



Capital Project Teams Scope of Services

Annex 1 to Schedule B of the Form of Tender
Project:

SERVICES SCHEDULE



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1.0 Introduction¹

The University of Galway has developed a Scope of Services document to facilitate the engagement of Professional Services Consultants for the delivery of capital development projects. This Scope of Services document embodies the principles of public procurement and public works engagement and is aligned with the Capital Works Management Framework (CWMF).

The Scope of Services provided relate to services to be provided by a number of team structures as follows:

- Integrated Project Team (IPT)
- Project Control Team (PCT)
- Single Point Design Team (SPDT)
- Single Direct Appointment

The Scope of Services included relate to the following non-exhaustive range of services including:

- Architecture
- Civil and Structural Engineering
- Quantity Surveying
- Mechanical & Electrical Engineering
- Fire Safety Engineering
- Project Management including Employers Representative
- Assigned Certifier
- Project Supervisor Design Process

The scope of services included, represent a non-exhaustive list of requirements of University of Galway for the delivery of capital projects Tenders. Tenderers are advised to refer to the Invitation to Tender (ITT) documents for details of the specific competition and project requirements, along with the Project Information Memorandum (PIM) for specific structure of the project team for the project they are tendering for.

Notwithstanding requirements as set out in this document, service providers are required to ensure that all services provided are in compliance with the CWMF and industry norms and in compliance with the service providers' relevant professional body.

The scope of services requirements provide guidance to tenderers in regard to the minimum requirements for compliance with University of Galway standards and regulatory requirements.

Each project demands a thorough understanding and estimation of all consultancies necessary to deliver the specified outputs. As such, tenderers must include all relevant consultancies in their submission. Tenderers are expected to familiarise themselves with this document and incorporate all necessary consultancies into their proposals, reflecting a comprehensive understanding of the university's requirements.

For further details, tenderers should consistently refer to the ITT and the PIM, as both provide specific and detailed information regarding contract engagement and the overall procurement process for Consultants and Teams.

¹ Does one need to distinguish between projects that are Employer-led design and Contractor-led design?



1.1 Document Structure

This scope of services document is prepared to support a number of Design Team procurement and engagement structures as listed above. Tenderers must refer to the relevant ITT and PIM which clearly identifies the projects proposed engagement structure and apply the relevant sections of this document.

The chapters which are generally not applicable to each of the team structures as listed in the table below.

Team Structure	Non Applicable Chapter
Integrated Project Team (IPT)	4, 5
Project Control Team (PCT)	3, 4
Single Point Design Team (SPDT)	3, 5
Separate Direct Appointments	3, 4, 5

Tenderers are reminded of requirements to deliver a complete service as set out in section 1 above and this scope of services sets out a non-exhaustive list and minimum requirements. Notwithstanding that some chapters of this scope of service document do not generally apply tenderers must familiarise themselves with all aspects of this document to ensure a complete and holistic service delivery is provided to the University.



2.0 Project Stages

The Form of Tender and Schedule sets out the various Stages which are briefly described as follows:

- Stage (i) – Preliminary
- Stage (ii) – Design
- Stage (iii) – Tender Action, Evaluation and Award
- Stage (iv) – Construction
- Stage (v) – Handover of Works

Stage (i): Preliminary: This Stage involves the development and finalisation of the definitive project brief which is the full and completed statement of University of Galway's functional and operational requirements for the Project. At the end of this Stage University of Galway's requirements will have been tested and a preferred preliminary design developed into a plan, taking cognisance of functional, aesthetic & operational requirements, local authority and public utility requirements, site issues, capital cost constraints, best overall value, delivery schedule and customer occupation.

Stage (ii): Design: This Stage follows a step-by-step process through three sub-Stages that progressively develop the design into drawings and other documentation that facilitates tendering and constructing the Project.

- Scheme design,
- Developed design/Working drawings & Performance Specifications.
- Tender documentation/Pricing Document (Bill of Quantities)

Stage (ii)(a) Scheme Design: The completion of this sub-Stage will result in an outline design to meet the requirements set out in the definitive project brief, design brief and preliminary output specification in compliance with budget. In parallel, this will include attainment of all regulatory requirements including planning permission, fire safety certificate, disability access certificate, appropriate environmental impact study and other statutory consents.

Stage (ii)(b) Developed Design/Working Drawings/Specifications for Construction: This sub-stage is the progression of the scheme design as approved or amended by statutory approvals, appeals, etc. to a point where design is complete and no items remain to be designed, and the level of information is provided to enable efficient, effective and returns value-for-money from the tender process. The completion of this sub-stage also involves the preparation and compilation of the various technical documentation; drawings, specifications, construction specifications and other documents.

Stage 2(c) Specification/Tender Documentation/Pricing Document: This sub-stage comprises all the information produced, compiled into an appropriate set of documents suitable to invite tenders in accordance with the procurement route. Tender documentation should include all the information about the Project to enable contractors to fully understand the Project, its scope and the requirements of the University of Galway and to then comprehensively price the Project based on a fixed price lump sum. All information must be checked for accuracy and consistency prior to issuing the invitation to tender and all team members must attest to having read and interrogated the entire set of documents and understood all aspects, checking for errors and/or inconsistencies where appropriate to their skills.

Stage (iii): Tender Action, Evaluation, Award: This Stage involves the project team, managing & implementing the prequalification process and advising University of Galway on the procurement of contractors and specialists to carry out the works. This will involve compliance with National & EU procedures, publication of notices, assessment of suitability of candidates and specialists. Issue tender documents and review returned tenders. The completion of this Stage should result in the placing of a contract with a suitable contractor within the approved budget. Some or all of these activities may



be required to run in parallel to meet the timeline proposed.

Stage (iv) Construction: This Stage involves the contract administration and regular inspection of the works. All the design, architectural and engineering discipline teams must continue to be available to support, and certify where required, the construction activities on an ongoing basis through to completion of construction. This comprises review of contractor proposals and submissions, query responses for clarification, explanation or further information and a pro-active engagement with the University and the Employer's Representative to support and manage this stage of the process.

Stage (v): Handover of Works & Final Statement: This Stage involves the provision of technical/design support to the commissioning and handover through to the end of the defects liability period Stage. Activities will involve input to the preparation of the commissioning and handover strategy and plan; participation in systems walkthrough and snagging; participation in system pre-commissioning, start-up and testing; system performance testing, sign off and handover. It also involves the preparation and agreement of the Final Account Statement in an agreed format. The project team must strictly comply with and enforce required permits and procedures in accordance with current best practice standards. The project team shall specify within the construction contract, that all Operating & Maintenance Manuals, safety files, drawings, specifications are stored on a computerised library system compatible with the existing University of Galway system at the handover stage. The defects period will commence, and the team must report in writing to the University after its conclusion. Should any formal or informal dispute with the contractor(s) arise during the course of the project, the Project Team will be required to provide all necessary support to the University in defending any such disputes.



3.0 Scope of Services for the Integrated Project Team

3.1 Team Structure

The IPT engaged by University of Galway will provide comprehensive services in accordance with University of Galway procedures and CWMF guidelines. These services encompass all stages of the project lifecycle, ensuring professional, efficient, and effective execution of all tasks to achieve the desired project outcomes. The IPT will include consultants for a range of principal service providers roles including:

- Architecture (Arch)
- Project Management including Employers Representative (PM)
- Quantity Surveying (QS)
- Civil and Structural Engineering (CSE)
- Mechanical & Electrical Engineering (ME)
- Fire Safety (FS)
- Assigned Certifier (AC)
- Project Supervisor Design Process (PSDP)
- Carbon Manager

A number of other supplementary specialist service providers may also be required as set out in the Invitation to Tender documents.

3.2 General Responsibilities

The IPT will be responsible for delivering a range of services to ensure successful projects.

The IPT Lead will act as the Lead for all Project Controls and SPDT services, serving as the primary contact for all management, cost, design and technical matters. Each IPT discipline will assign a senior staff member to direct activities and attend key meetings. The IPT must respond comprehensively to all queries within 1 working day unless agreed otherwise and allocate adequate resources, including key team members as identified in the tender. They are responsible for ensuring project delivery within constraints of business continuity, cost, performance, and time.

It is emphasised, for clarity, that the Project Management service required is a comprehensive one and will include elements of Project Management that might otherwise have been undertaken directly by public bodies on some other projects. The appointed Senior Project Manager, who will report directly to the Assistant Director of Estates Strategy & Capital Projects (or designated representative), will be required to take ownership in leading and delivering the project in its holistic sense, not purely focusing on CWMF and Infrastructure Guidelines in isolation, but continuously looking to the future to identify challenges and mitigate risk, tabling concerns at an early stage for effective resolution. Development projects incorporate wider elements than CWMF, can be impacted by regulations, commercial, economic, statutory, funding and compliance matters that sit outside of the CWMF and Infrastructure Guidelines. The Senior Project Manager is responsible for taking all these external elements into account in the project delivery.

It is a key requirement of the provision of these Project Management Services that the Senior Project Manager be known to, visible to, and available to University personnel. They are required to be available to take a hands-on approach to issues of concern, which will include regular attendance on campus and as a project progresses on site. Initially it is envisaged these services will be on campus on a weekly basis and more frequently as a project progresses and as requested by the Contracting Authority.

Elements of the overall project management of the project include, but are not limited to, the following:



- Engagement with all relevant stakeholders and third parties (including but not limited to: existing University staff/department working in the buildings on the site, local residents, local businesses, etc.); both within the Campus environment and externally as required at all stages; from the initial stage through design development, construction stage liaison and arrangements, commissioning/ demonstration/ handover, and defects identification and resolution
- All communications in relation to the project; including ensuring University-wide “buy-in” to the chosen delivery strategy, and communicating all aspects of this strategy, including to successive cohorts of students.
- Managing and implementing arrangements in relation to each phase of construction, including decants, temporary services provision, services outages, temporary access / egress, hoarding, noise / vibration / dust control, etc. All aspects of the control of the effective and safe progression of each phase of the project, while minimising impacts on day-to-day University operations and other buildings and functions, will be managed and co-ordinated by the PM.

The above list is illustrative rather than exhaustive. Tenderers are advised that their tendered lump sum fee will be deemed to include for a very detailed level of involvement and control in all aspects of each stage of the project. Therefore, tenderers should take this into account when considering their tender price and build provision for this in their tender price.

Throughout all project stages, the IPT are required to provide services that are considered incidental to the overall project execution and, again, these are deemed included in the tender price. This includes regular project team meetings in Galway, with a focus on frequent consultations and customer meetings to expedite the tight programme. The IPT will set agendas, convene meetings, and ensure actions are assigned and followed up.

3.3 Meetings and Reporting

The IPT will conduct regular project meetings, design team meetings, and stakeholder consultations. Weekly full-day meetings in Galway during initial stages, and fortnightly meetings, thereafter, will be held to ensure continuous engagement and progress tracking. The IPT Lead will chair these meetings, issue agendas, and coordinate design workshops as needed. Detailed design programmes will be developed, maintained, and updated regularly, with fortnightly updates and monthly progress reports provided to the Project Manager.

See also Sections 6.2 and 6.3.

3.4 Certification and Compliance

The IPT is responsible for ensuring compliance with all statutory and regulatory requirements, including health and safety regulations. They will provide all necessary opinions, certificates, and declarations of compliance throughout the project stages. Stage Completion Certificates will be issued to the University of Galway via the Project Manager at each relevant juncture.

3.5 Supplementary Responsibilities

The IPT will coordinate with other teams (including the economic consultants teams), to ensure seamless integration of all project activities. They will manage stakeholder engagements, workshops, and consultations to align project outcomes align with the University’s strategic objectives. The IPT will also facilitate the procurement of surveys and studies including student engagement, ensure sustainability and quality management practices are managed, and address any issues or risks promptly.



They will also manage integration of University IT and AV systems, conduct environmental modelling, and report on life-cycle analyses and maintenance costs and green procurement requirements that can be incorporated into the tender documentation and works requirements.

By fulfilling these comprehensive responsibilities, the IPT ensures the successful delivery of the University of Galway's capital works projects, maintaining high standards of design, compliance, and project management throughout the entire lifecycle.



4.0 Scope of Services for the Single Point Design Team

4.1 Team Structure

The SPDT engaged by University of Galway will provide comprehensive services in accordance with University of Galway policies and procedures and CWMF guidelines. These services encompass all stages of the project lifecycle, ensuring professional, efficient, and effective execution of all tasks to achieve the desired project outcomes. The SPDT will include consultants for a range of principal service providers roles including:

- Architecture
- Civil and Structural Engineering
- Mechanical & Electrical Engineering
- Fire Safety
- Project Supervisor Design Process
- Carbon Manager

4.2 General Responsibilities

The lead Architect will act as the Lead Designer and SPDT Lead, serving as the primary contact for all design and technical matters with the PCT and the University of Galway. Each SPDT discipline will assign a senior staff member to direct activities and attend key meetings. The SPDT must respond comprehensively to all queries within 1 working day unless agreed otherwise and allocate adequate resources, including key team members as identified in the tender. They are responsible for ensuring project delivery within constraints of business continuity, cost, performance, and time.

4.3 Meetings and Reporting

The SPDT will conduct regular project meetings, design team meetings, and success workshops, both in person and virtually as required. They will develop and maintain a detailed design programme aligned with the master programme, providing fortnightly updates and monthly progress reports. The design programme must be approved and set as the baseline, with continuous measurement and reporting against this baseline throughout the project duration.

See also Sections 6.2 and 6.3.

4.4 Certification and Compliance

The SPDT is responsible for ensuring compliance with all statutory and regulatory requirements, including health and safety regulations. They will provide all necessary opinions, certificates, and declarations of compliance throughout the project stages. Stage Completion Certificates will be issued to the University of Galway via the PCT at each relevant juncture.

4.5 Supplementary Responsibilities

The SPDT must coordinate all project design packages, including (but not limited to) architecture, civil and structural engineering, building services, landscape design, traffic consultancy, façade design, acoustic design, fire engineering, interior design, ergonomics, and universal design, to ensure seamless integration



of all design activities. They will also manage integration of University IT and AV systems, conduct environmental modelling, and report on life-cycle analyses and maintenance costs and green procurement requirements that can be incorporated into the tender documentation and works requirements.

By fulfilling these comprehensive responsibilities, the IPT ensures the successful delivery of the University of Galway's capital works projects, maintaining high standards of design, compliance, and project management throughout the entire lifecycle.



5.0 Scope of Services for Project Controls Team

5.1 Team Structure

The PCT engaged by University of Galway will provide comprehensive services in accordance with University of Galway procedures and CWMF guidelines. These services encompass all stages of the project lifecycle, ensuring professional, efficient, and effective execution of all tasks to achieve the desired project outcomes. The PCT will include consultants for a range of principal service providers roles including:

- Project Management (PM)
- Employers Representative (ER)
- Quantity Surveying (QS)
- Assigned Certifier (AC)

The services listed in this section are supplemented by the general services section outlined in the document. The contract engagement structure is detailed in the invitation to tender (ITT) and Project Information Memorandum (PIM).

The PCT will be responsible for delivering a range of services to ensure the professional, adequate, efficient, and effective execution of all tasks to achieve the desired project outcomes.

5.2 General Responsibilities

It is emphasised, for clarity, that the project management service required will be comprehensive and will include elements of project management that may otherwise have been undertaken directly by public bodies on some other projects. The appointed Senior Project Manager, who will report directly to the Assistant Director of Estates Strategy & Capital Projects (or designated representative), will be required to take ownership in leading and delivering the project in its holistic sense, not purely focusing on CWMF and Infrastructure Guidelines in isolation, continuously looking to the future to identify challenges and mitigate risk, tabling concerns at an early stage for effective resolution. Development projects incorporate wider elements than CWMF, can be impacted by regulations, commercial, economic, statutory, funding and compliance matters that sit outside of the CWMF and Infrastructure Guidelines. The Senior Project Manager is responsible for taking all these external elements into account in the project delivery.

It is a key requirement of the provision of these Project Management Services that the Senior Project Manager be known to, visible to, and available to University personnel. They are required to be available to take a hands-on approach to issues of concern, which will include regular attendance on campus and as a project progresses on site. Initially it is envisaged these services will be on campus on a weekly basis and more frequently as a project progresses and as requested by the Contracting Authority.

Elements of the overall project management of the project include, but are not limited to, the following:

- Engagement with all relevant stakeholders and third parties (including but not limited to: existing University staff/department working in the buildings on the site, local residents, local businesses, etc.); both within the Campus environment and externally as required at all stages; from the initial stage through design development, construction stage liaison and arrangements, commissioning/ demonstration/ handover, and defects identification and resolution
- All communications in relation to the project; including ensuring University-wide “buy-in” to the chosen delivery strategy, and communicating all aspects of this strategy, including to successive cohorts of students.



- Managing and implementing arrangements in relation to each phase of construction, including decants, temporary services provision, services outages, temporary access / egress, hoarding, noise / vibration / dust control, etc. All aspects of the control of the effective and safe progression of each phase of the project, while minimising impacts on day-to-day University operations and other buildings and functions, will be managed and co-ordinated by the PM.

The above list is illustrative rather than exhaustive. Tenderers are advised that their tendered lump sum fee will be deemed to include for a very detailed level of involvement and control in all aspects of each stage of the project. Therefore, tenders should take this into account when considering their tender price and build provision for this in their tender price.

Throughout all project stages, the PCT are required to provide services that are considered incidental to the overall project execution and, again, these are deemed included in the tender price. This includes regular project team meetings in Galway, with a focus on frequent consultations and customer meetings to expedite the tight programme. The PCT will set agendas, convene meetings, and ensure actions are assigned and followed up.

5.3 Meetings and Reporting

The PCT will conduct regular client meetings, project meetings, design team meetings, and success workshops, both in person and virtually as required. They will develop and maintain a detailed Project Master Programme aligned with the University goals, providing fortnightly updates and monthly progress reports. The Master Programme must be approved and set as the baseline, with continuous measurement and reporting against this baseline throughout the project duration.

See also Sections 6.2 and 6.3.

5.4 Certification and Compliance

The PCT is responsible for ensuring compliance with all statutory and regulatory requirements, including health and safety regulations. They will provide all necessary opinions, certificates, and declarations of compliance throughout the project stages. Stage Completion Certificates will be issued to the University of Galway via the PCT at each relevant juncture.



6.0 General Services – Consultants

The general services listed below apply to all consultancies. Each consultant is required to perform the services relevant to their specific discipline. For details on the contract engagement structure, please refer to the ITT documents.

6.1 Specific Duties

Appendices to this document outline specific duties for various design team members. Consultants should be aware that their duties are not limited to the specific tasks listed in these appendices. It is important to note that the general services listed below are applicable to all consultants.

General Services (To Be Provided in each of Stages (i) to (v))

Stage (i) – Preliminary

Stage (ii) – Design

Stage (iii) – Tender Action, Evaluation and Award

Stage (iv) – Construction

Stage (v) – Handover of Works

Together with those services, which may reasonably be regarded as incidental to the services for a project of the size, scale, nature and complexity of this Project, the selected tenderer must provide the following services throughout the course of the Project.

6.2 Meetings

A key responsibility of the lead Consultant will be to co-ordinate and lead the design team for the project. This will include, but not be limited to, arranging design meetings (in person) as directed and agreed with the contracting authority/employer, preparing, and circulating meeting minutes, arranging site meetings, providing drawings/information, services, as required and as agreed with contracting authority.

The consultant shall establish a meetings structure. Lay down procedures for convening, chairing, attendance, function, frequency, and responsibility for recording of meetings and circulation of information, monitoring, communications and distribution of information.

The Project Management service lead / Design Team lead shall ensure they attend University of Galway in person as agreed with University of Galway for all stages of the project.

The Project is based in Galway city and therefore, the University expects teams to hold their meetings in Galway, unless previously approved by the Buildings Office. The Design Team must attend meetings on a weekly basis in Galway on site, from commencement until procurement strategy is finalised and planning application submitted. Thereafter and until 2 months after substantial completion is attained the design team must attend in person a full day of meetings on a fortnightly basis in Galway.

