NEC4 Engineering and Construction

Short Contract

FCRM Operational Framework – South East Hub	
A contract between	**The Environment Agency** **Horizon House** **Deanery Road** **Bristol** **BS1 5AH**
And	**Land & Water Services Ltd**
For	**Burpham Court Farm fish bypass channel**
	Contract Forms - **Contract Data** - **The *Contractor's* Offer and *Client's* Acceptance** - **Price List** - **Scope** - **Site Information**

Contract Data

The *Client's* Contract Data

	The *Client* is	
Name	Environment Agency	
Address for communications	Horizon House, Deanery Road, Bristol, BS1 5AH.	
Address for electronic communications	https://defra.bravosolution.co.uk	
The *works* are	The construction of a fish bypass channel, three backwater features and an earth bund at Burpham Court Farm ("BCF"), near Guildford in Surrey.	
The *site* is	Burpham Court Farm near Guildford, GU47NA (centred at NGR TQ0061052856)	
The *starting date* is	25/08/22	
The *completion date* is	23/12/22 (construction) 23/01/23 (contract completion)	
The *delay damages* are	nil	Per day
The *period* for reply is	2	weeks
The *defects date* is	104	weeks after Completion
The *defects correction period* is	4	weeks
The *assessment day* is	the last working day	of each month
The *retention* is	5	%
The United Kingdom Housing Grants, Construction and Regeneration Act (1996) **does** apply		

The *Adjudicator* is :
In the event that a first dispute is referred to adjudication, the referring Party at the same time applies to the Institution of Civil Engineers to appoint an *Adjudicator*. The application to the Institution includes a copy of this definition of the *Adjudicator*. The referring Party pays the administrative charge made by the Institution. The person appointed is also *Adjudicator* for later disputes.

Contract Data

The *Client's* Contract Data

The interest rate on late payment is	0.5	% per complete week of delay.

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

Insurance Table

Event	**Cover**	**Cover provided until**
Loss of or damage to the *works*	The replacement cost	The *Client's* certificate of Completion has been issued
Loss of or damage to Equipment, Plant and Materials	The replacement cost	The defects Certificate has been issued
The *Contractor's* liability for loss of or damage to property (except the works, Plant and Materials and Equipment) and for bodily injury to or death of a person (not an employee of the *Contractor*) arising from or in connection with the *Contractor's* Providing the Works	Minimum £5,000,000 in respect of every claim without limit to the number of claims	
Liability for death of or bodily injury to employees of the *Contractor* arising out of and in the course of their employment in connection with this contract	The amount required by the applicable law	
Failure of the *Contractor* to use the skill and care normally used by professionals providing works similar to the works	Minimum £500,000 in respect of every claim without limit to the number of claims	6 years following Completion of the whole of the works or earlier termination

The *Adjudicator nominating body* is	The Institution of Civil Engineers

The *tribunal* is	litigation in the courts

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

Only enter details here if additional conditions are required.

