk Management Programme for 2020-2021

The Welsh Minister's Written Statement on Flood and Coastal Erosion Risk Management Programme for 2020-2021 identifies the unprecedented changes as a result of COVID-19 but emphasises that it is crucial that flood and coastal risk is continued to be managed. The flooding Wales suffered in February 2020 was the worst in a generation and brought into sharp focus the importance of our flood and coastal risk management programme in protecting lives, homes and businesses. In addition to announcing the Government's flood and coastal risk management programme for 2020-21, it states there will be additional support to Local Authorities and Natural Resources Wales and that the programme will bring forward more flood defence projects and develop a stronger pipeline of future schemes while increasing grant support for scheme preparation, coastal works and natural flood management.

5.2.6 Welsh National Marine Plan (2019)

The Welsh Government published the Welsh National Marine Plan in November 2019. This plan is directly informed by High Level Marine Objectives set out in the Marine Policy Statement (2011). These objectives align with the Welsh Government's Well-being Goals and principles for sustainable development and the direction provided in the EU Directive on Marine Spatial Planning 89/2014.

The plan objectives, related to supporting policy objectives (i.e., in the Marine Policy Statement), of particular relevance to the scheme include:

- Plan Objective 7: Support enjoyment and stewardship of our coasts and seas and their resources by encouraging equitable and safe access to a resilient marine environment, whilst protecting and promoting valuable landscapes, seascapes and historic assets.
- Plan Objective 8: Improve understanding and enable action supporting climate change adaptation and mitigation.
- Plan Objective 9: Support the achievement and maintenance of Good Environmental Status and Good Ecological Status.
- Plan Objective 10: Protect, conserve, restore and enhance marine biodiversity to halt and reverse its decline, including supporting the development and functioning of a well-managed and ecologically coherent network of Marine Protected Areas (MPAs) and resilient populations of representative, rare and vulnerable species.
- Plan Objective 11: Maintain and enhance the resilience of marine ecosystems and the benefits they provide to meet the needs of present and future generations.

5.2.7 Wellbeing of Future Generations (Wales) Act 2015

The Well-being of Future Generations (Wales) Act 2015 (WBFGA) is legislation requiring Welsh public bodies to put long-term sustainability at the forefront of their thinking, and work to prevent and tackle problems. Public bodies must work towards Seven Well-being Goals and enact the five Ways of Working for a more sustainable Wales.

The Seven Well-being Goals are;

- 1 A prosperous Wales
- 2 A resilient Wales
- 3 A healthier Wales
- 4 A more equal Wales
- 5 A Wales of cohesive communities
- 6 Wales of vibrant culture and thriving Welsh language
- 7 A globally responsible Wales

The five Ways of Working are;

- 1 Prevention - How acting to prevent problems occurring or getting worse may help public bodies meet their objectives.
- 2 Integration - Considering how the well-being objectives may impact upon each of the well-being goals, on the other objectives, or on the objectives of other public bodies.
- 3 Involvement - The importance of involving people with an interest in achieving the well-being goals and ensuring that those people reflect the diversity of the area which the body serves.
- 4 Collaboration - Acting in collaboration with any other person (or different parts of the body itself) that could help the body meet its well-being objectives.
- 5 Long Term - The importance of balancing short-term needs with the need to safeguard the ability to also meet long-term needs.

The Act also sets a requirement on Public Bodies in Wales to set and publish well-being objectives that are designed to maximise their contribution to achieving each of the well-being objectives. For the sake of the practice of this Act, Conwy and Denbighshire have merged to form Conwy and Denbighshire Public Services Board and have published a set of 3 Priorities and 4 Additional Principles. These are:

- People – Good Mental Well-being for All Ages;
- Community – Community Empowerment; and
- Place – Environmental Resilience.
- To address inequalities and treat everyone equally;
- To support and promote the Welsh Language;
- To support access to appropriate accommodation; and
- To avoid duplication.

5.2.8 Welsh Government Active Travel Guidance 2020-2021

Active travel is a key priority in the Welsh Transport Strategy and is identified at the top of the sustainable transport hierarchy that guides all our transport activities. The Active Travel Guidance sets out a vision of walking and cycling to be the natural mode of choice for short everyday journeys, or as part of a longer journey in combination with other sustainable modes, along with priorities to achieve this.

To assist local authorities to develop schemes that are ambitious and meet the vision of Active Travel, the following design principles relevant to Kinmel Bay Coastal Improvements Scheme include:

- Develop proposals using the five ways of working, collaborating with key stakeholders and involving communities.
- Facilitate independent walking, cycling and wheeling for everyone, including an unaccompanied child of secondary school age or a less-experienced cyclist;
- Design infrastructure that seeks to exceed, rather than just meet, minimum design standards;
- Ensure access for all and equality of opportunity in public space;
- Ensure all proposals are developed in a way that is evidence-led;
- Schemes should prioritise people walking, cycling and wheeling over private motor vehicles by considering the following hierarchy during scheme design:
- Separation of pedestrians from cyclists and motor traffic through provision of segregated off-carriageway infrastructure; if necessary, through reallocation of road space;
- Separation of pedestrians and cyclists from motor traffic through the provision of shared-use off-carriageway infrastructure; and
- Improve on-road conditions to encourage an increase in cycle use within existing highways, for example by reducing traffic volumes and speeds.

5.2.9 Shoreline Management Plan

The Shoreline Management Plan (SMP) is a non-statutory, high level policy document for coastal flood and erosion risk management planning that was formally adopted in August 2016. It provides a large-scale assessment of the risks associated with coastal processes and helps to reduce these risks to people and the environment by identifying the most sustainable policies for managing flood and coastal erosion risks in the short-term (0-20 years), medium-term (20-50 years) and long-term (50-100 years). SMPs form an important part of the Department for Environment, Food and Rural Affairs (Defra) and Welsh Assembly Government (WAG) strategy for managing risks due to flooding and coastal erosion.

Kinmel Bay is within the North West England and North Wales SMP2 (Area Sub-Cell 11a). This coastline is identified as important for tourism, industry and commercial activities. It explains that over the last 200 years, the construction of a mixture of seawalls, revetments, groynes and flood embankments along the majority of the North Wales coast has prevented shoreline erosion and managed flood risk to coastal towns (including Llandudno, Rhos-on-Sea, Colwyn Bay, Towyn, Rhyl and Prestatyn), tourism assets and infrastructure.

The SMP currently states that the section of coastline at Kinmel Bay continues to provide protection over this period through maintaining and improving/raising/widening the existing defences, with strong justification to continue to manage erosion and flooding risks for most of this frontage over the next century by maintaining defences on their current alignment (hold the line).

5.3 Local Planning Policy

5.3.1 Local Development Plan

CCBC adopted the current Local Development Plan (LDP) in October 2013 and is currently carrying out a full review. The Plan is composed of a Written Statement and a proposals map, and covers the period 2007 to 2022. Its policies relate to the part of CCBC that lies outside of Snowdonia National Park, equating to an area of 1,130 sq. km and an estimated population of 111,700.

