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Environment Agency
NEC4 engineering and construction contract (ECC)
Scope

Project / contract information

Project name	Feildes Weir Repair Project (part of the Eastern MEICA Sub-Programme 1)
Project SOP reference	ENV0004264C
Contract reference	C5582
Date	28/03/23
Version number	6
Author	[redacted]

Revision history

Revision date	Summary of changes	Version number
	First draft for comment	1
20/01/2023	Second draft following consultation with project team including *Contractor*	2
08/02/2023	Second draft following consultation with Commercial Services Manager	3
28/03/2023	Minor amends following receipt of further comments from Contactor	4
14/04/2023	CDF extension clauses inserted	5
28/04/2023	Amendments to carbon requirements	5.1
05/05/2023	CSM comments	5 2
05/05/2023	Contract Award	6

This Scope should be read in conjunction with the version of the Minimum Technical Requirements and Employer Information Requirements current at the Contract Date. In the event of conflict, this Scope shall prevail. The service is to be compliant with the following version of the Minimum Technical Requirements:

Document	Document Title	Version No	Issue date
LIT 13258	Minimum Technical Requirements	12	December 2021

LIT 17641	Employer Information Requirements	V03	20 Dec 2022

Part 2: Non-returnable Documents **NEC4 – ECC**	**Section 8 Scope**

Contents List

S100 Description of the *works*

S101 Description of the *works*

~~The drawings describing the *works* are included in Appendix x~~

~~The baseline setting out information is on drawing x. The *Contractor* will establish these lines on site and confirm the position with the *Supervisor* before commencement of any construction *works*. The *Contractor* shall check the provision of any level reference points shown on the drawings and confirm the position and level with the *Supervisor* before use for setting out the *works*. The *Contractor* shall inform the *Project Manager* when all setting out reference points have been agreed, checked and confirmed.~~

The work to be carried out under this contract is that required to implement the User Requirement Specification (URS), in Appendix A. In summary, the *works* include carrying out the detailed design and then the repair work necessary to return gate 2 back to full operation (by replacing the gearbox and actuator), and to organise the reconditioning and delivery of the old gearbox removed from gate 2.

S102 Purpose of the *works* / outcome required

Purpose of the works:

The Feildes Weir Repair project is one of eleven projects that comprise the Eastern MEICA Sub-programme 1. This sub-programme is comprised of projects where FCERM assets have been deemed 'approaching below required condition', as a consequence of failed, or failing, MEICA components The sub-programme is one of eight sub-programmes that fall under the Assets Below Required Condition Programme, which is focused on returning assets to the required condition.

Feildes Weir is a flood defence asset located on the River Lee navigation channel in Hoddesdon, Hertfordshire and North London Area (HNL, hereafter) It serves to direct flow to a relief channel when required, thus reducing the risk of flooding to 2,942 properties. The structure itself consists of a fixed crest weir alongside three electrically operated vertical lift gates. A sheet piled wall separates the flood relief channel from the navigation channel and two small side weirs provide a connection between the two channels downstream thus ensuring a sweetening flow

Feildes Weir is a strategically important asset, maintenance of which has been deemed necessary and economically viable within the 2010 Lower Lee FRM Strategy. There is also a legal duty on the *Client* to maintain the assets constructed under the Lee Conservancy Catchment Board Act 1938, which includes Feildes Weir

Feildes Weir is not currently fully functional. The actuator on Gate 2 at Feildes Weir is tripping when the gate is moved under load. Detailed investigations have concluded that the gearbox and actuator will need to be replaced, amongst others MEICA components The overall aims of this project have been to identify the root cause of the noted intermittent inoperability on Gate 2, and now to bring the asset back to its intended standard of service.

Outcome Required:

The Feildes Weir Repair project has two objectives –

1. To restore the Feildes Weir asset to the required condition as cost effectively, and sustainably (by minimising carbon impact) as possible, thus restoring flood defence capability in the locality

2. To negate the reputational risk to the *Client* from future flooding attributable, at least in part, to the likelihood of further failure at the Feildes Weir asset.

The Critical success factors for the project are –

1. Must ascertain root cause of the fault(s) at Feildes Weir (complete).

2 Must explore solutions to address the fault(s) at the Feildes Weir asset (complete)

3. Must select most cost-effective, and time efficient, solution to bring the Feildes Weir asset back to the required standard of service (complete).

4 Design and implement preferred option

The *Contractor* shall ensure the design is compliant with all relevant guidance and legislation, and minimises long-term asset management and maintenance costs This design shall be limited to that which is required to implement the repairs and maintenance tasks detailed in the URS.

The *Contractor* shall be responsible for ensuring the design is acceptable to the *Client*, gain necessary approvals, and be acceptable to statutory stakeholders

The *Contractor* shall produce a detailed design that demonstrates reduced risk of asset failure. The liability for this design shall remain with the *Contractor*.

The *Contractor* shall complete the asset repairs/maintenance such that it provides maximum value for money, and pursue efficiency savings where feasible

The *Contractor* shall maximise positive environmental outcomes and demonstrate mitigation has been considered.

The *Contractor* shall safeguard the site, the *works*, products, materials, and any existing structures affected by the *works* from damage and theft.

This Scope is limited to the Feildes Weir Repair project.

The Scopes for Wraysbury Offtake Weir and/or the EAN Package may be instructed by the *Project Manager* and shall be subject to agreement of the adjustment to the Target Price (including any associated changes to the programme and risk profile) in accordance with the Framework client set target (CST process).

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

The *Contractor* shall carry out the *works* in accordance with version 12 of the Minimum Technical Requirements (MTR), and in conjunction with other standards listed in section S1703.

