

# Environment Agency

## NEC4 engineering and construction contract (ECC)

### Scope

#### Project / contract information

Project name	Blind Yeo Tidal Outfall Improvements
Project 1B1S reference	ENV0000164C
Contract reference	33197
Date	09 September 2021
Version number	V5
Author	

#### Revision history

Revision date	Summary of changes	Version number
Jan 21	First issue	V1
24 March 2021	2 <sup>nd</sup> Issue	V2
25 March 21	Minor Client amendments	V3
01 June 21	ESE Scope added plus minor amends	V4
09 Sept 21	Minor amends following internal review and feedback from delivery partner	V5

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

Document	Document Title	Version No	Issue date
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customer service line  
03708 506 506  
[www.environment-agency.gov.uk](http://www.environment-agency.gov.uk)

incident hotline  
0800 80 70 60

floodline  
0845 988 1188

LIT13258	Minimum Requirements	Technical	11.0	04/05/2021
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## **S 100      Background**

Blind Yeo Tidal Outfall is located at Ordnance Survey grid reference ST 392 702 in Clevedon, Somerset, at the confluence of the river Blind Yeo with the Severn estuary. There is an Environment Agency gated access track to the tidal outfall from Strode Road, Clevedon, alongside the north bank of the river Blind Yeo.

The Tidal Outfall is designed to discharge flow from the Blind Yeo into the estuary during low tide, and to prevent flow entering the Blind Yeo during high tide. It also forms a critical part of the Severn Tidal Defence Scheme.

The tidal outfall structure consists of two parallel and adjacent reinforced concrete culverts supported by steel bearing piles. The culvert roofs form a vehicle access bridge across the Blind Yeo, and also support a control building. The southern culvert constructed in 1957 is known as the South Eye, while the northern culvert constructed in 1974 is known as the North Eye. Both are designated confined spaces.

The flow control equipment in the South Eye consists of a split leaf sluice gate at the upstream end, downstream of which are an intermediate isolation penstock and twin outfall flaps. The flow control equipment in the North Eye consists of a tilting weir at the upstream end, downstream of which are an intermediate isolation penstock and a single outfall flap.

Refurbishment were completed November 2019 the flow control equipment and accesses were at or near to the end of their service life, and residual hazards represented an ongoing safety risk to operatives.

## **S 101      Description of the works**

The *works* consist of the refurbishment of the tilting weir, the installation of new tilting weir hinges in the north eye and concrete repairs to the central pier on the foreshore between the two eyes as shown by the drawings and specifications. The *works* to be undertaken are shown on the drawings and are to meet the requirements of the MEICA Performance Specification for the Flow Control Equipment for Blind Yeo Tidal Outfall, the Blind Yeo Outfall Coastal Defences Refurbishment Works Specification and the Environment Agency Minimum Technical Requirements.

The drawings describing the *works* are listed in S 1702 and included in Appendix 2.

## **S 102      Purpose of the Works/ Outcome required**

The primary objective of the scheme is to maintain the Standard of Protection (SoP) provided by the Tidal Outfall which forms a vital part of the Severn Tidal Defence Scheme. The overall objectives are:

- To extend to the working life of the asset by a further 50 years through minor works to improve the condition of the existing structure.

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

### **S 201      General constraints**

The *Contractor* shall comply with the following constraints in addition to those identified in the Minimum Technical Requirements, refer to S 1700.

#### **S 201.1 Use of the Site**

The *Contractor* shall only use the Site for purposes connected with the outcomes and deliverables stated in S 101.

The site compound & welfare area indicated on drawing ENV0000164C-CH2-000-E00-DR-C-0001 to the north west of the Wessex Water pumping station extends onto land where the title resides with North Somerset District Council and a notice of entry will need to be served by the EA based on the *Contractors* programme. The other site compound area shown running parallel with the Blind Yeo to the south east of the WW pump station lies within EA land. Please note that Wessex Water have asked that the area immediately outside the main access doors to their pumping station is kept clear for operational reasons.

#### **S 201.2 Access to the Site**

Access for all labour, plant and material movements is via the EA gate off Strode Road and along the gravel track to the works location. Refer to drawing ENV0000164C-CH2-000-E00-DR-C-0001.

