Queensland Government Building Policy Guideline

November 2023

NOTE: Guideline subject to review to align with Queensland Procurement Policy 2026 and suspension of the use of BPICs.

Major Projects
Public Works Division
Department of Energy and Public Works

Queensland Government

Table of Contents

Table of Figures

List of Tables

Part A: Introduction

Purpose

The Queensland Government Building Policy Guideline (the guideline), authorised by the Queensland Government Building Policy Framework (BPF) intends to guide and support Queensland Government employees who are applying the BPF.

The BPF establishes key principles, e.g. planning, delivery, maintenance, performance and technical requirements for growth and renewal, for the effective and efficient stewardship of buildings owned by the Queensland Government.

The guideline will help implement these key principles.

The Department of Energy and Public Works (EPW) is the lead agency for promoting and facilitating adherence to the guideline.

Scope

The guideline and BPF apply to all Queensland Government agencies.

Buildings within the scope of the guideline include, for example, health service facilities, schools, government employee housing, public housing, public-facing service centres, government office buildings and police, corrective and research facilities.

The scope does not include transport corridor infrastructure such as roads, rail, busways, bridges, boat ramps, jetties and other marine infrastructure, or electricity infrastructure such as powerlines and generation facilities.

Public Private Partnership (PPP) projects are not covered in this guideline.[1]

Within this guideline, all dollar amounts are GST inclusive.

Context

Queensland Government agencies that own buildings are responsible for their assets, including planning, delivery, use and any refurbishment or replacement.

The Queensland Government is committed to constructing and maintaining government buildings to support quality local jobs and businesses; drive economic, ethical, environmental and social objectives; generate regional growth; encourage innovation and diversity; and maximise benefits for Queenslanders. This approach includes ensuring quality, safe workplaces for people working on major state government projects by establishing high standards of workplace health and safety, engaging appropriate numbers of trainees and apprentices, and using best practice industrial relations.

Government assets must be designed, built and maintained in line with their intended purpose and lifespan. Understanding the asset lifecycle helps to mitigate the risk of building an asset that is inconsistent with its intended use and purpose. For example, replacement of assets can include, creating new buildings, or developing alternative approaches to service delivery that may not require physical buildings.

Where applicable and relevant to Queensland, AS ISO 55000:2014 Asset Management – Overview, principles and terminology applies to use of the guideline.

[1] Queensland Treasury has specific responsibilities in relation to potential PPP projects. See https://s3.treasury.qld.gov.au/files/paf-supporting-guidelines.pdf

Overview

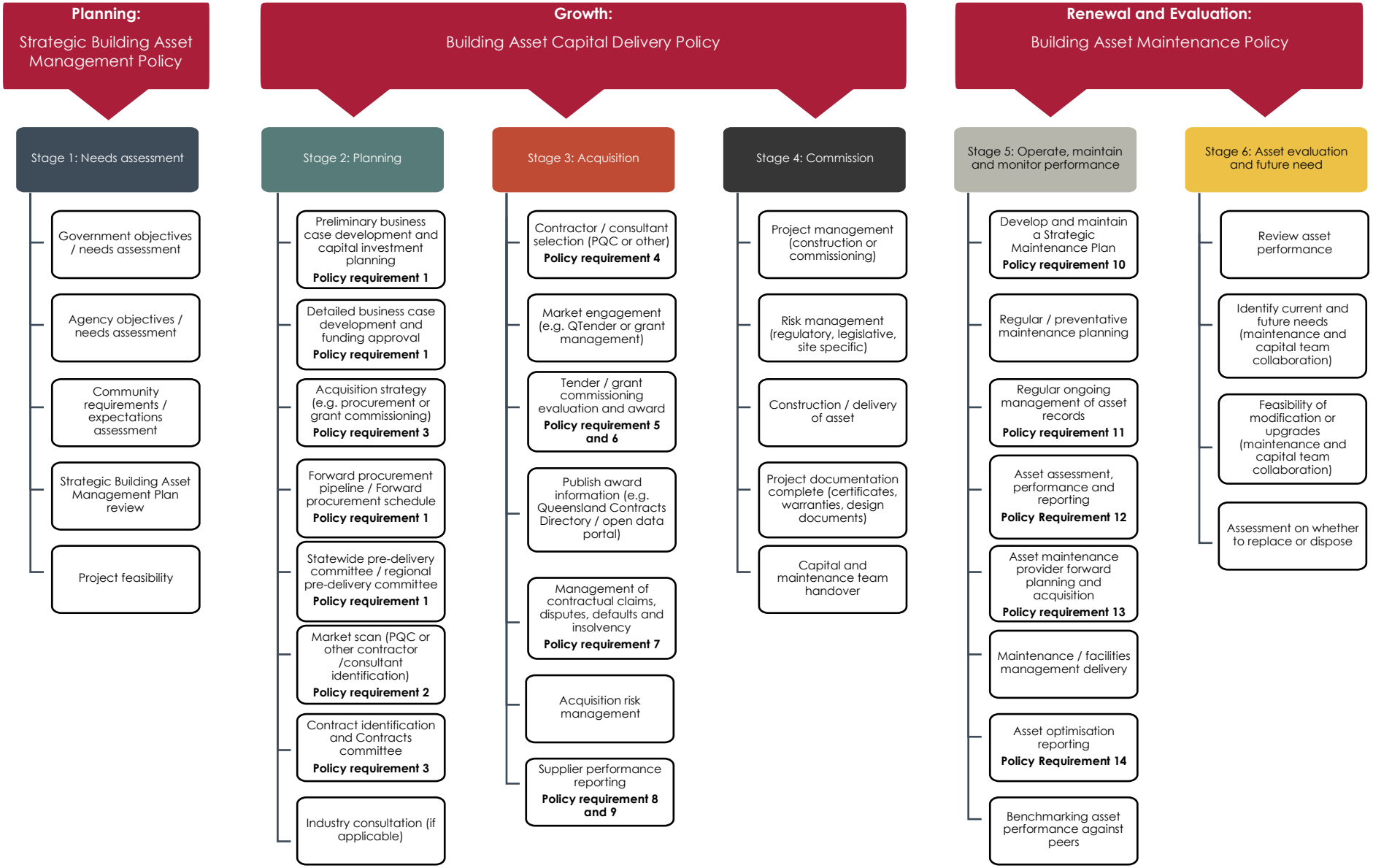
The guideline provides building management practitioners in Queensland Government agencies with:

- scope, risk and processes associated with the Queensland Government Asset Lifecycle Management process: (Figure 1):
  - Part B: Planning (stage 1)
  - Part C: Growth (stages 2, 3 and 4)
  - Part D: Renewal and evaluation (stages 5 and 6)
- details of the policy requirements outlined in the BPF (Figure 2)
- a mechanism for reviewing and amending the guideline.

Figure 1: Queensland Government approach to plan, build and maintain buildings

Text description for Figure 1

Figure 2: Overview of the Queensland Government Building Policy Framework



Text description for Figure 2

Policy requirements

The guideline interacts with several whole-of-government policies. Table 1 shows the key policy requirements that apply to planning, delivering and maintaining government building construction projects.

Government agencies must ensure sound corporate governance by adhering to policy requirements when planning and delivering government building construction projects and maintaining government buildings. Agencies are responsible for ensuring their activities align with policy requirements and relevant legislation.

Table 1: Policy requirements

Policy requirement	Title	Description
Policy requirement 1	Producing a whole-of-government building construction projects pipeline, and provision of advice for certain business cases and government briefing material development	Agencies may consult with EPW, in confidence, during development of business cases and preparation of internal government briefing material for government building construction projects. For Best Practice Principles (BPP) projects, potential BPP projects, and projects with an estimated project cost of $50 million or more, agencies must follow Queensland Treasury's Project Assessment Framework (unless an exemption applies) and must consult with EPW during the development of business cases and preparation of government briefing material. EPW will provide advice on unfunded and funded projects applicable to the agency, workload smoothing or business cases to ensure streamlined and efficient delivery of government building construction projects. To improve visibility of projects for industry and to assist government to maintain a consistent supply of building opportunities throughout Queensland, agencies must provide funded and unfunded project and program details to create a pipeline of whole-of-government building projects. Unfunded project information will be used for internal government purposes.[2] The pipeline information on building projects will be used by: • Statewide Predelivery Committee members to identify opportunities and constraints arising from other Queensland Government building and infrastructure projects • Queensland Treasury when producing and publishing the Queensland Government Budget Paper 3 – Capital Statement and administering the Queensland Government Insurance Fund • Department of State Development, Infrastructure, Local Government and Planning (DSDILGP) when producing and publishing the *State Infrastructure Strategy* • EPW to produce the Forward Procurement Pipeline that identifies upcoming building projects and when industry can expect the release of tendering opportunities.
Policy requirement 2	Delivering consistent due diligence across government through the Prequalification (PQC) System	To ensure due diligence is consistently applied prior to tendering, agencies must use the PQC System when selecting ethical, local and suitably qualified suppliers to deliver Queensland Government building projects. This applies to: • All engagements of a building consultant expected to exceed a threshold set by the government and published in the Queensland Government Gazette (as at 1 July 2021, $60,000 in value or that has a service risk rating of 3 or 4 where the consultancy fee is below the threshold). • All engagements of a building construction contractor or other category of contractor prescribed in this guideline expected to exceed a threshold set by the government and published in the Queensland Government Gazette (as at 1 July 2021, $1 million). • This includes using the PQC System to:

[2] Data is centralised through the Queensland Government Infrastructure Pipeline which EPW will access in partnership with other agencies.

Policy requirement	Title	Description
		– create, maintain and finalise program and project records – identify a High Risk/Significant (HRS) project and service risk ratings – provide up-to-date project and procurement information for publication on the Forward Procurement Pipeline – prepare an eligible tender list – undertake a Financial Capacity Assessment (FCA) of preferred suppliers – complete a supplier performance report to identify superior to poor performance. This may lead to an upgrade of PQC status or a review and sanctions process. For all head contractor engagements on a BPP project, a two-stage Managing Contractor procurement methodology (or two-phase variant) must be used and head contractors and subcontractors must be prequalified.[3] Where there are project specific requirements or constraints that cannot be adequately addressed using a standard two-stage contract, the obligations in Policy Requirement 3 will apply.
Policy requirement 3	Procurement strategy and contract selection	EPW's Chief Contracts Officer oversees the development and maintenance of standard building construction and maintenance contracts (including conditions of offer) for use on all government building construction projects and maintenance programs. This ensures consistency, fairness and efficiency in government's dealings with industry and effective implementation of government's building-related policies. Agencies must follow the EPW published guidance on procurement strategies and contract selection. Agencies must use standard contracts (including conditions of offer) developed and maintained by the EPW Contract Services Unit and currently published on the Queensland Government website for all government building construction and maintenance projects. Where there are project specific requirements or constraints that cannot be adequately addressed using a standard contract, the agency must consult with the EPW Chief Contracts Officer about the proposed procurement strategy and contract provisions ideally during the business case development. Subject to the outcome of the consultation, the agency must obtain endorsement of the proposed procurement strategy and contract provisions from the Contracts Committee. After gaining endorsement from the Contracts Committee, the EPW Contract Services Unit will prepare a contract incorporating suitable terms. Following consultation with the relevant agency, the EPW Chief Contracts Officer may engage external legal services to assist in the preparation of the contract, with the agency responsible for the legal costs. For HRS government building construction projects, where agencies have followed the EPW published guidance on procurement strategies and contract selection, and intend to use a standard contract, the agency must inform the Contracts Committee of the project, including the service risk assessment, proposed procurement strategy and form of contract. For all other HRS government building construction projects, the agency must seek endorsement of the procurement strategy and form of contract proposed for the project from the Contracts Committee. Agencies must provide a list of HRS government building construction projects on a quarterly basis to the Contracts Committee for whole-of-government coordination and reporting purposes.

[3] This is considered in conjunction with the Queensland Treasury-led Project Assessment Framework (PAF) and the requirements of executive government in directing major projects.

Policy requirement	Title	Description
Policy requirement 4	Select list of suppliers	To remove doubt, open tender is the preferred position for government building construction projects; however for various reasons a select tender will be required. To procure through a select tender rather than an open tender, agencies must prepare a select list of suppliers in consultation with the Select Tender Committee Registrar where either: • the building commission exceeds a threshold set by the government and published in the Queensland Government Gazette ($100,000 in value as at November 2020) • the building contract exceeds a threshold set by the government and published in the Queensland Government Gazette ($1 million in value as at November 2020) • the maintenance contract or arrangement (e.g. Standing Offer Arrangement (SOA)) exceeds an estimated $1 million value over its life.
Policy requirement 5	Financial capacity assessment of preferred supplier	Agencies must undertake a formal FCA of the preferred supplier for all government building construction projects exceeding a threshold set by the government and guided by PQC financial requirements.
Policy requirement 6	Tender evaluation plans	For all government building construction projects, including HRS, agencies must prepare a tender evaluation plan. Appropriate feedback to tenderers must be provided. For BPP projects, agencies must consult with advisory groups such as an Industry Reference Group[4] prior to calling tenders on the proposed evaluation criteria and weightings to be used in the selection of suppliers.
Policy requirement 7	Contractual claims, disputes, defaults, and insolvency	The EPW Chief Contracts Officer oversees the management of disputes, defaults, insolvencies and subcontractor's charges on behalf of government, to ensure that rights are exercised and obligations are performed fairly and consistently, to maximise outcomes for government, while promoting a sustainable industry. Agencies must seek ongoing advice from the EPW Chief Contracts Officer about the substantive issues, management and finalisation of any matter concerning a government building construction project or maintenance program where: • there is a contractual claim or dispute that concerns the interpretation of clauses in the EPW standard contracts • there has been a substantial breach of contract that may lead to termination or takeover of the contract • the contracted building construction or maintenance contractor or consultant has become insolvent • a subcontractor's charge has been made under Security of Payment legislation • security that is not in the form of money is proposed to be converted to money and used, or set-off rights are proposed to be exercised to satisfy an amount owing under another contract. Agencies may seek ongoing advice from the EPW Chief Contracts Officer where there is a real risk that the parties to a building construction or maintenance contract will not be able to resolve a claim or dispute between themselves, and the claim or dispute might be referred to adjudication, mediation, expert determination, arbitration, litigation, or other form of dispute resolution. The Chief Contracts Officer will, in consultation with the relevant agency, determine whether external legal advice or services are required and, if so, can engage and instruct solicitors on behalf of the relevant agency. While the Chief Contracts Officer will not charge for providing advice, the cost of any legal engagements will be the agency's responsibility.

[4] Industry reference group established by the Building Construction and Maintenance (BCM) Category Council. Membership of the IRG is noted on the Queensland Government website.

Policy requirement	Title	Description
Policy requirement 8	Supplier performance reporting[5]	Agencies must complete PQC System performance reports for each supplier engaged through the PQC System. These reports are to include information that may indicate supplier financial or managerial stress.
Policy requirement 9	Whole-of-government information exchange	Agencies with responsibility and accountability for administration of the legislation and policies listed below must provide EPW (PQC) with copies of all reports on general compliance by prequalified suppliers and report relevant supplier information to ensure appropriate and proactive due diligence for PQC System registration and agency tender evaluation processes. *Building Act 1975* *Building and Construction Industry (Portable Long Service Leave) Act 1991* *Building Industry Fairness (Security of Payment) Act 2017* (BIF Act) *Disability Services Act 2006* *Electrical Safety Act 2002* *Industrial Relations Act 2016* *Labour Hire Licensing Act 2017* *Plumbing and Drainage Act 2018* *Planning Act 2016* *Queensland Building and Construction Commission Act 1991* (QBCC Act) *Work Health and Safety Act 2011* *Workers' Compensation and Rehabilitation Act 2003* *Queensland Industry Participation Policy Act 2011* Queensland Procurement Policy (QPP) Queensland Indigenous Procurement Policy Queensland Building and Construction Code of Practice Queensland Government Building and Construction Training Policy Queensland Charter for Local Content.
Policy requirement 10	Develop and maintain a Strategic Maintenance Plan (SMP)	Agencies must develop and maintain a SMP that complements each agency's Strategic Asset Management Plan (SAMP) at the relevant times, i.e. during budget development periods. The SMP should: • consider matters including lifecycle costs of the assets, service delivery plans, the age, condition, value, replacement intervals, deferred maintenance, and functionality of its buildings. It should also consider emerging issues that may impact on service potential over short, medium, and long-term timeframes. • plan for minimum maintenance funding of 1 per cent of the replacement cost of the agency's existing building portfolio. Higher amounts, e.g. 3 per cent to 5 per cent, should be planned for heritage buildings and specialised assets on a case-by-case basis. An example of a specialised asset is a cyclone shelter. The SMP must explicitly include provision for proactive and reactive maintenance.
Policy requirement 11	Building asset information record management	Agencies must maintain complete and current records in the agency's building asset management system to inform the ongoing strategic asset management process, including asset condition assessments, technical and asset information, handover and

[5] Asset performance, such as resilience and reliability, is strongly related to asset selection, design and construction. Information should be shared in accordance with policy requirements 8 and 9 for maximising positive impact of public resources.

Policy requirement	Title	Description
		commission, government building maintenance program performance outcomes, and government building asset performance outcomes.
Policy requirement 12	Asset assessments and performance	Key standards such as ISO 55001 provide information about performance evaluation. The various Asset Assessment and Performance Guidelines produced by the Institute of Public Works Engineering Australasia are considered useful documents to meet those standards. At least every three years, agencies must carry out asset assessments to identify defects using a risk managed approach based on the Asset Assessment Rating description in this guideline. Agencies must assess critical government building assets and government building assets affected by natural disasters annually, and as soon as possible after a natural disaster. Asset assessments should include details such as remaining useful life, integrating the information with government building maintenance program history to ensure its SAMP can be implemented in an effective and tactically proficient manner. Agencies should use asset condition assessment standards to determine the appropriate standard required at facility level or individual building level. Agencies must monitor and review government building maintenance program performance, including the: • maintenance program management • maintenance service provider • maintenance outcomes. Agencies must monitor and review government building asset performance, including assessing the: • appropriateness of the government building asset in meeting service delivery requirements • financial impact of the government building asset • statutory compliance risk of the government building asset • effective use of the government building asset as a resource • environmental impact of the government building asset • social significance of the government building asset. While an aspect of the importance of heritage-listed buildings is social, it is not limited to only that aspect. There are other inherent values associated with maintaining examples of government buildings from the past.
Policy requirement 13	Planning government building maintenance program and pipelines	Agencies must enter appropriate arrangements with EPW (QBuild) or other maintenance service providers for the provision of a government building maintenance program. This includes proactive planning, using asset assessment reports and other asset information to develop a forward pipeline of work so maintenance programs can be developed and scheduled to maximise value for money[6] and pipelines of work for trades. Procurement and Maintenance Project Pipeline – agencies must provide the Statewide Predelivery Committee through EPW with estimated funded and unfunded maintenance programs per maintenance sub-category and region. EPW must provide this information to agencies on request, to assist with workload and market smoothing to ensure pipelines of government building construction projects are maximised in impacted communities. Agencies must engage appropriately registered maintenance service providers under the PQC System where: • the value of a government building maintenance program exceeds the threshold requirements approved by the government and published in the Queensland Government Gazette, or

[6] The QPP defines value for money as the best available outcome for money spent. To achieve value for money, relevant government objectives and targets, whole-of-life costs and non-cost factors set out in the QPP must be considered.

Policy requirement	Title	Description
		• the total package of a government building maintenance program from demand assessment through to delivery is outsourced to a private sector maintenance or facilities management organisation. Also refer to policy requirements 3 and 7.
Policy requirement 14	Sustainability indicators	Agencies must ensure their Strategic Asset Management Plan contains key sustainability indicators.

Amendment and review strategy

EPW welcomes feedback about this guideline. Questions and feedback should be sent to BCMSecretariat@epw.qld.gov.au. The guideline is available on the EPW website. All printed copies are uncontrolled. The EPW website should be routinely checked for updated versions.

Part B: Planning

Strategic asset management planning

DSDILGP leads the implementation of strategic asset management planning for all Queensland Government agencies through the SAMP framework and its guidance materials.

This guideline focuses on the parts of the SAMP that relate to government buildings. If there is a conflict between the guideline and the SAMP, the SAMP takes precedence.

Strategic asset management of government buildings focuses on the outcome or purpose of a building and guides decision-making processes over the entire life of the asset (i.e. planning, investment, procurement, management in use, and disposal).

A Strategic Building Asset Management Plan (SBAMP) promotes best practice in the planning, investment/procurement, management-in-use, and disposal of building assets in the Queensland public sector. In practice, the building construction asset class will be included with other asset classes as part of an agency's overarching SAMP.

Best practice requires each agency to develop a SBAMP. The SBAMP must comply with government priorities at the highest level yet ensure attention is given to key asset lifecycle matters such as fit-for-purpose design.

Strategic Building Asset Management Plan

Scope and application

This section assists agencies to develop asset management strategies through the SBAMP to contribute to the best use of assets in delivering services to the community in line with strategic plans, operational plans and service delivery strategies. Asset planning is a cyclical process contributing to the annual State Budget process and other strategic plans required under legislation and government policy.

An agency's SBAMP should complement the agency's strategic plan and provide:

- an analysis of key issues that influence the need for assets
- an examination of the appropriateness of existing assets (owned and leased)
- strategies to:
  - address demand by considering non-asset solutions[7]
  - meet the needs for new assets
  - achieve and maintain the level of performance for service delivery needs
  - dispose of assets no longer required.

Risks

Ineffective strategic planning for building assets can have unintended consequences, such as:

- failing to align with or support government, agency and/or community objectives, priorities and service delivery expectations
- insufficiently defined or communicated strategic direction
- building asset lifecycle management not regularly reviewed in response to changing strategic and operational contexts
- a building asset portfolio unable to adequately support service delivery.

Process

The implementation of effective SBAMP processes assists to:

- identify short and long-term asset-related needs to sustain service delivery in line with government expectations

[7] Examples are innovative models of service delivery such as telehealth implemented by Queensland Health.

- recognise emerging issues and risks
- develop an effective internal control structure
- increase the capability of agencies to incorporate a lifecycle approach to building planning and management, consistent with other plans required under legislation and government policy
- make more effective use and maintain existing building assets
- better allocate resources.

The SBAMP process for buildings should:

- conduct a strategic review of the building asset portfolio each year or after the strategic plan is updated to:
  - develop management strategies for building investment and procurement (including upgrades and refurbishments), maintenance or disposal
  - support strategic and operational plans and whole-of-government reporting requirements under the SAMP framework
- determine the agency's building asset needs, with all supporting information to be documented.

When initiating an agency SBAMP, the asset planning process should be based on needs identified through strategic and operational planning processes, such as:

- process inputs including:
  - service delivery requirements and strategies
  - previous SBAMP or similar building asset documentation
  - the relevant SMP
  - building management plans
  - financial and risk management plans
  - building performance information (records on the asset base should include details on both owned and leased property)
- process controls including:
  - agency-specific legislation and administrative arrangements
  - financial and accounting legislation
  - relevant government policies
- process mechanisms, including processes and systems that support asset management and service delivery (e.g. financial management systems, asset registers and business systems that enable the development of the SBAMP and documentation of stakeholder consultation and approvals).

When preparing a SBAMP, the following information should be considered:

- service delivery objectives, strategic and operational plans, and potential influences on the asset management environment
- optimum asset base required to support service delivery
- any non-asset solutions/non-build scenarios.

The SBAMP should ensure agencies:

- classify government building assets
- establish performance indicators and measures to assess building asset performance
- link building asset performance to service delivery objectives
- determine performance targets or benchmarks
- establish and maintain capacity to manage building asset performance
- review performance periodically.

The SBAMP process should undertake a gap analysis by identifying current and future asset needs and any asset base adjustments required, supported by:

- access to all relevant information on existing building assets
- knowledge of service demand trends
- awareness of the agency's strategic direction and objectives
- application of appropriate planning tools and methodologies – e.g. project management methodologies, cost-benefit comparisons, sensitivity analyses and other techniques suggested in the Project Assessment Framework (PAF).

If there is a conflict between this guideline and the PAF about the interpretation of strategic asset management planning, the PAF takes precedence.

The SBAMP should develop strategies to meet service delivery objectives identified in the analysis stage, to address demand by considering:

- non-asset solutions, e.g. sharing accommodation with other agencies or renting from the private sector where an adequate private rental market exists
- solutions that involve new buildings (using various investment and procurement strategy options)
- disposal or transfer strategies
- optimising building performance to ensure efficient and effective function and/or use.

The SBAMP should consider:

- adopting a lifecycle (or total cost of ownership or whole-of-life) costing approach to quantify the total cost of procuring a building
- engaging with stakeholders to determine opportunities for:
  - optimising the buildings' operational efficiency
  - integrating planning provisions (e.g. planning schemes, land use constraints) and demand-management strategies in decision-making processes
- articulating any key assumptions to facilitate a review of the strategic asset planning process for continuous improvement.

The process of compiling the SBAMP should:

- analyse key issues that influence the need for assets
- examine the appropriateness of existing assets
- develop strategies and identify funding implications to:
  - meet the need for new assets
  - maintain and achieve a level of building performance appropriate for service delivery
  - dispose of assets no longer required
- document the SBAMP by:
  - seeking comments and, if relevant, agreement from stakeholders before submission of final documents for senior management approval
  - including a provision to review and update the SBAMP each year.

Implementation

Agency SBAMPs should provide input into:

- the overarching SAMP for the agency
- project evaluations, including business cases and formulation of capital delivery programs
- the State Budget process (the agency SBAMP should be used to inform budget submission to seek funding through the annual budget process)
- SMPs
- asset disposal plans
- other specific-purpose plans required under legislation and government policy.

Monitoring and reviewing

Agencies should regularly review their SBAMPs to:

- ensure alignment with government priorities and policies
- confirm that building strategies for achieving and maintaining building performance are appropriate and relevant to operational requirements.

The review process should evaluate strategic asset planning strategies by considering if:

- the building asset is effectively supporting short and long-term service delivery
- the SBAMP is consistent with other agency-specific plans required under legislation and government policy
- improvements can be implemented to ensure effectiveness and consistency with government policy
- building asset performance information has been used to assist the asset planning process.

Lifecycle planning

Scope and application

The asset lifecycle covers the planning, investment, procurement, management in use and disposal of assets to best meet service delivery needs and potential, and to manage risks and costs over the life of the asset.

Best practice asset management is achieved by adopting a lifecycle approach, which uses transparent, informed decision-making processes.

Agencies are required to demonstrate sound analysis of project proposals when making submissions to government. This information is presented in a business case. Guidance on assessments related to the priority and affordability of project options and whether to develop a business case is available in the PAF Preliminary Evaluation guidance material.

Risks

Unintended consequences of not undertaking lifecycle planning include:

- failure to achieve optimal balance of operating and maintenance costs attributable to the use of the building relative to capital delivery investment and procurement costs
- capital costs being minimised without knowledge of the consequential impact on lifecycle costs
- deficiencies in asset planning and management processes which could result in assets that are inefficient to operate and maintain
- difficulty in determining whether refurbishment/renovation or an addition to a building will deliver better value for money than continuing to maintain a building no longer suited to its function or purpose
- inappropriate strategies for asset utilisation over the expected remaining life of the building.

Process

Lifecycle planning is a key asset management concept that considers the whole-of-life implications of acquiring, operating, maintaining, and disposing of a government building asset. It should be used when making decisions at both strategic and operational levels of capital delivery investment and building management.

The objectives of lifecycle planning are to:

- determine the total cost of ownership and operation of an asset to ensure service continuity
- establish a sound basis for decision making by evaluating the total cost of any investment decision, rather than just looking at the short-term impact or the initial capital costs
- identify the impact of refurbishment and maintenance decisions on asset disposal plans.

The lifecycle plan

Agencies should have an adequate lifecycle plan for each building that supports the agency's objectives. The plan should include, at a minimum:

- initial capital cost, including direct costs, such as fees, installation and the Asset Replacement Value (ARV)
- expected total life (in years) before full replacement (or, if this cannot be assessed, the facility's design life)
- estimated annual maintenance and operating cost of the building, referring to the SMP (which feeds into the agency SBAMP and SAMP) and estimated operating pattern
- expected timing and costs of major repairs, overhauls or refurbishments scheduled on an annual basis
- key assumptions used to identify the preferred option for timing and costs of repairs, overhauls, or refurbishments.

Lifecycle planning decisions

Lifecycle planning should guide decision making for each phase of the asset's lifecycle, including planning, investment and procurement, management in use, and disposal.

Planning considerations include:

- identifying management strategies, which could include the need for the asset
- referring to key policy documents, including the PAF, which address strategic planning assessments applicable to government building construction projects and the Business Case Development Framework (BCDF) in the preparation of proposals.

Investment and procurement considerations include:

- defining the need for the asset, such as:
  - service need
  - level of service/expected levels of service
  - demand analysis/projected demand
- evaluating the full costs and benefits associated with the project including value for money considerations as defined in the QPP
- testing viable alternatives, including the option of maintaining the status quo
- proceeding with the preferred option where it can be shown that benefits exceed costs
- evaluating feasibility of proposed projects, including an assessment of future uncertainties
- using a sensitivity analysis[8] to identify variables that may have a significant impact on project outcomes
- evaluating a range of scenarios, e.g. cost movements, demand, and demographic changes
- considering current and foreseeable market capacity challenges through supply market analysis and market sounding
- referring to the PAF Cost-Benefit Analysis for detailed information
- undertaking a detailed risk analysis of the financial, economic, budget, social and environmental impact of each option, to identify whether a new building, building refurbishment and/or alterations is the most appropriate. This analysis should be reflected in a business case which informs a decision on whether a government building construction project should be undertaken and, if so, which option represents best value for money
- determining the procurement method once the project and funding are approved.

Management-in-use considerations include:

- applying value for money principles when planning for maintenance and expenditure
- ascertaining if it is more economical to upgrade, replace or refurbish buildings rather than continuing to make repairs
- assessing the merits of proposals and test alternatives in terms of scope and timing by using lifecycle costing
- assessing the timing and extent of required refurbishments or enhancements through lifecycle planning, using building asset performance information such as:
  - broad scope and application of building asset performance management
  - key principles and elements necessary for effective management of buildings
  - operational costs and other aspects that influence the performance of an asset[9], such as annual operating cost, including:
    - ICT services
    - utilities including electricity supply, water supply, waste management services, gas, and fuel supplies
    - miscellaneous services including cleaning and hygiene services, security, health and safety, landscaping and gardening services, rates and statutory charges, building management services.
  - annual maintenance cost, including:
    - agency management/administration (including computerised maintenance management systems)

[8] Sensitivity analysis will identify variables that have the greatest impact on financial viability and areas which may require additional investigative work to ensure the validity and robustness of assumptions and of the outcomes of financial analysis. It may also assist in identifying key areas of project risk which may require initiative-taking risk management. It is therefore a key element in the financial evaluation of a project.

[9] That is capacity, functionality, location, condition, remaining life, statutory compliance risk, utilisation rate, and any department-specific, service-related performance indicator.

  - condition assessment
  - proactive maintenance (preventative, statutory and condition-based)
  - reactive maintenance
- deferred maintenance cost, including estimated cost of all maintenance work that has not been conducted within a financial year and is deemed necessary to bring the condition of the building asset to a required standard or acceptable level of risk
- estimated costs of operational and other aspects that influence the performance of an asset (e.g. capacity, functionality, location, condition, remaining life, statutory compliance risk, utilisation rate, and any agency-specific service-related performance indicators)
- periodic reviews of current and projected building asset performance to detect any changes, so plans can be made for either refurbishment, replacement, or disposal of the asset.

Disposal considerations include:

- Queensland Government Land Transaction Policy (QGLTP) requirements
- disposal based on decisions on service delivery and any agency obligations related to cultural heritage significance, community attachment or other government priorities
- SMP adjustment when an asset is to be disposed, so that only statutory maintenance is undertaken
- assessment of optimal timing and alternative methods for the disposal of an asset by using lifecycle costing techniques, noting some methods may incur capital expenditure to prepare the asset for sale.

Risk management

Scope and application

Risk management applies at every phase of a building asset lifecycle, including planning, investment, procurement, management in use, and disposal, and at the strategic management of a building portfolio. Risk, often specified in terms of an event or circumstance and the consequences that may flow from it, is measured in terms of the likelihood or probability of an event, and the potential consequences.

Risk management is an iterative process that should be embedded into existing practices by:

- establishing the context of risk management including identifying risk type such as operational or reputational risks
- setting the scope and boundaries of the application of risk management
- developing risk criteria
- identifying, analysing, evaluating, treating, monitoring, reviewing, and communicating risks associated with relevant activities, functions, or processes.

Risks

Without an appropriate risk management regime for project planning and delivery and the maintenance and disposal of building assets, agencies may fail to:

- recognise and manage risks associated with building health, safety, security and functionality
- avoid or mitigate the impact of natural disasters
- identify opportunities and threats and establish a rigorous basis for decision making and building planning
- manage the risk impacts associated with perceptions of stakeholders and the community relating to government buildings, government services and client/supplier relationship between the government and industry.

Process

Risk management is a systematic process to identify, analyse, assess and treat risks that may affect an organisation's objectives.

For risk management to be effective, agencies should integrate and align their agency's objectives, priorities, and strategic direction with the principles in the AS ISO 31000:2018 Risk management – Guidelines.

The risk management process should:

- ensure all potential risk events are appropriately identified, communicated and consulted with stakeholders including:
  - other government agencies
  - building users/occupants, service planners and building managers
  - maintenance service providers
  - building consultants and contractors
- harness risk identification tools and techniques including checklists, flowcharts, scenario analyses, studies, and engineering techniques
- analyse risks, identify existing process controls that minimise the likelihood of a risk event and consequences, along with mitigating factors that could reduce the nature, frequency, or damaging effects of such events
- evaluate risks, making decisions based on:
  - analysis related to risk treatment and treatment priorities
  - risk criteria established in the first stage of the risk management process
  - the asset's criticality to service delivery and the complexity of buildings in the agency's portfolio.
- conduct condition assessments, noting agencies must conduct such condition assessments for all Queensland Government buildings at least every three years, or more frequently depending on the nature of the building, its building elements, and services
- treat risks, determine and assess treatment options for unacceptable risks, and prepare and implement risk treatment plans by:
  - risk sharing or transfer, with responsibility for management of certain risks shared with or allocated to another party through contractual agreements, insurance or other means
  - risk avoidance, with an informed decision to eliminate the risk, e.g. cancelling a project or seeking alternative methods of project procurement
  - risk reduction, with appropriate techniques and management approaches selectively applied to decrease either the likelihood or the negative outcomes of the risk, e.g. having a backup diesel generator for a health service facility to lessen the impact of power outages, or incorporating specific design solutions to address identified changes in climate.

Compilation of the risk management plan should consider:

- management components and resources to be applied to the management of risk
- how risk management is conducted throughout the organisation
- the responsibilities and the strategies to identify and manage risks
- prevention, detection, and management responses to identified risks related to the planning and delivery of projects.

The risk management plan should reflect risk management plans for buildings in the agency's strategic and operational plans.

Once implemented, the risk management plan should be monitored and reviewed regularly. It may be necessary to repeat the risk management cycle if factors affecting suitability or cost treatment options change significantly.

Part C: Growth

Building asset capital delivery

The following sections provide guidance on elements of the building asset capital delivery and describe the operating environment and the various stages.

Capital investment, procurement planning and project delivery

Scope and application

Capital investment and procurement planning are the foundations for delivery of government building construction projects. This planning incorporates defining capital investment projects, preparing budget documentation, and formulating investment and acquisition plans. Project delivery involves the development of a project brief, selecting a procurement strategy for consultants and contractors, procurement activities, design, construction, and handover.

Well structured investment and procurement planning and project delivery processes aid sound capital acquisition planning, budget documentation, compliance and delivery of capital delivery projects and programs.

The QPP identifies all procurement must be planned and must achieve value for money. The extent of planning undertaken must be commensurate with the value, risk and complexity of the procurement.

Agencies should consider the above elements in conjunction with planning processes for non-building assets and other resources which include people and information assets.

Risks

A coordinated process for capital investment planning, procurement planning and project delivery can avoid exposure to risks associated with:

- health, safety, and security of buildings
- building suitability to service delivery needs
- environmental impacts of buildings, by ensuring these impacts are addressed in the most practical and cost-effective way
- public confidence in the government's ability to provide services effectively and efficiently.

Process

Capital investment planning

Capital investment and procurement planning should begin when strategic asset planning identifies the need for a new building or improvements to an existing building. Capital investment and procurement planning involves the following key activities:

- defining capital investment projects
- preparing budget documentation
- formulating programs
- reviewing building performance.

Planning and subsequent management considerations should include:

- evaluating capital investment and procurement options and strategies developed during strategic asset planning, to ensure they provide value for money and meet service delivery needs
- formulating capital delivery projects and programs for new government buildings or improvement to existing government buildings to increase performance (considering factors such as capacity, condition, utilisation rate, operating and maintenance efficiency, and extension of useful or economic life)
- delivery of capital delivery projects and programs.

Defining capital investment projects

Capital investment projects should be defined by:

- reviewing service delivery strategies
- evaluating asset options for service delivery
- developing project proposals.

The PAF provides methodologies and tools to support agencies to prepare strategic assessments and develop business cases (including the assessment of broader economic implications), funding frameworks and other processes.

The evaluation of asset options requires consideration of all implications of the asset options, including the implications of land acquisition. Agencies should consult the Department of Resources for guidance if native title issues could affect an asset option.

Analysis of options should include an assessment of:

- financial, economic, environmental and social risks and impacts
- any other identified risks or impacts as outlined in the PAF Cost-Benefit Analysis and the BCDF.

The options analysis should be consolidated in a report to enable a decision on whether to proceed to developing a complete business case. The business case should include realistic estimates of capital, operating and maintenance costs over the expected life of the assets.

Identifying the best option for project delivery should be guided by resources including:

- the PAF
- the BCDF
- the Queensland Public Private Partnership Supporting Guidelines.

Queensland Treasury should be involved from the earliest stage of assessing projects, particularly if there is potential for private finance.

Preparing budget documentation

Preparation of budget documentation involves:

- producing project bids that include sufficient detail to enable government decision-makers (such as the Cabinet Budget Review Committee or other government committees) to reach an informed decision regarding whether to approve the proposed project
- providing forward estimates by:
  - using initial cost estimates from the project budgets as the basis for cash-flow estimates for capital delivery projects (consider the application of the PAF and the requirements for confidence levels with cost planning)
  - using forecasts for escalation in building costs
  - declaring the confidence level of the building estimate when developing estimates for government building construction projects
- compiling budget submissions (through normal processes in each agency to assemble budget submissions for detailed discussion with relevant Queensland Treasury contacts).

Formulating programs

Developing a capital acquisition plan is the final phase in the project development and program formulation process. Agencies should consult with EPW if a whole-of-government approach is required to ensure the delivery schedule and procurement methodology benefit the government and the community.

Project delivery

Specific responsibilities relate to key stages of project delivery for government building construction projects. These key stages include the project definition, procurement strategy, contract selection, consultant/contractor selection, design and construction, and handover. Responsibilities include:

- the use of standard contracts
- selection of the procurement strategy and form of contract for all HRS projects
- the business area or procurement function developing a procurement strategy to deliver intended business outcome (implying for all types of procurement)

- assessing complexity, scope, opportunities, and risks associated with procurement objectives, and the level of competition in the supplier market
- identifying the procurement strategy and method (open, limited or selective) to be used to approach suppliers
- selection of prequalified consultants and contractors
- monitoring and reporting (of performance of prequalified consultants and contractors directly engaged by agencies):
  - financial and management risks
  - compliance with workforce management legislation and policies
- development and implementation of a legislative compliance strategy for each government building construction project, commensurate with risk level and cost
- undertaking commissioning and handover
- conducting a project review (comprising the building performance review / post-occupancy evaluation (POE) and process review stages), recognising the extent of the review will be influenced by the scale, risk and strategic importance of the project and the service program
- consider conducting a project review concurrently with the handover process, as commissioning and handover activities provide valuable information on project processes and outcomes.

Note, agencies may decide to explore the Modern Methods of Construction (factory built) process to deliver solutions that are more efficient.

Agencies are required to consult with EPW when:

- developing the business cases and the preparation of government briefing material for BPP projects or potential BPP projects
- seeking to depart from using a standard contract, the agency must consult with the Chief Contracts Officer (EPW) about the proposed procurement strategy and contract provision, and subsequently the agency must consult with the Contracts Committee
- selecting a procurement strategy and form of contract for all HRS building projects, where applicable, prior to the finalisation of the business case
- using a select tender list for a building contract on government building construction projects of more than $1 million
- using a select list for maintenance contracts that are more an $1 million over the life of the contract
- using a select tender list where a building commission on a government building construction project exceeds $100,000
- preparing a tender evaluation plan before calling tenders on all HRS building projects; and
- there is major disputation, litigation, or insolvency.

Business Case Development

The Queensland Government uses business cases to inform infrastructure investment decisions that affect Queensland's economic and social domain. Such decisions require quality proposals, well developed business case documentation, and transparent and robust assessment processes.

The BCDF ensures a consistent and rigorous approach to proposal development, enabling decision-makers to compare investment opportunities. Further guidance on business case development can be sought from DSDILGP.

It is important to note that under BPF Requirement 1 – Producing a whole-of-government building construction projects pipeline, and provision of advice for certain business cases and government briefing material development, it stipulates agencies must consult with EPW during development of business cases and preparation of government briefing material for BPP projects or potential BPP projects.

Agencies may be required to use project validation report methods, and should contact DSDILGP for guidance.

Bundling and scheduling of medium and lower value government building construction projects

Scope and application

The purpose of this section is to provide information about the centralised program and project coordination initiative. It will facilitate procurement of government building construction projects in a way suited to characteristics of the market in which projects are located.

The workload-smoothing role involves staging or sequencing procurement and building project delivery processes to remove or minimise high and low levels in resource demand over time. Smoothing of program and project delivery will provide building industry contractors with opportunities to offer continuity of work to individual employees and trade contractors.

Process

Coordination of procurement for medium and lower value projects

Agencies managing the procurement of medium and lower value projects should:

- determine bundling and scheduling during the program formulation phase of the capital delivery process
- centralise and coordinate workload smoothing and program management before government building programs and projects are rolled out (noting that EPW will consider the economic situation in Queensland regions and, if appropriate will liaise with agencies to centralise and coordinate workload smoothing)
- ensure tenders for government building construction project delivery are:
  - bundled for concurrent or sequential construction (where the nature of the works and/or geographical location of the projects means this will be a more effective use of limited resources)
  - scheduled in light of regional, trades, or supplier pressures
- use local sources, where relevant, to verify scheduling and bundling opportunities and to aid broader stakeholder participation and engagement
- secure support and cooperation for each proposal, ensuring there are no compelling reasons to use a different approach
- apply for exemptions, if applicable, recognising that timing to meet the agency's critical service delivery objectives should prevail over an optimal regional approach to procurement.

Benefits of bundling and scheduling

Bundling and scheduling medium and lower value government building projects will increase potential to meet government building capital delivery program priorities (providing value for money while meeting critical service delivery objectives).

Project definition

Scope and application

This section focuses on the project definition stage and the development of a project brief. It provides an outline of pre-design studies and accommodation guidelines and their context in the project definition stage. The project brief provides project managers and design teams with detailed information that is used to translate the project outcomes into successful building designs.

The objective of this section is to provide best practice guidance to improve the ability of government agencies to undertake the project definition stage of project delivery, considered in conjunction with requirements of the PAF. The PAF takes precedence over this guideline if there is a conflict in the terms of interpretation for undertaking project definition.

Project definition is the process of assessing the client operational needs and documenting them clearly and comprehensively. The outcomes of the project definition process are summarised in the project brief, which defines all elements of the project, that is consistent with the project and budget objectives and service delivery outcomes, and can be used as a benchmark to measure the quality of outcomes once the project is completed.

Risks

The lack of a well defined and documented project brief may result in cost and time overruns, and potentially deliver a building that is not fit for purpose. Client expectations may not align with project outcomes.

Process

The project definition stage encompasses pre-design studies and the preparation of the project brief. The scope of pre-design studies required will depend on the size, nature and complexity of the project.

Accommodation guidelines should be developed at a portfolio level to ensure that new and refurbished facilities are designed and constructed to particular standards or layouts.

Project development

Project development requires preparation of:

- business cases for individual projects in the project evaluation phase
- capital delivery programs for which provision has been made in the State Budget during the program formulation phase.

Competencies and resources

Developing and executing pre-design studies and preparing project briefs and accommodation guidelines requires a high level of technical and professional expertise. The competencies required to undertake the project definition phase of project delivery comprise skills including:

- facilitation and negotiation
- needs analysis
- project management
- project development
- value management.

Project definition

Development of the project definition is considered in conjunction with the requirements of the PAF and it should consider:

- undertaking pre-design studies
- preparing the project brief.

The client's needs and requirements should be detailed and the appropriate standard for the design should be established in the project brief in the project definition stage.

The project definition stage is finalised with development of a project brief that provides project managers and design teams with adequate detailed information that can be translated into successful building designs for further development in the project delivery phase.

Project brief

The project brief is developed based on the business case. A suggested structure for project briefs is:

- introduction (providing a general outline of the nature and purpose of the project and the people and organisations taking part) including:
  - project identity
    - project name, including the project title, location and street address, and PQC service risk rating
    - an introduction and description of the project, including ownership of land or buildings
    - identification of the management structure, client and project team
  - objectives and scope of the project
    - project objectives describe in general terms the agency's aims and requirements identified in the project evaluation phase as documented in an approved business case (note that these aims and requirements will be explained and analysed in more detail in later sections of the project brief)

    - project scope describes the scale of the project and any cultural, historical, technical, and environmental requirements
    - a statement of purpose of the project brief describes how the asset will be used by relevant parties in subsequent stages of project delivery
  - participants and related groups
    - provide a list of all parties/stakeholders involved in project delivery, and a brief description of the authority, responsibility and role of each stakeholder group
    - identify other related groups such as state and federal government agencies, local government authorities and other groups and people with special interest, and their consultants
    - a diagram identifying each participant and stakeholder, illustrating relationships between parties and the lines of communication
- context, aims and resources (information on the context, aims and resources of the agency and user groups) including:
  - project management
    - define the organisational structure and process to achieve a comprehensive understanding of the agency's needs and aims
    - a preliminary project delivery strategy proposing a procurement method
- legislative and policy requirements
  - laws, regulations, standards, codes, and policies, such as the relevant town planning scheme, the *Planning Act 2016,* the *Anti-Discrimination Act 1991,* as well as other relevant legislation and policies identified in pre-design studies
- financial and programming aspects
  - financing, including funding sources identified in the business case and capital investment plan
  - project budget, including projected cash flow for the project
  - key program dates and project timelines
- background
  - outline previous planning for service delivery and summarise relevant aspects of the agency's corporate plan, and development of service delivery and resource strategies previously undertaken, with reference to identified needs for building elements incorporated in asset strategies
  - outline the conclusions of pre-design studies such as master planning, value management studies and engineering service reports
  - describe the impact of any previous government or agencies decisions on the project objectives and purpose
  - provide a summary of the outcomes of consultations with the client and user groups, stakeholders, and the public
  - detail studies undertaken for site/location selection
- occupancy and use
  - provide a detailed analysis and description of the functional requirements of activities and services that need to be performed to address project requirements, and identify equipment required to perform these tasks
  - identify aspects of activities that require special consideration in the design
  - identify potential competing priorities and requirements and establish a basis for reconciling any potential issues
- design and performance requirements – identify specific design and performance requirements relating to the physical aspects of the project site and building requirements, including:
  - location and site:
    - detail any project related work that may be required outside of the project site boundaries and other projects that need coordination (e.g. road upgrades, or development work on neighbouring sites)
    - details for emergency supply of utilities in case of failure
  - functional performance and requirements:
    - functional spaces required in and around the building

  - minimum area requirements for each functional space
  - desired groupings and their respective functional relationships
  - quality objectives and standards to be incorporated in design and construction
  - details of requirements relating to the site and building (e.g. physical characteristics, circulation and access, safety, environmental, communications, security, appearance, artwork and operational aspects of the building, including cleaning and maintenance)
  - general planning and design principles that may be established by the agencies policies as defined in relevant Government accommodation guidelines
  - space data schedules, including descriptions of functions and relationships, and planning and fitout requirements
- technical and environmental performance requirements relating to:
  - health, safety, and security
  - heating, cooling and ventilation
  - lighting and acoustics
  - plumbing and electrical
  - materials
  - information technology (IT) (detail the assessment of strategies for IT hardware, software, operations, networks, and the impact these may have on the building and its design)
  - a detailed assessment of new and existing equipment to be accommodated and used in the building. All equipment should be identified on space data sheets (previously referred to in functional performance requirements in design and performance requirements)
- economic performance requirements:
  - consider the economic performance of the built asset as an investment and its operation in delivering the agency's services. Capital and recurrent investments as well as investments in human resources, equipment and furniture should be considered in identifying applicable resources and local availability/supply chains.
  - consider whole-of-life issues by undertaking assessment relating to all recurrent costs associated with building management and maintenance for ongoing provision of the agency's services, such as costs associated with building occupancy and operations, leasing and lease management, workplace health and safety, maintenance, disposal planning, and ecologically sustainable development
- symbolic performance requirements
  - describe the agency's aspirations for the building's aesthetic and image-related characteristics and how the building relates to the public and private domains of the community)
- Building Information Modelling (BIM) requirements
  - BIM requirements should be developed in accordance with Digital Enablement for Queensland Infrastructure – Principles for BIM Implementation
  - these requirements should specify how BIM is to be used and managed on the project and prescribe BIM deliverables at relevant project milestones.

Accommodation guidelines

The accommodation guideline is an agency's guide to the design policy for the construction or refurbishment of built assets and for specifying building components and services. It is a primary document that describes the agency's generic accommodation requirements and specific building needs.

Accommodation guidelines should be developed at a portfolio level where there is an agency need to ensure that new and refurbished facilities are designed and constructed to relevant standards or layouts. Accommodation guidelines should be part of a continuous improvement process, with design improvements incorporated in one building design able to be incorporated in future designs due to their reflection of the guidelines.

Agencies should ensure accommodation guidelines include:

- an introductory statement outlining the document's purpose and scope, and the agency's design philosophy

- guidance on how to use the accommodation guidelines in developing project briefs for specific project details of broad planning and design principles
- a detailed accommodation schedule, complete with functional diagrams and individual space data sheets
- detailed and technical information to be read in conjunction with individual space data schedules, details and plans relating to typical buildings and building details.

Agencies that are planning capital building projects that include fitout for government office accommodation should refer to EPW office fitout guidelines.

Estimate categories and confidence levels

Scope and application

Agencies should aim to improve the quality of building cost estimates associated with government building construction projects. Confidence levels are determined through the application of the standard estimate categories outlined in Table 2.

Each estimate category reveals basic information about how and when the building cost estimate was compiled and how it should be used, including the level of confidence project stakeholders should have in the estimate.

Queensland Treasury's PAF provides guidance for cost planning using confidence levels. For example, it provides guidance for a preliminary stage of cost/analysis investigations referred to as a P50 confidence level and more detailed cost planning and financial analysis referred to as a P90 confidence level. Note that P50 and P90 refer to a confidence level regarding the probability of the cost not being exceeded, and do not indicate a quantum of cost or proximity to the actual cost realised. Thus P90 is not a cost plus/minus 10 per cent, rather, it is a cost that will not be exceeded 90 per cent of the time.

Risks

Risks involved with using building cost estimates include:

- if a building cost estimate is provided without qualification, parameters, inclusions, and exclusions, then the user/recipient of the estimate may unintentionally misquote or misuse it
- where there is no record of when the estimate was produced and what it included, the scope of works may have changed since the estimate was produced. The user may not be aware of this change and may continue to assume that the project budget (based on this out-of-date building cost estimate) is adequate.

Other risks associated with an unqualified or outdated building cost estimate include:

- false expectations – project stakeholders are misled into believing funds allocated to the project will deliver a certain scope of works when this scope may change during the life of the project
- service delivery compromises – building to an unrealistic budget, leads to compromises in design and scope, potentially leaving a facility unable to fully support service delivery objectives
- delivery pressures - expectations raised by early project estimates lead to project managers being locked into delivering a project within a budget that no longer reflects the scope of works
- changing market conditions – which can affect costs, particularly in volatile markets where price escalations are extreme and/or unpredictable.

Process

Building cost estimates can be produced at any time during the life of a project – from project initiation through to settlement of the final account. The accuracy of the cost estimate will vary depending on the information available and the estimator's skill level and knowledge of building costs.

Cost estimates for government funded BPP building construction projects are informed by toolkit information and Best Practice Industry Conditions which are available on the Queensland Government website.

As the building project progresses, it is reasonable to expect cost estimate accuracy will increase and there will be an increase in the level of confidence in the estimate. However, project evaluation and program formulation usually require the preparation of a cost estimate at an early stage of the project. A

cost estimate (budget) set very early in the life of a project tends to set expectations, and the first cost estimate is usually the most remembered yet is the least accurate.

Project proponents must seek updated building cost estimates as the project proceeds through planning and procurement stages. Estimates users will be more likely to request an update of estimated costs if they can see the estimate is not aligned with the status or progress of a project. The adoption of standard categories for building cost estimates will aid identification of outdated estimates and facilitate the responsible use of estimates more generally.

Mitigating building cost estimate risks

Standard categories for building cost estimates should be adopted to help mitigate risks involved with quoting or relying on estimates for budgeting/building procurement purposes. Each estimate category reveals basic information about:

- how and when the building cost estimate was compiled[10]
- how it should be used.

Each building cost estimates for a government building construction project should be accompanied by a reference to the appropriate estimate category (Table 2).

