

**Environment Agency**  
**NEC4 engineering and construction**  
**contract (ECC) Scope**  
**Project / contract information**

Project name	South East Beach Maintenance Contract - Seaford beach shingle recycling
Project 1B1S reference	ENV0001315C
Contract reference	32892
Date	30 <sup>th</sup> June 2021
Version number	1.5 (FINAL)
Project Manager	James Webb

**Revision history**

Revision date	Summary of changes	Version number
15/06/21	Tracked changes accepted	1.3
17/06/21	Finalised following Commercial Services Manager review	1.4
30/06/21	Sharefile link added; bullet point added in S500 re: emergency / urgent requirement	1.5

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
LIT 13258	Minimum Technical Requirements	11	04/05/2021

customer service line  
03708 506 506  
[www.environment-agency.gov.uk](http://www.environment-agency.gov.uk)

incident hotline  
0800 80 70 60

floodline  
0845 988 1188

**Contents List**

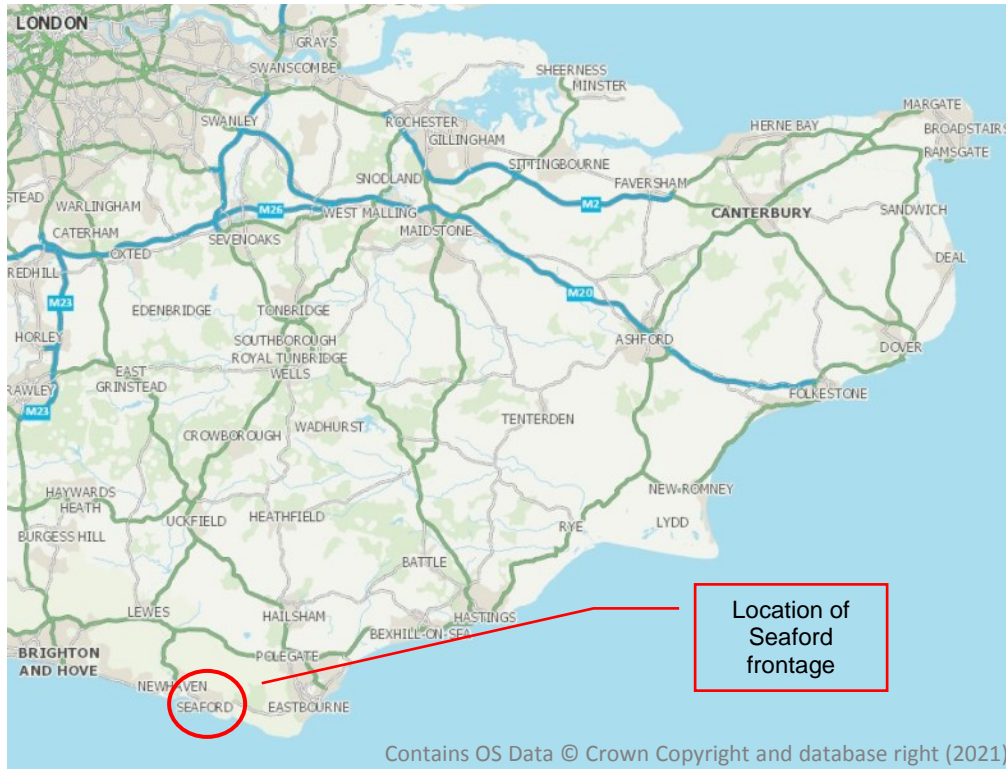
<b>S 100</b>	<b>Description of the <i>Works</i></b>
<b>S 200</b>	<b>General constraints on how the <i>Contractor</i> provides the <i>Works</i></b>
<b>S 300</b>	<b><i>Contractor's</i> design</b>
<b>S 400</b>	<b>Completion</b>
<b>S 500</b>	<b>Programme</b>
<b>S 600</b>	<b>Quality management</b>
<b>S 700</b>	<b>Tests and inspections</b>
<b>S 800</b>	<b>Management of the <i>Works</i></b>
<b>S 900</b>	<b>Working with the <i>Client</i> and Others</b>
<b>S 1000</b>	<b>Services and other things to be provided</b>
<b>S 1100</b>	<b>Health and safety</b>
<b>S 1200</b>	<b>Subcontracting</b>
<b>S 1300</b>	<b>Title</b>
<b>S 1400</b>	<b>Acceptance or procurement procedure (Options C and E)</b>
<b>S 1500</b>	<b>Accounts and records (Options C and E)</b>
<b>S 1600</b>	<b>Parent Company Guarantee (Option X4)</b>
<b>S 1700</b>	<b><i>Client's</i> work specifications and drawings</b>
<b>S 1800</b>	<b>Disallowed costs and standard risks</b>

**Appendix 1 – Draft Pre-Construction Information**

## S 100 Description of the Works

The *Works* comprise bi-annual shingle recycling at Seaford beach in East Sussex to maintain the sea defence to the required standard of protection. The *Works* are located at:

Seaford Beach, Seaford, East Sussex - Grid Ref: TQ 462,000 to TV 487,982 (location map below).



