

**22503 ECOLOGICAL SERVICES FRAMEWORK CONTRACT 3 PROJECT FORM**

**Part 1 – to be completed by Environment Agency Project Manager**

**Project title:** River Aire Re-meander feasibility study (29272)

**Date:** 10/04/2020

<b>Environment Agency Project Manager:</b>	<div></div>	<b>Phone number:</b>	TBC
<b>Budget holder:</b>	<div></div>	<b>Cost code:</b>	TBC
<b>Procurement Contact (if over £50k):</b>	Not applicable	<b>Phone number:</b>	Not applicable
<b>Project Start Date</b>	30 November 2020		
<b>Project Completion Date</b>	2 April 2021		
<b>For any projects over £10k, full competition is required (i.e. all suppliers on the Lot invited to quote). Please tick</b>	<b>Direct Award</b>	<input type="checkbox"/>	<b>Mini-comp</b> <input checked="" type="checkbox"/>
<b>Lot number 1/2/3/4</b>	4		
<b>Proposal return date: (no less than 10 working days from current date)</b>			

<b>Notes</b>	<p>Any extensions, or amendments to existing orders need to be discussed with the contract manager first and the table in section 6 completed to authorise the change to the contractor.</p> <p>A <b>Prior Rights Schedule</b> to record data being shared between parties and a <b>GDPR Schedule</b> (if personal data is being handled as part of the project) must be completed with the successful contractor at contract start up and updated throughout the project and held as part of the contract record.</p>
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**Evaluation criteria:** (for work over £10k project managers need to prepare and complete an evaluation model on receipt of tender submissions – see [Ecosf pages](#) on Easinet for template)

Price	Weighting	50%
Quality	Weighting	50%
<b>Quality Sub-Criteria Weightings:</b>		
<b>Approach &amp; Methodology</b> To include: <ul style="list-style-type: none"> <li>Outline method of how supplier proposes to deliver the services</li> <li>The approach to mitigate and minimise risks and maximise opportunities</li> </ul> <p><b>A minimum score threshold of 4 has been set for this criteria.</b> If this score is not achieved your bid may not be considered further regardless of scores for other criteria or commercial bid.</p>		55%
<b>Proposed Staff (inc CV's)</b> To include:		30%

<ul style="list-style-type: none"> <li>A description of how the proposed team will bring their skill and experience to deliver best value and efficiency on this particular project.</li> <li>CV's for proposed key team members</li> </ul> <p>A minimum score threshold of 4 has been set for this criteria. If this score is not achieved your bid may not be considered further regardless of scores for other criteria or commercial bid.</p>		
Project Management (including project plan) To include: A programme of the services		15%

<b>Specification</b> (Details to be provided by the Environment Agency project manager. <i>Note – the contractor's proposal will be limited to 3 pages (excluding cvs and costs) unless otherwise indicated in your specification. Please also detail the Contractor's required Limitation of Liability.</i> )			
<b>1. Description of work required – overall purpose &amp; scope</b>			
Please see attached document titled 'R.Aire re-meander feasibility study scope'			
<b>2. Required skills / experience from the Framework contractor</b>			
Experience of undertaking geomorphological assessments for river restoration / remeandering including: <ul style="list-style-type: none"> <li>Historic trend analysis</li> <li>Topographic / LiDAR analysis</li> <li>Geomorphological audit</li> </ul> Experience of undertaking Flood Risk Assessments for river restoration including assessment of flood risk benefit. Experience of delivering projects which maximise opportunities for environmental and habitat improvement.			
<b>3. Proposed programme of work and payment table (Detailing specific tasks, deliverables &amp; completion date where appropriate) Payment schedule should detail the % amount that will be paid after delivery of each task (We always hold back a minimum of 30% until the project is complete)</b>			
Task no.	Task and deliverable	Completion date	Payment schedule
1.	Identify a suitable location(s)	Completion dates to be agreed with successful contractor.	