If a project budget estimate is quoted or disclosed, it should be accompanied by the estimate category and confidence level, particularly in:

- budget and funding documentation
- project proposals and business cases
- capital delivery programs
- program and project reporting systems
- the PQC System.

For category 1 or 2 estimates, consider using cost ranges (e.g. $20 million to $30 million) to reflect the level of uncertainty in the initial stages of the building procurement process.

[10] Where the building cost estimate confidence level is low, consider engaging a quantity surveyor who has experience in the department's core business.

Table 2: Estimate categories and confidence levels

	Category 1 estimate	Category 2 estimate	Category 3 estimate	Category 4 estimate	Category 5 estimate	Category 6 estimate
Corresponding stage of the capital delivery process	Project initiation	Project evaluation (including business case development)	Project delivery	Project delivery	Project delivery	Project delivery
Time of estimate	Initiation	Brief	Schematic design	Developed design	Contract documentation	Tender acceptance
Basis of estimate	No formal scoping	Masterplan/ early concept/ pre-design	Early design	Advanced design	Designed and documented	Tender documents
When to use estimate	Basic budgeting	Detailed budgeting	Setting final project budget*	Basic cost management	Detailed cost management	Construction phase budget
Information used to formulate estimate	Similar projects	Masterplan/ project brief	Schematic design	Developed design	Full drawings and documents	Accepted tender
Aggregated effort to produce estimate	Very low	Low – medium	Medium	Medium – high	High	High
Confidence level**	Very low	Low – medium	Medium	Medium – high	High	Very high

* Preferred earliest time for media statements regarding budget.
** The PAF provides information on target confidence levels (in probability percentage terms) for cost estimates associated with the preliminary evaluation stage of projects. Details are available from Queensland Treasury and DSDILGP.

Benefits of estimate categories

The consistent use of building cost estimates categories will:

- ensure easy identification of outdated building cost estimates and budgets based on the estimates, as the estimate category acts as a time stamp on the building cost estimate and implies a use-by date
- encourage reviewing and updating of estimates as projects progress, conforming with sound practice to reduce risk that arise when there is a mismatch between the scope of works and the estimate
- facilitate the responsible use of building cost estimates, using them in an informed and responsible manner to reduce the likelihood of cost overruns
- increase understanding of how estimates are produced and how they should be used, ensuring estimates align with the scope of works for each project
- reduce the need for extra funding approvals, given that preparing and seeking approval for funding submissions consumes time and resources and often leads to delays that can result in reallocating funds, disrupting the capital delivery program and interfering with other project priorities.

Contract cost estimates: the need for realistic cost estimates and tender durations

Scope and application

This section aims to support the achievement of value for money in government building construction project planning and delivery, using the PQC System to match the experience and capability of contractors with risk and total estimated contract cost assigned to specific building contracts.

Process

All relevant data in the PQC System should be reviewed at the time tenders are called, to check for alignment with the most recent information on the proposed contract (particularly the latest cost estimate and anticipated contract duration). The database should be updated accordingly.

Consequences of over-estimating contract cost

Any contract cost over-estimation or incorrect data entry could result in eligible tenderers being excluded from eligible list searches for inadequate financial and/or PQC level threshold reasons.

Before calling tenders, project managers should review the total estimated contract cost recorded in the PQC System to ensure a maximum number of registrants is eligible to submit a tender, and to aid the achievement of value for money outcomes.

Developing realistic contract cost estimates

Agencies should:

- seek professional advice and assistance from appropriately qualified quantity surveyors and/or registered professional engineers (depending on the project)
- consider outsourcing if appropriate human resources are not available in an agency.

Consequences of under-estimating contract durations

Project managers recording contract durations in the PQC System should be aware that the database converts the total estimated contract cost into a 12-month component (the annualised contract value) based on the recorded contract duration. It is important to consider any under-estimated or incorrectly recorded contract durations that may result in higher annualised contract values, potentially reducing the pool of eligible tenderers.

Forecasting building cost escalation: calculating, documenting, and reviewing allowances

Scope and application

This section aims to provide agencies with information about processes for calculation, documentation, and ongoing review of allowances for building cost escalation.

Building cost escalation refers to anticipated increases, over a defined period, in the cost of constructing a building. Building cost increases usually occur as a result of market forces, and reflect increases in the cost of labour/materials and higher levels of construction activity.

Process

Calculating building costs escalation allowances

Agencies calculating allowances for building cost escalation should:

- ensure project budgets are achievable by allowing for cost escalation where appropriate, by:
  - for projects up to $100 million in value, seeking advice from a quantity surveyor. Agencies may consult with EPW, in confidence, during development of business cases and preparation of internal government briefing materials for government building construction projects.
  - for BPP projects (e.g. greater than $100 million), seeking advice from a quantity surveyor and consulting with EPW during the development of business cases and preparation of government briefing materials.
- when formulating a budget, consider cost escalation that could occur before the tender date or during the term of the contract, such as:
  - pre-tender phase escalation – estimate date, tender date
  - contract phase escalation – completion date
- allow for price increases likely to be incurred by the head contractor, subcontractors, and suppliers.

Increases should be incorporated into the project budget when preparing submissions for funding approval.

Pre-tender phase escalation

It is important to forecast and allow for the likely cost increases between the time an estimate is produced and the tender date. This allowance is required in all cases where an estimate has been prepared before the tender date. It requires identification of the:

- date the estimate was produced
- expected tender date
- expected escalation rate (as a percentage of the cost estimate)
- length of time between estimate date and tender date.

Commencement, staging and completion options

If commencement, staging and completion options are being considered, cost-escalation forecasting can be supported by a sensitivity analysis examining how sensitive the project's financial and economic outcomes are to variables such as the commencement date or a construction program that involves staging.

Information on the sensitivity analysis technique is available in the PAF Cost-Benefit Analysis guidance material.

Contract phase escalation

Agencies should consider an allowance for cost escalation between the expected tender date and the expected date of practical completion. This might not be required for the contract phases of less than 12 months.

Allowing for contract phase escalation is particularly important at times when the cost of building is rising rapidly, and on large high value projects with long contract periods.

Building cost escalation allowance risks

Reliance on unqualified or outdated escalation allowances can result in risks including:

- having to seek additional funding, potentially causing project delays
- issues with building functionality due to a reduction in scope of work to bring the project within budget
- compromised service provision due to reduced scope of work.

Documenting allowances for building cost escalation

The way in which cost-escalation allowances have been calculated should be documented, with the following information recorded in submissions for funding approval:

- date of preparation of the cost estimate
- expected tender date
- time between above two dates
- expected rate of cost escalation.

Reviewing allowances

The review process involves seeking updated building cost estimates, including updated cost-escalation allowances, as a project proceeds through planning and procurement stages. Allowances should be reviewed periodically, particularly during periods of rapid cost escalation.

It will be easier to identify if/when an allowance is no longer adequate if all assumptions were disclosed when the allowance was documented.

Programming and cash flow considerations

Scope and application

This section highlights key considerations in preparing cash flow forecasts for building capital delivery programs.

Agencies developing work programs for government building construction projects should consult EPW about provisions for cost escalation and proposed cash flows before any submission is made to government for funding.

Full consideration of project lead times, realistic time allowances for construction activities, and conservative cash flow forecasting will reduce the risk of delayed project delivery and failure to expend allocated funds.

All government building construction projects estimated to exceed $250,000 in value are individually listed in the Capital Statement (commonly referred to as Budget Paper No. 3) in the annual Queensland State Budget.

Each project listing in the Capital Statement includes the total estimated project cost and the budgeted expenditure for the coming financial year, and forecasts of expenditure up to the end of the previous financial year and for subsequent financial years.

Risks

Inadequate planning timeframes

Many projects may be subject to compressed design and construction timeframes due to delays in the planning phase and a failure to adjust the completion date (e.g. practical completion, handover) accordingly. Underestimation of planning phase activities and the allocation of insufficient time to ensure full consideration of all service delivery options may create a significant risk.

Factors that can cause delays in planning include:

- unforeseen legal, technical, and environmental issues
- underfunding and under-resourcing
- delayed approvals
- target delivery time frames not adequately considered at the outset.

Lack of adequate time to conduct planning may result in:

- inadequate consideration of all service delivery options
- inability to participate in cross-portfolio coordination
- setting unachievable project budgets
- setting unachievable cash flows.

Compressed design and construction timeframes can lead to compromised project outcomes including:

- the sacrifice of project or asset outcomes in favour of cash flow achievement
- poor design resulting in reduced functionality
- higher costs associated with working to unrealistic deadlines
- risks to the safety of site workers expected to work excessive hours, and the subsequent temptation for them to take shortcuts
- inability to respond to potential delay risks such as materials availability and location factors
- reduced quality of workmanship
- shorter or compromised commissioning and handover
- undermining of other projects though a diversion of effort and resources to time-critical projects
- increased likelihood of industrial relations issues.

Process

Project delivery considerations and cash flow forecasts expectations include:

- managing government and community expectations that funds will be expended and projects will be delivered in line with forecasts
- projects are delivered in line with cash flow forecasts published in Budget Paper No. 3
- communicating timeframes and cash flows to stakeholders published in the Budget papers
- confirming delivery expectations are met and full expenditure of allocated funds is achieved.

Considerations for cash-flow forecasting

Cash flow forecasting should be undertaken by appropriate agency officers, and the following requirements should be considered:

- budgetary requirements:
  - ensure at all stages of the capital delivery process that project managers align project delivery and expenditure (as closely as possible) with timeframe/cash flow forecasts published in Budget Paper No. 3
  - adjust (if required) cash flow forecasts during the construction stage and update in the next Capital Statement
- construction programming requirements that consider the actual rate of expenditure (the actual cash flow) on building projects will depend on the:
  - time taken to plan
  - granting of approval
  - design and construction for each building.

Importance of realistic timeframes

It is important to ensure cash flow forecasts are realistic and achievable, and to determine the time needed to complete each of activity.

Adequate and realistic project timeframes are critical. Realistic cash flow forecasts involving judicious construction programming that allocates adequate time to each construction activity, including allowances for approval times, are more likely to be achieved.

Unreasonable and unrealistic project timeframes are often the result of:

- a non-negotiable, critical end date set early in the planning phase:
  - a fixed end date means that the timeframe for procurement becomes fixed by default and in many cases, this fixed procurement timeframe bears no relation to a prudent allocation of time for delivery of the project
- planning based on timeframes for previous similar projects without proper analysis of the extent of the similarities:
  - do not assume that the time taken to deliver a similar project was reasonable or adequate
  - a similar project may have suffered from acceleration costs and a range of compromises.

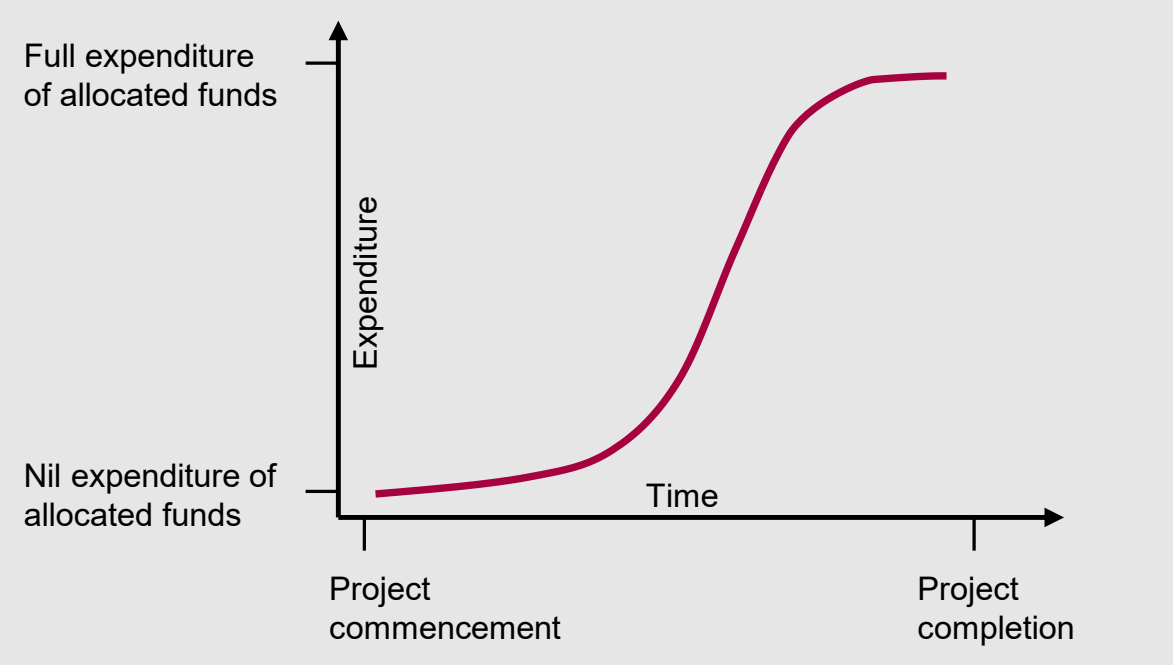
If there are potential project options, consider how commencement, staging and completion, and sensitivity analysis may be of assistance during the planning process and when forecasting cash flows. Refer to the PAF Cost-Benefit Analysis for guidance on this analysis approach.

Prudent forecasting

Prudent forecasting is important in ensuring expenditure is in line with the forecast cash flow. The rate of expenditure on a building project tends to start slowly but increases rapidly as the project progresses and then plateaus towards the end of the project. This is illustrated by an s-curve graph (Figure 3). Project expenditure may vary depending on the need to procure equipment at the initial or final stages; and project staging could result in multiple s-curves overlapping at various stages.

Consider expenditure patterns when forecasting for the purposes of the budget process and increments in which the total project funding will be expended.

Figure 3: Typical pattern/rate of building project expenditure



Procurement strategy and contract selection

Scope and application

This section provides an overview of procurement strategies and contracts that can be used on government building construction projects. It emphasises the need for early selection of a procurement strategy and for flexibility after the selection has been made.

This section does not apply to government building construction projects to be procured using a PPP strategy covered under Queensland Treasury's PAF.

It applies primarily to the project delivery phase of the capital delivery process, which incorporates project definition, procurement strategy, consultant/contractor selection, design, construction, and handover stages.

It supports consistency and provides guidance to government agencies on selecting the most appropriate procurement strategies and contracts for government building construction projects.

It focuses on the method of selecting an appropriate procurement strategy and associated contracts that will:

- assist in securing planned project outcomes
- encourage the appropriate allocation of risk between industry and government
- reduce the risk of project duration and budget overruns
- reduce the likelihood of contractual disputes and litigation.

Process

The selection of the appropriate procurement strategy and form of contract considers:

- the key objectives of, and constraints on the building project
- risks (both typical and specific) that might affect or be encountered at each stage in the delivery of the project, and how best to deal with those risks
- the level of complexity of the project
- key processes and activities that must be performed in delivering the project
- available procurement strategies and form of contracts
- relevant policy requirements.

Achieving value for money

Agencies should consider an appropriate procurement strategy and contract selection approaches (among other factors) to achieve value for money in accordance with the QPP and Queensland Treasury's PAF.

In accordance with the QPP, value for money is defined as the best available outcome for money spent. To achieve value for money, relevant government objectives (including economic, ethical social and environmental) and targets, whole-of-life costs and non-cost factors must be considered.

Selecting appropriate procurement strategies and forms of contract can help allocate risks. This is critical in determining if value for money is achieved in accordance with the QPP. Value for money assessment involves more than price alone. It addresses:

- compliance with relevant policy requirements, including the local benefits test
- contribution to the advancement of government objectives and outcomes
- cost-related factors such as whole-of-life and transaction costs
- non-cost-related factors such as fit for purpose, alignment with procurement objectives, compliance with specifications, quality, supplier capability, capacity, delivery, service, support and risk (including operational and reputational risks).

For projects of $100 million or more (or declared projects less than $100 million), value for money assessment must include application of the BPP, in accordance with the Best practice principles: Quality, safe workplaces guidance:

- workplace health and safety systems and standards
- commitment to apprentices and trainees
- best practice industrial relations.

Strategies to help achieve value for money and ensure probity and accountability include:

- allowing sufficient time for the procurement process and tender documentation stage
- optimising risk allocation between parties
- using performance specifications, where appropriate to encourage maximum innovation
- ensuring the flexibility to secure scope changes at reasonable cost
- using incentives to reward better than business as usual outcomes
- setting an appropriate contract period
- ensuring participants have the skills and capabilities required to deliver the planned project outcomes
- adopting a procurement strategy appropriate to the complexity of the project.

Procurement strategy and contract selection

Agencies should consider the procurement strategy (or strategies) and contract selection likely to be best suited to deliver required project outcomes during project development.

They should consider the project evaluation and program formulation, including decisions about:

- the type of building that is required, when it is needed, and what funds might be available to build it
- bundling opportunities.

Factors that influence procurement strategy selection

The procurement strategy best suited to the project will be the one that best aligns with key objectives and constraints, deals most appropriately with identified risks, and suits the level of complexity of the project.

Agencies should identify key factors that will determine the most suitable procurement strategy for a project, considering the key objectives and constraints, the risks, and the level of complexity.

Key objectives and constraints are frequently interdependent, and should be considered concurrently. Objectives generally relate to:

- scope (i.e. what is to be delivered) together with any required provision for flexibility in this regard
- cost, including whole-of-life and transaction costs

- time, including an appropriate allowance for the contract period
- quality, including fit for purpose considerations
- sustainability, including social, economic and environmental aspects
- innovation, encouraged through the use of performance, rather than prescriptive specifications
- community or stakeholder needs and expectations
- contribution to the advancement of government priorities
- better than business as usual outcomes, encouraged through performance incentives.

Constraints should be considered as aspects that limit, restrict or otherwise affect project objectives. They are typically unique to each project, and can include:

- time constraints
- budget constraints
- physical constraints
- availability of resources, including labour
- project participants' skills, capability, and capacity to deliver planned project outcomes
- market or industrial conditions
- policy requirements.

Careful consideration should be given to all objectives and constraints, as this helps identify risks – potentially critical impacts on project delivery will assist in selecting the most suitable procurement strategy. In some cases, there will be one clear objective or constraint that takes precedence over all others due to its impact on project outcomes (for example, requirements to complete a new school building before the start of the school year).

Consider risks that could arise during project delivery, and how they could be dealt with. In the context of this guideline, risks are events that are both known and unforeseen, and might occur during the delivery of the building project and could adversely affect project outcomes.

The nature of risks and their potential impacts on project outcomes are often identified by the project's key objectives and constraints. For example, if a project has a particularly tight completion timeframe, construction program delays will be identified as a risk.

The most suitable risk mitigation strategies to deal with identified risks should be considered and determined before selecting a procurement strategy for the project.

Appropriate risk allocation is vital to project outcomes and serves as a guide to ensure responsibility for managing particular risks that can be allocated to the party best able to deal with that risk.

Inappropriate risk allocation is likely to result in project budget overruns (contractors can reasonably be expected to make allowances in their tenders for risks for which they are responsible) and increase the likelihood of contractual disputes and litigation.

A project's level of complexity is determined by a combination of factors, including:

- project size
- duration
- scope
- number of stakeholders involved
- level of technology to be incorporated
- degree of innovation required by the client
- market conditions.

Agencies must select an appropriate procurement strategy that supports and considers the objectives, constraints, and risks of the project without adding unnecessary complexity.

Note that inappropriate selection of a complex procurement strategy could lead to unsatisfactory cost outcomes, as tenderers may make allowances in their tenders for additional administration costs and the possibility of contractual disputes.

The above factors should be considered together with factors that support the government's objective of achieving value for money, in accordance with the QPP.

Selecting the form of contract

The BPF's Policy Requirement 3 – Procurement Strategy and Contract Selection must be considered when selecting the optimum building contract. It applies equally to all contracts.

EPW's Chief Contracts Officer oversees the development and maintenance of standard building construction and maintenance contracts (including conditions of offer), for use on all government building construction and maintenance projects to ensure:

- consistency, fairness and efficiency in government dealings with industry
- effective implementation of government building-related policies.

EPW building contracts are specifically intended for use on government building projects and align with the procurement strategies outlined above. The contracts are generic but typically contain sections that must be completed with project-specific details by or on behalf of the Principal before tenders are called.

The suite of standard contracts also includes a maintenance contract, minor and medium works contract, and two consultancy contracts, one for small consultancies and the other for large consultancies.

Agencies should refer to the EPW website for current building and consultancy contracts and for guidance material on their application and use.

EPW contracts typically include Conditions of Tender, which should be followed rigorously as part of the contractual process. These conditions often incorporate schedules to be completed with project-specific details by or on behalf of the Principal, before tenders/offers are invited. The conditions may also provide for contractor selection using price, or a combination of price and non-price criteria. Consultant selection will always involve both price and non-price criteria. Details on the use of non-price criteria in the selection of contractors and/or consultants are included later in this section.

Contracts should be selected from:

- Fully Documented – Lump Sum
  - Principal to engage consultants to design the building project and prepare a Bill of Quantities and related documentation that fully describes the work to be undertaken
  - tenderer is to price to complete the construction in accordance with the project documentation prepared by the Principal's consultants, for the agreed lump sum price
  - should be considered for projects where there is a high degree of certainty about specific project requirements
- Design and Construct – Lump Sum
  - Principal to engage consultants to prepare a detailed project brief that defines the scope, quality, and functional requirements of the building project
  - tenderer is to price to complete the design of the project, prepare construction documentation, and construct the project for the agreed lump sum price
  - should be considered if there is benefit in the contractor undertaking design obligations and providing input into the detailed documentation and where the need to achieve defined time and cost outcomes outweighs the need for quality
- Managing Contractor – Two-stage Design and Construction Management
  - this contract form provides for early contractor involvement
  - before tender, the Principal engages consultants to prepare a project brief that includes a project construction cost estimate and estimated time for project completion
  - during stage 1, the Managing Contractor works collaboratively with their design consultants and the Principal to revise the project brief and refine design to meet budget and time constraints
  - before stage 2, the Managing Contractor makes an offer to the Principal based on revised project brief
  - if the offer is accepted, stage 2 begins, and the Managing Contractor completes the design and manages construction
  - this contract is best suited to major or significant projects where there is some uncertainty about specific project requirements

- Alliance
  - provides for early contractor involvement
  - an alliance is formed between key project participants, including the Principal and contractor, with all alliance partners collectively responsible for all aspects of project delivery
  - the alliance is generally structured so commercial risks and rewards are shared by the alliance partners. It is best suited to complex, high risk projects where alternative strategies for risk allocation will be ineffective
- Bundling
  - a program management strategy that involves the delivery of several projects (in some cases, for several agencies) under a single contract
  - can be particularly effective when the labour market is under strain, or for the delivery of multiple projects in remote or regional locations
  - not a complete procurement strategy, but must be considered by agencies in consultation with EPW, for medium and lower value projects (estimated to cost between $500,000 and $20 million).

Use of non-price criteria

When both price and non-price criteria are to be used for tender evaluation, the appropriate schedule in the Conditions of Tender should set out the non-price evaluation criteria and the weightings given to those criteria. Offerors/tenderers are required to respond specifically to the non-price criteria.

Contracts will allocate responsibility for certain risks and requirements to the consultant or contractor, and it is useful to understand how each offeror/tenderer proposes to manage those risks and/or meet those requirements before a consultant/contractor is selected.

Effectively drafted and appropriately weighted non-price criteria should elicit responses directly addressing risks to be managed by the consultant/contractor. In responding to non-price criteria, each offeror/tenderer should detail the commitments they will fulfil once the contract has been awarded.

Effectively drafted and appropriately weighted non-price criteria can be a powerful tool to give the offer/tender evaluation team opportunities to identify which offeror/tenderer will best deliver the planned value for money and project outcomes. Among other things, non-price criteria can assist the evaluation team to identify:

- particular competencies of each offeror/tenderer that are relevant to the project
- how each offeror/tenderer intends to address any nominated government policy requirements.

The BPF's Policy Requirement 6 notes that agencies must consult with advisory groups such as an Industry Reference Group prior to calling tender on proposed evaluation criteria and weightings to be used in the selection of suppliers for BPP projects.

HRS building projects

The BPF's Policy Requirement 6 – Tender Evaluation Plans stipulates that agency must prepare tender evaluation plans for HRS building projects.

The BPF's Policy Requirement 3 – Procurement Strategy and Contract Selection stipulates that agencies planning to use a standard contract for HRS building projects must inform the Contracts Committee of the project, including the service risk assessment, proposed procurement strategy and form of contract.

For all other HRS government building construction projects, the agency must seek Contracts Committee endorsement of the proposed procurement strategy and form of contract.

Contractor tendering and selection process

Scope and application

This section explains the Queensland Government's invitation and selection process for building industry contractors, associated with government building construction projects, including HRS building projects.

Process

Value for money

The QPP requires the tendering and selection process for building industry contractors to achieve value for money in the expenditure of public funds, with consideration of total transaction costs (including costs to government) and whole-of-life costs associated with the building project and non-cost factors.

Agencies should assess value for money, including:

- fit for purpose including alignment with government economic, ethical, social and environmental objectives and targets, compliance with specifications, and quality
- tenderers capability, capacity experience including after-sales service and support
- compliance with relevant policy requirements, considering policies that may affect tendering and selection processes, including the:
  - Queensland Government Building and Construction Training Policy (Department of Employment, Small Business and Training)
  - Queensland Charter for Local Content (DSDILGP)
- compliance with relevant government trade agreements and policies
- risk (this may include operational and reputational risks)
- requirements that relate to environmental sustainability and/or economy-wide emissions reductions targets.

Prequalification

Contractors eligible to tender (either open or select) for a government building construction project estimated to exceed $1 million in value must:

- be prequalified
- have a PQC level that matches or exceeds the PQC service risk rating associated with the project
- satisfy financial requirements
- meet project-specific criteria.

Exemptions can apply at the discretion of the Director-General, EPW, if an eligible list search of the PQC Database returns an insufficient number of appropriately prequalified contractors.

A formal FCA of the preferred tenderer must be undertaken at the time of tender and in accordance with PQC System – contractor financial requirements.

Prequalification should not be regarded as a guarantee of the performance of any contractor on any specific building project, or as a basis for liability by EPW for payments by the successful tenderer (contractor) to any subcontractors in the event of that contractor defaulting.

Procurement strategies

Procurement strategies support project delivery and generally incorporate a contractual relationship that allocates risk between the Principal and the contractor by:

- determining how procurement objectives will be achieved
- determining the type of contract to be used (see Table 3)
- ensuring risk allocation among all parties along the contractual chain is clear
- allocating risk preferably to the party best able to manage the risk.

Table 3: Forms of contract available for Queensland Government building procurement

Fully Documented Contracts	Design and Construct - Contracts with Design Obligations
• Fully Documented – Lump sum • Bundling (where the process involves two or more portions of the project being procured using Fully Documented contracts)	• Design and Construct – Lump sum • Managing Contractor – Design and Construction management • Alliance • Bundling (where the process involves two or more portions, at least one of which is being procured where the project is not fully documented) • Construction management

Major projects of $100 million or more will trigger a requirement for the Queensland Government BPP to be applied. Projects less than $100 million may also be declared as subject to BPP.

Tendering methods

Agencies generally use either open or select tender methods for building projects, depending on project requirements and the assessed PQC service risk rating. Regardless of the method or process, it is important to:

- ensure that effective competition is achieved and to minimise the total costs of tendering
- obtain a quantity surveyor's project check estimate of the tender documentation issued to tenderers (including any addenda) to provide a benchmark to assess the value for money of tenders received.

For BPP projects, toolkit items and Standard Best Practice Industry Conditions are available on the Queensland Government website.

Open tendering

Open tendering involves a call for tender submissions from all eligible contractors. It is used where:

- project requirements are well defined
- there is no significant construction time constraint
- project risks and total cost of tendering are anticipated to be relatively low.

Lower-risk, Lump Sum, Fully Documented projects (typically projects with a PQC service risk rating of 1 or 2) should usually be procured under open tendering arrangements.

Open tendering involves a call for tender submissions from all eligible contractors. In accordance with the QPP, agencies must use the Queensland Government's QTenders website to publish all tenders where an open offer method is used. QBuild also uses the eTender platform for electronic procurement. Each advertisement must identify the PQC service risk rating for the project.

Tenders can also be advertised in local or regional press in the region in which the project will be built.

Select tendering

Select tendering uses the PQC Database to select a limited number of contractors, inviting them in writing to tender on a project, based on:

- prequalification status and service risk rating
- financial capacity
- management systems requirements
- office location relative to the projects site
- project location
- capability for work
- project cost, size and complexity
- their current commitments and recent select tender opportunities on government construction projects
- past performance regarding time and quality of work, including any evidence of superior performance
- any "seek advice" flag on the contractor's registration (this would be displayed on an eligible tender list).

If several eligible contractors significantly exceed requirements, an Expression of Interest (EOI) process can be used as an additional filter to determine the availability of contractors for the project and to refine the list of contractors. Agencies should consider seeking EOIs providing specific information about how the tenderer proposes to address particular non-price project criteria (see Appendix 1-1 for examples of non-price criteria).

EPW works to achieve consistency across government in the select tender process by:

- preparing all select tender lists in consultation with the relevant agency
- using a transparent and equitable system that accords with auditable processes.

Agencies should ensure select tendering provides a balance between the total cost to the industry of tendering and government requirements to ensure adequate competition among suppliers.

Agencies should aim to reduce the risk of supplier collusion by:

- ensuring officers involved in the tendering and evaluation process are aware of the risk and are familiar with guidance provided in the Australian Competition and Consumer Commission's (ACCC) 2019 Cartels Deterrence and Detection: A Guide for Government Procurement Professionals reviewing the outcomes of tender processes at a project and program level to identify any abnormal patterns such as clustering of tender prices, withdrawal of tenders, or inclusion of unacceptable qualifications by tenderers
- confirming that a contract from the suite of standard contracts developed by EPW is used, as these contracts and associated Conditions of Tender require contractors to explicitly warrant they will not collude
- considering including the maximum (rather than the minimum) number of tenderers on the select list (see Table 4)
- varying the tender process by using an open tender process where a select tender process may have been routinely used
- ensuring eligible tenderers are not pressured into tendering or penalised for failing to tender.

If there is reasonable cause to suspect collusion on a specific contract, agency should:

- seek a statutory declaration from the contractor/contractors to warrant that they did not collude
- refer the matter to an appropriately delegated agency officer to decide if the matter should be reported to the ACCC.

Due to the higher risk and higher total costs of tendering to the industry, select tendering should be used for building projects being procured using a Design and Construct contract (typically projects with a PQC service risk rating of 3 or 4 and/or HRS projects). This approach may be varied depending on market conditions, to ensure opportunities for a broad pool of prequalified contractors.

Inviting a sole contractor to tender

Agencies should avoid inviting a sole building contractor to tender for and subsequently undertake a government building construction project without a competitive tendering process. This is because:

- value for money might not be achieved
- government priorities could be compromised
- access to government tendering opportunities by eligible contractors would be diminished.

If value for money can be demonstrated and there are compelling reasons to undertake a sole contractor tender process, an agency's chief executive (or appropriately delegated officer) can approve inviting a particular contractor to tender, based on one or more of the following reasons:

- the contract is of a specialist or confidential nature, and it is reasonable in the circumstances for it not to be tendered more widely
- only one contractor is able to meet the project requirements
- there is an existing contract under way
- a genuine urgency exists
- a structured process involving market analysis, industry consultation, and a registration and assessment-of-interest process has been used to identify only one suitable tenderer (generally only applicable for major projects).

If a sole contractor is invited to tender, the provisions of the QPP and all relevant provisions in this guideline should be met. Reasons for inviting a sole contractor to tender, including specific identification of how value for money will be achieved, must be clearly documented and available for external audit if required.

Calling for and receiving tenders

This section should be read in conjunction with the AS 4120–1994 Code of tendering, the QPP, and Conditions of Tender published by EPW.

It is expected that all parties will act in good faith towards each other at all times throughout the tendering process.

Agencies should assess the actual number of tenderers and the tender period, considering the:

- procurement strategy
- contract type
- project time constraints
- required level of input from tenderers.

Table 4 provides a guide to preferred numbers of tenderers and tender periods for government building construction projects.

Table 4: Preferred number of tenderers/tender period

Assessed project risk	Form of contract	Preferred number of tenderers	Tender period*
Assessed service risk rating 1–2	All	Generally open to all eligible contractors on the PQC System	3–4 weeks
Assessed service risk rating 3–4 (i.e. HRS projects)	Fully Documented Lump Sum without Bill of Quantities	Generally a select list of four eligible contractors from the PQC System**	4–6 weeks
Assessed service risk rating 3–4 (i.e. HRS projects)	Fully Documented Lump Sum with Bill of Quantities	Generally a select list of four eligible contractors from the PQC System**	4–6 weeks
Assessed service risk rating 3–4 (i.e. HRS projects)	Design and Construct Lump Sum	Generally a select list of three to four eligible contractors from the PQC System**	4–10 weeks (depending on complexity)
Assessed service risk rating 3–4 (i.e. HRS projects)	Fee-only Managing Contractor	Generally a select list of three to four eligible contractors from the PQC System**	4–6 weeks

* Tender periods shown are a guide only. Inadequate time for calling tenders can result in unsatisfactory project outcomes.
** For major projects, a maximum of three eligible contractors from the PQC System is required. Use of the designation major project will be determined by EPW, based on the estimated project cost, project risk factors and the economic state of the industry.

A Bill of Quantities (excluding specialist services such as mechanical services, electrical services, security, data and communications) should be prepared for all simple government building projects (e.g. housing units, school buildings and office buildings) over $5 million in value and for all other projects exceeding $3 million. The provision of a Bill of Quantities should reduce the risk for tenderers associated with incorrectly assessing the materials and quantities required for a project.

Tender documentation

Tender documents underpin the contract that will be established between the Principal and the successful tenderer.

The quality of tender documents is a major factor for the success of the tendering and selection process and the project itself. Inadequate documentation is likely to result in increased project costs. Agencies should:

- allocate adequate time for the preparation of tender documents
- use appropriately qualified staff
- identify clear and accurate project requirements for subsequent amendments
- provide the same information to all tenderers.

Tender documents should include as a minimum:

- the Invitation to Tender
- the closing date
- time and place of lodgement for submissions
- a tender form for completion by tenderers
- Conditions of Tender
- General and Special Conditions of Contract
- any general information that will help tenderers prepare a tender, including details of a nominated contact for further information
- all non-price evaluation criteria, where applicable
- details of any supporting information required from tenderers
- full details of the work to be covered by the tender. For major Fully Documented building projects this should include:
  - drawings and a specification
  - a Bill of Quantities, if applicable.

Note that prequalified contractors will not usually be required to provide further information relating to their compliance with PQC System requirements, provided their prequalification information on the PQC Database is current at the time of tendering.

Invitation to tender

Calls to tender can be by advertisement in the public domain (open tenders) or written invitation (select tenders), and should clearly state the closing date and the time and a place of lodgement for submissions. This information should also appear on the tender form.

The closing date should not fall on a Monday, an industry-recognised rostered day off, a public holiday, or a day following a public holiday. For projects located in regional Queensland, agencies should ensure that the tender closing date does not fall on a local public holiday (such as a show day), or on the day following a local public holiday.

Receipt of tenders should be in accordance with the Conditions of Tender. For example, if tender conditions require hard-copy submissions, agencies should not take receipt of a submission in electronic form.

The QPP requires agencies to:

- advertise all open tenders or EOIs for goods and services through the Queensland Government's QTenders website, rather than in metropolitan or national media. QBuild also uses the eTender platform for electronic procurement.
- advertise (if appropriate) for government building construction projects in regional centres in the local or regional press in those centres.

The Queensland Government primarily uses web-based electronic tendering to provide fast, convenient statewide access to tendering opportunities and documents, along with a simplified process for submitting tenders.

The tendering websites allows for:

- viewing current tender opportunities
- issuing of invitations to tender
- tender documents to be viewed and downloaded
- tenders to be submitted electronically
- viewing tenders that are under review
- viewing accepted tenders.

Enquiries during the tender period

A nominated representative of the Principal should respond to enquiries during the tender period. They should:

- address and record promptly any enquiries and responses relating to the tender documents for a particular project

- provide information to tenderers as a result of an enquiry, with the information to be issued to all tenderers as soon as possible
- request that tenderers confirm receipt of additional information
- consider an extension to the tender period if the information issued is expected to result in tenderers having to significantly amend their tenders.

Amending tender documents during the tender period

Agencies should avoid amending tender documents during the tender period (if possible) by checking the documents before tenders are called, using systematic and thorough processes. If amendments are required, they should be provided promptly, in the form of an addendum, to all contractors who were issued with tender documents.

The responsible officer/nominated representative of the Principal should request all contractors confirm receipt of any addenda and should make any required allowance in the tendered amount to cover the addenda in their tender responses.

Agencies should consider extending the tender period in the case of significant amendments (requiring extensive consideration or issued within five days of the tender close date). Any extension should be issued as an addendum.

Receiving and closing tenders

Agency staff responsible for receiving and closing tenders should:

- ensure an auditable system is in place to provide security and confidentiality of all tenders received before the closing time
- use local tender boxes where appropriate, to ensure local industry participants are not disadvantaged
- open all tenders as soon as practicable following the closing time
- ensure that each tender is:
  - checked to ensure that it is complete, with all parts of the submission included
  - marked with the date and time of receipt
  - initialled and recorded as being received.

Tenders should be opened by at least two people, both of whom should sign and date the summary of tenders received. They should also:

- disclose as soon as possible information specified in the tender documents as suitable/available for public release
- disclose by posting the information on the Queensland Government's QTenders website.

Evaluating tenders and awarding the contract

The tender evaluation process should identify:

- the tenderer that is best suited to perform the work or meets the non-price criteria
- offers the best value for money (not necessarily the lowest price).

A probity auditor should be commissioned, if warranted. This could be due to the need for a high level of accountability to be demonstrated (e.g. cases of complex tender evaluations), or for a tender being submitted by a government agency. Probity auditors or advisors should always be used for HRS building projects valued at more than $100 million.

The Use of Probity Auditors and Advisors guide provides information relating to the engagement of independent probity auditors and advisors during the procurement process.

Evaluation criteria for tenders using the Fully Documented contracts must be well defined and documented.

For Fully Documented contracts, the tender sum or tender price will be the major factor in evaluating tenders, however non-price evaluation criteria may also be used for these projects where appropriate.

Non-price evaluation criteria should be used as required, for HRS projects. For all HRS projects, agencies should prepare a tender evaluation plan and consult with EPW (before calling tenders) on the proposed evaluation criteria and weightings.

Fully Documented projects usually include fewer non-price evaluation criteria as there are no design obligations.

Non-price evaluation criteria must be included in the tender and selection process for Design and Construct contracts, to provide a greater level of certainty of project outcomes, such as for a project with a non-negotiable completion date. Tenderers would be required to submit details of how they intend to resource the project and coordinate construction activities to meet the critical objective.

Detailed guidance for the formulation, weighting and application of non-price criteria is provided in Appendix 1-1.

For projects with non-price evaluation criteria, tender documentation should clearly state the weighting given to each evaluation criterion, thus indicating the relative importance of each criterion. Weighting is usually provided as a percentage.

Tender evaluation panel

A tender evaluation panel should be formed to evaluate tenders for all projects where non-price evaluation criteria form part of the Conditions of Tender. The panel should include at least three people, such as:

- an officer who participated in preparing the tender documents
- an officer with sound current technical knowledge of the construction process, capable of understanding and interpreting the tenders
- an officer with sound knowledge of this guideline and the QPP.

Panel members must:

- be aware that information received from tenderers should be treated as commercial-in-confidence
- be vigilant in seeking to identify any aspects that may suggest collusion
- be familiar with the ACCC's 2019 Cartels Deterrence and Detection: A Guide for Government Procurement Professionals
- be familiar with the competitive neutrality principle (including seeking advice from the Queensland Competition Authority if necessary)
- act ethically
- maintain high standards of probity and accountability in accordance with Queensland Government procurement guidance
- provide a written declaration noting any conflicts of interest in relation to their role on a tender panel, so conflicts can be effectively managed
- be familiar with competitive neutrality principle (including seeking advice from the Queensland Competition Authority if necessary).

Evaluation of tenders

The tender evaluation process must be transparent and equitable. The process should be documented and randomly audited to verify its effectiveness.

Any discrepancies between submitted tenders and the tender documentation should be resolved before a final recommendation is made to management about tender acceptance and award.

In the case of reasonable suspicion of collusion, agencies should consider seeking, if required, statutory declarations from the tenderers. Depending on the circumstances, this could require the release of tenders, and (if it remains the most appropriate procurement method) a re-call of tenders.

The evaluation process must involve:

- technical review of all tenders
- capability validation of all contractors submitting tenders
- FCA of the preferred tenderer.

The technical review should include assessment of:

- any conditions or qualifications attached by the tenderers to their submissions
- the project's estimated value and the value of each tender received.

Capability validation should include assessment of the contractor's workload over the period of the proposed building contract.

FCAs of preferred tenderers for all government building projects estimated to exceed $1 million should include an assessment undertaken by a financial assessment company in accordance with PQC System – contractor financial requirements.

If the assessment indicates the financial position of the preferred tenderer is unsatisfactory, the agency should:

- discuss (if considered appropriate and dependent on procurement timeframes) with the preferred tenderer if they are able to improve their financial position
- consider if another financial assessment would be required if the contractor is able to improve their financial position and is being considered further for the tender
- bypass the tenderer and the next preferred tenderer should be assessed.

Tenders should only be called when there is an intention to proceed with a building project. The Principal may reject all tenders and re-call tenders in accordance with the Conditions of Tender.

For projects where a tender evaluation panel is required, the evaluation process generally involves:

- obtaining a written declaration from each tender panel member regarding any conflicts of interest they may have in relation to their role on the tender panel, so that such conflicts can be effectively managed
- an initial meeting of the tender panel before the tender closes, to confirm the members' understanding of the project timeframe, evaluation criteria, criteria weightings and required project outcomes
- a panel meeting to evaluate the completeness of tender information received (i.e. that all parts of each tenderer's submission have been received)
- a panel meeting to finalise scoring
- recommendation of a preferred tenderer (pending the outcome of the technical review and FCA).

If non-price criteria represent a significant proportion of the total weightings, tenderers may be invited to make a presentation to the evaluation panel. The purpose of such presentations should be limited to clarifying aspects of the tenders.

Responding to a very low tender price

If a tender price or a key element of a tender price is considered well below the median price and/or the project's estimated value, agencies should investigate before selecting the tender as the winning bid by:

- checking calculations and formulas within the tender submission
- requesting the tenderer to review the bid and/or respond to questions regarding particular aspects of the tender
- asking the tenderer to provide written confirmation that the scope of work and contractual obligations are fully understood and priced.

For HRS projects, agencies should consider engaging an audit quantity surveyor as a non-scoring tender panel technical expert, to verify and report on priced submissions.

Post-tender negotiations

Agencies must ensure that probity and accountability are met when undertaking post-tender negotiations with a tenderer or tenderers. Commissioning of a probity auditor may be warranted in situations where a high level of accountability should be demonstrated (e.g. cases of complex tender evaluations, or where a tender is submitted by a government agency).

Tender approval

The agency that called the tender is responsible for coordinating the tender evaluation and the FCA of the preferred tenderer. Subject to a satisfactory financial assessment report, the relevant agency will:

- nominate the preferred tenderer to the relevant approving authority

- seek financial approval and, where required approval to accept the tender
- award the contract following the receipt of the relevant approvals.

Awarding a contract

Once requisite approval has been received, the agency should issue a Letter of Acceptance or, where appropriate, a purchase order to the successful tenderer. At this point it is deemed the contract has been awarded.

A number of documents typically constitutes the agreement between the parties. These documents include:

- a copy of the tender documents, drawings and specifications, and any correspondence or addenda issued during the tender period
- the original submitted tender
- any post-tender correspondence and clarifications
- the Letter of Acceptance
- where applicable, a Formal Instrument of Agreement (FIA) in the form of a deed attached to Special Conditions of Contract that identifies the documents forming the contract.

In line with the QPP, details of awarded contracts valued at over $10,000 are to be released to the public, in accordance with the Procurement Guidelines: Contract Disclosure.

Requirements about information nominated for public release for government building construction projects will vary between projects, depending on particular circumstances, but the minimum details required to be published include:

- the name and address of the Principal and the contractor
- a description of the project and services being provided pursuant to the contract
- the date of contract award (including the relevant stage if the contract involves more than one)
- the contract value (including the value for each stage if the contract involves more than one) and advice as to whether any non-price criteria were used in evaluation
- the form of contract used (e.g. Fully Documented; Design and Construct – Lump Sum; Managing Contractor – Design and Construction Management).

It is essential to ensure that confidential or commercial-in-confidence information is not disclosed.

The publicly released information is to be published on the Queensland Governments QTenders website within 60 days of the contract date, with additional contract details included for contracts over $10 million. Such additional details are covered in the Procurement Guidelines: Contract Disclosure available from EPW.

Post-tender administration

Unsuccessful tenderers are advised in writing and directed to the information about the tender and the award results that have been publicly disclosed. Unsuccessful tenderers are to be offered the opportunity for a debrief.

Debriefing meetings to discuss tender evaluation results should be provided to any tenderer who requests feedback, and should be conducted by the officer accountable for the tender evaluation process. The meetings should focus on the contractor's performance as measured against the tender evaluation criteria, and provide constructive feedback on areas where tenderers could improve.

Debriefing meetings should not justify any determinations, decisions, or recommendations, or compare the contractor's performance with that of other tenderers.

Building regulatory requirements

Scope and application

This section describes Queensland's building regulatory framework as it applies to Queensland Government building construction projects, and outlines the approach to be used by government agencies to comply with the relevant requirements. It aims to aid consistency and provide guidance for managing compliance of government building construction projects.

The section has implications for the project evaluation, program formulation and project review phases of the capital delivery process, but most significantly for the project delivery phase. The capital delivery process is a generic process that assists agencies in adopting a strategic asset management approach to building projects.

Process

Qualifications and competencies

Qualifications and competencies for ensuring regulatory compliance include:

- assessing building work for compliance with building regulatory requirements – assessed by an appropriately qualified Building Certifier
- considering the following requirements when identifying building regulatory requirements applicable to government building construction projects and the establishment of the appropriate processes to ensure compliance:
  - knowledge of the provisions of the *Planning Act 2016* (Qld), including an understanding of provisions relating to local/state government planning instruments
  - technical knowledge of the provisions of the *Building Act 1975* (Qld), the Building Regulation 2021 (Qld), the National Construction Code (NCC) and the Queensland Development Code (QDC)
  - technical knowledge of the provisions of the *Plumbing and Drainage Act 2018* (Qld)
  - understanding of key processes and activities that should be performed in delivering a government building construction project and their relationship with the building regulatory framework
  - knowledge of information management and document control processes
- outsourcing (where appropriate) when human resources are not available within an agency, e.g. people with the relevant qualifications and competencies.

Identifying relevant requirements

Identifying relevant building regulatory requirements involves:

- complying with the building regulatory framework throughout the building asset lifecycle
- considering relevant state and local government planning instruments
- constructing and maintaining building assets to at least the minimum standards prescribed in applicable codes
- identifying building regulatory requirements applicable to a government building construction project as part of the project evaluation phase of the capital delivery process.

The building regulatory requirements applicable to the planning and delivery of government building construction projects can be separated into two main categories/groups:

- the requirements of state and local government planning instruments (mostly applicable to new building projects but can also impact major refurbishments)
- the requirements of applicable codes listed in legislation regarding all building provisions including building accessibility (applicable to new building projects and extensions/refurbishments of existing buildings).

State and local government planning requirements

The *Planning Act 2016* defines development and makes provision so that a regulation or a local categorising instrument can categorise development as either accepted development, assessable development, or prohibited development.

Other legislation can displace the ordinary operation of the *Planning Act 2016*, and may also regulate development. Other legislation that may regulate development could include, for example, the *Economic Development Act 2012*, *State Development and Public Works Organisation Act 1971*, and the So*uth Bank Corporation Act 1989*. This list is not exhaustive.

A suitably qualified town planner should identify and consider the applicable state and local government planning instruments and planning delivery pathways available for a project, and consult with relevant government stakeholders early in the planning stages of a government building construction project,

during the project evaluation phase of the capital delivery process. This process and its outcomes should be documented, with the documentation available to relevant officers for inclusion in subsequent processes in the development of building design and assessment of the building against relevant codes.

Agencies should seek assistance (if needed) from EPW to resolve any issues associated with compliance of government building construction projects with state and local government planning instruments.

Non-government building construction projects

Agencies conducting, overseeing or planning non-government building construction projects are required to provide evidence of the building work's compliance with relevant provisions of applicable codes, such as a certificate of occupancy issued by a qualified Building Certifier in accordance with the *Building Act 1975*.

Note that provisions of the *Building Act 1975* regarding the issuance of certificates only apply to building work subject to a building development approval.

Government building construction projects

Agencies involved in government building construction projects must retain all records of building work compliance assessment at each stage of the capital delivery process, including evidence of suitability documentation as the state's proof of compliance with relevant codes.

Non-discriminatory building accessibility

Scope and application

This section informs agencies of their responsibilities in providing non-discriminatory access to and within buildings. Non-discriminatory building accessibility allows all people within the community safe, dignified, and equitable access to, and the use of buildings and the services they provide.

People with disability should be provided with access to and use of the building and its facilities and services in the same or a similar manner as anyone else.

Australian and Queensland legislation places an obligation on building owners and managers to ensure they treat people with disability no less fairly than they treat others when providing for building accessibility.

Process

The *Disability Discrimination Act 1992* (Cth) (DDA) and *Anti-Discrimination Act 1991* (Qld) (ADA) require new buildings to be designed to be accessible to people with disability; and for existing buildings to be upgraded (where necessary) over time to improve compliance with disability access provisions.

This means appropriate non-discriminatory access provisions are to be incorporated into design and documentation for new buildings, to ensure they comply with the Disability (Access to Premises – Buildings) Standards 2010 (Premises Standards), and any other relevant Australian Standards referenced in the Premises Standards.

For existing buildings, if an extension or alteration is proposed and the work requires *Building Act 1975* (Qld) assessment and compliance with the Premises Standards, agencies are advised to design, document, and construct building work to comply with the NCC including the Premises Standards and any other relevant Australian Standards referenced in the Premises Standards.

Agencies should develop action plans to address accessibility issues for buildings where there are no plans for significant extensions or alterations. The action plans should include strategies for modifying building elements that could be considered discriminatory to people with disability, and should consider:

- building audit reports and recommendations
- assessment of compliance with technical specifications
- operational plans for rectification work
- complaint procedures

- a communication strategy, including consultation processes and outcomes documentation
- building management practices, including staff awareness training
- processes for effective monitoring, evaluating and reviewing against performance criteria.

The DDA makes discriminatory access to public premises unlawful except where the provision of non-discriminatory access would involve unjustifiable hardship for the owner. Developing and implementing action plans to achieve DDA compliance is a voluntary initiative that benefits agencies and people with disability who may wish to access the buildings.

Action plans should be lodged with the Australian Human Rights Commission (AHRC) as a commitment to make improvements within a particular timeframe.

Consultation

Agencies should consult stakeholders as early as possible when considering planning new buildings or modifying existing ones. Consultation must include the disability sector, government organisations and other stakeholders with access requirement interests, and with any other building users likely to be affected by building elements or features.

Consultation should enable the views of all stakeholders to be considered in the design process for new buildings, significant extensions or alterations to existing buildings, and preparation of action plans to address existing buildings.

A reference group should be established, with representation as appropriate from people, peak bodies and/or consultative groups to represent people who, e.g.:

- use a wheelchair (manual or motorised)
- have any condition that limits their mobility
- use a pram, stroller, scooter or walker
- are an amputee
- are blind or have a vision impairment
- are deaf or have a hearing impairment
- are aged or have medical conditions affecting their ability to walk long distances
- have a mental illness
- have a neurological impairment such as an intellectual disability or an acquired brain injury
- have a special cultural requirement
- have other important needs as representatives of the end-user groups.

Agencies with large building portfolios should consider establishing a standing community reference group arrangement (as used by many local governments). Such a reference group could meet regularly or as required to review and advise on design documentation and/or action plans.

Agencies can engage consultants, if appropriate, who specialise in disability access and offer independent facilitation on consultation processes.

The principal legislation protecting the rights of people with disability includes the DDA and the ADA. Under the DDA, complaints relating to disability access can be lodged with the AHRC. The Queensland Human Rights Commission (QHRC) is responsible for dealing with complaints made under the ADA.

In Queensland, a person can lodge a complaint with either the AHRC or the QHRC, but not with both jurisdictions simultaneously.

DDA Premises Standards:

- set overarching performance requirements and provide references to technical specifications to facilitate safe, dignified and equitable access to and use of buildings for people with disability
- provide greater certainty for building owners and managers and other building industry stakeholders by clarifying the general non-discrimination provisions in relation to building design, construction, and management
- provide a practical and ongoing means to achieve improved building accessibility, by requiring that all new buildings, and modifications of existing buildings that require a building approval, meet the relevant standards.

PQC System – consultant service risk assessment

Scope and application

This section explains the process for determining the service risk rating for commissions associated with Queensland Government building construction projects under the PQC System.

The service risk rating is an important element in the invitation and selection process for building industry consultants and is used to assist in the selection of suitably qualified consultants registered in the PQC System.

Process

PQC System

The PQC System contains records of registered consultant entities, including office details and information on past performance on commissions and the types of commissions each consultant is prequalified to undertake.

Agencies should ensure consultants are appropriately registered on the PQC System and have a PQC level that matches or exceeds the PQC service risk rating to be eligible for invitation to submit proposals for government commissions.

