



Date: 27 May 2025

FAO: Stuart Ross  
Ove Arup & Partners Limited



Dear Stuart,

Re: Variation of Call-Off Contract

Framework Agreement: TfL PSF2 94203 – Engineering Consultancy Services  
Call-Off Contract No: ENG Task 346 – DLR to Thamesmead Engineering Feasibility Design  
Variation No: 01 (Time and Value extension)

**THE EMPLOYER FOR VARIATION TO CONTRACT (AVC)**

Pursuant to Clause 32 of the Framework Agreement, authority is given for the variation to the Services and the Charges as detailed below. The duplicate copy of this form must be signed by or on behalf of the Consultant and returned to the Procurement Manager as an acceptance by the Consultant of the variation shown below.

Details of Variation:	Amount (£)
Extension of 8 months in contract term and increase in Maximum Value of £642,856.91.  This Variation is to include the additional scope of works in Attachment 1 below and is to be charged as per the pricing breakdown in Attachment 2.  Commencement Date: 22 <sup>nd</sup> March 2025 Expiry Date: 21 <sup>st</sup> November 2025  <b>All terms and conditions remain the same as the original Call Off Contract.</b>	
Value of Call-Off Contract before this variation	£ 356,766.69
Additional cost to the <i>Employer</i>	£ 642,856.91
Revised value of Call-Off Contract	£ 999,623.60



Acceptance by The Consultant – Ove Arup & Partners Limited

Signature:



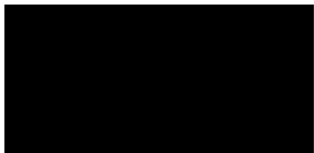
Name: Stuart Ross

Title: Director

Date: 30/5/2025 | 12:08 BST

Acceptance by The Employer - Transport for London

Signature:



Name: Shaheen Lodhi

Title: Senior Category Manager - Consultancy

Date: 30/5/2025 | 12:29 BST

Attachment 1: Additional Scope



**Workspace:** **TEX0000 DLR Thamesmead Extension Engineering Feasibility Design - Atkins-Arup**

**Date:** 19/05/2025

## Employer's Instruction to Submit Quotations

**Instruction No:** ISQ002

**Date:** 12/02/2025

**User Ref:** Additional Surveys

**Contract No:** [SCP\\_02459](#)

**Issued By:** Anisah Shohid, LUL

**Sent To** David Heal, AtkinsRealis  
**(Consultant):**

**Incident No:** [INC009](#)

**EWN Reference:**

**Section:** CV | Contract Value

### Subject:

Additional Surveys

### Funding Type:

**Clause 61.2:** The *Employer* hereby instructs the *Consultant* to submit quotations for the following proposed instruction or proposed changed decision:

The Employer instructs the Consultant to submit a quotation to prepare a Survey Scope and Specification, outlining the required surveys the Consultant and their construction partner, Bam Nuttall, consider to be necessary to validate the current feasibility design Single Preferred Option.

The Employer may wish to undertake a design freeze in due course, in support of a Transport and Works Act Order application, and therefore the Employer requires the Consultant to outline the required surveys that the Consultant and their construction partner consider necessary in order to validate the feasibility design, such that the Employer can have a sufficient level of confidence in the feasibility design to proceed to a TWAQ application. It is of the utmost importance to the Employer that the proposed survey scope is validated by the Consultant's construction partner, to give the Employer confidence that the proposed surveys will de-risk the TWAQ process and any future procurement and delivery phases.

The Survey Scope and Specification should include, but not be limited to, the following (if deemed to be required):

Detailed desk study and 3D ground model – The Consultant shall undertake a detailed geotechnical and geo-environmental desk study and subsequently develop a 3D ground model based on existing geotechnical information. The 3D ground model should be produced as a "live" model such that it can be developed and refined following future ground investigation phases.

