UNIVERSITY OF Southampton

Estates and Facilities

Briefing Notes: University Liaison Engineers, Consulting Engineers and their Duties

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BRIEFING NOTES: UNIVERSITY LIAISON ENGINEERS, CONSULTING ENGINEERS AND THEIR DUTIES

1 INTRODUCTION

These Briefing Notes define the relationship between the Consulting Engineer, who will normally be directly appointed by the University, other members of the Project Team (in particular the Project Manager) and the University Liaison Engineer in delivering Projects that meet the minimum and consistent standards required by the University.

This formalised route of communication is intended to avoid potential confusion and consequent inconsistency in design approach. It is not, however, intended to be a barrier to informal discussions between the Consulting Engineer and other members of the University staff and students but any agreements reached on mechanical or electrical building services design issues shall always be formally agreed directly with the Liaison Engineer as well as within the formalised routes defined in any contracts and/or agreements.

No comment or suggestions made by the Liaison Engineer shall absolve the Consulting Engineer of their obligations under their contracts and/or agreements. The Liaison Engineers is not responsible for checking the Consulting Engineer's work.

These briefing notes do not take precedence over any written agreement between the Consulting Engineers and the University but it shall be the responsibility of the Consulting Engineer to bring any inconsistency to the attention of the Liaison Engineer at the earliest opportunity.

2 DEFINITIONS

Project	The term Project includes any project carried out at the University including Capital Works Projects (normally managed by the Programme Management Unit or PMU) as well as Long Term Maintenance (LTM), projects carried out for faculties or departments Carbon Management Projects etc.
The Project Manager	The person or persons appointed by the University to manage delivery of the overall Project. These may be externally appointed Project Managers or internal Project Managers.

University Liaison Engineer:	The engineer or engineers (normally one mechanical and one electrical), designated by the University to assist the Project Manager and Consulting Engineer in ensuring a consistent and appropriate approach to the design and installation of M&E Services
Consulting Engineer:	The suitably qualified person or persons assigned by the appointed consulting engineering practice to be responsible for the mechanical and electrical engineering design on the Project

3 NORMAL CONTRACTUAL RELATIONSHIP

This guide is not intended to override the contractual relationship between the Consulting Engineer and the Project Team, which will normally be as outlined in Figure 1 below.

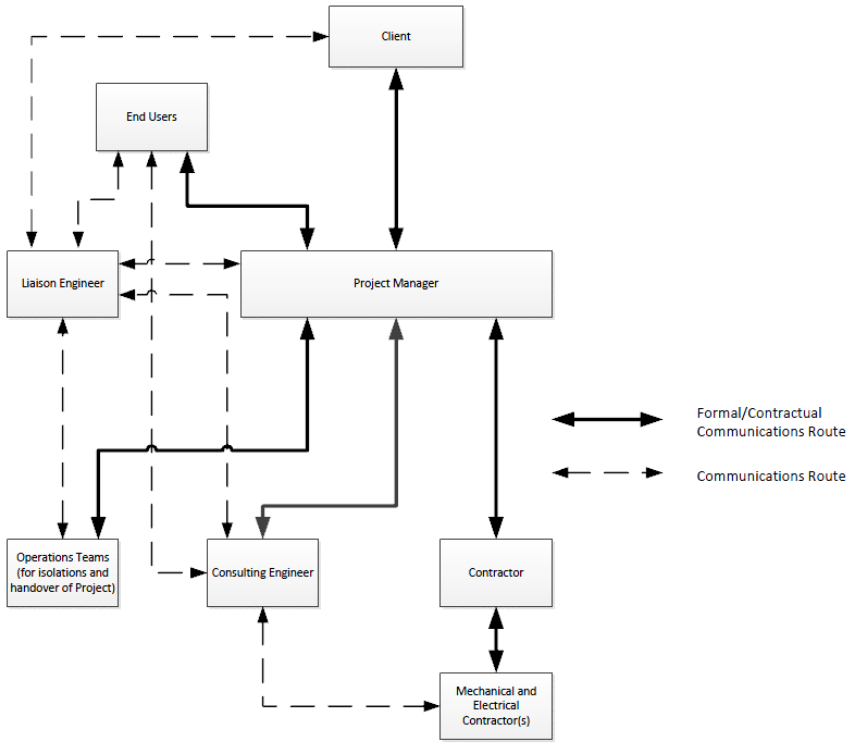

Figure 1 – Routes of Communication

4 OTHER BRIEFING DOCUMENTS

The University's current set of Standard Briefing Documents can be found at web sitehttp://www.southampton.ac.uk/estates/policies_procedures/standardspecifications/ .

Any difficulty in accessing the Standard Briefing Documents shall be raised with the Liaison Engineer.

The Standard Briefing Documents shall be used as the starting point for the design of mechanical and electrical services.

It should be noted that the Briefing Documents are updated on a rolling basis but may not at any point in time incorporate the latest and best available technology and may on occasions may not comply with latest good practice, guidance or legislation or may include items that have become obsolescent or obsolete.

It shall remain the Consulting Engineer's responsibility to ensure that any such shortcomings are recognised and brought to the attention of the Liaison Engineer and that the most appropriate designs are proposed.

5 CONSULTING ENGINEER APPOINTMENT

5.1 Consulting Engineer will normally be appointed under the ACE Agreement 1: Design 2009 Edition and either Schedule of services G(b) detailed design modified to incorporate specific University requirements including:

5.1.1 Completion of an option appraisal considering return on investment of differing capital and operating costs after accounting for all environmental and other taxes and any available grants or other incentives.

