22503 ECOLOGICAL SERVICES FRAMEWORK 3 (EcoSF3)

SCHEDULE B PROJECT FORM AND CONFIRMATION OF INSTRUCTIONS
PART 1
PROJECT DETAILS, SPECIFICATION AND EVALUATION CRITERIA

To be completed by Contracting Authority Project Manager

Project title: Lustrum Beck Urban River Restoration

Bravo project ref (if applicable): project_33955

Date: 28/10/2021

Contracting Authority (Environment Agency; Natural England; Defra etc)	Environment Agency		
Project Manager:	[redacted]	**Phone number:**	[redacted]
Budget holder:	[redacted]	**Cost code:**	ENV0003808C
Commercial Contact (if applicable):	[redacted]	**Email:**	[redacted]m
Project Start Date	24th January 2021		
Project Completion Date	24th April 2023		
For any projects over £10k, full competition is required (i.e. all suppliers on the Lot invited to quote).	**Direct Award**		**Mini-comp** X
Call off from Lot number (please tick)	1	2	3	4 X
Proposal return date: ***(no less than 10 working days from current date)***	26/11/2021		

Evaluation criteria:		
Contractors: Failure to meet the minimum score threshold stated will result in the bid being removed from the process with no further evaluation regardless of other quality or price scores.		
Price	**Weighting**	**50%**
Quality	**Weighting**	**50%**
Quality Sub-Criteria Weightings:		
Approach & Methodology *(minimum score threshold 6 will apply)*		**50**
Proposed Staff and Contractor's experience/accreditations. *(minimum score threshold 6 will apply)*		**25**
Project Management (including project plan) *(minimum score threshold 6 will apply)*		**15**
Health & Safety *(minimum score threshold 6 will apply)*		***10***

Specification (Details to be provided by the Contracting Authority Project Manager)
Note** – the contractor's proposal will be limited to a maximum of **10 pages*

The Contractor's required Limitation of Liability is one million pounds.

1. Description of work required – overall purpose & scope (including reporting requirements)

The Lustrum Beck Urban River Restoration Project aims to implement Water Framework Directive (WFD) mitigation measures and contribute in achieving the statutory environmental objectives for this waterbody set out in the Northumbria River Basin District Management Plan. As a statutory body, the Environment Agency and local authority must have regard to the Northumbria River Basin Plan and people.

The Lustrum Beck catchment (GB103025072550) is a tributary of the Tees Estuary flowing through the urban landscape of Stockton-on Tees. Under the Water Framework Directive this waterbody is designated as a heavily modified waterbody and is failing the Mitigation Measures Assessment element of the WFD classification. The waterbody also fails the Invertebrate, Phosphate, Ammonia, and Dissolved Oxygen elements.

The Mitigation Measures Assessment (MMA) element of the waterbody identifies that physical modifications for the protected uses of 'Flood Protection' and 'Urbanisation' prevent the waterbody reaching 'Good Ecological Status'. Where such modifications cannot be removed all feasible mitigation measures must be put in place to address ecological impacts and attain a status of 'Good Ecological Potential'. The mitigation measures will enhance and restore riverine habitat delivering environmental and social benefits for wildlife and people.

The Lustrum Beck channel has been widened, deepened and straightened to increase conveyance rates and reduce flood risk to people and property over several decades.

More recently in 2017 a £3 million Lustrum FAS scheme saw a range of different flood protection measures installed to better protect 150 homes from flooding. This included more traditional flood defence structures in Stockton on Tees and a Natural Flood Management (NFM) scheme in the Coatham Wood area upstream. This resulted in the delivery of OM4a benefits and 30ha of wetland habitat.

This project aims to work towards delivering the targets of the 25 Year Environmental Plan and has strategic links to The Stockton-on-Tees Green Infrastructure Strategy.

Overarching Project Objectives

The Lustrum Beck Urban River Restoration project objectives are to deliver feasible mitigation measures in order to work towards good ecological potential in line with the EA's responsibilities under the Water Framework Directive. The Client's geomorphologists, ecologists and other specialists will determine what constitutes "feasible mitigation measures" in collaboration with the Supplier.

Opportunities for ecological enhancement and to re-naturalise sections of the heavily modified Lustrum Beck and tributaries in the urban environment of Stockton-on-Tees will be scoped from the upstream points at;

Lustrum Beck NZ4310617991
Trib of Greens Beck NZ4110317764
Trib of Greens Beck NZ4066418955
Tribs of Bishopsgarth Beck

To the downstream points at;
Lustrum Beck at Portrack Lane NZ4653320162

See Figure 1.

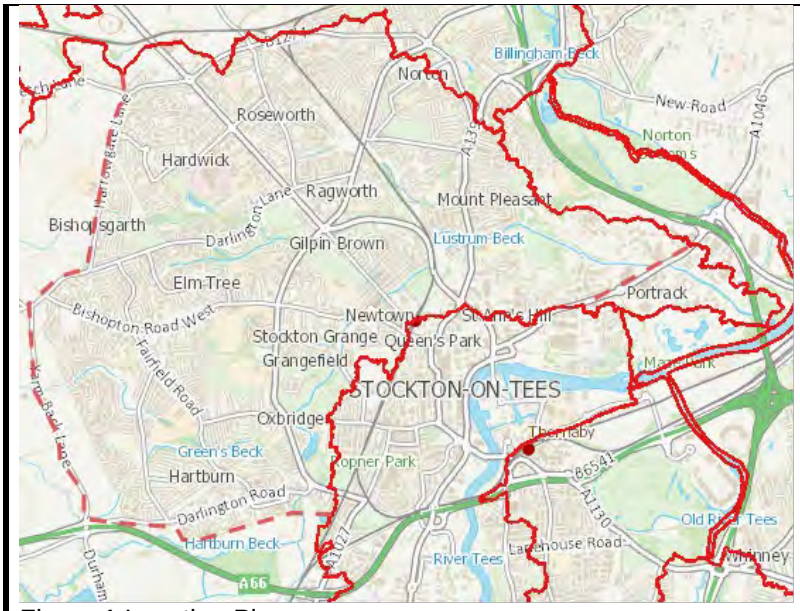

Figure 1 Location Plan

The Supplier will;

