NEC4 Engineering and Construction

Short Contract

FCRM Operational Framework – South East Hub Lot 1

FCRM SSD Capital Recondition 20/21 Solent and South Downs Package 1

A contract between	**The Environment Agency** **Horizon House** **Deanery Road** **Bristol** **BS1 5AH**
And	**ECS Engineering Services Ltd**
For	**FCRM SSD Capital Recondition 20/21 Solent and South Downs Package 1**
	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	Environment Agency, Guildbourne House, Chatsworth Road, Worthing, West Sussex, BN11 1LD	
Address for electronic communications	[redacted]	
The *works* are	Data collection, detail design, permit approvals, construction documentation and construction to recondition/repair existing assets in the Environment Agency Solent and South Downs Area to their required condition.	
The *site* is	Various locations across Solent and South Downs (Sussex and Hampshire) Portsmouth Lane trash screen replacement TQ3376725727 A259/The Drove culvert de-silt TQ 4541201901 Tanyard Stream culvert TQ 1767111478 Mill Rythe culvert, Haying Island, Hampshire SU 7288400923 Brookside Way bridge, Southampton, Hampshire SU4404915851 Porchester Outfall Repair SU6225805199 Porchester Seawall Repair SU6229105169 Noah's Ark Lane Flood Wall (named and unscoped) Argos Flood wall (named and unscoped) Pagham Rife outfall (named and unscoped)	
The *starting date* is	22/11/2021	
The *completion date* is	31/03/2022	
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	nil	%
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	-	% per complete week of delay.
Insert a rate only if a rate less than 0.5% per week of delay has been agreed.		
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 GBP	
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 £1,000,000 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 • 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
Z8.0	Framework Agreement
Z8.1	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*.
Z9.0	Termination
Z9.1	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.
Z10.0	Data Protection
Z10.1	The requirements of the Data Protection Schedule shall be incorporated into this contract
Z11.0	Liabilities and Insurance
Z11.1	Civil data protection claims and regulatory fines for breaches of Data Protection Legislation are excluded from any limit of liability stated.
Z12.0	Packaging
Z12.1	For contracts containing packages of projects the *Client's* Contract Data, Scope and Site Information particular to an individual project is contained within its Site Specific Pack
Z7.2	Additional Compensation Event COVID-19 Managing and mitigating the impact of Covid 19 and work in accordance with Public Health England guidance, as may vary from time to time, from 1st July to 31st August 2021.
Z30.0	Material Price Volatility The Client recognises the ongoing pricing uncertainty in relation to materials for the period from 1 July 2021 to 30 June 2022 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%.
Z30.1	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.
Z30.2	Price Volatility Provision Through a Compensation Event the Client shall pay the PVP. PVP is calculated as: Assessment x MF x L = PVP

Z30.3	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.
Z30.4	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 2022 period compensation event.

Assessment Date	Defined Cost?	Forecasted Cost?
31st Jul 21	In period costs only	No
31st Aug 21	In period costs only	No
30th Sept 21	In period costs only	No
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	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	ECS Engineering Services Limited	
Address for communications	[redacted]	
Address for electronic communications	[redacted]	
The *fee* percentage is	12	%
The *people rates* are		
category of person	unit	rate
The *published list of Equipment* is		
The *percentage for adjustment for Equipment* is		

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	£ 143,934.00 [redacted]
	Enter the total of the Prices from the Price List.

