

Use the template on the pages that follow to assist you when preparing the Scope for an ESE NEC4 engineering and construction contract (ECC).

Environment Agency NEC4 engineering and construction contract (ECC) Works Information

Project / contract information

Project name	Farlington Marshes Project Appraisal (SOC - OBC): Early Supplier Engagement
Project reference	ENV0002137C
Contract reference	29428
Date	03/12/20
Version number	8.1
Author	Paul Vincent

Revision history

Revision date	Summary of changes	Version number
24/07/20	First issue – EA/DGC review	1.0
07/08/20	Initial VS review	2.0

21/08/20	VS comments incorporated – EA/DGC review	3.0
	Issued to VS prior to review meeting	4.0
03/09/20	Post review meeting – incorporating comments	5
10/09/20	Final version post review – with changes agreed by VS	5.2
05/10/20	Clean version removing comments	6
08/10/20	Updated version after CSM review	7
14/10/20	Final version to be issued to VS	8
03/12/20	Final DGC review prior to contract issue on Bravo - comments removed, text colour changed to black, project name amended to match contract, punctuation corrected and reference to <i>Client</i> added in place of Environment Agency in S100.	8.1

This Works Information 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 Scope.

Document	Document Title	Version No	Issue date
412_13_SD01	Minimum Technical Requirements	Version 2	18/03/2020

Contents List

S100	Description of the <i>works</i>
S200	General constraints on how the <i>Contractor</i> provides the <i>works</i>
S300	<i>Contractor's</i> design
S400	Completion
S500	Programme
S600	Quality management
S700	Tests and inspections
S800	Management of the <i>works</i>
S900	Working with the <i>Client</i> and Others
S1000	Services and other things to be provided
S1100	Health and safety
S1200	Subcontracting
S1300	Title
S1400	Acceptance or procurement procedure (Options C and E)
S1500	Accounts and records (Options C and E)
S1600	Not used
S1700	<i>Client's</i> work specifications and drawings

Appendix 1 BIM Protocol – Production and Delivery Table

Appendix 2 BIM Protocol – *Clients* Information requirements

S100 Description of the works

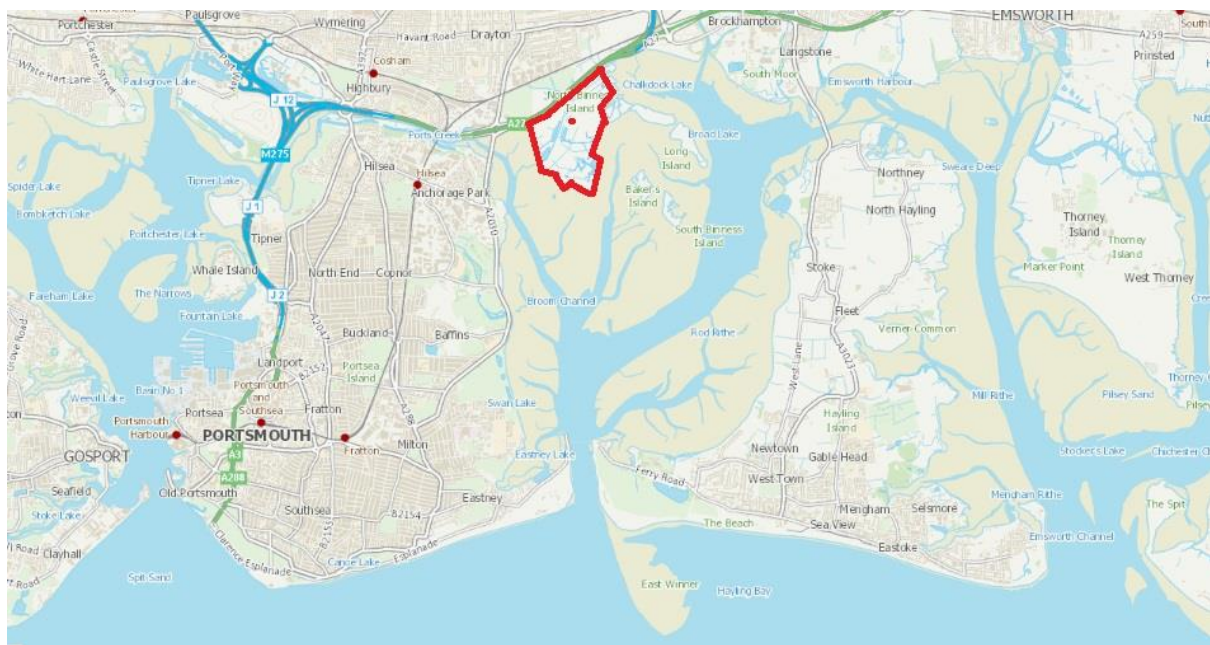
Farlington Marshes is a 125ha peninsula of undeveloped coastal land, situated between the city of Portsmouth and Thorney Island (see Fig 1). A 4km sea wall protects low lying land from tidal inundation.