Project Activities

- Become familiar with previous studies and data detailed in table 1 below.
- Arrange and facilitate a workshop with relevant internal EA stakeholders to determine the aims and objectives of the project, what 'all feasible mitigation measures' for the physical modifications may entail and how the options development will take place.
- Undertake Hydraulic modelling where necessary to demonstrate that there is no unacceptable increased flood risk for selected options. Also considering erosion potential, sediment transport and geomorphology.
- Develop the Full Business Case, the Supplier will be primarily responsible for the strategic case and the economic case, the Client will primarily be responsible for the financial, commercial and management cases. The Client is in the process of producing the Strategic Outline Case.
- Develop the long list of options that will deliver 'all reasonable mitigation measures' as determined by the Client's internal specialists.
- Facilitate a workshop to select a shortlist of options that give best cost effectiveness and which are affordable within the Client's budget.
- Assess the wider benefits for each of the long list options, with regards to North East Area Sustainability Goals.
- Produce detailed designs for the options selected. The Supplier will also secure relevant landowner agreements and permissions.
- Develop the BIM Information Delivery Plan and BIM Execution Plan for all phases of the project
- Provide input into the Client's internal and external stakeholder engagement plan
- Attend and contribute to the initial Risk Workshop and Optimum Bias considerations
- Understand the strategic significance of the project including political drivers and Area commitments, and apply this in the short list workshop.
- Understand project tolerances including acceptable deviations of funding sources and project drivers

- Understand the influence of partnership contributions on option choice and timescales for delivery, present this information at the shortlisting workshop.
- Work with EA staff to understand the status of stakeholder and public consultation, and build in the programme.
- Research baseline geotechnical conditions and assess risk through completion of a desk study.
- Collate existing site information (check it is in a suitable 3D format)
- Understand the reliance of existing structures and use this information to determine the shortlist of options
- Complete the following environmental deliverables at an appropriate agreed time to be decided at the initial workshop, to ensure key elements of the scope are fully informed before development of options;
    - Environmental Checklist
    - Preliminary Environmental Appraisal
    - UK Habitats classification assessment – To include habitat condition and variations of that condition within same habitat
    - Biodiversity Net Gain Assessment – To be informed by UKHab assessment
    - Ecological Walkover Survey
    - Water Framework Directive Assessment
    - Cultural Heritage Statement
    - Landscape and Visual Appraisal
- Utilise asset condition data if required in the option analysis and that asset residual life has been incorporated into the baseline economics (Do Nothing and Do Minimum cases)
- Understand flooding from other sources, the impact and how these are considered in the preferred option selection
- It is proven that spending time in a natural outdoor environment has both physical and mental health benefits. Consider the opportunities to maintain and enhance the public right of way connectivity of this site.
- Understand the status of negotiations/agreements with influential stakeholders (e.g. Network Rail, Utility Providers, Highways England) on issues affecting project delivery and use this information to determine the short list of options.
- Collate and document all available utilities data
- Actively seek low carbon solutions and will complete the Agency's Carbon Calculator for any preferred options identified.
- Undertake the role of Designer and Principal Designer under the Construction Design and Management Regulations (2015).
- Be responsible for complying with copyright, including the procuring of any licences required, relating to the use 3rd party data for the project.
- Be responsible for arranging any access required to undertake site visits in the study areas.
- Will conduct all meetings in accordance with any Covid-19 restrictions on working practices.

Potential Future Work

Depending appropriateness as well as the performance of the Supplier they may be asked to complete the construction support as an additional task, which would be dependent on the Client determining whether the quote received offers value for money. Should this be required, it will be classed as a contract variation and will be managed in line with the EcoSF3 framework agreement as per Section 6.6 Varying the contract.

Document title	Date	Digital Format (Consultant in ownership)	Status / Outcomes of study / Comments
Lustrum Beck Hydraulic Model		Digital Format	
Tees Tidal Model		Digital Format	
Lustrum Beck final report_January 2013	January 2013	Pdf digital copy	Feasibility Study by the River Restoration Centre
Groundwork 2014 Study		Pdf digital copy	Study produced by Groundwork following on from the above feasibility study
North East Area Sustainability Goals		Pdf digital copy	

Table 1

2. Information to be returned by the Contractor and the section of Part 2 the information should be provided in.

Approach and Methodology (including Health & Safety, Sustainability and Quality Assurance unless being evaluated separately):

- Identify proposed methodology to achieve the above outputs and confirm deliverables. This should include assumptions and exclusions.
- Details of how options will be appraised using the analysis tools set out in the Specification above and communications with the Environment Agency.
- Details of how costs will be developed for the various options proposed.
- Identification of key project risks and how they will be mitigated. A summary risk table (including residual risk ownership) should be included in the proposal.
- Include details of how risks relating to the ongoing Covid19 pandemic will be managed, from a business continuity perspective and operationally.
- Include details of how the quality assurance that will be applied to the project and the final outputs.

Project Management (including programme plan):

As part of the overall management of the commission the Supplier will:

1. Attend a contract start-up meeting (via Microsoft Teams or Zoom) with the Environment Agency PM to the deliverables for the project.
2. Attend monthly progress meetings and produce minutes of the meetings.
3. Produce monthly financial updates and forecasts to meet EA deadlines,
4. Any model and survey information will be provided to the Supplier in an encrypted format (using WinZip 128 bit encryption) according to the Client's Data Security Policy. It is expected that once the commission is completed, all the original data sent to the Supplier, which is classed as commercially sensitive, is returned in an encrypted format using WinZip 128 bit encryption.
5. Provide project deliverables such as model files, survey data or anything of a personal nature such as questionnaires or address data must also be returned in an encrypted format using WinZip 128 bit encryption.
6. Provide monthly checkpoint report, end project report and exception reports (as required) in standard template giving progress against programme, deliverables received and expected and financial summary against programmed.

Health and Safety

Health and Safety is the number one priority of the Client. The Supplier will promote and adopt safe working methods and shall strive to deliver solutions that provide optimum safety to all. Every meeting or workshop will begin with a Health, Safety & Climate Emergency Moment.

Sustainability

The Minimum Technical Requirements (see Appendix 1)set out the minimum standards specifications required for all Flood & Coastal Erosion Risk Management (FCERM) and other Environment Agency projects. The supplier will adhere to the most recent version of these standards. Version 11 published May 2021. Decisions should be based on a whole life Carbon approach. The Supplier will actively seek low carbon solutions and will complete the Agency's Carbon Calculator for any preferred options identified.

Biodiversity Net Gain (BNG)

BNG needs to be integrated into the initial assessment of any site, meaning the appropriate methods and survey techniques must be used from the outset to ensure the habitats present and their condition are recorded accurately.

