



Project Report:
**Stuart Lake Hospital
Redevelopment**
September 2022

Purpose of this Report

The purpose of this report is to provide key information to the public regarding the Stuart Lake Hospital Redevelopment Project (the Project). This report describes the need for the Project, its features, and its benefits. It also provides an overview of the different procurement options analyzed, the procurement process, and a summary of the important aspects of the Design-Build Agreement (DBA).

The Government of British Columbia (Government) is committed to a high standard of disclosure as part of its accountability for the delivery of public projects. Ministries, Crown Corporations, and other government agencies are publicly accountable for projects through regular budgeting, auditing, and reporting processes.

The Ministry of Health (MoH), Northern Health Authority (Northern Health), and Infrastructure BC Inc. (Infrastructure BC) are accountable for the contents of this report.

Abbreviations

Abbreviations are defined in table below:

TABLE 1: ABBREVIATIONS

CAMF	Capital Asset Management Framework
DB	Design-Build
DBA	Design-Build Agreement
DBA RFP	Design-Build Agreement Request for Proposals
DBB	Design-Bid-Build
DEWA	Design Early Works Agreement
DEWA RFP	Design Early Works Agreement Request for Proposals
Graham	Graham Design Builders LP Inc.
Government	Government of British Columbia
Hospital	New Stuart Lake Hospital
Infrastructure BC	Infrastructure BC Inc.
LHA 523 – Nechako	Nechako Local Health Area
MoH	Ministry of Health
Northern Interior HSDA	Northern Interior Health Service Delivery Area
PDB	Progressive Design-Build
Project	Stuart Lake Hospital Redevelopment Project
RFP	Request for Proposals
RFQ	Request for Qualifications
SNRHD	Stuart Nechako Regional Hospital District

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1. Executive Summary

The Stuart Lake Hospital (Hospital), located in Fort St. James, B.C, is a vital site for healthcare delivery in the Northern Interior Health Service Delivery Area (Northern Interior HSDA). The hospital delivers healthcare services to a diverse population, including Fort St. James and the First Nations communities of Takla Lake First Nation, Tl'azt'en Nation, Binche Whut'en First Nation, Nak'azdli Whut'en, and Yekooche First Nation.

The Project includes the construction of the new Hospital on the existing site, followed by demolition of the existing hospital and site redevelopment (i.e., landscaping and parking). The Project includes:

- 27 beds, including 18 long-term care beds;
- an emergency department with two exam rooms, a trauma bay, and an ambulance bay;
- primary care services; and
- laboratory and diagnostic imaging.

Northern Health received Government approval in February 2020 to procure and deliver the Project using a Design-Build (DB) or Progressive Design-Build (PDB) procurement model. The selection of these models was based on a thorough analysis of procurement options, which demonstrated that the DB model provides the best opportunity to meet Northern Health's objectives. The DB model also provides the ability to mitigate key Project risks and deliver the Project in a cost-effective and efficient manner.

Upon business plan approval, Northern Health and Infrastructure BC conducted a market sounding to determine the level of interest in the proposed procurement model for the Project. Based on the results of the market sounding, Northern Health determined that the PDB procurement model was best suited to generate more competition for the Project due to lower time commitment and risk associated with pursuing a PDB project compared to a DB.

Procurement commenced in April 2020 with the Request for Qualifications (RFQ) release. Northern Health received five responses which resulted in a short-list of three qualified teams who were invited to participate in the next stage of the procurement process, the Design Early Works Agreement RFP (DEWA RFP). Three proposals were received and evaluated, resulting in Graham Design-Builders LP (Graham) being named the successful proponent, which was then invited to execute the DEWA and begin the design of the new facility. Upon execution of the DEWA, Graham proceeded to negotiations with Northern Health, structured under the Design-Build Agreement Request for Proposal (DBA RFP), with the intention of entering into a Design-Build Agreement (DBA) for delivery of the Project.

The DBA includes a range of performance measures to help ensure the Project is delivered on budget and on schedule. Northern Health will pay Graham progress payments during design and construction, subject to holdbacks for non-performance as required by the DBA.

The total capital cost of the Project is approximately \$158 million. It is funded by the Government and Stuart Nechako Regional Hospital District (SNRHD), with the Government providing the majority of the funding.