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

<table>
<tr><td></td><td>• Radioactive, toxic, explosive or other hazardous properties of an explosive nuclear device
• Natural disaster
• Fire and explosion
• Impact by aircraft or other device or thing dropped from them</td></tr>
<tr><td>Z8.0</td><td>Framework Agreement</td></tr>
<tr><td>Z8.1</td><td>The Contractor shall ensure at all times during this contract it complies with all the obligations and conditions of the Framework Agreement made with the Client.</td></tr>
<tr><td>Z9.0</td><td>Termination</td></tr>
<tr><td>Z9.1</td><td>Delete the text of Clause 92.3 and replace with:
If the Contractor terminates for Reason 1 or 6, the amount due on termination also includes 5% of any excess of a forecast of the amount due at Completion had there been no termination over the amount due on termination assessed as for normal payments.</td></tr>
<tr><td>Z10.0</td><td>Data Protection</td></tr>
<tr><td>Z10.1</td><td>The requirements of the Data Protection Schedule shall be incorporated into this contract</td></tr>
<tr><td>Z11.0</td><td>Liabilities and Insurance</td></tr>
<tr><td>Z11.1</td><td>Civil data protection claims and regulatory fines for breaches of Data Protection Legislation are excluded from any limit of liability stated.</td></tr>
<tr><td>Z30.0</td><td>Material Price Volatility
The Client recognises the ongoing pricing uncertainty in relation to materials for the period from 1 July 2021 to 30 June 2023 the Client will mitigate this additional cost through this clause. Payment is made per assessment based upon a general average material proportion within assessments, calculated at 40%.</td></tr>
<tr><td>Z30.1</td><td>Defined terms
a) The Latest Index (L) is the latest index as issued by the Client. The L, which is at the discretion of the Client, is based upon the issued consumer price index ((CPI) based upon the 12-month rate) before the date of assessment of an amount due.
b) The Price Volatility Provision (PVP) at each date of assessment of an amount due is the total of the Material Factor as defined below multiplied by L for the index linked to it.
c) Material Factor (MF) 40% is used, based on a general average material proportion across our programme. The volatility provision is only associated with material element. No volatility provision is applicable to any other component of costs.</td></tr>
<tr><td>Z30.2</td><td>Price Volatility Provision
Through a Compensation Event the Client shall pay the PVP. PVP is calculated as:
Assessment x MF x L = PVP</td></tr>
<tr><td>Z30.3</td><td>Price Increase
Each time the amount due is assessed, an amount for price increase is added to the total of the Prices which is the change in the Price for Work Done to Date for the materials component only (and the corresponding proportion) since the last assessment of the amount due multiplied PVP for the date of the current assessment.</td></tr>
<tr><td>Z30.4</td><td>Compensation Events
The Contractor shall submit a compensation event for the PVP on a monthly basis (where applicable) capturing Defined Cost only for the PWDD increase in month. Forecasted costs should only be considered for the June 2023 period compensation event.
<table>
<tr><th>Assessment Date</th><th>Defined Cost?</th><th>Forecasted Cost?</th></tr>
<tr><td>31st Jul 21</td><td>In period costs only</td><td>No</td></tr>
<tr><td>31st Aug 21</td><td>In period costs only</td><td>No</td></tr>
<tr><td>30th Sept 21</td><td>In period costs only</td><td>No</td></tr>
</table>
</td></tr>
</table>

31st Oct 21	In period costs only	No
30th Nov 21	In period costs only	No
31st Dec 21	In period costs only	No
31st Jan 22	In period costs only	No
28th Feb 22	In period costs only	No
31st Mar 22	In period costs only	No
30th Apr 22	In period costs only	No
31st May 22	In period costs only	No
30th Jun 22	In period costs only	No
31st Jul 22	In period costs only	No
31st Aug 22	In period costs only	No
30th Sept 22	In period costs only	No
31st Oct 22	In period costs only	No
30th Nov 22	In period costs only	No
31st Dec 22	In period costs only	No
31st Jan 23	In period costs only	No
28th Feb 23	In period costs only	No
31st Mar 23	In period costs only	No
30th Apr 23	In period costs only	No
31st May 23	In period costs only	No
30th Jun 23	In period costs only	Forecasted costs for remainder of contract

The Defined Cost for compensation events is assessed using

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

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

Contract Data

The *Contractor's* Contract Data

	The *Contractor* is	
Name	Land & Water Services Ltd	
Address for communications	Weston yard, Albury, Guildford, Surrey, GU5 9AF	
Address for electronic communications	[redacted]	
The *fee* percentage is	As framework	%
The *people rates* are	As framework	
category of person	unit	rate
The *published list of Equipment* is		As framework
The *percentage for adjustment for Equipment* is		As framework

Contract Data

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

The *Contractor* offers to Provide the Works in accordance with these *conditions of contract* for an amount to be determined in accordance with these *conditions of contract*.	
The offered total of the Prices is	£ 571,743.92
	Enter the total of the Prices from the Price List.
Signed on behalf of the *Contractor*	
Name	[redacted]
Position	[redacted]
Signature	[redacted]
Date	31.8.2022
The *Client* accepts the *Contractor's* Offer to Provide the Works	
Signed on behalf of the *Client*	
Name	[redacted]
Position	[redacted]
Signature	[redacted]