- A UK Habitat classification (UK Hab) assessment should be undertaken within the agreed red line boundary of any project where BNG is to be applied – This should be done as an alternative to a Phase 1 habitat survey. This should be 'extended' to included protected and notable species.
- All surveys must be undertaken by a suitably qualified and experienced ecologist. We expect a minimum of one full member of CIEEM
- All surveys must follow UK Hab assessment guidelines (https://ukhab.org/) and latest BNG technical guidance (http://publications.naturalengland.org.uk/publication/5850908674228224)
- The condition of the habitat surveyed must be recorded. The habitat should be compartmentalised so similar habitats with different conditions in the same area can be clearly identified. Maps should be produced displaying the habitat types present, condition of these habitats and distinctiveness.
-
- The comments box within the BNG 3.0 Metric tool should be utilised to explain the reasoning behind the condition score (i.e. invasive species present, water quality in pond appears poor, lack of under storey to woodland etc)
- Provide recommendations on how each unit should be managed or uplifted.

2. Required skills / experience from the contractor and staff. Include any essential qualifications or accreditations required to undertake the work. Please provide details for any sub-contractors being used.

- Flood risk and habitat creation scheme appraisal in line with FCRM and treasury guidance
- Feasibility and design of solutions that work with nature and of decommissioning assets
- Estuarine restoration
- Stakeholder engagement
- CDM competency
- Project Management

Information to be returned by the Contractor in Part 2 Section 3

Project Staff (including team organisation chart for key project staff). If you propose to use sub-Suppliers to provide key elements of the project, your reply should evidence their skill and experience.

• Demonstrate appropriate skill and competency to deliver the required outputs identified in the Specification above.
• Identify previous relevant experience of undertaking similar projects

3. Proposed programme of work and payment table (Detailing specific tasks, key milestones, deliverables & completion date where appropriate) Payment schedule should detail the % amount that will be paid after delivery of each task

Task no.	Task and deliverable	Completion date	Payment schedule
1	Attend a contract start-up meeting. This includes, but not limited to:-	March 2022	10%

	Familiarisation with the lower Lustrum Beck, complete appraisal of all feasible mitigation measures that can be delivered. Develop the long list of options and host a workshop with the Client and selected stakeholders to confirm the short list.		
2	Evaluate short list of options as agreed at the workshop. This includes, but not limited to:- Complete a biodiversity baseline assessment of the river, current or potentially hydraulically or ecologically linked terrestrial habitats within the project area in accordance with DEFRA Biodiversity Metric 3.0 or subsequent version as appropriate. Appraise short list of options using DEFRA Biodiversity Metric 3.0, calculating the likely biodiversity unit changes resulting from the proposed options. Complete options appraisal in line with the FCRM Appraisal Guidance to include monetisation of FCRM and Ecological services benefits. Consider innovative approaches to reducing waste and maximise the reuse of site won materials. Undertake any hydraulic modelling if necessary Determine preferred option. Host workshop with the Client and selected stakeholders to confirm the preferred option.	August 2022	30%
3	Produce detailed design and costs for preferred option. Produce a Preliminary Environmental Information Report (PEIR) using existing environmental information available and identifying the need for further surveys/assessments.	October 2022	15%
4	Secure relevant landowner agreements, and necessary permissions. Prepare a full business case.	March 2023	15%
5	Project Completion	April 2023	30%

4. Health and Safety Requirements ***Note**: Only include if high risk activities being undertaken e.g. working at height, near or over water). Do not request RAMS or similar risk assessments are returned with submissions. These should only be requested at contract award.*
• Demonstrate how the project will have regard to health and safety. • Demonstrate how the risks associated with working near or over water will be managed.

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SCHEDULE B PROJECT FORM AND CONFIRMATION OF INSTRUCTIONS

PART 2
TASK QUOTATION SHEET

To be completed by Framework Contractor			
Framework Contractor name			
Contractor Project Manager name			
Contractor project manager phone number:		**Contractor project manager e-mail address:**	

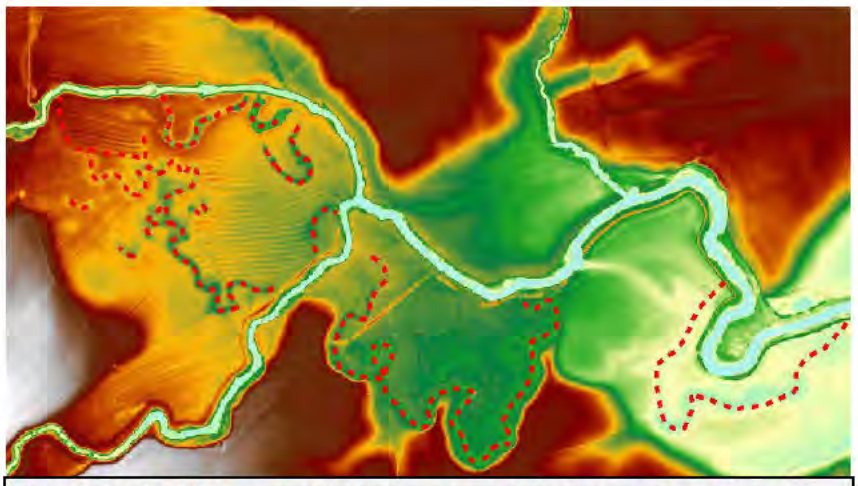
Note: **Your proposal must not exceed 6 sides of A4 plus the Costs Proposal in Section 4 (unless otherwise indicated in project client's specification above). Attachments must not be included unless requested with the exception of a programme diagram and full cost schedule if you consider these would support your proposal.**

Do not make or append Caveats and Assumptions in your proposal – any points of uncertainty must be raised as a clarification point prior to submitting the proposal. Where assumptions are to be made, these will be stated by the Authority's Project Manager.