The new Hospital is scheduled to be available to patients and long-term care residents in 2024, with final project completion expected in 2025. Northern Health will retain ownership of the site, including all Project buildings and structures, retain responsibility for all healthcare delivery, and provide maintenance and lifecycle services.

2. Project Background, Project Objectives, and Scope

2.1 Background

The hospital is a vital site for health care delivery in the Northern Interior HSDA of British Columbia. Originally built in 1972 as a single-storey modular wood structure, it has exceeded its anticipated life span of 25 years. In 2007, a small-scale 6-bed complex care unit was added to the existing structure, which increased the total building area to 1,759 m².

Despite a low total population growth rate in the Hospital catchment area, demand forecasts indicate significant growth in the seniors' population, driving the need for increased capacity in both acute and long-term care services. This, coupled with the poor facility condition of the existing facility, led to the approval of a new Hospital.

2.2 Project Objectives

During the capital planning process, Northern Health established key success factors ("Project Objectives") to guide the Project's decision-making. These Project Objectives are:

- 1) Create an exceptional hospital experience and support high levels of self-reported satisfaction for patients and families.
- 2) Incorporate evidence-based design features that improve the healing environment, enable culturally safe care for Indigenous peoples, and are welcoming to all communities the hospital serves.
- 3) Create a safe and healthy work environment that improves staff, physician, and volunteer engagement, recruitment, and retention and minimizes workplace injuries.

- 4) Meet current best practices and standards in healthcare delivery to improve outcomes for people, including enhanced infection control.
- 5) Provide a facility that can accommodate current and future demand, including workload projections.
- 6) Improve access to quality primary and community care services and ensure specialized perinatal, medical, and mental health services are available when required; and Improve operating efficiency.

Completing the Project will positively impact the patients and the communities served by the hospital.

2.3 Scope

The Project's scope includes the construction of the new Hospital, demolition of the existing hospital, and site redevelopment.

The construction of the new Hospital is on the same site as the existing facility; the new Hospital will provide expanded services for the community, including additional long-term care beds and co-locating primary care services in the facility.

The major program components of the Hospital are:

- Ambulatory Services, including Primary Care;
- Diagnostic and Treatment Services;
- Emergency Department;
- Inpatient Services,
- 18 Long-Term Care rooms¹;
- Patient Support and Administration; and
- Support Services.