*Location of Seaford frontage in south-east England*

The objective of the project is to restore/maintain the Seaford sea defence by means of bi-annual shingle recycling to its design profile. The design profile provides a 1 in 200 year or 0.5% annual exceedance probability (AEP) standard of protection against sea flooding to the town of Seaford.



*Seaford sea defence looking North West from Splash Point*

## **S 101 Description of the Works**

### **Summary of Seaford sea defence**

The Seaford sea defence scheme provides protection against coastal flooding to the low lying areas and properties within the town. The defence consists of a terminal groyne at Splash Point, a 1km length of rock armour toe (placed in front of the old sea wall) and an open 4km long beach re-nourished with 1.8 million cubic meters of shingle. The design beach profile is a crest level of 6.0mAOD at Tide Mills to 7.0mAOD at Splash Point, with a 25m\* wide crest and a slope of 1 in 7 to the foreshore (\*crest width does vary in some localised areas). Oblique wave action and long-shore currents acting on the beach erode shingle from the central section of Seaford Bay (The Buckle), to the south-east (Splash Point) and north-west (Tide Mills), reducing the standard of protection.

### **Seaford sea defence beach maintenance works specification**

The *Contractor* shall undertake shingle recycling annually in two recycling phases. These typically occur in November/December and February/March but are dependent on beach condition. Each phase requires the recycling of approximately 50,000m<sup>3</sup> to 60,000m<sup>3</sup> of shingle from areas of accretion to areas of depletion (the locations are determined by prevailing weather and site conditions) to restore the design profile and to minimise shingle by-passing to the east of Splash Point.

The *Contractor* shall carry out shingle re-profiling with bulldozers on an ad-hoc basis to respond to storm damage (between the two shingle recycling phases) or to stock pile material at Splash Point to prevent shingle loss to the east of the terminal groyne. Following large storm events, significant volumes of shingle can build up on the concrete promenade. When requested, the *Contractor* shall clear this shingle (using suitable light weight rubber tracked/wheeled plant) and place it back onto the beach.

### **Design**

The *Contractor* is not responsible for the design. The *Client* will provide site specific drawings in the appendix of the Pre-Construction Information (PCI) document ([which constitutes Appendix 1 of this Scope](#)).

### **Consents**

Due to the location/area of work and the type of work, beach recycling and re-profiling activities are defined as sea defence maintenance work and are exempt from requiring Crown Estates permission. A Marine Works License (issued by the Marine Management Organisation) and Flood Risk Activity Permit (issued by the Environment Agency) are also not required for this work.

Permission to recycle from the Tide Mills area of the frontage is required from Newhaven Port and Properties. This is obtained by the *Client* on an annual basis when required. Mitigation measures to protect vegetated shingle at Tide Mills have been agreed with the East Sussex County Council Ecologist and the Environment Agency Fisheries, Biodiversity and Geomorphology (FBG) Team. Details are contained within the Environmental Action Plan (EAP), which forms part of the Pre Construction Information (PCI). The EAP is reviewed annually but is unlikely to change for the duration of this contract.

### **Beach Management Plan (BMP)**

A BMP is available for the frontage and will be provided to the *Contractor* as part of the PCI documentation.

### **Surveys**

The *Contractor* is not required to undertake any surveys. Two post recycling (IN) surveys are

conducted by Data Management and Survey Teams of the Southeast Regional Coastal Monitoring Programme prior to each recycling phase. Maps illustrating the areas of erosion and accretion will be provided to the *Contractor*.

## **S 200 General constraints on how the *Contractor* provides the *Works***

### **S 201 General constraints**

#### **Principal landowners and stakeholders**

The principal landowners/stakeholders on and adjacent to the site are:

- Environment Agency: [REDACTED]
- Lewes District Council: [REDACTED]
- Seaford Town Council: [REDACTED]
- Newhaven & Seaford Sailing Club: [REDACTED]
- Newhaven Port & Properties Limited: [REDACTED]

The *Client* will inform all interested parties prior to re-profiling or recycling work commencing in autumn and spring.

#### **Site boundaries**

- Drawing '001 – Site Information' illustrates the site boundary, this document is available in Appendix 1 of the PCI.

#### **Adjacent land use and known construction activity**

- The site is an open public beach and is regularly used by members of the public for recreation, dog walking and fishing. The public could be present throughout the works at any time. The *Contractor* must develop procedures to ensure their protection at all times.
- Fishing boats, sailing boats and other leisure craft launching from the beach at Newhaven and Seaford Sailing Club may impact work activities.
- Fishing boats are stored on the beach crest between the Martello Tower and Splash Point Terminal Groyne. Re-profiling is not required in the vicinity of the boat storage area so this does not pose an issue. Access to the beach huts at the same location will not be affected by the work.
- There is a beach cafe located directly to the east of the Martello tower on the concrete promenade. A decked area with outdoor seating is located on the back of the beach crest. The cafe is open all year round and is often busy.
- There is a drinks kiosk and outdoor seating located on the concrete promenade to the south of West View Road. The drinks kiosk is open all year round and is often busy.
- There are no known adjacent or nearby construction activities.
- Refer to drawing '001 – Site Information' for locations (document is available in Appendix 1 of

the PCI).

