













Project Report:

Dawson Creek and District Hospital Replacement

August 2023

Purpose of this Report

The purpose of this report is to provide key information to the public regarding the Dawson Creek and District Hospital Replacement 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, 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 1 below:

TABLE 1: ABBREVIATIONS

| CCAMF | Capital Asset Management Framework | |
|---|--|--|
| Clark-Turner | Clark-Turner Dawson Creek Joint Venture | |
| DB | Design-Build | |
| DBA | Design-Build Agreement | |
| DBA RFP | Design-Build Agreement Request for Proposals | |
| DBB | Design-Bid-Build | |
| DBF | Design-Build Finance | |
| DEWA | Design Early Works Agreement | |
| DEWA RFP Design Early Works Agreement Request for Proposa | | |
| Existing Hospital | Current Dawson Creek and District Hospital | |
| Graham | Graham Design Builders LP | |
| Government of British Columbia | | |
| HDR | HDR Architecture Associates Inc. | |
| Infrastructure BC | Infrastructure BC Inc. | |
| LHA 531 - Peace River South | Peace River South Local Health Area | |
| New Hospital | New Dawson Creek and District Hospital | |
| New RFP | One Stage Design-Build Request for Proposals | |
| Northeast HSDA | Northeast Health Service Delivery Area | |
| NLC | Northern Lights College | |
| PDB | Progressive Design-Build | |
| Project | Dawson Creek and District Hospital Replacement Project | |
| Project Board | Northern Health's Capital Project Board | |
| RFP | Request for Proposals | |
| RFQ | Request for Qualifications | |
| PRRHD | Peace River Regional Hospital District | |
| | | |

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1. Executive Summary

The Dawson Creek and District Hospital Replacement Project (the Project) will result in a new state-of-the-art Dawson Creek and District Hospital (referred to as the New Hospital) that will be built in Treaty 8 territory, the ancestral home of the Beaver, Cree, Saulteau, Sicannie (Sikanni), and Slavey. The New Hospital will serve a diverse population that includes the communities of Dawson Creek, Pouce Coupe, Chetwynd, Tumbler Ridge, Fort St. John, Hudson's Hope, and Fort Nelson (see Figure 1 below). The New Hospital will also serve the First Nations communities of Blueberry River First Nation, Doig River First Nation, Fort Nelson First Nation, Halfway River First Nation, communities of Kelly Lake, Prophet River First Nation, Saulteau First Nations, and West Moberly First Nations; as well as Métis, Inuit, and urban Indigenous peoples within the Peace Region of Treaty 8 territory.

The New Hospital will include the design and construction of a new approximately 24,500m2 hospital with 70 inpatient acute beds (providing medical surgical, maternity, high acuity, and mental health services), two operating rooms, one minor procedure room, 15 emergency department treatment spaces, and an academic and teaching space. The New Hospital will be built on a greenfield site across the street from the current Dawson Creek and District Hospital (Existing Hospital) campus on the northwest corner of the Northern Lights College (NLC) Dawson Creek Campus.

Northern Health received Government approval in August 2020 to procure and deliver the Project using a Design-Build-Finance (DBF) model unless market interest was low. In that case, the Project would be delivered using a Progressive Design-Build (PDB) model. These options were selected based on a thorough analysis of procurement options, which demonstrated that the DBF model provided the best opportunity to meet Northern Health's objectives. The model also provided 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 the reduced procurement time commitment by proponents prior to selecting a preferred proponent.

Procurement commenced in October 2020 with the Request for Qualifications (RFQ) release. Northern Health received four responses resulting in a shortlist of three qualified teams which were invited to participate in the next stage of the procurement process, the Design Early Works Agreement Request for Proposals (DEWA RFP). Three proposals were received and evaluated. Clark-Turner Dawson Creek Joint Venture (Clark-Turner) was selected as the successful proponent. Clark-Turner contracted HDR Architecture Associates Inc. (HDR) as their design firm. Clark-Turner was invited to execute the Design Early Works Agreement (DEWA) and commence the design of the New Hospital.

Upon execution of the DEWA in September 2021, Clark-Turner proceeded to design in parallel with negotiations with Northern Health under the Design-Build Agreement Request for Proposals (DBA RFP), with the intention of entering into a Design-Build Agreement (DBA) for delivery of the Project.

