

**DUTIES OF THE ARCHITECT**

**GC/WORKS/5 GENERAL CONDITIONS FOR THE APPOINTMENT OF CONSULTANTS (1998)**

- All duties indicated with a '\*' below are additional services over and above the standard GC Works 5 consultant services.
- All duties in blue text with double underline indicate amendments to the standard GC Works 5 consultant services.
- All duties with a ~~strike through~~ indicate standard GC Works 5 consultant services not applicable to this Appointment.

**GENERAL DUTIES (ALL STAGES):**

1. Together with the Lead Consultant, draw up and comply with common standards and procedures for the production and format of drawings and documents, the use of CAD, BIM and electronic data transfer and similar arrangements for document management.
1. Together with the Employer and other Consultants, develop, implement and maintain a project extranet website for the sharing of drawings, specification and key project information. The Employer will provide a Collaboration Extranet Tool from RIBA Stage 3 onwards. Prior to this, the Architect shall make a suitable extranet available at the end of RIBA stage 2 the IPR and all data collated will become the property of the Employer.
2. Co-operate and collaborate with the Lead Consultant so as to assist them in their role of design team leader with responsibility to give direction to the design process and to co-ordinate and integrate overall design.
3. Provide services in connection with any necessary demolition or enabling works.
4. Advise as to the need for planning approvals and, if applicable, listed building consents and conservation area consents.
5. Support the Planning Consultant in discussing planning and traffic considerations with the planning and highways authorities.
6. If necessary, revise designs to obtain planning permission or other necessary statutory consents.

**Building Regulations**

7. With the other consultants, prepare and make submissions under the Building Regulations and other applicable statutory provisions.
8. In consultation with the Employer and other consultants, prepare and implement a strategy for ensuring that the design and construction of the Project complies with Part L of the Building Regulations with particular regard to thermal and air-tightness requirements, and for ensuring that such compliance can be demonstrated to the building control authorities for the purpose of obtaining a Completion Certificate (or, if applicable, a Final Certificate).
9. Conduct any negotiations required under the Building Regulations, and if necessary, revise production information in order to obtain approvals.

**Drainage**

10. Design all elements of foul and surface water drainage above ground level, and above the upper surface of the ground floor or basement slab, and at ground level in external areas.

**Changes in Legislations**

11. So far as is reasonably practicable, take account of any proposals for legislation published by government or the European Union or legislation which is enacted but not yet brought into force, insofar as it is likely to affect the architectural design of the Project or the cost in use of the Project. Consult with the Project Manager as to whether and if so how such prospective legislative change should be taken into account in the architectural design of the Works.

**Services in connection with design by sub-Contractors:**

12. Advise on the need for specialist sub-Contractors or suppliers to design and execute parts of the architectural Works. You are not to pass down any elements of architectural design to any such specialists without written instructions or approval from the Project Manager.
13. Prepare outline, descriptive or performance specifications for use where, with the Employer's agreement, architectural elements of the Works are to be designed by specialists; assist in obtaining quotations and other information in connection with specialist work.
14. Advise and assist in the selection of any specialist sub-Contractors or suppliers to be appointed, nominated or specified by the Employer.
15. Where required, with the other consultants, appraise and report upon tenders received from specialist sub-Contractors or suppliers.
16. Review and comment on designs and specifications provided by specialist sub-Contractors or suppliers, and co-ordinate and integrate their input.

