

Kinmel Bay Coastal Defence Improvements Scheme

Design and Access Statement

Final Report

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ameyconsulting

LD&DESIGN

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Contract

This report describes work commissioned by Amey Consulting, on behalf of Conwy County Borough Council. Jennie Steele of JBA Consulting and Scarlett Towse of LDA Design carried out this work.

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Purpose

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Abbreviations

CCBC	Conwy County Borough Council
CMU	Coastal Management Unit
EIA	Environmental Impact Assessment
ES	Environmental Statement
JBA	JBA Consulting
LNR	Local Nature Reserve
OBC	Outline Business Case
PAC	Pre-Application Consultation
PRoW	Public Right of Way
SSSI	Site of Special Scientific Interest
SPA	Special Protection Area

1 Introduction

1.1 Report Purpose

JBA Consulting (JBA) has been commissioned by Amey on behalf of Conwy County Borough Council (CCBC) to prepare a Design and Access Statement.

This report supports a full planning application for a scheme of works to improve flood defences along the coastline at Kinmel Bay. The scheme is submitted to CCBC as the determining Local Planning Authority.

This Design and Access Statement details:

- The context of the scheme
- The development site
- A description of the works
- The development of the scheme
- Who has been consulted
- The design of the coastal defences, public realm improvements, and ecological enhancements
- The access arrangements proposed
- The construction methodology and impacts.

This statement should be read in conjunction with the documents and drawings submitted as part of the planning application.

1.2 Context

The Kinnel Bay Coastal Defence Improvements Scheme covers a 2.3km stretch of North Wales coastline in Conwy. Figure 1-1 shows the extent of the scheme (there are no permanent works west of Golden Sands caravan park). The existing flood defences along this coastline are frequently overtopped by waves, which is flooding nearby homes and local infrastructure. Furthermore, climate change will increase risk of flooding. The current coastal defences' design will not protect from predicted sea level rise and increased storminess. Risk from a 1 in 200-year flood event goes from impacting 892 properties in 2021, to 3,335 properties in 2121 in these areas. Figure 1-2 shows the extent of flooding for a 1 in 200-year event occurring in the year 2121 if defences are maintained as present, including impact from sea level rise (but excluding impact from the River Clwyd).



Figure 1-1: Extent of Kinnel Bay Coastal Defence Improvements Scheme

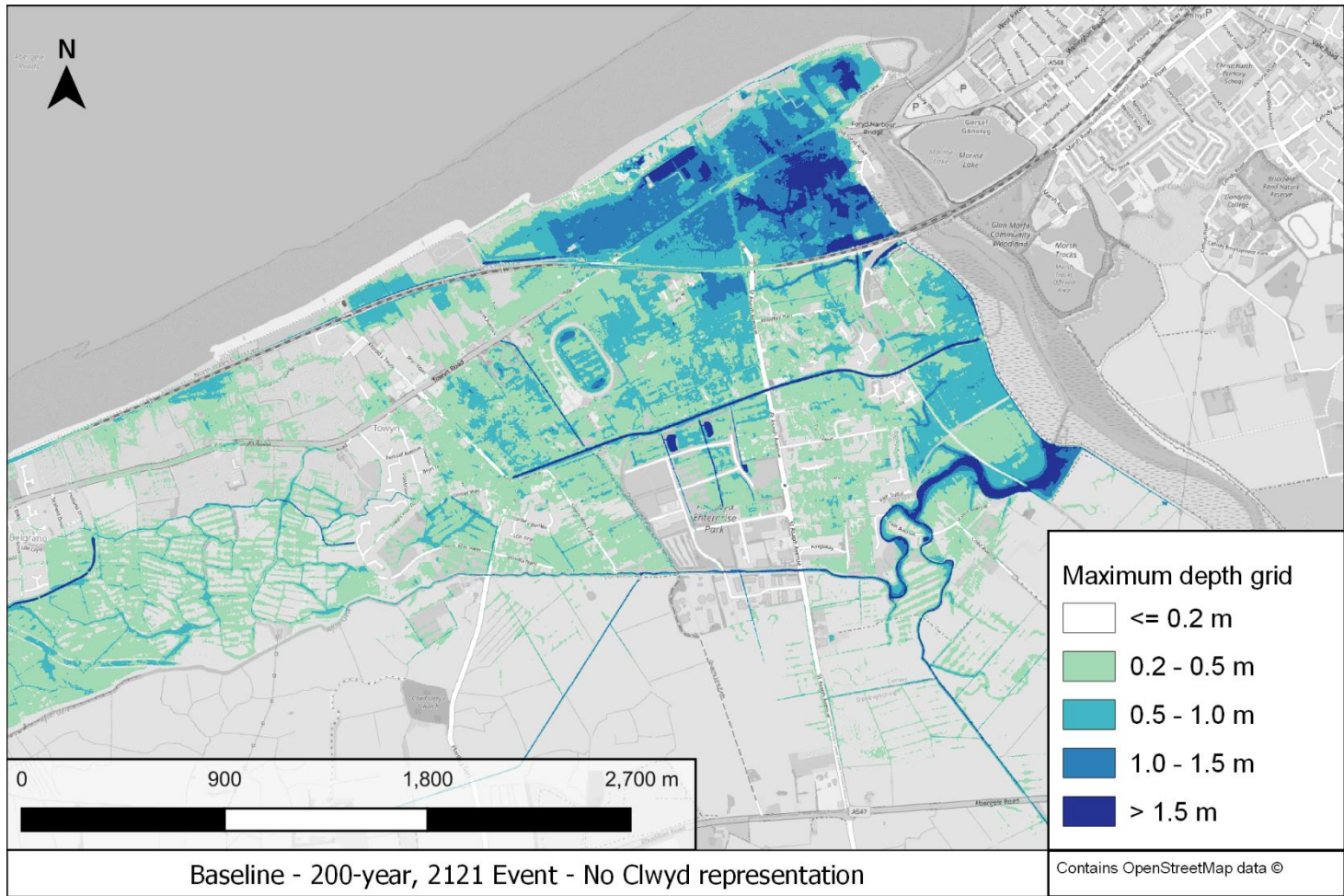


Figure 1-2: Map showing extent of flooding for a 1 in 200-year event in 2121, including sea level rise and assuming minimum maintenance is carried out on existing flood defences

CCBC have proposed the Kinmel Bay Coastal Defence Improvements Scheme to improve and extend flood defences, upgrade the public realm, and provide ecological enhancements at various locations along 2.3km section of this North Wales coastline. After

permissions and consents are in place, the scheme will be put forward for funding from the Welsh Government Coastal Risk Management Programme to cover 85% of the construction costs. CCBC will fund the remaining 15%. The scheme will reduce flood damages to 726 residential and non-residential properties currently at risk if nothing is done, and 2,289 properties in 2121. Figure 1-3 shows the improvement to flood risk that the scheme offers in the same scenario: a 1 in 200-year coastal flood event in the year 2121 including sea level rise (excluding impact from the River Clwyd).

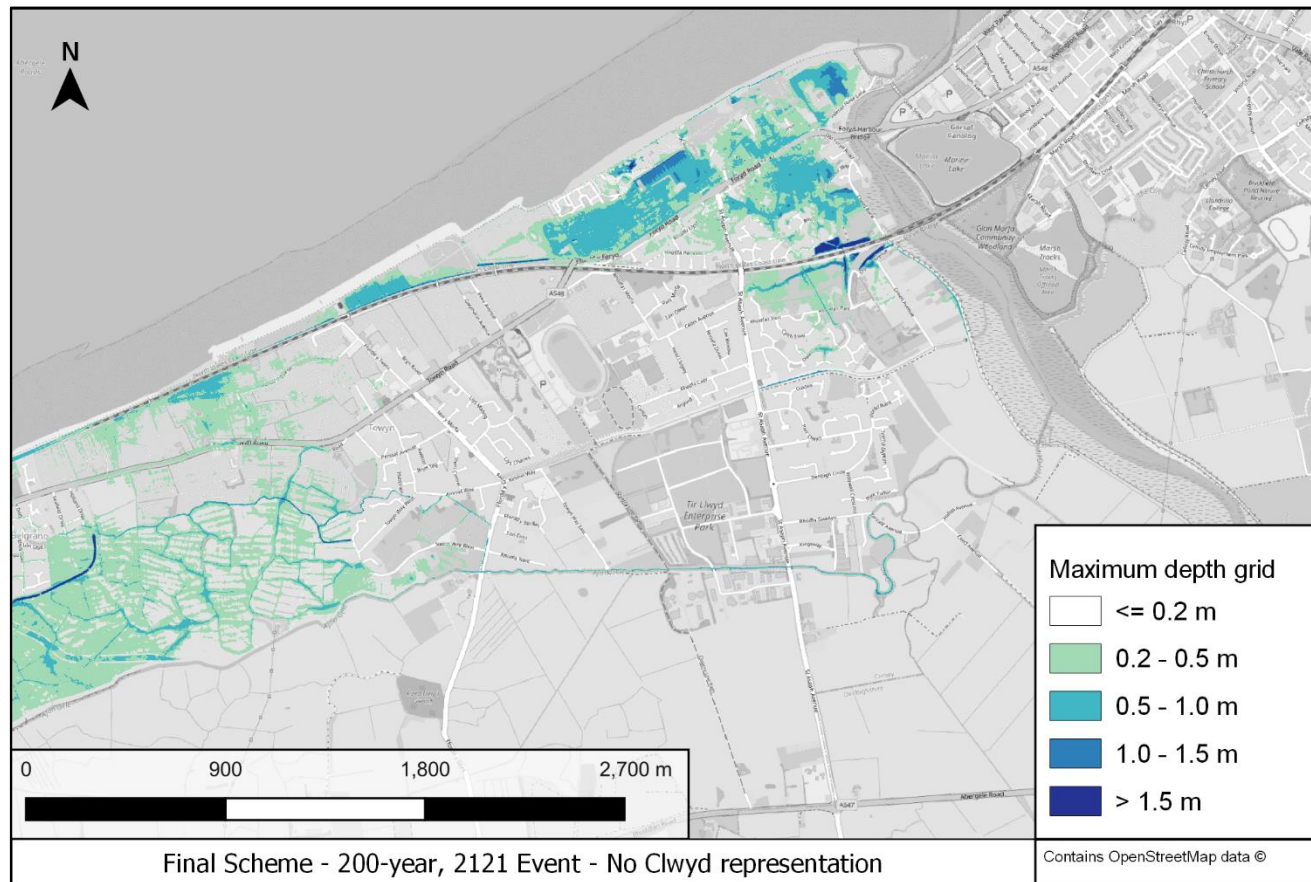


Figure 1-3: Map showing extent of flooding for a 1 in 200-year event in 2041, including sea level rise, with the scheme fully operational

2 Development Site

2.1 Location

There are proposed works between Towyn Revetment along the coastline to Kinmel Bay East. See Figure 1-1 for the application's red line boundary, detailing the exact extent of land required to undertake the works.

2.2 Site Description

The stretch of coastline at Kinmel Bay is characterised by sandy and pebble beaches, with a continuous path that forms part of the North Wales Coastal Route (Figure 2-1). Existing flood defences along this stretch of coastline are made up of rock armour, cobbled beaches, sea walls and flood gates.

There is an abundance of nature, with many coastal bird species, sea mammals (including seals, porpoises and dolphins) and other ecology and habitats. Kinmel Bay Local Nature Reserve (LNR) is adjacent to the site, and approximately 5km west of the site is the Traeth Pensarn Site of Special Scientific Interest (SSSI). Liverpool Bay Special Protection Area (SPA) is also sited 17.5km north, offshore of the proposed development site.

The Welsh language is a key part of the region's culture and identity; the 2001 census recorded 10.7% of the Kinmel Bay and Towyn population as Welsh speakers. The economy was historically based on local agriculture. Now, tourism is a major element of the economy. There are a number of caravan parks along the coastline, and thousands of visitors every year are attracted by the natural scenery, beaches, coastal path, and other tourist attractions close by such as the Gwrych Castle ruins. The A548 road and a railway line (with a train station at Abergele and Pensarn) follow the coastline.



Figure 2-1: The coastal path and holiday caravans at the development site

3 Proposed Development

3.1 Scheme Description

The scheme includes several proposals to protect against rising sea levels and increased storminess at Kinmel Bay, as well as improving the public realm and environment. There are elements of the work that would be 'permitted development' (therefore not needing a planning application) as a council scheme. However, all proposals have been included in the planning application for completeness. A summary of interventions is provided below.

Coastal defence improvements including:

- Raised and widened rock armour defences
- Raised sea walls
- Replaced flood gate and re-profiled land levels

Public realm improvements including:

- Improved and new access points between the coastal path and the beach
- Widened coastal path
- New parklets, street furniture and shelter with art displays
- Car park improvements at Sta Asaph Avenue (also known as Kinmel Bay Car Park)

Ecological enhancements including

- Reinstated sand dunes, and scrub and habitat and vegetation management
- Coastal wildflowers and improved grassland
- Textured rock armour to encourage colonisation of marine invertebrates
- Rain gardens, lawn, and tree planting

More details about the proposed coastal defence improvements, public realm improvements and ecological enhancements are laid out later in this document, and are detailed in more depth in the Environmental Statement. Additionally, details of design solutions that were considered (but rejected) are set out in later sections of this report and in more detail within the Environmental Statement.

4 Project Evolution

4.1 Options Appraisal

A flood benefits appraisal was undertaken within the Outline Business Case (OBC) for a long list of options that could reduce flood damages along an 11m stretch of coastline between Llanddulas and Kinmel Bay. In summary, the long list of options included: 'Walkaway' (where nothing is done), 'Business As Usual' (where periodic maintenance is carried out), wall raising, set back walls, beach recharge, revetment, and groynes. As there could be no 'one-size-fits-all' solution, the options were considered for each segment of the coastline, split into Coastal Management Units (CMUs).

4.2 Shortlisted Options

The long list of options was considered in detail, but several options were rejected as either not deliverable or unlikely to provide additional benefit over the anticipated increased cost.

The subsequent short list of options for the extended length of coastline is summarised below. These options explored solutions including installation of rock armour, set back flood walls, raised sea defences, beach recharge and groynes. They were finalised based on the review of overtopping rates, risk of breach and sensitivity to climate change. All the options would provide long-term protection and minimise the erosion issues along the whole study area. Environmental constraints were also considered.

