

## NEC4 engineering and construction contract (ECC) Scope

### Project / contract information

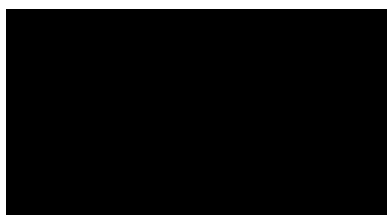
Project name	Surfleet Sluice – Detailed Asset Inspection
SOP reference	
Contract reference	
Date	7 <sup>th</sup> Oct 2021
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Author	

### Revision history

Revision date	Summary of changes	Version number
19/08/21	1 <sup>st</sup> issue for pricing (scope only to Henk& Ian, Louise )	V01
24/09/21	2 <sup>nd</sup> issue for publishing to Bravo sharepoint site	V02
08/10/2021	3 <sup>rd</sup> issue for publishing to Bravo sharepoint site	V03
16/11/21	Minor text clarifications	V03.1
22/11/21	Removal of S300 and update Appendices	V03.2

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 prevails. The works are to be compliant with the following version of the Minimum Technical Requirements:

Document	Document Title	Version No	Issue date
412_13_SD01	Minimum Technical Requirements	Version 9	29/08/18 – check if needed



<b>Part 2: Non-returnable Documents</b> NEC – ECC 4th Ed.	<b>Section 8 Scope</b>
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## S 100 Description of the works

### S 101 Summary of the works

1. The *works* are to dewater and inspect Surfleet Sluice in accordance with the information set out in the Scope.
2. The River Welland is approx. 15m wide. In normal flow conditions it will run 3m deep on the fluvial side and 0m to 4m on the tidal side.
3. The *Client* has a legal requirement to maintain navigation on the River Welland through one gate of Surfleet Sluice - the left tunnel only, with a current Nav water level of 2.85mAoD. Hence one culvert needs to be isolated at a time.

### S 101 Purpose/Objective of the Works

The *Client's* main objectives are:

- a. To reduce/stop the leakage through the pointing doors (mostly the right handside)
- b. Obtain all dimension s of the sluice (needed for future reference if/ when we adjust the retention level of the river by 3D Modelling)
- c. Confirm the Sluice operates as intended;
- d. Receive an Emergency Response Plan for the asset

The *Contractor* shall undertake the *works* to meet the above objectives, including, but not limited to, the following:

1. Arrange for drain down of vaulted tunnels, in sequence, maintaining one tunnel open for navigation
2. Allow Arup access to carry out a Detailed Asset Inspection of all civils parts and allow Martin Childs access to inspect all mechanical and electrical part of Surfleet Sluice. Provide access platforms, as necessary and clean and safe working environment.
3. Exercise the pointing doors and ensure counter weight mechanism performs well
4. Carry out an electrical audit. Bring a stand-by generator to site and test the system. Provide details to the *Client* to enable the *Client* to prepare an Emergency Response Plan.
5. Replace the existing stilling well, like for like, at the agreed location discussed on site with the *Client*.

### S 102 Description of the works

1. The *works* are as described in the table below

Item	Description
Dam Boards	Inspect the sluices dam boards stored at [REDACTED] Peakirk Pumping Station and if required refurbish them to make them useable
Detailed asset	a) arrange a drain down of vaulted tunnels b) pressure wash, or similar to be used to facilitate [REDACTED] visual inspection of all civils parts and [REDACTED] access to inspect all mechanical, electrical and

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inspection (DAI)	<p>control parts of the sluice, which must include [REDACTED] non-destructive testing of the pointing door fixings</p> <p>c) provide access for [REDACTED] (installer of pointing doors) to inspect and adjust pointing doors for a better fit, with the aim of reducing the leakage through the doors.</p>
3. Sluice doors	<p>Have the seals available for if the visual inspection shows that the existing seals on the sluice doors have failed, remove and replace them with a like-for-like seal.</p> <p>Dispose of the existing seals appropriately, if they are replaced.</p>
Stilling well	<p>a) remove the old stilling well and dispose of appropriately</p> <p>b) install a new stilling well upstream (as supplied by the <i>Client</i>)</p>
Pointing doors closing mechanism	<p>a) Check to confirm gates close near enough together as required as part of the detailed asset inspection.</p> <p>b) Service the current pulley and counter-weight system and adjust if necessary to ensure the mechanism works smoothly and is able to be operated by the <i>Client</i>.</p>
Electrical Load	<p>a) Determine the site electric load to confirm the size of the standby generator needed to power the <i>Client</i> consumables at Surfleet Sluice.</p> <p>b) Confirm that the standby generator infrastructure is suitable and serviceable.</p> <p>c) Carry out a full electrical load test of the system</p> <p>d) Bring a mobile generator to site and test the system using it, to confirm the <i>Client</i> Contingency Plan works during a power failure.</p>
Permits	<p>Discussions are at various stages. The <i>Client</i> is to facilitate the <i>Contractor</i> to obtain all permits, such as:</p> <p>a) Environmental Permitting Regs consent – to be [REDACTED]</p> <p>b) Ecological constraints as detailed in the section [REDACTED] surveys to be carried out</p> <p>c) Fish and eel - de-watering will require presence of <i>Client</i> FBG representative to ensure no adverse impact, including fish/ell rescue of out dewatered zone.</p> <p>d) Road closure (could be avoided. Please check the provided H&amp;S Manual)</p>

2. The existing drawings of the structure are provided in Appendix 5
3. The navigation notice is provided in Appendix 4.
4. The *Contractor* constructs the *works* in accordance with the *Client's* code of practice, the Safety Health Environment Wellbeing Code of Practice, (SHEW COP) dated May 2018.
5. The *Contractor* undertakes the *works* using methods that result in positive environmental outcomes and demonstrate mitigation has been considered. Appendix 6 contains documents describing environmental requirements on the *works* such as the Environmental Action Plan (to be prepared by the *Client's* consultant, [REDACTED]).

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

### **S 201      General constraints**

#### **1.      Use of the site**

The *boundaries of the site* are the extents shown in Appendix 3, ENV0002880C-Site Plan.

The Site contains a *Client* operational site, and an access road for residents on the island.

Prior to the possession of the *site* the *Client* supplies the *Contractor* with the known names and addresses of relevant landowners and occupiers.