### Heavy plant delivery/collection and access at Marine Parade/Edinburgh Road

All heavy plant must be unloaded and tracked/driven onto the beach at the designated plant access point at Edinburgh Road. This plant will then remain on the beach until completion of the work. Plant demobilisation must also be at the designated plant access point at Edinburgh Road. A *Contractor's* operative must be present to supervise all plant deliveries and tracking of plant along the foreshore.



*Foreshore access point for heavy plant at Marine Parade/Edinburgh Road*



*Foreshore access point for heavy plant at Marine Parade/Edinburgh Road*

### Access for site compound at Splash Point

Hiab lorry access for deliveries of oil stores, cones/signs, fencing etc. is through a gap in the parking bays located on the Esplanade, next to the junction of Cliffe Gardens. The *Client* will arrange access with Seaford Town Council prior to establishing the site compound. The Hiab lorry can then track along the concrete promenade to the site compound location on the beach crest immediately North West of Splash Point Terminal Groyne. A *Contractor's* operative must be present to supervise deliveries via Hiab lorry.



*Access for Splash Point Site Compound*



*Access for Splash Point Site Compound*

### Access for site compound at Seaford Sailing Club

Hiab lorry access for deliveries of oil stores, cones/signs, fencing etc. is through a padlocked gate on Marine Parade. The *Client* will provide the padlock key. The Hiab lorry can then track along the concrete promenade to the site compound located on the beach crest to the South East of the Seaford Sailing Club building. A *Contractor's* operative must be present to supervise deliveries via Hiab lorry.



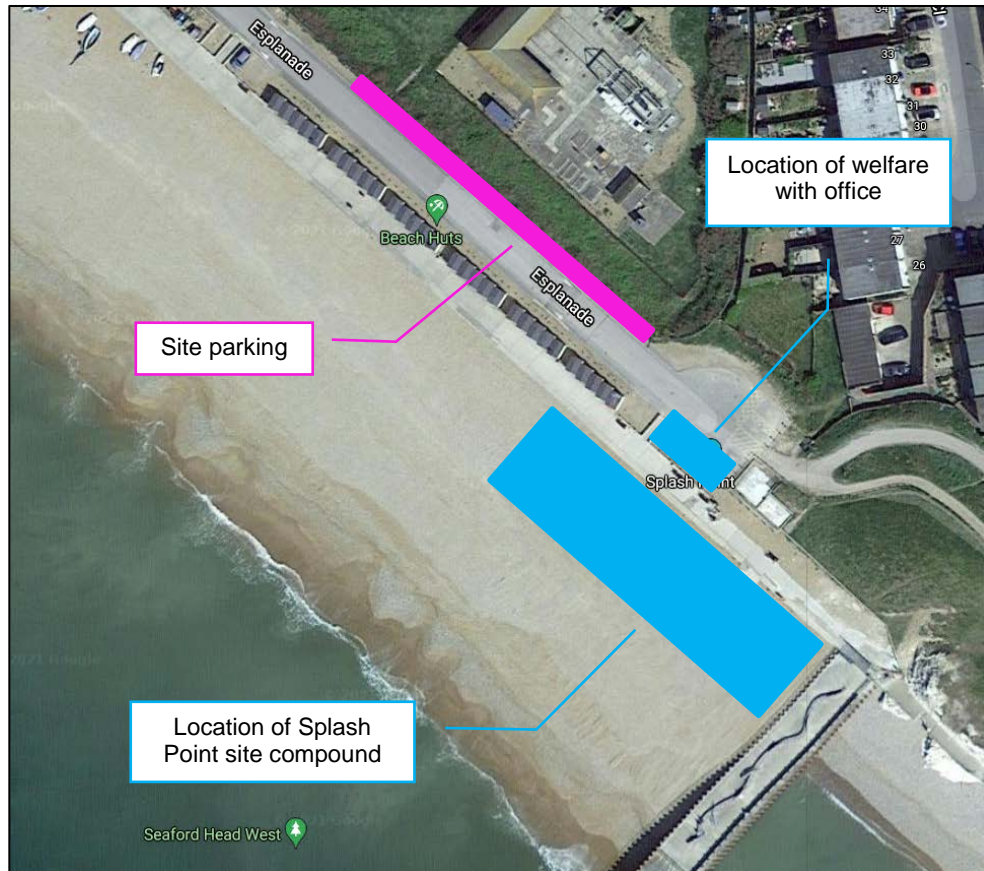
*Access for Seaford Sailing Club site compound*



*Access for Seaford Sailing Club site compound*

### Splash Point site compound and site parking location

The Splash Point site compound shall be located on the beach crest immediately North West of Splash Point groyne, with the site welfare and office unit located in the parking bays opposite (see below photo). Site parking is on the Esplanade.



*Splash Point Site Compound*



*Splash Point Site Compound from a previous phase of works*

### Seaford Sailing Club site compound and site parking location

Seaford Sailing Club site compound shall be located to the south east of the Seaford Sailing Club building (see below photo). Site parking is on the landward side of the concrete promenade.