#### **S 201.3 Existing structures and channels**

The *Contractor* shall carefully consider the location of construction plant with regard to the existing structures and channels to minimise risk to stability. The *Contractor* shall undertake any further investigations considered necessary for temporary works design prior to undertaking the permanent works.

#### **S 201.4 Deliverables**

The *Contractor* shall submit all deliverables to the *Project Manager* for acceptance. The *Contractor* shall allow a minimum of two weeks for review of all draft or final deliverables by the *Project Manager*, and ensure sufficient time is included to address any matters arising.

#### **S 201.5 Noise and vibrations**

The *Contractor* shall minimise noise disturbance with regards to plant and machinery when birds are using high tide roosts (Areas 4A and 4E, as presented in Natural England plan RP02262) and ensure vehicle and site personnel movements are restricted to the Working Areas and site compounds. The noise level within the Working Area when birds are using high tide roosts shall not exceed 140dB.

In other areas, noise and vibration levels shall be limited to those noted in Section S 1701 Minimum Technical Requirements.

#### **S 201.6 Working hours**

The *Contractor* shall adhere to daylight working hours only when birds are using high tide roosts (Areas 4A and 4E, as presented in Natural England plan RP02262). If any floodlighting is required for safety reasons this should be low level and directed away from the estuary to minimise the disturbance to overwintering birds.

In other areas, working hours shall be as noted in Section S 1701 Minimum Technical Requirements.

#### **S 201.7 Parking**

The *Contractor* shall provide adequate parking for site based personnel and visitors within the main and satellite compounds. No parking is allowed outside these areas unless the *Contractor* enters into specific agreements with Landowners and/or Authorities.

### **S 201.8 Storage of materials, fuel and chemicals**

All materials shall be carefully and properly stored in accordance with the suppliers' or manufacturers' instructions and directions.

Any materials that are found to be damaged, or that have suffered deterioration for any reasons whatsoever, shall not be incorporated in the *works*, shall be removed from the Site forthwith and shall be replaced with materials that comply with the Scope.

The *Contractor* shall not make use of public highways, thoroughfares or footpaths for depositing and storing Plant and Materials but shall make provision for the proper storage and protection of all Plant and Materials on the Site at locations accepted by the *Project Manager*. All such provisions shall be removed at Completion and any disturbance made good.

### **S 201.9 Pollution, ecological and environmental impacts**

The *Client* is committed to the environmental principles of stewardship and sustainability and has corporate goals to maintain and enhance the water environment. The *Contractor* shall provide the *works* in accordance with environmental best practice.

The scheme is located within the boundary of the multi-designated Severn Estuary. The site is of importance during the spring and autumn migration periods for waders moving up the west coast of Britain, as well as in winter for large numbers of water-birds, especially swans, ducks and waders.

The *Client* shall ensure that an ecological watching brief is in place, to monitor the impact of the *works*. If negative impacts are discovered during daylight hours, when birds are using high tide roosts (Areas 4A and 4E, as presented in Natural England plan RP02262), which require the *Contractor* to reduce their working hours, this will be dealt with as a Compensation Event.

The *Contractor* shall minimise noise disturbance with regards to plant and machinery when birds are using high tide roosts (Areas 4A and 4E, as presented in Natural England plan RP02262) and ensure vehicle and site personnel movements are restricted to the Working Areas and site compounds.

The *Contractor* shall adhere to daylight working hours only when birds are using high tide roosts (Areas 4A and 4E, as presented in Natural England plan RP02262). If any floodlighting is required for safety reasons this should be low level and directed away from the estuary to minimise the disturbance to overwintering birds.

The *Contractor* shall comply with the following current relevant environmental legislation, guidance and other such documentation in the delivery of the *works*:

- BRE – Green Guide to Specification
- BRE – Materials Information Exchange
- CIRIA, SP122 – Waste Minimisation and Recycling in Construction (practical guidance)
- CIRIA, C513 – The Reclaimed and Recycled construction materials Handbook.
- CIRIA, C533 – Environmental Management in Construction.
- CIRIA, C692 – Environmental Good Practice on Site (third edition).
- Environment Agency Japanese Knotweed Code of Practice 2012.
- Considerate Constructor Scheme
- Pollution prevention guidance on gov.uk

Activities within the watercourse shall be carried out in such a manner as to minimise environmental disturbance and in accordance with *Contractor's* Method Statements accepted by the *Supervisor*. This shall include reference to the Eels (England and Wales) Regulations 2009. The migration of glass eels from coastal to freshwater river systems usually begins around February, reaches a peak in April, and in some exceptional years may continue until June. <http://www.eelregulations.co.uk/>

There are no date constraints relating to eel migration that apply to these works. The contractor shall notify the Environment Agency in advance of commencing the works the date that the eel pass in the north eye will be taken out of service and the duration of the repairs to the tilting weir.