Date	13/09/2022

Price List

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

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

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

Item Number	Description	Unit	Quantity	Rate	Price
1	Produce full fabrication and construction drawings for hydraulic control/stop log facility and walkway over inlet structure based on Atkins detailed design drawing	Sum	1		£433.38
2	Review consents/licenses, vary FRAP and obtain Thames Water Operational Safety Authorisation (TWOSA)	Sum	1		£4,466.01
3	Design of temporary works	Sum	1		£6,250.00
4	Fabrication of hydraulic control/stop log facility	Sum	1		£13,256.25
5	Purchase materials for inlet, including walkway	Sum	1		£35,938.96
6	Purchase aggregate materials for channel substrate	Sum	1		£90,311.45
7	Purchase materials for rock ramp	Sum	1		£24,361.34

8	Purchase materials for formal crossing over the Thames Water sewer pipe	Sum	1		£11,592.16
9	Produce Construction Phase Plan (CPP) and other associated documents, including a Site Waste Management Plan (SWMP)	Sum	1		£4,354.25
10	Produce an EAP for the works (to be submitted to the *Client* 2 weeks before work starts).	Sum	1		£1,304.25
11	Any necessary advance tree works and strimming for reptile mitigation	Sum	1		£4,378.25
12	Mobilise (including provision of welfare facilities traffic management and temporary fencing)	Sum	1		£17,970.75
13	Preliminaries and supervision	Sum	1		£102,549.24
14	GPR survey of areas of intrusive works and other areas as deemed necessary by Contractor	Sum	1		£2,375.00
15	Install temporary works (including provision to manage flows)	Sum	1		£112,282.54
16	Construction of inlet, including installation of walkway	Sum	1		£28,402.21
17	Excavation and grading of naturalised channel, including introduction of gravels	Sum	1		£38,198.54
18	Construction of rock ramp structure at the downstream end of the channel	Sum	1		£14,552.44
19	Construction of formal crossing over the Thames Water sewer pipe	Sum	1		£10,469.42
20	Excavation and grading of backwater 1	Sum	1		£2,766.60
21	Excavation and grading of backwater 2	Sum	1		£1,148.40
22	Excavation and grading of backwater 3	Sum	1		£1,200.60
23	Landscaping works to form an earth bund adjacent to Clay Lane using the spoil excavated from the channel and backwaters (waste disposal option 1)	Sum	1		£13,567.38
24	Off-site disposal of all spoil in accordance with the current Waste Management Regulations (waste disposal option 2)	Sum	1	[redacted]	£0.00
25	Reinstatement of land	Sum	1		£9,512.25
26	De-mobilise	Sum	1		£17,970.75
27	Preparation of 'as built' drawings and provision of information to the Principal Designer to compile the Health and Safety File (including information on materials used and maintenance) - to be provided within a month of project completion.	Sum	1		£1,347.00
28	Completion of the Environment Agency's Carbon Calculator and Final Carbon Report for the 'as built' project to be provided within a month of project completion.	Sum	1		£784.50
			The total of the Prices		£571,743.92

The method and rules used to compile the Price List are

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

Scope

The Scope should be a complete and precise statement of the *Client's* requirements. If it is incomplete or imprecise there is a risk that the *Contractor* will interpret it differently from the *Client's* intention.

1. Description of the *works*

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

Background info

Bowers Old Bucks weir is located on the River Wey at Burpham Court Farm to maintain water levels for the Wey navigation, which flows off to the northeast, with the main Wey continuing to flow northwest (as seen on the General Arrangement Plan drawing). The weir is currently impassable to fish, and due to the need to maintain water levels, a bypass channel was deemed the most appropriate solution to improve fish passage. Over the last couple of years, the Environment Agency (EA) have been working with Guildford Borough Council (GBC), who own the site, and Atkins consultancy to design a 275m long naturalised fish bypass channel which incorporates a gravel-lined bed, three backwater features, an inlet structure (also serving as a crossing point), a formal crossing over a Thames Water sewer pipe and a rock ramp structure.

A planning application for these works was submitted to GBC on 27/4/22 and a FRAP submitted to the EA on 13/05/22. Both of these permissions are due for determination prior to this contract being awarded.

