



Old Colwyn Promenade Coastal Defence & Active Travel

Resilient Roads
Pre-Construction Information

20 January 2021

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Executive summary

While efforts have been made during the design process to eliminate or mitigate risks to health and safety, the proposed works will involve potentially hazardous operations that cannot be avoided.

Specific significant residual hazards  to be typically shown on drawings where appropriate.

The significant health and safety risks identified on this project are:

- Potential for contamination – TBC following Ground Investigation
- Potential for voids in hard standing areas behind existing sea wall.
- Potential to encounter buried structures.
- Potential to strike existing buried services.
- Diversion / protection requirements for existing services
- Instability of existing structures which include the sea wall
- Lack of archive information about existing structures
- Potential for conflict between pedestrians and vehicles especially during peak / holiday periods.
- Potential for unauthorized access.
- Working in close proximity to water - risk of drowning
- Working within a tidal environment (risk of entrapment) and an exposed area which can be affected by significant weather conditions.
- Working within the public realm
- Proximity of the Liverpool Bay Special Protection Area
- Potential for nesting birds
- Proximity and protection of mussel beds
- Potential of aggressive behaviour and attacks from seagulls
- Lifting of heavy items including boulders.
- Works on steeply sloping ground which may also be wet.
- Existing bituminous surfacing may contain coal tar, TPH and PHA.
- Proximity of 'live' railway, bridge and associated embankment.

Temporary works arrangements - The management and co-ordination of temporary works will be undertaken by the Principal Contractor in accordance with the requirements of B.S. 5975: 2019. The Principal Designer shall be informed of any temporary works design risk matters.

The above list is not exhaustive, but the Principal Contractor will be required to detail in his Construction Phase Plan the control measures needed to manage these risks and any others which he identifies when preparing his method statements.

The design of the works is not considered to require construction methods or practices beyond the expertise of a competent Contractor who is experienced in this type of work.

This document shall be read in conjunction with the drawings, specification, contract documents and relevant standards.

Significant Design Assumptions and Control Measures

The Designer has provided the following information on key design assumptions which need to be adhered to or verified. This information is included within the specification or on specific drawings.

- The GI works are currently being undertaken and it is understood that the Client will disseminate the results of this once the information becomes available.
- The Principal Contractor shall be responsible for stability of structures during all stages of construction. Existing adjacent structures not annotated as being removed on the site clearance must not be undermined or damaged during works. The Principal Contractor must ensure coastal protection of the site and promenade is provided throughout the project.
- New structures along promenade seaward edge not to be constructed until the new rock revetment is constructed to the existing promenade level. Rock revetment to be constructed to carefully rest against the seawall.
- Unless the Principal Contractor demonstrates otherwise in accordance with Eurocode Design Standards, construction loads along the existing promenade seawall shall be kept beyond the active wedge of the retained ground. For example, assuming a characteristic effective angle of shearing resistance of 30° for the retained earth and an effective retained height of 3m, this would equate to an exclusion zone for plant and heavy equipment of approximately 5.2m away from the seaward top edge of the existing seawall. (Note as the retained height is reduced during the construction of the proposed revetment, the width could correspondingly reduce.)
- General Arrangement drawings show approximate position of known services. See utility survey plans, statutory undertakers plans, and Appendix C of the Pre-Construction Information for further information. Further unknown services maybe present. The Principal Contractor is to undertake a survey to determine full extent of services present within working area. Results & plans to be forwarded to the Structural Design Engineer two weeks prior to commencement of works or ordering of materials, whichever occurs first.

1 Introduction

This document should be read in conjunction with all other project information.

1.1 Preparation and Purpose of the Pre-Construction Information

This Pre-Construction Information has been prepared by Mott MacDonald in accordance with the Construction (Design & Management) Regulations 2015 (CDM 2015).

In our role as collator of this information, Mott MacDonald:

- Does not accept any responsibility for the accuracy of the information provided by others, and
- Does not have any liability or responsibility for the methods of construction used throughout the construction process.