The identified short list of options:

- 1 Walkaway
This scenario assumes flooding frequency will not increase and also that no maintenance or improvements are carried out on the existing defences. It represents significant risk of breach, and no repair following a breach.
- 2 Business As Usual
This scenario assumes defences are maintained to their current defence standard by regular monitoring and maintenance, including repairs when breached.
- 3 Soft Engineering Option
This maximises the use of beach recharge to protect the area with a wider dissipative beach. It would be supported with hard structures where the beach recharge alone would not be sufficient to provide the required protection e.g. toe rock protection and set back walls. With the implementation of this option, the amenity value of the site would be largely promoted.
- 4 Hard Engineering Option
Minimising the need for ongoing maintenance over its lifetime, this option uses hard structures to reduce flooding and coastal erosion. These could include raised seawall crests, a secondary defence wall and improved and new armour to reduce overtopping.

5 Mixed Engineering Option

This combines approaches in Option 3 and 4, minimising the amount of maintenance while providing amenity benefit.

4.3 Preferred Option

The five options were assessed against the sustainability and well-being goals in the Well-being of Future Generations (Wales) Act. Economic performance assessments were also carried out, measuring the flood damages avoided for each option and critical success factors.

The Walkaway and Business as Usual Options provided no reduction in risk to life and property and were subsequently discounted. Although the Soft Option provided a significant reduction in flood risk, its performance was not as good as the Hard and Mixed Options. For this reason, the Soft Option was discounted. The performance of the Hard and Mixed options was very similar in terms of reducing flood risk, with the Mixed Option performing slightly better. However, the cost of delivering the Mixed Option is considerably higher, resulting in reduced value for money. For this reason, the Mixed Option was discounted.

As such, the preferred option was identified to be the Hard Engineering Option (Option 4). This option involves wall raising, new flood walls, rock armour and beach recharge at specified locations throughout the 11km coastal frontage assessed. It has been designed to avoid significant obstruction of views, whilst reducing the number of properties at risk of flooding. This option has the greatest cost : benefit ratio, the lowest present value cost and maintenance cost, and can improve the amenity of the seafront to act as a regeneration catalyst.

Scheme objectives:

- 1 Provide a solution that mitigates the risk from coastal flooding with the effects of climate change (200-year standard of protection until 2041)
- 2 Ensure the views of the coastline are not compromised from both the coastal path and surrounding properties
- 3 Deliver a sustainable solution that considers the local environment and ecology

4.4 Preferred Option Verification

Following the completion of the OBC in 2021, new more detailed design modelling was undertaken for the Full Business Case (FBC) in September 2022. This was undertaken 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, Abergale and Llanddulas.

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.

5 Stakeholder Engagement

Below is a summary of engagement carried out at the main stages of the project development prior to planning submission.

5.1 Outline Business Case Stage

During the preparation of the Outline Business Case (OBC), CCBC organised a series of consultation events to present the long list of options being considered. These sessions included:

- Kinmel Bay Town Council presentation (11 June 2018)
- Abergele Library drop-in session (4 July 2018)
- St David's Community Centre Prestatyn drop-in session (5 July 2018)
- Kinmel Bay Library drop-in session (6 July 2018)
- Abergele Town Council presentation (20 September 2018)
- Local Area Forum meeting (10 January 2019)
- Kinmel Bay Library drop-in session (6 March 2019).

A variety of individuals attended these sessions and meetings, including local residents and local Councillors. Once the preferred option had been chosen, further consultation was undertaken:

- Formal public consultation event (6 March 2019)
Included a variety of display material to inform local residents.
- Meetings with leaseholders of Rhyl Yacht Club
Club provided information about their future developments to consider impacts.
- Consultation with Abergele Town Council
Abergele Town Council provided information about the development of their Pensarn Beach Masterplan, which includes making a portion of the coastline a desirable tourist designation with improved amenity and recreational facilities.

5.2 Detailed Design Stage

Appendix A contains a comprehensive log of meetings and discussions with stakeholders that helped to shape the detailed design. Stakeholder consultation included (but was not limited to) meetings with:

- CCBC Planning
- Natural Resources Wales
- CCBC Strategic Planning and Communities

- Local councillors

5.3 Rescoping

The proposed scheme as originally presented for Environmental Impact Assessment (EIA) screening and scoping was based on CCBC's Outline Business Case (OBC) completed in January 2021. This scheme extended from Llanddulas to Kinmel Bay; the redline boundary can be seen in Figure 5-1.



Figure 5-1: Original extent of scheme as presented for EIA screening and scoping

Detailed design modelling was undertaken at the Full Business Case (FBC) stage (September 2022) to verify that the outline design 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 high 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, as presented in this planning application.

5.4 Pre-Application Consultation Stage

Pre-Application Consultation (PAC) is taking place from 22 November 2022 to 20 December 2022. During this time, there will be a public information event at:

- Towyn and Kinmel Bay Town Council Community Resource Centre (8 November 2022, 3pm-7pm)

Site notices have been put up on and around the site, including in caravan parks, advertising the PAC period and inviting comments. Properties adjacent to the red line boundary have received written notice of the PAC period. A hard copy of the application is viewable at Kinmel Bay Library.

When this planning application is submitted, a PAC report will be provided which will detail the responses from the public, community consultees, and specialist consultees.

6 Design Analysis

6.1 Character Areas

In-depth analysis of the current situation at the development site was undertaken prior to the design of the scheme. Across the 2.3km, four different character areas have been identified (Figure 6-1).

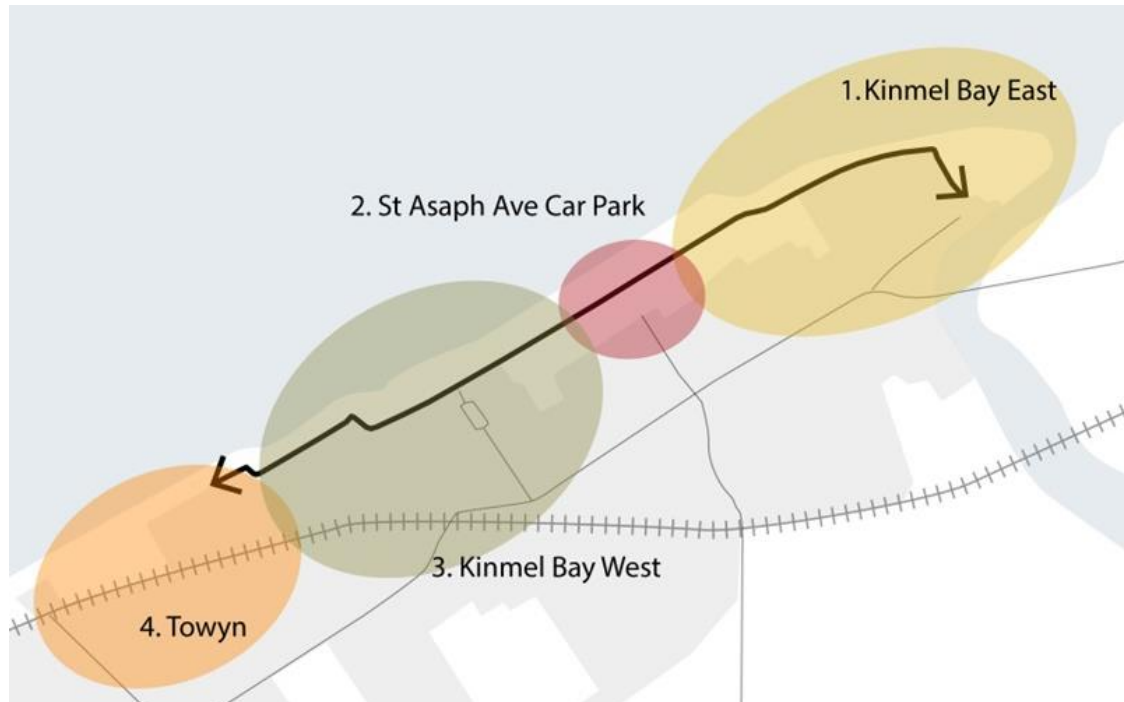


Figure 6-1: Character areas identified over the development site

- 1 Kinmel Bay East: Characterised by adjacent nature reserves (Norton's Nose and Kinmel Bay Dunes), small dunes on the beach, easy access to surrounding community.
- 2 St Asaph Avenue Car Park: Busy- active environment, café/kiosks, accessible, long-distance views, wide coastal path
- 3 Kinmel Bay West: Characterised by open vistas, adjacent nature reserve, easy access to surrounding community.
- 4 Towyn Revetment: Segregated promenade from the beach, windy, man-made/concrete environment, fun fair.

6.1.1 Coastal Defences Analysis

The coastal defences along this stretch of coastline are all in varying conditions. Significantly, they do not account for projected sea level rise and increasing storminess.

The present coastal defence at Towyn Revetment, on the frontage at Golden Sand's caravan park, includes a large rock armour revetment. The rock armour is currently in a good state of repair but does not take sea level rise or increasing storminess into account.

The coastal defence along the frontage at Kinmel Bay Beach includes a sea wall to the west with no rock armour, and a sea wall with rock armour protection to the east. The present section of rock armour along the eastern side has an established vegetated sand dune system which offers a vital coastal habitat. The western sea wall is currently too low to offer sufficient coastal flood protection.

6.1.2 Public Realm and Landscape Analysis

There are three main hubs of facilities which are either adjacent or within the site boundary of this project: Rhyl Harbour, St Asaph Avenue Car Park and Sandbank Road, Towyn. Each of these locations have different facilities and are in various states of condition. The Towyn and Kinmel Bay Place Plan has proposals for improvements St Asaph Avenue Car Park area. This project seeks to support these proposals where possible. The project team have met with the Place Plan team to discuss the proposals. Figure 6-2 depicts the location and type of facilities found across the project area.

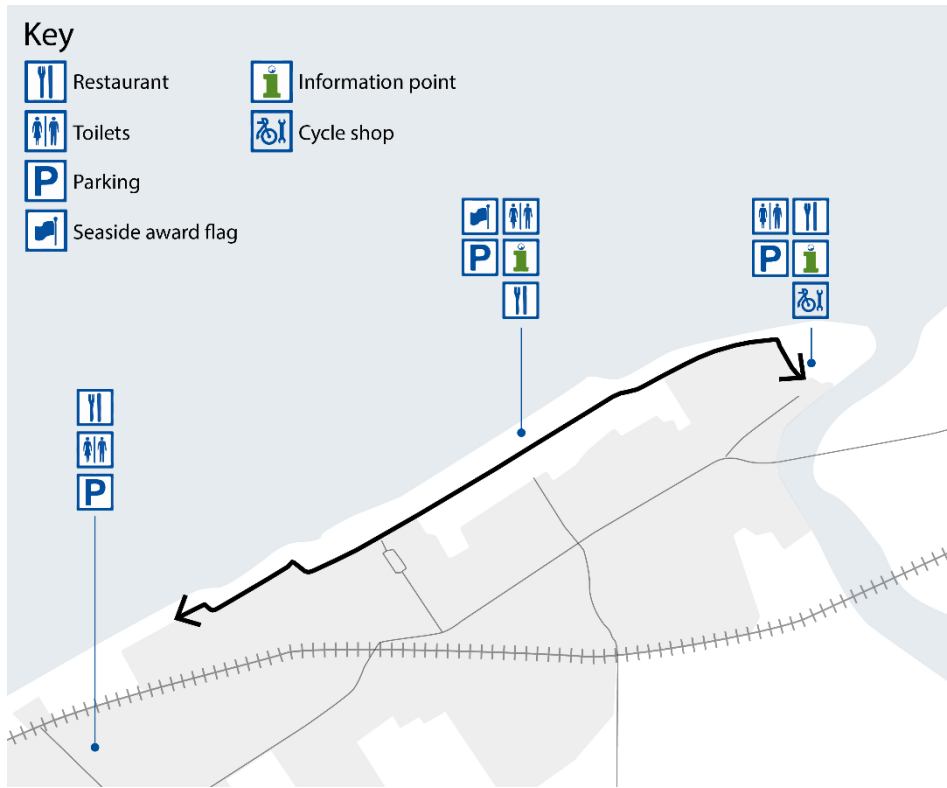


Figure 6-2: Analysis of existing facilities along the coastline

6.1.3 Environment Analysis

The Kinmel Bay coastline is important for many coastal habitats and species.

The expansive sandflats and mudflats provide food and resting opportunities for internationally important bird species, many of which are protected by the nearby Liverpool Bay SPA off the coast. The offshore open water provides further habitat for bird species such as Red Throated Diver and Common Scoter. Marine mammals, including Grey Seal, Common Porpoise and Common Dolphin, forage in the open water in front of the bay, and it is also important for many fish species. The Kinmel Bay LNR (located on Figure 6-3) has shifting dunes that provide a habitat for rare plant species, invertebrates, and reptiles.