The following priority issues have been identified as relevant to this scheme:

- **Overcoming High Levels of Constrained Land**
It is noted that the potential for development is hindered by the high levels of flood risk along the coast.
- **Encouraging Sustainable Tourism**
The coastal resorts are recognised as key economic drivers, and CCBC wish to sustainably safeguard and encourage more year-round tourism by harnessing potential related to the built and natural environment.
- **Encouraging Sustainable Transport**
There is an emphasis on decreasing car dependency within Conwy by encouraging non-car modes and developing an integrated transport system.
- **Promoting High Quality Design**
Quality and innovative design is to be leveraged to sustain the character of Conwy while also attracting and retaining the younger population to help address Conwy's age imbalance.
- **Efficient Use of Natural Resources**
It is recognised that Conwy is particularly susceptible to the effects of climate change in the form of rising sea levels and sudden heavy rainstorms causing flooding.
- **Protecting Conwy's Cultural Heritage**
The richness of Conwy's built heritage is to be protected, maintained, and, where appropriate, improved upon by new development.
- **Protecting and Enhancing Conwy's Natural Environment**
Biodiversity, habitats and species should be enhanced and protected by new development.

The Plan also includes a number of Spatial Objectives, the following of which are relevant to this proposal:

- SO1 – To accommodate sustainable levels of population growth
- SO2 – To promote the comprehensive regeneration of Colwyn Bay, Abergelge, Towyn and Kinmel Bay to broaden economic activity, address social exclusion and reduce deprivation through the Strategic Regeneration Area Initiative.
- SO8 – Assist tourism through the protection and enhancement of coastal and rural based tourism attractions and accommodation, and further exploit the potential to develop, strengthen and encourage an all year round tourism industry.
- SO10 – Ensure that good, sustainable, inclusive design is delivered, which includes the opportunity to design out crime, to develop strong, safe and locally distinctive communities and encourage the younger population to remain and return to the area.
- SO12 – Safeguard and enhance the character and appearance of the undeveloped coast and countryside, sites of landscape/conservation importance, features of archaeological, historic, or architectural interest and ensure the conservation of biodiversity and protected species.
- SO13 – To protect and improve accessibility to essential services and facilities, including open space, allotments, health, education and leisure.
- SO14 – To promote the prudent use of resources through the minimisation of waste and assist in providing an integrated network of waste management facilities consistent with the needs of the area and the waste hierarchy.

The following spatial policies and supporting development management policies have been identified as relevant to this scheme:

Policy DP/1 – Sustainable Development Principles

Proposed development must accord with sustainable development principles, including sequential approach to development, efficient and effective use of land, addressing flood and pollution risk etc.

Policy DP/3 – Promoting Design Quality and Reducing Crime

Design of developments should be high quality, sustainable, usable, safe, durable, and adaptable. It should protect local character and distinctiveness of the natural and built environment.

Policy DP/4 – Development Criteria

A list of requirements for development should be met, including the provision of enhancement of cycling and pedestrian infrastructure.

Policy DP/6 – National Planning Policy and Guidance

National planning policy and guidance must be followed.

Policy TOU/1 – Sustainable Tourism

Proposals for new high quality all-year round sustainable tourism development is supported, as well as improvements to the Wales Coastal Path.

Policy TOU/2 – New Sustainable Tourism and Recreational Development

A list of criteria for tourism and recreational development must be met, including resource efficient design, encouraging of non-car based transport, and the provision of a detailed landscaping scheme with Landscape and Visual Impact Assessment where appropriate.

Policy NTE/1 – The Natural Environment

Development will be regulated to conserve and, where possible, enhance the Plan Area's natural environment, countryside, and coastline.

Policy NTE/3 – Biodiversity

Biodiversity is to be conserved and, where possible, enhanced by new development with sensitive siting, layout, and design, and with other proactive measures. All proposals must be accompanied by a Biodiversity Statement.

Policy NTE/4 – The Landscape and Protecting Special Landscape Areas

The attributes of identified Special Landscape Areas must be considered in development proposals to integrate into the landscape.

Policy NTE/5 – The Coastal Zone

Development in the Coastal Zone will only be permitted where specific criteria are met, including requiring a coastal location, not interfering with natural coastal processes, not impeding the function of existing coastal defence structures etc.

Policy NTE/6 – Energy Efficiency and Renewable Technologies in New Development

Several methods for improving efficient use and conservation of natural resources are supported, including minimising use of new materials in construction, incorporating sustainable drainage, waste recycling areas/storage etc.

Policy NTE/8 – Sustainable Drainage Systems

Sustainable Drainage Systems are required where reasonably practicable.

Policy NTE/10 – Water Conservation

All developments must incorporate water conservation methods where practicable, and proposals larger than 1,000m² should include a Water Conservation Strategy.

Policy CTH/2 – Development Affecting Heritage Assets

Development must preserve or, where appropriate, enhance Conservation Areas, Conwy World Heritage Site, Historic Landscapes, Parks and Gardens, Listed Buildings, Scheduled Ancient Monuments, and sites of archaeological importance.

Policy CTH/3 – Buildings and Structures of Local Importance

Development proposals affecting buildings or structures which make an important contribution to the character and interest of the local area will only be permitted where the building's distinctive appearance, architectural integrity and its setting would not be significantly adversely affected.

Policy CTH/3 - Enabling Development

Sets out criteria for enabling development which seeks to secure the preservation and/or appropriate alternative use of a Listed Building, or a building which makes a significant positive contribution to the character of a conservation area, historic landscape or parks and gardens of special historic interest.

Policy CTH/5 – The Welsh Language

A 'Community and Linguistic Impact Assessment' should accompany a commercial, industrial or tourist development on unallocated sites with an area of 2,000m² or more. Features such as bilingual signs and the retention of traditional Welsh names are encouraged.

Policy STR/1 – Sustainable Transport, Development and Accessibility

Footways, cycle infrastructure and public transport should exist or be provided where appropriate. Walking and cycling is particularly promoted; improvements to make these means of transport safer and more accessible is encouraged to aid a transition in travel behaviour.

Policy STR/2 – Parking Standards

Car parking and secure cycle storage should be provided in accordance with the Council's standards.

Policy STR/3 – Mitigating Travel Impact

Undesirable effects of travel such as noise, pollution, impact on amenity and health, and other environmental impacts, must be mitigated. A Transport Assessment and Travel Plan may be required where proposals may have significant transport, social, environmental implications.

Policy STR/4 – Non-Motorised Travel

Development proposals should minimise distances between trip origins and destinations, provide adequate safe and secure cycle parking, and encourage cycle use and walking with designs and layouts.

Policy STR/5 – Integrated Sustainable Transport System

One of the transport schemes to be safeguarded and promoted is the Wales Coastal Path Improvement Programme and Conwy Rights of Way Improvement Plan. This scheme improves accessibility to the coast and countryside for local communities and visitors.