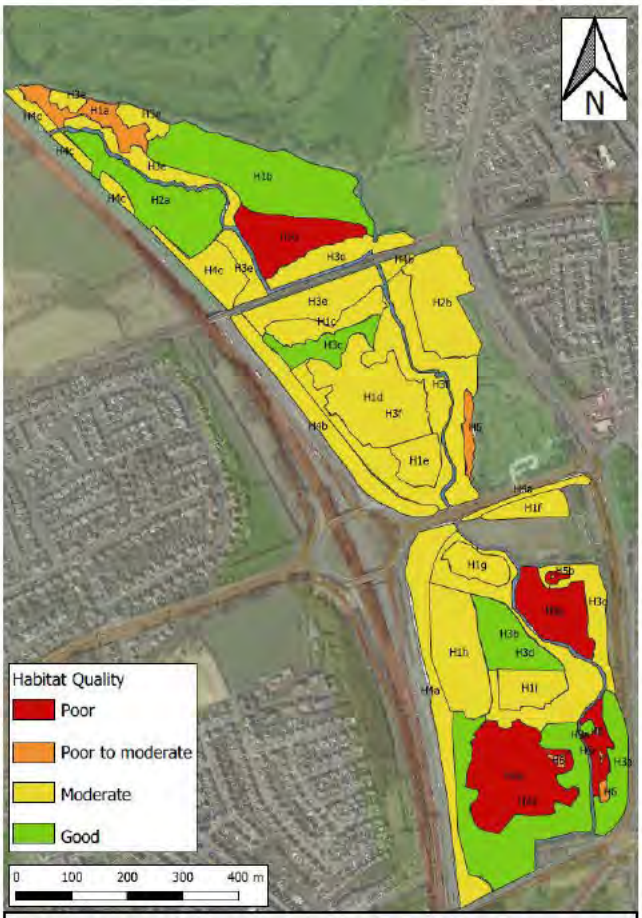
1. Approach & Methodology

Understanding the brief: [redacted] has wide experience in delivery of river restoration and the application of innovative schemes to deliver quantifiable Water Framework Directive (WDF) improvements. We have long-experience within the Lustrum Beck catchment, working on the modelling and capital project delivery. The project will be delivered from our Newcastle Office but supported from national technical experts across the company. Our strong IT base allows for seamless integrated teams across [redacted] sits on the Bloom Framework and has been working with the Tees Lead Local Flood Authorities (LLFA) since 2015.

Baseline development and long-list generation: A desk based review of existing information will be undertaken (including historic maps, images, research papers and reports) to gain an overview of catchment and to generate a historical chronology of river. The chronological analysis will provide vital context on why the system is in its present state, identify key historic and contemporary pressures and help in predicting how the system is likely to develop under a variety of different pressure scenarios. We will produce an annotated map showing any changes of the river planform, taking into account the superficial geology. Paleo-channels will be identified from LIDAR and aerial photography and will be shown on the maps as appropriate. A walk-over survey will be undertaken using our Riparian Survey (IRiS) methodology where the ecology and geomorphology are surveyed at the same time. The geomorphological and fluvial survey will determine the river type and associated forms and processes for surveyed watercourses. To provide baseline information in order to develop options and to assess potential impacts on the flow and sediment regime and channel stability, a Fluvial Audit will be completed for the watercourses within the project area (including upstream and downstream of the study reaches). We will utilise our *iPad* application *GISmapp Geomorph* to provide a standardised field recording proforma that allows accurate recording of existing forms and processes in the field using GPS, including geo-referenced photographs. The ecology surveys will be carried out in tandem with the fluvial audit. Ecology surveys will follow UK Hab assessment guidelines (https://ukhab.org/) and latest Biodiversity Net Gain assessment technical guidance (currently version 3.0). We shall ensure that the condition of the habitat surveyed will be recorded (this has an important influence on the BNG Score). Other features will be mapped including veteran trees, rare and notable species, otter holts, birds' nests. All occurrences of invasive species (W&CA Schedule 9) will be mapped. The data collected from the geomorphological assessments and the ecological assessment will feed into the BNG assessment.



Analysis of LIDAR and aerial imagery provides information of where channels were previously located. The above figure shows analysis of the Pont / Blyth at Pont Head.



Condition mapping – Billingham Beck, Stockton.

Options Appraisal: We will consider recommendations made in the RRC Report (Lustrum Beck final, January 2013) and the Lustrum Beck Green Infrastructure Report (Groundwork 2014). Since the preparation of this studies there has been significant change in the catchment. Several phases of the Lustrum Beck Flood Alleviation Scheme have been successfully implemented including the work in Stockton town, Sixfields and Coatham Woods. In addition, work with the Tees Rivers Trust has delivered measures to tackle diffuse pollution and deliver c. 30ha of OM4 habitat (contributing to *Slow-the-Flow* principles). We will review

and update the long list of options assessed as part of the SOCs. Walk-over surveys and early discussion with the **Client's internal specialists** will ensure that no obvious options that will deliver **'all reasonable mitigation measures'** will be overlooked. Key to option development would be determination of the benefits of each. The long-list will be rationalised using the **Critical Success Factors** (CSF) established in the SOC. We will facilitate a workshop to select a shortlist of options that give best cost effectiveness, and which are affordable within the Client's budget. The Option Workshop will be facilitated by [redacted]. This can be delivered remotely through Teams. The options workshop will be supported by concept designs and landscape sketches. We would undertake a **Multi-Criteria Analysis** (MCA). A key feature of MCA is its emphasis on the judgement of the decision-making team, in establishing objectives and criteria, estimating relative importance weights and in judging the contribution of each scenario to each performance criterion (e.g. OM4 creation, low carbon solutions, buildability, WFD benefits etc.). Within the option assessment we shall consider wider habitat creation opportunities that will still contribute to WFD targets. Refinement of the viable options will require assessment of economic, environmental, technical and risk issues. Thorough investigation of these issues will make sure that the preferred option can be delivered. The Options Appraisal will:

Erosion management and edge protection.

- Provide a clear record of the appraisal process and a well-argued justification for the favoured options;
- Enable the Environment Agency to make informed decisions in regard to support and funding;
- Gain support from other organisations that have an interest in the scheme (e.g., Natural England);
- Consider legal obligations, **consultation with third parties, identify the agreements and permissions**;
- Assess and manage risk – including the likelihood of design conditions being exceeded or failing; and
- Consider Technical Feasibility - **consideration of climate change**, consideration of land use, including sustainability goals and engineering design and costs.