Below is a breakdown of the meetings that will be required to be produced on a weekly, fortnightly, or monthly basis, along with the corresponding meetings:

Meetings:

1. Progress Meetings:
 - Frequency: Weekly/Fortnightly/Monthly



- Attendees: Design Team, Project Management, Contractor.
 - Purpose: Review progress on various aspects of the project, discuss any challenges,
2. Design Team Meetings
 - Frequency: Weekly/Fortnightly/Monthly
 - Attendees: Design Team, Project Management, Contractor, Employer.
 - Purpose: Review progress on various aspects of the project, discuss any challenges,
 3. Cost Meetings
 - Frequency: Weekly/Fortnightly/Monthly
 - Attendees: Design Team, Project Management, Contractor, Employer.
 4. Health and Safety meetings:
 - Frequency: As required
 - Attendees: All
 - Purpose: Identify, assess, and mitigate project Health and safety risks, review RAMS and plan upcoming works.
 5. Risk Management Meetings:
 - Frequency: Monthly
 - Attendees: Project Management, Stakeholders, Risk Management Team, all consultants
 - Purpose: Identify, assess, and mitigate project risks.
 6. Programme Monitoring Meetings:
 - Frequency: Monthly
 - Attendees: Project Management, Stakeholders, all consultants
 - Purpose: Monitor and evaluate the project's progress against the established program or schedule.
 7. Principals Meetings:
 - Frequency: Monthly
 - Attendees: Principal stakeholders, Project Management, Main Contractor, all consultants
 - Purpose: Discuss high-level project matters, strategic decisions, and alignment with organisational goals.
 8. Stakeholder Meetings:
 - Frequency: As required
 - Attendees: Relevant stakeholders, Project Management, all consultants
 - Purpose: Engage with stakeholders, gather feedback, and address concerns.
 9. Project Implementation Board Meetings:
 - Frequency: Monthly
 - Attendees: Project Implementation Board members, Purpose: Review progress towards project implementation, address any implementation issues, and ensure alignment with project objectives. (see TOR)
 10. End User Meetings:
 - Frequency: As required
 - Attendees: End users, Project Management, all consultants as required
 - Purpose: Gather user feedback, discuss user requirements, and ensure project deliverables meet user needs.
 11. Third-Party Meetings:
 - Frequency: As required
 - Attendees: Third-party contractors, Project Management, all consultants as required
 - Purpose: Coordinate activities with third-party contractors, discuss project dependencies, and resolve any issues.
 12. Carbon Management:
 - Frequency: fortnightly during design stage and monthly thereafter.



- Attendees: Design team, Project Management, Quantity Surveyor, Mechanical & Electrical consultant. Any other consultants deemed necessary.
- Purpose: To Establish Carbon Budgets and reduction targets for the project. Identify carbon hotspots, develop a carbon management plan, Carbon management process, Asset life cycle assessment and provide comparisons / alternative options to reduce carbon.

13. Building Information Modelling

- Frequency: fortnightly / as required
- Attendees: Project Management, designers, all consultants, Quantity surveyors
- Purpose: Detect and resolve clashes before they occur on-site. Enhance communication and collaboration among stakeholders. Increase efficiency, saving time and money.

6.3 Reports

1. Progress/program Report: Frequency: Monthly
2. Monthly Cost Report and reconcile with the university accounting system (Agresso)
3. Fortnightly Contractors Report review and critical analysis
4. Project Implementation Board Monthly Report.
5. Funding Reports.
6. Design stage completion reports at each stage of the CWMF.
7. Carbon Management Plan.
8. Stage completion reports / Design Guide Compliance
9. Post-project review will take place during the Defects Liability Period. Report to include Lessons learned report from each consultant at the end of the construction phase and updates report at the end of the defects period.

Each consultant must complete written stage completion reports for each of the five stages of CWMF. The lead consultant will compile and summarise these reports, ensuring that the design has progressed sufficiently to complete each stage. These reports will be submitted to the client for approval to proceed to the next stage. Each report must detail how the project design meets all aspects of the University of Galway's design guide. If any design elements do not meet these standards, the design team and lead consultant must notify the B&E office and propose solutions or alternatives promptly to prevent any impact on the schedule or cost.

The lead consultant must ensure that each report includes relevant metrics, updates, issues, risks, and any other pertinent information related to the respective aspect of the project including any specific information requested by the University of Galway. The lead consultant must regularly review the effectiveness of these meetings and reports to ensure they serve their intended purpose in facilitating communication, monitoring progress, and addressing challenges effectively.

6.4 Health and Safety Compliance

The consultant will be responsible for ensuring full compliance with relevant health and safety legislation, including the Safety, Health, and Welfare at Work (Construction) Regulations, as may be updated from time to time. They will provide all necessary design risk assessments and technical information for incorporation into the Health and Safety Plan and File. Additionally, they will coordinate ancillary certification from design professionals and specialists as required.



6.5 Sustainability and Carbon Management

University of Galway is committed to reducing embodied carbon in their projects and promoting sustainable construction. This section summarises various policy documents and guidelines to direct project managers, designers, and contractors in delivering construction projects that align with our sustainability goals and environmental objectives. Design team members are required to familiarise themselves with the various policy documents and guidelines and to implement their aims, objectives and requirements at each stage of the delivery of a project.

These include the Public Procurement Guidelines, green public procurement (GPP) which mandate sustainable practices in public tenders to meet national and EU standards, and the Climate Action Plan 2023, which sets ambitious targets for emission reductions in alignment with national objectives. Additionally, the university follows the EU Guidance on Nearly Zero-Energy Buildings (NZEB), emphasising energy efficiency and renewable energy sources in construction endeavours. Complementing these efforts is the commitment to Building a Zero Carbon Ireland, which aligns the university with targets for CO₂ emissions reduction and climate neutrality. Furthermore, the Procurement Directive 2014/24/EU outlines environmental considerations for contractors, ensuring compliance with environmental obligations throughout project implementation. The University's adoption of the RICS Whole Life Carbon Assessment further reinforces the University's commitment to estimating and managing carbon emissions comprehensively.

In line with these policies, the University's design principles for carbon management encompass various aspects such as sustainable design, energy efficiency, integration of renewable energy sources, and waste reduction strategies. These principles, outlined in a comprehensive manner, underscore the University's dedication to sustainability and align with its broader Sustainability Strategy 2021-2025 and Climate Action Roadmap 2030, which aim to embed sustainability across all developments and promote innovative solutions for addressing climate change challenges.

6.6 Building Information Modelling BIM

From January 2024, consultants overseeing public works contracts valued over €100m are required to incorporate Building Information Modelling (BIM). Over a period of four years, this requirement will extend to projects worth less than €1.0m, eventually covering all public works projects. This initiative leverages the public sector's buying power to drive digitalisation in construction, aligned with the Government's strategy to digitalise the sector by 2030.

Consultants will collaboratively develop, coordinate and maintain BIM Models for the duration of the Project. Each Consultant will appoint a competent BIM Manager / BIM Lead for their discipline. The Lead Consultant will act as Information Manager, responsible for coordinating information management processes, administration of the Common Data Environment, and compliance with the Irish Government Public Sector BIM mandate. BIM delivery will be undertaken in accordance with the ISO 19650 series of standards and associated national guidance in force at the time of appointment. Where relevant, the Lead Consultant, assisted by the design team, shall write the specification for the BIM Survey outlining all information and level of detail required, obtain quotes and advise clients. The Lead Consultant assisted by the design team will develop an overall BIM execution plan for the project and monitor through the project through fortnightly meetings.



The primary requirement of the University is that at the end of Stage 4 of the project, the model is developed to a sufficient level of detail and information so that it does not result in clashes that may lead to a compensation claim events from the main contractor.



7.0 General Services

1. The lead consultant will fulfil the role of Lead Designer. This consultant will be identified in the ITT. (Role fulfilled by the Architect if not stated otherwise). They shall act as a single point of contact on all design and technical matters with the design team and University of Galway. The design team will provide comprehensive design and other services including but not limited to the general coordination, dissemination, collation, and management of all technical information.
2. Each consultant discipline shall assign a senior staff member who shall direct all relevant activities and attend key meetings including all Client-facing meetings.
3. Respond to all queries comprehensively within 1 working day or less of receipt unless agreed otherwise by the consultant and the Client.
4. Allocate adequate resources to comply with its obligations. For any given period during the course of the Project, make available and deploy resources at levels at least equal to or greater than the resources tendered by the Consultant for the relevant period unless the University of Galway agrees otherwise.
5. Do all things reasonably required to ensure the delivery of the Project in compliance with the following constraints:
 - Business Continuity: Plan and execute the project and each phase thereof in a manner that minimises the project's impact on the quality to the students and staff of University of Galway, including maintaining an environment that is conducive to study/learning.
 - Cost: Deliver the Project within the total (project specific) development cost envelope to include VAT fees, direct costs related to the development, and all levies and charges (but excluding University of Galway pay costs, cost of land, and finance).
 - Performance: Meet the brief and be fit-for-purpose in accordance with the end-user customer brief and University of Galway's Design Guide.
 - Time: Deliver accommodation fully fitted, furnished, equipped, and occupied by the dates provided within the Project Information Memorandum (PIM).
6. Deliver all services in an efficient, effective, courteous, and professional manner, including methods of resolving issues that may arise.
7. Do all things required to ensure the Project is delivered in compliance with the requirements of the Capital Works Management Framework. This will include recommendations in relation to 'lessons learned' which will be integrated into all strands and stages of the Project with the involvement of appropriate teams/personnel at the correct junctures and outputs measured with post-DLP report(s). Recommendations from the Consultant in increasing overall and project organisational maturity must be provided. Suitable maturity models to be agreed with the University.
8. Participate and contribute to success workshops at Project commencement and comply with proposals set out by the Consultant in relation to success criteria following said workshops.
9. Advise University of Galway on its responsibilities under all applicable Health and Safety law, as maybe updated from time to time.



10. Participate and contribute to Value Management and Value Engineering Workshops throughout the project.
11. Utilise the Consultant & Client's electronic document management system (currently Sharepoint) for receiving, reviewing, and transferring documents from all disciplines and the Client. The Consultant Lead will be responsible for arranging access for all Consultant Members. The Consultant Lead will coordinate this through the Project Manager who will issue access permissions.
12. Maintain and own all design information on an electronic document management system including design-related folder structures, correct usage including revision control, audits (no less than monthly) of information for appropriate sign-offs, correctness, and timeliness through all Project Stages including construction.
13. In the event that a video conferencing platform is used for certain meetings, this will only be with the express consent of the Consultant and University of Galway. In such events, Microsoft Teams will be the platform used. All Consultant members must have access to Microsoft Teams.
14. In certain circumstances, the Consultant will record meetings/workshops to facilitate the accuracy of records. Such recordings will be deleted once the outcome of such meetings/workshops is documented. This will only occur in instances where expressly noted by the Consultant and agreed with University of Galway.
15. Develop and maintain a design document register identifying all design deliverables, their name, status, and location.
16. Establish and present to the Consultant and University of Galway a naming convention for all Consultant documentation. Ensure this is employed accurately by all Consultant members for all documentation throughout the project at all times.
17. Perform the duties required of the PSDP as defined in the Safety Health and Welfare at Work Act 2005 and the Safety Health and Welfare at Work (Construction) Regulations 2013, as may be amended from time to time.
18. All Disciplines shall comply with their obligations under the Safety Health and Welfare at Work Act 2005 and the Safety Health and Welfare at Work (Construction) Regulations 2013, as may be amended from time to time and shall provide the PSDP with a copy of all design risk assessment records.
19. Advise University of Galway on its obligations under any consultant appointments entered into.
20. Assist in the selection of other consultants/specialists (including PSDP) as required by the Consultant and University of Galway for the Project and:
 - Provide scope documents for the procurement of same;
 - Examine any proposed conditions of appointment of those consultants and advise the Consultant on the same;
 - Check that all consultants' responsibilities/requirements are clearly stated for the purposes of any tender;
 - Advise on the need for warranties and insurances.
21. Carry out all Services in compliance with all applicable Building Regulations and ensure that no materials or substances which are generally known at the time of specification or approval to be:
 - (a) Deleterious to:
 - i. Health and safety; or



- ii. The durability of the completed Project in the particular circumstances in which they are used; or
 - (b) Other than compliant with any relevant Irish, British, and European Standards, codes of practice, or good building practice or techniques are recommended or selected for use in the Project.
-
- 22. Carry out all Services to ensure that the design fully complies with the relevant Health & Safety² legislation including the Safety Health and Welfare at Work (Construction) Regulations 2006 to 2013 (“Construction Regulations”).
 - 23. Carry out all Services to ensure that any design complies with University of Galway’s Environmental and/or Sustainability Policy (and the Consultant shall provide any necessary technical information in connection with environmental studies or impact assessments which are reasonably required by University of Galway).
 - 24. Ensure that all designs produced as part of the Services comply with any relevant Law provided always that if after the date of the successful Tenderer's appointment there is a change of Law which was not foreseeable at the date of the successful Tenderer's appointment and which materially affects the Services, a fair and reasonable adjustment shall be made to the Consultant’s remuneration for the Services.
 - 25. At all stages of the Project’s development review and coordinate design information from all consultants engaged on the Project commenting as appropriate so that the design is fully coordinated, comprehensive, and quantifiable. Ensure at all times that the design information produced is clear and appropriate to the stage of the Project.
 - 26. Ensure awareness of (and that due regard is taken) of other projects being undertaken which may be affected or which may affect this Project.
 - 27. Encourage consideration of alternative designs and solutions which might be beneficial to the Project without compromising University of Galway requirements, available budget, and agreed brief.
 - 28. Make revisions to the design to address requirements of Planning, Fire Safety, Disability Access, Environmental authorities, and Statutory Bodies and agree these revisions with the Consultant and University of Galway.
 - 29. Make recommendations to University of Galway via the Project Manager for the training of the managers and staff who will be responsible for the operation, safety, and maintenance of the new facility.
 - 30. Monitor compliance with any obligations for the maintenance of professional indemnity insurances of the Consultant consultants and contractors’ designers including notification of significant changes as they are made known to the Consultant.
 - 31. Throughout the course of the Project monitor and update the overall “Cost Plan” for the Project to be prepared in Stage (i) and report to University of Galway against the same (such Cost Plan to include without limitation estimates in respect of all elements at all stages and in respect of non-construction related heads of cost).
 - 32. Advise University of Galway on options for reconciling estimated costs with Cost Plan budgets if the proposals exceed affordability limits.

² Repetition. Mentioned above already.



33. Benchmark costs against similar schemes identifying reasons why the Project costs sit where it does within the anticipated overall range.
34. Throughout the course of the Project monitor and update the “Master Programme” to be prepared in Stage (i). Arrange for the preparation of and incorporate the contractor’s detailed programme for construction. Note: This will be monitored closely by University of Galway and various committees/groups within the University. The Consultant will be required on occasion to attend and/or make presentations at such meetings and present.
35. Monitor and report on the progress of the consultants and contractor procured for the Project against the Master Programme.
36. Ascertain any mandatory procedures applicable to the Project and binding on University of Galway and develop compatible and appropriate working methods and procedures accordingly.
37. Work with the University’s master planners and Buildings & Estates Office as to ensure consistency and compliance with the estate management in the University campus.
38. Liaise with authorities in relation to permits, licenses, precautions, and other permissions required to construct buildings e.g. Fire Cert, Disability Access Certification, etc.
39. In conjunction with other consultants engaged for the Project advise University of Galway on the necessity for studies, reviews, research investigations, surveys, tests, or the like. This must include any work to be done on the composition of an Environmental Impact Assessment, Appropriate Assessment, or similar environmental studies.
40. Coordinate and collate the findings from such studies and report these to University of Galway.
41. All services required to prepare the site for handover to the construction contractor and to ensure possession can be given. These include but are not limited to all services required in relation to demolition/relocation of existing structures on site (including obtaining statutory approvals as required); coordinating the relocation of existing tenants on site (more detail in the PIM); diversion of services, etc.
42. Liaise with University of Galway/agents on matters relating to leases, rates, statutory contributions, and broad conditions of leases not including advice that must be sought from a legal professional.
43. Advise on the need for quality assurance schemes, possible facility management issues, defects insurance, and product guarantees.
44. Coordinate carbon audits of the building. Provide assistance in calculating its carbon tax from these profiles. If required by the University, lead the application to BREEAM for a bespoke or appropriate rating.
45. Liaise with University of Galway’s insurance adviser as required for the purposes of the Project or the works to be carried out for the same. Note: this service expressly excludes the checking, verifying, or commenting upon any of the insurances held by University of Galway consultants and contractor(s), subcontractors, or suppliers. It does, however, include the demand and follow-up on instruction of University of Galway to those parties for evidence of their insurances.
46. In the event that any aspect of the Project appears likely to fail to achieve University of Galway’s objectives, develop and agree with University of Galway suitable corrective action and monitor its



application (with due regard to University of Galway's agents' scope of service and delegated authority).

47. Initiate action in the event that any aspect of the Project appears to be likely to fail to achieve University of Galway's objectives, public obligations, budget, and programme. Agree suitable corrective action and monitor its implementation.
48. Advise on the impact of market conditions.
49. Advise on the availability of grants e.g. SEAI, or other, provide assistance in the preparation of applications for grants, and prepare cost analysis of expenditure in support of applications for grant payments.
50. Provide initial advice in relation to University of Galway's liability to pay VAT and provide advice regarding minimising the University's VAT liability.
55. Through all stages of the Project report as reasonably required to:
 - University of Galway
 - Any funder's agent as directed by the project leader
 - Relevant Government Departments
 - Statutory Bodies
 - Auditors
 - Other outside bodiesin relation to the Project and/or its status and progress (such reporting to be in a format and context approved in advance of issue by University of Galway) and:
 - Advise University of Galway on any decisions or actions which are indicated or required pursuant to such reporting.
 - Inform University of Galway of the consequences of decision delays.
51. Carry out ongoing workshops at key pre-agreed Stage points (all Stages) to review Project status and agree on any remedial action necessary.
52. Receive, check, and process fee accounts and other payments throughout the Project. All design team and other consultant fee invoices should be ratified by the Consultant first before issuing to University of Galway for payment. The time taken to carry out this ratification should be notified to all parties and consultants must accept this time addition to the payment period.
53. Establish communication, reporting, and authorisation procedures to operate between University of Galway Customers (staff, researchers, students, public, funder's agent(s) as specified by University of Galway), consultants, and contractors.
54. Agree with University of Galway the financial limit of University of Galway's agent's/ER authority to issue instructions without the Client's prior approval.
55. Ensure correct and appropriate integration of the Project cost packages including (but not exhaustively) structure, landscaping, and M&E Services.
56. Direct all consultants and contractors engaged on the Project in accordance with all relevant legal conditions, agreements, and contracts that have been disclosed to the consultant.
57. Direct the consultants and contractors to advise on statutory consents and legal obligations.



58. Keep updated the consultants and contractors on their duties, the scope of work required, the design input of the contractor, the Project procedures, and the Project itself to the extent needed to achieve the project brief.
59. Monitor information to and from Project participants and ensure that all consultants and contractors know not to circulate to third parties without the express permission of University of Galway.
60. Advise and assist University of Galway in obtaining the statutory and other licenses necessary for the occupation/use of the Project. Advise University of Galway on any arrangements for phased handover of the Project and on the logistics of taking possession of the Project.
61. Assist University of Galway in the identification of suitable benchmark sites in Ireland & UK. Arrange and attend such visits as appropriate for the project.
62. Provide to University of Galway (at the Consultant's cost) copies of all documentation produced by:
 - The Consultant as part of the Services; or
 - Any other consultants engaged for the Project

where requested by University of Galway including (without limitation) any tender documentation in respect of the procurement of further consultants for the Project and/or in respect of the procurement of the contractor for the Project. The Consultant shall also provide (at its cost) sufficient copies of all tender documentation for issue to each prospective tenderer in these procurements.

63. Review existing University of Galway Design Guide document. Facilitate a workshop with staff members of University of Galway Building Office in order to review and update these documents. Collate any updates and prepare an updated set of documents for incorporation into the project.
64. Provide a report at the end of specific stages of the project in regard to compliance with the University's Design Guide document. This shall be provided in the form of a completed signed checklist (Appendix 11) whereby the status of each item shall be advised using the following categories:
 - (a) Compliant
 - (b) Non-complaint (including reasons why, alternatives agreed etc.)
 - (c) Not Applicable to project
65. For each contract, coordinate the ancillary certification by members of the design team and any other relevant bodies for the Certificate of Compliance on Completion.
66. Identify all design professionals and specialists in conjunction with the Contractor from whom ancillary certificates are required.
67. Seek advice as necessary from the Building Control Authority in respect of compliance matters relating to the contracts where disputes or differences of opinion arise between the parties to the Development.
68. Provide such other services:³
 - as are reasonably incidental to all other services identified in this document, in relation to all stages, and/or which are required to complete all stages of the services such that the Project can be completed in accordance with our requirements;

³ Do you want to mention supporting the University in any formal claims process? Liaising with the University's legal advisers from time to time as may be required?



- as a reasonable Consultant would contemplate or infer as being required as part of all stages of the services for the Project; and
- Services listed in the appendices of this document for each design discipline.



