

Environment Agency NEC4 engineering and construction contract (ECC) Scope

Project / contract information

Project name	Preston Beach Rock Revetment – Recovery 2020-21
Project 1B1S reference	ENVIMSW0002807C
Contract reference	32654
Date	22 nd October 2021
Version number	Version 6.0
Author	██████████

Revision history

Revision date	Summary of changes	Version number
29/09/2021	First issue	1.0
08/10/2021	First Revision	2.0
19/10/2021	Second Revision	3.0
20/10/2021	Third Revision	4.0
21/10/2021	Final Version	5.0

This Scope should be read in conjunction with the version of the Minimum Technical Requirements current at the Contract Date. In the event of conflict, this Scope shall prevail. The *works* are to be compliant with the following version of the Minimum Technical Requirements:

Document	Document Title	Version No	Issue date
412_13_SD01	Minimum Technical Requirements	V11	04/05/2021

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- S 1700 *Client's* work specifications and drawings **Project specific changes to the MTR**

Appendix 1 – Drawings & Specification

S 100 Description of the works

S 101 Description of the works

The *works* are to install approx. 110m of Rock Revetment on Preston Beach, Weymouth. The required revetment is detailed on drawings PC2049-RHD-XX-XX-DR-C-001 & PC2049-RHD-XX-XX-DR-C-002, and is situated at the Greenhill (southern) end of Preston Beach.

The drawings describing the *works* are included in Appendix 1.

The required profile & alignment of the revetment is indicated on drawings PC2049-RHD-XX-XX-DR-C-001 & 002. The *Contractor* will establish the alignment on the Site, and confirm the position with the *Supervisor* before commencement of any construction works. The *Contractor* shall check the provision of any level reference points shown on the drawings and confirm the position and level with the *Supervisor* before use for setting out the *works*. The *Contractor* shall inform the *Project Manager* when all setting out reference points have been agreed, checked and confirmed. Details of EABMs E31110099, E31110100 & E61110256 as referenced on Topo drawing 1007229 supplied – Details in appendix 1.

S 102 Purpose of the Works/ Outcome required

The objective of this project is to construct a rock revetment on Preston Beach to provide stability to the beach material seaward of the concrete promenade & seawall.

The function of the sea defence asset is dependent on retaining beach material in front of the concrete promenade. Maintaining an adequate width of beach material in this location will minimise the potential for wave overtopping / splashing over the sea wall.

It has been proven that that the rock revetment installed in 2014 has added stability to the beach crest, and made the asset more resilient. Routine maintenance has become less critical in the areas with improved rock revetment.

Outcome Required

The *Contractor* shall construct a rock revetment as detailed in the drawings and specifications referenced in this document.

The completed *works* will;

- 1 Reduce risk of wave overtopping.
- 2 Increase resilience of Sea Defence Asset.
- 3 Reduce requirement for routine maintenance.
- 4 Be consistent with Beach Management Plan (BMP) and Shoreline Management Plan (SMP) to maintain a Sea Defence at this location.

Construction of the proposed rock revetment is considered to be a formalisation and improvement of the existing revetment, and as such, can be constructed as 'Permitted Development' on behalf of the Environment Agency, and will not require Planning Permission.

The *Contractor* shall complete the *works* such that it provides value for money to the *Client* in line with Benefits in Full Business Case and results in economic efficiencies based on the project budget.

S200 General constraints on how the *Contractor* provides the works

S 201 General constraints

The *works* will need to be undertaken on the beach which has open Public Access. The *Contractor* shall develop a solution to effectively manage the 'People – Plant' interface on both the access route along the beach, and on the Promenade adjacent to the Working Areas.

The section of promenade adjacent to the Working Areas will need to remain open (PROW). The *Contractor* must set up suitable means to segregate the public from the Working Areas. The *Contractor* must maintain the PROW in a suitable condition for all users of the promenade including, pedestrians, cyclists, mobility scooters, wheelchairs etc.

The *Contractor* must conform with CDM 2015 regulations, engaging constructively with the *Client*, Designer, and Principal Designer.

A suitably developed Construction Phase Plan (CPP) must be prepared, and be approved by the *Principal Designer* before any constructions works take place.