	Conduct a catchment-wide desk study, using historic maps and LIDAR to identify potential locations for paleo-channel re-connection.		100%
	Undertake desk based assessment of site constraints		100%
2.	<b>Produce a long-list of potential sites based on the desk-study.</b>		100%
3	<b>Topography and levels</b>		
	Use LIDAR to assess the suitability for river restoration via paleo-channel reconnection. or new channel, and - estimating volumes of excavation.		100%
	Complete a topographic levels survey on site as required to ground-truth the LIDAR data, and to cover any gaps.		100%
	Levels survey of the river channel (existing and proposed reconnection), including channel cross-sections and long-section for: - use in the flood modelling, and - designing river habitat features, and - understanding bed levels in both the current river channel and paleo-channel		100%
	<b>If excavation is required:</b>		100%
	Calculate the volume of material, including sediment, that will have to be excavated to create the various habitat features and areas of habitat;		100%
	Identify where excavated material can be disposed of and volume that receiving area can take.		100%
	Calculations to ensure the design does not result in any loss of flood storage where required.		100%
5	<b>Hydrology</b>		
	Obtain measurements of water levels in the paleo-channel / old meander.		100%
	Obtain measurements of water levels in current channel (existing data and site measurements/monitoring).		100%
	Determine the flow duration curve, Q10 – Q95, Qmean		100%
	ADCP / bathymetric survey (to assess flow depth, velocity and channel cross section).		100%
6	<b>Flood Risk Assessment</b>		
	Show that the identified option provides a flood risk benefit (reduction) to Leeds city centre (measured at Armley gauging station).		100%
	Demonstrate that the identified option (which could include removing sections of flood embankment) will not impact on water levels upstream and downstream of the area, for modelled water levels up to and including the 1% AEP (including the 1% AEP plus climate change allowance).		100%
	The tenderer should state what type of model and modelling approach they will use to determine if the project is feasible.		100%
7	<b>Ground / sediment investigation</b>		
	Review the existing BGS drift and underlying geology.		100%

	Gather any other relevant existing information (e.g. borehole records/logs).		100%
	Conduct a desk study to identify potential contaminants at site.		100%
8	<b>Geomorphology</b>		
	Undertake a historic trend analysis to understand the sequence of past channel change at the site (including both natural and anthropogenic changes).		100%
	Undertake a hydromorphic audit and geomorphology assessment in order to fully understand: <ul style="list-style-type: none"> <li>- the wider catchment character; and</li> <li>- the existing flow regime; and</li> <li>- the existing geomorphological character of the site (study reach), including but not limited to mapping the existing morphological features and physical modifications, assessing the existing river bed substrate, mapping and characterising the paleo-channel; and</li> <li>- Set baseline.</li> </ul>		100%
9	<b>Environmental</b>		
	Carry out a Phase 1 ecological survey to assess the existing habitats and species that would be affected by the proposed re-meandering project.		100%
	Carry out any appropriate heritage / archaeological assessments as required		100%
	Identify any further environmental surveys that would be required.		100%
	Provide a consideration of any environmental enhancements that could be achieved as part of the project.		100%
10	<b>Consents, permissions and permits</b>		
	Provide a summary of any consents, permission and permits required.		100%
11	<b>Other investigations as required</b>		
	Structural survey (if appropriate – e.g. weir, access structures, adjacent walls, etc).		100%
	Potential for site access for contractors		100%
	Risk assessment and identify CDM issues for construction, highlighting any issues and providing confirmation that the principals of prevention as set out under the CDM Regulations 2015 have been addressed.		100%
	Mining search.		100%
	Unexploded ordnance search.		100%
	Any liabilities to maintain access to water for tenants / landowners downstream of project area.		100%
	Any other constraints.		100%

**ECOLOGICAL SERVICES FRAMEWORK CONTRACT 2 (EAAA-9BEDDK)  
TASK QUOTATION SHEET**

**Part 2 – to be completed by Framework Consultant Project Manager**

Framework Consultancy name		Ecological Services Framework 3	
Consultant Project Manager name		[REDACTED]	
Consultant project manager phone number:	[REDACTED]	Consultant project manager e-mail address:	[REDACTED]