8.0 Specific Design Obligations

1. Do all things or acts and perform all services identified in any part of the Form of Tender included with the Contract to the extent that such things, acts, or services:
 - Are additional to any of the Services specified in this Annex 1; and/or
 - Provide a greater quality or level of service than otherwise contemplated in the Contract.
2. Throughout all stages of design development, the Consultant will be required to coordinate and agree on design specifics with relevant personnel within University of Galway's Buildings & Estates Office or their designates.
3. Prepare planning documentation required to achieve a final grant of permission from the local authority
4. Prepare:
 - All documents required to obtain planning permission:
 - All documents required for any other necessary statutory consents (including the fire safety certificate, disability access certificate);
 - Detailed specifications and designs for inclusion in the Construction Contract
 - Any other necessary tender documents in respect of the Construction Contract to enable the Project to progress to the successful selection of a preferred candidate from a tender process.
5. Preparation and coordination of the procurement strategy for the Project with the Consultant, University of Galway, and any other consultants, which includes reviewing the key drivers, i.e., constraints set by University of Galway, cost & programme certainty, risk accountability, responsibility, control, flexibility, buildability, and design quality against various procurement routes.
6. Construction works will generally be performed using PW-CF1 (Public Works Contract for Building Works Designed by the Employer); or as advised by the procurement strategy. It is anticipated that the procurement of Reserved Specialists will also be required.
7. Assume and undertake the role of Project Supervisor Design Process (as set out in the Construction Regulations), unless stated otherwise in the ITT documents. Assume and undertake the roles of Design and Ancillary Certifiers as appropriate under the Building Control (Amendment) Regulations 2016, unless stated otherwise in the ITT documents.
8. Provide all necessary information and Design Risk Assessments required under the Construction Regulations for incorporation into the Health and Safety Plan and Health and Safety File. Provide or assist in the preparation of manuals or other documents describing the design, operation, and maintenance of the Project.
9. Provide suitable and sufficient technical and design information for incorporation into the Pre-Tender Health & Safety Plan.
10. Provide all necessary services required for the Project in relation to (without limitation):
 - A. Planning Consultancy services
 - B. Architectural design
 - C. Civil & Structural engineering design
 - D. Building Services (including environmental) engineering design; full building fabric and services report energy efficient assessment including BER, full building thermal analysis.



- E. Project Management
 - F. Employer Representative Services
 - G. Quantity Surveying team, cost management services, Carbon assessor, Life cycle cost assessor, carbon budget assessor, project cost reports, cashflow analysis, expenditure analysis, funding agency reports
 - H. Landscape designer including arborist
 - I. Traffic consultancy services
 - J. Archaeologist
 - K. Façade design including thermal analysis. The façade designer must ensure their design is not restricted to one system only and should portray that their design is applicable to numerous systems available on the market.
 - L. Environmental and Ecology reporting and design.
 - M. Heritage & Conservation reporting, and services required by the project.
 - N. Surveys - The Consultant shall identify all surveys required to facilitate the progression of the design process. This shall include but is not limited to geotechnical investigations, topographical surveys, façade surveys, surveys of existing services, etc. The Consultant shall prepare all necessary tender packages for the procurement of any and all surveys required to inform the design development process.
 - O. Acoustic design services (in particular prepare studies, reports, and other requirements to satisfy user comfort issues in relation to noise)
 - P. Fire Safety engineering
 - Q. Interior design (the role of furniture design and selection by the Consultant will be a critical element within the interior design services and achieving the required sense of space, feel, and functionality for the end user. This will be a fundamental design element from the outset of the project)
 - R. Ergonomics
 - S. Universal design and Accessibility design; Disability Access Certificate
 - T. Audio-Visual design
 - U. BREEAM consultancy services
 - V. Airtightness design
 - W. Landscape Design
 - X. Project Supervisor Design Process
 - Y. Auditing and reporting on space utilisation (and in this context:
 - Z. National and international benchmarking for space allocation per FTE student, staff, researcher, and function
11. Ensure correct and appropriate integration of all Project design packages including (but not exhaustively) cladding/façade, structure, M&E services, AV, acoustics, interiors, airtightness, fire, landscaping, IT fit-out, etc.
12. Benchmark space and designs against recent similar schemes identifying reasons why the Project arrangement benchmarks are within/not within the anticipated overall range. Recommend reference benchmark facilities to the university and arrange for benchmarking reviews. An allowance of four days of benchmarking visits will be required. The Consultant will be required to prepare a benchmarking report covering the findings of the benchmarking tour which shall also include details of national and international best practice and trends for the approval of University of Galway.
13. Throughout each stage of design where required or requested, prepare any necessary board papers or presentation material that may be required in order for the Client or Project Manager to sanction the release of subsequent design stages. Attend any meetings to present the prepared material. Ensure Client approval is documented.



14. Operate a quality management system in respect of all activities required to perform the services and communicate the principal features of that system to the other consultants and contractors.
15. Under the direction of the Consultant and following appointment, prepare a sustainability strategy for the Project to drive design that promotes the use of sustainable resources, excellent thermal performance, airtightness, low carbon footprint and emissions, and low-energy running profiles. Undertake carbon audits of the building and calculate its carbon tax from these profiles. Lead the application to BREEAM for a bespoke or appropriate rating as required by the University.
16. Receive any revisions to University of Galway requirements or brief. Where notification from University of Galway is verbal, confirm in writing with comment on anticipated effect on the design. This confirmation should be through the Consultant using the Project change management process.
17. Monitor and report on the progress of the consultants and contractor procured for the Project against the Master or Design Programme as appropriate and instructed by the Project Manager.
18. Ascertain any mandatory procedures applicable to the Project and binding on University of Galway and develop compatible and appropriate working methods and procedures accordingly.
19. Lead all consultations with authorities in relation to permits, licenses, precautions, and other permissions required to construct buildings e.g. Planning, Fire Cert, Disability Access Certification, etc.
20. Advise University of Galway through the Consultant on the necessity for studies, reviews, research investigations, surveys, tests, or the like. This must also include any work to be done on the composition of an Environmental Impact Assessment, Appropriate Assessment, or similar environmental studies. Coordinate and collate the findings from such studies and report these to University of Galway.
21. Complete the actions required for Design and Ancillary Certifiers as required under the Building Control Amendment Regulations 2014 as amended from time to time. Ensure proactive and comprehensive coordination and liaison with the Assigned Certifier throughout all stages of the project.
22. The Consultant will comply with the provisions of the Building Control (Amendment) Regulations 2014 S.I. No.9 of 2014 as amended from time to time. Liaise directly with the Assigned Certifier on all matters relating to these regulations in the execution of these services.
23. Liaise with the Consultant and University of Galway/agents on matters relating to leases, rates, statutory contributions, and broad conditions of leases not including advice that must be sought from a legal professional.
24. In the event that any aspect of the Project appears likely to fail to achieve University of Galway's objectives, public obligations, business continuity obligations, budget, and programme, develop and agree with University of Galway suitable corrective action and monitor its application.
25. Report on the life expectancies of critical elements of the proposed works. Carry out life-cycle analyses of the materials, goods, and plant to be incorporated. Consider issues including cost in use, maintenance, and renewal requirements.
26. Review the design at all times during development against University of Galway brief to ensure compliance. Should there be any elements which either extend or reduce the brief, then these are to be identified along with proposals to realign the design with the brief. University of Galway approval should be sought before proceeding with any change.



27. Take an active part in regular Project reviews to ensure that communication and procedures are operating efficiently. Allow for one review following completion to explore experience gained and lessons learned for future projects. This Lessons Learned review will be conducted in accordance with the Capital Works Management Framework.
28. Provide to University of Galway as and when University of Galway may reasonably require or on completion of the services or on termination of the Consultant's appointment, whichever first occurs:
 - One complete set in computer-generated format of such of the documents/reports/drawings which have been prepared as part of the Services by or on behalf of the Consultant as University of Galway requires.
29. Provide 3-dimensional drawings updated at each stage and as required to demonstrate the proposed designs of the building. The Consultant will integrate all matters raised by the planners in a final 3-dimensional drawing which will have detail of all elements of the building fabric greater than 100mm in size
30. Provide 3-dimensional camera angle stills visualisations at requested resolutions upon request from University of Galway. Similarly, fly-bys or walkthroughs must be provided on request.
31. All 3-dimensional files will be provided to University of Galway in the source .3ds format including materials libraries and other files connected with any 3-dimensional models made.
32. Attend and contribute to ongoing workshops at key pre-agreed Stage points (all Stages) to review Project status and agree on any remedial action necessary.
33. Keep updated the consultants and contractors on their duties, the scope of work required, the Project procedures, and the Project itself to the extent needed to achieve the project brief.
34. Design in accordance with the guidance and intent as outlined within University of Galway's Design Guide documents, or any future revisions thereof. Review existing University of Galway Design Guide documents design/specification/performance documents. Facilitate a workshop with staff members of University of Galway Building Office in order to review and update these documents. Collate any updates and prepare an updated set of documents for incorporation into the project.
35. While reference is made to specific standards/codes/regulations within University of Galway's Design Guide documents, it is the responsibility of the design team to ensure that all designs comply with the current and relevant standards/codes/regulations at the time of design development and that any foreseeable future changes to standards/codes/regulations are accounted for in so far as practical. In any such circumstance where the design team identifies the need to deviate from guidance or standards/codes/regulations identified within the Design Guide documents, the Project Manager must be notified in writing with the associated rationale and approval must be obtained from University of Galway. All Stage Certificates issued by the design team should verify that the designs completed are in compliance with the Design Guide documentation. Where any deviations from the Design Guide have taken place, the Consultant must include a register with the Stage Certificate providing details of the change/deviation and of the approval from University of Galway associated with such approval.
36. Coordinate the ancillary certification by members of the design team and any other relevant bodies for the Certificate of Compliance on Completion. Proactively engage with the Assigned Certifier throughout the project and lead to the provision of all certificates/documentation from the Consultant as may be needed by the Assigned Certifier in the fulfilment of their duties.
37. Identify all design professionals and specialists in conjunction with the Assigned Certifier and Contractor from whom ancillary certificates are required.



38. Advise and assist the Consultant and University of Galway in obtaining the statutory and other licenses necessary for the occupation/use of the Project. Advise University of Galway on any arrangements for phased handover of the Project and on the logistics of taking possession of the Project. Coordinate the delivery of all such arrangements as relevant to the services provided.
39. Contribute and input as required to the development of a phasing strategy for the delivery of the project including all aspects of the development and assessment of phasing strategies and options and in the final recommendation of a phasing strategy for University of Galway endorsement. This includes preparation for phasing workshops, attendance and contribution at phasing workshops, and Consultant input to phasing reports.
40. Provide all design services as may be required for temporary decant spaces for staff/students/materials should temporary decant facilities be required based on the final delivery strategy adopted for the project.
41. Collect photographic evidence during all inspections accompanied by detailed inspection reports as evidence that inspections have taken place in accordance with the Inspection Plan. Hard copies of all evidence will also be supplied to our clients upon completion.
42. Advise on the most appropriate work breakdown structure and procurement strategy for the Project having due regard to the project brief, the capabilities of University of Galway, characteristics of the Project (urgency, complexity, size), market conditions, and the University of Galway's requirements on risk allocation.
43. The engineer will be responsible for all underground drainage systems, the Architect will be responsible for all above ground rainwater drainage. The M&E consultant will be responsible for all foul and waste systems above ground.

8.1 Administrative Procedures

44. Work within the communication protocol and systems established by the Consultant in reporting and authorisation procedures between University of Galway customers (staff, researchers, students, public personnel as specified by the Buildings Office), consultants, and contractors.
45. Comply with University of Galway's Consultant's and where applicable the Contractor's procedures for the following:
 - Change control;
 - Design Control (including deliverables and progress monitoring);
 - Document control and use of a shared Electronic Common Data Environment (detailed above);
 - Use of extranet services/sharepoint services
 - Design Information or Method Statements from Contractors;
 - Risk Management;
 - Value Management;
 - Programme Control;
 - Communications.
46. In circumstances where there is a conflict between any of these procedures, University of Galway will decide which is to have priority.
47. Establish and agree with University of Galway/Consultant procedures for management and approval of design as follows:



- Design control (including deliverables and progress monitoring);
 - Drawing procedures (including document numbering and preparation);
 - Reviewable design information or method statements from contractors.
48. All final (issued for construction) drawings and details will be provided in AutoCAD (.dwg) format and also in Adobe (pdf) format to University of Galway and kept updated.
49. Maintain and own all design information on electronic document management system including design-related folder structures, correct usage including revision control, audits (no less than monthly) of information for appropriate sign-offs, correctness, and timeliness through all Project Stages including construction.

8.2 Third Party Liaison

50. Identify and lead or support any necessary consultation with statutory or other third parties. Prepare drawings or technical information for applications under Planning, Fire Safety Certificate, or other statutory or third-party requirements. Provide ongoing support through to final approval of lodged submissions with third parties including for the input to and development of responses to any further information requests from authorities or third parties and full proactive coordination with the planning consultant in relation to the same.
51. Assist University of Galway, other consultants, and contractors in seeking to discharge any conditions of third-party approvals such as Planning, Fire Safety, or Disability Access.
52. Make all necessary approvals and consents on behalf of University of Galway obtaining sufficient and suitable technical information from any other consultants in order to do so (and approval from University of Galway through the Consultant should be sought before making any application for approval).
53. Obtain prior approval from University of Galway and/or Consultant before approaching any third party (and in this context third parties may also include but are not limited to owners of adjoining or nearby properties, other tenants, or public authorities).
54. Ensure that any matters relating to statutory consents are notified to the Client and permission is sought from the Client before corresponding on such matters with the statutory authorities.

8.3 Reporting

55. Establish the format and content required for design information prior to preparation, particularly in the case of approvals.
56. Through all stages of the Project report via the Consultant to University of Galway on the status of the Project and obtain decisions needed and inform University of Galway of the consequences of decision delays. Identify all such decision points in good time.
57. Prepare or assist in the preparation of reports for auditors, funding agencies, and other outside bodies in formats to be prescribed by those agencies or University of Galway.
58. Attend meetings as set out above and as reasonably requested in connection with the design or progress of the Project. Provide regular reports as set out above on the progress of the design in relation to the programme.



59. Lead and coordinate the development and compilation of all Stage Reports and associated presentations. Make all such presentations to the University. Manage all required inputs from other consultants. Stage Reports must be submitted to University of Galway via the Project Manager and receive University of Galway approval to proceed to the next stage of the Capital Works Management Framework. Stage Reports shall align with the project stages of the Capital Works Management Framework. All Stage Reports will also include site constructability assessments/reviews completed by the Consultant. The consultant must incorporate University of Galway feedback and re-issue the report as required until approval is received.
60. Report regularly in writing and promptly to University of Galway through project lead throughout the Project. Chair and direct design team and site meetings and attend progress meetings with University of Galway representatives, and any other consultants as required (unless directed otherwise by University of Galway).
61. Submit in a previously agreed format a report which has been pre-agreed with the Consultant which would cover but not be limited to progress, quality, cost, risk, design matters, health & safety, and any other elements as requested by the Consultant or by University of Galway. The format and content of the report may be subject to change at the instruction of the project manager as the project progresses/evolves.
62. In conjunction with the design team and other consultants, provide University of Galway with sufficient notice of all University of Galway approvals, decisions on matters that require action by University of Galway, and where appropriate, assist University of Galway by providing recommendations and options.
63. Provide any required input/information/documentation as may be required by the Consultant & University of Galway in their preparation of reports to funders.
64. In addition to the reporting requirements in the Infrastructure Guidelines and CWME, the Consultant will be responsible for all submissions and reporting required under the University governance structure and the HEA Devolved Control Procedures.

8.4 Studies & Surveys

65. Liaise with the Consultant, University of Galway, and other consultants to establish the need for and extent of initial viability studies.
66. In conjunction with the Consultant and any other consultants, advise on the necessity for further studies, reviews, research investigations, surveys, tests, or the like. Assist in the appointment of suitable specialists to carry these out, which shall include the preparation of any necessary tender packages to procure such surveys, the management of such tender procedures, and the contract administration requirements during such investigations, etc. Manage and/or witness such investigations and obtain or prepare an interpretive report of the findings with recommendations on action to be taken.
67. Coordinate and collate the findings from such studies and report these to University of Galway.

8.5 Registers

68. Participate in Value Engineering and Value Management workshops. Provide sufficiently detailed information to allow the preparation and regular update of a value engineering register, assist with the identification of opportunities, and develop such opportunities so that University of Galway can make an informed decision.



8.6 Cost Control and Management

69. Review draft cost plans with the Consultant / University of Galway prior to issue.
70. Advise the Consultant on value-engineering options for reconciling estimated costs with the budget if the proposals exceed affordability limits.
71. Provide information sufficiently detailed to allow the preparation of estimates, cost plans, or pre-tender estimates during the design stages. The format of the information will be dependent on the design stage.
72. Assist the Consultant in preparing cost plans and estimates where required, including for the building engineering services.
73. Exercise the degree of skill, care, and diligence required in order to monitor that the design adheres to the budget. Immediately warn University of Galway in writing of changes to the design which might lead to any element of the budget being exceeded.
74. Provide the necessary technical input to allow a design check against the budget or cost plan and the necessary updating to be carried out.

8.7 Programme Management

75. Assist in the preparation and coordination of the Project programmes, including programmes for procurement, market testing, and construction. Comment within the scope of the services on programmes prepared and submitted by contractors.
76. Prepare a detailed design programme fully addressing all necessary deliverables and approvals with input from other consultants. The detailed design programme should be coordinated with the overall master programme for the project as prepared by the Consultant. The detailed design programme should include the following:
 - Planning Compliance submission
 - Fire Cert Application
 - Disability Access Certification
 - Other statutory approvals e.g. EHO
 - Elemental design breakdown e.g. substructure, superstructure, etc.
 - Preliminary Design
 - Surveys / Investigative Works
 - Scheme Design
 - Detailed Design
 - University of Galway Reviews & Sign Off's
 - Room data sheet process
 - Procurement requirements (if any)
 - Bill of Quantities preparation incl. pre-tender estimate (this task is by Consultant but to be identified within the Consultant programme also such that integration and coordination between the Consultant and Cost Managers on this critical element is considered in and linked to the progress of design development)
77. Provide promptly all advice, consents, reports, comments, approvals, instructions, certificates, and other information so as not to delay or disrupt the progress of the Project.



78. Receive regular status reports from the other consultants and review the actual progress of the design against the anticipated, keeping the design programme up to date. Seek to achieve improvements to the design programme where practical.
79. During construction stage the design team shall provide critical analysis of the construction program and undertake their own assessment to measure progress against the agreed construction programme. The design team shall undertake this collectively using agreed software and identify the critical path for each delay claim as required.

8.8 Risk Management

80. Prepare a written project Risk Management Strategy. This strategy shall include inter-alia an analysis of what is risk, how to schedule, score, negate, mitigate, manage, escalate response and report, overall methodology proposed e.g. FMEA, etc.
81. Carry out an initial Risk Management Workshop (facilitated by fully qualified specialists) and produce an initial Risk Register incorporating risk owners, likelihoods, impacts, and nominal exposure. Hold subsequent regular meetings to review the Risk Schedule and update and publish the Risk Register on a regular basis.
82. Participate in and contribute to Risk Management Workshops throughout the project.
83. Provide sufficiently detailed information to allow the preparation and regular update of a risk register, relating to relevant technical issues and where appropriate, assist with the identification of any commercial risks. Where possible, assist the Client and Project Manager and lead the other Consultants in managing risks in order to minimise their effects.
84. Risk Management workshops shall be facilitated by the Consultant. Provide sufficiently detailed information to allow the preparation and regular update of a risk register relating to relevant technical issues and where appropriate, assist with the identification of any commercial risks. Where possible, assist University of Galway and Consultant and lead the other consultants in managing risks in order to minimise their effects.



9.0 Detailed Scope of Services Requirements per Stage

9.1 Stage (i) – Preliminary

2. On or before the execution of the Contract and/or the execution of any sub-consultant appointment, provide copies of the executed sub-consultant appointments and executed collateral warranties from:
 - Any sub-consultant to the lead Consultant for the benefit of both University of Galway and any funder to the Project;
 - the consultant for the benefit of any funder to the project;
3. Engage with project stakeholders and undertake studies/assessments to develop a project delivery strategy. Prepare the following written strategy documents (which are to be to standards reasonably to be expected for the purposes of administering a project of the size, nature, and complexity of the Project):

Project Delivery Strategy: A detailed written strategy for the delivery of the project. The delivery strategy will outline and quantify the key advantages and challenges of the proposed delivery strategy including the requirement or otherwise of enabling works and a Risk Management strategy for managing and minimising the specific risks associated with the proposed strategy.

Project Management Strategy: A written strategy to be agreed with University of Galway for managing the Project and the teams inside and outside of the Consultant when appointed. This strategy should include value management as a core principle and also consider:

- team communications,
- change management,
- organisational behaviour,
- ethics,
- motivation,
- dynamics, and interaction with customers and the client,
- strategies for dealing with information from multiple users,
- contract document management.

The preparation of this document should be carried out with input from customer focus groups and University of Galway.

Project-Specific Quality Strategy: This strategy must deal with:

- the identification of the route to the realisation of the Project defining its necessary stages, their likely timescale, milestones, target dates, and indicative costs;
- total quality and value management;
- management of technical submissions/reviewable design from the building contractor;
- finished product production;
- control limits;
- stage-gate;
- out-of-spec product quality control;
- information control;
- Project success factors procedures;
- key performance indicators service levels (which are to be derived from fitness for purpose measurables to be derived from the project group workshops)

and shall detail how the Services will be provided in efficient and effective yet lightweight management structures in accordance with the Capital Works Management Framework.



Sustainability Strategy: Establish a sustainability strategy for the Project to drive design that promotes the use of sustainable resources, excellent thermal performance, airtightness, low carbon footprint and emissions, and low-energy running profiles. Such strategy documents to be submitted to University of Galway for approval (such approval not to be unreasonably withheld or delayed).

