# NEC4 Engineering and Construction

# Short Contract

**FCRM Operational Framework – South East Hub Lot 1**

| | |
|---|---|
| **A contract between** | **The Environment Agency**<br>**Horizon House**<br>**Deanery Road**<br>**Bristol**<br>**BS1 5AH** |
| | |
| **And** | **Amalgamated Construction Ltd** |
| | |
| **For** | **FCRM SSD Capital Recondition 20/21 Embankment Package 2** |
| | **Contract Forms**<br>- **Contract Data**<br>- **The *Contractor's* Offer and *Client's* Acceptance**<br>- **Price List**<br>- **Scope**<br>- **Site Information** |
| | |

# Contract Data

## The *Client's* Contract Data

| | | |
|---|---|---|
| | The *Client* is | |
| Name | Environment Agency | |
| | | |
| Address for communications | Environment Agency, Guildbourne House, Chatsworth Road,<br>Worthing, West Sussex, BN11 1LD | |
| | | |
| Address for electronic communications | [redacted] | |
| | | |
| The *works* are | Data collection, detail design, permit approvals, construction documentation and construction to recondition/repair existing embankment assets in the Environment Agency Solent & South Downs Area to their required condition. | |
| | | |
| The *site* is | **Various locations across Solent and South Downs:**<br>Ranscombe Outfall to A27 - Embankment erosion: TQ 4234109223 to TQ 4338007584 (topographical survey and condition survey report only).<br>Glynde Reach to A27 - Embankment erosion: TQ 42254 09142 to TQ 43552 07137 (topographical survey and condition survey report only).<br>Lewes Embankment - Phase 2 - Kissing Gate to Chalkpit Cut: TQ 41193 10842 to TQ 40567 11672 (Design and build).<br>Lewes embankment – Phase 3 – Chalkpit Cut to Ivors Lane – Lewes: TQ 41102 12251 to TQ 40567 11672 (topographical survey and design only). | |
| | | |
| The *starting date* is | 30/05/2022 | |
| | | |
| The *completion date* is | 01/12/2022 | |
| | | |
| The *delay damages* are | Nil | Per day |
| | | |
| The *period* for reply is | 2 | weeks |
| | | |
| The *defects date* is | 104 | weeks after Completion |
| | | |
| The *defects correction period* is | 4 | weeks |
| | | |

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| The *assessment day* is | the last working day | of each month |
| | | |
| The *retention* is | nil | % |
| | | |
| The United Kingdom Housing Grants, Construction and Regeneration Act (1996) **does** apply | | |
| | | |
| The *Adjudicator* is: | | |
| In the event that a first dispute is referred to adjudication, the referring Party at the same time applies to the Institution of Civil Engineers to appoint an *Adjudicator*. The application to the Institution includes a copy of this definition of the *Adjudicator*. The referring Party pays the administrative charge made by the Institution. The person appointed is also *Adjudicator* for later disputes. | | |

# Contract Data

## The *Client's* Contract Data

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| The interest rate on late payment is | - | % per complete week of delay. |

**Insert a rate only if a rate less than 0.5% per week of delay has been agreed.**

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| For any one event, the liability of the *Contractor* to the *Client* for loss of or damage to the *Client's* property is limited to | £100,000 GBP |
| The *Client* provides this insurance | None |

**Insurance Table**

| **Event** | **Cover** | **Cover provided until** |
|---|---|---|
| Loss of or damage to the *works* | The replacement cost | The *Client's* certificate of Completion has been issued |
| Loss of or damage to Equipment, Plant and Materials | The replacement cost | The defects Certificate has been issued |
| The *Contractor's* liability for loss of or damage to property (except the works, Plant and Materials and Equipment) and for bodily injury to or death of a person (not an employee of the *Contractor*) arising from or in connection with the *Contractor's* Providing the Works | Minimum £5,000,000 in respect of every claim without limit to the number of claims | |
| Liability for death of or bodily injury to employees of the *Contractor* arising out of and in the course of their employment in connection with this contract | The amount required by the applicable law | |
| Failure of the *Contractor* to use the skill and care normally used by professionals providing works similar to the works | Minimum £1,000,000 in respect of every claim without limit to the number of claims | 6 years following Completion of the whole of the works or earlier termination |

| | |
|---|---|
| The *Adjudicator nominating body* is | The Institution of Civil Engineers |
| The *tribunal* is | litigation in the courts |

The *conditions of contract* are the NEC4 Engineering and Construction Short Contract June 2017 and the following additional conditions

