4.2 Project Procurement and Design

4.2.1 Standards and Guidelines

The Standards and Guidelines sub-committee of the Joint Operations Committee has been established to:

- review current standards and guidelines that relate to health facility design; and
- provide advice and recommendations to the Joint Operations Committee concerning their implementation or amendment.

Since standards and guidelines relating to health facility design and construction are directly applicable to service delivery and capital costs, all three parties will be members of the sub-committee. Key responsibilities of the sub-committee include the following:

- develop a common understanding on the use of standards and guidelines that would promote safe, high-performing and sustainable buildings;
- develop a prioritized work plan for the purpose of formulating recommendations concerning the relevance and impacts or consequences of approval, including (as a minimum) the following documents:
  - Infection Prevention and Control, including the Canadian Standards Association (CSA) documents including the Z317 and Z8000 (see section 4.3.4 – IPC);
  - Grossing Factors and Net Areas;
  - Building Performance Evaluation methodology and implementation; and
  - Continuing Care Design Guidelines.
- identify impacts, opportunities and obstacles concerning the implementation of standards and guidelines.

4.2.2 Procurement Planning

Procurement involves the selection of qualified consultants and contractors (proponents) for the various phases of major capital projects. The four main contractor/consultant types are:

- Programming Consultant (for Functional Program development);
- Prime Consultant (for design services and contract administration);
- Contractors or Construction Managers; and
- Commissioning Agents.

Additionally, other technical consultants or contractors, including Value Management, Cost Management, Scheduling, and Risk Management consultants, may be engaged by INFRA based on the requirements of an individual project.

Project Managers administer the procurement process in consultation with INFRA technical, procurement and Cost Management staff to ensure best practices. The procurement process is conducted in accordance with GoA legislation, trade agreements and departmental policies, processes and guidelines. While the procurement process typically includes the following steps, some steps may be omitted for less complex projects:

- development of a project delivery model and procurement plan;
- determination of potential proponents (e.g., consultants or contractors);
- solicitation of interest from potential proponents (through a Request for Information process);
- development of RFQ from interested proponents;
- development of RFP and tenders;
- evaluation of proponent submissions;
- contract approvals and awards; and
- communication of the outcomes of the procurement process to the Project Team.

Role of AHS in the Procurement Process

AHS is responsible for informing INFRA of any policy, procedures, or guidelines that may need to be addressed in the tendering process, including RFQ, RFP, contracts, or specifications. AHS will also advise INFRA of any requirement for criminal records checks or any other such limitation to contractor access.

AHS participates as a voting member of the Project Team as required for the development of RFQs and RFPs and review of proponent submissions for the four main contractor/consultant roles (see above). In their review, AHS identifies any contract work or conditions that conflict with AHS operational policy, procedures, or guidelines. HEALTH may be invited to provide feedback where appropriate.

Communications

Project Managers are responsible for coordinating with INFRA Communications any public announcements at tenders or contract awards. INFRA Communications will consult with HEALTH Communications and AHS Communications prior to making public announcements.

4.2.3 Capital Project Design Process

Role of the Project Steering Committee in Project Design

In addition to the responsibilities outlined in section 4.1.3, the Project Steering Committee assists the design process by providing high-level guidance to the Project Manager. The Project Steering Committee is responsible for:

- maintaining vision for the project;
- clarifying priorities for project design;
- making decisions when required concerning design options and recommendations brought forward by the Project Manager;
- escalating issues that cannot be resolved by the Steering Committee to the Joint Operations Committee as appropriate. (See Figure 6 – Joint Decision Making Process); and
- assisting and collaborating with the Project Manager and Prime Consultant as needed throughout the design process.

Development and Approval of Design Documents

The Project Manager oversees the project from approval through completion, including the development of the design documents. This includes the procurement of consultants and contractors, and the direction and supervision of the project and consulting teams as appropriate, and according to the composition of the Project Team described in section 4.1.3.

In addition to the Project Manager and design consultants, the Project Team includes the AHS Clinical Liaison and AHS F&E/IT and FM&E representatives. The Project Team may also include INFRA technical resource personnel, user group representatives, cost consultants and commissioning consultants. (See section 4.1.3).

Under the direction of the Project Manager, the team works together in:

- selecting the Prime Consultant(s) to develop the design documents;
- validating a design process with the Prime Consultant that:
  - is structured, iterative, and incorporates ongoing consultation with AHS, HEALTH and other user groups or stakeholders;
  - follows the design process as presented in Appendix 10 - Project Design Flowchart;
  - monitors deviation from approved scope; and
  - follows INFRA procedures and protocols and general industry best practices.