Farlington Marshes is an internationally, European and nationally designated site (SAC, SPA and RAMSAR) comprised of coastal grazing marsh and lowland meadow. Farlington Marshes plays a critical role in supporting the tens of thousands of waterfowl and wading birds that overwinter in the Chichester, Langstone and Portsmouth Harbour Special Protection Areas (SPAs) every year and is a key refuge site within the Solent wide network of high tide roost sites.

A recent survey undertaken by JBA (2020) concluded that the sea wall is in poor condition and if significant defects are not repaired, the current defence at Farlington Marshes will continue to deteriorate and could possibly fail within five years.

This failure of the flood defence would result in the loss of important coastal habitat at Farlington marshes and have an adverse impact not only on the immediate SPA/SAC and RAMSAR but also Solent wide SPA's. This would also require the *Client* to find a significant amount of compensatory habitat to meet the requirements of the Habitat Regulations (2010), which initial studies have shown would be hard if not impossible to find within the Solent.

Fig 1 – Farlington Marshes



S101 Purpose of the Works

In providing the Early Supplier Engagement commission, the *Contractor* shall deliver the following:

1. Buildability and SHEW considerations

The *Contractor* shall:

Provide guidance and advice that the following documents are comprehensive and provide the best information available for the ground investigation and the development of the preferred options, inputting as required, to include suitable assurance for each of the following documents:

- Hazard Plan, Buildability Statement, desktop services searches, Pre-Construction Information Pack, Design Statement, Environmental Action Plan, Construction Method in the EIA, Information Delivery Plan, Carbon Reporting

Provide comprehensive advice on proposed options such as the impact of potential relevant permissions and consenting application processes including related programme considerations.

Provide the logistics and practical considerations for the options, preferred option and ground investigations including for the use of supply chain engagement, temporary works, example materials, site compound locations, access constraints, construction logistics, community safety, procurement and sourcing options.

Any proposed project solutions shall have appropriately considered the impact on known and unknown services. The *Contractor* shall provide input into Ground Investigation scoping including proposals for service location identification to PAS 128, UXO surveys or Asbestos demolition / refurbishment surveys as required

Champion SHEW, wider sustainability matters and challenging assumptions where applicable.

2. Affordability and Risk Management

The *Contractor* shall:

Identify opportunities and risks, the measures required to mitigate, quantification, and the allocation of residual risk to the party best placed to manage the residual impacts as part of the integrated project risks register.

Support in the identification of project efficiencies through active contribution to the Efficiency Target and in the Efficiency Register.

~~Provide market relevant advice to support on project whole life costs (and carbon), e.g. compensation exposure for third parties, input into the Pricing Strategy, and setting adequate~~

~~budgets. This includes providing detailed costing for the preferred option and costing support to the *Consultant* for the remaining short listed options.~~

Provide market relevant advice to support on project whole life costs (and carbon). A 'Project Estimate Pricing Strategy Meeting' will be required to agree the appropriate method for costing and deliverables required.

Consider where applicable innovation and technology that can be embedded throughout the project, evaluating on a risk and opportunity basis.

Support in ensuring the Project Preferred Option costing is within set tolerances, at the earliest opportunity, including input into funding options where feasible.

3. Programme and project management

The *Contractor* shall:

- Review and report progress of ESE *Contractor* activities to the *Consultant* monthly upon the Whole Life Programme for the project. The *Client's Project Manager* remaining accountable for the programme.
- Provide a monthly forecast and expenditure profile which is in line with the Whole Life Programme and the Environment Agency Gateways.
- Provide a detailed methodology to support the draft construction element of the Whole Life Programme.
- Provide a project team with the relevant demonstrable knowledge and skills to undertake the work defined in the Scope.
- Maintain weekly verbal contact with the *Consultant's* Project Manager such that the *Consultant* is fully informed of progress and issues.
- Attend monthly progress meetings. Meetings shall be held in the *Client's* local offices arranged by the *Consultant*.
- Attend Project Board meetings as required to be organised by the *Client*. The *Consultant* shall provide a project progress update at Project Board meetings as required.
- Lead an interactive programming/ planning session and attend other required workshops at key gateways/ milestones/ decision points, to allow the project team to understand the risk/ dependencies within the programme and how tasks are related and risks are managed. This will result in aligning project team members' objectives, resources and mitigation of constraints.
- Attend a team start up meeting **and two** subsequent team building meetings required to develop the team charter.
- Work with the *Consultant* to **provide input into** all required *Client* periodic (monthly /quarterly) project reporting in line with timescales agreed within the first 4 weeks of the contract. This is to include finances, progress, updated programme (with actual and forecast progress), lessons learned log, efficiencies, carbon and a risks, assumptions, issues & dependencies register. The monthly project report shall be timely and accurate with 0 errors at the point of circulation to the *Client*.