Service risk assessment and management strategies

Agencies conducting risk assessment processes should determine a PQC service risk rating. The numerical risk rating equates with the commission's identified level of risk, with 1 indicating a low-risk commission and 4 indicating a very high risk commission. A rating of 4 is allocated only in extraordinary circumstances.

Agencies should use the PQC service risk assessment process to inform and manage the Queensland Government's exposure to risks associated with government building construction project commissions by:

- ensuring all commissions undergo a service risk assessment early in the planning process
- providing a transparent and auditable service risk assessment framework
- providing a system that identifies consultants best placed to manage risks associated with the commission
- identifying strategies to minimise risks.

Management of any high or very high risk (rated 3 or 4) commission elements should consider:

- incorporating the high risk elements in the non-price criteria, requiring consultants to specifically address these elements in their proposal, and weighting the criteria accordingly (see Consultant invitation and selection process details of non-price evaluation criteria)
- reviewing and, if necessary, modifying the proposed procurement strategy to ensure high risk elements are appropriately managed.

Identification of PQC service elements

Government building construction projects generally require several separate consultant services for which there may be different risk ratings.

Each of the consultants should be assessed separately for their risk rating. The assessment process should be documented, transparent and auditable. The PQC System facilitates this by providing a service risk rating table and associated documentation.

When a service risk rating for a particular service is being assessed, the agency officer who administers the commission must document the decision process and record the rating in the PQC System to provide sufficient information to enable audit and/or an independent review.

Using the Service Risk Assessment Tool

Service risk assessment for consultants, based on risk management processes should focus on the following three key areas of risk:

- time overruns
- cost overruns
- potential for functionality or commission requirements not being met.

The Consultant PQC Service Risk Assessment Tool should be used to determine the service risk rating for particular commissions, based on a consideration of consequences and likelihood of the risk event (see Appendix 2-1).

Agencies should:

- assess the PQC service risk rating to differentiate the levels of consequence and likelihood (see Appendix 2-1)
- assess each consultancy service separately for its risk rating by considering and determining risk consequences and the likelihood of the risk event occurring (as outlined in columns C and E of the assessment tool)
- multiply the scores in columns B and D of the assessment tool and record this in column F for each risk areas (see Appendix 2-1)
- average the results to determine the PQC service risk rating (1, 2, 3 or 4) for the commission.

Most services are expected to have a PQC service risk rating of 1, 2 or 3.

After determining the PQC service risk rating, agencies should develop a long list of consultants. Only those who are registered on the PQC System and have a PQC level that matches or exceeds the service risk rating are eligible to be invited to submit proposals for government building construction project commissions.

PQC System – contractor service risk assessment

Scope and application

This section explains the process for determining the service risk rating for services associated with government building construction projects under the PQC System. It includes risk assessment of services for HRS building projects.

The service risk rating is an important element in the building industry contractor tendering and selection process and is used to assist in the selection of suitably qualified contractors registered under the PQC System.

Process

Government building construction projects may include a range of separate contractor services, each requiring separate risk ratings. Project managers must assess the risk rating separately for each service and ensure the process is documented, transparent and auditable. Project managers should then record the rating in the PQC System in a way that provides sufficient information to enable an audit and/or independent review.

The PQC service risk assessment process is to be used in the selection of all contractors, regardless of whether an open (publicly advertised) tender or a select tender process is used. Suitably prequalified contractors should be identified through the PQC service risk rating and other project-specific factors.

Contractors are to be appropriately prequalified on the PQC register, with a PQC level equal to or greater, to be eligible to compete for a project.

The PQC service risk rating should be included in tender documentation and any associated call for tenders.

PQC service risk assessments should be conducted as soon as possible during the planning stages of each government building construction project. This assessment will enable decisions and assumptions to be considered and the practicalities of providing that service analysed.

The PQC service risk assessment (see Table 5) is used to determine service risk ratings based on:

- consideration of the procurement system
- estimated contract sum

- use of project bundling (tender packages involving several projects on different sites)
- a range of service attributes.

The highlighted areas of Table 5 differentiate the service characteristics of government building construction projects considered to be HRS. The rest of the table identifies service attributes to be used when the service characteristics do not automatically clarify the PQC service risk rating.

For PQC services not considered HRS, project managers should:

- consider the service attributes for the appropriate procurement system
- determine which attributes are most relevant to the project, noting that services are expected to have a PQC service risk rating of 1, 2 or 3
- consider service attributes corresponding to the highest service risk rating, particularly when such attributes may lead to assessment of a higher rating than might otherwise be justified
- record the basis of the decision to adopt the service risk rating
- identify and record aspects of sensitivity where there is uncertainty about the most appropriate PQC service risk rating
- complete a new assessment if changes to the scope, timing or cost of the project will affect services to be provided.

Care should be taken to ensure the service risk is neither over nor under-classified (that is, higher or lower than it should be). Over-classification may restrict the number of providers eligible to complete the work. Under-classification may result in appointing a contractor who is not technically or managerially capable of undertaking the work, possibly leading to time and cost overruns and a reduced quality of work.

Project managers should use Table 5 (also available in the PQC Database) to support their decision processes and record ratings in the PQC System, providing sufficient information to enable an audit and/or independent review.

PQC services assessed as high risk

If a service is assessed as high risk (PQC service risk rating 3 or 4), agencies should consider reducing or removing the high risk elements being sought from the contractor by:

- incorporating the high risk elements in the non-price criteria
- requiring tenderers to address high risk elements in their tender, giving appropriate emphasis to that element in the selection of the contractor and in the way the non-price evaluation criteria will be addressed
- unbundle certain services, where applicable
- manage high risk elements in-house or under a separate contract.

Matching services with contractors

Agencies should aim to get the best match between the services to be provided and service providers (the contractors). The PQC service risk rating should clearly indicate the level of challenge and the anticipated capability and capacity requirements, noting that higher service risk ratings equate with greater challenges in delivering the service.

Ensure the capabilities of the contractor are higher for services assessed as high risk. The PQC Database provides information on each contractor's capabilities and capacity.

Confirm the PQC service risk rating before calling the tender

PQC service risk ratings should be reviewed, confirmed or amended shortly before a tender is called, to confirm scope, timing, and complexity, and to determine the availability of other information that could affect the initial service risk assessment.

Table 5: PQC Service Risk Assessment

	Form of contract	Estimated contract sum	Service attributes generally	Assessment[4]	PQC service risk rating
Bundled[1]>$10 million	All	>$10 million	• bundled projects where the total value of the projects exceeds $10 million	☐	3 (or 4)[6]
Not bundled, or bundled ≤$10 million	Fully Documented	<$25 million[5]	• fully documented design, materials, and simple services trades with minimal requirement for innovation • completion date, while important, is not critical • nil or low-level sensitivity[2] – identify sensitivity:	☐ ☐ ☐	Est. contract sum ≤ $5 million = 1 >$5 million = 2
Not bundled, or bundled ≤$10 million	Fully Documented	<$25 million[5]	• a requirement to resolve industry standard construction techniques and/or buildability issues • completion date is critical and has implications • moderate level of specialist services trades required • medium-level sensitivity[2] – identify sensitivity:	☐ ☐ ☐ ☐	2
Not bundled, or bundled ≤$10 million	Fully Documented	<$25 million[5]	• a requirement to resolve complex construction techniques and/or buildability issues • completion date is critical and has significant implications • high level of specialist services trades required • higher than industry standard quality required • high-level sensitivity[2] – identify sensitivity:	☐ ☐ ☐ ☐ ☐	3 (or 4)[6]
Not bundled, or bundled ≤$10 million	Fully Documented	>$25 million	HRS building project[3]	☐	3 (or 4)[6]
Not bundled, or bundled ≤$10 million	Design and Construct - Contracts with Design Obligations	<$15 million	• a requirement to develop documentation • a requirement to resolve industry standard construction techniques and/or buildability issues • completion date is critical and has implications • normal consultation with stakeholders required • moderate level of specialist services trades required • medium-level sensitivity[2] – identify sensitivity:	☐ ☐ ☐ ☐ ☐ ☐	2
Not bundled, or bundled ≤$10 million	Design and Construct - Contracts with Design Obligations	<$15 million	• a requirement to develop design and documentation • a requirement to resolve complex construction techniques and/or buildability issues • completion date is critical and has implications • extensive consultation with stakeholders required • high level of specialist services trades required • higher than industry standard quality required • high-level sensitivity[2] – identify sensitivity:	☐ ☐ ☐ ☐ ☐ ☐ ☐	3 (or 4)[6]
Not bundled, or bundled ≤$10 million	Design and Construct - Contracts with Design Obligations	>$15 million	HRS building project[3]	☐	3 (or 4)[6]

	Form of contract	Estimated contract sum	Service attributes generally	Assessment[4]	PQC service risk rating
Not bundled, or bundled ≤$10 million	Combination of Standard Contracts >$10 million	>$10 million	• projects delivered using a combination of standard contracts and where the separate components are expected to exceed $10 million in value	☐	3 (or 4)[6]

Table 5 notes

1. Refers to projects where high-level skills will be required to manage people, time and resources concurrently on a number of different sites.
2. Sensitivity refers to identified risk issues associated with the service. Such issues would typically relate to environmental, cultural, heritage, social, workplace health and safety, and public health and safety aspects of the service. The building industry contractor would require the appropriate levels of experience, systems, people, and business skills to address the issues of sensitivity.
3. Refer definition of HRS project
4. Tick the box or boxes of the most relevant service attributes and then circle the service risk rating that best corresponds to the selected attributes.
5. If the estimated contract sum is >$5 million under a Fully Documented contract, the minimum PQC service risk rating should be 2.
6. A PQC service risk rating of 4 would be used only in unique or extraordinary circumstances.

Expressions of interest for building industry consultants and contractors

Scope and application

An EOI may be required to identify consultants or contractors able to meet specific project requirements. This section establishes that an EOI may be used in certain circumstances to identify consultants or contractors suitable for particular services. This section:

- explains what is an EOI
- explains when and how EOIs may be used
- identifies sources of advice and assistance with EOI aspects.

Note that EOIs for PPP projects, including Build Own Operate (BOO) and Build Own Operate Transfer (BOOT) projects, which include design, building and operation of a major complex consisting of buildings and a range of service provisions, are outside the scope of this section.

Process

EOIs can be used to procure building industry services for:

- consultants, by inviting proposals from a select list of PQC registered consultants
- contractors, by either an open or a select tender process for government building construction projects estimated to exceed $1 million. Contractor services are generally procured by:
  - open tender for projects with a PQC service risk rating of 1 or 2
  - select tender for projects with a PQC service risk rating of 3 or 4.

EOIs can identify consultants or contractors that are able to meet specific project requirements.

What is an EOI?

An EOI is an optional early-phase process for selecting service providers by inviting prospective consultants or contractors to make submissions for building projects. They are invited to state their ability to meet specific project requirements, either individually or by combining abilities, and are assessed for potential inclusion in a short list for invitation to submit a consultancy proposal or construction tender.

When and how an EOI is used

Agencies considering EOIs should assess the supply market by searching the PQC Database for eligible consultants and contractors.

EPW can assist agencies in the early planning stages by providing information on the suitability of PQC registered consultants and contractors for any building project.

Alignment of project requirements and supply market capability

Agencies should consider delivery aspects such as staging a project and bundling or unbundling project components.[11] Staging, bundling and unbundling can assist in maximising local industry participation, meeting QPP objectives, the Queensland Charter for Local Content, and government priorities.

Decide if services can be procured through the normal process

If market supply assessment determines services cannot be procured through a standard process of inviting proposals from a select list of PQC registered consultants or, in the case of contractor services, through open or select tendering, an EOI may be used.

An EOI can be used as an additional filter when the number of consultants or contractors significantly exceeds the optimum number for select list proposals or tenders.

An EOI can also be used when PQC System assessment and requests for information fail to identify a suitable number of consultants or contractors. In such cases, an EOI could increase the supply base

[11] Bundling refers to the grouping of a number of projects or project elements into a single project.

and ensure interested consultants or contractors are prequalified for required services, providing industry participants an opportunity to form joint venture partnerships where appropriate.

Preparing an EOI brief

The EOI brief should request essential information to assess the relevant financial, commercial, and technical resource capacities of consultants or contractors. The EOI brief should:

- identify the project, the nature of services (including the planned procurement system), the terms and Conditions of Contract, and when the services will be required
- provide relevant project background information, including all information the consultant or contractor should have in considering a submission
- define evaluation criteria (including local industry participation and other policy requirements), relative weightings (if appropriate), and processes for short listing for invitation for consultant proposals or construction tenders
- indicate any constraints such as financial and performance hurdles, risk-allocation parameters, legislation, and government policy requirements (such as requirements for quality management systems and for PQC registration, indicating the PQC service risk rating required and the specific category)[12]
- specify the minimum information required from the consultant or contractor, including:
  - the identities of all participants
  - their capability, including financial capacity, technical expertise, other relevant experience, and details of resources (including trade or professional registration).

Invitation of EOI, evaluation of submissions, and select list preparation

The relevant agency (or its agents for a building consultancy) should manage the EOI invitation, along with submission evaluations and select list preparation.

An EOI invitation can be made at any stage of the capital delivery process. Invitations should be by letter forwarded to prospective consultants or contractors, attaching the EOI brief, specifying when and where EOIs are to be lodged, and nominating a contact person.

Invitations should explicitly state the intention of the EOI process.

If the invitation does not explain the evaluation process, all consultants or contractors submitting an EOI would be eligible to receive the consultant proposal or contractor tender documents, as appropriate.

EOI submissions should be evaluated and select lists prepared in accordance with the selection criteria, weightings, and the process defined in the EOI brief.

When agencies are responsible for the preparation of a select list, their purchasing procedures may require approval of the list at a specific management level before the invitation of consultant proposals or contractor tenders.

A detailed evaluation report should be prepared, recommending a short list of consultants or contractors.

The selection process for choosing a consultant or contractor should consider information provided in the EOI submissions and additional information required to address selection criteria. It should not require consultants or contractors to submit information previously requested in the EOI process.

All consultants or contractors who submit EOIs should be promptly advised of the outcome of the EOI phase.

Value management

Scope and application

Value management can assist agencies to make sound decisions on the planning, management, and use of building assets. Value management is best integrated during the initial stages of the project

[12] Building industry contractors are required to be registered in the PQC System for projects exceeding $1,000,000.

cycle. Opportunities to create enduring community value through responsible public procurement choices, includes the use of local workforces and increasing opportunities for apprentices and trainees wherever possible.

Agencies can find value management particularly useful when:

- determining and prioritising needs
- testing and validating planning assumptions
- enhancing the performance of assets
- securing the commitment of stakeholders to outcomes through structured participation
- ensuring a project or program is cost effective
- improving value through reduced costs while maintaining required standards
- identifying alternative solutions to achieve agreed objectives and outcomes.

Risks

Potential risks associated with not undertaking value management include:

- outcomes that represent poor value for money
- inappropriate strategies for meeting service needs
- inadequate definition of service needs
- imbalance between capital, operating and maintenance expenditure
- an asset that does not support service delivery
- ineffective communication among stakeholders
- deficient project briefs
- lack of project ownership by end users.

Process

Value management studies:

- follow a specific methodology
- are based on a creative and problem-solving approach
- involve key stakeholders in a managed team approach, for example a workshop
- consider functions and interrelationships
- focus on achieving value added solutions.

Decide whether to conduct a value management study based on:

- perceived potential for cost savings or improved outcomes
- desire to overcome a difficult or multi-faceted problem
- the need for rigorous review or audit
- the need to optimise balance between capital, operating and maintenance expenditure
- requirement to accelerate a project
- the complex, high-cost or innovative nature of a project.

Conduct a value management study by holding a workshop involving a multidisciplinary, representative group of people committed to work together and follow a prescribed work plan that clearly outlines the stages and associated activities. Include stakeholders associated with the project, such as:

- clients interested in achieving the best value for money
- users who want the project to meet their needs as effectively as possible
- designers keen to meet client and user expectations and ensure the planning and design principles and performance requirements[13] are understood, evaluated, and appropriately applied
- project directors and project managers seeking to ensure the project is managed within time, quality, and budgetary constraints
- contractors aiming to provide services in a way that they receive an adequate profit.

Consider the cost of conducting a value management study before commissioning a study. Costs can include:

[13] For guidance related to planning and design principles and performance requirements in the context of preparing a project brief, see Project definition.

- engaging a facilitator or team
- participant attendance
- venue hire
- administrative support.

Consider engaging a skilled in-house or external value management facilitator or team to manage the process. Select a facilitator by considering the:

- nature of the study
- complexity of the task
- likely number of stakeholders involved in a workshop
- competence in the principles and practices of value management
- experience with group facilitation of similar projects
- knowledge of and willingness and ability to comply with the AS 4183-2007 Value Management.

Undertake referee checks, and review any supporting documents previously produced for a value management study. Ensure the facilitator has professional qualifications relevant to the building industry and/or is eligible for Institute of Value Management Australia value management facilitator registration.

The selected facilitator should be objective and:

- have no personal stake in or involvement with the project
- be familiar with the design and construction process, and with the roles of design team members.

A value management study should follow a four-stage process (pre-workshop, workshop, post-workshop, and post-study)[14].

In the **pre-workshop** stage, the facilitator and the sponsor of the study should work collaboratively to:

- establish and document the objectives and scope of the study
- determine the venue, format, and duration of the workshop
- identify key stakeholders, including technical experts, end users, decision-makers, and others
- invite participants
- produce a facilitation strategy and workshop agenda
- prepare and distribute background material.

During the **workshop,** the facilitator should focus on process rather than content as they guide participants through the following activities:

- confirm the objectives and scope of the study
- build knowledge and understanding by identifying essential functions (budgets, project inclusions, relevant legislation, and policies) and key issues and concerns, and analyse essential and supporting functions, costs, and resources
- generate alternatives that are the most likely to achieve best value for money
- evaluate ideas
- develop options and proposals considered to have the most potential
- make recommendations and prepare an action plan to:
  - consolidate the outcomes of the workshop
  - represent the consensus of views of the workshop participants
  - highlight ideas that show the greatest potential for value improvement
  - identify:
    - issues that may need to be addressed after the workshop
    - ideas that require further evaluation and resolution
    - actions needed to implement the recommendations arising from the workshop
    - people responsible for implementation actions and associated timeframes for completion
    - resources required for implementation.

The workshop is the main element of the value management study, bringing key stakeholders together to:

[14] These stages are consistent with the AS 4183-2007 Value Management.

- maximise their contribution
- draw on the combined knowledge, technical expertise, and experience of people from a variety of disciplines
- take advantage of group dynamics, rather than relying on input from individuals in isolation
- help bring into perspective the project as a whole, rather than as a collection of independent elements.

The **post-workshop** stage involves preparing a report documenting the workshop process, proceedings, and outcomes and providing a clear and comprehensive record of events and justifications that leads to the development of recommendations and actions. The report should include:

- an executive summary
- an overview of the workshop
- study findings and value improvement options
- a list of actions and recommendations.

Distribute the report to workshop participants/stakeholders before submitting it to management for acceptance of its recommendations.

Determine if the value management process has achieved its objectives in a cost-effective way.

Post-study implementation depends on allocation of appropriate resources and time to assess and implement recommendations and decisions. It is advisable to establish management controls to achieve the agreed objectives and outcomes.

PQC System – contractor financial requirements

Scope and application

Under the BPF Policy Requirement 5, an agency procurement officer must obtain a PQC FCA on a preferred contractor before the award of a government building construction project exceeding $1 million in value.

Risk

The purpose of undertaking an FCA of the preferred tenderer is to minimise the risk of the contractor becoming insolvent while undertaking the project. Such insolvency would be detrimental to the project, the state, sub-contractors, and the wider supply chain.

Process

After identifying a preferred tenderer, and before awarding a contract, an agency procurement officer must use the FCA request form to engage a financial assessment firm from the whole-of-government Professional Services Panel to complete an FCA.

An FCA should only be undertaken for the preferred tenderer, and assessments should not be undertaken on multiple tenderers at the one time.

FCAs are costly and time-consuming for the agency and suppliers. They are conducted at the expense of the procuring agency.

When the financial assessment firm provides the outcome of the FCA, the agency procurement officer must consider the results, which will be presented as one of the following:

- pass – the contractor satisfies the PQC financial requirements for the project and is considered suitable for award of the contract
- pass with concerns – the contractor satisfies the PQC financial requirements for the project, but concerns have been raised and should be considered by the agency procurement officer before awarding the contract
- fail – the contractor does not satisfy the PQC financial requirements for the project and is considered unsuitable for award of the contract.

Where the outcome is pass with concerns, the financial assessment firm must provide conditions for engaging with the contractor (e.g. additional security provided by the contractor through a bank guarantee) to mitigate any concerns identified in the report.

The agency can seek (if required) additional information from the financial assessment firm to understand concern/s raised and the potential risk.

Note that only an officer or employee of an agency covered by provisions of the *Public Sector Act 2022* and the *Public Sector Ethics Act 1994* are to be provided with contractors' financial details.

The FCA report is valid for 25 business days.

If a contractor does not meet the minimum PQC financial requirements, the PQC Registrar will make them inactive in the PQC System, meaning they are unable to tender on or be awarded a project procured through the PQC System. The Registrar will ensure the contractor remains inactive until they provide evidence that they have improved their financial position to meet the PQC financial requirements.

The agency procurement officer will communicate (if required) with the preferred tenderer (contractor) about their ability to improve their financial position. An additional FCA would need to be undertaken to include any changes the contractor makes in their business.

The agency procurement officer should consider the next preferred tenderer for an FCA if the original tenderer (contractor) is unable to improve their financial position.

Eligible tenderer lists for government building construction projects

Scope and application

The PQC System provides a comprehensive central register of prequalified building industry consultants and contractors. Agencies must engage prequalified consultants where the commission fee is expected to exceed $60,000 and/or the service risk rating is 3 or 4, and engage prequalified contractors for contracts expected to exceed $1 million in value.

Process

How to use an eligible tenderer list

Project records are to be created in the PQC System for all government building construction projects with total project expenditure exceeding $1 million. Commissions and/or contracts are to be attached to the project records once they are created in the PQC System. An eligible tenderer list should be generated from the PQC System for commissions/contracts above the thresholds, to determine the pool of appropriately prequalified consultants or contractors for the relevant commission/contract.

Early identification of available consultants or contractors

The following steps should be taken to inform the Project Manager of the availability or otherwise of a competitive pool of eligible consultants or contractors whose prequalification registration details match the requirements of the commission or contract:

- prepare a preliminary eligible tenderer list early in the project lifecycle (i.e. soon after the project has been entered in the PQC System)
- confirm whether the relevant consultants/contractors have a PQC level that matches or exceeds the service risk rating associated with the commission/contract
- ensure the consultants/contractors meet the specific requirements of the commission/contract
- ensure the consultants/contractors are registered to work in the PQC geographical location for the project.

If a competitive pool of appropriately prequalified consultants or contractors cannot be identified, consider approaching the market to encourage any known consultants or contractors potentially suitable but are not prequalified to apply for prequalification.

Note that a preliminary list of eligible tenderers cannot be relied on to determine appropriately prequalified consultants or contractors at the time a tender is called.

Tender call

The process of calling a tender involves generating an eligible tenderer list from the PQC System immediately before the tender call, to determine the current pool of appropriately prequalified consultants/contractors for the commission or contract.

An eligible list cannot be generated too far in advance of the tender call, as the PQC System is dynamic, and the status of consultants or contractors registered as active (eligible to tender) can change quickly. If an outdated tenderer list is used, it is possible that a consultant or contractor who was registered as active in the PQC System at the time the list was generated, and who has subsequently been made inactive could be able to collect tender documents. Their tender would not be able to be accepted due to the change in their prequalification status.

Other PQC System checks

Other PQC System checks include:

- checking for any changes in a consultant's or contractor's prequalification status prior to awarding a commission or contract
- checking if a seek advice flag has been placed on the registration of a consultant or contractor, signifying there is an issue or matter that needs to be considered, suggesting further investigation may be required.

Consultant invitation and selection process

Scope and application

This section explains the Queensland Government's invitation and selection process for building industry consultants for a prescribed range of higher value and risk commissions associated with government building construction projects.

The Queensland Government's *Buy Queensland*[15] procurement approach supports quality, local jobs and businesses, helps to boost the local economy and leaves a lasting positive legacy for current and future generations of Queenslanders.

Process

The QPP is the overarching Queensland Government policy for procurement and should be read in conjunction with the *Queensland Procurement Strategy 2023 – Jobs, Economy, Legacy, Confidence* (QPS). The QPP covers procurement by agencies, (budget sector agencies), government-owned corporations, statutory bodies, and special purpose vehicles.

The QPP requires consideration of the total transaction costs to achieve value for money (including costs to government), together with whole-of-life cost implications, non-cost factors and the impact of any relevant project-specific criteria.

The QPP principles must be addressed for all purchasing, including procurement of government building construction projects. These principles are reflected in the whole-of-government building industry consultant invitation and selection process.

The consultant invitation and selection process that incorporates the PQC System aims to achieve an efficient and sustainable market in the building construction industry.

Intent and objectives of invitation and selection process

Agencies need to understand the intent and associated objectives of the invitation and selection process to ensure:

- a consistent, fair, and transparent consultant selection process
- the scope, extent, and threshold of commissions that require prequalification of consultants has a direct relationship to the risk to government

[15] *Buy Queensland* consists of the QPS and QPP.

- an effective vehicle exists for the achievement of value for money (as defined in the QPP) and the implementation of government priorities
- savings to government and industry through lowering of overhead cost
- access to objective and quantifiable data through a whole-of-government database to support the invitation and selection process and to allow the government to monitor its impact, including to measure and monitor the distribution of work relating to building industry consultants
- enhanced confidence in the ability of consultants to deliver satisfactory time, cost, and quality outcomes
- enhanced industry confidence that the government applies competence, consistency, and probity in the selection of consultants
- consultants compete for government projects against their peers
- effective capacity and appropriate mechanisms for government to respond to evidence of superior or inadequate consultant performance, possible including non-compliance with relevant government policy or contractual and/or legislative requirements
- building industry development and long-term sustainability are facilitated and all relevant government policies are supported through the process.

When does the PQC System apply?

The PQC System applies to commission types identified in Appendix 3-1 where the consultancy fee is either $60,000 or higher, or less than $60,000 and the service risk rating is 3 or 4.

Table 6: Consultancy fee/service risk thresholds

Consultancy fee value	Service risk rating(s)	Does the PQC System apply?
<$60,000	1 or 2	No. Normal QPP provisions apply
<$60,000	3 or 4	Yes
≥$60,000	All	Yes

If the PQC System applies, prior approval is required from the Director-General, EPW, if an agency proposes not to use the PQC System to source consultants for commissions.

Minor government project commissions

If a standing offer or period consultancy arrangements are in place, the agency should ensure that only prequalified consultants are used for individual commissions where the dollar and risk thresholds require the use of the PQC System.

Pre-invitation activities

The quality of initial planning and documentation prepared by agencies is critical to the selection of suitable consultants and ensuring successful project outcomes.

Before inviting and selecting consultants through the PQC System, agencies should:

- prepare a comprehensive and well defined Terms of Reference
- prepare a commission fee estimate
- select an appropriate procurement method.

Commissions where the PQC System applies require:

- creating a project record in the PQC System
- maintaining project records during the invitation and selection process and subsequent commission
- confirming, during initial planning phases, the availability of prequalified consultants specific to the commission requirements.

Where specialist or unique services are required and there are few or no prequalified consultants that offer the service, agencies should seek consultants not currently registered on the PQC System through an EOI process.

Consultant invitation

Prequalified consultants invited to submit proposals can be identified through a select invitation or an EOI process. Both methods ultimately involve the preparation of a shortlist of consultants, but the initial approach differs.

Note the Queensland Government uses the select invitation method for most consultant commissions by identifying a short list of prequalified consultants who are then invited to submit proposals.

Preparing a long list of consultants

The agencies should prepare a long list of consultants from the PQC System, using criteria that correspond to commission requirements including:

- commission type and service activity, confirming the consultant has appropriate qualifications and meets the relevant registration or licensing requirements
- the PQC service risk rating for the commission, confirming consultant PQC levels meets or exceeds the required service risk rating for the project
- certified management systems, ensuring consultants have the relevant certified management systems in place
- the location of the project, confirming the consultant has nominated the geographic areas of operation across Queensland within which they seek to offer services
- the value of the commission, confirming the consultant has nominated the minimum and maximum dollar value for commissions they are interested in for the geographic areas of operation across Queensland within which they seek to offer their services
- the type of work associated with the commission (new, refurbishment or fitout), confirming the consultant has provided evidence of experience and capability associated with the nominated type(s) of work at the time of their application
- the type of project (e.g. civic, residential, health care, office), confirming the consultant has provided evidence of experience and capability associated with the type(s) of project at the time of their application.

It is essential to ensure each commission is correctly established in the PQC System.

Preparing a select list of consultants from the long list

Detailed commission requirements should be analysed as the basis for reducing the long list of appropriately prequalified and eligible consultants to a short list to be invited to submit proposals.

Select list preparation involves consideration of:

- previous opportunities for consultants on the long list to submit proposals for government building construction project commissions, considering the size of the consultant firm and the period of registration on the PQC System (see Appendix 3-2)
- the consultants' demonstrated performance, particularly on previous government building construction project commissions, taking into account any superior performance rewarded with an increase in invitations to submit proposals (see Appendix 3-3)
- the consultants' current commitments and capacity to service any new commitments
- the consultants' PQC level relative to the PQC service risk rating
- any "seek advice" flag on the consultant's registration (this would be displayed on an eligible tender list).

Select list preparation also requires:

- analysing the detailed commission requirements
- reducing the long list of appropriately prequalified and eligible consultants to a shortlist to be invited to submit proposals
- determining the number of consultants for inclusion on the select list by considering the:
  - type and value of the commission
  - service risk
  - urgency.

These steps will minimise the risk of multiple commissions being awarded to a consultant without a competitive process, and facilitate the approach to price scoring.

An exception to this approach may be warranted in circumstances such as emergent commissions or the need for highly specialised or unique services. Such circumstances can result in a select list of one or two consultants. In such cases, the reason for any departure should be recorded.

Note that agencies are required to consult EPW when preparing select invitation lists where the commission fee is estimated to exceed $100,000. This is required to enhance consistency across government.

Selection panels

Selection panels determine select invitation lists of prequalified consultants. A panel should have at least two people, including:

- the agencies officer administering the commission (a professionally qualified person, preferably from the same or related discipline as the required consultant)
- a person with sound knowledge of the register of prequalified consultants.

The panel should:

- identify additional consultants beyond the select list if any consultants are not able to submit a proposal
- review the proposed select invitation list and the documented methodology used to determine it, ensuring the material has been approved by an appropriately delegated senior officer and is retained for probity and audit purposes
- contact the short-listed consultants before finalising the list, to determine their availability and interest in being invited to submit a proposal.

Expressions of interest

EOIs should only be used as an invitation method where:

- special skills or a high level of innovation (e.g. associated with a design competition) are required or
- it is desirable to provide opportunities for consultants to work together (particularly to meet local industry participation policy objectives).

An EOI process may not be necessary if there is an adequate pool of prequalified consultants in the relevant geographical area.

The Queensland Charter for Local Content applies to infrastructure and resource-based projects valued at more than $5 million; and to similar projects in regional and rural Queensland valued at more than $2.5 million.

Private sector projects supported by government may also be subject to Queensland Charter for Local Content provisions.

Local industry participation

EOI advertising should aim to achieve optimum local industry participation. It should be limited to the relevant local area (geographical areas described in the PQC System), and include provisions for principal consultant–subconsultant and consortia arrangements. This will enable prequalified local consultants who may not meet the prequalification requirements to undertake a particular commission by:

- seeking a principal consultant with whom to undertake the commission, or
- entering into a consortium arrangement with one or more other consultants and be considered for shortlisting and invitation
- confirming the consortia, when established for commissions are prequalified.

EOI process for prequalified consultants

Agencies undertaking an EOI process for prequalified consultants to make submissions should:

- confirm the prequalified consultants' ability to meet specific project requirements, either individually or by combining their abilities
- assess on the basis for determining the inclusion or otherwise in a shortlist for invitation to submit a consultancy proposal

- manage risks associated with the procurement of consultant services through, among other things:
  - assessment of the supply market for the consultant services
  - alignment of project requirements and supply market capability
  - preparation of the EOI Terms of Reference.

Invitation for EOI, evaluation of submissions, and preparation of select lists should be managed by the relevant agency.

If fees are estimated to exceed $100,000, agencies are required to consult with EPW when preparing select lists using this method. Terms of Reference should be prepared after it has been decided to seek an EOI.

It is important to:

- minimise the effort and documentation required from consultants
- limit the requested information essential to assess the consultant's capability and interest in the Terms of Reference
- avoid duplication of information that has already been provided and is available in the PQC System
- avoid requiring information more appropriately addressed in subsequent stages of selection.

Managing invitation activities

Note that this section should be read in conjunction with the AS 4121–1994 Code of ethics and procedures for the selection of consultants and the QPP.

Invitation activities should enable invited consultants to develop proposals appropriate to the Terms of Reference and within the nominated timeframe. These activities include:

- preparation and distribution of documents
- responding to consultant enquiries during the proposal preparation period
- receiving and closing of proposals
- scheduling pre-invitation briefings with consultants on the select list, as required.

Invitation documents

Preparing invitation documents for a commission underpins agreements between the agency and consultants. Agencies should ensure adequate time is allocated for document preparation and that documents are clear and accurate, reducing the likelihood of subsequent amendments.

The agency should provide each consultant on the select list with an invitation package that contains all information necessary to enable them to prepare a concise proposal that conforms with the relevant requirements. The same package must be provided to each consultant.

As a minimum, the invitation documents package should include:

- a Letter of Invitation including evaluation criteria and any applicable weightings
- conditions of offer
- Terms of Reference detailing the specific service requirements and scope of the commission
- where appropriate, a copy of the relevant Conditions of Contract
- a copy of any Special Conditions of Contract
- details of the required structure and/or format of proposals.

The invitation should not require previously provided information available in the PQC System.

Consultant responses to price and non-price criteria (see Evaluation criteria, and Appendix 3-4) should always be:

- sought in separate parts (e.g. envelopes or electronic files, depending on whether the process is paper-based or involves digital tendering)
- assessed separately before the fee proposal is sighted, to determine the relative merits of each consultant's non-price proposal
- made clear to consultants in the instructions relating to format requirements.

Enquiries and amendments during the invitation period

The agencies officer managing the commission should:

- attend promptly to and record any enquires and responses relating to invitation documents
- compile any information considered necessary as a result of the enquiry, and issue it to all invited consultants as an addendum as soon as possible
- request each consultant to confirm receipt of all addenda at the time of submitting their proposal
- avoid amendments to invitation documents during the invitation period
- consider extending the invitation period if the amendments are significant or are issued late in the invitation period
- determine whether to extend the invitation period, noting any extension should be managed as an addendum.

Lodgement

Invitation documents should nominate a closing date, time, and place of lodgement. The closing date should allow reasonable time for the preparation of proposals, with consideration of any addenda issued and any public holidays within the proposal period.

Agencies should have a documented and auditable system in place to:

- ensure security and confidentiality of all proposals received prior to the closing time
- secure paper-based proposals by using a locked box
- enable secure and appropriate processes for electronic lodgement
- store electronic files securely.

Unless an agency has an electronic tendering system, proposals should be opened as soon as practicable after the closing time; checked, dated, and signed by at least two people; and recorded in a register. Receipt should be acknowledged in writing.

If an electronic tendering system is used, the receipt of proposals should be electronically recorded and acknowledged.

Consultant fees

Consultants' fees should be determined in accordance with requirements specified in the invitation documents, usually described in a lump sum or percentage of the estimated building cost. Fees are an important aspect of any proposal, but it is important that they are not over-emphasised relative to the non-price evaluation criteria.

Several key industry bodies produce fee guides for different types and levels of service. These may be helpful as a reference, subject to the provisions of the *Competition and Consumer Act 2010* (Cth).

Fee preparation advice to consultants could include reference to a range of factors for consideration, including:

- specified quality requirements
- required documentation levels
- known risks and contractual obligations (e.g. ownership of copyright)
- any value adding to be delivered by the consultant through activities such as research, option studies, design innovations and coordination of subconsultants.

Consultants should receive a fee commensurate with the level of required service.

A minimum fee should be fixed for commissions where there is a particular need to achieve a required level of service.

Note that consultants generally cannot claim fees for the preparation of proposals, but this might not be the case when a complex commission is likely to involve considerable cost in preparing proposals. In complex cases, the agency should consider allowing invited consultants to claim a portion of their costs and identify these additional arrangements in the invitation documents.

Advice should be sought from EPW if there is any uncertainty about appropriate consultant fee levels, when to fix a minimum fee, or the circumstances in which payments should be considered for the preparation of proposals.

Consultant selection

Value selection evaluation should be used if service requirements are well defined and/or routine (i.e. in most cases).

Value selection evaluation methodology will identify proposals that represent the best value for money based on consultant responses for both price and non-price criteria. Note that this method rewards the consultant who has the highest overall weight-adjusted score for both price and non-price criteria.

The highest score for the price criterion should be awarded to the proposal offering the fee closest to the average. The lowest score should be awarded to the fee(s) furthest from the average, whether above or below.

Note that this approach requires a minimum of three fee proposals and will result in a negative score if a fee is less than half the average.

Scores must be weight-adjusted using any pre-established weighting determined for the price criterion.

Price scores are added to the scores for non-price criteria to arrive at an overall score for each proposal.

If an agency seeks three proposals but receives only two, the highest score for the price criterion will generally be awarded to the proposal offering the lowest price.

The agency should consider re-calling proposals if three proposals are sought but only one is received.

Qualification-based selection and associated negotiations require professional and technical expertise. Agencies should seek EPW advice before committing to using this method.

Qualification-based selection is used when service requirements lack definition and/or require significant innovation. The method identifies consultants best qualified to address the commission's non-price selection criteria. Selection is based on an evaluation of consultant responses to non-price criteria only, meaning the fee proposal is not considered in the initial evaluation.

The fee proposal should be opened only after a preferred consultant is identified, and then only for that preferred consultant. The fee proposal then sets the starting point for negotiations about the scope of work and associated fees.

If an agreement cannot be reached with the preferred consultant, negotiations can begin with the second-ranked consultant and so on through the rankings.

Unopened fee proposals are to be returned to their respective unsuccessful consultants.

For further information on what is a consultant and indirect worker, expectations of consultants and indirect workers, engaging and managing consultants and indirect workers, evaluation and selection of consultants etc refer to Engaging and Managing Consultants and Indirect Workers.

Evaluation criteria

Agencies must consult EPW on proposed evaluation criteria and weightings for all HRS projects and consultancies.

Evaluate consultants using price and non-price evaluation criteria based on their fee proposal.

Non-price criteria include:

- understanding of project objectives
- methodology
- resource strategy
- value adding
- support for local industry.

The information and level of detail sought in proposals in response to the above criteria should be limited to the critical aspects of the service to be provided, and commensurate with the value and service risk associated with the commission.

Evaluation criteria and associated sub-criteria are addressed in more detail at Appendix 3-4.

Weightings

The weightings for particular criteria should align to achieve an appropriate balance of project and community outcomes, and should be responsive to factors such as:

- project size
- complexity
- profile
- budget
- timeframe
- specialist nature
- site conditions and location.

Evaluation

Proposals should be evaluated to identify the most advantageous proposal for the agency – the proposal that offers the best value for money outcomes.

The review and evaluation process must be transparent, fair and equitable. The process should be documented, with random audits conducted to verify the process is working effectively. Any discrepancies should be addressed before a final recommendation is made.

The Principal has the option to reject all proposals and re-call invitations in accordance with the conditions of offer, but it is important that this step is undertaken with good reason.

Note that proposals deemed to be non-conforming (due to factors such as late lodgement without a reasonable written explanation of causes of delay beyond their control, or non-compliance with the conditions of offer in the invitation package) can be rejected without evaluation.

An evaluation panel should be formed and must include at least three people (including agency representation) comprising:

- a professionally qualified person involved in preparing the invitation documents
- a person with sound technical knowledge and capable of understanding and interpreting the proposals (preferably from the same discipline as the consultant required)
- a person with a sound knowledge of the QPP and procedural requirements.

One of the panel members assumes the role of chairperson and is responsible for conducting the proposal evaluation process in a timely, competent, and accountable way.

An evaluation plan may be required to assist evaluators dealing with high value, high risk and/or sensitive commissions. Such plans can help ensure the evaluation process is conducted in a timely, competent, and accountable way. An evaluation plan should include:

- a description of the evaluation criteria and associated weightings, including a list of sub-criteria presented in the form of a checklist to aid evaluation of the proposals (see Appendix 3-4 for a list of sub-criteria)
- a description of the scoring method to be used
- a brief explanation of the evaluation method being used (i.e. value selection or qualification-based selection) and an overview of the steps in the process.

Exceptionally low fee proposals

Care is required in selecting proposals where the whole or a key element is at a fee level considered well below the average proposal fee and/or the fee estimate for the commission. The price scoring approach used in the value selection method significantly reduces the likelihood of a proposal with an exceptionally low fee being the preferred proposal, but this could occur if the consultant scored highly in response to non-price criteria. Low fee proposals may also be encountered where there is a sole invitee or two invitees.

In such cases the consultant offering the exceptionally low fee should be asked to review their proposal and/or respond to questions about it; and to confirm in writing that the Terms of Reference and contractual obligations are fully understood before proceeding, or to align costs to deliverables to demonstrate they understand the obligations.

The consultant can withdraw the proposal if they have made a mistake in preparing it.

Pre-approval activities

Before recommending a preferred consultant:

- determine the consultant's workload commitments
- check the PQC System to confirm the consultant is eligible to undertake the commission
- check the consultant's registration/licensing, management systems and insurances are current
- consider any other issues that could preclude awarding the commission to the consultant.

Awarding the commission

The evaluation panel should nominate, subject to satisfactory pre-approval checks, the preferred consultant to the relevant approving authority.

After approval at the appropriately delegated management level:

- issue a Letter of Acceptance to the successful consultant accepting their tender offer and commissioning them under the tendered Conditions of Contract
- raise a purchase order, noting that financial reporting approaches in some agencies could require a purchase order be raised before a Letter of Acceptance is issued
- advise in writing each unsuccessful consultant of the outcome of the evaluation process.

Standard consultant agreement

Agencies should ensure they have the latest version of the Conditions of Contract before seeking proposals from consultants, either by contacting EPW Contract Services or downloading the documents from the ForGov website.

EPW maintains two standard consultant contracts for building industry consultants (General Conditions of Contract for Consultants and the Short Form Consultancy Services Contract). Both are available to agencies for the engagement of consultants.

Debriefing

Debriefing meetings to discuss evaluation results should be available to consultants on request. Such meetings should be held on an individual basis (i.e. with one consultant), and be conducted by a member of the evaluation panel, preferably the chairperson.

The purpose of the debriefing is to provide constructive feedback on areas where the consultant could improve for future proposals. The panel should advise the consultant on the:

- adequacy of their proposal in relation to the evaluation criteria
- relativity of their selection criteria responses in comparison to the successful consultant (note that actual scores must not be disclosed).

Related bodies corporate in select tender lists

Scope and application

This section addresses the approach that should be taken when two or more contractors with either a common majority owner or a parent-subsidiary relationship are being considered for inclusion in a select tender list. Under Section 50 of the *Corporations Act 2001* (Cth), two bodies corporate are related if:

- one is a holding (i.e. parent) company of the other
- one is a subsidiary of the other, or
- both are subsidiaries of the same holding company.

In the context of the PQC System and in accordance with the *Corporations Act 2001* (Cth), related bodies corporate are defined as either:

- two or more prequalified building contractors that are majority or wholly owned by the same parent company
- two prequalified building contractors where one contractor is majority or wholly owned by the other.

Ownership of more than 50 per cent of shares in a company constitutes a majority (and therefore controlling) interest in that company. If one prequalified contractor owns less than 50 per cent of shares in another prequalified contractor, these contractors are considered to operate independently and not as related bodies corporate. Similarly, where a company owns less than 50 per cent of shares in each of two or more prequalified contractors, those contractors are considered to operate independently.

Risks

Prequalified building industry contractors with a common majority owner or parent–subsidiary relationship will act independently of each other, but the potential for public concerns regarding collusion is greater than for unrelated prequalified contractors.

The risk of collusion should be considered when developing contractor select tender lists, and action should be taken to ensure an appropriate level of competition in the tendering process.

Process

Select tendering

Select tendering involves selection, from the PQC System, of a limited number of contractors who are invited to tender on a government building construction project. Select tendering is generally used on projects with a high PQC service risk rating (3 or 4), while open tendering is used on projects with a low PQC service risk rating (1 or 2).

Select tendering minimises the total cost of tendering to industry, while enabling adequate competition and a transparent and equitable selection process. See Contractor tendering and selection process for more information on select and open tendering processes.

The benefits of select tendering and the use of flexible procurement techniques to pursue relevant government economic, ethical, social and environmental objectives are identified in the QPP. A limited offer method may also be used if a procurement need can be met by another agency, including commercialised business units.

To achieve consistency across government in the select tender process:

- prepare all select tender lists for government building construction projects over $1 million in value
- prepare select lists in accordance with an auditable process, in consultation with representatives of the agency sponsoring the project
- do not include related bodies corporate on the same select tender list unless specific approval is granted before finalising the list.

Approval to include related bodies corporate on a select tender list may be granted when:

- an inadequate number of eligible prequalified tenderers (excluding related bodies corporate) has indicated preparedness to tender (after all have been approached), or
- the project is considered so highly technical and specialised that the pool of eligible prequalified tenderers (excluding related bodies corporate) is too limited to achieve effective competition.

Agencies seeking to include related bodies corporate to be on the same select tender list should:

- seek approval from the Director-General, EPW
- prepare (by project proponents) a written submission to the Deputy Director-General, EPW setting out the case for granting approval
- prepare a submission seeking approval when it is not possible to form a competitive select tender list based on eligible and unrelated prequalified contractors.

The approach with respect to related bodies corporate should not apply to open tender processes. All eligible prequalified contractors should be entitled to tender under the open tendering method.

Advertising tenders for Queensland Government building construction projects

Scope and application

All Queensland Government agencies, statutory authorities, and commercialised business units are covered by a SOA for placing (buying) advertising. This section outlines the required procedure, in accordance with the SOA and associated whole-of-government policy, for advertising tenders for Queensland Government building construction projects.

Process

Tenders to be advertised

Agencies must ensure the selection of building industry consultants and contractors (through the tendering process) for services related to government building construction projects occurs in accordance with the:

- QPS and QPP
- Associated guidance included in this guideline (see Consultant invitation and selection process and Contractor tendering and selection process).[16]

Open tendering

For projects procured under open tendering arrangements:

- ensure the call for open tender submissions is advertised using the Queensland Government's QTender website
- procure building contracts for lower-risk lump sum Fully Documented projects (typically projects with a PQC service risk rating of 1 or 2) using open tendering arrangements.[17]

Two-stage EOI process

For projects procured using a two-stage EOI process:

- call for EOIs from consultants or contractors, followed by a select tender process
- ensure interested suppliers are prequalified for the services required
- advertise EOIs using the Queensland Government's QTender website.

Note that agencies should follow the procedure outlined in this section when placing advertisements calling for an EOI.

Information required in the advertisement

Advertisements calling for tender submissions for services related to a government building construction project should state:

- the name of the agency sponsoring the building project
- the type of service required (e.g. construction services, architectural services, project management services)
- the type of submission required (either a tender submission or an EOI)
- the PQC service risk rating for the project
- the project title, location and reference number, and a brief description of the nature of the work
- how/where interested service providers can collect relevant documentation (which may include downloading documents from a secure website)
- a contact phone number
- the tender closing date and time, the place for lodgement of submissions (i.e. the location of the tender box, if required for regional tenders) and details for electronic lodgement.

[16] For government building projects that do not meet the threshold for application of the PQC System, selection of consultants/contractors should be conducted with probity and accountability, in accordance with the QPP.

[17] Building contracts with a PQC service risk rating of 3 or 4, and all building consultancies, are normally procured using the 'select tendering' method, which involves targeted invitations to tender to prequalified suppliers rather than advertisement in the public domain.

Agencies must ensure building industry service providers are appropriately prequalified under the PQC System when tendering for projects with a project value of more than $1 million.

Advertising on the Queensland Government's tendering website

Tenders should be advertised on the Queensland Government's tendering website (QTenders), in accordance with the QPP. The Queensland Government primarily uses web-based electronic tendering to:

- facilitate faster and more convenient access to tendering opportunities/tender documents by industry service providers throughout the state
- simplify the process of submitting tenders.

Mass media advertising

Mass media advertising and communication activities are important tools for the government to deliver information to the public. The Department of the Premier and Cabinet (DPC) administers the Advertising and Marketing Communication Code of Conduct, the Government Advertising and Communication Committee (GACC), and the master media contract for media buying and planning[18] to ensure all government activities align with the government's priorities, are appropriately targeted and offer value for money.

Inviting tenders for early works contracts

Scope and application

For government building construction projects that are required to be delivered within short timeframes, it is sometimes necessary to let a separate contract for work required to prepare a site for construction. This work is commonly referred to as early works.

Process

The type of early works covered under the project contract will determine the approach taken to comply with government policy and legislation. The main types of early works include:

- civil work
- building work
- all works in relation to a government building construction project.

If early works consist only of civil work, a Queensland Building and Construction Commission (QBCC) licensed contractor is not required. Consideration should be given to using a Department of Transport and Main Roads prequalified civil contractor under the National Prequalification System to undertake this work.

If building work such as a retaining wall or perimeter fence is included in the early works contract and the value of the building work component exceeds $3300, the early works contract must be undertaken by a QBCC or other relevant licence-holder, unless:

- the building work is removed from the early works contract, tendering the civil package separately while seeking and tendering the sections covering building work from a QBCC licence-holder, or
- a civil contractor with an appropriate QBCC building licence is sought from the Transport and Main Roads National Prequalification System.

If the contract value of the building work is more than $1 million and it falls under the definition of a government building construction project, then it is necessary to ensure the work is undertaken by an appropriately licensed contractor registered and active on the PQC System.

[18] See https://marketing.govnet.qld.gov.au/advertising.aspx

Professional indemnity and public liability insurance for building industry consultants

Scope and application

This section outlines the insurance requirements for prequalified building industry consultants and advises agencies of their obligations involving these requirements.

Building industry consultants registered on the PQC System must have appropriate professional indemnity and public liability insurance to be eligible for government building construction project commissions. This is to limit the risk to government.

Process

Professional indemnity insurance

The PQC System requires all prequalified building industry consultants to have a professional indemnity insurance policy with the following provisions:

- a minimum insured amount of $1 million per claim
- personal injury coverage
- continuity of coverage for a period appropriate to the commission type
- a maximum excess of $50,000 (a higher excess may be acceptable if the consultant can demonstrate to EPW that their trading entity has sufficient net tangible assets to justify the higher amount).

The required minimum insured amount will vary from $1 million to $10 million, depending on the type of commission, the service risk rating, and the estimated cost of the government building construction project with which it is associated.

Public liability insurance

The PQC System requires all prequalified building industry consultants to have a public liability insurance policy with:

- a minimum insured amount of $5 million per claim
- a maximum excess of $50,000 (potentially higher if the consultant can demonstrate to EPW that their trading entity has sufficient net tangible assets to justify the higher amount).

Agencies have a range of responsibilities to ensure the above requirements are met. For each commission, the agency should:

- determine the level of professional indemnity insurance appropriate to the service risk rating
- consider the period over which the professional indemnity insurance policy should be maintained
- ensure the requirements for professional indemnity insurance and public liability insurance (i.e. the level of insurance and the duration for which cover should be maintained) are included in the commission invitation documents (see Consultant invitation and selection process for more information on managing the consultant invitation process)
- ascertain the appropriate level of professional indemnity insurance for each commission, using Table 7 as a guide. The minimum insured amounts shown in Table 7 reflect those offered by the insurance market (i.e. $1 million, $2 million, $5 million or $10 million).

Professional indemnity insurance is purchased on an annual basis, and renewal of a consultant's cover is not guaranteed. To limit the risk to government of a consultant's professional indemnity insurance lapsing during or shortly following completion of a commission, consultancy contracts may stipulate a period during which the specified level of insurance should be maintained. This should not exceed six years following completion of the commission.

*Table 7: Levels of professional indemnity insurance by Minimum insured amount relative to service risk rating (SRR)**

Project value	SRR 1	SRR 2	SRR 3	SRR 4
< $2 million	$1 million	$1 million	$1 million	$2 million
$2 million to < $5 million	$1 million	$1 million	$2 million	$2 million
$5 million to < $20 million	$2 million	$2 million	$5 million	$5 million
$20 million to < $50 million	–	$5 million	$10 million	$10 million
$50 million to < $100 million	–	–	$10 million	$10 million
$100 million+	–	–	Contact PQC	Contact PQC

* A service risk rating of 4 indicates a very high risk commission, while a service risk rating of 1 indicates a low-risk commission. See PQC System – consultant service risk assessment for more information about service risk ratings.

Financial capacity assessments: Two Stage Design and Construction Management Contracts

Scope and application

This section provides information about projects delivered under Design and Construct contracts. Under Design and Construct contracts, contractors have varying degrees of responsibility for the design and documentation process, and can be engaged to undertake or be involved in elements of the design phase.

Note that a formal FCA of the preferred tenderer is to be made by a financial assessment company at the tender evaluation stage for all government building construction projects exceeding $1 million in value.

Process

Understanding tender evaluation stages

Design and Construct contracts are distinct from Fully Documented contracts. The latter typically has one tender evaluation stage, and usually concludes with the acceptance of preferred tenderer.

