



Project Report:
**Cariboo Memorial
Hospital Redevelopment**
May 2023



Purpose of this Report

The purpose of this report is to provide key information to the public regarding the Cariboo Memorial 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), Interior Health Authority (Interior 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
CM	Construction Management
CMA	Construction Management Agreement
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
Government	Government of British Columbia
Hospital	Cariboo Memorial Hospital
Infrastructure BC	Infrastructure BC Inc.
Interior Health	Interior Health Authority
LHA	Local Health Area
MoH	Ministry of Health
PDB	Progressive Design-Build
Project	Cariboo Memorial Hospital Redevelopment Project
RFP	Request for Proposals
RFQ	Request for Qualifications
Williams Lake	The City of Williams Lake

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1. Executive Summary

The Cariboo Memorial Hospital (Hospital) is the primary acute care hospital serving the Cariboo Chilcotin, an area with more than 26,000 residents including the City of Williams Lake (Williams Lake). Serving a large Indigenous population, the Hospital is located within the Secwepemc traditional territory and in close proximity to the T'exelcenc First Nations (Williams Lake Indian Band) and the Xat'sull First Nation (Soda Creek Indian Band).

Originally built in 1963 the Hospital has gone through several renovations but has not been able to keep pace with the growing healthcare needs of Williams Lake and surrounding areas.

The Cariboo Memorial Hospital Redevelopment Project (Project) consists of two phases. Phase One includes construction of a new expansion connected to the existing Hospital. Phase Two includes renovations to the existing Hospital once the Phase One expansion is operational. The Project will result in new clinical and support spaces, 15 additional patient beds and space for an additional 10 patient beds. The Hospital will continue to serve the region 24 hours per day during the construction of the Project.

Interior Health Authority (Interior Health) received business plan approval for the Project in July 2019. A thorough analysis of procurement options was included in the business plan and concluded that, for Phase One, the DB model provided the best opportunity for Interior Health to meet its objectives and mitigate key Project risks while delivering the Project in a cost-effective manner. Due to lack of market interest in a competitive DB RFP, Interior Health received approval to adjust to a progressive DB procurement approach in an effort to increase market interest in the procurement while maintaining the key risk transfer of the Design-Build Agreement (DBA).

The progressive DB procurement also required the design-builder to provide construction management services for Phase Two to ensure design-builder construction input into the design of Phase Two and provide coordination around the transition from Phase One to Phase Two construction activities.

The procurement process concluded in January 2023 resulting in Interior Health entering into the following contracts with Graham Design Builders LP (Graham):

- a performance-based, fixed price contract (DBA) for Phase One; and
- a Construction Management Agreement (CMA) for Phase Two.

The DBA includes a range of performance measures to help ensure the Project is delivered on budget and on schedule. Interior 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 \$367 million.

The construction of Phase One is scheduled to be completed in 2026, with completion of Phase Two expected in 2029.

2. Project Background, Project Objectives, and Scope

2.1 Background

Located in Williams Lake, the Cariboo Memorial Hospital (Hospital) serves the population living in Williams Lake and in adjacent rural and remote areas including the Cariboo Chilcotin and 100 Mile House Local Health Areas (“LHAs”).

The Hospital provides a critical role within Interior Health’s network of hospitals and integrated patient care in the area. The Hospital is currently facing critical challenges related to inadequate physical space that impact patient access, patient safety, and infection prevention and control. Based on the present condition and health care need forecasts, the existing Hospital cannot meet the healthcare needs for people living in the Cariboo and Chilcotin areas.

Approved by Government in 2019, the Project will see the existing Hospital expanded and upgraded and will improve patient care, access and flow through the site, increase patient safety, and infection prevention and control. The Project will result in the development of new clinical and support spaces that will be constructed in the new expansion and in renovated space.

2.2 Project Objectives

During the capital planning process, Interior Health established key success factors (“Project Objectives”) to guide the Project’s decision-making. These Project Objectives are:

- 1) Enhance patient safety and care;
- 2) Enhance patient privacy and confidentiality;
- 3) Enhance staff safety;
- 4) Optimize clinical utilization and operational efficiencies; and
- 5) Enhance wellness and restorative/healing environments for patients and staff.

2.3 Scope

The Project’s scope includes a new expansion to the existing Hospital (Phase One) followed by a renovation of the existing Hospital (Phase Two).