**Part 2 - Consultant Proposal (details to be provided by the Contractor)**

*(to include methodology, work programme, staff details (including relevant cvs) Limit to 3 sides of A4, excluding CVs and Costs (unless otherwise indicated in Environment Agency project client's specification)*



## 1. Approach & Methodology

Our highly experienced team will deliver the Client's aspirations for the River Aire catchment and develop real and long-lasting improvements using an innovative methodology to identify and assess feasible Natural Flood Management (NFM)/ restoration options with a focus on flood risk and environmental benefits. The team has extensive experience of delivering feasibility studies for the EA and Local Authorities and are particularly strong in bringing together the various stakeholders and project drivers within the technical constraints. We have a strong presence in the Leeds area with an office of over 40 employees and work with local stakeholders within the Aire catchment such as Yorkshire Water and the Local Authorities.

We present a phased and spatially-nested approach, firstly appraising the catchment-wide opportunities for restoration and flood management to determine a long-list of options, using the OVERFLOW model (see below) to assess their relative benefits.

Through close collaboration and a workshop with the EA, we will then agree the selection of two 'short-listed' locations for NFM implementation which will be assessed in more detail during the second phase, with the results presented in a feasibility study report to inform future design and delivery.

Health and Safety (H&S) is at the forefront of how we operate and with the ongoing COVID-19 pandemic our H&S policies and guidelines are vitally important to safeguarding the health and wellbeing of our employees and our clients. Site visits are subject to rigorous H&S risk assessments and are completed in accordance with the latest guidance issued by the Stantec UK

Pandemic Incident Management team, with sign off from the relevant levels received in advance. In response to government guidelines we have implemented the use of virtual meetings and anticipate that this approach will continue throughout the duration of this study. In addition, we have started to conduct 'virtual site visits' whereby one person attends the site and is connected to other team members via video and audio link. The team members are able to instruct the attendee and view specific aspects as required, obtain photos of relevant features and access the site as though in attendance. This approach has yielded multiple benefits including the safeguarding of our staff, carbon savings through reduced travel, allow staff who would be unlikely to attend the site to 'dial-in' as required, and provide cost and time savings through reduced expenses and removal of travel time. Due to the success of our recent trials we hope to explore a similar approach during this study.

H&S underpins our philosophy, is embedded within our processes and systems, and is practically applied through effective team and project management. The Construction Design Management (CDM) Regulations 2015 apply to this project as it has the potential to lead to construction of a scheme. As designer we will comply with our "designer" duties under the CDM Regulations. We note that the role of principal designer has not been allowed for and have assumed the EA will fulfil this role.

### Phase 1: Data Gathering and Baseline Analysis

On appointment we will host a virtual start-up meeting with the EA to discuss the project, its aims and its aspirations in more detail to confirm our assumptions, manage our approach and meet and exceed expectations. Initially we will complete a data gathering and review exercise. We have assumed that the data will be provided free of charge and is adequate to undertake the subsequent stages of the project. Outputs of this Phase will be provided in tabular and GIS-based format upon completion and prior to the workshop with the EA.

### Identify Suitable Locations and Long-list of Options (project form ref 1 & 2)

A catchment-wide desk study will be undertaken to identify potential locations of interest using existing EA NFM opportunity assessment, LiDAR, aerial imagery, current/ historic mapping, landcover/ land-use, solid/ drift geology and hydrological data-sets. This will identify potential locations for 'paleo-channel'/ floodplain reconnection, as well as other NFM opportunities which may also deliver a significant benefit to flood risk management. This initial screening-level assessment will direct a reconnaissance field-based assessment to 'ground-truth' the identified opportunities and to provide a representative understanding of the entire catchment (possibly also identifying further NFM/ restoration opportunities). The output of the secondary, field-based screening process will be a 'long-list' of practically feasible candidate NFM/ restoration options. All sites will be considered as unconstrained at this stage. The survey will provide invaluable information with regards to existing site conditions and would inform the OVERFLOW modelling approach.

