

Environment Agency

NEC4 Professional Service Contract (PSC)

Scope

Project / contract information

Project name	Sanway-Byfleet Flood Alleviation Scheme
Project SOP code	ENVIMSE500194
Contract number	32898
Date	15/02/2023
Project stage	OBC-FBC

Assurance

Author	Project Manager	Date:28/11/22
Consulted	Senior User	Date:22/11/22
Consulted	NEAS PEPM	Date: 22/11/22
Consulted	DG Commercial Lead	Date: 18/11/22
Reviewed	Project Executive	Date:13/12/22
Checked prior to issue	Commercial Services Manager	Date: 14/12/22

Revision History

Revision date	Summary of changes	Version number
7/7/22	First issue – For Initial Input and Comment	1
24/8/22	Second Issue, post Review Meeting for Agreement	2
20/10/22	Third Issue, incorporating inputs and revisions to AD clauses	3

25/11/22	Fourth Issue, incorporating inputs and revisions to AD clauses. Scope freeze for CST	4
14/12/2022	Minor revisions agreed at Scope Freeze Contract pricing meeting 13/12/22	4.1
15/02/2023	Text within 6.1.10 amended to reflect that 6.1.10.2 – 6.1.10.4 would be compensation events if required.	4.2 - FINAL

This Scope should be read in conjunction with the version of the Minimum Technical Requirements current at the Contract Date. In the event of conflict, this Scope shall prevail. The *service* is to be compliant with the following version of the Minimum Technical Requirements:

Document	Document Title	Version No	Issue date
412_13_SD01	Minimum Technical Requirements	LIT 13258 V12	30/12/2021

1 Overview

The Sanway-Byfleet Flood Alleviation Scheme (FAS) project is comprised of flood defences and compensatory storage, associated environmental opportunities and a fish pass .

1.1 Background

The Sanway-Byfleet Flood Alleviation Scheme (FAS) is a partnership project between the Environment Agency (the *Client*), Surrey County Council (SCC), Woking Borough Council (WBC), Surrey Wildlife Trust (SWT) and Thames Water (TWUL). The project seeks to address the high level of flood risk to Sanway-Byfleet.

Byfleet has a history of flooding. Without intervention the levels of flood risk within these communities will remain high. Extensive flooding occurred in the autumn of 2000 when 242 properties were flooded. The communities were also flooded more recently in the winter of 2013/14 when 74 properties were inundated.

In 2015 the *Client* completed an Initial Assessment – this identified 773 residential and 17 commercial properties at risk of fluvial flooding for 1% AEP event.

Capita were appointed as consultants to appraise the scheme and they concluded that flood defence at Sanway Road is the only viable option for this proposed work. They completed an Outline Business Case (OBC) for 1 in 100 +climate change standard of protection (SoP) in 2019.

The *Client's* Area team proposed new additional works to this OBC for the study area and in April 2019 under the Next Generation Supplier Arrangement (NGSA) Collaborative Delivery Framework (CDF), Jacobs were appointed as the new consultants for the Eastern Hub.

Of the options appraised by Jacobs, the preferred option and the OBC that form the scope for this stage of the project are defined in the respective documents listed below in Table in 1.2

1.2 Previous Studies

- 1.2.1 In undertaking the *service* the *Consultant* shall take account of the previous studies detailed in the table below and produce a short technical summary explaining how best use will be made of historical data.

Report	Date	Format	Outcomes of study
For previous studies refer to Appendix 4			

- 1.2.2 The previous studies have been undertaken by or for the *Client* using reasonable skill and care and have been accepted. The *Consultant* shall review the information provided and notify the *Client* if the data is incorrect, contains anomalies, is not adequate for the purposes of detailed design or is based on inappropriate assumptions. Following this review, and completion of any work required to rectify the deficiencies identified, the *Consultant* will take the risk of any deficiencies in existing data quality and quantity which have not been notified to the *Client*.

1.3 Objectives

The project objectives (as stated in the OBC) are listed in the table below.