4. Visit the site and establish any factors likely to influence time, cost, or methodology in relation to Project delivery.
5. Carry out initial success workshops at Project commencement and produce an action plan for addressing success criteria, Project charters, and value-tree items.
6. Discuss and record University of Galway's broad objectives and constraints and assess the Project's general feasibility within those constraints. Identify in particular University of Galway's critical success factors and formally notify the team that these are the required outputs. Provide University of Galway with a written report on the same.
7. Advise and assist University of Galway on any changes required to the project brief.
8. Liaise with University of Galway and all other consultants to establish the need for and scope of any other initial studies, surveys, or investigations which are required for the Project (in respect of Project viability or otherwise) and arrange for the same to be carried out.
9. Ascertain the statutory duties and University of Galway's mandatory procedures applicable to the Project and develop compatible and appropriate working methods and supplementary procedures.
10. Ascertain from University of Galway details of its organisational structure as it will relate to the Project.
11. Establish communication, reporting, correspondence, and drawings distribution and authorisation procedures to operate between University of Galway consultants, contractors, and University of Galway's agent. Communicate these to every party.
12. Develop with University of Galway a detailed "project brief" to include all relevant objectives, statutory duties, constraints, and their relevant priorities.
13. Advise and assist University of Galway in establishing University of Galway's financial and cash flow constraints and in seeking funding.
14. Brief all design consultants on their duties. Monitor the consultants' work and initiate appropriate action in the event that their work appears unlikely to achieve the project brief.
15. Develop a plan for the execution of the Project through all stages to its handover. Obtain University of Galway's approval of the Project execution plan and direct all the Project team to apply it.
16. Agree assumed form of procurement (including any contractor designed elements of the scheme) and adjust the Cost Plan to suit.
17. Carry out an initial Value Engineering workshop (facilitated by fully qualified specialists) and publish a consolidated schedule of Value Engineering suggestions, actions, and timescales.



18. Carry out a follow-on Value Management workshop (initial VM completed) with University of Galway's core project team to support the development of the Client/Design brief of the Project focusing on key Project deliverables.
19. Convene further formal (facilitated) VE/VM workshops as reasonably required by University of Galway.
20. On behalf of University of Galway, receive or issue such applications, consents, instructions, notices, requests, or statements required in accordance with the conditions of the building contract that may occur in Stage (i).
21. Prepare and distribute periodically updated Project Directory and Execution Plan as necessary.
22. Assist University of Galway in seeking funding, including providing information where required to be inserted into University bids under state funding programmes. Provide additional reports required by funders as reasonably necessary.
23. Assist with the submission of planning applications and with the coordination of negotiations with planning authorities. Check that conditions attached to a planning consent are dealt with. Link these activities with planning activities in subsequent stages.
24. The Consultant Lead shall direct the design process and other Consultants at all stages through to delivery of a fully coordinated, comprehensive, and quantifiable design for the project that meets or exceeds the Client's brief and during construction and handover periods.
25. Acquire a thorough understanding of and assist in establishing and/or reviewing University of Galway's needs and requirements for the Project; including functional requirements, environmental standards, lifespan, and levels of quality. Lead the development of the project brief in consultation with University of Galway, the Consultant, and other consultants. Fully interrogate any outline briefing documentation or information provided at the time of Consultant Tender as such documentation has been provided as guidance. The Consultant will lead and take ownership over the development of a detailed brief accounting for University of Galway's requirements and complying with the above-mentioned project constraints.
26. Visit the site and carry out an initial appraisal. Make every endeavour to acquire information about the site and verify it by further investigation where necessary. Confirm to University of Galway, the Consultant, and the other consultants any physical restrictions which may have a significant impact on the design solution.
27. Prepare a list of all required surveys, including invasive surveys for agreement with the Consultant and University of Galway. The Consultant shall provide cost estimates for each survey required. The Consultant shall prepare tender documentation, administer tender competitions, and administer the associated contracts for all required surveys. A project execution plan will be developed by the Consultant. Ensure compliance with the administrative protocols and procedures outlined within the project execution plan.
28. Lead in all aspects regarding the interrogation of the Vision Brief, the review, confirmation, and configuration of University of Galway requirements as necessary, and the full development and approval of a finalised and definitive project brief that meets all requirements of the university and complies with the constraints noted within this schedule of services.
29. In conjunction with University of Galway and Consultant, formulate the key objectives and constraints contained within University of Galway's brief as reviewed against existing documentation and site surveys.



30. Brief all consultants on the requirements of University of Galway and their duties. The design will be informed by the principles and guidance identified within University of Galway's Design Guide documentation (or any subsequent revision thereof). Where deviation from these principles or guidance occurs, the Consultant must confirm in writing the change and rationale and obtain Client approval for this deviation.
31. Monitor the consultants' work to ensure full compliance with the developed brief and that they observe all reasonable obligations required to achieve that brief.
32. Develop in conjunction with the Consultant and agree with University of Galway a set of performance measures for key Project deliverables. These measures will be reviewed and updated through the different project stages.
33. Proactively coordinate and lead the work of the other consultants, making sure the whole design is fully coordinated, comprehensive, and quantifiable at every stage of the Project.
34. Ensure all relevant statutory duties and obligations are identified. Comply with the relevant statutory requirements and obtain all necessary consents from the appropriate statutory authorities. Coordinate all statutory applications and responses in association with the assigned planning consultant.
35. Review with University of Galway the proposed procurement options. Prepare reports on each option and make a recommendation on the most suitable procurement route for this Project.
36. Establish from University of Galway their preferred method of contracting with contractors. Report on the cost and other implications of adopting this method.
37. Undertake Value Management/Engineering exercises with the design team and Consultant to identify where value can be improved in the Project. This will be done through a series of workshops. University of Galway must approve any suggestions from these exercises before implementation.
38. Agree on a detailed design programme with University of Galway and the Consultant and all other consultants.
39. Maintain and own all design information on an electronic document management system including design-related folder structures, correct usage including revision control, audits (no less than monthly) of information for appropriate sign-offs, correctness, and timeliness through all Project Stages including construction.
40. Develop the agreed preliminary design into a plan that takes into consideration functional, aesthetic, and operational requirements, local authority and public utility requirements, site issues, capital cost constraints, best overall value, delivery schedule, and customer occupation.
41. Initiate action in the event that any aspect of the Project appears likely to fail to achieve University of Galway's objectives, agree with University of Galway, the Consultant, and suitable corrective action and monitor its application (with due regard to the Consultant's scope of service and delegated authority).
42. Advise University of Galway on the management and requirements of any grant funding available.
43. Advise University of Galway of the implications of new or amended legislation on the Project.
44. Formulate an appropriate naming convention for the Project to be used by the design team and consultants when producing reports and drawings. Ensure that this naming convention is



implemented accurately by all team members and that all documentation is correctly named and organised throughout the project.

45. Ensure that the design of the Project includes, as far as practicable, provision for easy future expansion.
46. Advise on the need for and content of quality assurance schemes, possible facility management issues, defects insurance, and product guarantees.
47. Ensure that the preliminary design is completed to a sufficiently detailed level in order to enable and facilitate compliance with the procurement requirements of University of Galway, and provide for the inclusion of any requirements to enable the preliminary design to be incorporated within the enabling works contract (if required).
48. Prepare a sufficiently detailed preliminary design to enable an application for planning permission to be submitted to the local planning authority and coordinate the preparation and submission of the planning application. Lead and coordinate the responses to any further information requests from the local authority arising from the planning application.
49. Liaise with the Consultant & University of Galway/agents on matters relating to leases, rates, statutory contributions, and broad conditions of leases not including advice that must be sought from a legal professional.
50. Ensure all design information is presented in such a manner as to be fully compliant with any relevant legislation including the Building Control Amendment Regulations 2014 and coordinate the requirements of the BCAR through all design stages.
51. Assist University of Galway in the identification of suitable benchmark sites in Ireland & UK and arrange and attend such visits as appropriate for the project. This is likely to include two two-day visits to European university benchmark sites. This task will need to be completed in coordination with the Consultant and University of Galway.
52. Coordinate carbon audits of the building. Provide assistance in calculating its carbon tax from these profiles. If required by University of Galway, lead the application to BREEAM for a bespoke or appropriate rating. Confirm the target rating and establish the project BREEAM strategy. Actions and credits requiring early design decisions shall be identified and integrated into preliminary design.
53. Carry out an assessment of the requirement or otherwise for the inclusion of an ASRS within the Learning Commons project. This must be based on market engagement with specialist suppliers. Develop a strategy for the delivery of the ASRS and its future operation/maintenance. Prepare all necessary tender documentation for the procurement of the ASRS if required.
54. In conjunction with other consultants engaged for the Project, advise University of Galway on the necessity for studies, reviews, research investigations, surveys, tests, or the like. This must include any work to be done on the composition of an Environmental Impact Assessment, Appropriate Assessment, or similar environmental studies. Coordinate and collate the findings from such studies and report these to University of Galway.
55. Formulate in consultation with University of Galway the overall Project execution plan which details the methodology of Project delivery through all stages. The plan must be formulated such that it reflects a comprehensive response to the critical success factors of the Project.
56. Propose to University of Galway a Master Programme for the Project that defines the principal activities and identifies critical dates from Project inception to handover. Maintain and manage the



master programme through all project stages, provide monthly updates, and ensure the Master Programme is updated and distributed to the team and the Client.

57. Prepare the site for handover to the construction contractor and ensure possession can be given. These include but are not limited to all services required in relation to demolition/relocation of existing structures on-site (including obtaining statutory approvals as required); coordinating the relocation of existing tenants on site; and diversion of services.
58. Make recommendations to University of Galway via the Project Manager for the training of the managers and staff who will be responsible for the operation, safety, and maintenance of the new facility.
59. Monitor compliance with any obligations for the maintenance of professional indemnity insurances of the Consultant consultants and contractors' designers including notification of significant changes as they are made known to the Consultant.
60. Assist University of Galway in identifying the need for any further consultant appointments. Assist in the preparation of the necessary documentation to procure the services of these consultants. Provide recommendations to University of Galway on the procurement approach to be adopted and the form of agreement to be used. Prepare scope documents for the procurement of same; examine any proposed conditions of appointment of those consultants and advise the Consultant on the same; check that all consultants' responsibilities/requirements are clearly stated for the purposes of any tender; and advise the Consultant on the need for warranties and insurances. Support University of Galway in preparing, assessing, and appointing the additional consultant appointments required.
61. Throughout the course of the Project, monitor and update the overall Cost Plan for the Project. Report to University of Galway against the same (such Cost Plan to include without limitation estimates in respect of all elements at all stages and in respect of non-construction related heads of cost).
62. At the end of Stage (i), issue to University of Galway the updated Cost Plan in the format agreed with the Client.

9.2 Stage (ii) – Design

Stage (ii) A – Design: (Developed Sketch Design)

1. Direct the preparation of a document which defines the design basis of the Project.
2. Direct the application of the principles value management to design. Present Value Management analysis to University of Galway and prepare iterations as required to arrive at decision. Pairwise and value-tree analyses, along with value tree and weighted option-criteria scoring matrices will be required.
3. Oversee the design process and monitor whether the deliverables are produced on time and potential changes to scope are identified as soon as practicable
4. Co-ordinate the submission of the design, in stages if appropriate, to University of Galway and obtain its' approval. Advise University of Galway in the event that design indicates that compromises are necessary between particular requirements of the project brief. Ensure that all possible information is made available to allow University of Galway to make informed decisions.
5. Assess and control the possible costs, benefits, programme and technical implications of proposed design changes.
6. Monitor the dissemination of design information amongst the Project Team such that abortive



- work is avoided and the cost budget accords with the current design.
7. Advise University of Galway regarding the constituent elements and tasks of the decided strategy and programme for the procurement of services, materials and the construction of the Project. Make recommendations on the number and scope of contracts, risk allocation and terms of payment. Assist in executing University of Galway's relevant mandatory procedures.
 8. Establish requirements and details of advance orders with the consultant for long delivery equipment and possible construction packages. Arrange for the direct placing of early orders for long delivery items where necessary. Arrange for their subsequent novation if appropriate.
 9. In relation to other commissions, develop the management structure, define responsibilities, lines of communication, reporting and authorization procedures between the parties until completion of the Project and communicate these to every party.
 10. Co-ordinate the preparation of lists of suitable contractors to invite to tender. Advise University of Galway on advertising for tenders, taking up references and conducting pre-qualification evaluations and/or clarification interviews.
 11. Advise University of Galway on obtaining appropriate specialist input, including terms of contracts, risk allocation, insurance, warranties and bonds.
 12. Liaise with statutory bodies and others on behalf of University of Galway where they are required to carry out work for the Project.
 13. Measure gross internal and net internal areas based upon the Design Teams general arrangement drawings.
 14. Benchmark net/gross efficiency and other key factors highlighting opportunities for increasing efficiencies (or provisions that appear inadequate). Seek international education benchmarks if necessary for comparison.
 15. Advise on departures from HEA and/or international space norms.
 16. Advise on tendering and contractual arrangement to be adopted.
 17. Advise other consultants of possible alternative design solutions that are worthy of further consideration.
 18. Produce alternative costings for alternative design solutions proposed for various parts of the building/Project.
 19. Prepare high level Life Cycle/Whole Life Cost studies and estimates of annual running/maintenance costs.
 20. Carry out an initial strategic review of the buildings from an FM point of view.
 21. Prepare detailed high level Life Cycle/Whole Life Cost studies and estimates of annual running/maintenance costs.
 22. Oversee the preparation of a testing and commissioning programme. Check that every party is aware of what is required.
 23. Advise on alternative sustainable design solutions that could be incorporated
 24. Prepare a 'carbon audit' of the Project and prepare 'carbon index' to be incorporated into key Cost Plans.
 25. Prepare costings for alternative sustainable design solutions and facilitate University of Galway's wishes for costed options within the tender
 26. Assess Whole Life Implications and impact on carbon emissions.
 27. Carry out Life Cycle Assessment (LCA) of the Project's key materials/components as required
 28. Advise on means of improving sustainability / environmental performance.
 29. Review any drawings/designs/specifications produced by any specialists engaged directly by the University, for any works/equipment to be included either as part of, or outside of the main construction contract, in order to ensure that such designs are being developed within the Master Programme and Cost Plan allowances.
 30. Provide advice to University of Galway in relation to the Building Contract and the works or the performance or execution thereof.
 31. Assist University of Galway and the planning supervisor in carrying out their duties in compliance with current and relevant legislation, including facilitating planning consultations
 32. Oversee and coordinate, in conjunction with University of Galway, the preparation of a design and performance brief and concept design together with the consultant (where appropriate).
 33. Monitor the work of all other consultants and initiate appropriate action in the event that their



- work appears unlikely to achieve the project brief.
34. Oversee the design programme and monitor production of information in a timely manner. Report on progress to University of Galway regularly and at the completion of each design stage.
 35. Arrange for the preparation of a detailed construction programme for the Project.
 36. Coordinate preliminary discussions with the Fire Officer, University of Galway's insurers or any other body which may influence the content of the brief and the Employer's Requirements.
 37. Establish with the other consultants the availability of public utilities to provide any pre- defined services.
 38. Establish any University of Galway procedures for the selection and method of appointment of the contractor and novation of any consultants to the contractor, as applicable. Where appropriate, observe statutory procedures.
 39. Oversee the preparation of the performance specification and Employer's Requirements and monitor the preparation and assembly of the Employer's Requirements.
 40. Liaise with the consultant and incorporate their specifications and drawings into the Employer's Requirements.
 41. Challenge overall design on an ongoing basis and ensure team is fully aware of the overall design and implications
 42. The Project Management service lead / Senior Project Manager shall ensure they known to, visible to, and available to University personnel. They are required to be available to take a hands-on approach to issues of concern, which will include attendance on site initially on a weekly basis and more frequently as the project progresses and as requested by the University.
 43. Prepare and co-ordinate information relating to the Project as may be required for submission to any appropriate statutory authority or third party e.g. planning, fire certification and make the submission on behalf of University of Galway in good time and in accordance with the agreed master programme, following approval to do so.
 44. In conjunction with the planning consultant, prepare and submit all necessary design and technical information including all necessary consultation meetings with Galway City Council (or An Bord Pleanála). Prepare multiple applications for Planning Permission, as and if required. For the avoidance of doubt, this will include for any and all statutory applications as may be required for temporary facilities, and the any decant requirements if required.
 45. Make revisions to scheme design to deal with requirements of planning authorities, where necessary
 46. If required, liaise with the planning consultant to co-ordinate, prepare and submit any Planning Appeal
 47. Duly respond to all requests from the local authority for additional information during the planning application process and provide any submissions to authorities, where necessary.
 48. Assess and advise on any / all architectural conservation matters, including listed / protected buildings/structures, special areas of conservation, heritage works etc. Advise of the requirements for, and lead any and all related consultations with third parties.
 49. Prepare the fire certification application and fire safety strategy report for the development, including submission of fire safety certification application and obtain clean copy.
 50. Prepare the disability access certificate application for the development, including submission of the disability access certificate application and obtain clean copy.
 51. Identify and lead or support any necessary consultation with statutory or other third parties. Prepare drawings or technical information for applications under Planning, Building Regulations, Fire Safety Certificate or other statutory or third-party requirements. Provide on-going support through to final approval of previously lodged submissions with regard to agreements, leases and consents with third parties. Confirm in writing to University of Galway and consultant when approval is received or otherwise, providing an interpretive summary of any issues or conditions of the approval.
 52. Assist University of Galway, other consultants and contractors in seeking to discharge and conditions of third-party approvals such as Planning or Fire Safety.



53. Outline the effects of any constraints or limitations of the existing site, discovered during the appraisal stage; including existing structures, vibration, contaminants or physical site restrictions which may affect the design/engineering options for the Project. Collate comments from the other consultants on appropriate solutions.
54. Prepare and agree a recommended design solution. Compile a Stage report, with input from the other consultants, in order to gain University of Galway approval for subsequent development.
55. Consider the outline proposals against University of Galway's brief to confirm compliance. Should there be any elements which either extend or reduce the agreed brief then these are to be identified and quantified along with proposals to align the scope with the brief for subsequent University of Galway approval.
56. Encourage the design team to consider alternative outline solutions, as necessary or beneficial to the Project to ensure scheme design is within the budget parameters set by University of Galway.
57. Liaise with the consultant and University of Galway and make sure that relevant and appropriate requirements from the brief functional requirements are incorporated into the designs
58. Consult any local or other authorities about matters of principle in connection with the design of the Project. Ensure University of Galway and the consultant is kept up to date on the progress of consultations with third parties.
59. Establish Fire Safety and Accessibility strategies as the design is developed to comply with any constraints imposed by the final phasing strategy endorsed for the project (it is envisaged that a final phasing strategy will not be endorsed/selected until completion of Stage 1 – it will be developed for agreement during phase 1).
60. Develop the design such that design requirements and works sequencing adhere to any conservation legalities / requirements.
61. Identify and design all IT and AV systems such that they are fully integrated with all aspects of design, including but not limited to structural, building services and fit out design.
62. Utilise Internal Environment Modelling in the development of the design and natural ventilation strategy.
63. Investigate and report the available range of options affecting:
 - Built form, including size, shape, orientation, sub-division, shading, weather and noise protection, etc;
 - Construction standards; including glazing ratios, thermal and noise insulation, thermal capacity, natural and artificial illumination, ventilation;
 - Building services and components, including heating, hot water, cooling, ventilation, lighting, communications, lift or transportation equipment and public health systems; their operational relationships, methods of control and means of energy supply, distribution and recovery;
64. Assist University of Galway, the consultant and the planning consultant in carrying out his duties in compliance with current and relevant legislation, including facilitating planning consultations
65. Provide acoustic input into the ongoing design development of the project.
66. Analyse, identify and report on the University of Galway's acoustic requirements within the various rooms / areas and ensuring "fit for purpose" economical design solutions for each.
67. Advise University of Galway of all acoustic health and safety issues applicable to the project
68. Develop and present mechanical services noise control criteria and solutions for acoustically sensitive areas.
69. Identify particular items of equipment, which would generate unacceptable acoustic levels for surrounding activities
70. Ensure written advice is circulated to all members of the project team by the acoustic designer on, but not limited to the following elements, such that design development by all disciplines is in accordance with acoustic requirements, in a coordinated and integrated manner:
 1. the building material selection
 2. all construction methods proposed including external wall or cladding, roof, floor,



- internal wall and ceiling construction
 3. raised access floors, full height partitions, particularly built to ceiling line iv. limiting noise breakout from plant rooms or plant space
 4. advise on window / door design
 5. advise on attenuation requirements from mechanical systems
 6. advise on cross talk attenuation
 7. advise on flanking noise in all locations
 8. advise on attenuation requirements from mechanical systems
 9. any other considerations associated with the acoustic management strategy
71. Develop designs that address sound reverberation and acoustic “stopping” through the fabric of the building.
 72. Ensure the acoustic design of the specialist areas satisfies the Building Regulations, any Planning requirements or other governing codes and the requirements of the specialist use.
 73. Define the acoustic performance requirements for all components and ensure design is developed in a coordinated manner to deliver such acoustic performance requirements.
 74. Ensure all designs are reviewed in detail by the consultant’s acoustic specialist throughout design development to ensure compliance with the University’s acoustic requirements and with the requirements of the acoustic management strategy.
 75. Develop the agreed outline proposals through to a scheme design/developed sketch design for presentation to University of Galway and consultant.
 76. Define the footprint of the building for the purposes of the design and facilitate the establishment of dimensional and structural planning requirements for the Project, with particular regard to fire escape, accessibility and engineering services. Ensure that all consultants are aware of the parameters for developing the design.
 77. Provide such representative schemes, drawings and specifications in a sufficient format to allow a scheme design cost plan and programme to be developed
 78. Consult, with the permission of the consultant and University of Galway, as necessary with Planning, Building Control, fire safety, environmental and licensing authorities and statutory bodies. Support other consultants in similar consultations. Ensure University of Galway and the consultant are kept up to date on the progress of consultations with third parties.
 79. Prior to the Planning Submission provide an accurate area measure(s), for your proposed scheme, identifying gross and nett internal areas.
 80. Demonstrate compliance with Building Regulations / other statutory requirements.
 81. Carry out a BREEAM test assessment and report only to the consultant and University of Galway on the likely results. Advise on any improvements that can be made to improve the BREEAM rating.
 82. Apply for BREEAM rating with all necessary calculations and submissions to BREEAM, noting that any requirement to get a pre-assessment completed by BREEAM for a bespoke model is included.
 83. Conduct all necessary actions to comply with the BER rating requirements.
 84. Actively interrogate designs and demonstrate that the M&E design has been assessed against all elements of the architectural design that may bring about environmental or other improvements, such as aspect, height, depth, volumes, materials, shapes, proportions, entrances, apertures, roof design, floor plate layouts, structural elements etc.
 85. Prepare a detailed report on sustainable technologies in the Project, to at least include primary fuel, structure, using the site, renewables, responsible construction, embodied energies, emissions, carbon footprint and paybacks for any capital required on the above.
 86. Develop a preferred façade solution. Liaise with any required University departments in doing so, such as Building Services and Facilities Management. Aid with the provision of budget rates per square metre for each of the principal façade types and liaise proactively with the consultant with respect to estimates and costings.
 87. Produce technical scheme design façade drawings with proposed specialist façade systems & façade specification report.
 88. Establish zone sizes and typical details for each of the façade types, including zones and typical framing element sizes.