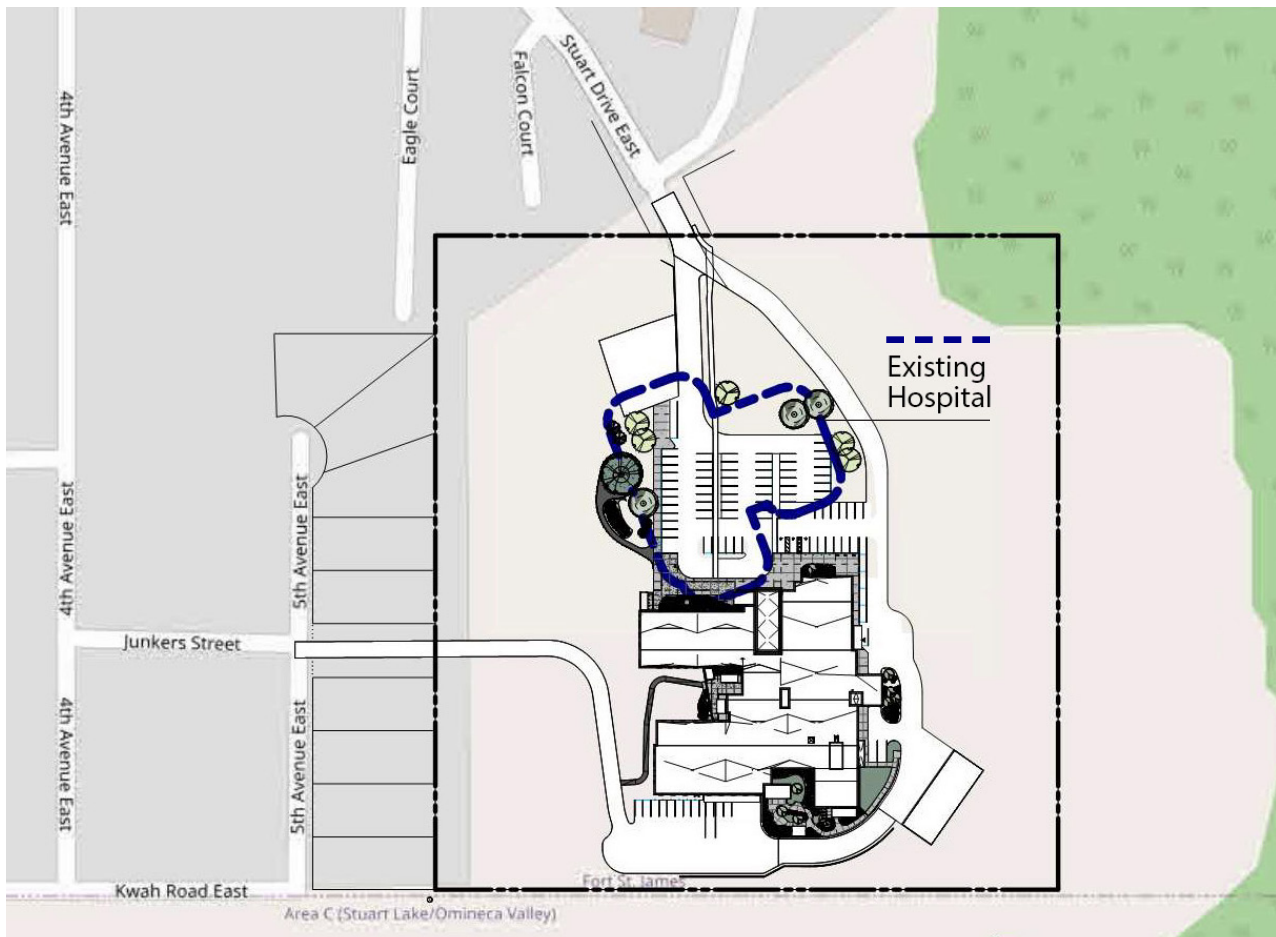
Upon the new Hospital's completion, the existing hospital will be demolished, and the site will be redeveloped to include 85 surface parking stalls, respite gardens, wandering paths, and landscaping.

¹Also known as Residential Care

3. Project Benefits

The Project will strengthen the role of the hospital in the Northern Interior HSDA and support Fort St. James and the surrounding communities through:

- Better management of patients across the jurisdiction by making fewer referrals out of Fort St. James that impact alternate healthcare facilities and providing opportunities for other locations to refer patients to Fort St. James. These activities provide opportunities for Northern Health to optimize patient volumes across the region; and
- Serves as a leading example of how space can enable positive engagement with Indigenous peoples and provide culturally safe care.



Site plan.

4. Project Procurement Options

In accordance with Government's Capital Asset Management Framework (CAMF), the Project team, including Northern Health and Infrastructure BC, undertook a procurement options analysis to determine an optimal procurement model for the Project. Procurement options were evaluated to identify a procurement model that delivers value and reduces risks for the taxpayer while ensuring procurement objectives are met. Procurement characteristics such as schedule and cost certainty, an opportunity for design flexibility and innovation, and optimizing risk management influenced the selection of a procurement model.

4.1 Procurement Options Analyzed

The following procurement options were considered in the procurement options analysis for the Project:

- **Design-Bid-Build:** Under a Design-Bid-Build (DBB), Northern Health retains significant responsibilities related to design and construction period activities and all responsibilities and risks related to operating period activities.

A DBB process includes a series of consecutive tasks (e.g., detailed design, tendering, and construction). Detailed design is completed and approved by the Owner before the construction tendering process. In a DBB, Northern Health would engage a design team of architects and engineers to develop a detailed design (tender drawings) for the facility. Once the drawings are complete, a tender call for construction pricing will be issued. The lowest qualified price must be selected, and an industry-standard fixed-price construction contract would be used. The construction contract may include supplementary conditions typically used by

Northern Health for this type of contract. The construction contractor would take responsibility for constructing the facility to the specifications detailed in the drawings issued for construction developed by Northern Health's design team. Northern Health would be responsible for any design errors and omissions, and Northern Health would make monthly progress payments to the contractor during construction.