Northern Health worked with Clark-Turner under the DEWA and DBA RFP from September 2021 until December 2022. Upon evaluation of Clark-Turner's technical submission at the 30% Design stage, Northern Health determined it substantially met the Project's requirements. However, when evaluating Clark-Turner's financial submission Northern Health determined it would be unable to reach an agreement that provided value for taxpayers. As a result, in January 2023, as allowed for in the DEWA and DBA RFP, Northern Health terminated both the DEWA and DBA RFP and subsequently took assignment of the design contract with HDR.

Northern Health continued to advance the design with HDR to a 60% level of completion in advance of the release of the New RFP. Northern Health issued a subsequent one stage Design-Build Request for Proposals (New RFP) in January 2023 to seek a new design-builder to deliver the Project under a DBA. The New RFP allowed, but did not mandate, that proponents could engage with HDR as their design firm as part of their proposal. Three proposals were received and evaluated as part of this New RFP

process with Graham Design Builders LP (Graham) being the successful proponent. In June 2023, the DBA was executed between Northern Health and Graham. Graham partnered with HDR as their design firm to advance the design from 60% through to completion.

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 as required by the DBA.

The total capital cost of the Project is approximately \$590 million. It will be funded by the Government and Peace River Regional Hospital District (PRRHD), with Government providing approximately \$413 million and the PRRHD providing approximately \$177 million.

Construction is scheduled to be completed in late 2026, with completion of the Project expected in 2027. Northern Health will retain ownership of the site, including all Project buildings and structures, and retain responsibility for all healthcare delivery.



Artistic rendering of the hospital exterior.

2. Project Background, Project Objectives, and Scope

2.1 Background

The Existing Hospital is located within the city of Dawson Creek, BC, in the Peace River Regional District and the Peace River South Local Health Area (LHA 531 - Peace River South). LHA 531 - Peace River South covers approximately 31,336 km² and is home to approximately 27,000 people.

Dawson Creek is approximately 410 km northeast of Prince George and 75 km south of Fort. St. John and is home to more than 12,000 people. Dawson Creek has a diverse economy relying on agriculture, oil and gas, forestry, and tourism.

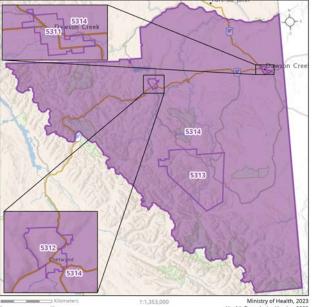
The Existing Hospital is the community referral hospital within LHA 531 - Peace River South, supporting the Chetwynd Hospital and Health Centre and the Tumbler Ridge Community Health Centre. It is also the regional referral centre for the Northeast Health Service Delivery Area (Northeast HSDA) for inpatient mental health services. As a community referral hospital serving Dawson Creek and the surrounding local health area, the Existing Hospital provides a wide range of services to a diverse population.

The Existing Hospital was constructed in 1960 with approximately 8,810 m^2 of space on three levels and a full basement. In 1996, a one-storey addition with a service basement was constructed on the northeast side of the hospital with approximately 6,796 m^2 of additional space. Today, the Existing Hospital has 15,606 m^2 of space, with the main entrance facing 13th Street to the west.

FIGURE 1: LHA 531 - PEACE RIVER SOUTH



Community Health Service Area (CHSA)
5311 Dawson Creek
5312 Chetwynd
5313 Tumbler Ridge
5314 Peace River South Rural



The Existing Hospital's age significantly limits the effective delivery of healthcare services to the residents of Dawson Creek and the surrounding area. The limitations include capacity constraints, physical and functional issues, and limited ability for coordination of certain key services necessary to provide healthcare services efficiently.

Given the challenges caused by the Existing Hospital's condition, Government approved the development of the New Hospital on a greenfield site across the street from the Existing Hospital campus on the northwest corner of the NLC Dawson Creek Campus.

Northern Health worked with NLC, the Ministry of Health, the Ministry of Post-Secondary Education and Future Skills, the Ministry of Forests, and the City of Dawson Creek to proceed with a Crown Grant land transfer for the New Hospital site. This land transfer was completed in early 2023 in anticipation of the New Hospital's construction.

2.2 Project Vision and Objectives

The vision for the Project is to create a model of excellence in healthcare that will incorporate modern best practices and standards for the hospital, and meet the future healthcare needs of the region.

The New Hospital will improve the healing environment and provide culturally safe care for residents of the Northeast. It will benefit patients, families, physicians, and staff through strengthened existing services. The Project will support the recruitment, retention, and engagement of healthcare workers and bring economic benefits to the City of Dawson Creek, the surrounding areas, and local First Nations.

