



**Framework:** Collaborative Delivery Framework  
**Supplier:** Ove Arup & Partners Ltd  
**Company Number:** 01312453  
  
**Geographical Area:** North East  
**Project Name:** Fatfield Model Update  
**Project Number:** [REDACTED]  
  
**Contract Type:** Professional Service Contract  
**Option:** [REDACTED]  
  
**Contract Number:** project\_36835  
  
**Stage:** Pre\_SOC

Revision	Status	Originator	Reviewer	Date
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

## PROFESSIONAL SERVICE CONTRACT under the Collaborative Delivery Framework CONTRACT DATA

**Project Name** Fatfield Model Update

**Project Number** ENV0004160C

This contract is made on 19 September 2022  
between the *Client* and the *Consultant*

- This contract is made pursuant to the Framework Agreement (the "Agreement") dated 01st day of April 2019 between the *Client* and the *Consultant* in relation to the Collaborative Delivery Framework. The entire agreement and the following Schedules are incorporated into this Contract by reference
- Schedules 1 to 22 inclusive of the Framework schedules are relied upon within this contract.
- The following documents are incorporated into this contract by reference  
2022\_07\_07\_Fatfield (with appendix 2021-12-13\_PSC\_Fatfield Model Update\_V2.1)

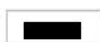
### Part One - Data provided by the *Client*

#### Statements given in all Contracts

##### 1 General

The *conditions of contract* are the core clauses and the clauses for the following main Option, the Option for resolving and avoiding disputes and secondary Options of the NEC4 Professional Service Contract June 2017.

Main  
Option



Option for resolving and  
avoiding disputes

W2

#### Secondary Options

X2: Changes in the law

X9: Transfer of rights

X10: Information modelling

X11: Termination by the *Client*

X18: Limitation of liability

X20: Key Performance Indicators

Y(UK)2: The Housing Grants, Construction and Regeneration Act 1996

Y(UK)3: The Contracts (Rights of Third Parties) Act 1999

Z: *Additional conditions of contract*

The *service* is

Modelling update of River Wear at Fatfield for scheme design, SOC and OBC.

The *Client* is



Address for communications



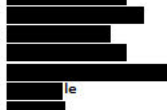
Address for electronic communications



The *Service Manager* is



Address for communications



Address for electronic communications



The *Scope* is in

2022\_07\_07\_Fatfield (with appendix 2021-12-13\_PSC\_Fatfield Model Update\_V2.1)

The *language of the contract* is English

The *law of the contract* is

the law of England and Wales, subject to the jurisdiction of the courts of England and Wales

The period for reply is

2 weeks

The *period for retention* is

6 years

following Completion or earlier termination

The following matters will be included in the Early Warning Register

Early warning meetings are to be held at intervals no longer than 2 weeks

## 2 The *Consultant's* main responsibilities

The *key dates* and *conditions* to be met are  
*conditions* to be met *key date*

'none set' 'none set'

'none set' 'none set'

'none set' 'none set'

The *Consultant* prepares forecasts of the total Defined Cost plus Fee and *expenses* at intervals no longer than 4 weeks

## 3 Time

The *starting date* is [REDACTED]

The *Client* provides access to the following persons, places and things  
access *access date*

The *Consultant* submits revised programmes at intervals no longer than 4 weeks

The *completion date* for the whole of the *service* is [REDACTED]

The period after the Contract Date within which the *Consultant* is to submit a first programme for acceptance is 4 weeks

## 4 Quality management

The period after the Contract Date within which the *Consultant* is to submit a quality policy statement and quality plan is 4 weeks

The period between Completion of the whole of the *service* and the *defects date* is 26 weeks

## 5 Payment

The *currency of the contract* is the £ sterling

The *assessment interval* is Monthly

The forecast of the Prices is £75,182.44

The *expenses* stated by the *Client* are as stated in Schedule 9

The *interest rate* is 2.00% per annum (not less than 2) above the  
Base rate of the Bank of England

