

NEC4 Engineering and Construction

Short Contract

FCRM Operational Framework –SW Hub

A contract between

The Environment Agency
Horizon House
Deanery Road
Bristol
BS1 5AH

And

For

Project_32522 - South West Culvert Inspection and
Cleansing programme 2021 to 2023

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 <i>Client</i> is	
Name	Environment Agency	
Address for communications	Rivers House, East Quay, Bridgwater, TA6 4YS	
Address for electronic communications	[REDACTED]	
The <i>works</i> are	To undertake the culvert inspection and cleansing programme including provision of reports and updating the systems of the <i>Client</i> .	
The <i>site</i> is	South West England	
The <i>starting date</i> is	29th June 2021	
The <i>completion date</i> is	31 st March 2022	
The <i>delay damages</i> are	Nil	Per day
The <i>period</i> for reply is	2	weeks
The <i>defects date</i> is	52	weeks after Completion
The <i>defects correction period</i> is	4	weeks
The <i>assessment day</i> is	the last working day	of each month
The <i>retention</i> is	nil	%
The United Kingdom Housing Grants, Construction and Regeneration Act (1996) does apply		
The <i>Adjudicator</i> 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 <i>Adjudicator</i> . The application to the Institution includes a copy of this definition of the <i>Adjudicator</i> . The referring Party pays the administrative charge made by the Institution. The person appointed is also <i>Adjudicator</i> for later disputes.		

Contract Data

The *Client's* Contract Data

The interest rate on late payment is		% per complete week of delay.
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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 <i>Contractor</i> to the <i>Client</i> for loss of or damage to the <i>Client's</i> property is limited to	£100,000
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The <i>Client</i> provides this insurance	None
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Insurance Table

Event	Cover	Cover provided until
Loss of or damage to the <i>works</i>	The replacement cost	The <i>Client's</i> 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 <i>Contractor's</i> liability for loss of or damage to property (except the <i>works</i> , Plant and Materials and Equipment) and for bodily injury to or death of a person (not an employee of the <i>Contractor</i>) arising from or in connection with the <i>Contractor's</i> Providing the <i>Works</i>	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 <i>Contractor</i> 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 <i>Contractor</i> to use the skill and care normally used by professionals providing <i>works</i> similar to the <i>works</i>	Minimum £100,000 in respect of every claim without limit to the number of claims	12 years following Completion of the whole of the <i>works</i> or earlier termination

The <i>Adjudicator nominating body</i> is	The Institution of Civil Engineers
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The <i>tribunal</i> is	litigation in the courts
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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 <i>Contractor</i> submits the name of each proposed subcontractor to the <i>Client</i> for acceptance. A reason for not accepting the subcontractor is that their appointment will not allow the <i>Contractor</i> to Provide the <i>Works</i> . The <i>Contractor</i> does not appoint a proposed subcontractor until the <i>Client</i> 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 <i>Client</i> 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 <i>Contractor</i> is responsible for obtaining these and paying fees (unless stated otherwise in

	the Scope). The <i>Client's</i> acceptance of a tender and the <i>Client's</i> 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 <i>Client</i> and is not a compensation event.
Z3.0	Confidentiality & Publicity
Z3.1	The <i>Contractor</i> may publicise the works only with the <i>Client's</i> 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 <i>Client</i> but is not warranted correct. The <i>Contractor</i> 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 <i>Contractor</i> to ensure the use of skill and care normally used by professionals providing similar design services.
Z6.2	The <i>Contractor</i> designs the parts of the works which the Scope states they are to design.
Z6.3	The <i>Contractor</i> submits the particulars of their design as the Scope requires to the <i>Client</i> for acceptance. A reason for not accepting the <i>Contractor's</i> design is that it does not comply with either the Scope or the applicable law. The <i>Contractor</i> does not proceed with the relevant work until the <i>Client</i> has accepted this design.
Z6.4	The <i>Contractor</i> 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 <ul style="list-style-type: none"> • War, civil war, rebellion revolution, insurrection, military or usurped power • Strikes, riots and civil commotion not confined to the employees of the <i>Contractor</i> 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 <i>Contractor</i> shall ensure at all times during this contract it complies with all the obligations and conditions of the Framework Agreement made with the <i>Client</i> .
Z9.0	Termination
Z9.1	Delete the text of Clause 92.3 and replace with: If the <i>Contractor</i> 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.
Z7.2	Additional Compensation Event COVID-19 Managing and mitigating the impact of Covid 19 and working in accordance with Public Health England guidance, as may vary from time to time, from 1 st April to 30 th June 2021.