The *Contractor* shall submit its Construction Phase Plan, detailing the following as a minimum, for the acceptance of the *Project Manager* & Principal Designer:

- Access to the Site – only via the routes shown on the site plan in Appendix 1
- Noise and vibrations – To be kept to a minimum as a courtesy to the surrounding residents. The *Contractor* shall provide Noise monitoring equipment to be installed by specialist contractor / supplier at the part of the Working Areas at the southern end of the beach & at the unloading area at the Overcombe end. If mitigation is required following the noise monitoring then this will be instructed under a compensation event.
- Working hours are restricted to – 7.00am – 7.00pm Monday – Saturday.
- Interfaces between the *works* and existing structures – Any damage shall be rectified before the *Contractor* leaves the Site.
- The work activities shall be planned around the known astronomic tide times.
- Fuel shall not be stored on the beach, and only brought to the Site in suitably banded bowsers.
- The *Contractor* shall make provision for the proper storage and protection of all Plant and Materials on the Site. All such provisions shall be removed at Completion and any disturbance made good.
- Plant and machinery shall be re-fuelled & serviced in designated areas on concrete surface (not directly on shingle) with spill kits available on the Site in accordance with the SHEW COP. Concrete area to be protected from damage by tracked machines.
- The *Contractor* shall comply with all current and relevant environmental legislation, guidance.

S 201 Confidentiality

The *Contractor* does not disclose information in connection with the *works* except when necessary to carry out their duties under the contract or their obligations under the contract

The *Contractor* may publicise the *works* only with the *Client's* written permission.

S 202 Security and protection on the Site

The *Contractor* shall establish a site compound for the provision of welfare facilities and vehicle parking etc. The *Client* will provide a suitable area for the compound adjacent to the Site.

The *Contractor* shall provide any security requirements for the Site and protection of the public.

S 203 Security and identification of people

The *Contractor* shall arrange for any security, vetting and identification of people working on or visiting the Site.

S 204 Protection of existing structures and services

All readily available services information within the *boundaries of the site* is included within the Site Information. Prior to carrying out the *works* the *Contractor* shall independently verify the location of all known services.

The *Contractor* is responsible for any temporary works necessary to facilitate the works.

The *Contractor* is to locate the Sealife Centre intake pipe, and Lodmoor Outfall Culverts, and ensure that these are clearly marked. The *Contractor* shall ensure that no damage is caused to these pipes by heavy Plant & Machinery.

Clause 80.1 and 81.1 of the NEC4 ECC contract take precedence over Section S 1701 'Environment Agency Minimum Technical Requirements', Section 1.31.

S 205 Protection of the works

The *Contractor* shall make arrangements for protection of the *works, Plant and equipment* against damage.

S 206 Cleanliness of the roads

The *Contractor* shall protect the access roads to the Site from damage due to its own operations,

The *Contractor* shall ensure the cleanliness of the access roads to the Site to prevent any deterioration due to its operations.

S 207 Traffic Management

The *Contractor* shall prepare a Traffic Management Plan. The plan shall demonstrate arrangements for safe management of all traffic affected by the *works*, including site personnel and plant, road vehicles of all kinds, cyclists and pedestrians.

The *Contractor* shall obtain all necessary temporary consents required for traffic management and pays for all application and processing charges.

S 208 Condition survey

The *Contractor* shall undertake photographic condition surveys of the existing structures and access routes etc. prior to the *works*, and upon completion. The area covered by the surveys shall include the full extent of the areas used for unloading & delivery of rock, and the Working Areas.

Pre-Condition photographic survey to be issued to the *Client* prior to commencement of *works*.

The completion surveys shall demonstrate that any damage caused by the *Contractor's* operations has been rectified before leaving site.

S 209 Consideration of Others

The *Contractor* shall avoid disturbance to the general public and occupiers of adjacent premises wherever possible.

The *Contractor* shall exclude the public from the Working Areas, and all practicable measures must be taken to minimise risks to the public. The *Contractor* will be required to keep the Public Right of Way open for the duration of the *works*.

S 2010 Control of site personnel

The *Contractor* shall have control of people working on or visiting the Site.

S 2011 Site cleanliness

The *Contractor* shall protect the *works*, the public and the workforce on the Site by maintaining good site cleanliness. The Site shall be left tidy at the end of each working day.

S 2012 Waste materials

The *Contractor* shall be responsible for removal of all waste materials generated by the *works* and must ensure appropriate disposal.