Farlington Marshes SOC to OBC

- Work with the *Client* to provide a monthly financial report. This will include a breakdown of all expenditure to date and forecast future expenditure. In addition, this will identify and provide an estimated valuation of all outstanding compensation events and an estimated value to completion. The contract information held on A site/ FastDraft does not constitute completion of this task. The finances shall be checked and correct with 0 errors at the time of circulation to the *Client*.

4. Contract Documentation

The *Contractor* shall review the adequacy and clarity of all documents required for any contracts covering intrusive investigation works and detailed design, all developed in accordance with the agreed Pricing Strategy.

5. Services Required

Cost and Carbon Estimation

The *Contractor* shall provide support for estimations of cost and carbon for potential solution(s), which will be prepared based upon the information collated to date and operational experience. At this stage the focus is on the scale and timing of possible costs to be used by the *Client* to review the project mandate and aid planning. This should include solution socio environmental mitigation and enhancement costs and an allowance for risk. This estimate should identify the extent of validity of the *Client's* Project Cost Tool (PCT) and potential risks of variance to PCT.

Ground Investigation

The *Consultant* will review previous reports to identify gaps in existing data. The *Consultant* will use this to inform the Scope of supplementary ground investigations required to allow proper progression of the appraisal, design and construction methodology.

The *Consultant* will undertake all necessary permissions and consents in order to progress with the Ground Investigations. The *Client* will clearly communicate the specifications for these further ground investigations to the *Contractor* for the *Contractor* to undertake. This will result in a change of Scope.

The *Contractor* shall provide ESE support and advice for the *Consultant* in the scoping of the GI including inputting into their estimated costs.

Key Outputs

The *Contractor* shall attend a site visit to identify access requirements, physical constraints, easement requirements, required working areas and compound areas.

The *Contractor* shall:

Undertake a review of outline design options / drawings that are to form part of the pricing information – including consideration of whether or not sufficient information is available for the *Consultant* pricing the schemes, as well as identification and advice on buildability, construction methods, SHE compliance, etc.

Undertake a review of high-level programme and input into activities, durations and sequence – can works be planned around seasons (e.g. earthworks in the summer months),

Farlington Marshes SOC to OBC

identification of long lead items (and therefore when does the contract need to be let), ecological constraints, third party constraints, consents, robust delivery durations considering risk. Early identification of programme constraints that could prevent a scheme from starting or completing as planned.

Undertake a review of the draft Scope for the ground investigations - and **provide assurance** that there is sufficient information available for the *Consultant* pricing the scheme.

Undertake a review of draft Site Information - is sufficient information available for the *Consultant* pricing the schemes. If gaps are identified, assess whether there is value in closing the gaps.

Undertake a review of draft temporary works schedule. Identification of any significant temporary works designs that need to be considered from a CDM perspective in advance of the works pricing, to ensure sufficiency of resources and time.

Provide information for the carbon tool and CEEQUAL assessment.

Contribute to specialist areas of the high level cost estimate against a defined Scope as requested by the project team. Provide assurance to ensure that a suitable risk pot is established considering the stage of project.

Input into a project level risk register that can be communicated to the *Consultant* at the time of works pricing and updated regularly throughout the life of the project.

Input into the project queries log for response by both the *Consultant* and the *Contractor* to record how issues identified have been incorporated into the project going forward.

Ensure the works project Scope and importantly either business case or works information has no gaps and can be fully communicated including risk.

Ensure end user engagement to set the scene for future delivery in terms of solution expectation, ongoing management of assets or asset performance and present a way of delivery that can be delivered.

6. Requirements of the programme

The *Contractor* shall provide input into the *Consultant's* programme as described in section 3.

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

8.1 Data and information management and intellectual property rights

All of the data listed as being supplied to the *Contractor* as part of this study remains the IP of the *Client*.