The *Contractor* informs the *Client* one week prior to the possession of the site. The *Client* issues statutory Notices of Entry for all private land within the Site at least 7 days before the possession dates. Additional Working Areas required by the *Contractor* outside of the Site are provided by the *Contractor*.

A site compound area, if necessary, must be proposed for use by the *Contractor*.

The public have a right of access across Surfleet Sluice, which the *Contractor* needs to manage.

The *Client* has a legal requirement to maintain navigation on the River Welland through one gate of Surfleet Sluice - the left tunnel only. with a current Nav water level of 2.85 Hence one culvert needs to be isolated at a time

#### **2.      Access to the Site**

The location of the Site is shown on the drawings in Appendix 3, ENV0002880C-Site Plan.

Site access and egress is from/to public road, as confirmed at the time of the site visit on 19/8/2021.

The access to the site must remain available to others throughout the *works*, or as agreed by the *Contractor* with residents [REDACTED]

#### **3.      Possession of the Site**

Shortly before first entry, the *Contractor* undertakes 'Pre-start condition surveys' of all highways, property and land as agreed with the *Project Manager* (including trees, boundaries, crops and any other features which may be affected by the work) within the Boundaries of the site and of the access route(s).

The Pre-start condition surveys shall consist of digital photographs with an inventory, and a pdf location map of the photos. Copies of the survey shall be made and provided to the following:

- a) *Client* (electronic format);
- b) *Project Manager* (electronic format);

The *Contractor* undertakes similar 'Post-completion condition surveys' when the *works* are complete and on dates agreed with the *Supervisor*. Copies of the 'Post-completion condition surveys' are distributed in the same format and to the same recipients as the Pre-start condition surveys.

The *Contractor* undertakes the condition surveys in conjunction with the *Project Manager*.

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

4. **Interfaces with *Client* operations**

The Site contains a *Client* operational site, Surfleet Sluice, which must remain operational throughout the *works*.

The *Contractor* must develop a methodology that allows the *Client* to operate the sluice gates as normal throughout the *works* as per the Conditions in the Environmental Permit.

The sluice gates have two functions, to maintain the river level upstream, and to maintain navigation traffic (5 boats per year)

The *Contractor* ensures that the *Client* control panel kiosk remains secure throughout the *works*.

5. ***Client* specified policies and procedures**

The *Contractor* adheres to the *Client* policies and procedures as set out in the *Client's* documents:

- SHEW COP; and
- Minimum Technical Requirements.

The *Contractor* adheres to the specific policies and procedures for Surfleet Sluice as described in the O&M Manual.

6. **Interfaces with** [REDACTED]

The *Contractor* to communicate the *works* to the Council for the purpose of providing access for emergency vehicles, if needed.

7. **Third Party Complaints and Claims**

The *Contractor* notifies the *Project Manager* immediately following any damage or injury arising out of the execution of the *works*.

The *Contractor* and *Project Manager* notify each other without delay of all complaints, claims or warnings of intended claims which they may receive.

The *Contractor* deals promptly with any complaints, claims, damage or injury by or to owners, operators or occupiers.

The *Contractor* keeps the *Project Manager* informed as to the progress made towards settlement of claims.

8. **Project Site Accommodation**

If Site Accommodation is deemed necessary, The *Contractor*, *Project Manager* and *Supervisor* share Site accommodation, offices and facilities. The *Contractor* provides

accommodation and services as described in the Minimum Technical Requirements. The accommodation is to be sited to the acceptance of the *Project Manager*.

9. **Deliveries**

The *Contractor* plans deliveries to be within working hours. If the *Contractor* requires deliveries outside of working hours they will seek acceptance by the *Project Manager* prior to the delivery.

10. **Working hours**

The *Contractor* working hours are noted in the *Client's* Minimum Technical Requirements. The *Contractor* agrees the working hours with the *Client* and South Holland District Council prior to the start of the *works*.

The *Contractor* does not undertake night work during the *works*, unless acceptance is given by the *Project Manager*. If the *Contractor* requires night working, they must appoint an ecologist to assess the impact of that activity on bats, see Environment Action Plan and Bat survey reports for further details.

11. **Parking**

The *Contractor* arranges for their own parking for the *works* within the site compound.

12. **Site tidiness and branding**

The *Contractor* keeps the working area and parking areas tidy and promptly removes rubbish, waste and surplus. Materials, Plant and Equipment are positioned, stored and stacked in a safe and orderly manner. The Site outside the working area, Site offices and Site yards is kept free of construction debris and suitable for use by the public. Materials contaminated by oil and spillages or otherwise polluted due to the *Contractor's* activities shall be immediately removed and disposed of according to the statutory regulations.

13. **Storage of plant and materials**

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

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

The *Contractor* does not make use of public highways, thoroughfares or footpaths for depositing and storing Plant and Materials but provides 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 and returned to original condition.

The *Contractor* maintains a detailed record of all materials received on the Site and in his stores and working areas. The *Contractor* makes the records available to the *Project Manager* and *Supervisor* at such times as the latter may require.

14. **Noise and vibrations**

Noise and vibration levels are limited to those noted under the *Client's* Minimum Technical Requirements.

It is understood that noise and vibration is inevitable with the *works* and appropriate monitoring should be undertaken on the *Client's* structures, including the sluice gates and control building. This is critical during the piling works.

The *Contractor's* monitoring shall include:

- a) Baseline building conditions surveys;
- b) Baseline monitoring – to establish the current situation against which to review any measurements;
- c) Task monitoring – during activities to record the levels of noise and vibration for comparison and use in any possible discussions with adjacent land owners.

15. **Pollution, ecological and environmental impacts**

The *Contractor* produces, maintains and adheres to an Environment Management Plan for the *works* and provides this to the *Project Manager* and *Supervisor*.

The *Contractor* maintains, adheres to and updates the Environment Action Plan throughout the duration of the *works*.

16. **River level Information**

The *Contractor* can access river level information for the River Welland on the .gov.uk website or the national flow archive.

Gauging station live data: <https://flood-warning-information.service.gov.uk/station/2102>

Flow archive data: <https://nrfa.ceh.ac.uk/data/station/info/28009>

The *Contractor* can request additional river level data from the *Client*.

17. **Interference with any access to property, apparatus or service**

Before interfering with any access to property, apparatus or service, the *Contractor* identifies its access requirements. The *Contractor* notifies the *Project Manager* and the relevant owners and occupiers in writing 14 days in advance of any such interference and confirms to the *Project Manager* if alternative arrangements have been agreed.