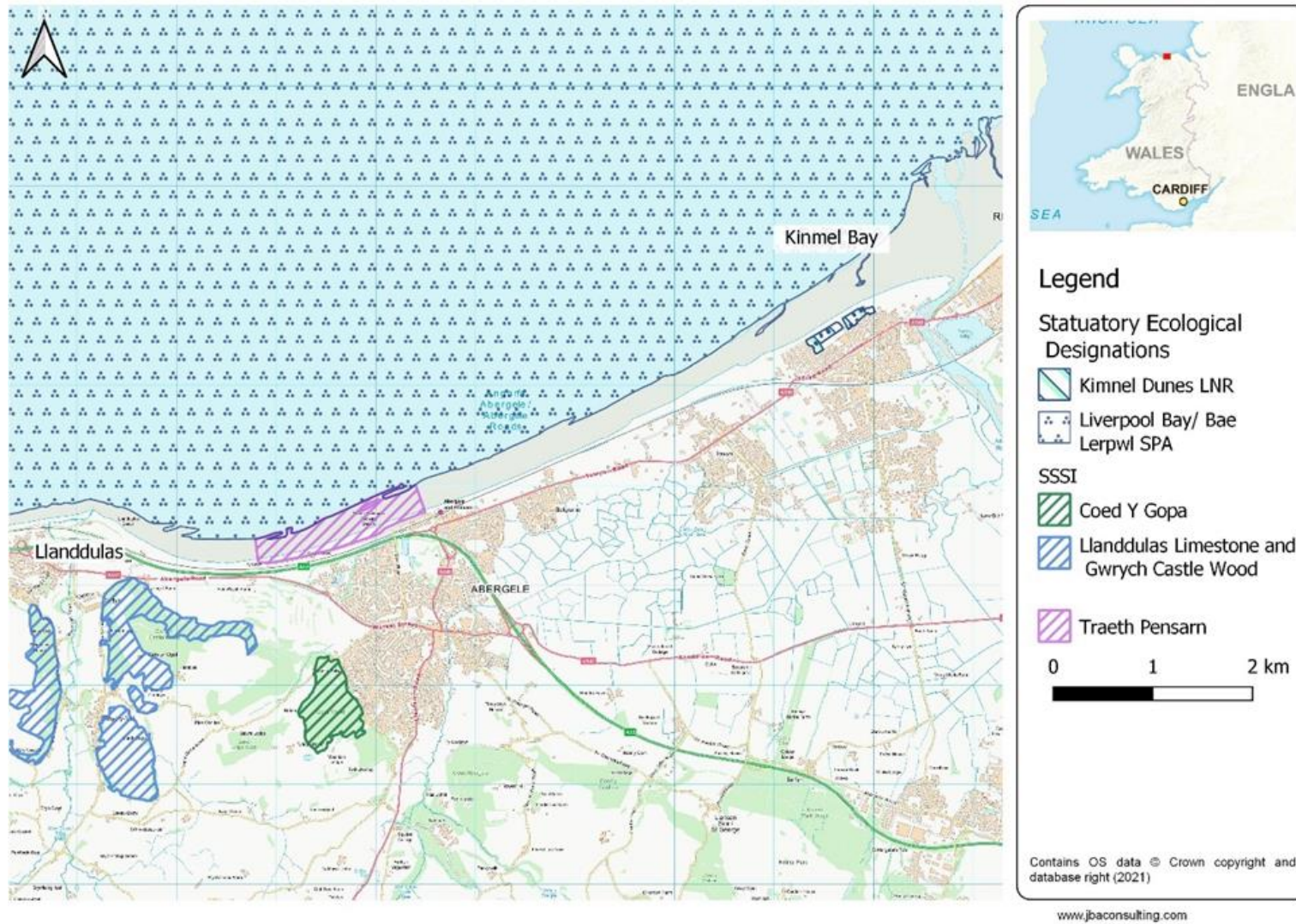


Figure 6-3: Location of Kinmel Bay Local Nature Reserve, Liverpool Bay SPA, and Traeth Pensarn SSSI

7 Design Proposals

7.1 Coastal Defence Proposals

The coastal defence solutions have been tailored to the localised geography of the 2.3m stretch of coastline. The sea wall will be raised along the coastline, and rock armour improvements are proposed at Towyn Revetment and Kinmel Bay East.

7.1.1 Towyn Revetment

This section will have increased rock armour and a raised sea wall (extending upwards by approximately 0.75m/2.5 feet). Adapting the existing rock armour and sea wall will minimise cost and size of the defence. See Figure 7-1 for a cross section of the proposal at this section.

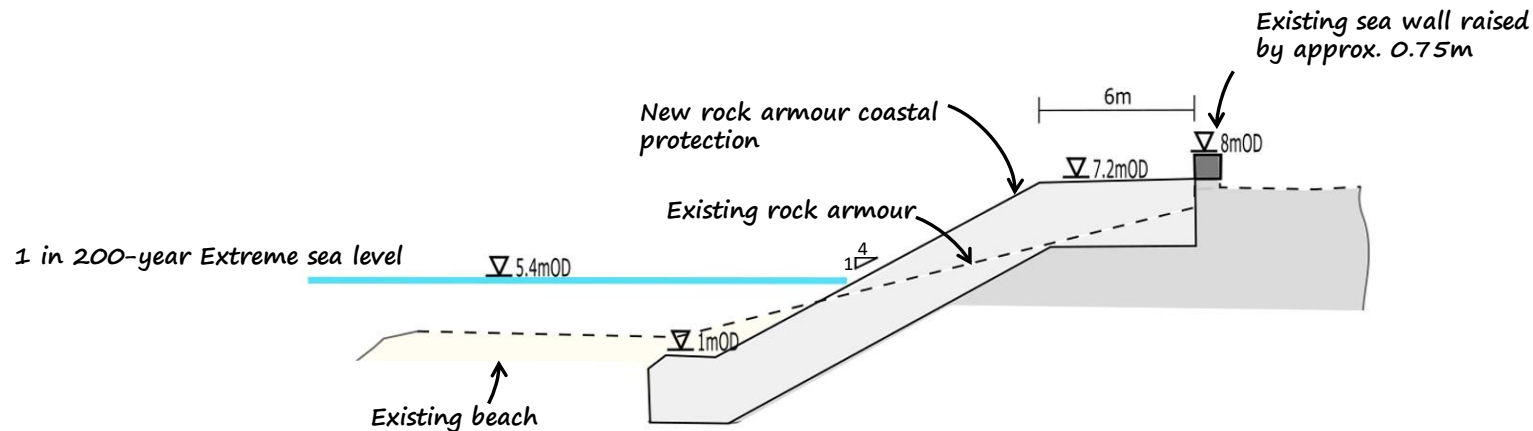


Figure 7-1: Cross section of improved rock armour and raised sea wall at Towyn Revetment

7.1.2 Kinmel Bay Beach West

Again, defences proposed in this area will adapt existing structures by raising the sea wall by approximately 0.5m/1.6 feet. The car park by St Asaph Avenue will have an upgraded/replaced flood gate at the same height as the sea wall, and the level of the entrance to the car park will be re-profiled. This localised change in elevation will prevent flood water from entering the tow; it will return to the sea by flap gates. See Figure 7-2 for a cross section of the proposal at this section.

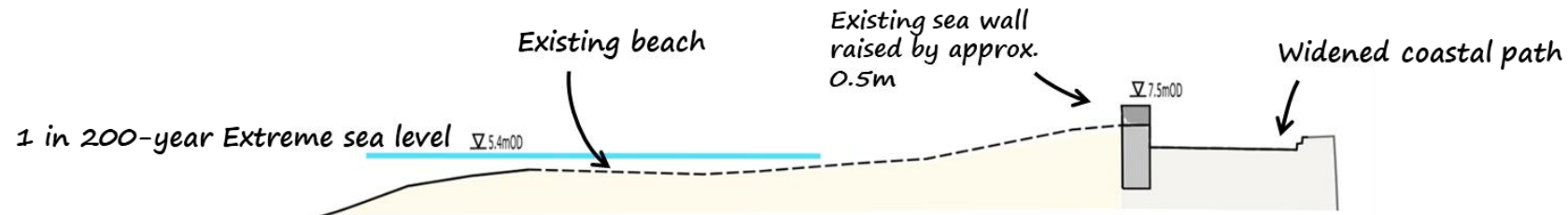


Figure 7-2: Cross section of raised sea wall at Kinmel Bay Beach West

7.1.3 Kinmel Bay Beach East

Rock armour will be raised and widened, and the sea wall will be raised by approximately 0.5m. The length of the new rock armour will be approximately 420m. Sand dunes will also be reinstated east of the car park where necessary. See Figure 7-3 for a cross section of the proposal at this section.

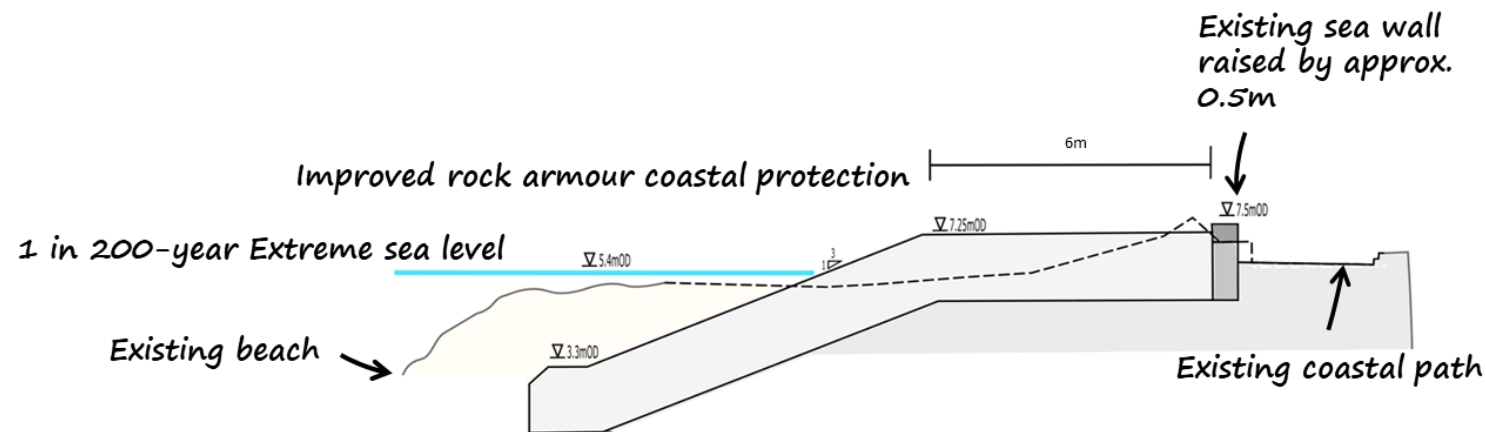


Figure 7-3: Cross section of upgraded rock armour and raised sea wall at Kinmel Bay Beach East

7.2 Public Realm and Landscape Proposals

The public realm proposals aim to marry the technical requirements of flood defence with placemaking and other opportunities such as sociability, biodiversity, health and well-being, and economic regeneration. More specifically, the proposals relating to public realm and landscape aim to:

- Improve the accessibility of the beach for all users and abilities
- Improve and upgrade the pedestrian and cycle facilities and amenities along the route
- Provide an attractive route that promotes active travel
- Improve biodiversity and climate resilience
- Integrate different types of seating and informal play
- Reduce the landscape and visual impact of the proposed flood defence
- Provide a site-specific response relating to local landscape character

A wider review of existing facilities along the coast path was carried out as part of this project and additional areas for improvement have been identified. These are typically areas that comprise facilities that are no longer fit for purpose, and sit outside of other projects already underway. For example, there are already proposals to revitalise the kiosks at St Asaph Avenue Car Park. Therefore, this scheme does not address these projects, but looks to support them.

The following improvements, which are shown on a map in Figure 7-4, have been identified to support a lively and attractive coastal environment for the existing community and thousands of visitors that spend their leisure time here:

- New toilet facilities that include a gallery shelter that can house artwork as part of Oriel Môr's coastal gallery project
- Improving St Asaph Avenue Car Park
- Providing a further shelter from poor weather

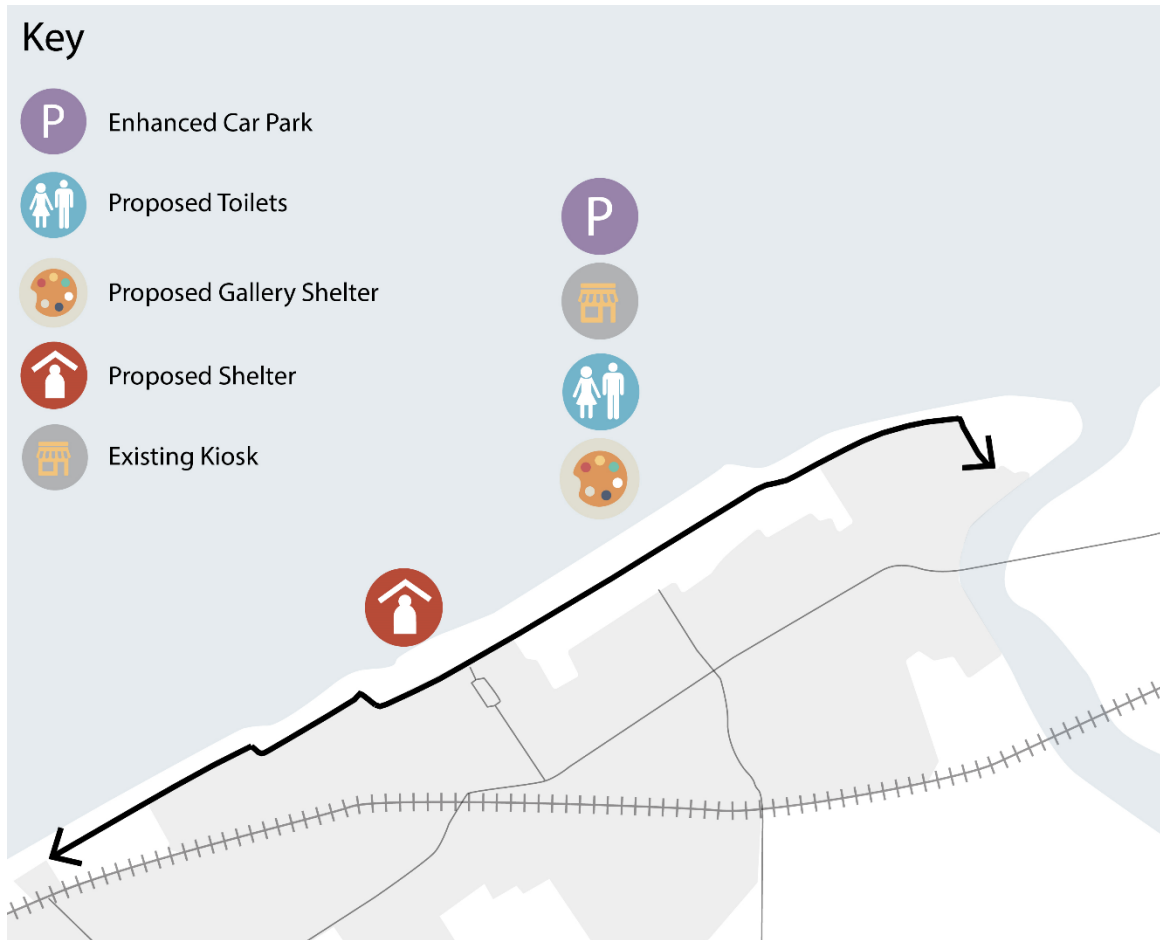


Figure 7-4: Proposed facilities along the coastline

7.2.1 Rest Areas and Parklets

The public realm and facilities proposals will improve the St Asaph Avenue Hub, and create two more key areas of public realm as mini park spaces (parklets) for public benefit. The core improvements are located at key junctions of the project. These parklets and hub include seating, informal play opportunities and ecological enhancements. There is a further informal rest area proposed at Kinnel Bay East where the public can sit and enjoy the views and local environment. All proposed furniture will be robust, low maintenance and suitable for the coastal environment. Figure 7-5 shows the location of each of these public realm proposals.