**Only enter details here if additional conditions are required.**

| | |
|---|---|
| Z1.0 | Sub-contracting |

| | |
|---|---|
| Z1.1 | The *Contractor* submits the name of each proposed subcontractor to the *Client* for acceptance. A reason for not accepting the subcontractor is that their appointment will not allow the *Contractor* to Provide the Works. The *Contractor* does not appoint a proposed subcontractor until the *Client* has accepted them. |
| Z1.2 | Payment to subcontractors and suppliers will be no more than 30 days from receipt of invoice. |
| Z2.0 | Environment Agency as a regulatory authority |
| Z2.1 | The Environment Agency's position as a regulatory authority and as *Client* under the contract is separate and distinct. Actions taken in one capacity are deemed not to be taken in the other. |
| Z2.2 | Where statutory consents must be obtained from the Environment Agency in its capacity as a regulatory authority, the *Contractor* is responsible for obtaining these and paying fees (unless stated otherwise in the Scope). The *Client's* acceptance of a tender and the *Client's* instruction or variation of the works does not constitute statutory approval or consent. |
| Z2.3 | An action by the Environment Agency as regulatory authority is not in its capacity as *Client* and is not a compensation event. |
| Z3.0 | Confidentiality & Publicity |
| Z3.1 | The *Contractor* may publicise the works only with the *Client's* written agreement. |
| Z4.0 | Correctness of Site Information |
| Z4.1 | Site Information about the ground, subsoil, ducts, cables, pipes and structures is provided in good faith by the *Client* but is not warranted correct. The *Contractor* checks the correctness of any such Site Information they rely on for the purpose of Providing the Works. |
| Z5.0 | The Contracts (Rights of Third Parties) Act 1999 |
| Z5.1 | For the purposes of the Contracts (Rights of Third Parties) Act 1999, nothing in this contract confers or purports to confer on a third party any benefit or any right to enforce a term of this contract. |
| Z6.0 | Design |
| Z6.1 | Where design is undertaken, it is the obligation of the *Contractor* to ensure the use of skill and care normally used by professionals providing similar design services. |
| Z6.2 | The *Contractor* designs the parts of the works which the Scope states they are to design. |
| Z6.3 | The *Contractor* submits the particulars of their design as the Scope requires to the *Client* for acceptance. A reason for not accepting the *Contractor's* design is that it does not comply with either the Scope or the applicable law.<br><br>The *Contractor* does not proceed with the relevant work until the *Client* has accepted this design. |
| Z6.4 | The *Contractor* may submit their design for acceptance in parts if the design of each part can be assessed fully. |
| Z7.0 | Change to Compensation Events |
| Z7.1 | Delete the text of Clause 60.1(11) and replace by:<br>The *works* are affected by any one of the following events<br>• War, civil war, rebellion revolution, insurrection, military or usurped power<br>• Strikes, riots and civil commotion not confined to the employees of the *Contractor* and sub-contractors<br>• Ionising radiation or radioactive contamination from nuclear fuel or nuclear waste resulting from the combustion of nuclear fuel<br>• Radioactive, toxic, explosive or other hazardous properties of an explosive nuclear device<br>• Natural disaster<br>• Fire and explosion<br>• Impact by aircraft or other device or thing dropped from them |
| Z8.0 | Framework Agreement |
| Z8.1 | The *Contractor* shall ensure at all times during this contract it complies with all the obligations and conditions of the Framework Agreement made with the *Client*. |
| Z9.0 | Termination |

| | |
|---|---|
| Z9.1 | Delete the text of Clause 92.3 and replace with:<br><br>If the *Contractor* terminates for Reason 1 or 6, the amount due on termination also includes 5% of any excess of a forecast of the amount due at Completion had there been no termination over the amount due on termination assessed as for normal payments. |
| Z10.0 | Data Protection |
| Z10.1 | The requirements of the Data Protection Schedule shall be incorporated into this contract |
| Z11.0 | Liabilities and Insurance |
| Z11.1 | Civil data protection claims and regulatory fines for breaches of Data Protection Legislation are excluded from any limit of liability stated. |
| Z12.0 | Packaging |
| Z12.1 | Not used |
| Z30.0 | Material Price Volatility<br><br>The Client recognises the ongoing pricing uncertainty in relation to materials for the period from 1 July 2021 to 30 June 2023 the *Client* will mitigate this additional cost through this clause. Payment is made per assessment based upon a general average material proportion within assessments, calculated at 40%. |
| Z30.1 | Defined terms<br><br>a) The Latest Index (L) is the latest index as issued by the Client. The L, which is at the discretion of the Client, is based upon the issued consumer price index ((CPI) based upon the 12-month rate) before the date of assessment of an amount due.<br><br>b) The Price Volatility Provision (PVP) at each date of assessment of an amount due is the total of the Material Factor as defined below multiplied by L for the index linked to it.<br><br>c) Material Factor (MF) 40% is used, based on a general average material proportion across our programme. The volatility provision is only associated with material element. No volatility provision is applicable to any other component of costs. |
| Z30.2 | Price Volatility Provision<br><br>Through a Compensation Event the Client shall pay the PVP. PVP is calculated as:<br><br>Assessment x MF x L = PVP |
| Z30.3 | Price Increase<br><br>Each time the amount due is assessed, an amount for price increase is added to the total of the Prices which is the change in the Price for Work Done to Date for the materials component only (and the corresponding proportion) since the last assessment of the amount due multiplied PVP for the date of the current assessment. |
| Z30.4 | Compensation Events<br><br>The Contractor shall submit a compensation event for the PVP on a monthly basis (where applicable) capturing Defined Cost only for the PWDD increase in month. Forecasted costs should only be considered for the June 2022 period compensation event. |

| Assessment Date | Defined Cost? | Forecasted Cost? |
|---|---|---|
| 31st Jul 21 | In period costs only | No |
| 31st Aug 21 | In period costs only | No |
| 30th Sept 21 | In period costs only | No |
| 31st Oct 21 | In period costs only | No |
| 30th Nov 21 | In period costs only | No |
| 31st Dec 21 | In period costs only | No |
| 31st Jan 22 | In period costs only | No |
| 28th Feb 22 | In period costs only | No |

| | | |
|---|---|---|
| 31st Mar 22 | In period costs only | No |
| 30th Apr 22 | In period costs only | No |
| 31st May 22 | In period costs only | No |
| 30th Jun 22 | In period costs only | No |
| 31st Jul 22 | In period costs only | No |
| 31st Aug 22 | In period costs only | No |
| 30th Sept 22 | In period costs only | No |
| 31st Oct 22 | In period costs only | No |
| 30th Nov 22 | In period costs only | No |
| 31st Dec 22 | In period costs only | No |
| 31st Jan 23 | In period costs only | No |
| 28th Feb 23 | In period costs only | No |
| 31st Mar 23 | In period costs only | No |
| 30th Apr 23 | In period costs only | No |
| 31st May 23 | In period costs only | No |
| 30th Jun 23 | In period costs only | Forecasted costs for remainder of contract |

The Defined Cost for compensation events is assessed using:

- the Defined Cost at base date levels for amounts calculated from rates stated in the Contract Data for People and Equipment, and

- the Defined Cost current at the date the compensation event was notified, adjusted to the base date by 1+PVP for the last assessment of the amount due before that date, for other amounts.