Ground Investigation strategy & scoping report – The Employer, along with Geotechnical Consulting Group, have previously prepared a Crossrail 2 Strategy and Guidance for Design and Scoping of Ground Investigations which is provided for guidance to support these works (see attached). A ground investigation strategy should be developed for this scheme commensurate to the size and complexity of the proposed DLR Thamesmead Extension and consider current and future design and investigation phases. Form and contents to be agreed with the Employer prior to issue. Allow for two issues of document, preliminary issue to propose ground investigation strategy and scope for agreement with Employer, prior to finalising detailed specification.

Ground Investigation specification – The Consultant shall develop a Phase 1 'preliminary' ground investigation specification to validate the feasibility design to the level required to support the TWAQ. Works to be developed in accordance with EC7, BS5930, ICE UK Specification for Ground Investigation Third Edition and industry best practice.

Geoenvironmental – The Consultant shall propose sufficient geoenvironmental surveys, laboratory analysis and testing (including but not limited to groundwater conditions, ground contamination, ground gas) in order to establish a geoenvironmental baseline in support of an Environmental Impact Assessment. Geoenvironmental investigations to be combined with geotechnical investigations where practicable. The requirements for these surveys to be developed as part of the Ground Investigation strategy & scoping report.

Utilities – The Consultant shall consider what, if any, additional utility surveys are required based on the desktop utility searches previously undertaken. The Consultant, and their construction partner, should consider what utility surveys are required in line with PAS128, in order to undertake the Ground Investigation and Geoenvironmental surveys referred to above, and also to validate the

feasibility design for a potential design freeze in support of a TWAO application  
Unexploded Ordnance – The Employer has previously commissioned a desktop UXO survey (attached), The Consultant should consider what additional UXO surveys are required in support of undertaking the GI scope referred to above, and in support of the above mentioned design freeze. In addition to the above list, The Consultant and their construction partner are required to identify any other surveys not listed above, that they consider necessary to validate the feasibility design in support of a design freeze, and include these in the proposed Survey Scope and Specification. For the avoidance of doubt, any surveys arising from any future Environmental Impact Assessment scoping will be addressed separately, and should not be included as part of this instruction.

Deliverables:

Detailed desk study and 3D Ground Model,  
Ground Investigation Strategy and Scoping Report  
Phase 1 Ground Investigation Specification  
Plan Drawings – to include sufficient level of detail to procure required surveys, including but not limited to locations of boreholes and trial pits, depths, known hazards, setting out coordinates. The plan drawings should also identify the boundaries of each survey, and the land ownership of the parcels of land on which the surveys encroach on.  
The consultant should consider the impact on green infrastructure associated with the proposed ground investigation surveys, and the scoping report should identify any vegetation that may need to be removed, or any other potential impacts on green infrastructure that could arise from the proposed survey locations.

The *Consultant's* quotation comprises proposed changes to the Prices and any delay to the Completion Date and Key Dates assessed by him.  
The *Consultant* is to submit details of his assessment with his quotation.  
If the programme for the remaining work would be affected if this work is carried out then the *Consultant* is to include a programme with his quotation which illustrates the impact of this potential event on the remaining works.

The date of this notification by the *Employer* is: 12/02/2025  
**Clause 62.3:** The date by which *Consultant* is to submit quotations is: 05/03/2025  
(within 21 days of being instructed to do so)

***Note: The Consultant is not to put this proposed instruction or proposed change decision into effect until instructed to do so by the Employer.***

Reference Documents

Employer's Comments:

Quotation Summary					
Quotation No	Subject	Quotation Date	Cost Changes £	Programme Changes (Days)	Status

## **Outline Scope Proposal for 'Phase C':**

Phase C will consist of the following tasks:

### **1. Surveys Scope**

- 1.1. Produce a '*Surveys & Investigations Schedule*' – preliminary (high-level) scoping for surveys/obtain quotes (**jointly sourced by AADT & BAM**, inc. 'benchmark' costs from recent projects), itemise in the cost estimate allowances, phasing and programme - **joint AADT & BAM view**.

### **2. Systems Integration:**

- 2.1. Engage with Hitachi (through workshop(s) - via TfL). **AADT would provide rail systems/signalling specialists** to attend workshop with Hitachi. **BAM** to also provide Rail Systems (Track) Specialist (part of Programme/ Estimating team – see Task #5). The workshop would aim to develop the project's understanding of the signalling scope, to inform cost and programme.