	Objective
1	Develop an affordable jointly funded sustainable scheme and work with our partners to reduce fluvial and all sources of flood risk to people, property and infrastructure.
2	Develop a scheme which provides the economically optimal standard of protection that is resilient and adaptive to climate change
3	Develop a scheme which helps to create a better place, maximise environmental outcomes for people and wildlife, and contributes to WER objectives where practicable. Meet Environment Agency target of biodiversity net gain of 20%
4	Minimise and mitigate for adverse impacts, and safety and environmental risks that may result from the scheme.
5	Involve the local community and stakeholders in the development of the scheme and document this.
6	Aim to achieve Environment Agency's corporate target of a 40% reduction in embodied carbon for the scheme

For the avoidance of doubt and notwithstanding any other terms of this Scope the Consultant's obligation is to use the skill and care referred to in 20.2 of the NEC4 PSC to Provide the Service in accordance with the Scope.

2 The service

2.1 Outcome Specification

The *Consultant* shall deliver the *service* such that it meets the outcomes listed in this section.

- 2.1.1 The required outcome of this commission is to develop the outline design produced at appraisal stage into a detailed design such that it meets the project objectives and enables the scheme to be priced and constructed under an NEC4 Engineering and Construction Contract.
- 2.1.2 The *Consultant* shall ensure that the detailed design takes into consideration all relevant guidance and legislation and seek to minimise long-term asset/land management, maintenance costs and whole life carbon.
- 2.1.3 The design will also demonstrate that the *Consultant* has learnt from best practice and demonstrate how optimum flood risk reduction, natural processes, recreation, good ecological water quality and visual amenity can be combined.
- 2.1.4 Working with the *Client* and Early Supplier Engagement (ESE) contractor, the *Consultant* shall be responsible for ensuring the design is acceptable to the *Client* (gaining approval of Gateway 3), is designed to gain planning approval and any other associated approvals and to be acceptable to statutory and key stakeholders.
- 2.1.5 The *Consultant* shall prepare a single planning application covering the proposed construction works and shall submit these to the relevant Planning Authority for Planning Consent. The *Consultant* shall be responsible for submitting the required documents through the Planning Authority portal. The *services* exclude the payment of Planning Fees. This commission must result in planning permission being obtained, and all other necessary permissions required for construction being identified. Should the *Consultant* become aware that the Planning Authority is not expected to support the scheme, or if the *Consultant* considers the refusal of the Planning Authority was not reasonably foreseeable, the *Consultant* shall raise an early warning.
- 2.1.6 Once planning permission has been obtained, the *Consultant* shall apply for protected species licences, on behalf of the *Client*.
- 2.1.7 The *Consultant* shall seek to develop the detailed design such that the cost and quality of the scheme represents value for money and can be constructed within the approved OBC budget.
- 2.1.8 The *Consultant* shall demonstrate sustainability leadership through fully considering and contributing to achieving the *Client's* environment and sustainability ambitions and targets. These are set out in the EA2025 Action Plan, e:Mission 2030 Strategy, the Defra 25 Year Environment Plan and are in line with the principles of sustainability as described by the United Nation's Sustainable Development Goals.

- 2.1.9 The *Consultant* shall design the scheme taking into account the environmental sensitivities and opportunities of the sites, and involving key environmental specialists as appropriate within the *Consultant* and the *Client's* organisation.
- 2.1.10 The *Consultant* shall ensure the design process fully considers and addresses sustainability including carbon reduction as strategic outcomes.
- 2.1.11 The *Consultant* shall develop the outline design into a detailed design that optimises the project objectives and outcomes identified in the OBC, supported by evidence that will enable the *Client* to produce a Full Business Case.
- 2.1.12 The *Consultant* shall produce a detailed design that supports the *Client* to achieve efficiency targets set for this commission and future stages of the project using the Combined Efficiency Reporting Tool (CERT).
- 2.1.13 The *Consultant* shall prepare the ECC Scope for the main works tender document. The ECC Scope shall not contradict the *Client's* standard documents. If there is a requirement to do so the *Consultant* shall justify the need and obtain the prior written agreement of the *Client*.
- 2.1.14 AD: As 2.1.5 The *Consultant* shall submit a second duplicate planning application for Guildford borough Council (GBC) Local Planning Authority (LPA) in addition to WBC LPA consistent with Appendix 3.