The *Contractor* takes into particular account the access and service requirements of those with special needs.

18. **Licences and Consents**

The *Client* provides the following consents, the *Contractor* must adhere to the conditions of these consents:

- a) Notice of Entry.

The *Contractor* confirms their requirement for land access and provides an accompanying marked up drawing at least one month prior to the access being required.

The *Client* provides the following consents, the *Contractor* secures the consent and discharges any conditions associated with these consents:

- a) Impact on Water Resources, if any
- b) EPR consent
- c) EAP prepared by Arup



**19. Use (or non –use) of explosives**

Explosives are not to be used on the Site.

**S 202 Confidentiality**

1. 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.
2. The *Contractor* may publicise the services only with the *Client's* written permission.

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

1. The *Contractor* protects the Site, the works, products, materials, and any existing structures affected by the *works* from damage and theft.
2. The *Contractor* shall keep the public fully informed of the works and of the dangers present on Site.
3. The *Contractor* is responsible for the security of the Working Areas, Site offices, Site yard and any other facilities deemed necessary by the *Contractor*.

**S 204 Protection of existing structures and services**

1. The *Contractor* protects the existing Surfleet Sluice compound and structures, unless otherwise shown on the design drawings.
2. The *Contractor* takes reasonable measures to avoid damage to existing roads, property and other works caused by their operations. The *Contractor* is responsible for any damage to existing roads, properties and other works caused by its operations. Prior to work commencing on Site the *Contractor* provides, for acceptance by the *Supervisor*, a photographic record of the condition of the existing roads and any other existing works which may be affected by their operations. On Completion of the *works*, the *Contractor* returns the roads and any other affected existing works to a condition not inferior to that pertaining at the *access date*.
3. The *Contractor* carries out their own utility undertakers searches and protects buried services that are effected by the works.
4. The *Contractor* liaises with all relevant Statutory Undertakers, the Highway Authority and other owners of apparatus before commencing any excavations and satisfies themselves as to the exact position of existing apparatus which may affect or be affected by the construction of the *works*. The *Contractor* complies with all specific requirements from these third parties.
5. Where any portion of the *works* is close to, across or under any existing apparatus of Statutory Undertakers, the Highways Authority, the Terminal Companies or other parties, the *Contractor* obtains all necessary licences and consents and temporarily supports and works around, under or adjacent to all apparatus in a manner designed to avoid damage, leakage or danger and to ensure uninterrupted operation.
6. Should any leakages or damage to existing services, highways or apparatus be discovered, the *Contractor* immediately notifies the Statutory Undertaker, Highways Authority or owner

concerned, as appropriate, and the *Project Manager*. The *Contractor* affords every facility for the repair or replacement of the apparatus affected unless otherwise specified.

7. Before mechanically excavating close to services, the *Contractor* undertakes full preliminary investigations by means of electromagnetic and other locating devices and hand-dug trial holes to locate the existing services. The *Contractor* notifies the *Project Manager* of the results of these investigations without delay.
8. The *Contractor* procures and manages the diversions for the *works*.
9. The *Contractor* notifies the *Project Manager* in advance of any diversion or removal of apparatus, which the *Contractor* requires for his own convenience or because of his proposed methods of working. The *Contractor* arranges (including obtaining any necessary permissions, notices, licences or consents) and undertakes any such additional diversion or removal of apparatus but complies with any requirements of the *Project Manager*.
10. The *Contractor* provides a record drawing of services and apparatus encountered, highlights the differences from the information provided by the Statutory Undertaker and Highway Authority and issues this to the *Project Manager*.

#### **S 205      Protection of the works**

1. The *Contractor* shall take all reasonable care to protect the works from damage, including weather and flood related conditions.

#### **S 206      Cleanliness of the roads**

1. The *Contractor* agrees the cleanliness of the road with South Holland District Council and informs the *Project Manager* and *Client* of any agreement.

#### **S 207      Traffic Management**

1. The *Contractor* produces and enacts a traffic management plan for the *works*, if traffic management is necessary.
2. The *Contractor* is responsible for traffic safety and management, including obtaining road closure, opening or traffic signals consents and nominates one of his Site staff to be responsible for all related activities.
3. The *Contractor* provides the *Project Manager* with an up-to-date list of 'Supervisors' and 'Operatives' who have achieved accreditation in the relevant activities in the New Roads and Street Works Act 1991 or The Street Works (Northern Ireland) Order 1995.

#### **S 208      Control of site personnel**

1. The *Contractor* staff act in accordance with the *Client's* SHEW Code of Practice.

#### **S 209      Site cleanliness**

1. The *Contractor* undertakes the *works* in accordance with the *Client's* SHEW Code of Practice.

#### **S 2010      Waste materials**

1. The *Contractor* undertakes the *works* in accordance with the *Client's* SHEW Code of Practice and the Minimum Technical Requirements (CL 1.41).

#### **S 2011      Deleterious and hazardous materials**

Not used.

#### **S 2012      Environmental Restrictions**

1. The *Contractor* undertakes the *works* in accordance with the *Client's* SHEW Code of Practice.
2. The *Contractor* undertakes the *works* in accordance with the Environmental Action Plan. The Environmental Action Table within the plan provides a list of actions and who is responsible for each action.
3. The key restrictions for the *Contractor* to manage are highlighted below:
  - a) The pump used for dewatering is very likely to be subject to the Eels Regulations (anything which pumps more than 20m<sup>3</sup> per day is), and therefore will require screening to prevent injury to eels. The *Contractor* to provide detail on the type of pump likely to be used. The size of the mesh on the screen depends on the distance from the tidal limit of the watercourse. This site is less than 30km from the tidal limit, and so glass eels could be present, requiring a fine 1-2mm mesh screen. It would be worth contacting the manufacturer to ask how much pump capacity is reduced when screened, as this may have implications for your timescales. A fish-friendly pump or turbine would be an alternative to screening a typical pump.
  - b) A fish rescue should be in place to relocate any fish species which remain in the dewatered culverts.
  - c) Any silt removed should be checked for fish, which should be relocated to the water prior to dewatering (if relevant).
  - d) A bat roost potential survey should be carried out as soon as possible to ascertain the likelihood of bats being present in the structure, whose roosts could be disturbed during works depending on the location of potential roost features. It would be worth undertaking this survey immediately before the end of the bat survey season.
  - e) Check-Clean-Dry protocol applies to all equipment to be used in the water, to prevent the spread of non-native and invasive species.
  - f) Future works arising from the inspection will require an eel passability assessment to determine whether improvements should be made in order to comply with the Eels Regulations; Surfleet Sluice is a priority site for eel passage. The *Contractor* to notify the *Project Manager* Please get back in touch if remedial works to the structure are deemed necessary after inspection.
  - g) *Contractor* to maintain a Site Waste Management Plan.