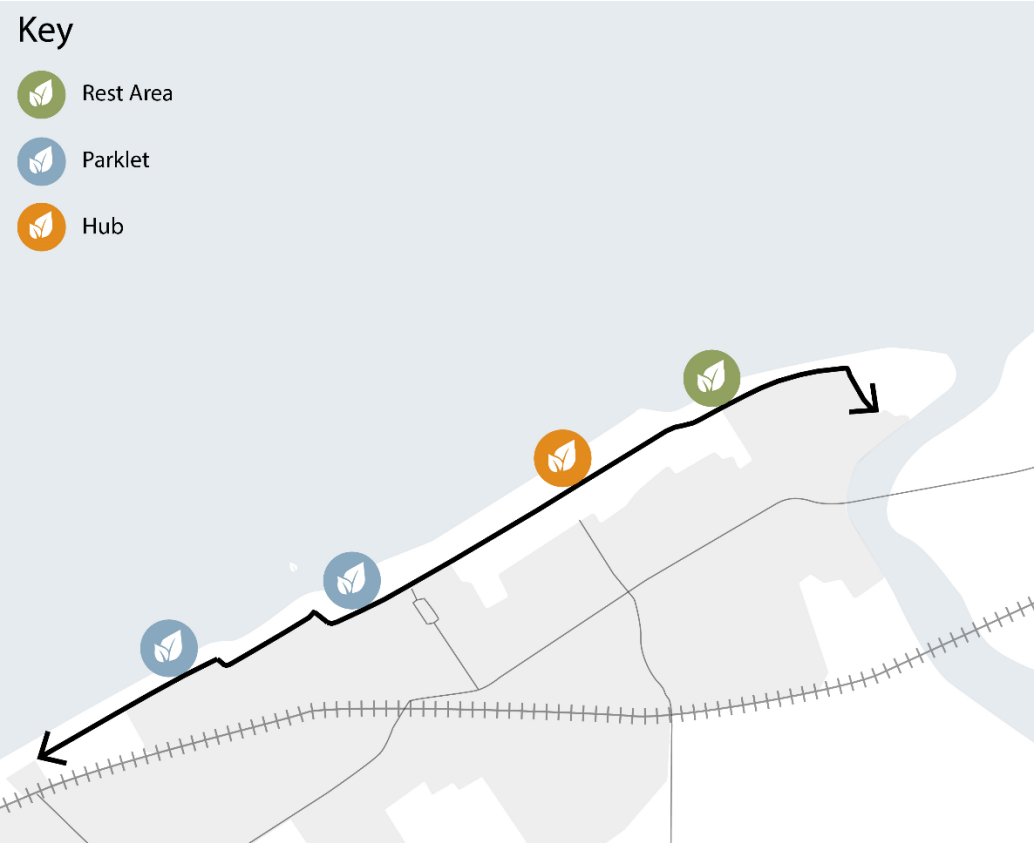


Figure 7-5: Proposed rest areas and parklets along the coastline

Towyn Revetment Parklet: Located on the western end of the Towyn Revetment, two lounge seats and a pair of picnic tables overlook the improved rock armour towards Kinmel Bay (Figure 7-6).

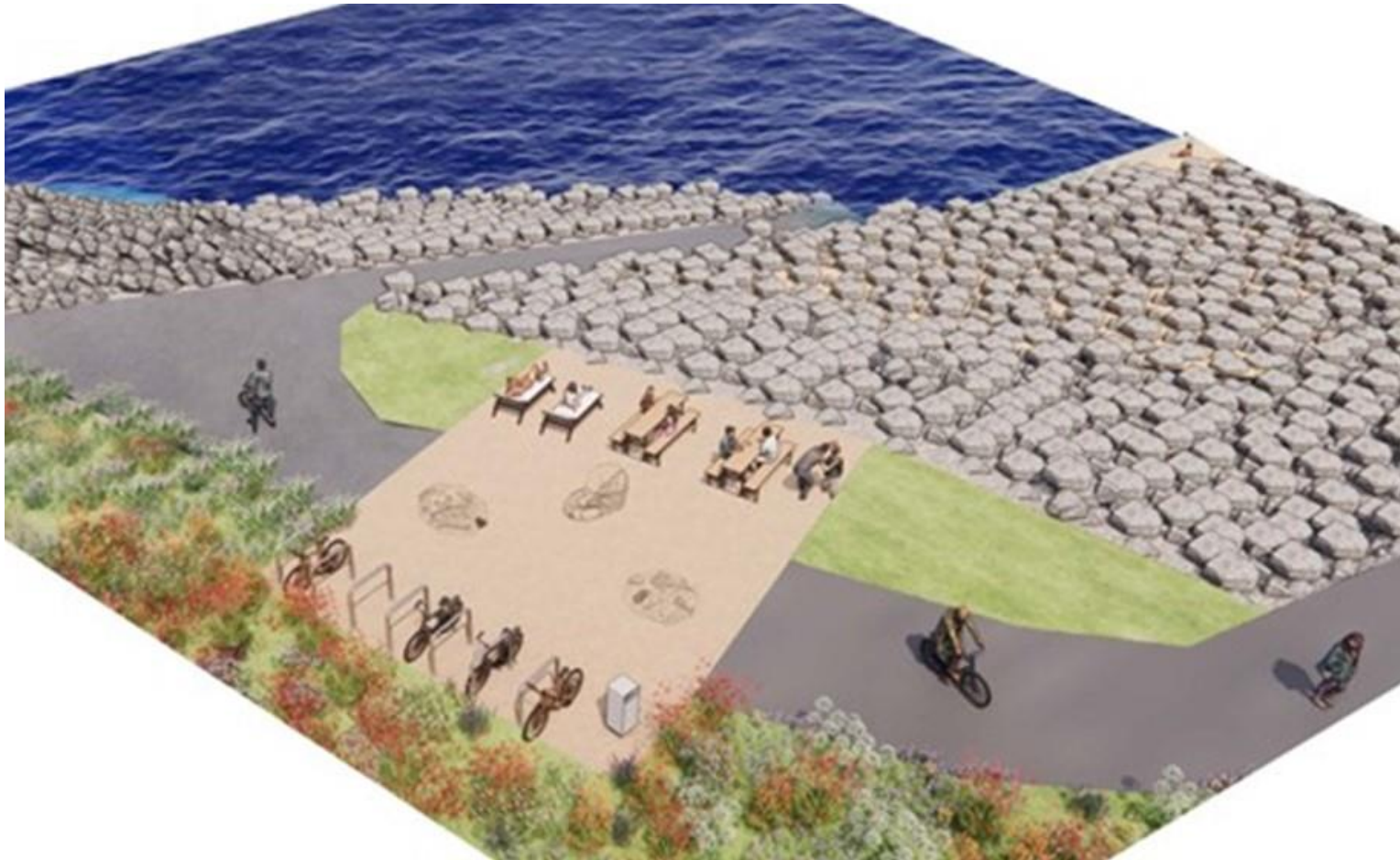


Figure 7-6: Indicative visualisation of proposed Towyn Revetment Parklet

Kimmel Bay West Parklet: Located close to the local community, this parklet provides a space to rest and play (Figure 7-7). A small shelter provides protection from the elements. The proposals include cycle parking, electric bicycle charging, and a cycle repair station. On the opposite side of the shelter, there are two lounge seats by a small piece of play equipment. On the opposite side of the shelter, there are two lounge seats by a small piece of play equipment.



Figure 7-7: Indicative visualisation of proposed Kimmel Bay West Parklet

St Asaph Avenue Hub: This is the main access point to the beach for both the Kinmel Bay and Towyn communities. There are several kiosks in this area and the proposals retain them and improve the area around them (Figure 7-8). This project proposes a small new building which will house new toilet facilities and a gallery shelter – a covered area which will provide space for Oriel Môr to display artwork. Oriel Môr has worked with the project team to develop the design of this shelter to ensure it is fit for purpose and meets requirements to display local artworks or historical images. This hub will also provide additional cycle parking, electric cycle charging facilities, cycle maintenance station, picnic tables, seating and play equipment.



Figure 7-8: Indicative visualisation of proposed St Asaph Avenue Hub

The proposed toilet building at St Asaph Avenue will provide an accessible toilet, three more toilets and two urinals for public use. The building will be clad in local stone and will have a planted roof, comprising a low maintenance and drought tolerant planting mix. A large open area at the front of the building will provide the space for the gallery shelter for the community. Each of the toilets will be self-cleaning, and match the public facilities located elsewhere throughout the county. In addition to these toilets, the building will house a maintenance and cleaning cupboard to allow for storage of additional items.

Rest area: A bench and litter bin are proposed near Sunnyvale Caravan Park at the east of the scheme. This rest area is located close to an access point, and will be offset from the main route to allow easy movement along the coastal path.

7.2.2 Street furniture

Figure 7-9 shows the benches, picnic tables, and lounge seats proposed throughout the scheme. They will be made of recycled plastic. Figure 7-10 shows the e-bicycle charging points, maintenance points with pumps, and Sheffield cycle racks to be used.



Figure 7-9: Proposed street furniture to be placed along the coastline



Figure 7-10: Proposed cycle facilities to be placed along the coastline

7.2.3 Car Parks

The scheme will improve the St Asaph Avenue Car Park with comprehensive proposals as this is the key community car park (Figure 7-11). The proposals include:

- Providing rain gardens to capture surface water run-off
- Enlarging the car park to accommodate 70 spaces
- Providing additional cycle parking
- Providing electric charging points for electric vehicles



Figure 7-11: Proposed St Asaph Avenue Car Park improvements

7.3 Ecological Enhancements

7.3.1 Planting and vegetation management

The project seeks to improve the ecology of the coast across the scheme. Most of the areas where ecological enhancements are possible are small areas situated alongside the coastal path. By providing these additional areas of planting, the route could become a 'Bee Highway' and provide a haven for pollinators and insects. There are three types of planting proposed along the 2.3km coastal path:

- 1 Small rain gardens to capture surface water from St Asaph Avenue Car Park, with species indicated in Figure 7-12.
- 2 Coastal wildflower grassland areas. These will have a high percentage of native pollinator species which are suitable for a coastal environment. Figure 7-13 shows a selection of suitable species which will be used. Topsoil from the site will be reused where possible which will contain several of the larval foodplants for local butterfly, bumblebee, and moth species.
- 3 Small areas of hard-wearing and species-rich lawn (Figure 7-14) providing a setting to larger pieces of play equipment.



Figure 7-12: Proposed rain garden plant species



Figure 7-13: Proposed coastal wildflower plant species



Figure 7-14: Proposed lawn plant species

7.3.2 Additional ecological enhancements

The rock armour below the Mean High Water Spring will have textured rock surfaces that create a habitat for intertidal marine species, and encourage them to colonise.

The scheme will also improve the Kinmel Bay Local Nature Reserve dune habitat with important management tasks such as scrub clearance and invasive species removal that will encourage an increased diversity of plants and invertebrates to colonise.

7.3.3 Benefits of the ecological enhancements

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

- Birds - through seeding a species diverse grass and wildflower mix encourages invertebrates and reptiles, which will provide new foraging habitat for birds.
- Reptiles - through seeding a species diverse grass and wildflower will encourage invertebrates. Controlled scrub clearance at Kinmel Bay LNR will improve the habitat mosaic for reptiles.
- Priority invertebrate species - through seeding specific grass species which are larval foodplants to many priority butterfly and moth species that have been recorded locally. The coastal grassland planting will provide linked corridors throughout the length of the scheme for a range of pollinator species such as bumblebees.

8 Access and Connectivity Analysis

There are many pedestrian and cycle access points to the coastal path throughout its 2.3km. Access from the coastal path to the beaches varies greatly. A full access report was compiled to understand access and connectivity. This graded each of the 10 access points in terms of: accessibility, proximity to facilities (such as car parks, bus stops, toilets and so on), visibility, materiality and the condition of the sea defence and access point (as defined by CCBC and National Rail's condition reports). Figure 8-1 summaries these findings and classifies each access point on a five-point scale ranging from 'Very Good' to 'Very Poor'. This study has informed priority access points to be improved by this project.

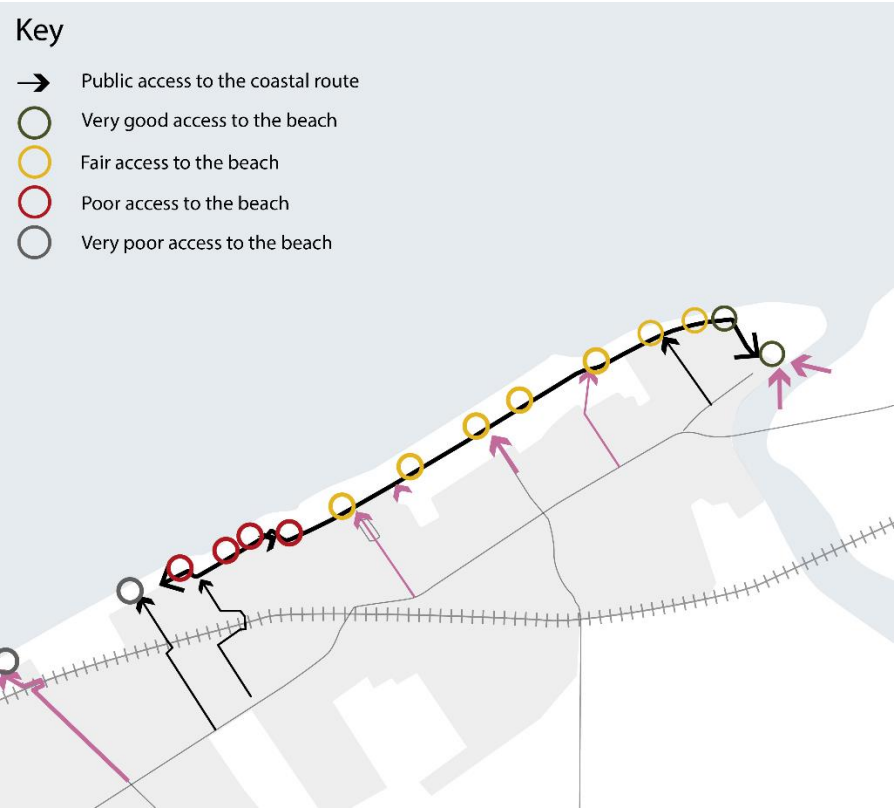


Figure 8-1: Analysis of existing access points along the coastline

8.1.1 Route Widths

The route varies from a generous 4m width at the Towyn Revetment to short stretches that drop below 2m. The average width is around 2.5m. Figure 8-2 classifies these various widths from less than 2m to more than 4m. There are significant pinch points causing user conflicts where people currently access the beach. Therefore, this project seeks to widen the route, and new access points will be set back into the sea defences to improve connectivity and minimise these pinch points. The aim of the project is to widen the route to the minimum 3m 'Sustrans' dual-use standard' for shared use of cyclists and pedestrians wherever possible and within the scope of the project.

