1. Project Background

The replacement of the 44-bed, Fort St. John Hospital is urgently needed to address the current operational challenges Northern Health faces. The outdated hospital layout, the lack of appropriate space provision for health service delivery and the strenuous efforts to control the spread of infection, raise concerns around the efficient delivery of health care to meet the needs of the north-eastern communities over the next decade. These issues present serious concerns related to the delivery of health services, to medical education and technology, and to recruiting and retaining experienced health professionals.

The replacement of the Fort St. John Hospital will modernize the delivery of health care for the north-eastern communities now and into the future. It will provide a unique opportunity to enhance workflow efficiency, utilize best practices in health services delivery, and cultivate education and technology through a Health Service Delivery Area that will enrich the health care provided to northern communities. The health care facility will integrate Leadership in Energy and Environmental Design (LEED) principles early on, ensuring the achievement of operational efficiencies, while delivering a healthier building for patients for and hospital staff.

Northern Health, and specifically the Northeast, require increased capacity in the provision of senior care. Northeast residential care demand is served by three, outdated and aging facilities. These remote centres require extensive investment to meet minimum building performance standards and are no longer appropriate to provide appropriate the residential care to patients or for expansion and improvement.

The proposed solution to this requirement includes the centralization of long-term care services through the replacement of 98 existing residential care beds, and the development of 25 new residential care beds in Fort St. John. Northern Health will construct a new 123-bed replacement facility on the proposed site of the Project.

2. Project Objectives

The overarching goal of the Project is to be a model of excellence in rural health care. This goal is supported by the following objectives:

1. Accommodate current and future acute patient care service requirement;
2. Provide all the appropriate hospital functions necessary to accommodate current and future acute patient needs for the targeted population
3. Accommodate current and future residential care services for senior patients within the catchment area.
4. Enable care delivery approach that generates the right health outcomes for patients and fulfilling service delivery outcomes for clinicians and staff;
5. Improve quality of care provided to patients;
6. Provide an environment conducive to clinical practice and learning that will attract and retain quality health care professionals;
7. Become the North-East referral centre for clinical systems such as pathology, radiology, clinical support and pharmacy;
8. Provide health services connectively to remote communities through Telehealth applications.

In addition, the Project will support remote communities by providing alternatives and support to community care.

3. Project Status

Preparations for the project have included:

- Development of a preliminary functional program to confirm the scope and range of services to be delivered and to determine the approximate size of the building;
- Preliminary estimate of project costs by a quantity surveyor, including preliminary estimates for obtaining LEED rating for the buildings;
- Development of a project budget reflecting the preliminary cost estimates;
- Analysis of project risks;
- Analysis of project procurement method;
- Acquisition of a 40 acre site, at no cost to NHA, from the City of Fort St. John, to enable the replacement of the Fort St. John Hospital and to allow for the establishment of other healthcare uses collocated on the site, such as the 123 bed Residential Care facility;
- Preliminary, high level discussions with the City of Fort St John, the Peace River Regional Hospital District and other stakeholders; and
- Approval from Treasury Board / Cabinet to proceed to the Request for Qualification (RFQ) and Request for Proposals (RFP) stages.

Northern Health has completed evidence-based demand modeling to establish the number of inpatient beds needed at Fort St. John Hospital, taking into account demographic factors, health needs and the evolving continuum of care.

The residential care capacity available in the North East is insufficient to address current and estimated future demands for senior care. The proposed 123 residential care beds facility will provide immediate capacity relief to the existing senior care pressures, as well as to the acute care hospital where geriatric patients currently occupy acute care beds.

The site provided by the City of Fort St John is a vacant lot located just outside the downtown area of Fort St. John.

4. Costs and Benefits

Project Costs
The estimated capital cost of the project is $267.9 million. This estimate is based on the preliminary functional program developed for the new Fort St John hospital. The project quantity surveyor advises that, in the current market, in North-Eastern BC, the construction cost estimate has an accuracy of +/- 20 percent, 18 times out of 20.

**Project Benefits**

The project will benefit the community by:

- Accommodating acute care service requirements
- Upgrading hospital care delivery by replacing an outdated facility with a standardized, modernized hospital;
- Providing centralization of senior and long-term care services;
- Providing space needed in the training of medical students from the Northern Medical Program at the University of Northern BC.
- Improving safety and clinical outcomes and providing a healthier environment for patients and staff;
- Becoming the centre for a range of telecommunications and Telehealth applications related to clinical education and training;
- Providing connectivity to remote communities through Telehealth applications and linking with other larger hospitals for some clinical procedures;
- Becoming the North-East referral centre for clinical systems such as pathology, radiology, clinical support and pharmacy.
- Promoting regionalization of health care support services by including a centralized service centre for material and labour for the North East.

5. **Project Risks**

The major risks associated with the replacement of the Fort St John Hospital and the development of the 123 beds Residential Care facility co-located with the new hospital are generally related to project scope, the functional program, the project development schedule, overall project cost and operating risk.

**Scope and Functionality:** These risks arise when the buildings are not sized appropriately, and/or do not have optimum design, including consideration to integrate LEED principles in design and apply them throughout construction. The result might be poorer program functionality, less efficient operations, and user dissatisfaction. Measures to mitigate these risks include:

- Extensive user involvement during the functional programming and concept design phase to ensure integration, functionality and higher levels of user satisfaction, for patients and staff.
- Design is taken to concept drawings before the procurement process starts. This reduces the likelihood of oversight and ensures that key functional components are included.
- The concept design architect and its team of engineers and consultants are retained to act as “shadow consultants” to the Project. This reduces the likelihood of oversight.
- Continued interface with user groups (both clinical and non-clinical) throughout the design development and construction phases. User groups will have representation on the Request for Proposal evaluation team.
Schedule Risk: This risk arises from the possibility that the procurement process takes longer than expected, the zoning/permitting process takes longer than expected, or the design/construction process takes longer than expected. Measures to mitigate this risk include:

- NHA engaged Partnerships BC to support the procurement process, and procurement and legal documentation is based on industry-accepted templates.
- A Request for Qualifications process is used to short-list the best proponents.
- Contractual documentation is prepared ahead of time and appended to the RFP.
- Concept design drawings are included in the RFP to inform and support the procurement cycle.
- NHA engages early with the City of Fort St John to obtain municipal support. Fast-track zoning and permitting processes must be explored.

Cost Risk: This risk arises from the possibility that overall project cost and construction costs are higher than the estimated budget. Measures to mitigate this risk include:

- The preliminary budget is based on a quantity surveyor’s report.
- Realistic estimates of construction escalation and inflation were built into the budget, based on other recent projects and informed by recent local construction data.

Operating Risk: This risk arises if the facilities are not well-maintained over time and/or the cost of their maintenance is higher than expected. Measures to mitigate this risk include:

- Detailed performance specifications are included as part of the RFP to ensure the proper building systems are provided.
- Inclusion of LEED principles in the design of the two facilities, incorporating long-term energy efficiency features, as well as focusing on reduction of fuel consumption.
- There is a requirement that the consortium includes a facilities maintenance provider that will have input into the design/construction process.