Design and Construct contracts involve:

- an initial review of offers received from tenderers before acceptance of a preferred contractor for the initial stage
- a subsequent review of an offer submitted by the successful contractor before the project progresses to the next stage (e.g. under a Managing Contractor two-stage Design and Construction Management (Negotiated Guaranteed Construction Sum (GCS)) contract – a staged version of a contract with design obligations):
  - the Principal initially prepares a project brief, including a budget estimate and estimated completion time
  - the Principal then seeks submissions from appropriately prequalified registrants under the PQC System
  - submissions are evaluated and a tenderer is identified and accepted as the Managing Contractor for stage one of the contract
  - during stage one, the Managing Contractor is required to collaborate with the Principal to revise the project brief and refine design to meet budget and time constraints
  - at a suitable time during stage one of the contract, the Principal asks the Managing Contractor to submit a GCS offer
  - the Managing Contractor's GCS offer is evaluated and considered by the Principal

– if the GCS offer is accepted, the second stage of the contract begins, and the Managing Contractor completes design and documentation and manages construction.

The time between acceptance of stage one and stage two varies between projects, but can range from three to nine months, depending on project size and complexity.

Implications for agencies and project managers

Agency project managers dealing with Design and Construct contracts are required to seek an FCA of the preferred tenderer (from a financial assessment company), and to ensure a "Pass" or "Pass with concerns" (where the concerns have been considered, and where applicable, conditions placed on the contractor to minimise any associated risk) outcome is received before accepting the tenderer for a multi-staged project.

FCAs are based on an estimated or known contract value that adequately reflects work to be undertaken under the full scope of the contract. In the case of multi-staged forms of contract, this contract value will be the estimated cost to complete the entire contract.

FCAs are valid for 25 business days from the date of issue.

Notification of the award of government building contracts

Scope and application

The QPP requires agencies to publish details of awarded contracts. Minimum requirements for reportable contracts are outlined in the contract disclosure guidelines and include:

- basic details of all awarded contracts valued at $10,000 and over
- procurement method used for contracts valued at $500,000 and over
- additional contract details for contracts valued at $10 million and over.

Where a limited procurement method is used, procuring agencies must also publish a brief description of the circumstances justifying the use of this method.

Agencies administering their own building contracts or commissions should ensure details are published no more than 60 days from when the contract is awarded.

If EPW is administering the contract or commission on behalf of an agency, it is EPW's responsibility to meet this obligation.

Formal instruments of agreement

The Queensland Government BPF's Policy Requirement 3 requires agencies to use standard contracts developed by EPW, on all government building construction and maintenance projects. Some of these contracts provide an option for a FIA. A guide note is available on the BCM Contract page.

Management of government building construction projects

Scope and application

The purpose of this section is to provide context for assessing the management arrangements required for effective and efficient management of a government building construction project. The term management of government building construction projects refers to the process by which government building construction projects are defined, planned, monitored, controlled, and delivered to realise agreed goals and objectives.

Risks

The potential risks of not efficiently managing government building construction projects are:

- unpredictable outcomes that may result in objectives not being fully achieved
- reduced effectiveness of the completed assets
- inability to control time and cost

- inefficiencies in the use of resources
- exposure to public criticism or decreased public confidence leading to reputational risk
- legal action, e.g. arising from non-compliance with statutory requirements.

Process

Agencies are responsible for ensuring activities related to managing government building construction projects comply with relevant legislation and government policies. When agencies outsource aspects of planning and delivery, roles should be articulated in agreements between the agencies and service providers, whether private or public sector.

Consultation with EPW during the management of government building construction projects may vary based on the project risks and estimated cost.

The PAF is the foundation for ensuring that project initiation and development is undertaken effectively across the Queensland public sector to deliver maximum value for money.

EPW has established a Project Management Centre of Excellence (PMCoE) to guide the delivery of building projects through its Public Works Division. The PMCoE can be contacted for further guidance.

The expected benefits of managing government building projects are:

- achievement of project objectives
- greater accountability and control, reflected in time, cost and quality outcomes
- effective stakeholder communication and management
- all participants have a clear understanding of their roles and responsibilities.

Considerations for management of a government building construction project

The management process should consider a balance between the social, environmental and economic aspects of the project. Demographic trends and changing consumer patterns and preferences should inform the evaluation methods when considering project options.

Key factors that may affect management of projects include:

- the regulatory environment, government priorities, strategies and policies
- availability and use of adequate management information for project initiation, project and program planning and control
- the development of design solutions that achieve:
  - optimal layout on the site
  - enhanced environmental performance such as reducing water and energy consumption
  - enhanced economic performance by addressing whole-of-life issues including maintenance and management in use and the optimum balance between capital and operating costs
  - optimal health, safety, and security outcomes
  - avoidance or mitigation of the impact of natural disasters
- stakeholder management and communication – integration and participation of various parties including consultants, contractors, maintenance providers in managing projects
- monitoring and control of project progress
- a systematic process to identify, analyse, assess, and treat risks that may affect the project's objectives, involving:
  - a structured process that integrates all activities in the key phases (project initiation, project development and project implementation)
  - evaluation reports, submissions, plans and other information to support decision making for:
    - project delivery
    - project review to improve knowledge and expertise for future projects
  - project planning that involves strategic assessments for defining project outcomes and goals and the development of business cases
  - budgeting for building projects, which should ensure that financial and programming aspects of the brief, including the budget, the forecast cashflow and the key program milestones and timelines, are achievable.

Agency consultation with EPW

Consult with EPW when:

- developing the business cases and the preparation of government briefing material for BPP projects or potential BPP projects
- seeking to depart from using a standard contract, the agency must consult with the Chief Contracts Officer (EPW) about the proposed procurement strategy and contract provision, and subsequently the agency must consult with the Contracts Committee
- selecting a procurement strategy and form of contract for all HRS building projects, where applicable, prior to the finalisation of the business case
- using a select tender list for a building contract on government building construction projects of more than $1 million
- using a select list for maintenance contracts that are more an $1 million over the life of the contract
- using a select tender list where a building commission on a government building construction project exceeds $100,000
- preparing a tender evaluation plan before calling tenders on all HRS building projects; and
- there is major disputation, litigation, or insolvency.

Control of project progress and reporting

Control and monitor the progress of the project and use regular progress reports to detail:

- activities completed within the reporting period and the forecast for the next reporting period, with a focus on activities on the critical path
- expended and forecast cashflows
- scope changes and the measures intended to ensure that the changes achieve the value for money outcomes identified at the business case stage
- risk mitigation strategies.

Benefits realisation

Benefits realisation occurs towards the end of the benefits management process and focuses on ensuring that a project is delivering the anticipated benefits and value for money, documented in the approved business case and benefits realisation plan. The benefits realisation process involves:

- implementing measurement processes to reinforce benefits realisation, e.g. tracking benefits, where possible, using financial measures, or adopting more complex measures
- for complex projects, referring to the Gateway Review Process Benefits Realisation: Gate 5 (Queensland Treasury)
- assessing the impact of the project on service delivery, using:
  - feedback from POEs
  - feedback from stakeholders such as property staff, tenancy staff and service delivery staff in the agency
  - audit reports that noted any overall improvement in service delivery from previous audits
  - assessment of business benefits being realised as set out in the business case, which should be continually updated during the project.

The assessment should be undertaken as part of project review, including building performance review and process review (see Project review).

Payments in the building and construction industry

Scope and application

The purpose of this section is to provide a general overview of protections and requirements in the BIF Act and QBCC Act, designed to ensure contractors are paid for the work that they do. The QBCC is responsible for oversight of these protections and requirements.

While all the information contained in this section may not directly apply to government, it is important that contractors have an adequate understanding should other parties seek further information or have any questions.

The Principal or contracting party (for the purposes of this section is the Queensland Government) is at the top of the contractual chain for procurement of building and construction work and services. This means payments made to engaged companies and persons may flow down the contractual chain to many other parties. It is important that government facilitates the lawful flow of payments through the contractual chain.

Process

The BIF Act requires a project trust account (PTA) and/or a retention trust account (RTA) to be established for certain eligible contracts for building and construction work.

Project trust accounts

PTAs apply to eligible Queensland government building and construction contracts valued at $1 million or more and eligible private sector, local government, statutory authorities' and government-owned corporations' contracts valued at $10 million or more. The following should be considered:

- the requirement for a PTA is progressively expanding in phases to private sector contracts, with full implementation scheduled for 1 October 2025
- a PTA is generally established by the head contractor (contracted party/trustee) for the eligible contract
- all progress payments from the Principal to the head contractor must be deposited in a PTA
- the head contractor acts as trustee of the PTA and distributes payments to subcontractors and itself from this account only
- government principals are not required to establish a PTA
- a PTA is separate to the contracted party's personal or business account, and project funds and amounts owed to subcontractors are kept separate from funds of other projects or contracts, and other cash flows.

A contracted party under an eligible contract must open a PTA within 20 business days after entering into the first subcontract, noting:

- the eligible contract could state a date by which the PTA must be opened; however, this date must be at least 20 business days from the contract date
- the date applicable to the contracted party must be checked.

Once a PTA is established the contracted party must notify the Principal and the QBCC within five business days and ensure the notice about the opening of the PTA states the:

- trustee's name
- PTA – name, account number
- financial institution – name and BSB.

If the Principal knows or ought to reasonably know that a PTA is required but has not been opened, they must:

- check the QBCC register to confirm if the trustee has notified the QBCC and established a PTA, and check with the contracted party before making a complaint
- notify the QBCC using the myQBCC online submission or a manual form (Form TA6 – Trust Account complaint).

The contracted party must, within five business days of closing the PTA, notify the Principal and the QBCC.

The QBCC is responsible for regulating PTAs and RTAs. It has a range of powers, responsibilities and oversight functions, including receiving notices about trust accounts, maintaining a register of all trust accounts, approving financial institutions where trust accounts may be held, conducting approved audit programs to establish trust account compliance, investigating complaints about possible non-compliance with trust laws, conducting enforcement activities, prosecution of alleged offences and directing trustees and financial institutions in certain cases, where warranted.

More information on PTAs is available on the QBCC website.

Retention amounts

The QBCC Act specifies requirements for retention amounts and securities, including:

- when they can be withheld
- how much can be withheld
- when they must be released.

The contracting party:

- may withhold a retention amount or security from a payment to a contracted party to provide financial protection to the contracting party for the purpose of correcting defects or securing performance of the contract
- may withhold, before practical completion, no more than 5 per cent of the contract price as a retention amount or security. After practical completion is reached, no more than 2.5 per cent of the contract price (for the contract) can be withheld as a retention amount or security
- must release remaining retention amounts to the contracted party at the end of the defects liability period or if the building contract does not state a defects liability period date, then it must be released 12 months after practical completion (it is an offence if the contracting party does not release the retention amount).

Retention trust accounts

Government principals are not required to establish RTAs. RTA requirements apply to all non-government principals and head contractors withholding cash retention amounts under an eligible project trust contract, and are scheduled to expand to cash retention amounts withheld by parties (including subcontractors) along the contracting chain from 1 October 2025.

The contracting party withholding the cash retention amounts must establish an RTA. The contracting party requires only one RTA to be established to hold cash retentions across multiple projects, the contracting party can choose to establish more than one RTA.

Cash retentions withheld under eligible project trust contracts must be held in an RTA for the benefit of subcontractors and the trustee.

Note that RTAs include additional protection of a charge in favour of the beneficiary.

More information on RTAs is available on the QBCC website.

Progress payments

The BIF Act provides protections and rights in relation to payment for performance of construction work or supply of related goods and services.

The BIF Act requires the giving of a payment claim (an invoice can constitute a payment claim) by the claimant (the person who performs construction work or provides related goods and services).

Under progress payment requirements the claimant is entitled to a response from the person they gave the payment claim to (for example, the Queensland Government would be a respondent). The response can be payment in full for the amount claimed (by the due date), or by providing a payment schedule specifying the amount the respondent intends to pay.

A valid payment schedule must be provided within 15 business days of the respondent being given a payment claim – or earlier if the contract states another timeframe. The payment schedule must:

- identify the relevant payment claim
- state the amount to be paid (if any)
- state all reasons if paying a lesser amount or withholding payment.

It is an offence if the respondent either:

- fails to pay the full amount claimed without providing the claimant with a valid payment schedule; or
- fails to pay the amount stated in the payment schedule by the due date.

Agency officers should check with their agency's internal guidelines about what checks to make before payment and how to make the payments.

If a claimant disputes a payment schedule or amount paid, and the respondent has either not provided a payment schedule or reasons for the lower amount, the respondent may, in some cases, lose their right to respond during adjudication.

If there is a dispute about the proposed payment amount, the contractor has the right to certain payment protections to secure their access to the money and to have the dispute resolved. This could include adjudication, Queensland Civil and Administrative Tribunal (QCAT), court process, or stopping work.

In the event of disputes, agencies should immediately seek advice from their legal services team, EPW Contract Services, or other line managers.

If subcontractors or other contractors working on a project report they have not been paid, the matter should immediately be reported to the QBCC and if possible, investigated by the agency.

Supporting statements

A head contractor who has engaged subcontractors must supply a supporting statement with every payment claim (noting there are penalties for non-compliance). A supporting statement is similar to previous government contractual requirements to supply a statutory declaration, and must declare that all subcontractors have been paid the amounts they are owed or list all subcontractors who have not been paid in full and give the reasons why.

If an invoice/payment claim is received, and it does not have a supporting statement attached:

- speak to the contractor to ensure a supporting statement is provided
- report this to the QBCC
- pay the claim (the absence of a supporting statement does not invalidate the claim or constitute grounds for non-payment)
- investigate (if appropriate) if all subcontractors are being paid for their work.

Securing unpaid amounts and disputes

Contractors and subcontractors have several options available under the BIF Act when there is disagreement about payment or monies owed. While these options are not relevant to the Principal (being the party at the top of the contracting chain), it is important to understand the consequences of a payment dispute.

Adjudication

Adjudication is a quick, cost-effective dispute-resolution process to help resolve disagreements about progress payments and monies owed, and an alternative to court proceedings.

Under the BIF Act, a claimant (a contractor who claims to be entitled to a progress payment) can lodge an adjudication application with the Adjudication Registrar who will refer the matter to an adjudicator (whose decision is enforceable by a court).

If a respondent (person or company under the contract who is or may be liable to make the payment) does not pay an adjudicated amount, they may face fines, prosecution, or other disciplinary action.

If agencies receive adjudication applications, they must seek advice from their legal services team, EPW Contract Services or the relevant agency line manager.

The QBCC website has more information on adjudication.

Payment withholding requests

Head contractors and subcontractors who have not been paid an adjudicated amount (amount decided by an adjudicator as owing) are able to make a payment withholding request to the party that is higher in the contractual chain than the party who engaged them. This could include a subcontractor making a payment withholding request to the government as Principal.

The higher party that receives a payment withholding request is required to withhold an amount no greater than the unpaid adjudicated amount. This can be withheld over more than one payment claim, including for final payment claims and retention amounts. Failure to withhold payment may result in the higher party becoming jointly and severally liable for the amount.

If agencies receive payment withholding requests they must seek advice from their legal services team, EPW Contract Services or the relevant agency line manager.

The QBCC website provides more information on payment withholding requests.

Charge over property

If a head contractor is owed an adjudicated amount and not paid in full by the due date, they can register a charge over the property where the work took place or goods and services were supplied. This can only occur if the respondent to adjudication or a related entity of the respondent is the registered owner of the property. This can include property owned by the state. In such cases, agencies should consult their legal services area or EPW Contract Services.

The QBCC website provides more information on charge over property.

Subcontractors' charges

Subcontractors' charges are similar to payment withholding requests, in that they provide a way for subcontractors to:

- secure payment of an amount owed under a contract by someone who is higher in the contractual chain (e.g. government Principal)
- secure retention monies held under the contract.

If agencies receive a subcontractors' charge, they must seek advice from their legal services team, EPW Contract Services or the relevant agency line manager.

The QBCC website provides more information on subcontractors' charges.

PQC System – contractor performance reporting

Scope and application

The BPF's Policy Requirement 8 requires agencies to complete performance reports for each supplier engaged through the PQC System.

This section provides guidance for agencies engaged in government building construction projects to complete performance reports on prequalified contractors. It includes information for people managing contracts (e.g. Superintendent's Representative (SR), Site Representative) who are required to prepare performance reports.

Risk

Performance reports are used to assess prequalified building contractors for continued registration on the PQC System and for possible inclusion on select tender lists.

Failure to prepare and submit performance reports accurately and promptly could result in contractors remaining prequalified and eligible to tender on projects, even though they have displayed unsatisfactory performance, unethical behaviour or non-compliance with government policy.

Process

The performance reporting process aims to encourage contractors to achieve superior-level performance, which can increase the likelihood of them being offered select tender opportunities on government building construction projects.

The performance reporting process incorporates a scoring methodology that automatically calculates a percentage score in the PQC Database. This score is used to assign a star ranking between 1 (lowest ranking) and five (highest ranking) to the contractor's registration details. The star ranking is also displayed on PQC eligible tenderer lists to inform procurement officers.

Agencies must complete performance reports for each contractor engaged through the PQC System when construction is 50 per cent complete, and again between one and three months after practical completion of a project.

Performance reports should be completed at other times on an exception basis, particularly if:

- the project is high value or significant
- a contractor is not performing to expectations or is experiencing financial or other stress
- a contractor is displaying superior performance that the reporting officer wishes to highlight.

Reports should be completed as soon as possible if performance issues are identified, to support timely discussions between reporting officers (e.g. SR, Site Representative) and contractors. Performance reports can be completed by agency staff or by third parties engaged by an agency. Every report must be approved by an agency employee.

People preparing and/or approving contractor performance reports must:

- ensure reports are objective, accurate and completed in line with performance metrics outlined in Appendix 4-1
- consult frequently with the contractor to ensure factual and agreed assessments of contractor's performance.

In cases of unsatisfactory performance, it is preferable that those managing the contract and contractor's representative:

- complete a performance report at a face-to-face meeting
- include the management levels of both the entity managing the contract and the contractor in the meeting.

Each performance report must be approved by the agency officer responsible for managing the contract (such as a Superintendent, Superintendent's Manager, Principal's Representative, or Principal Representative's Manager) to certify it is objective and accurate, and can therefore be relied upon by:

- the PQC Registrar when making decisions about a contractor's registration on the PQC System
- agencies considering a contractor for possible inclusion on, or exclusion from, select tender lists.

Contractors must have reasonable opportunity to comment on assessments of their performance in accordance with the principles of natural justice. However, to put the matter beyond doubt, a contractors' support agreement, approval or otherwise is not required to submit a performance report to the PQC Registrar.

Procedure for completing contractor performance reports

Performance reporting should follow the two-step process outlined below.

Step 1 – reporting

The reporting officer (e.g. SR, Site Representative) must:

- consider the contractor's performance under the contract and grade each evaluation criteria on the contractor performance report template as:
  - unsatisfactory
  - poor
  - satisfactory
  - good
  - superior
- accompany unsatisfactory or superior gradings with relevant supporting documentation
- complete section 1 and provide a copy of the report to the contractor's representative, who is to complete section 2 of the report and return it to the reporting officer
- if poor or unsatisfactory performance has been identified, the reporting officer should meet with the contractor's representative to discuss the assessment
- forward the completed performance report and relevant documents to the approving officer for review and approval.

Step 2 – approval

The approving officer (e.g. Superintendent, Principal's Representative) should:

- consider the performance report and any attachments and complete section 3
- forward the report to the PQC Registrar if they are supportive of the comments previously made.

The contractor's representative/management must be given a right of reply if the approving officer makes additional comments that could be considered unfavourable to the contractor. They must:

- forward the report to the contractor's representative/management to complete section 4, with the report to be returned to the approving officer
- where there is significant challenge by any party:
  - the approving officer must forward the report to the approving officer's management for consideration and addressing as required with the contractor's management
  - the approving officer's manager must complete section 5 of the report and forward it to the PQC Registrar.

Where any of the evaluation criteria outlined below have been graded as unsatisfactory or poor, the approving officer should provide a copy of the report to the agency procuring the project:

- industrial relations management
- workplace health and safety management
- compliance with the Queensland Government Building and Construction Training Policy
- compliance with the Queensland Charter for Local Content.

The agency procuring the project will review the performance report and determine if any investigation/action is necessary under the Ethical Supplier Mandate.

There is also provision for final sign off by a client representative (to provide an opportunity for the client agency to view the performance report before it is submitted to the PQC Registrar) at step 6, e.g. where the client's agency:

- wishes to provide feedback on the contractor's performance, in addition to that provided by the reporting officer and approving officer
- has engaged QBuild to manage the contract on its behalf and wishes to be involved in the performance reporting process.

When a performance report is submitted to the PQC Registrar, the Registrar should:

- review the report and any attachments
- seek any necessary additional or clarifying information from the reporting officer, approving officer and/or approving officer's management
- record results of the report against the contractor's registration in the PQC Database
- undertake a formal review and sanctions process where a performance report is unsatisfactory (i.e. has one star ranking), which may lead to a contractor's registration being downgraded, suspended or cancelled.

The PQC Registrar may undertake a review of a contractor's registration status if the overall performance is ranked as two stars, dependent on factors that led to the performance ranking.

PQC System – consultant performance reporting

Scope and application

The BPF's Policy Requirement 8 – Supplier Performance Reporting requires agencies to complete PQC System performance reports for each supplier engaged through the system.

This section provides guidance for agencies undertaking prequalified consultant performance reporting associated with government building projects. It includes information for people managing a consultancy (i.e. project managers and procurement managers) who are required to prepare performance reports on building consultants.

Risk

Performance reports are used to assess prequalified building consultants for continued registration on the PQC System and for possible inclusion on select tender lists.

Failure to prepare and submit performance reports accurately and promptly could result in consultants remaining prequalified and eligible to tender on projects, even if they have displayed unsatisfactory performance, unethical behaviour or non-compliance with government policy.

Process

The performance reporting process aims to encourage consultants to achieve a superior level of performance, which can increase their future opportunities for select tenders on government building projects.

Agencies must:

- complete a performance report for each consultant engaged through the PQC System (at the completion of the consultancy service)
- complete a performance report at other times on an exception basis, particularly where the consultant is:
  - not performing to expectations
  - displaying superior performance that the Project Manager wants to highlight.

Reports should be completed as soon as possible when performance issues are identified. These reports should facilitate prompt discussion between the agency officer (e.g. Project Manager) and the consultant.

Reports can be completed by an agency officer or a third party engaged by an agency, but every report must be approved by an agency officer.

Completing consultant performance reports

It is important to ensure consultant performance reports are objective and accurate. The agency should consult frequently with the consultant to enable factual assessments of their performance.

In the case of unsatisfactory performance, it is preferable that those managing the consultancy and the consultant's representative complete a performance report at a face-to-face meeting. On some occasions, it may be appropriate for the management levels of both the entity managing the consultancy and the consultant to attend the meeting.

The performance report must be approved by the agency officer responsible for managing the consultancy (e.g. procurement manager) to certify that it is objective and accurate, and can be relied upon by:

- the PQC Registrar when making accountable decisions regarding a consultant's registration on the PQC System
- agencies when considering a consultant for possible inclusion on or exclusion from select tender lists.

The consultant must be given reasonable opportunity to comment on the assessment of their performance, in accordance with the principles of natural justice. However, to put the matter beyond doubt, a consultants' support agreement, approval or otherwise is not required to submit a performance report to the PQC Registrar.

The person completing the report must consider the consultant's performance under the consultancy, and grade each of the evaluation criteria (see Appendix 5-1) listed on the consultant performance report template as either:

- unsatisfactory
- adequate, or
- superior.

Reports graded as unsatisfactory or superior should be accompanied with the relevant documentation to support the grading.

Completed reports should be:

- signed by the agency's management officer (e.g. procurement manager)
- forwarded to the consultant's representative, who is to complete the report and return it to the agency officer.

If unsatisfactory performance has been identified on the report, the agency management officer and the consultant's representative (or management) should meet and discuss the assessment.

The completed performance report is to be forwarded to the PQC Registrar. The agency management officer is to forward a copy of the report to the agency procuring the project if 'compliance or support for local industry evaluation criteria have been graded as unsatisfactory.

The agency procuring the project is to review the performance report and determine if any investigation/action is necessary under the Ethical Supplier Mandate.

Receipt of a performance report

On receipt of a performance report, the PQC Registrar will:

- review the report and any attachments
- request (if necessary) the agency officer or agency management officer to provide further information about any assessed criteria, or clarification of any issues
- record the report results against the consultant's registration in the PQC Database
- undertake a formal review and sanctions process where a report is unsatisfactory, noting this may lead to a consultant's registration being downgraded, suspended, or cancelled.

Commissioning and handover on government building construction projects

Scope and application

This section applies to the commissioning and handover of Queensland Government building construction projects, including new buildings, plant upgrades and replacements, major maintenance projects and building improvements.

Handover is a major milestone in the capital delivery process, occurring in the transition between project completion and start of building operations.

This section aims to support consistency and guidance to agencies about the management of handover activities for a smooth transition to operations and maintenance.

Risks

The risks associated with a poor commissioning and handover process include:

- financial risks such as:
  - financial loss due to inaccurate accounting and asset management reporting
  - unnecessary financial exposure due to under-utilised warranties and defect liability periods
  - unnecessary financial exposure due to a lack of supporting documentation, should legal proceedings related to the building be brought against the state
- operational risks such as:
  - deficient asset management due to inadequate building knowledge caused by a lack of documentation (manuals, specifications, certificates, as-built drawings etc.)
  - potential disruptions and inefficiencies in building operations/maintenance due to a lack of building services information
  - non-compliance with statutory and/or government policy requirements
- design risks in future refurbishments/improvements due to lack of accessible and accurate building information
- health and safety risks to maintenance staff due to inadequate training and knowledge about building systems, plant, and equipment.

Process

Each project will have its own specific issues, so the purpose and scope of commissioning and handover requirements should be clearly defined in the project specification.

Plan commissioning and handover activities from an early stage to ensure that:

- the building meets operational requirements
- current and future maintenance needs are identified

- operational and maintenance staff have received all information and knowledge they need to strategically and physically manage the building.

There should be agreed and clearly documented procedures to assist agencies in identifying and implementing adequate management strategies to maximise efficiency and minimise risks.

A government building is commissioned before handover to ensure it is functioning, operational and ready for use. Defects or any outstanding work under the contract should be identified and documented during commissioning. This approach will ensure a clear understanding of work to be completed during the project's final stages:

- ensure commissioning is adequately planned and undertaken, as required under relevant building and development codes, including production of documents, certificates, warranties, inspection, and maintenance schedules
- identify and document any defects or outstanding work under the contract, to ensure a clear understanding of work to be completed during the project's final stages
- contractors/consultants prepare a building commissioning program (including key dates and activities) for the project sponsor and building owners (noting the contractor is generally, under the contractual arrangements, responsible for the commissioning of the building)
- commissioning activities may include:
  - calibrating, testing, and running building systems, services, and equipment to ensure the building is ready for use
  - considering if manufacturers' representatives should be onsite to authorise operation of services and equipment, potentially followed by a report attesting to correct installation and functioning in accordance with manufacturers' specifications
  - calibrating control instruments and systems to ensure energy conservation and environmental conditions are maintained
  - starting handover training for operation and maintenance staff (this should continue throughout handover)
- retain performance data gathered from these activities for ongoing performance benchmarking
- begin the handover training program, involving building owners/users and maintenance providers
- undertake final inspection at conclusion of commissioning, enabling key project personnel (including the project sponsor, contractors/consultants and building owners/users) to ascertain the building's readiness for handover. A satisfactory inspection will result in the issue of a Certificate of Practical Completion.

Commissioning and handover

The strategic objectives of the handover stage are to ensure the building is free from identified defects, fully functional and operational and to prevent disruption to operations during the transition. An efficient handover strategy will also ensure the required building information and knowledge is transferred from the design and construction team to the operational and maintenance staff, improving the latter's ability to manage the short and long-term performance of the building.

Consider the following in the handover process (responsible roles are bracketed):

- pre-handover activities including commissioning:
  - establish a commissioning program, including key dates and activities (contractor)
  - calibrate, evaluate, and run building equipment, services and systems (contractor)
  - review designated contract services deliverables (project sponsor)
  - identify and document defects (project sponsor)
  - rectify defects impacting on safety and service delivery (contractor)
  - submit building documentation to the project sponsor (contractor)
  - confirm maintenance arrangements, including proactive, reactive, preventative, and operational services with maintenance providers (project sponsor and building owner/users)
  - begin handover training with building owner/users and maintenance providers (contractor)
  - prepare and submit handover report (contractor)
- practical completion
  - inspect with building owner/users (project sponsor/contractor)
- post-handover activities

  - identify and document defects/omissions (project sponsor)
  - rectify outstanding defects/omissions (contractor)
  - monitor service maintenance and maintain defect rectification records (project sponsor and building owner/users)
  - arrange final completion inspection with project sponsor and building owner/users to ensure satisfactory rectification of all outstanding defects (contractor)
  - accept final handover report (project sponsor and building owner/users)
  - complete handover training (contractor)
  - update asset register (building owner/users)
  - identify defects/maintenance issues and notify maintenance provider (building owner/users)
- project-close activities
  - close auditable project files (project sponsor)
  - release final payment to contractor (project sponsor)
  - close financial accounts (project sponsor/building owners)
  - review project (project sponsor).

Receipt of building documentation

Agencies should ensure that key project documentation is produced and handed over to the appropriate officer for recording on an agency register and access is made available by those responsible for operating and maintaining the facility.

The contractor/consultant should transfer all building documentation to the project sponsor before handover. The project sponsor should provide copies of this documentation to building owners/users and maintenance providers.

Building documentation may include:

- as-built building plans and commissioning data
- statutory authority permits and approvals, including progressive Building Certifier approvals
- plant, equipment, services, and system information/schedules, including recommendations related to lifecycle costing
- service maintenance requirements
- operation and maintenance manuals covering design and operating parameters, service maintenance schedules, maintenance and cleaning products/tools and spare parts
- certificates, warranties, and guarantees
- occupational instructions and/or any training packages
- lists of outstanding defects identified during commissioning that are to be rectified before practical completion.

Before handover, agencies should ensure that systems and processes are in place for the acceptance and retention of building information. This information should be validated and maintained by the officers responsible for building operation and maintenance.

Building documentation must be handed over and stored in an industry-standard format compatible with relevant asset management systems. The mode of transfer of contract documents and handover requirements should be clearly noted in contract documents and handover requirements.

Copies of all building code assessment documents (including as-built plans and approvals) are to be provided to EPW via the e-plan portal. This information will be made available for access by all agencies.

Building Information Models

Agencies must ensure BIM files are produced according to BIM requirements under the contract and handed over to a nominated officer. These files should be stored in a location that can be accessed by officers responsible for operating and maintaining the facility.

Confirming maintenance arrangements

Before handover, project sponsors and contractors/consultants should assist building owners/maintenance providers determine building maintenance requirements and facilitate planning

and budgeting for maintenance operations. This could include proactive, reactive, preventative, and operational services or a fully bundled facilities management arrangement.

Handover training

In relation to handover training:

- agencies must ensure training is undertaken using the services of members of design and construction teams where appropriate
- project sponsors coordinate training sessions to familiarise building owners/users and maintenance providers with building equipment and systems.

Design and construction teams (including subcontractors, where appropriate) should provide these training sessions, which may involve instructions for occupants and coincide with the handover of building documentation.

Handover training should be started as early as possible during commissioning to prevent disruptions to operations once handover is complete.

Handover report

The handover report, generally prepared by the contractor should document all handover activities in a handover report. and ensure it provides the project sponsor with key building documentation and acknowledges that:

- practical completion has been reached and all elements of the project have been delivered
- commissioning has been undertaken and all building elements are fully functioning and ready for use at the time of handover
- identified major defects have been rectified
- all required building documentation has been provided to the project sponsor
- handover training has been completed.

The contents of the handover report are generally agreed between the project sponsor and contractor at practical completion. Before agreement is reached, the following issues may need to be addressed:

- identification of outstanding issues to be addressed by the contractor and project sponsor
- confirmation that the contractor has satisfied any contractual obligations and complied with all relevant legislation.

Building/asset registration

On practical completion, the relevant agency should:

- ensure building details, for example, identification number, description, acquisition date, value, manufacturer, model, serial number, location are entered into its asset register
- ensure information in the asset register is kept up-to-date and accurate
- where required, complete an audit to identify the location, type and condition of any asbestos containing material
- record all identified (confirmed or assumed) asbestos containing materials in the relevant agency asbestos register
- update these registers where any building work, such as refurbishment, alteration, extension, or improvement, has involved the removal of identified asbestos containing material
- ensure the accuracy, currency, and completeness of building information, including efficient collection, storage, access, use, and disposal of the building asset information over the entire lifecycle of the building.

Practical completion

Practical completion:

- signals the end of the construction stage and the time when the building is handed over to the building owners/users
- is achieved when project requirements have been delivered in accordance with the project brief, approved design and intent, contractual obligations and statutory requirements

- occurs (usually) at the conclusion of commissioning/pre-handover activities and it is at this time that maintenance providers should be advised of all maintenance-related design and construction issues.

Before practical completion, the contractor receives a Building Code Assessment Summary (similar to a certificate of occupancy) from the Building Certifier. This document grants right of occupancy to the building owners/users.

Post-handover activities – defects liability period

Most building contracts have a defects liability period, typically 12 months from the practical completion milestone. During this period, the contractor (or their nominee) is responsible for:

- addressing minor omissions and defects outstanding at handover
- rectifying building defects identified during the defects' liability period.

The project sponsor should inform the building owners/users of contractual responsibilities retained by the contractor after handover.

Document all defects identified during the defects liability period and the rectification actions agreed with the contractor. Defect rectification should cause minimal interference with building operations.

The project sponsor should notify the contractor, or their nominee of any rectification work required to be completed.

It is important to:

- monitor maintenance activities during the defects liability period
- update continually maintenance records to reflect any new defects and/or rectification work
- incorporate maintenance records into a defects report that includes details of maintenance activities undertaken, defects identified and/or rectified, and other building issues requiring attention
- retain maintenance records in maintenance manuals for easy access to information on the condition of assets
- ensure that by the end of the defect liability period, the building is fully operational, and all identified defects and omissions have been addressed.

Final completion

A Certificate of Final Completion is to be issued following satisfactory final completion inspection.

A Certificate of Final Completion confirms that all contractual requirements have been met, including the rectification or acceptance of all outstanding defects and attendance to all omissions.

If defects or omissions are identified by building owners after final completion, see Rectification of building defects or omissions after final completion (below), and refer the matter to EPW for advice, where appropriate.

Project-close activities

Following final completion, close all project files and accounts in a way that allows easy future auditing:

- sort, index, and store key documents produced during the project to ensure an auditable trail
- ensure the archiving process adheres to all relevant legislation, regulations, and agency instructions
- consider the project sponsor's administrative procedures for retaining hard copy signatures or physical stamps, as well as handover of information to regional offices
- close the project accounts (and all related financial cost centres) and store all financial records securely, as required by applicable financial management procedures
- release (by the project sponsor) the final retention payment to the contractor in accordance with the contractual arrangements.

Rectification of building defects or omissions after final completion

Scope and application

This section covers the process and steps to be followed by agencies for the rectification of defects or omissions identified after final completion of government building construction projects.

Process

Agencies should identify defective (faulty or unsatisfactory) building work, as well as omissions. Under a typical contract such as the Conditions of Contract issued (e.g. under AS 2124 with Special Conditions of Contract), omissions are considered to include materials or work (provided or not provided by the contractor) not in accordance with the contract.

A final certificate issued once the contract is completed is, under most contracts evidence that the works have been completed in accordance with the terms of the contract except in cases of:

- fraud, dishonesty, or fraudulent concealment relating to the works
- identification of any defect or omission that was not apparent or not disclosed on reasonable inspection at the time of issuing the final certificate.

In the absence of these exceptions, the Principal is unlikely to have any recourse against the contractor for breach of contract and may have to rectify the works at its own cost.

Where the contract has ended, there are no longer any remedies under the contract that are available to the Principal. If the contractor had failed to rectify the defect or omission, it will be necessary to seek relief through legislation, common law (via the courts) or by exercising rights of set-off where it is possible to do so.

Notifying the contractor

The Principal should:

- establish the issue is a defect or omission in the works under the contract (despite the issuing of the final certificate. The Principal has recourse against the contractor in the case of such defects or omissions)
- notify the contractor of the specific details of the defect or omission
- ask the contractor to inform the agencies in how they propose to undertake rectification works, and in what timeframe
- advise the contractor of any access requirements or restrictions about when work can be inspected or undertaken.

If EPW provided a superintendency role during the contract period, agencies can contact their EPW client representative and ask them to contact the contractor on their behalf.

Note that contractors may be willing to rectify defects or omissions after final completion. There is no need for further action if they do so to a standard and within a timeframe acceptable to the Principal.

Defective work not rectified

If the contractor is unwilling to rectify defects or omissions, or fails to do so to a standard and within a timeframe acceptable to the Principal, available mechanisms include:

- the review and sanction process under the PQC System
- legislative provisions available to the QBCC
- suing the contractor for breach of contract
- off-setting any costs to rectify the defect or omission against amounts otherwise due and payable to the contractor under any other current contract between the contractor and the Principal.

Agencies should:

- advise the PQC Registrar, outlining all action and negotiations taken to date
- attempt to negotiate resolution, which could include reviews, sanctions, or other recommended actions in relation to the contractor's prequalification status, based on consultation with the contractor and relevant people involved, such as departmental legal services and contract services teams and/or the QBCC.

If negotiation fails and the contractor clearly does not intend to rectify defective work in an acceptable manner, the EPW Contract Services Unit is available to provide advice to assist agencies address the matter through legislation, common law, or the Principal's rights of set-off.

Rectification by others

If liability for defects or omissions is disputed, agencies can seek to have rectification work conducted by others, such as EPW's commercialised QBuild unit. Unless the defect or omission gives rise to urgent safety concerns, the contractor should be notified before any work occurs.

Agencies should determine if a debt is payable by the contractor to the Principal, to enable to set-off costs incurred in rectifying the defect or omission. EPW Contract Services should be consulted for advice before actioning the above.

QBCC involvement

The QBCC can only become involved in work that is considered building work under the QBCC Act. Agencies should exhaust all other available mechanisms before involving the QBCC.

Timing

It is important to provide reasonable opportunity for the contractor to rectify work, noting legal timeframes regarding instigating proceedings for work performed under a contract. The EPW Contract Services Unit can provide more information.

If at any time during the process it is considered that remedial work is necessary to address a threatening or serious situation, work can be undertaken by others.

Project review

Scope and application

This section provides best practice guidance for government in undertaking a POE in the project review phase of the capital delivery process.

Building projects at the project delivery handover stage are expected to meet design and performance requirements essential to support the agency's service and strategies.

Building performance and the activities involved in the initiation, development and delivery processes are evaluated in the project review stage. This involves undertaking POEs to complete the capital delivery process cycle.

Project reviews are undertaken at a relatively early stage in the lifecycle of buildings, and feed back into the capital delivery process cycle. Early-stage building performance assessments relate to all performance aspects, including economic performance (including management-in-use costs).

In relation to ongoing management responsibilities, the Queensland Financial and Performance Management Standard 2019 requires efficient and effective management of assets, including a review of the need for existing or additional assets and a review of maintenance strategies.

Process

Competencies and resources required

The competencies required for POE comprise of a range of skills, including:

- facilitation
- strategic asset management
- value management
- project management
- comparative analysis and interpretation
- communication.

The level of technical and professional expertise required will depend on the scope and level of complexity of the evaluation. Agencies engaging consultants in the POE process must ensure they are prequalified and selected from the PQC System.

Project review

POEs should include:

- a building performance review either for individual projects or for programs involving several projects, and must enable objective evaluation
- a process review that assesses the efficiency and effectiveness of the initiation, development, and implementation processes
- preparation of action plans, and reporting findings and recommendations.

Building performance review results are integrated into process reviews, which contribute to continuous improvement in the capital delivery process by assisting in identifying:

- success factors for improved building performance
- inhibiting factors for diminished or declining building performance.

Agencies should consider the building project's impact on agency service operations, including the performance measures used to determine and assess the delivery of outputs; and evaluate the resource and operational performance associated with building projects in conjunction with the POE and processes for project initiation, development, and delivery.

Performance information should be:

- focused on the agency's objectives and services
- appropriate and useful for stakeholders likely to use it
- balanced, giving a picture of what the agency is doing, covering all significant areas of work
- robust, to withstand organisational change or individuals leaving
- integrated into the organisation as part of agency planning and management processes
- cost effective, balancing benefits of the information against the costs.

Project review key elements are:

- project objectives
- projected building performance
- achieved performance outcomes
- process for project initiation, development, and delivery.

Pre-review activities

POEs should consider:

- Queensland Financial and Performance Management Standard 2019 requirements, noting the accountable officer preparing evaluation of a decision to complete an asset, should consider the PAF
- Queensland Treasury's Queensland Government Program Evaluation Guidelines, noting that some major projects undertaken, and ongoing major programs that may involve a series of smaller projects, should be subject to ex-post evaluations
- requirements for asset review and analysis in developing resource strategies during project initiation in the capital delivery process, noting a POE may be undertaken to assess the performance of existing buildings
- any provisions in the relevant agency's internal control procedures that may require:
  - building performance review
  - process review
  - review of particular aspects of building performance or process
- any other aspect of a program (which may involve a number of smaller projects), an individual project, or program or project initiation, development and delivery processes, where a review may benefit current or future programs or projects.

The following checklist should be used to assist in choosing programs or projects to decide whether to undertake a POE:

- is the program or project of significant value in line with the agency's priorities?
- is it innovative?
- is it sensitive to contextual issues, such as government priorities, community expectations, change management and public relations?
- is there a high level of risk exposure, such as may arise from complexity or legal sensitivity?
- does it involve management or mitigation of significant social or environmental impacts?

- is one project a forerunner to several proposed similar projects?

A POE can be initiated by a building owner, a program director, or an asset manager. The following requirements should be considered when deciding whether to conduct a POE, noting that evaluations may be initiated for a number of reasons:

- feedback on the project – an assessment can be made on whether the project itself has been a success or not. This requires a comparison between initial objectives, predicted performance and actual achievement of objectives, and the performance of the project
- feedback on the planning process – this will assist in determining if there is synergy between project achievements and agency goals, policies, and priorities, and can guide planning processes for future projects
- assessment of economic evaluation approach – project economic evaluation is based on costs and benefits assumptions, which may or may not be realised
- control of ex-ante approach – where there is an established process of evaluation, an extra discipline is imposed on the overall planning and evaluation process.

The scope of the POE should be defined. It can be tailored to individual projects or programs, and will generally encompass:

- one or two key project aspects critical to particular agency objectives
- functional performance and user satisfaction (including user responses to the physical environment) with general evaluation of the project delivery process and an emphasis on areas where it has been established that functional performance and user satisfaction may have been compromised
- operational performance (from the perspective of outcome managers)
- an objective assessment of all areas of design and performance.

Review activities

Parties such as building supervisors, maintenance personnel and other occupants should be included in stakeholder briefings. Stakeholders should be identified in pre-review activities, and must be advised exactly what the evaluation will involve, in order to avoid suspicion and maximise cooperation.

An appropriate POE methodology should be developed by integrating scope and level of evaluation requirements with activities required by the selected data collection and analysis evaluation instruments.

Evaluation plans may be developed to meet management framework requirements. Such plans include:

- phases and activities established for application of the evaluation instruments
- roles and responsibilities of the parties involved
- time and resource schedules.

Typical evaluation instruments for POEs include:

- focus groups involving a small number of relevant stakeholders for evaluation of particular elements
- workshops, often preferred for larger POEs to enhance communication and networking
- questionnaires, generally used for larger and investigative evaluations, as a simple way to collect data from a representative sample of stakeholders
- structured interviews (which may be followed by informal discussions) can be used to gather data for smaller focused and indicative POEs
- walk-through inspections, potentially including video recording and behavioural mapping
- case studies, which can be used for investigative evaluations involving major ongoing programs that have a series of smaller building projects. This allows for individual buildings to be treated as individual elements within the evaluation framework and can be useful for comparative assessment.

Activities involved in performing the evaluation include:

- Collecting data and monitoring the evaluation –a review of as-built drawings and other relevant data will assist this process. The main activities involve the application of evaluation instruments selected in the methodology. The outcomes of this stage are indicators and measures of building performance and the process for its initiation, development, and implementation.
- Analysing and interpreting data– the main activities involve analysis, interpretation, and drawing conclusions from the data collection process. Data analysis may identify positive and negative

aspects of the building in use, and may require further analysis of process aspects that have affected building performance. The outcomes of this stage will be findings relating to building performance and the processes for its initiation, development and implementation.

Action plans should be developed to review relevant stakeholder feedback and develop and prioritise strategies to address any issues identified.

Review outcomes and recommendations should be documented in a project review report to support asset management decisions over the life of a building to maximise investment benefits. The format for a project review report will depend on the scope and level of the POE.

Post-review activities

Once the review is complete, the responsible officer should:

- seek approval of the recommendations at appropriate agency management level (before implementation and review of their effectiveness)
- implement the recommendations, which could relate to:
  - design and performance of the building and its associated spaces, elements, materials, and finishes
  - activity performance relating to operational performance and processes for initiation, development, and implementation
- review effectiveness of actions, monitoring the outcomes and changes implemented to ascertain if they have had the desired impacts on performance.

Building design and performance review

Building performance reviews should be undertaken for individual buildings or for several buildings that are part of a larger complex or building works program. Their purpose is to provide information about the performance requirements of new or existing buildings when fully operational, after at least 12 months of occupancy. These reviews aim to:

- assess the suitability of a building or several buildings to meet service and output requirements
- identify how future building investments can be improved.

Building performance reviews focus on specific design aspects and performance requirements relating to project location, site and building elements, and their impact on business performance. Aspects to be assessed include business performance which relates to the delivery of outputs and services, as well as the following which may also impact business performance (noting performance indicators and measures may be developed for each aspect):

- functional performance
  - functional spaces in and around the building
  - space allocations and fitout
  - space groupings and functional relationships
  - design and construction quality and standards
  - the site and building generally, including physical characteristics, circulation and access, safety, environment, communications, security, appearance, artwork and operational aspects (including cleaning and maintenance)
  - general planning and design
- technical and environmental performance
  - health, safety and security
  - heating and cooling
  - lighting and acoustics
  - plumbing and electrical provisions
  - materials
  - IT provisions
  - equipment
- economic performance
  - building performance as an investment in resources

  - whole-of-life issues, such as those relating to recurrent costs associated with occupancy and operations, leasing and lease management, workplace health and safety, and maintenance
- symbolic performance
  - aesthetic and image characteristics
  - how buildings relate to community private and public domains
  - integration of art and design.

Performance indicators and measures should be used to assess performance for each aspect and compare it with performance levels that may have been established in the project brief. Evaluation should relate to performance of both building systems and human activities and responses, and involve relevant data collection and analysis.

Building performance reviews should be made by selecting a range of indicators and measures for evaluation. If a review is being undertaken for a number of buildings (potentially part of a larger complex) or a building works program, the review may be based on an aggregation of appropriate indicators and measures selected from the building level.

Process review

Process reviews assess the effectiveness and efficiency of the process for building project initiation, development and implementation, and identify how future investments can be improved. They should be undertaken at levels similar to those for building performance reviews (i.e. for projects that involve individual buildings or several buildings that may be part of a larger complex or building works program).

Process reviews are undertaken when the building is fully operational and after (at least) 12 months of occupancy

Consider the following aspects of strategic asset management systems relating to the process for initiation, development, and implementation of building projects (noting process indicators and assessment measures may be developed for each aspect):

- asset management policies (and other policies unrelated to asset management, such as employment and social policies, which could affect performance)
- asset management practices
  - existence of and compliance with documented processes
  - alignment with BPP and associated practices
  - integration with agency core business processes
  - extent of focus on achieving project objectives
  - independent capital delivery process performance indicators
- asset management resources
  - management structure and reporting hierarchies
  - integration with core business functions
  - capacity (including numbers, competencies and skill mix)
  - project management cost margins (cost of resources relative to capital value of the project)
  - integration of project team resources
  - defined responsibilities.

Process indicators and measures developed for each aspect should be used to assess the effectiveness and efficiency of each stage of building project initiation, development, and implementation, and to identify how future investments can be improved.

Building performance outcomes should be integrated in process reviews to contribute to continuous improvement in application of the capital delivery process by assisting to identify:

- success factors for improved building performance
- inhibiting factors for diminishing or declining building performance

Post-occupancy evaluation

Scope and application

This section aims to provide agencies with a structured approach to conduct a POE of a new or existing facility when it is fully operational – after at least 12 months of occupancy.

The POE process collects and analyses building performance data and translates this into action plans including:

- focusing on how users interact with the building after sufficient time has elapsed for them to experience and adjust to the building
- assessing how the building supports service delivery objectives
- assisting continuous improvement in the planning process, by identifying positive and negative aspects of the building and incorporating this information into the planning and design of future facilities
- informing the preparation of defect action plans, at an operational level, to help correct deficiencies by improving maintenance, minor works, and management decisions.

Risks

Risks that must be managed when planning and undertaking a POE include:

- inadequate definition and management of the POE
- an undisciplined approach
- invalid or unreliable data collection
- an exclusive focus on negative aspects
- unavailability of participants.

Failure to conduct a POE may result in:

- lost opportunities to improve future facilities
- reduction of asset performance in support of service delivery needs
- repetition of current deficiencies in future facilities.

Process

All agencies that control or administer buildings are required to undertake building performance reviews for:

- HRS government building construction projects and
- a representative sample of repetitive government building construction projects (not necessarily HRS projects) such as prototypes and standard building types.

The following provides agencies with a process to conduct a POE for a new or existing facility occupied for at least 12 months.

The POE process involves three phases:

- pre-evaluation
- evaluation
- post-evaluation.

Pre-evaluation phase

Decide whether to conduct a POE by considering the:

- necessity for a rigorous review or audit
- desire to improve building functionality
- need to enhance project briefs
- criticality of the building type to agency service delivery requirements.

The building owner is responsible for initiating a POE.

The level of review required will depend on the objectives and scope of the POE. The scope should be identified early, and should consider:

- functional performance – general planning and design associated with functional spaces in and around the building, including:
  - space allocation and fitout
  - design and construction quality and standards
  - physical characteristics, circulation and access, safety, operational aspects including cleaning and maintenance
- technical and environmental performance, including:
  - health, safety, and security
  - building services provisions including heating and cooling, lighting, acoustics, and plumbing and electrical
  - equipment
  - materials and IT provisions.
- economic performance:
  - the performance of the building/s as an investment in resources; and whole-of-life issues, including those relating to recurrent costs associated with building occupancy and operations, leasing and lease management, and maintenance
- symbolic performance:
  - aesthetic and image characteristics of the building/s for the community
  - integration of art and design.

The POE process should identify stakeholders such as building users, the building design team, and the building manager. It should establish a management framework that defines the scope, level and the roles and responsibilities of the evaluation team. Management could involve a reference group.

Evaluation team selection is based on the scope, level, and complexity of the POE, noting that:

- a simple POE may be undertaken by one person
- a complex review (addressing a variety of issues) may require a combination of external consultants and in-house resources with a range of skills to ensure objectivity. Team membership should be based on expertise in relation to anticipated issues.

Evaluation phase

Conduct a POE study by:

- engaging with stakeholders who may affect or be affected by the POE, e.g. the building owner, building manager and building users
- determine appropriate data collection methodology, including data collection instruments and preparation of a review plan[19]
- conduct the study, analyse the results, and develop an action plan
- prepare the POE report by including:
  - a summary that provides a quick overview
  - methodology
  - data analysis
  - findings
  - recommendations and action plans, which can include:
    - tasks and activities linked to building project processes and outcomes, including project briefs, SMPs, and minor works programs, noting that further investigation of project planning and delivery processes that affect building performance is sometimes required to allow an adequate interpretation of results
    - enhancements/modifications to the design and performance of the building to improve energy and water use, occupant comfort, workplace health and safety and the proper operation of all building systems.

[19] A review plan should include activities established by the methodology for the review, the roles and responsibilities of the parties involved, and the time and resource schedules.

A POE for a general study can be a brief document, but comprehensive structured reports are required for in-depth investigative studies.

Post-evaluation phase

Implement actions and measure effectiveness by:

- seeking approval of the recommendations and action plans
- addressing recommendations and action plans
- reviewing the effectiveness of actions.

POE recommendations and action plans can identify enhancements or modifications to building design and performance to improve energy and water use, occupant comfort, workplace health and safety and building systems operation. The results of this evaluation together with the process review, will contribute to continuous improvement of agency internal control procedures.

Modern Methods of Construction

Scope and Application

This section aims to guide and inform the adoption of Modern Methods of Construction (MMC) for the delivery of specific Queensland Government building construction projects.

MMC is not anticipated or intended to replace traditional (in situ) construction, but is seen as a complementary or supplementary approach to deliver more projects within the current and future constrains of labour, skills, materials, budgets and timelines.

MMC describes a broad spectrum of construction methodology, systems, processes and products which seek to improve and provide better efficiency, value for money, quality and sustainable outcomes from the construction industry to deliver social infrastructure. MMC is most suited to social infrastructure projects such as schools, housing and health care.

Common product examples of MMC include but not limited to:

- precast panels
- Structural Insulated Panels (SIPs)
- volumetric (Modular)
- pods
- floor and wall cassettes
- mass timber (e.g. cross-laminated timber, glue laminated timber, etc)

QBuild is leading the implementation of MMC for Queensland Government and has established the MMC supply chain of manufacturers, contractors and consultants to be able to deliver suitable projects for agencies. As the government's specialist advisor and delivery partner of MMC projects, QBuild should be contacted early in the preliminary planning phase to assist in any MMC opportunity assessment.