89. During the design process ensure extensive coordination between the façade designer and all other disciplines such that guidance and details of typical junctions and interfaces on materials, manufacturing techniques, and possible systems to assess the feasibility of the proposals are fully coordinated. Ensure façade design considers and accounts for performance issues, cleaning, maintenance and replacement of proposed systems throughout its development
90. Establish and define the technical performance requirements for the façade and clarify where necessary the following information:
 - a. Façade system performance (loading air permeability, weather tightness, thermal performance, solar control, acoustics, fire, durability, and safety).
 - b. Requirements at interfaces between the façade and structural / building services elements.
 - c. Provision for building movement and tolerances specified by the Structural Engineer and thermal movements. iv. Façade Support requirements.
 - d. Selection of materials and finishes
91. Establish requirements and details of advance orders for long delivery equipment and possible construction packages. Arrange for the direct placing of early orders for long delivery items where necessary. Arrange for their subsequent novation if appropriate.
92. Monitor the dissemination of design information amongst the Project Team such that abortive work is avoided and the cost budget accords with the current design.
93. Participate in any meetings required with stakeholders as required to progress the project. For the avoidance of doubt this shall include any meetings required with adjacent residents and/or relevant associations as may be necessary to progress the scheme to conclusion.
94. Liaise with statutory bodies and others on behalf of University of Galway where they are required to carry out work for the Project. Seek approval from the consultant and University of Galway prior to any such engagement.
95. Oversee the design process and monitor whether the deliverables are produced on time, and potential changes to scope are to be identified as soon as practicable
96. Prepare, collate and issue to the planning consultant all consultant deliverables required for inclusion in the planning pack. Liaise with the planning consultant early to establish a clear and defined list of deliverables required for inclusion in the planning submission and coordinate all consultants in the preparation of such deliverables, such that they can be collated and issued to the planning consultant in a timely manner. The quality, accuracy and comprehensiveness of the pack issued by the consultant to the Planning Consultant will be the responsibility of the consultant Lead.
97. Co-ordinate the submission of the design, in stages if appropriate, to University of Galway and obtain its' approval. Advise University of Galway in the event that design indicates that compromises are necessary between particular requirements of the project brief. Ensure that all possible information is made available to allow University of Galway to make informed decisions.
98. Ensure that the consultant design fully complies with the relevant Health & Safety legislation including the Safety, Health and Welfare at Work (Construction) Regulations 2013, or latest relevant standards/regulations.
99. Provide all necessary information and design risk assessments required by the Project Supervisor Design Process under the Regulations and for incorporation into the Health and Safety Plan and Health and Safety File. Provide or assist in the preparation of manuals or other documents describing the design, operation and maintenance of the project.
100. Provide suitable and sufficient technical and design information for incorporation into the Preliminary Health & Safety Plan.
101. Attend and participate in all Value Management Workshops. Provide sufficiently detailed information to allow the preparation and regular update of a value engineering register, assist with the identification of opportunities and lead the Consultants in developing such opportunities so that the Client can make an informed decision. Provide a leadership role with respect to value engineering and the identification and tracking of related options and proposals.
102. Report on the life expectancies of critical elements of the proposed works. With other Consultants carry out life-cycle analyses of the materials, goods and plant to be incorporated.



Consider issues including cost in use, maintenance and renewal requirements.

103. Prior to the Planning Submission, provide an accurate area measure(s), for your proposed scheme, identifying gross and net internal areas.

Stage (ii) B – Design (Detailed)

1. Consult any local or other authorities about matters of principle in connection with the design of the Project.
2. Agree with consultant the format and content for production information to ensure the appropriate level of detail is provided.
3. Prepare a detailed design programme fully addressing all necessary deliverables and approvals. The design programme should include, but not be limited to the following (full details of programming and reporting requirements are provided above):
 - a. University of Galway sign off
 - b. design development process
 - c. room data sheet process
 - d. tender package release
 - e. package procurement milestones
 - f. construction information release dates
4. Provide by way of detailed drawings or schedules the structural planning requirements for the engineering services showing locations and sizes of plant rooms, items of plant, ducts and service runs and incorporate within the structural design.
5. Prepare the detailed design proposals for presentation to University of Galway. Identify any significant differences from the previously agreed requirements for the Project and seek documented University of Galway approval for any necessary changes to the previously agreed scheme. Advise on the effects of a proposed change upon the design of the Project.
6. Develop all Room Data sheets for compliance with University requirements, and in particular, review all data sheets with the Library Management Team, and other departments of the University as may be required, such as but not limited to security, IT, Centre for Excellence in Learning & Teaching. Make amendments as necessary to accord with the requirements of such departments.
7. Consult as necessary with Planning, Building Control, fire safety, environmental and licensing authorities and statutory undertakers.
8. Prepare life cycle cost assessments where appropriate such as heating installations.
9. Provide a coordinated detail design to achieve air tightness parameters as agreed with University of Galway. Advise on elements of the Project that require work to obtain this air tightness and set out a specific report for the contractor in achieving this air tightness including descriptions of seals, M&E junction and opening covering and proprietary/bespoke seals, etc.
10. Oversee the design process and monitor whether the deliverables are produced on time, and potential changes to scope are to be identified as soon as practicable
11. Apply the principles of risk analysis and value management to design.
12. Planning and negotiating with the supply authorities in connection with the provision and installation of supplies.
13. Provide such detailed drawings, specifications, and/or calculations in a sufficient format to allow the detailed cost plan and programme to be developed.
14. Discuss with University of Galway the likely requirements for site staff and review these prior to and following the appointment of the contractor.
15. Develop the detailed proposals to enable the team to prepare final proposals.
16. Co-ordinate the design of the Project into the overall design.
17. Prepare the final proposals for presentation to University of Galway. Identify any significant differences from the previously agreed design and seek documented University of Galway approval for any necessary changes. Advise on the effects of a proposed change on the design of the Project.
18. Complete detailed design of all HVAC requirements for the Project
19. Complete detailed design of all mechanical and electrical building services.
20. Assist University of Galway, other consultants and contractors in seeking to discharge and conditions



of third-party approvals such as Planning or Fire Safety. Make revisions to the design to address requirements of Planning, Fire, DAC, BC(a)R, Environmental authorities and Statutory Bodies and agree these revisions with the Project Manager and Client.

21. Ensure all designs are reviewed in detail by the consultant's acoustic specialist again at this stage and throughout design finalisation to ensure compliance with the University's acoustic requirements and with the requirements of the acoustic management strategy.
22. Integrate into the design of the Project any requirements of specialist consultants or contractors (note – by contractors this term for the purposes of this document is to include for subcontractors or specialist contractors).
23. Co-ordinate builders work information sufficient to allow development of the structural, architectural and other design.
24. Provide information sufficient in content and format to allow the cost plan to be updated and reviewed against the budget.
25. Advise whether the designs have been sufficiently developed and are sufficiently complete in order to obtain quotes and/or tenders on the basis required by University of Galway. Identify where information is deficient and advise how this can be addressed within the design information and tender documentation. It is anticipated the construction works will be performed using PW-CF1 (Public Works Contract for Building Works Design by the Employer; design will need to be progressed to a sufficient level of detail to facilitate use of PW-CF1.
26. Observe all relevant Building Regulations. Monitor that any materials or substances which are generally, known at the time of specification or approval, to be deleterious to health and safety or the durability of the completed project in the particular circumstances in which they are used or otherwise not to be in accordance with Irish, British or European Standards, codes of practice or good building practice or techniques are not recommended or selected for use in the project.
27. Prepare and co-ordinate sufficiently detailed design drawings and specifications for the purposes of inviting tenders from contractors in accordance with the Public Works Contract (envisaged to be PWCF1 - Public Works Contract for Building Works Design by the Employer). In all cases such documentation should be fully co-ordinated with the equivalent documentation provided by other consultants and/or specialist consultants/contractors. Such detail will include, but is not limited to; demolition, specialist fixings, structural elements relating to central plant delivery/installation and services distribution, temporary and permanent works.
28. Prepare sufficiently detailed specification documentation for the works, with particular regard to levels of quality required.
29. Produce a detailed façade specification for the project describing each façade type, including testing requirements, sample submissions, design life, performance issues, manufacturing techniques, cleaning, maintenance, replacement and warranty
30. Prepare sufficiently detailed employer's requirements, works requirements and specification documents for the purpose of seeking a Contractor.
31. Provide copies of design information to assist in the assembly of the tender documentation, including preliminary information to address issues such as work sequencing and access. Prepare and provide the necessary input to the Invitation to Tender documentation.
32. Assist with the preparation of contract conditions with regard to any particular requirements that might be included to reflect the technical content or specific site conditions relating to the Project.
33. Provide information to assist in the preparation of pricing documents by other consultants.
34. Prepare and co-ordinate information relating to the Project as may be required for submission to any appropriate statutory authority or third party and make the submission on behalf of University of Galway, following approval to do so.
35. Receive, review and comment on information received from specialist consultants, contractors, or end users to ensure compliance with the provided design guidelines. Co-ordinate comments from other consultants so that a joint response can be made.
36. Exercise the degree of skill, care and diligence required in order to monitor that the design adheres to the budget. Immediately warn the University and Project Manager of changes to the design which might exceed any element of the budget.
37. Provide the necessary technical input to allow a design check against the budget or cost plan and the necessary updating to be carried out. It will be the responsibility of the project team to liaise



continuously with the cost management consultants as the design is developed to ensure compliance with budgetary parameters. Where cost plans, reports, order of magnitude costs or similar are required, it will be the responsibility of the Project Team Lead to coordinate the provision of full and detailed design documentation, information and advice to the cost manager in a timely and agreed manner, such that programme requirements are met at all times.

38. Comply with the University's and Project Manager and any contractual procedures for the following:
 - a. Change control
 - b. Design Control (including deliverables and progress monitoring)
 - c. Design Information or Method Statements from Contractors
 - d. Risk management
 - e. Value management
39. Provide suitable and sufficient technical and design information for incorporation into the Pre-Tender Health & Safety Plan. Develop detail design production drawings and specifications from approved outline proposals in a timely manner to allow the preparation of the tender documents, Bill of Quantities and Pre-tender Cost Estimate.
40. Conduct a tender readiness and constructability review and prior to issuance of the Stage Two Report. This will include: buildability and biddability of the documents, site logistics and constraints, environmental constraints and impacts, clarity of documents, compatibility and completeness of plans, specifications and applicable standards and form of contract, construction phasing, utility and services issues, site access and pedestrian issues during construction, cross disciplinary design review accuracy and consistency check, cost review. The location, structure and format for this review to be agreed in advance with the Project Manager

9.3 Stage (iii) – Tender Action Evaluation Award

1. Assist and advise on the selection of prospective tenderers for the building works required for the Project.
2. Provide scope in the works tender document for priced options or potential Value Engineering items as required.
3. Advise on the need for warranties to be provided by the building contractor and its sub-contractors. Advise on processes when warranties are required by lending institutions to the University.
4. Advise on the need for Performance Bonds or Parent Company Guarantees to be provided by the building contractor and its sub-contractors.
5. Oversee and coordinate the preparation of formal tender documents and/or performance specifications including collating design information by others.
6. Prepare Form of Tender, instructions to tenderers and other forms required for contract.
7. Invite tenders on behalf of University of Galway.
8. Administer tender queries and tender addenda.
9. Check tender submissions for arithmetical accuracy, level of pricing and compliance with the tender documentation and instructions incorporating comments from the Project Manager in respect of compliance with design intent, specifications and other design information provided as part of the tender process.
10. Appraise and report on tenders received and recommend acceptance as appropriate.
11. Conduct tender assessments as required on any works tenders suspected as being abnormally low.
12. Advise on green tendering (i.e. ensuring the suppliers meet specified sustainability criteria).
13. Prepare reports on tenders incorporating appropriate recommendations. Facilitate the novation process where required.
14. Provide comment on programmes and method statements provided by tenderers.
15. Advise on any errors and qualifications included within tender submissions and administer the process for clearing these in accordance with the agreed processes.
16. Review with the Project Team alternative proposals put forward by contractors and make appropriate recommendations to University of Galway.



17. Monitor the procurement progress against the current Cost Plan and Master Programme and initiate appropriate action in the event that tender prices exceed the Cost Plan or where the Master Programme is in delay.
18. Advise University of Galway regarding risks and insurance of the construction stage of the Project and check that agreed insurances are put in place.
19. Arrange for the preparation of schedules identifying when reviewable design data/information is required and check that this is co-ordinated with the programme.
20. Brief the building contractors on their duties, the Project itself and the roles of the other members of the Project Team so that all parties and individuals understand what is needed to achieve the Client's objectives.
21. Recommend suitable procedures to control variations and monitor that these are correctly implemented.
22. Prior to the building contractor's appointment, produce cashflow forecasts for the construction works.
23. If required, produce an overall Project Cashflow Forecast incorporating all Project expenditures.
24. Check the building contractor's detailed cashflow projections based upon his anticipated programme and feed these into the overall Project Cashflow Forecast.
25. Provide advice in relation to University of Galway's entitlement to deduct liquidated and ascertained damages.
26. Provide general advice in relation to the terms of the contract entered into between University of Galway and the building contractor(s)
27. Prepare a full elemental cost analysis for the Project based upon tender or out-turn cost as appropriate.
28. Facilitate a pre-appointment briefing workshop with the preferred bidder.
29. Check that the necessary planning and building regulations and fire officer approvals have been obtained before work starts on site.
30. Agree with University of Galway the definition of the split between main contract works and any direct works contracts.
31. Co-ordinate the preparation and signature of all building contract documents.
32. Agree the requirement for performance bonds, collateral warranties and guarantees in favour of University of Galway.
33. Agree the requirement for performance bonds and guarantees. Agree the requirement for collateral warranties in favour of third parties. Report the progress of the procurement of the same.
34. Perform a detailed review of the Project with the preferred contract bidder to ensure the contractor will provide confirmation of robustness of design and that a full-risk analysis of the Project design and deliverability is carried out. This risk-analysis must highlight any risks, in the contractor's view, relating to the triple constraints and should be notified to the University. Although the contractor has incorporated such matters in his bid, University of Galway wishes to take a view on the risks.
35. Hold a Project completion review before the Project Team is dispersed pre-novation (if applicable), to define the causes and lessons of the Project successes and challenges. Link findings to total Project review and evaluation process to also be performed at the end of Stage (v)
36. Support and provide input as required in the preparation of Suitability Assessment Questionnaire documentation to facilitate the prequalification process(es) for contractors, specialists, reserved specialists or similar. Attend and contribute to all assessments and evaluation panels as required during the prequalification process(es).
37. Assist and advise on the selection of prospective tenderers for the building works required for the Project. Prepare tender documents for the main Contractor, Reserved Specialists and specialist subcontractors where appropriate.
38. Provide scope in the works tender document for priced options or potential Value Engineering items as required.
39. Investigate prospective tenderers and prepare a report on suitability.
40. Advise on the need for warranties to be provided by the building contractor and its sub-contractors.
41. Oversee, collate and issue all design related documentation for the project. Contribute to the



- preparation of all other tender documentation as required, including but not limited to the means of evaluation of tendering contractors.
42. Provide information to assist in the preparation of pricing documents by other Consultants.
 43. Advise the Project Manager as to the suitability for carrying out the works, of firms to be invited to tender for any contract, supply and/or installation of all or part of the project.
 44. If required, co-ordinate a list of materials and finishes, with reference to possible suppliers, so that procurement issues can be assessed.
 45. Perform the duties required of the Project Supervisor Design Process (PSDP) as defined in the Safety, Health and Welfare at Work Act, 2005 and the Safety, Health and Welfare at Work (Construction) Regulations 2013.
 46. Assess the competency and sufficiency of resources of Contractors to act both as Project Supervisor (Construction Stage) and as Contractors. In this case, the full submissions of all candidates provisionally pre-qualified will be referred to the PSDP for assessment.
 47. Review and monitor the tender design development and proposed risk assessment process in relation to the library and university campus.
 48. Record potential health and safety issues, as contained in Tenderers' designs, and propose mitigation measures.
 49. Prepare evaluation reports for each Tenderer as it pertains to health and safety.
 50. Attend any selection, mid-tender and post tender interviews / workshops as necessitated by the process.
 51. Review the Contractor's proposals and coordinate comments from the other consultants to provide a design team response to the client on the relative merits of tenders, prices and estimates received for execution of all or part of the project. Following review, confirm if tender submissions are compliant with all design information and works requirements issued as part of the tender.
 52. Assist in the tender process to procure contractor(s), reserved specialists, specialist sub-contractors as required. This will include, but not be limited to, being a member of the evaluation panel(s) and contributing to relevant sections of the tender evaluation report(s) to be issued to University of Galway.
 53. Attend, and contribute to any and all evaluation panels as may be required by the procurement / tendering processes implemented on the project.
 54. Under the direction of the consultant, receive and respond to any technical queries arising during the tender period(s), with due regard to the co-ordination of other Consultants design. Ensure a documented audit trail is maintained
 55. Assist the consultant in conducting tender assessments as required on any works tenders suspected as being abnormally low.
 56. Advise on the obligations to include Public Green Procurement criteria in all tender documentation tendering (i.e. ensuring the suppliers meet specified sustainability criteria).
 57. Advise on any errors and qualifications included within tender submissions and assist in the process for clearing these in accordance with the agreed processes. Ensure that the necessary planning and building regulations and fire officer approvals have been obtained before work starts on site.
 58. If required, prepare a design team evaluation report relating to the technical merits of contractors' submissions. Identify any conditional issues that require resolution before accepting the tender. Comment on returned prices relating to the works. Input if requested into the tender report to the client. Reports furnished must include recommendations relating to appointment, next steps, and any further considerations.
 59. Arrange meetings with main contractor and sub-contractors in respect of key aspects of Building Services Installations as required in support of contract closure
 60. Assist the IPT as required in the initiation and execution of appropriate action in the event that tender prices exceed the Cost Plan or where the Master Programme is in delay.
 61. Advise the IPT and University of Galway regarding its statutory duties, particularly with regard to health, safety and the environment.
 62. Arrange for the preparation of schedules identifying when technical submittals as required and check that this is co-ordinated with the programme.



63. Provide general advice in relation to the terms of the contract entered into between University of Galway and the building contractor(s)
64. Advise regarding special inspections or tests arising during the construction phase.
65. Negotiate an information release schedule with the Contractor prior to the award of the Building Contract.
66. Provide advice and assist in the negotiations of contracts for any specialist works or Contractors.
67. Advise on the need for specialist contractors and suppliers to design execute the various parts of the works. It is currently envisaged that Reserved Specialists, and associated procurements, will be required.
68. In collaboration with the Project Manager and other Consultants assist with the finalisation of the contract documentation.
69. Facilitate a pre-appointment briefing workshop with the preferred tenderer.
70. Perform a detailed review of the contract/works requirements with the preferred tenderer to ensure that the tenderer will provide confirmation of robustness of design (where required) and construction and that a full-risk analysis of the Project design and deliverability is carried out. This risk-analysis must highlight any risks, in the tenderers view, relating to the triple constraints of cost, time and performance, and should be notified to the University. Although the contractor may have incorporated such matters in the tender, University of Galway may wish to take a view on the risks.
71. Complete the actions required for Design certifiers and Ancillary Certifiers as appropriate under the Building Control Amendment Regulations 2013 and coordinate proactively with the Assigned Certifier throughout.