Policy MWS/1 – Minerals and Waste

Sufficient provision of mineral resources and waste management facilities is provided while safeguarding the natural environment. Permitted reserves of hard rock are safeguarded, including reserves at. A landfill buffer zones manages development in this area.

5.3.2 Supplementary Planning Guidance Documents

Supplementary planning guidance (SPG) is provided for a range of subjects. This proposal has been particularly influenced by guidance given about the Natural Environment. The following documents were consulted:

- LDP5 Biodiversity
The conservation of habitats and species is promoted, and advice is provided on how to reduce development effects on biodiversity as much as possible.

- LDP24 Renewable Energy
This document gives guidance on how to include renewable sources of energy into the development. It also includes advice on incorporating sustainable materials into the construction process.
- LDP27 Coastal Flood Risk Protocol
Controls on and constraints to development within the coastal flood risk area of the North Wales Coast is presented in this document.

Regard has also been given to guidance about Sustainable Transport, focused on parking standards. This document gives advice about design and provision of car and cycle parking.

6 Planning Policy Review and Material Planning Considerations

Section 70(2) of The Town and Country Planning Act 1990 confirms that planning applications should be determined in accordance with the Development Plan unless material circumstances indicate otherwise. In this section, the planning issues and material conditions raised by the proposed development are considered against the prevailing planning policy framework and the associated Development Plan. In so doing it demonstrates the planning rationale for the proposed development, and why planning permission should be granted. These are set out under the following headings:

- The Principal of Development
- Ecology and Biodiversity
- HRA
- Water Framework Directive (WFD)
- Landscape and Visual
- Coastal Processes
- Hydrology and hydrogeology
- Flood Consequence
- Heritage and Archaeology
- Contaminated Land
- Social and Economic Benefits
- Traffic and Transport
- Noise and Vibration
- Public Rights of Way (PRoW) and National Cycle Network (NCN)

6.1 Principle of Development

6.1.1 Flood and Coastal Risk Management

The existing coastal defences at Kinmel Bay comprise a combination of rock armour, cobbled beaches, sea walls and flood gates. Historic flood events and forecasting studies show that the risk of flood events is likely to increase with climate change projections, which predict increased sea level rise and storminess. Improved coastal defences are therefore required not only to protect properties in current climatic conditions, but also for the long-term sustainability of the local community, infrastructure, and economy in and around Kinmel Bay in the future.

The proposed coastal defence scheme is in line with PPW (Edition 11) that recognises the impact of sea level rise, storm surge, wave action and changes in coastal morphology and sediment supply and the effects at the coast, increased by the effects of climate change. PPW identifies the need to establish long-term local policy frameworks for the management of coastal risk.

The FCERM in Wales also makes it clear that flooding and coastal erosion are two of the biggest natural hazard risks affecting the safety and sustainability of communities across Wales, and that opportunities for multiple social, economic and environmental benefits must be maximised when investing in flood risk management infrastructure. In relation to managing coastal flood risk, the scheme also aligns with Policy 8 of Future Wales: The National Plan, TANs 14 'Coastal Planning' and 15 'Development and Flood Risk'.

The Welsh Minister's Written Statement on Flood and Coastal Erosion Risk Management (June 2016) highlights the need for investment in infrastructure improvements to protect coastal towns. In providing enhanced protection from coastal flooding at Kinmel Bay, the proposed scheme is a response directly to the needs and requirements highlighted in national documents and will contribute positively to the national agenda for coastal flood resilience, in current climates, and accounting for future climate change. The scheme contributes towards achieving the delivery of flood and coastal management schemes as identified in Wales National Strategy

for FCERM. The scheme also meets Plan Objective 8 of the Welsh National Marine Plan by enabling 'action supporting climate change adaptation and mitigation'.

The proposed scheme would accord with 'Hold the Line' and thus the adopted Supplementary Planning Document Conwy Coastal Flood Risk Protocol (LDP27) and the SMP, as it would maintain/upgrade existing defences in their current positions and provide protection to Kinmel Bay until 2118.

In terms of the LDP, policy NTE/5 (The Coastal Zone) requires development to not interfere with natural coastal processes, and not impede the function of existing coastal defence structures. The proposed scheme has been designed to work in harmony with the existing defence structures and to minimise the impact it would have upon natural coastal processes. Furthermore, policies SO1, SO2, SO8, DP/1, NTE/1 and NTE/3 seek to support proposals within the North Wales Coast Strategic Regeneration area which help to achieve the criteria set out in the policy (the retention, enhancement, and development of tourism related facilities, protection of the natural environment and address existing problems of deprivation in a manner which is consistent with the principles of sustainable development). They also consider the protection for the coastal areas of Kinmel Bay as crucial to the visitor economy of the area.

The scheme would play a significant role in helping to reduce the flood-risk and seek to protect the long-term future of coastal tourism of the area, it plays a crucial part in managing flood and coastal risk, which is also in line with the Welsh Minister's Written Statement - Flood and Coastal Erosion Risk Management Programme for 2020-2021, Conwy Coastal Flood Risk Protocol, and SMP.

6.1.2 Public Realm Improvements

The public realm improvements marry the technical requirements of flood defence with placemaking and other opportunities such as sociability, biodiversity, health and well-being and economic regeneration, in line with PPW. They link to the priority themes in 'prosperity for all' of the FCERM National Strategy.

As part of the public realm works, the beach will be made accessible for all users and abilities. There will be enhanced and upgraded pedestrian and cycle facilities and amenities along the route (detailed in the Design & Access Statement). The scheme improves the attractiveness of the cycle and pedestrian route, which promotes active travel. The scheme also integrates different types of seating and informal play, that will help to achieve a 'healthier more equal Wales' in line with the objectives of the Well-being of Future Generations Act, TAN 12 and Welsh Government Active Travel Guidance.