Signed on behalf of the *Contractor*

Name	[redacted]
Position	[redacted]
Signature	[redacted]
Date	22/12/21

The *Client* accepts the *Contractor's* Offer to Provide the Works

Signed on behalf of the *Client*

Name	[redacted]
Position	[redacted]
Signature	[redacted]
Date	22/12/2021

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	Portsmouth Lane Trash Screen				
1.1	Surveys				[redacted]
1.1.1	Topographical survey	sum			[redacted]
1.1.2	One comprehensive environmental survey to develop the design and support the Flood Risk Activity Permit application.	sum			[redacted]
1.1.3	Services search	sum			[redacted]
1.2	Detailed Design and construction drawings	sum			[redacted]
1.3	Design statement that explains the design philosophy, standards, data used and any assumptions. (Can be one document covering all sites)	sum			[redacted]
1.4	Pre-Construction Information	sum			[redacted]
1.5	Construction Phase Plan	sum			[redacted]
1.6	Environmental Action Plan	sum			[redacted]
1.7	Flood Risk Activity Permit and/or Marine licence including any fees and supporting Construction Method Statement and Environmental Risk Assessment	sum			[redacted]
1.8	Project Management and programme	sum			[redacted]
1.9	Construction of asset repair including any Mobilisation Welfare Site access Temporary works Off-site fabrication Watercourse flow management Access reinstatement Demobilisation	sum			[redacted]
1.10	Health and Safety File including As built drawings	sum			[redacted]

	1: Portsmouth Lane Trash Screen – Sub total				**£ 33,586.00**
2	A259/The Drove culvert de-silt				
2.1	Surveys				
2.1.1	Topographical survey	sum			[redacted]
2.1.2	One comprehensive environmental survey for to develop the design and support the Flood Risk Activity Permit application.	sum			[redacted]
2.1.3	Services search	sum			[redacted]
2.2	Detailed Design and construction drawings	sum			[redacted]
2.3	Design statement that explains the design philosophy, standards, data used and any assumptions. (Can be one document covering all sites)	sum			[redacted]
2.4	Pre-Construction Information	sum			[redacted]
2.5	Construction Phase Plan	sum			[redacted]
2.6	Environmental Action Plan	sum			[redacted]
2.7	Flood Risk Activity Permit and/or Marine licence including any fees and supporting Construction Method Statement and Environmental Risk Assessment	sum			[redacted]
2.8	Project Management and programme	sum			[redacted]
2.9	Construction of asset repair including any Mobilisation Welfare site access temporary works Watercourse flow management Silt disposal (assumed 40% of culvert volume) access reinstatement demobilisation	sum			[redacted]
2.10	Health and Safety File including As built drawings	sum			[redacted]
	2: A259/The Drove culvert de-silt – Sub total				[redacted]
3	Tanyard Stream culvert				
3.1	Surveys				
3.1.1	CCTV Culvert survey	sum			[redacted]
3.1.2	One comprehensive environmental survey for to develop the design and support the Flood Risk Activity Permit application.	sum			[redacted]
3.1.3	Services search	sum			[redacted]
3.2	Detailed Design and construction drawings	sum			[redacted]
3.3	Design statement that explains the design philosophy, standards, data used and any assumptions. (Can be one document covering all sites)	sum			[redacted]
3.4	Pre-Construction Information	sum			[redacted]
3.5	Construction Phase Plan	sum			[redacted]
3.6	Environmental Action Plan	sum			[redacted]

3.7	Flood Risk Activity Permit and/or Marine licence including any fees and supporting Construction Method Statement and Environmental Risk Assessment	sum			[redacted]
3.8	Project Management and programme	sum			[redacted]
3.9	Construction of asset repair including any Mobilisation Welfare site access temporary works access reinstatement demobilisation	sum			[redacted]
3.10	As built drawings	sum			[redacted]
	3: Tanyard Stream culvert – Sub total				[redacted]
4	Mill Rythe culvert, Hayling Island, Hampshire				
4.1	Surveys				
4.1.1	structural assessment	sum			[redacted]
4.1.2	One comprehensive environmental survey for to develop the design and support the Flood Risk Activity Permit application.	sum			[redacted]
4.1.3	Services search	sum			[redacted]
4.2	Detailed Design and construction drawings	sum			[redacted]
4.3	Design statement that explains the design philosophy, standards, data used and any assumptions. (Can be one document covering all sites)	sum			[redacted]
4.4	Pre-Construction Information	sum			[redacted]
4.5	Construction Phase Plan	sum			[redacted]
4.6	Environmental Action Plan	sum			[redacted]
4.7	Flood Risk Activity Permit and/or Marine licence including any fees and supporting Construction Method Statement and Environmental Risk Assessment	sum			[redacted]
4.8	Project Management and programme	sum			[redacted]
4.9	Construction of asset repair including any Mobilisation Welfare site access temporary works access reinstatement demobilisation	sum			[redacted]
4.10	As built drawings	sum			[redacted]
	4: Mill Rythe culvert, Hayling Island, Hampshire – Sub total				[redacted]
5	Brookside Way bridge, Southampton, Hampshire				
5.1	Surveys				
5.1.1	Topographical survey	sum			[redacted]
5.1.2	One comprehensive environmental survey for to develop the design and support the Flood Risk Activity Permit application.	sum			[redacted]