# Contract Data

## The *Contractor's* Contract Data

| | | |
|---|---|---|
| | The *Contractor* is | |
| Name | Amalgamated Construction Ltd | |
| Address for communications | Whaley Road, Barugh, Barnsley, South Yorkshire, S75 1HT | |
| Address for electronic communications | [redacted] . | |
| The *fee* percentage is | | 12% |
| The *people rates* are | | |
| category of person | unit | rate |
| Project Manager | | As Operational Framework |
| Quantity Surveyor | | As Operational Framework |
| General Foreman | | As Operational Framework |
| | | |
| The *published list of Equipment* is | | CECA |
| The *percentage for adjustment for Equipment* is | | 12% |

# Contract Data

## The *Contractor's* Offer and *Client's* Acceptance

The *Contractor* offers to Provide the Works in accordance with these *conditions of contract* for an amount to be determined in accordance with these *conditions of contract*.

Please also refer to tender assumptions included in our covering letter dated April 14th, 2022.

| | |
|---|---|
| The offered total of the Prices is | **£389,150.80** |
| | **Enter the total of the Prices from the Price List.** |

Signed on behalf of the *Contractor*

| | |
|---|---|
| Name | [redacted] |
| Position | [redacted] |
| Signature | [redacted] |
| Date | [redacted] |

The *Client* accepts the *Contractor's* Offer to Provide the Works

Signed on behalf of the *Client*

| | |
|---|---|
| Name | [redacted] |
| Position | [redacted] |
| Signature | [redacted] |
| Date | [redacted] |

# Price List

**Entries in the first four columns in this Price List are made either by the *Client* or the tenderer.**

**If the *Contractor* is to be paid an amount for the item which is not adjusted if the quantity of work in the item changes, the tenderer enters the amount in the Price Column only: the Unit, Quantity and rate columns being left blank.**

**If the *Contractor* is to be paid an amount for the item of work which is the rate for the work multiplied by the quantity completed, the tenderer enters the rate which is then multiplied by the expected quantity to produce the Price, which is also entered.**

| Item Number | Description | Unit | Quantity | Rate | Price |
|---|---|---|---|---|---|
| 1.0 A | Ranscombe Outfall to A27 Embankment | | | | |
| 1.1 | Topographical survey and CAD output | sum | | | [redacted] |
| 1.2 | Condition survey report | sum | | | |
| | | | | Sub-total | |
| 1.0 B | Glynde Reach to A27 - Embankment | | | | |
| 1.1 | Topographical survey and CAD output | sum | | | [redacted] |
| 1.2 | Condition survey report | sum | | | |
| | | | | Sub-total | |
| 2.0 | Lewes embankment - Phase 2 - Kissing Gate to Chalkpit Cut | | | | |
| 2.1 | Surveys: | | | | |
| 2.1.1 | Topographical survey –<br>Pre-Construction survey not required - provided in site information.<br>Post Construction survey required. | sum | | | [redacted] |
| 2.1.3 | One comprehensive environmental survey for to develop the design and support the Flood Risk Activity Permit application. | sum | | | |
| 2.1.4 | Services search | sum | | | |
| 2.2 | Detailed Design and construction drawings | sum | | | |
| 2.3 | Design statement that explains the design philosophy, standards, data used and any assumptions. (Can be one document covering all sites) | sum | | | |
| 2.4 | Pre-Construction Information | sum | | | |
| 2.5 | Construction Phase Plan | sum | | | |
| 2.6 | Environmental Action Plan | sum | | | |

| | | | | | |
|---|---|---|---|---|---|
| 2.7 | Flood Risk Activity Permit including any fees and supporting Construction Method Statement and Environmental Risk Assessment | sum | | | [redacted] |
| 2.8 | Project Management and programme | sum | | | |
| 2.9 | Construction of embankment repair including any<br>Enabling works.<br>Mobilisation.<br>Site access.<br>Earthworks.<br>Footpath (compacted type 1, assume the path width to be 1.5m)<br>Grass cover.<br>Protective livestock fencing.<br>Demobilisation.<br>Access and site compound reinstatement. | sum | | | |
| 2.10 | As built information | sum | | | |
| | | | | Sub-total | |
| 3.0 A | Lewes embankment - Phase 3 - Chalkpit Cut to Ivors Lane | | | | |
| 3.1 | Surveys | | | | |
| 3.1.1 | Topographical survey (Pre-Construction) | sum | | | [redacted] |
| 3.1.4 | Services search | sum | | | |
| 3.2 | Detailed Design | sum | | | |
| 3.3 | Design statement that explains the design philosophy, standards, data used and any assumptions. (Can be one document covering all sites) | sum | | | |
| | | | | Sub-total | |
| | | | | **The total of the Prices** | **£389,150.80** |

The method and rules used to compile the Price List are

Civil Engineering Standard Method of Measurement 4th edition (CESMM4) as per the Framework Price Workbook.

Minimum Technical Requirements v12 December 2021, as per the SE FCRM Operations Framework.

677_15 SHEW code of practice.

Prices to include but not limited to all project management costs, the production of any other pre-condition survey reports not included on the scope environmental permits and welfare provisions as required.

Prices to include but not limited to all costs related to any enabling works the *Contractor* determines is required to undertake the scoped works.

# Scope

## 1. Description of the *works*

**Give a detailed description of what the *Contractor* is required to do and of any work the *Contractor* is to design.**

The *Contractor* is to undertake the detailed design and construction to recondition identified sections of assets back to condition Grade 2 or better. General assessment criteria stated below:

Table 1

| Grade | Rating | Description |
|---|---|---|
| 1 | Very Good | Cosmetic defects that will have no effect on performance. |
| 2 | Good | Minor defects that will not reduce the overall performance of the asset. |
| 3 | Fair | Defects that could reduce performance of the asset. |