Table 4 below provides a summary how the proposed scheme complies with other Local Development Plan Policy / Local & Regional Strategies

Table 4 - Planning Policy Review (summary)

Local Development Plan Policy / Local & Regional Strategies	Key Principles	How the Proposed Scheme Complies
SO10 – (Sustainable and inclusive design). SO12 – (Safeguard and enhance character and appearance) TAN 12 (Design) TAN 24 (The Historic Environment) DP/1 (Sustainable Development Principles) DP/3 (Promoting Design Quality and Reducing	Sustainable development and good design that meets the scheme objectives, protects, and enhances the local natural and historic environment.	The proposals are a sustainable and adaptive option to reduce the risk of coastal flooding and erosion to people and property from Towyn to Kinmel Bay, which improves the well-being of the local community, securing the long-term sustainability as a tourism asset. The scheme is aligned with the principles of sustainable development within the identified North Wales Coast Strategic Regeneration Area. The proposed coastal defence scheme seeks to preserve local character and amenity whilst providing the necessary protection to properties. The design has been optimised to try and achieve

Crime)		the best balance between meeting required design performance standards and minimising material usage and hence carbon footprint.
SO02 – Strategic Regeneration Area Initiative SO08 – (Coastal and rural based tourism protection) Policy TOU/1 – Sustainable Tourism Policy TOU/2 – New Sustainable Tourism and Recreational Development Policy STR/1 – Sustainable Transport, Development and Accessibility TAN 15 (Development and Flood Risk) TAN 23 (Economic Development)	Infrastructure, Regeneration, Economic Development, Coastal Tourism and Outdoor Activities	The protection of coastal areas such as Kinmel Bay is considered vital to the visitor economy of the area. The proposed scheme will also provide the locality with improved protection from coastal flood events, which will contribute to safeguarding and improving the visitor economy by protecting assets and infrastructure that enable and attract visitors. This in turn is anticipated to contribute to the wider regeneration of the area, providing confidence for inward investment in the tourist industry and wider economy. The scheme supports development proposals which will enable the retention, enhancement, and development of tourism related facilities, and address existing problems of deprivation in a manner which is consistent with the principles of sustainable development within the identified North Wales Coast Strategic Regeneration Area.
Policy NTE/1 – The Natural Environment Policy NTE/3 – Biodiversity Policy NTE/5 – The Coastal Zone TAN 5 (Nature Conservation and Planning)	Nature conservation and protecting the natural environment / conservation of natural resources, including marine biodiversity enhancement and restoration of habitats and species	The public realm proposal provides a site-specific response relating to local landscape character. In terms of landscape and biodiversity the scheme will help to improve biodiversity and climate resilience, it will reduce the landscape and visual impact of the proposed flood defence. An Ecological Impact Assessment (EcIA) has been prepared to provide an assessment of likely ecological effects associated with delivery of the scheme (detailed below). The coastal environment from Towyn to Kinmel Bay is sensitive and the design process has sought to ensure the effective protection of significant environmental features. In particular, the scheme has been designed to have no significant effect on the Liverpool Bay Special Protection Area (SPA) or Kinmel Bay Local Nature Reserve. Mitigation and avoidance measures outlined in the ECIA will ensure that any potential impacts are minimised to an acceptable level. A Construction Environmental Management Plan (CEMP) will ensure that these measures are implemented on site during construction work. An outline CEMP form part of the application submission and can be found at Appendix H of the ES. Enhancement measures that include proposed habitat creation work on site and at the adjacent Local Wildlife Site will benefit protected and priority species, including invertebrates and plants. In terms of impacts upon marine biodiversity and ecosystems, foreshore works are required, however, and thus a Marine Licence application has been submitted to NRW and is in the process of being determined.
Policy DP/1 Access for All SPG TAN 12 (Design)	Access for all	Careful consideration has been given to the design of the access ramps to ensure they are accessible to all. Active travel standards are incorporated into the scheme design.

6.2 Ecology and Biodiversity

An Ecological Impact Assessment (EcIA) has been prepared to provide an assessment of likely ecological effects associated with delivery of the scheme. The EcIA identifies and describes all potentially significant ecological effects associated with the proposed development and also identifies appropriate mitigation measures where these are required and details how these could be secured. The significance of any residual effects has also been assessed. Appropriate enhancement measures have been identified, and any post-construction monitoring required also detailed. The full details of the EcIA are set out at Chapter 4 of the ES, a summary is set out below.

6.2.1 Designated Sites and Habitats

The scheme is 0.5km from the SPA, however, the potential for impacts on features of the SPA have also been considered. Pollution prevention measures (set out at section 6 of the EcIA) will result in no significant effect on the site integrity of Liverpool Bay SPA.

The works will impact a small area (1%) of the Kinmel Bay Dunes LNR that will be replaced with sand on completion of the works.

There will also be a short-term, temporary loss of terrestrial habitat, such as amenity grassland, pockets of vegetated shingle and small pockets of sand because of the construction work. The area impacted will be limited to as small a footprint as possible and all sand temporarily removed will be replaced within the LNR under the supervision of an Ecological Clerk of Works ECoW. Scrub and habitat management (removal of Seabuckthorn, Bramble & Gorse etc.) is proposed on completion of the scheme to improve the diversity and biodiversity of the LNR and contribute to the management objectives of the LNR.

Intertidal habitats will be impacted by the proposed enhanced rock armour. To minimise disturbance and habitat degradation, plant will keep to agreed haul routes and not stray outside of these areas. Pollution prevention measures set out within the CEMP will minimise potential construction impacts. The permanent loss of intertidal habitats will be compensated through habitat improvements with the aim of the scheme having a net-gain for biodiversity in the area.

Ecological enhancements will be provided in the form of adding texture to the boulders within the intertidal zone. These indentations in the rock create niches and ecological opportunities for colonisation by intertidal species. The positioning of the modified boulders will be agreed with the ECoW to ensure they are suitably positioned to be inundated during each tidal cycle.

The works will result in the direct loss of a small number of intertidal sediments and a temporary impact upon associated species. Whilst it is not possible to recreate this habitat like for like, it is considered that the proposed habitat creation work on site and at the adjacent LNR is expected to improve biodiversity, as well as additional priority species including invertebrates and plants.

6.2.2 Protected and Priority Species

The potential impacts of the scheme on Terrestrial Invertebrates, Intertidal Invertebrates and Marine Mammals have been considered, as have priority or protected species, such as birds, and reptiles (Common Lizards). Mitigation and avoidance measures that include implementation of pollution prevention measures set out in the CEMP (Outline CEMP can be found at Appendix H of the ES) and appropriately timed and managed vegetation management works will ensure that any potential impacts are minimised to an acceptable level.

The enhancements that form part of the scheme will provide overall gains to the following protected and priority species:

- Birds - through seeding a species diverse grass and wildflower mix adjacent to coastal path to encourage invertebrates and reptiles, which will provide new foraging habitat for birds.

- Reptiles - through seeding a species diverse grass and wildflower mix along the coastal path, which will encourage invertebrates, and also through conducting controlled scrub clearance of the dense areas of Gorse and Bramble scrub at Kinmel Bay LNR will improve the habitat mosaic for reptiles.
- Priority invertebrate species - The coastal grassland planting will provide linked corridors throughout the length of the scheme for a range of pollinator species, such as bumblebees.

A Non-Native Species (INNS) biosecurity management plan will be required to ensure that no such species are introduced the works area. Measures will need to be put in place to ensure that there is no spread of invasive non-native species or diseases. The Check-Clean-Dry approach should be followed, ensuring that all PPE and equipment is cleaned before leaving site.

The scheme therefore aims to protect and enhance Conwy's natural environment and biodiversity, in line with PPW, TAN5, LDP5 and spatial policy NTE3.