S201 General constraints

~~Examples of constraints are:~~

- ~~Use of the Site~~
- ~~Access to the Site~~
- ~~Deliverables~~
- ~~Noise and variations~~
- ~~Working hours~~
- ~~Parking~~
- ~~Use of cranes~~
- ~~Use (or non –use) of explosives~~
- ~~Restrictions on the use of hazardous materials~~
- ~~Storage of fuel and chemicals~~
- ~~Pollution, ecological and environmental impacts.~~
- ~~Archaeological requirements~~
- ~~Interfaces between the *works* and existing things.~~
- ~~Occupied premises and users~~
- ~~*Client* specified policies and procedures.~~
- ~~Constraints imposed to meet the requirements of Others (example finders).~~
- ~~Tide Information~~
- ~~Sustainability targets~~
- ~~Timber and tropical hardwood requirements~~

S201.01 Construction Phase Plan

Prior to commencement of the *works*, a Construction Phase Plan shall be submitted to, and approved in writing by the *Project Manager* The approved plan shall be adhered to throughout the period of this Contract. It shall provide for, but is not limited to:

- Working hours
- The parking of vehicles of site operatives and visitors
- Deliveries
- Loading and unloading of plant and materials
- Storage of plant and materials
- Welfare arrangements
- Incident reporting

Normal working hours shall be 0800 to 1800 Monday to Friday unless by prior agreement with the Project Manager. Deliveries shall only be taken during working hours and vehicles shall not wait or be parked on nearby roads outside of working hours

Parking of work / staff vehicles should not inhibit vehicular access to nearby residential properties.

S201.02 Pollution, ecological and environmental impacts

The *Contractor* prepares an Environmental Action Plan (EAP) ~~in the *Client*'s standard format, or as otherwise agreed with~~ and submits this to the *Project Manager*, at least 4 weeks prior to commencement of the works The *Contractor* updates this until completion and makes it available for the *Project Manager* and *Supervisor's* or Environmental Clerk of Work's (ECoW) inspection on request.

Pollution, ecological and environmental impacts shall be managed in accordance with the Minimum Technical Requirements and the *Contractor's* EAP

The *Contractor* shall take into account the sensitivities of the Site, and comply with the requirements of the *Client's* Fisheries, Biodiversity and Geomorphology (FBG) team, as detailed below:

Sensitivities -

Immediately downstream of the weir, the river forms part of the wider Lee Valley North Local Wildlife Site. The Rye Meads SSSI, part of the Lee Valley SPA site, is just over 350m to the North of the site The river channel running through the site forms part of the Lea Navigation (Fieldes Weir to Enfield Lock) (GB106038077851) WFD water body. This is designated as a heavily modified water body which is currently at poor ecological potential. The river is also a European Eel migratory route. Water voles have been recorded between Fieldes Weir and Dobbs Weir.

Requirements -

Works to be completed outside of fish spawning season (March 15 – June 15 inclusive), where the impacts cannot be mitigated to *Client's* satisfaction. If vegetation clearance is needed, works to be outside nesting bird season An invasive species survey of the site to be carried out pre works to ensure no risk of spreading invasive species, and mitigation measures proposed. Fish friendly pumps or screened intakes and outlets will need to be used to prevent harm to fish.

The *Contractor* shall minimise and manage noise, vibration, and other potential nuisances during *works*, and respond to and resolve any complaints received

The *Contractor* shall undertake all corrective actions, as detailed by the *Project Manager* (based on the *Supervisor* or ECoW audit), to adhere to the current version of the EAP

S201.03 Sustainability targets / *Client* specified policies and procedures

The *Contractor* shall work towards the *Client's* reaching net zero by 2030 (e: Mission)

S201.04 Consents and Permissions

The *Contractor* shall obtain all consents required to deliver the *works* including, but not limited to:

- Road closures
- Footpath closures

The walkway over the weir via which all of the gate headworks are accessed is narrow and also a public right of way

S201 05 Maintaining flow through the asset

An Environmental Permit for a Flood Risk Activity is not required, as only Gate 2 will be stop logged off during the construction *works*, thus allowing flow through the asset to be maintained through Gates 1 and 3. There are only enough stop logs on site (as part of the existing equipment) to stop off upstream and downstream of one gate at a time

S201.06 Contingency Arrangements for Gate 2

Gate 2 is currently stop logged off At any stage of the *works* the asset owner will not allow the gate to be opened without some stop logs in place to prevent the upstream pound from emptying should the gate jam in the open position. Please refer to the Site Contingency Plan, in Appendix B, and defer to the Senior User for further details.

202 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

203 Security and protection on the site

~~State any security requirements for the Site and protection of the public~~

The *Contractor* is responsible for the security of the site and of vehicles and pedestrians entering and leaving the site. The level of security required, for the compound is to be assessed by the *Contractor*.

The *Contractor* ensures that the site gates are closed after the passage of vehicles or personnel on each and every occasion. Gates are not left open when not in use.

The *Contractor* ensures that the site is left properly secured at the end of each working day

The *Contractor* shall ensure that the working areas are secure to prevent any unauthorised access by the public.

The *Contractor* considers the security of neighbouring properties and does not leave unattended scaffolding, ladders, or any equipment, which provide or assist access to neighbouring properties

S204 Security and identification of people

~~State any security, vetting and identification of people working on or visiting the Site~~

The level of security and procedures for identification of personnel on site is to be determined by the *Contractor*.

S205 Protection of existing structures and services

~~State any specific requirements for the protection of existing structures, services, mains, trees and other plants Requirements for maintenance of existing services Procedures for working on existing structures and services Refer to the Site Information for the location of existing things to be protected or procedures for identifying them.~~

The *Contractor* shall be responsible for maintaining the existing services within the site All existing services, including water, electricity, telephone, drains and other services are to be maintained without interruption during the *works*. They shall not be interfered with in any way except insofar as may be specified in the contract or otherwise be agreed with the *Project Manager* as the *works* progress.