**1.0 A Ranscombe Outfall to A27 Embankment** (topographical survey and condition survey report only)

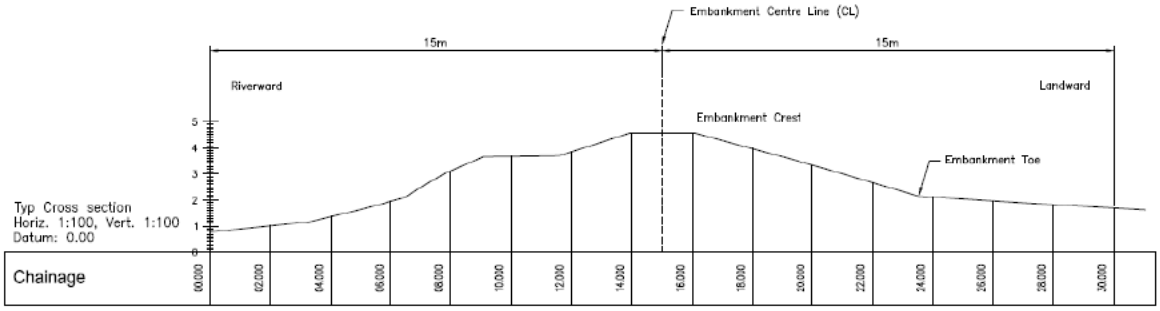
This embankment is below target condition as a result of complete deterioration of the embankments exposed face pole wharfing revetment and this has led to extensive erosion and loss of the embankment exposed face and crest.

The objective of the project is to quantify the amount of damage to allow third parties to price the repair works and assess the embankment's residual life.

The embankment is located between the A27 (NGR TQ 4234109223) and Ranscombe outfall (NGR TQ 4338007584). The total length is approx. 1935m.

The *Contractor* shall:

- Undertake a 3D topographical survey for the whole length of the embankment to quantify the extent, dimensions (volume) and location of any damage, scour and low spots identified. The topographical survey must cover a width of 15m either side of the embankment's centre line, covering a total width of 30m.




- Undertake a non-intrusive condition survey report of the embankment and associated scour protection that contains, but is not limited to:

    - Condition and residual life assessment and timescales for the different sections of the embankment. These sections shall be determined by the *Contractor*.
    - Repair prioritisation and recommendations of any urgent remedial works.
    - Optioneering for the embankment, including: "do nothing", "do minimum", etc.
    - The *Contractor* shall submit the condition survey report's format for the *Client's* acceptance, prior to commencing the works.

The *Contractor* is to deliver the output in a way that allows third parties to price the remedial work identified in the condition survey report.

The *Contractor* shall deliver all the raw topographical survey data in CAD and GIS format.

The *Contractor* shall produce a 3D civil model (2018 version) using the topographical data, including cross-sections at 15-meter intervals.

**1.0 B Glynde to A27 Embankment** (topographical survey and condition survey report only)

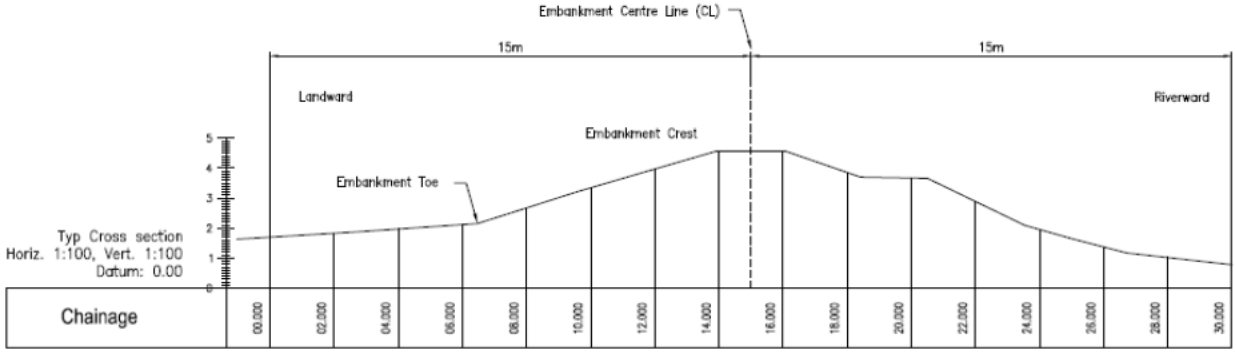
This embankment is below target condition as a result of complete deterioration of the embankments exposed face pole wharfing revetment and this has led to extensive erosion and loss of the embankment exposed face and crest.

The objective of the project is to quantify the amount of damage to allow third parties to price the repair works and assess the embankment's residual life.

The embankment is located between the A27 (NGR TQ 42254 09142) and Glynde (NGR TQ 43552 07137). The total length is approx. 2500m.

The *Contractor* shall:

- Undertake a 3D topographical survey for the whole length of the embankment to quantify the extent, dimensions (volume) and location of any damage, scour and low spots identified. The topographical survey must cover a width of 15m either side of the Embankment's centre line, covering a total width of 30m.




- Undertake a non-intrusive condition survey report of the embankment and associated scour protection that contains, but is not limited to:

  - Condition and residual life assessment and timescales for the different sections of the embankment. These sections shall be determined by the *Contractor*.
  - Repair prioritisation and recommendations of any urgent remedial works.
  - Optioneering for the embankment, including: "do nothing", "do minimum", etc.
  - The *Contractor* shall submit the condition survey report's format for the *Client's* acceptance, prior to commencing the works.

The *Contractor* is to deliver the output in a way that allows third parties to price the remedial work identified in the condition survey report.

The *Contractor* shall deliver all the raw topographical survey data in CAD and GIS format.

The *Contractor* shall produce a 3D civil model (2018 version) using the topographical data, including cross-sections at 15-meter intervals.