To assess the potential flood risk benefits of the identified long-listed interventions, we will use the catchment-scale OVERFLOW model. Previously the model has been successfully applied to a number of NFM/ restoration feasibility, design and flood risk studies (e.g. Pickering Beck, North Yorkshire and River Enrick, Highland). OVERFLOW will be used to assess the initially identified long-list of options in terms of delivering meaningful flood risk management for receptors in the River Aire catchment. Quantitative output will permit an objective comparison of flood risk benefit between specific interventions and combination of interventions distributed throughout the catchment. It is assumed that there is sufficient LiDAR of suitable coverage and resolution for the catchment, which will be provided by the EA or downloaded from the DEFRA spatial data platform.

OVERFLOW is not a high-resolution hydraulic model and it is therefore more suitable for appraisal-level assessments such as this project; it will therefore provide a more rapid and cost-effective appraisal of the entire River Aire catchment than other approaches. Through the application of OVERFLOW, the effects of different types and combinations of broad-scale land-use change (e.g. reforestation, drainage re-naturalisation, wetland enhancement, widespread buffer strip development etc) and more discrete 'within- floodplain' measures (e.g. re-meandering, embankment removal, field corner bunds, addition of in-channel large wood) distributed throughout the catchment can be assessed. So, while the model is applied to the entire catchment, it also has the capacity to resolve the influence of interventions at the sub-reach scale through the prescription of site- and case-specific hydraulic geometry and hydraulic roughness relationships. Therefore, OVERFLOW will provide an appraisal-level assessment of the individual and cumulative effects of the type and spatial distribution of the 'long-list' of candidate NFM / restoration options, enabling the identification of an optimal short-list. In other words, not only does the model predict what type of interventions are the most effective, it also shows what spatial arrangement they should be applied in and, hence, provides a good initial answer to the question, "What to apply and where?". The OVERFLOW modelling of the River Aire catchment can determine the resultant change in a hydrograph as a result of the implementation of a measure or combination of measures. This information can then be transposed to produce flow duration curves at locations associated with time-series data. It will therefore be possible to understand the influence on flood risk that any option (i.e. long- or short-listed) can have through the OVERFLOW results.

The long-list of options produced from the initial desk-based study, the subsequent refinements from the reconnaissance field survey and the OVERFLOW modelling outputs will be submitted to the EA. This data will be presented at a workshop involving members of the project team and key stakeholders to discuss the range of options and to identify a short-list (at this stage

assumed to be two) that will be assessed in greater detail in Phase 2. The quantitative assessment of a wide range of NFM/ restoration options (i.e. additional to the re-establishment of historical channels) throughout the Aire catchment (i.e. the long-list) in terms of their relative benefit, both individually and in various combinations, to flood risk represents added value to the project. The associated reporting will provide a stand-alone document that can subsequently be utilised for ongoing catchment-scale NFM-planning in the River Aire catchment.

#### **Phase 2: Assessment of Short-Listed Options & Feasibility Study**

The two selected short-listed options determined during the EA workshop will be scrutinised in more detail during Phase 2. This will include the appraisal of the specific site constraints and opportunities and the formulation of the options within a feasibility study report. Although all types of options will be considered during the initial screening stages of the project, the ITT identifies the reconnection of the river with its floodplain of particular potential interest; such an option could be developed through measures such as restoring the natural sinuous course of the river and/ or embankment removal/ set-back.

The feasibility study report will be the deliverable for Phase 2. This would include specific reference to the topics of information outlined below, and would identify any further survey requirement, scale and programme for their ultimate delivery. The merits and limitations of each site location / option will be assessed from a geomorphological, environmental, ecological, geological and flood risk perspective, and will be summarised in line with the project objectives within the feasibility study report.

#### **Topography and Levels (project form ref 3)**

An initial assessment of LiDAR at each site will have been made during Phase 1, identifying potential gaps in the dataset. Topographic survey(s) will be conducted over areas of no or poor LiDAR coverage. Elsewhere, spot checks to validate LiDAR will be conducted. This will ensure that full coverage of each site of interest, including the floodplain, are held (where site constraints allow). Outputs will allow for the production of site Digital Elevation Models (DEMs) of sufficient detail for any subsequent higher resolution hydraulic modelling and to provide the basis for initial specification of potential outline designs.