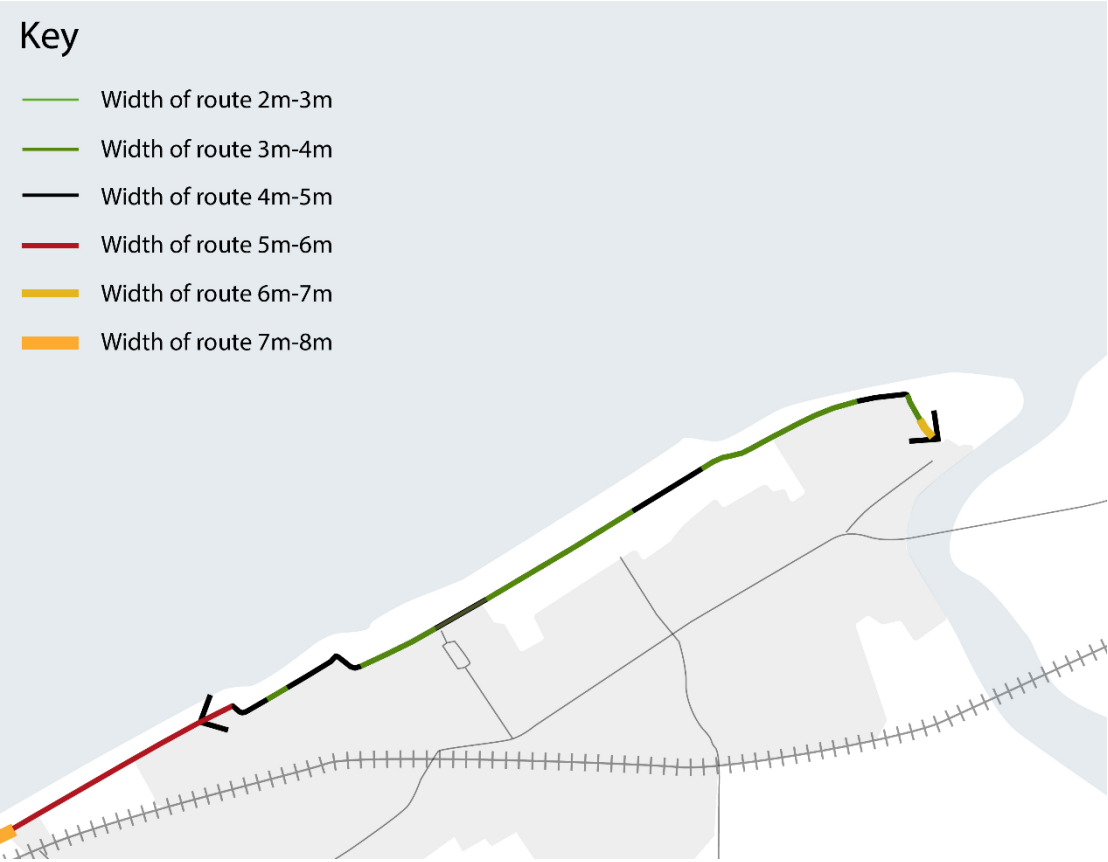


Figure 8-2: Analysis of route widths along the coastline

8.1.2 Public Rights of Way and Cycleways

There are two Public Rights of Way (PRoWs) in Kinmel Bay that lead to the coastal path adjacent to the scheme (footpaths 02 and 03), and one PRoW between Kinmel Bay and Towyn that forms part of the coastal path (footpath 01) (Figure 8-3)

Footpaths 02 and 03 will not be impacted by the scheme. There may be some temporary impacts to Footpath 01 during construction work. However, these impacts will be managed on site by the appointed contractor and in agreement with the CCBC PRoW Officer.

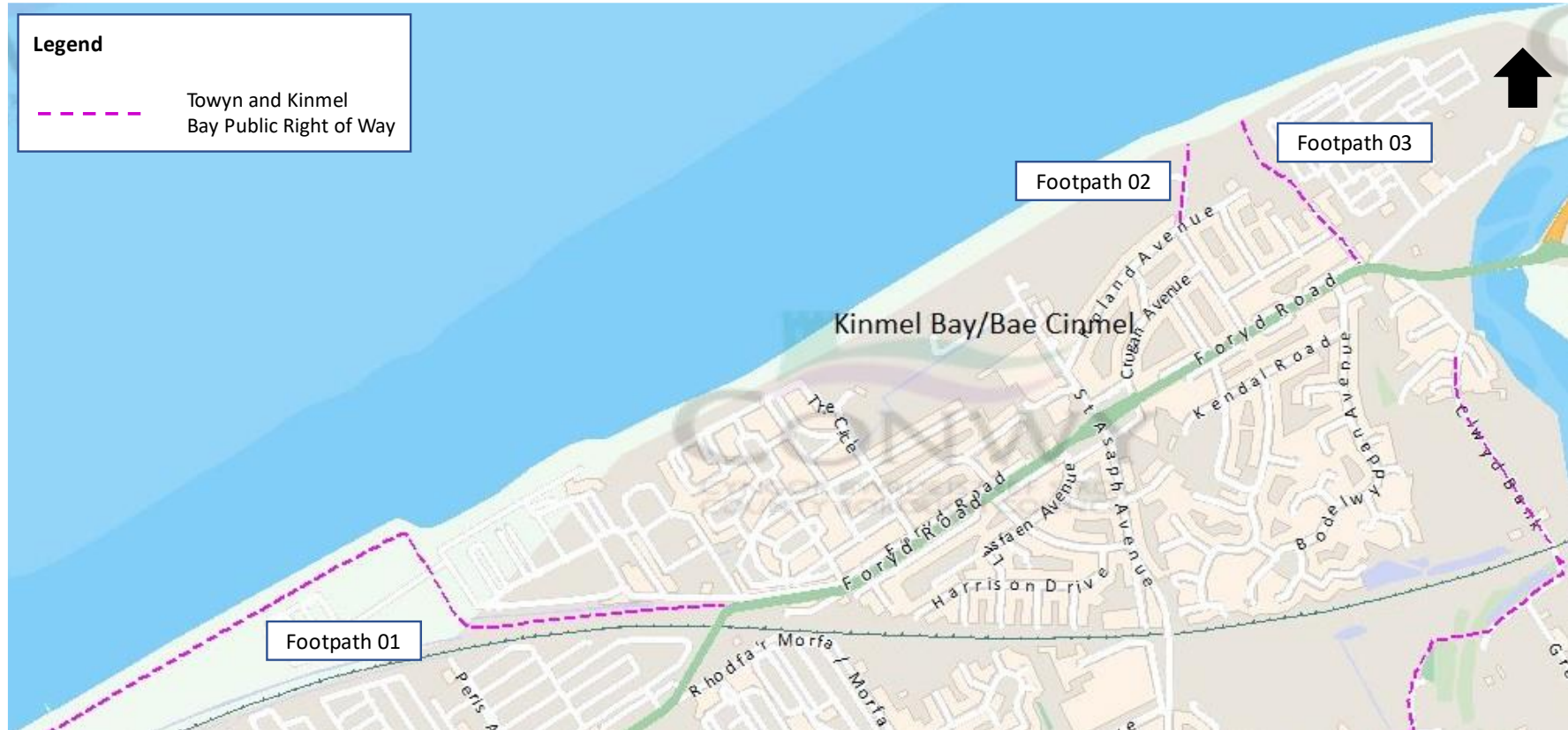


Figure 8-3: Public Rights of Way near the development site (Source: CCBC, 2022)

In addition to The Wales Coast Path, Sustrans National Cycle Route 5 runs through the site. There will be some temporary impacts to the route during construction works, however this will be managed on site by the approved Contractor and in agreement with Sustrans.



Figure 8-4: National Cycle Network Route 5 along the coastline (Source: Sustrans, 2022)

9 Access and Connectivity Proposals

There are 10 access points within the 2.3 km stretch which the project covers. The scheme will provide improvements to a total of 9 access points. The remaining access point will remain as existing, because it is in satisfactory condition and outside the scope of this project, according to the condition report created. Where possible, the proposals include seating at the beach access points to allow visitors and residents alike to enjoy the panoramic sea views. These seats also provide a space to pause, shake off the sand and replace shoes before returning to the coastal path from the beach. Figure 9-1 depicts the locations of fully accessible and stepped beach access points. Details of all access points are provided in the plans and drawings submitted as part of the application.



Figure 9-1: Proposed improved accesses along the coastline

9.1.1 Fully Accessible Access Points

At three key locations, fully accessible (and Disability Discrimination Act compliant) ramps from the coastal path to the beach will be provided. These are notably adjacent to Sunnyvale Caravan Park and Woodside Avenue. The flood gate at St Asaph Avenue Car Park will be upgraded. Accesses have been located to connect with paths that link with the sea front or close to car parks to enable easy beach access for people who are less able.

Figure 9-2 shows ramped access over the sea wall to the beach to be provided at Kinmel Bay Beach West, and in front of Kinmel Bay Nature Reserve. Figure 9-3 shows ramped access over the rock armour to be provided in front of Sunnyvale Caravan Park.



Figure 9-2: First proposed ramped and fully accessible access design

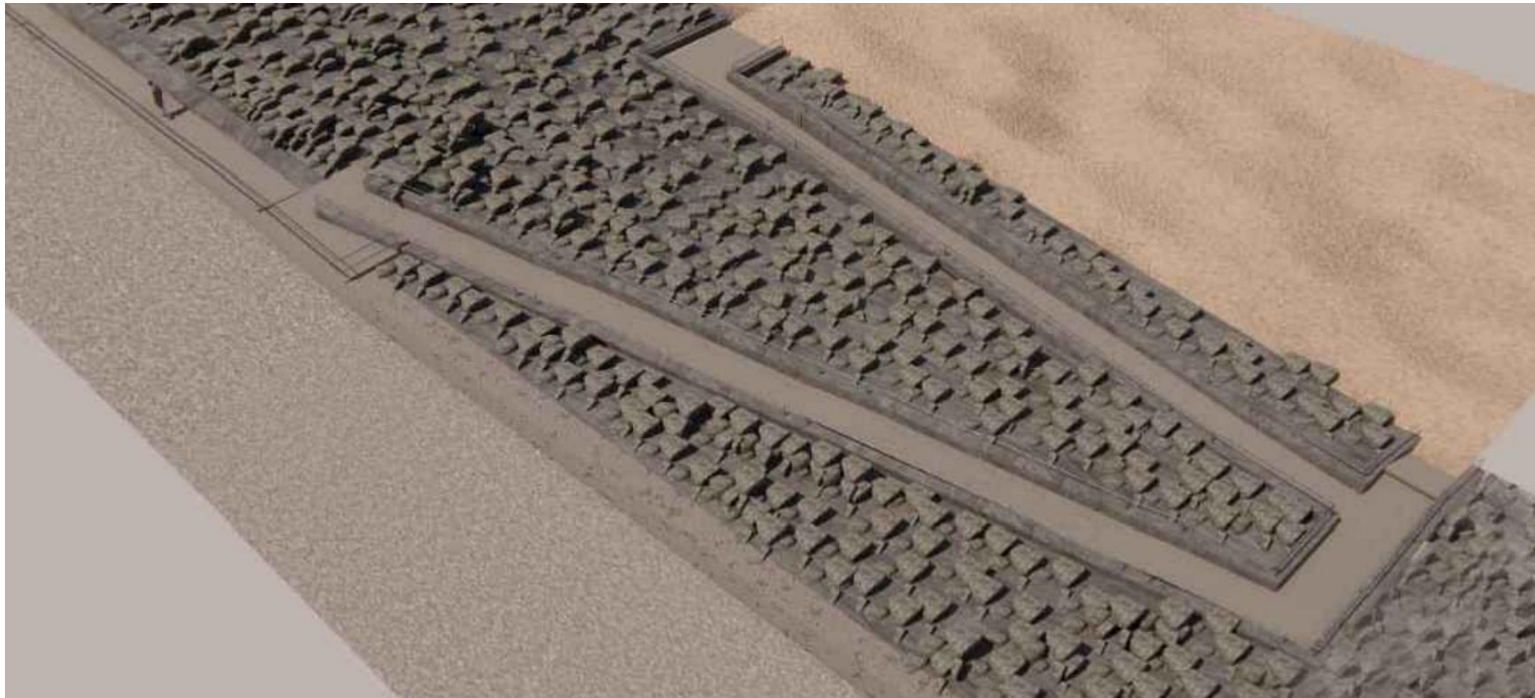


Figure 9-3: Second proposed ramped and fully accessible access design

9.1.2 Stepped Access Points

There are different types of stepped access points which relate to the proposed sea defence proposals. Where appropriate the proposals incorporate 'Perron's' steps. These are ramped steps to allow improved beach access for pushchairs or beach carts. Figure 9-4 shows access with seating steps proposed at Kinmel Bay Beach West, and at two points in front of Kinmel Bay Nature Reserve. Stepped access over rock armour (Figure 9-5) will be provided at two points along Towyn Revetment in front of Golden Sands Caravan Park. Another stepped access over the rock armour design (Figure 9-6) will be provided at Kinmel Bay East, near Norton's Nose Nature Reserve.