- **Design-Build:** Under a Design-Build (DB), Northern Health would manage a competitive selection process to select a design-build team to undertake the design and construction of the facility, based primarily upon the output specifications prepared by the Owner's compliance team, and the Owner would retain all responsibilities and risks related to only operating-period activities. The DB procurement is undertaken in two stages, with the first stage being an RFQ where respondent teams submit qualifications for evaluation. Shortlisted teams from the RFQ stage are then invited to participate in an RFP stage.

In a DB option, most design and construction risk is typically transferred to the design-builder, while Northern Health retains all operating period risks, including life cycle maintenance risks. Liquidated damages and surety bonding is used to secure the risk transfer to the design-builder. The DB procurement option encourages integrated design and construction from both a risk transfer and innovation perspective.

The DBB model involves a one-stage tender for a contractor to construct the project. The DB model would be undertaken in two stages, with the first stage being an RFQ where respondent teams submit qualifications for evaluation. Shortlisted teams from the RFQ stage are then invited to participate in an RFP stage.

4.2 Results of the Procurement Options Analysis

A multiple-criteria analysis was conducted to assess the different procurement options. The analysis concluded that a DB had both qualitative and quantitative advantages over the DBB.

Considering Northern Health's familiarity and experience in prior procurements, the DB procurement option was ultimately selected for the Project as it was expected to best meet Northern Health's procurement objectives and allow Northern Health to best manage and mitigate key Project risks to deliver the Project in a cost-effective and efficient manner.

Due to the high number of health care projects in the B.C market at the time of business plan completion, it was recommended that a secondary procurement option be a PDB based on market conditions prior to procurement. The PDB model is considered when a traditional DB lacks market interest due to a busy construction market, high pursuit costs, and time commitment required under a competitive DB process. The PDB model seeks to improve competition for the project, reduce bid costs and time commitment, and reduce the risk associated with pursuing a project. The PDB model is a modified three-stage form of the traditional two-stage (RFQ/RFP) DB procurement approach.

FIGURE 1: PDB PROCUREMENT MODEL



5. Procurement Process

The Project's PDB procurement process timeline is outlined in Table 1 below.²

TABLE 2: PROCUREMENT TIMELINE

PROCUREMENT STAGE	TIMING
RFQ	April 2020
RFQ Shortlist	July 2020
DEWA RFP	August 2020
Successful Proponent Selected	December 2020
DBA RFP	February 2021
DBA Execution	April 2022

5.1 The RFQ Process

An RFQ was issued in April 2020, inviting interested parties to submit Responses indicating their interest in and qualifications for the Project. Five teams responded to the RFQ. Northern Health's Capital Project Board (Project Board) appointed an evaluation committee to evaluate the five Responses received based on the criteria set out in the RFQ. Following the evaluation, a shortlist of three Proponents were invited to participate in the DEWA RFP.

5.2 Design Early Works Agreement RFP Process

In August 2020, Northern Health issued the DEWA RFP inviting the shortlisted Proponents from the RFQ to prepare and submit Proposals to enter into a DEWA to develop the design for the Project.

Following the evaluation of the Proposals, based on the criteria set out in the DEWA RFP, Northern Health selected Graham as the successful Proponent. The DEWA was executed in January 2021.

5.3 Design-Build Agreement RFP Process

Northern Health issued the DBA RFP to Graham on February 1, 2021, inviting Graham to prepare and submit one or more Proposals to execute the DBA, complete the design, and construct the Hospital.

Graham submitted proposals to Northern Health that included a fixed price and schedule to enter into the DBA and a technical submission confirming that the design substantially met the requirements of the DBA.

Evaluation of Proposals - To determine if value is being provided to Northern Health and the B.C. taxpayers, independent shadow estimates were developed at each proposal stage by Northern Health's quantity surveyor. Northern Health's quantity surveyor was also given access to Graham's bid process, reviewed sub-contractor pricing, and met with subcontractors to understand how Graham arrived at its price.

Graham submitted its first proposal to Northern Health in June/July 2021. Following the evaluation of the first proposal, Northern Health determined that the proposal in its current form did not demonstrate good value and that a second proposal following additional design and costing work would be required to proceed.

² The RFQ and RFP procurement documents are publicly available at www.infrastructurebc.com.

Graham submitted its second proposal in December of 2021. Following the evaluation of the second proposal, Northern Health conducted targeted negotiations with Graham and requested a supplementary proposal at the conclusion of these targeted negotiations. This would constitute a “best and final offer” submission. The Project team developed a detailed negotiation plan that focused on both technical and commercial aspects of Graham’s proposal.