1.2 Clients Duties

Before the construction phase begins, the Client has a legal duty to: -

1. Ensure that a Construction Phase Plan (CPP) is drawn up by the Contractor if there is only one Contractor, or by the Principal Contractor. The CPP must adequately address the arrangements for managing risk, must be relevant and must meet the requirements of the project taking into account the PCI information.
2. Ensure that workers are provided with suitable welfare facilities for the duration of construction work.

2 Project Information

2.1 Project Description

The project is to provide coastal defence improvements along approximately a 300m to 500m section (depending on funding and contract) of the Old Colwyn Bay frontage at Splash Point and briefly includes: -

- New rock revetment
- Extension / protection of outfalls
- New pedestrian beach access
- New handrailing, etc.
- New fishing platform.
- New promenade ramp and stairs to access fishing platform.
- Seawall repairs.

2.2 Location

The Site is centred around the eastern area of Colwyn Bay in Conwy County Borough, North Wales. It is approximately 300m to 500m in length extending from to the west from Splash Point at approximate NGR 287025, 378701

2.3 Key Dates

Refer to Appendix 1/13 of the Works Specification for a programme of works.

2.4 Working Hours

Refer to the Works Specification for further information.

2.5 Workplace (Health, Safety and Welfare) Regulations 1992

The requirements of the Workplace (Health, Safety and Welfare) Regulations 1992 will not apply to the scope of works being undertaken except for maintenance purposes.

2.6 Extent and Location of Existing Records and Plans

Refer to Appendix A and to Appendix 1/16 of the Works Specification for further information.

2.7 Notification of the Project

It is expected that the project will meet the requirements for notification to the HSE, i.e.: -

- last more than 30 days and have 20 workers working simultaneously at any point in the project.
- exceed 500 person days.

The Client will notify the HSE before the construction phase commences and provide a copy of the F10 to the Principal Contractor to display on site. The Principal Contractor shall inform the Client of changes so that an updated notification can be submitted to the HSE.

3 Client's Planning and Management

3.1 Standards and Objectives

It is expected that the Designers, Principal Contractor and Contractors, as defined by CDM2015, will undertake the appropriate measures to achieve the highest standards regarding health, safety and welfare.

It is the Client's expectation that the project will be completed on time with no reportable injuries, ill health or occupational disease and with no unplanned interruptions or inconvenience to any adjacent activities, occupants, public activity, highway or footpath.

The Principal Contractor will be responsible for the day-to-day monitoring of health, safety and welfare issues on site and must also ensure that their project-specific Construction Phase Plan is prepared, reviewed at regular intervals, and updated and revised as necessary throughout the duration of the construction works.

The Principal Contractor is to provide the Client with copies of their RAMS for review prior to works being undertaken.

3.2 Site Rules

The Principal Contractor shall include within the CPP site rules relevant for the works to be carried out which are to be passed to all site personnel at the site induction prior to starting work on-site.

Refer to the Works Specification for further information and CCBC supplementary information.

3.3 Communications and Co-ordination Requirements

The Client is to confirm the requirements for meetings.

3.4 Compound and Welfare Provisions

The proposed welfare facilities shall be fully detailed in the Construction Phase Plan. The location for the welfare and compound facilities are to be agreed with Conwy County Borough Council and the Conwy County Borough Council Harbour Master. It is anticipated that a suitable area will be available on or near to the promenade.

The Client is to confirm information on the location for welfare, site compound and availability of temporary services.

It is anticipated that all facilities will be located within a secure area segregated from the general public.

Prior to commencing work on site, the Principal Contractor shall agree with the Client the arrangements for loading and unloading.

3.5 Site Security

The works are to be carried out on the Promenade and beach at Old Colwyn. During holiday seasons this area can become very busy with families, children and dogs, therefore security of the site including the beach section is extremely important to prevent unauthorised access. The CPP must outline how site security will be managed and how members of the public will be

prevented from entering working areas. It must also consider how the public can safely egress the beach beyond the site.