#### **S 2013      Archaeological Requirements**

1. The *Contractor* undertakes the works in accordance with the methodology set out in the Written Scheme of Investigation. The *Contractor's* attention is drawn to the excavation methodologies in particular and the *Contractor's* programme is to reflect the archaeological requirements.

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

N/A

## **S 400 Completion**

### **S 401 Completion definition**

1. The following are absolute requirements for Completion to be certified, without these items the *Client* is unable to use the *works*. The *Contractor* is to provide the following prior to Completion:
  - a. Provide all information to the *Client* and Principal Designer to enable their compiling of the Health and Safety File, including:
    - i. Full set of Completion records, which are in accordance with the *Contractor's* quality management system and accepted by the *Supervisor*;
    - ii. A full set of "As Built" Drawings signed off and agreed with the *Supervisor*;
    - iii. A full set of "As Built" Surveys signed off and agreed with the *Supervisor*;
    - iv. 1 hard copy of Operating and Maintenance Manuals and one electronic version;
    - v. Digital copies of photographs of all stages of the *works* (titled and dated);
  - b. Completed Environmental Action Plan including environmental auditing/reporting;
  - c. Issue of Testing Report to the *Project Manager*;
  - d. Completion of all testing, training and the works handover meetings with the *Client*;
  - e. Completion of the Site acceptance tests;
  - f. Handover of all keys to any security padlocks supplied as part of the permanent works;
  - g. Population of the *Client's* latest version of the Project Cost Tool, or its successor;
  - h. Transfer to the *Client* databases of BIM data;

### **S 402 Training**

1. The *Contractor* trains the *Client* staff on the use of any installations before the Completion Date.

### **S 403 Final Clean**

1. The *Contractor* cleans the completed *works* and removes all equipment not required for incorporation into the permanent works including; temporary structures and access, materials, Site accommodation, construction debris, signage, protection, plant, machinery and tools.

### **S 404 Security**

1. The *Contractor* liaises with the *Project Manager* to remove locks, access restrictions, password protection etc. and replace with the security arrangements to be agreed with the *Project Manager* prior to the Completion Date.

### **S 405 Correcting Defects**

1. Access for the correction of any Defect after Completion shall be arranged by the *Client*.

### **S 406 Pre-Completion arrangements**

1. Prior to any *works* being offered for take-over or Completion the *Contractor* arranges a joint inspection with the *Supervisor, Project Manager and 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 Date.

**S 407      Take over**

1.    Not used.

## **S 500 Programme**

### **S 501 Programme requirements**

1. The programme complies with the requirements of NEC ECC Clause 31.2 and includes alignment and submission of the BEP and Master Information Delivery Plan (MIDP).
2. The programme shall be supplied in pdf in accordance with the *Client's* BIM standards.

### **S 502 Programme arrangement**

1. Not used.

### **S 503 Methodology statements**

1. The expected issue date of all method statements should be provided to the *Project Manager* and *Supervisor*. All method statements are issued at least two weeks prior to their use on site for comment and acceptance.

### **S 504 Work of the *Client* and Others**

1. The order and timing of the work of the *Client* and Others is to be included in the programme and information to be provided.

### **S 505 Information required**

1. Not used.

### **S 506 Revised programme**

1. The *Contractor* submits a full explanation of any changes in sequencing and duration of the work activities from the previous accepted programme when they submit a new programme.
2. The *Contractor* provides a monthly update on the progress against the accepted programme. The monthly update shall be provided on or before the 8<sup>th</sup> day of each month to assist the *Client* with their reporting.

**S 600      Quality management**

**S 601      Samples**

Not used

**S 602      Quality Statement**

Not used

**S 603      Quality management system**

Not used

**S 604      BIM requirements**

1.    The *Contractor* assigns a member of their project team as their BIM Information Manager for the project.
2.    The *Contractor* follows the *Client's* BIM standards and Employer's Information Requirements.



## **S 700      Tests and inspections**

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

1. Testing and inspection of Materials and *works* is undertaken by the *Contractor* in accordance with the Scope, specifications and the *Client's* Minimum Technical Requirements.
2. The *Contractor* produces a test report showing the test undertaken and the result, and provides this to the *Project Manager* at least 2 weeks prior to the Completion date.

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

1. The *Contractor* is responsible for the testing and inspection of the *works*.

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

1. The *Contractor* is responsible for the protection of the *works* until the Completion Date.

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

1. The *Supervisor* can watch and observe all tests undertaken by the *Contractor*.

**S 800      Management of the works**

**S 801      Project team – Others**

1. Not used

**S 802      Communications**

1. The scope of the *works* is discussed at a pre-start meeting arranged by the *Project Manager*.
2. Weekly progress chaired by the *Project Manager* to keep all informed of progress.
3. Contractual communication is undertaken via the FastDraft platform that the *Client* provides access to. The templates for use in Contract Communication are provided on FastDraft.
4. Communications to and from the *Contractor* are defined by the *Project Manager*, and storage of project files shall be administered through Asite common data environment, which the *Client* provides access to.
5. All contract communications shall contain a unique reference number and shall be appropriately titled. Numbering logic and sequencing to be agreed with the *Project Manager*.
6. The *Contractor*, *Project Manager* and *Supervisor* shall attend a weekly issues meeting, chaired by the *Project Manager*.
7. The *Contractor* shall provide a summary 2 week look ahead programme which shall be updated and issued on a weekly basis to the *Project Manager* and *Supervisor*.