2.2 Constraints

- 2.2.1 Refer to 1.2 for previous studies and 13 for Guidance.
- 2.2.2 AD: NB Approvals to be obtained from National Grid for working in vicinity of power lines and tie-in to Highway's England (M25) Embankment..

2.3 *Consultant* Project Management

- 2.3.1 In managing the *service* the *Consultant* shall follow all the requirements as set out in the Collaborative Delivery Framework schedules and the relevant content of the Minimum Technical Requirements.
- 2.3.2 The overall management of the commission shall:
- Contribute monthly to the updates to the project risk register.
 - Provide input to project efficiency CERT Form.
 - Attend progress meetings.
 - Produce monthly financial updates and forecasts meeting the *Client's* project reporting timetable together with progress reports. Monthly financial updates and forecasts to meet EA deadlines provided by no later than the 10th day of each month or otherwise agreed at the project start up meeting.

- Deliver a monthly progress report in the *Client's* standard template ([Link](#)) giving progress against programme, deliverables received and expected through IDP and MIDP, financial summary against programme and forecast project carbon.
- Commission capital forecast to be entered on FastDraft monthly
- Project forecast carbon outturn to be entered onto FastDraft monthly
- Attend project board meetings as required.
- Ensure quarterly input into framework performance assessment/environmental Performance Measures.
- Ensure the *Consultant's* environmental lead provides monthly progress and risk reviews to the *Client* and attends progress meetings, as invited.
- Maintain and show how accurate and up to date information on the whole-life cost and carbon is driving optimum solutions at all stages of design development.
- Capture lessons learnt relevant to scheme delivery for the EA PM to include in the scheme lessons learnt log to be appended to the FBC.

2.3.3 The contract will be administered using FastDraft.

2.4 Outputs and Deliverables

- 2.4.1 The *Consultant* shall confirm the list of products with the *Client* and submit the product description for the *Client's* acceptance before commencing work on the product.
- 2.4.2 The *Consultant* shall produce the following key documents and those listed in the IDP (Appendix 1) for this commission:
- Detailed Design.
 - Updated Programme showing milestones to construction completion including funding and environmental constraints and opportunities. The Programme shall take account of the timeframe required for all approvals necessary for mitigation and enabling works to be carried out in advance of main construction.
 - Update Carbon Optimisation Report.
 - Capital and Whole Life Carbon outturn forecast for the project (using ERIC or subsequent carbon tools)
 - Draft text within relevant sections of the FBC.
 - GeoCobie data.
 - Master Information Delivery Plan (MIDP).

- The *Consultant* shall in accordance with the latest Employers Information Requirements ensure that a 3D modelling approach is undertaken. The approach should plan to generate object-based native Autodesk format discipline 3D models and to federate these for coordination, alignment and review for the *Client's* purposes. The federated output model should be produced in NavisWorks NWD format and open ifc format.

- AD: Updated Benefits Register (submitted at OBC as per template LIT 58244'),

- AD: Completed SERA tool,

2.4.3 The detailed design shall be sufficient for a contractor to set out and construct the works. The detailed design should include; but not be limited to:

- i. Calculations.
- ii. Drawings (including landscape/ ecological design drawings/ planting schedules).
- iii. Environmental Assessment.
- iv. Documents necessary to enable the *Client* to form a NEC4 Engineering and Construction Contract for the construction works with the Lot 2 Delivery Partner
- v. Specifications (including any additional clauses to Environment Agency standard specifications - e.g. Environment Agency NEAS Landscape Specification template).
- vi. Design philosophy statement, giving design process, standards used, and assumptions made to the satisfaction of the *Client*. This should demonstrate compliance with the *Client's* sustainability targets.
- vii. Design report, including asset schedule, buildability statement and maintenance plan.
- viii. Designer's Risk Assessments.
- ix. Public Safety Risk Assessments.
- x. Pre-construction information.
- xi. Application for all necessary consents and permissions required at FBC stage.
- xii. Environmental Action Plan.
- xiii. Materials Management Plan.