*Sailing Club Site Compound*



*Sailing Club Site Compound from a previous phase of works*

### Details of “no-go” area

Vegetated shingle	There is an area of vegetated shingle between Seaford Sailing Club and Newhaven Harbour Arm. Vegetated shingle is clearly marked by vertical timber posts located at regular intervals. Plant must not track on the landward side of these posts.
Plant movements on concrete promenade	No heavy plant is to be loaded or unloaded, tracked or parked on the concrete promenade between Splash Point Terminal Groyne and Seaford Sailing Club. The only exception to this is the designated plant access point onto the beach at Edinburgh Road.
Martello Tower	Plant must keep a minimum of 1m from the perimeter wall of the Martello Tower Museum.

The three locations detailed above are marked on drawing ‘001 – Site Information’ in Appendix 1 of the PCI.

### Working times

Site operating times are between 08:00 and 18:00 Monday to Friday. In the event of significant storm damage or an operational requirement the *Contractor* may be required to work on weekends.

### Tidal Working and working near water

Due to the nature of the work, tidal working and working near water will be required. The *Contractor* shall consult tide times and weather forecasts on a regular basis using the Newhaven Tide Times.

### Working in extreme conditions

Due to the nature of the work and the exposed site location, operatives will be required to operate plant in cold/wet/windy conditions.

### Ground conditions

The gradient of the beach will vary as the sea erodes and reshapes the foreshore and it can become steep and unstable. The *Contractor* shall establish procedures to monitor and review changes in the shingle beach to ensure plant can operate safely and does not overturn or become stuck or trapped. The *Contractor* must specify the type and quantity of plant to be used and develop safe working procedures to ensure competent operators do not put themselves or others in danger. The procedures will include items such as:

- Never park on a slope
- Do not encroach within 2m of crest edge
- Stop work when public enter working zone
- Appropriate levels of competent supervision

### Unexploded ordnance

An unexploded ordnance search has not been carried out but a Zetica Unexploded Ordnance Risk Map is supplied in Appendix 1 of the PCI. The Seaford sea defence scheme that was constructed in 1987 imported 1.8 million cubic metres of shingle onto the beach and therefore the main UXO risk is from ordnance washed onshore (no previous incidents have been recorded during recycling or re-profiling works). It is suggested that a compulsory toolbox talk is carried out to all personnel explaining emergency action to take should and UXO incident be encountered.

## **Existing structures**

None of the existing concrete and timber groyne structures will impact the works as they are buried well below the current beach level. For locations of the old groyne field refer to drawing '002 – Groyne Locations' in Appendix 1 of the PCI.

A Southern Water long sea outfall runs below the beach at Tide Mills. For location please refer to service searches in Appendix 1 of the PCI. The structure is buried well below the current beach level, however as a precaution when working in the vicinity a 'no go' area shall be marked with a suitable barrier. Refer to service drawings in Appendix 1 for the outfall location. A manhole cover at Tide Mills marked by a timber post provides a starting reference point for marking the area.

Work will be required in close proximity to Splash Point Terminal Groyne. A sea outfall runs through the center of the groyne but this is protected by mass concrete.

Seaford Martello Tower is located on the beach crest and is surrounded by a perimeter wall. To mitigate the risk of the wall being hit, plant must not track within 1m of the wall. The one metre distance must be marked with suitable barriers.

## **Asbestos, including results of surveys**

The construction site is the shingle sea defence. The shingle is made up of marine dredged material placed on the beach from Oahs Bank (located in the English Channel) in 1987. The *Client* is not aware of asbestos on site.

## **Existing storage of hazardous materials**

There is no existing storage of hazardous material on site. The *Contractor* must develop procedures to ensure the safe refueling of plant and equipment in designated areas to ensure environmental protection and the safety of personnel and the public.

## **Contaminated land, including results of surveys**

The construction site is the shingle sea defence. The shingle is made up of marine dredged material placed on the beach from Oahs Bank (located in the English Channel) in 1987. The *Client* is not aware of any contaminated land.

## **Use of the site**

The site is an open public beach and is regularly used by members of the public for recreation, dog walking and fishing and to access the sea for swimming and water sports. The public could be present throughout the works at any time. The *Contractor* must develop procedures to ensure their protection at all times.

Due to the urban nature of the site, consideration must be given to local residents. Site operating hours of 08:00 to 18:00 must be observed and noise minimised at the start and end of the day. In drier/warmer conditions (typically during Phase 2 in Feb/March) dust can be created by trucks travelling along the haul road. When this occurs the *Contractor* must contact the *Client* and take appropriate steps to reduce the dust. This may involve reducing the trucks' speed or in an extreme case, temporarily pausing the recycling operation.

## Environmental considerations

The specific environmental risks are detailed in the Environmental Action Plan (EAP) below (also provided in the PCI). The *Contractor* must comply with this plan.

