



LEETON
SHIRE COUNCIL

TENDER No. LSC2019-109A

ARCHITECTURAL DESIGN/LEAD CONSULTANT SERVICES

for the

ROXY THEATRE REDEVELOPMENT

VOLUME 2 of 3

TECHNICAL SPECIFICATIONS (PROJECT REQUIREMENTS)



DATE: MAY 2019

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1 BACKGROUND

1.1 PURPOSE

The Roxy is a purpose-built cinema and community venue owned by Council located in Leeton in regional New South Wales.

The facility opened in 1930 as a cinema however over the generations it has also been utilised for theatre productions, community events, functions, and civic ceremonies. The Roxy is historically important as a centre for many community gatherings and other local institutions. But its influence, both real and potential, extends further. As an incubator of local ideas, hopes and aspirations extending back many years, it serves as a vector for the community's wider economic and social interests.

The difficult position the Roxy finds itself in is due to the myriad of technical compliance issues surround it. Address one issue and there is a domino effect of occupational health and safety standard that require solution, as well as building compliance issues and in particular addressing disability access. There is a prominent and precious heritage fabric to enhance. What is urgently required is a new functionality for the building, in which compliance challenges are addressed within a constrained building foot print, sympathetic to the cultural legacy of Leeton and the Roxy itself.

This investment will extend far beyond a simplistic architectural touch up and putting in a disability ramp. It takes as its starting point the town's reputation for innovation and adaptability, evident in the translation of the economy from small scale agricultural production and low-value food processing to today's economy based on agribusiness, value-added agricultural products and high-end engineering and international tourism.

1.2 STRATEGIC OBJECTIVES

There are 3 key areas on which this redevelopment will deliver measurable outcomes:

- *Increase Arts and Cultural Participation*
 - Leeton and the surrounding community are content generators meaning that The Roxy experiences high attendances for activity generated by community, however the building is operating at 35% capacity due to functional and legislative building constraints.
 - Making the building efficient to operate will leverage further economic potential through community generated activity and investment from industry.
 - The reconfigured Roxy brings the building into the 21st century, allowing a mix of cultural activity for the town and region, while also providing a vehicle for external investment in cultural activity by Leeton's industries, that will generate social and economic benefits.
- *Vibrant Civic Centre*
 - Redevelopment of The Roxy will contribute to the social resilience of the town and beyond that, to its civic amenity and tradition of community engagement.
 - The Roxy Redevelopment allows for increased community and educational programming which will attract and increased level of corporate and philanthropic support to deliver increased arts and cultural participation that will directly impact the liveability and activation of the town centre.

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- *Heritage Fabric:*
 - It is acknowledged that the Roxy, built in 1930, is a rare surviving example of a 1930's picture theatre still in use and is one of only a few remaining examples of architect Kaberry and Chard's cinemas. The Roxy is valued by several generations of the Leeton and surrounding community as a key centre for social interaction, community events and entertainment for over 80 years. The theatre has been an essential part of the social and cultural fabric of the Leeton community for most of the town's period of existence
 - A conservation management plan is to be prepared for the Roxy, which will contribute to informed decision making for anyone engaged in caring for the heritage place and for the current proposed redevelopment.

1.3 PREVIOUS STUDIES

Key Reports will be available on request, including:

- Marshall Day Technical Report
- Previous Conservation Management Plan
- Existing Conditions Drawings
- Engineering Report – Existing Conditions – Feb 2019

2 THE PROJECT

2.1 PROJECT SCOPE

The proposed redevelopment works will include conservation and restoration of significant elements of the existing building. A new Conservation Management Plan will be developed to supersede the Conservation Management Strategy of August 2007. All works will be undertaken to meet requirements of the Heritage Act 1977 (NSW).

The original building footprint together with its later additions occupies almost all of the site area up to all boundaries. The undercroft spaces that are currently not utilised as functional floor space are fragmented and require careful consideration for incorporation into potential upgrade strategies for the auditorium and stage or other supporting amenities.

The project will uncover hidden and under-utilised spaces to create new space by removal of redundant fabric or reconfiguration within the total volume of the Roxy. Where possible existing fabric is adjusted for reuse rather than removed.

The 1980s additions are substantially reused and modified.

The works (potential) include:

- a) Disability access to front and side entry, stage, rehearsal area, seating, amenities, foyer
- b) Provision of new function prep kitchen
- c) Optional: boutique smaller cinema
- d) Upgrade of Heating and Cooling
- e) New changeroom / dressing room space.
- f) Access to both sides of the stage.
- g) Upgrade technical cabling, sound, lighting and AV equipment
- h) New motorised rigging system
- i) Install code compliant seats in public spaces
- j) Provide hearing augmentation system

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- k) Improve thermal and acoustic insulation
 - l) Improve fire protection to the building

2.2 PROJECT OBJECTIVES AND SCOPE

The project aim is to address issues and constraints:

Strategic Considerations:

- Prepare a masterplan that considers surrounding land use and provides options for future proofing Leeton's arts and cultural functional capacity. This may involve architectural, structural and services masterplanning options analysis of possible future expansion into adjacent areas.