The *Contractor* shall allow flood waters and all land drainage systems to discharge unimpeded through the South Eye of Blind Yeo Outfall for the duration of the works.

The *Contractor* shall ensure all refuelling and servicing of vehicles are carried out within a designated area with an impermeable base, away from watercourses. Construction works are to adhere to BS 5837 'Guide for trees in relation to construction' and BS 3998:2010. No clearance of trees or scrub permitted without prior agreement with the *Client*.

Any vegetation to be removed shall be checked by a suitably qualified ecologist, provided by the *Client*, for breeding birds immediately prior to removal. To minimise unnecessary damage or loss to vegetation, the Site shall be accessed by a defined access route which is to be agreed as part of the Contractor's method statement.

Fish must be rescued prior to any dewatering activities. Any pumps will require a screen at the inlet. An Environment Agency approved fish rescue must be facilitated by the *Contractor*. The *Contractor* shall give the *Client* at least two weeks of notice of any planned dewatering activities.

The *Contractor* shall consider the maintenance of access for angling/recreation purposes. The Clevedon & District Fresh Water Angling Club controls angling from the north bank of the Blind Yeo (River Kenn) between Strode Road and the tidal outfall. A short section of the north bank lies within the site boundary area shown on drawing ENV0000164C-CH2-000-E00-DR-C-0001. The *Contractor* shall confirm to the *Client* whether access for anglers to this area can be retained or whether access should temporarily be suspended for the duration of the *works*.

Marginal vegetation and excavated bed material to remain next to the river for at least 24 hours to minimise impact on aquatic fauna and allow them to return to the river.

The *Contractor* shall plan and order all their activities to achieve the following:

- Avoidance of pollution of any waters (surface or underground). In the event of a watercourse being polluted as a result of their work, the *Contractor* shall be responsible for taking immediate action to prevent the pollution spreading downstream and shall immediately report the incident to the Environment Agency.
- Avoidance of pollution of any land.
- Preservation of flora and fauna, including those features associated with the Severn Estuary SPA/SAC/SSSI.
- Avoidance of nuisance of sounds, vibrations and dust.
- Minimise energy and water use.

The *Contractor* shall ensure that all dewatering is passed through a 'Siltbuster' or filtration device before returning to the river.

The *Contractor* shall consider actions highlighted in the supporting Environment Agency Screening (Stage 1) Habitats Regulation Assessment (HRA) and the requirements of the Marine Management Organisation (MMO), Blind Yeo works will fall under Article 19 of the Marine Licensing (exempted activities) Order 2011. The *works* do not, therefore, require a marine licence or notification of their exempt status to the MMO.

For the location of designation (Severn Estuary SPA/SSSI/SAC) refer to Environmental Site Appraisal Plan (ESAP) drawing (drawing no: ENV0000164C-CH2-000-E00-DR-EN-0500).

The *Contractor* shall maintain and implement the Environmental Action Plan (EAP) for the construction stage to the satisfaction of the Environmental Clerk of Works (ECW). Environmental Action Plan ref no: ENV0000164C-CH2-000-E00-RP-EN-0010.

#### **S 201.10 Archaeological requirements**

Any unforeseeable archaeological finds that cause a delay to the programme will be subject to a Compensation Event.

#### **S 201.11 Occupied premises, users and access**

The *Contractor* shall not gain access to any occupied premises or third-party land without the prior written agreement of the Landowner and Tenant, and the *Client's* Estates Team.

#### **S 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 *works* only with the *Client's* written permission.

#### **S 203 Security and protection on the site**

Refer to Section S 1701 'Environment Agency Minimum Technical Requirements', Section 1.9.

The *Contractor* manages the security and protection of the Site. The *Contractor* shall ensure that the *works* do not compromise the security of properties within or adjacent to the *works*. The *Contractor* ensures that the Site is left properly secured at the end of each working day.