**STAGE 1: Inception [RIBA Plan of Work Stages 0 - 2]**

- ~~A2.1.1 The Consultant shall carry out a structural survey and submit a report to the Employer. The report to include:~~
- ~~• a description and address of the property;~~
  - ~~• the dates during which the survey was undertaken;~~
  - ~~• the name and qualification of the person who carried out the survey;~~
  - ~~• advice on matters relating to Statutory and legal requirements including rights of support and the like;~~
  - ~~• details of its present condition of the property disclosed by the survey;~~
  - ~~• whether further investigation is advised including a geotechnical investigation;~~
  - ~~• supporting drawings and/or photographs;~~
  - ~~• recommendations (and estimated costs if applicable);~~
  - ~~• an anticipated programme for completion of the Works;~~
  - ~~• the name and qualification of the person signing the report who should be a Partner or Director of the Consultant.~~
- A2.1.2 Receive an initial brief from the Project Manager and assist in identifying possible options, expenditure limits [and programme constraints](#). [Provide general advice on how to proceed](#).
- A2.1.3 Carry out an inspection of the site and subsequently consult as necessary with any local or other authority on matters relating to the proposed Works.
- A2.1.4 [Review all existing site investigation and survey information, recommend additional surveys / investigations and](#) arrange for the carrying out of any site investigation authorised by the Employer [Project Manager](#), interpret the result and, if necessary, make recommendations to the Employer. [Provide to the Cost Manager sufficient information to enable the production of an approximate costing of the design options.](#)
- A2.1.5 Arrange with the other members of the Project Team to undertake preliminary feasibility studies based on the Employer's brief, discuss with the Employer and obtain instructions
- A2.1.6 Liaise with the other members of the Project Team and undertake such further studies as may be necessary in order to submit proposals and options to the Employer including an anticipated programme and costs and undertake all work necessary to obtain the Project Manager's approval to proceed on the basis of the Employer's approved brief. [Provide to the Cost Manager sufficient information to enable the production of an approximate costing of the design options.](#)
- A2.1.7 Make all necessary submissions to Statutory Authorities and obtain approvals.
- A2.1.8 Where necessary act as a witness at any hearing or planning enquiry or the like.
- A2.1.9 Undertake risk assessments.
- A2.1.10 Undertake value management exercises.
- A2.1.11 Obtain the Project Manager's approval to proceed with the preparation of detailed designs up to tender stage in accordance with Stage 2, [including the preparation of a detailed programme for the delivery of further services.](#)
- A2.1.12\* The Norwich Research Park has an existing masterplan consent with outline planning permission. This is supported by transport assessments and a masterplanned services infrastructure. The Consultant will develop a mini-masterplan including overall design and

transport assessment to coordinate the relationship between proposed and existing developments to enable wider masterplan activity.

A2.1.13\* Provide the technical drawings, reports and advice in support of a Planning Application and Environmental Impact Assessment which will be collated and submitted by the Planning Consultant and amend the strategic design proposals as directed by the Planning Consultant in order to minimise the environmental impact of the whole site development.

A2.1.14\* Relevant design codes, guidelines, standards and regulatory requirements: Contribute to the report provided by the Lead Consultant identifying the codes, guidelines, British and European standards, regulatory requirements, industry best practice guides and all other relevant published documents which contain information relevant to the design requirements for the proposed facility.

The report should include all aspects of the design but should be structured to enable the requirements affecting operational health and safety, biological containment, security and other matters affecting the licensing of the facility by the Health and Safety Executive and Home Office to be clearly understood by all parties involved in the briefing, management, design, construction, operation and licensing of the proposed facility.

The report should clearly state the categorisation of each element of the proposed facility and should confirm how this categorisation affects the application of these requirements.

Where these documents require a level of interpretation or other assumption these considerations should be explicitly stated.

The report should make reference to all known and anticipated changes in the documents or to other changes in law which may come into effect during the period before the proposed JIC-NGI facility becomes operational.

A2.1.15\* Employer's Operational Requirements: Assist the Lead Consultant and Employer in developing the operational requirements for the proposed facility.

A2.1.16\* Validation, Commissioning and Testing Strategy: During the early stages of concept design, Support the CVV Consultant to provide a report describing the overall approach and methodology for commissioning and verification activities during the design, construction / installation and post-construction periods for the project. The report shall include a description of the roles and responsibilities of all parties and the deliverables to be produced. The report shall define the performance acceptance criteria for each element of the proposed facility, subject to the actual elements, products, construction materials and methods of installation chosen.

A2.1.17\* Review the Employer's initial feasibility report and advise of any comments.