3.6 Traffic Management

The Promenade is a narrow 30-mph bidirectional roadway with a shared use path for pedestrians, cyclists and NMUs to the seaward side and a footpath to the railway embankment side. The shared use path forms part of the Wales Coastal Path and is used by cyclists, pedestrians and NMUs all year round.

The works may require closure to parts of the Promenade and adjacent shared use path and footpath, therefore the Principal Contractor shall incorporate within the CPP arrangements for managing the following: -

- Delivery and removal of materials to the site.
- Arrangements for site traffic during busy holiday / weekend periods.
- Arrangements for movement of site vehicles adjacent to public open spaces
- Diversions for cyclists, pedestrians and NMUs for the duration of the works.
- Parking arrangements for contractors' vehicles.

The Principal Contractor is to include in his Construction Phase Plan a Traffic Management Plan to show the layout of traffic and pedestrian routes, welfare location and all storage and lay down areas which is to be agreed with the Client.

Refer to Appendix 1/17 of the Works Specification for further information.

3.7 Emergency Procedures / Means of Escape

The works are to be carried out on the beach and on the sea wall. These areas can be extremely dangerous during extreme weather events, especially when there is a combination of high tides and strong winds

The Principal Contractor shall include within the CPP arrangements for evacuation of workers should they become entrapped by the tide or swept into the sea.

Emergency contact details for Client and Principal Contractor to be provided at the start up meeting.

3.8 Permit to Work and Authorisation Requirements

The works to the highway will need appropriate licencing and where relevant a Traffic Management Plan will need to be produced as part of any required road-opening licences. Appendix 1/17 of the Works Specification provides information on the timescales required for the submitting of traffic management approvals for approval.

The works will require a Marine Licence from National Resources Wales.

3.9 Smoking, Drugs and Alcohol Restrictions

The Principal Contractor and the Contractors on site will be expected to invoke and clearly identify strict guidelines and procedures in respect of drugs and alcohol use through both induction and within the Construction Phase Plan.

3.10 Ongoing Design & Design Changes

Designers shall engage with the Principal Designer in sufficient time to enable consideration of health and safety issues and updating of the PCI.

3.11 Contractor Design Elements

Where the Principal Contractor is responsible for the design of elements of the project, the Principal Contractor's Designers must comply with the requirements of Regulation 9 of CDM 2015 and shall engage with the appointed Principal Designer in sufficient time to enable consideration of any significant health and safety risks and updating of the PCI.

Refer to Appendix 1/10 of the Works Specification for further information.

3.12 Design Changes due to Unforeseen Circumstances or Conditions

The Principal Contractor will be required to submit to the appointed Principal Designer details of unforeseen circumstances or conditions encountered during the project execution resulting in substantial design changes or which might affect significant health & safety risks for the project design.

4 Health & Safety Hazards

4.1 Boundaries and Access

The site covers the area to the west of Splash Point for a distance of approximately 300m to 500m. The north of the site is bounded by the Irish Sea and to the south is the Holyhead to Chester railway line which is operated by Network Rail. Access to the site can be gained via: -

- Promenade to the west
- Junction 22 of the A55 to the south
- Cliff Gardens to the east.

It should be noted that the specification states that access and egress to the working areas for construction traffic (including road deliveries) is strictly off the A55 at Junction 22. This is to reduce the interaction and risk of collision with traffic/pedestrians along Promenade Rd and the surrounding housing estate roads. Refer to Appendix 1/9 of the Works Specification.

The Client is to provide information on any Health & Safety issues that will affect access and requirements for temporary access routes.

Access to the beach is via the slipways at Splash Point.

4.2 Adjacent Use and Interface

The site is located adjacent to the following: -

- Colwyn Bay beach which becomes very busy during holiday season.
- Holyhead to Chester railway line which is the main railway line for north Wales.

4.3 Environmental Issues

The 'Colwyn Bay Preliminary Ecological Appraisal Report' (doc ref 410895-MMD-N-R-00-XX-1701) provides information on issues affecting the site, which include: but not limited to -

- Proximity of the Liverpool Bay Special Protection Area
- Potential for nesting birds
- Mussel beds.