3 Site Investigation

For existing site surveys see table in section 1.2.

- 3.1.1 AD: The *Consultant* will check that all site survey data is sufficient to undertake the detailed design (Table in 1.2).

3.1 Topographic Survey

- ~~3.1.2 The *Consultant* will review previous topographic survey to identify gaps in existing data. The *Consultant* will use this to inform the scope of supplementary topographic survey required.~~

- ~~3.1.3 The *Consultant* shall work with NEAS to ensure that environmental and sustainability constraints within the likely scheme footprint are identified and included in the survey and to determine if efficiencies can be made by joint working.~~

~~3.1.4 A topographical survey is required to supplement that previously undertaken in order to have comprehensive geographical coverage of land affected by the preferred option. Specific requirements are:~~

- ~~• Preparation of a brief and procurement of the survey in accordance with the current version of the Environment Agency's National Standard Technical Specifications for Surveying Services, to enable the above.~~
- ~~• Review and agree surveyors' site risk assessment.~~
- ~~• Supervision and management of topographic survey company.~~
- ~~• Review data / checking deliverables.~~
- ~~• AD: The Consultant shall undertake the topographic survey necessary to be able to complete a detailed design.~~

3.1.5 The *Consultant* shall use the outputs from the topographic survey in their modelling and design.

3.2 Ground Investigation

- 3.2.1 The *Consultant* shall scope any additional Ground Investigation required to undertake the detailed design and agree the scope with the *Client*.
- 3.2.2 The *Consultant* shall ensure that the environmental risks and opportunities associated with the Ground Investigation, including the collection of environmental evidence to support Appraisal and Assessment, are identified and addressed.
- 3.2.3 In scoping the Ground Investigation works the *Consultant* shall include the necessary works to facilitate efficient and sustainable materials management planning and re-use within the project.
- 3.2.4 The *Consultant* shall seek to identify any contaminated land within the area of the project and specify testing within the Ground Investigation scope such that it can be classified properly for disposal.
- 3.2.5 The *Consultant* shall clearly communicate the scope of the Ground Investigation to the Lot 2 contractor for the Lot 2 contractor to undertake.
- 3.2.6 The *Consultant* shall supervise the Ground Investigation undertaken by the Lot 2 contractor. The supervision will be subject to a Compensation Event.
- 3.2.7 The *Consultant* shall produce a summary of key interpretative decisions based on the Ground Investigation undertaken by the Lot 2 contractor.

3.3 Ecological surveys

- 3.3.1 Undertake additional surveys consistent with current guidelines, where these are essential to securing permissions or are essential to achieving good environmental design such as informing the Biodiversity Metric. Utilise project information regarding habitat condition as well as the distribution of species and the current understanding of the factors governing their distribution. Use habitat, species and survey information in a scientific and informed way to justify environmental decision making.
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3.4 Services Search

- 3.4.1 The *Consultant* shall obtain services data from utility companies and shall ensure services data is requested from relevant landowners. This shall include direct costs of obtaining data. This shall be incorporated into the design, including preparation of plans.
- 3.4.2 The *Client* will arrange for a non-intrusive survey to detect key utilities (e.g. GPR) to inform SI and/or detailed design. The *Consultant* shall determine the extent of the survey and produce a specification for the survey in accordance with EA Guidance and Principal Designer discussion; defining type and purpose of survey including extents and available information.
- ~~3.4.3 The *Consultant* shall also provide a site supervisor to manage the survey supplier.~~
- 3.4.4 The outputs from this survey shall be included in the design, including revising the plans. The output shall be used to make recommendations for any further surveys required which would include intrusive investigations to inform the detailed design.
- 3.4.5 AD: The supervision will be subject to a Compensation Event.
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4 Hydrology and Hydraulics