The locations for which the *Consultant* provides a charge for the cost of support people and office overhead are All UK Offices

## 6 Compensation events

These are additional compensation events

1. 'not used'
2. 'not used'
3. 'not used'
4. 'not used'
5. 'not used'

## 8 Liabilities and insurance

These are additional *Client's* liabilities

1. 'not used'
2. 'not used'
3. 'not used'

The minimum amount of cover and the periods for which the *Consultant* maintains insurance are

EVENT	MINIMUM AMOUNT OF COVER	PERIOD FOLLOWING COMPLETION OF THE WHOLE OF THE <i>SERVICE</i> OR TERMINATION
The <i>Consultant's</i> failure to use the skill and care normally used by professionals providing services similar to the <i>service</i>	<b>£5,000,000</b> in respect of each claim, without limit to the number of claims	12 years after Completion
Loss of or damage to property and liability for bodily injury to or death of a person (not an employee of the <i>Consultant</i> ) arising from or in connection with the <i>Consultant</i> Providing the Service	<b>£15,000,000</b> in respect of each claim, without limit to the number of claims	12 years after Completion
Death of or bodily injury to the employees of the <i>Consultant</i> arising out of and in the course of their employment in connection with the contract	<i>Legal minimum</i> in respect of each claim, without limit to the number of claims	<i>For the period required by law</i>
The <i>Consultant's</i> total liability to the <i>Client</i> for all matters arising under or in connection with the contract, other than the excluded matters is limited to	<b>£5,000,000</b>	

### Resolving and avoiding disputes

The *tribunal* is litigation in the courts

The *Adjudicator* is  
Address for communications

'to be confirmed'  
'to be confirmed'

Address for electronic communications

['to be confirmed'](#)

The *Adjudicator nominating body* is

The Institution of Civil Engineers

## Z Clauses

### Z1 Disputes

Delete existing clause W2.1

### Z2 Prevention

The text of clause 18 Prevention is deleted.

Delete the text of clause 60.1(12) and replaced by:

The *service* is affected by any of the following events

- War, civil war, rebellion, revolution, insurrection, military or usurped power;
- Strikes, riots and civil commotion not confined to the employees of the *Consultant* and sub consultants,
- Ionising radiation or radioactive contamination from nuclear fuel or nuclear waste resulting from the combustion of nuclear fuel,
- Radioactive, toxic, explosive or other hazardous properties of an explosive nuclear device,
- Natural disaster,
- Fire and explosion,
- Impact by aircraft or other aerial device or thing dropped from them.

### **Z3 Disallowed Costs**

Add the following in second bullet of 11.2 (18) add:  
(including compensation events with the Subcontractor, i.e. payment for work that should not have been undertaken).

Add the following additional bullets after 'and the cost of ' :

- Mistakes or delays caused by the *Consultant's* failure to follow standards in Scopes/quality plans
- Reorganisation of the *Consultant's* project team
- Additional costs or delays incurred due to *Consultant's* failure to comply with published and known guidance or document formats
- Exceeding the Scope without prior instruction that leads to abortive cost
- Re-working of documents due to inadequate QA prior to submission, i.e. grammatical, factual arithmetical or design errors
- Production or preparation of self-promotional material
- Excessive charges for project management time on a commission for secondments or full time appointments (greater than 5% of commission value)
- Any hours exceeding 8 per day unless with prior written agreement of the *Service Manager*
- Any hours for travel beyond the location of the nearest consultant office to the project unless previously agreed with the *Service Manager*
- Attendance of additional individuals to meetings/ workshops etc who have not been previously invited by the *Service Manager*
- Costs associated with the attendance at additional meetings after programmed Completion, if delay is due to *Consultant* performance
- Costs associated with rectifications that are due to *Consultant* error or omission
- Costs associated with the identification of opportunities to improve our processes and procedures for project delivery through the *Consultant's* involvement
- Was incurred due to a breach of safety requirements, or due additional work to comply with safety requirements
- Was incurred as a result of the *Client* issuing a Yellow or Red Card to prepare a Performance Improvement Plan
- Was incurred as a result of rectifying a non-compliance with the Framework Agreement and/or any call off contracts following an audit

### **Z6 The Schedule of Cost Components**

The Schedule of Cost Components are as detailed in the Framework Schedule 9.