Contract Data

The *Contractor's* Contract Data

The <i>Contractor</i> is		
Name	Bridge Civil Engineering Ltd	
Address for communications	Silverton House, Chudleigh, Devon, TQ13 0DF	
Address for electronic communications	Enquires@bridgecivileng.co.uk	
The <i>fee</i> percentage is	As framework agreement	%
The <i>people rates</i> are		
category of person	unit	rate
The <i>published list of Equipment</i> is		
The <i>percentage for adjustment for Equipment</i> 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 £ 566,305.00

Enter the total of the Prices from the Price List.

Signed on behalf of the *Contractor*

Name

Position Pre-Construction Manager

Signature

Date 4th May 2021

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

Signed on behalf of the *Client*

Name

Position Local Delivery Lead

Signature

Date 29/06/2021

Price List

Item Number	Description	Unit	Quantity	Rate	Price
Management					
SW1	Programme lead to attend a virtual start up meeting on a date proposed by the client.	day	1		
SW2	Programme lead to attend bi-monthly virtual progress meeting for a twelve month period.	Per year	6		
SW3	Provision of completed reports on a monthly bases and updates of the programme and risk register.	Per year	12		
SW4	Provision and management of Cloud Based System	Per Year	1		
SW5	For complex culvert cleansing and inspection provision of co-operation and supporting information (CPP and RAMS) to a client appointed <i>Principal Designer</i>	Per culvert	1		
Provision of workforce					
SW6	Carry out pre-inspection site survey and reporting before works commence	Per culvert	250		
SW7	Provision of a 2 person CCTV team on site	Day	300		
SW8	Provision of a 3 person ROV / Sonar team on site	Days	25		
SW9	Provision of a jetvac (min 50gpm) and 2 person team on site	Day	50		
SW10	Provision of Recycler and 2 person team on site	Hours	100		
SW11	Provision of a 2 person entry team working on site - NC2	Day	50		
SW12	Provision of a 4 person entry team working on site - NC3	Day	20		
SW13	Provision of a 4 person entry team working on site with working breathing apparatus – NC4	Day	20		
SW14	Provision of a 3 person rescue team on site	Day	40		
SW15	Provision of Laser Scanning Surveying and post processing and reporting	Day	1		
SW16	Day rate for the Provision of Topographic Surveying Services capturing pipe invert levels, pipe sizes, manhole cover levels in conjunction with inspection and cleansing.	Day	200		
SW17	Provision of £2k per highlighted 30 culverts for works to allow access to culvert to perform inspection				
Sampling and disposal of material					
SW18	Silt samples and analysis (WAC Test)	Item	1		
SW19	Waste removal and disposal to an appropriate waste disposal facility off site: Hazardous - Liquid/sludge (inc all transport and disposal costs)	Tonne	1		
SW20	Waste removal and disposal to an appropriate waste disposal facility off site: Hazardous - Solid/granular. (inc all transport and disposal costs)	Tonne	1		
SW21	Waste removal and disposal to an appropriate waste disposal facility off site: Non-hazardous -	Tonne	1		

	Liquid/sludge (inc all transport and disposal costs)				
SW22	Waste removal and disposal to an appropriate waste disposal facility off site: Non-hazardous - Solid/granular (inc all transport and disposal costs)	Tonne	1	■■■■	■■■■
Forming report					
SW23	Provision of reports and digital topographic drawings on the CCTV survey as detailed in the Scope on a monthly bases. (digital copies only onto cloud based system)	Per Culvert	488	■■■	■■■■
SW24	One days' training of one person in the EA's Asset Information Management System (AIMS).	Per day	1	■■■■	■■■■
SW25	One days' training of one person in the EA's Asset Information Management System (AIMS OM).	Per day	1	■■■■	■■■■
SW26	Provision of appropriate operative to input condition data into AIMS or AIMS OM at <i>Clients</i> office. (Assume that Operative can input 20 inspections per day)	Per day	25	■■■■	■■■■
SW27	Provision of digital topographic drawing and data files.	Per culvert	488	■■■	■■■■
SW28	Provision of Carbon Calculator Report at end of year one contract (ERIC)	report	1	■■■■	■■■■
Travel					
SW29	Travel (only to be charged for sites over 25 miles from Contractors depot)	Mile	1,500	■■■	■■■■
The total of the Prices					
				£ 566,305.00	

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

The description of the *works* provided below is intended for South West culvert inspection and cleansing.