General:

- Maintenance and upkeep
- Limited functional capacity to meet arts and cultural needs of community
- Band-Aid approach is not a sustainable option and is leading to higher ongoing maintenance costs over time

OHS:

- The Roxy currently doesn't meet code in relation to:
 - Disability Access.
 - Occupational health and safety for staff, performers and customers.
 - Fire Safety Compliance as well as theatre rigging represents a danger.

Infrastructure constraints:

- In addition to the Roxy's current lack of flexible performance and auditorium spaces, there is also a lack of a kitchen/function preparation space. This is limiting the number, type and size of events currently able to be hosted at the Roxy.
- At present there is no loading dock with scissor lift facilities to bring in larger props and equipment in at stage level. This is limiting the number and type of performances that can be delivered at the Roxy. The other related constraint is the efficiency with which the Theatre can transition from one performance / use to the next.
- The lack of smaller rehearsal spaces/theatres means that while the main auditorium is being used, smaller performances or movies screenings can't be accommodated. It makes the theatre less flexible for hosting film festivals and additional events and exhibitions.
- The current facilities for performers are relatively poor. The changing rooms are constrained and there are no separate male/female changing rooms.

Lack of Functional Capacity

- The Roxy currently has one large performance stage and auditorium. There are no smaller rehearsal spaces or theatres and the changing facilities for performers are limited. The lack of smaller spaces limits scheduling flexibility in that only one performance/screen can occur at a time. In addition, the viability of smaller events is limited as the only option is to use the entire theatre, with all the associated staffing and utility costs.
- The Roxy is the centrepiece of Leeton and when the lights are on and people are in town, Leeton is 'alive', spirits are raised, and business and community confidence is high.
- The other civic role that the Roxy plays is that of a de facto Town Hall. The Roxy's current lack of capacity and flexibility means that when the theatre is being used for town hall purposes, other civic activities are unable to take place in the building.

Heritage

- The heritage value of the Roxy has been recognised to be of State significance. This responsibility, that extends far beyond Leeton, represents a heavy cost burden for the community.

Operational

- Attractiveness to new audiences and next generation users.
- Increasing occupancy and participation.
- Increased Programming at The Roxy that encourage visitors to town.
- Increase income streams for The Roxy.
- To be accessible and affordable for cultural group use.

2.3 CONSULTANCY STRUCTURE

The consultants to be appointed for this project are listed below and will each be separately appointed by Leeton Shire Council:

- Principal Consultant/Architect is to be appointed to undertake Architectural and Interior Design services, Structural Engineering, DDA & Acoustic Engineering works and coordination of all design consultants.
- External Project Manager/ Superintendent is to be appointed to provide Project Management and Superintendent services.
- Quantity Surveyor to be appointed to provide Cost Planning and Cost Management services.
- Town Planning Consultant to be appointed to address all statutory planning requirements of the project.
- Heritage Consultant to be appointed to prepare the Conservation Management Plan
- Services Engineer is to be appointed to provide services design including Mechanical, Electrical/ICT/Security, Hydraulics, Fire Protection and Fire Engineering services.
- Theatre Consultant to be appointed to undertake technical and operational theatre design services for the integrated fitout component of the project.
- Building Surveyor is to be appointed to provide building certification and structural certification services.

3 PROGRAM

The indicative Program is as follows:

- Consultant Appointment –late May 2019
- Complete Master plan options and Schematic Design – July 2019
- Complete Design Development – August 2019
- Complete Contract Documentation – October 2019
- Construction Tender Award – December 2019
- Commence Construction – February 2020
- Complete Construction – December 2020
- Commissioning & Training – March 2021

The consultants are to provide a preliminary program to reflect the targets based upon traditional construction procurement approach. The program should highlight workshops, progressive design reviews (as applicable) and allow a minimum of two weeks for client review and approval prior to conclusion of each phase of the project.

Consultants should allow a minimum of 10 trips to Leeton to adequately service the project as follows:

- 3-4 trips during design & documentation phases
- Balance during construction phase

Consultants should demonstrate in their tender submission how they will effectively service the project given its remote location and manage travel costs in the most effective manner.

4 ESTIMATED PROJECT COST

The estimated **Total Construction Cost (TCC)** is **\$3.5M** exclusive of GST. The TCC includes demolition, construction, integrated fitout and FF&E costs and excludes property acquisition, consultants' fees and authority charges.

This amount is to form the basis for the consultant's fee submission.

5 PHASES OF CONSULTANCY SERVICES

5.1 PHASES TO BE UNDERTAKEN

The consultant is to provide services for each phase in accordance with the details set out below.