Full Business Case (FBC): Based on the range of options considered, a Short Form FBC will be prepared. We acknowledge that the Agency has requested that the project moves from SOC to FBC. [redacted] has applied this approached for other schemes and is confident that this approach is appropriate (risks have been identified in the Risk Management section of the submission). [redacted] will produce the strategic, economic and financial cases with the **Environment Agency providing the text for the commercial and management cases** (given these relate, in part, to procurement strategies). [redacted] will lead the preparation of the FBC, which will be reviewed independently within [redacted] has completed a secondment with the EA in Newcastle and has direct experience in the preparation of SOC, OBC and FBC for Environment Programme projects and projects with the PCM Teams in the North-East. Projects have included Natural Flood Risk (NFM) Management and Diffuse Pollution schemes including natural capital / ecosystems services in the development of benefits. [redacted] and [redacted] will provide support and technical review for the OBC. [redacted] has undertaken several benefit assessments for habitat creation projects at Billingham Beck, Greatham Marsh, Hurst to Lymington scheme appraisal for the Environment Agency, Cwm Ivy (South Wales) for Natural Resources Wales and as part of the Committee for Climate Change's research into Land use: 'Reducing emissions and preparing for climate change'. Partnership funding scores will be derived for the preferred option. **Hydraulic Modelling -** Although there has been extensive modelling on the Lustrum Catchment there isn't any existing detailed modelling of the tributaries mentioned. We would review the option assessments completed as part of the earlier Lustrum Beck FAS and the studies completed with regard to upstream storage completed for the Coatham Woods NFM Study. We would we provide an assessment of the possible impact of the options on flows and determining whether modelling is needed. Whilst significant change in slope or reach length/meandering might require modelling but smaller measures might not. At this stage we do not propose to complete detailed modelling to support the options. **Detailed Design and Construction, Design and Management (CDM) Regulations:** Following the identification of a short-list for each location, we will develop preferred options and provide a detailed design at each location. We have assumed that an

Case Study: Option Selection & BNG-At Greatham Marsh we have considered the opportunity for BNG several options based on different interventions. The Do Minimum option simply reflects the removal of a tidal structure. This leads to a very high % uplift, but only a small number of additional units. Options 1, 2 and 5 show increases in units following creation of new channels, breaches in additional to the removal of the tidal structure. The % uplift is also shown. Review of the % uplift and the actual unit change helps to identify the preferred option.

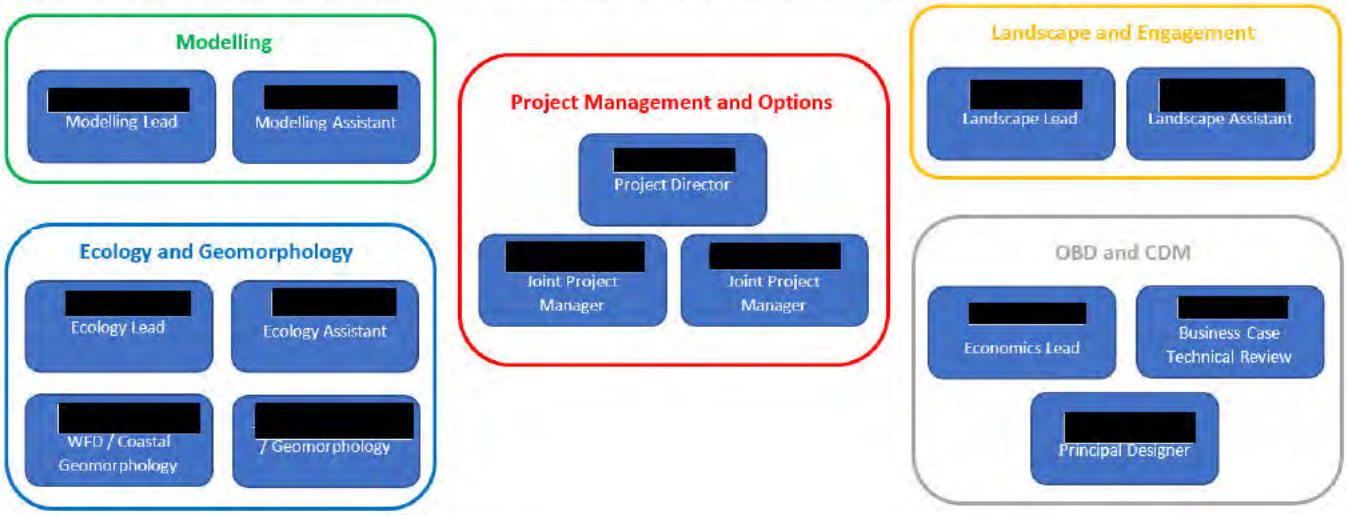
	Do Minimum	Option 1	Option 2	Option 5
On-site Baseline	6.71 units	88.12 units	115.46 units	88.08 units
On-site Intervention	20.38 Units	252.44 units	284 .83 units	275.76 units
Total Net Unit Change	13.67 units	164.32 units	169.37 units	187.68 units
Total Net % - uplift	203.73 %	186.48 %	146.69%	213.07 %

existing EA framework contractor will be appointed to complete any works and therefore we will provide a 'contract pack' in line with NEC4 as part of the detailed design documentation (for example drawings, Designer Risk Assessment, pre-construction management tool, specification, PCI). We have assumed a this will be required to support the FBC. [redacted] has extensive experience in management of design and construction works under the Construction (Design and Management) Regulations 2015. We will work with the EA as the Client under these regulations. We will provide a Principal Designer as requested by the client ([redacted] has close relations with experienced contractors in the North-East and can provide ECI support to **develop the costs** for the various options proposed these can be compared to costs derived from the Framework contractors. In addition, [redacted] has worked with the River Restoration Centre to catalogue a range of NFM measures and identify costs for guidance. **Project Risks:** The main risks identified, which are not generic (e.g. changes in scope, loss of staff, poor weather delaying site work), relate to the timely delivery of all relevant information and datasets to [redacted], receiving comments on draft deliverables as programmed, and the consequences of any remaining prevailing Covid-19 guidelines and restrictions during the course of the project. Unknown utilities present a significant risk to the project in terms of time, cost and meeting the objectives of the restoration. As part of the desktop study, we will request record plans from all statutory service providers and record utilities that could impact on the restoration. Existing utilities will be mapped on the options and design proposals with an assessment of the risk to the project and identification for the need of further-site investigation surveys during the delivery stage. We will work with project contractors to further reduce the risk of unknown services. We are not proposing to undertake a Site Investigation including trial pits to locate services at this stage. A live risk register will be maintained throughout the project, with any early warnings submitted to the EA Project Manager. We will review the key risks during project meetings, with an aim to reduce the severity and costs / implications for FBC. We will follow EA standard practice for Risk Assessment for FBC. **Water Framework Directive and BNG -** The EA's catchment explorer states that reasons for not achieving good (RNAG) and reasons for deterioration (RFD) for Lustrum Beck include Modification and Diffuse pollution (amongst others). Knowledge of the catchment will help identify opportunities to tackle these issues. [redacted] and Rosie [redacted] have an excellent understanding of the Lustrum Beck Catchment through previous projects with the EA Newcastle Team. [redacted] worked with the Tees Rivers Trust implementing a range of initiatives with local land managers tackling diffuse pollution issues. In addition, c.30 ha of OM4 habitat was developed, including Sixfields, Burn Wood and Coatham Woods. We acknowledge the requirement of the BNG survey work. [redacted] is **Full members of CIEEM** and also qualified to undertake the BNG surveys. As part of our collaboration with the EA under CDF and EcoSF3 we are supporting the Agency in the application of BNG in option assessment. The metrics used within the BNG are the actual number of **units gained** through the interventions and the **% uplift** that this represents (see Case Study). Each has a value in supporting the viability of the project. The units gained is affected by the target habitats that are created through the interventions, where the uplift of certain habitat (e.g. inter-tidal) is greater than others. Although these habitats are more challenging to create with the predicted condition 'lower' in its early establishment and the time to achieve **target condition** is likely to be longer. **Quality and Environmental Management:** [redacted] is a registered practice with CIEEM and also holds the IEMA Kitemark for its EIA works. Both require external review and continuous improvement through performance targets. [redacted] maintains an Integrated Management System (IMS) that covers Quality Management (QMS ISO01:2015), Environmental Management (EMS-ISO14001:2015), Health, Safety and Wellbeing Management (HSW ISO45001:2018), Information Security Management (ISMS-ISO27001:2013), Business Continuity Management (BCM) and Human Resources Management (HR). Work carried out on this project by any member of staff will be subject to [redacted] QA procedure. To comply with [redacted] IMS Technical Review Certificates will be provided at appropriate stages. Delivery for the project will be the programme which sets out milestone and inter-dependent elements. We will report progress against the agreed programme at progress meetings through the Project Managers Report.