Project deliverables

The principal objective of this contract is to construct the fish bypass channel at Burpham Court Farm. In order to achieve this, the following works are required:

- The design and installation of temporary works as required. Dam sections must adhere to all current temporary works regulations. Work cannot commence on site before the *Client* approves the design. The *Contractor* will need to ensure that contingency planning is in place to remove any temporary works, plant, compound, welfare facilities etc. in the event of a flood.
- Design, fabrication and installation of the new hydraulic control/stoplog facility shown on drawings 5192284-ATK-XX-ZZ-DR-C-0151 A-C4 and 5192284-ATK-XX-ZZ-DR-S-0005 Rev C01. The *Client* is open to discussion on the material used to construct the hydraulic control/stop logs but for tendering purposes, should work on the assumption that this will be aluminium.

- Review of the FRAP (and any approved method statements) and apply for a variation as required. The *Contractor* must accept all responsibility and liability for their methodology.
- Discharge of any pre-commencement planning conditions as required
- Obtain a Thames Water Operational Safety Authorisation (TWOSA) before any construction activity is undertaken near the Thames Water sewer main.
- Liaison with the landowners to agree access and the location of any compound and welfare facility. As most of the land where construction is to occur sits within the floodplain, the compound will likely be located on the raised ground to the north of the river.
- Access arrangements will need to have consideration of the project's approved Red Line Boundary.
- Production of the Construction Phase Plan (CPP) and all other associated documents. A suitably developed CPP must be issued for approval no less than 10 days prior to planned mobilisation. Please refer to the Pre-Construction Information (PCI) for further clarification of requirements for the CPP.
- Production of an Environmental Action Plan (EAP) which demonstrates how the *Contractor* will manage the works to avoid any negative impacts on the environment or ecology, including pollution prevention, tree protection (please refer to the Tree Constraints Plan), protected species requirements and archaeological mitigation. The recommendations outlined in the Ecological Survey Report, Arboricultural Impact Assessment and Archaeological Walkover Survey must be incorporated and complied with. The EAP must be submitted to the *Client* for review at least two weeks before construction work starts and reviewed alongside the EA's FBG officer on a fortnightly basis thereafter.
- The *Contractor* must produce a Site Waste Management Plan (SWMP) and ensure compliance with the current Waste Management Regulations.
- A GPR survey of areas of intrusive works, and other areas as deemed necessary by the *Contractor* e.g. this could include survey of access routes where heavy plant is likely to be required to operate over possible service routes, is to be carried out prior to works commencing on site in accordance with the SHEW Code of Practice. The requirement for GPR can be risk assessed out where this is deemed not reasonably practicable.
- Liaison with the National Trust regarding water level management and impacts to river users during the works
- Provision of welfare facilities and a compound area.
- Provision of traffic management as required.
- A detailed photographic record of access routes and all working areas must be carried out by the *Contractor* prior to works commencing on site and provided to the *Client*. All access routes and working areas must be reinstated on completion of the works.
- Construction of the fish bypass channel in accordance with the designs. Further info on the design of the bypass channel and backwaters can be found in the design report ('Bypass channel and wetlands v3.0').
    - Earthworks to form a new river channel to facilitate fish passage around the weir at Burpham Court Farm. The channel plan and long section can be seen in Drawing 5192284-ATK-XX-ZZ-DR-C-0150-C4
    - Formation of an inlet structure consisting of steel sheet piles, precast concrete units, a hydraulic control/stop log facility and a pedestrian footbridge. The details of this inlet structure (also known as the 'fish pass exit) can be found in drawings 5192284-ATK-XX-ZZ-DR-C-0151 A-C4, 5192284-ATK-XX-ZZ-DR-S-0005 Rev C01, 5192284-ATK-XX-ZZ-DR-S-0006 Rev C01, 5192284-ATK-XX-ZZ-DR-S-0007 Rev C01 and 5192284-ATK-XX-ZZ-DR-S-0008 Rev C01. This includes the provision of fixings for the boom but not the boom itself. This will be installed by the EA at a later date, if required.
    - Formation of a formal crossing over the Thames Water sewer pipe (concrete). The details of this crossings can be seen in Drawing 5192284-ATK-PC-ZZ-DR-S-0004 and Drawing 5192284-ATK-PC-ZZ-DR-C-0004. The design has been reviewed and approved by Thames Water.
    - Formation of a rock ramp structure at the downstream end of the channel. The details of this rock ramp structure (also known as the 'fish pass entrance') can be found in Drawing 5192284-ATK-XX-ZZ-DR-C-0152 A-C4.
    - Earthworks to form three new backwater features connected to the new bypass channel. The details of the backwaters can be found in drawings 5192284-ATK-XX-ZZ-DR-C-0153-C2, 5192284-ATK-XX-ZZ-DR-C-0154-C2 and 5192284-ATK-XX-ZZ-DR-C-0155-C2.
- Landscaping works to form an earth bund adjacent to Clay Lane (see further info below)
- Management and disposal of waste in accordance with the *Client*'s SHEW Code of Practice
- Prior to completion an input to a suitably developed Health and Safety File must be issued to the Principal Designer along with 'as built' drawings (provided in CAD and pdf format) showing any changes from the original design.
- The Successful *Contractor* will be provided with a completed Carbon Calculator. This is the Environment Agency's tool for assessing whole life carbon. In order to support the *Client* in cutting