Process

Considering MMC - MMC opportunity assessment

To achieve the highest influence and opportunity for MMC to be a success in delivering the outcomes for a project or program, the MMC process should be considered at the very early stages of a project. The more detailed and progressed a design is, the less flexible it is for MMC application (without redesign). Note that designing for MMC does not restrict the opportunity for traditional delivery.

All social infrastructure projects should undertake a preliminary assessment as part of the project/program delivery strategy to determine if the approach should include MMC in part or full.

MMC preliminary strategy quotation

When the MMC has been identified as a viable delivery approach, QBuild can be requested to provide a MMC preliminary strategy quotation. This enables a more detailed assessment of the MMC opportunity,

define the project scope, outcomes and key deliverables as well as identifying preliminary cost and time planning advice.

MMC preliminary strategy

Upon acceptance of the scope and quotation, QBuild will progress a preliminary strategy providing schematic design documentation, supporting cost plan and timeline. Following the completion of the preliminary strategy, the client determines the adoption of the MMC preliminary strategy.

MMC design and delivery

QBuild will be responsible for the design and delivery of projects which adopt the MMC strategy. QBuild utilises a team of internal and consultant resources to provide program management, project management, manufacturing management and where identified, Principal Contractor services.

Benefits and opportunity of MMC

MMC should be considered for the delivery of projects or programs of work which seek to achieve any of the following benefits:

- environmental
- certainty of delivery
- time savings
- labour/skills shortages
- safety
- minimise disruption
- complex/restricted sites
- improved quality
- improved productivity
- upskills workforce
- opportunities to reduce costs

Whilst many of the benefits may be realised, it is important for each project or program to prioritise the benefits to guide the delivery approach and requirements.

The MMC approach is particularly relevant for rural/regional projects which generally have limited access to trades.

Climate-smart buildings

Scope and application

The purpose of this section is to highlight environmental sustainability as a key consideration in the planning, procurement, management in use, disposal and acquisition of government buildings.

Consistent with government climate change policies and strategies, the QPP requires agencies to integrate sustainability, renewable energy, and energy efficiency principles and practices into the procurement of goods, services, and capital projects.

Agencies must continue to develop and adopt more environmentally sustainable approaches to building design and construction and to reduce the environmental impact (e.g. greenhouse gas emissions, waste production, energy and water use) of existing buildings.

Process

Key considerations throughout the asset lifecycle

Consider environmental sustainability incorporating energy efficiency and renewable energy throughout the entire asset lifecycle stages (i.e. planning and investment, procurement, management in use, and disposal).

Environmental sustainability should be addressed at the early stages of the capital delivery process (such as the project initiation and development stage), using the BCDF where appropriate.

Project feasibility study and business case development

Consider adopting strategies that avoid unnecessary consumption of, and manage demand for, resources during the development of asset strategies to support agency service delivery strategies and the subsequent conduct of project feasibility studies.

Using a lifecycle, total cost of ownership or whole-of-life costing approach can quantify the total cost of procuring a building. It should include consideration of potential savings through maximum energy efficiency of a building during operation (supporting the *Queensland Energy and Jobs Plan's* emissions-reduction outcomes), rather than just the initial cost of procuring an environmentally sustainable building.

Project the lifecycle costings should be documented in business cases, and building environmental impacts should be considered during project feasibility studies.

Project definition

The project brief should address the need to reduce the environmental impact of buildings during construction, operation, and disposal by considering the configuration of workspaces to facilitate effective and efficient service delivery while conserving resources. For example, workspaces could be laid out to maximise space efficiency and minimise energy requirements for tenant operations.[20]

Building designs should:

- support:
  - the *Queensland Building Plan*
  - the *Queensland Energy and Jobs Plan*
  - the *Queensland Climate Adaptation Strategy* and *Queensland Climate Action*
  - flexibility for use adaptation
  - building resilience to climate change impacts, such as flood, tropical cyclone and fire
- comply with legislation, regulation, and Commonwealth, state, and local government environmental policies
- incorporate water efficiency measures (e.g. water-efficient fixtures, grey water and rainwater harvesting for use in toilets)
- use low-maintenance materials and finishes, thereby contributing to a reduction in operational service costs over the life of the building
- use materials that are reusable and/or recyclable, and/or contain recycled content that are fit for purpose and provide environmental benefits and are of comparable cost and quality to alternative products
- ensure optimum access for equipment maintenance (considering cost effectiveness, the type and degree of access required for specific equipment, and requirements under occupational health and safety legislation)
- ensure landscaping is responsive to climatic conditions (e.g. drought-hardy vegetation in dry climates), enhances the working environment, and is complementary to any site-specific environmental plan
- define environmental outcomes or performance requirements (e.g. energy emissions/usage targets, indoor air quality and recycling targets) for a building project, and ensure it facilitates the most cost-effective and innovative means of compliance by consultants and contractors (e.g. avoid prescribing the use of specific products/building materials where it is likely there are other environmentally sustainable solutions available).

Investment and procurement stage

If a specific environmental rating or performance requirement has been set for a government building construction project, the agency should confirm that all parties to the project understand their roles, and commit to achieving the rating or performance requirement.

[20] Where capital building projects include fitout for government office accommodation, departments should refer to the EPW Office Accommodation Management Framework Guideline fitout section, in conjunction with the Ecologically Sustainable Office Fitout Guideline.

Elements and aspects of the rating system certification process should be embedded in building contracts where appropriate[21], and implementation of any environmental performance provisions should be monitored.

Handover and commissioning

Agencies should ensure maintenance staff and plant operators (particularly those in roles responsible for maintaining environmental performance) receive thorough training and orientation in accordance with the developed project plan completion and commissioning activities as part of the transition from construction to operations.

Operation and maintenance manuals are to be provided during handover and should include:

- procedures/maintenance activities, e.g. manufacturer recommendations for appropriate maintenance and cleaning regimes
- settings and specifications for plant and equipment to enable buildings to perform to the expected design level.

Management in use

During the use of the building, monitor the building's compliance with environmental performance requirements including:

- a developed environmental framework, such as the National Australian Built Environment Rating System (NABERS)
- any contractual requirements for maintenance service providers/contractors to provide regular accurate environmental performance information
- the contribution of building users and tenants to the building's overall environmental performance (e.g. recycling, turning off lights and computers).

Ensure environmental performance data is reviewed and analysed at appropriate intervals to maintain and improve performance levels.

Maintenance and refurbishment

Agencies should evaluate options for maximising sustainable outcomes during maintenance and refurbishment activities, and demonstrate commitment to continual improvement in cost-effective sustainable outcomes. Environmental considerations and operational targets should be incorporated into maintenance strategies and practices, noting it is essential that agencies engage with maintenance providers for this purpose.

Agencies are encouraged to:

- engage and partner with maintenance and services providers to ensure buildings continue to operate sustainably over their life, including adopting new technologies and practices at critical asset lifecycle milestones
- consider upgrading building systems (e.g. lighting systems) to more energy-efficient models
- consider improvements of existing buildings (including installation of energy or water-efficient systems), in terms of the complexity of implementation, practicality, relative cost, and compliance with legislation, standards or codes (e.g. *Queensland Heritage Act 1992*, NCC).

Building performance assessment

Agencies should:

- implement an industry-recognised performance-based approach to building asset planning, decision-making and management
- ensure buildings effectively support agency service delivery requirements and are used in cost-effective, efficient and sustainable ways
- allow for performance testing and comparison against as-constructed design assumptions, to contribute to building research and as part of POEs and building design improvements.

[21] Departments should consult with the Contract Services unit of EPW regarding the selection of contracts for government building construction projects.

Disposal stage

Government buildings should be disposed of by:

- transfer to another agency or open market sale[22]
- demolition (if physical condition has deteriorated to a level that it is uneconomical to renovate/rehabilitate/refurbish), considering if the building can be:
  - reused or reallocated
  - returned to the supplier for reuse or recycling
  - contributed to a waste exchange program
  - recycled locally.

Disposal plans should consider mitigation of potential long-term pollution risks, and reinstatement of safe, stable landforms compatible with the surrounding ecosystem.

EPW environmental sustainability initiatives

EPW has adopted the application of two specific environmental rating systems – Green Star and NABERS – to the design and management in use of office buildings within its portfolio.

Workplace health and safety

Scope and application

This section aims to assist agencies to manage building assets throughout each stage of the lifecycle, including planning, investment, procurement, management in use, and disposal, by:

- controlling potential risks to the health and safety of workers and others in operating the asset
- reducing the human and financial cost of workplace injuries to employers, workers, and the community.

Risks

Failure to manage risks can result in injuries, illness, or death, and reduce job performance to an extent where budgets, delivery times, and corporate objectives are not met.

Process

To fulfil workplace health and safety obligations in relation to government buildings, agencies should:

- identify hazards and potential risks to health and safety, including at/or near the workplace where construction is taking place
- implement measures to eliminate or minimise the level of risks, including documenting steps undertaken to ensure the highest level of health and safety protection from hazards arising from work, as far as is reasonably practicable
- prepare and communicate a workplace health and safety policy to workers, visitors, and clients
- ensure contractors working in government buildings or on government building construction projects are appropriately licensed and use correct safety equipment
- consult with contractors and others responsible for management or control of a workplace where construction work is being undertaken, to ensure information about hazards is shared, risks are controlled, and procedures are in place to monitor and review effectiveness
- allocate responsibilities and accountabilities for health and safety advice to a specific person in the agency (such as a safety advisor) or engage a consultant on an as-needs basis to assist officers to meet due diligence duties under the *Work Health and Safety Act 2011* (Qld). The duty to exercise due diligence:
  - cannot be delegated to the safety advisor
  - always remains with each individual person with management or control of fixtures, fittings, or plant at a workplace, to ensure (as far as is reasonably practicable) that those activities are without risks to anyone's health and safety

[22] See Asset disposal for guidance on planning for the disposal of building assets.

- train people in the workplace about workplace health and safety duties and responsibilities to meet legislative requirements and agency health and safety objectives
- implement a recording and reporting system for workplace health and safety incidents
- monitor progress and achievements on an ongoing basis
- develop and implement appropriate emergency procedures associated with events such as fires, bomb threats and gas or chemical leaks.

Planning

During the planning stage of a building, risks likely to arise throughout the building's life should be identified, assessed, and considered in the context of design. Risks should be eliminated if possible or managed with appropriate control measures.

Building design should support and protect the health and safety of people who:

- participate in its construction
- will work in or visit it
- might be put at risk by its operation
- maintain or repair it or any fixtures, fittings, and plant.

During construction work, consult with people responsible for workplace health and safety, including:

- designers
- project managers and principal contractors
- others responsible for management or control of a workplace where construction work is being undertaken.

Designers should ensure the design of the building does not adversely affect the health and safety of people:

- during construction
- when the building has been completed and is being used for the purpose for which it was designed
- when the building is being dismantled and disposed.

Develop the design so as to limit the affect on workplace health and safety by:

- conducting tests for hazards unique to the design, and not common to all designs of that type
- making information available to those the building has been designed for
- testing results and implementing any conditions necessary to ensure it is safe.

Investment and procurement

For existing buildings (purchased or leased):

- undertake risk assessments and appropriate action before building occupancy, to ensure people's health and safety
- ensure that buildings with asbestos containing material[23] are not purchased or leased for occupancy unless all alternatives have been considered and an asbestos management plan has been developed to manage the assessed risk.

For construction work, the principal contractor should fulfil workplace health and safety duties including:

- displaying prescribed signage
- preparing a health and safety management plan
- obtaining a copy of safe work method statements before work starts.

Management in use

Develop and implement operational risk management processes to ensure the ongoing health and safety of people affected by the building.

[23] There are other hazards in addition to asbestos such as lead-based paint. See https://www.worksafe.qld.gov.au/safety-and-prevention/hazards/hazardous-exposures

Document safe working procedures used by workers, undertake regular audits to monitor implementation and effectiveness of systems and control measures.

Train workers with specific reference to controlling workplace risks.

Make regular inspections and risk assessments of asbestos containing material. Asbestos removal work must meet requirements under the Work Health and Safety Regulation 2011.[24]

Disposal

Identify, assess, and manage risks to health and safety associated with the disposal, sale, or demolition of a building by:

- remediating site contamination and addressing other site preparation works before the sale of the building
- considering the impact on the surrounding community of demolition processes or the decommissioning of specific plant or equipment
- appropriately removing and handling asbestos containing material during demolition.

Capital delivery checklist

Scope and application

This checklist will assist agencies to self-assess compliance and develop improvement strategies for meeting the relevant requirements.

Agencies can adopt this compliance checklist as is, or amend it to suit individual circumstances, subject to all applicable requirements being covered. Records that support assessments should be retained to allow for any future audit.

Details of non-compliance should be recorded, and an action plan developed by the agency to address areas of non-compliance. The action plan should include a list of remedial actions and identify the officer responsible and the timeframe for implementation of each action.

[24] See https://www.worksafe.qld.gov.au/laws-and-compliance/work-health-and-safety-laws

Project initiation

Requirement	Met? (yes, no or N/A)	Comments	More information
The project has been initiated to support planning for service delivery strategies to match the outcomes required by government with current and projected needs of the community.			The link between business strategy and the need for the project should be clearly identified and substantiated in accordance with the Financial Accountability Handbook, the Queensland Treasury PAF and the BCDF.

Project development

Requirement	Met? (yes, no or N/A)	Comments	More information
The project has been developed based on a systematic evaluation of options (at project feasibility and business case stages).			More information is available in the PAF Business Case Development Guideline.
The project feasibility stage, involving the comparative evaluation of build and non-build scenarios, clearly confirms the need for the building project through the production of a business case.			Refer to the PAF Strategic assessment of service requirement

Program formulation

Requirement	Met? (yes, no or N/A)	Comments	More information
The project has been included in capital acquisition plans as part of the program formulation stage. Agency program formulation procedures identify a clear requirement for consultation with EPW to identify program alignment with government strategy for centralised workload smoothing and program management for medium and lower value projects.			Note the date of the most recent assessment or planned future assessment.
Agency program formulation procedures identify a clear requirement for consultation with EPW about proposed project estimates, escalation, cash flows and urgency for each project. Consultation should also take place with EPW during the project definition stage of the capital delivery process.			Note the date of the most recent assessment or planned future assessment.
The agency ensures that project records for all building projects with total project expenditure exceeding $1 million are created and maintained in the PQC System.			Note the date of the most recent assessment or planned future assessment.

Requirement	Met? (yes, no or N/A)	Comments	More information
			Project records should include, apart from project budget and location details, details of planned tender call, contract award and practical completion dates.

Capital delivery program

Requirement	Met? (yes, no or N/A)	Comments	More information
Notification to suppliers The agency supports online project search through the PQC System and publishes Queensland Government tenders along with forward procurement pipelines. The online project search facility provides information of likely and confirmed government building construction project opportunities available to the private sector across Queensland.			

Project implementation

Requirement	Met? (yes, no or N/A)	Comments	More information
An effective project procurement strategy involving the use of standard contracts developed by EPW. Alterations to standard contracts should not occur without consultation with and agreement from EPW's Contract Services unit.			Note the date of the most recent assessment or planned future assessment.
Selection of contracts for all HRS projects has been undertaken in consultation and agreement with EPW.			HRS building projects are those where failure to achieve project objectives would critically affect the delivery of services to the community or impact aspects of industry development. Note the date of the most recent assessment or planned future assessment.

Requirement	Met? (yes, no or N/A)	Comments	More information
The PQC System has been used to engage building consultants and contractors[25] based on prescribed risk and financial thresholds.			Note the date of the most recent assessment or planned future assessment.
For any commission expected to exceed $100,000, requirements for consultation with EPW in preparing a select list of building consultants has been met.			Note the date of the most recent assessment or planned future assessment.
The requirement for EPW (in consultation with the relevant agency) to prepare a select list of building contractors, where required, for a government building construction project expected to exceed $1 million has been met.			Note the date of the most recent assessment or planned future assessment.
For all government building construction projects exceeding $1 million, an FCA of the preferred tenderer has been undertaken.			Note the date of the most recent assessment or planned future assessment.
A tender evaluation plan for HRS projects has been prepared. Consultation has been undertaken with EPW on the proposed evaluation criteria and weightings to be used in the selection of contractors and consultants prior to calling tenders.			Note the date of the most recent assessment or planned future assessment.

Design and construction

Requirement	Met? (yes, no or N/A)	Comments	More information
A legislative compliance strategy for each government building construction project commensurate with the level of risk and cost of the project has been developed and implemented.			Note the date of the most recent assessment or planned future assessment.
Agency project management processes consistent with assessment against building regulations have been implemented.			Note the date of the most recent assessment or planned future assessment.

[25] The PQC System and/or standard forms of contract are only required to be applied to projects where a Queensland Government department is the Principal. It is not appropriate for other types of entities (including local governments, universities, government-owned corporations, and statutory bodies, etc.) to be granted direct access to information about eligible tenderers from the PQC System.

Requirement	Met? (yes, no or N/A)	Comments	More information
Consultant and contractor performance reporting during and at the end of the commission or contract has been undertaken.			Note the date of the most recent assessment or planned future assessment.
Consultant and contractor financial and management risk-monitoring and reporting to the PQC Registrar.			Note the date: • that any contractual, legal, or administrative action involving a consultant or contractor came to the attention of the agency • that the PQC Registrar was informed.
Any major disputation, litigation, and insolvency has been reported to EPW Contract Services.			

Handover

Requirement	Met? (yes, no or N/A)	Comments	More information
Commissioning and handover processes have been reviewed to ensure their adequacy to facilitate proper management of the building.			Note the date of the most recent assessment or describe what other process is used to ensure that: • commissioning is adequately planned • training of maintenance service providers, where appropriate, is undertaken • key project documentation is produced, handed over to the appropriate officer for recording on an agency register, and kept available for access by the officers responsible for operating and maintaining the facility.

Project review

Requirement	Met? (yes, no or N/A)	Comments	More information
Agency building performance review procedures have been issued.			Note the date that the procedures were last reviewed.

Part D: Renewal and evaluation

Building asset maintenance

This section expands on key areas of building asset maintenance and provides decision-making methodologies. Consistency in approaches to the management, planning and delivery of maintenance is essential to enable the government to monitor the condition of assets and future maintenance requirements.

Maintenance management

Scope and application

Building maintenance management is a fundamental part of strategic asset management. Buildings must be physically inspected and properly maintained to support service delivery needs.

Consistent approaches to the management, planning and delivery of maintenance is essential for the government's ability to monitor the condition of its assets and future project maintenance requirements.

Risks

Decisions about material selection and design layouts (which may require additional provisions to enable access for maintenance purpose) have a significant impact on a building's maintenance expenditure. Buildings should be designed for ease of maintenance to ensure more economical lifecycle costs, as well as suitability to the needs of end users.

Process

Consistent maintenance management leads to substantial long-term benefits where:

- assets perform better
- asset life is extended
- operating costs are reduced
- users/community members have favourable perceptions of government services.

Agencies have specific roles and responsibilities, including:

- establishing an agency SMP[26], maintenance policies, maintenance strategies, and maintenance plans and work programs
- incorporating service delivery objectives, which should be reflected in the building maintenance specified condition standards
- developing procurement strategies to assist in achieving value for money
- adopting a SMP that incorporates a balance of proactive and reactive maintenance
- undertaking site inspection condition assessments at least every three years
- assessing buildings impacted by natural disaster as soon as practical after the event
- using condition assessment information to identify the need for short and long-term maintenance planning
- monitoring and reporting maintenance performance, including establishing proper protocols, processes, and systems for information retention.

Understanding the implementation of the key concepts will support maintenance outcomes, building performance, risk management, and strategic decision-making. Key concepts include:

- the definitions of maintenance, specified condition standards and building asset assessment
- classification of maintenance work into categories and sub-categories, such as:
  - proactive maintenance including condition based, preventative (statutory, recommended), operational (cleaning, horticulture) and facilities management

[26] This feeds into departmental SBAMP and SAMP documentation.

  - reactive maintenance including find and fix, wear and tear, make safe and responsive maintenance related to incidence
- risks associated with deferred maintenance
- maintenance work planning based on condition programs, existing programs, historical data and agency asset planning.

Scope of building maintenance

Scope and application

The scope of building maintenance is established in the context of the overall management of buildings. The maintenance of Queensland Government buildings should optimise service potential and minimise whole-of-life costs. It is important to obtain accurate and objective knowledge of buildings' physical and operating conditions, including risk and financial impact associated with maintenance.

The purpose of this section is to provide guidance on the identification of building assets, building-related assets and building maintenance activities. Correct identification of buildings, building-related assets and building maintenance activities will help determine resource levels that will ensure government buildings are adequately maintained.

This section will assist agencies to distinguish components which form part of a building from those that do not.

Process

Building assets

Building assets should be defined to assist agencies to distinguish components that form part of a building from those that do not. Definition should consider the types of activities related to building maintenance (as distinct from building operations).

Consider the following for maintenance of buildings

Building services, site improvements and temporary buildings that provide storage or shelter should be reported as building maintenance.

For planning and undertaking maintenance, buildings and building-related assets are broken down to component levels. Building components and building-related assets are collectively referred to as building assets.

Costs associated with the maintenance of non-building assets should be assigned to operational or other budgets, rather than reported as building maintenance expenditure.

Building asset components

Note that definitions below are consistent with the Australian Institute of Quantity Surveyors' Australian Cost Management Manual – Volume 2, which refers to the components of a building as element groups, elements, and sub-elements.

Use a standard method to break building structures into smaller components to facilitate consistency in:

- maintenance reporting
- establishing specified condition standards
- costing, planning and implementing maintenance works.

Building substructure, superstructure, finishes, and fittings components should be considered.

Substructure – includes basement and foundation excavations; piers, piles, pedestals, beams, and strip footings; foundation walls; drop aprons; hardcore filling; work slabs and damp-proofing or other membranes; floor structures; sub-soil drainage; ducts, pits, bases, and service tunnels; entrance steps, ramps, and their finishes; steps and ramps in the one floor level; structural screeds and toppings; internal swimming pools; and all other work up to, but excluding, the lowest floor finish.

Superstructures include:

- **columns** – internal and external columns, from tops of columns to bases, column casings, and all protective non-decorative coatings
- **upper floors** – all beams, concrete precast and in-situ floors, waffle slab and filler block floors, metal floors, computer floors, timber framed floors, structural screeds and toppings, concealed insulation, balconies, overhangs, and sunhoods integral to floor structures, steps, and ramps in the one floor level, and all protective non-decorative coatings
- **staircases** – the supporting framework of a staircase, its treads and risers, landings, ramps between floor level, fire escapes, access ladders, spiral staircases, string and soft finishes, and balustrades and handrails
- **roof** – portal frames, roof construction, gables and other walls in roof spaces, parapet walls and roof balustrade, thermal insulation, roof lights and dormers with their sun screening, eaves, verges and fascias, rainwater goods, internal stormwater drainage runs, awnings and open lean-to roofs, and all protective non-decorative coatings
- **external walls** – structural walls, basement walls and tanking above lowest floor finish, spandrel, curtain and window walls, external shop fronts, glazed screen walls, columns and isolated piers to non-framed (load-bearing) structures, gallery and balcony walls and balustrades, solar screen walls, plant room air flow screens, all insulation to external walls, all external finishes to columns, slab edges, beams, projecting overhangs and walls, lintels and flashings at openings, ring beams and stiffening beams not integral to floor, and ceiling or roof slabs
- **windows** – flyscreens, louvres, guard grilles, remote control opening/closing gear, sun protection to windows, curtains, blinds, track and pelmets, windowsills and linings, and hardware and decoration
- **external doors** – frames, linings, glazing, architraves, hardware, panels and highlights (above the door frame) and other decoration, fly doors, roller shutters, garage doors, fire doors, grille and chain-wire doors, gates, service cupboard doors and thresholds
- **internal walls** – walls and piers, internal columns and isolated piers to non-framed (load-bearing) structures, lintels, damp courses and bearing strips, stiffening beams not integral to floor, ceiling, or roof slabs, part-height solid walls glazed over to ceiling, un-ducted air flow grilles, and firewalls and smoke screens
- **internal screens and borrowed lights** – proprietary-type office partitioning, glazed screens, internal shop fronts, fold away and operable walls, overhead framework and supporting beams, chain-wire and grille screens, toilet partitions and screen walls, borrowed lights, balustrades and rails not associated with staircases, and all finishes and decorations
- **internal doors** – frames, linings, glazing, architraves, pelmets, hardware and door grilles, chain-wire and grille doors, toilet doors, cell and strong room doors, fire doors, roller shutters, service cupboard doors, duct access panels, fanlights and panels over fanlights, linings to blank openings, and all finishes decorations.

Finishes include:

- **wall finishes** – finishes to internal faces of external walls and columns, acoustic wall linings, face and coloured blocks and off-form concrete, splashbacks, dados, and regulation wall vents
- **floor finishes** – balcony floor finishes, skirtings, screeds, timber floor finishes, dividing strips, mats and matwells, duct and pit covers, carpeting used as a permanent floor finish, timber and other finishes to concrete floors, and finishes to steps within the floor level
- **ceiling finishes** – suspended false ceilings, proprietary suspended ceiling systems, acoustic ceiling linings, linings to roof lights, ceiling utility access holes, framing to bulkheads and cornices.

Fittings include:

- **fitments** – benches, cupboards, shelving, racks, seats, counters, notice boards, signs and name plates, coat rails and hooks, mirrors, wall hatches, and daises and stages
- **loose furniture** – furniture that is not built-in and is easily re-locatable (such as tables, chairs, desks, lounges, freestanding cupboards and shelving, and filing cabinets) is considered a non-building asset
- **special equipment** – includes window cleaning apparatus, boiling water units, sink heaters, refrigerated drinking-water coolers, sanitary macerators, and circulating fans.

Equipment provided for a purpose-built building should be considered part of the building. This rule applies when equipment is built-in, affixed or installed in a way that removal would necessitate

extensive restoration works or result in substantial cost (e.g. spray-painting booths, incinerators, autoclaves, sterilisers, bakery equipment, laundry equipment and cranes).

Equipment that can be easily removed from a building (or building site) after erection/installation is not considered part of the building. In this context, the primary function of the building is as a shelter.

Non-building plant and equipment can be disconnected, dismantled, and removed without significant impact on the building in terms of:

- damage to the building structure, including internal partitions
- function of the building as a shelter
- need to restore, change or upgrade the building after removal.

Consider using the following sub-categories to identify items as non-building plant and equipment:

- **portable and attractive equipment** – generally smaller items of a stand alone, hand-held or plug-in nature and includes hand-held tools, portable power tools, cameras, calculators, and battery-operated clocks
- **white goods and general office equipment** generally plug-in electrical items; usually included as office facilities and includes plug-in urns, fridges/freezers, clothes washers, computers, printers, photocopiers, shredders, and microwave ovens
- **production and business equipment** – generally used for carrying out the core business activities (e.g. production, training, testing, research) of the building occupant; can be easily removed without significant impact on the building and includes scientific equipment, woodworking, metalworking and welding equipment, sewing machines, and biological safety cabinets
- **ancillary equipment** – generally used for routine operational purposes and includes motor vehicles and tractors, trailers, boats, ride-on mowers, pool cleaning and servicing equipment, cleaning equipment, garden hoses and sprinklers
- services including:
  - **sanitary fixtures** – WC suites, urinals, basins, sinks and tubs, troughs and runnels, drinking fountains, slop hoppers, showers, hobs, shower curtains and trays, terminal outlets integral with fixtures, flusherette valves, soap and toilet paper holders, and towel rails and hand driers
  - **sanitary plumbing** – stacks and vents, all loose traps, floor wastes, internal sewer drainage runs, pumps and ejectors, acid-resisting pipes and drains, box ducting and paintwork
  - **water supply** – storage tanks, pumps, water treatment plants, water heaters and coolers, reticulation pipework, including pipeline components, terminal outlets not integral with fixtures and/or equipment, controls other than those associated with water consuming items of equipment, box ducting, insulation, sheathing, paintwork and identification, and building and electrical work forming part of the water supply
  - **gas service** – portable gas cylinders, booster compressors, manifolds and regulators, box ducting, painting, and identification, building and electrical work forming part of the gas services, reticulation pipework and pipeline components, terminal outlets not integral with fixtures and/or equipment, and gas detection systems
  - **space heating** – unitary heaters, reticulated steam, hot water, or hot oil systems, warm air systems, electric floor or ceiling heating systems, fireplaces, hearths, or associated work in chimney stacks, boiler plant, insulation and painting, controls and associated electrical work
  - **ventilation** – mechanical ventilators, non-mechanical roof ventilators, supply and/or exhaust fans, ducted systems, exhaust hoods, ducting, plant, controls and associated electrical work
  - **evaporative cooling** – evaporative coolers, rock-bed regenerative systems and ancillary heating devices, ducting, insulation, painting and associated electrical work
  - **air conditioning** – package air conditioners, systems for cooling only, plant (chillers, cooling towers, air handling units, pumps etc), ductwork and air conditioning grilles, controls and associated electrical work
  - **fire protection** – sprinklers and other automatic extinguishing systems, fire indicator boards, manual and automatic fire alarm installations, firefighting equipment, hydrant installations, hose reels and cupboards, and hand appliances

  - **electric light and power** – main distribution board, sub-mains and distribution boards, emergency lighting systems, power sub-mains to mechanical equipment and sub-mains and/or sub-circuits to other equipment and/or final sub-circuits
  - **communications** – all telephone cabling, internal telephones, public address, call, emergency warning and intercommunication systems, personal paging, clock and/or bell systems, TV antenna and closed-circuit TV
  - **transportation** – lifts, hoists, and conveyor systems, escalators, all associated equipment and work other than structural building work
  - **special services** – monitoring systems, cool rooms and process cooling, special conditioned rooms, staircase pressurisation systems, compressed air, medical and industrial gas systems, dust extraction systems, security systems, lightning protection, stage lighting and theatre equipment, reticulated soap dispenser systems, laundry, heat and water reclaim systems
- external services include:
  - **external stormwater drainage** – pipe runs from the external faces of buildings, inspection pits, sumps, road gullies, culverts, box drains, grated trenches, runs from pools and fountains, outfalls and head/walls, agricultural and sub-soil drains, and connections to existing runs and pits
  - **external sewer drainage** – pipe runs from the external faces of buildings, grease gullies, inspection pits and utility access holes, acid-resisting and special drains, dilution pits, petrol and plaster arrestors, septic tanks, collection and holding wells, absorption trenches, transpiration areas, pumps and ejectors, and connections to existing runs, pits, and mains
  - **external water supply** – storage tanks, water towers, pumps, water treatment plants, water heaters and coolers, reticulation pipework including pipeline components, terminal outlets not integral with fixtures and/or equipment, insulation, sheathing, painting and identification, meters and meter enclosures, water bores, irrigation and ground watering systems, and building and electrical work forming part of the water supply
  - **external gas** – storage cylinders and tanks, meters and regulators, meter enclosures, reticulation pipework and pipeline components, and building and electrical work forming part of the external gas supply
  - **external fire protection** – standby and booster pumps, pipe runs, storage and reticulation of gas and vaporising agents, hydrant points, and overhead and underground cables for fire detection systems
  - **external electric light and power** – connections to source of power supply, consumer mains, sub-station equipment, emergency generating plant, main switchboard, underground and overhead cables, pylons and all trenches for cabling, street and area lighting, and illuminated signs and building flood lighting
  - **external communications** – underground and overhead cables, pylons, connections to existing cables, external speakers, hooters, clocks, bells, closed-circuit TV, and community antenna systems
  - **external special services** – external connections to special services, service tunnels, ducts or conduits in connection with external reticulation of services elements, dust extraction plant, incineration plant, and bulk storage for medical and industrial gases.

Building asset site improvements

Site improvements provide infrastructure support for buildings that assist with the delivery of agency services. The cost of maintaining site improvements should be reported under building maintenance. Consider the following elements that constitute improvements to the site:

- roads, footpaths, and paved areas – trafficable areas between and around buildings for vehicles and pedestrians, including car parks, playgrounds, kerbs, crossovers, bollards, steps and associated balustrades
- walls, fencing and gates – structures that enclose or define the extent of the site and portions within that site, including all walls, fences and gates on the site, and fencing on vacant land
- outbuildings and covered ways – small buildings supplementary to main buildings, and covered areas or bridge links for pedestrian or vehicular site circulation, including detached covered ways

not alongside buildings, garages, bicycle sheds, incinerator buildings, residential and gatekeepers' cottages, garbage shelters, workshops, chapels, stores, sheds, stair blocks, electrical, mechanical, and other services for outbuildings or covered ways
- general improvements – structures/installations that enhance the site's appearance and provide incidental site facilities for the use of occupants, including seats, fountains, petrol bowsers (pumps) and tanks, sculptures, flagpoles, signs and notices, cricket nets, basketball posts and goal posts, sports pitches and open-air swimming pools.

Note that temporary site improvements are considered non-building assets.

Non-building assets include:

- structures erected on a site for a short period of time, generally for specific events/activities, including temporary signs, cloth banners, and displays and fête stalls
- landscaping – any vegetation and associated improvements provided to enhance the aesthetic appearance of the site, including lawns, gardens, vegetable plots, shrubs and plants, sports ovals, and ornamental pools.

Building maintenance activities

Report the following activities as building maintenance:

- payment of statutory fees, such as those required to comply with legislation, including:
  - registration of plant and equipment with Workplace Health and Safety Queensland
  - environmental licences (fuel-fired plant, fuel installations)
  - fire system connection to fire brigade
- maintenance cleaning – considered part of building maintenance if the purpose is to preserve or protect the building asset or improve its appearance, including:
  - high-pressure water blasting and washing of building exteriors
  - removal of algae from paths where it presents a slip hazard
  - note that day-to-day hygiene-type cleaning is not considered part of building maintenance. Hygiene-type cleaning includes general cleaning of walls and floors, washing down surfaces, vacuuming, polishing, and shampooing
- various external works – some external works are considered part of building maintenance if they are necessary to prevent damage to buildings, including:
  - lopping trees/branches to prevent leaves clogging gutters
  - removing of roots that threaten foundations and underground services
  - maintaining firebreaks (i.e. an area that forms a protective barrier against the spread of fire from adjacent sites)
  - mowing and clearing vacant sites to minimise vermin problems
  - activities associated with erosion control.

Day-to-day landscaping activities necessary to maintain aesthetics (e.g. mowing/slashing grass, pruning and trimming of trees, shrubs, and plants, tending to gardens and vegetable plots, removing horticultural waste) are considered building operational activities.

Building operational activities

Building operational activities are routine functions for hygienic, aesthetic and security purposes, and for the supply of utilities; and activities not considered as building maintenance activities but are necessary to keep buildings in a habitable and usable condition.

Routine functions can sometimes be undertaken at the same time as maintenance activities and/or by the same maintenance service provider. In such cases, costs for building operational activities should be charged to operational or other budgets.

Building operational activities include:

- pest control – activities associated with regular treatment for and eradication or removal of, for example, redback spiders, cockroaches, dust mites, lice, mosquitoes, dogs, cats, and possums (note that treatment for preventing termites or white ants from gaining access to buildings is considered a building maintenance activity)

- security services – services related to the monitoring and operation of a security system, including:
  - alarm monitoring and false alarm charges
  - mobile security patrols
  - alarm monitoring phone line rentals
  - security audits
  - provision of security personnel
- refuse/waste collection and disposal, including:
  - removal of general refuse
  - emptying grease traps/septics
  - cleaning acid traps
  - providing sanitary services
  - removal of trade waste
- the services of operational personnel, including, for example:
  - boiler operators/attendants
  - sewerage plant operators
  - janitors
  - gardeners
  - security staff
- operational consumables and utilities, including:
  - pool chemicals
  - water purification or treatment material
  - water
  - gas
  - fuel for engines and generator sets
  - office consumables such as guillotine blades, first-aid kits
  - material used to neutralise disposed acidic waste
  - electricity
  - telecommunication services.

Building maintenance policy, standards and strategy development

Scope and application

This section aims to contribute to consistency in planning and implementing building maintenance. The maintenance management process is part of the overall asset management process.

The maintenance management process stage involves building maintenance planning and development activities and consists of three closely related processes:

- developing an agency maintenance policy
- assigning specified condition standard ratings
- preparing a SMP.

Process

The maintenance management process is a generic process designed to assist agencies to establish appropriate practices for the maintenance of Queensland Government buildings.

Documenting a agency maintenance policy

Agencies should produce an internal maintenance policy that incorporates service delivery objectives that aim to:

- provide a clear statement of agency objectives for the maintenance of building assets
- explain how the objectives support the delivery of agency services
- identify, at strategic and operational levels, the officers and/or agency units responsible for maintenance management and outline the nature of these responsibilities.

Key elements of a maintenance policy

Agencies should:

- identify how and by whom agency building asset maintenance is to be managed
- structure the policy to include:
  - a statement of intent and objectives
  - scope
  - details (i.e. policy requirements)
  - allocation of responsibility for implementing the policy requirements
  - continuous improvement arrangements, including policy review procedures
- outline an approach to achieving the policy's objectives
- address the agency's approach to:
  - establishment and periodic review of specified condition standard ratings for all building assets
  - formulation of a SMP that reflects the agency's maintenance needs over the immediate, medium, and long-term development and implementation of a program of regular condition assessments
  - assessment of maintenance demand across the agency's building portfolio
  - formulation of a budget based on a realistic calculation of the level of funding needed to maintain the agency's portfolio to specified condition standard ratings
  - production of an annual maintenance works program based on condition assessments, existing programs, historical data, and the agency SBAMP and SAMP
  - procurement of maintenance services in accordance with government policy
  - ongoing monitoring and periodic review of maintenance performance, including the development of performance measures and their integration with other asset management performance measures
  - establishment of processes to collect and use maintenance information to facilitate maintenance management and meet minimum reporting requirements
  - establishment of processes for the retention of technical and asset information from handover and commissioning
  - establishment of feedback loops between maintenance service providers and building planners and designers (effective feedback loops can facilitate improvements in maintainability, thereby minimising the maintenance needs of future buildings)
- consider obligations including:
  - heritage and environmental legislation
  - health and safety regulations
  - building security
  - risk management
  - relevant quality assurance policies
  - related government policies and strategies such as the SAMP framework and the QPP.

Specified condition standard ratings

Determining the specified condition standard ratings for building assets is fundamental to the maintenance management process.

Specified condition standards provide a clear statement of the level to which assets are to be maintained (i.e. the desired condition) to meet service delivery needs and are conducted by, for example:

- agency teams
- portfolio asset managers
- facility managers
- business managers
- asset user representatives
- maintenance service providers.

Conditions standards:

- are the starting point of agency maintenance strategies and plans
- are benchmarks against which building condition assessment results are evaluated (thus identifying the extent of any gap between desired and actual building condition)
- facilitate the analysis of the actual condition over time (i.e. detection, monitoring and forward-projection of trends in building condition)
- are important factors in the development of maintenance budgets and annual works programs
- ensure that during the condition assessment process, maintenance service providers focus only on work required to bring an asset up to the specified condition (rather than unnecessarily identifying work that may exceed agency requirements).

A specified condition standard rating for each building is to be documented, with regard to the:

- building's physical condition
- functional purpose
- operating environment
- future plans and associated costs in relation to proposed refurbishments, upgrades, replacement, or disposal.

Identifying what is required of building assets

Consider the requirement of the asset before assigning a specified condition standard rating. The process of assigning ratings should begin with a review of the agency's service delivery plan.

Determine each building asset's criticality to service delivery and the required function (e.g. laboratory, heritage building, office accommodation, no longer operational) of each building in the agency's portfolio. Note that the condition of a building asset (its physical state of repair) influences its physical and functional performance.

Assigning ratings

Agencies are to use Table 8 to determine the appropriate specified condition standard rating required at facility level or individual building level.

Table 8: Specified condition standard rating

Functional purpose	Specified standard	Rating
Highly sensitive purpose with critical results (e.g. hospital operating theatre) or high-profile public building (e.g. Parliament House).	Building to be in the best possible condition. Only minimal deterioration will be allowed.	S5
Good public presentation and a high-quality working environment are necessary (e.g. modern multi-storey, Central Business District (CBD) building).	Building to be in good condition operationally and aesthetically, benchmarked against industry standards for that class of asset.	S4
Functionally focused building (e.g. laboratory).	Building to be in reasonable condition, fully meeting operational requirements.	S3
Ancillary functions only with no critical operational role (e.g. storage) or building has a limited life.	Building to meet minimum operational requirements only.	S2
Building no longer operational, dormant pending disposal, demolition etc.	Building can be allowed to deteriorate but should be marginally maintained to meet minimum statutory requirements.	S1

Where standards are specified at overall building level, agencies should give detailed descriptions of what is meant by the S1 to S5 ratings in terms of specified condition standards of key building elements most critical to delivery of services. More complex and critical building elements will have specific performance requirements that require some elements to be maintained above the standards required of the overall building.

The building's criticality to service delivery and the complexity of its components will dictate how ratings are assigned. In the case of less complex and less critical assets (e.g. storage sheds, single rooms meeting halls) it may be sufficient to assign a rating to the overall building.

More complex, critical and strategically important assets will generally have particular performance requirements that should be specified in greater detail. In such cases, specified condition standards should be assigned to elements/sub-elements.

To establish a common understanding and agreement with condition assessors, agencies are to use the descriptions in Table 8 to focus on building elements most likely to warrant immediate repair or further assessments.

Agencies are to:

- assign specified condition standard ratings to:
  - an overall building
  - element groups if required to manage the asset effectively (e.g. superstructure, finishes, services)
  - elements if required to manage the asset effectively (e.g. roof, external walls, floor finishes, lighting, air conditioning)
  - sub-elements if required to manage the asset effectively (e.g. brick walls, distribution boards, ductwork, controls)
- in more complex buildings, maintain some elements to a higher standard than the rest of the building and ensure the agency's expectations are communicated to maintenance service providers and to condition assessors
- apply accordingly the specified condition standard ratings to assets that are approaching the end of their useful/economic life.

Proposals for asset disposal, refurbishment or any future change to service delivery (which affect building function) will influence specified condition standard ratings.

Implementing ratings

Determine the specified condition standard ratings outlined in the agency maintenance policy and any related documents (e.g. asset management manuals). Once determined, the specified condition standard ratings form the basis of instructions to the maintenance service provider about the level to which the agency expects building assets to be maintained.

Clearly communicate the ratings to service providers and document this in procurement arrangements (e.g. a Service Level Agreement (SLA)).

Identify gaps between the desired and actual condition of buildings, using the ratings within the condition assessment process. Providers can then determine, and report maintenance works necessary to return buildings to the desired standard.

Specified condition standard ratings will be referenced by service providers during day-to-day maintenance delivery, including delivery of reactive works. This regular referencing will ensure works undertaken meet and do not exceed the standards established by the agency.

Proactive and reactive maintenance

SMPs should incorporate a balance of proactive and reactive maintenance.

Proactive maintenance (also referred to as planned maintenance) applies to building structures, building fabric, services and site improvements, and consists of preventative (statutory and recommended), operational and condition-based maintenance programs.

Work should be planned at predetermined intervals to meet health and safety, technical or operational reliability considerations and statutory requirements (mandated in legislation, regulations and other statutory instruments) to preserve the asset and prolong economic life.

Condition-based maintenance programs are identified through an asset assessment or inspection process, and work is conducted because the physical condition is below the acceptable standard.

Reactive maintenance (also referred to as unplanned maintenance) occurs when a building component failure requires immediate attention (corrective and breakdown maintenance). It is undertaken to rectify health, safety or security risks or the consequence of natural disaster.

Both proactive and reactive maintenance can be provisioned through a facilities management arrangement where there is integration of facilities managers facility supervisors and trade staff.

Observation is a minimum maintenance approach that can be applied to minor non-critical buildings and buildings scheduled for refurbishment, replacement or disposal. Under this approach, there is no maintenance action (apart from statutory requirements) until either breakdown, or the condition is expected to fall below legal requirements.

Key elements of a SMP

A SMP should be a succinct document and should, as a minimum:

- describe the systems and procedures to be used to plan and manage maintenance work
- specify the types of maintenance to be conducted and why
- establish the order of priority for maintenance activities
- nominate the means of resourcing and implementing maintenance.

A SMP should be adjusted when service delivery strategies change or agencies need different accommodation arrangements (e.g. leasing, co-location of all or some of its functions, or joint use with other agencies).

A comprehensive SMP encompasses a range of specific strategies that address various aspects of maintenance management, such as:

- technical strategy, outlining maintenance work to be undertaken and the purpose of this work, noting that the type of maintenance applied to a particular building, or its components will depend on the importance of the building and its components to service delivery, taking account of any service delivery strategy changes in direction
- risk management strategy, identifying how an agency intends to manage risks associated with building asset custodianship, considering factors such as health and safety, building security, loss of functionality, and community perception (note that a agency's risk management strategy will determine priorities in undertaking maintenance activities)
- financial management strategy, identifying the agency's approach to funding building maintenance, with a focus on value for money (which will influence the type, cost and planning of maintenance activities)
- procurement strategy, determining methods used to procure maintenance services
- management strategy, determining management arrangements for building maintenance across the agency, and outlining the organisational structure that will support management of maintenance at head office, regional, district and facility levels.

Developing an agency SMP

SMPs should be developed as part of an agency SBAMP and SAMP processes.

The SMP is a structured process undertaken by portfolio managers, assisted by facility managers, business managers, finance managers, planners, capital works managers, and maintenance service providers to ascertain the immediate, medium and long-term maintenance requirements of an agency's building portfolio. Modifications may be necessary if service delivery priorities change.

SMPs should be developed at portfolio, regional/district, facility and building levels, and should address how agencies will:

- manage deferred/backlog maintenance
- fund and sustain future maintenance
- reduce maintenance demand through improved design of new buildings and incorporation of feedback from facility managers and occupants on maintainability and other issues
- gain better value for money in expenditure of maintenance funds and achieve government objectives and targets
- improve the management of maintenance by using better systems and procurement models
- incorporate ecologically sustainable development and environmental impact considerations into maintenance strategies and practices
- mitigate the consequences and impacts of natural disaster
- maintain or improve the health and safety aspects of buildings.

The SMP process should:

- review and analyse:
  - the agency's building portfolio
  - agency corporate and service delivery objectives
  - the building maintenance environment
- ensure a thorough understanding of the agency's:
  - capital acquisition plans
  - service delivery strategy, and the contribution of building asset maintenance to service delivery outcomes
- consider the following factors:
  - service delivery plans
  - the age, condition, value, deferred maintenance, and functionality of the agency's buildings
  - building performance of in terms of water and energy consumption
  - health, safety and security requirements
  - new buildings
  - disposal or refurbishment plans
  - emerging issues that may affect buildings service potential.

A SMP should contain the following information and analyses of:

- the status of the agency's existing building portfolio issues and trends:
  - includes an analysis of the agency's building portfolio
  - identifies any instances where key attributes of the building portfolio are affecting service delivery
  - considers attributes such as building age, condition, remaining economic life and performance level
  - includes an overview of maintenance-related issues and trends to help identify strategies to address/rectify potential problems
- the maintenance environment, outlining the context in which maintenance activities will be undertaken, and considers aspects of the maintenance environment that can affect maintenance demand, including:
  - new building assets and/or assets scheduled for refurbishment/disposal
  - major repairs
  - special maintenance programs or initiatives (e.g. asbestos removal)
  - new policy/statutory responsibilities associated with workplace health and safety, environmental impact or cultural heritage significance of buildings
  - deferred maintenance trends and their correlation to the condition and performance of the existing building portfolio
- maintenance budgeting implications, strategies, and projections, considering:
  - current and future funding scenarios based on the agency's building portfolio, corporate direction, maintenance analysis, and the budgetary environment
  - articulate additional funding to meet increasing demands, including any strategies for meeting these funding requirements
  - substantiate with reliable data the risks associated with funding shortfalls
  - incorporate all funding projections into the agency's capital acquisition plans and operating statement financial summary
- strategic review of maintenance management arrangements, outlining the process for reviewing maintenance performance, including:
  - maintenance programs
  - maintenance service provider arrangements
  - maintenance outcomes to ensure maintenance activities continue to support achievement of the agency service delivery objectives and are in accordance with government policy
  - identifying and describing any changes required to meet projected strategic business and portfolio directions and to improve maintenance efficiency and effectiveness.

The SMP should be summarised in an action plan that draws on key elements, and concludes with a list of key actions, responsibilities, and implementation timeframes. This action plan provides the basis for any future reviews and adjustments of the SMP.

Key success factors for maintenance establishment

Consider the following key factors for successful implementation of agency maintenance policy, specified condition standard ratings, and SMP:

- stakeholder consultation
  - seek comments and, if relevant, agreement from stakeholders (before submitting final documents for senior management approval)
  - communicate the intent of the agency maintenance policy/specified condition standard rating/SMP to building users (at an appropriate level) to enable contribution to the implementation and review of these documents.
- secure senior management endorsement and record this in line with agency procedure/policy
- relationship with other corporate documents, including relevant aspects of agency management policies, plans and procurement agreements.

Regular review

Agency maintenance policy and strategy documents should be reviewed regularly to ensure alignment with government priorities and policies, and to confirm maintenance priorities are appropriate and relevant to operational requirements.

Specified condition standard ratings should also be reviewed regularly to ensure building assets are not over or underrated.

Maintenance policy reviews should consider:

- the policy's application period
- policy review intervals
- arrangements for receiving and recording feedback between reviews.

Specified condition standard ratings reviews should consider:

- review intervals – the review should take place before starting a condition assessment program, to allow for the incorporation of any altered ratings
- arrangements for receiving and recording feedback between reviews, noting that previously established ratings may require changes if:
  - agency service delivery requirements have changed
  - building assets have been scheduled for disposal or refurbishment
  - lower standards have become acceptable, thus presenting an opportunity to save on maintenance costs.

Reviews of strategy documents, including SMPs, should consider:

- review intervals, aligning reviews with the annual budget, agency SBAMP and SAMP, and corporate planning cycles
- arrangements for receiving and recording feedback between reviews.

Building asset assessment

Scope and application

This section aims to provide guidance on building asset assessment planning, scope definition, and implementation.

The development of an annual proactive condition-based maintenance works program based on asset assessment reports is outside the scope of this guideline.

Asset assessments are an important aspect of an effective SMP and maintenance planning process. Incorporating asset assessments in maintenance processes ensures there is a structured objective

process for identifying demand for proactive condition-based maintenance works to meet strategic and operational priorities.

Proactive condition-based maintenance works should form part of any comprehensive maintenance program, in conjunction with preventative (e.g. statutory and/or recommended), operational, and reactive maintenance work over the immediate, medium, and long-term.

In addition to asset assessment information, agencies require a range of other asset management information, which is also obtained through inspections or surveys of buildings.

Process

Technical inspections to evaluate the physical state of building elements and services to assess maintenance needs should be made by competent assessors.

Site inspections are to be made on all buildings at least every three years, depending on the nature of the buildings, building elements and services. Buildings affected by a natural disaster should be fully assessed as soon as practicable after the event. Agencies should decide on appropriate intervals for inspections depending on each building asset's complexity and criticality to service delivery. The more critical and complex the building, the more likely an asset assessment will be required more often.

The following should be considered when determining assessment intervals:

- intensity of use (number of occupants and nature of business activities)
- robustness of construction and susceptibility to wear and tear
- number of days and hours of operation
- extent of public use (visitors or users)
- exposure to harsh environmental conditions or malicious damage
- age of the building and its components
- cost, risks and benefits of the assessment intervals adopted
- likelihood or possibility of health and safety or other environmental issues
- other periodic inspections or monitoring of building assets that may be required, such as inspection of hazardous building materials (e.g. asbestos containing material, lead paint).

Reliable and objective knowledge of the physical state of building assets and impacts on service delivery should be collected to develop strategies and actions for:

- maintenance
- major replacements
- refurbishments
- investment.

A lack of knowledge about the physical state of a building asset could result in:

- unnecessary exposure to legal, social, and other risks associated with deteriorated facilities, statutory non-compliance, and hazardous materials
- premature asset failures, shorter useful asset lives, and higher repair and replacement costs, all of which affect service delivery capacity and quality.

Asset assessments involve:

- physical inspections to assess the actual condition of the building and its individual elements and services (e.g. air conditioning, fire protection), compared to the asset owner's specified condition standard
- identifying maintenance works required to bring the condition of the building and its services up to, or maintained at, the specified condition standard[27]
- ranking maintenance works in order of priority

[27] Where specified condition standards are assigned at an overall building level, detailed descriptions of what is meant by the S1 to S5 ratings (Appendix 6-2, Table 17) should be articulated in terms of specified condition standards of key building elements most critical to delivery of services. This is because more complex and critical building elements will have specific performance requirements and these elements may therefore need to be maintained above the standards required of the overall building.

- determining (by the assessor) actions to mitigate any immediate risk, pending remedial works or other actions.

Other building inspections and audits

Effective building asset management requires a broad range of information in addition to that produced by building asset assessments (see Appendix 6-1**).**

Appropriate SLAs (or other suitable instruments) should be established, as applicable, between agencies and service providers conducting inspections and audits, noting that some agencies use in-house staff for these tasks.

It is important to differentiate asset assessments from other data-gathering audits and inspections.

Agencies should consider how to integrate or coordinate services/activities before finalising SLAs or other suitable instruments, to harness opportunities for efficiency and effectiveness.