The phases applicable to this project will be:

Phase 1	Masterplan Options including Functional Brief involving key stakeholders
Phase 2	Schematic Design
Phase 3	Design Development
Phase 4	Contract Documentation
Phase 5	Contract Administration
Phase 6	Defects Liability Period

5.2 PHASE 1 – FUNCTIONAL BRIEF

This phase involves:

- Masterplan Options
- Preparation of the Functional Brief
- Site due diligence and construction staging sequencing
- Communication and Stakeholder Engagement Plans

5.2.1 MASTERPLAN OPTIONS

The Principal Consultant (Architect) is to prepare a options paper on adjoining land uses and how this might improve Leeton's cultural capacity whilst integrating current scope and budget.

This is envisaged as 2-3 week analysis concurrent with Functional Brief and Site due diligence.

5.2.2 FUNCTIONAL BRIEF

The Principal Consultant (Architect) is to prepare a Functional Brief to articulate and test functional and design requirements and involve development and inclusion of the Schedule of Accommodation and associated details. It will be used to test design options against and to finalise design.

5.2.3 SITE DUE DILIGENCE AND CONSTRUCTION STAGING SEQUENCING

Complete detailed site due diligence including assessment of site constraints such as accessibility of the site during construction.

Review the scope of works from a construction implementation perspective and resolve the broad staging sequencing to support the ongoing operation of the Roxy. This will involve inspection of site and the various work fronts, assessment of these areas in the context of construction access, materials movement in and out, impacts on the operations and development of a programme for completion of the works. Detailed review with Leeton Shire Council is required to discuss and agree the constraints that need to be put in place to deal with the various work fronts and maintain ongoing operation of The Roxy during the construction phase.

5.2.4 COMMUNICATION AND STAKEHOLDER ENGAGEMENT PLANS

Input and involvement will be required in the preparation of communication and stakeholder engagement plans, the stakeholder engagement process and the development of reports to support and implement public communication strategies and the like to assist the project governance team. Consultants will be involved in the preparation and presentation of material for forums as required that will be concurrent with key milestones.

5.3 PHASE 2 – SCHEMATIC DESIGN

This phase involves:

- design sketches for the agreed development option
- the preparation of a Limit of Cost Estimate (Cost Plan C) for the agreed development option, and
- the preparation and submission of planning approval applications. This applies to both architectural and engineering services design.

A Schematic Design Report will be prepared that demonstrates that a thorough analysis of design and engineering service systems has occurred ensuring that the intent of the Functional Brief has been met including the preparation of a Comparison Schedule of Accommodation (comparing briefed to designed areas).

The report will also demonstrate how the performance requirements of the BCA Part J will be met, as well as including studies and recommendations relating to operational issues, such as:

- Cinema and theatre events and activities
- Communications
- Energy Systems
- Fire safety systems
- Maintenance systems
- Deliveries and Loading
- Waste Management
- Catering, etc.

Typical documentation required at the completion of this stage shall include the following:

- Cost Plan C(including life cycle recurrent costs / square metre)
- Development Application documentation, if required.
- Elevations and Sections (1:100 or 1:200).

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- Floor and roof plans (1:100 or 1:200).
 - Building Services systems description (including energy consumption / hour / square metre)
 - Preliminary Room Data Sheets.
 - Preliminary Specification for all materials and finishes (including low maintenance issues).
 - Presentation Standard Perspectives.
 - Site Plan (1:500) including identification of setbacks, built forms, vehicular & pedestrian routes, easements, emergency access routes.
 - Title Survey Plan (if not already provided).
 - Typical Construction Details and Sections for facade, walls, floors and roof (1:100).

A review of the project programme of key milestone dates and procurement method may be required at this phase and, if so, consultants should prepare an updated report on options considered and confirm the recommended project delivery methodology.

The approval of the PCG is required before proceeding to the next phase.

5.4 PHASE 3 – DESIGN DEVELOPMENT

This phase involves the ongoing development and refinement of the approved design by all consultants and the incorporation of all Authority requirements into a design, including those in the BCA Part J. A further Cost Plan (C2) estimate will be prepared to demonstrate that the project is still within budget.

A Design Development report will be prepared that demonstrates that issues of planning, design, materials selection, constructability, building services, (structural, civil, fire safety, mechanical, electrical, hydraulic and energy services) have been coordinated and integrated into the proposal to ensure an effective project outcome.

Typical documentation required at the completion of this stage should be based on the approved Schematic Design developed in more detail. It will include but not necessarily be limited to the following:

- Asset Management Plan (including items listed below)
- Building Services including plant, reticulation, monitoring and control systems.
- Construction sections (1:50) for facade, perimeter wall sections showing finishes at junctions of walls and floors, ceilings, etc.
- Coordinated reflected ceiling plans (1:100).
- Developed Room Layouts (1:50).
- Equipment Briefing Schedules.
- Lift, stair and riser details (1:50).
- Plans, Sections and Elevations (1:100).
- Roof layout and drainage details.
- Room Data Sheets.
- Site Plan.
- Site works and landscaping layouts.
- Review & confirm Cost Plan C (including life cycle & recurrent costs/square metre).

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- Description of the project operations in terms of:
 - users' performance requirements (e.g. low maintenance and low energy consumption)
 - design parameters (e.g. architectural/engineering capacity of structure and systems).