carbon emissions, the *Contractor* must complete an 'as built' Carbon Calculator and Final Carbon Report within one month of completion of the works.

Earth bund/spoil disposal

The current intention is for the material excavated from the channel and backwaters to be used to create an earth bund along the site's boundary with Clay Lane. The bund will screen Clay Lane from visitors using the site and provide suitable habitat for burrowing insects, reptiles and badgers. The repurposing of spoil in this way will also reduce carbon emissions associated with taking the spoil off-site. The location of the bund has been agreed with GBC and is currently being designed by ESE *Contractor* under a separate contract. The bund design will be available prior to contract award but for time being, the *Contractor* should assume that the bund will be approximately 1.5m high and 10m wide. The location and extent of the bund can be seen on the General Arrangement Plan. Ground investigations will be carried out following/during the tender period. This may influence whether the excavated spoil is taken off-site for disposal or used on-site to create the bund. As a result, the *Contractor* must cost for using the spoil to create the bund, in addition to the cost of taking the spoil off-site for disposal. The cost of off-site disposal will be excluded from the total project cost for tender evaluation purposes.

The *Contractor* shall also:

- Fulfil the duties of both Principal *Contractor* and Designer in terms of the CDM 2015 regulations. Duties will include, but are not limited to, producing the temporary works schedule, completing the RAG list and liaising with the *Client* and the EA's appointed Principal Designer. The role of Designer will be required for the design of the hydraulic control/stoplog facility and temporary works.
- Liaise with the *Client* and the Principal Designer on matters relating to the delivery of the project, compliance with the CDM regulations, flood risk management, regulatory compliance, ecological stewardship and the programme. The *Contractor* must carry out the work taking into consideration the information provided in the PCI.
- Update the EAP fortnightly, following advice from the EA's FBG officer. The EAP is a key contractual document which the *Contractor* must comply with though.
- Ensure that the fish bypass channel, backwaters and bund are created according to the design. There will be a requirement for the works to be inspected and signed-off by the Environment Agency's Fisheries team.
- Agree the specification of aggregate materials for the channel substrate in advance of ordering. Any gravel used to line the channel bed must be angular.
- Ensure that the land is reinstated upon completion of the works to the satisfaction of GBC and the EA's FBG team.
- Comply with the Safety, Health, Environment and Wellbeing (SHEW) CoP

All communications are to be made electronically and will be agreed in detail at project start up. It is anticipated that monthly progress meetings will be held and an allowance should be made for this, as well as ad hoc meetings as required to deliver the project.

2. Drawings

List the drawings that apply to the contract.

Drawing Number	Revision	Title
5192284-ATK-PC-ZZ-DR-C-0004	01.6	GENERAL ARRANGEMENT OF PIPE CROSSING SLAB
5192284-ATK-PC-ZZ-DR-S-0004	01.3	REINFORCEMENT DETAILS OF PIPE CROSSING SLAB
	2	GENERAL ARRANGEMENT PLAN
5192284-ATK-XX-ZZ-DR-C-0150-C3	C4	Fish pass channel plan and long section