4.1 General

- 4.1.1. The existing modelling is identified in the table in section 1.2. The extents of the modelling and assumptions made are within the model report.
- ~~4.1.2. The *Consultant* shall verify the model with quality and extent checks.~~
- 4.1.3. The model is to be used for updating levels with detailed design components, if the *Consultant* feels this is necessary. It is not intended for the whole range of options to be re-run, only the scheme design at the design flow(s).
- ~~4.1.4. The *Consultant* shall provide the service in accordance with the Modelling Technical Scope, included in Appendix 2.~~
- 4.1.5. Following completion of the study, this model will be handed over to the Flood Incident Management team and the model should be able to determine thresholds of flooding and trigger levels. All electronic data should be in an agreed format in line with the scheme data management plan. A copy of the plan will be provided by the *Client*.
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5 Economics Appraisal

- 5.1.1 AD: The *Consultant* shall update the economic business case for input to the scheme business case.
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6 Environmental Assessment

- 6.1.1 The *Consultant* shall give due consideration of the environment and sustainability risks and opportunities throughout the design evolution of the project to maximise the delivery of *Client* and project objectives.
- 6.1.2 The *Consultant* shall ensure that the project level assessment sits within the context of any previous strategic environmental assessment and additional information developed in support of the OBC through the Appraisal Stage. This commission will bring forward all relevant information and conclusions.
- 6.1.3 The *Consultant* shall be able to demonstrate how the information from the environmental assessment has been used to inform and adapt the detailed design.
- 6.1.4 Should the preferred option or the design significantly change (unless instructed to do so by the *Client*), the scope of the environmental assessment shall be adapted accordingly.
- 6.1.5 The *Consultant* shall ensure that the detailed design includes all of the necessary information to assure the delivery of all mitigation, management and monitoring measures and the delivery of wider benefits during construction.
- 6.1.6 The *Consultant* shall report the findings of the environmental assessment as required which will form an Appendix to the FBC with relevant summary details incorporated by the Client into the relevant section(s) of the FBC main text.
- 6.1.7 The *Consultant* shall be able to demonstrate how they have taken account of the *Client's* wider sustainability aspirations in the development of the detailed design and the associated benefits.
- 6.1.8 AD: The *Consultant* shall report on the CEEQUAL assessment in accordance with the hub workload plan.
- 6.1.9 AD: The *Consultant* shall lead a Sustainability Challenge workshop. The purpose of the workshop is to build an understanding of the requirements and opportunities to deliver sustainable outcomes for the project including, but not limited to, the four themes of e:mission; responding to the climate emergency, optimising our use of resources, benefitting people and communities and delivering environmental net gain.
 - 6.1.9.1 The *Consultant* shall provide a suitably experienced sustainability lead, independent of the project, to set up, run and report on a project Sustainability Challenge workshop early in the project's development. This does not preclude workshops being held later in a projects life cycle.
 - 6.1.9.2 The sustainability lead shall organise the Sustainability Challenge workshop, in partnership with the Client's Project Manager and subject matter experts, as required.
 - 6.1.9.3 The workshop & output shall be holistic (and coordinated with 7.1.6 and 11.1.5) optimising the design, economic value as well as environmental benefits with reference to Appendix 2.
- 6.1.10 AD: The *Consultant* shall review the OBC BNG assessment against calculator metrics, updated survey information and relevant policy and project partner obligations applicable to the Planning Application. Options to achieve 20% net gain should be investigated sequentially to establish the most economically advantageous and ecologically suitable approach e.g. from:

6.1.10.1 1. 20% within GBC boundaries (10% within WBC boundaries)

Subsequent steps not included in this scope so subject to compensation event/s would be:

6.1.10.2 2. 20% across scheme, within scheme boundary,

6.1.10.3 3. 20% across scheme, but utilising Partner owned property outside scheme boundary (e.g. WBC's SANG, more of SWT's Manor Farm, RHS beyond the CSA)*, before

6.1.10.4 4. marketed credits.

* note part of Manor Farm and RHS CSA are within the scheme boundary

7 Preferred Option Development – Detailed Design

7.1.1 The *Consultant* shall assist with pricing and buildability which will be led by the ESE contractor.

7.1.2 The *Consultant* shall develop designs with the *Client* including the Field Service and Area Teams.

7.1.3 The *Consultant* shall discuss with the *Client* where environmental information, landscape details, archaeological information, methodologies or on-site management deviate from that stated in the OBC environmental report or associated documents. This will enable any legal implications to be checked and for the environmental implications of the changes to be assessed.