6.3 Habitat Regulations Assessment (HRA)

A Habitats Regulation Assessment has been undertaken for the proposed scheme due to the proximity of Liverpool SPA (a copy can be found at Appendix B.6 of the ES). The HRA concluded, providing pollution prevention measures are implemented there will be no significant effects on the site integrity of Liverpool Bay SPA. In addition, the proposed scheme will not have an adverse impact upon the Liverpool Bay SPA either alone or in combination with any other plans or projects. The scheme is therefore considered to be in line with PPW, TAN5, Conwy's local development management policies and spatial planning policy NTE3.

6.4 Water Framework Directive (WFD)

A Water Framework Directive (WFD) assessment has been prepared to inform the development and design of the Kinmel Bay Coastal Defence Improvements Scheme. A copy can be found at Appendix E.1 of the ES.

The WFD regulations require environmental objectives to be set for all surfaces, including river, lake, coastal and transitional waters and groundwaters in England and Wales to enable them to achieve a 'Good' status by a defined date. The assessment concludes the proposed scheme is not likely to have a significant impact on any WFD receptors. No significant long-term impact on existing coastal processes is predicted, whilst impacts on beach habitats, including damage and disturbance during construction, will be limited and temporary in nature. These are not considered to be significant. Furthermore, construction of the rock armour revetment may provide an ecological benefit. No impacts on WFD Protected Areas are anticipated. The WFD assessment provides recommendations to support the delivery of the proposed scheme and compliance with the requirements of the WFD, that will be addressed. These include:

- The provision of further ecological enhancement of the rock armour revetment.
- Ground investigation works, and subsequent sediment analysis should be used to determine the presence of any existing contamination within the footprint of the scheme.
- The preparation of a Construction Environmental Management Plan (CEMP).
- Visual monitoring of the construction area should be undertaken daily during the construction period to identify any signs of sewage debris or any other contaminated materials, which should be removed offsite for disposal.
- Caution to avoid the scheme coinciding with other coastal defence and infrastructure schemes to avoid cumulative impacts.

The proposed scheme therefore accords with section 6 of PPW and NTE/1.

6.5 Landscape and Visual

A Landscape and Visual Assessment (LVA) has been undertaken and is set out at Chapter 5 of the ES. The assessment describes the existing landscape and views, considers their sensitivity to change and identifies the changes likely to arise from the proposed development, providing judgements of the importance of effects arising. The LVA describes the existing defences and 'heavily developed coastline' immediately south of the application site.

In landscape and seascape character terms, the site is located within National Landscape Character Area 08: Colwyn and Northern Coastline (North Wales Coast). National Marine Character Area 02: Colwyn Bay and Rhyl Flats is located immediately to the north. The existing holiday parks and a man-made edge to the coast with rock armour are the key characteristics described in the character areas. The LVA confirms that there would be no significant effects on either landscape or seascape character as a result of the scheme.

In visual terms, visibility of the proposed development would be relatively contained, except during construction when the temporary construction compound at the southwestern edge of the scheme would be visible.

In most views, the scheme would not appear out of character with the existing coastline, with most views largely unchanged or resulting in minor changes that are entirely in keeping with the existing views. Elements, such as the car park improvements, the introduction of the parklets, shelters and toilet block, will result in localised changes and will enhance the provision of facilities and views.

The widening of the coastal path and increase in height of the sea wall, along with the higher sea gate and changes to the beach accesses would also be visible, but would be barely perceivable as a change once constructed. The increase in height of the sea wall would still allow views over it to the sea and beach. The additional areas of rock armour would change some views but would be in keeping with existing views along this stretch of coast. There would be no significant effects on either landscape or seascape character as a result of the scheme.

Overall, the scheme has been designed to a high standard. The proposals are not obscure in the context of the existing landscape character and do not interfere with coastal processes. The proposals are adaptable, accessible, safe, and secure, improving connectivity by supporting the delivery of improvements to the North Wales Coastal Path and Public Rights of Way Improvement Plan. The scheme therefore accords with PPW, TAN12, CCBC's strategic policies DP/1, DP/3 and NTE/1, NTE/4 and NTE/5, TOU/1 and TOU/22.

6.6 Coastal Processes

A Coastal Processes Assessment has been prepared and is set out at Chapter 6 of the ES. The chapter looks at the existing baseline conditions as this is essential to identify how the area under investigation functions in response to a range of physical coastal processes. In determining the linkages between process and response it is possible to establish the potential natural evolution of the coastline as well as highlighting future impacts. The key interest areas for this chapter are:

- Hydrodynamics (wave climate and tidal regime)
- Sediment dynamics and transport
- Coastal geomorphology

The assessment highlights that impacts of climate change are expected to pose a threat to coastal communities and infrastructure in the future, primarily because of the predicted increase in sea level rise. Rising sea levels are the most significant mechanism by which future coastal inundation and flooding is expected to occur. A direct impact of sea level rise is a change in tidal range whereby both low and high-water levels are set to increase beyond contemporary elevations. This is also expected to impact on the extent to which storm surges affect coastal communities and infrastructure particularly when storm events coincide with spring tidal cycles.

The assessment recognises that coastal defence schemes that account for and adapt to future changes in sea level and tidal characteristics are necessary to mitigate against the impacts of these predicted rises. Without modifying and constructing defences to protect the coastal

frontage at Towyn Revetment and Kinmel Bay the likelihood is that coastal flooding will occur more regularly resulting in damage to property and infrastructure as well as posing a threat to life.

The chapter assesses the potential significant impacts arising from the short-term (construction) and long-term (operational) effects of the scheme on local and regional coastal processes. They are considered with respect to the Zone of Influence (ZoI) defined by Natural Resources Wales as “the area of the seabed or foreshore that could be affected by a proposed development or activity, during both construction and/or operation.”

The assessment identified that the impacts are likely to be negligible to minor. Furthermore, the proposed scheme will employ a CEMP, which will include measures to deal with issues such as good working practices, consideration of weather events, spillages of substances (i.e. oil, fuel, cement) and soil erosion or the generation of suspended solids during construction activities (i.e. through excavations and plant/wheel washing), and prevention measures, such as bunded storage; designated wheel washing areas etc.

By implementing the CEMP, all impacts are assessed to be negligible or minor with no associated significant residual effects. It is therefore considered that the proposed scheme will not interfere with natural coastal processes, and not impede the function of existing coastal defence structures. The proposed scheme has been designed to work in harmony with the existing defence structures and to minimise the impact it would have upon natural coastal processes in line with the LDP, policy NTE/5 and TAN 15.

6.7 Hydrology and Hydrogeology

A hydrology and hydrogeology assessment has been undertaken; the full details are set out within Chapter 7 of the ES. The chapter assesses the potential significant effects of the proposed scheme in terms of the construction, operation and maintenance / decommissioning (where practical) on the water environment, including on hydrology (surface water quality, levels and flows) and hydrogeology (groundwater quality and levels). The assessment considers the potential environmental impacts associated with:

- Surface water drainage – flows
- Surface water drainage – quality
- Construction site runoff – suspended fine sediments
- Construction site runoff – chemical spillages
- Modifications to drainage channels on-site and surrounding watercourses.
- Temporary increase in impermeable area and ground compaction.
- Impacts on groundwater recharge.
- Impact on flood risk.