5192284-ATK-XX-ZZ-DR-C-0151 A-C2	C4	Fish pass channel fish pass exit plan and cross sections
5192284-ATK-XX-ZZ-DR-C-0152 A-C4	C4	Fish pass channel fish pass entrance plan and cross sections
5192284-ATK-XX-ZZ-DR-C-0153-C2	C2	Backwater 1 plan, long section and cross sections
5192284-ATK-XX-ZZ-DR-C-0154-C2	C2	Backwater 2 plan, long section and cross sections
5192284-ATK-XX-ZZ-DR-C-0155-C2	C2	Backwater 3 plan, long section and cross sections
5192284-ATK-XX-ZZ-DR-S-0005	**C01**	General arrangement for fish pass exit structure
5192284-ATK-XX-ZZ-DR-S-0006	**C01**	Reinforcement details of fish pass exit structure sheet 01 of 02
5192284-ATK-XX-ZZ-DR-S-0007	**C01**	Fish pass exit structure walkway arrangement
5192284-ATK-XX-ZZ-DR-S-0008	**C01**	Reinforcement details of fish pass exit structure sheet 02 of 02
5192284-ATK-XX-ZZ-M3-C		Proposed 3D CAD model
A120101-TGEE-BC-19-DR-C-0001-P03	**P03**	**Burpham Court Site Hazard Plan**
A120101-TGEE-BC-19-DR-C-0002-P03	**P03**	**Burpham Court Bund Layout**

3. Specifications

List the specifications which apply to the contract.

Title	**Date or Revision**	**Tick if publicly available**
Environment Agency Blockage Management Guide (Gov.uk)	12/2019	yes
Latest Ciria Guidance: Culvert, screen and outfall manual - New CIRIA guidance	12/2019	yes
Minimum Technical Requirements	As per the SE FCRM Operations Framework	
The civil engineering works are to be constructed to the 'Civil Engineering Specification for the Water Industry, Seventh Edition', published by the Water Industry Research Ltd in 2011.	7th Edition	yes

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

State any constraints on the sequence and timing of work and on the methods and conduct of work including the requirements for any work by the *Client*.
The *Contractor* shall not commence any work on the site until the *Client*, or their representative, has accepted the method statements and risk assessments related to this contract and provided authorisation in writing.
Burpham Court Farm is owned by Guildford Borough Council and part of it leased to Surrey Wildlife Trust who graze it with cattle. Both organisations are supportive of the work but the *Contractor* will need to agree working methodologies and access agreements with both parties in advance of the works. The *Client* will be responsible for ensuring any land agreements are in place before the works commence.
Burpham Court Farm is not currently accessible to the public (other than the occasional trespasser) but may be opened to the public in the near future.
All temporary works and access arrangements around them will be sole responsibility of the *Contractor* and should be priced in the tender submission. There is a bridge over the River Wey which connects the north and south parts of the site. A structural assessment determining the loading capacity of the bridge is being carried out by an ESE *Contractor* and will be available to tenderers on 1st June 2022.
Construction of the bypass channel is close to Bowers Old Bucks Weir. *Contractor* will need to be considerate of Bowers Old Bucks Weir in their construction planning / methodology and adopt a method of working to protect the structure during the works.
Thames Water are intending to construct a new sewer pipe within this project's red line boundary. The works aren't due to start until 2023 but the *Client* will liaise with Thames Water in case of any overlaps between the two projects. If an overlap is confirmed, the *Contractor* will be responsible for communicating with Thames Water's *Contractor*s on access arrangements.
The works are located within the floodplain. The *Contractor* will need to ensure that contingency planning is in place to remove any temporary works, plant, compound, welfare facilities etc. in the event of a flood.
The measures outlined in the Ecological Survey Report must be incorporated into the *Contractors* CPP/EAP and be complied with. This includes but is not limited to the following: • 10m buffer zones along the River Wey and adjacent to wetland features. Buffers should be fenced with orange netlon fencing or similar. Where a 10m buffer cannot be maintained along the River Wey or adjacent to wetland features (for example, alongside the pond near the Site entrance and where the wetland feature and River Wey are very close to each other in the middle of the Site), measures to prevent run-off should be considered. • The *Contractor* will protect all of the retained trees and their Root Protection Areas (RPAs) within 10m of the proposed works with orange netlon fencing or similar as outlined in the Arboricultural Impact Assessment and Tree Constraints Plan. • Any tree or shrub clearance will be carried out outside of the breeding bird season (typically taken to be from March to August inclusive) where possible. If clearance is required within the main breeding bird season, vegetation will need to be checked for active nests by the EA's FBG team no more than 48 hours prior to removal. If an active nest is found, an appropriately sized exclusion zone will be set up around the nest until the young birds have fledged. • In order to minimise the risk to amphibians/reptiles, the scrub/grass within the working area should be cut to 150mm and left for a minimum of 24 hours to allow amphibians/reptiles to move into surrounding habitat, followed by cutting the vegetation to ground level and leaving for a further 24 hours minimum period. Prior to strimming, the EA's FBG team will carry out a destructive finger-tip search of any potential refugia or hibernacula to allow any resting amphibians to move out of the area. • In order to minimise any impact, piling activities must avoid the coarse fish spawning season (March to June inclusive). When piling, the power of the driving hammer must be increased slowly over a 5-minute period in order to enable fish to swim away from the area before the full power of the pile hammer is felt. • The location of Himalayan Balsam (and any other non-native invasive species) will be mapped and demarcated by the EA's FBG team before works commence to ensure these areas are avoided. Where excavation and/or vegetation clearance is required in these areas, the *Contractor* must separate and dispose of any arisings via a waste carrier that is licensed to take non-native invasive species. This will be advised to the *Contractor* as an instruction. • All works will follow up-to-date EA guidance regarding control measures when working in the vicinity of invasive species (https://www.gov.uk/guidance/prevent-the-spreadof-harmful-invasive-and-non-native-plants).