The *Contractor* does not damage highways, roads, properties, land, trees, roots, boundaries and any other features, and the apparatus of statutory undertakers, the Highways Authority and others. The *Contractor* shall comply fully with the requirements of the relevant statutory authority when working in the vicinity of their apparatus and including both for the permanent and temporary *works*, including all access off the public highway

Refer to the Minimum technical requirements Section 1 31 for clauses on Existing Structures and Environment.

Refer to the Preconstruction Information, in Appendix C of this *Scope*, for the location of existing structures and services.

S206 Protection of the *works*

~~State any specific requirements for the protection of the *works* against damage.~~

The *Contractor* protects the *works*, Equipment, Plant and Materials, liable to damage either by the weather or by the method used for carrying out the *works*

S207 Cleanliness of the roads

~~State any requirements agreed with authorities for protecting and cleaning of access roads to the Site~~

S208 Traffic Management

~~State any requirements and procedures for the management of traffic, road closures and public highways. Communication and information requirements~~

Before any work in, or affecting the use of, any highway or road is commenced the *Contractor* shall agree a management plan with the *Project Manager*.

Any requirements and procedures for the management of traffic and public highways is the *Contractor's* responsibility

The *Contractor* maintains private and public access to footpath ways which are to remain open or provides a suitable diversion, where feasible. The *Contractor* minimises Working Area and reopen lengths of paths when feasible.

The *Contractor* arranges all the necessary permissions and licences for any temporary highway, road or footpath closures or diversions and any other temporary closures or diversions that become necessary.

S209 Condition survey

~~State condition surveys that need to be carried out by the *Contractor* and any associated reinstatement *works*. State that the survey record should be stored in the BIM archive.~~

Shortly before first entry, the *Contractor* undertakes 'Pre-starting condition surveys' of all highways, property (including buildings and other structures) and land (including trees, boundaries and any other features which may be affected by the works) within the boundaries of the Site.

The *Contractor* undertakes similar 'Post-completion condition surveys' when the works are complete, and on dates agreed with the *Supervisor*

The *Contractor* gives at least 5 working days' notice to the *Project Manager* and *Supervisor* prior to any condition survey.

A copy of each survey is given to the *Project Manager* and *Supervisor* within 5 working days of the date of the survey.

The *Contractor* also compares subsequent surveys with previous surveys and any changes in level or damage are notified to the *Project Manager* and *Supervisor*

S2010 Consideration of Others

~~State restrictions on work to avoid disturbance to the general public and occupiers of adjacent premises.~~

Access to the properties in the vicinity of the site compounds must be maintained at all times unless otherwise agreed

The *Contractor* shall complete the *works* in a manner such that the disruption to local residents, landowners and the general public is kept to a minimum.

The *Contractor* notifies the *Client* of all press or media enquiries and refers them to the *Client's* Communication Co-ordinator

S2011 Control of site personnel

~~State any specific requirements for control of people working on or visiting the Site Permits and licences (for example permits to work), and particular format required~~

The *Contractor* shall comply with the requirements set out in the Constructing a Better Environment Safety, Health, Environment and Wellbeing Code of Practice and the *Contractor*'s own safe systems of work

In addition to the requirements of their own safe systems of work and site management arrangements, the *Contractor* ensures all site staff, operatives and visitors comply with any measures and/or procedures required by *Client's* operating requirements.

S2012 Site cleanliness

~~State any requirements for protecting the *works*, the public and the workforce on the Site over and above the legal requirement and those stated elsewhere in this contract.~~

The *Contractor* shall maintain the site in a clean, safe and tidy condition, clear of debris

S2013 Waste materials

~~Removal of waste and restrictions on the disposal of waste material. Are there any requirements for recycling?~~

The *Contractor* prepares a Site Waste Management Plan (SWMP) in the *Client*'s standard format, or as otherwise agreed with the *Project Manager*, prior to commencement of the works The *Contractor* updates this until completion and makes it available for the *Project Manager* and *Supervisor's* inspection on request.

Waste Duty of Care information and permits are identified and obtained by the Contractor. In addition, the *Contractor* completes the 'carrier and tip details' section of the SWMP The *Contractor* undertakes training and ensures that employees and Sub-Contractors are aware of the SWMP and co-operate with it Details of wastes generated and reused on the works and wastes removed from the site are kept by the *Contractor* and used to update the 'actuals' section of the SWMP.

On completion of the physical *works* on the site, the *Contractor* signs the declaration in the 'sign-off' section of the SWMP and submits the completed SWMP to the *Project Manager*

The *Contractor* endeavours to maximise re-use / recycling of waste materials generated during the repair works.

S2014 Deleterious and hazardous materials

Restrictions on the use of deleterious and hazardous material.

The *Contractor* shall deal with requirements of identification and classification of deleterious and hazardous materials and develop a suitable strategy to deal with contamination/ hazardous material

All substances potentially harmful to human health shall be stored in a locked store in accordance with manufacturer's storage recommendations.

The *Contractor* shall provide a list of substances forming part of the works which are covered by the COSHH Regulations to the *Project Manager* For each substance listed a detailed product sheet must be submitted to the *Project Manager* at the design stage

S2015 NOT USED

S300 *Contractor's* design

S301 Design responsibility

Clause 21.1 As above

The *Contractor* is required to design the *works*, including temporary *works*, necessary to implement the URS, and to submit this to the *Project Manager* for acceptance

In undertaking the *Contractor*'s design the *Contractor* shall be responsible for provision of detailed design drawings, and other drawings including those in respect of necessary temporary *works*.

The *Contractor* shall demonstrate application of principles of prevention in relation to Health and Safety implications of the design for construction, operation, maintenance and use of the completed structures including:

- Preparation of Designer's Risk Assessments,
- Identifying significant SHE information on all drawings,
- Producing buildability statements for each design element,
- Applying the Environment Agency's Designer RAG List
- Provision of information requested by the CDM Principal Designer including assessment of competence

S302 Design submission procedures

Clause 21 2 As above

The *Contractor*'s design submission shall be in accordance with the accepted programme, and shall be submitted via Asite. The *Client* shall respond within 2 weeks of receipt.