7.1.4 The *Consultant* shall discuss developments in the design with the appointed Principal Designer.

7.1.5 The *Consultant* shall discuss with the *Client* how the design enables carbon reduction targets to be met.

7.1.6 The *Consultant* shall facilitate design workshops, facilitate risk workshops to produce a risk register with analysis in accordance with [LIT 14847](#) Risk Guidance for Capital Flood Risk Management Projects.

7.1.7 AD: The *Consultant* shall appraise the technical viability and the value of the opportunities recommended in the surface water report (ENVIMSE500194-JAC-ZZ-3K0-RP-Z-0001-S4-P02-B1300-EA3-LOD3-Sanway-Byfleet FAS Surface Water Flood Risk Assessment.pdf) for overflow storage of outfall pipes during a fluvial flood event.

8 Stakeholder Engagement

8.1.1 AD: The *Client* will lead on consultation, but the *Consultant* shall assist and prepare materials (as part of 2.1.5) in advance of Planning Application timeframes for use in meetings with key stakeholders in accordance with the Stakeholder Engagement Plan.

8.1.2 AD: The *Consultant* shall facilitate a face to face Community Involvement workshop, taking the lead in organising, preparing relevant materials to identify and define opportunities for Local Public and community interest groups to 'be involved' in the project. Produce a report for publication to capture decisions and outcomes. Technical and design material shall be extracted from existing outputs.

8.1.3 AD: The Consultant will arrange and facilitate a SERA session with relevant members of the Client team, the output of which will be completion of the SERA tool (insert ref to template). The SERA tool will be updated by the Consultant if required throughout the project. The SERA tracker will be the responsibility of the Client.

8.1.4. AD: All engagement with third-party stakeholders will be led by the Client. The Consultant will attend as required and an initial allowance will be made, to be reviewed periodically throughout the programme. Presentation material shall be taken from existing and no new information to be produced for the purposes of third-party engagement. Any bespoke presentation material will be subject to Compensation Event.

8.1.5 The Consultant shall support two stages of public engagement before submission of the planning application. Stage 1 to share details of items not shared before such as the surface water drainage, construction compounds, traffic routes, detailed environmental enhancements, etc. and Stage 2 to share the details of the planning application before submission so any feedback can be incorporated without delaying the planning determination.

9 Health and Safety

- 9.1.1 Health, Safety and Wellbeing (HSW) is the number one priority of the *Client*. The *Consultant* shall promote and adopt safe working methods and shall strive to deliver solutions that provide optimum HSW to all.
 - 9.1.2 The *Consultant* shall follow and comply with the requirements outlined in the Safety, health environment and wellbeing (SHEW) Code of Practice (LIT 16559).
 - 9.1.3 The *Consultant* shall supply designer risk assessments, drawings and any other data required to fulfil their duties under CDM.
 - 9.1.4 The works on site included in the geotechnical section will be subject to notification to the HSE. Detailed design work shall be treated as if it was notifiable.
 - 9.1.5 AD: The *Consultant* shall fulfil the Principal Designer (PD) role and discharge the duties in accordance with the requirements of regulations 8, 9, 11 and 12 of the Construction Design Management Regulations 2015.
 - 9.1.6 AD: The PD must be a lead or active designer and can either demonstrate relevant Skills, Knowledge and Experience to undertake the role or have access to relevant support to discharge their duties.
 - 9.1.7 AD: The PD will demonstrate their compliance with their CDM duties by preparing and updating the Pre-Construction Management Tool on a monthly basis (or more frequently for start of construction activities) and liaising with the CSF Resident Principal Designer.
 - 9.1.8 AD: The PD will identify and track significant risks, scrutinise the quality of treatment of risks with regards to the principles of prevention, co-ordinate other designers' mitigation and handover designs which can be constructed safely.
 - 9.1.9 AD: The PD shall ensure there is effective liaison and coordination between phases with the Principal Contractor.
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10 Business Case Submission