5.1.2 Preparation at the start of the project and updating throughout the project of a matrix of all items of plant and equipment, identified by Planon Asset Number, showing the particular team or teams within the University responsible for a) paying for the operation and maintenance of each item of plant and equipment b) the operation of this equipment and c) the carrying out of maintenance.

5.1.3 Attend site and prepare a list of defects at end of defects liability period and oversee and sign off completion of the rectification of such defects.

5.2 Where no formal Agreement is in place the Consulting Engineer shall be deemed to have been appointed under an agreement as defined above.

5.3 The appointment of the Consulting Engineer will be made by the Project Manager and all formal communications will be via this route.

6 DUTIES OF CONSULTING ENGINEER

6.1 In addition to the content of the Consulting Engineer appointment agreement, the Consulting Engineer shall base all designs upon all relevant current legislation, guidance and good practice as well as in compliance with the Briefing Documents.

6.2 The Consulting Engineer shall liaise with Liaison Engineer throughout the Project ensuring that wherever there is any doubt or inconsistency in any of the above that they recommend and agree the most appropriate solution.

6.3 Of particular importance will be to ensure that the completed Project includes mechanical and electrical building services that:

- Can be maintained in a safe, straightforward and energy and cost efficient way.
- Ensure that it will be possible to readily comply with the University's Control of Contractors specifications. This is best achieved by avoiding specifying plant and equipment that can only be maintained by uniquely qualified maintenance contractors and avoiding closed protocol software.
- Is consistent with the objectives of the University's Carbon Management Plan.

6.4 Liaison Review Meetings and Gateway Signoff

The Consulting Engineer shall agree and carry out regular design reviews with the University Liaison Engineer throughout all stages of the Project and in particular at each Gateway as defined in the Project or at the end of each stage of the ACE Agreement plus additional stages as outlined below for which they are appointed including:

- G2.1 Appraisal,
- G2.2 Strategic Briefing,
- G2.3 Outline Proposals,
- G2.4 Detailed Proposals,
- G2.5 Final Proposals,
- G2.6 Production Information,
- G2.7 Tender,
- G2.8.3 Examine Contractors and Subcontractors proposals,
- G2.8.11 Examine results of setting to work and regulation of installation,
- G2.8.13 Examination of documentary records, which shall include the final schedule of responsibilities described in clause 5.1.2 above.
- N/A End of Defects Liability inspection

The Consulting Engineer shall be responsible for arranging these meetings at the appropriate stages and in conjunction with design team meetings and allowing adequate time for the University Liaison Engineer to assess the design and proposals made, to give feedback and adequate time for any suggested changes to the design, specification etc, to be incorporated.

6.5 The Consulting Engineer shall review with the University Liaison Engineer tender returns from contractors regarding any omissions and/or qualifications before submitting any recommendations on the acceptance of a tender.

Once the Liaison Engineer is satisfied with the standard, this will be confirmed with the Project Manager, normally by signature on the Gateway Signoff Document.

7 EXISTING RECORDS AND INFORMATION

As necessary to ensure the best possible design, the Liaison Engineer will assist the Consulting Engineer by facilitating access to relevant sources of information including but not limited to:

7.1 Future and existing building occupants and users

7.2 The University's Energy Manager

7.3 M&E Operations teams

7.4 The University's comprehensive energy metering system

7.5 Record O&M Manuals, safety files and record drawings

7.6 Any existing asbestos records

7.7 Any existing maintenance and testing information

The Consulting Engineer shall, however, retain responsibility for obtaining from these sources and elsewhere information and data relevant to the design of the mechanical and electrical installations on the project as required.

8 FACILITATING ACCESS TO OPERATIONS TEAMS

8.1 The Liaison Engineer will facilitate access to the Operations Teams, who will be able to provide input to the Project design in the following ways:

8.1.1 Providing permits, attendance etc to allow the Consulting Engineer access to carry out site investigations.

8.1.2 Providing access to details of and advising about existing installations, their condition and how best to operate them.

8.1.3 Issuing permits to work (where such permits are not operated by the contractor using his own systems) and in facilitating shutdowns, drain downs etc. and in reinstating services during the construction phase of the project.

8.1.4 Providing limited assistance in witnessing tests and commissioning carried out by the Contractors.

8.1.5 In taking over the completed installations as identified in the Schedule of Operations and Maintenance Responsibilities as described in 5.1.2 above.

8.2 The Consulting Engineer shall liaise with the University Liaison Engineer when considering alternative designs proposed by the Contractors. It should be noted that acceptance of any alternative proposals must be instructed by the Project Manager who will act upon the advice of the Liaison Engineer in this respect.

8.3 Compliance with the University's Carbon Management Plan.

The University's Carbon Management Plan requires that all activities undertaken at the University, which includes Projects, contributes towards the aim of a 20% reduction in carbon emissions by 2020 compared to 2005/06 levels.

In pursuit of this aim, the Consulting Engineer shall be responsible for ensuring that energy and water conservation is fully assessed and that enhancements to the design are incorporated where a whole life cost or environmental benefit can be demonstrated.

The Consulting Engineer shall be responsible for carrying out an assessment of each likely energy and water efficiency design enhancement and, for each, making information available to the Liaison Engineer.

For additional information on this subject refer to ES/006 Energy Conservation

8.4 Monitoring of Energy and Water use shall be fully integrated into the University's Automatic Metering System.

For additional information on this subject refer to ES/021 Automatic Metering System.

8.5 The Consulting Engineer shall be responsible for ensuring that appropriate calculations are completed in accordance with the requirements of Part L of the Building Regulations including the provision of any updated or new Energy Performance Certificate that may be required.

8.6 Mechanical and Electrical contractors, whether they be appointed directly by the University, as sub-contractors or in any other way shall be ones included on the Approved Contractors ' list.