**2.0 Lewes embankment - Phase 2 - Kissing Gate to Chalkpit Cut**

This embankment is below target condition as a result of footpath erosion causing low spots in the embankment crest. The defence is located between TQ4119310835 (downstream) and TQ4061911508 (upstream), approximately 930m. The *Contractor* shall design and construct a repair of the asset before 1st October 2022 by undertaking the following tasks:

- Design and construct embankment repair to low spots along full length of embankment. Level the embankment, where top of clay is greater than 4.20 reduce level to 4.20mOD, where top of clay is under 4.20mAOD increase to 4.20 m AoD including re-profiling of slopes to 1:3.
- Pedestrian footpath construction - Construct a footpath using compacted clean granite type 1 aggregate 40mm to dust, separated from the clay using a permeable geotextile. This is to be laid to a camber and to a maximum width of 1.5m. No edging is to be used. All areas of bank reinstatement not stoned will be top soiled and reseeded. Grass seed should be in accordance with 249_18_SD14 FCRM Operational Framework Lot 2 Specification Section 4 – Planting and Seeding.
- The *Client* will arrange any right of way diversion-closure for the *Contractor* to implement. Route subject to *Client's* approval, prior to commencing the works.
- Establish grass cover to the repair. (Grass seed should be in accordance with 249_18_SD14 FCRM Operational Framework Lot 2 Specification Section 4 – Planting and Seeding).
- Post construction topographical survey of repairs.
- Access track and site compound area to be reinstated to previous or better pre-construction condition.
- Livestock fencing will be required to protect the repair until the grass establishes.
- The *Client* shall arrange permission for access and site compound location with the landowner.

- Access to site compound will require the crossing of two shallow ditches and an existing culvert. The *Contractor* shall include any enabling works required.
- Access to the embankment will require improvements to the existing ramp. The *Contractor* shall include any enabling works required.

The documentation and activities that the *Contractor* undertake, and produce are listed below:

- Pre-construction condition assessment of access tracks and proposed site compound area.
- One comprehensive environmental survey to develop the design and support the Flood Risk Activity Permit application. If any further outcomes, constraints or mitigation measures were to derive from the comprehensive survey, these would be subject to a Compensation Event.
- Flood Risk Activity Permit including any fees and supporting Construction Method Statement and Environmental Risk Assessment.
- Enabling works for access routes, mitigation of environmental constraints to include environmental, habitat, vegetation & tree management works.
- Services search.
- Detailed Design and construction drawings.
- Design statement that explains the design philosophy, standards, data used and any assumptions. (Can be one document covering all sites).
- The *Contractor* shall complete the sections of the Pre-Construction Information that require input from Designer and Principal Contractor.
- Construction Phase Plan.
- Environmental Action Plan.
- Project Management and programme.
- Construction of embankment repair including any; mobilisation, site access, earthworks, grass cover, protective fencing, access reinstatement, demobilisation.
- Access tracks and site compound area to be reinstated to previous or better condition.
- As built information including drawings, H&S File & post-works topographical survey.

Due to the nature of the works close collaboration will be required with the *Contractor,* the *Client* area team representative and the landowners to ensure information and agreements are in place prior to the construction works.

All access routes and working areas must be reinstated to the same or a better standard than on commencement on completion of the works. The *Contractor* shall take a detailed photographic record of access routes and all working areas (including vertical and horizontal alignments and close proximity photos of elements of the structure included in the scope of works) prior to works commencing on site and provided to the *Client,* and after works and provide them to the *Client.*

The *Contractor* must independently obtain and include all costs associated with all permits, licences, planning and environmental permits and full approvals, including FRAPs (Flood Risk Activity Permit), SSSI (Sites of Special Scientific Interest), HRA stage 1, 2 (Habitats Regulations Assessment) and MCZ (Marine Conservation Zones) assessments or consents, as required to deliver the works. The *Contractor* shall commence FRAP consultations for the schemes where required in liaison with the *Client's* Project Manager.

The *Contractor*, as operator, will in accordance with clause Z2.2 be required to sign and pay for the Flood Risk Activity Permit (FRAP). The *Contractor* will need to prepare and submit the FRAP application (which will be required for each project) within a week of Outline Design to enable works to start on site in line with the timescales set out in Section 5 of this Contract.

Public Safety Risk Assessments (PSRAs) where required should be provided by the *Contractor* with support from the Principal Designer. The design for each project must be accepted by the *Client*, including the Environment Agency's PSRA assessor and/or supervising engineer where required, and provide time allowed in the programme for review.

The *Contractor* must prepare a detailed Construction Phase Plan (CPP) in accordance with the SHEW Code of Practice and any other information critical to be produced and accepted by the *Client* before commencement on site. Note: A suitably developed Construction Phase Plan must be issued for approval not less than 10 working days prior to planned mobilisation. Please refer to the Pre-Construction Information (PCI) for further clarification of requirements.

As part of delivering the works the *Contractor* shall fulfil the duties of Principal Contractor in terms of the CDM 2015 regulations. Duties will include, but are not limited to, producing the buildability statement, *Contractor's* risk assessment, temporary works schedule, completing the RAG list and liaising with the *Client* and Principal Designer

Prior to Completion, a suitably developed Health and Safety File must be issued to the Principal Designer along with 'as built' drawings (provided in CAD and pdf format) showing any changes from the original approved design.

**3.0 A - Lewes embankment North & South - Phase 3 - Chalkpit Cut to Ivors Lane – Topographical survey and design only**

The *Contractor* shall complete a topographic survey and design a suitable repair. The design solution should be developed with the *Client* to determine an appropriate and cost-effective repair. The design will need to address defects at two locations detailed below (please refer to supporting map 'Lewes banks - Phase 3 v2'):

Lewes Bank - Phase 3-a

- Embankment length = ~174m
- Embankment NGR - TQ 40569 11672 (US) to TQ 40619 11508 (DS)
- Defects requiring repair: Low spots along embankment and erosion and slips to channel side/exposed face.
- Essential repairs: Construct bank stabilisation works to channel side/exposed face and raise low spots in embankment crest with clay to match existing crest height, top soil and re-seed with grass. Willow trees on channel side to be retained if possible.

Lewes Bank - Phase 3-b

- Embankment length = ~326m
- NGR - TQ 40769 11934 (DS) to TQ 40569 11672 (US)
- Defects requiring repair: Undulations and low spots in embankment crest and landward face caused by footpath erosion.
- Essential repairs: Fill undulations and low spots with clay to match existing crest height/profile, top soil and re-seed with grass.