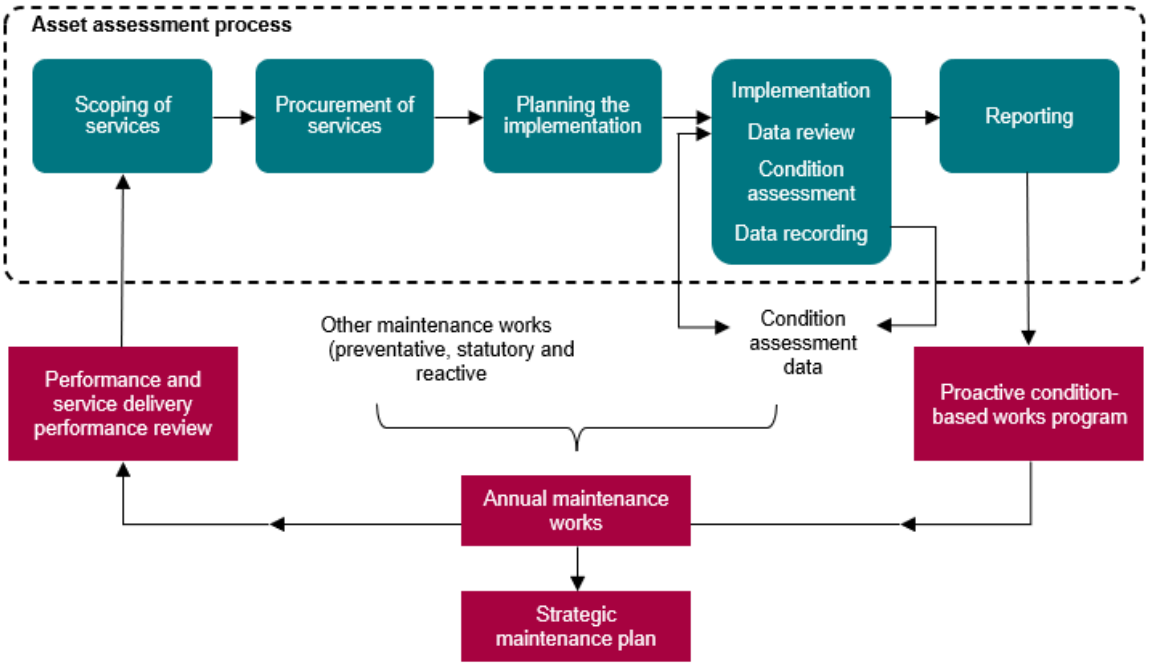
Asset assessment process

Use Table 9 to establish and/or refine existing SMP and maintenance planning procedures. Apply the stages of the asset assessment process and the associated SMP activities in Figure 4.

Table 9: Stages of the asset assessment process

Stage	Description	Responsibility
Scoping of services	• Determining the requirements for information and other data to meet asset management obligations • Developing service specifications	Agencies
Procurement of services	• Procuring the asset assessment service from a service provider (e.g. QBuild), using appropriate arrangements (some agencies use in-house staff to undertake assessments)	Agencies
Planning implementation	• Planning the implementation of asset assessments (including targets and milestones) based on requirements established through the scoping stage	Agencies/ service providers
Implementation	• Reviewing data from previous assessments, removing references to completed or redundant works, and making any other necessary corrections to ensure that appropriate areas are targeted during condition assessments • Undertaking assessments in accordance with the agreed scope and timeframes • Recording data from the assessments and updating any existing data from previous assessments	Agencies/ service providers
Reporting	• Providing reports on the results of assessments to enable the development of a proactive condition-based works program and to support other asset management objectives	Service providers, including in-house staff, as applicable

Figure 4: Asset assessment process



Text description for Figure 4

Scoping of services by agencies

Agencies should:

- identify and articulate requirements and develop service specifications
- provide guidance to service providers on the agency's objectives, expectations, and constraints
- use appropriate inputs in the scoping process, including:
  - agency maintenance policies
  - SMPs
  - desired specified condition standards.[28]
- consider and define the asset assessment and other data requirements (e.g. condition, asbestos inspection data) so service providers are able to offer and provide the full scope of services required.
- explore efficiencies to ensure coordination with other maintenance tasks, including tasks of other agencies in the same location or region, or assessment programs/data gathering services, particularly in remote locations.
- determine the objective and scope of service/s to identify outputs including:
  - data to meet maintenance requirements
  - data to meet requirements of other policies, such as the Queensland Government Asbestos Management Policy for its Assets
  - any other asset management data to be collected, such as the performance of buildings in terms of energy consumption
- reporting requirements for assessment results
- buildings to be assessed in the relevant period
- buildings to be assessed in any particular year by:
  - portfolio size
  - agency priorities
  - frequency of assessments (provided that the three-year requirement is satisfied)

[28] Guidance for departments on establishing specified condition standards is provided in Building maintenance policy, standards and strategy development.

  - considering that complex and service-critical buildings (which can include residences) with workplace health and safety and risk issues may require more frequent and thorough assessments, while other buildings may be inspected less frequently and in less detail.
- assess buildings that have been affected by a natural disaster as soon as practical after the event.
- determine the frequency of assessments by considering the various building elements. Dynamic elements may require more frequent assessments than more stable elements such as building fabric and structural elements. Dynamic elements include:
  - electrical services
  - mechanical building services
  - fire services.

Asset assessments should be made as part of preventative maintenance routines or other tasks, and results must be integrated into the overall program of condition assessments for other building elements.

Asset assessment frequency must be made on all buildings at least every three years, or more frequently by considering the following risk factors:

- likelihood of workplace health and safety risks to occupants and residents
- nature of the building and its associated engineering services
- criticality and volatility of the assessment information required
- age of the building and its essential components
- actual state and rate of deterioration of the building and the associated risks
- operating environment and its impact on the rate of deterioration
- cost and value to the agency of more frequent assessments.

The asset assessment processes allows for the identification of maintenance works using the condition assessment priority ranking scale (rankings 1–4), which enables identification of longer-term maintenance needs.

Suitably qualified or technical people should, where appropriate, determine the frequency of assessments.

Asset assessments relating to condition should be coordinated with other periodic inspections or building monitoring, such as inspection of hazardous materials e.g. asbestos containing material.

The outcome of the scoping stage contributes to service specifications for any procurement arrangements for provision of asset assessments, and any other inspections or data collection services that might be undertaken concurrently.

Service specifications may be part of an SLA or other suitable instrument that complies with government policy.

Ensure service specifications:

- are outcomes focused
- include performance requirements
- enable service providers to respond with effective, innovative, and value for money approaches.

Service providers should have appropriate access to building asset data and/or any associated information needed to enable them to respond to service specifications. Data can be provided in service specification documentation or through other means, such as direct access to electronic databases.

The standard of service should be measured against the service specification requirements. Service specification should, at a minimum, detail:

- scope of the asset assessment and any other data gathering tasks
- frequency and level of detail of the asset assessment and other assessments
- expected outputs and outcomes, including the level of detail and format of reports
- desired implementation strategy
- performance and quality requirements.

Procurement of services

Procurement of services should be based on SLAs or other instruments that comply with this guideline, noting some agencies use in-house staff to undertake assessments.

Agencies may make arrangements with EPW (QBuild) or other maintenance service providers, in accordance with government policy.

Agencies not using EPW can obtain asset assessment services from in-house maintenance staff who satisfy competency requirements, or other service providers (in line with QPP provisions) that meet the criteria for a competent assessor.

Planning implementation of asset assessments

Asset assessments may be undertaken by agencies using in-house staff, or by service providers.

When a service provider is engaged by more than one agency, it is expected that agencies:

- coordinate asset assessments with other planned/periodic assessments and across other agencies
- where possible, coordinate asset assessment programs with other agencies to help achieve efficiencies.

Consider the following when planning asset assessment programs:

- types of buildings and building elements to be assessed
- availability of competent resources
- accessibility of information such as asset data, drawings, technical manuals, and data from previous assessments, including new information from handover and commissioning
- accessibility and logistical issues in relation to geographical location, seasonal weather conditions and agency operational constraints
- data collection methods and the use of appropriate technology
- opportunities for whole-of-government efficiencies (i.e. coordination between agencies for the scheduling of activities, where possible)
- targets and milestones for implementation
- achievement of performance requirements.

Local onsite knowledge, and cooperation of building occupants and other facility management staff are valuable for people undertaking asset assessments, improving cost-effectiveness, particularly with aspects of data gathering.

Past maintenance records and relevant agency maintenance information should be analysed and used to determine patterns.

Ensure service providers have building and other relevant information (e.g. computerised maintenance management systems) to contribute to efficient and effective delivery of asset assessments.

Implementation

Agencies should consider key activities associated with implementation of asset assessments, including:

- reviewing data from previous asset assessments
- undertaking the asset assessment
- recording and updating asset assessment data.

Ensure agency participation, in a facilitating/monitoring capacity, in the implementation stage. Agencies are responsible for:

- monitoring and reviewing asset assessment program progress and performance
- monitoring and reviewing service provider performance (detailed in service specifications, SLAs and suitable instruments)
- liaising and coordinating at regional and local facility level to assist service providers to undertake assessments efficiently and effectively

- providing access to facilities, including the provision of security and appropriate escorts where necessary (e.g. for secure or sensitive facilities)
- establishing equivalent arrangements where in-house staff are used.

Agencies must manage risks and determine appropriate action to address critical maintenance items/issues identified by asset assessors and/or as a result of natural disasters.

Effective asset assessment implementation depends on work management procedures and resources, including appropriate access to maintenance information and systems.

Key factors

Key factors that contribute to successful asset assessments include procedures, competencies, supporting information and systems.

Asset assessments should be managed and delivered using appropriate procedures for:

- work planning
- resource allocation
- scheduling
- coordination and monitoring.

Assessors' competencies should be matched with the building elements being assessed, to ensure the integrity and quality of outcomes.

Supporting information and systems give service providers a wide range of information to ensure a quality service that meets agency needs. Asset assessment implementation requires:

- information on assets to be inspected, including site and building plans, photographs, and engineering drawings of building services
- asset condition and performance standards and benchmarks
- operations and maintenance manuals, maintenance logbooks and other technical documentation
- maintenance history and records from previous asset assessments
- capital investment, refurbishment, and asset disposal plans
- building management plans
- deferred maintenance data.

Assessments should be based on an appropriate computerised maintenance management system that facilitates planning, implementation, and reporting.

Drawing on local knowledge contributes to asset assessment efficiency and cost effectiveness.

Reviewing existing asset assessment data

Data from previous asset assessments should be reviewed, and any data made redundant by capital improvements and other programs should be identified and removed. Relevant information should be removed to ensure data on deferred maintenance works are not duplicated and can be updated during the next round of assessments, based on:

- relevance
- scope
- priorities.

Undertaking asset assessments

Agencies are to work with assessors to:

- evaluate the physical asset of the building and determine the maintenance works required to bring them up to, or maintain them at the asset standard (see Appendix 6-2**,** Table 17) specified by the building owner
- advise (promptly) the agency of any actions deemed necessary by the assessor to mitigate immediate risks until remedial works or other actions can take place
- ensure the key criterion for decision making on any corrective works identified is compared to the actual condition of the building against the desired specified condition standard rating specified by the building owner

- develop and use an itemised, recommended schedule of maintenance work necessary to bring each building up to the desired specified condition standard, using the condition assessment priority ranking scale (see Appendix 6-2, Table 19)
- confirm that priority rankings to be used by the assessor are defined through the assessment of risks associated with defects and potential failures
- ensure the assessor identifies, where practical, opportunities for integrating and leveraging works with other agencies in the preparation of a recommended schedule of maintenance work in remote locations
- ensure the assessor provides an assessed overall condition index for each building (see Appendix 6-2, Table 18) to communicate the general state of buildings to the building owner.

Defects and risks

Defects include the effects of physical deterioration and other factors, and represent the gap between the desired condition standard and the actual condition. Defects can lead to the complete or partial failure of building elements and their performance.

Potential failures include anticipated failures arising from deterioration of elements/components reaching the end of their foreseeable useful life.

Competent assessors draw on their technical knowledge and experience to assess risks and prioritise remedial work. They collect data on defects, including information on the cause of defects, in a form that should enable analysis of trends and trigger remedial work or other action. It is important to understand the causes of defects and address how they will be rectified to avoid repetition.

Remedial work consists of:

- proactive maintenance to repair and restore physical condition and operational effectiveness
- preventative (statutory and/or recommended) maintenance to prevent further deterioration leading to failure
- replacements and upgrades to comply with standards and regulations, to avoid future failure (e.g. end of useful life)
- actions to avoid or mitigate the impact of natural disasters
- investigative work where the full extent of defects and their remedial actions cannot be readily assessed on site by the assessor, and further expert engineering investigations are required (potentially leading to any of the above remedial actions).

Remedial work cost estimates

Remedial work cost estimates should be reviewed and updated as part of the asset assessment process, to allow for cost escalation and changed circumstances. They should be prepared carefully and may need to be relied on at any time to inform the agency annual maintenance works programs and forecast future liabilities for anticipated replacements or upgrades.

Competent personnel with adequate estimating skills and knowledge about regional differences in building costs and other factors should be engaged to undertake cost estimates. Estimates should include all foreseeable work associated with remedial work, including scaffolding, presence of asbestos containing material, removal and reinstatement of furniture, and alternative accommodation for building occupants.

Interpreting cost estimates often requires access to contextual data to enable work program development to be viewed in a broader perspective. Cost estimates should be accompanied by:

- an indication of the degree of confidence in the estimate
- an allowance for contingency (where appropriate)
- a cash-flow forecast that addresses budgetary and maintenance program requirements, including consideration of work that extends over more than one financial year
- appropriate allowance for cost escalation, calculated using the escalation rates and data readily accessible.

Longer-term maintenance needs

Asset assessments must identify future remedial work and include sufficient detail to enable prioritisation and cost estimates to be developed.

Forecasting future major repairs, replacements, natural disaster mitigation, and upgrades is essential to enable agencies to plan future maintenance or capital commitments and make funding arrangements.

Forecasts contribute to effective SBAMP and SAMP processes, however forecast reliability decreases as timeframes are extended. Estimates for future work should be revised after each asset assessment. Longer-term maintenance needs should be reflected in an agency SMP.

Recording and updating asset assessment data

All asset assessment data is to be recorded and updated in a maintenance management system and should occur after asset assessments are completed, to ensure it can be used for reporting purposes and maintenance works program development. Indicative priorities of recommended maintenance work, aggregation of works and adjustments of cost estimates, including escalation, should be re-assessed as required.

Asset assessment reporting

Asset assessment reports are the primary outputs of the asset assessment process. They provide information necessary for the development of proactive condition-based maintenance work programs within a comprehensive SMP.

Asset assessment results should be presented in a report that includes:

- the desired specified condition standard rating for each building, as specified by the agency
- a condition index determined by the assessor for each building, which communicates the general state of buildings
- an itemised schedule of recommended maintenance work necessary to bring each building up to, or maintain it at the condition standards nominated by the asset owner (Appendix 6-3 provides an example schedule of maintenance works that would form part of a building asset assessment report)
- cost estimates for identified remedial work (at a level of detail agreed with the relevant agency)
- advice about the longer-term maintenance needs to assist in planning and decision making (e.g. any anticipated major replacements or upgrades).

Agencies should analyse asset assessment reports in the context of other building data and information, such as:

- functionality
- utilisation rate
- remaining life
- operational cost efficiency
- agency and government priorities (e.g. environmental sustainability, workplace health and safety commitments, community service obligations)
- budget imperatives.

Asset assessment reports should enable the agency to:

- form objective views of the relative condition of their buildings compared to the desired condition necessary for service delivery, and to undertake any further analysis to refine that knowledge
- understand the scope, cost and priority of maintenance work required to rectify defects or to maintain the building to the required specified condition standard
- plan for future funding requirements for major replacements, natural disaster mitigation, repairs, and upgrades
- develop a maintenance program for the following financial year and beyond, and a longer-term strategic plan by facility and portfolio
- seek and allocate funding for maintenance program implementation
- initiate engineering and other investigations as required, to further define the scope and severity of defects.

The nature or intent of the work, or parts of work, identified may extend beyond restoring an asset to its original condition, capacity, or function, and the expenditure may be more appropriately classified as a capital outlay (i.e. increasing the value of the asset on which the expenditure is incurred). This

should either be separately identified in a report, together with a cost estimate, or recommended for further investigation.

Further guidance on determining whether it is more appropriate to classify work as maintenance expenditure or capital expenditure is provided in the Capital or expense? A guide for asset and maintenance managers section of this guideline.

Depending on specific services commissioned by agencies, asset assessment reports could also contain information and other data collected in addition to that required for maintenance purposes.

Table 10 summarises key asset assessment process results and their application.

Table 10: Building asset assessment results

Result	Outcome of results analyses	Application
Condition index	Assessed portfolio condition profile	• Strategic asset planning • Business cases for maintenance funding and other purposes
Schedule of maintenance work	Proactive condition-based maintenance work program	• Maintenance planning
Cost estimates	Proactive condition-based maintenance work program	• Maintenance planning
Longer-term maintenance needs	Forecast budgets for future replacements, upgrades, and natural disaster mitigation	• Strategic maintenance planning • Strategic asset planning

Building maintenance budgets

Scope and application

This section provides agencies with advice on how to develop an annual building maintenance budget. A maintenance budget should identify the quantum of funding an agency requires to address the key maintenance needs of its buildings to ensure it continues to support delivery of government services.

Process

Agencies must allocate sufficient funding to enable buildings to be maintained to the specified condition standard ratings identified and documented in the agency maintenance policy. Annual maintenance budgets should be based on maintenance demand, providing a costed program of proposed works over the timeframe based on:

- planned levels of service
- agency maintenance policies
- building specified condition standards
- SMPs.

Maintenance budgets should support agency efforts to meet environmental performance requirements, such as allocating sufficient funding to replace components at the end of their useful life with modern equivalents that reduce energy and water consumption or have potential to reduce long-term maintenance needs.

It is important to differentiate between maintenance expenditure and capital expenditure, due to the difference in accounting approaches and tax liabilities associated with these expenditures (e.g. maintenance expenditure affects the cost of an agency's outputs, while capital expenditure affects the value of assets and, subsequently depreciation and equity return).

The nature or intent of the work, or parts of work should be identified, noting it could extend beyond restoring an asset to its original condition, capacity, or function. In such cases, the expenditure could be more appropriately classified as a capital outlay (i.e. it increases the value of the asset on which the expenditure is incurred).

Consider the agency SBAMP and SAMP when formulating maintenance budgets, including:

- existing assets to be maintained
- new assets requiring maintenance
- existing assets to be upgraded, refurbished, or have components replaced (a minimum maintenance approach may be appropriate in the lead up to such intended actions)
- existing assets identified for inclusion in special maintenance programs and initiatives
- existing surplus assets scheduled for disposal.

Consider key factors that affect the level of maintenance funding, including:

- quality of materials and components in buildings
- quality of designs and construction workmanship
- deterioration or wear associated with use/occupancy
- climatic conditions (e.g. coastal, inland)
- required level of proactive and preventative maintenance to meet desired specified condition standards
- outcomes of previous budget reviews and historical maintenance data.

Calculating funding requirements should be governed by the total maintenance needs of an agency's portfolio (i.e. maintenance demand), and not based on perceived limitations related to availability of funds.

The required level of funding to address identified maintenance needs should be sought. This may involve seeking additional funding through the government's annual appropriation funding process, or reallocating funds from internal funding sources.

Maintenance budgets should be developed as part of the agency's annual budgetary processes, in line with budget development requirements and timeframes administered by Queensland Treasury.

Establishing an adequate maintenance budget requires an understanding of many variables associated with maintaining building assets, particularly when dealing with a portfolio that consists of a complex building mix (i.e. buildings of different ages, varied geographical location/climate, intensity of use, and functional/service delivery requirements).

Maintenance budget composition

Agency maintenance funding is to be split into the following cost components (as endorsed by the Cabinet Budget Review Committee):

- asset assessment costs
- preventative maintenance costs, including statutory and recommended
- proactive condition-based maintenance costs
- reactive maintenance costs
- agency maintenance management costs.

The size of each cost component should be relative to the total maintenance expenditure for the building portfolio.

Appropriate agency mechanisms should be in place to achieve sustained reductions of management costs by:

- using sound administrative decision-making processes
- systems for planning
- monitoring maintenance delivery.

Ledgers or cost centres are to be structured around cost components listed above to gain a clear indication of where maintenance funds have been expended.

Maintenance budgets should reflect provisions for the works program, i.e. the annual program of total maintenance works and the type of maintenance to be applied to a particular building or its components.

Works programs should consist of a balance of proactive and reactive maintenance, noting agencies should strive to minimise reactive maintenance.

Maintenance budgets should be adjusted if SMPs require minimal maintenance for minor, non-critical buildings, and for buildings scheduled for refurbishment, replacement, or disposal.

Agencies should review the level of funding for asset assessment, proactive condition-based maintenance cost estimates to ensure alignment with agency priorities and recommended timing of works. This is relevant for remedial work[29] to be undertaken in the longer term and if the economic state of the building industry has changed.

Key considerations in maintenance budget decisions

Agency maintenance budget decisions should:

- identify and reduce deferred/backlog maintenance, and regularly evaluate risks associated with allowing maintenance works to be deferred
- use risk management techniques described in the AS ISO 31000:2018 Risk management – Guidelines
- explore options to reduce deferred/backlog maintenance, including:
  - seeking special funding as part of an agency annual maintenance budget processes
  - reallocating funds from internal funding sources
- coordinate maintenance decisions with projected future major repairs or replacements over a planning period
- identify significant future major plant/equipment replacements (e.g. lifts, air-conditioning chillers etc.) that may influence maintenance decisions, noting major plant/equipment replacements can be identified from handover and commissioning manuals (also referred to as manufacturers' maintenance manuals and warranties)
- obtain cost estimates for major plant/equipment replacements from manufacturers, other firms and/or professionals, and factor these into maintenance budgets
- consider whole-of-life costs in maintenance budgeting decisions associated with replacing building components (e.g. sanitary plumbing fittings, lighting systems) including:
  - initial costs of procuring the building component
  - long-term maintenance
  - operating and disposal costs
- use appropriate building performance information (e.g. location, functionality, utilisation rate, remaining life) to determine if high-maintenance buildings should be assessed for possible refurbishment or disposal
- identify efficiencies/savings when determining an agency maintenance programs by:
  - coordinating inspections
  - sequencing/bundling (where possible) for remote or regional maintenance works with other agencies, where the same service provider is engaged by more than one agency
  - considering building and other information required that may affect delivery of maintenance services, and assist the service provider to deliver the service as efficiently and effectively as possible
- consider cost-effective improvements in building performance (e.g. water-saving fittings and energy-efficient lighting).

Managing maintenance budgets

Managing a maintenance budget includes:

- establishing maintenance priorities
- regularly monitoring, reporting, and analysing budget components against actual expenditure (monitoring budgets for contracted maintenance services may include consultation with facility managers/maintenance service providers about scheduling, and material and equipment needs)
- establishing accountabilities and performance requirements
- monitoring against benchmarks and policy requirements

[29] The interpretation of cost estimates should be made with appropriate allowance for cost escalation. Escalation rates data may include the Consumer Price Index (CPI) and wage price index published by the Australian Bureau of Statistics (ABS) along with related indices published by other parties.

- managing variances and contingencies and monitoring the effects of deferred maintenance, where required.

Any additional maintenance funding allocated for emergent priorities (e.g. the reduction of deferred/backlog maintenance) should be integrated into the maintenance budget.

Reviewing maintenance budgets

Agency maintenance budgets should be subject to rigorous annual reviews. These reviews should include:

- assessment of the achievements of the previous year's maintenance budget against the agency's intended outputs
- consideration of the following factors:
  - adequacy
  - affordability
  - efficiency
  - effectiveness
  - competitiveness
  - compliance.

Reviews should identify if previous budgets have been adequate, and highlight any necessary actions or corrections, such as funding replacements rather than ongoing repairs, and/or adjustments to the budget development process.

Agencies should draw on appropriate maintenance information systems to assess the adequacy of the maintenance budget, for example, affordability. If a budget is not sufficient to meet applicable standards, agencies should consider if:

- standards established for functionally focused buildings are realistic and can be afforded
- buildings are so far below the desired standards that special funding above normal maintenance requirements may be required
- maintenance funding needs to be increased.

Maintenance demand assessment, planning and program management should be reviewed to evaluate efficiency and effectiveness.

Maintenance expenditure patterns in existing buildings should be reviewed to evaluate the effects of maintenance previously undertaken, including cost drivers, to improve efficiencies.

Maintenance program delivery efficiency should be considered, including:

- costs related to time
- resources used to deliver the program, including the level of transactions and rectification of work that should be part of the assessment of a maintenance budget.

Maintenance performance should be monitored and initiative-taking responses encouraged from maintenance service providers.

Relevant performance targets or benchmarks aligned with performance indicators contribute to assessment of the appropriateness of a maintenance budget. Maintenance cost is an important performance indicator, and can be measured as:

- cost per square metre of Gross Floor Area (GFA)
- expenditure as a percentage of gross book value of the building asset
- other agency-specific measures.

Maintenance budgets review may include:

- comparison with benchmarks based on technical advice
- research by other jurisdictions with similar building portfolios (buildings of a similar nature and service delivery role operating in similar climatic conditions).

Maintenance budgets should support relevant agency policies and guidelines, including:

- agency maintenance policies

- financial management strategies to fund building maintenance.

Maintenance funding benchmark

The amount budgeted for maintenance at portfolio level should meet or exceed the minimum funding benchmark of 1 per cent of the building ARV of the agency's building portfolio. An ARV:

- is the best estimate of the current cost of constructing (for its original use) a new facility providing equivalent service potential as the original asset
- does not include the value of the furnishings or other items not permanently part of the facility, or design and project management costs
- is a 1 per cent funding recommendation as the minimum threshold for annual maintenance expenditure for the building portfolio (not as the optimal funding level).

It is likely that an agency's maintenance budget will exceed the recommended minimum threshold of 1 per cent of the ARV if the portfolio has:

- unfunded or deferred maintenance projects
- ageing or deteriorating buildings
- heritage or iconic buildings
- highly critical or complex facilities.

Minimum maintenance funding benchmark for annual agency budget

Scope and application

This section provides asset and maintenance managers with general guidance on how to estimate the minimum maintenance funding benchmark for the annual agency budget.

Comprehensive advice about how to prepare a maintenance budget is provided in the Building maintenance budgets section of this guideline.

Process

It is important that the annual agency maintenance budget is rigorously reviewed each year, including an assessment of the achievements of the previous year against intended outputs and impacts.

The optimum time to undertake this review is at the beginning of the annual budgeting cycle, to identify any implications on budget submissions and/or risk management processes.

Agencies should:

- allocate sufficient funding in the maintenance budget to enable buildings to be maintained to the specified condition standard ratings documented in the agency maintenance policy
- understand that the difference between maintenance expenditure and capital expenditure is important due to accounting approaches and tax liabilities associated with these expenses (guidance on determining whether work is most appropriately classified as maintenance expenditure or capital expenditure is provided in the section Capital or expense? A guide for asset and maintenance managers)
- assess the agency maintenance demand to calculate the annual maintenance budget, by considering:
  - proactive maintenance programs
  - preventative service maintenance
  - proactive condition-based maintenance identified in asset assessment reports
  - deferred/backlog maintenance
  - maintenance to meet mandatory statutory and health and safety requirements
  - reactive maintenance based on historical information.

Minimum funding benchmark

It is recommended that a minimum funding benchmark of 1 per cent of the building ARV of the agency's building portfolio, be allocated for maintenance expenditure. The amount budgeted for maintenance at portfolio level should meet or exceed this funding benchmark.

The funding benchmark may be exceeded if a portfolio has:

- unfunded or deferred maintenance projects
- ageing or deteriorating buildings
- heritage or iconic buildings
- highly critical or complex facilities.

Accurate and consistent building performance information is required to support maintenance budget formulation and the identification of strategies to address risks associated with underfunding maintenance.

The building ARV

The ARV for budget and funding purposes should be determined using estimated current building costs provided by a valuer registered in Queensland. The agency should:

- issue clear instructions to valuers that the estimated cost of constructing a new facility should be consistent with the definition of the ARV, noting that if a valuation based on replacement value for building insurance purposes will not comply with the ARV definition because it includes design and project management fees
- use a quantity surveyor or competent person with adequate estimating skills and knowledge about regional differences in building costs and other factors – building cost is stated in terms of dollars per square metre of the GFA
- estimate the building's GFA using the measuring method in the Australian Cost Management Manual, published by the Australian Institute of Quantity Surveyors
- seek further building cost estimates advice from EPW, if required.

Capital or expense? A guide for asset and maintenance managers

Scope and application

This section provides asset and maintenance managers with general guidance on how to account for major maintenance expenditure on building assets.

Maintenance expenditure can range from a few dollars to many thousands of dollars. In most cases, work undertaken is readily identified as maintenance and treated as an expense.

At times, the nature or intent of work, or parts of work, extend beyond restoring the asset to its original condition, capacity, or function. In these cases, managers should decide whether the expenditure is most appropriately classified as maintenance, or as a capital outlay that increases the value of the asset on which the expenditure is incurred.

Treating an expenditure as maintenance (i.e. as an expense) affects an agency's output costs, while capital expenditure affects the value of assets, depreciation, and equity return. Accounting for expenditure in an appropriate and consistent way provides a more accurate indication of an agency's output costs and the value of its assets.

Process

Maintenance-type work classified as an expense

Maintenance-type work is classified as an expense when the intent is to:

- reinstate the physical condition to a specified standard
- prevent further deterioration or failure
- restore correct operation within specified parameters
- replace components at the end of their useful/economic life with modern engineering equivalents
- make temporary repairs for immediate health, safety, and security reasons (e.g. after a major building failure)

- assess buildings for maintenance requirements (e.g. to obtain accurate and objective knowledge of physical and operating condition, including risk and financial impact, for the purpose of maintenance).

Maintenance reflects consumption (through use) of a building asset. As consumption results in a reduction in the value of the asset, it meets the definition of an expense; however, works undertaken in the course of maintenance may include activities that result in expenditure being classified as capital.

Maintenance work classified as capital expenditure

Maintenance work is classified as capital expenditure (i.e. added to the carrying amount of the asset) when it improves the condition of the asset beyond its originally assessed standard of performance or capacity. This must be in accordance with Queensland Treasury's Non-Current Asset Policies for the Queensland Public Sector – NCAP 1 Recognition of Non-Current Assets.

Capital expenditure work includes upgrades, enhancements, and additions to a building asset that:

- increase in the asset's useful function or service capacity
- extend its useful life
- improve the quality of the services delivered through use of the asset
- reduce future operating costs
- result in upgrades or enhancements that become an integral part of the asset.

Maintenance expenditure simply preserves an asset's original serviceability and does not result in improvements, but work initiated under maintenance can result in capital expenditure classification.

An example of work initiated under maintenance that could fall into the category of capital expenditure is the replacement of a deteriorated roof over an open patio, undertaken in conjunction with work to convert the patio into an enclosed space. When the requirement for maintenance of the patio roof is the catalyst for the work, the building owner may see advantages (e.g. cost savings, time savings, minimisation of impact on building users) in enclosing the patio at the same time.

The work to enclose the patio results is an enhancement to the building asset (i.e. the useful function of the asset has increased as the patio can now be used during poor weather conditions), therefore expenditure on the roof replacement and patio enclosure would be capitalised as it has increased the useful function of the asset.

Extension of useful life

Significant components[30] within buildings (e.g. major electronic security systems) should be identified, recognised, and depreciated separately.

The useful life of each component is different to that of the building asset and to each other. For example, an air-conditioning chiller has a useful life estimated on the basis of its expected running hours and also its expected workload.

The Non-Current Asset Policies for the Queensland Public Sector – NCAP 5 Depreciation and Amortisation notes that the useful life of an asset to one agency may well differ from its useful life to another entity, or even differ between business units within the same entity.

Factors that influence the useful life of building assets and their components include:

- physical wear and tear as a result of use
- environmental conditions
- technical obsolescence
- commercial obsolescence
- legal compliance issues
- other limitations on the continued safe and legal use of the asset.

An extension of the useful life of a building asset may result from work incorporating:

[30] See Queensland Treasury's Non-Current Asset Policies for the Queensland Public Sector – NCAP 2 Complex Assets for criteria to satisfy the definition of a significant component of a complex asset.

- a more robust material than that used in the original structure
- a component that benefits from an improved design (e.g. a new more efficient compressor of the same capacity as the original).

Expenditure in such instances should be carefully reviewed and categorised as capital expenditure, expense, or a combination of both.

Reduction in future operating costs

Reductions in the future operating costs of building assets may occur as a result of:

- repairs that incorporate new materials
- more efficient components
- integration of new technology (e.g. more durable or weather-resistant materials may reduce maintenance costs, while the installation of a modern air conditioning plant may reduce energy costs).

Even if such replacements are precipitated by maintenance requirements and fail to result in increased output, capacity, or improvement in service quality, the expenditure should still be reviewed in terms of its capital content.

Expenditure should be classified as capital if the primary intent is to reduce future operating costs. In contrast, replacement of an asset component purely for maintenance reasons (even if the replacement is made with a modern engineering equivalent that has potential to reduce future operating costs) should be categorised accordingly unless there is a material change or enhancement in the physical characteristics of the building asset.

Asset and maintenance managers

Asset and maintenance managers should consider issues of capital versus expense when assessing both short and long-term maintenance requirements of building assets.

Key considerations for asset and maintenance managers making decisions about maintenance works include:

- financial management and accounting policies and guidelines
- value for money principles (when ascertaining if it is more economical to upgrade, replace or refurbish buildings rather than continuing to make ongoing repairs)
- value of the asset
- intent of the work
- scope of the work
- outcome of the work
- impact of the work on asset value, depreciation, and equity return
- consistency in decision making.

Building management

Scope and application

Building management is the process required to achieve and sustain defined levels of building performance throughout the life of a building. The main objectives of building management are:

- effective risk management
- extended asset life
- reduced operating costs
- compliance with statutory obligations
- provision of a healthy work environment
- improved performance of building systems
- performance and investment predictability through a lifecycle approach
- alignment of building performance with user expectations, relevant to productivity and service delivery
- improved user/occupant satisfaction
- enhanced community perceptions

- environmental compatibility.

Risks

Poor building management risks that may affect service delivery capacity and quality include:

- degradation of the Queensland Government asset base
- premature asset failure
- shorter asset useful life
- higher repair and replacement costs
- missed opportunities to identify and implement improvements to reduce environmental impacts
- unnecessary exposure to legal, social, and other risks associated with:
  - deteriorated buildings
  - statutory non-compliance
  - workplace health and safety
  - hazards
- inappropriate maintenance practices that may cause damage that is expensive to repair.

Process

Elements of building management

The size, type, complexity and role individual government buildings or building complexes play in supporting the delivery of services varies significantly, meaning building management activities should be tailored to achieve effective building asset performance management and efficient and effective resource allocation.

Building assets should be classified in terms of their operational roles and criticality to service delivery.

Four aspects of building management are:

- building occupancy
- building operation
- building maintenance
- building upgrades.

Building occupancy

Building occupancy relates to activities required to enable spaces in a building to be occupied. It encompasses

- occupancy management that:
  - involves management of available space to optimise use and economic performance
  - includes consideration of the occupancy mix to:
    - support harmonious use by occupants
    - monitor occupancy levels to support occupancy prediction and the formalisation of occupancy agreements (agreements in an owner-occupier situation may take the form of Memoranda of Understanding or lease contracts).
- lease management that:
  - provides the legal and contractual framework for building occupancy and defines the requirements to be met by the lessor and the lessee
  - ensures successful occupancy and use of any building or complex.

More information on government office accommodation can be found in the EPW Office Accommodation Management Framework.

Building operation

Building operation activities should support building occupants to deliver government services in line with government environmental and social commitments by:

- controlling and monitoring building services and plant operation that are critical to the provision of a habitable, comfortable, and functional environment, such as workplace health and safety requirements for building occupants
- commissioning building services and plant is important to ensure that buildings maintain optimum energy efficiency and all systems, e.g. water-based fire safety systems, fire hydrants and sprinkler systems, work as intended in the design
- facilitating building operational activities to include:
  - reducing the likelihood of conflict in the use of common areas, storage, materials handling facilities and access
  - ensuring that occupants and users are not disrupted in the delivery of services
  - ensuring effective planning and communication to achieve these outcomes
- coordinating and directing contractors and supply authority employees to ensure their access and activities are safe and security is maintained
- ensuring effective communication with building occupants and users by providing a means for complaint management, building promotion, crisis management and continuous improvement in building operations in support of occupants' requirements
- identifying and managing hazardous material for example liquid and gaseous fuels, asbestos, halon/inert gas, fertilisers, and cleaning agents to:
  - protect the safety of building users and occupants
  - ensure compliance with statutory obligations
- assessing and documenting the condition of asbestos containing material in building elements in accordance with the requirements in the Queensland Government Asbestos Management Policy for its Assets
- accessing control and security measures to protect the building, its physical contents, and its users (security management can range from the control of keys to sophisticated electronic systems and specialist patrols)
- confirming that emergency/disaster management for each building involves:
  - ensuring adequate protection of building occupants and users in the event of emergencies or natural disasters (involves training building management staff and users)
  - consulting with police and other emergency services authorities for rescues and disaster recovery
  - evaluating all procedures regularly
  - requiring building owners and users to ensure testing of fire systems and equipment and assessing the safety level of the building is undertaken by qualified service providers
  - building owners should have:
    - appropriate skills to manage risk areas affecting building protection systems and equipment, and to ensure occupant safety is adequate, in accordance with the Building Fire Safety Regulation 2008
    - information about specific design considerations of smoke control and fire protection systems and equipment, to facilitate accuracy of testing and assessments
    - access to historical data (where the above information is not available) as it may identify necessary rectifications to ensure integrity of such systems
- ensuring external and internal cleaning (day-to-day hygiene-type cleaning) takes place so the building is both habitable and well presented (noting that structured and systematic procedures by specialist contractors may be necessary to meet occupant expectations and maintain the image of the building)
- ensuring waste management and recycling services comply with hygiene and environmental requirements (specialist and/or licensed service providers may be required)
- conducting regular pest control activities to eradicate cockroaches, spiders, and other pests
- undertaking landscaping activities (such as mowing grass, pruning and trimming trees/shrubs, garden maintenance, and removing horticultural waste) as often as necessary to maintain the property to the required standard
- ensuring integrity of other building operation services, including energy and water supply and management, telecommunications (voice and data services), laundry and catering services, and artworks and special features management services.

Agencies are required to focus on the following building management practices:

- energy management – strategies to increase energy efficiency and lower operating costs in Queensland Government buildings should be assessed and integrated with relevant aspects of asset planning and management
- water management – strategies to increase water efficiency, such as preparing water efficiency management plans (for owners of non-residential buildings with substantial water consumption or premises with cooling towers for air conditioning).

Building maintenance

Staff responsible for building maintenance should:

- document maintenance procedures
- coordinate maintenance activities with building operations to ensure minimal disruption to occupants
- ensure statutory obligations are undertaken to maintain building water-based fire safety systems in accordance with fire hydrant and sprinkler system commissioning and periodic testing (Queensland Development Code MP 6.1 – Commissioning and maintenance of fire safety installations).

Maintenance is work undertaken on existing buildings with the intention of:

- reinstating physical condition to a specified standard
- preventing further deterioration or failure
- restoring correct operation within specified parameters
- replacing components at the end of their useful/economic life with modern engineering equivalents
- making temporary repairs for immediate health, safety and security reasons (e.g. after a major building failure)
- mitigation of the consequences of a natural disaster
- assessing buildings for maintenance requirements (e.g. to obtain accurate and objective knowledge of physical and operating condition, including risk and financial impact, for the purpose of maintenance).

Building upgrades

Building upgrades (e.g. renovations, refurbishments, alterations, extensions or improvements) are defined as government building projects. Upgrades aim to optimise the utility, amenity and functionality of a building and increase its useful life to meet future service delivery requirements.

Engage appropriate persons skilled in design, project and contract management to manage the works associated with building upgrades to prepare design briefs, reviews of design and documentation, invitations of tenders, and the awarding of contracts.

When the project is completed, all certificates, warranties, and operation and maintenance manuals are to be provided at handover to enable proper management of the facility.

Agencies must ensure systems and processes are in place for the acceptance and retention of building information.

Fire hydrant and sprinkler tests are to be commissioned. Information ascertained by the tester to be provided to the appropriate officer for recording on an agency register where it can be accessed by the officers responsible for operating and maintaining the assets.

Building management systems

Building management monitoring and control systems should be used to coordinate and control activities associated with continual monitoring and improvement of the asset and to identify improvement opportunities (e.g. energy efficiency and reliability).

Building management systems must be capable of providing comprehensive reports to facilitate:

- building occupancy management
- building performance management to meet service delivery needs
- project progress for building upgrades.

Operational technology

Operational Technology (OT) refers to the use of technology to manage and control physical devices and processes. This includes technologies such as programmable logic controllers (PLCs), CCTV, intercoms, control systems, fence detection, duress. The primary focus of OT is to monitor and control physical processes, such as power generation, transportation and the security management systems, cameras, monitors. OT systems leverage the power of network and server infrastructure to improve operational efficiency.

It is important to note that the main difference between IT and OT is that IT is focused on managing and processing digital data, while OT is focused on managing and controlling physical devices and processes.

Information management systems

Information management systems data should be collected, stored, retrieved and reported to support effective management of the building's operation. Information management systems include:

- maintenance management systems that record technical and asset information relevant to the maintenance of buildings and services to inform the SMP and for normal progress reporting
- financial management systems that store and monitor financial transactions and manage basic revenue and expenditure data to provide consolidated financial reports to support management decisions
- lease management systems that track space utilisation and vacancies and can initiate rental and services billing to tenants. Access to effective lease management systems that generate appropriate reports enables building managers to use this information for decision-making processes and to analyse financial performance and consolidate data for benchmarking purposes.

Performance management

Measuring, analysing, and reporting building performance is critical to effective building management. Accurate building performance data is vital to anticipate:

- issues related to the management and operation of a building
- issues that may affect service delivery (noting that maintenance issues should be addressed before they become a problem).

Decision making and planning for maintenance and capital delivery programs should inform future disposal and rationalisation decisions. Continuous improvement should be supported by benchmarking.

Heritage asset management

Scope and application

This section describes the best practice processes to enable agencies to recognise, manage and conserve government building assets with cultural heritage significance during all stages of the asset lifecycle (planning, investment, procurement, management in use, and disposal).

The objective of heritage asset management is to use heritage assets to deliver services to the community in an efficient, cost-effective way while conserving cultural heritage significance for present and future generations.

The responsibility for managing government-owned heritage assets lies with the agencies that control and administer these assets in accordance with the *Queensland Heritage Act 1992*.

Risks

Consequences of ineffective heritage asset management may include:

- breaches of statutory obligations
- delays to project delivery
- lack of integration of heritage value in planning
- decrease of heritage value of government assets
- loss of civic esteem

- community dissatisfaction
- reduced asset life
- functional inefficiencies due to existing assets being used inappropriately or ineffectively
- unscheduled or unexpected major expenditure.

Process

Agencies must consider:

- principles and elements necessary for achieving effective management of buildings
- community expectations
- strategy for managing Queensland's heritage to allow for state growth and development while conserving valuable heritage.

Heritage asset management should:

- identify assets with cultural heritage significance
- record heritage assets in agency asset registers and consider nominating heritage assets of state significance to the Queensland Heritage Register, following advice from the Department of Environment and Science (DES)
- manage heritage assets to retain cultural heritage significance while achieving agency asset objectives
- identify and plan for disposal of surplus or under-utilised building assets
- monitor and review outcomes to inform future management processes.

Staff leading the heritage asset management process should:

- develop a heritage strategy and incorporate it in the planning processes
- recognise the heritage value of the building or place and implement a process to ensure this value is not compromised during alterations or maintenance
- consult with the DES, recognising that:
  - DES is responsible for the management and protection of heritage places that fit into the state level of cultural heritage significance
  - heritage places include buildings, structures, cemeteries, archaeological sites, gardens and parks, urban precincts and natural and landscape features
  - effective heritage conservation does not require that historic places remain frozen in time and are never altered. Rather, it recognises the best way to protect heritage places is to ensure they continue in active use and are valued by the community
- engage a person with appropriate skills and experience (such as a heritage consultant) when assessing heritage significance. The assessment will typically involve:
  - collecting information on the place and its context from documentary sources and a physical inspection
  - recording, analysing, and assessing this information to determine aesthetic, historic, scientific, and social values
  - preparing a concise written cultural heritage significance statement
- incorporate heritage survey results into the agency's asset register (this will provide a useful snapshot of all heritage assets an agency controls) noting if and/or how the site is recorded on the Queensland Heritage Register.

Conservation management plan

Agencies should consider preparing a conservation management plan for each asset assessed to be of state significance.

A conservation management plan will:

- provide clear direction and a consistent approach, and identify management objectives and responsibilities
- identify appropriate actions to manage a heritage place specific to the asset and to the level of detail needed
- establish policies and mechanisms for decision-making about the future use of an asset with cultural heritage significance

- define conservation objectives and management responsibilities, and identify appropriate management techniques.

A conservation management plan should be completed before any decisions are made that could have an adverse effect on an asset's significance. It should be:

- reviewed and updated regularly
- available for use by asset managers, building occupants and users
- lodged with DES for state-owned heritage places to facilitate the development assessment process.

Heritage asset maintenance

Agencies should:

- undertake specific and regular maintenance programs to avoid ad-hoc repairs that, over time, can result in a loss of cultural heritage significance
- prepare a five-year maintenance plan (linked to the SMP) for each heritage asset to identify proposed work
- manage, plan and deliver building maintenance for Queensland Government heritage buildings
- inspect buildings regularly to ensure potential problems are identified early and to help asset managers gain an understanding of present and future maintenance requirement cost implications
- use (where possible) the same materials and techniques as used in the original work.

Inappropriate maintenance practices can cause damage that is expensive to repair. Quality information is a prerequisite to sound decision making.

Management of use

Retain the significant use of a heritage building by using sympathetic adaptation to meet changing service delivery environments. Where this is not possible, a compatible new use should be considered, ideally within government ownership.

The impact of any proposed new use should be assessed, along with any associated adaptations on the cultural heritage significance of the place.

Evaluation of total accommodation requirements for an agency on a site may support strategies for government consideration, such as adding a new building to accommodate the most demanding new requirements.

Agencies should aim to occupy heritage buildings, as the cost of retaining them as a heritage asset in everyday use may be less than the ongoing cost of caring for vacant assets, noting that unoccupied properties can be vandalised or subject to arson, and maintenance problems may go unrecognised without occupants to report them.

If no alternative or temporary use is arranged before a heritage asset is vacated, it should be secured by mothballing until a new occupant, owner or custodian is found. Regular maintenance and security inspections should be made.

Considerations when installing new services

Agencies should:

- plan service upgrade improvements to heritage assets in a coordinated and integrated way that will:
  - encourage careful planning
  - seek input from designers with suitable experience and select the appropriate systems which make use of new technology
  - incorporate the requirements of the DES
- consider installations that provide ongoing flexibility for future adjustment or addition to ensure minimal disturbance to the fabric of the building.

Provision for services will continue to change in response to:

- new legislative requirements, such as fire safety or energy consumption

- changes in the way business is conducted, such as access to electronic data
- building user expectations for the building to be maintained at a comfortable temperature by using air conditioning.

Many older assets were constructed at a time when services were minimal, and updating services is an important ongoing activity agencies need to undertake to maintain an effective portfolio.

Equitable access

It is important to provide easy and dignified access for everyone, with minimum impact to the heritage building. An access strategy should be determined for each heritage building to provide accessible entrances, paths of travel, work environments and toilets.

Disposal of heritage assets

DSDILGP is the lead for the whole-of-government QGLTP, which is the framework for asset disposals. If there is no alternative to disposal, agencies should consider transfer within government, rather than sale.

Heritage information should be provided to potential owners to identify any advantages and constraints before a sale is finalised. This information allows agencies to minimise the potential for loss of heritage value during disposal by sale. New owners should be provided with any additional information (held by the agency) on the building once a sale is completed, including copies of drawings and other records of construction, alteration and use of the asset.

Relevant information should be provided to the Queensland State Archives after completion of a transfer or sale.

Demolition of heritage assets is managed on a case-by-case basis. Agencies should contact DES for guidance.

Security management of government buildings

Scope and application

Agencies have a responsibility to ensure its services are resilient to foreseeable risks. In the context of security management, agencies need to implement processes and procedures to ensure the safety and security of people in government buildings and the continued delivery of government services.

For managing the security of government buildings, contact the Protective Services Group, a Queensland Police Service unit under the Security and Counter-Terrorism Command. The group provides a range of security services to Queensland Government clients across the State, including static guarding, mobile patrols, alarm monitoring, Building Services Coordinators within government buildings, security consultancy, and up-to-date technical services. It also issues identification cards for Queensland Government departments.

The Prepare, Prevent, Protect Group, a Queensland Police Service unit under the Security and Counter-Terrorism Command provides specialist counter-terrorism and general Protective Security support to Queensland Government, including security risk management and protective security advice, performing protective security assessments of existing buildings, and informing the selection of security risk treatment options. This Group also informs design considerations for planned buildings, including crime prevention through environmental design. Following initial advice from the Group, agencies should seek further advice from specialised consultants.

Ongoing risk management of security considerations for people, information management and assets should be incorporated into an agency's risk planning.

Security management of government buildings should be considered with information security responsibilities for agencies.

Risks

Consequences of ineffective security management of government buildings may include:

- reduced safety of people, publicly funded assets and sensitive information

- loss of public confidence and trust in the delivery of government services
- tenant dissatisfaction
- unnecessary exposure to legal, social, and other risks
- functional inefficiencies due to existing assets being used inappropriately or ineffectively.

Process

Security management is the process of identifying, implementing and monitoring systems and processes for the protection of people and building assets against loss, misuse, damage or deprivation of use caused by deliberate acts. Building assets should have adequate security systems and processes in place to protect people, property, operational capability and information.

Efficient security management requires:

- assessing security risks (including the risks associated with terrorism) and their impacts on service delivery
- developing and implementing cost effective and appropriate measures to manage the risks
- monitoring the effectiveness of security measures and adjusting them as risks and circumstances change.

A strategic approach to security management is essential for effective protection, prevention and emergency response. The following services related to the monitoring and operation of a security system (which are necessary to keep the building in a habitable and useable condition) should be considered:

- alarm monitoring
- mobile security patrols
- security audits
- provision of static security personnel
- other relevant protection measures in accordance with the Queensland Protective Security Framework and the *Queensland Counter-Terrorism Strategy.*

The key stages of the security management process are considered with Queensland Treasury's A Guide to Risk Management and AS ISO 31000:2018 Risk management – Guidelines.

It is necessary to determine the assets and service delivery processes and procedures of the agencies and the potential security incidents/threats which may impact upon them, for example:

- the key activities in the building with a particular focus on those which, if disrupted, could substantially affect the agency's ability to deliver its services
- the security threats to which the department may be exposed
- where the vulnerabilities lie in relation to each of the threats regarded as plausible.

Agencies should consider what controls are in place, the likelihood of the situation taking place, whether there are any triggers which could signal the potential for such an event to happen, the consequences of such an occurrence and the cost to the organisation. To complete the risk assessment, the level of the security risks should be evaluated and ranked according to their importance and the potential damage or harm that could result. Priorities should also be set to address each of these risks.

In order to determine the most risk/cost effective security risk treatment options, agencies should identify options, assess options, prepare and implement treatment plans and analyse and evaluate residual risks.

Security measures can be broadly categorised as prevention, deterrence, detection, delay and response, or a combination of these.

A security management plan should be based on the recommended risk treatment options which:

- assign responsibilities for reporting, recording and analysing security incidents
- establish communication processes and (where applicable) ensure that relevant information is provided to key management committees
- institute a training and awareness program for key personnel and stakeholders

- include a process and timetable for the implementation of agreed physical and technical security procedures
- document performance criteria and ongoing monitoring processes for plan implementation
- determine funding requirements taking into consideration any existing SLA with the security provider and agency plans for security/onsite emergency response and business continuity.

Building tenants should work cooperatively to develop collective arrangements for common areas of their building. Similarly, tenants of adjacent buildings need to implement mutually supportive security arrangements for their precinct.

A building security committee should be established in multi-tenanted buildings. The committee is responsible for periodically reviewing security risks and developing, implementing, reviewing and testing building security arrangements. The committee should comprise representatives from all tenants and from the building owner. A tenant representative with relevant authority should undertake the role of the chair of the committee.

In government buildings, for protective security services, the officer performing the function of the building service coordinator is responsible for implementing and testing security and emergency arrangements.

The security management plan should be monitored to ensure its effectiveness. Improvements/changes in asset planning, maintenance procedures, risk management and security management plans could be triggered by:

- responses to, or the impact of, security incidents on service delivery
- the results of testing exercises
- occurrence of security incidents not previously anticipated
- views of stakeholders regarding the effectiveness and value of security management and onsite emergency responses
- legislative changes
- performance of security operations

Best practice for the performance assessment of Queensland Government buildings

Scope and application

This section provides agencies with a systematic approach to managing building asset performance to meet service delivery requirements. It includes the broad scope and application of building asset performance management, and key principles and elements necessary for achieving effective management of buildings.

This section adopts a contemporary approach to performance management by considering social and environmental aspects, as well as a functional and financial performance assessment approach. It should be applied when an agency requires information on how its building portfolio is performing, particularly to inform the following asset management processes and decisions:

- the agency SBAMP and SAMP to meet whole-of-government requirements and agency priorities
- planning decisions before procurement and investment, including development of business cases for funding bids
- disposal and rationalisation decisions
- replacement and maintenance decisions
- renewal/refurbishment decisions
- benchmarking and continuous improvement.

The principles and elements should be integrated with the agency's building asset management policies, processes and systems that support core business functions and service delivery.