S303 Design approval from Others

~~Clause 27.1 State any requirements for design checks and approval by Others. This includes other departments in the EA that need to approve the design~~

In advance of *Project Manager* acceptance the design submission shall be issued to the Principal Designer. The *Project Manager* shall not accept the design until the Principal Designer is satisfied that the requirements of the CDM Regulations have been complied with, and until the Senior User is satisfied that the design meets the requirements of the URS

S304 *Client's* requirements

~~Identify the *Client's* requirements for the parts of the *works* to be designed by the *Contractor*. Examples of this information are listed below:~~

- ~~Specifications, including reference to relevant standards.~~
- ~~Design standards and codes of practice~~
- ~~Size and/or space limitations.~~
- ~~Loading and capacity requirements~~
- ~~Operational performance requirements and design life~~
- ~~Planning drawings and planning consents.~~
- ~~Energy consumption targets~~
- ~~Environmental standards~~
- ~~Sustainability requirements~~
- ~~Design quality evaluation criteria~~
- ~~*Client's* design reports~~
- ~~*Client's* standard design guidance~~
- ~~Collection of permanent works design criteria for BIM archive~~
- ~~Requirements of the Whole-life Carbon Assessment using the Carbon Tool outputs to inform design selection and methodology~~
- ~~The Corporate Requirement for carbon reduction and specific requirement to meet the EA NZC target for 2030 defined by a project 'carbon budget calculation' that are produced by the Consultant for acceptance by the Client.~~

The *Contractor* shall provide red line drawings for site works prior to Completion to the *Consultant* for them to update the final as-built drawings to include in the Health and Safety File. Drawings shall be numbered as on the Master Information Delivery Plan (MIDP).

The *Contractor* shall confirm the setting out position on Site with the ECC *Supervisor* before commencement of any construction works and obtain acceptance by the *Project Manager*

Design and provision of all temporary works is the responsibility of the *Contractor* and they shall meet the *Client's* requirements. To meet the *Client's* requirements the *Contractor* shall produce them in compliance with the *Client's* Minimum Technical Requirements and the SHEW CoP and

- Requirements of the Whole-life Carbon Assessment using the Carbon Tool outputs to inform design selection and methodology (
- The Corporate Requirement for carbon reduction and specific requirement to meet the EA NZC target for 2030 defined by a project 'carbon budget calculation' that are produced by the Consultant for acceptance by the *Client*

In designing the *works*, including temporary *works*, the *Contractor* shall ensure that the URS is fully implemented, inclusive of the MEICA specific specifications detailed therein

S305 Design co-ordination

~~State what responsibility the *Contractor* has for co-ordination with Others in preparing his design and any responsibility for the co-ordination of design by Others~~

The *Contractor* is responsible for liaising with individual suppliers over the design of the *works*, including temporary *works*, to reach an agreed design.

In developing the design, as a minimum the *Contractor* shall present the design to the following team members during project meetings:

- *Project Manager*
- Senior User
- MEICA Lead
- NEAS
- Principal Designer appointed by the *Client*.

S306 Requirements of Others

~~Explain the *Contractor's* responsibility for obtaining and satisfying any necessary authority requirements (for example planning officials or government departments)~~

S307 Copyright/licence

~~Clause 22.1 State any purpose for which the *Client* may wish to use and copy the *Contractor's* design if it is not stated in subclause 22.1~~

In addition to Clause 22.1 of the ECC Conditions of Contract the *Client* may use and copy the *Contractor's* design for the following purposes, in addition to those connected with the *works:*

- Use of standard details for other *Client* projects.
- Use of documents as exemplar examples to inform other *Client* projects.

S308 Access to information following Completion

~~State the *Client's* requirements for access to information once the Defects Certificate is issued including the timescale for the retention of any information after Completion. Consider any need for computer software source code for example~~

The *Client* requires access to the *Contractor's* design information up to the final Defects Certificate of the *works* is issued and requires the retention of any information after Completion for a period of 15 years

S309 Site investigations

~~1 The *Contractor* obtains soils information as necessary for the design of the *works* The *Contractor* specifies, procures, manages and undertakes site investigations to inform the detailed design of the *works* and to manage their risk of unforeseen ground conditions during construction. The *Contractor* undertakes laboratory testing of samples, and longer term monitoring of site conditions as required. This supplements the information provided in the Site Information~~

~~2. The *Contractor* liaises with all historic environment stakeholders as required to ensure that the heritage and archaeological risks are identified and appropriately managed. The *Contractor* obtains all necessary consents and approvals.~~

~~3 The *Contractor* provides the *Project Manager* with the final Factual Report of the investigation in digital format.~~

~~5. The *Contractor* reviews and analyses the data within the Factual Report and prepares an Interpretative Report to support their detailed design The *Contractor* provides the *Project Manager* with the final Interpretative Report in digital format~~

~~6. The *Contractor* informs the *Project Manager* of the proposed works a minimum two weeks before the investigation is undertaken and complies with the Access to the Site condition~~

S400 Completion

S401 Completion definition

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

- 1 hard copy of Health and Safety File and one electronic version ~~Adjust this to Provide all information to the Principal Designer, if the Principal Designer is compiling the Health and Safety File~~
- 1 hard copy of Operating and Maintenance Manuals and one electronic version
- 1 hard copy of As Built drawings and one electronic version
- Population of the *Client's* latest version of the Project Cost and Carbon Tool (PCCT), or its successor
- Transfer to the *Client* databases of BIM data
- Delivery of the Final Carbon Appendix

Clause 11 2(2) Work to be done by the Completion Date

S402 Sectional Completion definition

Option X5, X5 1 Work to be done for each Sectional Completion

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

- Transfer to the *Client* databases of BIM data
- ~~Delivery of the carbon differentials between alternative design solution options at appraisal stage (if appraisal, design and build)~~
- ~~Delivery of carbon considerations in PAR (if appraisal, design and build)~~
- ~~Completion and Delivery of Carbon optimisation report at Gateway 3 (if design and build)~~

S403 Training

~~Training required for the *Client* or Others and associated timescales~~

Contractor shall provide the necessary training to *Client's* end-user staff, in accordance with the URS, including but not limited to the operation of:

- Any new MEICA components installed as part of the *works*
- Any new maintenance regimes.