Note: The Asset (or Facility) Management Plan is to be prepared to enable the facility to be managed across its operational life. The Plan will include, but not be limited to:

- an asset register including age, condition, value and supplier data
- operating plan(s) (including cleaning, energy services)
- maintenance plan(s) (including replacement/refurbishment schedules)
- compliance issues e.g. maintenance of essential services
- projected costs for annual (recurrent/ongoing) requirements, e.g. energy or cleaning, and anticipated costs for the life cycle of the facility e.g. major plant or refurbishment of systems.

Approval of the PCG is required before proceeding to the next phase.

5.5 PHASE 4 – TENDER DOCUMENTATION

This phase involves the development of properly coordinated documents, suitable for tendering and subsequent construction either as a lump sum or a number of contracts. The documents, and the project, must have all relevant Authority approvals.

A pre-tender estimate Cost Plan D will also be prepared to demonstrate that the project will remain within budget.

Typical documentation required at the completion of this stage should include but not necessarily be limited to the following:

- Contract including special conditions.
- Cost Plan D
- Specification.
- Tenderer's Brief.
- Working Drawings.
- Program of key milestone dates.

Note: If the adopted project delivery method is non-traditional (e.g. Early Contractor Involvement such as Managing Contractor or Construction Management or a hybrid approach) then contractor procurement will occur earlier in the project.

Approval of the Phase 4 - Tender Documentation by the PCG is required before proceeding to the next phase.

5.6 PHASE 5– TENDER, EVALUATION, AWARD AND CONTRACT ADMINISTRATION

This phase involves the calling, evaluation and awarding of tender(s), and contract administration. It also involves the appropriate commissioning of the building.

Typical documentation required at the award of tender stage should include but not necessarily be limited to the following:

- Bank guarantee
- Contract documents (including Instrument of Agreement, legal contract and technical documents)
- Financial check
- Compliance with OHS, IR and local content requirements

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- Insurance evidence
 - Selection report and endorsement
 - Statutory declaration (comply with Code of Practice)
 - Building Permit, including permits for staged construction or separable portions;
 - Construction issue drawings in electronic format (AutoCAD and PDF) that can be released to the successful Building Contractor for completion of Shop and As Built drawings, as required. Any change to drawings during the Construction Phase is expected to be accompanied by issue of updated CAD and PDF files in time for the building contractor to produce As Built drawings.

The construction phase involves contract administration, and quality management through the construction period.

All consultants must complete the following activities in the construction period:

- Respond to RFI's from the Building Contractor within 2 business days of receipt in writing via email or other agreed method. Note: Formal response to RFI's are by Architects or Engineering instruction only and not in meeting minutes. Site instructions must be followed up with a formal Architect or Engineering instruction;
- Conduct site walks on a fortnightly basis or as agreed with the Project Manager. Take images of as built conditions that may not be visible once complete (e.g. in wall services);
- Conduct detailed defect walks prior to Practical Completion, or at nominated times, as informed by the Project Manager;
- Review As Built documentation, Operations and Maintenance Manuals and Asset Registers and provide confirmation to the Project Manager that all information contained therein accurately reflects what has been constructed and is complete.

5.7 PHASE 6 – DEFECTS LIABILITY PERIOD

This phase involves monitoring the works and having all discovered defects addressed by the Contractor. The consultants shall provide advice and support to the Principal regarding defects, including faulty materials and workmanship. Where the matter is critical to the service delivery functions or occupant safety, the Superintendent shall arrange for the Contractor to promptly rectify the defect. In the case where this fails, the Superintendent, on behalf of the Principal, may arrange for an alternative means to be used utilizing the security retained for this purpose.

The consultants are to arrange for a coordinated report to be provided to the Principal, initially for review and sign off, in sufficient time to be forwarded to the Contractor during the Defects Liability Period.

Post Occupancy Evaluation (POE) is required to be undertaken as part of the project consultancy quality assurance process. It usually takes place 12 months after the completion of the construction and occupation by the agency. The POE shall review the functions and suitability (i.e. fit-for-purpose) in terms of the original brief and shall make comment on:

- assessment of current operations,
- project objectives have been met, and
- the requirements to be considered for future projects.

6 ROLES AND RESPONSIBILITIES – ALL

6.1 ENVIRONMENTAL SUSTAINABLE DEVELOPMENT

The project team and all consultants are to prepare designs and documentation that embody objectives of improved indoor environment quality, low carbon emissions, sustainable transport options, efficient use of water, minimal impact on the local environment and minimising waste to landfill.

The project team shall take a whole-of-life approach to sustainability. The Project Team shall design and deliver systems which support positive behavioural practices from staff and visitors.

The project team shall undertake design and documentation of building systems, materials and engineering infrastructure which are robust and low maintenance and reflect sound engineering design principles. Building design and Engineering systems selected should promote low carbon solutions to reduce the carbon footprint of the facility.

6.2 LIAISON WITH PROJECT MANAGER

Leeton Shire Council will have an internal Project Manager to provide local project management support for the project. In addition, it is proposed to appoint an external Project Manager to provide superintendency services and to provide overall project management of the project team.