Lewes banks - Phase 3 v2.pdf

The documentation and activities that the *Contractor* undertake, and produce are listed below:

- Topographical survey.
- Services search.
- Detailed Design drawings.
- Design statement that explains the design philosophy, standards, data used and any assumptions. (Can be one document covering all sites).

**General – all sites**

For a list of guidance documents see Section 3 Specifications. This must be obtained directly from the relevant organisation for required licences.

There are no as-built drawings available.

There are no ground investigation reports available.

Assume all sites are exempt from obtaining a Marine Management Organisation License (MMO).

The *Contractor* shall provide the *Client*'s Project Manager at least 10 working days' notice to arrange site visits for the assessments.

The *Contractor* shall include any temporary works required to undertake the *Contractor*'s method of working as deemed necessary to meet the works Scope.

As part of delivering the works the *Contractor* shall fulfil the duties of Principal Contractor in terms of the CDM 2015 regulations.

The *Contractor* should produce risk assessments and method statements (RAMS) prior to works commencing. The risk assessments and method statements shall meet the requirements of the Construction Design and Management Regulations 2015, unless notified otherwise by the *Client*.

The *Client* will communicate with residents and landowners as part of the local engagement strategy.

If any liaison with utility companies, local councils or any other third parties not mentioned in this contract is required, the *Contractor* shall undertake the liaison. This will be managed through the Compensation Event mechanism.

For the sites requiring topographical surveys, the *Contractor* shall:

1. When on site, carry with them at all times the letter of introduction, or similar, supplied by the *Client*.

2. Ensure that all survey results including the survey report are to be delivered in a digital format as a zipped file email attachment if the zipped file is smaller than 10Mb or via DEFRA Sharefile (link supplied by *Client* upon request), unless it has been agreed by both Parties.

3. Comply with the general requirements for all surveys as stated in Section 1 of the National Standard Technical Specifications for Surveying Services.

***Contractor* Project Management**

*The Contractor* shall:

- Produce a monthly report with an updated programme showing actual and forecast progress and when key activities are taking place including any dependencies. This is to be submitted on the 1st Friday or nearest working day of the month.
- The *Contractor* shall support in the identification of project efficiencies through active contribution to an Efficiency Register managed by the *Client*.
- The *Contractor* shall use the Carbon Calculator tool to provide project carbon data during the delivery phase of the projects in accordance with 249_18_SD02.

**The following are named and un- scoped sites that require repairs within the same time frame as the scoped sites. They do not currently form part of the Scope and are for information only. They maybe be added as a Compensation Event dependant on budget availability and *Contractor* performance. If instructed to deliver these repairs, the delivery of these sites must be given equal importance when the contract is awarded. The scopes for these three sites will be provided at contract award, however a summary of the required work is detailed below:**

**3.0 B Lewes embankment - Phase 3 - Chalkpit Cut to Ivors Lane - Construction**

Work will involve construction and as-built drawings in accordance with the embankment repair design completed as part of the scoped work for this embankment. The repair will involve repairing low spots along the embankment crest and landward face and conducting bank stabilisation and erosion and repairs at two locations. The total length of the embankment is ~951m in length, the upstream extent of the embankment is TQ 41102 12251 (~125m south west of Ivors Lane) and the downstream extent of embankment is TQ4061911508.

The works will also require in-channel de-silting in the location detailed below:

- In-channel de-silt length = ~32m
- NGR - TQ 40993 12117 (DS) to TQ 40569 11672 (US)
- Essential work: Localised in-channel de-silt required to prevent flow being deflected towards the right bank.

Please refer to location map provided in the Site Information.

**4.0 Lewes embankment - Deanery Embankment**

Work will involve design and construction to repair the asset.. The asset has the following defects:

Low spots to ~175m length of embankment. Upstream extent of repair is TQ 41317 10819, downstream extent of repair is TQ 41210 10918.

Please refer to location map provided in the Site Information.

**5.0 Botolphs / Passies Pond flood Embankment.**

This embankment is below target condition as a result of isolated erosion sections. The *Contractor* may be instructed to design and construct a repair of the asset by undertaking the following tasks:

- Design and construct embankment repair to eroded section (approximately 30m in length) including topographical surveys.
- The repair shall achieve a crest height which matches the adjacent embankment (averaged over a 10m length either side of repair location) with allowance for settlement of the repair.
- The repair shall achieve a slope which matches the adjacent embankment slope (approx. 1 in 3).
- Establish grass cover to the repair. (Grass seed should be in accordance with 249_18_SD14 FCRM Operational Framework Lot 2 Specification Section 4 – Planting and Seeding)
- Post construction topographical survey of repairs.
- Access track and site compound area to be reinstated to previous or better pre-construction condition.
- Livestock fencing will be required to protect the repair until the grass establishes.

## 2. Drawings

**List the drawings that apply to the contract.**

No drawings available

| Drawing Number | Revision | Title |
|---|---|---|
| | | |

## 3. Specifications

**List the specifications which apply to the contract.**

| Title | Date or Revision/ Doc ref number | publicly available |
|---|---|---|
| Safety, Health, Environment and Wellbeing Code of Practice (SHEW CoP) | May 2018 | |
| Civil Engineering Specification for the Water Industry (CESWI Seventh Addition) | 7th Edition | Yes |
| Application of Eurocode 7 to flood embankments. CIRIA Guidance. | C749 revision 1 | |
| National Standard Technical Specifications for Surveying Services. | Version 5, March 2021 | |
| FCRM Operational Framework Deed and Specifications Lot1 and Lot2 - Section 4 – Planting and Seeding | 249_18_SD36 | |
| Minimum technical requirements | Dec 2021 (latest version) | |
| whole life carbon management doc | 249_18_SD02 | |
| water safety training doc | 249_18_SD07 | |
| The Contractor shall also utilise the following but not limiting to specifications where applicable, to design and build the projects with reasonable skill and care. | | |
| British Standard Code of Practice and Euro codes | Latest version | yes |
| European Standards | Latest version | yes |