9.4 Stage (iv) – Construction

1. Meetings: Initiate, attend, chair and minute where appropriate, meetings at University of Galway and other locations where required, to ensure proper planning, control and reporting, as follows:
 - Contractor Progress Meetings: Co-ordinate, chair and minute regular progress review meetings.
 - Design Team meetings
 - Development workshops with the contractor and their specialists to review developing designs to facilitate faster processing of same
 - All other relevant meetings with University of Galway, suppliers, and outside bodies as reasonably required to ensure
 2. Reports:
 - Prepare periodic reports in an agreed format at monthly intervals, including:
 - Appointment of sub-contractors where necessary
 - Construction progress
 - Design progress (where required)
 - Financial status
 - Forecast final account
 - Site resource levels
 3. Contractor Claims: Provide fortnightly reports to University of Galway on the following:
 - Status of current contractor claims
 - Actions required on current claims
 - Potential future claims
 - Mitigation measures required for potential future claims
- Cost: Prepare periodic cost reports following an agreed standard template, ensuring cost reports take account of all future instructions or other matters affecting cost, and ensuring that the report includes an adequate contingency level taking into account the specific project circumstances and programme.



Programme: Prepare Programme Monitoring Reports to contain: Programme analysis, Resource analysis, Recommendations

4. Establish project and cost management procedures for the Project in conjunction with University of Galway and contractor(s).
5. Examine contractors' proposals for constructing the works and resolve any concerns that the work can be completed safely, to specification, on time and within budget.
6. Define the duties of designers for supporting construction and advise University of Galway on the need for consultants to supervise contractors' work.
7. Monitor the construction stage in order to anticipate risks and hazards and initiate appropriate action in the event of technical problems, delays, unforeseen difficulties, communication breakdowns and any other event which threatens the Project objectives.
8. Devise a system to receive and process reviewable design data submissions from the main contractor.
9. Monitor that components manufactured off site are inspected and tested.
10. Check that consultants named as supervising officer or equivalent for contracts carry out their duties.
11. Establish a dispute resolution process and actively assist in the resolution of disputes as they occur.
12. Monitor the payment process and initiate action in the event of problems.
13. In conjunction with University of Galway's legal advisers, advise on methods of progressing design and/or construction works prior to the execution of formal building contract documentation.
14. Draw up building contracts (and associated documentation) for formal execution by contractors.
15. Implement an agreed Change Management process ensuring that all potential variations are costed and approved by University of Galway before being formally issued.
16. Maintain a log of all changes proposed clearly identifying those that have been instructed, those which have been rejected and those which are pending. Review this schedule regularly with University of Galway and design team.
17. Visit the site and prepare periodic recommendations for interim payment to contractors.
18. Monitor that the contractor submits the necessary information to the relevant statutory bodies.
19. Check with the consultant or contractor which other statutory approvals are required and that applications for approvals are submitted.
20. Check that the consultant or contractor applies for amendments to statutory approvals granted when required.
21. Co-ordinate and manage inspections by the monitoring consultants of the design and construction of the works.
22. Following liaison with the monitoring consultants advise on any departures from the Building Contract in terms of design and workmanship
23. Carry out the duties of the Employer's Representative, as defined in the building contract to be let for the Project works.
24. Arrange with University of Galway for possession of the site to be given on the due date and with University customers as to special requirements at that time.
25. Brief the contractors on their duties, the Project itself and the roles of the other members of the Project team.
26. Monitor design development (where required) and construction against the agreed programme.
27. Establish and maintain communication systems so that instructions resulting in changes to the Employer's Requirements are issued at the proper time.
28. Advise University of Galway as is practicable on the cost and programme implications of proposed changes to the Employer's Requirements in accordance with the change management system.
29. Administer the payment process as described in the building contract.
30. Assist with arrangements for installation of plant, machinery and furniture.
31. Assist with the arrangements for removal and relocation of personnel, stores, equipment, structures etc., including the management of the effects on the Student body and University staff during the works.
32. Liaise with University of Galway during the construction phase, obtain regular reports and escalate



- issues for corrective action with the contractor.
33. Co-ordinate the activities of inspection, testing and commissioning personnel from University of Galway, consultants, contractors and statutory bodies.
 34. Oversee the preparation, completion, recording and delivery of test reports and certificates.
 35. Monitor the testing and commissioning programme and initiate appropriate action in the event that delays occur.
 36. Monitor the results of the tests and agree suitable measures with the Project Team in the event that failures occur.
 37. Obtain warranties and guarantees from contractors, consultants and sub-contractors in favour of University of Galway. Advise University of Galway on its rights under the warranties and limitation periods.
 38. Provide advice and assistance as the Employer's Representative to University of Galway on the actions required to avoid or mitigate claims from the contractor.
 39. Manage and where possible resolve any contractual claims.
 40. Assist University of Galway in ensuring that they are aware of, and comply with their obligations (in terms of timescales for responses etc.) under the contract
 41. As Employer's Representative ensure the contractor has completed all contractual obligations
 42. Notwithstanding the general duties as detailed elsewhere in this stage and throughout the project, the consultant shall:
 - (a) Take a proactive approach to the avoidance or mitigation of claims
 - (b) Prepare and maintain records to support robust defence of any contractual claims
 - (c) Report directly to University of Galway/Project Manager where actions to avoid/mitigate claims are not being implemented
 - (d) Have a detailed knowledge of all aspects of the project and documentation
 43. Identify at the earliest stage actions or inactions by the contractor, the Employer's Representative, University of Galway that may result in contractual claims
 44. Monitor progress on potential claims situations
 45. Prepare, instigate, compile and maintain records to repudiate contractual claims
 46. Monitor and where appropriate, pro-actively seek contractor's compliance with their obligations
 47. Maintain records of compliance with obligations for use in defence of contractual claims
 48. Address contractor's proposals for alternative materials, equipment etc. in a timely and contractually correct and appropriate way to minimise potential cost, delay or disruption risks.
 49. Where appropriate, provide input towards innovative and proactive solutions to problems that may have a negative impact on the project cost or schedule
 50. Generate auditable records of contractor default
 51. Advise and assist University of Galway in the settlement of claims and disputes
 52. Promptly advise University of Galway of anything that may vary the cost at completion
 53. Produce detailed accurate records of works on site (written & photographic). This will enable you to track planned vs. actual programme, identify any potential delays, monitor the effect any additional works have on programme
 54. Monitor contractor's daily resources on site to ensure the project is sufficiently resourced.
 55. Ensure records are available as back-up for any adjudication on claims by University of Galway or you as Employer's Representative.
 56. Source KPI data from the contractor and carry out analysis where appropriate.
 57. Monitor finishes and commissioning programmes.
 58. Monitor progress and resources closely so that any slippage can be immediately highlighted to the contractor to take remedial action.
 59. Ensure records shall be available to enable you as Employer's Representative to adjudicate on any claims/delays.
 60. Interact with the specialists on site to understand the 'real' issues on site which are driving programme / delays etc.
 61. Ensure all approvals as per the Construction Contract are in place.
 62. Ensure that all necessary notices, certificates and other obligations under the Construction Contract are discharged in accordance with the Construction Contract.



63. Provide the contractor with all design and details necessary to bring the Project to completion. Receive and respond to specialist suppliers' Requests for Information (RFI) providing additional design input and/or clarification where required. Provide necessary documentation to confirm status of RFI closure.
64. Undertake reviews of the acoustic aspects of the contractor's technical submissions. Highlight instances where the technical submissions (or proposals) fail to achieve the acoustic design criteria.
65. Examine contractors' proposals for constructing the works and resolve any concerns that the work can be completed safely, to specification, on time and within budget.
66. Receive and review specialist supplier production drawings, method statements and other relevant submissions to ensure compliance with contract requirements. In particular provide input into the technical evaluation of method statements and risk assessments issued to comply with health and safety regulations.
67. Respond promptly to all contractor submissions within the agreed procedure for approval with the contractor. Provide written commentary confirming or otherwise the status of each submission. Status criteria being a) outright rejection requiring further submission, b) acceptance to proceed subject to clarification of noted comments and c) acceptance without comment.
68. Prepare all necessary designs and drawings required for the purposes of clarification (as required).
69. Devise a system to receive and process Technical Submittals from the main contractor.
70. Monitor that components manufactured off site are inspected and tested.
71. Visit site & monitor contractor's compliance with any conservation requirements and satisfactory execution of conservation works. Provide reports on same.
72. Visit façade mock-ups and quality control mock-ups on site. Visit manufacturing facilities to review manufacturing procedures and quality control with the main contractor and prepare reports on same for issue to the Employers Representative. Attend selected prototypes tests and report on these.
73. Review and comment on site façade test reports prepared by any Independent Test Authority.
74. Undertake on-site façade inspections to review the quality of installation and prepare short written report on findings.
75. In the event that submissions include proposals to vary the works, or intended methods of work, or to alter or amend specification, co-ordinate a response from the design team and advise on the effects of a proposed change to the design of the project, in accordance with the change control procedure. Support the construction phase of the project as required by inspections, site meeting attendances, dealing with Requests for Information, review of all design data and works proposals, and liaise with project QS regarding valuations of completed works. Co-ordinate a response from the Design Team and advise on the effects of a proposed change to the design of the project, in accordance with the change control procedure
76. Where necessary advise the Project Manager on the need for any additional inspections and/or tests which are not covered under the agreement and which have arisen during fabrication and/or construction activities. Where requested propose recommended suppliers, provide brief and obtain costs for the provision of such services.
77. Reports shall be regularly furnished on the compliance of the façade works with the works requirements and the operational requirements of the university. The façade engineer will regularly liaise with the contractor in relation to checks or inspections required. The Consultant shall be in a position to brief the Project Lead and University of Galway at all times.
78. Monitor the construction stage in order to anticipate risks and hazards and initiate appropriate action in the event of technical problems, delays, unforeseen difficulties communication breakdowns and any other event which threatens the Project objectives.
79. Co-ordinate and manage inspections by all consultants of the design and construction of the works. Advise on any departures from the Building Contract in terms of design and workmanship
80. In conjunction with University of Galway's legal advisers, advise on methods of progressing design and/or construction works prior to the execution of formal building contract documentation.
81. Take and catalogue periodic progress photographs. Such catalogue shall be held in good order by the consultant and available to the project team for review at all times.



82. Each month, provide advice and opinions of compliance with contract documents appropriate for the preparation and evaluation of certificates of payment to the Contractor(s).
83. Advise on the effects of a proposed change to the design of the Project, in accordance with the change control procedure.
84. Assist proactively in the implementation of an agreed Change Management process ensuring that all potential variations are costed and approved by University of Galway before being formally issued.
85. Co-ordinate the other Consultants' advice on the need for issuing contract instructions and communicate regularly with the Project Manager, providing suitable information to support the advice.
86. Monitor that the contractor submits the necessary information to the relevant statutory bodies.
87. Apply for amendments to statutory approvals granted when required.
88. Advise the consultant immediately on any departures from the Building Contract in terms of design and workmanship
89. Provide all necessary design development / detailed design as required by the contractor to progress the project.
90. Brief the contractors on their duties, the Project itself and the roles of the other members of the Project team.
91. Examine contractors' proposals for constructing the works and resolve any concerns that the work can be completed safely, to specification, on time and within budget.
92. Ensure all approvals as per the contract are in place. Ensure that all necessary notices, certificates and other obligations under the Contract are discharged in accordance with the contract.
93. Monitor the provision of contractor submissions and construction against the agreed programme.
94. Coordinate and cooperate proactively with the ER at all times in the provision of advice, communication and / or documentation required such that instructions resulting in changes to the Employer's Requirements are issued at the proper time.
95. In the event of a proposed change, advise on the effects of the proposed change on the design of the Project and the environment within the building.
96. Examine and report on any variations and claims, including those resulting from delay/disruption, pertaining to the works
97. Provide backup on any change orders and claims notified by the main contractor or instructed by the consultant to the contractor.
98. Carry out all necessary supervision of the works and visit the site at appropriate intervals to monitor the progress of the works in accordance with the contract documents and good building practice. Fortnightly site visits (as a minimum) will be required depending on the stage of construction.
99. Co-ordinate the activities of inspection, testing and commissioning personnel from University of Galway, consultants, contractors and statutory bodies.
100. Oversee the preparation, completion, recording and delivery of test reports and certificates.
101. Monitor the testing and commissioning programme and initiate appropriate action in the event that delays occur.
102. Monitor the results of the tests and agree suitable measures with the Project Team in the event that failures occur.
103. Witness tests and/or commissioning. Receive and examine test results obtained by the Contractor and advise on any areas which require further testing prior to completion.
104. Oversee the preparation of up-to-date operating and maintenance manuals and check that they meet with University of Galway's needs and in the required format.
105. Snagging will be an ongoing process. Manage the register for same and liaise with the contractor for close out of snags. Report to the project manager on progress of same.
106. Check contractors progress and support evaluation of payment milestones. Provide opinions to the ER/consultant at each Payment Certificate stage as to the validity of the contractor's payment application.
107. As required, visit the sites of extraction, fabrication and assembly of materials and components



- to inspect materials and workmanship before delivery to the site and report thereon.
108. Give all necessary advice in a timely manner to the ER and contractor pertaining to building works being carried out to allow the orderly running of the contract.
 109. Examine shop fabrication drawings prepared by the sub-contractors, specialists or suppliers for the works
 110. Where necessary advise University of Galway and the consultant on the need for any additional inspections and/or tests which are not covered under the agreement and which have arisen during fabrication and/or construction activities. Where requested propose recommended suppliers, provide brief and obtain costs for the provision of such services.
 111. Where appropriate comment on the need for any site supervision staff either during investigation or subsequent construction activities.
 112. Make regular visits to the works, at least fortnightly. Identify to the contractor specific work elements which need to be inspected and tests or inspections which need to be carried out prior to any closure or covering up. Establish and agree suitable notification periods and attend site accordingly. Document the witnessing of such work elements, tests or inspections. University of Galway will request a copy of these documents. Thereafter, attend site to monitor and record that the construction activities are being delivered in accordance with the contract documentation and good construction practice.
 113. Examine and report on any variations and claims, including those resulting from delay/disruption, pertaining to civil and structural works
 114. As required, prepare frequent reports for University of Galway and the IPT.
 115. Receive and comment on any sub-contractors or specialist suppliers' proposals for commissioning procedures and performance testing of the works. Where required, witness tests and/or commissioning. Receive and examine test results obtained by the contractor and advise on any areas which require further testing prior to completion. Agree and comply with a procedure to confirm acceptance of systems or elements of works.
 116. Co-ordinate inspections of the works either on phased or full completion and prepare a list of snags and defects. University of Galway will request a contractor self-assessed defects list and may appoint a consultant to assist.
 117. Cooperate with any University employee or consultant, engaged to check work of the consultant.
 118. Lead in the evaluation of sectional and/or practical completion. The IPT should co-ordinate all other consultants and confirm in writing their recommendation that the works have reached substantial or sectional completion or advise otherwise giving reasons. After consultation with University of Galway and consultant and after the consultant is fully satisfied that Substantial Completion has been achieved, issue a recommendation for the issue of the Certificate of Substantial Completion.
 119. Assist in the compilation of Digital Operation and Maintenance Manuals and the Health and Safety File, as set out in the works contract. Provide sufficient copies of each of the final drawings supplied by the consultant to the contractor(s) for the purpose of constructing the works.
 120. Receive and comment on the relevant sections contained within the contractors' draft issue of the Operating and Maintenance manuals, Health and Safety File, record drawings and any other related document to ensure compliance with the contract documentation. On issue of the final set of the same documentation ensure that observations prepared on the draft issue have been closed out.
 121. Co-ordinate the team's inspection of the works and identify any snags or defects. Attend progress review meetings throughout the completion stage. Comment on the rectification of snags and defects and on completion, carry out final inspection and document accordingly. At all times, notify University of Galway and the consultant of progress of identification and rectification of snags and defects.
 122. Take an active part in and provide technical input to University of Galway's post contract review, which will be undertaken in accordance with the procedures for same as set out within the Capital Works Management Frameworks.
 123. Provide reasonable information and assistance required for settling final accounts and the Project final account.



124. Where contract claims are submitted assist with the technical evaluation of the same inclusive of justification commentary where required.
125. Assist the Consultant/ER in the management and where possible resolution of any contractual claims
126. Assist the consultant and University of Galway as required in the objective of gaining Substantial Completion for the building
127. In collaboration with the Project Manager give at least 14 days' notice of intention to certify the substantial completion of the Works or any part or section of the Works.
128. Lead in the evaluation of sectional and/or substantial completion. The Lead Designer should coordinate all other Consultants and confirm in writing their recommendation that the works have reached substantial or sectional completion or advise otherwise giving reasons.
129. Attend and report on acoustic commissioning measurements, including internal noise levels, sound insulation and room acoustic parameters in the acoustically sensitive areas.
130. After consultation with the Project Manager and University of Galway, and after the Lead Designer is fully satisfied that Substantial Completion has been achieved, issue Opinions of Compliance to the ER for the issuing of the Certificate of Practical Completion.
131. Oversee the preparation of up-to-date operating and maintenance manuals and check that they meet with University of Galway's needs and in the required format.
132. Collate and issue to the Employers Representative all required documentations to facilitate issue of the Substantial Completion certificate. Including but not limited to ancillary certificate, statements of compliance, schedules of defects/snags, etc.
133. Complete the actions required for Design and Ancillary Certifiers as required under the Building Control Amendment Regulations 2014.
134. The Designer will comply with the provisions of the Building Control (Amendment) Regulations 2014S.I. No.9 of 2014, insofar as these Regulations apply to the works and the Designer's discipline. Liaise directly with the Assigned Certifier on all matters relating to these regulations in the execution of these services.
135. Notwithstanding the provisions of same, the following is a non-exhaustive summary of the key requirements of each Designer (any works required in fulfilment of the Project Teams obligations, but not listed below are included):
 - a. Design their respective elements of work in accordance with the applicable requirements of the Second Schedule to the Building Regulations
 - b. Liaise with the Design Certifier and Assigned Certifier to determine their requirements for the project
 - c. Provide sufficient information, relative to the Designer's discipline, to enable the Design Certifier and Assigned Certifier to fulfil their respective roles
 - d. Provide the Design Certifier with the necessary plans, specifications and documentation that is required for lodgement at commencement stage
 - e. Identify any design within their respective elements which is not yet complete at commencement stage and provide a schedule of anticipated dates for completion of same. Provide the Design Certifier with an Ancillary Certificate of Compliance: Design in the form approved by the RIAI, EI, ACEI & SCSI
 - g. Provide information to the Assigned Certifier for inclusion in the Preliminary Inspection Plan on proposed inspections, tests or certificates necessary to provide Ancillary Certificates on Compliance at completion stage
 - h. Prepare an appropriate inspection plan for their design discipline and provide this to the Assigned Certifier for inclusion in the Inspection Plan.
 - i. Issue to the Assigned Certifier an inspection notification framework for inclusion in the Inspection Notification Framework (INF). Liaise with the Assigned Certifier, Builder and other design team members in this regard
 - j. In conjunction with the Contractor, identify any specialist sub-contractors, relative to their elements of work, from whom Ancillary Certificates should be sought.
 - k. As agreed with the Assigned Certifier and scheduled in the Inspection Plan, carry out work inspections which are pertinent to their elements of the Design and liaise with the Assigned Certifier in terms of this and the required ancillary certification



- l. Maintain records of all inspections undertaken.
 - m. Provide regular inspection reports to the Assigned Certifier, confirming works inspected in the period (relative to the Inspection Plan) and any non-compliances identified. Frequency of inspection reports to be agreed with the Assigned Certifier, taking account of the overall duration of the works.
 - n. Monitor the rectification by the Contractor of any non-compliances identified during inspections
 - o. At appropriate stages or intervals during construction, provide to the Assigned Certifier with details of all ancillary certificates, material certificates or test results which they have obtained from, or reviewed with, the Builder. Such intervals/ stages should be formally acknowledged by way of a Milestone Certificate or similar written confirmation of compliance from the Designer
 - p. Advise the Assigned Certifier of any proposed amendments to their inspection plan during the course of the construction works
 - q. When so requested by the Assigned Certifier, provide their plans, calculations, specifications and particulars to show compliance with the Building Regulations.
 - r. Upon completion of all inspections, provide the Assigned Certifier with an Ancillary Certificate of Compliance: Inspection in the form approved by the RIAI, EI, ACEI & SCSI
 - s. Where the works are completed in two or more phases, provide all necessary completion documentation for each phase, at the appropriate time
136. Such other services:
- Provide pro-active advice and assistance to the Employer's Representative on all matters throughout the construction phase, including the actions required to avoid or mitigate claims from the contractor, and the resolution of contractual claims.
 - Prepare and maintain records to support robust defence of any contractual claims
 - Address contractor's proposals for alternative materials, equipment etc. in a timely and contractually correct and appropriate way to minimise potential cost, delay or disruption risks.
 - Where appropriate, provide input towards innovative and proactive solutions to problems that may have a negative impact on the project cost or schedule
 - Assist in the settlement of claims and disputes
 - Promptly advise the consultant of anything that may vary the cost at completion
 - Examine and report on any variations and claims, including those resulting from delay and disruption.