The tidal outfall is located within the security fenced Environment Agency compound. The *Contractor* must maintain the integrity of this fence and provide, install and maintain temporary security fencing to the perimeter of any additional working areas for the duration of the construction period.

#### **S 204 Security and identification of people**

Refer to section S 2011.

#### **S 205 Protection of existing structures and services**

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

#### **S 206 Protection of the works**

The *Contractor* protects the *works*, Material, Plant and Equipment liable to damage either by the weather or by the method used to provide the *works*.

#### **S 207 Cleanliness of the roads**

Refer to Section S 1701 'Environment Agency Minimum Technical Requirements', Section 1.36.

#### **S 208 Traffic Management**

Not applicable

#### **S 209 Condition survey**

Refer to Section S 1701 'Environment Agency Minimum Technical Requirements', Section 1.7.

Before commencement of the *works* on the Site, the *Contractor* undertakes 'Pre-starting condition surveys' of all highways, property, land and any other features which may be affected by the construction works (including boundaries, gates, fences, walls as well as land and surfaces (including the depth and condition of any topsoil, if present) within the Working Areas, access routes, site compounds and all private properties and structures adjacent to the Working Areas.

The pre-starting condition survey comprises as a minimum: photographs of the condition of the items listed in S 205, original features on the land and an inventory of all items moved by the *Contractor* and where they are stored.

The *Contractor* will make a note of any existing damage and bring this to the attention of the landowner or tenant. Photographs, surveys and inventories must be date stamped and copies held by the *Contractor*. Four copies shall be made and sent to the landowner, the *Client*, the *Client's* estates officers, the *Project Manager*.

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

The *Contractor* undertakes the condition surveys in conjunction with the *Project Manager*, accompanied by any others invited by the *Contractor* or *Project Manager*. The *Contractor* and *Project Manager* notify each other in advance if any others are invited. The *Contractor* will remedy damage attributable to the *Contractors* activities at their own cost.

The *Contractor* gives at least 3 working days' notice to the *Project Manager* prior to any condition survey.

All condition survey records shall be stored in the project BIM archive.

#### **S 2010      Consideration of Others**

The *Contractor* shall register the Site and act in accordance with the Considerate Contractor Scheme. As such the *Contractor* shall work to limit the impacts of the *works* on local residents and the land uses.

#### **S 2011      Control of site personnel**

The *Contractor* shall ensure that all persons working on or visiting the Site hold a valid and current Construction Skills Certification Scheme (CSCS) card. Persons without this card shall be escorted at all times by a member of the site team.

A visitor's book will be maintained by the *Contractor* at the site compound location in which the date, the time in, the time out, evidence of a specific Health and Safety induction, CSCS number, and the name and company of the person visiting shall be noted.

The *Contractor* shall make appropriate arrangements for the control of people working and visiting the Site.

#### **S 2012      Site cleanliness**

Refer to Section S 1701 'Environment Agency Minimum Technical Requirements', Section 1.5.

The *Contractor* keeps the Working Areas tidy and promptly removes rubbish, waste and surplus. Materials, Plant and Equipment are positioned, stored and stacked in a safe and orderly manner.

#### **S 2013      Waste materials**

Refer to Section S 1701 'Environment Agency Minimum Technical Requirements', Sections 1.40 and 1.41.

## **S 2014 Deleterious and hazardous materials**

Refer to Section S 1701 'Environment Agency Minimum Technical Requirements' Section 1.40.

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

### **S 301 Design responsibility**

#### **General design requirements**

##### **S 301.1 Design**

The *Contractor* is responsible for the design of all temporary works.

The *Contractor* shall design in accordance with the latest Eurocode standards and/or other relevant industry standards or codes of practice. The *Contractor* shall submit full calculations to the *Client* on request.

All designs shall be produced to the satisfaction of the *Client*.

##### **S 301.2 Investigations**

None required.

##### **S 301.3 Consents**

The *Contractor* is responsible for ensuring the following consents are in place along with any other consents or permissions that may be required in respect of the *Contractor's* working method.

- Flood Risk Activity Permit.

In the event that the Flood Risk Activity Permit is determined later than 5 October 2021 and/or constraints are introduced that were outside of the original application then a Compensation Event will apply.