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

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

Not used

### **S 902 Co-operation**

1. The *Contractor* understands the importance of and assists the *Client* to establish and maintain good public relations during the course of the contract and thereafter. Public relations activities by the *Client* include keeping the general public informed; publicising the project and the work of the *Client* in general; liaising with local residents, businesses and landowners, and dealing with complaints. The *Contractor* informs the *Client* immediately of any complaint, incident or accident.
2. The *Contractor* notifies the *Project Manager* of all press or media enquiries and refers them to the *Client*.
3. The *works* are undertaken in accordance with Clause 1.27.10 (Noise Control and Working Hours) of the Minimum Technical Requirements.
4. The *Contractor* is required to co-operate with Others in obtaining and providing information which they need in connection with the *works*.

### **S 903 Co-ordination**

1. The *Contractor* project manager is responsible for communication with the *Client*, *Project Manager* and *Supervisor*.
2. The *Contractor* coordinates with the Principal Designer throughout the *works* in line with their duties under the CDM Regulations.

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

1. The *Contractor* is responsible for the utilities and service diversions.
2. The *Contractor* complies with HSE Guidance Notes, Statutory Undertakers and private company requirements when working in the vicinity of their apparatus.
3. The *Contractor* is responsible for coordinating and procuring diversions with Statutory Undertakers.

## **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***

1. The *Contractor* provides items listed in Clause 1.1 of the *Client*'s Minimum Technical Requirements.

## **S 1100 Health and safety**

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

1. The *Contractor* shall be aware of the latest version of the *Client's* [REDACTED] 'Safety, Health, Environment & Well Being Code of Practice' and fully comply with its requirements.

#### **S 1102 Method statements**

1. Method statements and risk assessments shall be submitted to the *Project Manager* and *Supervisor* for comment at least 4 weeks before the activity is programmed to commence unless agreed otherwise with the *Project Manager*.
2. The *Contractor* updates and addresses the comments on the Method statements and risk assessments, and resubmits the updated document for acceptance before starting the activity. It is expected that Method statements and risk assessments are required for the following activities as a minimum:
  - a. Site set up;
  - b. Interface with:
    - i. *Client*;
    - ii. Public;
  - c. Road construction;
  - d. Footpath diversion;
  - e. Excavation works, including management of archaeology;
  - f. Bridge construction;
  - g. Lifting plans;
  - h. Stop log installation;
  - i. Service diversions;
  - j. Surfacing; and
  - k. Other method statements as listed in the Environmental Management Plan.

#### **S 1103 Legal requirements**

1. The Construction (Design and Management) Regulations 2015 (the CDM Regulations) apply to the *works*.
2. The CDM Principal Designer is: TBC.
3. The *Contractor* copies to the *Project Manager* all correspondence with the CDM Principal Designer.

#### **S 1104 Inspections**

1. The *Contractor* makes all health and safety records available to the *Project Manager* for inspection if required.

#### **S 1105 Emergency Plans and Access**

1. The *Contractor* produces an emergency plan for the scheme and incorporates the *Client's* emergency procedures for the Surfleet Sluice emergency requirements.

## **S 1200 Subcontracting**

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

1. The *Contractor* submits their proposed procurement procedure to the *Project Manager* for acceptance. It is anticipated that all contracts will be back to back with the main contract. Where this is not the case, then acceptance will be required prior to entering into that contract. The procedure is not accepted if it:
  - a. does not follow best practice principles;
  - b. conflicts with the need to ensure transparency in the disbursement of public funds; or
  - c. does not meet other requirements stated in this contract, such as the SHEW Code of Practice.

### **S 1202 Acceptance procedures**

1. The *Contractor* shall send through a list of proposed subcontractors to the *Project Manager* for acceptance prior to the contract start date and updates as required.

## **S 1300 Title**

### **S 1301 Marking**

No specific requirements.

### **S 1302 Materials from Excavation and demolition**

Not used

**S 1400    Acceptance or procurement procedure (Option C)**  
Not Used

## **S 1500    Accounts and records**

### **S 1501    Additional Records**

1. The format and presentation of records are reviewed and accepted by the *Project Manager*.
2. The contract will be managed through FastDraft and all contract communication will be undertaken through this portal.
3. The following additional records are to be kept by the *Contractor*:
  - a. Timesheets and site allocation sheets, which should be submitted with monthly applications.
  - b. Equipment records.
  - c. Forecasts of the total Defined Cost.
  - d. Specific procurement and cost reports.
4. In addition to the photographs taken during the 'Pre-start condition surveys', the *Contractor* takes regular photographs of the *works* as it progresses and as further required by the *Project Manager* and/or *Supervisor*:
  - a. The photographs are taken by a competent photographer using a digital camera;
  - b. All photographs are date stamped, georeferenced and filed electronically in a chronological and identifiable manner;
  - c. The photographs are submitted in electronic format to the *Project Manager* and *Client* on a fortnightly basis and uploaded on to the *Client's* Asite tool. All photographs should be zipped up and labelled as the Year, Week (1,2,3 etc), Day;
  - d. Upon completion, the *Contractor* is to ensure that all photographs have been passed to the *Project Manager*. They become the property of the *Client*. The *Contractor* ensures that no use is made of the photographs without the written acceptance of the *Client*.
5. The *Contractor* supports the requirements of the *Client* in providing video / DVD material to help support communications. This material shall cover all operations required to deliver the works to support the project team in raising awareness of the project activities.
6. The *Contractor* may incorporate the use of drones for monitoring and progress reporting purposes. Drones that are used must be operated by licensed operators. Any footage taken will be provided copyright free, in an agreed format, to the *Client* for their use in public communication, free of charge.

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

As per the framework.



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

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

Not used

### **S 1702    *Drawings***

1. Not used

### **S 1703    *Standards the Contractor complies with***

1. The *Contractor* carries out their work using the following guidance, however this does not preclude them from undertaking the *works* in accordance with current legislation.