The assessment concludes that during construction and operation, the proposed scheme is not expected to have a significant impact on the identified receptors across both the construction and operational phase.

The proposed scheme will employ a CEMP, which will include measures to deal with issues such as spillages of substances (i.e. oil, fuel, cement) and soil erosion or the generation of suspended solids during construction activities (i.e. through excavations and plant/wheel washing), and prevention measures, such as bunded storage; designated wheel washing areas etc.

By implementing the CEMP, all impacts are assessed to be negligible or minor with no associated significant residual effects. It is therefore considered that the proposed scheme will accord with PPW and local development plan policies.

6.8 Flood Consequence

A Flood Consequence Assessment (FCA) has been prepared for the scheme and a copy is submitted as part of the application. The FCA identifies coastal flood risk as the most significant source of flood risk to the site and surrounding communities. The site falls largely within Zone

C2 of NRW's Development Advice Maps. Zone C2 is described as "areas of the floodplain without significant flood defence infrastructure". Zone C1 is present in the southern vicinity of the site boundary, which is defined as "areas of the floodplain which are developed and served by significant infrastructure, including flood defences".

The FCA provides a figure (extracts below) of the baseline flood extents and post scheme construction in 2021 and 2022 for both 0.5 and 0.1 (Annual Exceedance Probability) AEP events, that illustrates the benefits of the scheme. In the baseline scenario, areas within the settlement of Kinmel Bay are at risk during the 2021 0.5% (1 in 200 year) AEP and 0.1% (1 in 1000 year) AEP scenarios. In the 2121 0.5% AEP and 0.1% AEP events, a significant area of residential and commercial development in Kinmel Bay are at risk of flooding, with predicted flood depths exceeding 1.5m.

During the 2021 0.5% AEP and 0.1% AEP post development scenarios, flood extents are significantly reduced by the proposed scheme. During the 2121 design events, flood depths are generally predicted to decrease by up to 300mm.