The Contractor shall use workers with the right skills, knowledge and experience to complete culvert cleansing and inspection tasks.

Planning and Delivery Phase

The Contractor shall form a baseline programme to carry out culvert inspections and cleansing of the culverted lengths detailed in Appendix A: South West programme 21 22). The Contractor shall manage the programme to deliver the tasks in the most efficient way, passing on any savings to the Client.

The Contractor shall consider in the programme, flooding over the winter period, environmental constraints including migratory fish and overwintering birds, holiday seasonal people influx to ensure delivery of inspections. The Contractor is to manage and update a progress tracker and risk register in either MS Excel or MS Project format, this will be provided to the client on the 10th day of each month.

The Contractor shall assume that the **Client has arranged Natural England assent** to carry out culvert cleansing and inspection task for the identified culverts, all tasks are considered to be included in the 'General Maintenance Tasks'. (see section 7 of CROW Appendix 3 Formal Notice - Routine Maintenance and Operational Checks together with Debris and Obstruction Removal).

The Client will provide a 'letter of introduction' to aid the Contractor completing tasks. It is not anticipated that Client will issue formal notice to landowners unless deemed necessary by the client.

The Client has shared pre-existing information on the Appendix A: South West programme 21 22. The Contractor shall review the information provided and where gaps in the information exist the Contractor shall carry out a **preliminary site inspection** to identify missing details, potential hazards to enable a plan of work to be formed accordingly in **Wessex**.

The Contractor shall undertake the **preliminary site inspection** to all culverts in **Devon and Cornwall** area irrespective of the detail provided by the Client before the inspection is undertaken and report via email issues that might compromise the inspection task to the Client. Issues could include but are not limited to de-vegetation requirements, debris/health and safety screen constraints and locked sites. **The Contractor shall provide supporting photos and cost estimation** to undertake remedial tasks, such as clearing vegetation, removing debris screen, so that the Client can take appropriate steps to instruct tasks and make necessary progress. The Contractor should report identified issues ten work days before the planned inspection.

The Client has provided a 'culvert clearance instruction' in Appendix A: South West programme 21 22 heading '**Clearance upto £2k where required**' (response is 'yes'). **This instruction is limited to culverts in Wessex** area, culvert clearance tasks can be progressed upto a value of £2,000 allowing a more effective culvert inspection. This will avoid duplication and delays to the programme (E.g. de-silting/vegetation clearance/install (like for like) materials or components). This instruction aims to reduce the number of failed inspections and fast track resolution to some of the simple and frequent defects identified. The Contractor is to **provide 'before and after' photos and a task description** to the Client when tasks have been carried out.

The Contractor shall be responsible for selecting an appropriate method to clear the culverts, the Contractor will need to ensure that all necessary permissions are in place prior to undertaking clearance tasks. All culvert

clearance task shall have a pre-determined method statement, risk assessment and waste management plan that will be received by the *Client* prior to commencement, this will be in the form of a "Construction Phase Plan".

Where the complexity of the tasks requires more than one contractor on site at any time a **Principal Designer will be appointed by the *Client***. The contractor will form a site specific construction phase plan (CPP). The Contractor will include an allowance of ten working days for the *Client* and Principal Designer to review the CPP before work an instruction to work is given.

The *Contractor* shall be prepared to amend the programme when requested by the *Client* in order to take account of priority non-routine inspections where requested by the *Client*.

The *Contractor* shall obtain, and will be liable for, the costs associated with any relevant licenses and permissions from all relevant authorities and must provide copies of any licenses and permissions to the *Client* prior to the commencement of the works.