Ref	Report Name	Where used
300_10	300_10 SHE handbook for managing capital projects	Construction works
300_10_SD27	300_10_SD27 SHEW Code of Practice	Construction works
	Project Cost Tool	Costs
	Sustainability Measures Form	Project Records
	Timber Policy Documents	Construction works
PB13897	Environmental Permit Core Guidance for the Environmental Permitting regulation 2010	Construction works

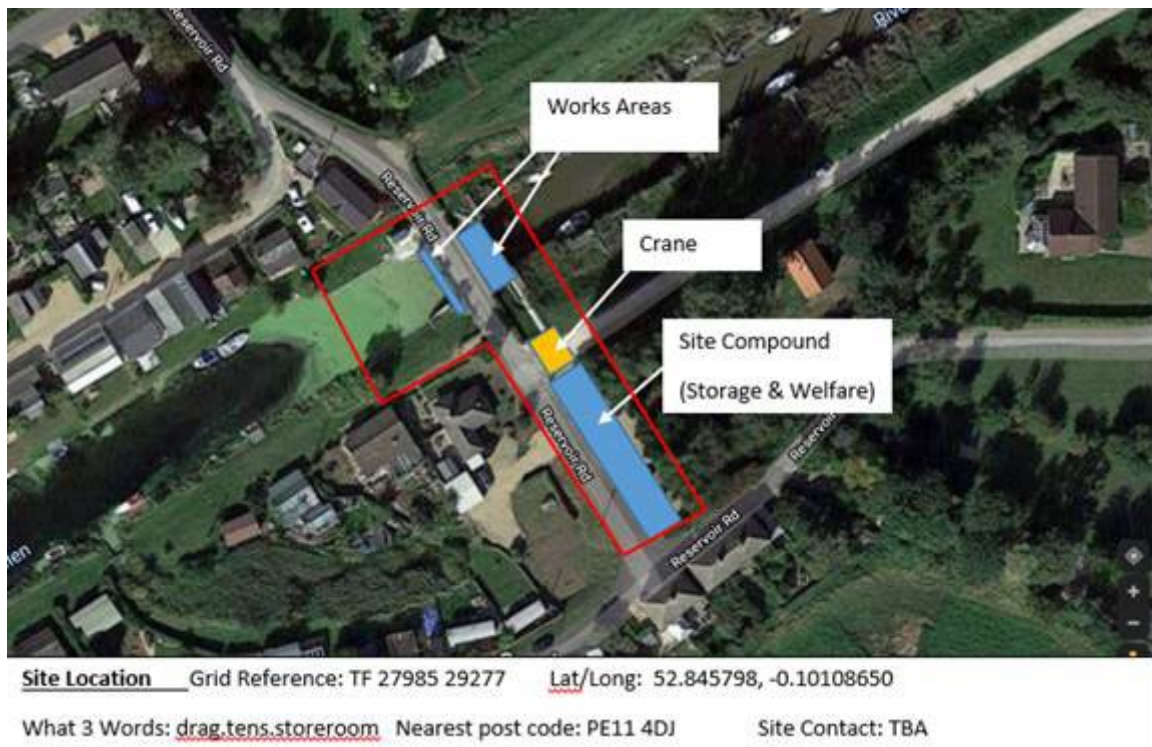
## Appendix 1 BIM Protocol – Information Production and Delivery Table

1. The *Contractor* adheres to the *Client's* BIM standards and Employers Information Requirements (EIR).
2. The *Contractor* produces a BIM Execution Plan (BEP) for the project and submits it to the *Client* for acceptance prior to the Start Date.
3. All *Client* issued information referenced within the Information Delivery Plan (IDP) remains within the Site Information unless it is referenced elsewhere within the *Scope*. The *Client* provides its IDP on the following site: [www.Pow.bim4.info](http://www.Pow.bim4.info)
- 4.

## **Appendix 2 BIM Protocol – Employers Information Requirements**

## Appendix 3

### 1. Site Boundaries

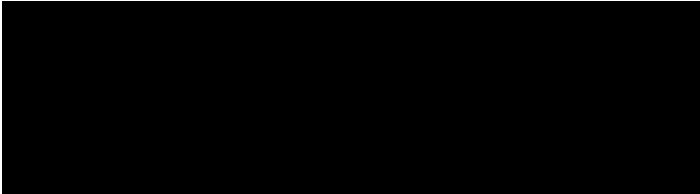


## **Appendix 5 – Site Information and drawings**

## **Appendix 6 – Environmental Information**



**Framework:**  
**Supplier:**  
**Company Number:**



**Geographical Area:** Midlands  
**Project Name:** Surfleet Sluice Detailed Asset Inspection  
**Project Number:** [Redacted]

**Contract Type:** Engineering Construction Contract  
**Option:** Option C

**Contract Number:** [Redacted]  
**Stage:** [Redacted]

Revision	Status		Originator		Reviewer		Date

ENGINEERING AND CONSTRUCTION CONTRACT under the Collaborative Delivery Framework  
CONTRACT DATA

Project NameSurfleet Sluice Detailed Asset Inspection

Project Number

This contract is made on 29 November 2021  
between the *Client* and the *Contractor*

- This contract is made pursuant to the Framework Agreement (the “Agreement”) dated 01st day of April 2019 between the *Client* and the *Contractor* in relation to the Collaborative Delivery Framework. The entire agreement and the following Schedules are incorporated into this Contract by reference
- Schedules 1 to 21 inclusive of the Framework schedules are relied upon within this contract.
- The following documents are incorporated into this contract by reference  
20211007 Sufleet\_sluice\_detailed asset inspection\_scope v03.2.doc, dated 07.10.21

Part One - Data provided by the *Client*  
Statements given in  
all Contracts

1 GeneralThe *conditions of contract* are the core clauses and the clauses for the following main Option, the Option for resolving and avoiding disputes and the secondary Options of the NEC4 Engineering and Construction Contract June 2017.

Main Option	Option C	Option for resolving and avoiding disputes	W2
-------------	----------	--	----

Secondary Options

- X2: Changes in the law
- X7: Delay damages
- X9: Transfer of rights
- X10: Information modelling
- X11: Termination by the *Client*
- X18 Limitation of Liability
- X20: Key Performance Indicators
- Y(UK)2: The Housing Grants, Construction and Regeneration Act 1996
- Y(UK)3: The Contracts (Rights of Third Parties) Act 1999
- Z: *Additional conditions of contract*

The *works* are

Dewater, invesitgate and undertake maintenance and repair works to Surfleet Sluice and installation of stilling well.

The *Client* is

Address for communications

Address for electronic communications

The *Project Manager* is

Address for communications

Address for electronic communications

The *Supervisor* is

Address for communications



Address for electronic communications

The Scope is in  
20211007 Sufleet\_sluice\_detailed asset inspection\_scope v03.2.doc, dated 07.10.21

The Site Information is in  
 Lincs and Northants Recondition and Revenue Programme 2021-22 - Surfleet Sluice - All Documents (sharepoint.com) and provided on a CD rom 'Surfleet

The *boundaries of the site* are ENV0002880C-Site Plan.