### **3. Minimum Viable Product ('MVP') Review**

- 3.1. One day VE workshop with wider stakeholders, chaired and **facilitated by AADT, with BAM attendance** and TfL's 'SMEs' e.g. TfL's MVP 'working group' including HS2 experience. *Note: **BAM would support the review of selected VE opportunities providing Contractor view on construction feasibility, safety, programme and budget cost impacts.***
- 3.2. Update the Phase B VE Report (**by AADT, BAM support**) to document MVP review outcomes.

### **4. Risk Register Review**

- 4.1. Further review of the Project Risk Register and cost estimation for key risk items (**by BAM**).
- 4.2. **BAM** to provide advice on approach to pricing in response to risk & identification of mitigations (e.g. key surveys - informing Task #1) which could change pricing approach.
- 4.3. **BAM** to incorporate risk into the Contractor's Cost Estimate (see Task #5).

### **5. Contractor's Cost Estimate & Programme (P6):**

- 5.1. **BAM** to produce an independent Cost Estimate & P6 Programme. The Estimate and Programme are required to be 'Contractor-led' and independent from AADT's Phase B programme and Cost Estimate. Noting the early stage of design and lack of design maturity, BAM's team will make assumptions where necessary to inform the programme/estimate. All assumptions will be clearly recorded by BAM in an Assumptions Log associated with the Estimate and Programme. BAM's programme and cost estimate will consider all stages of the Scheme delivery, including surveys/investigations, enabling works, main construction, testing, commissioning and handover.
- 5.2. **BAM's** Estimate/Programme will incorporate cost/programme elements for other project development phases - e.g. TfL's costs for managing a TWAO, itemised surveys and investigations costs (from Task #1 above), systems integration aspects of programme & how this changes the costs (if applicable) - input from Task #2 above).
- 5.3. **BAM** to include in the P6 programme, where applicable, durations and/or developed WBS for systems elements based on engagement with Hitachi and/or AADT Railway Systems Specialists (input from Task #2 above).

### **Deliverables:**

- New, standalone P6 Programme **by BAM** showing construction of the Scheme through to Scheme commissioning (TfL to provide procurement/ design/ consents process activity durations as required).
- New, standalone Scheme Construction Cost Estimate **by BAM**.
- VE Report (updates to the Phase B VE Report) – **by AADT**.

**Programme:**

- Upon acceptance of quotation, **commencing w/c 22<sup>nd</sup> April with approx. 8 weeks programme**, allowing for required meetings and assuming iterative engagement and review with TfL throughout.

**Key Assumptions:**

1. Allowance made for review and sign-off of BAM's work by AADT.
2. TfL would arrange/ contract/ facilitate engagement with Hitachi. Allowance made for up to 2nr (0.5day). workshops (via MS Teams). It also assumes that Hitachi will provide cost data for signalling works to inform BAM's estimate.
3. TfL would advise on design development/TWAO phase programme durations and associated detailed costs (where required to be incorporated in the AADT+BAM cost estimate).
4. Allowance made for up to 6no. meetings with TfL during BAM's production of the estimate. TfL would provide access to/facilitate engagement with the MVP working group/ review process. Further information on MVP process to be provided in advance.
5. BAM's Cost Estimate to be based on the information available during the feasibility design stage as provided by AADT (Phase B General Arrangement and Plan/Profile drawings, Construction Strategy Report. BAM will make assumptions as required based on lack of information and/or design maturity and clearly state these assumptions in the estimate.
6. AADT will support BAM through answering technical queries as required to inform the costing/ programme (e.g. on reasonable assumptions to make regarding design, noting the lack of design detail available to BAM at Phase B), however allowances for activity durations and rates will be based on BAM's independent judgment.
7. BAM's Cost Estimate will be based on the following:
  - The 'emerging SPO' from Phase B; with:
  - A single option for the station at Thamesmead (Elevated – T1A\_2)A single turnback option (*TfL to confirm whether this should be Canning Town or Royal Victoria – to be agreed prior to commencement*).

Attachment 2: Pricing Schedules for Additional Scope