The EA's FBG team will carry out an ecological walkover in advance of any vegetation clearance and the works themselves to check that no additional ecological constraints have arisen since the last survey was carried out. Any additional ecological constraints/mitigation required will be advised to the *Contractor* as an instruction and incorporated into the EAP.

The 'Burpham Court earthwork survey' produced by Oxford Archaeology was carried out in response to comments received from Surrey County Council's (SCC) Archaeologist. The report shows existing features of archaeology which should be protected during the works. Of particular note, SCC's Archaeologist has advised that the ridge & furrow identified as '128' on figure 16 of the report should be protected and any tracking of plant kept to a minimum. The *Contractor* must demonstrate how they will protect any features of archaeological interest in their CPP/EAP and agree this with SCC's Archaeologist in advance of the works starting. This will include the use of designated trackways around field edges and limiting unnecessary movement across the ridge and furrow.

To note, the Archaeological Assessment also identified potential for parts of the Site adjacent to the river to contain upstanding and below ground remains associated with the initial construction of the River Wey Navigation. In order to minimise the risk of uncovering these remains during construction and causing delays, a contract is currently being prepared to carry out trial trenching along the route of the fish pass in advance of the main construction.

The project is currently awaiting Planning and FRAP Approval. The *Contractor* should familiarise themselves with the planning application and FRAP. Where a conflict is identified (for example in construction methodologies based on the planning application/FRAP) this should be highlighted in your tender return. The *Contractor* must comply with any requirements set out as a result of conditions placed upon the Environment Agency by the planning authority and the EA's PSO team, which will be advised to the *Contractor* as an instruction.

There is a Thames Water sewer that runs underneath the proposed bypass channel (see services referenced below). Thames Water have reviewed and approved the slab pipe crossing that has been designed and advised that a Thames Water Operational Safety Authorisation (TWOSA) is required from Thames Water's Field Operations Specialist before are site work/ construction activity is undertaken near the asset. To issue the TWOSA, Thames Water will require a detailed method statement on how the work will be undertaken. The *Contractor* is responsible for obtaining this authorisation.

The *Contractor* shall notify the *Client* of any issues that may affect residents or the public (e.g. piling) and the dates and times of expected disturbances.

At the pre-start up meeting the *Client* will advise which activities in the *Contractors* programme will be the subject of tests or inspections. The *Contractor* must allow sufficient time in their programme for Atkins to review and approve the fabrication drawings for the hydraulic control/stop log facility.