The external Project Manager is the primary contact for the consultant team and is the main conduit to the Client. The external Project Manager is to provide technical expertise in the processes of planning, procurement and implementation of assets, buildings and associated infrastructure works.

The external Project Manager will engage, direct and monitor the services, responsibilities and duties of the consultants throughout all stages of the appointment.

All consultants are to liaise with the PCG through the external Project Manager.

Consultants are engaged to facilitate the planning and redevelopment of the Roxy. All consultants are to work as a consultant team to plan and deliver the stated facility.

6.3 VALUE MANAGEMENT AND VALUE ENGINEERING

Value management and engineering processes must be undertaken throughout the project and the Consultants role is to:

- Carry out a documented value management/engineering process with the Project Manager and the Quantity Surveyor at the completion of each design phase;
- Provide a scope of works at each design stage for scope and cost verification;
- Ensure designs and documentation seek best value for money in considering capital and recurrent cost ramifications;
- Ensure that the design solution submitted complies with the budget constraints of the project;
- Consider the lifecycle costs of design and make the Client aware of any aspect of the design that may result in a significant increase in costs over the lifecycle of the project;
- Provide cost reduction options that may be needed to maintain the project cost within budget;
- Ensure that the project remains within the established budget always. If it is the opinion of the Architect/Lead Consultant that increased value for the Client might be obtained by a scope deviation at increased cost, this must be brought to the attention of the Project Manager and direction from the PCG obtained prior to any changes being implemented.

6.4 SAFETY BY DESIGN

All consultants are required to demonstrate that Safety by Design has been considered when developing design documentation. All design and construction methodologies must be of the highest industry standards in relation to OHS and limit all safety hazards as far as reasonably practicable. This relates to demolition, material selection, construction methodology, maintenance and decommissioning / disposal.

Where shown to be required by Risk Assessment, a Safety by Design process is required to be carried out in each design phase. Actions are to be documented and coordinated with drawings which are marked up by each consultant for their discipline. If risks are identified that cannot be mitigated to a satisfactory level within the design, they must be referred to the Client for acceptance prior to being transferred to maintenance operations at the completion of the project.

6.5 MEETING ATTENDANCE

All consultants are required to attend regular (e.g. fortnightly) meetings throughout each phase of the project. Meetings they are expected to attend include but are not necessarily limited to:

- Consultant Team meetings
- Design Team meetings
- Design Review Workshops
- User Group meetings
- Contractor's meetings
- Project Control Group meetings.

6.6 CONSULTANT TEAM MEETINGS

All consultants are required to attend regular Consultant Team meetings (e.g. fortnightly) throughout the design and documentation phases of the project. Consultant Team meetings manage all activities and report on the status of the project to the Project Control Group. The meetings are chaired and minuted by the Project Manager (Consultant) or where there is no Project Manager, the Principal Consultant.

6.7 DESIGN TEAM MEETING

All consultants are required to attend regular Design Team meetings at which all design and technical issues are discussed in detail. Design Team meetings are chaired and minuted by the Project Manager (or Principal Consultant).

6.8 DESIGN REVIEW

All consultants are required to prepare information for briefings and participate in Design Reviews as required by the Project Manager (Consultant) or Principal Consultant.

6.9 USER GROUP MEETING

An intensive programme of User Input is expected. This is achieved primarily through regular meetings with the project User Groups during key stages of the design, documentation and commissioning phases.

User Group meetings determine the performance requirements to be met for each service, within reasonable financial limits. User requirements are subject to the approval of the Project Control Group. The meetings may be used as a checklist for compliance checking of documents, with verifying records produced at the end of each applicable design phase.

All consultants attend as required by the Project Manager or Principal Consultant. The Services Engineer and the Quantity Surveyor attend, with other engineering consultants in attendance as requested. The structure and format should have prior agreement with the Project Manager. The Principal Consultant minutes all User Group meetings and distributes copies prior to the next meeting.

6.10 CONTRACTOR'S MEETING

Consultant Team meetings and Design Team meetings are replaced by Contractor's meetings when construction commences. All consultants must attend as required by the Superintendent. This is generally for the duration of the contract administration phase for their area of responsibility. The Quantity Surveyor is to attend all Contractor's meetings. The meetings are chaired and minuted by the Contractor and held on site if feasible.

6.11 PROJECT CONTROL GROUP (PCG) MEETING

All consultants may be required to attend Project Control Group (PCG) meetings at the request of the Project Control Group or the Project Manager. Project Control Group Meetings are generally attended by the Project Manager, Principal Consultant and Quantity Surveyor, and for the majority of projects, the main Services Engineer is to attend. Other consultant engineers or specialised consultants may be required to attend from time to time, as required by the Project Manager.

6.12 REPORTING REQUIREMENTS

All consultants must prepare monthly progress reports (generally no more than 3 pages in length) for inclusion in the Project Manager's Monthly Report to the Project Control Group. The consultant's progress report should include a brief summary of the status of the work and outline any key issues or critical decisions to be made regarding their area of responsibility.