**STAGE 2: Development of the design and the preparation of tender documentation  
[RIBA Plan of Work Stages 3 – 4 and including Procurement]**

- A2.2.1 In co-operation with the other members of the Project Team, develop a scheme design within the approved cost and submit to the Employer for approval giving details of proposed specification, [forms of construction, construction standards](#) and Services.
- A2.2.2 Make recommendations to the Employer on the need for specialist Contractors to design and execute any sections of the Works or for specialist suppliers to provide any materials or equipment and obtain the Employer's approval and take any action necessary to implement the Employer's decision.
- A2.2.3 In liaison with the other members of the Project Team assist in the preparation of a cost plan based on the approved cost and the anticipated start and completion dates and, thereafter, monitor the development of the scheme design against the cost plan and report any anticipated difficulty to the Employer including proposals for overcoming that difficulty and obtain the Project Manager's instructions in sufficient time to allow corrective action to be taken.
- A2.2.4 Ensure that the designs for the Works fully comply with all Statutory Requirements or Regulations including, but not confined to requirements concerning Health and Safety, Planning, Fire, Building Control, etc., and take any action necessary to rectify deficiencies.
- A2.2.5 Where the Employer has indicated the possibility of a change to the agreed brief during the design phase, inform the Employer of the cost and programme implications and obtain the Employer's instructions. [Carry out any redesign work the Employer may request or as may be necessary to bring the estimated cost of the Works within an acceptable budget.](#)
- A2.2.6 Ensure that life cycle costings and environmental assessment techniques are applied to the design for the Project and adopt solutions giving the best overall value for money and, where this may result in the cost limit for the project being exceeded, make recommendations to the Employer and obtain instructions.
- A2.2.7 Ensure that the specifications prepared for the Works specifically exclude the use of materials accepted as being deleterious at the time and subsequently ensure that such materials are not used in connection with the Works.
- A2.2.8 In co-operation with the other members of the Project Team, complete the design of the Project up to tender stage, [including but not limited to the preparation of Production Information, detailed specifications and any necessary room data sheets.](#)
- A2.2.9 Discuss with the Employer the need for site inspection staff and obtain instructions.
- A2.2.10 [In liaison with the other members of the Project Team,](#) consider the most suitable options for the procurement of the Works and, following discussion with the other members of the Project Team, make recommendations to the Employer and obtain instructions.
- A2.2.11 In liaison with the other members of the Project Team, make recommendations to the Employer on the suitability of firms who may be invited to submit tender for the main Works and any specialist Works and obtain instructions.
- A2.2.12 In liaison with the other members of the Project Team, ensure that all drawings, specifications, schedules, bills of quantities, programmes or other documents necessary for the placing of contracts are completed and are fully co-ordinated, are in accordance with the brief approved by the Employer and are available on the programmed date.
- A2.2.13 ~~Ensure that a pre-tender cost check is prepared based on the tender documentation and inform the Employer of the result of that check.~~ [Support the Cost Manager in the production of a pre-tender estimate, based on the tender documentation.](#)
- A2.2.14 Agree with the Employer final arrangements for the obtaining of tenders.
- A2.2.15 Undertake risk assessments.
- A2.2.16 Undertake value management exercises.
- A2.2.17 Obtain the Project Manager's approval to proceed to Stage 3.

A2.2.18\* In conjunction with the other consultants, prepare a report and cost plan in respect of the final design, illustrating the scheme in scale plans, sections and elevations and specifications in sufficient detail to enable the Employer to approve spatial arrangements, materials and appearance, and reporting as to all the above issues required to be dealt with under this work stage.

A2.2.19\* Prepare and provide to the [Lead Consultant](#) such information as may be required relating to general and architectural matters for inclusion in the pre-construction phase plan.

A2.2.20\* Advise the scope and content of the Design Brief. Advise on information required for the Design Brief incorporating the site wide issues including but not limited to the sustainability policy and energy strategy. Provide the Lead Consultant with data required to carry out relevant design studies and support the preparation of the Design Brief for approval by the Employer.

A2.2.21\* Provide information in support of an application for detailed planning consent for the proposed facility made by the Planning Consultant on behalf of the Employer.

A2.2.22\* Production information of architectural or building work shall include, but shall not be limited to, location drawings, general arrangement drawings, construction details assembly drawings, interface and co-ordination details, schedules, specifications, calculations and integrating information from specialists.

Production information of architectural building work shall include integrated component drawings including structural design for all elements forming, supporting or otherwise affecting the containment barrier or other elements critical to biological containment.

Where the containment barrier is formed by or relies upon the integrity of proprietary elements or applied finishes the limiting physical capacities, including strength under the ultimate loading conditions and resistance to cracking under serviceability loading conditions or other physical conditions shall be determined, if necessary from primary investigation, and included within the design calculations.