- 10.1.1 The *Client* shall aggregate all of the work undertaken from this commission into an update of the Outline Business Case document to create the Full Business Case.
 - 10.1.2 AD: The *Client* will update the Commercial and Management Case sections, and the Funding section of the Financial Case. The *Consultant* will update the remainder, in consultation with the Client and project team as required."
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11 Carbon

- 11.1.1 Carbon emissions shall be identified and assessed on a strategic whole life basis (cost and benefit) in the appraisal of the design following the latest *Client* issued guidance and tools.
- 11.1.2 The Corporate requirement for carbon reduction will be set following latest *Client* issued guidance and tools and include the requirement to meet the EA NZC target for 2030 defined by project 'carbon budget calculations' that are produced by the Consultant for acceptance by the *Service Manager*.
- 11.1.3 At completion, the carbon (outturn) forecast is within the approved project carbon budget calculation with any difference within the 'stage Optimisation Bias' and is from a verified 'carbon assessment' (ERIC/CCT).
- 11.1.4 The *Consultant* shall demonstrate how they have met the corporate requirement for carbon reduction through whole-life carbon assessment using the Carbon Tools, 'ERIC' and CCT:
- Ongoing updates to the carbon calculator and use of the carbon calculator to inform design and construction methodology decisions.
 - Completion and submission of the carbon calculator and Carbon Optimisation Report at the pre-defined stages.
 - Inclusion of a whole-life carbon assessment to ensure optimisation of lowest carbon in detailed design.
- 11.1.5 AD: The *Consultant* shall lead low carbon agenda as part of the Sustainability Challenge workshop.6.1.9 ff

12 General

- 12.1.1 None
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13 Relevant guidance

- 13.1.1 The *Consultant* shall deliver the *service* using the following guidance:

Ref	Report Name	Where used
LIT 16559	Safety, health environment and wellbeing (SHEW) Code of Practice	Throughout

Ref	Report Name	Where used
183_05	Data management for FCRM projects	Mapping and modelling
379_05	Computational Modelling to assess flood and coastal risk	Modelling
LIT 14847	Risk Guidance for Capital Flood Risk Management Projects	Detailed design
OI 120_16	Whole-life Carbon Planning Tool	Detailed design
LIT 14284	Whole Life (Construction) Carbon Planning Tool User Guide	Detailed design
	Access for All Design Guide	Detailed design
	Project Cost Tool	Costs
LIT 12982	Working with Others: A guide for staff	Consultation & Engagement
LIT 12280	Lessons Log template	FBC
LIT 55096	Integrated Assurance & Approval Strategy	Approvals

14 Requirements of the Programme

- 14.1.1 The *Consultant* shall provide a detailed programme in Microsoft Project format version Standard 2016 meeting all requirements of clause 31 of the *conditions of contract*.
- 14.1.2 The *Consultant* shall provide a baseline programme for the project start up meeting and shall update the programme monthly for progress meetings with actual and forecast progress against the baseline. The programme shall also include alignment and submission of the BIM Execution Plan (BEP) and Master Information Delivery Plan (MIDP).
- 14.1.3 The programme shall cover all the activities and deliverables in the project and include all major project milestones from commencement to the end of the reporting, consultation and approvals stage.
- 14.1.4 The programme shall include review and consultation periods for drafts, scoping letters, statutory consultation etc.
- 14.1.5 Include internal project team/board decision gateways (as a minimum) for:
- a) Gateway 3, to ensure the detailed design and costings are complete and the works can be constructed within the allowed time and budget.
- 14.1.6 The following consultation periods should be incorporated into the programme, with adequate allowance for review and revision of documents by the project team where appropriate:
- a) *Consultant* internal review (as per *Consultant's* quality review procedures) and *Client* review of all outputs before circulation to the wider project team to ensure high quality of all output.
 - b) Sufficient allowance for internal and external consultation. Statutory consultation periods at scoping & draft stages. Note local authority approvals through cabinet prior to public consultation can take a long time.
 - c) Local Authority time for planning approval.
 - d) *Client* approvals as required to include for ~~Reservoirs Act, impoundment licence and~~ working in watercourse approvals.
 - e) Time for pricing up of the works by the Lot 2 contractor.
 - f) Submission for approval and time allowance for the *Client's* approval process.
- 14.1.7 ~~The *Consultant* shall produce a programme such that the following milestone dates are achieved~~
- 14.1.8 The following are absolute requirements for Completion to be certified:
- Population of the *Client's* latest version of the Project Cost and Carbon Tool, or its successor.
 - Transfer to the *Client* of BIM data.
 - Clause 11.2(2) work to be done by the Completion Date.