7 ROLES AND RESPONSIBILITIES – ARCHITECT AS PLANNING & DESIGN

7.1 ENGAGEMENT

The Planning & Design Architect is directly responsible to the Project Control Group, but is under the day-to-day direction of the Project Manager.

7.2 SCOPE OF SERVICES

Generally, in respect of the project: prepare proposals, plans and reports; supply copies of plans and other relevant documents; evaluate information; attend meetings; recommend payments; prepare and supply "as built" documentation; respond to management requests.

Initiate, evaluate and recommend design and construction variations to the project.

7.3 ATTENDANCE AT MEETINGS

The Architect is required to:

- Attend meetings of the Project Design and Construction Team, attend user group meetings and attend meetings of the PCG to report and advise on the project on a regular basis;
- For general meeting attendance requirements for the Architect, reference should be made to the requirements for "All Consultants" above;

7.4 REPORTING REQUIREMENTS

Reporting responsibilities include:

- Preparation of all reports including development reports, equipment lists, as built drawings, asset management plans, post occupancy evaluation and other reports as required;
- For the preparation of monthly reports: reference should be made to the requirements for "All Consultants" above;

7.5 PHASE RESPONSIBILITIES

7.5.1 DESIGN REVIEW

During any review stage:

- Participate in Design Reviews and any other reviews;
- Prepare relevant documentation for presentation by the review team;

7.5.2 SCHEMATIC DESIGN

During the Schematic Design stage:

- Develop the recommended design to preliminary sketch plan stage;
- Review and confirm scope and approved budget with consultant team
- Ensure that the proposed designs from engineering and other disciplines conform to the brief;
- Check that the design conforms to regulations;
- Prepare report to the PCG on progress, including advice on time, cost and quality implications;

7.5.3 DESIGN DEVELOPMENT

Design Development responsibilities of the Architect during this stage are:

- Prepare Architectural plans, sections, elevations and 3D CAD drawings further developing the design approved by the PCG;
- Co-ordinate the development of associated mechanical, structural, electrical and other engineering disciplines to conform to the brief and the approved design;
- Commence the preparation of the specification and contract documentation;
- Commence the preparation of Part J certificates for the building fabric (J1), glazing (J2), building sealing (J3) and access for maintenance (Building fabric & Glazing); co-ordinate the preparation of Part J certificates from the Services consultant for parts J4, J5, J6 and J8;
- Initiate preparation of equipment and furniture lists as appropriate;
- Assist the Quantity Surveyor in monitoring of key decisions made in each discipline in terms of their impact on capital costs of the project;
- Ensure resolution of all outstanding design issues;
- Identify optional items for inclusion in the project;
- Present documentation to enable the PCG to approve completion of DD phase;

7.5.4 CONTRACT DOCUMENTATION

The responsibilities of the Architect in the Contract Documentation Stage shall include the following:

- Complete the preparation of all architectural plans, sections, elevations, 3D CAD drawings and details in clear and co-ordinated format, to enable the construction contractor to efficiently implement the work;
- Co-ordinate the completion of appropriate documentation from engineering disciplines and other appropriate consultants;
- Complete the preparation of the specification;
- Complete the preparation and co-ordination of all Part J certificates to satisfy the “deemed to satisfy” provisions; where the design of any component fails to achieve the “deemed to satisfy” provisions, assist the ESD consultant to undertake performance based assessment;
- Prepare contract documentation to enable tendering to proceed;
- Supply to the Project Manager, copies as requested in pdf format or CAD format on disc, of A3/A4 floor plans, sections, elevations, 3D drawings, details, specifications and other appropriate documents, at pre-tender phase. Hard copies shall also be supplied if requested.

7.5.5 TENDER, EVALUATE AND AWARD

The responsibilities of the Architect during these processes are to:

- Supply all documentation required for tendering to the Project Manager in electronic format;
- Participate in the evaluation and awarding process; contribute as a member of the Tender Opening Panel as required;
- Review all tenders received and prepare tender reports with recommendations to be submitted to the Project Manager;
- Assist as required in detailed assessment and recommendations during any negotiations;

7.5.6 CONSTRUCTION

During project construction the Architect is to:

- Provide advice, explanation and elaboration on the intent of the documented design;
- Provide advice on acceptable alternatives to the design, layout, finishes and standard of finish; and
- Provide recommendations on payments to sub-consultants, contractors and suppliers where requested.