S404 Final Clean

~~Details of final clean, removal of temporary structures, materials, protection and tools~~

The *Contractor* is to undertake a final clean of the site (including access routes) including the removal of temporary structures, materials, protection and tools, prior to completion, to the acceptance of the *Supervisor*.

S405 Security

~~Details of security arrangements and handover at Completion.~~

The *Contractor* is responsible for safety and security of the site and storage compounds, if used.

The site, including any parts thereof, is secured to the same standard or better than before the start of the *works* Any gates are left as prior to entry, any keys are returned to the relevant party

S406 Correcting Defects

~~Procedures for access for the correction of any Defects and process for liaison with the *Project Manager* and *Client*.~~

Any defects found by either the *Project Manager*, *Client's* staff or the *Contractor* are to be reported to the *Supervisor* within 24 hours of any such defect being found The *Supervisor* notifies the *Contractor* of the defect and confirms whether the defect is considered to be critical and requires emergency correction within 24 hours. See contract data for defect correction period.

The *Contractor* shall liaise the Senior User for access to site to correct defects

The *Contactor* shall liaise with the *Project Manager*, and *Supervisor* detailing the corrective actions to be taken, timescales, and sign off.

S407 Pre Completion arrangements

Prior to any *works* being offered for take over or completion the *Contractor* shall arrange a joint inspection with the *Supervisor, Project Manager, Client* (scheme Project Manager) and Senior User The initial inspection shall take place a minimum of one week in advance of the planned take over or completion *Contractor* shall provide 3 weeks' notice to *Client*.

S408 Take over

~~Identify parts of the *works* that the *Client* requires to use prior to completion without taking it over. Details to include~~

- ~~Location of parts of the *works* and~~
- ~~Reasons for use~~
- ~~Details of *Contractor's* access provision during periods of use.~~

The *Client* ~~does not require any part to be made available prior to completion~~ may require use of the gates, including Gate 2, for operational reasons before completion This does not constitute takeover of the *works*.

S500 Programme

S501 Programme requirements

The programme complies with the requirements of Clause 31.2 and includes alignment and submission of the BEP and Master Information Delivery Plan (MIDP).

S502 Programme arrangement

~~Any specific arrangement of the programme, including any requirement for the programme to be produced in levels (summary levels to detail level).~~

The programme shall be provided in electronic format PDF and Microsoft Project copies shall be required. Submission shall be via FastDraft. A clear critical path shall be shown. Activities to be undertaken by the *Client* are clearly identified on the programme.

S503 Methodology statement

~~Particular requirements for methodology statements, including any specific requirements for resource information~~

The *Contractor* shall implement their approved Construction Phase Plan ~~submitted under an earlier phase of the project.~~

S504 Work of the *Client* and Others

The order and timing of the work of the *Client* and Others to be included in the programme and information to be provided. Refer as necessary to sections WI 901 and WI 902

S505 Information required

A schedule of information to be provided, who it is to be provided by, and the date by which it is to be provided

S506 Revised programme

~~Any specific requirements for the submission of revised programmes, such as an explanation of changes.~~

The *Contractor* shall submit a revised and updated programme in accordance with Clause 32 of the contract at intervals stated in Contract Data Part 1 Changes made to the prior programme shall be highlighted and explained

S507 Monthly reports

In managing the *service* the *Contractor* shall:

- Contribute monthly to the updates to the project risk register.
- Provide input to project efficiency CERT Form
- Produce monthly financial updates and forecasts meeting the *Client's* project reporting timetable together with progress reports. Monthly financial updates and forecasts to meet EA deadlines provided by no later than the 10th day of each month, or otherwise agreed at the project start up meeting
- Deliver a monthly progress report in the *Client's* standard template (hyperlink to template included below) giving progress against programme, deliverables received and expected, financial summary against programme and forecast project carbon
- Commission capital forecast profile to be entered on FastDraft monthly
- Project forecast outturn project carbon profile to be entered onto FastDraft monthly The Consultant/Contractor is required to provide a monthly forecast on FastDraft for both carbon and cost in accordance with FHU
    - Framework Heads Up 244 Commercial Clarification 54
    - Framework Heads Up 256 Commercial Clarification 57
- Attend project board meetings as required
- Ensure quarterly input into framework performance assessment/environmental Performance Measures.
- Maintain and show how accurate and up to date information on the whole-life cost and carbon of options is driving optimum solutions at all stages of design development.
- Capture lessons learnt relevant to scheme delivery for the EA PM.

S600 Quality management

S601 Samples

~~State the materials and samples required including any procedures for submission and acceptance.~~

S602 Quality Statement

~~State any requirement for a quality statement from the *Contractor.*~~

S603 Quality management system

State any requirements for a quality management system, including accreditations or legislative standards.

The *Contractor* shall develop their Quality Plan as part of the submission of the Construction Phase Plan.