Figure 9-4: First proposed stepped access design with integrated seating



Figure 9-5: Second proposed stepped access design



Figure 9-6: Third proposed stepped access design

9.2 Route Width Proposals

The scheme will include widening over 1000 metres of the coastal route to a generous 4.5m along the stretch of coastline between Towyn Revetment and Baysville Coffee and Grill. within the proposal area, shown on a map in Figure 9-7. This section of the coastal path is intensely used, and this widening will minimise conflicts and pressure on the nearby nature reserves. The new setback access points will help to further reduce conflicts between pedestrians and cyclists.



Figure 9-7: Proposed route widening along the coastal path

10 Construction Information

10.1 Timescale

Construction is expected to take 18 months, but the start date will depend on permissions, consents, and funding. Figure 10-1 is an indicative timescale of construction activities.

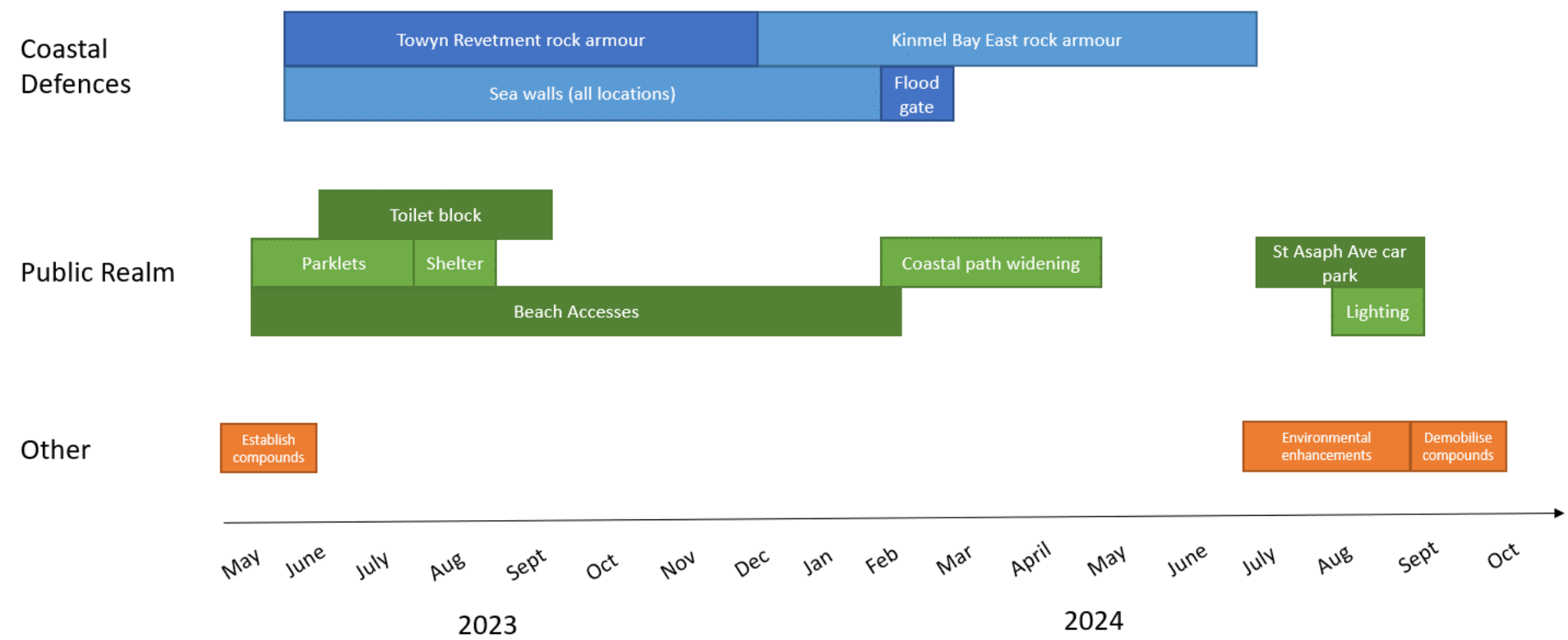


Figure 10-1: Indicative timescale of construction activities, subject to permitting, consents and funding

10.2 Methodology

10.2.1 Temporary Compounds

It is anticipated that there will be two temporary site compounds (Figure 10-2). Wheel cleaning facilities will be provided at each site compound which will be included in the contractor specification.



Figure 10-2: Location of temporary site compounds along the development site

10.2.2 Working Hours

Construction activities taking place above the Mean High Water Springs mark will take place within normal working hours of 8:00am to 6:00pm between Monday to Friday, and 8:00am to 12:00pm on Saturdays. There will be no construction activities on Sundays and Public Holidays.

Construction of the rock armour at Towyn Revetment will require some foreshore access and tidal working as some of the rock armour footprint is to be below the tide line. These works will be irregular and more in sync with the tidal patterns along this coastline.

10.2.3 Construction Methods

Sheet piling will be installed using the Giken (or similar) vibration-free piling method. No hammer piling will take place.

The preferred method for excavations and placing rock armour is illustrated in

Figure 10-3. It shows access of construction vehicles from the south side (landside) of the site to excavate material, lay geotextile, and place a double later of rock armour. However, there will also be a need to enable access to each work site from the north side from the north side to handle and manage excavated material, geotextile and rock armour. Marine-based plants and machinery are not considered suitable due to the large tidal range at this stretch of coastline.

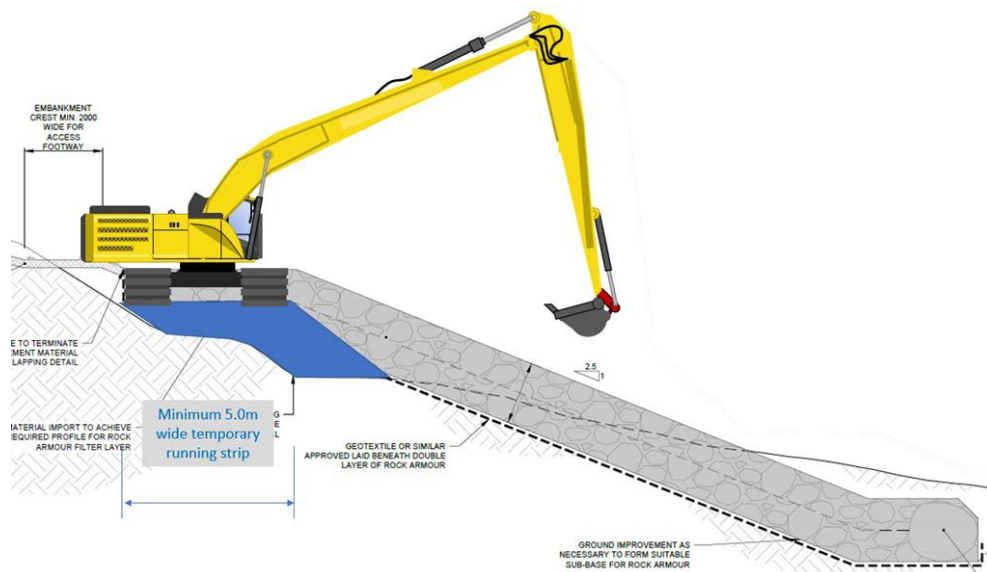


Figure 10-3: Typical construction arrangement for excavating and placing rock armour

Excavated material shall be retained on-site to be incorporated within the permanent works. However, if off-site disposal is required:

- The material will be tested and classified
- A Material Management Plan will be developed
- Suitable storage areas will be allocated to process and dry materials.

The sequence of construction activities at each site are detailed in the Environmental Statement, and also in Appendix B.

10.3 Impacts

10.3.1 Traffic

The completed scheme will not generate significant traffic movements. However, the construction period will generate traffic relating to material and plant delivery, and staff accessing the sites. All plant and material will be delivered by road rather than by sea, and a schedule of construction vehicles and machinery is provided in Table 10-1. HGV traffic levels are only expected to rise 3% on St Asaph Avenue and the A548, which is not expected to have significant impacts on traffic conditions in the locality. The Considerate Constructors Scheme ensures active community engagement so that potential impacts on the local community are minimised.

There will be approximately 30 operatives and 10 office staff present on-site (this may vary depending on the sites open at different points). It is likely that most staff will access the site by car, as there are limited convenient train and bus options. Staff will park in the site compound closest to the site being worked on to reduce impact on the highway network in the immediate vicinity.

Table 10-1: Construction vehicles and machinery needed for the development

	40t Tipper (104 dBa)	36t Excavator (101.8 dBa)	20t Road Wagons (Concrete & Rock) (103 dBa)	10t Tipper (106dBa)	3 tonne tipper (102 dBa)	1.5 t tipper (102 dBa)	15 t Excavator (97.5 dBa)	5t Excavator (89 dBa)	Asphalt Spreader (92 dBa)	Sheet piling Rig (69 dBa)	Vibrating Roller (100 dBa)
Rock armour Kinmel Bay East & Towyn Revetment	2	1	4	2							
Sea wall - Kinmel Bay East & West			4	2	1		1				
Car park - Kinmel Bay			2		1		1		1		1
Coastal Path Widening			1			2		1	1		1
Beach accesses			2	1	1		1			1	

10.3.2 Noise and Vibration

The construction phase of the scheme will unavoidably generate noise. However, the activities will be spread out along the length of the coastline, and will only take place during daytime periods Monday – Saturday over the 14-month construction period.

To reduce noise, the mitigation measures to be used during construction include (but are not limited to):

- Using the quietest available machinery
- Using well maintained machinery fitted with silencers, mufflers, or acoustic covers
- Creating acoustic barriers of site materials (e.g. bricks and earth mounds) to absorb and deflect noise
- Informing and educating site workers about the need to reduce noise and disruption
- Controlling vehicle movements to and from the site
- Implementing a 'no idling' policy
- Orienting noise-emitting machinery away from residential properties where possible

When including mitigation measures, construction noise created from most of the activities will not be excessive. However, the rock armour to be installed at Towyn Revetment is still likely to create disturbance even with the mitigation measures in place. Pre-emptive communication with residents in this area can alert and prepare them for this.

Vibration is not expected to cause disturbance and no damage to buildings is anticipated. The limited piling proposed for the site will use the Giken vibration-free piling method, which will not be noticeable to residents.

Regular noise and vibration monitoring during the construction operations will be undertaken to ensure that the control and mitigation measures are utilised in full and that they are effective.

10.3.3 Air Quality

Dust may result from the excavation of material, haulage, tipping and stockpiling which will be required at Towyn Revetment and Kinmel Bay East. At both locations, the scale and timescale of works, combined with the number of residential properties within 50m of the sites, has resulted in a potential effect of dust assessed as 'temporary slight adverse'. Dust may also occur where vehicles leaving sites transfer dust onto the road after having travelled on unpaved access tracks (a process called 'trackout'). At Towyn Revetment, access to the sites and site compound includes an unpaved track, but the potential dust creation is assessed as 'temporary slight adverse' due to the temporary nature of the works. The potential dust effect from trackout for both Kinmel Bay East and West is considered 'not significant' as wheel washing facilities will be available before exiting the site. Minor demolition works in the scheme may cause dust, but these specific activities are of small volume, or of components with low potential for dust release (such as wooden fencing). As such, the potential dust from demolition is assessed as 'not significant' for some elements, and 'temporary slight adverse' for others.

Various mitigation measures will be put in place to control and reduce dust emissions during dust-emitting activities. Such mitigation measures include, but are not limited to:

- Displaying the name and contact details of the person(s) accountable for air quality and dust issues on the site boundary.
- Recording all dust complaints, identify cause(s), take appropriate measures to reduce emissions in a timely manner, and recording the measures taken.
- Recording any exceptional incidents that cause dust and/or air emissions either on or off site and the action taken to resolve the situation in a logbook. Making the complaints log available to the local authority when requested.
- Increasing the frequency of site inspections for air quality and dust when activities with a high potential to produce dust are being carried out or during dry or windy conditions.
- Erecting screens or barriers around dusty activities.
- Imposing and signposting a maximum speed limit of 15 mph on surfaced and 10 mph on un-surfaced haul roads and work areas (these speeds may be increased on long haul roads with suitable additional control measures subject to the approval of the nominated undertaker and with the agreement of the local authority when appropriate).
- Minimising drop heights from conveyors, loading shovels, hoppers and other loading or handling equipment.

11 Conclusions

The Kinmel Bay Coastal Defence Improvements Scheme has been thoughtfully designed to decrease long-term flood risk to 2,289 residential and commercial properties by the year 2121, while improving the public realm and beach access points for local residents and visitors.

The design has evolved alongside extensive stakeholder engagement during Outline Business Case and Detailed Design, and the Pre-Application Consultation period gives local residents, community consultees and specialist consultees the chance to comment further.

The existing public realm, coastal defences, and accesses were first analysed, and points for improvement were then identified. This scheme addresses those points for improvement where possible. It will strengthen and improve coastal defences to reduce wave overtopping and respond to increasing sea levels and increasing storminess. Bespoke solutions are tailored to the localised geography of the coastline. Local residents and visitors will benefit from public realm improvements that have been influenced by local culture and stakeholder consultation, with proposals including play equipment, cycle facilities, and an improved car park. Accessibility for all will be improved along the coastal path with widened sections of pathway, new fully accessible ramped accesses to the beach, and stepped accesses suitable for prams and pushchairs.

Ultimately, this scheme is vital for the protection of people and places in Kinmel Bay, and the scheme design and access improvements provide significant benefits to the settlements along this coastline.

Appendices

A Detailed Design Consultation Log

Discussions include consultation about the wider Llanddulas to Kinmel Bay scheme. Rescope of the project to current 2.3km extent took place in October 2022.

Meeting attendees	Date of communication	Summary of comments/discussions	Responses and actions
Gwen Thomas- Sustrans Project team: Kevin Lucas -CCBC Neil Tynan -Amey	29-09-21	Review of proposed LKB cycle route.	Retain cycle route along coastal path. 4.5m wide is desirable.
Dylan Jones – CCBC Active Travel Project team: Kevin Lucas, Owen Conry -CCBC Neil Tynan, Lee Selway – Amey Fiona Walters - LDA	29-09-21	Review of current CCBC Active Travel plans. Discussion on proposed coastal path widening at Kinmel Bay.	No actions or changes to design.
Lesley Susan Lawson – CCBC Environment Project team: Kevin Lucas - CCBC	04-10-21	Review of proposals focussed round Kinmel Bay promenade and nature reserve.	No actions or changes to design.
Kate Surry- CCBC Ecology Neil Smith - NRW Project team: Kevin Lucas -CCBC Neil Tynan - Amey Dorian Latham - JBA Fiona Walters - LDA	08-10-21	Discussion with CCBC Ecologist.	No actions or changes to design.