##### **S 301.4 Health and Safety**

The *Contractor* is responsible for the following:

- Fulfilling obligations of the CDM Regulations as Principal Contractor.
- Produce Construction Phase Plan in accordance with the requirements set out in Regulation 12 of CDM 2015 and L153 Managing Health and Safety in Construction Guidance, which is to be submitted to the Principal Designer as early as possible but **no later than 14 working days** prior to the planned start of the construction phase, for review by the /Principal Designer to advise the *Client* of compliance with Regulation 4. **Submission shall ensure that it encompasses all relevant sections required by L153 Appendix 3.**
- The *Contractor* shall provide full welfare provision for the Site in accordance with Regulation 13(4)(c), 15 (11) and Schedule 2 of the CDM Regulations. Proposals shall be **fully detailed** in the Construction Phase Plan submitted to the *Client* for review under Regulation 4, this shall include a schematic showing the compound layout and welfare facilities.
- Produce demobilisation plans (including method statements and risk assessments) which will be subject to review and acceptance by the Principal Designer.
- Provide information as requested by the Principal Designer in a timely manner.

- At Handover provide information for review and acceptance of the *Project Manager* that will enable the safe operation and maintenance of the *works* following substantial completion.
- The Principal Contractor, contractors, designers and *Client*, shall, where applicable, provide the Principal Designer with all relevant information for inclusion in the Health and Safety File.
- All parties shall cooperate fully with the Principal Designer in their duty to prepare this and meet agreed deadlines for preparing and submitting the requisite information requested by the Principal Designer.

Principal Contractor, contractors, designers and *Client* shall ensure that information is collated during the project and issued at the completion of each stage as agreed.

#### **S 301.5 Environment**

The Environmental Action Plan (EAP) is provided in Appendix 3.

The EAP shall be followed, reviewed and updated by the *Contractor*.

#### **S 301.6 CEEQUAL**

Not required.

#### **S 301.7 Project Management**

The *Contractor* shall have the following project management responsibilities:

- Provide updated Cost breakdown, Expenditure profile and programme each month.
- Participate in design review meeting and value engineering and risk meetings as required.
- Prepare and submit as part of construction phase plan a Final Site Waste Management Plan, Carbon Calculator, Access plan and traffic management plan.
- Provide sustainability and efficiency register for works which is updated quarterly.
- Review risk register (time and cost). Risk analysis shall include a full evaluation of all risks including base assumptions, assumptions made in the calculation of minimum, maximum and most likely values and will assess the impact of identified mitigation measures.

#### **S 301.8 Other**

The *Contractor* shall provide the following services:

- Attend pre-commencement meetings.
- Prepare and update programme and financial monitoring/forecasting (including risk reviews) monthly and share with the *Client* and *Project Manager*
- Attend monthly project team meetings every 4 weeks during construction phase
- Contribute to Issue reports (where a decision is required by the project board) and highlight reports for project board meetings.
- Undertake any additional data collection from the *Client's* offices as required.
- Provide senior representative to participate in the role of Senior Supplier on all Project Board meetings.

#### **S 302 Design submission procedures**

The *Contractor* shall submit design and other deliverables to the *Client* for acceptance. The *Contractor* shall allow a minimum period of 2 weeks for the *Client* to review deliverables and 2 weeks for the *Contractor* to make any amendments. Acceptance periods shall be clearly shown on the programme.

**S 303      Design approval from Others**

The *Contractor* shall obtain approvals from others as detailed in S301.

## **S 400 Completion**

### **S 401 Completion definition**

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

- *Contractor* to supply marked up drawings to inform the As-Built drawing production.
- *Contractor* to supply copies of material datasheets for any materials used in the construction of the *works* for inclusion in the Health and Safety File.
- Population of the *Client's* latest version of the Project Cost Tool, or its successor
- Transfer to the *Client* databases of BIM data
- Delivery of the Final Carbon Report

Clause 11.2(2) Work to be done by the Completion Date.

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

Section 1: Tilting weir refurbishment and hinge replacement is defined as all works necessary within the North Eye of the Blind Yeo Outfall and excludes any work on the seaward side of the structure.

Section 2: Concrete revetment repairs is defined as all works on the central pier on the seaward side of Blind Yeo outfall and excludes all works within the North Eye.

### **S 403 Training**

Not applicable.

### **S 404 Final Clean**

Not applicable.

### **S 405 Security**

Not applicable.