The *language of the contract* is English

The *law of the contract* is  
the law of England and Wales, subject to the jurisdiction of the courts of England and Wales

The period for reply is 2 weeks

The following matters will be included in the Early Warning Register

Early warning meetings are to be held at intervals no longer than 2 weeks

## 2 The *Contractor's* main responsibilities

The *key dates* and *conditions* to be met are  
*condition* to be met

```
'none set'
'none set'
'none set'
```

```
key date
'none set'
'none set'
'none set'
```

The *Contractor* prepares forecasts of the total Defined Cost for the whole of the *works* at intervals no longer than

4 weeks

### 3 Time

The *starting date* is

18.11.21

The *access dates* are  
part of the Site  
Environmental Permit

date  
18.11.21

The *Contractor* submits revised programmes at intervals no longer than

4 weeks

The *Completion Date* for the whole of the *works* is

14.12.21

The *Client* is not willing to take over the *works* before the Completion Date

The period after the Contract Date within which the *Contractor* is to submit a first programme for acceptance is

1 weeks

## 4 Quality management

The period after the Contract Date within which the *Contractor* is to submit a quality plan is

1 weeks

The period between Completion of the whole of the *works* and the *defects date* is

52 weeks

The <i>defect correction period</i> is	2 weeks	except that
• The <i>defect correction period</i> for	safety issues	is 24 Hours
• The <i>defect correction period</i> for		is

5 Payment

The *currency of the contract* is the £ sterling

The *assessment interval* is Monthly

The *Client* set total of the Prices is [REDACTED]

The *interest rate* is 2.00% per annum (not less than 2) above the  
Base rate of the Bank of England

The *Contractor's share percentages* and the *share ranges* are

	<i>share range</i>		<i>Contractor's share percentage</i>
less than		<b>80</b> %	<b>0</b> %
from	<b>80</b> %	to <b>120</b> %	as set out in Schedule 17
greater than		<b>120</b> %	as set out in Schedule 17

6 Compensation events

The place where weather is to be recorded is Kate's Bridge Gauging Station

The *weather measurements* to be recorder for each calendar month are

- the cumulative rainfall (mm)
- the number of days with rainfall more than 5mm
- the number of days with minimum air temperature less than 0 degrees Celsius
- the number of days with snow lying at 09:00 hours GMT

and these measurements:

1. water level
- 2.
- 3.
- 4.
- 5.

The *weather measurements* are supplied by Environment Agency  
The *weather data* are the records of past weather measurement for each calendar month  
which were recorded at Kate's Bridge Gauging Station  
and which are available from Environment Agency

Assumed values for the ten year weather return *weather data* for each *weather measurement* for each calendar month are

Jan	Jul
Feb	Aug
Mar	Sep
Apr	Oct
May	Nov
Jun	Dec

These are additional compensation events

1. Delay to inspection of the structure due to water levels rising above the 1 in 10 level of 6.603mAOD at Kate's Bridge Guaging Station
2. 'not used'
3. 'not used'
4. 'not used'
5. 'not used'

8 Liabilities and insurance

These are additional *Client's* liabilities

- 1 'not used'
- 2 'not used'
- 3 'not used'

The minimum amount of cover for insurance against loss of or damage to property (except the *works* , Plant and Materials and Equipment) and liability for bodily injury to or death of a person (not an employee of the *Contractor*) arising from or in connection with the *Contractor* Providing the Works for any one event is

£15,000,000

The minimum amount of cover for insurance against death of or bodily injury to employees of the *Contractor* arising out of and in the course of their employment in connection with the contract for any one event is

not less than the amount required by law

The insurance against loss of or damage to the *works*, Plant and Materials is to include cover for Plant and Materials provided by the *Client* for an amount of

Resolving and avoiding disputes

The <i>tribunal</i> is litigation in the courts	
The <i>Senior Representatives</i> of the <i>Client</i> are	
Address for communications	
Address for electronic communications	
Name	
Address for communications	
Address for electronic communications	
The <i>Adjudicator</i> is	
Address for communications	
Address for electronic communications	<a href="#">'to be confirmed'</a>
The <i>Adjudicator nominating body</i> is	The Institution of Civil Engineers

Z Clauses

Z1 Correctness of Site Information and other documents

Z1.1 Site Information about the ground, subsoil, ducts, cables, pipes and structures is provided in good faith by the *Client* , but is not warranted correct. Clause 60.3 does not apply to such Site Information and the *Contractor* is responsible for checking the correctness of any such Site Information they rely on for the purpose of pricing for or providing the *works* .

Z1.2 Information regarding construction methods or processes referred to in pre contract health and safety plans are provided in good faith by the *Client* but are not warranted correct (except for the purpose of promoting high standards of health and safety) and the *Contractor* is responsible for checking the correctness of any such information they rely on for the purpose of pricing for, or providing the *works* .

Z 2B: Water levels: Contractor’s risk

Clause 60.1 (12) second bullet point is amended to: “are not weather conditions or floods and”

Z3 Prevention: No change to prices

Delete first sentence of clause 62.2 and replace with:  
“Quotations for compensation events except for the compensation event described in 60.1(19) comprise proposed changes to the Prices and any delay to the Completion Date and Key Dates assessed by the *Contractor* . Quotations for the compensation event described in 60.1(19) comprise any delay to the Completion Date and Key Dates assessed by the *Contractor* .  
Delete ‘The’ At start of clause 63.1 and replace with:  
“For the compensation event described in 60.1(19) the Prices are not changed. For other compensation events the...”

Z 4 The Schedule of Cost Components

The Schedule of Cost Components is as detailed in the Framework Schedule 9.

Z 6 Payment for Work

Delete existing clause 11.2 (31) and replace with:  
“11.2 (31) The Price for Work Done to Date is the total Defined Cost which the *Project Manager* forecasts will have been paid by the *Contractor* before the next assessment date plus the Fee, not exceeding the forecast provided under clause 20.4 and accepted by the *Client* .”

Z7 Contractor’s share

After cl54.2 and before cl54.3, insert the following additional clause:  
54.2A If, prior to Completion of the whole of the works, the Price for Work Done to Date exceeds 110% of the total of the Prices, the amount in excess of 110% of the total of the Prices is retained from the Contractor.