Alice Lovegrove-Jones – Jones Peckover (agents for the Crown) Project team: Kevin Lucas -CCBC Neil Tynan, Kevin Wright - Amey	09-11-21	Meeting to discuss the procedure for carrying out works on Crown land.	No problems – submit details when confirmed.
Robert Jones - Owner of Sunnyvale Holiday Park Project team: Kevin Lucas, Owen Conry - CCBC	15-11-21	Meeting with owner of Sunnyvale to discuss acquisition of approx. 1m strip of land on the northern perimeter of the park to widen the cycle/pedestrian way.	No actions or changes to design.
Laurie Clark - General Manager of Golden Sands Caravan Park Project team: Kevin Lucas, Owen Conry - CCBC	15-11-2021	Scheme updated and discussed acquiring a 1m strip on land for widening the cycleway. Laurie said not possible because caravans are very close to the perimeter fence and can't be moved.	No actions or changes to design.
Site Meeting with Luke Knightly – Towyn and Kinmel Bay Town Council councillor and owner of Knightly's Funfair Project team: Kevin Lucas - CCBC	30-11-2021	Site meeting to run through the scheme. Mr Knightly suggested to focus on the sea defence work and leave the public realm until later.	No actions or changes to design.
Cllr. Keith Eeles Neil Tynan, Lee Selway – Amey Cllr Andrew Wood, Cllr Charlie McCoubrey, Cllr Nigel Smith, Cllr Geoff Corry, Cllr Helen Stewart, Cllr Jesse Lock, Cllr K Redhead, Cllr Wendy Williams, Cllr Barry Griffiths Project team: Kevin Lucas, Owen Conry – CCBC	01-12-21	Presentation of scheme proposals and Councillor Q&A. Discussions included the following comments: Option for groynes not evident. Sea wall realignment northwards needs to be included. Beach access for all is a high priority.	No actions or changes to design.
Llanddulas, Abergele, Towyn/Kinmel Bay Councillors and Town Councillors	22-11-2021	ST Presented the proposed public realm proposals via a video link which was shared with the Town Councillors.	Feedback was gathered via a questionnaire.

Project team: Kevin Lucas - CCBC Scarlett Towse - LDA			
Abergele Place Plan Committee Project team: Kevin Lucas, Owen Conry – CCBC Scarlett Towse - LDA	25-11-2021	ST Presented the proposed public realm proposals to the Abergele Place plan meeting	No actions or changes to design.
Neil Smith, Rowland Sharp, Katie Reynolds, Emmer Litt - NRW Environment Project Team: Kevin Lucas CCBC Neil Tynan, Lee Selway - Amey Dorian Latham, Johan Skanberg-Tippen - JBA	14-12-21	Overview of scheme. Pensarn SSSI – erosion an issue. Shingle proposed.	Hold the Line policy – NRW advised that moving the sea wall northwards would not be supported.
Simon Billington, Steven Teale – CCBC Maintenance Project Team: Kevin Lucas, Owen Conry - CCBC Neil Tynan - Amey Scarlett Towse - LDA	21-12-21	Sand on promenade is an ongoing issue Boat ramps proposed for Pensarn and Llanddulas Beach – agreed. Any proposed toilets will need to be self-cleaning.	Toilets to be self-cleaning.
Ceri Thomas – CCBC Planning Officer Project Team: Kevin Lucas, Owen Conry - CCBC Neil Tynan, Lee Selway - Amey Dorian Latham JBA Scarlett Towse, Marina Solodova - LDA	13-01-22	Landscape/Scoping Report informal consultation. Presentation given to Ceri. Viewpoints discussed. Comments on Scoping in the next week. Critical comments have been received.	No actions or changes to design.
Michael O'Connell – BCA Landscaping	19-01-22	Sandy Bay (Kinnel Bay) highway improvements.	Agreement on the LKB landscaping proposals

Richard G Morris – Mott Macdonald Project team: Kevin Lucas - CCBC Neil Tynan – Amey Scarlett Towse - LDA		BCA as Landscape Architects are designing public realm works in the Sandy Bay area – for Mott Macdonald (Motts) / CCBC. Motts presented proposals for Sandy Bay streetscape improvements. ST presented LKB public realm proposals	Query on land boundaries to be sorted
Stephen Davis, Rhodi Powell, Elinor Meloy, Katrina Marshall – NRW Project team: Kevin Lucas - CCBC Neil Tynan, Kevin Wright - Amey	16-03-22	River Dulas – Environmental proposals. Dulas River scheme overview – Options appraisal stage Weir removal, at river mouth. Regrade river-bed back to rail bridge. Current risk of weir failure and consequential bed and bank scouring. Strengthening proposed on wooden pedestrian bridge. Ecological enhancements in river to assist fish movements. Design in 2022, construction 2023 – TBC	No interaction between schemes – no changes
Paul Sampson, Jackie Ley – Oriel Mor CCBC officers/PMs: Helen Goddard – CCBC Head of Culture and Information Benji Poulton – CCBC PM Sam Parkinson - CCBC PM Chris Fewtrell – CCBC PM Project team: Kevin Lucas – CCBC	07-04-2022	General introduction to both the Oriel Môr concept and appointed project artist, Jackie Ley. Money in CRF to investigate art in shelters Aiming for at least 2 shelters on each project Change design every 6 months: art is photography based, and funding for artwork by Oriel Môr.	Arrange meeting with Amey and LDA
James Harland, Richard Clarke – CCBC Strategic Planners Robin Sandham - CCBC Planning Officer Project team: Kevin Lucas, Owen Conry, Geraint	21-04-22	Introduction of Tan 15 revisions will blight large sections of land along Conwy coast. SFCAs and TAN 15 implications discussed	Next steps for SFCA – short term for 15 years. Messaging around development is clear from NRW POV

Edwards - CCBC George Baker - JBA			
James Harland, Richard Clarke - CCBC Strategic Planners Project team: Kevin Lucas, Owen Conry - CCBC	11-05-22	Further discussion regarding the scheme in relation to flood risk and TAN 15 implications	No actions or changes to design.
Ceri Thomas – CCBC Planning Officer Della Adams - JBA	26-05-22 (telephone conversation)	DA has a discussion with Ceri about: Contaminated Land – level of information required for the ES.	26.05.2022 Contaminated land: Ceri happy for Team to liaise directly with Simon Cottrell – Councils Principal Environmental Land Officer
Dylan Jones, John Rowlands – CCBC Traffic, Transport and Network Project team: Kevin Lucas, Owen Conry - CCBC Neil Tynan - Amey Ashleigh Davies, Chuang Zhou - LDA	30-05-22	Catch-up and review public realm/amenities proposals and Sandy Cove interface	No actions or changes to design.
David Thornley – Director of Thornley’s Caravan Park Chris Darby – General Manager Project team: Kevin Lucas- CCBC	07-06-22	Further discussion regarding options at Thornley’s Caravan Park. Discussed who owns park, and why rock groyne creation or repair of existing isn’t being considered.	Visualisations requested Construction programme requested
Michael Brady, Thomas Rooney – RWE Project team: Kevin Lucas - CCBC Neil Tynan, Siew Loo Chao - Amey	08-06-22	Meeting to discuss the interface between the Rhyl Flats Export Cables interface with the new sea defences.	Access to pits is required Access ramp may be required Drawings to be provided by RWE Check with Dan Durrens CCBC for survey info.
Steve Teale - CCBC	29-06-22	Discussion regarding toilets and shelters.	Steve to send specs and drawings of other CCBC

Project team: Kevin Lucas - CCBC		Steve being replaced by Gary Williams.	facilities. Requested to provide things like charging points (bikes and phones), LED lighting, Solar panels. Use easy to maintain design
Paul Sampson, Jackie Ley – Oriel Mor Project team: Kevin Lucas – CCBC Neil Tynan - Amey	06-07-22	PS requested to provide input / influence to shelter design. LDA are currently designing shelters. - Artwork for shelters – glass / Perspex panels to protect artwork - Jackie contacted Llanddulas primary school – workshop on art for area. Suggested for use within scheme	JL will forward artwork from local school children to Scarlett Towse for integration
Ceri Thomas – CCBC Planning Officer Project team: Della Adams - JBA	07-07-22 (telephone conversation)	DA has a discussion with Ceri about: Noise & Vibration: Requirements of the Noise Assessment. I.e. If Baseline information would be acceptable for the ES / and impacts could be conditioned. LVIA: Suitable Viewpoint locations.	14.10.2022 Noise & Vibration: Impact assessment of noise generated construction activities would be required. LVIA: LDA to send viewpoint locations to Ceri (via Della) for review / comment.
Paul Sampson, Jackie Ley – Oriel Mor Project Team: Scarlett Towse - LDA	11-07-22	Follow up meeting with Scarlett	Shelter designs adapted to fit requirements.
Neil Smith, Rowland Sharp - NRW Project team: Kevin Lucas – CCBC Neil Tynan - Amey Sam Wingfield, Della Adams, Jon Harrison - JBA	12-07-22 (Teams call)	Marine Licence / general consultation with NRW regarding the scheme.	Linley Hastewell/ Jon to complete NRW – more concern re SSSIs (consider enhancements improvements to SSSI?)
Shane Wetton - Strategic Engagement and Place Plan Officer Strategic Planning and Communities CCBC	12-07-22 (Teams call)	Discussion about the Towyn and Kinmel Bay Place Plan which is a regeneration plan for Towyn and Kinmel Bay which partly overlaps our scheme.	Action is for KL to chat with Chris Jones who drew up the Place Plan for TKB Town Council.

Project team: Kevin Lucas – CCBC Neil Tynan - Amey			
Chris Jones - Chris Jones Studio Project team: Kevin Lucas - CCBC	19-07-22 (telephone call)	Discussion about the Towyn and Kinmel Bay Place Plan which is a regeneration plan for Towyn and Kinmel Bay which partly overlaps our scheme. Chris drew up the plan.	Meeting to be arranged- Amey design team and Chris Jones and also Chris Gentle who is the designer of the Sandy Cove Road and infrastructure improvements.
Marine Licence Team - NRW Project team: Linley Hastewell - JBA	19-07-22	Email requesting guidance on the information on marine license application.	No actions or changes to design.
Meeting with Robert Jones Owner of Sunnyvale Holiday Park Kevin Lucas - CCBC	27-07-22	Meeting with owner of Sunnyvale to discuss acquisition of approx. 1m strip of land on the northern perimeter of the park to widen the cycle/pedestrian way.	On-going discussions.
Councillors - Cllr Andrew Wood, Cllr Chris Jones, Cllr Chris Nott, Cllr Bernice McLoughlin, Cllr Charlie McCoubrey, Cllr Geoff Stewart, Cllr Goronwy Edwards, Cllr Kay Redhead, Cllr Michael Smith, Cllr Nigel Smith, Cllr Paul Luckock, Cllr Barry Mellor Project Team: Kevin Lucas, Owen Conry - CCBC Neil Tynan - Amey Scarlett Towse – LDA Johan Skanberg-Tippen, Jennie Steele - JBA	05-08-22 (Teams call)	Presentation about the scheme. Q&A included discussion about solution at Ty Crwn, longshore drift, types of beaches, the original OBC, and types of amenities (showers, car park, toilets, shelters etc.) included in the scheme.	Presentation about TAN15 with James Harland (Strategic Planner in CCBC) to be arranged, and on-site meetings organised.
Cllr Andrew Wood Project Team: Kevin Lucas - CCBC	09-08-22 (meeting on-site)	Ty Crwn beach recharge proposal discussed- Andrew Wood said he disagrees with the proposal.	No actions or changes to design.

Della Adams, Alexander Fyffe, Johan Skanberg-Tippen - JBA			
Jodie Pullen - NRW Project Team: Kevin Lucas - CCBC Neil Tynan - Amey Linley Hastewell, Sam Wingfield, Lydia Price - JBA	11-08-2022	Discussion relating to Marine Licence application and proposed beach recharge at Ty Crwn. Also addressed need to complete elements of the Welsh National Marine Plan (WNMP) policy.	Jodie Pullen to provide info on SMP policy units, HTL etc and find external/create map showing red line boundary. Respond to sediment sampling query.
Councillors – Cllr Kay Redhead, Cllr Bernice McLoughlin, Cllr Nigel Smith, Cllr Anne Macauley, Cllr Goronwy Edwards Town Councillor Anne Breenan TKBTC Clerk – Dylan Project Team: Kevin Lucas, Owen Conry - CCBC Neil Tynan – Amey	16-08-2022	Councillor presentation on site. Objection to Ty Crwn beach re-charge, discussion about longshore drift, beach types, the original OBC, groynes. Belgrano Beach – two areas of rock armour proposed – impact of rock armour on tourism. Kinnel Bay – all access to high tide line requested, e.g. wooden track across beach. Issues with mobility impaired people getting to low tide beach from base of ramps. Vehicular access from Kinnel Bay car park discussed. Good for boat users but not desirable to have vehicles driving on the beach.	No actions or changes to design.
Rhodri Powell, Elinor Meloy – NRW Project Team: Kevin Lucas, Owen Conry – CCBC	17-08-2022	Dulas Marine Wier – Rhodri explained about works being planned by NRW at the mouth of the River Dulas. Fish passage and weir being looked at by Binnies. Also discussed sediment management of the river	Send plans of our scheme to Rhodri. Check if CCBC manage sediment? Not expecting this to have any effect on the project
Paul Sampson, Jackie Ley – Oriel Mor Project team: Kevin Lucas – CCBC Neil Tynan, Anthony Williams – Amey Scarlett Towse – LDA	22-08-22	Oriel Môr catch up to discuss artwork in shelters	General discussion about putting artwork by Oriel Môr into the shelters
Neil Smith - NRW	01-09-22	Discussion with the CCBC Ecologists and	Provide ecology chapter and