### **S 406 Correcting Defects**

The *Contractor* is to liaise with the *Project Manager, Client* regarding arrangements for access for the correction of Defects following Completion. Access may not be granted immediately due to activities being undertaken by the landowners. Prior notification of 2 weeks is therefore required.

### **S 407 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 three weeks in advance of the planned take over or *Completion*.

### **S 408 Take over**

- No requirements for take over prior to completion.

## **S 500     Programme**

### **S 501     Programme requirements**

The *Contractor* shall:

- Develop a fully resourced programme that shall show the period for construction including necessary time for internal reviews, external consultation and securing statutory approvals.
- Show linkages between the activities and products and the key activities and deliverables shall be highlighted.

The programme is to show the progress and percentage completion of each activity.

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

In preparing the Programme and Critical Path the *Contractor* shall show clearly the co-ordination of the work with the requirements of the *Employer*, Statutory Bodies, Public Authorities and Utility Companies and shall make allowance for giving notices in accordance with the Conditions of Contract and the Special Requirements in relation to the Authorities and other Bodies.

A minimum prior notification of 2 weeks is required for access for correction of defects following Completion

### **S 502     Programme arrangement**

Not applicable.

### **S 503     Methodology statement**

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

All method statements submitted to the *Project Manager* are to include environmental management actions where relevant and will be reviewed by the Environmental Clerk of Works (ECW).

The *Contractor* issues method statements 2 weeks in advance of carrying out items of work. The *Contractor* allows the period for reply for acceptance or rejection of method statements. Work does not commence until the *Project Manager* has accepted the relevant method statement. The *Contractor* does the work in accordance with the accepted method statement.

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

- Health & safety measures
- Extent of Working Areas and protective barriers
- Access to Working Areas, including confined spaces
- The implementation of relevant statutory regulations
- The design and construction of temporary works and de-watering measures
- How the environmental impact of the activities are to be minimised
- Equipment requirements, siting and mode of operation
- Labour requirements and supervision

- Delivery and storage of Plant and Materials
- Provision of access to third parties
- Details of the construction sequence
- Details of working methods
- Detailed programme
- Result of any consultation with third parties
- Contingency plans in the event of flooding, other difficulties or emergencies
- Risk and COSHH assessments.

**S 504      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 S 901 and S 902.

**S 505      Information required**

Not applicable.

**S 506      Revised programme**

Not applicable.

**S 600      Quality management**

**S 601      Samples**

Not applicable

**S 602      Quality Statement**

Not applicable

**S 603      Quality management system**

The *Contractor's* quality management system shall comply with the requirements of ISO 9001 and ISO 14001.

**S 604      BIM requirements**

The BIM Information Manager is the *Client* Project Manager

The *Contractor* shall apply BIM, including data collation, in accordance with the *Client's* BIM protocols (refer Appendices 1 and 2).

## **S 700      Tests and inspections**

### **S 701      Tests and inspections**

The *Contractor* shall undertake testing and inspection of Materials and the *works* in accordance with the specifications. The testing schedule shall be suitable to confirm that the *works* have been constructed in accordance with the Scope.

The *Contractor* shall undertake as-built surveys of the *works* prior to Completion to demonstrate that they have been achieved. The survey record shall be stored in the BIM archive in accordance with the *Client's* BIM protocols (refer Appendices 1 and 2).

### **S 702      Management of tests and inspections**

Refer to section S 1700

### **S 703      Covering up completed work**

No specific requirements.

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

No specific requirements.

## **S 800      Management of the works**

### **S 801      Project team – Others**

The project team includes

- *Client's* Project Manager (PCM)
- *Client's* Senior User (Area client)

The following advise the *Client*, *Project Manager* and *Site Supervisor* in undertaking their duties (no formal role under the contract)

- Environmental Clerk of Works (ECW) – general advice on EIA and ecology.
- Environment Agency Fisheries Recreation and Biodiversity Officer – advises on ecology.
- Environment Agency Fisheries Officer – advises on fisheries.

All of the above are allowed to visit and inspect the Site and the *works*, acting within the constraints of the *Contractor's* health and safety procedures.

### **S 802      Communications**

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

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

The Contract shall be administered using the standard forms and schedules that are incorporated into the Next Generation Supplier Arrangements (NGSA) Framework agreement.

Monthly progress meetings are to be held either at the Site or at the *Client's* area office. Attendees shall include the *Contractor's* project manager, agent and quantity surveyor as a minimum.