Z10 Payments to subcontractors, sub consultants and

Subcontractors  
The *Contractor* will use the NEC4 contract on all subcontracts for works. Payment to subcontractors will be 28 days from the assessment date.  
If the *Contractor* does not achieve payments within these time scales then the *Client* reserves the right to delay payments to the *Contractor* in respect of subcontracted work, services and supplies.  
Failure to pay subcontractors and suppliers within contracted times scales will also adversely affect the *Contractor’s* opportunities to work on framework contracts.

Z16 Disallowed Costs

Add the following bullets to clause 11.2 (26) Disallowed costs

- was incurred due to a breach of safety requirements, or due to additional work to comply with safety requirements.
- was incurred as a result of the client issuing a Yellow or Red Card to prepare a Performance Improvement Plan.
- was incurred as a result of rectifying a non-compliance with the Framework Agreement and/or any call off contracts following an audit.

Z19 Linked contracts

Delays and additional cost on this contract resulting from the *Contractor’s* fault or error on a previous contract on this project or programme will be a Disallowable cost under this contract and not be a Compensation event under this contract.

**Z21 Requirement for Invoice**

Add the following sentence to the end of clause 51.1:  
The Party to which payment is due submits an invoice to the other Party for the amount to be paid within one week of the *Project Manager's* certificate.  
Delete existing clause 51.2:

- 51.2 Each certified payment is made by the later of
- one week after the paying Party receives an invoice from the other Party and
  - three weeks after the assessment date, or, if a different period is stated in the Contract Data, within the period stated.

If a certified payment is late, or if a payment is late because the *Project Manager* has not issued a certificate which should be issued, interest is paid on the late payment. Interest is assessed from the date by which the late payment should have been made until the date when the late payment is made, and is included in the first assessment after the late payment is made

**Z22 Resolving Disputes**

Delete W2.1

**Z23 Risks and insurance**

Replace clause 84.1 with the following  
Insurance certificates are to be submitted to the *Client* on an annual basis.

Secondary Options

OPTION X2: Changes in the law

The *law of the project* is the law of England and Wales, subject to the jurisdiction of the courts of England and Wales

OPTION X7: Delay damages

**X7 only** Delay damages for Completion of the whole of the *works* are [redacted] per working day

OPTION X10: Information modelling

The period after the Contract Date within which the *Contractor* is to submit a first Information Execution Plan for acceptance is 2 weeks

The minimum amount of insurance cover for claims made against the *Contractor* arising out of its failure to use skill and care normally used by professional providing information similar to the Project Information is, in respect of each claim £5,000,000

The period following Completion of the whole of the *works* or earlier termination for which the *Contractor* maintains insurance for claims made against it arising out of its failure to use the skill and care is 6 years

OPTION X11: Termination by the *Client*

OPTION X18: Limitation of liability

The *Contractor's* liability to the *Client* for indirect or consequential loss is limited to [redacted]

For any one event, the *Contractor's* liability to the *Client* for loss or damage to the *Client's* property is limited to [redacted]

The *Contractor's* liability for Defects due to its design which are not listed on the [redacted] d to [redacted]

The *Contractor's* total liability to the *Client* for all matters arising under or in connection with the *works* other than excluded matters, is limited to [redacted]

The *end of liability date is* 6 years after the Completion of the whole of the *works* [redacted]

OPTION X20: Key Performance Indicators (not used with Option X12)

The *incentive schedule* for Key Performance Indicators is in Schedule 17.  
A report of performance against each Key Performance Indicator is provided at intervals of 3 months.

Y(UK2): The Housing Grants, Construction and Regeneration Act 1996

The period for payment is 14 days after the date on which payment becomes due

Y(UK3): The Contracts (Rights of Third Parties Act) 1999

Part Two - Data provided by the Contractor

Completion of the data in full, according to the Options chosen, is essential to create a complete contract.

1 General

The Contractor is  
Name

Address for communications

Address for electronic communication

The fee percentage is

The working areas are

The key persons are

- Name (1)
- Job
- Responsibilitie
- Qualifications
- Experience

The key persons are

- Name (2)
- Job
- Responsibilitie
- Qualifications
- Experience

The key persons are

- Name (3)
- Job
- Responsibilitie
- Qualifications
- Experience

The key persons are

- Name (4)
- Job
- Responsibilities
- Qualifications
- Experience

The following matters will be included i

2 The Contractor's main responsibilities

The Scope provided by the *Contractor* for its design is in

### 3 Time

The programme identified in the Contract Data is

Surfleet Seas End Programme Rev A (submitted to Vaughn

## 5 Payment

The *activity schedule* is

## Resolving and avoiding disputes

The *Senior Representatives* of the Contractor are

Name	Address
------	---------

Adresse

Name	Address
------	---------

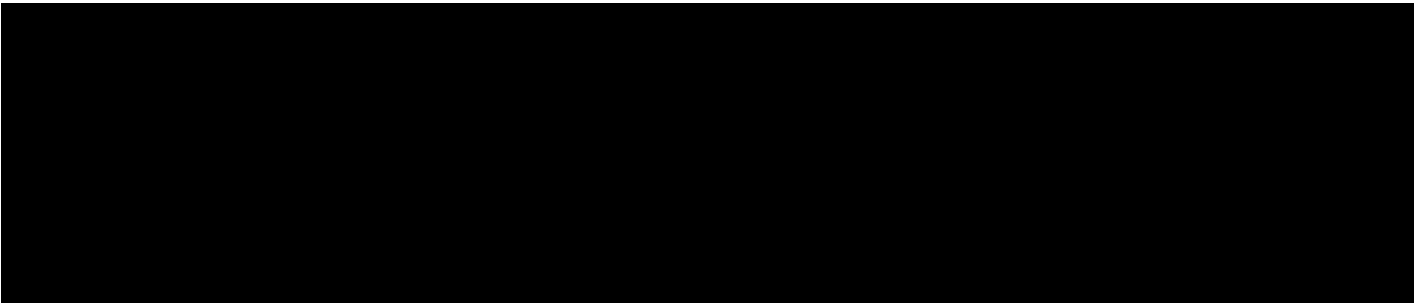
Adresse

## X10: Information Modelling

The *information execution plan* identified in the Contract Data is

# Contract Execution

*Client* execution



*Contractor* execution