The major program components of the Project are detailed in Table 2 below:

TABLE 2: PROGRAM AND COMPONENTS BY PHASE

PHASE ONE (NEW EXPANSION)	PHASE TWO (RENOVATION)
LEVEL 4 • Mechanical Penthouse	
LEVEL 3 • Medical/Surgical Inpatient Unit • Maternal Care and Women’s Health	LEVEL 3 • UBC Faculty of Medicine Academic Space
LEVEL 2 • Medical/Surgical Inpatient Units	LEVEL 2 • MHSU Inpatient Psychiatry Unit
LEVEL 1 • Emergency Department • Retail Space	LEVEL 1 • Ambulatory Care Services (vacated Emergency Department) • Reception, Patient Registration, Interfaith Space and Main Entry
LEVEL 0 • Pharmacy Services • Mechanical/Electrical Rooms	LEVEL 0 • Health Information Management
PARKING • 273 Total Stalls (219 replaced and 54 new)	

Note 1: Phase One will connect directly to the existing Hospital on three levels (levels 0, 1, and 4) and parking will be expanded to the north, west and south on the existing site.

3. Project Benefits

The Project will result in updated and expanded facility that will:

- Improve coordination of care in Williams Lake and surrounding areas;
- Enhance and improve the patient experience through state-of-the-art upgrades and modern technology;
- Meet the forecasted demand for healthcare in the region;
- Improve safety and overall environment for staff and patients; and
- Provide opportunities to train more doctors in the interior region of BC through the new UBC Facility of Medicine space.

FIGURE 1: CMH PHASE ONE ILLUSTRATION

A graphic representation showing Phase One of the Project is illustrated in Figure 1 below.



4. Project Procurement Options

In accordance with Government's Capital Asset Management Framework (CAMF), Interior Health 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 were taken into account in the selection of a procurement model.

4.1 Procurement Options Analyzed

A separate procurement options analysis was conducted for each phase on the Project. Interior Health compared a Design-Build approach to a Design-Bid-Build approach for Phase One. For Phase Two, Interior Health considered Construction Management and Design-Bid-Build models.

The procurement options considered are described below.

Design-Build (Phase One):

Under a Design-Build (DB), Interior 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 statement of requirements prepared by Interior Health's compliance team, and Interior Health 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 Interior 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.

Design-Bid-Build (Phase One and Two):

Under a Design-Bid-Build (DBB), Interior 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 Interior Health before the construction tendering process. In a DBB, Interior 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 Interior 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 Interior Health's design team. Under a DBB, Interior Health and its design team would be responsible for any design errors and omissions, and Interior Health would make monthly progress payments to the contractor during construction.

Construction Management (Phase Two):

In a Construction Management (CM) delivery model, Interior Health would separately procure a design team and a construction manager. The construction manager would be contracted early in the design phase under the CMA. This enables the construction manager to provide significant input to the owner on cost, schedule, constructability and serviceability of the design as it develops. The construction manager would have no contractual relationship with the Interior Health's design team and would receive a fee for their service.

Under a CM model, trade contracts may be entered into sequentially. As soon as a specific part of the design is complete, bids for that trade package can be solicited and construction can commence. This overlapping of design and construction is known as 'fast-tracking', a process with which CM is often associated. The construction manager would be responsible for managing the tender work packages on behalf the owner. The construction manager would act as an agent of the owner and would not do any of the construction work itself.

Interior Health and its design team would remain responsible for design errors and omissions, and Interior Health would make monthly progress payments to the construction contractors and the construction manager during the construction period. Upon completion of the contract, Interior Health would continue to be responsible for operations, maintenance and life cycle.

4.2 Results of the Procurement Options Analysis

A multiple-criteria analysis was conducted to assess the different procurement options. The analysis concluded that for Phase One a DB model best met Interior Health's procurement and Project Objectives including:

- The potential for cost savings;
- More efficient risk transfer; and
- Cost and schedule certainty as well as innovation in design and construction for the Project.

For Phase Two it was recommended that the procurement approach include the Phase One design-builder provide construction management services including the tender of construction contracts for Phase Two. This approach is expected to generate valuable synergies and efficiencies across the site and add value to the Project by:

- Incorporating constructability input from the Phase One design-builder into the Phase Two design;
- Maintaining consistent construction management responsibility across Phase One and Phase Two; and
- Providing a greater degree of coordination around the planning and decanting of the existing space which is critical for Phase Two of the Project.