This section can be applied at a floor, building or portfolio level, depending on the performance information required.

Process

Agencies are encouraged to:

- implement a performance-based approach in relation to planning, decision making and management of building assets
- demonstrate the use of performance indicators and measures in monitoring the performance of their building assets
- have the capacity to provide reports on the performance of their building assets to the government, when required, to guide strategic decisions and policy development.

EPW can assist agencies to implement performance building assets strategies by providing advice, where requested, and facilitate sharing information between agencies.

Performance management involves:

- evaluating the achievement of policy and program objectives and outcomes, and the effective use of resources
- ensuring the performance assessment and management of building assets is part of the overall performance management in an organisation, noting this will help ensure building assets (that incur significant capital and recurrent costs) effectively support service delivery requirements, and are used in a cost-effective and sustainable manner
- ensuring performance management is based on reliable and timely performance information that provides the foundation for informed decision-making, planning, implementation, and review.

Key principles

Consider the following key principles that underpin the effective use of building asset performance information as part of strategic asset management.

Clarity of purpose:

- agencies identify the following before starting to collect data:
  - the purpose of collecting performance information
  - the end-users of the information
  - how the information will be used
- agencies ensure performance information is relevant and targeted at appropriate areas so the benefits of performance measurement are optimised.

Context of performance information:

- asset performance information should be complemented with appropriate qualitative and statistical contextual information relevant to service-delivery objectives and operating environments
- ensure valid, verifiable and reliable conclusions are drawn from the analysis of the asset performance information
- avoid using building asset performance information in isolation from other contextual information, as it may lead to incorrect or misleading conclusions.

Quality of performance data:

- the quality of outcomes obtained through performance measurement and analysis is dependent on the quality of the data on that the performance information is based on
- ensure the performance data is:
  - valid (actually measures or is an acceptable assessment of the designated performance indicator)
  - reliable (does not vary significantly under set conditions)
  - accurate (provides a true representation of the unit of measure)
  - timely (available when required)
  - current (up-to-date for the purpose)
- establish appropriate quality assurance procedures to ensure the quality of data
- consider the volatility of data and its impact on reliability, and the ability to aggregate data to provide performance perspectives at various levels.

Cost and value of performance information:

- consider the (potentially significant) cost to collect, analyse and report on performance information
- carefully weigh up the value and benefits of collecting and pursuing optimal levels of reliable and accurate performance information against the cost of doing so
- consider if the costs outweigh the benefits, the application of alternative performance information within appropriate cost-benefit parameters to determine the performance of the building portfolio.

Continuity and consistency of performance measurement:

- monitor trends over time, particularly when assessing the overall performance of buildings, as opposed to individual components, which may have shorter life spans
- maintain the continuity of performance information by using trend monitoring to enable assessment of outcomes and asset decisions
- the consistency of data is critical to effective evaluation of performance information, and any inconsistencies could lead to misleading interpretations and loss of credibility in the results of any analysis.

Building asset performance elements

The elements listed below should be incorporated into agency asset performance management systems.

Classifying building assets

Building assets should be classified into specific asset types or categories as a minimum means of differentiation for performance assessment, noting that individual building assets play different roles in supporting agency objectives and have varying degrees of importance or criticality.

Classifying assets in terms of operational roles and service delivery provides a focus for asset performance measurement priorities. This differentiation assists in:

- providing a means of analysing performance information by type and criticality of building assets
- enabling agencies to target specific buildings for performance assessment and monitoring
- establishing priorities for resource allocation
- achieving a balance between the costs and benefits of performance measurement.

Building asset categories

Agencies should assign building assets to categories that reflect their role in supporting service delivery or other objectives, considering performance information in terms of the asset's operational role to assist in the prioritisation of performance improvement across the portfolio.

Use Table 11 to classify agency building assets (shows the minimum categories to be used).

Table 11: Building asset categories

Category	Description of building asset role
Operational asset	Used for delivery of core agency services (e.g. teaching block, police station, health service facility)
Ancillary asset	Used for support functions (e.g. storage sheds, administration, training)
Non-operational asset	Surplus or de-commissioned (e.g. assets awaiting disposal).
Administered asset	Administered on behalf of the government (e.g. heritage and cultural assets).

Building asset criticality

Building assets in each category may be of varying levels of importance to achieving service delivery objectives.

Use Table 12 to determine criticality ratings, considering:

- the importance of the building asset to delivery of core agency services
- the consequences of failure of the building in terms of risk to service delivery and ease of replacement.

Table 12: Building asset criticality rating scale

Rating	Criticality (importance to service delivery)
5	Vital to service delivery operations. high profile and extremely difficult to replace or find short-term service delivery alternatives if damaged or otherwise adversely affected.
4	Important to service delivery operations but can be quickly replaced with alternative.
3	Service delivery will be affected, with no major implications, and alternative asset is readily available.
2	Support function only with no direct impact on service delivery, and alternative is readily available.
1	No impact on service delivery. Asset may be surplus or administered only.

Performance areas, indicators, and measures

Agencies should establish specific performance areas, indicators and measures for assessing building asset performance, and integrate them with existing asset management practices and systems.

Building asset performance areas are:

- appropriateness in meeting service delivery requirements
- financial impact
- statutory compliance risk
- effective use as a resource
- environmental impact
- social significance.

Building asset performance indicators include:

- appropriateness:
  - capacity – physical capacity to support the level of current and future service activity
  - functionality – suitability and flexibility for current and future service delivery
  - location – physical location relative to current and future demand for services (an important consideration in light of population movement and growth, and infrastructure planning)
  - condition – physical condition appropriate for current and future service activity
  - remaining life – an estimate of the remaining useful or economic life in terms of either the asset's future potential to sustain delivery of services, or the costs of ownership and use not being viable
- financial:
  - operating cost – the annual operating cost of the building asset e.g. utilities:
    - electricity supply
    - water supply
    - waste management services
    - gas and fuel supplies
  - maintenance cost – the annual maintenance expenditure on a building asset, including:

  - agency management/administration (including computerised maintenance management systems)
  - asset assessment
  - preventative maintenance (including statutory and manufacturer recommended)
  - proactive condition-based maintenance
  - reactive maintenance
- deferred maintenance cost – the estimated cost of all maintenance work that has not been conducted within a financial year and which is deemed necessary to bring the condition of the building to a required standard or acceptable level of risk

- statutory compliance risk:
  - consider the extent of non-compliance with Australian Standards, codes, laws, and regulations, which is identified as a result of an audit, discovery, or the introduction of new legislation
- effective use:
  - consider the extent of utilisation expressed as a percentage of available capacity based on agency-specific measures
- environmental impact:
  - consider the presence of hazardous materials, site contamination or consumption of non-renewable resources (e.g. water and energy)
- social significance:
  - meet government priorities or community obligations, including in terms of cultural heritage significance, community attachment, or other government priorities.

Agencies can choose to supplement the above key performance indicators with optional indicators listed below if they add value to the assessment:

- net return on asset value – net revenue as a percentage of gross book value of the building asset (relates to the financial performance area and is only applicable to agencies that have revenue-generating building assets)
- compatibility of use – compared with the design purpose of the asset (relates to the effective use performance area)
- environmental rating system assessment – reflecting achievement in meeting the objectives and specific criteria of a particular environmental rating system suitable to the type of building asset and agencies and government priorities (relates to the environmental impact performance area).

For building assets previously assessed and rated against an environmental rating system (either at the design stage or on completion), it is important to ensure the achieved rating is being maintained during operation. Occupant operation and maintenance service provider practices may be assessed to identify whether environmental initiatives incorporated into the building asset are being maintained.

Performance measures

Performance measures are qualitative or quantitative methods of assessment relevant to a particular performance indicator. Agencies should:

- use appropriate performance measures that are relevant to service delivery needs to ensure performance data is useful and meaningful for their specific requirements
- use Appendix 7-1 to assist in undertaking performance assessments, which can be customised to suit particular agency requirements.

Linking performance to service delivery

Performance measures applied to each performance indicator must be relevant to service delivery objectives and provide information on the match or gaps between actual performance and the performance required for optimum service delivery outcomes.

Establishing performance targets or benchmarks

Performance targets or benchmarks should drive improvement efforts are appropriate for individual requirements. They should be established with consideration of the building asset's nature, service delivery role and relative importance.

Targets and benchmarks support comparisons at building, facility, district/regional, program and portfolio level to assist in decision-making and drive improvement.

Benchmarks or targets must be appropriate and relevant so building assets can be monitored and compared against the targets to produce meaningful information for asset management.

Managing performance

It is important to establish and maintain agency capacity to manage building asset performance. This requires appropriate agency resources, processes, management structures, systems, and competencies to assess, review and evaluate building asset performance.

Reviewing performance

Periodic reviews of building asset performance should be undertaken as part of asset management practices, and for specific planning purposes such as business cases for new projects and the agency SBAMP and SAMP.

Using performance information

Performance information should inform asset management decisions. Performance assessments provide status reports or profiles summarising the performance of a particular building asset. The information gained helps agencies to answer the following questions:

- how well is the building asset performing in supporting current service delivery?
- is the building asset relevant to future service delivery needs?
- what areas need improvement?
- what are possible options for improving performance?
- what is the best option?

Asset performance information also assists agencies to anticipate issues related to the management and operation of building assets and to address these issues before they become of concern or affect service delivery.

Asset review and analysis

Scope and application

Asset review and analysis involves evaluating the performance of building portfolios for asset planning as part of overall agency planning processes.

The objective is to ensure the best possible alignment between the building portfolio, service delivery requirements, and government objectives. This is done by developing the following strategies:

- capital delivery investment, including new assets or extensions to existing buildings, reconfiguration of existing buildings, leasing of building space, or other non-asset solutions
- maintenance, ensuring the physical condition of building assets are at an appropriate standard for their functional purpose and value to the community
- disposal of surplus assets, including decommissioning leased premises.

These strategies are the basis for exploring options for capital investment, maintenance, and disposal plans.

Asset review and analysis to monitor building portfolio performance in the context of its service delivery objective will facilitate:

- optimal use of buildings
- advancing sustainable changes in energy and water management
- improving reporting capability to senior management and to government.

Risks

The consequences of agencies failing to monitor the performance of their buildings include:

- inadequate building asset management systems and processes that may adversely affect service delivery performance
- lack of rigour in planning and resource allocation processes and decisions
- financial losses arising from failure to maximise return on the asset portfolio
- over-maintenance of a building scheduled for disposal or demolition
- inappropriate or inefficient use of existing assets
- degradation of the Queensland Government asset base
- sub-optimal outcomes in relation to capital delivery investment, maintenance, energy, and water management.

Process

Understanding building portfolio performance

Agencies should undertake a systematic asset review and analysis to establish connections between the strategic and operational aspects of asset management.

Accurate building asset performance and status data is essential for planning capital delivery and maintenance programs and managing emerging risks at the agency and whole-of-government level. The comprehensiveness of the information required will be determined by the complexity of the building assets and the overall size of the portfolio.

Building portfolio review

Building portfolio review outcomes and information should be incorporated into agency processes, systems and reports, and into asset planning processes to allow effective prioritisation of projects and funding.

Building portfolio reviews should:

- establish a systematic approach to managing the performance of building assets to meet service delivery requirements by using specific performance areas, indicators and measures related to economic/financial aspects, environmental impact, and social significance
- consider review objectives and the systems to provide information on actual and required performance for optimum service delivery outcomes
- consult with key building users, maintenance service providers and service delivery planners to determine appropriate performance indicators and measures
- consider building audits and inspections to provide input into the performance of the building asset:
  - condition assessments, noting it is a requirement for all Queensland Government buildings to be assessed by site inspection at least every three years, depending on the nature of the facility
  - asbestos audits
  - building asset register data collection
  - building reviews (building codes audits, fire safety audits, town planning code audits, health and amenity audits, functionality audits, utilisation audits, and POEs)
  - risk management audits
  - data collection for lifecycle planning
  - energy management audits
  - engineering investigations e.g. geotechnical, structural integrity, and electrical/mechanical investigations
  - environmental audits
  - water management audits.

Guidance on specific techniques (such as risk analysis, sensitivity analysis, economic evaluation, and cost-benefit analysis) that can be used to analyse project options resulting from building reviews is available in the PAF Cost-Benefit Analysis guidance material

Environmental sustainability management

Scope and application

Environmental sustainability is a key consideration in the management of all government buildings. The Queensland Government's sustainability agenda is outlined in *Queensland Climate Action* and the *Queensland Climate Adaptation Strategy*.

Agencies have a key role to play in supporting this agenda during the planning, construction, operation, maintenance, and disposal of government buildings, by reducing environmental impacts and ensuring services to the community are resilient to climate change.

Risks

There may be significant consequences if environmentally sustainable practices are not integrated into the management and design of government buildings, including:

- higher operating costs for inefficient buildings
- lower asset values compared to similar environmentally accredited assets
- building tenant dissatisfaction
- buildings less resilient to impacts of climate change, such as severe weather events
- funding inefficient use of resources
- adverse community perception if the government is not seen to be proactively addressing the impact of climate change
- reducing the ability for agencies to deliver services in case of significantly changed climatic conditions.

Process

Asset management and procurement practices

Agencies should use environmentally sustainable government building management practices to:

- improve agency ability to meet sustainability targets, savings and outcomes in planning, construction, operation, and maintenance of government buildings
- accelerate and maintain the organisational improvement efforts related to environmental sustainability
- address effects of climate change in planning processes to ensure that government services are resistant to climate change impacts.

Key aspects of environmental sustainability

Environmental sustainability should be addressed when planning, constructing, operating, and maintaining government buildings, by:

- undertaking lifecycle planning analysis to support strategic management and decision-making processes
- documenting (in the project business case) lifecycle costings and consideration/investigation of the environmental impact of building solutions undertaken during the project feasibility study
- integrating sustainability into procurement processes in accordance with the QPP and the associated purchasing guideline Optimising Opportunities for Local Suppliers
- setting, achieving, measuring, and reporting on sustainable procurement targets annually, in alignment with agency strategic and operational procurement objectives and government strategies
- contributing to government energy efficiency and emission objectives by:
  - complying with actions in the QPP and the *Queensland Building Plan*
  - using information and lessons learnt from managing existing buildings, with a focus on:
    - assessing heating, ventilation, and air conditioning (HVAC) systems for improving energy efficiency by looking at the impacts and energy saving potential of improved fan technology, ductwork, and insulation
    - using new lighting and sensor technologies to reduce artificial lighting power densities
    - improving building sealing to prevent unintended air leakages

  - glazing and shading to limit unwanted heat gain or loss
  - high-efficiency heating technologies for hot water and space air-conditioning systems, such as solar thermal heating or electric heat pumps
  - control systems to improve energy efficiency by setting optimum performance levels for zoning, equipment scheduling, peak demand use and hours of operations
  - monitoring equipment for waste production and energy and water use
  - developing and adopting environmentally sustainable approaches to design and construction
  - using light-coloured roof and building materials to reduce solar heat gain
  - considering allowances of flexible work arrangements when designing new buildings
- demonstrating leadership by reducing the environmental impact of greenhouse gas emissions, waste production, energy, and water use of existing buildings
- considering application of environmental ratings to construction projects
- seeking project submission/proposal approval from government and providing information to enable good decision making
- considering social, economic, and environmental impact assessments and risks for business case development
- using project designs, function, and performance (rather than technical specifications) by considering:
  - local industry participation when specifying building industry products and, where necessary, nominating proprietary products of local (i.e. Australian and New Zealand) origin before those from other countries
  - reducing greenhouse gas emissions attributable to construction and operation of buildings
- recognising that disaster management plans and guidelines may affect function, design and construction
- supporting the commitment to a 2050 zero net emissions target, in accordance with the Queensland Climate Action[31]
- jointly planning office accommodation needs i.e. agencies to consult with EPW, noting that all approaches to private sector office building owners should be made through EPW
- undertaking commissioning and handover processes that facilitate proper management of the building asset and ensure environmental performance is maintained over the life of the building by:
  - identifying and implementing adequate management strategies to ensure manuals, specifications, certificates, and as-built drawings are provided
  - providing thorough training and orientation of facility managers, maintenance personnel and plant operators, particularly regarding their roles in maintaining the environmental performance of the building
- operation and maintenance manuals should include procedures/maintenance activities, such as manufacturer recommendations for maintenance and cleaning regimes, and settings for plant and equipment that will allow sustainable buildings to perform to the specified level
- once an environmentally sustainable building is in use:
  - ensure environmental performance data is reviewed and analysed at appropriate intervals to maintain and improve performance levels
  - monitor the building's compliance with environmental performance requirements, including:
    - contractual requirements for maintenance service providers/contractor to provide regular and accurate environmental performance information
    - the contribution of building users/tenants to the building's overall environmental performance e.g. recycling, turning off lights and computers
- integrating the principles of ecologically sustainable development in government buildings, programs, environmental strategies, and initiatives.

[31] Also see the Queensland Energy and Jobs Plan https://www.epw.qld.gov.au/energyandjobsplan

Mitigating the impact of natural disasters on government buildings

Scope and application

Natural disasters present a significant and rising cost to the community. Irrespective of geographic location. Queensland Government buildings may be at risk from a range of hazards, including cyclone, flood, landslide, earthquake, bushfires, severe thunderstorm, heatwave, storm surge and tsunami.

Natural disaster risks and consequences vary around the state, depending on location and physical characteristics of land. They cannot always be precisely predicted, but the impacts are well understood and can be managed through comprehensive hazard mitigation planning.

Climate change effects in Queensland can include annual rainfall reductions, increases in rainfall intensity, sea level and coastal erosion, bushfire risks, flood risks, and damage to transport infrastructure and low-lying human settlements. These factors should be considered when undertaking assessments or developing mitigation strategies.

Where buildings are leased, the risks associated with natural disasters is to be taken into account during the determination of needs, options analysis, lease negotiation and lease management.

Agencies should comply with relevant legislation, policies, and codes, and should seek to exceed such requirements in the case of:

- buildings critical to the delivery of services to the community
- buildings intended to have a specific resilience capacity – resilient government buildings will allow the continued delivery of government services irrespective of any natural disaster.

Resilient structures play a critical role in supporting communities to withstand, respond to and recover from disasters, For the purpose of this guideline resilient buildings are those that are built to relevant resilience standards and are able to continue to function and operate during and after disaster events.

Risks

Ineffective planning, scheduling and prediction of natural disaster risks can result in health, safety, financial, and environmental implications including:

- disruption of government services delivery
- loss of life
- contamination issues
- significant costs associated with reconstruction.

It is important to consider the potential adverse consequences of climate change on flooding and to remember that, in addition to impacts on rainfall and run-off, conditions such as sea level rise and an increase in the southern excursion of tropical cyclones may have significant implications for coastal floodplains.

The 2021/22 State Disaster Risk Report (SDRR) assesses statewide risk for 10 hazards, two compound or cascading hazards, and a range of risk drivers. The intent of the SDRR is to provide a foundational level of information for risk assessments by local and district disaster management groups and other state entities. It also provides authoritative guidance on climate change and its relation to disaster risk in Queensland.

Process

The Queensland Reconstruction Authority (QRA) is the lead agency responsible for disaster recovery and resilience policy and funding in Queensland.

QRA administers the Disaster Recovery Funding Arrangements (DRFA), which is joint Commonwealth and State government funding, providing financial assistance to help communities recover from eligible disasters. The Queensland Disaster Funding Guidelines 2021 detail Queensland's administrative requirements for the DRFA that may be activated within Queensland and provide guidance on the financial assistance and funding that may be available in the event of a disaster for local governments and state government agencies, not-for-profit organisations, primary producers, small businesses and the general public.

QRA also coordinates several non-disaster specific resilience funding programs, details of which can be located on the QRA website.

Natural disasters and potential mitigation strategies

Agencies should consider a comprehensive approach to mitigating the effects of natural disasters and include strategies related to:

- land-use planning
- engineering (e.g. structural, and civil)
- building services
- building codes and standards
- increasing building resilience.

Where possible, avoid site selection, planning and design of government buildings in areas susceptible to natural disasters.

Agencies should:

- consider project planning, design, and development at the earliest possible stage, when the design and material decisions can achieve the greatest savings
- determine the degree of protection that can be provided against specific hazards when planning buildings (the costs of protection should be commensurate with the probable losses from an event occurring)
- address the following aspects when designing buildings, to increase resilience to natural disasters:
  - align development and associated site works to follow slope contours and minimise land excavation and filling, where appropriate
  - design retaining walls as an integral element of building form
  - design buildings for ease of maintenance
  - provide safe access to building elements and services to enable the delivery of maintenance work
  - design proposed developments to include expected longevity, and continued operation, of the building, before, during, and after a disaster
- consider the following aspects for building design:
  - factors such as increased sea levels, extreme climatic risk events, higher temperatures and greater wind loads in susceptible areas
  - acceptable and non-acceptable consequences for the building due to a risk event occurring
- ensure consequences are minimised or avoided through appropriate design
- recognise that the desired service delivery role of a building in and/or after a disaster may be different to its normal day-to-day role (buildings in threat-prone areas need to be multi-purpose, to support rapid responses to changing needs if required)
- consider additional QRA guidance materials for on resilient design and construction for homes.

Cyclones

Strategies to improve building resilience to cyclones include:

- designing structures to withstand expected lateral and uplift forces
- strengthening connections between roof and walls to the ground
- ensuring roof tiles and anchorage systems are strong enough to resist extreme wind pressure[32]
- installing door and window hardware, fixings, hinges, and locks suitable for the location, noting that the failure of large access doors (such as roller doors or panel doors that can be vulnerable to severe wind) can result in internal pressurisation
- protecting and/or bracing doors and windows to reduce impact of airborne materials
- selecting appropriate weather treatments of eaves and building openings to protect them from wind-driven rain and mitigate impact of any damage to building interiors

[32] Design wind pressures are derived from AS/NZS 1170.2 or AS 4055, as applicable. Design or construction details (including the timber size, bracing and fixing requirements) for residential timber-framed construction in cyclonic areas, are derived from the AS 1684.3:2021.

- minimising the extent of non-essential glazing, particularly in locations that are exposed or highly susceptible to extreme weather events
- protecting and securing equipment including air-conditioning plant, ventilators, antennas, and solar panels installed on roofs to avoid loss of the services or secondary damage to the building envelope
- storing free-standing furniture or other items, including bins and pot plants, in preparation for cyclone
- ensuring the selection of species and location of trees around buildings should consider that heavy seasonal rain can result in waterlogged ground providing little support for large trees during strong wind.

Opportunities to retrofit existing buildings should be considered. This can include upgrading roof structures and improving window protection to withstand high winds and prevent water entry.

Storms

Strategies to improve building resilience to storms include:

- designing appropriate roofs to minimise the possibility of water ponding, which can cause deflection of structural members
- protecting buildings against floods by preventing groundwater and rainwater from entering the building
- diverting surface water by grading the ground surface away from building walls
- maintaining roofs to prevent blockages and premature corrosion in roof gutters.

Floods

Strategies to improve building resilience to floods include:

- undertaking preventative measures to safeguard or minimise impacts on service delivery, including informed site and location selection, if possible, away from coastal, estuarine, and riverine floodplains
- where buildings are required to be constructed in flood hazard areas for operational purposes, consider elevated building pads, appropriate building design, and/or suitable construction materials including unlined core-filled block-work walls, free-standing furniture, elevated power and data connections, and carpet floor tiles
- designing buildings so habitable floor levels are at or above the flood level[33] to increase protection of essential services, and to limit potential flood damage
- undertaking dry flood-proofing by making the building watertight to prevent water entry, or wet flood-proofing by making uninhabited or non-critical parts of the building resistant to water damage
- considering relocation of the building and incorporation of levees and floodwalls into site design where safety and other considerations can be properly addressed
- locating mechanical, electrical, and electronic equipment above flood level (e.g. not in basements)
- providing auxiliary generators, appropriately located to supply emergency power if mains power is not available
- ensuring the main switchboard has the capacity to connect to an emergency generating plant if the power supply to a building's main distribution board is disrupted
- incorporating alternate means for onsite sewerage and water systems where protection may not be possible and disruptions may occur
- considering installing pumps to remove water from buildings
- providing protection against flowing/flooding/surface water, commonly caused by rivers overflowing
- ensuring site selection decisions are supported by economic, social, and environmental analysis and addressed during business case preparation
- considering protection for buildings adjacent to large bodies of water that could be undermined due to erosion storm-driven waves or tsunami.

[33] Enquiries about historical flood levels for the site should be made of relevant authorities to ensure land is suitable for its intended purpose. The information should be available to relevant officers for inclusion in subsequent project management processes (for example, in design development and compliance assessment).

Refer to the Queensland Development Code MP 3.5 – Construction of Buildings in Flood Hazard Areas.

Bushfires

Strategies to improve building resilience to bushfires include:

- appropriate siting of buildings, including adequate separation of buildings from bushfire-prone vegetation (firebreaks)
- clearing areas around a property to reduce the level of radiant heat from bushfires and provide working space for fire brigades, between the property and bushfire-prone vegetation
- designing buildings to improve resistance to burning embers, radiant heat, flame contact and/or a combination of these
- using suitable fire-resistant construction materials (including timber that has bushfire-resistant properties or has been treated with fire-retardants) in roofs, awnings and exterior surfaces to assist in avoiding spontaneous combustion due to radiant heat
- planting fire-retardant/resistant vegetation (noting most deciduous trees such as oaks and fruit trees are less flammable than pines and eucalypts)
- maintaining buildings and grounds to reduce bushfire risks.

For buildings in bushfire-prone areas:

- maintain grounds/landscape to ensure any erosion does not affect footings/foundations stability
- maintain fire protection systems in accordance with the Queensland Development Code MP 6.1 – Maintenance of Fire Safety Installations and the Building Fire Safety Regulation 2008.

Refer to the AS 3959:2018 Construction of Buildings in Bushfire-Prone Areas, the State Planning Policy, and local government for further information.

Earthquakes

Strategies to improve building resilience to earthquakes include:

- installing specific structural components such as shear walls, braced frames, movement-resisting frames, and diaphragms
- installing seismic dampers such as diagonal braces or other energy dissipating devices and techniques
- bracing non-structural components.

Ground subsidence, landslides, and mudslides

Strategies to improve building resilience to ground subsidence, landslides, and mudslides include:

- undertaking appropriate studies for location and site selection, and avoiding cut-and-fill building sites where practicable
- undertaking preventative measures to safeguard or minimise impacts on building foundations
- using shear walls, geo-fabrics and earth reinforcement techniques when retrofitting structures
- constructing channels, drainage systems, retention structures, and deflection walls
- planting groundcover.

Refurbishment and retrofitting of existing buildings

Consider measures to mitigate risks from natural disasters when making decisions related to refurbishment and retrofitting, including extension and alteration, and building maintenance. Apply all building acts, regulations and standards, in particular the *Building Act 1975* (Qld).

Building maintenance

Maintenance requirements should be assessed to identify measures to mitigate risks from natural disasters. All Queensland Government buildings must be assessed by site inspection at least every three years (at a minimum), depending on the nature of the facility.

Agencies should:

- assess all buildings affected by a natural disaster

- undertake condition assessments to evaluate the physical state of building elements and services and determine maintenance needs. Condition assessment should:
  - provide enough information on the condition of buildings to support informed asset management decisions
  - identify future remedial works in sufficient detail to enable associated priorities and cost estimates to be developed
  - include a review of disaster recovery plans etcetera to determine the likely effect of a natural disaster on the building and its services
  - assist agencies to proactively identify opportunities for natural disaster mitigation, including elements and services such as air conditioning and fire protection
  - manage risks and determine appropriate actions as soon as possible, to address critical maintenance items/issues.

Agencies should also consider:

- advice from maintenance service providers on workplace health and safety and risk issues that may require more frequent and thorough assessments
- replacing damaged components with modern engineering equivalents where applicable
- providing feedback to building designers on using materials or items more resilient to natural disasters
- timely re-establishment of any soil eroded from the building footings/foundations after flooding.

Asset disposal

Scope and application

This section will assist government agencies to implement processes and procedures to ensure appropriate asset disposal planning of government buildings.

Effective asset disposal planning is critical to the management of agency building asset bases. Disposing of surplus buildings in accordance with an asset disposal plan ensures they do not become a maintenance and/or financial burden.

It may also release funds for capital works, influence decision-making, and support forward estimates and budget processes by enabling reinvestment of disposal revenue.

A building may be identified for disposal due to:

- functionally inadequacy and unsuitability for refurbishment due to economic or technical constraints
- financial under-performance with little potential for improvement
- sub-standard physical condition (and it is uneconomical to reinstate to an acceptable standard)
- negligible demand for it.

The objective of asset disposal is to ensure that buildings identified as surplus are examined in detail and that there are no alternative economic or community uses for them. Building disposal should achieve the maximum possible financial return to government.

Risks

Disposal processes not supported by competent and professional advice and accurate and relevant information can result in:

- inadequate returns
- poor coordination of cash flow with capital investment requirements
- insufficient security or inappropriate maintenance of vacant property.

Process

Asset disposal plans

Agencies should develop an asset disposal plan to prioritise and optimise disposal of building assets identified as surplus (based on surplus and not investment/economic cost) to agency requirements.

The buildings should be examined in detail, and it should be determined they have no alternative economic or community use.

Asset disposal plans must have both a strategic and an operational focus.

Review holdings of surplus buildings

Agencies should:

- review building asset performance periodically as part of asset management practices
- assess how well buildings are performing to meet service delivery requirements
- identify any buildings that are surplus to existing or future service delivery needs, and which may be considered for disposal in the agency asset register and Government Land Register (GLR).

A review should be undertaken to ensure the disposal action is appropriate and there are no alternative economic or community uses for the assets.

Identify/prioritise asset disposal action

Agencies should:

- perform a financial and/or economic analysis to assist in identification of the best method and timing of disposal
- consider social impacts to assist in the planning for the disposal of buildings
- identify and prioritise disposal of surplus properties to best meet service delivery requirements and optimise the returns to government by identifying:
  - buildings that are readily available for disposal (inter-agency transfer should be given priority over a sale to the private sector)
  - for buildings with the potential for refurbishment or redevelopment to maximise returns from their disposal, consult with Queensland Treasury and seek budget and funding approval from Executive Government or other delegated bodies
  - for buildings with little or no value and where sale is not feasible, economic, or probable, consider demolition and using the land for future capital delivery projects.

Based on an objective evaluation, agencies should decide if there are savings to be made from:

- developing a resource (waste) recovery program for recyclable materials in any significant government building that is being demolished or redeveloped
- recycling and reusing materials in building projects where Resource Recovery Transfer Centres are established.

Consult with DSDILGP before disposal (refer to the QGLTP for more information), and update the GLR with sale information.

Constraints to transfer, sale or other disposal action include:

- existing accommodation/use arrangements
- stage of property market cycle – to determine the optimum time for disposal to achieve the highest sale price
- land title issues – location of title, ownership, subdivision, native title checks
- environmental issues – including contamination and workplace health and safety
- service delivery timings and imperatives
- social issues such as community involvement
- agency/government replacement policies
- government/agency budget cycles
- government priorities, programs, and initiatives.

Agency maintenance planners should inform the development of strategies to ensure vacant properties, including those identified for disposal, are maintained to meet minimum statutory requirements.

Disposal should include and allow for agency service delivery continuity and optimise the return to the government.

Finalise the asset disposal program

Develop an asset disposal program to achieve an ordered and economic disposal of buildings, by:

- listing the buildings for disposal in order of priority
- identifying the timeframe for disposal
- determining any associated costs which may be incurred in disposing of buildings
- quantifying (through valuations) expected returns on sale
- detailing funds available from disposal for reinvestment in capital delivery projects
- providing information to meet annual reporting and budget forecasting requirements.

Agencies should manage any surplus and/or under-utilised building assets, and improve asset portfolios by reducing potential wasteful holding of surplus assets and increasing the use of under-utilised assets.

Identification and notification of surplus property assets

Agencies should:

- identify surplus property assets as part of the SBAMP and SAMP processes
- develop and implement processes for disposing of these assets
- record surplus properties on the GLR as soon as practicable after the decision is made that the property is surplus
- maintain on the GLR for a minimum of 30 calendar days
- seek additional properties (if required) to meet service delivery requirements by regularly monitoring the GLR.

Interagency transfers should be prioritised over the sale of assets to the private sector. Transferring surplus property assets to satisfy the needs of other agencies is more efficient than buying additional properties from the private sector, and it maximises the use of assets.

The transfer of a surplus property to another government agency should usually occur on a market value basis.

The QGLTP outlines exceptions that allow a property to be transferred at less than market value where required to meet whole-of-government strategic priorities, public benefit, or other considerations under the Property Principles.

Agencies must ensure transfers are appropriately reflected in asset registers and financial systems.

Any due diligence and other requirements should be addressed at the disposal stage to ensure adequate information is available to inform a new owner of their responsibilities. The Non-Current Asset Policies for the Queensland Public Sector mandate specific requirements to account for and report on the disposal of government building assets.

In cases of open market disposal of buildings or land, agencies should:

- seek a valuation from a valuer registered in Queensland
- use the valuation as a benchmark for the sale
- use public competition, public auction, or public tender
- ensure maximum return to government is achieved.

Private treaty disposal is occasionally used as an alternative method of property disposal. It occurs only where it is necessary and/or commercially advantageous to the state and not contrary to the best interests of the community.

Appendices

Appendix 1: Contractor tendering and selection process

1-1: Non-price evaluation criteria

Non-price evaluation criteria are included in the tendering and selection process to support government policy and provide a greater level of certainty to project outcomes.

The inclusion of non-price evaluation criteria in tender evaluation is based on the recognition that:

- the lowest priced conforming tender does not necessarily represent best value for money
- project requirements considered important or critical may be best satisfied by contractors who can demonstrate specific skills or experience
- non-price evaluation criteria have a role in the realisation of government priorities and outcomes.

Non-price criteria addressing government priorities

Non-price criteria addressing government priorities provide a mechanism for ensuring the construction of government building construction projects supports the Queensland Government's overall aim to achieve greater value for money from the government's infrastructure program and service delivery.

Typical non-price criteria may include:

- the nature of the project
- tenderers' past record in and/or commitment to using local industry.

Project-specific criteria should consider:

- project complexity
- risk level
- type and size of the project.

Project-specific, non-price criteria should be designed to address:

- the contractor's proposed methodology
- the contractor's proposed resource strategy
- any other issues related to the project, as determined by the project sponsor.

Contractor methodology

Contractor methodology refers to the way a contractor intends to meet project objectives. Depending on the form of contract, contractor methodology may encompass all of the activities undertaken throughout the design and delivery phases of the project.

Non-price criteria addressing contractor methodology may focus on any of the following non-exhaustive sub-criteria list:

- buildability/maintainability
- community consultation
- consultant management
- design management
- environmental sustainability
- handover management
- innovation
- programming of works
- safety
- subcontractor management
- use of local industry
- waste management
- communication
- construction management
- cost management
- documentation management
- functionality

- incorporation of best practice
- lifecycle costs
- quality management
- site management
- supporting equipment and systems
- user group/client management.

Contractor resource strategy

A contractor's resource strategy will specify which individuals, companies and sub-contractors will be involved in the project:

The contractor's resource strategy may include some or all of the following aspects:

- key managerial and supervisory personnel
- key team members (including their résumés)
- key trade packages
- project organisation chart
- identification of key activities in terms of tasks and people
- management structures, roles, and reporting relationships
- contractor's past and current time-related performance
- personnel back-up strategy
- referees.

Weightings for non-price criteria

For projects where non-price evaluation criteria form part of the Conditions of Tender:

- tender documentation should give an indication of the relative importance of each criterion (i.e. a weighting, usually expressed as a percentage)
- weighting of non-price criteria depends on the risks associated with the project
- non-price criteria for projects delivered using a Design and Construct contract will have a higher weighting than those projects delivered using a Construct Only contract.

For the majority of Construct Only Lump Sum contracts, price will be the major consideration in a tender evaluation:

- tender price will usually be assigned a weighting of 100 per cent, where there are no non-price criteria, and
- a tender price weighting ranging from 70–90 per cent where there are non-price criteria.

Projects Design and Construct contracts should include non-price criteria, depending on the risks involved. All projects identified as HRS will incorporate non-price evaluation criteria.

Criteria weightings should be developed considering:

- opportunities for contractors to add value to a project, given the level of contract documentation and type of contractual conditions
- requirements of government policy
- scoring methodology adopted for the evaluation.

The greater the input of the contractor into the design and documentation process, the lower the weighting for the price criteria.

For all HRS projects, agencies should prepare a tender evaluation plan and consult with EPW on the proposed evaluation criteria and weightings to be used in the selection of consultants and contractors, prior to calling tenders.

Further information on the use of non-price evaluation criteria and weightings is available from EPW and the tender evaluation, including the preferred scoring methodology for HRS projects, is available from EPW, Contract Services Unit.

The non-price criteria in the tender evaluation process:

- may be used in open or select tender situations

- should be consistent with the objectives of the QPP and with required project outcomes and
- ensure that the non-price criteria used to assess value for money are appropriate.

It is important to ensure that the non-price criteria used to assess value for money are appropriate and consistent with the objectives of the QPP and with required project outcomes.

The process for using non-price criteria in a tender evaluation is as follows:

- identify any project-specific non-price issues critical to the success of the project, and determine the appropriate non-price criteria
- consider which, if any, of the government ambitions and targets are most relevant/appropriate to the project, and determine the non-price criteria accordingly
- determine the overall weightings for the price and non-price criteria
- apportion the overall weighting for non-price criteria among the government ambitions and targets and project-specific, non-price criteria (including any sub-criteria), as appropriate
- incorporate all criteria and associated weightings into the tender documents
- evaluate tenderers' responses to the non-price criteria, along with tender prices (undertaken by a tender panel).

Appendix 2: PQC System - consultant service risk assessment

2-1: Consultant PQC Service Risk Assessment Tool

A Key area of risk	B Consequence rating (Refer Table 13)	C Considerations when determining consequence rating	D Likelihood rating (Refer to Table 14)	E Considerations when determining likelihood rating	F Risk rating B x D
Time overrun	☐ 1 insignificant ☐ 2 minor ☐ 3 moderate ☐ 4 major ☐ 5 catastrophic	• Consultancy is on the critical path • Implications if program or project completion is delayed • Time overrun has implications for service delivery • Public statements (e.g. media releases) have been made advising of a particular completion date	☐ 1 rare ☐ 2 unlikely ☐ 3 possible ☐ 4 likely ☐ 5 almost certain	• Consultancy timeframe is compressed • Approvals required and may cause delays • Approvals involve various levels of government (i.e. local, state, federal) • Consultation with stakeholders required and may cause delays • Requirement for coordination of consultants/number of consultants requiring coordination	BOX 1 ☐
Cost overrun	☐ 1 insignificant ☐ 2 minor ☐ 3 moderate ☐ 4 major ☐ 5 catastrophic	• Implications if the project budget is exceeded • Implications if lifecycle cost requirements are not met or recurrent costs exceeded • Availability of additional funds • Capacity to reduce project scope • Capacity to stage project	☐ 1 rare ☐ 2 unlikely ☐ 3 possible ☐ 4 likely ☐ 5 almost certain	• Whether project budget is based on historical data for projects of similar size, scope, location, and currency • Firmness and clarity of Terms of Reference / brief for commission • Anticipated level of innovation required • Degree of rigour required with respect to lifecycle cost performance • Budgeted contingency amounts considered adequate	BOX 2 ☐
Reduced functionality and/or failure to meet commission requirements	☐ 1 insignificant ☐ 2 minor ☐ 3 moderate ☐ 4 major ☐ 5 catastrophic	• Implications if commission requirements are not met or functionality is not fully achieved • Level of public awareness of, and interest in, the project to which the consultancy relates • Effect of functionality on service delivery • Level of quality specified in the Terms of Reference / brief for the commission	☐ 1 rare ☐ 2 unlikely ☐ 3 possible ☐ 4 likely ☐ 5 almost certain	• Firmness and clarity of Terms of Reference / brief for commission • Anticipated level of innovation • Adequacy of project budget to cover brief requirements • Requirement for coordination of consultants / number of consultants requiring coordination	BOX 3 ☐

Instructions

- **Determine consequence rating** – for each key area of risk (column A):
  - rate the consequences should the risk event occur (column B)
  - see Table 13 for descriptions of typical consequences and associated levels
  - considerations (columns C and E) are provided as prompts to assist decision-making, and are not rated.

- **Determine likelihood rating** – for each key area of risk (column A):
  - rate the likelihood of the risk event occurring (column D)
  - see Table 14 for descriptions of the likelihood ratings.
- **Calculate** – when each risk event has been rated:
  - multiply the numerical ratings from columns B and D and insert the total in column F
  - calculate the average of the figures recorded in column F by adding boxes 1, 2 and 3 and dividing this figure by 3
  - record the average at the top of Table 15.
- **Determine PQC Service Risk Rating**
  - locate the average within the ranges given in Table 15
  - record the PQC Service Risk Rating at the bottom of Table 15.

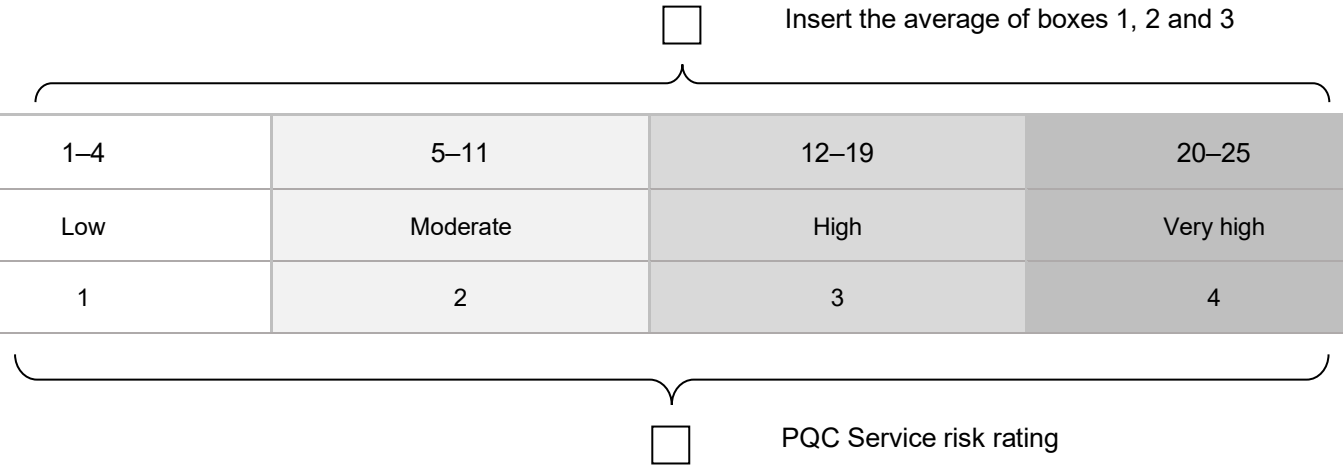
Table 13: Measures of consequence

Level	Descriptor	Example detail description
1	Insignificant	Errors/omissions/defects/design flaws are inconsequential or non-existent; intended functionality delivered; service delivery as planned
2	Minor	Errors/omissions/defects/design flaws requiring limited rework/redesign, slightly reduced functionality; service delivery generally unaffected
3	Moderate	Errors/omissions/defects/design flaws requiring significant rework/redesign; reduced functionality; delayed/reduced/interrupted service delivery
4	Major	Errors/omissions/defects/design flaws making the building unfit for occupancy without extensive rework/redesign, significantly reduced functionality; significantly delayed/reduced/interrupted service delivery
5	Catastrophic	Errors/omissions/defects/design flaws resulting in partial or total building collapse requiring demolition, redesign, and rebuilding, serious injuries, or loss of life; loss of functionality/service delivery

Table 14: Measures of likelihood

Level	Descriptor	Description
1	Rare	May occur only in exceptional circumstances
2	Unlikely	Could occur at some time
3	Possible	Might occur at some time
4	Likely	Will probably occur in most circumstances
5	Almost certain	Is expected to occur in most circumstances

Table 15: PQC Service risk rating ranges



Range	1–4	5–11	12–19	20–25
Level of risk	Low	Moderate	High	Very high
PQC Service risk rating	1	2	3	4

Appendix 3: Consultant invitation and selection process

3-1: Schedule of commission types, service activities and building industry consultants

Commission Type – Survey/Site Investigation

Service Activity	Building Industry Consultant
Geotechnical	☐ Registered civil engineer (BPEQ) ☐ Engineering technologist/ associate (Civil) (NETR-registered) ☐ Site classifier (QBCC)
Surveying	☐ Licensed consulting surveyor (SBQ)

Commission Type – Design and Documentation

Service Activity	Building Industry Consultant
Building Design	☐ Registered architect (BOAQ) ☐ Building designer (QBCC) ☐ Residential designer (QBCC)
Landscape Design	☐ Landscape architect (eligible for corporate membership of AILA)
Environmental	☐ Registered civil engineer (BPEQ) ☐ Environmental scientist practising in environmental engineering ☐ Landscape architect (eligible for corporate membership of AILA) ☐ Certified Environmental Practitioner (CEnvP)
Civil Engineering	☐ Registered civil engineer (BPEQ) ☐ Engineering technologist/associate (Civil) (NETR-registered)
Energy	☐ Registered electrical/mechanical engineer (BPEQ) ☐ Engineering technologist/associate (electrical/ mechanical) (NETR-registered) ☐ Mechanical contractor (QBCC)
Hydraulics/ Plumbing	☐ Registered civil engineer (BPEQ) ☐ Hydraulics services designer (QBCC)

Commission Type – Design and Documentation

Service Activity	Building Industry Consultant
Acoustics	☐ Registered engineer (BPEQ)
Mechanical (HVAC)	☐ Registered mechanical engineer (BPEQ) ☐ Mechanical contractor (QBCC)
Structural	☐ Registered civil engineer (BPEQ) ☐ Engineering technologist/associate (Civil) (NETR registered)
Vertical Transportation	☐ Registered engineer (BPEQ)
Fire	☐ Registered engineer (BPEQ)
Security	☐ Registered electrical/ mechanical engineer (BPEQ)

Commission Type – Building Project Management

Service Activity	Building Industry Consultant
Building Project Management	☐ Builder low rise/medium rise/open (QBCC) ☐ Builder project management services (QBCC) ☐ Registered Architect (BOAQ) ☐ Registered Engineer (BPEQ)

Commission Type – Cost Management

Service activity	Building Industry Consultant
Cost Planning and Management	☐ Quantity surveyor (eligible for AIQS membership)
Bill of Quantities	☐ Quantity surveyor (eligible for AIQS membership)

Commission Type – Compliance

Service Activity	Building Industry Consultant
Building Certification	☐ Building Certifier (QBCC) ☐ Building Certifier assistant (QBCC) ☐ Building Certifier technician (QBCC)

3-2: Assessment of value of consultant opportunities

To achieve a consistent, fair, and transparent consultant selection process, the PQC System (record of each consultant's previous opportunities to submit proposals for government building construction project commissions) is used to determine the initial order of the long list of prequalified consultants when a select list is being prepared.

Consultant opportunities are considered on the basis of:

- total dollar value of commissions for which the consultant has previously been invited to submit a proposal
- the size of the consultant entity, and
- the period of time the consultant has been registered on the PQC System.

A moderated ratio referred to as the Adjusted Value of Opportunities (AVO) ratio is determined for each consultant on the long list.

Determining the AVO ratio includes:

- the period of time the consultant has been registered on the PQC System, and
- if two consultants have had the same total dollar value of opportunities and the entities are the same size, then the entity that was first prequalified and registered should be higher in the initial ordering of the long list.

The size of the consultant entity is used to recognise industry sustainability as a factor in determining the AVO ratio on the basis that a small consultant entity would receive a greater benefit than a large consultant entity from the same commission.

The AVO ratio for each consultant is determined using the formula:

$$AVO = \frac{RVO}{NVO_{av} \times PR} \times 100\%$$

AVO is the Adjusted Value of Opportunities ratio

RVO is the Raw Value of Opportunities in $ for the total period of registration

NVO_{av} is the average annual Net Fee Value of the consultant (excluding fees paid to subconsultants where the consultant is the Principal Consultant) and

PR is the consultant's Period of Registration on the PQC System, in years

3-3: Increasing opportunities for superior consultants

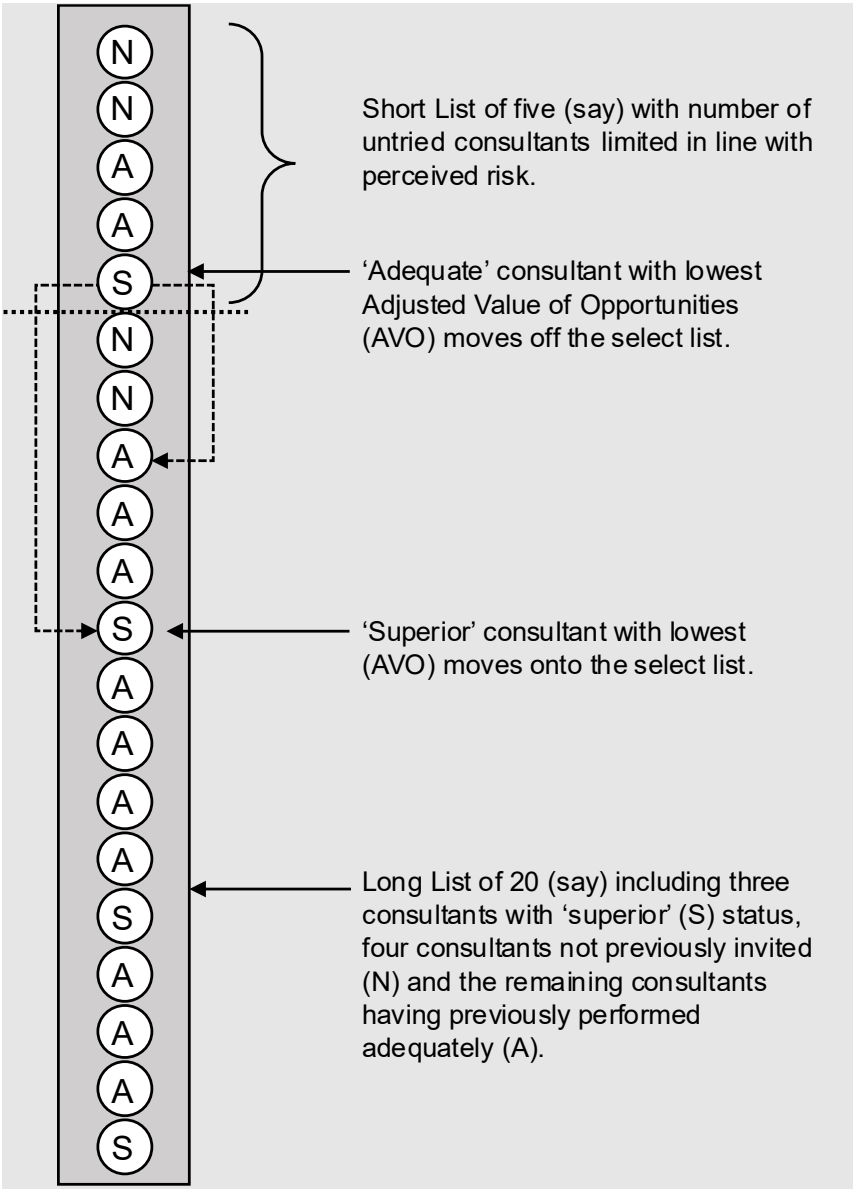
Consultants awarded superior consultant status are identified in the PQC System.

Whenever consultants appear on a long list during the preparation of a select invitation list, at least one should be given priority consideration for inclusion on the select list. This priority should be given to the superior consultant, which is one who has previously had the least opportunity to submit proposals for government building construction project commissions (i.e. the lowest ratio).

There may be scope to include other superior consultants on the same select list; however, consideration also needs to be given to consultants on the PQC System who have previously performed, those who have not had a government building construction project commission, and, within this group, those that have not previously been invited to submit a proposal.

The following diagram illustrates the preferred approach.

Figure 5: Shortlist example for commission with Service Risk Rating of 3



Text description for Figure 5

3-4: Evaluation criteria and sub-criteria for consultancy proposals

The following criteria should be used to evaluate consultant proposals:

- understanding project objectives
- methodology
- resource strategy
- value adding
- support for local industry
- price (fees).

Each of these criteria is addressed in this attachment, together with relevant sub-criteria, which agencies may use at their discretion.

Understanding project objectives

The consultants' understanding of project objectives is important, particularly for design commissions associated with larger projects.

Consultant responses to this criterion should convey their analytical understanding of the objectives and not simply repeat those stated in the Terms of Reference.

The consultants' understanding of project objectives should also be evident in their response to other criteria.

Relevant sub-criteria that consultants could be requested to address in their proposals include:

- scope of work identified in the Terms of Reference
- project objectives and deliverables in terms of time, cost, quality, and function
- design intent
- operational efficiency requirements/intended service delivery from the facility
- flexibility requirements
- built asset whole-of-life factors such as maintenance, operating costs, etc.

Methodology

This criterion covers the consultants' processes for the delivery of the required service.

Consultant responses may include:

- diagrammatic representation of the proposed processes
- reporting relationships
- systems and procedures.

Relevant sub-criteria that consultants could be requested to address in their proposals include:

- process management
- overall design (or trade package) documentation process
- programming issues
- cost planning and cost management
- built asset whole-of-life cost issues
- training, handover, and commissioning processes
- buildability issues
- quality management, safety, and environment policies
- management systems
- key support equipment and systems
- built asset whole-of-life cost issues
- alternative forms of procurement
- strategy for maximising value for money
- community consultation strategy
- environmental management/sustainability.