| | | |
|---|---|---|
| And the following but not limiting to Environmental specifications/guides and codes of practise:<br>• BRE – Green Guide to Specification;<br>• BRE – Materials Information Exchange;<br>• CIRIA SP122 – Waste Minimisation and Recycling in Construction (practical guidance);<br>• CIRIA C513 – The Reclaimed and Recycled construction materials Handbook;<br>• CIRIA C533 – Environmental Management in Construction;<br>• Considerate Constructor Scheme;<br>• CL:AIRE Policy Paper (2010)<br>• General Guide to the Prevention of Water Pollution: PPG1;<br>• Works in, near or liable to affect Watercourses: PPG5;<br>• Working at construction and demolition sites: PPG6;<br>• Pollution Prevention Guidelines Marinas and Craft: PPG14; and<br>• Pollution Prevention Guidelines Pollution incident response planning: PPG21. | Latest version | yes |
| | | |

**4. Constraints on how the *Contractor* Provides the Works**

**State any constraints on the sequence and timing of work and on the methods and conduct of work including the requirements for any work by the *Client*.**

The *Contractor* shall not commence works on site until the RAMS, CPP, FRAP Permit, other statutory and non-statutory permits, including HRA and MCZ full assessments and full consents are obtained as required and required EAPs are in place and accepted by the *Client*.

Access to site for construction is yet to be agreed, the *Contractor* is to consider access routes to the site during detail design. The local EA representative will then work with the Landowner and *Contractor* to get an agreement in place prior to construction work commencing.

The visiting of sites shall be agreed in writing with the *Client's* Project Manager. A minimum of 7 calendar days' notice is required before each site visit.

**Working times**

The *Contractor* will be permitted to work between 7.30am and 6.00pm on weekdays (Monday to Friday)

**5. Requirements for the programme**

**State whether a programme is required and, if it is, state what form it is to be in, what information is to be shown on it, when it is to be submitted and when it is to be updated.**

**State what the use of the *works* is intended to be at their Completion as defined in clause 11.2(1).**

The *Contractor* submits their first programme with the Contractor's Offer for acceptance by the 10th of every month.

The *Contractor* shows on each programme submitted for acceptance (every four weeks)

• the *starting date* and Completion Date,

• planned Completion,

• the order and timing of the operations which the *Contractor* plans to do in order to Provide the Works, including the activities listed within the Price List,

• the order and timing of the work of the *Client* and others as last agreed with them by the *Contractor* or, if not so agreed, as stated in the Scope,

• the dates when the *Contractor* plans to complete other work needed to allow the *Client* and others to do their work,

• provisions for float, time risk allowances, health and safety requirements, environmental requirements and the procedures set out in the contract,

• the dates when, in order to Provide the Works in accordance with the programme, acceptances, Plant and Materials and other things to be provided by the *Client* and information from others,

• for each operation, a statement of how the *Contractor* plans to do the work identifying the principal Equipment and other resources which will be used

• other information which the Scope requires the *Contractor* to show on a programme submitted for acceptance. A programme issued for acceptance is in the form stated in the Scope.

• Any key third party interfaces: lead in periods for materials and sub-contractors; time required to obtain consents/waste and Flood Risk Activity permits; stated constraints; *Contractor's* risks.

• FRAP application submittal dates period (2 months for a bespoke Permit).

Within two weeks of the *Contractor* submitting a programme for acceptance, the *Client* notifies the *Contractor* of the acceptance of the programme or the reasons for not accepting it. A reason for not accepting a programme is that

• the *Contractor's* plans which it shows are not practicable,

• it does not show the information which the contract requires, it does not represent the *Contractor's* plans realistically or

• it does not comply with the Scope.

If the *Client* does not notify acceptance or non-acceptance within the time allowed, the *Contractor* may notify the *Client* of that failure. If the failure continues for a further one week after the *Contractor's* notification, it is treated as acceptance by the *Client* of the programme.

The *Client's* Delegate shall notify and agree with the *Contractor* regarding any additional items required on each programme within 2 weeks of contract award. The *Contractor* shall agree any changes to the schedule with the *Client's* Delegate within 2 weeks of Contract Award and issue a schedule of planned design submission to the *Client's* Delegate. The *Contractor* shall ensure the changes shall not impact the Completion date.

The *Contractor* shows on each revised programme:

• the actual progress achieved on each operation and its effect upon the timing of the remaining work,

• how the *Contractor* plans to deal with any delays and to correct notified Defects and

• any other changes which the *Contractor* proposes to make to the accepted programme

The *Contractor* submits a revised programme to the *Client* for acceptance

• within the *period for reply* after the *Client* has instructed the *Contractor* to, and

• when the *Client* chooses to.

**6. Services and other things provided by the *Client***

**Describe what the *Client* will provide, such as services (including water and electricity) and "free issue" Plant and Materials and equipment.**

| **Item** | **Date by which it will be provided** |
|---|---|

## 7. Site Information

For the 2.0 Lewes embankment - Phase 2 - Kissing Gate to Chalkpit Cut, please refer to PCI, location map, topographic survey provided in the Site Information. A previous design has been completed for this embankment and is provided for reference/information only in the Site Information.

For all site access, please refer to PCI location map with suggested site access route. It is not anticipated that additional works are required for this access route, however only suitable all-terrain vehicles should be used.

A Pre-Appraisal Assessment (PAA) has been provided for Botolphs/Passies Pond as site information only. The PAA was used to develop the scope of works and identify potential hazards, risks and project restraints and should be considered in conjunction with the development of the detailed design.

Access options shown in PAA. The contractor may identify alternative suitable routes.