#### **Hydrology and Flood Risk Assessment (FRA) (project form ref 5 & 6)**

At the short-listed sites, water level measurements will be taken in the main stem, and in any visible historic/ backwater/ cut-off channels. Surveyed water levels will allow for further calibration of the OVERFLOW model and to inform the design of options. OVERFLOW will determine the change in hydrographs and flow duration curves as a result of the implementation of a specific NFM/ restoration measure (or combination of measures), providing a detailed understanding of hydrology of the River Aire at the short-listed locations under existing and design conditions. The OVERFLOW model results will provide an assessment of the influence of the short-listed options on flood risk to their local areas in accordance with the EA's expectations, with the results inferred to understand resultant changes in flows at the downstream Aire at Armley (27028) gauge. The FRA will sit within the Feasibility Study and will demonstrate that the short-listed options meet the EA's expectations for flood risk.

#### **Ground / sediment investigation (project form ref 7)**

For the two short-listed sites we will undertake a high level preliminary review of the anticipated ground conditions and potential for ground contamination to be present. This will assist to identify potentially significant geotechnical and geoenvironmental constraints to the proposed development of the site.

The review will be carried out using freely available historical mapping, from publicly available (non-chargeable) web-based sources to enable a brief review of historical ordnance mapping, geological mapping and BGS boreholes, where available. It should be recognised that, subject to the proposed intervention, further studies including a full Phase 1 Ground Conditions Assessment report and Phase 2 ground Investigation may be required. Whilst we will provide an indication of the extent of likely further works within our technical note, detailed recommendations and costs for such can only be made once the extent and nature of the proposed schemes are defined.

#### **Geomorphology (project form ref 8)**

At Phase 1, a historic assessment of the site(s) will be conducted, providing information as to the potential natural dynamic character of the reach(es) and anthropogenic changes. Outputs will be provided in GIS-based format and a summary will be included within the feasibility study report. Following the identification of the long-list sites, a targeted reconnaissance survey will then be conducted at each long-listed site to field-validate NFM opportunity and, generally, on a representative basis throughout the catchment. In addition to refining the long-list, this survey will also provide a general understanding of the physical condition of the catchment, important to identifying appropriate implementation measures given varying geomorphic condition. Following the workshop and identification of the short-listed sites, a more detailed geomorphic survey (following a 'fluvial audit' approach) covering each site and extending a maximum 1 km upstream and downstream will be conducted. Field data collected will be used in conjunction with the desk-based information to develop a broad-scale understanding of contemporary catchment processes in the Aire catchment and how these have been impacted by historical human activity. Based on the outcome of the historic assessment and an understanding of the imposed fundamental controls on the physical (i.e. geomorphic) condition of the catchment, where possible, a 'reference state' (i.e. the condition of the catchment under low human impact) will be determined for each discrete physical zone identified. This will provide a benchmark against which restoration/ NFM targets can be defined and providing the geomorphic constraints for sites where interventions are proposed.

#### **Environmental (project form ref 9)**

Desk-based assessments will be completed to understand key heritage, archaeological, environmental and ecological constraints and opportunities within the two short-listed sites, including any local, national and international designations and to understand presence/absence of species of importance and areas of raised archaeological, geoarchaeological or heritage potential. We will carry out a Phase 1 Habitat Survey of the site, review any available species survey results and determine the value of the existing habitat and identify key constraints and opportunities. The outcomes of the ecological desk-based assessment, archaeology and heritage desk-based assessment and the Phase 1 Habitat Survey will inform future survey requirements of the short-listed site. Our ecologists and archaeologists will be key to the development of the options, advising how we can enhance the habitat appropriately to achieve the target natural floodplain habitat, restoration and/or copse and woodland network habitat and how we can avoid, minimise or mitigate risk to buried and extant heritage assets.

#### **Consents, permissions and permits (project form ref 10)**



The Feasibility Study report would include a summary of the necessary consents, permissions and permits that may be required for each short-listed site. This would include likely requirements for planning permission, flood risk activity permits, ordinary watercourse consents, land drainage consents, listed building consents and other such permissions.