2. Project Management (inc Project plan). A project plan may be provided as an attachment with your **reply**

Copyright and Licensing: [redacted] will be responsible for complying with copyright restrictions and will procure any third party use licences required for the Environment Agency to use any such data. [redacted] is certified to ISO 27001:2013. All model and survey information will be returned to the client in an encrypted format using WinZip 128 bit encryption. We confirm that all project deliverables such as model files, survey data or anything of a personal nature such as questionnaires or address data will be returned in an encrypted format using WinZip 128 bit encryption. **Project Management:** The project will be managed from our Newcastle Office, which is conveniently located for Tyneside House and also the study areas. Staff proposed are from the EcoSF3 submission, although since award we have supplemented our Team. Pen Portraits are submitted when new staff are appointed in accordance with the framework agreements. An organogram is provided to describe the team make up. We are proposing that Project Manager responsibilities are shared by [redacted] and [redacted] with [redacted] acting as Project Director. Over the past 12 – 18 months our project Teams have developed effective ways of using Microsoft Teams (unfortunately we are requested not to use Zoom) to run our meetings and workshops. This is used in conjunction with Teams Sharepoint Sites to allow joint working and secure safe transfer of data. Over our current EcoSF Projects we have successfully maintain weekly contact with the EA PM, providing updates on programme and costs. Project Communication will be managed through the **Project Communication Plan**, established at the start of the project.

On a day-to-day function the project manager will lead the communication. The **Project Manager's Report** will be produced monthly, with a weekly summary of progress to date provided for the client manager. The inter-action of individual tasks will be highlighted to establish any **critical paths**. Regular **Progress Meetings** will be held (frequency of 4 - 6 week dependent upon the nature of the project). We would aim to manage these meetings for efficiency utilising teleconferences / video conferences or Teams as appropriate. **Risk Management:** At the start of the project we would undertake a **Risk Meeting** to establish the risks associated with the delivery of the project, identify the ownership of each risk and the mitigation required to control or eliminate each. This would populate the **Risk Register**. Action on the top risks would form an agenda item on each Progress Meeting. **Efficiency and Innovation:** [redacted] is currently working with the EA and Stockton Borough Council within the Tees Tidal catchment helping to deliver several of the current restoration projects. [redacted] was the Project Management for the upstream works for the Lustrum Beck FAS during his secondment to the EA. We have supported the EA on the Lustrum Beck modelling for many years. We are therefore in a unique position to provide an informed and efficient support to the EA. [redacted] has developed a virtual conference room that can be used where face to face engagement may not be possible. **Additional scope and delivery phases:** [redacted] possesses a depth of experienced in steering projects through SOC, OBC, FBC and construction. We have worked with the Environment Agency for many years and currently sit on all its frameworks. We are the CDF Supplier for the South **East Hub.** We have design teams in Edinburgh, Leeds, Saltaire, Peterborough, Newport, Coleshill and Haywards Heath to support the Newcastle Team, although that we would ensure that that key Project Management services were provided by the local delivery office. Our Design Teams have delivered habitat creation schemes for the EA, NRW, SEPA, local authorities and Rivers Trusts. [redacted] Consulting is a Registered company with CIEEM. We are incredibly proud to state that [redacted] Consulting was named Consultancy of the Year (Medium) 2021 at the Chartered Institute of Ecology and Environmental Management Awards: https://www.ibaconsulting.com/knowledge-hub/jba-consulting-named-medium-consultancy-of-the-year-2021-at-chartered-institute-of-ecology-and-environmental-management-awards/



3. Proposed Staff who will do the work and briefly state previous relevant qualification/experience. Contractors experience of undertaking similar projects and accreditations (if requested)

[redacted] **BSc MSc MCIWEM** – [redacted] is a highly experienced modeller, who has worked extensively with the Newcastle EA teams to establish habitat creation / restoration opportunities on numerous catchments across the North East (notably the Tees). [redacted] has worked on wide range of experience using Flood Modeller-TUFLOW software. She has also progressed modelling work through to mapping, flood warning and economic appraisal, providing continuity of understanding throughout detailed studies. [redacted] has managed several hydraulic modelling studies for the Environment Agency and private sector clients. Through managing complex modelling studies, drawing on multiple disciplines, [redacted] has directed solutions for a wide range of water and environmental issues. Over the past 3 years Rosie has completed secondment opportunities with the Environment Agency North East Partnerships and Strategic Overview (PSO) team. Through her secondments, she has investigated potential projects for the pipeline of capital works in the North East and supported Strategic Outline Case development. [redacted] has planned, initiated, and managed accelerated hydraulic modelling projects to progress Outline Business Cases. [redacted] **BSc PhD** – [redacted] has recently joined [redacted] based in Newcastle from the Environment Agency into our growing national geomorphology team. [redacted] has a PhD in Geomorphology from the University of Northampton (2018) and a BSc (Hons) degree in Rural Resource Management from Myerscough College (UCLAN - 2013). She joined [redacted] Consulting in 2021 as an Analyst Geomorphologist. [redacted] specialist skills include geomorphology, river restoration and WFD assessment.