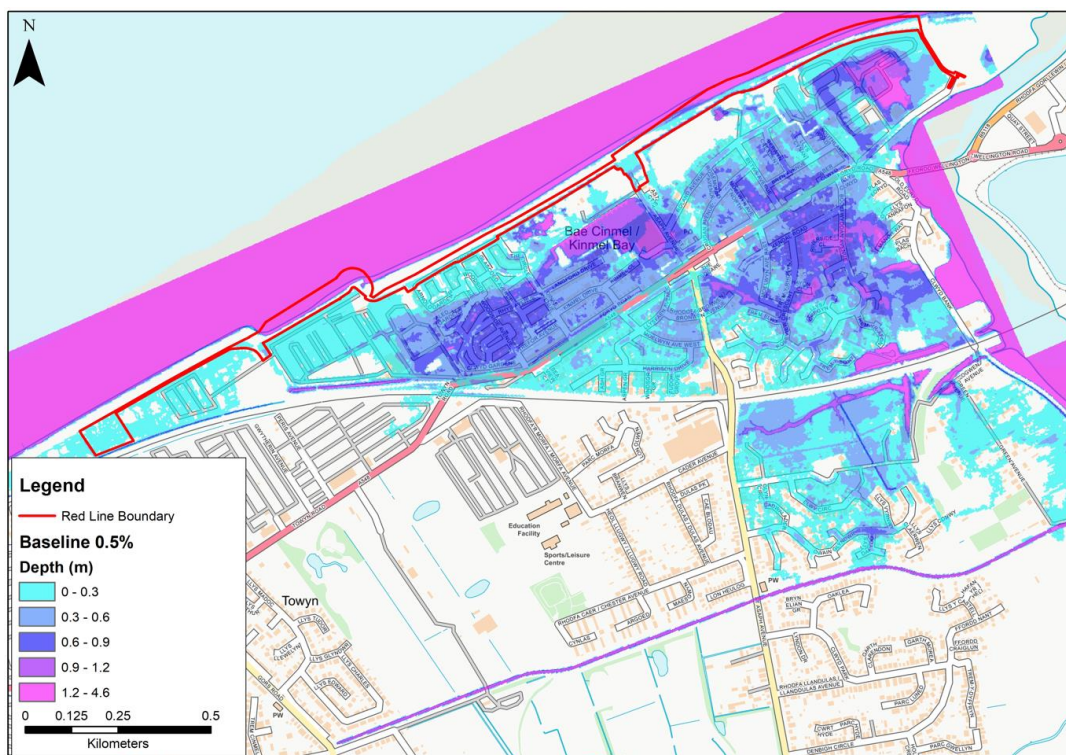


Figure 6-1: 2021 0.5% AEP Baseline Flood Extent

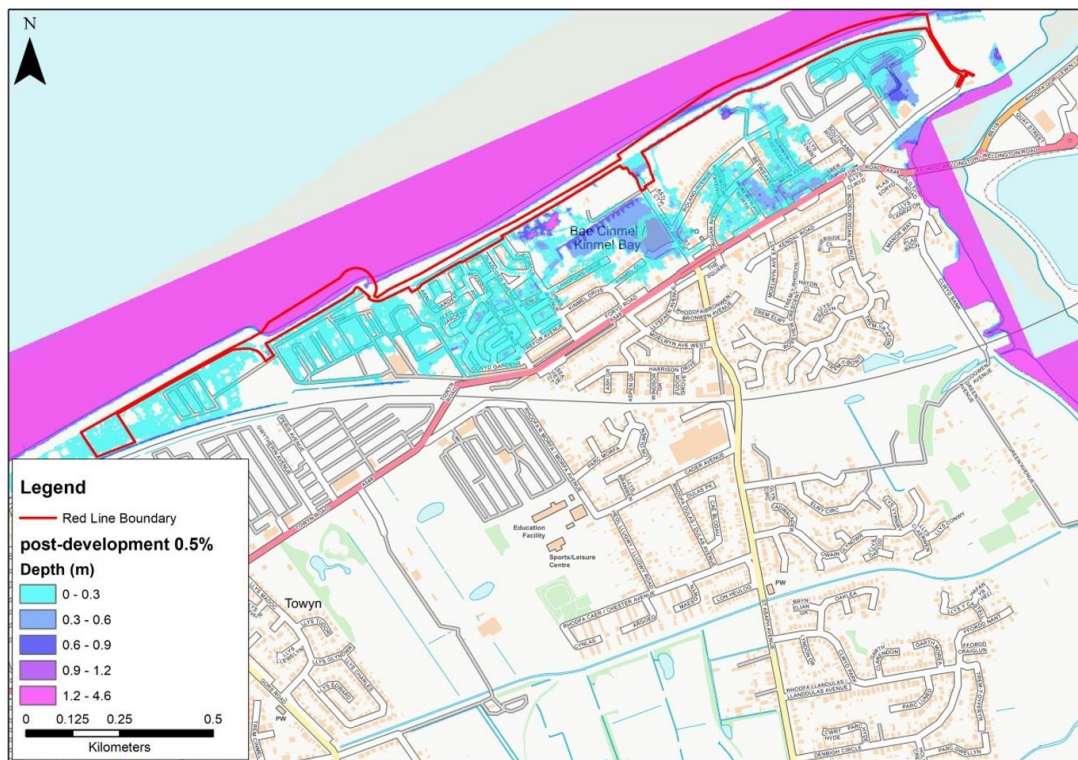


Figure 6-2: 2021 0.5% AEP Post Scheme Construction Flood Extent

As a result of the proposed Kinmel Bay coastal defence scheme, the risk of coastal flooding is reduced across the settlement. The scheme will support an adaptive strategy of future flood defence improvements to keep pace with rising sea levels and the impacts of climate change. It is concluded that the proposed coastal defence scheme complies fully with the policy requirements of PPW and TAN-15.

6.9 Heritage and Archaeology

A Heritage Desk Based Assessment (DBA) has been prepared for the scheme, along with Heritage Chapter 8 of the ES. The aim of the DBA is to determine (as far as is reasonably possible from existing records) the nature, extent, and significance of the historic environment within the study area of the application site. This allows identification of the impact of the proposed development on the significance of the historic environment (or to identify that further evaluation is required). It allows reasoned proposals and decisions to be made about whether to mitigate, offset or accept the impact without further intervention.

The DBA identified six designated assets, including five Listed Buildings and one Conservation Area, 43 non-designated assets, and five archaeological events within the study area. The assessment concluded that no heritage assets are considered likely to be physically impacted directly by the scheme and 14 heritage assets considered likely to be indirectly impacted by the scheme.

In terms of the impacts, these include construction related impacts, operational impacts, and scheme wide-operational impacts. The DBA identified that the scheme would have some minor adverse impacts on heritage assets (River Street Conservation Area. Nos 72-75 West Parade, Foryd Bridge, Post-medieval brick building at Foryd Harbour and Foryd timber yard wharf and quay). These impacts are temporary, indirect impacts because of the construction works. The impact once the scheme is operational is neutral.

The assessment also identified a low possibility of discovering buried archaeological remains on the foreshore within the site boundary. This potential can be managed through a toolbox

talk, the legal reporting of all archaeological discoveries (however found) and, if warranted, further licensed archaeological investigations.

Consultations will be undertaken with the appropriate advisory bodies, including CCBC and CPAT prior to construction to confirm the details of the proposed mitigation, detailed design, finishes and construction methodology.

The scheme is in line with PPW with regards to the historic environment and follows the best practice guidance set out in TAN24. It considers the historic built environment, ensuring that design and build quality will help protect, maintain and, where appropriate, improve on this quality in Conwy in line with spatial objective S012 and local plan policy CTH/1 to CTH/4.

6.10 Contaminated Land

A Contaminated Land Assessment has been undertaken and is set out at Chapter 9 of the ES. As part of the assessment a Phase 1 Contaminated Land Desk Study has been undertaken. The assessment considers the contaminated land baseline relevant to the scheme and assesses the potentially significant issues scoped in as part of the scheme. The assessment includes consideration of the risks to human health and environmental receptors associated with the proposed construction and operation of the scheme. The assessment identifies the predicted environmental effects and proposes management and mitigation measures to negate or minimise those effects.

The assessment has identified that most effects on receptors (these include human health, surface water, ground water, aquifers and ecology are likely to be negligible with no significant impact. However, during the construction phase of the proposed scheme, there is the potential for localised spillages of fuel, which may lead to contamination of the soils as well as being carried to surface watercourses, underlying groundwater and ecological receptors through surface run-off (i.e. leaching through the soil profile). Contaminants from fuel spillages are likely to occur on hardstanding areas, such as car parking. The proposed scheme will employ a CEMP, which will include measures to deal with issues, such as spillages of substances (i.e. oil, fuel, cement), and soil erosion or the generation of suspended solids during construction activities (i.e. through excavations and plant/wheel washing), and prevention measures, such as bunded storage; designated wheel washing areas etc.

By implementing the CEMP, all impacts are assessed to be negligible with no associated significant residual effects. It is therefore considered that the proposed scheme in line with section 6.9 of PPW.

6.11 Social and Economic Benefits

The Socio-Economic chapter of the accompanying ES (Chapter 10) sets out the social and economic benefits associated with the proposed development. In summary, tourism has been an integral part of North Wales's economy since the 19th century. Tourism is one of the most notable sectors of the Conwy local economy and a major sector (representing almost a quarter) in Kinmel Bay. However, unlike neighbouring sections of the North Wales coast, which have struggled to adapt to changing tourism practices, Conwy has benefitted from a pivot towards outdoor activities. Walking, cycling, windsurfing, and kayaking are popular at Kinmel Bay, as the geography of the coast lends itself to favourable water sports conditions.

The increased protection the scheme would offer Kinmel Bay should contribute to the area becoming a more attractive place to live and work, increasing the economic competitiveness of Kinmel Bay as an area, and helping the area to prosper in future. In this way, the proposed scheme can indirectly contribute to local employment levels.

The new defences would protect properties, businesses, and infrastructure from a 1 in 200-year coastal flood event, reducing the risk of flood damages to 726 residential and non-residential properties currently at risk, and 2,289 properties by 2121. The scheme would improve the environment and developed areas through protection thereby increasing community resilience and potentially reducing mental health impacts associated with fear of flooding. This will ensure Kinmel Bay remains a viable community now and in the future, in the face of ongoing climate change.

The proposed scheme therefore accords with PPW, as well as LDP policies SO1, SO2, SO8, SO10, SO12, DP/1 and TOU1 with respect to enabling delivery of substantial social and economic benefits to the betterment Kinmel Bay area. The economic benefits of the proposed scheme are therefore regarded acceptable.

6.12 Traffic and Transport

A Traffic and Transport Assessment has been prepared and is set out at Chapter 11 of the ES, further information is also set out within the Design and Access Statement. The assessment considers the construction and operational traffic implications of the scheme. It concludes that the scheme will not generate significant traffic movements beyond infrequent maintenance works. It acknowledges that there will be traffic generated by the construction of the scheme works, associated with material and plant delivery and staff accessing the sites. However, the potential impacts of the construction related traffic on the local highway network around the works sites are considered not to be significant. The construction traffic will be accommodated by the local highway network without resulting in adverse effects, and the environmental impacts of the scheme due to transportation are acceptable.

Any potential impacts are temporary and will be felt only during the construction works on the coastal defences. They will be mitigated through active community engagement under the Considerate Constructors Scheme. The public will be made aware of the proposed works in advance and the construction material delivery routes will be highlighted.