These negotiations realized material savings to the Project, and Graham submitted a supplemental proposal. After evaluating the supplemental proposal, Northern Health and its advisors determined that the proposed design and final negotiated price demonstrated value to Northern Health and British Columbia taxpayers based on the following:

- the supplementary Proposal’s design substantially met the requirements of the DBA;
- the price reflected the terms of the negotiations between Northern Health and Graham in identifying and incorporating appropriate cost reductions for the Project; and
- based on Graham’s design, the price, although exceeding the original budget for the Project, was within five percent of the shadow price prepared by Northern Health’s quantity surveyor.

5.4 Fairness and Transparency

To ensure fairness and transparency of the procurement process, Jane S. Shackell, Q.C. of Miller Thomson LLP was engaged as a fairness reviewer during the RFQ and DEWA RFP processes to monitor all evaluation activities and provide an opinion as to whether the selection process was fair and transparent. A fairness reviewer was not required for the DBA RFP process because there was only one proponent.

Fairness reviewer reports were provided at the end of the RFQ and DEWA RFP and are publicly available at www.infrastructurebc.com, together with the RFQ and RFP documents and the final redacted DBA.



LTC nurse station, dining and living room area.

6. Design-Build Agreement

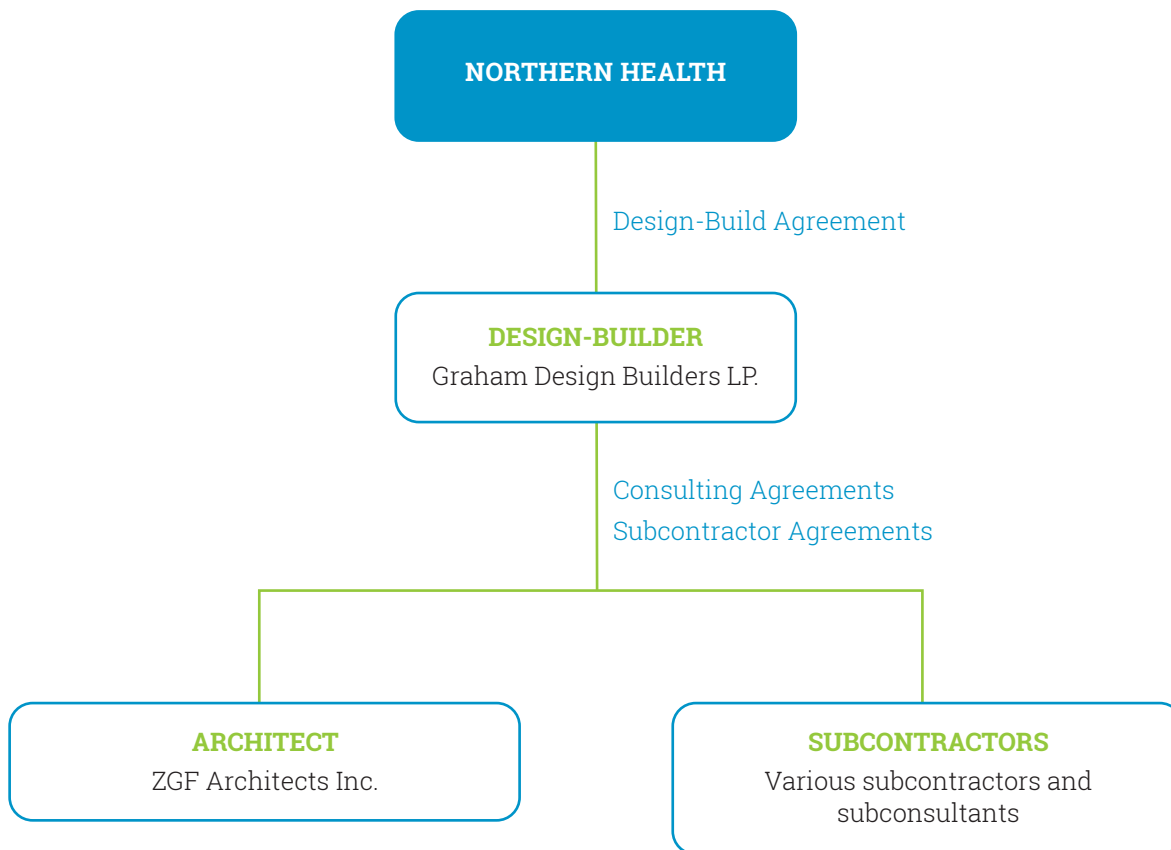
TABLE 3: PROJECT QUICK FACTS

QUICK FACTS	
Design-Builder	Graham Design Builders LP.
Facility Owner	Northern Health Authority
Location	Fort St. James, BC
Hospital Available for new patients	2024
Term of the DBA	Construction period plus a one-year warranty period.
Final Project Cost	\$158.3 million

6.1 Profile of Design-Builder

Graham will deliver the Project using specialist providers and sub-contractors as well as self-performing certain aspects. The contractual structure is illustrated in the figure below.

FIGURE 2: CONTRACTUAL RELATIONSHIPS



6.2 Responsibilities of Graham

Under the terms of the Design-Build Agreement, Graham is responsible for:

- design and construction of the Hospital;
- demolition of existing hospital; and
- site redevelopment (e.g., construction of surface parking and landscaping).

6.3 Risk Allocation Summary

Key Project risks and their allocation under the DBA are summarized below.

TABLE 4: RISK ALLOCATION UNDER DBA

RISK	RETAINED BY NORTHERN HEALTH	TRANSFERRED TO GRAHAM
Construction including cost and schedule		✓
Design including errors or omissions		✓
Geotechnical		✓
Life cycle	✓	
Maintenance	✓	
Escalation during construction		✓
Latent defects (risk is shared)	✓	✓
Undisclosed hazardous materials	✓	
Northern Health-supplied equipment	✓	
Northern Health-driven scope changes	✓	



Entry lobby, waiting and reception

7. Ongoing Project Monitoring

The DBA includes specific provisions to ensure Project delivery, performance, and quality standards are met. Monitoring spans every phase of the Project, from contract execution through design and construction to total completion.