Working times

The *Contractor* will be permitted to work between 7.30am and 6.00pm on weekdays (Monday to Friday), with piling restricted to the hours 9am – 5pm

5. Requirements for the programme

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

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

The *Contractor* submits his programme with the *Contractor's* Offer for acceptance. The *Contractor* shows on each programme which he submits for acceptance (in form of Gantt chart showing the critical path, proposed order and timing to undertake the works and proposed plant and labour resources) the following:

(a) Period required for mobilisation/ planning & post contract award

(b) Contract starting date

(c) Construction starting date

(d) Each of the activities listed within the Price List, including activities which are dependent upon river level

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

(f) Completion date

(g) Information to be provided, who it is to be provided by, and the date by which it is to be provided including anything required from the *Client*

(h) Order and timing of tests, inspections and commissioning activities whether done by the *Contractor* or Client or others

Following contract award, a programme is to be submitted every 4 weeks for acceptance by the *Client*

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

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

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

Site Information

Further site information is included within the PCI.

There are two Thames Water manholes in the area of land adjacent to the proposed fish bypass channel that are known to frequently surcharge raw sewage. Please report any pollution incidents to the EA Hotline - 0800 80 70 60.

Access:

- BCF Accommodation Bridge Details (Oct 1992)
- Burpham Court Farm Bridge 1993

Channel surveys:

- Long section Fishers Farm Bridge to Woking Road Bridge (02024-01)
- Cross section 03.077 to 03.086 (02024-09)
- Cross section 03.087 to 03.097 (02024-10)

Designer's docs:

- Burpham Court Farm - Bypass channel and wetlands v3.0 **– please ignore information relating to wetlands, scrapes and ditches**
- Appendix G Public Safety Risk Assessment
- Appendix I Flood Risk Assessment
- Flood Risk Appendix A_Burpham_Technical Note v1.0
- Flood Risk Appendix B_Burpham_Hydraulic modelling summary_v1.0
- Appendix J Designers Risk Assessment (v1.0)
- Appendix K - Bill of Quantities (v 2.0)
- Appendix N Design report for Fish pass exit (vP1.1)
- Design report for pipe crossing slab (v P01.4)

Environmental surveys:

- Archaeological Desk-Based Assessment, October 2019 (1)
- Archaeological Walkover Survey Addendum, June 2021 (v.1)
- Tree Constraints Plan-1476032
- Tree survey
- Burpham Court Farm fish bypass channel ecological report (Sept 2021)
- Burpham Court Farm Arboricultural Impact Assessment

FRAP docs:

- Burpham – FRAP TMP RAMS & EMP
- Burpham FRAP – Part A
- Burpham FRAP – Part B10
- Burpham FRAP – Part F3
- Red Line Boundary & Design
- Appendix I Flood Risk Assessment (in 'Designer's docs)
- Flood Risk Appendix A_Burpham_Technical Note v1.0 (in 'Designer's docs)
- Flood Risk Appendix B_Burpham_Hydraulic modelling summary_v1.0 (in 'Designer's docs)
- Burpham Court Farm fish bypass channel ecological report (Sept 2021) (in 'Environmental surveys)
- Tree Constraints Plan-1476032 (in 'Environmental surveys)

Ground investigations:

- GI in info in WWT SUR02-2-K Concept Design Report (pages 18, 32-34 only)
- 6 photos of GI

Planning app docs/drawings:

- All drawings listed in section 2.
- Appendix I Flood Risk Assessment (in 'Designer's docs')
- Flood Risk Appendix A_Burpham_Technical Note v1.0 (in 'Designer's docs')
- Flood Risk Appendix B_Burpham_Hydraulic modelling summary_v1.0 (in 'Designer's docs')
- All Environmental surveys listed above
- Burpham Court Farm Planning Statement
- Burpham Court Farm covering letter
- Landscape & Ecological Management Plan
- Burpham Traffic Management Plan (TMP) rev 2
- Burpham Court Farm Construction & Environment Management Plan (CEMP) rev 3
- Burpham Court Farm Arboricultural Method Statement and Tree Protection Plan rev 1.2

Services search pack, including the following:

- Utility search request_Burpham Court Farm
- Site map
- Results Schedule
- LSBUD
- At a glance
- SGN
- UK Power Networks
- National Grid
- BT
- Cityfibre
- Vodafone
- Zayo
- CA Telecom
- Instalcom

- Sky - Verizon - Virgin Media - Thames Water – clean water - Thames Water – waste water - River obstructions
Atkins BCF topo

Proposed sub-contractors

	Name and address of proposed subcontractor	Nature and extent of work
1.	Form of Contract:	
2.	Form of Contract:	
3.	Form of Contract:	
4.	Form of Contract:	