Environmental Action Plan					
Ref.	Objective	Action	Responsibility	Ref	Further Action / Comments
1	<i>Avoid disturbance to nesting ringed plover</i>	No works to take place between April and August.	<ul style="list-style-type: none"> <li>• <i>Client</i> Project Manager</li> </ul>		Work scheduled for outside of nesting season.
2	<i>Minimal disturbance of flora and fauna.</i>	Marked/coned off “no go” area around vegetated shingle in place. Vehicles follow a set route.	<ul style="list-style-type: none"> <li>• <i>Client</i> Project Manager</li> <li>• <i>Contractor's</i> Site Manager and Site Supervisor</li> <li>• <i>Contractor's</i> workforce</li> </ul>		Monitoring to ensure marked areas are clearly visible for duration of works. Routine site inspections.
3	<i>Minimal air pollution from combustion of petrol or diesel.</i>	Engines switched off when not in use, minimal vehicles used.	<ul style="list-style-type: none"> <li>• <i>Contractor's</i> Site Manager and Site Supervisor</li> <li>• <i>Contractor's</i> workforce</li> </ul>		Monitoring by <i>Contractor's</i> Site Manager and Site Supervisor to ensure objective is achieved.
4	<i>Minimal air pollution from dust</i>	Suppress dust by reducing speed of trucks travelling along haul road or temporarily pausing the recycling operation in extreme cases.	<ul style="list-style-type: none"> <li>• <i>Contractor's</i> Site Manager and Site Supervisor</li> <li>• <i>Contractor's</i> workforce</li> </ul>		Monitoring of atmospheric dust by <i>Contractor's</i> Site Manager and Site Supervisor. <i>Contractors</i> Site Manager and Site Supervisor to deploy dust suppression when appropriate.
5	<i>Water quality</i>	Minimise the risk of water pollution from spillages of fuel by adhering to good working practices and emergency procedures.	<ul style="list-style-type: none"> <li>• <i>Contractor's</i> Site Manager and Site Supervisor</li> <li>• <i>Contractor's</i> workforce</li> </ul>		Spill kits to be carried on all plant. Always use drip trays and clean up spills promptly with suitable spill kit. Dispose of hazardous waste through a specialist contractor.

## **S 202 Sustainable Materials**

The use of sustainable materials is not applicable to this work as the sole construction material is shingle that is already in-situ on the frontage.

## **S 203 Floods**

The site compound locations at Splash Point and Seaford Sailing Club are located on the crest of the beach. These two locations aren't as prone to erosion as other locations but the *Contractor* must be vigilant and monitor erosion during storms to ensure the plant, equipment, stores and welfare located in the compound aren't at risk.

As an additional measure, the Contractor can register with the Environment Agency Flood Warning Service for automatic notification of flood alerts and flood warnings for Seaford. Please register here: <https://www.gov.uk/sign-up-for-flood-warnings>

## **S 204 Setting Out**

Refer to S 401 Completion.

## **S 205 Liaison with third parties and Public Liaison**

The *Client* will inform all stakeholders prior to the start of each recycling phase and will ensure all permissions are in place. Public information signs informing of the works will be displayed by the *Client* in the RNLI clip frames located along the frontage. The *Client* will also supply two large copies of these signs to the *Contractor* which they must fix and display at appropriate locations on the site compound fencing. Bi-annual shingle recycling has taken place at Seaford every year since completion of the sea defence in 1987 and as a result local residents and businesses are very familiar with the work and enquires/questions are relatively infrequent.

The *Client* will not be present on site for the duration of the works and the *Contractor* is therefore expected to engage with the public and seafront concession stalls to answer any questions, record and respond to any complaints and to warn members of the public if they encroach within an area of operating plant.

The *Contractor* shall notify the *Client* of any complaints received and can provide the *Client's* email address to a member of the public should they wish to escalate the matter (please do not provide them with the *Client's* mobile telephone number). When required/necessary the *Client* will formally respond to the complainant.

## **S 300 Contractor's design**

The *Contractor* is not responsible for the design. Refer to '003 - Beach Design Profile' in Appendix 1 of the PCI and S 401 'Completion definition' below.

## S 400 Completion

### S 401 Completion definition

The *Client* will confirm excavation and deposition locations with the *Contractor* prior to the start of all recycling operations. Locations and quantities of shingle to be moved will be guided by the results of a post recycling (IN) survey that's conducted one to two weeks prior to each recycling phase. The results of the survey are illustrated on a map which details the areas of erosion and accretion and approximate recycling volumes required.

The eroded sections of beach need to be re-built in accordance with the design profile (refer to '003 - Beach Design Profile' in Appendix 1 of the PCI), however due to the nature of the shingle beach at Seaford, achieving a high degree of accuracy against the design profile is unrealistic. A pragmatic approach will therefore be adopted as follows:

- When placing shingle to replenish eroded sections of the beach, the crest height shall be built level with the concrete promenade at the back of the beach. The concrete promenade crest is 7.0mAOD at Splash Point and falls gradually to 6.0mAOD at Tide Mills.
- The crest and seaward slope width shall be measured with a tape to ensure the approximate design standard is built/achieved.
- On/near completion of the recycling operation, the *Client* will attend site to confirm to the *Contractor* that the required crest and recycle volume has been achieved along the frontage (please see note below\*)
- The finished profile will then be shaped by bulldozers to a 1 in 25m crest width and 1 in 7 seaward slope. To assist bulldozer operators with the beach profile, the *Client* will be available with GPS survey equipment to provide (mAOD) levels as and when requested. The *Client* will attend site regularly to confirm to the *Contractor* that the profile is acceptable.