The Principal Contractor should note there is a potential hazard relating to foraging seagulls. They can display aggressive behaviour and carry out attacks to obtain food. Therefore it is recommended that there be no exposed sources of food, and that food waste / wrappings etc is to be in confined within enclosed bins.

4.4 Noise, Dust, Vibration and Hot Works Restrictions

Refer to Appendix 1/9 of the Works Specification for further information.

It is understood that the Principal Contractor will select processes with least noise, dust, vibration where reasonably practicable and programme the use of any plant & equipment to minimise the risk to operatives and members of the public.

4.5 Utilities

Information on existing services is provided in Appendix A.

Services identified in the vicinity of the works include: -

- Outfalls and culverts
- Sewers (surface and combined)
- Buried electrical cables (LV)
- Street lighting cable in the vicinity of the new Splash Point works.
- Surface water drainage

Welsh Water existing assets require protection works to be carried out to permit construction of the new revetment, refer to Appendix 1/16 of the Works Specification for further information. All other services shall be protected during the works.

The Principal Contractor should assume that all services are live and so should undertake all necessary investigations to satisfy himself on the presence of services within the confines of the works. The Principal Contractor is required to forward the results of these investigations to the Structural Design Engineer at least two weeks prior to the commencement of the works or ordering of materials, whichever occurs first.

All works involving underground services are to be carried out in accordance with HSE Guidance Note HSG47 (Third Edition) – 'Avoiding dangers from underground services'.

The Principal Contractor will note the type, size, level and position (from recognisable surface features) of all services encountered during the course of the works. This information is to be included within the Health and Safety file which shall be developed during the course of the works.

Where necessary the Principal Contractor shall co-ordinate the isolation of known services with the Client and Statutory Undertakers.

Where necessary the Principal Contractor shall liaise with the Client with regard to the provision of temporary services and maintaining existing services.

4.6 Ground Conditions

The following information is available: -

- Aecom Old Colwyn Promenade Improvements Geotechnical Technical Note
- Mott MacDonald Old Colwyn Promenade Coastal Defence Geotechnical Desk Study.

Hazards which may impact on the work include the following: -

- Works required on or adjacent to steeply sloping ground.
- Voids
- Buried structures

The Ground Investigation works are currently being undertaken and information will be provided by the Client when it becomes available.

4.7 Existing Structures

Works are to be carried out adjacent to the existing sea wall. Information from the Ground Investigations will provide some information of the existing sea wall foundations.

Note loadings to the sea wall to be kept to a minimum.

Existing sea walls are to be repaired and repointed.

Refer to section "Significant Design Assumptions and Control Measures", drawings and specification for further requirements.

4.8 Materials Requiring Particular Precautions

4.8.1 Asbestos

Information provided by the Client has not identified any asbestos in the area of the works.

In the event that asbestos is found in the working areas, it is expected that the Principal Contractor will immediately stop work and inform the Client and the Principal Designer. Under no circumstances should a material suspected to contain asbestos be disturbed.

4.8.2 Existing carriageway

The bituminous surfacing material may be to the existing carriageway and promenade may contain coal tar, total petroleum hydrocarbons (TPH) and polycyclic aromatic hydrocarbons (PAH).

The Client has not provided information on any other materials which require particular precaution.

4.9 Working at Height

Work at height will be required on the sea wall. This work may be significantly more hazardous depending on tidal and weather conditions. The Principal Contractor is to identify within their CPP how these works will be managed.

Every effort should be made to reduce the amount of working at height where possible. Where it is not possible to remove the activity, consideration should be given to providing collective measures of protection over individual measures.

4.10 Excavations

The proposed work will require significant excavations as part of this scheme. The Principal Contractor shall be responsible for the stability of structures during all stages of construction. The Principal Contractor must ensure coastal protection of the site and promenade is provided throughout the project.

Every effort should be made to reduce the amount of excavation where possible. Where it is not possible to remove the activity, consideration should be given to providing collective measures of protection over individual measures.

4.11 Confined Space

The works do not require any CSW. Confined space working may be required for the drainage works.