5. Procurement Process

5.1 The Procurement Timeline

The Project's procurement process timeline is outlined in Table 3 below.¹

TABLE 3: PROCUREMENT TIMELINE

PROCUREMENT STAGE	TIMING
Competitive RFQ Issued	December 2019
Progressive DB RFQ Issued	April 2020
RFQ Respondents Shortlisted	September 2020
DEWA RFP Issued	October 2020
Successful Proponent Selected	March 2021
DBA RFP Issued	April 2021
DBA Executed	January 2023

5.2 The RFQ Process

5.2.1 Competitive RFQ

An RFQ was issued to the market for a competitive DB procurement in December 2019. Due to market conditions and lack of interest in the Project, Interior Health cancelled the RFQ.

5.2.2 Progressive DB RFQ

Government approved a change in procurement model from a DB to a Progressive DB (PDB). The PDB model seeks to improve competition for a project by reducing bid costs and time commitment, and reducing 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. In a PDB, after the RFQ process is complete, up to three teams compete under a Design Early Works Agreement (DEWA) RFP to enter into a DEWA to develop the design for the Project. The Preferred Proponent is then invited to participate in a structured negotiation under a DBA RFP to enter into a DBA. Refer to Figure 2 for a high level overview of the PDB model.

FIGURE 2: PDB PROCUREMENT MODEL



¹ Interior Health issued an RFQ for a PDB procurement in April 2020, inviting interested parties to submit Responses indicating their interest in and qualifications for the Project. Five teams responded to the RFQ. Interior 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 three Proponents were shortlisted.

5.3 Design Early Works Agreement RFP Process

In October 2020, Interior 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 Phase One of the Project and be invited to participate in the Design-Build Agreement RFP (DBA RFP).

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

5.4 Design-Build Agreement RFP Process

Interior Health issued the DBA RFP to Graham in April 2021, inviting Graham to prepare and submit one or more proposals to implement the Project.

Graham submitted proposals to Interior Health that included a fixed price and schedule to enter into the DBA and CMA and a technical submission confirming that the design for Phase One substantially met the requirements of the DBA and the DBA RFP.

Evaluation of Proposals - Proposals were evaluated in accordance with the DBA RFP evaluation criteria including if the design meets the requirements of the DBA and if value is being provided. To determine if value is being provided to Interior Health and the B.C. taxpayers, independent shadow estimates were developed at each proposal stage by Interior Health's quantity surveyor. Interior 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 three proposals to Interior Health, with progressively more advanced design. Following the evaluation of the third proposal Interior Health developed a detailed negotiation plan and conducted targeted negotiations with Graham to reach agreement on price and technical items related to the design.

These negotiations realized material savings to the Project, resulting in a negotiated price that demonstrated value to Interior Health and BC taxpayers based on the following:

- the price reflected the terms of the negotiations between Interior Health and Graham in identifying and incorporating appropriate cost reductions for the Project; and
- based on Graham's design, the price, although exceeding the Design-Build Price Ceiling for the Project, was within five percent of the shadow price prepared by Interior Health's quantity surveyor and was reviewed by a third-party quantity surveyor to verify value.

5.5 Fairness and Transparency

To ensure fairness and transparency of the procurement process, John Singleton Q.C of Singleton Urquhart Reynolds Vogel 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.