During the capital planning process, Northern Health established project objectives (refer to Table 2 on the right) to guide the Project's decision-making.

TABLE 2: PROJECT OBJECTIVES

PROJECT OBJECTIVES

Create an exceptional hospital experience and support high levels of self-reported satisfaction for patients and families.

Incorporate evidence-based design features that improve the healing environment, enable culturally safe care for Indigenous peoples, and are welcoming to all communities served by the Project.

Create a safe and healthy work environment that improves staff, physician, and volunteer engagement, recruitment, and retention and minimizes workplace injuries.

Meet current best practices and standards in healthcare delivery to improve outcomes for people.

Provide a hospital that can accommodate current and future demand projections.

Improve the overall efficiency of hospital operations.



Artistic rendering of the hospital exterior.

2.3 Scope

The New Hospital will be approximately 24,500 square metres (263,000 square feet) and have 70 beds, an increase of 24 over the Existing Hospital. The New Hospital will be approximately 29% larger than originally anticipated in the Business Plan. The increase is primarily due to the engineering solution required to address the region's expansive clay soil. This resulted in the creation of a foundation which extended to the till level and a basement floor which matched the ground floor area to ensure appropriate loading capacity. The basement area allowed for the main plant rooms (mechanical and electrical) to be relocated inside the building, rather than outside as originally contemplated in the Business Plan.

The emergency department will also increase in size, with treatment spaces going from 10 to 15. The New Hospital will continue to provide a range of surgical services as well as chemotherapy, ambulatory care, radiology, clinical support and pharmacy services. There will also be space for a laboratory, diagnostic imaging as well as physical rehabilitation. New parents and families will be supported through a perinatal unit including labour, delivery, recovery and post-partum rooms and a nursery. Mental health service delivery will be brought up to modern standards with a new inpatient suite and an increase of beds from 15 to 18. The following table presents a comparison of the program components between the Existing Hospital and the New Hospital.

TABLE 3: NEW HOSPITAL PROGRAM COMPONENTS

| PROJECT OBJECTIVES | EXISTING HOSPIITAL | NEW HOSPITAL |
|---|--------------------------------------|---------------------------------------|
| Acute Care Inpatient Beds Medical / Surgical Convalescent Maternity High Acuity Unit Acute Psychiatry Total | 25 0 3 3 15 46 | 32 10 7 3 18 70 |
| Surgical Services General Operating Room Endoscopy Suite Minor Procedure Room Total | 2 1 0 3 | 2 1 1 4 |
| Emergency Department Treatment Spaces Clinical Decision Unit Total | 10 0 10 | 15 4 19 |
| Medical Imaging Ultrasound Rooms Total | 3 3 | 5 5 |
| Visiting Specialist Treatment Spaces Total | 2 2 | 5 5 |
| IV Therapy Treatment Spaces Total | 0 0 | 6 6 |
| Cancer Care Treatment Spaces Total | 6 6 | 6 6 |

Once the New Hospital enters into operations, Northern Health anticipates demolishing the Existing Hospital. Future use of the current site will likely be determined after the New Hospital is in operation.

3. Project Benefits

The Project will strengthen the role of the Dawson Creek and District Hospital in the Northeast HSDA and support the residents of the Northeast with appropriate healthcare service delivery. The New Hospital will:

- 1. Enable a more technologically capable facility;
- **2.** Address patient and staff safety concerns related to infection prevention and control;
- 3. Reduce the number of alternative level care patients by increasing acute inpatient throughput with a convalescent care inpatient unit focused on maintaining and improving activities of daily living, with a focus on rehabilitation in a home-like setting;
- 4. Improve mental health services in the LHA 531 Peace River South by improving access to inpatient care and creating a safe and respectful mental health emergency services area;

- **5.** Enhance cancer and IV therapy services through increased capacity and improved healing environments;
- 6. Improve capacity for surgical services by creating a more efficient surgical environment and ensuring procedures occur in the most appropriate location;
- 7. Provide additional treatment spaces in the emergency department, improving flow through the department, and creating a care environment that better supports patient and care provider requirements;
- **8.** Enhance the role of Dawson Creek and District Hospital as the Northeast HSDA centre for supply chain management; and
- 9. Provide improved regional pharmacy services that meet the new National Association of Pharmacy Regulatory Authorities guidelines and requirements.