Kate Surry, Lesley Lawson - CBCC Ecologists Project Team: Kevin Lucas, Owen Conry - CCBC Neil Tynan - Amey Jon Harrison, Linley Hastewell, Della Adams - JBA	(Teams meeting)	Neil Smith (NRW) about the proposed scheme, and the outlined ecological enhancements with consideration to SSSI. Discussed the potential for additional ecological enhancements and dunes adjacent to Local Nature Reserve.	GA to CCBC ecologists for review.
Dickon Wells - Welsh Government Project Team: Kevin Lucas, Owen Conry - CCBC	05-09-22	Agenda: Update current progress The programme to start of construction Any key risks or issues that might impact that date. AOB	Check planning period
Jodie Pullen - NRW Project Team: Linley Hastewell - JBA	06 - 12-09-22 (email correspondence)	Query regarding the particle size data and other information in submission. Discussing sampling plan, and matching the existing sediment at Ty Crwn.	Follow-up phone conversation.
Jodie Pullen - NRW Project Team: Linley Hastewell - JBA	08-09-22 (telephone call)	Telephone conversation following previously sent email relating to sediment sampling and analysis in relation to proposed beach recharge at Ty Crwn.	Jodie Pullen forwarded email to NRW Marine Area Advice team (Rowland Sharp) for input (email dated 08/09/22).
Jodie Pullen - NRW Project Team: Linley Hastewell - JBA	12-09-22 (telephone call)	Telephone conversation following email chaser. Discussion relating to requirements for submission of Marine Licence. Emphasis on sediment sampling and analysis in relation to proposed beach recharge at Ty Crwn.	Jodie Pullen to contact Rowland Sharp (NRW Marine Area Advice team) for input (12/09/22).
Rowland Sharp - NRW Project Team: Linley Hastewell - JBA	12-09-22 (telephone call)	Discussion relating to requirements for submission of Marine Licence with emphasis on sediment sampling and analysis in relation to proposed beach recharge at Ty Crwn.	Rowland Sharp (NRW Marine Area Advice team) advised on sampling protocol & proposed sediment transport measurements methods (email dated 15/09/22).
Ceri Thomas - CCBC Planning	16-09-22	General discussion with Ceri about the	No actions or changes to

Project Team: Kevin Lucas, Owen Conry – CCBC		planning process. Neighbourhood notification by letter and adjoining owners and occupiers. Look at other schemes to see who commented and who we need to contact. Have we done traffic surveys? Have we consulted with Network rail.	design.
Dickon Wells - Welsh Government Project Team: Kevin Lucas, Owen Conry – CCBC Neil Tynan – Amey Sam Wingfield, Anne-Marie Moon – JBA	04-10-22	Meeting to explain to Dickon concerns that the western end of the scheme may not be viable.	Dickon requested some calcs of benefits vs costs to back this up and was going to discuss within WG and get back to us. Another meeting required 7th or 10th October.
Dickon Wells and Rhodri Williams - Welsh Government Project Team: Kevin Lucas, Owen Conry – CCBC Neil Tynan - Amey Sam Wingfield, Anne-Marie Moon – JBA	11-10-22	Meeting to discuss the potential change of scope and reasons why.	Scheme is to be reduced in size to include only the Kinmel Bay end. Dickon requested a programme for this change.
Ceri Thomas – CCBC Planning Officer Project Team: Kevin Lucas - CCBC Andrew Softley, Lydia Price - JBA	13-10-22 (Teams call)	Call to discuss change in scope, whether the scheme still constitutes EIA Development and what will be the efficient way to progress to hit the deadline for Welsh Government Funding.	Scheme likely to still be EIA development. Due to time constraints, proceed with the planning application based on previous screening and scoping.
Bleddyn R Evans – CCBC Estates and Asset Management Chris Dingsdale - CCBC Estates and Asset Management Project Team: Kevin Lucas - CCBC	19-10-22	Meeting to discuss the acquisition of land required for widening the Coastal Route at Baysville Café and Golden Sands Caravan Park. If value is less than £10k relatively straight forward. Above will involve CCBC legal. Site visit to be arranged to discuss with owners. They said a notice can be submitted with the planning application.	No actions or changes to design.

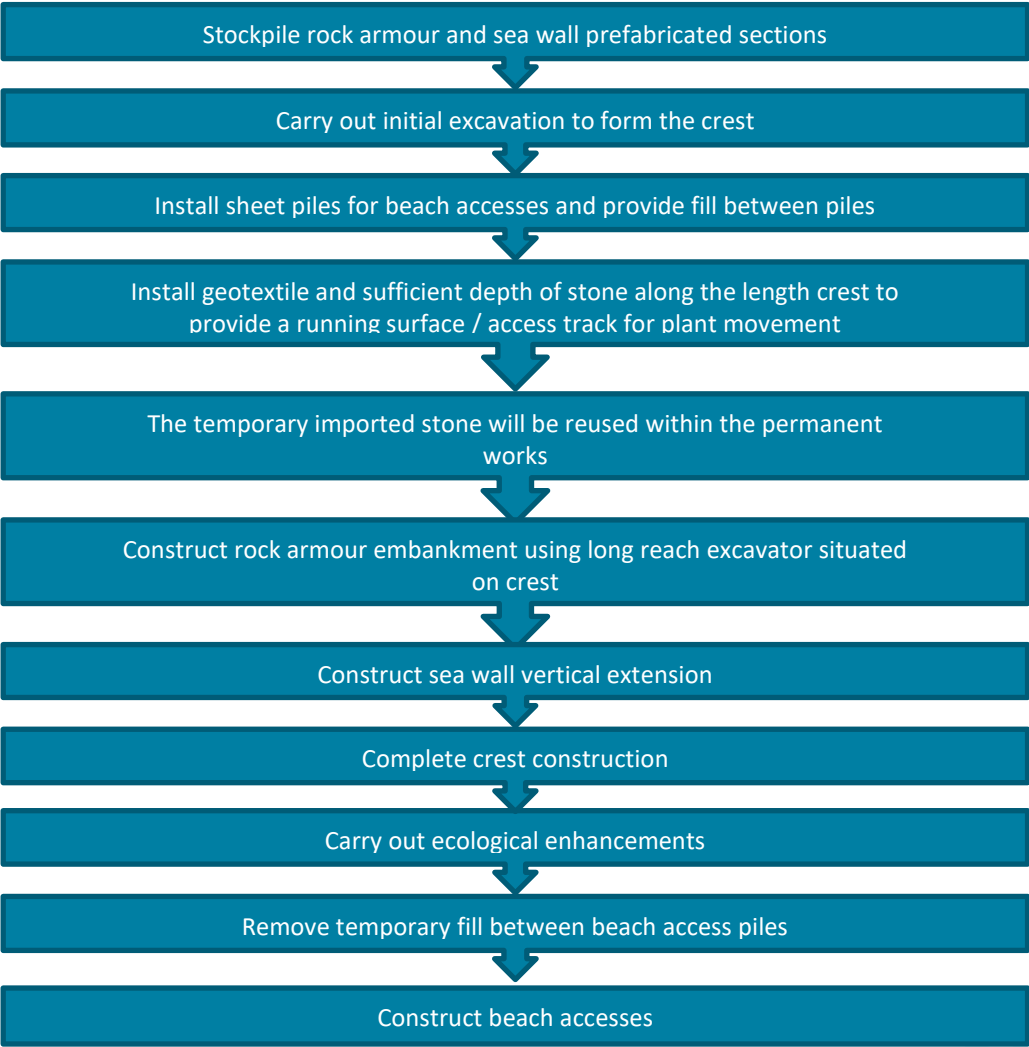
Sarah Gallacher, Geraint Newman - CCBC Project Team: Martin Gibson, Gabriel Pearson - JBA	20-10-22	This meeting is to ensure that carbon management on the project aligns with Conwy County Borough Council's carbon aims. A suggested approach is: Introductions, including attendees' roles. Agreeing agenda (suggested points below). Brief overview of project. Carbon aims and policies. Discussion of key points of focus for carbon management.	No actions or changes to design.
Jodie Pullen - NRW Project team: Neil Tynan - Amey Della Adams, Lydia Price - JBA	24-10-22 (teams call)	Meeting with Jodie to update her on the revised scheme and discuss the Marine License requirements.	Team to get the ML to Jodie ASAP. ML would require the submission of the Environmental Statement.
Ceri Thomas CCBC Planning Project Team: Kevin Lucas, Owen Conry - CCBC	25-10-22	Meeting to discuss the planning process and programme in relation to the re-sized scheme. Draft planning application can be submitted before the end of the PAC for checking. PAC still required even though the scheme is smaller (still greater than one hectare). Have list of consultees prepared well in advance. Advertise for land where ownership unknown. Clock doesn't start ticking until PAC report received and cert "c" issued. Planning - 3 weeks statutory consultation period within the usual 16-week period. Overall duration can be reduced if all goes well. Ceri said try and get planning application validated before Xmas to meet programme date of mid-March for planning permission.	No actions or changes to design.
Dickon Wells - Welsh Government Project Team:	26-10-22	Discussed programme for the revised scheme. Deadline for funding is still end of March 2023	No actions or changes to design.

Kevin Lucas, Owen Conry – CCBC			
Llanddulas, Abergele, Towyn/Kinmel Bay Councillors and town councillors Project Team: Kevin Lucas, Owen Conry – CCBC Neil Tynan – Amey Sam Wingfield - JBA	03-11-22	Meeting with all Councillors to provide scheme update including re-sizing of the proposals. General acceptance of the need to rescope but reassurances wanted for future works at Ty Crwn/Pensarn/Abergele	No actions or changes to design.

Appendices

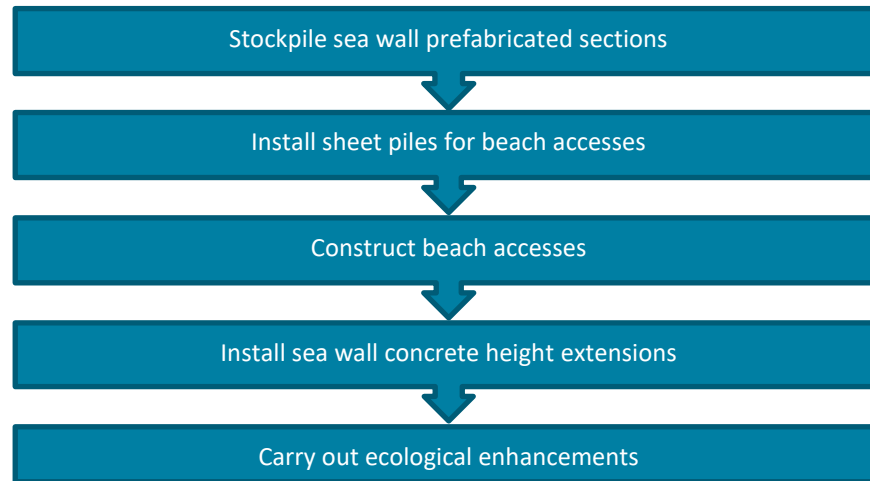
B Proposed Construction Sequences

B.1 Towyn Revetment

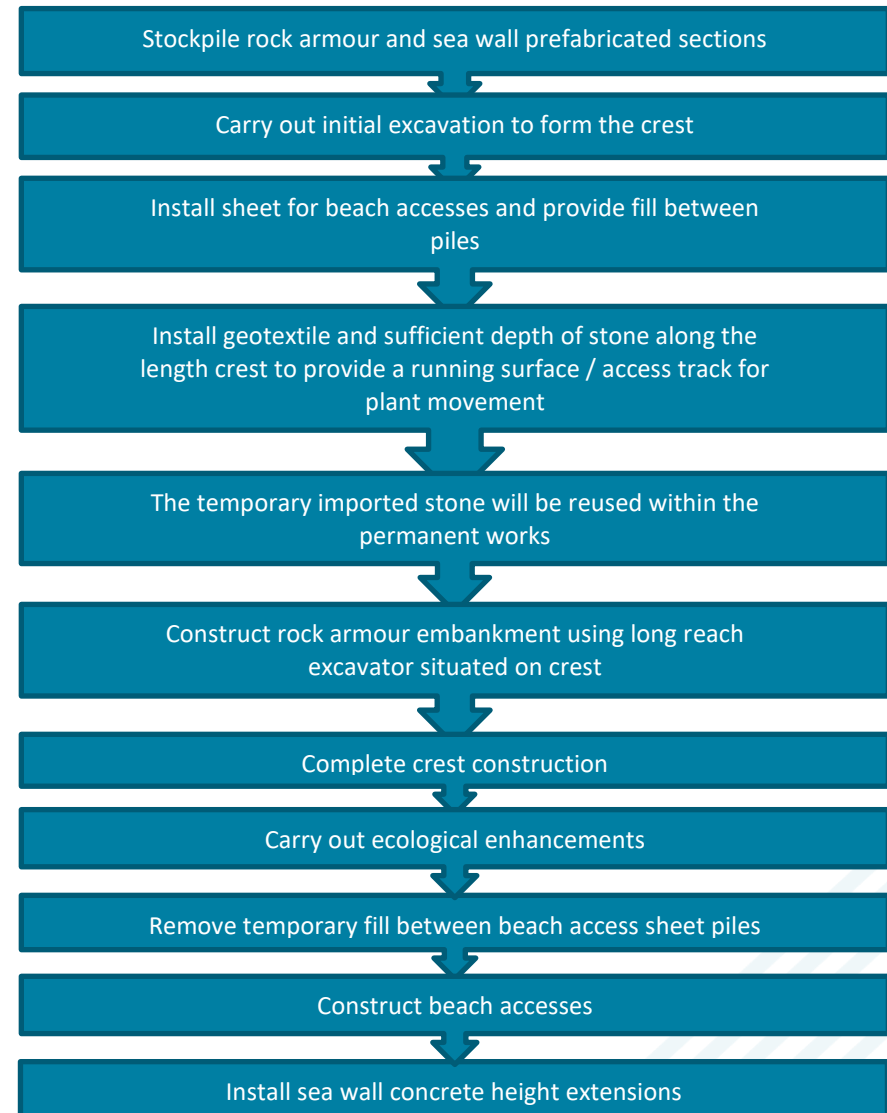


B.2 Kinmel Bay West and East

West



East



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Doncaster
Dublin
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Exeter
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