5.1.3	Services search	sum			[redacted]
5.2	Detailed Design and construction drawings	sum			[redacted]
5.3	Approval in Principle in accordance with The Design Manual for Roads and Bridges (DMRB) CG 300 Technical approval of highway structures (Design statement)	sum			[redacted]
5.4	Pre-Construction Information	sum			[redacted]
5.5	Construction Phase Plan	sum			[redacted]
5.6	Environmental Action Plan	sum			[redacted]
5.7	Flood Risk Activity Permit and/or Marine licence including any fees and supporting Construction Method Statement and Environmental Risk Assessment	sum			[redacted]
5.8	Project Management and programme	sum			[redacted]
5.9	Construction of asset repair including any Mobilisation Welfare site access temporary works Off-site fabrication access reinstatement demobilisation	sum			[redacted]
5.10	Health and Safety File including As built drawings	sum			[redacted]
	5 Brookside Way bridge, Southampton, Hampshire – Sub total				[redacted]
6	Porchester Outfall and Seawall Repair				
6.1	Surveys				
6.1.1	One comprehensive environmental survey to develop the design and support the Flood Risk Activity Permit application.	sum			[redacted]
6.1.2	Services search	sum			[redacted]
6.2	Detailed Design and construction drawings	sum			[redacted]
6.3	Design statement that explains the design philosophy, standards, data used and any assumptions. (Can be one document covering all sites)	sum			[redacted]
6.4	Pre-Construction Information	sum			[redacted]
6.5	Construction Phase Plan	sum			[redacted]
6.6	Environmental Action Plan	sum			[redacted]
6.7	Flood Risk Activity Permit and/or Marine licence including any fees and supporting Construction Method Statement and Environmental Risk Assessment	sum			[redacted]
6.8	Project Management and programme	sum			[redacted]
6.9	Construction of asset repair including any Mobilisation Welfare site access temporary works	sum			[redacted]

	access reinstatement demobilisation				
6.10	As built drawings	sum			[redacted]
	6: Porchester Outfall and Seawall Repair – Sub total				[redacted]

[redacted]

The *Contractor* is to use the above activities to complete the pricing template below. Based upon the *Contractor*'s programme, the *Contractor* shall divide the works over two financial years.
All, some or none of the FY2022-23 work may be added into the Contract as Compensation Events (as per the quoted price) at the *Client*'s discretion, subject to *Contractor* performance and funding approval.

2021/2022 Financial Year

Item Number	Description	Unit	Quantity	Rate	Price
2	The Drove Culvert	Sum			[redacted]
3	Tanyard Culvert	Sum			[redacted]
5	Brookside Way	Sum			[redacted]
		Sum			
		Sum			
		Sum			
	The total of the Prices				**£ 143,934.00**

2022/2023 Financial Year

Item Number	Description	Unit	Quantity	Rate	Price
1	Portsmouth Lane	Sum			[redacted]
4	The Mill Rythe	Sum			[redacted]
6	Portchester Sea Outfall	Sum			[redacted]
		Sum			
		Sum			
		Sum			

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

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.

The *Contractor* shall deliver Activities 2,3 and 5.