S 2013 Deleterious and hazardous materials

The *Contractor* shall restrict the use of deleterious and hazardous material.

S300 Contractor's design

S 301 Design responsibility

The *Contractor* shall undertake the design of any temporary works required for the construction of the permanent works, including access routes if deemed necessary. The *Contractor* shall design the temporary works in accordance with the latest Eurocode standards and / or other relevant industry standards or codes of practice. The *Contractor* shall submit full calculations to the *Project Manager* on request.

S 302 Design submission procedures

The *Contractor* shall submit any temporary works design to the *Project Manager* & Principal Designer for acceptance.

S 303 Access to information following Completion

The *Contractor* shall undertake Survey Work at suitable intervals during the construction phase so that suitably detailed As-Built Information can be collected, and provided on completion of the *works*.

Sufficient As-built information shall be provided to allow 'As-Built' Drawings, and as suitable updates to the existing Health & Safety File to be prepared by others. The *Contractor* shall engage with the Principal Designer & *Client* on completion of the works to provide such updates.

S 400 Completion

S 401 Completion definition

The following are absolute requirement for Completion to be certified, without these items the *Client* is unable to use the *works*:

- The information necessary to allow completion of the Health and Safety File
- Sufficient information to allow As Built drawings to be prepared by others.

S 402 Pre-Completion arrangements

The *Contractor* shall engage in regular (weekly / twice weekly) site meetings with the *Project Manager and / or Supervisor* during the construction phase.

Prior to any works being offered for Completion the *Contractor* shall arrange a joint inspection with the *Supervisor, Project Manager, Client, Senior User* as necessary.

S403 Take Over

The *Client* shall take over the Site upon satisfactory completion of the *works and associated activities*.

S 500 Programme

S 501 Methodology statement

Method Statements provided to support a programme for acceptance include full particulars of the methods, timing and sequence of construction, including the use and design of temporary works, Materials and Plant and Equipment proposed by the *Contractor*. Method statements shall contain sufficient information to enable the *Project Manager* to assess any likely detriment to either the proposed or the existing *works* or to the *Client's* overall objectives.

All method statements submitted to the *Project Manager* are to include environmental management actions where relevant.

The *Contractor* issues method statements in advance of carrying out items of work. The *Contractor* allows the period for reply for acceptance or rejection of method statements. Work does not commence until the *Project Manager* has accepted the relevant method statement. The *Contractor* does the work in accordance with the accepted method statement.

Method statements submitted with a programme for acceptance include but are not limited to the following matters:

- i. Health & safety measures
- ii. Extent of Working Areas and protective barriers
- iii. Access to Working Areas,
- iv. The implementation of relevant statutory regulations
- v. The design and construction of temporary works and de-watering measures
- vi. How the environmental impact of the activities are to be minimised
- vii. Equipment requirements, siting and mode of operation

- viii. Labour requirements and supervision
- ix. Delivery and storage of Plant and Materials
- x. Provision of access to third parties
- xi. Details of the construction sequence
- xii. Details of working methods
- xiii. Detailed programme
- xiv. Result of any consultation with third parties
- xv. Contingency plans in the event of flooding
- xvi. Risk and COSHH assessments

S600 Quality management

N/A

S 700 Tests and inspections

S 701 Tests and inspections

The *Contractor* shall undertake testing and inspection of Materials and the *Works* as required in accordance with the specification.

S 702 Management of tests and inspections

Results of tests shall be provided to the *Client* or their representative as soon as available.

S 703 Covering up completed work

The *Contractor* shall communicate with the *Supervisor*, ensuring that all areas of work have been inspected if necessary, prior to being backfilled with beach material.

S800 Management of the works

S 801 Project team – Others

As identified in the Contract Data.

S 802 Communications

The *Contractor* shall agree the following requirements with the *Client* and *Project Manager*:

- Meetings, attendees and meeting records,
- Reporting requirements (eg progress reports, recipients of reports),
- Information requirements,
- Electronic systems and communications,
- Use of standard forms and templates,
- Terminology and abbreviations.

FastDraft shall be used for document issue and contractual correspondence.

The *Contractor* shall attend regular Progress Meetings as requested, and provide reports on progress throughout the construction phase.

S 900 Working with the *Client* and Others

S 901 Co-operation

The *Contractor* shall co-operate with surveyors (e.g. ecology, archaeological) engaged by the *Client* and representatives of organisations such as Natural England (monitoring) during construction of the *works*.