[redacted] previous employment at the Environment Agency for 3 years included roles such as Geomorphology Technical Specialist and Geomorphologist. In these roles [redacted] provided technical & regulatory leadership in the Fisheries, Biodiversity & Geomorphology (FBG) team. [redacted] roles had a strong focus on delivering Water Framework Directive outcomes through operational and regulatory activities, as well as partnerships. [redacted] also has an interest in coastal and estuarine geomorphology. [redacted] **BSc PhD** - Anissia has a BSc degree in Conservation Biology and Geography from the University of Exeter (Cornwall campus). She completed her PhD at Plymouth University, which investigated the ways in which salt marsh creation and restoration schemes can be

optimised following managed realignment. [redacted] expertise lies in catchment processes and she is particularly interested in catchment-based interdependent ecological and geomorphological processes (eco-geomorphology). At [redacted] has largely been involved in habitat restoration projects such as coastal managed realignment at Cwm Ivy, South Wales, reedbed creation at Marland, Porlock and catchment-scale mapping of restoration opportunities to meet WFD objectives on the Tory and Long Brooks, Plympton. [redacted] has conducted hydromorphic audits for a range of projects, including flood alleviation, habitat restoration and hydropower schemes. Anissia is part of [redacted]s Design Team for Greatham Beck and Ormesby Beck. [redacted] **BSc Dip LA CMLI** – [redacted] is an experienced Chartered Landscape with our 20 years' experience in design consultancy in delivering planning applications for large scale development schemes, regeneration projects, strategic infrastructure and energy projects. She is the National Resource and Technical Lead for Landscape Architecture at [redacted] and based in Newcastle. Since joining [redacted], [redacted] has been involved in a variety of Environment Agency projects through CDF, CSF and EcoSF3. She has experience at Public Inquiry giving evidence for Transport Scotland and Durham County Council, as well as preparation of numerous Proofs of Evidence, Masterplanning, detailed design and specification for a full range of hard and softworks projects. Key skills in staff and project management, client liaison and business development. [redacted] has been a mentor on the Pathway to Chartership for a number of successful candidates. [redacted] **BSc MSc MCIEEM** - [redacted] has a BSc in Zoology and an MSc in Biodiversity Conservation. She has been working in ecological consultancy for five years and has experience in Preliminary Ecological Appraisals, protected species surveying, river restoration and Habitat Regulation Assessments. [redacted] has survey experience for a range of protected and notable

species and has completed a wide range of ecological projects including Preliminary Ecological Appraisals, Habitat Regulation Assessments and river restoration. [redacted] has recently become an accredited **River Habitat Surveyor** [redacted] has worked alongside both public and private clients and has been involved with multi-disciplinary projects. [redacted] holds a Great Crested Newt Class Licence and is currently working towards a Hazel Dormouse and White-clawed Crayfish licence. [redacted] is competent in undertaking Water Vole displacement having led on several projects and is an Accredited Agent on the Environment Agency Water Vole displacement licence. [redacted] **MSci** – [redacted] has recently successfully passed the [redacted] Graduate Programme and provides environmental support across a range of environmental projects including Biodiversity Net Gain and Ecological Clerk of Works. [redacted] has completed a MSci degree at the University of Birmingham, where she gained

knowledge of ecological concepts, conservation practice and management. She was able to gain practical experience, surveying plant species in Norway and completing a placement year with the Field Studies Council. During this year, she worked with a range of people to deliver fieldwork sessions and continued to develop her survey skills. This was further developed in her internships with Mott MacDonald, where she also produced numerous professional ecological reports for Severn Trent Water and Welsh Water. [redacted] also has a wide range of voluntary experience, including completing weekly otter and shrew surveys for the Birmingham Canal and River Trust, working on the Out of Hours Helpline for the Bat Conservation Trust and as a committee member for the University of Birmingham Conservation Volunteers. [redacted] **BSc MSc CEnv CSci MCIWEM C.WEM** - [redacted] has been working since 2001 on a broad range of flood risk appraisal projects in the UK. He is JBA's lead for economic appraisal and is a specialist in economic analysis to support the management of existing defence assets and the promotion of

new flood mitigation measures. [redacted] has led and contributed economic experience to a large number of business cases for the Environment Agency and local authorities (as well as NRW and Scottish Local Authorities). Recent business cases include Lowestoft, Southwell, Lymington, Ulverston, Ponteland, Hucknall and the River Don. [redacted] has trained over 400 staff in the flood damage calculations, economic appraisal and whole life costing. [redacted] is pioneering the use of natural capital and ecosystem service assessments to monetise the environmental and wider benefits associated with a range of FRM measures (managed realignment, Natural Flood Management) are incorporated and implemented within business cases. This includes ecosystem service assessments for the Eddleston NFM catchment, the Western Solent and Hurst Spit, the environmental benefits of woodland planting in Southwell, ecosystem services related to a habitat creation/managed

realignment north Gower (Wales), an economic review of NFM approaches in the Yoker and an ecosystem services assessment of WFD restoration works in Plympton. **BA (Hons) MSc –** is s Carbon Lead and a key member of our Environment and Sustainability Team. joined having completed an MSc in Sustainability and Consultancy and a BA degree in Geography prior, at the University of Leeds. Master's thesis was undertaken on placement at and was focused on the factors that impact and shape the success of partnership working in NFM schemes. As Carbon Lead, has facilitated the upskilling of project teams to encourage greater engagement with carbon and sustainability during the design process, using carbon tools for optioneering and facilitating sustainability workshops. is researching and scoping a carbon modelling and reporting tool that could be applicable to NFM schemes and has a recently contributed to a Committee on Climate Change report which analysed land-use change as a means of adaptation. Outside of her work, is a Sustainability Ambassador for Kendal Mountain Festival, assisting in research over the next 3 years to help the UK's leading outdoor festival set and achieve the highest standards of innovation, inclusivity and creativity for Mountain Festival Sustainability **BEng MSt CEng MICE MAPM MCIWEM C.WEM –** Engineering Lead and Principal Designer. is an NECReg and APMP qualified Project Manager, Chartered Engineer and Member of the ICE, APM and CIWEM. has managed complex projects and programmes of work over the full project lifecycle including the Construction / Implementation Phase of Projects as NEC Project Manager.