Activities 1, 4 and 6 may be instructed at the *Client*'s discretion.

The *Contractor* is to undertake the detailed design and construction to recondition identified sections of assets back to condition Grade 2 or better without increasing flood risk during and post project completion. General assessment criteria stated below

Table 1

Grade	Rating	Description
1	Very Good	Cosmetic defects that will have no effect on performance.
2	Good	Minor defects that will not reduce the overall performance of the asset.
3	Fair	Defects that could reduce performance of the asset.

1 Portsmouth Lane Trash Screen
The *Contractor* shall repair the asset by October 2022 by undertaking the following tasks:

An initial needs assessment has been completed in line with the CIRIA Culverts Screens and Outfalls Manual and identified that Portsmouth Lane requires a debris screen (not a security screen). Therefore the work required is to:

- Re-design and construct new screen in line with latest CIRIA Culvert Screen and Outfall Manual. Re-designed screen will incorporate changes that improve the function/operation of the asset to reduce/minimise the risk of the screen becoming blocked and overwhelmed.
- The design should consider the suitability and loading requirements that would be applied to the access hatches during maintenance.

The screen can be accessed by the adjacent homeowner via a side gate.

The relevant culvert details are included within the 2016 CCTV report provided, with the diameter listed as Ø1000mm.

No flow data is available for this watercourse as it is ungauged.

Upstream flow diversion is not possible.

A traffic management system will need to be developed in the design stage in co-operation with the local authority and *Client* area team.

2 A259/The Drove culvert de-silt
The *Contractor* shall repair the asset by October 2022 by undertaking the following tasks:

- Undertake CCTV survey to ascertain internal condition, culvert dimension, invert level and channel bed level

- Remove overhanging vegetation (and other blockages) from upstream and downstream (130m of clearance) watercourses. This will include but may not be limited to:
    - Lower limb trimming/cutting from upstream trees;
    - Channel-side vegetation trimming to allow access to inlet and for construction of silt trap(s);
    - Downstream reed and bramble trimming to allow sufficient access to install temporary
- Dispose of all cleared vegetation (note: no channel profile information is currently available)
- Clear area surrounding culvert openings
- De-silt culvert

- 50 meters long culvert, 0.9m diameter (as detailed in CCTV report - KES H35 EA Executive Report Drove)
- assume 40% blockage = 13m^3 contaminated silt (petrol station, supermarket, road run-off)
- The quantity of sediment is assumed as 13m^3, however, the *Client* understands there may be variance from this figure.
- No additional sediment should be removed from the culvert without prior written agreement with the *Client*.
- For the purposes of pricing please assume the silt is contaminated.
- Silt sampling and testing is required for all material loads removed and the *Contractor* shall provide the results to the *Client* at regular, agreed intervals, prior to removal from site.
- Additional disposal costs for contaminated silt will be dealt with by compensation events.
- The *Contractor* is to provide and dispose of appropriate sediment traps downstream of the site. To reduce the risk of cross contamination the *Contractor* is to wash down all vehicles and equipment between jetting sites.

- Design and construction of upstream silt traps to trap sediment and prevent silting of culvert
- Downstream silt mitigation during culvert de-silt and silt trap installation work.
- Dispose of arisings and any remaining debris off site

3 Tanyard Stream culvert

The *Contractor* shall repair the asset by October 2022 by undertaking the following tasks:

- Undertake CCTV to ascertain current condition of culvert and location of required repairs
- Establish site security and welfare given proximity to residential properties
- Remove fencepost and repair culvert damaged by fencepost and any additional damage identified from the CCTV survey
- The 4no. defects identified for repair are:
    - plywood sheet
    - hole at no. 5
    - hole at no. 11
    - fence post at no. 16.

    House numbers and hole locations to be confirmed from survey report.

Noted that other defects may be found during *Contractor*'s CCTV survey and will be managed as a Compensation Event.

Garden reinstatement to agreed pre-construction condition including potential grass seeding.