**Table 2 (below) contains details of previous studies and existing information. All this information can be download from the following sharefile link:** https://ea.sharefile.com/d-s265e6587693d4a8a9c4f975c8f09ed19

**The link will expire 30 days from 11/03/2022.**

| Site number | Site | Document Ref Number |
|---|---|---|
| **0.0** | **Standard & General Documents** | ***"0.0 Standard documents.zip"***<br>0.0 ELENs<br>0.0 HASLEs<br>0.0 Standard documents<br>2. Survey_National_Specifications_V5.0.pdf<br>3. Survey_National_Specifications_Guidance_V5.0.pdf |
| **1.0 A - B A27 Embankments** | **1.0 A – B General** | ***"1.0 A - B A27 Embankment.zip"***<br>Package 2 - Survey Width Typ Embankment 1.0 A.pdf<br>Package 2 - Survey Width Typ Embankment 1.0 B.pdf<br>Package 2 - Topographical survey extents.pdf |

| | | |
|---|---|---|
| **1.0 A** | **1.0 A Ranscombe Outfall to A27 - Embankment erosion** | ***"1.0 A Ranscombe to A27 Embankment.zip"***<br>1.0 A A27 Additional Information<br>1.0 A GPS Sections and Details<br>1.0 A Hazard Map<br>1.0 A Location Map<br>1.0 A Service Searches<br>1.0 A Site Photos |
| **1.0 B** | **1.0 B Glynde to A27 - Embankment erosion** | ***"1.0 B Glynde Reach to A27 - Embankment.zip"***<br>1.0 B Site Information<br>1.0 B Hazard Map<br>1.0 B Site Photos |
| **2.0** | **Lewes embankment - Phase 2 - Kissing Gate to Chalkpit Cut** | **Lewes embankment - Phase 2 - Kissing Gate to Chalkpit Cut - PCI – V-01**<br>***"2.0 Phase 2 - Kissing Gate to Chalkpit Cut.zip"***<br>2.0 Design<br>2.0 FRAP Example<br>2.0 Hazard Map<br>2.0 Location Information<br>2.0 PCI - EAP Example<br>2.0 Service Searches<br>2.0 Site Photos<br>2.0 Topographical Survey<br>02577-BCE-VTO-ZZ-DR-G-00001<br>02577-BCE-VTO-ZZ-DR-G-00001 - EXISTING GROUND TOPO SURVEY - 3<br>02577-BCE-VTO-ZZ-DR-G-00001 - EXISTING GROUND TOPO SURVEY - 2<br>02577-BCE-VTO-ZZ-DR-G-00001 - EXISTING GROUND TOPO SURVEY - 1 |
| **2.0** | **Lewes embankment - Phase 2 - Kissing Gate to Chalkpit Cut** | ***"Lewes embankment - Phase 2 - Kissing Gate to Chalkpit Cut - Design.zip"***<br>02577-BCE-HEW-ZZ-DR-W-00001 EARTHWORKS EVALUATION SHEET 1 OF 3.pdf<br>02577-BCE-HEW-ZZ-DR-W-00002 EARTHWORKS EVALUATION SHEET 2 OF 3.pdf<br>02577-BCE-HEW-ZZ-DR-W-00003 EARTHWORKS EVALUATION SHEET 3 OF 3.pdf<br>A121036-TGEE-00-XX-TN-C-0001.pdf<br>A121036-TGEE-ZZ-XX-DR-C-0001-P01.pdf<br>A121036-TGEE-ZZ-XX-DR-C-0002-P02.pdf<br>A121036-TGEE-ZZ-XX-HS-C-0001 P01.pdf<br>A121036-TGEE-ZZ-XX-HS-C-0002 P01.pdf |
| **3.0 A** | **Lewes embankment –** | ***"3.0* Phase 3 - Chalkpit Cut to Ivors Lane.*zip"*** |

| | | |
|---|---|---|
| | **Phase 3 - Chalkpit Cut to Ivors Lane** | 3.0 Hazard Map<br>3.0 Location - Information<br>3.0 PCI -EAP<br>3.0 Site Photos |
| **3.0 B Named & Un-scoped** | **Lewes embankment – Phase 3 - Chalkpit Cut to Ivors Lane** | ***"3.0* Phase 3 - Chalkpit Cut to Ivors Lane.*zip* "**<br>3.0 Location - Information<br>3.0 PCI -EAP<br>3.0 Site Photos |
| **4.0 Named & Un-scoped** | **Lewes embankment - Deanery Embankment** | ***"4.0 Malling Deanery* embankment.*zip*"**<br>Malling Deanery embankment - Location Map.jpg<br>Malling Deanery embankment - Location Map.pdf |
| **5- Named & Un-scoped** | **Botolphs / Passies Pond flood Embankment** | **ENVRECOV014R-JBA-00-59-RP-C-0001-S6-C01-B1500-EA2-LOD2-Botolphs_Passies_Pond_PAA** |

| **Proposed sub-contractors** | | |
|---|---|---|
| | Name and address of proposed subcontractor | Nature and extent of work |
| 1. | Trackside Solutions Ltd.<br>Phils View, Mill Lane,<br>Whitwell, Worksop,<br>Nottinghamshire. S80 4SE<br>Form of Contract: NEC4 Engineering & Construction Short | Complete works at 2.0 Lewes embankment - Phase 2 - Kissing Gate to Chalkpit Cut including embankment and footpath construction. |
| 2. | Matrix Consulting Eng. Ltd.<br>311 Wakefield Road,<br>Barnsley, South Yorkshire.<br>S71 3LR<br>Form of Contract: NEC4 Engineering & Construction Short | All non-intrusive surveys & detailed design of permanent works. |

| | | |
|---|---|---|
| 3. | Anthony Brookes Surveys Ltd.<br>Unit 2 Thornbury Office Park, Midland Way, Thornbury, Bristol. BS35 2BS<br>Form of Contract: NEC4 Engineering & Construction Short | All topographical surveys. |
| 4. | CC Ground Investigations Ltd.<br>Unit A2 Innsworth Technology Park, Innsworth Lane, Gloucester. GL3 1DL<br>Form of Contract: NEC4 Engineering & Construction Short | Site/Ground investigation works at 2.0 Lewes embankment - Phase 2 - Kissing Gate to Chalkpit Cut & 3.0 A Lewes embankment - Phase 3 - Chalkpit Cut to Ivors Lane. |