4.12 Unexploded Ordnance

The site is categorised as low risk from UXO.

4.13 Demolition / Dismantling

The works will involve some demolition and dismantling which will include the following main elements: -

- Toe armour in front of sea wall adjoining the new revetment – if present and it complies with the specification it is anticipated that this will be re-used within the new rock revetment.
- Steel beach access steps and handrailing.
- Groyne concrete steps.

Refer to dwg no. 415437-MMD-00-ZZ-DR-D-0210 for further information.

The designer is developing a site clearance drawing which will identify all items that are to be removed.

4.14 Work Exposing Workers to the Risk of Drowning

The works require construction activities to be carried out on the beach and on the sea wall and will therefore expose workers to the risk of drowning and possible entrapment by the incoming tide on the beach. The CPP will need to provide information on how the Principal Contractor will manage this hazard and what arrangements will be put in place for rescue of workers.

4.15 Work Involving the Assembly or Dismantling of Heavy Prefabricated Components

Information has been provided detailing the assembly of prefabricated units and includes: -

- Precast units for the stair structures and outfalls.
- Steel structure for the fishing platform and associated promenade access ramp and stairs.

4.16 Maintenance

The Principal Contractor is to provide any information on maintenance that may be required by the Client such as outfalls, paint systems, etc.

5 Health & Safety File

A Health & Safety File has been prepared and will be issued to the Client refer to Mott MacDonald doc 415437-MMD-00-XX-RP-Y-4002. The Client must make sure the Principal Contractor updates the document and passes the completed Health & Safety File back to the Client at the end of the works.

Appendix B outlines the duty holders' responsibility for the provision of information.

A. Extent and Location of Existing Records and Plans

Title	Doc Ref	Date
Old Colwyn Promenade Coastal Defence – Ground Investigation Report	T.B.C.	T.B.C.
Colwyn Bay Preliminary Ecological Appraisal Report	410895-MMD-N-R-00-XX-1701	20/02/2020
PAS 128 Type B survey (awaiting information)	TBC	TBC
Drainage Condition survey. Invek Surveys Ltd – Colwyn Bay Promenade	N/A	06/05/20
Manhole Condition Survey Invek Surveys Ltd – Colwyn Bay Promenade	Numerous photos	May 2020
Colwyn Bay Promenade Drainage Layout. Overall Layout	A1_1637/01_Rev_00	11/05/20
Colwyn Bay Promenade Drainage Layout. Western Layout	A1_1637/02_Rev_00	11/05/20
Colwyn Bay Promenade Drainage Layout. Central Layout	A1_1637/03_Rev_00	11/05/20
Colwyn Bay Promenade Drainage Layout. Eastern Layout	A1_1637/04_Rev_00	11/05/20
Old beach Surveys – numerous	Various	Various
Archive Drawings	Various	Various
Utilities – see Appendix C	Various	Various
Beach survey		2019
CCBC coastal defence inspections	Various	Various
Topographical Survey		2007
GPR Survey	51701-001 (2 sheets)	Jan 2020
CCTV Survey Inspection Report	N/A	21.02.2020
Old Colwyn Promenade Coastal Defence Geotechnical Desk Study	415437-MMD-G-R-00-XX-1500	24/01/2020
Old Colwyn Promenade Improvements Geotechnical Technical Note – Aecom	N/A	16/01/2020
Apron to Existing S.W. Outfall, Beach Road, Colwyn Bay	5853	10/04/85
<u>Splash Point Project</u>		
Old Colwyn Coastal Defence & Active Travel Works Project Manual - As-Built File	NA	NA
<u>Splash Point As-Built</u>		
OLD COLWYN PROMENADEPHASE 1 GENERAL ARRANGEMENT	OCSP-ACM-XX-XX-DR-AR-100001	24/11/2020
OLD COLWYN PROMENADEPHASE 1 CROSS SECTIONS	OCSP-ACM-XX-XX-DR-AR-100002	24/11/2020
OLD COLWYN PROMENADEPHASE 1 PROPOSED PAVEMENTS	OCSP-ACM-XX-XX-DR-AR-100003	24/11/2020
OLD COLWYN PROMENADEPHASE 1 PROPOSED CONTOURS	OCSP-ACM-XX-XX-DR-AR-100004	24/11/2020
OLD COLWYN PROMENADEPHASE 1 SIGNAGE GENERAL ARRANGEMENT	OCSP-ACM-XX-XX-DR-AR-100006	24/11/2020