6. Design-Build Agreement

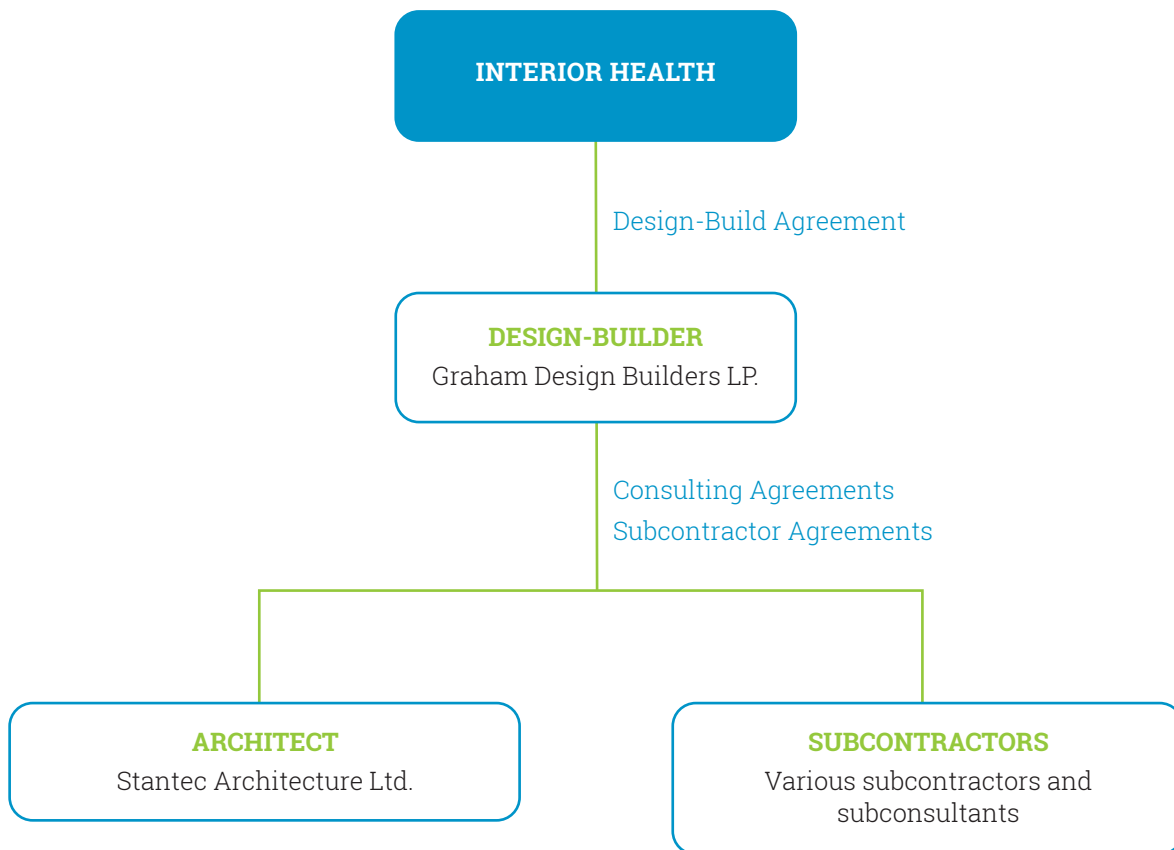
TABLE 4: PROJECT QUICK FACTS

QUICK FACTS	
Design-Builder	Graham Design Builders LP.
Facility Owner	Interior Health
Location	Williams Lake, BC
Phase One ready for patients	2026
Phase Two ready for patients	2029
Term of the DBA	Construction period plus a one-year warranty period.
Approximate Project Capital Cost	\$367 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 Figure 3 below.

FIGURE 3: CONTRACTUAL STRUCTURE



6.2 Responsibilities of Graham

Under the terms of the Design-Build Agreement, Graham has an obligation to design and construct the Project in accordance with the requirements set out in the DBA for Phase One.

Key features under the DBA include:

- design and construction of Phase One including integration of various building components; and
- site redevelopment work (e.g. construction of surface parking).

Under the terms of the CMA for Phase Two Graham is responsible for providing CM Services for the renovation scope once the space has been vacated following completion of Phase One.

6.3 Risk Allocation Summary

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

TABLE 5: RISK ALLOCATION UNDER DBA

RISK	RETAINED BY	
	INTERIOR 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	✓	
Interior Health-supplied equipment	✓	
Interior Health-driven scope changes	✓	

Under the CMA all risks are retained by Interior Health, however, Graham’s role as construction manager includes assisting Interior Health in mitigating the key Project risks and transferring portions of risk to subcontractors.

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 Interior Health's major capital projects, including this Project. Project Board members include Interior Health, Ministry of Health, Ministry of Transportation and Infrastructure, and Infrastructure BC.

Interior 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 director of major capital projects to the Project Board.

7.2 Design and Construction Phase

The DBA stipulates that Interior Health and Graham each must appoint their respective representatives. Interior 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 team. Graham's representative serves as a key point of contact for Interior Health during design and construction.

In support of the monitoring activities, Interior Health and Graham have also jointly appointed an independent certifier who will monitor and report on construction progress and provide certification that the conditions for payment have been achieved.

7.3 Quality Management

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

8. Glossary of Terms

Construction Management Agreement (CMA):

A contract that sets out the requirements for the provision of construction management services by a construction manager.

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: Cariboo Memorial Hospital.

Phase One: Construction of a new expansion connected to the existing Hospital.

Phase Two: Renovations to the existing Hospital once the Phase One expansion is operational.

Progressive Design-Build: A modified three-stage form of the traditional DB procurement approach as described in Section 5.2.

Project: Cariboo Memorial Hospital Redevelopment Project.

Project Board: The Interior Health Capital Project Board, established to provide guidance and oversight for the implementation of Interior 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.