Total shingle volume on the frontage is insufficient to achieve a 25m crest width along the full 4km length of beach and therefore the design crest width varies as follows:

- ~25m crest width between Splash Point terminal groyne and Dane Road. This length protects the greatest number of properties.
- ~40m crest width between Dane Road and Edinburgh Road. Road deviates landward at this location with Salts Recreation ground behind so crest is naturally wider at this point. Crest needs to tie in 'naturally' with crest at either end.
- ~20m to 25m crest width between Claremont Road and Edinburgh Road (known as Bonningstedt Parade or High Prom). This is the lowest priority area from a flood risk perspective but necessary for the truck haul road. This area is most susceptible to erosion.
- ~25m crest width between Claremont Road and Seaford Sailing Club.
- ~20m crest width between Seaford Sailing Club and Newhaven Harbour Arm. The crest width at this location is measured from the line of timber posts (marking vegetated shingle) to the seaward edge of the crest.

Note\* - Due to the dynamic nature of the Seaford frontage, coastal processes acting along the foreshore can very quickly erode and move shingle along the frontage. As a result, a balanced approach is required to ensure a suitable crest width and standard of protection is achieved whilst at the same time ensuring that project costs are not exceeded. Although the target at the start of each recycling phase will be to restore the design profiles it may not always be feasible to achieve. Regular communication is essential between the *Contractor's* Site Manager and Site Supervisor and the *Client*. Prior to the start of each recycling phase these three parties will agree a suitable day/time for a weekly site progress meeting to discuss progress and plant requirements, agree any changes to the deposition and extraction locations and agree plans for the week(s) ahead.

In consultation with the *Contractor's* Site Manager and Site Supervisor, the *Client* will decide when sufficient crest width along the frontage has been achieved and when the recycling operation can complete. Sufficient time (typically a minimum of a week) will be given to the *Contractor* on this decision, to allow the *Contractor* appropriate time to make the necessary arrangements to off-hire plant, operators etc. The time required for the two bulldozers to shape the beach into the design profile is also typically agreed by the above parties at the same time. The time required for beach profiling can vary depending on the length between the extraction and deposition locations.

#### **S 402 Sectional Completion definition**

Sectional completion is not applicable on this project.

#### **S 403 Final Clean**

The site and site compound must be kept clean and tidy at all times. All site rubbish must be suitably stored and disposed of.

#### **S 404 Security**

Site security and preventing unauthorised persons entering the site compound is essential. To achieve this, the *Contractor* shall ensure that the minimum standard of security includes the following:

- Site compound to be established on the beach crest at Splash Point or to the east of the Sailing Club with appropriate perimeter fencing (double clipped and weighted down) and Health & Safety signage displayed. Refer to drawing '001 - Site Information' in Appendix 1 of the PCI for locations.
- Plant, equipment, stores and welfare facilities to be locked and located in the site compound at appropriate times.

#### **S 500 Programme**

The *Contractor* shall program for bi-annual beach recycling at Seaford in two phases in November/December and February/March (subject to the condition of the beach). If beach conditions allow, site set-up will ideally take place in the autumn and spring half terms (refer to East Sussex County Council term dates) with recycling commencing the week immediately preceding the half term weeks. It must be noted that these dates are subject to beach condition and may need to be bought forward or pushed back.

The *Contractor* shall attend a pre-start site meeting with the *Client* (typically two to three weeks prior to each recycling phase site). During this meeting the deposition and excavation locations will be visited and the expected duration of the recycling phase will be assessed.

A plan/program will then be finalised between both Parties to confirm site set-up and recycling start dates, site compound location and number of Articulated Dump Trucks (ADTs). An estimate on the likely number of required recycling weeks can also be made (although subject to change). The above cannot be undertaken any earlier due to potential changes in beach condition. This will provide a minimum two week mobilisation period for the *Contractor*.

The *Contractor* shall submit the Construction Phase Plan (CPP) and Risk Assessments and Method Statements (RAMS) to the CDM Principal Designer, and copy it to the *Client*, a minimum of 10 days prior to commencement of construction works. Construction shall not commence until the *Client* has confirmed in writing that the Construction Phase Plan is adequate.

For a typical/average recycling phase the program shall allow for a three day site set up, three to four weeks recycling and three to five days profiling with two bulldozers after completion of the

shingle recycling operation. The site de-mob is timed to coincide with the profiling, so that the profiling and de-mob complete at the same time.

The *Contractor* must be able to accommodate flexibility within this program and respond to additional contract instruction requirements/changes requested by the *Client*. Examples of potential changes may include:

- Emergency/urgent re-profiling and/or recycling with 24/48/72 hour response requirement.
- Storm damage requires a recycling phase to start earlier than the typical start dates stated above.
- Additional recycling is required during a recycling phase due to storm damage incurred during the recycling operation.
- Addition or reduction in the number of ADTs on-hire due to changes in the haul distances.
- Weekend bulldozer profiling work (during a recycling phase) to stockpile material on the beach crest at Tide Mills to allow sufficient material to be available for recycling during high tides.
- Ad-hoc bulldozer profiling work to stock pile material at Splash Point to prevent shingle loss to the east of the terminal groyne.
- Concrete promenade shingle clearance.

An early warning and resulting compensation event may be required for the Shoreham and Lancing Frontage. In this eventuality, the *Client* for Seaford, and Shoreham and Lancing will arrange a site visit with the *Contractor* and *Project Manager* as soon as practicable to discuss the recycling requirement and timescales, and commence plans to finalise the scope, complete necessary H&S documentation and mobilise to site. Beach recycling at Shoreham and Lancing is typically on a reactive/ad-hoc basis following storm damage, and as a result an urgent response and quick mobilisation to site may be required.