S604 BIM requirements

~~The BIM Information Manager is the *Client* Project Manager. State any requirements for a BIM data to be collected.~~

The *Contractor* shall submit a project BIM Execution Plan (BEP) for approval by the *Client* Once approved by the *Client*, the *Contractor* shall implement the BEP

Document management shall be via the Common Data Environment (CDE) on Asite, via the Information Delivery Plan, as agreed with the *Contractor's* Supplier's Information Manager

Volume and location strategies for this project shall be highlighted at the programme level (ABRC Programme) and should be confirmed by the *Project Manager* and agreed with the *Contractor's* Supplier's Information Manager.

The *Contractor* shall assist in the completion and fulfilment of Digital Maturity Assessments (DMAT) at the end of each project gateway.

For other specifics in relation to required BIM and Information Management processes and information requirements for this project, please refer to Appendix D and E

S700 Tests and inspections

S701 Tests and inspections

~~Clause 40.1, 40.2, 41.1 and 60.1 (16) Consider the following checklist for test and inspection details:~~

- ~~Objective, procedure and standards to be used,~~
- ~~When they are to be done,~~
- ~~Where they are to be done,~~
- ~~Who does the tests, and who is in attendance,~~
- ~~Testing and inspection method,~~
- ~~The Equipment required and who provides it,~~
- ~~Access arrangements,~~
- ~~Information or instructions required to be provided,~~
- ~~Materials, facilities and samples to be provided,~~
- ~~Involvement of specialists,~~
- ~~Acceptable results and deviations,~~
- ~~Test environment,~~
- ~~Documents to be provided before and after the test,~~
- ~~Whether or not authorisation to proceed to the next stage of the work depends on the test results.~~
- ~~Are there any data tests required to ensure data required for BIM archive.~~

The *Contractor* is required to undertake all necessary tests and inspections, and to provide relevant certification, to implement the requirements of the URS.

S 701 Management of tests and inspections

~~Consider the requirement for a test and inspection schedule, containing all relevant information. State procedures for submission and review.~~

The *Contractor* is required to incorporate test and inspection schedule in programme, and which allows for suitable notice, review, and acceptance periods as detailed in the URS.

S 702 Covering up completed work

~~State timescales for the covering up of *works* which have been tested.~~

Contractor to provide *Client* with 3 weeks advance notice of covering up completed work

S 703 *Supervisor's* procedures for inspections and watching tests

~~State any inspection procedures required by the *Supervisor*~~

The *Contractor* allows the *Supervisor* any reasonable opportunity and facility to inspect and monitor the testing processes. The *Contractor* notifies the *Supervisor* of who, where, how, and when testing is being carried out, at least 3 weeks in advance

S800 Management of the *works*

S801 Project team – Others

As above

The Senior User is responsible for setting out the specifications for the project and for assisting testing and acceptance processes The Senior User is supported by the MECIA Lead Both are *Client* roles, and who will liaise closely the *Supervisor*

S802 Communications

~~State any communication procedures which the *Contractor* is required to follow Consider the following:~~

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

The *Contractor* shall attend monthly Progress Meetings and two weekly ‘check in’ meetings, by TEAMS, that are chaired by the *Client* who produces the agenda Key points shall be recorded by the *Contractor*, and shared with the project team

The contract shall be managed on Fast Draft.

Aside from the contractual documents managed on Fast Draft, project files to be shared with other parties shall be uploaded to Asite, the *Client’s* collaboration tool The *Client’s* ABRC SharePoint site can be used for collaboration on draft documents before they are uploaded to Asite.

As detailed above, the *Contractor* shall provide monthly progress reports to the *Project Manager*, using the *Client’s* standard template (hyperlink to template included above)

S900 Working with the *Client* and Others

S901 Sharing the Working Areas with the *Client* and Others

~~Clauses 25.1 and 60.1(5). Provide a list of activities to be undertaken, explaining the following:~~

- ~~What is being done,~~
- ~~Who is doing it,~~
- ~~When it is being done, and for how long,~~
- ~~Where is it being done,~~
- ~~How the *Contractor* is to co-operate and share the Working Areas.~~

The *Contractor* shall provide the *Client* with access to the Site at any time during construction to undertake any activities for operational purposes that do not form part of the *works*.

S902 Co-operation

~~Identify known information requirements, for the *Contractor* to obtain from Others or to provide to Others, and timing.~~

S903 Co-ordination

~~State how the *Contractor* is to liaise with the *Client* and Others for the co-ordination of *works* and access~~

Throughout the *works*, the *Contractor* shall liaise with the *Client* for the co-ordination of the *works* and access to the site, via TEAMS meetings and / or email as appropriate.

S904 Authorities and utilities providers

~~Identify *works* to be carried out by the authorities and utilities providers. State the responsibility for enquiry, management, procurement and provision of notices and payment~~

The *Contractor* shall be responsible for arranging and managing any appropriate utility company consents and any road/footpath closures or vehicle movement permissions that may be required.

S905 Diversity and working with the *Client,* Others and the public

~~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.~~
- The *Client* shall lead communications with the public.

In delivering the project, the *Contractor* shall foster an inclusive environment in which all parties feel heard, and, where appropriate, are invited to contribute to the successful completion of the project.

The *Contractor* shall have due regard to the Equality Act when assigning workforce to this project.

S1000 Services and other things to be provided

S1001 Services and other things for the use of the *Client, Project Manager* or Others to be provided by the *Contractor*

~~Clause 25.2 may include the following:~~

- ~~Accommodation,~~
- ~~Meeting rooms,~~
- ~~Storage facilities,~~
- ~~Catering,~~
- ~~Medical facilities and first aid.~~
- ~~Recreation,~~
- ~~Sanitation,~~
- ~~Security,~~
- ~~Copying,~~
- ~~Telephone, fax, radio and CCTV~~
- ~~Computer equipment and services,~~
- ~~Sign boards and other signage,~~
- ~~Safety equipment and services,~~
- ~~Fences, screens and hoardings,~~
- ~~Postage,~~
- ~~Maintenance of access roads,~~
- ~~Temporary facilities,~~
- ~~Utilities, eg. Water and power,~~
- ~~Meter readings~~

The *Contractor* shall provide access to welfare facilities for all *Client's* staff, who may visit site in connection with their respective responsibilities

S1002 Services and other things to be provided by the *Client*

Same checklist as above Consider the following also

- Access to the Site,
- Space for the accommodation,
- Plant and Materials

The *Client* provides the *Contractor* with access to the site.