Artistic rendering of the information desk & registration.

4. Project Procurement Options

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. A DBB process includes a series of consecutive tasks (e.g., detailed design, tendering, and construction). Detailed design is completed and approved by Northern Health 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 would 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 contractor would take responsibility for constructing the facility to the specifications detailed in the issued for construction drawings developed by Northern Health's design team. Northern Health would be responsible for any design errors and omissions, and would make monthly progress payments to the contractor during construction.

Upon completion of construction, the contractor would be responsible for any testing and commissioning, after which the facility would be turned over to Northern Health, who would be responsible for operations, maintenance, and life cycle.



Artistic rendering of the public waiting room.

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 statement of requirements prepared by Northern Health's compliance team. The DB procurement 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 would then be invited to participate in an RFP stage.

In a DB procurement, most design and construction risks are typically transferred to the design-builder. Liquidated damages and surety bonding are used to secure the risk transfer to the design-builder. The DB option encourages integrated design and construction from both a risk transfer and innovation perspective.

DB procurement is typically 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.

Upon completion of construction, the design-builder is responsible for any testing and commissioning, after which the facility is turned over to Northern Health, who is responsible for operations, maintenance, and life cycle.

Artistic rendering of the Non-Denominational Spiritual Room entry.

Design-Build-Finance:

The Design-Build-Finance (DBF) model is similar to DB, with the addition of private financing for a portion of the capital requirements during construction. The private finance is typically repaid to the contractor at substantial completion, with the potential for holdbacks during a performance demonstration period post-substantial completion.

The DBF option includes partial private financing to help achieve the intended risk transfer related to cost and schedule. Consequently, lenders and their advisors maintain a keen interest in the contractor's performance throughout the project. Additional benefits include lender due diligence, enhanced enforceability of the contract terms, and a lower likelihood of owner scope changes.

The DBF procurement is a two-stage process, involving an RFQ stage and an RFP stage. During the RFQ stage respondent teams submit qualifications for evaluation resulting in a shortlist of qualified teams.

Shortlisted teams are then invited to participate in the RFP stage. The Preferred Proponent will be eligible to enter into a contract with Northern Health to design and build the project, with the private partner providing partial financing.

Upon completion of construction, the design-builder is responsible for any testing and commissioning, after which the facility is turned over to the owner who is responsible for operations, maintenance and life cycle.



Artistic rendering of the Non-Denominational Spiritual Room.

4.2 Results of the Procurement Options Analysis

Based on the analysis carried out, the DBF model was determined to be the preferred procurement option. The DBF model was expected to best meet Northern Health's procurement objectives and allow Northern Health to manage and mitigate key Project risks to deliver the Project in a cost-effective and efficient manner.

However, due to construction market conditions along with market sounding of potential participants at the time of Business Plan completion in early 2020, it was decided that the Project proceed with an alternative procurement option, a Progressive Design-Build (PDB), in an effort to maximize market interest.

The PDB model can be used to achieve a Design-Build Agreement where project characteristics or market conditions preclude the use of a typical competitive DB procurement. In a busy market, potential proponents consider the opportunity cost of a typical two stage procurement process (high pursuit costs and the time commitment required). The PDB model reduces the proponents' pursuit costs and time commitment, compared to a DB, by selecting a preferred proponent more quickly. As illustrated in the figure below, the PDB model is a modified three-stage form of the traditional two-stage (RFQ/RFP) DB procurement approach.

PROGRESSIVE DB RFQ

DEWA RFP

DBA RFP

DBA RFP

ENTER INTO DBA

Shortlist up to 3 Proponents
Proponent to enter into DEWA

FIGURE 2: PDB PROCUREMENT MODEL



Artistic rendering of a typical operating room.

5. Procurement Process

The Project's procurement process timeline is outlined in Table 4 below.1

TABLE 4: PROCUREMENT TIMELINE

| PROCUREMENT STAGE | TIMING |
|--------------------------------------|-------------------------------|
| RFQ | October 2020 – January 2021 |
| RFQ Evaluation | January 2021 – March 2021 |
| RFQ Shortlist | March 2021 |
| DEWA RFP | March – September 2021 |
| Initial Preferred Proponent Selected | September 2021 |
| DBA RFP / DEWA Process | September 2021 – January 2023 |
| Termination of the DBA RFP and DEWA | January 2023 |
| New One-Stage DB RFP | January 2023 – May 2023 |
| New Preferred Proponent Selected | May 2023 |
| DBA Execution | June 2023 |

5.1 The RFQ Process

An RFQ was issued in October 2020, inviting interested parties to submit responses indicating their interest in and qualifications for the Project. Four teams responded to the RFQ. Northern Health's Capital Project Board (Project Board) appointed an evaluation committee to evaluate the four responses based on the criteria set out in the RFQ. Following the evaluation, three Proponents were shortlisted.