## **S 600 Quality management**

Not used.

## **S 700 Tests and inspections**

The *Client* and Contractor's Site Manager and Site Supervisor will conduct weekly inspections to review progress of the recycling operation and crest widths along the frontage. These inspections will help to inform operational/planning decisions. Ad-hoc inspections may also be required following storm damage.

## **S 800 Management of the Works**

The *Contractor's* delegated Site Manager and Site Supervisor will be responsible for the management, operation and delivery of the works. The *Client* will oversee the management of the project on behalf of the *Client*. Site Manager administrative and contractual communication between the Parties shall be directed through the *Client* and the *Contractor's* Site Manager. Weekly site progress meetings will be held between the *Client* and the *Contractor's* Site Manager and Site Supervisor. Following this meeting the *Client's* Project Manager and Contractor's delegated Site Manager will have a virtual meeting with the ECC *Project Manager* to update on progress and implement/action any resulting changes such as early warning and compensation events. If a compensation event is required to undertake shingle recycling at Shoreham and Lancing the work will be managed following the same format as detailed for Seaford.

If a compensation event is required to deliver work on another frontage (e.g. Shoreham and Lancing) and the required start or end date aligns with Phase 1 or Phase 2 at Seaford, any transferable plant, equipment, stores, welfare etc. should be transported directly from one frontage to the other to minimise costs and carbon emissions (as the transportation costs of returning to a depot first are avoided). Where this is feasible, both projects must see the benefit from the cost and carbon savings made e.g. if moving from Seaford to Shoreham and Lancing, the Seaford project should be invoiced half of the demobilisation cost for each item, and Shoreham and Lancing invoiced half of the mobilisation cost for each item.

## **S 801 Communications**

The *Contractor* shall communicate with the *Client* on matters relating to contract administration. Contract instructions will be issued via email by the *Project Manager* and/or via FastDraft. Weekly site progress meetings and regular communication shall take place between the Contractor, the *Client* and the *Project Manager*.

A suitable communication process shall be developed and operated by the *Contractor* to provide a safe means of communication with plant drivers/operators and site operatives/lookout. Under no circumstances should plant drivers/operators or the *Contractor's* Site Supervisor use a mobile phone whilst plant/vehicle engines are running.

## **S 802 Reporting requirements**

The *Contractor* shall record and submit a weekly shingle recycling records sheet to the *Client* detailing the ADT movements, excavation and deposition locations and quantities moved/recycled. This record must also document any factors that have impacted productivity on site (e.g. plant breakdowns, reducing truck speed to suppress dust etc.) and a summary of plant/equipment brought to Site or taken off Site. A shingle recycle record sheet document with instructions will be provided to the *Contractor* to populate this information.

Any Health and Safety or Environmental incidents must be recorded and reported to the *Client* as soon as they have occurred.

## **S 900 Working with the *Client* and Others**

### **S 901 Sharing the Working Areas with the *Client* and Others**

The site is located in a residential area and the beach is open to the public. The *Contractor* shall take this into account when planning and constructing the *works*.

### **S 902 Authorities and utilities providers**

Not used.

## **S 1000 Services and other things to be provided**

Underground and overhead services searches have been completed for the following:

- Gas
- Water
- Electric
- BT
- Virgin Media

Service maps have been provided for the foul/storm water outfalls at Tide Mills and Splash Point and for BT and UKPN cables along the frontage. Fresh water and sewer pipes, gas pipes and Virgin Media cables also run along the seafront but are not included in Appendix 1 as they are underground, do not

encroach on the beach and will therefore not be affected by the recycling operation.

Detailed utility searches including ground penetration radar have not been carried out due to the nature of the scheme and location. All relevant utility details are marked on the utility drawings in Appendix 1 of the PCI. This does not remove the *Contractor's* requirement to carry out safe working practices in relation to overhead and underground services.

## **S 1100 Health and safety**

The *Contractor* shall comply with the requirements of the Marine and Coastal Framework Schedules and the *Client's* Safety, Health and Environmental (SHEW) Code of Practice May 2018, or any revision thereof, in the undertaking of these *Works*.

### **S 1101 Construction Phase Plan**

The *Contractor* shall submit the Construction Phase Plan to the CDM Principal Designer, and copy it to the *Client*, a minimum of 10 days prior to commencement of construction works. Construction shall not commence until the *Client* has confirmed in writing that the Construction Phase Plan is adequate.

### **S 1102 Methodology**

The *Contractor* shall submit Risk Assessments and Method Statements to the CDM Principal Designer, and copy them to the *Client*, a minimum of 10 days prior to commencement of construction works. This must include a suitable People & Plant Coordination Plan/Site Layout Plan. The below details must be incorporated into this documentation:

#### **Site Compound**

Designated plant storage areas are at the Sailing Club or Splash Point (refer to drawing '001 - Site Information' for locations). All refueling and servicing of plant or machinery can only be conducted at these locations.