**Other investigations as required (project form ref 14) (Excluded)**

Subject to the location and type of interventions, future assessments or other investigations may be required. These could include structural surveys of assets, mining search or UXO search. As the location and type of assets are still to be established it is not possible to determine the future survey requirements at this stage, however the project team would be able to advise on the likely requirements at the virtual workshop with the EA after the long list options are developed.

**2. Project Management (inc Project plan)**

Stantec and cbec jointly developed the ECOSF3 submission. Between us we have the capability to cover all areas identified within the scope of works. We have successfully worked together on a number of schemes combining restoration, option appraisal and engineering. These include the River Rother re-meandering and weir removal study, the Kinness Burn and Dunfermline Flood Studies, and a number of weir removal projects. The project team comprises of specialist personnel from both Stantec and cbec with the skill sets required to deliver this feasibility study from inception through to delivery. The project will be managed by [REDACTED], Stantec, who will provide the single point of contact for the EA and who will coordinate the team and manage the various specialists. The project team structure is included in Appendix 1.

The ongoing COVID-19 pandemic has altered our method of project management; successfully moving from face to face to fully virtual meetings. These virtual meetings are expected to operate throughout this project to comply with current government guidelines and our own H&S policies. We expect to work closely with the EA throughout the project and have allowed fortnightly progress updates to the EA PM, during which we would also escalate technical queries and receive project feedback and updates. Monthly progress reports will be prepared for the EA to be fully aware of the project progression. Information will be circulated to the project team and the EA via an appropriate share site (such as Microsoft Teams, Asite, Adoddle or other as preferred by the EA) following each meeting. In addition to the start-up meeting, we have allowed for two monthly progress meetings up to project completion (31<sup>st</sup> July 2020). A proposed project programme is included in Appendix 2 which we will confirm and clarify with the EA at start-up.

Given the relatively short programme, fortnightly telecoms with the internal discipline leads will be implemented to facilitate effective collaboration between the teams and for the opportunities and constraints to be raised. This will allow concerns or challenges to be rapidly raised and addressed to minimise programme delay. To achieve the programme activities will need to be completed partially in parallel and therefore the fortnightly meeting will be critical to creating a collaborative response to developing the long- and short-list, and to deliver a feasibility study report that meets the expectations of the EA.

The project team has established project management systems in place to ensure timely delivery of the project to the high standard demanded by the EA. An updated plan for implementation of the project will be created on award of the contract and communicated with all team members with their involvement agreed according to the project plan and subsequent start-up meeting, including (i) the scope of tasks, (ii) the outputs required, (iii) key deadlines.

A key objective in this stage of the process is to control the link between the PM and the project team by placing formal requirements on accepting, executing and delivering project work. Individual work packages are authorised and agreed so that it is clear to the whole project team what is to be delivered, the expected effort, cost and the timescales.

**3. Proposed Staff who will do the work and briefly state previous relevant experience**

Key staff who will complete the work are identified below. They will have access to the full depth of resource at Stantec and cbec. An organogram is included in Appendix 1 and CVs are provided in Appendix 3.

[REDACTED]



*Please use day rates, including any applicable discounts, as agreed under the framework contract.*