Title	Doc Ref	Date
OLD COLWYN PROMENADE PHASE 1 SIGN PLATE DETAILS	OSCP-ACM-XX-XX-DR-AR-100007	24/11/2020
OLD COLWYN BAYAS BUILT RETRACTION PLAN	OSCP-ACM-XX-XX-SK-CE-100001	23/11/2020
OLD COLWYN BAYAS BUILT CROSS SECTION 1	OSCP-ACM-XX-XX-SK-CE-100002	23/11/2020
OLD COLWYN BAYAS BUILT CROSS SECTION 2	OSCP-ACM-XX-XX-SK-CE-100003	23/11/2020
ACCESS RAMP LONG SECTION	OSCP-ACM-XX-XX-DR-CE-100004	23/11/2020

The above information can be obtained by contacting Conwy County Borough Council.

B. Health and Safety File

Information to be forwarded by the Principal Contractor (PC), Contractors (C), Designers (D) and Principal Designer (PD) for inclusion in the Health and Safety File is shown below. The letters in brackets indicate the party which should be providing the information

Health & Safety File Information Requirement

Information	Responsibility	Completed
Brief description of design / construction work carried out.	PD/PC	
List of principal parties involved in the project, including company names, addresses and telephone numbers for Client, Contract Administrator, Designer, Principal Designer	PD	
A table is to be provided by the Principal Contractor indicating the names, addresses and contact details of any Contractors employed on the works. The latter to include a brief description of the work carried out by the Contractor. Names of personnel should be excluded	PC	
Any residual hazards and how they would be dealt with. This is to include the presence of any unidentified services encountered. Any unexpected hazards encountered during the works	D/PC	
Key structural principles (for example, bracing, sources of substantial stored energy – including pre- or post-tensioned members) and safe working loads for floors and roofs, particularly where these may preclude placing scaffolding or heavy machinery there	D	
The general details of all materials used	D/PC	
Details of hazardous material used. Material data sheets for any materials used in the works which could be hazardous during future maintenance, alteration, cleaning or demolition	PC	
Details of preparation methods employed and materials applied (including manufacturer's trade descriptions), the suppliers, their addresses and telephone numbers	PC	
Design criteria for materials and associated components (i.e. their anticipated life before replacement envisaged)	D/PC	
Information regarding the removal or dismantling of installed plant and equipment (for example any special arrangements for lifting, order or other special instructions for dismantling etc.)	D	
Health and safety information about maintenance and cleaning	D/PC	
Details on nature and precise location and marking of services presented schematically. Particularly where services were found to be in a different position than shown or indeed were encountered during the works but were previously unrecorded. In this case, type, size and precise location is required	C/D/PC	
Maintenance/cleaning/dismantling/inspection procedures to be adopted in the future – these can include manufacturer's documents for the materials/components installed	D/PC	
As-built drawings - all drawings must be marked "As-Built" or "Record Drawing". They should therefore not carry a revision letter or "clouding". If the drawings have been reduced, they must remain legible. Drawings specifically produced for the project are to be a true reflection of the structures as constructed and not limited to 'schematics'. Any hidden services are to be included. It should be noted that construction issue drawings will not be considered adequate for the Health and Safety File.	PC	

Documents are to be originals or clear legible copies

C. Utilities Information

C.1 Scottish Power

C.2 Welsh Water

C.3 B.T.

C.4 Wales & West

C.5 Other

C.5.1 Existing S.W. Outfall Beach Road, Colwyn Bay

C.5.2 Street Lighting

Information received from Conwy CBC street lighting team showing the screen shots of the existing street lighting.

C.5.3 Invek Drainage Surveys