Additional costs associated with delays caused by ecological or archaeological survey work will be considered a compensation event.

S 1000 Services and other things to be provided

S 1001 Services and other things for the use of the *Client, Project Manager* or Others to be provided by the *Contractor*

The *Contractor* shall provide welfare facilities that can be used by the project team members when on the Site. It is assumed that there will be no more than 2 visitors to site at any one time.

S 1100 Health and safety

S 1101 Health and safety requirements

The *Contractor* shall comply with the requirements of:

The *Client's* 'Constructing a Better Environment' 677_15 Safety, Health, Environment and Wellbeing (SHEW) Code of Practice (CoP) Version 3 dated May 2018. The *Client's* Operational Instruction 300_10; Safety, Health and Environment (SHE) handbook for managing capital projects **Version 3 dated May 2018.**

The *Contractor* shall provide information as requested (complete with as-constructed records) to allow the Health and Safety File to be completed.

The *Contractor* shall register with the Environment Agency's Area Flood Warning team before commencing construction. The *Contractor* may arrange regular weather forecast information from the Environment Agency's Flood Warning team.

The *Contractor* shall make all health and safety records available to the *Project Manager* for inspection if required.

S 1102 Method statements

The *Contractor* is required to submit method statements and risk assessments to the *Project Manager* and Principal Designer for acceptance.

S 1103 Legal requirements

The *Contractor* shall fulfil the role of Principal Contractor under the Construction Design and Management Regulations 2015 for the duration of the *works*. The *Client* shall provide a Principal Designer for the duration of the *works*.

S 1104 Inspections

A *Supervisor* will be procured by the *Client* to inspect the *works*. The *Contractor* shall accommodate the *Supervisor's* requirements in order to complete these inspections.

S1200 Subcontracting

S 1201 Restrictions or requirements for subcontracting

The *Contractor* shall provide the *Project Manager* with details of proposed sub-contractors and suppliers, including method statements and risk assessments, for acceptance prior to sub-contractor's commencing the *works*, and prior to suppliers providing Plant or Materials in connection with the *works*.

The *Contractor* shall quality assure all subcontracted items of the *works*, including environmental products, prior to submission for review, or prior to requesting an inspection by the *Project Manager, Client* or *Supervisor*.

S 1202 Acceptance procedures

NEC4 Clauses 26.3 and 11.2(26) State any specific submission and acceptance procedures for the proposed subcontracts not based upon the NEC contract. The basic requirement for submission and acceptance is dealt with in subclause 26.3.

1300 Title

N/A

S 1400 Acceptance or procurement procedure (Options C and E)

N/A

S 1500 Accounts and records (Options C and E)

S 1501 Additional Records

NEC4 Clause 52.2 - This includes but not be limited the following:

- Timesheets and site allocation sheets,
- Equipment records,
- Forecasts of the total Defined Cost, (Forecasts are to include, but not be limited to costs to date, costs to completion including detailed breakdown of staff, sub-contract and major material items)
- Specific procurement and cost reports

The format and presentation of records to be kept are to be accepted by the *Project Manager*.

S 1600 Parent Company Guarantee (Option X4)

Not required

S 1700 Client's work specifications and drawings

S 1701 Client's work specification

The Project-Specific Technical Specification comprises the Preston Beach Revetment Works - Specification document (RHDHV) and the Environment Agency's Minimum Technical Requirements, which are amendments and addenda to the Civil Engineering Specification for the Water Industry (CESWI) 7th Edition.

Where there is a conflict the Specification shall take precedence.

S 1702 Drawings

The drawings included in the Scope are identified in Appendix 1.

S 1703 Standards the Contractor will comply with

The *Contractor* shall carry out their work using the following guidance.

Ref	Report Name	Where used
	Sustainability reporting requirements in accordance with the CDF reporting requirements	
	300_10 SHE handbook for managing capital projects	
	300_10_SD27 SHEW Code of Practice	

Appendix 1 - Drawings & Specification

Drawing No and Title	Drawing version
PC2049-RHD-XX-XX-DR-C-001	C01
PC2049-RHD-XX-XX-DR-C-002	C01
PC2049-RHD-XX-XX-SP-C-0003 (Specification)	
1007229 – Topographic Survey (EA)	
EABM Details - E31110099, E31110100 & E61110256	