A2.2.23\* Production information for all internal areas of the proposed facility shall include detailed layout plans at a scale not less than 1:50 and detailed wall elevations at a scale not less than 1:25. These drawings shall be fully co-ordinated to include all physical features within the internal space including mechanical and electrical fittings; Employer supplied loose and fixed equipment to accurately represent all surface features visible to the Employer when the facility is occupied.

A2.2.24\* Provide rendered BIM data model and three-dimensional visualisations (BIM Level 2) of all internal areas of the proposed facility include all physical features within the internal space including mechanical and electrical fittings, Employer supplied loose and fixed equipment to accurately represent all surface features visible to the Employer when the facility is occupied.

A2.2.25\* Provide information in support of SWIFT and HAZOP studies undertaken by the Employer. Attend workshops and actively participate in the SWIFT and HAZOP exercises. Respond to the output recommendations of the SWIFT and HAZOP studies providing additional information or making amendments to the design as appropriate and as required.

A2.2.26\* Provide information in support of the Design Qualification, Installation Qualification and Operation Qualification to be undertaken by the CVV Consultant.

A2.2.27\* During the detailed design stage, develop the Commissioning and Testing Plan in consultation with the Employer and the CVV Consultant. The plan shall identify the following:

- i. Each element of the systems or equipment which is to be commissioned and/or tested,
- ii. A detailed description of the commissioning and/or testing activity required.

**MULTI-DISCIPLINARY DESIGN TEAM  
STRUCTURE**

**JIC - NGI TEAM**

- iii. The performance acceptance criteria and the method by which the parameters shall be measured,
- iv. Requirements for specialist instrumentation including accuracy.
- v. Requirements for witnessing by the Employer's CVV Consultant and the Employer's staff.
- vi. Requirements for documentation defining the commissioning activities in further detail.

A2.2.28\* Develop Room Data Sheets and review the information with the JIC user groups and with the Contractor.

**STAGE 3: Covering tender stage (including both first and second stage tenders under the two stage design and build contract) [RIBA Plan of Work Stages – Procurement]**

- ~~A2.3.1 In liaison with the other members of the Project Team, invite tenders from Contractors included on the list approved by the Employer and arrange for tenders to be returned direct to the Employer in accordance with the Employer's tendering procedures.~~
- ~~A2.3.2 Copy all correspondence regarding the obtaining of tenders direct to the Employer.~~
- A2.3.3 Examine tenders received and, in liaison with the other members of the Project Team, make recommendations to the Employer and advise on any corrective action which may be required if the lowest tender is higher than the approved cost for the Works and obtain the Project Manager's instructions.
- A2.3.4 ~~Arrange with~~ [Support the Project and Cost Manager with drafting](#) any tender under consideration for acceptance to receive an arithmetical and technical check and ~~ensure use~~ [all reasonable endeavours to procure](#) that any errors are resolved in accordance with the Employer's procedures and inform the Project Manager of the results of those checks.
- A2.3.5 Obtain the Project Manager's instructions regarding the acceptance of a tender, [including providing assistance to the Employer in negotiating prices and contractual matters with Contractors.](#)
- A2.3.6 Where required, provide the Employer with drawings or other documents necessary for entering into contract (or alternatively follow the procedure for the appointment of specialist sub-Contractors). [Revise any design information as may be required to adjust the tender sum.](#)
- A2.3.7 Undertake risk assessments.
- A2.3.8 Undertake value management exercises.
- A2.3.9 Before Stage 4 is implemented ensure that the Employer has accepted the selected Contractor's tender and that the Employer approves that the matters referred to in Stage 4 can proceed.
- A2.3.10\* With the other consultants, negotiate an information release schedule with the Contractor prior to the award of the Building Contract.
- A2.3.11\* Raise with the Project Manager for discussion the inclusion in the Building Contract of appropriate requirements for the Contractor to prevent or minimise inconvenience, danger, disturbance or nuisance to third persons who are likely to be adversely affected by the carrying-out of the Works. Take steps to see that such appropriate requirements are included in the Building Contract.
- A2.3.12\* Once the Employer is ready to enter into the Building Contract, confirm to the Project Manager in writing that so far as matters within your responsibility or knowledge, a state of readiness has been achieved for construction to commence and to proceed in accordance with the proposed construction programme, or notify the Project Manager of any respects in which that is not the case.