#### **Heavy plant access onto the beach**

All heavy plant must be unloaded and tracked/driven onto the beach at the designated plant access point at Edinburgh Road. This plant must then remain on the beach until completion of the work. Plant demobilisation must also be at the designated plant access point at Edinburgh Road. A site operative/lookout must be present to supervise all plant deliveries and tracking of plant along the foreshore. Appropriate lights and flashing beacons shall be used by all plant and vehicles when operating on site. Operating plant must stop immediately if pedestrians or animals come within an unsafe operating distance.

#### **Shingle Recycling**

A two-way haul road for ADTs is to be used on the beach crest. This haul road must be clearly marked by suitable barriers and signage at regular intervals on the landward side (where possible, laid ideally 1m to 2m from the prom edge). ADTs travelling along the haul road must pass on left with no overtaking permitted. Trucks must not travel above the designated site speed limit of 10 mph.

A site operative/lookout must be stationed at the extraction and deposition location whilst plant is operating in the vicinity. These areas must be clearly marked by suitable barriers and signage. The *Contractor's* Site Supervisor will patrol the haul road and extraction and deposition locations with a 4x4 when plant is operational. Appropriate lights and flashing beacons shall be used by all plant and vehicles when operating on site. Operating plant must stop immediately if pedestrians or animals come within an unsafe operating distance.

#### **Shingle re-profiling**

The working area for shingle profiling/grading must be clearly marked by suitable barriers and signage

and a site operative/lookout must be present whilst the bulldozer(s) is operating. Appropriate lights and flashing beacons shall be used by all plant and vehicles when operating on site. Operating plant must stop immediately if pedestrians or animals come within an unsafe operating distance.

## **S 1200 Subcontracting**

### **S 1201 Restrictions or requirements for subcontracting**

The *Client* will permit the *Contractor* to sub contract the provision of plant and equipment to other companies, however, it must not affect the *Contractor's* ability to fulfil its obligations under the contract.

All subcontractors shall adhere to the Environment Agency SHEW CoP Specific Risk Management Arrangements for the use of vehicles and site plant. Drivers and plant operators must be competent and hold the appropriate vehicle driving licence and/or plant operation certification. All drivers must not exceed their permitted daily working hours.

## **S 1300 Title**

Not Used

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

Not Used

## **S 1500 Accounts and records (Options C and E)**

### **S 1501 Additional Records**

The *Contractor* shall maintain the following additional records for inspection by the *Client*:

- a) People timesheets, plant and equipment record sheets
- b) Daily diary sheets as completed by site management personnel
- c) Forecasts of the total Defined Cost, separating forecast of total defined cost into the following cost components:
  - i. People
  - ii. Equipment
  - iii. Material
  - iv. Subcontract
  - v. Fee
- d) Weekly shingle recycling records sheet (a blank Excel template will be provided by the *Client* for the *Contractor* to populate). See section S802 for further details.

These records shall be available in electronic format using Microsoft Office applications or pdf format for inspection by the *Client* as and when required.

## **S 1600 Parent Company Guarantee (Option X4)**

Not Used

## **S 1700 Client's work specifications and drawings**

### **S 1701 Client's work specification**

1. The *Client's Works* specification is provided in the following documents

- The Scope
- The *Client's* Minimum Technical Requirements (MTR) V11 04 May 2021
- Civil Engineering Specification for the Water Industry, 7<sup>th</sup> Edition (CESWI 7)

The Scope shall take precedence over the Minimum Technical Requirements which shall in turn take precedence over CESWI 7. The *Project Manager* shall be informed of any inconsistency.

2. The numbering of the below supplementary clauses follows the numbering system of the Minimum Technical Requirements.
3. The Supplementary Clauses to CESWI 7 and Minimum Technical Requirements are for the following Sections:
  - i. Section 2 – Materials
4. References in the Minimum Technical Requirements to the Contract Administrator shall be read as references to the *Project Manager*.
5. References in the Minimum Technical Requirements to the Environmental Clerk of Works (ECoW) shall be read as references to the *Supervisor*.

## **S 1702 Specification: Supplementary Clauses**

Not used

## **S 1703 Standards the *Contractor* will comply with**

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

Ref	Report Name	Where used
300_10_SD27	SHEW Code of Practice	Site Management, RA and MS
C685B	CIRIA Beach Management Manual 2 <sup>nd</sup> edition	Beach Management Plans

## **S1800 Disallowed costs and standard risks**

### **S1801 Disallowed costs**

The following shall be disallowed costs:

For all coastal works the removal of equipment or plant and materials sunk in connection with, or as a result of, providing the works and the removal of any other equipment or materials sunk as a direct consequence of the *Contractor's* actions.

### **S1802 Standard risks**

The following standard risks associated with beach recycling will not be compensation events:

- a. Plant/equipment accidents, collisions etc.
- b. The beach and/or site left unsafe for public use.
- c. Environmental impacts.
- d. Fluctuations in fuel prices after the *starting date*.
- e. Adverse weather and/or sea conditions.

## **Appendix 1**

Please access the Pre-Construction Information using the following link (link will expire 30 days from 30/06/2021):

<https://ea.sharefile.com/d-seef673fb16de4e03851fb554b593bbbf>

Please note that this link will expire in 30 days from the date on which the documents are uploaded. Please therefore ensure that the documentation is downloaded as soon as possible after receipt of the link.