8.2 Data custodianship

The data custodian for project deliverables from this commission will be the Hampshire and Isle of Wight PSO team.

8.3 Licensing information

Licences for LiDAR Data, Ordnance Survey mapping, model, survey, hydrometric and historical data will be provided to the *Consultant* upon award of this commission.

8.4 Data management and metadata

The *Client* populates a metadata database called the information asset register (IAR). It is a requirement that all information produced by modelling work is appropriately tagged with metadata. The *Client* will supply an IAR spreadsheet (and any supplementary local metadata requirements if appropriate) where all relevant metadata can be recorded and handed over on project completion.

8.5 Data security

All model and survey information will be provided to the *Contractor* in an encrypted format (using WinZip 128 bit encryption) according to *Client* data security policy. It is expected that once the commission is completed, all the original data sent to the *Consultant*, which is classed as commercially sensitive, is returned in an encrypted format using WinZip 128 bit encryption.

Project deliverables such as model files, survey data or anything of a personal nature such as questionnaires or address data must also be returned in an encrypted format using WinZip 128 bit encryption.

Further details regarding security measures will be discussed at the start-up meeting for this commission.

8.6 Client's Advisors

The *Client* has a number of advisory departments. Instructions will only be deemed enacted from them when they are confirmed by an Instruction from the *Client's Project Manager*. These departments include Area, NEAS, etc.

8.7 Client Documents the Contractor contributes to

The *Client* maintains several project documents, the *Contractor* is required to contribute to these *Client* owned documents:

- Project Risk Register
- Project Efficiency register
- Carbon register
- CEEQUAL assessment

S 200 General constraints on how the *Contractor* provides the works

- No access to private property is to be made by the Contractor without written Client approval and/or formal issue and serving of Notice of Entry.
- It is essential to ensure that invasive species are not introduced or spread if found to be present on site
- Due to the protected nature of the site the project is expected to require a statutory EIA, and a Habitat Regulations Assessment will also be required including for any Ground Investigations undertaken at this stage of the project. The Contractor will not be required to undertake these however outcomes of the Habitat Regulations Assessment and any environmental restrictions due to work being undertaken in a protected site will need to be followed.
- Access to the site is restricted to one way in and out
- The site is used for recreational access and a footpath runs along the embankment, any work undertaken will likely require footpath closure
- There is uncertainty about the embankment materials and its ability to support heavy plant
- The current sea defence is in poor condition and there is a potential risk of embankment failure
- There is a risk of UXO on site
- There may be a risk of contaminated land
- There may be archaeology on site
- Reducing the risk of pollution, ecological and environmental impacts will be essential

S 201 Confidentiality

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

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

S 202 Security and protection on the site

In the event of additional work being added to the Scope the *Client* will advise the *Contractor* accordingly.

S 203 Security and identification of people

Farlington Marshes SOC to OBC

ENV0002137C

10

03/12/2020

In the event of additional work being added to the Scope the *Client* will advise the *Contractor* accordingly.

S 204 Protection of existing structures and services

In the event of additional work being added to the Scope the *Client* will advise the *Contractor* of any additional requirements accordingly.

S 205 Protection of the works

In the event of additional work being added to the Scope the *Client* will advise the *Contractor* accordingly.

S 206 Cleanliness of the roads

In the event of additional work being added to the Scope the *Client* will advise the *Contractor* accordingly.

S 207 Traffic Management

In the event of additional work being added to the Scope the *Client* will advise the *Contractor* accordingly.

S 208 Condition survey

In the event of additional work being added to the Scope the *Client* will advise the *Contractor* accordingly.

S 209 Consideration of Others

In the event of additional work being added to the Scope the *Client* will advise the *Contractor* accordingly.

S 2010 Control of site personnel

In the event of additional work being added to the Scope the *Client* will advise the *Contractor* accordingly.

S 2011 Site cleanliness

In the event of additional work being added to the Scope the *Client* will advise the *Contractor* accordingly.

S 2012 Waste materials

In the event of additional work being added to the Scope the *Client* will advise the *Contractor* accordingly.

S 2013 Deleterious and hazardous materials

In the event of additional work being added to the Scope the *Client* will advise the *Contractor* accordingly.

S300 Contractor's design

In the event of additional work requiring any *Contractor's* design being added to the Scope the *Client* will advise the *Contractor* accordingly.