**STAGE 4: Covering the construction and operations on site [RIBA Plan of Work Stage 5]**

- A2.4.1 In collaboration with the other members of the Project Team, assist the Project Manager in administering the terms of the Works contract during operations on site and relating to the completion of the Works including (but not limited to) all activities in connection with the adjudication of disputes between the Employer and the Contractor.
- A2.4.2 Until completion of the project report to the Project Manager at monthly intervals on the progress of the Works.
- A2.4.3 ~~Ensure that~~ Assist the Project Manager and use all reasonable endeavours to procure that relevant legislation, standards and rigorous safety policies are in place and are implemented by the Contractor and Sub-Contractors working on the site and that there is adequate protection for the public and others and that Health and Safety Statutory requirements or regulations are fully observed.
- A2.4.4 ~~Ensure that~~ Assist the Project Manager and use all reasonable endeavours to procure that relevant legislation, standards and rigorous quality management procedures are in place throughout the construction phase.
- A2.4.5 Attend the regular meetings with the Contractor and the other members of the Project Team as necessary in order to monitor the progress of the Works and the production of design information to the Contractor.
- A2.4.6 Visit the site at regular intervals during the construction of the Works in order to inspect the quality of the work and to monitor progress and ensure that the Works are completed fully in accordance with the contract documents.
- A2.4.7 Inform the Project Manager of any contractual difficulties which may arise during the course of the contract and obtain the Project Manager's instructions.
- A2.4.8 In liaison with the other members of the Project Team, establish post contract cost control procedures in order to ensure financial control covering the issue of instructions which vary the Works and the issue of cost reports to the Project Manager ~~in accordance with Condition 27 (Variations).~~
- ~~A2.4.9 Liaise as necessary with the other members of the Project Team and issue interim payment certificates in accordance with the terms of the construction contract.~~
- A2.4.10 Inform the Project Manager four weeks prior to the anticipated date of completion of the Works.
- A2.4.11\* Provide Production Information at the times required under the Building Contract.
- A2.4.12\* Inspect materials delivered to the Site.
- A2.4.13\* As appropriate, instruct sample-taking and the carrying out of tests of materials and workmanship and examine the conduct and results of such tests whether on or off-site.
- A2.4.14\* As appropriate, visit the sites of the extraction of materials or assembly of components to inspect materials or workmanship before delivery to Site.
- A2.4.15\* Arrange for photographers to take and catalogue periodic progress photographs. All photographs are to be provided to the Employer and share with the Employer's Project Team free of copyright and reproduction restrictions.
- A2.4.16\* Monitor and report to the Project Manager upon the progress of the Works against the Contractor's programme. During Site visits, monitor compliance by the Contractor with any provisions of the Building Contract for the avoidance or minimisation of inconvenience, danger, disturbance or nuisance to third parties.
- A2.4.17\* Conduct sample reviews of record drawings and O&M Manual submittals as prepared by the Contractor. Such reviews will be conducted on the basis of a benchmark set of such Record Drawings and O&M Manual submittals prepared by the Contractor and approved by the Employer prior to any O&M Manuals and Record Drawing Reviews being conducted. Review such Record Drawings and O&M Manuals for general completeness. Such reviews will not represent a full check of the documents for accuracy (assumption that any such

accuracy verification will be performed by others i.e. the Clerk of Works) and the reviews are based on the assumption that it is the Contractor's responsibility to provide a complete set of information in the manner specified under the contract.