9.5 Stage (v) – Handover of Works & Final Statement

1. Oversee and confirm the agreement of final statements with consultants and contractors.
2. Assist University of Galway regarding the settlement of contractual disputes.
3. Establish suitable procedures for the notification and rectification of defects during the defects liability period and for the final inspection of the Project at the end of that period.
4. Co-ordinate the collation of a completed set of documentation relating to the Project.
5. Oversee the preparation of digital project information including the digital project safety file, safety material, O&M manuals and instructions for use, cleaning, repair and maintenance of the fabric and finishes, all in digital format as per the University specification.
6. Hold a Project completion review before the Project Team is dispersed, to define the causes and lessons of the Project successes and problems, using the CWMF and best practices available.
7. Provide estimate of reconstruction costs for insurance purposes.
8. Ascertain final value of all instructions for inclusion in the Final Statement.
9. Issue draft Final Statement to contractor for review.
10. Review contractor's comments and issue Final Statement formally.



11. Obtain final agreement of contractor.
12. Prepare a preliminary review of claims/delay days etc. and provide advice to University of Galway with respect to actions necessary to progress agreement.
13. If instructed to do so, carry out a full ascertainment of any loss claims submitted by the contractor(s).
14. Provide services in connection with any third-party dispute resolution procedure.
15. Provide advice on final account closing matters, and reconcile the University's financial management system (Agresso) balance tables for the Project with the cost plans.
16. Oversee the preparation of a handover and occupation programme.
17. Arrange the preparation by others of drawings, specifications or other documentation required for marketing or contracts.
18. Arrange for the provision of any information required by customers to enable them to prepare fitting out proposals. Arrange University of Galway approvals to be obtained.
19. On behalf of University of Galway prepare any procedures necessary to control the undertaking of customers' fitting out.
20. Make recommendations to University of Galway for the training of the managers and staff who will be responsible for the operation, safety and maintenance of the new facility.
21. Check that the manuals and helpline facilities needed for the training are provided.
22. Take an active part in regular Project reviews to ensure that communication and procedures are operating efficiently. Allow for one review following completion to explore experience gained and lessons learned for future projects, using the CWMF and best practices available.
23. Establish suitable procedures for the notification and rectification of defects during the defect liability period and for the final inspection of the Project at the end of that period.
24. Co-ordinate the collation of a completed set of documentation relating to the Project for issue to University of Galway.
25. Monitor the Project Defects Liability Period. Compile a list of defects of work, one month before the end of the Defects Liability Period and issue a schedule of defects/snags to the Contractor and issue to University of Galway and Consultant. During Defects Liability Period instruct as appropriate on any urgent defects, which require immediate attention.
26. Lead, plan and manage all snagging related activities, including the provision of detailed plans for the completion of same in preparation for any handovers, whether full or partial. Snagging will be an ongoing process. Manage the register for the same and liaise with the contractor for close out of snags. Report to the project manager on progress of same.
27. On final completion of all defects, inspect the works and issue a Defects Certificate for the contractor to issue to University of Galway.
28. Confirm that all tests, installation and commissioning reports on the operation of systems and services are available and review and confirm as satisfactory.
29. Complete all protocols as required by the master validation plan.
30. Assist the Consultant and University of Galway regarding the settlement of contractual disputes.
31. Assist the Consultant as required in the preparation of a preliminary review of claims/delay days etc. and provide advice with respect to actions necessary to progress agreement.
32. Prepare drawings, specifications or other documentation required for marketing or contracts as may be required.
33. Arrange for the provision of any information required by customers to enable them to prepare fitting out proposals.
34. Make recommendations to University of Galway via a collated report for the training of the managers and staff who will be responsible for the operation, safety and maintenance of the new facility. Check that the manuals and helpline facilities needed for the training are provided.
35. Issue final as-built drawings and drawings issued to the Contractor at the construction stage.



36. Arrange for preparation of all appropriate digital operating and maintenance manuals and instructions for all installations, as well as test certificates, and all other documents including warranties and safety statements as per the main contract requirements.
37. Arrange handover of individual systems and manufacturers manuals and advise on maintenance contracts to enable University of Galway to operate and maintain the works.
38. Liaise with University of Galway and support the close-out of validation activities and start-up runs.
39. Resolve any disputes or differences with the contractor(s) requiring the intervention of members of the design team and the main contractor.
40. Provide information and assistance required for settling of Contractors' final accounts and the project final account. Where contract claims are submitted lead and assist with the technical evaluation of the same inclusive of justification commentary where required.
41. Assist regarding the settlement of contractual disputes, including any third-party disputes as relevant. Provide technical input to University of Galway's post contract review. Attend Team review to explore experience gained and lessons learned for future projects.
42. On final completion of all defects, the Consultant will inspect the works and make a recommendation to the ER / University for the issuing of a Making Good Defects Certificate.
43. As part of the main contract requirements, provide to University of Galway a complete set in computer-generated format of a detailed technical specification and drawings showing the Project "as built", scale drawings showing the main lines of drainage and all other services. Arrange for drawings of the building services installations to be provided; provide to University of Galway in digital format, all operation and maintenance manuals for the Project incorporating information obtained from others. The collation of 'as built' drawings will be managed by the Consultant to satisfy the requirements of University of Galway.



10.0 Appendix 1

10.1 Architectural Scope of works

Introduction

The Architect engaged by the University of Galway will provide comprehensive architectural services in accordance with the Capital Works Management Framework (CWMF) procedures. The services listed in this appendix are supplementary to the General Services outlined in the primary document. The contract engagement structure is detailed in the invitation to tender (ITT).

General Requirements

The Architect will be responsible for delivering high-quality architectural services to support the University's Buildings & Estates in their ongoing program of project work, planned preventative maintenance, and minor improvements. The services are required to be delivered within demanding time frames and often in operational and occupied buildings. The architect will manage the overall design and construction process, coordinating with various consultants and ensuring compliance with statutory requirements and university policies.

1. Project and Design Management and Coordination

- Oversee and coordinate the entire design and construction process from inception to completion.
- Coordinate with and manage the inputs from any other design/specialist services consultants such as landscape designer, acoustic specialist, archaeologist, heritage/conservation consultant, interior designer/FF&E, universal access and DAC consultant, air tightness design consultant, BREEAM design consultant, environmental and ecology reporting consultant, and planning consultant. Unless noted otherwise in the ITT
- Act as Project Supervisor Design Process (PSDP), unless otherwise stated in the ITT.
- Allocate competent and qualified personnel for the duration of the project, ensuring continuity of service.

2. Surveys and Investigations

- Identify all surveys required to facilitate the progression of the design process, including geotechnical investigations, topographical surveys, façade surveys, and surveys of existing services.
- Prepare tender packages for the procurement of surveys required to inform the design development process.
- Ensure surveys are conducted in a BIM format.

3. Design Development

- The Architect fulfil the role of the BIM Information manager on the project unless stated otherwise in the ITT.
- The Architect will develop room data sheets and reflective ceiling plans in conjunction with the design team in particular building services engineer to ensure clashes are avoided that may lead to a compensation event during stage 5 of the project. Room data sheets are required for all rooms, mirrored/ left/ right-handed rooms will also require room data sheets. Exact positions for all M&E services will be required. It is not acceptable to outline flexible parameters for positions of services. The design team should request details on bespoke services / equipment at tender stage to ensure that room data sheet coordination can be completed early in the project.



- Prepare plans and flow charts showing movement of personnel, materials, and waste in each area, highlighting relevant adjacencies and considering university operational policies.
 - Prepare an outline of all public and private routes, including way-finding strategy and links to existing facilities.
 - The architect will manage and design the entire scope of signage / wayfinding systems internally and externally, directional signage, room numbering, visual manifestations.
 - The engineer will be responsible for all underground drainage systems, the Architect will be responsible for all above ground rainwater drainage. The M&E consultant will be responsible for all foul and waste systems above ground.
 - Collaborate with structural engineers to integrate structural systems into the design. Coordinate with mechanical, electrical, and plumbing engineers to ensure seamless integration of building systems.
 - Provide 3D renderings or models to help the client visualise the design.
4. Construction/ Handover Phase
- On the anticipated date of substantial completion, inspect the works together with other consultants and ensure all outstanding items are complete.
 - Advise the Employer and ER in writing on the suitability of the Works to be considered ready for a Certificate of Completion.
 - At the end of the defects liability period, carry out a detailed site inspection with the contractor and advise the Employer and ER on the release of any outstanding retention monies if the works are free from defects and constructed per specifications and drawings.
 - Provide all design/as-built drawings in AutoCAD/BIM format to the University of Galway upon project completion.
5. Cost Management
- Assist the Quantity Surveyor in preparing an order of magnitude cost for proposals and verifying the Client's cost limit.
 - Undertake a preliminary technical appraisal of the Project to enable the Employer to decide in what form to proceed, if required.
6. Regulatory Liaison
- Liaise with Galway City Council Planning Authority and Galway Fire Services as required.
 - Liaise with all other statutory bodies to ensure all statutory requirements are met.

Design Team management.

The architect will be required to manage the following specialist consultants as part of their scope. Please refer to the ITT for specialist services you are required to provide directly for this project.

1. Landscape Designer Management
 - Ensure landscape designs integrate seamlessly with the architectural vision and meet environmental and aesthetic requirements.
2. Acoustic Specialist Coordination and Management
 - Incorporate acoustic requirements into the building design to meet university standards for sound control and manage the acoustic consultant.
3. Archaeologist and Heritage/Conservation Consultant Management
 - Ensure compliance with archaeological and heritage conservation requirements, especially for listed building and building in the curtilage of listed buildings. Please refer to the record of protected structures of Galway City.
4. Interior Design and FF&E Coordination & Management



- Integrate interior design and FF&E (Furniture, Fixtures, and Equipment) requirements into the overall design and manage the consultant.
- 5. Universal Access and DAC Consultant Management
 - Ensure designs meet all requirements for universal access and disability access certification (DAC). Manage and submit all applications required to obtain certification.
- 6. Air Tightness and BREEAM Design Management
 - Integrate air tightness and BREEAM requirements into the design process. Manage and submit all applications required to obtain certification.
- 7. Environmental and Ecology Reporting
 - Ensure all environmental and ecological impacts are reported and addressed in the design. Produce all reports and designs that may be required during all phases of the project.
- 8. Planning Consultant Management
 - Ensure planning applications and processes are managed efficiently to secure necessary approvals in a timely cost-efficient approach. Manage and submit all applications required to obtain certification.



11.0 Appendix 2

11.1 Civil & Structural Engineering Consultant Scope of works

Introduction

The Civil and Structural Engineer engaged by the University of Galway will provide comprehensive Engineering services in accordance with the Capital Works Management Framework (CWMF) procedures. The services listed in this appendix are supplementary to the General Services outlined in the primary document. The contract engagement structure is detailed in the invitation to tender (ITT).

General Requirements

The Civil and Structural Engineer will be responsible for delivering high-quality engineering services to support the University's Buildings & Estates in their ongoing program of project work, planned preventative maintenance, and minor improvements.

1. Civil and Structural Design Stage

- Provide civil and structural design for all aspects of the project, including in-ground services, in compliance with all relevant codes, standards, and regulations.
- Utilise Building Information Modelling (BIM) for design and ensure full coordination with other design team members.
- Include all necessary traffic and mobility engineering services, either through sub-consultants or in-house specialists.
- Provide a comprehensive engineering design service throughout all project stages, including enabling works, building works, and full fit-out of buildings.
- Ensure structure is design for seamless integration of M&E systems, architectural design, and existing structures.
- Attend and contribute to all Design Team meetings, coordinating structural design information to avoid variations at the construction stage.
- Advise on relevant civil engineering matters, including road design (re-alignments), car parking layouts, traffic management, mobility management, footpaths, temporary works or structures, site drainage, site services, and construction traffic management plans.
- Assess the condition and load-bearing capacity of existing structures in relation to proposed works. Carry out surveys of existing buildings as required to incorporate new structure.
- Evaluate the location, condition, and sufficiency of water supply for consumption and firefighting purposes.

2. Soil and Geotechnical Evaluation

- Evaluate soil and geotechnical conditions through trial holes or borings.
- Offer recommendations for suitable substructures based on ground conditions and assist the QS in costing recommended options.

3. Underground Services and drainage Design

- Provide design information on the positions, levels, capacities, and conditions of existing underground services, such as drainage, attenuation, and Sustainable Urban Drainage Systems (SUDS). The engineering consultant will be responsible for and carryout the design of all underground drainage systems.
- Ensure efficient utilisation of existing underground services to minimise construction costs and potential disruptions to the university.



- Coordinate with the Architect (responsible for above-ground rainwater drainage) and the M&E consultant (responsible for foul and waste systems).
4. Liaison with Local Authorities
- Liaise with Galway City Council Planning Authority, Galway Fire Services, and other statutory bodies as required to ensure all statutory requirements are met.
 - Manage sub-consultants, including traffic consultancy services and surveying services, unless stated otherwise in the ITT.
5. Survey Requirements
- Identify all necessary surveys to facilitate the design process, including but not limited to geotechnical investigations, topographical surveys, existing façade surveys, and surveys of existing services.
 - Prepare tender packages for the procurement of required surveys.
 - Ensure surveys are conducted in a BIM format.
6. Enabling Works
- Review and advise on the provisions of the Employers Enabling Works contract.
 - Provide recommendations on the condition and load-bearing capacity of existing structures, water supply adequacy, and the adequacy of proposed access, road layouts, and car-parking designs.
7. Civil/Structural Engineering Reports
- Provide Civil/Structural Engineering reports for each stage of CWMF, including design proposals for (non-exhaustive list):
 - Building structure and foundations.
 - Site development and services, including drainage and water-main layouts, attenuation, etc.
 - Road layouts.
 - Carpark layouts.
 - Footpaths.
 - Traffic and Mobility Management.
 - Temporary works or structures.



12.0 Appendix 3

12.1 Mechanical & Electrical Consultant Scope of works

Introduction

The Mechanical and Electrical (M&E) Engineer engaged by the University of Galway will provide comprehensive engineering services in accordance with the Capital Works Management Framework (CWMF) procedures. The services listed in this appendix are supplementary to the general services outlined in the primary document. The contract engagement structure is detailed in the invitation to tender (ITT).

General Requirements

The M&E Engineer will be responsible for delivering high-quality mechanical and electrical engineering services to support the University's Buildings & Estates in their ongoing program of project work, planned preventative maintenance, and minor improvements.

Specific Services

1. Specialist Surveys, Investigations and Enabling works.
 - Arrange for specialist surveys and investigations on existing services.
 - Consider and advise on the results of these surveys.
 - Ensure surveys are conducted in a BIM format.
 - Review and advise on the provisions of the Client's Enabling Works contract.
 - Provide recommendations on integrating M&E services into the enabling works and main construction phases.
2. Energy Efficiency and Sustainability
 - Conduct preliminary energy efficiency assessments, including sustainability considerations and life cycle costs.
 - Incorporate sustainable and energy-efficient solutions into the M&E design.
 - Recommend renewable energy sources and energy-saving technologies when applicable.
 - Provide costed options for heating in collaboration with the Architect and Quantity Surveyor.
 - Provide advice, design inputs, and materials to support the attainment of legislative project requirements for energy efficiency and sustainability ratings.
 - Develop design provisions to support the university's sustainability goals and a roadmap to net zero carbon emissions.
 - Produce building thermal analysis to ensure compliance with energy consumption and CO2 emissions targets.
 - Confirm that designs meet all relevant energy efficiency and sustainability standards.
3. Building Services Design
 - Develop outline building services design proposals for the chosen design option.
 - Explore suitable design approaches considering budget, client needs, existing building systems, market requirements, planning or site requirements, and third-party requirements (e.g., local authorities, Service providers, ESB, BGE, SEI, Eir,). Etc as required by the project.
 - Attend and coordinate technical meetings to develop and resolve work requirements, including capital cost, risk, traffic, utilities, sustainability, construction issues, phasing, commissioning/handover, and specifications.



- Agree on principles for integrating building services with the building structure and finishes, including distribution routes for service runs, "soft spots," and cross-over zones.
 - Provide input and advice to the Architect regarding Building Services (M&E) to assist in developing project-specific Preliminary Room Data Sheets for each room type.
 - Prepare and report on the cost implications, including the cost of carbon for the preferred design solution compared to other potential design solutions.
 - Develop design solutions to facilitate a clear roadmap to net zero carbon emissions.
 - Carry out computational fluid dynamic calculations and 3-dimensional modelling of the building as designed and update for changes in the Project. Provide for University of Galway detailed reports on the likely impact on the targets set in the comfort charter during a nominal calendar year using an agreed weather file adjusted for Galway. Highlight areas that exceed the comfort charter and propose measures to adjust accordingly.
 - Measure as requested by University of Galway, the performance of internal spaces with respect to their HEVAC and environmental performance against the pre-construction computational fluid dynamics modelling and predicted outputs. Provide a report on any deviations, including causes and solutions for any deviations over 10% of baseline predictions.
 - Ensure the design of the fire alarm system is Open Protocol only.
4. Schematic Layouts and Coordination
- Prepare schematic layouts for all relevant services, including mechanical, electrical, life safety, security, IT, and building management systems.
 - Lead the requirements for named specialists (if relevant to the project) for Building Services (M&E and Lift) Engineering works.
 - Coordinate the integration of M&E systems with the architectural design and existing structures.
5. Quantity Surveying Services
- Provide quantity surveying services for all aspects of M&E services.
 - Prepare detailed cost estimates and manage budgets for M&E elements of the project.
6. Project Management and Coordination
- Ensure seamless integration of M&E systems with the overall project design.
 - Attend and contribute to all Design Team meetings, ensuring effective communication and coordination with all stakeholders.
 - Manage the M&E aspects of the project to avoid variations and ensure project objectives are met.
7. Liaison with Authorities
- Liaise with local authorities, utility providers, and other third parties as required to ensure compliance with all regulatory and statutory requirements.
 - Ensure all necessary permits and approvals are obtained for M&E works.
8. Seasonal Commissioning
- Monitor and supervise Mechanical and Electrical contractors seasonal commissioning for two years post substantial completion. Prepare bi annual commissioning reports during this period, summarising the process and changes.

Mechanical & Electrical Systems

The following is a non-exhaustive list of Building Engineering Services to be fully developed (or as specified otherwise in the ITT documents) as the design progresses and fully integrated with the design development

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of all other disciplines:

1. Acoustic and vibration performance specification of mechanical and electrical Equipment.
2. Heating, Ventilation, Air Conditioning and associated Mechanical and Electrical Services.
3. CFD Analysis.
4. Daylight Modelling
5. Sun Path Modelling vi. Heat Modelling vii. Building Management Systems
6. Boiler Plants and Auxiliaries.
7. Calorifier Plant
8. Chiller Plant
9. Cold Water Services.
10. Cooling Water Services
11. Distribution Mains for any Building Services
12. Drainage Systems
13. Electrical Distribution Services.
14. Electric Lighting and Power Installations, including Lighting Fittings (in conjunction with the Lead Designer).
15. Lighting Control Systems.
16. Electrical Sub-stations and interface with utilities.
17. Data and Voice Cabling Systems.
18. Energy Management System
19. Engineering services to security-installations and systems designed by others.
20. Engineering services to window cleaning equipment and supplies.
21. Exhaust Gas Treatment and Flues.
22. Engineering Services to food Preparation, Cooking and Serving Equipment
23. Fire Detection and Alarm Services
24. Smoke Control in consultation with Fire Safety Engineer
25. Fire Protection Services.
26. Fuel Gas Incoming Supply and Distribution.
27. Generating Plant Installations.
28. Heating Installations
29. Hot Water Services
30. Humidification Systems.
31. Services to Information Technology and Data (University IT/Data/Telecommunications department Information Solutions Services)
32. Incoming Statutory/Utilities supplies (in conjunction with Structural Engineer)
33. Lightning Protection Services.
34. Mechanical Ventilation Services. xxxviii. Any other services as relevant.



13.0 Appendix 4

13.1 Fire Consultant Scope of works.

Introduction

The Fire Consultant engaged by the University of Galway will provide comprehensive fire engineering services in accordance with the Capital Works Management Framework (CWMF) procedures. The services listed in this appendix are supplementary to the general services outlined in the primary document. The contract engagement structure is detailed in the invitation to tender (ITT).

General Requirements

The Fire Consultant will be responsible for delivering high-quality fire engineering services to support the University's Buildings & Estates in their ongoing program of project work, planned preventative maintenance, and minor improvements.