“As Built” Documents

Following project completion, the Architect is to supply “As Built” documentation in electronic and hard copy formats. All documentation on disc, including the work of sub-consultants, contractors and sub-contractors, is to be provided on uncompressed DFX drawing and pdf format, within 2 weeks of Practical Completion. The CAD files are to be provided in the following manner:

- simplified floor plans, sections, elevations, 3D drawings and major engineering services systems suitable for reproduction (without dimensions, drawing notes, fitting or construction schedules, section lines, elevations, construction details, joinery details or similar extraneous information);
- full set of all “As Built” documentation on separate layers (viz: site plan, roof plan, floor plans, reflected ceiling plans, sections, elevations, details, dimensions, drawing notes, fitting or construction schedules and construction / joinery / etc. details. Separate layers are required for equipment, plant and engineering systems and safety/security services;
- furniture, finishes and equipment schedules are to be provided in Microsoft excel format, set out in a format suitable for the client to include on the asset register (e.g. description of the item, date of purchase, model / make Nos., value, expected life, location);
- the data on each disc is to include a complete list of all items, with the items on that particular disc highlighted; and
- all discs are to be clearly labelled with the project name, consultant or sub-consultant’s name, practical completion date, CAD format information, disc name indicating flow plan, etc.

“As Built” drawings shall be based on information provided by contractors and verified wherever possible by consultants, with particular attention to building services.

7.5.7 POST OCCUPANCY EVALUATION

The Architect shall participate in, contribute to and advise on, any POE process.

8 ROLES AND RESPONSIBILITIES – ARCHITECT AS PRINCIPAL CONSULTANT

In addition to being appointed as Planning & Design Architect, the Architect is appointed as Principal Consultant.

The responsibility of the Architect as Principal Consultant will be to:

- Where required, engage sub-consultants, direct and administer the work of the Consultant Team members (sub-consultants) including the certification of their accounts for payment.
- manage and co-ordinate all design documentation for all design disciplines for the project during the planning, design, construction, documentation, equipping, and commissioning stages, to ensure that the agreed scope, cost and quality parameters are met (including those design consultants engaged directly by the Principal);
- Ensure that all engineering consultants provide evidence, including computations, that the design of all elements contained within each individual consultant's discipline has been prepared in accordance with the relevant standards.
- For alteration work or work within an existing facility, ensure that all engineering consultants have examined existing site conditions and have allowed for those conditions in their designs.
- Advise on the scope and content of work to be undertaken by consultants as well as other Specialist Services consultants which may be required from time to time.
- Advise on the program and the consequential planning and construction implementation strategies.
- Investigate existing conditions as necessary to confirm feasibility of proposed design. Co-ordinate the investigation of existing services by the relevant services engineers.
- Co-ordinate the development of the briefs for the design and operation of the Facility. Take responsibility for the preparation of the functional brief, where this has not been otherwise prepared, co-ordinating input from other consultants. Co-ordinate user group consultation.
- Prepare all planning, design and pre-tender construction programs as well as implementation alternatives.
- Liaise and negotiate with Statutory Authorities during the course of the project.
- Ensure designs and documentation seek best value for money in considering capital and recurrent cost ramifications to the client and report to the PCG.
- Undertake duties including carrying out the role of the Superintendent's Representative, where appropriate, for those roles delegated by the Superintendent at his/her discretion. The role of the Superintendent's Representative may include contract administration matters such as directing variations, and issuing relevant certificates. Liaise with statutory authorities and engage Building Surveyor and fire safety engineering services as part of the Principal Consultant team to certify the works.
- Convene all meetings of the Project Team, prepare minutes and circulate to relevant groups and follow up as required to maintain project momentum.
- Attend all meetings of the PCG to report, recommend and advise on matters relating to the project. Prepare minutes and reports for the PCG as directed.
- Assist in calling tenders, assessment and recommendation to the client on acceptance of all tenders for Contractors and suppliers.
- Attend Site Meetings during construction period.
- Review the Contractors construction program and implementation alternatives as may be considered from time to time.
- Advise the PCG on the implications of any deviations by the Project Team and construction team to the agreed program.
- Prepare recommendations on corrective measures to be adopted by participants to maintain the agreed program.
- Monitor and advise the Client on the Contractors' performance generally, with particular regard to time, cost and quality.

9 ROLES AND RESPONSIBILITIES – STRUCTURAL ENGINEERING

9.1 OVERVIEW

Structural engineers must be qualified as specified in the Building Regulations.

The Structural Engineer is expected to provide all structural engineering services throughout the proposed works, including the following components:

- Lift shafts and stairways
- Walls
- Floors
- Columns
- Foundations
- Ramps for disabled access
- Roofs.

9.2 ROLES AND RESPONSIBILITIES

Structural engineers have general responsibilities to:

- Communicate with relevant authorities and obtain all necessary approvals.
- Monitor the project throughout the design, documentation and development phases to ensure conformity with statutory requirements.
- Report any areas of non-compliance to the Project Control Group.
- Prepare designs, documentation, technical advice and estimates that are commensurate in detail with each stage of the project. Provide appropriate design computations for all structural components. For alteration work or work within an existing facility, examine existing site conditions and allow for those conditions in the structural design.
- Develop clear and coordinated construction documentation that allows the contractor to carry out their work efficiently.
- Advise on the location and structural implications of the selection and installation of any specialist equipment.
- Contribute to the preparation of reports for tender documents, asset register, operation and maintenance plan and energy management plan.
- Administer the individual components of the work during the construction stage and issue the relevant completion certificates as required. Carry out site inspections as necessary.
- Maintain quality control systems that ensure all information and documentation provided is complete, comprehensive, up to date, checked and coordinated.
- Liaise with the Project Manager, Principal Consultant and other consultants throughout all phases of the project.