### **Z23 Linked contracts**

Issues requiring redesign or rework on this contract due to a fault or error of the *Consultant* will neither be an allowable cost under this contract or any subsequent contract, nor will it be a Compensation event under this contract or any subsequent contract under this project or programme.

### **Z24 Requirement for Invoice**

Add the following sentence to the end of clause 51.1:

The Party to which payment is due submits an invoice to the other Party for the amount to be paid within one week of the *Service Manager's* certificate.

Delete existing clause 51.2 and replace with:

51.2 Each certified payment is made by the later of

- one week after the paying Party receives an invoice from the other Party and
- three weeks after the assessment date, or, if a different period is stated in the Contract Data, within the period stated.

If a certified payment is late, or if a payment is late because the *Service Manager* has not issued a certificate which should be issued, interest is paid on the late payment. Interest is assessed from the date by which the late payment should have been made until the date when the late payment is made, and is included in the first assessment after the late payment is made

### **Z25 Risks and insurance**

The *Consultant* is required to submit insurances annually as Clause Z4 of the Framework Agreement

## Secondary Options

### OPTION X2: Changes in the law

The *law of the project* is the law of England and Wales, subject to the jurisdiction of the courts of England and Wales

### OPTION X10: Information modelling

The period after the Contract Date within which the *Consultant* is to submit a first Information Execution Plan for acceptance is 2 weeks

### OPTION X18: Limitation of liability

The *Consultant's* liability to the *Client* for indirect or consequential loss is limited to

██████████

The *Consultant's* liability to the *Client* for Defects that are not found until after the *defects date* is limited to

██████████

The *end of liability* date is 6 years after the Completion of the whole of the *service*

### OPTION X20: Key Performance Indicators (not used with Option X12)

The *incentive schedule* for Key Performance Indicators is in Schedule 17

A report of performance against each Key Performance Indicator is provided at intervals of 3 months

### Y(UK)2: The Housing Grants, Construction and Regeneration Act 1996

The period for payment is 14 days after the date on which payment becomes due

### Y(UK)3: The Contracts (Rights of Third Parties Act) 1999

term *beneficiary*

not used not used

Part Two - Data provided by the Consultant

Completion of the data in full, according to the Options chosen, is essential to create a complete contract.

1 General

The Consultant is

Name

Ove Arup & Partners Ltd

Address for communications

8 Fitzroy Street  
London  
W1T 4BQ

Address for electronic communications

The fee percentage is

The key persons are

Name (1)

Job

Responsibilities

Qualifications

Experience

Name (2)

Job

Responsibilities

Qualifications

Experience

Name (3)

Job

Responsibilities

Qualifications

Experience

Name (4)

Job

Responsibilities

Qualifications

Experience

Name (5)

Job

Responsibilities

Qualifications

Experience

Name (6)

Job

Responsibilities

Qualifications

Experience

Name (7)

Job

Responsibilities

Qualifications

Experience

The following matters will be included in the Early Warning Register

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

**3 Time**

The programme identified in the Contract Data is

TBC

**Resolving and avoiding disputes**

The *Senior Representatives* of the *Consultant* are

Name (1) [REDACTED]  
Address for communications  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]

Address for electronic communications  
[REDACTED]

Name (2)  
Address for communications

Address for electronic communications

**X10: Information Modelling**

The *information execution plan* identified  
in the Contract Data is

TBC



## Contract Execution

### *Client* execution

Signed Underhand [PRINT NAME]

for and on behalf of the Environment Agency

[Redacted Signature]

[Redacted]