BA PhD CEnv FCIEEM – in a Technical Director at and leads our EIA and Environmental Management workstream. has 30 years' experience in the environment sector. Since 2001 has worked on large infra-structure schemes in flood defence and transportation. He has applied his environmental knowledge as a skilled environmental co-ordinator complying Environmental Statements, non-statutory environmental reports for private and public clients. He has acted as expert witness at inquires and planning appeals. has prepared numerous statutory Environmental Statements and non-statutory Environmental Report for public and private clients. He routinely takes the role of report editor and technical reviewer, but provides specialist knowledge to the Ecology, Water Quality / Water Framework Directive and Cumulative Impacts sections. has published a range of peer-reviewed paper and contributes to professional conferences. He is an active member of his professional institute and is a Fellow with the CIEEM.

A draft programme has been provided as an appendix to this submission. The programme will be confirmed within two-weeks of the start-up meeting.

4. Health & Safety (only complete if requested in defined evaluation criteria)

operates a certificated Health, Safety and Wellbeing Management (**ISO45001:2018**) system. We have a proactive approach to Safety, Heath, Environment and Welfare(SHEW), ensuing **all staff** receive an additional 'minimum' of safety training over and above that prescribed in our CMS policies. We encourage an open-door approach to SHEW Management where all incidents are raised to encourage better and safer working. We have adopted an approach that every meeting or workshop will begin with a Health, Safety & Climate Emergency Moment for several years. We have developed systems for risk assessment including the development of safe systems of work when working near or over water.

5. Sustainability (only complete if requested in defined evaluation criteria)

Not Required

6. Quality Assurance (only complete if requested in defined evaluation criteria)

Not Required

	2022												2023	
Activity	**January**	**February**	**March**	**April**	**May**	**June**	**July**	**August**	**September**	**October**	**November**	**December**	**January**	**February**
Attend a contract start-up meeting.	■													
Weekly PM Catch-ups	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Familiarisation with the lower Lustrum Beck, complete appraisal of all feasible mitigation measures that can be delivered.	■	■	■											
Develop the long list of options and host a workshop with the Client and selected stakeholders to confirm the short list.			■											
Evaluate short list of options			■	■	■									
Options workshop				■										
Complete a biodiversity baseline assessment of the river.				■	■									
Complete DEFRA Biodiversity Metric calculating the likely biodiversity unit changes resulting from the proposed options.					■									
Complete options appraisal in line with the FCRM Appraisal Guidance to include monetisation of FCRM and Ecological services benefits.					■	■								
Undertake any hydraulic modelling if necessary				■	■									
Determine preferred option.							■							
Consider innovative approaches to reducing waste and maximise the reuse of site won materials.							■							
Host workshop with the Client and selected stakeholders to confirm the preferred option.								■						
Produce detailed design and costs for preferred option.								■	■					
Produce a Preliminary Environmental Information Report (PEIR)				■	■	■	■	■	■					
Identifying the need for further surveys/assessments.								■						
Secure relevant landowner agreements, and necessary permissions.									■	■				
Prepare a full business case.										■	■	■		
FBC Review and updates													■	
Project Completion														■

7. Cost Proposal

Please use day rates, including any applicable discounts, as agreed under the framework contract. A full cost schedule may be attached to support the costs summarised below.

Task No.	Name	Framework grade	Day rate	No. of Days or part thereof	Cost
	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
				Total staff costs	[redacted]
Expenses (please detail type ie travel, accommodation etc)					
	Utilities Data				[redacted]
	Enviro Check Report				
	Biological Data				
				Total overall cost	

8.-Terms & Conditions	
Note to contractor – All call off contracts under the Ecological Services Framework are subject to the terms and conditions agreed at framework award, including the Prior Rights Schedule and GDPR Schedule completed at award of the call-off contract.	
Notes	You must have a purchase order number from the Contracting Authority before you start any work in connection with this proposal. **If you have carried out a protected species survey, data collected must be uploaded onto the NBN network. Please take account of this in your quote.**
By signing this form *(Insert Contractors Name)* agree to provide the services stated above for the cost set out in your Cost Proposal and in accordance with the Ecological Services Framework 3 Agreement Terms and additional appendices (if used).	
Contractor Project Manager:	[redacted]
Signature:	[redacted]
Date:	29th November 2021

9. Confirmation of Instructions (Contracting Authority Project Manager to complete)	
Notes	All agreed post submission amendments to scope, proposal, timetable or costs must be updated in the sections above prior to accepting the proposal. **A commission code must be obtained from [redacted] prior to confirming award and must be quoted on your purchase order.** A Bravo ECM reference should be obtained from Commercial if the project has been issued via Bravo and quoted on your purchase order.

Authorisation	Name	Signature	Date
Contracting Authority Project Manager	[redacted]		**21/12/21**
Authorised Contracting Authority Signature	[redacted]	[redacted]	**22/12/21**
DgC Authorised Signature (if required)	[redacted]	[redacted]	**22/12/21**

Commission Code	**EcoSF3/21/166**
Purchase order no.	
Bravo ECM Ref (if applicable)	**33955**

The completed Project Form should be returned to the Contractor as authorisation to commence work. A copy must be provided to the named Commercial Lead if the award has been conducted via Bravo.

22503 ECOLOGICAL SERVICES FRAMEWORK 3 (EcoSF3)
SCHEDULE B PROJECT FORM AND CONFIRMATION OF INSTRUCTIONS

PART 3
CHANGE CONTROL SCHEDULE

Notes	**To be completed by Contracting Authority Project Manager** **Any extensions, price changes or amendments to existing orders need to be discussed with Stephen Perriss before being agreed with the Contractor**. Please remember to amend your Purchase Order in SOP if necessary. The table below should be used to record and authorise the agreed changes throughout the project. A Change Control Notice (CCN) should be completed for substantial changes to the project and a summary provided in the table below. Send a copy of the revised Project Form and CCN (if used) to the Contractor once the change has been agreed and approved. A copy should also be sent to your Commercial Lead if a Bravo ecm reference has been provided.

10. Change Control
All amendments to project scope, timetable or costs must be submitted to and approved by the Contracting Authority PM prior to implementing the change.

Change Details	CCN Ref. (if applicable)	Revised completion date (if applicable)	Revised Project Cost (if applicable	Approved by (Contracting Authority's PM) / Date