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<b>Expenses (please detail type ie travel, accommodation etc)</b>	Travel & accommodation costs (see also assumptions)	£1,500
	Utility data (two sites)	£1,000
<b>Total overall cost</b>		<b>£42,572.50</b>
<b>Assumptions:</b> The above costs have been based on the following assumptions:		
<u>Desk-based study to identify suitable locations (Ref. 1):</u> <ul style="list-style-type: none"> <li>Assumes two short listed options will require utility information, with cost of £500 per site (included in expenses)</li> <li>If this information already exists within the project team or third parties this cost may be removed</li> <li>We have excluded any liaison or project management with the landowner.</li> </ul>		
<u>Long-listing (Ref. 2):</u> <ul style="list-style-type: none"> <li>Costs for the reconnaissance surveys of the representative catchment areas assumes a max. of 2 days surveying and that access will be arranged by the client prior to mobilisation. Costs further assume that no formal reporting or write up of the long-list is required, with results presented in a tabular and GIS-based format with accompanying maps and figures to inform the short-listing process.</li> </ul>		
<u>Topography and levels (Ref. 3):</u> <ul style="list-style-type: none"> <li>As site extents are not yet known, costs for topographic survey assume a maximum 4 days of survey for a team of two, between the selected sites, which includes an allowance for risk.</li> </ul>		
<u>Hydrology and Flood Risk Assessment (FRA) (Ref 5 &amp; 6):</u> <ul style="list-style-type: none"> <li>The River Aire hydraulic modelling and hydrology relevant to the study area will be provided to the project team free of charge and at project commencement.</li> <li>All other available hydraulic models applicable to the study will be provided to the project team free of charge and at project commencement.</li> <li>The analysis will review the reduction of flood risk and provided a qualitative assessment of flood risk benefit.</li> <li>It is assumed that the model will be run for three return periods, to be confirmed at the project start up meeting</li> </ul>		
<u>Ground / sediment investigation (Ref 7):</u> <ul style="list-style-type: none"> <li>A high-level desk based ground investigation review has been allowed to review of site conditions completed based on freely available data (historic mapping, ground information, borehole data etc). This will be submitted in 'RAG assessment' and technical note</li> <li>No allowance at this stage for the purchase of environmental databases or OS mapping for inclusion in reports due to extent of the short-listed sites being unknown and unquantifiable.</li> <li>No allowance has been made to undertake enquires with statutory authorities /regulators in relation to potential contaminative land use or other constraints.</li> <li>The time resources is based on a 'typical site' that is of up to 5hectares in area, i.e. a typical 250m length of channel with an appraisal taken of ground conditions within 100m of the centre line. Larger areas will require additional time and which will be recovered accordingly on a time charge basis.</li> <li>Due to the uncertainty of type / location of interventions no allowance has been made for a full Phase 1 Ground Condition Assessment. A Phase 1 Assessment would include further detail and a more extensive desk study including site reconnaissance to identify likely ground conditions and environmental liabilities or land stability hazards that could affect the site. We would advise on the requirement for the Phase 1 / Phase 2 survey to deliver the detailed design.</li> </ul>		
<u>Geomorphology (Ref. 8):</u> <ul style="list-style-type: none"> <li>Costs for detailed geomorphic surveys assume a max. 2 sites and assume the client will arrange access prior to mobilisation.</li> </ul>		
<u>Environmental (Ref 9):</u> <ul style="list-style-type: none"> <li>Costs for the heritage reviews assumes a max. of 2 days appraisal of the available information based on the above 'typical site' area</li> </ul>		
<u>Consents, permissions and permits (Ref 10):</u> <ul style="list-style-type: none"> <li>No consents / permits are allowed for within this study</li> <li>Allowance has been made for the identification of likely consents/permits for the future delivery of the potential options.</li> </ul>		
<u>Other investigations as required (Ref 11): (Excluded)</u> <ul style="list-style-type: none"> <li><del>Due to the uncertainty of type / location of interventions no allowance has been made for further surveys</del></li> </ul>		
<u>Feasibility Report</u> <ul style="list-style-type: none"> <li>We have allowed for a single iteration of the feasibility report after submission to the EA Project Manager</li> </ul>		
<u>PM &amp; Liaison</u> <ul style="list-style-type: none"> <li>We have made an allowance for the following virtual meetings: start-up telecom, one workshop and two client meetings.</li> <li>We have allowed for a 10 week programme and associated project management time. Any extension to the programme will result in the pro-rata of the PM costs.</li> </ul>		
<u>Expenses</u>		

- A budget estimate has been provided.

## 5.-Terms & Conditions

**Note to contractor –** All call off contracts under the Ecological Services Framework are subject to the terms and conditions issued with the framework, 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 EA project manager 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.

Contractor Project Manager:

Signature:

Date:

08/07/20

## 6. Change Control

All amendments to scope, timetable or costs must be submitted to and approved by the PM Prior to implementing the change.