4 Mill Rythe culvert, Hayling Island, Hampshire

The *Contractor* shall repair the asset by October 2022 by undertaking the following tasks:

- Conduct structural assessment to confirm the condition and residual life of the existing structure and sheet piles and confirm locations where repairs of the sheet pile are required. The assessment will also confirm the suitability of existing piles to support the concrete slab.
    - If sheet pile condition is deemed appropriate to support existing concrete slab then the *Contractor* will repair the identified locations in the sheet piling. Assume 40 patch repairs are required, 0.25m² each, with the exact number to be identified and agreed from the Structural assessment. Additional repairs will constitute a Compensation Event under the contract.
    - If the current condition of the sheet piling is considered unsuitable to support the concrete slab, then the *Contractor* will agree the next course of action with *Client*, which may include design of patch repair to the sheet pile and removal of the concrete slab and replacement with a more suitable solution to reduce the loading on top of the piles. This option will constitute a Compensation Event under the contract.

The design of repair will also include

- Replace penstock key cover
- Replace middle access man-hole access ladder (assume 8m length, to be confirmed by survey)
- Replace middle access man-hole cover

- Reinstall handrail and security gate if these are removed for the works, and replace if deemed unsuitable or damaged.

Key dimensions are found in the CCTV report, which identifies the diameter of the inlet and outlet pipes as Ø1100mm.

No stop logs are available for either the inlet or outlet of the structure.

Repair to the Inlet/Outlet wingwalls is not included in the scope.

5 Brookside Way bridge, Southampton, Hampshire

The *Contractor* shall repair the asset by April 2022 by undertaking the following tasks:

- Design of appropriate replacement for the bridge utilising the existing abutments, including suitable inspection of the abutments to confirm they remain adequate. The bridge should be designed in accordance with the requirements of the Standards for Highways Design Manual for Roads and Bridges for pedestrian footbridges.
- Production of an Approval in Principle in accordance with The Design Manual for Roads and Bridges (DMRB) CG 300 'Technical approval of highway structures' for submission and acceptance by the *Client* prior to completion of the design.
- The replacement bridge should have parapets resistant to arson in this location. (Timber has been assumed, however, alternative materials can be suggested for consideration).
- Removal and decommissioning of existing bridge structure. Note: identified sentimental graffiti to be removed as a single unit and preserved for local resident. The *Contractor* is to work closely with the local area representative to facilitate this task.
- Construction of new bridge structure.
- The new bridge structure must be resistant to arson as with the parapets.

The *Contractor* is also responsible for gaining Flood Risk Activity Permit including any fees and supporting Construction Method Statement and Environmental Risk Assessment.

The *Contractor* is also responsible for gaining any permissions for closures of public rights of way and similar approvals, with all closures to be agreed with the *Client* before application is made.

6 Porchester Outfall and Seawall Repair

The *Contractor* shall repair the asset by October 2022 by undertaking the following tasks:

Replacement of existing cast iron flap with lighter and self-greasing flap.

- The replacement flap should be lighter than the existing as this currently requires the hiring and use of a lifting frame to remove and self-greasing.
- The replacement should not cause micro plastics to enter the watercourse.

Repair of the damaged seawall blockwork.

- Undertake a survey to ascertain the number of blocks in need of replacement and number of salvageable/reusable blocks
- The total length of blockwork to be replaced / repaired has been estimated as 25m, split into 2 sections, a 15m by 4m ($60m^2$) and 10m by 1m ($10m^2$) section.
- Replace/repair two sections of damaged revetment totalling 25 meters in length using existing and reclaimed concrete blocks that are available.
- Additional repairs/ replacement of blocks identified in the initial survey should be undertaken only with written approval from the *Client*. Additional repairs will be dealt with as compensation events.
- Repair and replace geotextile material if damaged or missing.
- Replace blocks and using U-shaped stainless-steel metal pins to secure the blocks into position.