S1100 Health and safety

S1101 Health and safety requirements

~~Clause 27.4 Details of any additional health and safety requirements for the project, all of which may include the following.~~

- ~~*Client's* safety requirements,~~
- ~~*Reporting requirements,*~~
- ~~Safety management, supervision and qualification,~~
- ~~Management of Subcontractors,~~
- ~~Drug and alcohol policy~~
- ~~Site induction procedures~~

Procedures and policies as outlined in the Environment Agency 'Safety, Health, Environment, and Wellbeing (SHEW) code of practice Constructing a better environment' document shall be applied throughout the project

S1102 Method statements

~~Detail the operations for which the *Contractor* is required to submit method statements and risk assessments to the *Project Manager* for acceptance.~~

The *Contractor* shall produce and issue sufficient risk assessments and method statements (RAMS) relevant to the *works* detailed in the URS The *Contractor* shall submit the RAMS to the *Project Manager* and *Supervisor* for acceptance at least 2 weeks in advance of the *works* being scheduled to commence. The *Contractor* shall allow a period for reply for review of the RAMS, prior to work commencing.

The *Contractor* undertakes the *works* in accordance with the reviewed RAMS Review of the RAMS does not relieve the *Contractor* of his contractual, and health and safety responsibilities.

The method statements shall include, but are not limited to, full particulars of methods, people, organisation, working hours, safety, Plant and Equipment, expected outputs, timing, environment, welfare, and sequence of *works* including the use and design of temporary *works*, Materials and Equipment proposed by the *Contractor*.

The RAMS shall contain sufficient information to enable the *Project Manager* to assess the likely detriment to either the proposed or the existing *works* or to the *Client*'s overall objectives

S1103 Legal requirements

~~If any health and safety duties are required by law, state who will perform them~~

The *Contractor* shall comply with all applicable and current health, safety & wellbeing legislation.

The Construction (Design and Management) Regulations, 2015, apply The Principal Designer (appointed by the *Client*) is:

The *Contractor* shall copy to the *Project Manage*r all his correspondence with the Principal Designer

The *Contractor* is the Principal Contractor under the CDM Regulations.

The CDM Pre-construction information does not form part of the Contract

S1104 Inspections

~~State and requirement for review and inspection of *Contractor's* health and safety procedures by the *Project Manager*~~

In addition to the technical supervision duties, the *Supervisor* shall undertake appropriate checks on the *Contractor's* compliance with the SHEWCoP, MTR's, and their own safe systems of work including, but not limited to, the record of site inductions, confined space procedures and certifications, PPE

The *Contractor* shall cooperate with all checks and audits made by the *Supervisor* and other members of the *Client's* staff

S1200 Subcontracting

The Contractor may subcontract work in accordance with the NGSA framework agreement

S1201 Restrictions or requirements for subcontracting

~~State any restrictions and additional procedures which the *Contractor* must follow~~

S1202 Acceptance procedures

~~Clauses 26.3 and 11.2(25) (Options C and E) State any specific submission and acceptance procedures for the proposed subcontracts not based upon the NEC contract. The basic requirement for submission and acceptance is dealt with in subclause 26.3~~

S 1210 Procurement of subcontractors

Sub-contractors need to be selected using best value processes.

This requires the *Contractor* to demonstrate that they have made reasonable attempts to obtain three competitive tenders for all work in excess of £25,000

The only exception to this is work which has been accepted (in writing) by the hub Commercial Services Manager for strategic suppliers or for emergency work.

The *Client* and *Project Manager* acknowledge that the following suppliers / subcontractors have been selected with due regard for this clause and represent best value:

1. [redacted]

S1300 Title

S1301 Marking

As above

In accordance with ECC Conditions of Contract Clause 71.1 the *Contractor* is paid for the following items of Plant and/or Materials which are outside of the Working Areas, once marked by the *Supervisor* as being for this contract:

- 1 No MTW 8 gearbox and IQ 25 actuator
- 8 No Howa composite bronze/graphite bearings
- 2 No shaft bearings. FAG SNC housings and spherical bearings. 1 no fixed, 1 no floating.

All Plant and Material procured under this contract must be marked as “The property of the Environment Agency” irrespective of where they are stored. All markings shall be to the satisfaction of the *Client*. The *Contractor* is to notify the *Supervisor* a minimum of 48 hours prior to the requirement for inspecting the marked items.

If required by the *Project Manager* stored Plant and Materials shall be titled (vested) in the name of ‘The Environment Agency’ and Title Certificates provided for all the Plant and Materials stored. The format and wording of the title certificate shall require approval by the *Project Manager* prior to vesting taking place. The titling (vesting) shall include for insurance of the Plant and Materials against loss and/or damage It is not guaranteed that the *Client* shall vest Plant and Materials in connection with the works

The store shall be secure, dry and undercover with all the Plant and Materials protected from the elements. Sufficient heating shall be provided to keep the Plant and Materials free from deterioration and condensation

Titled Plant and Materials shall be placed in a separate designated area at the store and clearly labelled as being the property of The Environment Agency. A copy of the Title Certificate shall also be clearly displayed. Where this is not practicable an alternative means of confirming title shall be agreed with the *Project Manager*

Within the Working Areas, The *Contractor* prepares each item of Plant and/or Materials for marking by the *Supervisor* by:

a) preparing the item as detailed in the URS
b) completing the tests and inspections detailed in the URS; and
c) providing to the *Project Manager*:

- Evidence that the *Contractor* has the right to pass title to the *Client*; and
- A signed and dated certificate passing ownership of the item to the *Client*

The *Contractor* shall ensure that all of their personal mechanical and electrical plant / equipment be clearly marked together with that hired or rented from other suppliers Reference tags shall be provided for all cables, pipework and structures provided as part of these *works*.