Change Details	Revised completion date (if applicable)	Revised Cost (if applicable)	Approved by EA PM / Date

Client Project Manager:

Signature:

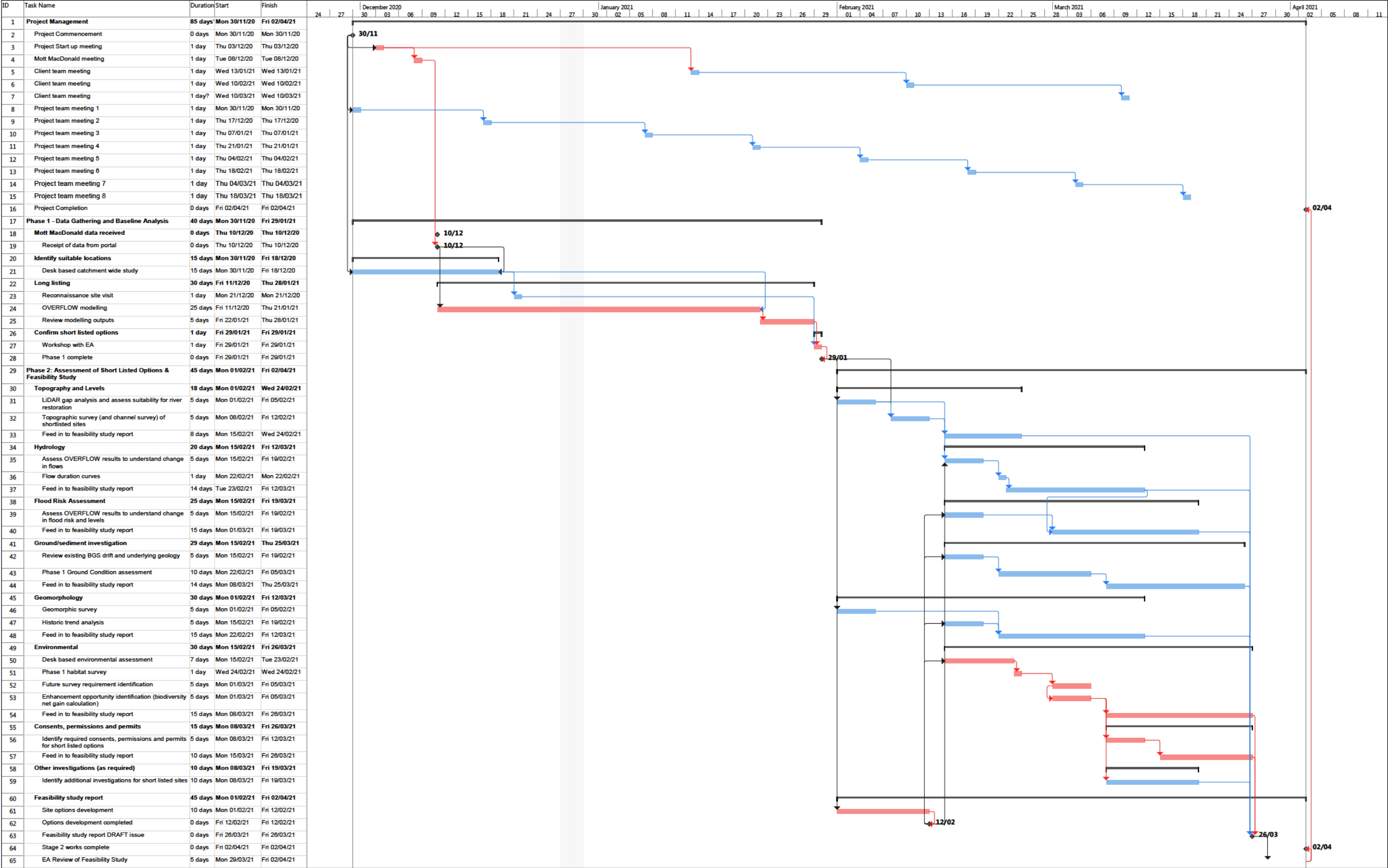
Date: 3/12

## Appendix 1: Team Organogram





## Appendix 2: Project Programme



## Appendix 3: Project Team CVs