15 Services and other things provided by the *Client*

15.1.1 Access to Environment Agency systems and resources including:

- Asite.
- FastDraft.
- Collaborative Delivery Community SharePoint access.

15.1.2 Letter of appointment of Principal Designer.

15.1.3 Site access authorisation letter(s).

15.1.4 Previous studies listed in Section 1.2.1. The *Client* will provide the previous studies within two weeks of contract award.

16 Data

Requirements for the handling of project data are covered by the framework schedules.

16.1.1 The *Consultant* shall handle, manage data in accordance with the framework schedules and Employers Information Requirements (EIR).

17 *Client's* Advisors

17.1.1 The *Client* for the contract is represented by the Programme & Contract Management (PCM) team, primarily the EA Project Manager and in their absence the Project Executive. Instructions may only be given by these staff.

17.1.2 The *Client* has a number of advisory departments. Instructions will only be deemed enacted from them when they are confirmed by an instruction from the *Service Manager*. These departments include Asset Performance, Partnership & Strategic Overview, NEAS and others.

17.1.3 The *Client's* organisation has a regulatory function. Communications from the Environment Agency in its capacity as a regulator are not to be confused with communications as the *Client* or the *Service Manager*.

18 *Client* Documents the *Consultant* Contributes to

18.1.1 The *Client* maintains several project documents, the *Consultant* is required to contribute to these *Client* owned documents:

- Project Risk Register.

- Project Efficiency CERT Form.
 - Scheme Lessons Learnt Log.
 - Cost and Carbon Tool (CCT).
 - Information Delivery Plan (IDP)
-

Appendices

Appendix 1 – Information Delivery Plan (IDP)

The *Consultant* shall adhere to the Environment Agency's Employers Information Requirements (EIR) framework level minimum technical requirements.

All *Client* issued information referenced within the Information Delivery Plan (IDP) requires verifying by the *Consultant* unless it is referenced elsewhere within the Scope.


The *Consultant* shall register for an Asite Account and request access to the project workspace to view the IDP and update to create the MIDP.

Guidance on the IDP can be found [here](#)

Appendix 2 – Modelling Technical Scope

If required, insert the Modelling Technical Scope created using the Quick Scope Writer, referenced in Section 4.

Appendix 2 – Detail Design Considerations

 https://defra.sharepoint.com/:w:/s/MST-EA-SanwayByfleetFASProjectTeam/ERQ9zMHMvi1Hs2wMUf8ahHABjJ37_AHfKyzYYvnNZu8XIA?e=KhQdl4

Appendix 3 – Visualisation scope

~~Guidance on visualisation can be found [here](#)~~

~~A tool to aide in the identification and scoping of visualisation can be found in knowledge management <https://adoddleak.asite.com/lnk/5A95rLxSkL7gEpunXgb>. Create a scope of visualisation requirements if needed and embed a PDF output here as Appendix 3.~~

~~Visualisation e-learning can be found on learning zone. Search visualisation.~~

Appendix 3 – LPA Scoping Opinion & supporting information

[PLAN-2022-0932 Screening Opinion SBFAS.pdf](#)

[Sanway-Byfleet FAS - WBC EIA Screening Opinion Request Letter 30.09.22.pdf](#)

[Appendix A - Sanway-Byfleet FAS - EIA Screening Opinion Note 30.09.22.pdf](#)

[Appendix B - Environmental Constraints Plan - Sanway-Byfleet FAS EIA Screening Opinion 30.09.22.pdf](#)

Appendix 4 – Previous Studies