5.2 Design Early Works Agreement RFP Process

In March 2021, Northern Health issued the DEWA RFP inviting the shortlisted Proponents from the RFQ to prepare and submit proposals for Northern Health to select a single proponent to enter into a DEWA to develop the Project's design and participate in the DBA RFP.

Following the evaluation of the proposals, based on the criteria set out in the DEWA RFP, Northern Health selected Clark-Turner as the successful Proponent. Clark-Turner contracted with HDR as their design firm. The DEWA was executed in September 2021.

¹ The RFQ and RFP procurement documents are publicly available at www.infrastructurebc.com.

5.3 Design-Build Agreement RFP Process

Northern Health issued the DBA RFP to Clark-Turner on September 8, 2021, inviting Clark-Turner to develop the design and submit proposals to execute the DBA to complete the design and construct the New Hospital.

Northern Health, Clark-Turner, and HDR worked together to develop the design. In late 2022, Clark-Turner submitted a technical proposal and a 30% schematic design, followed by a financial proposal, for evaluation by Northern Health.

Upon evaluation of Clark-Turner's technical submission at the 30% Design stage Northern Health determined it substantially met the Project's requirements.

Financial Proposal evaluation:

One of the DBA RFP's key objectives was achieving the Project scope while providing value to the Authority. To determine if value was being provided to Northern Health and B.C. taxpayers, independent third-party cost estimates were developed by Northern Health's quantity surveyors to compare against the financial proposal. Northern Health's quantity surveyors were also given access to Clark-Turner's bid process and reviewed sub-contractor pricing to understand how Clark-Turner arrived at its price.

Upon evaluation of the financial proposal, Northern Health determined that the proposal did not provide value to taxpayers.

As allowed for in the DEWA and DBA RFP process, Northern Health terminated the DEWA and DBA RFP with Clark-Turner in early January 2023 and took assignment of the existing design contract with HDR. At this stage, the design had almost reached the 60% design development stage.

5.4 Subsequent Design-Build Agreement RFP Process

Northern Health assessed the market's interest in pursuing the New RFP and determined there would be sufficient interest to generate a price competition. On January 18, 2023, Northern Health issued the New RFP as a one-stage process to select a new design-builder to execute the DBA.

Given HDR and its team of subconsultants' familiarity with the Project and design work to date, Northern Health decided, in the New RFP, to offer HDR as a shared use party that all proponents could choose to team with. Proponents were free to decide whether to pursue a design service agreement with HDR or bring forward an alternative design firm for Northern Health's consideration.

The decision to proceed with a one-stage process was driven by both the desire to reduce proponents' pursuit costs and schedule concerns to select a new proponent in time for construction work to start in summer of 2023. To ensure only qualified design-builders participated in the RFP process, the New RFP invited interested parties to submit eligibility documents indicating relevant experience, key individuals, and bonding capacity for the Project.

Three qualified Proponents pursued the opportunity and were actively involved in the collaborative process with Northern Health from January to May 2023. In May 2023, the three Proponents submitted proposals for evaluation by Northern Health. Based on the evaluation, Northern Health selected Graham as the successful Proponent. Graham's proposal price was deemed to deliver value and was significantly lower than the earlier price which was rejected for not providing value in the previous procurement process. The successful result of the subsequent procurement process justified the Government's decision to terminate the DEWA and DBA RFP process.

5.5 Fairness and Transparency

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

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

6. Design-Build Agreement

TABLE 5: PROJECT QUICK FACTS

| QUICK FACTS | | |
|------------------------|---|--|
| Design-Builder | Graham Design Builders LP | |
| Facility Owner | Northern Health Authority | |
| Location | Dawson Creek, B.C. | |
| New Hospital Occupancy | 2027 | |
| Term of the DBA | Design and construction period (2023 – 2027) plus a two-year warranty period | |
| DBA Contract Price | \$478.56 million | |
| Final Project Budget | \$589.61 million | |

6.1 Contractual Structure of the 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.

NORTHERN HEALTH

Design-Build Agreement

DESIGN-BUILDER
Graham Design Builders LP.