Specific Services

1. Fire Engineering Design Services
 - Provide a full Fire Engineer design service throughout all stages of the project, including enabling works, building works, and full fit-out of the buildings.
 - Provide fire engineering design options as requested, including alternative solutions, feasibility studies, and best practices.
 - Ensure seamless design integration with all M&E systems with architectural plans and existing structures.
 - Contribute to all Design Team meetings and coordinate design information to avoid variations at the construction stage.
 - Ensure the design of the fire alarm system is Open Protocol only.
 - Provide design for fire extinguishers, ensuring coordination with the architect's layout.
 - Participate in regular project meetings, design team meetings, coordination meetings, and any other necessary meetings for effective collaboration and communication.
 - Advise on all fire engineering design issues to ensure compliance with relevant regulations, standards, and codes.
 - Contribute relevant fire engineering data to the BIM model.
 - Attend BIM coordination meetings to ensure accurate representation within the digital model.
2. Reporting and Updates
 - Report on matters pertaining to fire engineering design throughout all stages of the project.
 - Provide regular updates, progress reports, and technical analysis to the project team and relevant stakeholders.
 - Monitor and record progress on any fire related issues (including BCAR issues) raised during the course of the project.
3. Design and Construction Access
 - Evaluate the implementation of fire safety measures during all stages of design and construction.
 - Ensure alignment with the overall fire engineering strategy, considering existing campus infrastructure and integration with new projects.



14.0 Appendix 5

14.1 Project Manager Scope of works.

Introduction

The Project Manager engaged by the University of Galway will provide comprehensive project management services in accordance with the Capital Works Management Framework (CWMF) procedures. The services listed in this appendix are supplementary to the general services outlined in the primary document. The contract engagement structure is detailed in the invitation to tender (ITT).

General Requirements

The Project Manager (PM) will be responsible for managing the entire design team process from start to finish, ensuring coordination among various team members and disciplines. The PM will oversee the project's progress through all stages, ensuring timely completion and adherence to budget and quality standards.

Specific Services

1. Design Team Coordination
 - Manage the entire design team process, ensuring effective coordination among various team members and disciplines.
 - Develop a list of deliverables and coordinate this list for each design team member for each project stage.
2. Program Management
 - Prepare and manage design and construction activity programs, ensuring progress through all project stages to completion.
 - Keep the client informed with monthly progress reports and notify them of any issues affecting the project timeline.
3. Client Consultation and Reporting
 - Report to and take instructions from the client at all stages of the project, ensuring continuous client consultation and engagement.
 - Provide regular updates and detailed progress reports to the client.
4. Risk Management
 - Oversee risk management by working closely with the Quantity Surveyor and other design team members to identify and mitigate risks.
 - Manage design contingencies and report on contingency measures through cost reporting functions.
5. Value Management and Engineering
 - Lead value management exercises to ensure value for money and optimal investment outcomes.
 - Participate in value engineering exercises to align project budgets with client budgets and contribute to relevant lifecycle costing exercises.
6. Change Management
 - Implement change management processes and maintain a log of all changes.
7. Safety, Health, and Welfare Compliance
 - Ensure compliance with Safety, Health, and Welfare regulations throughout all project stages.
 - Coordinate health and safety design elements and attend relevant workshops.



8. Quality Control
 - Implement and operate a quality control system to ensure all information and documentation comply with project requirements and authorised client instructions.
9. Meeting Organisation and Chairing
 - Organise and chair various project meetings, including introduction and clarification meetings, project team meetings, risk management meetings, and value management meetings.
 - Ensure effective communication and decision-making during meetings.
10. Final Accounts and Project Completion
 - Coordinate with the QS and other consultants in the preparation of final accounts and reports on project completion, ensuring reconciliation with approved budgets and addressing any variances.
 - Participate in post-project reviews to assess final costs, program deficits, project management procedures, and provide feedback for future projects.
11. Stakeholder Liaison
 - Liaise with local authorities, service providers, end users, and all stakeholders to ensure smooth project progression and address any concerns.



15.0 Appendix 6

15.1 Scope of Works for Quantity Surveying Consultant

Introduction

The Quantity Surveyor engaged by the University of Galway will provide comprehensive cost management services in accordance with the Capital Works Management Framework (CWMF) procedures. The services listed in this appendix are supplementary to the general services outlined in the primary document. The contract engagement structure is detailed in the invitation to tender (ITT).

General Requirements

The Quantity Surveyor (QS) will be responsible for the cost management aspects of the project. The QS is required to carry out the following specific activities throughout all stages of the project:

- Liaise with all members of the design team and Contracting Authority's representatives.
- Consult any local or other authorities on matters in connection with the costs of the project.
- Take Architect and Client's instructions.

Specific Services

1. Performance Monitoring Setup
 - In conjunction with the Employer's Representative (ER), set up systems to monitor performance parameters such as earned value, time, cost, and safety performance.
 - Establish and communicate M&E Cost Drivers to the Design Team (e.g., lighting, comfort cooling strategy, specialist installations) to allow efficient designs to develop and help incorporate such into the designs.
2. Design Process Oversight
 - Oversee the design process and monitor whether the deliverables are produced on time and potential changes to scope are identified as soon as practicable.
 - Check that conditions attached to planning, fire, and Disability Access Certificate (DAC) consents are addressed and picked up in the overall financial budget.
 - Ensure bill descriptions are accurate and describe the works clearly to eliminate ambiguity.
3. Cost and Budget Management
 - Direct the application of risk analysis and value management principles throughout the project.
 - Ensure conditions attached to planning, fire, and DAC consents are dealt with and reflected in the project cost plan.
 - Assess the impact on costs due to technical design changes.
 - Advise the Contracting Authority on procurement strategy, including number and scope of contracts, risk allocation, and terms of payment.
 - Prepare formal tender documentation and assist with tendering and contractual arrangements.
 - Provide detailed life cycle and whole-life cost studies, and alternative costings for sustainable design solutions.
 - Provide monthly cost reports throughout the project and monitor the university accounting system 'Agresso' for all expenditure relating to the project.
4. Tender Preparation and Coordination
 - Oversee the preparation of tender documents and specifications.



- Coordinate and prepare contract documents, measure gross and net internal areas, and benchmark efficiencies.
 - Manage and invite tenders on behalf of the Contracting Authority.
 - Administer tender queries and tender addenda.
 - Appraise and report on tenders received, recommending acceptance as appropriate.
 - Monitor procurement progress and advise on risks and insurance.
 - Brief contractors on their duties and recommend procedures to control variations and monitor progress.
 - Produce cashflow forecasts and provide advice on liquidated damages.
 - Prepare full elemental cost analysis and facilitate pre-appointment briefing workshops.
5. Contract Administration
- Prepare and administer building contracts.
 - Establish a dispute resolution process and assist in resolving disputes.
 - Monitor payment processes and advise on the need for warranties and guarantees.
 - Provide periodic reports including design progress, construction progress, financial statements, and forecast final accounts.
 - Liaise with the Contracting Authority, providing monthly cost reports.
 - Assist with the installation of plant, machinery, and furniture.
6. Final Accounts and Dispute Settlement
- Advise on insurance for the completed project.
 - Obtain warranties and guarantees from contractors and sub-contractors.
 - Oversee and confirm the agreement of final accounts with consultants and contractors.
 - Assist in settling contractual disputes.
 - Issue draft and final accounts, obtain final agreements, and prepare reviews of claims and delays.
 - Provide services in connection with any third-party dispute resolution procedure
 - Provide a full insurance reinstatement cost estimate in advance of substantial completion to all the property to be correctly valued on the university system.

Prepare a preliminary Cost Plan suitable at order of magnitude cost estimations for Stage (i). Develop the Cost Plan to a stage where it may be formally agreed with the Client as soon as possible. This cost service is to include all cost control and estimating also.

Subsequently prepare initial budget estimates/cost models for all options under consideration. This cost service is to include all cost control and estimating also.

Advise on the cost of non-construction heads of cost to be incorporated into the Cost Plan or development appraisal.

Advise on the cost implications of alternative construction and/or development programmes.



16.0 Appendix 7

16.1 Scope of Works for Assigned Certifier Consultant

Introduction

The Assigned Certifier engaged by the University of Galway will provide comprehensive certification services in accordance with the Capital Works Management Framework (CWMF) procedures, the Building Control (Amendment) Regulations 2014, and the Department of the Environment, Community and Local Government's "Code of Practice for Inspecting and Certifying Buildings and Works" (February 2014).

A copy of this Code can be found at:

https://www.localgov.ie/sites/default/files/2016-10-21_code_of_practice_for_inspecting_and_certifying_buildings_and_works_final_version-2016.pdf

The services listed in this appendix are supplementary to the general services outlined in the primary document. The contract engagement structure is detailed in the invitation to tender (ITT).

General Requirements

The Assigned Certifier (AC) will be responsible for ensuring compliance with Building Control (Amendment) Regulations 2014 and in accordance with the Department of the Environment, Community and Local Government's "Code of Practice for Inspecting and Certifying Buildings and Works" (February 2014), and coordinating the certification process. The AC will oversee the implementation of the Inspection Plan, maintain records, and act as the single point of contact with the Building Control Authority.

Specific Services

1. Statutory Certificates
 - Provide and sign relevant statutory certificates, including the Certificate of Compliance (Undertaking by Assigned Certifier) at commencement and the Certificate of Compliance on Completion.
2. Co-ordination and Certification
 - Co-ordinate the ancillary certification by members of the design team and other relevant bodies for the Certificate of Compliance on Completion.
 - Identify all design professionals and specialists, in conjunction with the Builder, from whom certificates are required and obtain these certificates.
 - Co-ordinate and collate all certification of compliance for completion in conjunction with the Builder.
 - Provide confirmation to the Employer that the relevant details from the Certificate of Compliance on Completion have been included on the statutory register.
3. Inspection Plan
 - In consultation with the members of the design team, plan and oversee the implementation of the Inspection Plan during construction.
 - Prepare the Preliminary Inspection Plan and oversee adherence to this plan, and on completion, provide the Inspection Plan as implemented.
4. Handover and Compliance
 - On termination or relinquishment of their appointment, make available to the Building Owner all certification prepared and inspection reports carried out.
 - Act as the single point of contact with the Building Control Authority during construction.



- Seek advice from the Building Control Authority in respect of compliance matters relating to the building or works where disputes or differences of opinion arise between the parties to the project.
5. Record Maintenance
 - Maintain records of inspections throughout the construction phase.
 6. Completion Tasks
 - Oversee the implementation of the inspection plan during construction.
 - Collate all certificates of compliance and ancillary certificates required for the completion stage.
 - Ensure that all necessary documentation is lodged with the Building Control Authority upon completion.
 7. Final Reporting and Post-Project Review
 - Prepare reports at final account and reports on project completion, ensuring reconciliation with approved QA standards and addressing any variances.
 - Participate in post-project reviews to assess final costs, program deficits, project management procedures, Quality Issues and provide feedback for future projects.
-
1. The Assigned Certifier (AC) must be registered with the online Building Control Management System (BCMS) and we will use this facility for submitting all commencement documentation.
 2. Coordinate and collect the notices of appointment in respect to the Contractors who will carry out works and of the Assigned Certifier who will inspect and certify the works.
 3. Coordinate and collect the Certificates of Compliance (Design), the Certificates of Compliance (Undertaking by Assigned Certifier), the Certificates of Compliance (Undertaking by Builder), and the accompanying plans, calculations, specifications, and particulars for validation by the Building Control Authority (BCA).
 4. Liaise with all Ancillary Certifiers for design and construction scheduling and collecting inspection reports regularly as per our Inspection Plan.
 5. Non-compliances will be logged by the Assigned Certifier and by Ancillary Certifiers and flagged for close-out.
 6. Collect photographic evidence during all inspections accompanied by detailed inspection reports as evidence that inspections have taken place in accordance with the Inspection Plan. Hard copies of all evidence will also be supplied to our clients upon completion.
 7. Issue Certificates of Compliance on Completion accompanied by plans and all other documents as are required to outline how the completed works differ from the plans submitted at commencement. The Certificate will also include such plans as are required to outline how the completed works comply with the Building Regulations. The Inspection Plan implemented by the AC will be included with the Certificate of Compliance on Completion.
 8. The Assigned Certifier will be the single point of contact with the BCA during construction. The AC will validate and register the Certificate of Compliance on Completion. The AC will support the BCA and provide all documentation necessary for them to complete their work.



17.0 Appendix 8

17.1 Scope of Works for Project Supervisor for the Design Process (PSDP)

Introduction

The Project Supervisor for the Design Process (PSDP) engaged by the University of Galway will provide comprehensive safety and health services in accordance with the Capital Works Management Framework (CWMF) procedures. The services listed in this appendix are supplementary to the general services outlined in the primary document. The contract engagement structure is detailed in the invitation to tender (ITT).

General Requirements

The PSDP will be responsible for ensuring coordination of the work of designers throughout the project, focusing on hazard identification, risk management, communication, and compliance with safety and health regulations.

Specific Services

1. Hazard Identification and Risk Management
 - Identify hazards arising from the design, technical, organisational, planning, or time-related aspects of the project.
 - Where possible, eliminate hazards or reduce risks associated with the design.
2. Communication and Coordination
 - Communicate necessary control measures, design assumptions, or remaining risks to the Project Supervisor Construction Stage (PSCS) so they can be addressed in the Safety and Health Plan.
 - Ensure that the work of designers is coordinated to ensure safety.
 - Organise cooperation between designers working on the project.
3. Safety and Health Planning
 - Prepare a written safety and health plan for any project where construction will take more than 500 person days, 30 working days, or involve particular risks. Deliver this plan to the client before tendering.
 - Take into account the General Principles of Prevention during the design process to ensure the project's safe planning and completion.
 - Prepare a safety file for the completed structure and hand it over to the client. This file should contain all necessary information to ensure the structure can be used safely and maintained in the future.
4. Compliance and Enforcement
 - Notify the Authority and the client of non-compliance with any written directions issued.
 - Issue directions to designers, contractors, or others to ensure compliance with safety regulations. Confirm these directions in writing if necessary.
5. Appointment and Competence
 - Ensure the appointed PSDP has extensive knowledge of the design process, familiarity with the type of construction work involved, a sound understanding of safety and health issues associated with the work, good communication skills and systems, and adequate training appropriate to the type of work (e.g., recognised certificates or degrees in Safety and Health).
6. Documentation and Reporting



- Document a preliminary safety and health plan, including general project descriptions, work activities on site, work involving particular risks, project timescales, and design conclusions regarding safety and health.
 - Ensure proper notification to relevant authorities about safety compliance and directions issued.
7. Continuous Duties
- Continuously identify and address hazards or risks throughout the project lifecycle.
 - Maintain constant communication with the design team and ensure ongoing cooperation between all designers involved in the project.
 - Update and refine the Safety and Health Plan as the project progresses, ensuring all stages are compliant with safety regulations.

Issue directions to ensure compliance with safety regulations. In cases of non-compliance, the PSDP must notify the Health and Safety Authority (HSA) if required, the client, and the concerned party, including details of the directive and any responses. All written directions and notifications should be documented within the safety and health plan. The PSDP must monitor compliance and take necessary actions, using agreed procedures for conflict resolution and ensuring immediate action in high-risk situations.



18.0 Appendix 9

18.1 Scope of Services for the Employer Representative (ER)

Introduction

The Employer Representative (ER) engaged by the University of Galway will provide comprehensive project management services in accordance with the Capital Works Management Framework (CWMF) procedures. The services listed in this appendix are supplementary to the general services outlined in the primary document. The contract engagement structure is detailed in the invitation to tender (ITT).

Construction Stage

1. Fulfil the role of Employer's Representative for the Construction Works contract, in accordance with the CWMF.
 2. Ensure that all necessary notices, certificates and other obligations under the Contract are discharged in accordance with the Contract and that the Client's rights under the Contract are protected at all times.
 3. Contract Administration
-
1. Documentation:
 - Ensure all necessary documentation, including operating and maintenance manuals, safety files, and as-built drawings, are complete and handed over to the Client.
 2. Training and Handover:
 - Recommend and facilitate training for managers and staff responsible for operating and maintaining the new facility.
 - Prepare a handover and occupation programme, ensuring a smooth transition to full operation.
 3. Post-Completion Review:
 - Conduct a post-completion review to identify lessons learned and best practices for future projects.
 - Provide recommendations for continuous improvement in project delivery processes.



19.0 Appendix 10

19.1 Scope of Services for the Planning and Environmental Consultant

Introduction

The Planning and Environmental Consultant (PEC) engaged by the University of Galway will provide comprehensive services in accordance with the Capital Works Management Framework (CWMF) procedures. The services listed in this appendix are supplementary to the general services outlined in the primary document. The contract engagement structure is detailed in the invitation to tender (ITT).

General Requirements

The Planning and Environmental Consultant (PEC) will be responsible for delivering a full range of planning, environmental, and ecological consultancy services. These services will support the regeneration and development of the University campuses, associated lands, and their grounds. The PEC will ensure that all planning and environmental aspects of the projects are managed professionally, adequately, efficiently, and effectively to meet the University's objectives.

Specific Services

1. Project Meetings and Coordination:
 - Attend regular project meetings in Galway, unless otherwise approved by the Buildings & Estates Office.
 - Participate in separate meetings with statutory bodies such as Galway City Council and National Parks & Wildlife.
 - Ensure awareness of and coordination with other ongoing projects to avoid conflicts and ensure alignment with the University's overall development strategy.
2. Planning Consultancy:
 - Provide planning advice and strategy guidance for various projects including building works, car parks, infrastructure, and utility services.
 - Liaise with relevant planning authorities and engage in consultations and meetings.
 - Participate in campus masterplanning exercises, including stakeholder engagement and public consultation processes.
 - Prepare and submit planning applications, including strategic housing developments, and manage responses to submissions and observations.
3. Environmental and Ecological Assessments:
 - Conduct environmental impact assessments (EIA), screenings, and prepare the necessary documentation for planning applications.
 - Perform ecological assessments such as appropriate assessments, Natura impact statements, and ecological impact statements.
 - Manage environmental monitoring, sampling, and risk assessments to ensure compliance with regulatory requirements.
4. Regulatory Compliance and Reporting:
 - Ensure all services comply with relevant laws and regulations, including environmental standards.
 - Prepare and submit all required statutory consents and approvals, coordinating with other consultants and contractors as necessary.
 - Provide regular progress reports to University of Galway, highlighting any potential issues and recommending corrective actions.



5. **Site Inspections and Constraints Analysis:**
 - Visit sites and conduct initial appraisals to identify physical restrictions and constraints that may impact project design and implementation.
 - Validate existing survey data and documentation, and recommend additional investigations if necessary.
 - Observe and document existing site constraints, such as easements or statutory authority conditions, and communicate these to the contracting authority.
6. **Stakeholder Engagement and Communication:**
 - Design and manage stakeholder engagement processes, including public consultation events and meetings with statutory authorities.
 - Establish and maintain communication protocols and reporting procedures to ensure efficient information exchange between all parties involved.
 - Advise University of Galway on the necessity of further studies, surveys, and investigations, and coordinate the procurement and management of these activities.
7. **Environmental Monitoring and Compliance:**
 - Oversee environmental monitoring and sampling during construction to ensure compliance with environmental management plans.
 - Advise on guidelines for flood risk management and incorporate these into project proposals.
 - Develop and implement construction and environmental management plans, including supervision of construction activities to ensure adherence to environmental standards.
8. **Post-Completion Review and Documentation:**
 - Conduct post-completion reviews to identify lessons learned and best practices for future projects.
 - Provide all necessary documentation, including reports, drawings, and environmental assessments, in both hard copy and digital formats.
 - Maintain confidentiality and control of documents, ensuring they are not circulated to third parties without express permission from University of Galway.



20.0 Appendix 11

20.1 Design Stage Sign-Off Document

Project Name:

Project Number:

Design Stage: *[Insert Design Stage (e.g., Preliminary Design, Detailed Design, etc.)]*

Date:

Consultant Discipline: *[Insert Discipline (e.g., Architecture, Structural, M&E, etc.)]*

Consultant Sign-Off

I, the undersigned, confirm that the design for the [specific discipline] has been completed in accordance with the University Design Guide complies with all the relevant standards and requirements outlined in the document.

Design Compliance:

- The design complies with the University's Design Guide.
- The design has been coordinated with other design consultants.
- There are no discrepancies or ambiguities in the design with respect to the Design Guide.

If there are any elements of the design that do not comply with the Design Guide, please identify them below and provide reasons for non-compliance:

Non-Compliant Elements:

- Element: (Describe the element)
- Reason for Non-Compliance: (Provide reasons)

Comments:

Consultant Details

Consultant Name:

Consultant Company:

Signature: _____

Date:

Design Lead - Sign off

As the Design Lead, I have reviewed the above and confirm that the [specific discipline] design is in accordance with the project requirements and the Design Guide.



Design Lead Name:

Signature: _____

Date:

Coordination Confirmation

I, the undersigned, confirm that the design has been fully coordinated with other design disciplines. Any conflicts have been identified and resolved.

Design Lead Name:

Signature: _____

Date:

This document must be completed and signed at each stage of the design process before proceeding to the next stage. Any non-compliant elements must be addressed and resolved in consultation with the University's Buildings and Estates Office