



## **SCHEDULE OF SERVICES – LOT C2 ENGINEERING CONSULTANCY**

### **Specific Requirements**

For the purposes of this agreement, the Engineering design shall comprise all such services as normally apply under the standard ACE agreement taken in conjunction with the particular requirements of the Employer's Requirements and Contractor's Proposals. The Engineer will ensure that all matters that may affect the completed building, occupation and use are incorporated into the design process as the work proceeds.

Typically, Engineers are to be appointed to ICN's framework to provide engineering services from project appraisal up to appointment of a Principal Contractor as required by individual project requirements. Principal Contractors will then take responsibility for engineering design. ICN members can novate Engineers to Principal Contractors. ICN members consider there are benefits in retaining a consistent design team throughout the Contractor's design phase.

The Engineer is required to produce drawings, specifications and any other information required by an individual ICN member in relation to the civil and structural requirements of a proposed project, all drawings produced must be checked and signed off by a suitably qualified professional. The Engineer shall also verify that any design, drawing or technical approvals submitted by any other person including but without limitation any Specialist Designers, Sub-Contractors or specialist suppliers acting on behalf of the Contractor, the Employer or the Employer's Agent before or after the date of this Agreement are in accordance with the Employer's Requirements and the Contract, and the Consultant shall ensure that such designs, drawings or technical approvals are checked and coordinated with the overall design ambition.

For ease of reference, the services have been divided into two parts, those being stage 1, pre-construction and stage 2, construction phases. Such division is not intended to and shall not limit or affect the Engineer's obligation to provide all the Services as and when they may be necessary or appropriate for the timely carrying out and completion of the Works. In carrying out the services, the consultant shall address all communications, including advice to the Employer.

Please note that the services outlined below broadly correspond to the RIBA work stages as follows:

Stage One covers RIBA stages 0-4

Stage Two covers RIBA stages 5-7

ICN is committed to Equal Opportunities, and you will be expected to uphold the spirit of this commitment in all your dealings on behalf of each ICN member.

The appointed practice shall demonstrate reasonable skill and care as is expected of a person deemed competent to undertake the role.

The Engineer will provide all of but not be limited to the following services:

**Stage One – Pre-Construction Phase**

|     | <b>Description of Services</b>   |
|-----|--|
| 1.  | Visit the site and study all data, reports, investigations and surveys relating to the project and reasonably available to the Consultant through the contract or in the wider industry/regulatory domain.   |
| 2.  | Produce a scope of works using the information supplied to date and to be updated as the project progresses.   |
| 3.  | As information becomes available, share with the design team, and support the design development process, advising on any further studies or surveys that may be beneficial to the process. Collate three quotes for these studies or surveys for approval by the client.              |
| 4.  | Work with the design team to look for cost effective Engineering solutions for the site. Including but not limited to levels, retaining structures, foundation solutions, remediation strategies, drainage strategies, highways design etc.  |
| 5.  | Consult with the Building Control authorities, environmental authorities, licensing authorities, statutory undertakers, and others as appropriate and consider the extent of any requirements that they may have in relation to the Works. Advise the design team on actions required. |
| 6.  | In conjunction with the design team, review alternative designs and construction approaches to seek out maximum value.   |
| 7.  | Periodically review the design as it is being developed and report to the design team on any matters suitable for further amendment.   |
| 8.  | Advise and answer queries from the design team to support their process of achieving a viable solution for the site.   |
| 9.  | Consult with the design team to determine the scope of work to be sub-let to specialist sub-Contractors and suppliers.   |
| 10. | Develop the Engineering designs for the Works such that they are suitable for initial pricing.   |
| 11. | Provide drawings, notes, sketches, and details to enable taking off quantities for the accurate preparation of construction cost estimates.  |
| 12. | Produce all relevant Engineering drawings in electronic format for wider distribution to the Project Team.   |
| 13. | Comment on the Employer’s Requirements and Contractor’s Proposals and provide necessary details, calculations, and drawings to meet them.  |
| 14. | Advise upon any specialist tests or inspections arising during the design or construction of the Works.  |
| 15. | Propose a programme of information for the post contract design work to assist the design team in determining a realistic programme of proposed Works.   |

## **Stage Two – Construction Phase**

NB. Typically, the Client requires the Principal Contractor to engage an Engineer to provide the following services.

The Client may decide to novate the Engineer to the Principal Contractor and this instance the Stage 2 services may be re-negotiated directly between the Engineer and the Principal Contractor

|     | <b>Description of Services</b>  |
|-----|---|
| 1.  | At the outset of the construction phase, agree with the Employer and the Contractor a design programme that includes all design activities and transfer of information between all members of the project team. Report on design progress at intervals as reasonably requested.   |
| 2.  | Develop the Engineering design of the Works so that it will conform to the Employer's Requirements and Contractor's Proposals. Provide any information that can reasonably be expected from an Engineer that the Employer or Contractor may require to progress the Works.  |
| 3.  | In the event of a proposed change to the design, advise the Employer and Contractor of the effects of the proposed change upon the design of the Works and upon design work generally.  |
| 4.  | Highlight if any design development has the potential to materially affect the cost of the Works compared with the design in the Employer's Requirements and Contractor's Proposals.  |
| 5.  | Consult with the Building Control authorities, environmental authorities, licensing authorities, statutory undertakers, and others as appropriate in relation to their requirements for the Engineering aspects of the Works and advise on any revisions to the scheme design to deal with the requirements of any of those authorities.  |
| 6.  | Prepare and submit within reasonable timescales applications for section agreement approvals (including but not limited to roads and sewers) and any other approvals (including relevant planning discharges) that may be required under any statutory requirement to enable the scheme to be constructed and occupied. Negotiate if necessary over drainage and highway designs to meet statutory requirements set by the appropriate authority and where necessary revise any production information. |
| 7.  | Prepare and submit any Engineering drawings and calculations required for the overall design of the scheme including but not limited to building regulation calculations, reports and structural details.   |
| 8.  | Examine proposals, working drawings and details of any other Consultant and/or specialist sub-Contractors or specialist suppliers and make comments as appropriate, with reference to structural design and suitability of the design in respect of meeting the Contractor's Proposals and Employer's Requirements.   |
| 9.  | Where any item is being supplied for fixing, installation and/or integration by others the Consultant shall review and comment on the manner of fixing, installing or integrating such items.   |
| 10. | The Consultant will provide to the Employer and any relevant Contractor or  |

|     |   |
|-----|---|
|     | Consultant throughout the course of the Works drawings, specifications and other relevant documents as may be amended and revised during the course of the project.   |
| 11. | Advise on selection of components and materials and inspect materials delivered to the site as required.  |
| 12. | Attend design coordination or site meetings as necessary and produce a progress report if requested. Carry out site inspections to ensure that the Works are being carried out in accordance with the design.   |
| 13. | Monitor any specialist tests or inspections previously requested and report to the Employer.  |
| 14. | Prior to Practical Completion of the Works, the Engineer shall issue a letter to the Employer confirming that within the scope of the inspection duties under the Agreement, the Works have generally been carried out and concluded to the specified standard covered by their design. |
| 15. | Prior to Practical Completion of the Works, provide such copies of the as-built drawings and other documents as the Employer may require.   |
| 16. | Assist in the production and compilation of the maintenance and operation manuals as may be specified in the Contract.  |
| 17. | The project must operate within the Engineer's quality management system. The Engineer will be required to show compliance.   |

This appointment is being executed as a deed. Documentation and guidance relating to matters arising from the Building Contract may be sought for the full term of the deed.