The location of the site compound and welfare must be agreed with the *Client* before works begin on site.
Key dimensions are found in the CCTV report, which identifies the diameter of the inlet and outlet pipes as Ø900mm.

Noah's Ark Lane Flood Wall (named and unscoped)

Depending on initial assessment outcome, *Contractor* performance and *Client* budget this site may be added to the contract as a Compensation Event.

Argos Flood wall (named and unscoped)

Depending on initial assessment outcome, *Contractor* performance and *Client* budget this site may be added to the contract as a Compensation Event.

Pagham Rife outfall (named and unscoped)

Depending on initial assessment outcome, *Contractor* performance and *Client* budget this site may be added to the contract as a Compensation Event.

Please note: Additional information for all sites, including land registry details will be provided within the relevant PCIs.

Applicable for all sites

The *Contractor* will be responsible for attaining one comprehensive environmental survey for each site to develop the design and support the Flood Risk Activity Permit application (FRAP) and/or Marine licence. Additionally, the *Contractor* shall produce all construction documentation to support the Flood Risk Activity Permit application, Pre-Construction Information and Construction Phase Plan in line with the CDM regulations. Additional documentation may be requested from stakeholders and these will be delivered under a compensation event.

The documentation and activities that the *Contractor* undertake and produce are listed below:

- Topographical survey(if required for design)
- Waste material testing
- One comprehensive environmental survey for to develop the design and support the Flood Risk Activity Permit application.
- Services search
- Detailed Design and construction drawings
- Design statement that explains the design philosophy, standards, data used and any assumptions.
- Pre-Construction Information
- Construction Phase Plan
- Environmental Action Plan
- Flood Risk Activity Permit including any fees and supporting Construction Method Statement and Environmental Risk Assessment
- Project Management and programme
- Construction of asset repair including any; mobilisation, welfare, site access, temporary works, material disposal, access reinstatement, demobilisation.
- Footpath Closure application including any fee (if required)
- Health and Safety File (Portsmouth Lane, A259/The Drove, Brookside Way bridge) including As built drawings
- As Built drawings (Tanyard Stream, Mill Rythe, Porchester Outfall and Seawall)

Due to the nature of the works close collaboration will be required with the *Contractor,* the *Client* area team representative and the landowners to ensure information and agreements are in place prior to the construction works.

The *Contractor* is not liable for the residual life of the existing assets and structures. If further works are identified, the *Client* will review the need for this work, and will issue Compensation Events as appropriate.

***Contractor* Project Management**

The Contractor shall:

- Produce a monthly report with an updated programme showing actual and forecast progress and when key activities are taking place including any dependencies. This is to be submitted on the 1st Friday or nearest working day of the month.
- The *Contractor* shall support in the identification of project efficiencies through active contribution to an Efficiency Register managed by the *Client*.
- The *Contractor* shall use the Carbon Calculator tool to provide project carbon data during the delivery phase of the projects in accordance with 249_18_SD02.
- The *Contractor* should allow 14 calendar days for the *Client* to review the Construction Drawings and Design Statement.
- The *Contractor* shall not start on site until the Construction Phase Plan has been reviewed by the CDM

2. Drawings

List the drawings that apply to the contract.

No drawings (including as built drawings for any of the sites) available

Drawing Number	Revision	Title

3. Specifications

List the specifications which apply to the contract.

Title	Date or Revision/ Doc ref number	publicly available
Safety, Health, Environment and Wellbeing Code of Practice (SHEW CoP)	May 2018	
Civil Engineering Specification for the Water Industry (CESWI Seventh Addition)	7th Edition	Yes
FCRM Operational Framework - Deed and Specifications: Link Doc - Deed and Specifications Lot1 and Lot2	249_18_SD36	
whole life carbon management doc	249_18_SD02	
water safety training doc	249_18_SD07	
FoF lot1a spec supplementary clauses - culverts	249_18_SD10	
CIRIA Culvert, screen and outfall manual	C786F	Yes
The Design Manual for Roads and Bridges (DMRB)		Yes
MEICA MTRs - 369_13 + SD01, 02, 04, 05.		