[Redacted]

[Redacted]

Signature

Date

Role

### *Consultant* execution

Signed Underhand by [PRINT NAME]

for and on behalf of

[Redacted]

[Redacted]

[Redacted Signature]

[Redacted]

[Redacted]

Signature

Date

Role

# Environment Agency

## NEC4 professional services contract (PSC)

### Scope

#### Project / contract Information

Project name	Fatfield
Project 1B1S reference	ENV0004160C
Contract reference	
Date	07/07/2022
Version number	2.0
Author	

#### Revision history

Revision date	Summary of changes	Version number
05/04/2022	First issue	1.0
07/07/2022	Project restart second issue	2.0

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 services are to be compliant with the version of the Minimum Technical Requirements.

Document	Document Title	Version No	Issue Date
LIT 18686	NEC4 Minimum Technical Requirements for Modelling	6.0	23/03/2022
LIT 17616	2021-12_13_PSC_Fatfield Model Update_V2.1	2.1	13/12/2021

## Details of the services

Details of the *service* are:

### 1. Objective

This project will aim to update the 2018 Fatfield Model Updates Study model (developed for flood risk and warning purposes). This model was recently reviewed by Arup (Summer 2021) who concluded that the model is generally of good quality and has been well calibrated. Updates were recommended to implement more recent changes in guidance (non-stationarity, coastal boundary etc) and to ensure that the model is suitable for use in future scheme development, at both SOC and OBC stages. This document outlines the scope with further technical details specified in the document 2021-12\_13\_PSC\_Fatfield Model Update\_V2.1.

Fatfield is located approximately 3km downstream of Chester-le-Street at the confluence of the River Wear and Biddick Burn, approximately 10km inland from Sunderland. Fatfield is located within the tidal limit of the River Wear as it flows in a north-easterly direction towards to the North Sea coast. Fatfield is also at risk from fluvial and tidal flooding from the River Wear.

A 2018 flood mapping and warning study (Fatfield Model Updates Study, 2018 JBA) suggested a number of properties are at risk in the 1 in 5 and 1 in 20 year return periods. The current model does not appear to be reflective of actual flooding reports and this study is needed to increase confidence and understanding of risk.

Tasks include: data review, site visit, modelling method statements, survey specification and collection, comprehensive hydrological review, provision of a new calibrated and verified hydraulic model, provision of hydrology and model reports, provision of GIS outputs and an assessment of the existing flood warning and forecasting provision and recommendations for improvement.

### 2. Outcome Specification

The *Consultant* shall undertake and complete the Tasks as set out below further supporting information is included in the Appendix 1 in the document titled 2021-12\_13\_PSC\_Fatfield Model Update\_V2.1:

1. The *Consultant* shall undertake one site visit (maximum 2 people, 1 day). The *Client* will facilitate this visit and arrange for appropriate *Client* staff to accompany the *Consultant* to provide local knowledge. If the *Consultant* needs to visit areas that do not have public access they must discuss this in advance with the *Client*. A warranted officer may need to accompany the *Consultant* on private land.
2. The site visit should be used to understand the local flood flow pathways and flood history. The *Consultant* will also use the site visit to review existing topographic data and make recommendations in terms of suitability and define additional survey requirements.
3. Once survey requirements and any other new data requirements have been agreed with the *Client*, the *Consultant* will be responsible for procuring and managing the acquisition of this data. Survey quotes will be reviewed by the *Client*.
4. The *Consultant* will undertake a desktop review of the data which has been collected and provided by the *Client* as defined in the "Project Data Register". Commentary and recommendations from this review shall be documented in Hydrology and Modelling Method Statements produced as part of this commission.
5. The *Consultant* shall provide clear recommendations on required activities to update the hydraulic model in line with Environment Agency hydrology and modelling guidance for acceptance by the *Client*. Please refer to the LIT 13528 Minimum Technical Requirements for details.