- developing a design schedule with the Prime Consultant that fits within the overall project schedule and key design milestones/checkpoints with particular consideration of the following:
  - schematic design, which includes floor plans and general system descriptions, as summarized in the schematic design report;
  - design development, which is a further development of the schematic design, documents the building plans, building systems design, F&E/IT requirements, and is summarized in the design development report; and
  - contract documents, which include the drawings and specifications that make up the final documents the builder, will use to construct the facility.

At the conclusion of each milestone, the Prime Consultant will submit the applicable design report and any supporting documentation to the Project Manager. AHS and HEALTH will each receive a copy for review and comment. AHS will be given an opportunity to review through the Clinical Liaison. The AHS Clinical Liaison is responsible for getting feedback, consensus and ultimately providing AHS organizational sign-offs for the design documentation at each milestone. Before proceeding to the next design milestone, the Project Team:

- reviews design documents to ensure completeness and compliance with the project scope and user requirements;
- consults with other internal resources or consultants as needed to review the documents and solicit feedback (e.g., INFRA Technical Services Branch); and
- finalizes and approves the milestone design documents.

The Project Team may incorporate design strategies such as integrated design, value management, value engineering, (see Appendix 1.1 - Glossary for definitions) and peer reviews, to ensure the design provides good value for money and meets the requirements of the program. Selection of design strategies will depend on the complexity and risk profile of the project. Design strategies will be done early in the design planning stage, before schematic design begins. This process will typically be led by the Prime Consultant, in consultation with the Project Team.

Role of Clinical Liaison in Project Design

In addition to the responsibilities outlined in section 4.1.3, throughout the design process, the Clinical Liaison is responsible for:

- coordinating the involvement of appropriate clinical and stakeholder/user groups within AHS, including collecting information and feedback about various components of the design;
- sharing relevant supporting information important to the development of the project design;
- validating that the desired clinical outcomes for the project are being achieved throughout the design process;
- facilitating the resolution of issues or conflicting interests within AHS, and obtaining consensus among AHS stakeholders (e.g., User Groups, FM&E, CPSM, IPC, Construction Safety); and
- acquiring all necessary design approvals on behalf of AHS, in particular at the key milestones for the project.

4.2.4 Leadership in Energy and Environmental Design (LEED®) Planning

INFRA endeavors to provide safe and healthy workplaces that respect the environment for current and future generations. The LEED® Rating System for new construction is the tool used to implement, track and measure the sustainable design goals for new facilities.

INFRA has set the achievement of LEED® Silver as a minimum certification level for new building projects with a TPC equal to or exceeding $5 million. The Ministry also promotes the use of environmentally sustainable designs, practices and products for all projects, including those with a TPC of less than $5 million.

For new construction projects over $5 million, the Ministry has identified the following mandatory LEED® point targets:

- Energy and Atmosphere Credit 3 Enhanced Commissioning. INFRA will retain an independent Building Commissioning Authority early in the design process. See sections 4.4.1, 4.4.2 and 4.4.3 for further information on commissioning;
- Energy and Atmosphere Credit 1 Optimize Energy Performance – target is a minimum of 6 out of 10 energy points;
- Energy and Atmosphere Credit 5: Measurement and Verification*; and
- Materials and Resource Credit 5: Regional Materials – 1 point for 20% Regional Materials.

* Note: Energy modeling and similar initiatives require particular attention to measurement and verification during the project Design Phase (see section 4.2.3).

Representation to the Joint Steering Committee is required to amend the LEED® Silver policy for a specific project. Any considerations on amendment to the policy will need to recognize the Ministry's interest in attaining the maximum possible LEED® points within a sustainable building and facility budget.

Further information on LEED® is available on the Canada Green Building Council's (CaGBC) website at http://www.cagbc.org/.

LEED® Certification Process

As identified in the design scope of work, the project design team will identify a LEED® accredited professional who will be responsible for overseeing and coordinating the entire LEED® process. The LEED® professional reports to the INFRA Project Manager through the Prime Consultant. Their joint role includes:

- registration of the project with the CaGBC using LEED® Canada NC 2009 or the USGBC if using the LEED® 2009 for Healthcare Rating System. (Registration should be made by the prime consultant's LEED® professional on behalf of INFRA);
- development of a LEED® plan;
- tracking of LEED® point achievement;
- advice on design strategy and options;
- preparation and submission of documentation; and
- advocacy to the CaGBC for the Project Team.

Commissioning activities include the building envelope as well as the mechanical and electrical systems. The design and performance of the building envelope is integral to achieving high-performance energy efficient buildings. See section 4.4 for more information on commissioning.

Role of AHS in LEED® Certification Process

The INFRA Project Manager and design team will consult with the AHS FM&E representative throughout the LEED® commissioning and measurement and verification processes. This will ensure building systems are compatible with AHS operational goals and objectives.