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* is to prepare, for the *Client's* acceptance, the Construction Phase Plan (CPP) and the Environmental Action Plan (EAP) at least 14 calendar days prior to starting the construction works

The *Contractor* shall not commence any work on the site until the Construction Phase Plan has been reviewed by the CDM Client and CDM Principal Designer.

Access to site for construction is yet to be agreed The *Contractor* is consider access routes to the site during detail design. The local EA representative will then work with the Landowner and *Contractor* to get an agreement in place prior to construction work commencing.

The visiting of sites shall be agreed in writing with the *Client's Project Manager.* A minimum of 7 days notice is required before each site visit. .

Working times

The *Contractor* will be permitted to work between 7.30am and 6.00pm on weekdays (Monday to Friday)

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* will submit a programme with the *Contractor's* Offer for acceptance and then subsequent programmes are submitted on the 1st Friday of each month for the duration of the project. The *Contractor* shows on each programme which is then submitted 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) starting date

(c) Each of the activities listed within the Price List

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

(e) include FRAP application submittal dates period (2 months for a bespoke Permit).

(f) Completion date

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
Not Applicable	

Site Information

We have included the Pre-Appraisal Assessment (PAA) for each location as site information only. The PAA were used to develop the scope of works for each site and identify potential hazards, risks and project restraints and should be considered in conjunction with the development of the detailed design.

Project Specific Site information is included in the Pre-Appraisal Assessment

Table 3 (below) contains details of previous studies:

Table 3

Site number	Site	Document Ref Number
53	**Portsmouth Lane Trash Screen**	**ENVRECOV014R-JBA-00-53-RP-C-0001-S6-C01-B1500-EA2-LOD2-Portsmouth_Lane_Trash_Screen_Replacement_PAA**

53	Portsmouth Lane Trash Screen	Portsmouth Lane Trash Screen Initial Needs Assessment
53	Portsmouth Lane Trash Screen	Portsmouth Lane Health and Safety File
55	The Drove Culvert	ENVRECOV014R-JBA-00-55-RP-C-0001-S6-C01-B1500-EA2-LOD2-The_Drove_Culvert_De_Silt_PAA
55	The Drove Culvert	Drove Culvert historic CCTV report 2009
55	The Drove Culvert	Drove Culvert Health and Safety File
57	Tanyard Stream Culvert	ENVRECOV014R-JBA-00-57-RP-C-0001-S6-C01-B1500-EA2-LOD2-Tanyard_Stream_Culvert_Pre_Appraisal_Assessment_Report
57	Tanyard Stream Culvert	Tanyard Stream historic CCTV report 2016: "015 – 49425 Final Report.pdf"
65	Mill Rythe Culvert	ENVRECOV014R-JBA-00-65-RP-C-0001-S6-C01-B1500-EA2-LOD2-Mill_Rythe_Culvert_PAA
69	Brookside Way Bridge	ENVRECOV014R-JBA-00-69-RP-C-0001-S6-P04-B1500-EA2-LOD2-Brookside_Way_Bridge_Pre_Appraisal_Assessment_Report
69	Brookside Way Bridge	Monks Bridge Principal Inspection Report October 2018
69	Brookside Way Bridge	Brookside Way Bridge graffiti to be preserved "SW1" "SW2"
69	Brookside Way Bridge	Brookside Way bridge Health and Safety File
71	Porchester Outfall	ENVRECOV014R-JBA-00-71-RP-C-0001-S6-C01-B1500-EA2-LOD2-Porchester_Outfall_Repair_PAA
74	Porchester Seawall	ENVRECOV014R-JBA-00-74-RP-C-0001-S6-C01-B1500-EA2-LOD2-Porchester_Seawall_Repair_PAA

Health and Safety File (Portsmouth Lane, A259/The Drove, Brookside Way bridge

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:	