7.1 Project Governance

A Project Board has been established to provide guidance and oversight for the implementation of Northern Health's major capital projects, including this Project. Project Board members include Northern Health, Ministry of Health, Ministry of Transportation and Infrastructure, and Infrastructure BC.

Northern Health has assembled an integrated project management team responsible for implementing the Project through design, construction, and transition into operations. This team reports through a project director to the Project Board.

7.2 Design and Construction Phase

The DBA stipulates that Northern Health and Graham each must appoint their respective representatives. Northern Health's representative is supported by a team of professionals (e.g., architects, engineers, lawyers) who, together, will have full access to the construction site, drawings, and specifications and will report observations to the Project Board regularly through the project director. Graham's representative serves as a key point of contact for Northern Health during design and construction.

In support of the monitoring activities, Northern Health has appointed the Project team's quantity surveyor to be the payment certifier who will monitor and report on construction progress and provide certification that the conditions for payment have been achieved. Infrastructure BC will be working with Northern Health to manage the DBA and ensure the value contracted is obtained.

7.3 Quality Management

Under the terms of the DBA, Graham is required to implement a quality management plan that is acceptable to Northern Health. Northern Health is permitted to conduct quality audits as construction progresses to provide assurance that quality requirements are being met.

8. Glossary of Terms

Design-Build Agreement (DBA): A contract that sets out the requirements for the delivery of a project under a partnership delivery model in terms of cost, schedule, and performance that typically governs the performance-based payment to the design-builder.

Design-Build Agreement Request for Proposals (DBA RFP): The document issued by a project owner during the procurement process for a qualified proponent to submit a proposal(s) to deliver a project.

Design Early Works Agreement (DEWA): A contract that sets out the requirements for the design of a project.

Design Early Works Agreement Request for Proposals (DEWA RFP): The document issued by a project owner during the procurement process for qualified proponents to submit a proposal to deliver the design for a project.

Hospital: New Stuart Lake Hospital

Project: Stuart Lake Hospital Redevelopment Project.

Project Board: The Northern Health Capital Project Board has been established to provide guidance and oversight for the implementation of Northern Health's major capital projects.

Request for Qualifications (RFQ): The document issued by a project owner as the first stage of the procurement process inviting interested parties to submit their qualifications for delivering a project.



LTC corridor and resident room entry