Consulting Agreements
Subcontractor Agreements

Subcontractor Agreements

Various subcontractors

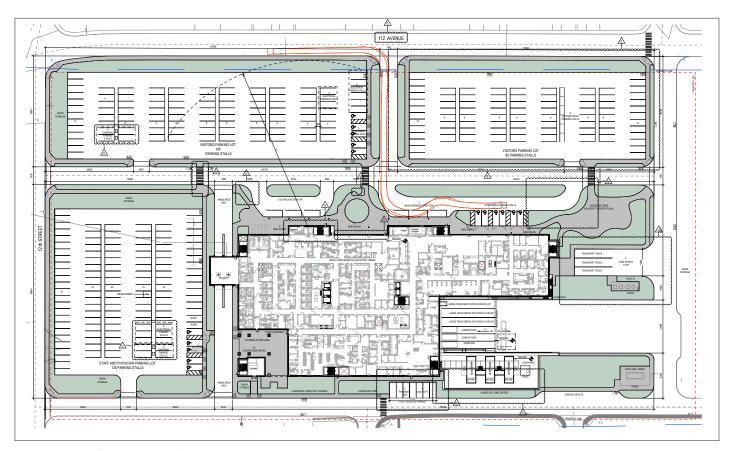
12

6.2 Key Terms of the Design-Build Agreement

The design-builder, Graham, has an obligation to design and construct the Project in accordance with the requirements set out in the DBA.

Key features of the DBA include:

- progress payments from Northern Health, subject to performance holdbacks;
- allocation of risks to the party best able to manage them. Risks allocated to the design-builder include the design beyond the 60% stage, construction, schedule and cost; and
- a requirement for the design-builder to provide a two-year extended warranty for the Project.



Site Plan (subject to change)

6.3 Risk Allocation Summary

Key Project risks and their allocation under the DBA are summarized below. The typical risk allocation in a DBA had to be modified, to a certain extent, to reflect that the Authority had an existing 60% design that it wanted the New RFP proponents to adopt as part of their solution going forward.

TABLE 6: RISK ALLOCATION UNDER DBA

| RISK | RETAINED BY NORTHERN HEALTH | TRANSFERRED TO DESIGN-BUILDER |
|--|--|--|
| Design including errors or omissions | ✓- 60% Design Key Elements as defined in the DBA: | Balance of the design work after 60% needs to meet the |
| | (a) master site plan in respect of the location of the New Hospital and site circulation; (b) building area and department layouts as indicated in floor plans; (c) floor to floor heights as indicated in exterior and floor elevations; and (d) concrete structure and building foundation design and scope of work | DBA requirements |
| Geotechnical | ✓- This differs from the traditional approach in the DBA. This risk was retained by Northern Health given the level of work completed by Northern Health in support of the Stage 1 Building Permit application with the City of Dawson Creek | |
| Construction including cost and schedule | | V |
| Escalation during construction | | ✓ |
| Undisclosed environmental contamination or hazardous materials | ✓ | |
| Potential remnants from the old Royal Canadian Air Force base | V | |
| Equipment | ✓ | V |
| Authority driven scope changes | ✓ | |
| Operations, Maintenance and Life Cycle | ✓ | |
| Energy Consumption | ✔- Post Substantial Completion | ✓- Pre-Substantial Completion Energy Guarantee |

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 exists 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

An integrated project management team within Northern Health will be 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 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.

7.2.1 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): The legal agreement between the design-builder and Northern Health to design and construct the Project.

Design-Build Agreement Request for Proposals (**DBA RFP**): The document issued by Northern Health during the competitive selection process to the proponent selected under the DEWA RFP to submit a proposal(s) to deliver the Project.

Design Early Works Agreement (DEWA):

The legal agreement between the design-builder selected under the DEWA RFP and Northern Health to undertake the design.

Design Early Works Agreement Request for Proposals (DEWA RFP): The document issued by Northern Health during the competitive selection process to shortlisted proponents to ultimately select a preferred proponent to enter into the DEWA and participate in the DBA RFP

One Stage Design-Build Request for Proposals (New RFP): The document issued by Northern Health during the subsequent competitive selection process for qualified proponents to submit a proposal to Northern Health to deliver the Project.

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

Request for Qualifications (RFQ): The document issued by Northern Health as the first stage of the competitive selection process inviting interested parties to submit their qualifications to deliver the Project.



Artistic rendering of a typical isolation room.