The *Contractor* shall provide traffic management in accordance with the Department of Environment, Traffic and the Regions (DETR) Traffic Signs Manual Chapter 8 where required.

Confined spaces entry shall only be allowed where there are no alternative survey techniques available and by prior agreement with the *Client*.

The *Contractor* shall take steps to prevent pollution incidents arising from cleansing and surveying activities. The *Contractor* shall employ suitable methods to trap and control the silt from travelling downstream.

The *Contractor* will complete analysis of sediment prior to its removal from culverts to determine its characteristics in accordance with relevant waste regulations. Sampling and testing will be in accordance with WRC Regulations, postage and courier. (WAC Testing).

Any material removed from culverts is to be disposed of at a licensed facility or re-used where possible, in accordance with the Environmental Protection Act 1990 (or subsequent replacements). Such material may only accumulate on a site for the purposes of collection and drying and must be removed from the site as soon as practicable. Material must only be transported by a registered waste carrier or re-enactment thereof, for the purpose of transporting and disposing of such waste as it may be necessary to remove during the execution of the task. The *Contractor* shall note that cut vegetation, dredged spoil and other natural or man-made arising from works are considered as waste when taken off site, and shall therefore be disposed of accordingly.

Full documentary evidence of the collection, transfer and disposal of waste, in accordance with a "Duty of Care: Controlled Waste Transfer Note" (Annex C Environmental Protection Act 1990, Waste Management, The Duty of Care A Code of Practice) and "Duty of Care - Controlled Waste Transfer Regulations" made under the Control of Pollution (Amendment) Act 1989, must be copied to the *Client*.

All weigh/tip tickets must be made available to the *Client* at the regular progress meetings. Failure to produce this documentation may result in forfeiture of payment to the *Contractor*.

Topographic Survey.

The *Contractor* shall undertake topographic survey on culverts to collect culvert georeferenced data in accordance with Environment Agency Specifications : National Standard Technical Specifications for Surveying Services.

Where it is not possible to achieve Environment Agency specification due to vegetation cover or access constraints then the *Contractor* is to use other best practice surveying techniques to achieve XYZ data requested. The *Contractor* must include a note where 'non-Environment Agency' best practise survey techniques have been adopted and provide a statement on the accuracy. (for example: Dumpy level +/-50mm OR tape measurement +/-10mm)

Post inspection reporting.

The *Contractor* shall provide all reporting and deliverables on a minimum monthly bases. The inspection reports are to be made available on a cloud storage approved by the *Client* and accessible for nominated Environment

Agency staff (up to twenty persons). In addition a digital hard drive containing all reports and associated digital data shall be provided to the *Client* at the end of the contract period.

The *Contractor* shall form a process to measure and report on the total carbon output in delivering the culvert inspection and cleansing task using Environment Agency approved techniques in the SHEW Handbook.

Deliverables

The following outputs shall be provided on each culvert inspection completed. Information to be provided in digital format only. All filenames to include the asset ID as a prefix and the Environment Agency System Code and year and month the survey completed (do not include other company names, **do not exceed 35 characters** in file names including spaces. The *Contractor* shall crop the asset name to ensure the character number is not exceeded). See Example below:

Date of Report EA Asset ID Asset Name

1221EA123456 Bure Lane Mudeford (example has 31 characters)

The *Contractor* shall aim to keep the file string as short as possible removing any unnecessary file structure components such as 'Files for issue' or 'ss documents'.