The *Contractor* shall prepare monthly progress reports, submitted in pdf format to the *Project Manager* for distribution to the project team at least 3 working days in advance of each monthly progress meeting. The progress report shall include those details listed in the Minimum Technical Requirements CI 1.30 and also the following:

- Progress:
  - activities started, progressed and completed during the month
  - activities planned for the forthcoming month
  - summary of ground conditions encountered
  - summary of weather conditions experienced
  - instructed changes to the Scope
- Labour/Materials/Equipment:
  - summary of principal equipment and materials brought to Site or taken off Site
  - subcontractors on Site
  - approximate numbers on Site
- Programme:
  - marked up copy of current programme showing progress and percent activities complete
  - revised programme (if appropriate).

- Issues: problems encountered or anticipated
- Information/services required from the *Client*
- Information required by the *Contractor*
- Public Relations:
  - contacts with the public or other third parties
  - complaints or claims
- Health and safety incidents
- Environmental:
  - breaches of the Environmental Action Plan;
  - carbon calculator update
  - pollution incidents, etc.
  - recycling and waste reports
- Efficiency register
- Project Satisfaction Survey (or equivalent)
- Representative progress photographs
- Any other issue/subject requested by the *Project Manager*

The *Contractor* shall comply with the following:

- Emergency Contacts List: develop and maintain for the duration of construction, copied to the *Client*, *Project Manager*, and *Site Supervisor*.
- Risk reduction meeting: held fortnightly, attended by the *Contractor*, *Project Manager* and *Supervisor*, chaired by the *Project Manager*.
- Summary 2 week look ahead programme: updated and issued on a weekly basis to the *Project Manager* and *Site Supervisor*.
- Communications to and from the *Contractor* and storage of project files sent by Asite as agreed with the *Project Manager*.
- *Client's* standard contract forms (available on A-site under Knowledge Management/09 Commercial and Contracts/ 03 ECC Templates) shall be used.
- All contract communications shall contain a unique reference number, appropriately titled.

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

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

The *Contractor* shall grant the *Client* access to take control of the Site during a Flood Event.

The Contractor shall grant the Client access to the Site to undertake routine maintenance tasks if required.

### **S 902      Co-operation**

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

### **S 903      Co-ordination**

No specific requirements

### **S 904      Authorities and utilities providers**

Wessex Water have a site adjacent to the Working Areas. The Site access track is also used by Wessex Water to access their assets. In the event that Wessex Water activities impact the Contractor this would constitute a Compensation Event under clause 60.1.

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

No specific requirements

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

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

Refer to NEC 4 ECC Clause 25.2

Refer to Section S 1701 'Environment Agency Minimum Technical Requirements', Clause 1.2.

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

Stop logs for the upstream side of the structure are available from the Environment Agency compound at Bradney. These are designed specifically for the structure and are adequate for upstream water levels up to 4.0mAOD.

Arrangements for the collection of the stop logs will need to be made by the *Contractor* with the EA Field Team. The fixings for interlocking each stop log are stored in the control room at Blind Yeo.

The *Contractor* shall inspect the condition of the stop logs prior to use in order to confirm they are appropriate for undertaking the *works*.

The *Client* will undertake the following:

- Vegetation clearance along the full length of the access track from Strode Road to the outfall.
- Isolation and removal of the north eye isolation penstock drive gear and guard to allow the *Contractor* access into the tilting weir compartment.
- advice on fish rescues as required.

The *Contractor* shall inform the *Project Manager*, giving two weeks' notice before any fish rescues will be required.

### **S 1003 Early Supplier Engagement Services**

The *Contractor* shall complete all Early Supplier Engagement Services prior to commencement of *works* at the Site. The Early Supplier Engagement Services will form part of a Compensation Event under clause 60.1.

## **S 1100 Health and safety**

### **S 1101 Health and safety requirements**

The *Contractor* shall comply with the requirements of:

- The *Client's* Constructing a Better Environment' 677\_15 Safety, Health, Environment and Wellbeing (SHEW) Code of Practice (CoP) Version 2 dated May 2018.
- The *Client's* Operational Instruction 300\_10; Safety, Health and Environment (SHE) handbook for managing capital projects Version 6 dated April 2019.

The *Contractor* shall provide information as requested to allow the Health and Safety File to be completed.