6. The *Consultant* shall produce a Coastal Boundaries Report for acceptance prior to commencement of design simulations. Derivation of tidal conditions for design probabilities is also required.
7. The *Consultant* shall update and calibrate the hydraulic model for acceptance by the *Client*.

### 3. Constraints on how the *Consultant* provides the service

1. The *Consultant* shall only carry out work directly associated to Provide the Service as set out in the outcome specification above.
2. The *Consultant* is to report monthly on tasks they plan to do and tasks they have undertaken and time to be charged for that month as detailed in the *Client's* NEC4 Professional Services Contract.
3. The *Consultant* is to detail hours and costs for activities in the Application for Payment as per detailed in the accepted activity schedule.
4. The *Consultant* shall maintain close contact with the *Client* in order that their actions reflect the *Client's* objectives.
5. The *Consultant* shall notify the *Client* of any changes from the Scope, and also if there is any detrimental change to any of the following aspects of the Contract; time, cost and quality. The *Consultant* shall:
  - I. cease all work, howsoever arising, associated with the task
  - II. await the *Client's* written instruction on how to proceed
6. Data held by the *Client* that is relevant to the project will be collected by the *Client* and provided directly to the *Consultant*.

### 4. Standards to be achieved

#### 4.1 Health and Safety

Health and Safety is the number one priority of the *Client*. The *Consultant* will promote and adopt safe working methods and shall strive to work in a safe manner.

### 5. Requirements of the programme

1. The *Consultant* shall provide a detailed programme in a format (pdf) agreed with the *Client*, meeting all requirements of Clause 31 of the conditions of contract. The programme must show critical path activities, gateway, risk buffers and activities requiring *Client* input, for example review periods and accelerated scheme input. The programme shall comply with the requirement of Clause 31.
2. A baseline programme shall be provided for the project start up meeting and this will be updated monthly, with actual and forecast progress against the baseline. The programme shall cover all the activities to be undertaken by the *Consultant* to deliver the study. Include all major project and modelling milestones. Milestones include, but are not limited to:
  - a. Start Up Meeting
  - b. Site Visit
  - c. Data Review
  - d. Survey specification

- e. Survey procurement
  - f. Hydraulic Modelling Methodology
  - g. Hydrology Method Statement and Interim Hydrology Report
  - h. Model Build
  - i. Calibration
  - j. Design Runs
  - k. Reporting
3. It is acknowledged that the period for reply outlined in the framework agreement is two weeks, however please allow for 15 working days for the *Client* to review items F – k outlined above. Provision of 2 weeks' notice of submission for review is required.

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

- 1. All of the data listed as being supplied to the *Consultant* as part of this study remains the Intellectual Property of the *Client*.
- 2. The *Client* is responsible for the accuracy & sufficiency of existing data owned by the *Client*. The *Client* will only cover the costs of sourcing new data, if existing data is proven to be incomplete or to contain mistakes or errors.
- 3. The *Consultant* is responsible for any new data requirements. The *Consultant* is to scope, procure and manage the acquisition of any new surveys.
- 4. The data custodian for project deliverables from this commission will be the area Partnerships and Strategic Overview (PSO) team.
- 5. Licences for LiDAR Data, Ordnance Survey mapping, model survey, hydrometric and historical data will be provided to the *Consultant* upon award of this commission.
- 6. All model and survey information will be provided to the *Consultant* according to *Client* data security policy. It is expected that once the commission is completed, the original data sent to the *Consultant* which is classed as commercially sensitive, is returned following the *Client* data security policy.
- 7. Timesheets as normally utilised by the *Consultants* shall be submitted with fee notes unless otherwise agreed with the *Client's* project manager. Electronic submissions would be acceptable
- 8. Payment is subject to the procedure agreed in or under the framework.
- 9. The quality management system complies with the requirements of ISO9001 and ISO14001.
- 10. The *Consultant* shall use the specifications and guidance included in LIT 13528 Minimum Technical Requirements.

## 7. Appendix 1