- 1) A **report format** description of the condition of the culverted lengths for each survey, in accordance with the Manual for Sewer Condition Classification, Latest Edition and Condition Assessment Manual. In pdf format.
- 2) The *Contractor* shall provide **manhole record cards** and **digital topographic information** for structures and manholes associated with the surveyed lengths and a plan at a suitable scale showing the route of the culvert. Information will include all relevant structures (i.e. manhole covers, inlets, screens, outlets, culvert characteristics), together with ground levels invert and soffit levels of structures. The digitised data shall be georeferenced in British National Grid ESRI shapefiles.
- 3) A visual record of the survey in the format of a **video and photographs**. Videos shall be in .wmv format and photographs shall be .jpeg. Video files include asset ID in the filename, the video footage shall be in colour and - include embedment of culvert location, direction of inspection (i.e. inlet to outlet), simple description of asset, and location measurement from start of the survey headwall, or recorded feature. (see specification: Culvert Inspection Video Deliverable).
- 4) An **'executive summary'** detailing any significant defects and the overall condition grade in accordance with the *Environment Agency – Condition Assessment Manual (CAM) – T98*. (see executive summary example document in Appendix B)
- 5) The T98 condition grades, inspection date, comment, will be added to the **monthly updated programme** and returned to the *Client* on a monthly basis.
- 6) The *Contractor* shall populate the Asset Inspector data (detailed on the Executive Summary and photos to the **Environment Agency's AIMS** within 30 days of the inspection taking place.
- 7) The *Contractor* shall provide a Carbon Calculator Report at the end of the 12 month programme period.

AIMS Data Upload in Environment Agency Office.

The *Contractor* shall provide suitable computer operative(s) to receive basic data input training in uploading relevant culvert summary data from inspections onto the Client's 'Asset Information Management System' (AIMS) or (AIMS OM from June 2021). The *Contractor* shall allow one day for training per operative. Example screen shots of the AIMS system are provided in appendix A. The operative will be supervised by an Asset Performance T98 trained member of the *Client's* team to oversee the data input task.

The *Contractor* operative shall carryout AIMS data uploads on behalf of the *Client* on a monthly basis in Rivers House Bridgwater. The *Contractor* will be unable to start this task until June 2021 due to data management system changes from 'AIMS' to 'AIM OM' at the Environment Agency.

This contract shall be awarded for an initial period concluding on the completion date stated in the Contract Data. The *Client* retains the right to extend the contract for one period of 12 months, up until a completion date of 31st March 2022. This extension shall be based on business need and satisfactory completion of the Scope by the *Contractor*.

2. Drawings

None supplied

Drawing Number	Revision	Title

3. Specifications

Title	Date or Revision	Tick if publicly available
Manual of Sewer Condition Classification	4th Edition	Yes
New Roads & Street Works Act	1991	Yes
DETR Traffic Signs Manual Chapter 8	Latest	Yes
Specification as set out in the SW Culvert Inspection and Clearance FW2: Ref Culverts SW2 – Specification	Latest	Yes
Condition Assessment Manual (CAM)	Latest	Available from Client
Design Manual for Roads and Bridges - Inspection of Highway Structures (BD 63/17 Section 1 Inspection)	November 2017	Yes
Culvert Inspection Video Deliverable	3 rd May 2019	No
National Standard Technical Specifications for Surveying Services Version: 4.01.		No
SHEW Code of Practice	2017	No
Environment Agency Specifications : National Standard Technical Specifications for Surveying Services	4.01	

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

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

The *Contractor* is to prepare, for the *Client's* acceptance, the Construction Phase Plan (CPP) that shall incorporate a Environmental Action Plan (EAP) prior to starting the *works*.

The *Contractor* shall adhere to SHEW CoP.

The *Contractor* shall be responsible for scheduling and undertaking inspection for lower tides and lower water flows.

The *Contractor* will establish a liaison procedure with the Environment Agency flood warning service to obtain advanced flood warnings.

Working times

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

The *Contractor* will be permitted to carryout tasks between 17th May and 31st October 2021 on North Wessex SSSI Site

Working times

The Contractor will not be permitted to upload culvert inspection data into AIMS until June 2021. (This is due to data migration into a new Asset Database which will be used).

5. Requirements for the programme

- see section 1 'Description of the works' for programme requirements.

The *Contractor* submits the programme with the *Contractor's* Offer for acceptance. The *Contractor* shows on each programme which the *Contractor* 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) 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 permits; stated constraints; *Contractor's* risks.
- (e) Completion date

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

Item	Date by which it will be provided
Provision of Environment Agency computers and appropriate user details for inputting AIMS asset information	(to be agreed)
Previous Inspection Reports in digital format (where available)	(on award)
A Culvert Inspection Executive Summary Template to assist AIMS data input	(included as contract)
CROW Appendix 3 Assent for North Wessex SSSI	(included in contract)

Site Information

- 1) Shape File Containing. Known Asset Information and Location. (on award)

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:	