The more specific responsibilities of the structural engineers are to:

- Analyse functional requirements and confirm performance standards to be met by structural elements.
- Ensure adequate stability of all structural elements.
- Identify options and report on the recommended structural systems including:
 - Design, location and size including all interface with mechanical, electrical, hydraulic, communications and security systems.
 - Specifications including testing regimes for materials.
- Coordinate location of all components with other services and architectural requirements.
- Identify all work by others associated with the structural system and define the builder's work.

9.3 SCHEMATIC DESIGN

During Schematic Design the structural engineer is required to carry out the following tasks in relation to their area of professional responsibility:

- Analyse functional requirements and confirm performance standards to be met by structural systems including provision for future development.
- Prepare a schematic design report following a comprehensive assessment of possible alternative solutions including capital development costs of each alternative.
- Provide the Project Manager and Project Control Group with advice and recommendations on issues associated with their area of professional responsibility.
- Ensure the schematic design for their area of responsibility conforms to the scope of work and budget for the project.
- Ensure the structures are adequate for installation, removal and replacement of major plant, equipment or similar loads.
- Continuously monitor architectural, civil engineering and services decisions, drawings and documentation for their functional, capital and/or recurrent cost impact.
- Prepare benchmarks for evaluation of the Schematic Design against comparable projects.

9.4 DESIGN REVIEWS.

Structural engineers are required to:

- Identify areas of high cost for consideration by the Project Control Group at the Design Review.
- Provide cost reduction options that may be needed to maintain the project cost within Budget.

9.5 DESIGN DEVELOPMENT

During design development the structural engineer is required to carry out the following tasks in relation to their area of professional responsibility:

- Resolve any outstanding design issues, including any changes to the Schematic Design required as a result of the Design Review.
- Prepare a report that includes evaluation statements for all major decisions for inclusion in the Design Development Report for the project.
- Ensure design development for their area of responsibility meets the functional requirements of the brief and is in accordance with the project budget.
- Provide any information necessary to identify issues associated with special facilities and/or major plant and equipment.
- Ensure all elements and components are suitably fixed and reinforced where necessary when designing secure facilities.
- Confirm the location and dimensions of all major structural elements for all consultants.
- Provide the Architect with all the information required to finalise Room Data Sheets.
- Prepare draft Specification if required.
- Review all systems to ensure their coordination with all other systems, e.g. architectural, mechanical, electrical etc.

9.6 CONTRACT DOCUMENTATION

During contract documentation, the structural engineer is required to undertake the following tasks in relation to their area of professional responsibility:

- Prepare contract documentation suitable for competitive tendering of the project including:
 - Specifications
 - Documentation
- Ensure that documentation remains within the briefed areas and budgeted cost parameters for the project.
- Ensure that all documents are checked and coordinated in accordance with quality control requirements.
- Ensure tender documentation is available for checking, coordination and costing two weeks prior to the date of tender.
- Liaise with the Project Manager and Architect in the preparation of a construction schedule.
- Establish agreed contract administration procedures with the Superintendent for the proper handling of issues (e.g. variations) that arise throughout the project.
- Liaise with the Project Manager regarding the amount and detail of structural engineering tender documents required for the procurement model to be used.

9.7 TENDER, EVALUATE AND AWARD

The structural engineer is required to undertake the following tasks in conjunction with the Project Manager and other consultants:

- Respond to requests for information.
- Review all tenders received and prepare detailed tender reports and recommendations on the relevant sections.
- Assist in detailed assessment and recommendations during the negotiation period if required.
- Conduct reference checks on contracting firms and ascertain the availability of equipment and replacements if needed.
- Ensure that the successful contractor completes all schedules, programmes, and cash flow before commencing work on the project.

9.8 CONSTRUCTION

During construction, the structural engineer is required to:

- Monitor construction to ensure compliance with project documentation and design intent.
- Provide regular Reports regarding the work's progress, quality and compliance with construction documents.
- Provide any documentation required for the processing of variations.
- Ensure that the client is provided with 'as-built' drawings.
- Respond to Contractor's requests for information and on site queries.
- Amend contract drawings as required during construction and provide "as built" drawings upon completion.
- Examine and endorse all structural shop drawings.
- Check off-site fabrications as required.
- Periodically witness the testing of materials.
- Ensure the preparation of as-built drawings by the Contractor.

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- Make the final inspection and report to the Project Manager.
 - Issue a defects lists at Practical Completion.
 - Inspect the works at intervals during the Defects Liability Period.

9.9 ASSET MANAGEMENT

The structural engineer is to provide a record of all structural design computations required for use in any refurbishment, redevelopment or demolition of the facility.

9.10 POST OCCUPANCY EVALUATION

The structural engineer is required to participate in the Post Occupancy Evaluation of the completed project.