Resource strategy

The consultants should resource the project in line with the project objectives. The required resources should be identified, including back-up resources and any special expertise considerations.

Relevant sub-criteria that consultants may be requested to address in their proposals include:

- capability of the project team:
  - managerial
  - supervisory personnel
  - key team members
- personnel backup strategies
- referees
- resource management strategies
- management structures and reporting relationships (including identification of key activities and the proportion of time that identified personnel will be allocated to these activities)
- past and current time related performance
- impact on agency resources
- use of special IT packages.

Value adding

This criterion provides consultants with an opportunity to state benefits that they can offer over and above those sought in the Terms of Reference.

The information provided should demonstrate how consultants propose to add value to the delivery process or the project outcome.

Relevant sub-criteria that consultants may be requested to address in their proposals include:

- innovative approaches to design issues described in the Terms of Reference
- incorporation of research and development findings into project deliverables
- prior knowledge of the particular site
- understanding of local issues
- special skills of personnel (may also be reflected in resources section)
- contribution to the built environment.

Support for local industry

This criterion is concerned with local industry participation issues and requires consultants to explain how full, fair, and reasonable access to government building work will be provided. This criterion is particularly relevant to commissions for projects in regional Queensland.

Relevant sub-criteria that consultants may be requested to address in their proposals include:

- strategy for use of local subconsultants and/or service providers and suppliers
- strategy for providing training and/or skills/technology transfer to local consultants and/or local service providers or suppliers, and
- opportunities for local product specification/import replacement.

Price (fees)

This criterion is relevant to both value selection and qualification-based selection as it provides the basis for assessment of value for money of consultant proposals.

Under value selection, price scores are calculated using a price-scoring formula; whereas, for qualification-based selection, price scoring is relevant only to the extent of providing a starting point for negotiations with the preferred consultant after that consultant has been initially identified based on responses to the non-price criteria.

Consultant fees should be stated in accordance with the invitation documents. This will be in the form of a lump sum or percentage of the estimated building cost or based on an hourly rate with an agreed maximum limit.

Appendix 4: PQC System – contractor performance reporting

4-1: Evaluation criteria and performance metrics

The following metrics are to be used by the reporting officer (e.g. SR) when assessing and grading a contractor's performance against the specified evaluation criteria on the performance report template.

An unsatisfactory or superior grading recorded on a performance report should be accompanied by relevant documentation to support such a grading being given by the reporting officer.

Table 16: Performance metrics

Quality – the standard of the contractor's work

	Unsatisfactory	Poor	Satisfactory	Good	Superior
	• Number of defects/non-conformances identified during construction or when the project was offered for practical completion is considered excessive and unsatisfactory for a contract of this value/complexity	• Number of defects/non-conformances identified during construction or when the project was offered for practical completion is considered high for a contract of this value/complexity	• Number of defects/non-conformances identified during construction or when the project was offered for practical completion is considered average for a contract of this value/complexity	• Number of defects/non-conformances identified during construction or when the project was offered for practical completion is considered low for a contract of this value/complexity	• Number of defects/non-conformances identified during construction or when the project was offered for practical completion is considered very low for a contract of this value/complexity

Quality – the standard of the contractor's contract documentation (e.g. submissions and construction program)

	Unsatisfactory	Poor	Satisfactory	Good	Superior
	• Less than 70% of documentation provided is accurate and complete	• 70% or more of documentation provided is accurate and complete	• 80% or more of documentation provided is accurate and complete	• 90% or more of documentation provided is accurate and complete	• 100% of documentation provided is accurate and complete

Time – the extent to which the contractor adhered to contract timeframes

Project duration	Unsatisfactory	Poor	Satisfactory	Good	Superior
Up to 6 months	• More than 10% late	• 4–10% late	• On time or up to 4% late	• Up to 4% early	• More than 4% early
6 months to 18 months	• More than 7% late	• 3–7% late	• On time or up to 3% late	• Up to 3% early	• More than 3% early
More than 18 months	• More than 5% late	• 2–5% late	• On time or up to 2% late	• Up to 2% early	• More than 2% early

Time – the contractor's responsiveness in the rectification of major non-conformances and defects

	Unsatisfactory	Poor	Satisfactory	Good	Superior
	• Less than 75% of defects/non-conformances rectified within the specified number of working days	• 75% or more of defects/non-conformances rectified within the specified number of working days	• 85% or more of defects/non-conformances rectified within the specified number of working days	• 95% or more of defects/non-conformances rectified within the specified number of working days	• 100% of defects/non-conformances rectified within the specified number of working days

Time – the contractor's responsiveness in the rectification of minor non-conformances and defects

	Unsatisfactory	Poor	Satisfactory	Good	Superior
	• Less than 75% of defects/non-conformances rectified within the specified number of working days	• 75% or more of defects/ non-conformances rectified within the specified number of working days	• 85% or more of defects/ non-conformances rectified within the specified number of working days	• 95% or more of defects/ non-conformances rectified within the specified number of working days	• 100% of defects/non-conformances rectified within the specified number of working days

Time – the contractor's timeliness in delivering submissions / other documentation required under the contract

	Unsatisfactory	Poor	Satisfactory	Good	Superior
	• Contractor has been requested five or more times by the (SR) to provide documentation required under the contract	• Contractor has been requested more than twice by the SR to provide documentation required under the contract	• Contractor has been requested twice by the SR to provide documentation required under the contract	• Contractor has been requested once by the SR to provide documentation required under the contract	• Contractor has provided all documentation required under the contract within the timeframe specified without request from the SR

Communication – the contractor's level of communication with the client / project participants

	Unsatisfactory	Poor	Satisfactory	Good	Superior
	• The contractor has failed to effectively communicate during the project e.g. evidenced by the contractor repeatedly: demonstrating an uncooperative approach; not returning phone calls or emails to project team members; missing or arriving late for project meetings without notice; not responding in a timely manner to requests by the SR to provide information	• The contractor has, on a number of occasions, been unwilling to cooperate or communicate openly	• The contractor has, on most occasions, effectively communicated and generally demonstrated a cooperative approach	• The contractor cooperated and communicated well in all matters relating to the contract	• The contractor has excelled in communicating and cooperating with the SR, Project Manager, and the client

Environmental management – the contractor's level of compliance with legislative requirements and management of environmental matters

	Unsatisfactory (any of the below applied)	Poor	Satisfactory (all of the below applied)	Good	Superior
	• Contractor failed to comply with legislative requirements • Minor non-conformances were identified, which were actioned poorly • A notifiable environmental incident occurred, which could have been avoided if the contractor had appropriate environmental controls in place	• N/A	• Contractor complied with legislative requirements • Minor non-conformances were identified, which were always actioned promptly and effectively • No notifiable environmental incidents occurred	• N/A	• N/A

Subcontractor management – the head contractor's management of subcontractors

	Unsatisfactory	Poor	Satisfactory	Good	Superior
	• Head contractor has not met all contractual requirements in relation to engagement of subcontractors	• N/A	• Head contractor has met all contractual requirements in relation to engagement of subcontractors	• N/A	• N/A

Industrial relations management – the contractor's management of industrial relations matters

	Unsatisfactory (any of the below applied)	Poor	Satisfactory (all of the below applied)	Good	Superior
	• Contractor did not maintain a cooperative workplace environment • An IR incident occurred (other than unprotected industrial action), which could have been avoided if the contractor had taken reasonable and timely action	• N/A	• Contractor maintained a cooperative workplace environment • Contractor identified and resolved any IR issues within the contractor's control	• N/A	• N/A

Workplace health and safety management – the contractor's level of compliance with contract / legislative requirements and management of health and safety matters

	Unsatisfactory (Any of the below applied)	Poor (Any of the below applied)	Satisfactory (All of the below applied)	Good (All of the below applied)	Superior (All of the below applied)
	• A major non-conformance (PQC category 1) was identified during a site inspection Contractor failed a site inspection and failed to rectify identified non-conformances in a timely manner	• Contractor failed to comply with contract and legislative requirements • Contractor failed a site inspection (due to accumulation of 25 or more demerit points relating to PQC categories 2 and 3 non-conformances) Non-conformances (PQC categories 2 and 3) were identified during a site inspection, which were not rectified promptly by the contractor	• Contractor complied with all contract and legislative requirements Non-conformances (PQC categories 2 and 3) were identified during a site inspection, which were rectified promptly by the contractor	• Contractor complied with all contract and legislative requirements Only minor non-conformances (PQC category 3) were identified during a site inspection, which were rectified promptly by the contractor	• Contractor complied with all contract and legislative requirements No non-conformances (PQC categories 1–3) were identified

Compliance with Queensland Government Building and Construction Training Policy – the contractor's level of compliance with the policy

	Unsatisfactory	Poor	Satisfactory	Good	Superior
	• Contractor failed to comply with contract or policy requirements	• N/A	• Contractor has met the compliance hours required and submitted the appropriate documentation in the Training Policy Administration System TPAS as per the contract conditions (i.e. compliance plan, a skills development plan, a nominated training coordinator where applicable).	• N/A	• N/A

Compliance with Queensland Charter for Local Content – the contractor's level of compliance with the policy

	Unsatisfactory	Poor	Satisfactory	Good	Superior
	• Contractor failed to comply with contract or policy requirements	• N/A	• Contractor complied with contract and policy requirements	• N/A	• N/A

Compliance with non-price criteria – the contractor's level of compliance with its non-price tender responses

	Unsatisfactory	Poor	Satisfactory	Good (All of the below applied)	Superior (All of the below applied)
	• Contractor failed to comply with its non-price tender responses	• Contractor complied with some of its non-price tender responses	• Contractor complied with all its non-price tender responses	• Contractor complied with all its non-price tender responses • Exceeded expectations	• Contractor complied with all its non-price tender responses • Exceeded expectations • Added unexpected value/improvement/ innovative approach

Note: Evaluation criteria such as Compliance with Queensland Charter for Local Content and Compliance with Non-Price Criteria may not be applicable to all contracts. In such cases, Not Applicable is to be recorded on the performance report template.

Appendix 5: PQC System – consultant performance reporting

5-1: Evaluation criteria

The evaluation criteria used for assessing a consultant is outlined in this appendix.

Compliance

The extent to which the consultant complied with government policy and statutory requirements.

Support for local industry

The extent to which local industry is provided with full, fair and reasonable access to government building work as evidenced in the consultant's activities and deliverables. This criterion is particularly relevant in regional areas.

Resources management

The consultant's capacity to manage human, technical and other resources in accordance with the strategies outlined in the initial proposal.

Function

The consultant's delivery of the commission requirements as reflected in the alignment between the commission's deliverables and the intended operation and requirements of the building project.

Time management

The consultant's performance in managing the commission timeline and adhering to agreed milestones and deliverables.

Cost management

The consultant's performance in managing costs associated with the commission and, where applicable, the overall project cost, including whole-of-life costs.

Quality of documentation

The consultant's performance in producing complete, accurate, appropriate and compliant documentation that uses sound version control, co-ordination and distribution methods.

Value adding

The consultant's performance in understanding and meeting project objectives; handling of unforeseen challenges and/or known complexities; and, where applicable, the effectiveness of research and/or development undertaken by the consultant specifically for the commission. It also recognises value for money considerations as evidenced by the alignment between the Terms of Reference, the consultant's proposal and what was actually delivered.

Communication

The extent and quality of consultation with the client, other consultants, participants in the supply chain and key stakeholders, including, where appropriate, the general community.

Management processes and systems

Where a particular management system and/or a project-specific management plan (i.e. quality, environmental or workplace health and safety management plan) is a specified requirement of the commission, this criterion measures the extent to which the management system resulted in enhanced performance.

Appendix 6: Building asset assessment

6-1: List of other building inspections and audits

Following is a list of building inspections and audits that can be coordinated with the asset assessment process.

Asbestos audits

- Asbestos audits are undertaken to comprehensively identify the actual location, type, quantity, and condition of asbestos containing material. After it has been identified, validate and update existing asbestos containing material records.

Building asset register data collection

- Includes the review, validation and/or collection of building asset data for the purpose of asset registration in asset management systems or computerised maintenance management systems.

Building reviews refers to any of the following:

- **Building code audits** – review of existing building facilities for compliance with the current building code (including the minimum standards under the NCC for the provision of mandatory equitable access to buildings for people with disabilities), identification of areas of non-compliance, and development of strategies and recommendations to either comply with the code or seek exemption.
- **Fire safety audits** – review of existing building facilities for compliance with current legislation pertaining to fire safety, identification of areas of non-compliance, and development of strategies and recommendations to comply.
- **Town planning code audits** – review of existing building facilities for compliance with current legislation pertaining to planning and development, identification of areas of non-compliance, and development of strategies and recommendations to either comply or seek exemption.
- **Health and amenity audits** – review of existing building facilities for compliance with current legislation pertaining to health and amenity, identification of areas of non-compliance and development of strategies and recommendations to either comply or seek exemption.
- **Functionality audits** – review of existing building facilities in terms of their suitability for current or future functions. This includes identification of options for refurbishment, redevelopment, or change in usage. Functionality audits can be done for components as well as whole or parts of buildings, sites, and campuses.
- **Utilisation audits** – review of existing building facilities to assess the current utilisation levels, identification of areas of non-compliance with performance targets, development of strategies/options and recommendations to address over/under utilisation.
- **Post-occupancy evaluations** – a range of post-project reviews for measurement against set performance criteria, from small project reviews to comprehensive POEs. Recommendations resulting from these reviews can inform and influence future projects, future use of current building facilities, and strategic directions in the delivery of building facilities.

Condition assessments (as a type of asset assessment)

- Condition assessments are a technical assessment of the physical and operating condition of the assets to ensure they are maintained to an acceptable standard. Data from these assessments can drive proactive condition-based maintenance programs.

Data collection for lifecycle planning

The collection of data will enable to develop a long-term funding plan for facilities by identifying all costs and other impacts associated with each phase of the asset's lifecycle.

Energy management audit

A review conducted based on current energy usage and operational practices, including the development of options for savings based on improved consumption practices and operational, maintenance and systemic changes.

Engineering investigations

- **Geotechnical investigations** – geotechnical and other survey services to identify potential issues with ongoing management and development of the site.
- **Structural integrity investigations** – a review of assets, including testing of structural members for any sign of deterioration, failure, or corrosion. Service includes preparation of a report identifying any recommendations for rectification, review, or replacement.
- **Electrical/mechanical investigations** – specific investigations of electrical or mechanical service installations in relation to operating performance, failure, upgrading/enhancement, and additions.

Environmental audit

A review of existing building facilities for compliance with current legislation pertaining to environmental protection, identification of areas of non-compliance and development of strategies and recommendations to either comply or seek exemption.

Risk management audit

A review of existing building facilities for identification and prioritisation of risk associated with the use of the facilities as well as the facility itself.

The review can include:

- audit of risks to the health and safety of occupants and visitors
- environment and the surrounding community, and
- recommendations on how to eliminate, mitigate or manage the risks.

Water management audit

A review conducted based on current water usage and operational practices, including the development of options for savings based on improved consumption practices and operational, maintenance and systemic changes.

6-2: Specified Condition standards, index and ranking scale

Agencies are to use this table to determine the appropriate specified condition standard required at facility level or individual building level.

Table 17: Specified condition standard

Functional purpose	Specified standard	Rating
Highly sensitive purpose with critical results (e.g. hospital operating theatre) or high-profile public building (e.g. Parliament House).	Building to be in the best possible condition. Only minimal deterioration will be allowed.	S5
Good public presentation and a high-quality working environment are necessary (e.g. modern multi-storey CBD building).	Building to be in good condition operationally and aesthetically, benchmarked against industry standards for that class of asset.	S4
Functionally focused building (e.g. laboratory).	Building to be in reasonable condition, fully meeting operational requirements.	S3
Ancillary functions only with no critical operational role (e.g. storage) or building has a limited life.	Building to meet minimum operational requirements only.	S2
Building no longer operational, dormant, pending disposal, demolition etc.	Building can be allowed to deteriorate, but should be marginally maintained to meet minimum statutory requirements.	S1

Where standards are specified at overall building level, agencies should give detailed descriptions of what is meant by the S1 to S5 ratings and should be articulated in terms of specified condition standards of key building elements most critical to delivery of services. Complex and critical building elements will have specific performance requirements and these elements may need to be maintained above the standards required of the overall building.

These descriptions are to be used to establish a common understanding and agreement with condition assessors by focusing on building elements most likely to warrant immediate repair or further assessments. These descriptions can also be used to monitor change in the general condition over time.

Table 18 sets out the ratings to be used by the assessor to represent the general condition of building assets.

Table 18: Condition index

Rating	Status	Definition of rating/condition of building asset
5	Excellent	• No defects • As new condition and appearance
4	Good	• Minor defects • Superficial wear and tear • Some deterioration to finished • Major maintenance not required
3	Fair	• Average condition • Significant defects are evident • Worn finishes require maintenance • Services are functional but need attention • Deferred maintenance work exists
2	Poor	• Badly deteriorated • Potential structural problems • Inferior appearance • Major defects • Components fail frequently
1	Very poor	• Building has failed • Not operational • Not viable • Unfit for occupancy or normal use • Environmental/contamination/pollution issues exist

Table 19 sets out the rankings to be used by the assessor undertaking condition assessments to provide an indication of recommended maintenance work. Critical maintenance items that require immediate rectification should not be programmed as these items warrant urgent actioning as reactive maintenance.

Table 19: Condition assessment priority ranking scale

Priority ranking	Definition
1	Works needed to: • meet maintenance-related statutory obligation and due diligence requirements • ensure the health and safety of building occupants and users • prevent serious disruption of building activities and/or may incur higher costs if not addressed within one year.
2	Works that: • affect the operational capacity of the building • are likely to lead to serious deterioration and, therefore, higher future repair costs if not addressed between one to two years.
3	Works that: • have minimal effect on the operational capacity of the building but are desirable to maintain the quality of the workplace. • are likely to require rectification within three years.
4	Works that: • can be safely and economically deferred beyond three years and reassessed at a future date.

6-3: Example schedule of maintenance works in a condition assessment report

1 Building ID	2 Building	3 Specified Cond. Std.	4 Actual. Cond.	5 Building asset/ element	6 Defect description	7 Work to rectify defect	8 Recomm. mth/yr	9 Est cost ($)	10 Comments on estimates	11 Cause code	12 Category	13 Reference code	14 Priority
04	Teaching Block C	S3	2	IFAB	Ceiling near entry is sagging. Students at risk if ceiling falls.	Repair sagged ceiling to entry area.	2023	$4,800	Needs full measure and estimate	C	WH&S	B123456	1

Column legend:

1. **Building ID** – building identification code (e.g. WIC number)
2. **Building** – building description
3. **Specified Condition Standard –** established for the building asset or the key building element
4. **Actual Condition** – assessed using condition index rating
5. **Building asset/element –** building asset or key building element group in which the defect is located (e.g. IFAB = internal fabric, ELEC = electrical, VENT = mechanical ventilation)
6. **Defect description** – description of the defect, associated risk, and any other additional information to assist the owner to develop work programs
7. **Work to rectify defect** – description of the task required to rectify the defect
8. **Recomm mth/yr** – recommended timeframe for rectification
9. **Est. cost ($)** – estimated cost (inclusive of GST) to rectify the defect, including estimated cost escalation for the recommended year of execution
10. **Comments on estimates** – information on the estimated cost, such as the level of confidence, relevant references, date of estimation etc.
11. **Cause code** – code to indicate cause of defect (e.g. A = design fault; B = overload; C = age deterioration; D = hostile environment)
12. **Category** – category of the work (e.g. WH&S = workplace health and Safety; IAPP = image and appearance; BC&S = building codes and standards)
13. **Reference code** – service provider's work reference code (e.g. work order number)
14. **Priority** – priority of work as per condition assessment priority ranking scale (1–4) (Table 19). Do not program critical maintenance items that require immediate rectification. These items warrant urgent action as reactive maintenance.

Note: This schedule is a guide only. Agencies should choose a format that suits their requirements; however, it should, as a minimum, include or map to items 3, 4, 6, 7, 8, 9, 10 and 14. Other items may be considered and adapted to suit the operating methods of agencies.

The full report provided by a service provider would contain other information that complements the schedule above to assist the building owner in using the report for their SMP.

Appendix 7: A best practice for the performance assessment of Queensland Government buildings

7-1: Building asset performance assessment template

Agency

Building asset name

Description

Region/district

Date assessed

Address

Assessor's name

Assessor's telephone number

This template is intended as a guide only. Agencies may customise it to suit their particular requirements and the application of specific measures against performance indicators.

Building asset classification

Table 20: Category of building asset

Category	Description of role	Tick one only	Comments
Operational	Used for delivery of core agency services (e.g. teaching block, police station, health service facility).	☐	
Ancillary	Used for support functions (e.g. storage sheds, administration, training).	☐	
Non-operational	Surplus or de-commissioned (e.g. assets awaiting disposal).	☐	
Administered	Administered on behalf of the government (e.g. heritage and cultural assets).	☐	

Table 21: Building asset criticality

Rating	Criticality (importance to service delivery)	Tick one only	Comments
5	Vital to service delivery operations. High profile and extremely difficult to replace or find short-term service delivery alternative if damaged or otherwise adversely affected.	☐	
4	Important to service delivery operations but can be quickly replaced with alternative.	☐	
3	Service delivery will be affected with no major implications and alternative asset is readily available.	☐	
2	Support function only and has no direct impact on service delivery. Alternative is readily available.	☐	
1	No impact on service delivery. Asset may be surplus or administered only.	☐	

Appropriateness

Table 22: Capacity

Rating	Performance measure	Tick one only	Comments
5	Exceeds service delivery needs/expectations (e.g. there is potential for sharing with other agencies).	☐	
4	Meets all service delivery needs for current and near future (3–5 years).	☐	
3	Meets all current service delivery needs.	☐	
2	Below service delivery requirements. Some impact on service delivery. Action required.	☐	
1	Significantly below service delivery requirements. Significant action required.	☐	

Note: Factors to consider above include nature of services delivered, space or other standard based on service delivery requirements, capacity to accommodate people and equipment, and demand projections for services based on demographics.

Table 23: Functionality

Rating	Performance measure	Tick one only	Comments
5	Exceeds service delivery needs/expectations (e.g. there is potential for sharing with other agencies).	☐	
4	Meets all service delivery needs for current and foreseeable future (3–5 years).	☐	
3	Meets all current service delivery needs.	☐	
2	Below service delivery requirements. Some impact on service delivery. Action required.	☐	
1	Significantly below service delivery requirements. Significant action required.	☐	

Note: Factors to consider above include size, shape, and configuration; services and facilities; suitability of building asset or space for intended purpose; and flexibility to be changed to suit a new purpose.

Table 24: Location

Rating	Performance measure	Tick one only	Comments
5	Suitably located to meet current demand and in the foreseeable future (3–5 years).	☐	
4	Suitable for current demand but site has potential for better use. Demand can be met through an alternative location.	☐	
3	Location is marginally suitable. Demand at this location needs to be monitored.	☐	
2	Demand is changing rapidly, and location needs review.	☐	
1	Location is very unsuitable for meeting demand.	☐	

Note: Factors to consider above include location relative to current and future demand for services, dynamic population demographics, and accessibility of location for occupants and clients/visitors.

Table 25: Condition

Rating	Performance measure	Tick one only	Comments
5	No defects; as new condition and appearance.	☐	
4	Minor defects; superficial wear and tear; some deterioration to finishes; major maintenance not required.	☐	
3	Average condition; significant defects are evident; worn finishes require maintenance; services are functional but need attention; deferred maintenance work exists.	☐	
2	Badly deteriorated; potential structural problems; inferior appearance; major defects; components fail frequently.	☐	
1	Building has failed; not operational; not viable; unfit for occupancy or normal use; environmental/contamination/pollution issues exist.	☐	

Table 26: Remaining life

Indicator	Performance measure	Result	Comments
Remaining life	Estimated years to end of useful or economical life		

Note: Factors to consider above include overall age and condition compared with design life projections; impact of technological changes on future usefulness; need for upgrades to meet future requirements; type of construction; and operating and maintenance costs.

Financial

Table 27: Financial

Indicator	Performance measure	Result	Comments
Operating cost	$ per square metre		
Maintenance cost	$ per square metre		
Deferred maintenance cost	Estimated cost of deferred maintenance as a % of gross book value of asset		
Net return on asset value (this is an optional indicator for agencies with revenue-generating assets)	Net revenue as a % of gross book value of asset		

Statutory compliance risk

Table 28: Statutory compliance risk

Indicator	Performance measure	Tick one or more	Comments
Extent of non-compliance (identify the area of non-compliance that exists)	Workplace health and safety	☐	
Extent of non-compliance (identify the area of non-compliance that exists)	Fire protection	☐	
Extent of non-compliance (identify the area of non-compliance that exists)	Environmental	☐	
Extent of non-compliance (identify the area of non-compliance that exists)	Building Act	☐	
Extent of non-compliance (identify the area of non-compliance that exists)	Electrical	☐	
Extent of non-compliance (identify the area of non-compliance that exists)	Other (provide details)	☐	
Estimated cost to remedy non-compliance		**$**	

Effective use

Table 29: Utilisation rate

Indicator	Performance measure	Result	Comments
Utilisation rate	Level of utilisation as a percentage of available capacity based on agency-specific measure		

Table 30: Compatibility of use (compared with the design purpose of the asset)

Rating	Performance measure	Tick one only	Comments
5	Compatible with design purpose in all aspects of use.	☐	
4	Mainly compatible with design purpose but used for other purposes as well.	☐	
3	Multi-use including design purpose (e.g. residence used as office, used as a residence and other purposes also).	☐	
2	Not compatible – higher level use (e.g. storage shed used as workshop).	☐	
1	Not compatible – lower-level use (e.g. teaching block used as a store or vacant space).	☐	

Note: This is an optional indicator which may be used by agencies if it is considered relevant to the performance assessment being undertaken.

Environmental impact

Table 31: Impact on environment (hazardous materials/contamination issues)

Indicator	Performance measure	Tick one or more	Comments
Impact of building asset on environment (identify the type of hazardous material/contamination issue present)	Asbestos	☐	
Impact of building asset on environment (identify the type of hazardous material/contamination issue present)	Sewage and contaminated water	☐	
Impact of building asset on environment (identify the type of hazardous material/contamination issue present)	Hazardous chemicals	☐	
Impact of building asset on environment (identify the type of hazardous material/contamination issue present)	Odours and fumes	☐	
Impact of building asset on environment (identify the type of hazardous	Land contamination	☐	

Indicator	Performance measure	Tick one or more	Comments
material/contamination issue present)			
Impact of building asset on environment (identify the type of hazardous material/contamination issue present)	Other (provide details)	☐	

Table 32: Impact on environment (consumption)

Indicator	Performance measure	Result	Comments
Impact of building asset on environment	Water consumption ($ per square metre)		
Impact of building asset on environment	Energy consumption ($ per square metre)		

Environmental rating system assessment (optional indicator): reflecting achievement in meeting the objectives and specific criteria of a particular environmental rating system suitable to the type of building asset and agency and government priorities.

Social significance

Two methods can be applied to assessing the significance of a building asset.

Method B is an alternative approach that examines whether the building asset:

- still supports, and will continue to support, the whole-of-government outcome and government priority to be delivered by the agency
- continues to deliver the outputs it was intended to deliver, in line with the whole-of-government outcome and government priority
- still meets, and will continue to meet, the goals established
- meets targets in terms of specific service-related performance indicators (e.g. number of escapes from a custodial facility; patients processed by an outpatient's agency).

Table 33: Significance of building asset – Method A

Indicator	Performance measure	Tick one or more	Comments
Significance in meeting government priorities or community obligations	Cultural heritage significance	☐	
Significance in meeting government priorities or community obligations	Heritage-listed (Queensland Heritage Register and Local Heritage Register)	☐	
Significance in meeting government priorities or community obligations	Community attachment	☐	
Significance in meeting government priorities or community obligations	Iconic (community pride)	☐	
Significance in meeting government priorities or community obligations	Government commitment	☐	
Significance in meeting government priorities or community obligations	Other (provide details)	☐	

Table 34: Significance of building asset – Method B

Indicator	Performance measure	Achievement or future potential to achieve (yes/no)	Comments
Significance in meeting government priorities or community obligations	Whole-of-government outcome (agency-specific)		
Significance in meeting government priorities or community obligations	Government priority (agency-specific)		
Significance in meeting government priorities or community obligations	Outputs being delivered (agency-specific)		
Significance in meeting government priorities or community obligations	Goals being met (agency-specific)		
Significance in meeting government priorities or community obligations	Service-related performance indicator applicable to the building/facility (agency-specific)		

Assessor's comments

Assessor's signature _____ **Date:** _____

Appendix 8: Alternate text descriptions

8-1: Figure 1: Queensland Government approach to plan, build and maintain buildings

Graph is made up of three main circles, each showing a key level of information.

The outside circle lists out:

1. Needs assessment
2. Planning
3. Acquisition
4. Commission
5. Operate, maintain and monitor performance
6. Asset evaluation and future need

The second circle lists out:

- Planning
- Growth
- Renewal & evaluation

The inner circle states:

Benefits

- Provides a consistent, coordinated and transparent Queensland Government approach to plan, build and maintain buildings
- Manage risks through good governance and due diligence including prequalification, procurement strategies, contracts and contract management.

Return to Figure 1

8-2: Figure 2: Overview of the Queensland Government Building Policy Framework

Complex flowchart outlining three major elements and six stages with a number of key elements in each.

Planning: Strategic Building Asset Management Policy

Stage 1: Needs assessment

- Government objectives / needs assessment
- Agency objectives / needs assessment
- Community requirements / expectations assessment
- Strategic Building Asset Management Plan review
- Project feasibility

Growth: Building Asset Capital Delivery Policy

Stage 2: Planning

- Preliminary business case development and capital investment planning - Policy requirement 1
- Detailed business case development and funding approval - Policy requirement 1
- Acquisition strategy (e.g. procurement or grant commissioning) - Policy requirement 3
- Forward procurement pipeline / Forward procurement schedule - Policy requirement 1
- Statewide pre-delivery committee / regional pre-delivery committee - Policy requirement 1
- Market scan (PQC or other contractor /consultant identification) - Policy requirement 2
- Contract identification and Contracts committee - Policy requirement 3
- Industry consultation (if applicable)

Stage 3: Acquisition

- Contractor / consultant selection (PQC or other) - Policy requirement 4
- Market engagement (e.g. QTender or grant management)
- Tender / grant commissioning evaluation and award - Policy requirement 5 and 6
- Publish award information (e.g. Queensland Contracts Directory / open data portal)
- Management of contractual claims, disputes, defaults and insolvency - Policy requirement 7
- Acquisition risk management
- Supplier performance reporting - Policy requirement 8 and 9

Stage 4: Commission

- Project management (construction or commissioning)
- Risk management (regulatory, legislative, site specific)
- Construction / delivery of asset
- Project documentation complete (certificates, warranties, design documents)
- Capital and maintenance team handover

Renewal and Evaluation: Building Asset Maintenance Policy

Stage 5: Operate, maintain and monitor performance

- Develop and maintain a Strategic Maintenance Plan - Policy requirement 10
- Regular / preventative maintenance planning
- Regular ongoing management of asset records - Policy requirement 11
- Asset assessment, performance and reporting - Policy Requirement 12
- Asset maintenance provider forward planning and acquisition - Policy requirement 13
- Maintenance / facilities management delivery
- Asset optimisation reporting - Policy Requirement 14
- Benchmarking asset performance against peers

Stage 6: Asset evaluation and future need

- Review asset performance
- Identify current and future needs (maintenance and capital team collaboration)
- Feasibility of modification or upgrades (maintenance and capital team collaboration)
- Assessment on whether to replace or dispose

Return to Figure 2

8-3: Figure 4: Asset assessment process

Complex flowchart with multiple path options in places as described below:

Asset assessment process

Scoping of services leads to:

- Procurement of services

Procurement of services leads to:

- Planning the implementation

Planning the implementation leads to:

- Implementation, data review, condition assessment, data recording

Implementation, data review, condition assessment, data recording leads to:

- Reporting
- Condition assessment data

Reporting leads to:

- Proactive condition-based works program

Proactive condition-based works program leads to:

- Annual maintenance works

Annual maintenance works leads to:

- Strategic maintenance plan
- Performance and service delivery performance review

Performance and service delivery performance review leads to:

- Scoping of services

Annual maintenance works has two inputs of:

- Other maintenance works (preventative, statutory and reactive)
- Condition assessment data

Condition assessment data is an input and output of:

- Implementation, data review, condition assessment, data recording

Return to Figure 4

8-4: Figure 5: Shortlist example for commission with Service Risk Rating of 3

Examples shortlist showing a number of ‘N’ ‘A’ and ‘S’ results in a line with the following explanations:

- Short list of five (say) with number of untried consultants limited in line with perceived risk.
- ‘Adequate’ consultant with lowest Adjusted Value of Opportunities (AVO) moves off the select list
- ‘Superior’ consultant with lowest (AVO) moves onto select list.
- Long List of 20 (say) including three consultants with ‘superior’ (S) status, four consultants not previously invited (N) and the remaining consultants having previously performed adequately (A).

Return to Figure 5

Abbreviations

Abbreviations

ABS	Australian Bureau of Statistics
ACCC	Australian Competition and Consumer Commission
ADA	*Anti-Discrimination Act 1991* (Qld)
AHRC	Australian Human Rights Commission
ARV	Asset Replacement Value
AS	Australian Standard
AS/NZS	Australian Standard/New Zealand Standard
AVO	Adjusted Value of Opportunities
BCDF	Business Case Development Framework
BIF Act	*Building Industry Fairness (Security of Payment) Act 2017* (Qld)
BIM	Building Information Modelling
BOO	Build Own Operate
BOOT	Build Own Operate Transfer
BPF	Building Policy Framework
BPP	Best Practice Principles
CBD	Central Business District
CPI	Consumer Price Index
DDA	*Disability Discrimination Act 1992* (Cth)
DES	Department of Environment and Science
DPC	Department of the Premier and Cabinet
DRFA	Disaster Recovery Funding Arrangements
DSDILGP	Department of State Development, Infrastructure, Local Government and Planning
EOI	Expression of Interest
EPW	Department of Energy and Public Works
FCA	Financial Capacity Assessment
FIA	Formal Instrument of Agreement
GACC	Government Advertising and Communication Committee
GCS	Guaranteed Construction Sum
GFA	Gross Floor Area
GLR	Government Land Register
GST	Goods and Services Tax
HRS	High Risk/Significant
HVAC	Heating, Ventilation and Air-Conditioning
IT	Information Technology

MMC	Modern Methods of Construction
MP	Mandatory Part
NABERS	National Australian Built Environment Rating System
NCAP	Non-Current Asset Policies
NCC	National Construction Code
OT	Operational Technology
PAF	Project Assessment Framework
PMCoE	Project Management Centre of Excellence
POE	Post-Occupancy Evaluation
PPP	Public Private Partnership
PQC	Prequalification
PTA	Project Trust Account
QBCC	Queensland Building and Construction Commission
QBCC Act	*Queensland Building and Construction Commission Act 1991*
QCAT	Queensland Civil and Administrative Tribunal
QDC	Queensland Development Code
QGLTP	Queensland Government Land Transaction Policy
QHRC	Queensland Human Rights Commission
QPP	Queensland Procurement Policy 2023
QPS	*Queensland Procurement Strategy 2023 – Jobs, Economy, Legacy, Confidence*
QRA	Queensland Reconstruction Authority
RTA	Retention Trust Account
SAMP	Strategic Asset Management Plan
SBAMP	Strategic Building Asset Management Plan
SDRR	State Disaster Risk Report
SLA	Service Level Agreement
SMP	Strategic Maintenance Plan
SOA	Standing Offer Arrangement
SR	Superintendent’s Representative

Glossary

Glossary

Accredited auditor for construction means a person accredited by Workplace Health and Safety Queensland, under contract to assess the level to which construction contractors comply with the requirements of the *Work Health and Safety Act 2011*, the Work Health and Safety Regulation 2011 and any relevant codes of practice on government building construction projects.

Agency means a department as defined in the *Financial Accountability Act 2009 (Qld).*

Annualised Contract Value for a project means where the contract duration (excluding any design, documentation, or defects liability period) is greater than 52 weeks, is the Contract Value translated into an annual rate for comparative purposes.

Applicable code means any codes including a concurrence department code, that can be identified as applying to the development in question e.g. for building work, the principal applicable codes are:

- *Building Act 1975*
- Building Regulation 2021
- NCC
- Queensland Development Code
- Australian Standards referenced in any of the above.

Assessment for compliance with applicable codes means the assessment of building work, including inspections during construction, to ascertain compliance status with applicable codes. Also referred to as the assessment process and compliance assessment.

Asset assessment means a technical inspection by a competent assessor to evaluate the physical state of building elements and services and to assess the maintenance needs of the facility.

Asset assessment cost means the cost undertaking the asset assessment.

Asset Replacement Value (ARV) means the best estimate of the current cost of constructing (for its original use) a new facility providing equivalent service potential as the original asset. It does not include the value of the furnishings or other items not permanently part of the facility, nor does it include design and project management costs.

Building means a fixed structure that is wholly or partly enclosed by walls or is roofed. The term includes a floating building and any part of a building.

Refers to all government buildings, including residence and includes:

- building structures, exterior and foundations
- building interiors and finishes
- site improvements around a building (e.g. sculptures, driveways, footpaths, retaining walls, car parks, recreational facilities, fences)
- fire detection and other safety systems
- HVAC systems
- electrical power systems, including emergency power generation facilities
- building data and communication facilities
- plumbing and sewerage (above ground and below ground)
- elevators, escalators, and people movers
- enclosed/unenclosed walkways and corridors
- building management and control systems
- access control and surveillance systems
- stage and performance-related facilities
- built-in artworks and sculptures.

Building Certifier refer to *Building Act 1975*, section 8.

Building contract means the written agreement between the Principal and the contractor for the construction of the project. The terms of the agreement may provide for the design and documentation of the project by the contractor and may also include ongoing maintenance obligations.

Building industry consultant means an organisation or individual contracted directly to the Principal to provide particular services in relation to a government building construction project. The terms Building industry consultant and consultant are used interchangeably in this guideline.

Building industry contractor (or contractor) means an organisation or individual contracted directly to the Queensland Government to provide services in relation to government building construction projects.

Building owner/user means the agency that own/manage/use the building. The building owner may also be the project sponsor under the contract.

Building regulatory framework means a collective term encompassing all legislation, codes and Australian Standards that apply to/govern building work in Queensland.

Building regulatory requirements means a collective term referring to building owners' obligations as set out in the various acts, codes and standards that comprise the building regulatory framework. The building regulatory requirements applicable to the planning and delivery of government building construction projects can be separated into two main categories/groups: the requirements of state and local government planning instruments and the requirements of applicable codes.

Building work refer to *Building Act 1975*, section 5.

Bundling means a process by which a single contract award is used to contract multiple projects. Such a contract can require a number of contract elements, stages, or separable portions to be constructed concurrently or sequentially. Alternatively, the contract may involve a staged process whereby, on satisfactory completion or satisfactory partial completion of the first element or separable portion, the contractor could be permitted to move onto the next phase of the contract.

Bushfire means an uncontrolled fire burning in forest, scrub, or grassland vegetation. Bushfires are unplanned, but they are a natural feature of the Australian landscape. A bushfire may occur on most vegetation and topography types in Queensland where there is a fuel path of sufficient dryness to be flammable.

Business case means a documented value proposal proposition providing justification for undertaking a project. It aligns with key government strategic objectives and is considered the core management and assurance tool to inform investment decisions that maximise value for taxpayer dollars and benefit for Queenslanders.

Certificate of occupancy means a certificate of occupancy that complies with the requirements under the *Building Act 1975* (Qld). It is issued by a Building Certifier, in accordance with the *Building Act 1975*. A certificate of occupancy states the classification, under the NCC, of a building or structure and is evidence that the building to which it pertains complies with applicable codes. Certificates of occupancy can only be issued with respect to assessable building work (i.e. generally they cannot be issued with respect to work conducted by, or on behalf of, the state).

Civil work means earthmoving and excavating work conducted on a site; however, it does not involve building work under the contract. If the early works only consists of civil work, then a QBCC licensed contractor is not required.

Commission means the contractual relationship between the consultant and Principal.

Competent assessor means a person that has the relevant training, qualifications, ability, aptitude, experience and where required by law, and the appropriate licence or registration to undertake a building condition assessment. These attributes should be relevant to the specific building elements being assessed (e.g. electrical and mechanical systems, lifts, hydraulics, building structural elements) or to particular aspects of interest such as asbestos, environmental pollution and workplace health and safety.

Compliance assessment refer to assessment for compliance with applicable codes.

Conservation means the processes of looking after a place so as to retain its cultural significance. It includes maintenance and may according to circumstances include preservation, restoration, reconstruction, and adaptation and will be commonly a combination of more than one of these.

Conservation management plan means a plan that investigates and establishes the cultural heritage significance of a place. It makes recommendations about appropriate ways of conserving this significance by setting out a conservation policy that:

- identifies the physical condition of the place, along with its history of development
- acts as a record of the decision-making process
- allows for appropriate community consultation
- is adopted by the agency that manages the place
- is reviewed regularly (each five years) or whenever the place is subject to major change.

Consultancy contract means the written agreement between either the Principal and a consultant or the building contractor and a consultant, for the delivery of consultancy services (such as design, documentation, cost planning and project scheduling related to a building project).

Consultant means an organisation or individual contracted directly to the Principal to provide particular services in relation to a government building construction project. The terms building industry consultant and consultant are used interchangeably in this guideline.

Contract value (for government building construction projects) means the sum accepted or the sum calculated in accordance with the prices accepted in bid and/or the contract rates as payable to the contractor for the entire execution and full completion of the work.

Contractor means any individual, company or other person (including partnerships, joint ventures, and groups of related companies) that tenders or contracts directly with a government agency on a government building construction project, irrespective of whether or not the nature of the work requires the person/entity to be licensed under the QBCC Act.

Cultural heritage significance of a place or feature of a place means its aesthetic, architectural, historical, scientific, social, or other significance, to the present generation or past or future generations.

Defect means an issue resulting from defective design, defective or faulty workmanship, defective materials, or a failure to comply with the structural performance requirements of the NCC.

Deferred/backlog maintenance (means all maintenance work that has not been conducted within a financial year and is deemed necessary to bring the condition of the building asset to a required standard or acceptable level of risk. Deferred maintenance is the maintenance work that is postponed to a future budget cycle, or until funds become available. It excludes work earmarked in anticipation of a level of deterioration that did not occur (e.g. forecast repainting).

Department refer to *Financial Accountability Act 2009*, section 8.

Department maintenance management cost means cost incurred by departments in managing maintenance and includes the costs of management personnel, maintenance management systems, financial administration, and other overhead costs. Activities to be costed include:

- general management
- administration
- maintenance (e.g. proactive and reactive)
- program formulations
- program management
- contract management (if maintenance is outsourced).

Earthquake means the sudden release of energy in the earth's crust or upper mantle, usually caused by movement along a fault plane or by volcanic activity and resulting in the generation of seismic waves that can be destructive.

Evidence of suitability means a range of documents/certificates, used to confirm that a material, form of construction or design (i.e. product) will achieve the required or expected performance criteria.

Ex-ante means based on forecast rather than actual results.

Fabric means all the physical material of a place, including components, fixtures, contents, and objects.

Flood means as the inundation of normally dry land by water overflowing from the normal confines of any natural watercourse or lake (whether or not altered or modified), reservoir, canal, or dam.

Flood hazard area means an area subject to flooding as determined by the authority having jurisdiction, or where this information is not available, by the proponent in accordance with standards set, or referred to, by the authority having jurisdiction (i.e. local government). A local government may designate part of its area as a natural hazard management area (flood) and declare, for this area, the defined flood level, the floor level of habitable rooms, maximum flow velocity, and the finished floor level required for class 1 buildings (houses). It may also declare a freeboard for building work conducted on an allotment located in a flood hazard area of a height of more than 300 mm.

Government building asset means a structure that:

- is or will be owned by an agency on completion
- is wholly or partly enclosed by walls or is roofed
- is fixed, including temporarily.

Government building construction project means construction of new buildings and upgrades/improvements to existing buildings to increase the useful life.

This includes:

- the erection, establishment or construction of a government building asset
- any maintenance of a government building asset assessed as a HRS government building construction project
- the renovation, alteration, extension, improvement, repair, refurbishment or restoration of a government building asset
- maintenance of a government building asset combined with any work of a kind mentioned above
- the dismantling, demolition or removal of a government building asset
- any site work (including any site work defined as building work under the QBCC Act) related to work of any kind associated with the points above as a separate contract in itself
- installation or supply and installation of travelators, escalators, water supply, sewerage or drainage related to work of any kind associated with the first five points above as a separate contract in itself, and
- the provision, including installation or supply and installation, of services for a government building asset (including but not limited to power supply, lighting, heating, ventilation, air conditioning, communication systems, security systems, fire protection, lifts).

This does not include:

- service maintenance contracts associated with a government building asset
- the construction, maintenance or repair of a road under the *Land Act 1994*
- the construction, maintenance or repair of a bridge
- the construction, maintenance or repair of railway tracks, signals, or associated structures
- the construction, maintenance or repair of harbours, wharfs and other marine structures not related to land-based building work or
- the construction, maintenance, or repair of a dam.

Government building maintenance program means work on existing buildings to reinstate physical condition and prevent deterioration or failure.

This includes:

- testing
- taking samples and restoring the sample site
- work required on an ongoing basis to:
  - prevent deterioration or failure of a component
  - restore a component to its correct operating specifications or standard or
  - replace a component at the end of its working life
  - making temporary repairs for immediate health, safety and security reasons
  - mitigation of the consequences of a natural disaster
- assess the condition of a government building asset.

This does not include:
- improving a government building asset to increase its capabilities or functions
- improving a government building asset to meet new statutory requirements applying to the building or
- a refurbishment or replacement of a government building asset that extends the life of the building.

Hazard means elements posing the most risk to public servants and Queenslanders as occupiers and users of state government facilities, these could include asbestos, biohazards, chemicals, lead, mould, respirable crystalline silica (RCS), or electric shock.

High risk / significant (HRS) government building construction project means a government building construction project or government building maintenance program where either:

- the failure to meet project objectives of time, cost and quality would critically affect the delivery of services to the community
- the lack of clear and transparent processes in the procurement of high value projects could impact the Government as a whole in terms of industry development and consistency of approach.

It also has any one or more of the following elements:

- is expected to exceed $25 million in value delivered using a Fully Documented contract procurement strategy
- is expected to exceed $15 million in value delivered using a Design and Construct contract procurement strategy
- will be delivered using a combination of standard contracts and where the separate components are expected to exceed $10 million in value (e.g. building structure delivered using a Fully Documented contract and building fit out delivered using a separate Design and Construct contract)
- will involve the tendering, under one contract of a bundle of smaller government building construction projects across several different sites, where the total value of the government building construction projects exceeds $10 million
- is assessed as a PQC service risk rating of 3 or 4
- is a BPP project
- has another potential risk element not defined above.

Landslide means a movement of material downslope in a mass as a result of shear failure at the boundaries of the mass. There are several causes, including geological, morphological, physical, and human. Geological causes include weak materials, weathered materials, jointed materials, adversely oriented structures, and contrasts in permeability. Morphological causes include a steep slope, wave erosion or fluvial erosion. Physical causes are rainfall, rapid snowmelt, and thawing.

Legislative compliance strategy means a documented strategy that identifies all building regulatory requirements that apply to a particular government building construction project and outlines a process to ensure compliance with these requirements. The strategy should be prepared during the project evaluation phase.

Letter of Acceptance means a written communication to the successful tenderer that its offer has been accepted in accordance with the provisions contained in that letter.

Lifecycle costing for construction means a method of economic analysis directed at all costs related to constructing, operating, and maintaining a construction project over a defined period of time. It considers the whole-of-life implications of acquiring, operating, maintaining, and disposing of a building asset. It is used when making decisions at both strategic and operational levels of capital delivery investment and building management. The costs incurred should include the capital investment cost and the building's estimated operating, maintenance, and disposal costs.

Maintenance means work undertaken on existing buildings with the intention of:

- re-instating physical condition to a specified standard
- preventing further deterioration or failure
- restoring correct operation within specified parameters
- replacing components at the end of their useful/economic life with modern engineering equivalents

- making temporary repairs for immediate health, safety, and security reasons (e.g. after a major building failure)
- mitigation of the consequences of a natural disaster
- assessing buildings for maintenance requirements (e.g. to obtain accurate and objective knowledge of physical and operating condition, including risk and financial impact for the purpose of maintenance).

Maintenance service providers means individuals or organisations that undertake ongoing building maintenance works and that may also have a participatory responsibility at the handover stage of a project, for example QBuild.

Mitigation means measures taken to reduce the severity of or eliminate the risk from disasters.

Mothballing means the deactivation and preservation of a building for possible future use or sale and controlling the long-term deterioration of the building while it is unoccupied as well protecting it from sudden loss by fire or vandalism.

Natural disaster means a natural hazard event that severely disrupts the fabric of a community and requires the intervention of the various levels of government to return the community to normality.

Non-conformance means a judgement made by an accredited auditor that the audit evidence does not fulfil the specified requirements of the audit criterion.

Payment claim refer to BIF Act, section 68(1).

Payment schedule refer to BIF Act, section 69.

Planned maintenance refer to proactive maintenance.

Post-occupancy evaluation (POE) means a process of analysing how functional and comfortable a building is after users have been occupying it for some time. It focuses on the users' interaction with the building after sufficient time has elapsed for them to experience and adjust planned to the building and helps assess the degree to which the building supports service delivery objectives. It informs the preparation of defect action plans, at an operational level. This entails the correction of deficiencies by improving maintenance, minor works, and management decisions.

PQC Registrar means the officer responsible for the maintenance and integrity of the PQC System and associated register.

PQC System refers to the Queensland Government Prequalification (PQC) System, a whole-of-government system for prequalification of suppliers for major government building construction projects.

Preventative maintenance cost means the cost associated with the periodic servicing of plant and equipment and preventative repairs to other building components to ensure reliable operations, comply with duty of care responsibilities and general good maintenance practice to preserve assets in a condition appropriate for service delivery.

Principal means the party under a contract for whom work is being undertaken. For government building construction projects, the role of Principal is often undertaken by EPW.

Principal's Representative means the person or party appointed by the Principal to function as the Principal's Representative for the purposes of the contract (under a Managing Contractor Design and Construction Management contract).

Proactive condition-based maintenance cost means maintenance undertaken as a result of the deteriorated condition identified through condition assessments. Funding of this component is variable and less predictable.

Proactive maintenance means "planned maintenance" being an asset management approach that includes preventative (statutory and recommended) and condition-based programs to ensure buildings and their components function adequately, preserve the value of the building, satisfy legal

obligations, inform annual cost planning requirements and procurement planning, and achieve best value in terms of built assets during the occupancy phase of the building.

Procurement strategy means the process used to approach the market and ultimately tender the works under the selected form of contract.

Project review means a strategic phase in the process for initiation, development, and implementation of capital building projects and for management of performance and are undertaken at an early stage in the lifecycle of buildings.

Project sponsor means the government agency funding the project and includes their nominated representatives, such as the Principal's Representatives, Superintendents, client representatives, or project managers, depending on their roles and the specific form of contract. These nominated representatives are responsible for managing and coordinating the government building construction project on behalf of the government agency.

QBuild is a commercialised business unit of EPW that delivers procurement and contract management services for the construction, maintenance and operation of government building assets, including schools, health service facilities, housing, police stations, correctional facilities and ambulance stations.

Queensland Building and Construction Commission (QBCC) is a statutory authority established under the QBCC Act to regulate the building industry.

Reactive maintenance means "unplanned maintenance" being corrective and breakdown maintenance that restores an asset to operational condition following unforeseen failure. Also includes incident maintenance to bring an asset back to an operational or safe condition following damage caused by natural disasters, storms, fire, forced entry or vandalism.

Reactive maintenance cost means reactive work undertaken because of breakdowns and routine failure of building components and services or incidents such as natural disasters / vandalism. Funding of this component of maintenance would fluctuate in varying degrees between agencies. However, historical data should provide guidance in terms of annual estimates of funding required.

Recommended servicing maintenance cost means the cost associated with undertaking maintenance to meet manufacturer recommended requirements, e.g. servicing of solar power systems.

Scheduling means the determination of the timing and/or sequence for the delivery of two or more separate contracts for government building construction projects.

Service means the scope of work contained in the contractor's contract.

Service provider means an in-house maintenance unit or a commercial business unit of EPW, QBuild or a private sector organisation capable of providing building condition assessments.

Site Representative means the person appointed under the contract by the Principal's Representative.

Storm means a violent weather condition that may include strong winds, rain, hail, thunder, and lightning.

Superintendent means a person who undertakes the contract management functions for all forms of contract other than the Managing Contractor's Design and Construction Management Contract.

Superintendent's Representative (SR) means the Superintendent's nominated representative. For non-traditional projects, an equivalent role is the Site Representative.

Supplier means a building industry contractor and/or consultant relevantly qualified and capable of supplying the required goods, services, and/or works.

Terms of Reference means the document issued by the Principal to the consultant for the purpose of describing the scope of the project and the scope of the services to be provided by the consultant.

Tropical cyclones mean a powerful weather system that can cause significant damage to the built and natural environments. They generate severe winds, heavy rain, riverine and flash flooding, as well as storm tides.

Unplanned maintenance refer to reactive maintenance.

Value management means a structured and analytical process that follows a prescribed work plan to achieve best value or, where appropriate, best value for money by comparing alternatives based on the relationship between value and total cost.

Ventilation means a system to circulate air within buildings by means of supply and/or exhaust systems.

(DOCUMENT ENDS)