Additionally, it is acknowledged that the National Cycle Network Route 5 runs between Anglesey and Reading along the North Wales coastline and North Wales Coastal Path. NCN Route 84 joins NCN Route 5 in Kinmel Bay.

The scheme promotes sustainable travel through improvements to the North Wales Coastal Path and National Cycling route by improving accessibility and encouraging the use of the beach for exercise. Additionally, the works will also protect important rail infrastructure, again supporting sustainable travel.

The scheme therefore accords with the Welsh national and regional planning policies, the Welsh Active Travel Plan, as well as LDP policies DP1, STR1, 4 and 5, SO2, SO8, SO12, and TAN 18.

6.13 Noise and Vibration

The construction activities as a consequence of the coastal defence improvements, are close to noise sensitive residential and holiday let properties and have the potential to generate significant noise and vibration impacts. Therefore, a Noise and Vibration Assessment has been undertaken to assess the impacts and identify mitigation methods to minimise the impacts. A summary of the assessment follows, with full details of the assessment set out at Chapter 12 of the ES.

To determine the current environmental noise and vibration climate, baseline surveys were completed at two representative locations along the length of the proposed scheme, one at Golden Sands Holiday Park (Location A), and the other at Kinmel Bay Harbour Shipyard (Location B).

The construction phase of the development will inevitably generate noise due to plant, equipment and activities associated with the scheme proposals. However, the activities will be spread out along the length of the coast and sequenced accordingly. The works will be programmed to occur during daytime periods only, from Monday to Saturday, over an estimated 18-month period.

This a construction process that, once complete, will not result in any on-going processes or operations. Therefore, construction is the only element to be considered from a noise and vibration perspective.

6.13.1 Baseline Conditions

The results from the two locations indicate that the baseline ambient noise levels range between 49 LAeq dB to 51 LAeq dB. The primary noise climate for the application site is due to traffic noise from the nearby road network and the railway line, operated by Avanti West Coast.

The railway line is the main North Wales railway line linking Wales to England and as such is a busy route with train passage averaging 15 minutes in both directions, which was clearly audible at Location A.

The data presented is considered representative of the baseline conditions present for the relevant monitoring locations. The selected monitoring locations are deemed an appropriate sample of the closest sensitive receptors to the proposed development works and account for the various noise and vibration sources present within the area.

6.13.2 Noise and Vibration Assessment

British Standards BS 5228-1: 2009 +A1:2014, Parts 1 and 2, which deal with construction noise and vibration were consulted to determine the noise and vibration limits to be achieved at each noise sensitive location. This returned a daytime threshold value of 65 LAeq dB for each of the noise sensitive locations.

The assessment predicts that in most cases, even without any mitigation measures being applied, there will be no significant noise impacts in relation to construction of the scheme. However, there will be some limited construction operations exceeding the threshold values of 65 LAeq dB. These operations will adopt Best Practicable Means (BPM) (as defined in Section 72 of the Control of Pollution Act 1974) on site during the work to reduce construction noise levels. In addition, mitigation measures shall be utilised by the appointed contractor where possible, such as the use of noise barriers. Noise monitoring will be undertaken, in addition, pre-emptive communication with the residents by community liaison will take place to reduce the likelihood of potential complaints.

The vibration levels of the scheme will be limited in accordance with the requirements of BS5228:2009+A1:2014 Part 2. The vibration limit utilised will be 7.5mm/s when considered at any permanent structure, excluding static or mobile caravans. This limit represents 50% lower value than would be applicable to result in structural damage to residential or light commercial buildings. Where possible (and in agreement with the appointed contractor) a Giken press pile will be used to minimize noise and vibration which will not be noticeable to the nearest sensitive receptors when compared against the pre-existing baseline conditions and is not likely to give rise to complaints.

6.13.3 Noise and Vibration Summary

Mitigation measures will be deployed to minimise the impacts of noise and vibration during the construction works of the scheme to ensure there are no significant adverse effects. As such, the proposed development conforms to section 6.7 of PPW and TAN 12 with respect to preventing negative impacts on residential amenity and wider public safety from noise emission and vibration.

6.14 Public Rights of Ways (PRoWs) & The National Cycle Network

There are two PRoWs in Kinmel Bay (Towyn and Kinmel Bay Footpath 02 & 03) that lead to the coastal path adjacent to the scheme, and one PRoW between Kinmel Bay and Towyn (Towyn and Kinmel Bay Footpath 01 that forms part of The Wales Coastal Path, and Sustrans National Cycle Route 5 also runs through the site. There will be some temporary impacts to Footpath 09, The Wales Coastal Path and NCN Route 5 during the construction work. However, this will be managed on site by the approved Contractor to ensure minimal disturbance and in agreement with CCBC's PRoW Officer and Sustrans.

6.15 Construction

Outline construction methodology, with details of working hours and anticipated programme is set out at Chapter 2.6 of the ES and within the accompanying Design and Access Statement.

7 Conclusions

Coastal defence schemes that account for and adapt to future changes in sea level are necessary to mitigate against the impacts of these predicted rises. Without modifying and constructing defences to protect the coastal frontage at Kinmel Bay, coastal flooding will occur more regularly, resulting in damage to property and infrastructure as well as posing a threat to life.

Kinmel Bay Coastal Defence Improvements Scheme involves works to existing primary defences in the form of improved rock armour, raised sea walls and a new flood gate along 2.3km stretch of the coastline from Towyn Revetment to Kinmel Bay. The scheme will help to protect the number of properties and critical infrastructure at risk of flooding in current climate conditions, but also in the future, as flood events are likely to increase with climate change projections, increased sea level rise and storminess.

The scheme will protect properties, businesses, and infrastructure from a 1 in 200-year coastal flood event, reducing the risk of flood damages to 726 residential and non-residential properties currently at risk, and 2,289 properties by 2121. The scheme would improve the environment and developed areas through protection thereby increasing community resilience and potentially reducing mental health impacts associated with fear of flooding. This will ensure Kinmel Bay remains a viable community, where tourism can continue to thrive now and in the future, in the face of ongoing climate change.

As part of the scheme, opportunities for social, economic and environmental benefits are to be maximised through public realm improvements and ecological enhancements designed to marry the technical requirements of flood defence with placemaking and other opportunities, such as accessibility, sociability, biodiversity, health and well-being and economic regeneration benefits.

Throughout the design and development of the scheme, a range of technical supporting surveys and reports have been undertaken to assess the impact of the development upon the environment. Overall, there are no significant or permanent impacts that would outweigh the overriding, strategic benefits of the scheme in terms of long-term flood risk betterment, enhancement of climate change resilience alongside public realm improvement, and ecological enhancements.

The benefits described within this statement illustrate that the proposed development is fully in accordance with national, local, and regional planning policies and strategies. As such, it is considered that there is a compelling case for this flood defence scheme, and that there are no sound reasons why planning permission should not be granted.

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