The *Contractor* shall register with the Environment Agency's Area Flood Warning team before commencing construction. The *Contractor* may arrange regular weather forecast information from the Environment Agency's Flood Warning team. The *Client* is not liable for any

consequences if it is unable to provide either flood warnings or weather forecasts, of if they prove inaccurate.

A copy of the H&S Notification will be provided to the *Contractor* prior to commencement of the *works*.

**S 1102      Method statements**

Refer to S 503

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

**S 1103      Legal requirements**

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

**S 1104      Inspections**

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

## **S 1200     Subcontracting**

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

NEC 4 ECC Clause 26.1

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

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

Any landscape works comprising topsoil preparation, cultivation, grass seeding, initial grass establishment and tree planting shall be undertaken by an experienced and accredited 'full member' of the British Association of Landscape Industries (BALI).

### **S 1202     Acceptance procedures**

Not used.

**S 1300 Title**

The *Client* will not make payment or accept transfer of title for any equipment, Plant or Materials outside of the Working Areas.

**S 1301 Marking**

No requirement for marking.

**S 1302 Materials from Excavation and demolition**

The *Contractor* has no title to materials from excavation and demolition.

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

No additional requirements

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

No additional requirement made in addition to those of NEC 4 ECC sub-clause 52.2

### **S 1501 Additional Records**

Clause 52.2 (Options C and E) 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

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

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

A parent company guarantee is not required

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

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

The Project-Specific Technical Specification is the Environment Agency's Minimum Technical Requirements, which are amendments and addenda to the Civil Engineering Specification for the Water Industry (CESWI) 7<sup>th</sup> Edition. The following additional project-specific amendments and addenda also apply.

In the event of conflict between Environment Agency's Minimum Technical Requirements and the following additional project-specific amendments and addenda, the following additional project-specific amendments and addenda shall prevail.

The following specifications and documents apply. In case of inconsistency the documents shall be interpreted in the following descending order of precedence:

- *ECC Scope* (this document) current at the Contract date
- Environment Agency Minimum Technical Requirements (MTR) current at the Contract date.
- Environment Agency MTR for Strategically Important Assets (OI 17\_17) – please note that Blind Yeo Sluice has been defined as cat. C
- CESWI 7

### **S 1702    *Drawings***

The following drawings are included in the Scope.

ECI (BAM Nuttall Ltd)	
ENV0000164C-BMM-MM-E10-DR-ME-5000 C01	Hinge Replacement General Arrangement
ENV0000164C-BMM-MM-E10-DR-ME-5001 C01	Hinge Replacement Details
ENV0000164C-BMM-MM-E10-RP-ME-5002 C01	Hinge Replacement Design Load Cases
ENV0000164C-BMM-MM-E10-RP-ME-5003 C01	Hinge Replacement Designers Risk Assessment
ENV0000164C-BMM-MM-E10-RP-ME-5004 C01	Hinge Replacement Calculations

Designer (Jacobs)	
ENV0000164C-CH2-000-E00-DR-CI-0001 C06	Site Location and Access Plan
ENV0000164C-CH2-000-E00-DR-CI-0006 C04	Central Ramp Repair

There is currently insufficient accurate record data available to accurately assess the extent of the concrete repairs required on drawing ENV0000164C-CH2-000-E00-DR-CI-0006. However, the following assumptions shall be made:

- The area of concrete repair is 80m<sup>2</sup> (based on a slope length of 17.500m & width of 4.571m)
- The toe of the concrete revetment (slope) is at a level of +0.457mAOD (to be confirmed on site).
- The repairs shall (subject to confirmation of the level of the toe of the revetment) commence from a level of +0.623mAOD and terminate at a level of +6.157mAOD (both start and end levels to be confirmed on site).

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

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

Ref	Report Name	Where used
	Project Cost Tool	Costs
	Sustainability Measures Form	
	Timber Policy Documents	
	300_10 SHE handbook for managing capital projects	
	300_10_SD27 SHE Code of Practice	

## 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*

[www.Pow.bim4.info](http://www.Pow.bim4.info)

You need google chrome for this link to work. Once the table is completed it should be printed for issue in the tender document, so that the correct baseline position can be seen by suppliers.

## **Appendix 2 Drawings**

## **Appendix 3 – Environmental Action Plan**

**Document Ref.: ENV0000164C-CH2-000-E00-RP-EN-0010 v11**