- A2.4.18\* Review of architectural related design information for the interior and exterior of the building during Contractor design.
- A2.4.19\* Review of architectural work package submittals for compliance with design intent documented in the Employers Requirements. Comment on any aspects of the proposals which do not or appear may not comply with the Employer's Requirements either requesting this is changed to comply or that further information is provided demonstrating compliance. Comment on other aspects of the proposals which appear to comply with the Employer's Requirements but which you believe the Contractor may wish to modify (more clarity, alternative solution, etc.). Any actions on these comments are entirely at the Contractor's decision.
- A2.4.20\* Technical support and technical advice in the form of answers to Request for Information as related to architectural design during the construction period.
- A2.4.21\* Support and advise the Employer with regard to regulatory compliance of the design information developed by the Contractor Team.
- A2.4.22\* Provide support to reconcile comments between the Contractor Team, JIC User Team and the Employer's Project Manager on design information being prepared by the Contractor.
- A2.4.23\* Support the Project Manager in the Change Control Process based on input from the Employer and the Contractor, where appropriate
- A2.4.24\* Provide support to review and advise on issues related to reconciliation of design proposals and contractual requirements via the Request for Project Manager's Instruction (RFPMI) process.
- A2.4.25\* Review information issued by the Contractor.
- A2.4.26\* Attendance at weekly communication and coordination meetings with the Contractor during development of the Contractor Design. Attendance at site meetings by a site architect during the construction activity period.
- A2.4.27\* Weekly site observations and walk-through, and preparation of site observation reports during the construction activity period.
- A2.4.28\* Visit the site once per week during the course of the main civil, structural, MEP and construction works to conduct site observation of the works in progress, the completed works, and to observe the works for general compliance with the Employer's Requirements and accepted good practice. Such observations are NOT a full quality check – the full responsibility to construct the building to the required, benchmarked and approved level of quality remains with the Contractor. After each site observation prepare and issue a site visit and observation report which will highlight any aspects of the works which appear to not comply with the design intent of the Employer's Requirements. The site observation reports will identify the non-compliant items and will suggest a corrective action to be performed by the Contractor to bring such items into compliance with the design intent of the Employer's Requirements, or it will identify that further information is provided demonstrating compliance.
- A2.4.29\* Carry out periodic checks to see that the Contractor is operating robust quality control procedures and periodically inspect test records, such any samples requested.
- A2.4.30\* Attendance at project update meetings
- A2.4.31\* Review of a Sample of Record Drawings and O&M Manuals related to the facility to provide advice and comments on the general completeness of such documents.
- A2.4.32\* Support to defects and observations activities to conduct an observation of visible defects for each of the building elements declared by the Contractor as "substantially complete". Each walk-through will be documented in a written defects report issued to the Project Manager, with a revisit to confirm defect has been rectified and closed.

A2.4.33\* Attendance at HAZOP and other containment design related meetings conducted on the project site.

A2.4.34\* Review of design information prepared by the Contractor team and related to the containment design of the project.

A2.4.35\* Review of containment related work package submittals including, but not limited to, the list below. The proposal is based on conducting one such review per work package submittal. The reviews are limited to advising the Employer that the information generally complies with the design intent documented in the Employer's Requirements.

- Autoclave
- Scientific gases
- BMS
- Cold Rooms & Freezers
- Fume Cupboards
- Microbiological Safety Cabinets
- Controlled Environment Rooms
- Air Handling and HEPA filtration in containment laboratories
- ICT fit out
- General laboratory fit out

**STAGE 5: Covering completion [RIBA Plan of Work Stage 6-7]**

- A2.5.1 ~~In liaison with the other members of the Project Team, provide the Employer with a set of record drawings and guidance on the operation and maintenance of the Project and its services.~~
- A2.5.2 Issue a list of defects to the Contractor at the appropriate time in accordance with the terms of the Works contract.
- A2.5.3 ~~Ensure~~ Use all reasonable endeavours to procure that the Contractor rectifies the defects within a reasonable time and issue a Certificate to the Contractor when all defects have been made good. Use all reasonable endeavours to procure that operational-critical defects are rectified prior to operational start to ensure the Employers deadline are not jeopardised.
- A2.5.4 Liaise with the other members of the Project Team regarding final valuation of the Works and report the final cost of the Works to the Project Manager.
- A2.5.5 In the event of any arbitration or litigation resulting from the Project prepare any necessary documentation and reports and, if required by the Employer, attend any hearing acting as witness (and subject to the payment of an additional fee) ~~in accordance with Condition 46 (Payment for changed Services and variations).~~
- A2.5.6\* Assist in compiling a programme for the planned maintenance of the Project.
- A2.5.7\* Assist the Project Manager to prepare a completion report to the Employer showing:
- A comparison between the outturn cost and the approved budget cost.
  - The actual expenditure against sums included in the contract for specialist works and provisionally measured work.
  - The costs included against any Variation or Price clause.
  - The expenditure against approved variations and additional works authorised by the Employer.
  - A comparison of programmed dates against actual dates achieved.
  - Any lessons obtained from the scheme which could be applied to future projects
  - The performance of project participants.