S 301 Design responsibility

As above

S 302 Design submission procedures

As above

S 303 Design approval from Others

As above

S 304 Client's requirements

As above

S 305 Design co-ordination

As above

S 306 Requirements of Others

As above

S 307 Copyright/licence

As above

S 308 Access to information following Completion

As above

S 309 Site investigations

As above

S 400 Completion

S 401 Completion definition

This Contract will be completed on the *Client's* confirmation of the project's Outline Business Case approval.

S 402 Sectional Completion definition

N/A

S 403 Training

In the event of additional work requiring any *Contractor's* design being added to the Scope the *Client* will advise the *Contractor* accordingly.

S 404 Final Clean

As above

S 405 Security

As above

S 406 Correcting Defects

As above

S 407 Pre-Completion arrangements

As above

S 408 Take over

As above

S500 Programme

S 501 Programme requirements

As per NEC core clauses.

S 502 Programme arrangement

As above

S 503 Methodology statement

As above

S 504 Work of the *Client* and Others

As above

S 505 Information required

As above

S 506 Revised programme

As above

S 600 Quality management

In the event of additional work being added to the Scope the *Client* will advise the *Contractor* accordingly.

S 601 Samples

In the event of additional work being added to the Scope the *Client* will advise the *Contractor* accordingly.

S 602 Quality Statement

In the event of additional work being added to the Scope the *Client* will advise the *Contractor* accordingly.

S 603 Quality management system

In the event of additional work being added to the Scope the *Client* will advise the *Contractor* accordingly.

S 604 BIM requirements

The BIM Information Manager is the *Client's Project Manager*.

The *Contractor* shall comply with the Collaborative Delivery Framework requirements and ensure that the project outputs are compliant with the BIM Employers Information Requirements 2.3.

S 700 Tests and inspections

In the event of additional work being added to the Scope the *Client* will advise the *Contractor* accordingly.

S 701 Tests and inspections

As above

S 702 Management of tests and inspections

As above

S 703 Covering up completed work

As above

S 704 *Supervisor's* procedures for inspections and watching tests

As above

S 705 Reduction of carbon against the original solution carbon budget

As above

S 800 Management of the works

In the event of additional work being added to the Scope the *Client* will advise the *Contractor* accordingly.

S 801 Project team – Others

As above

S 802 Communications

As above

S 803 Monthly Progress Reporting

As above

S 900 Working with the *Client* and Others

In the event of additional work being added to the Scope the *Client* will advise the *Contractor* accordingly.

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

As above

S 902 Co-operation

As above

S 903 Co-ordination

As above

S 904 Authorities and utilities providers

As above

S 905 Diversity and working with the *Client*, Others and the public

In delivering the *works*, the *Contractor* shall consider the following and document how they are addressed on this contract:

- **Public:** how to effectively engage with, and how they perceive us, the diverse public throughout projects?
- **Project team:** how to create an inclusive environment for our project team?
- **Framework:** identify opportunities to support diverse workforces on our projects across our organisations.

S 1000 Services and other things to be provided

In the event of additional work being added to the Scope the *Client* will advise the *Contractor* accordingly.

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

As above

S 1002 Services and other things to be provided by the *Client*

As above

S 1100 Health and safety

In the event of additional work being added to the Scope the *Client* will advise the *Contractor* accordingly.

S 1101 Health and safety requirements

As above

S 1102 Method statements

As above

S 1103 Legal requirements

As above

S 1104 Inspections

As above

S 1200 Subcontracting

In the event of additional work being added to the Scope the *Client* will advise the *Contractor* accordingly.

S 1201 Restrictions or requirements for subcontracting

As above

S 1202 Acceptance procedures

As above

S 1300 Title

In the event of additional work being added to the Scope the *Client* will advise the *Contractor* accordingly.

S 1301 Marking

As above

S 1302 Materials from Excavation and demolition

As above

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

In the event of additional work being added to the Scope the *Client* will advise the *Contractor* accordingly.

S 1500 Accounts and records

In the event of additional work being added to the Scope the *Client* will advise the *Contractor* accordingly.

S1501 Additional Records

In the event of additional work being added to the Scope the *Client* will advise the *Contractor* accordingly.

S 1600 Parent Company Guarantee (Option X4) [not used]

Not required.

S 1700 Client's work specifications and drawings

In the event of additional work being added to the Scope the *Client* will advise the *Contractor* accordingly.

S 1701 Client's work specification

As above

S 1702 Drawings

As above

S 1703 Standards the Contractor will comply with

As above

Appendix 1 BIM Protocol – Information Production and Delivery Table

All *Client* issued information referenced within the Information Delivery Plan remains within the *Site Information* unless it is referenced elsewhere within the Scope.