S1302 Materials from Excavation and demolition

~~Clause 73.2 Decide the title of materials from excavation and demolition. State whether the *Client* wishes to salvage any such materials, and if so where they are to be delivered or collected from, and by whom.~~

The *Contractor* shall arrange for the refurbishment of the gearbox removed from Gate 2, and subsequent delivery of both this and the old actuator removed from Gate 2 at a storage location to be agreed with the *Client*.

S1400 Acceptance or procurement procedure (Options C and E)

A Project Bank Account is to be set up by the *Contractor* and used for the Payment of the *Contractor* and all Subcontractors in accordance with Y(UK)1: Project Bank Account.

The *Contractor* shall provide a Payment profile with milestones for design and construction deliverables

The *Contractor* sets up a procedure for vesting of items not yet delivered to the Working Areas for the *Client* prior to Payment being made for such undelivered items (see also section S1301).

S1500 Accounts and records (Options C and E)

S1501 Additional Records

Clause 52.2 ~~List~~ the additional records to be kept by the *Contractor*. This may include but not be limited the following:

- Timesheets and site allocation sheets,
- Equipment records,
- Forecasts of the total Defined Cost, (Forecasts are to include, but not be limited to costs to date, costs to completion including detailed breakdown of staff, sub-contract and major material items)
- Specific procurement and cost reports
- Subcontractor applications detailing when payments are due / paid
- Daily diary sheets as completed by the site management
- Cost forecasts, see below

The *Contractor* prepares forecasts of the total Defined Cost and Fee for the whole of the *works* in consultation with the *Project Manager* and submits them to the *Project Manager* for acceptance. Forecasts are prepared every month from the starting date until Completion of the whole of the *works* An explanation of the changes made since the previous forecast is submitted with each new forecast

The above records shall be kept up to date on a weekly basis and filed in separate files and be available for inspection by the *Project Manager* at his request.

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

S 1502 Application for Payment / Invoice

The *Contractor* is required to provide the backup to their application for payment in the following format:

Worksheet actual Cost CDF Lot 2

Submission of an application for payment without this format of backup sheet will **not** be recognised or treated as a compliant submission

S1600 Parent Company Guarantee (Option X4)

~~Include the form of performance bond required~~

Not required.

S1700 *Client's* work specifications and drawings

S1701 *Client's* work specification

The specification for the *works* is provided in the URS, in Appendix A.

S1702 Drawings

Historical drawings of the asset previously provided via the CDE on Asite.

S1703 Standards the *Contractor* shall comply with

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

Ref	Report Name	Where used
LIT13219	MEICA Standard Specification	Throughout
LIT 16559	Safety, health environment and wellbeing (SHEW) Code of Practice	Throughout
183 05	Data management for FCRM projects	Mapping and modelling
379_05	Computational Modelling to assess flood and coastal risk	Modelling
LIT 14847	Risk Guidance for Capital Flood Risk Management Projects	Option development
OI 120_16	Whole-life Carbon Planning Tool	Option development
LIT 14284	Whole Life (Construction) Carbon Planning Tool User Guide	Option development
	Access for All Design Guide	Option development
	Project Cost and Carbon Tool	Costs
	Carbon Tools for budget calculation and reporting	
LIT 12982	Working with Others: A guide for staff	Consultation & Engagement
Gov uk	Appraisal Guidance Manual	Business case development
672_15_SD03	Business case template 5 case Model	Business case development
672_15_SD02	Short Form Business case template	Business case development
LIT 4909	Flood and Coastal Erosion Risk Management appraisal guidance (FCERM-AG)	Business case development
	Flood and Coastal Erosion Risk Management: A Manual for Economic Appraisal (the 'Multi Coloured Manual')	Business case development
OI 1334_16	Benefits management	Business case development
Gov uk	Partnership Funding Calculator Guidance	Business case development
LIT 15030	The Investment Journey	Business case development
LIT 55124	Write a Business Case	Business case development
LIT 14953	FCRM Efficiency Reporting – capital and Revenue	Business case development
LIT 12280	Lessons Log template	Business case development

LIT 55096	Integrated Assurance & Approval Strategy	Approvals

APPENDIX A – User Requirement Specification

User Requirement Specification (URS) document titled 2023 02 09 Feildes Weir URS Rev C 2, dated 09/02/23, which can be accessed on the project Common Data Environment (CDE) on Asite, via the IDP

APPENDIX B – Site Contingency Plan

Site Contingency Plan document titled 2021 10 18 Feildes Contingency 1, dated 19/01/21, which can be accessed on the project CDE on Asite, via the IDP

APPENDIX C – Preconstruction Information

Preconstruction Information document titled 2022 10 Fieldes Weir PCI version 3.3 Repair Phase, dated 23/11/22, which can be accessed on the project CDE on Asite, via the IDP

APPENDIX D – Information Delivery Plan (IDP)

The *Contractor* shall adhere to the Environment Agency's Employer's Information Requirements (EIR) framework level minimum technical requirements.

All *Client* issued information referenced within the IDP requires verifying by the *Contractor* unless it is referenced elsewhere within the *Scope*

The *Contractor* shall register for an Asite Account and request access to the project workspace to view the IDP and update to create the MIDP.

Guidance on the IDP can be found here

Create the IDP on Asite and embed a PDF version as Appendix 1

https://www.asite.com/login-home

APPENDIX E – BIM Protocol – *Client*'s Information Requirements

The *Contractor* shall adhere to the *Client's* Employers Information Requirements (EIR) framework level minimum technical requirements.