DISTRICT OF METCHOSIN
AGENDA

FIRE HALL STEERING COMMITTEE MEETING

Wednesday, September 10, 2025, at 7:00 p.m.
Council Chambers

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1. Agenda, Additions, Approval

2. Presentation

3. Public Participation

4. Adoption of Minutes
a) Fire Hall Steering Committee Meeting, August 13, 2025 1

5. Business Arising from the Minutes

6. Receipt of Minutes

7. Reports
a) Chair's Report
b) CAO Update
- Fire Hall Cost Comparison Staff Report 3
- Class D Estimate Preferred Option1. a 9
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8. Other Business

9. Adjournment and next meeting

District of Metchosin

Minutes
Firehall Steering Committee Meeting
Wednesday, August 13, 2025 at 7:00 P.M.
Council Chamber
Metchosin Municipal Hall

Present: (Chair) Mike Hornick, Brent Donaldson, Johnny Carline, Steve Malkow, Bruce McCall, Shane Cyr, Councillor Sharie Epp, Councillor Shelly Donaldson.

Staff: Bob Payette, Chief Administrative Officer, and Tina Hansen, Deputy Corporate Officer.

Regrets: Scott Henning, Stephanie Dunlop, Fire Chief

The meeting was called to order at 7:00 p.m.

1. Agenda, Additions and Approval

Moved and Seconded by Bruce McCall and Steve Malkow
THAT the Agenda of August 13, 2025, Firehall Steering Committee be adopted as circulated.
Carried

2. Public Participation

There was no participation from members of the public.

3. Adoption of Minutes

Moved and Seconded by Bruce McCall and Steve Malkow
THAT the minutes of the July 09, 2025, Firehall Steering Committee meeting be adopted.
Carried

4. Business Arising from the Minutes

a) As Built Drawings, J.E. Anderson & Assoc., Municipal Grounds and Sewage Disposal System documents obtained from Island Health

The Chair provided an overview of the sewage disposal system as-built drawings for the existing buildings on the Municipal Grounds.

Committee Discussion:

- Existing buildings on site
- Previous updates to the sewage disposal system
- Current and future capacity of the existing septic tank and field
- Adding onto existing field versus rebuilding the system in terms of building a new firehall
- The existing right of way on the property was noted

b) Herold Engineering Seismic Upgrade Costing Review, Existing Apparatus Bay Structure

The Chair provided an overview of the Herold Engineering Seismic Upgrade Costing Review for the existing firehall apparatus bay noting that the estimated costs provided were strictly related to structural upgrades for seismic and did not include work for mechanical, electrical, or architectural.

Committee Discussion:

- Analysis of existing apparatus bay roofing assembly
- Skyline Engineering Report:
  - reference to 2024 BC Building Code requirements related to seismic
  - reference to engaging a general contractor or quantity surveyor to provide order-of-magnitude costs related to the existing apparatus bay
- Additional work not included within the scope of the Herold Engineering Report; mechanical, electrical, architectural
- Estimated engineering costs for renovating existing apparatus bay are specific to seismic requirements only (walls, floors, foundation)
- Class D costing estimates and contingencies
- Alternate options presented in the Johnston, Davidson Architecture (JDa) Report
- Potential for flexibility in options in relations to a successful grant application
- Full costing analysis will be presented to Council
- Building on new proposed site versus building on existing site
- Loss of greenspace with Option 1a
- Current condition of existing administrative building and apparatus bay
- Options are to either rehabilitate existing buildings or build new

5. Reports

a) Chair's Report

The Chair had nothing new to report at this time.

b) CAO Report

The CAO reported that the Class D Estimates for the proposed firehall would be coming forward for Council consideration at an upcoming Special Council meeting. The CAO also noted that the new webpage for the proposed firehall project was under construction and will include updated information as the project moves forward.

6. Adjournment and Next Meeting Date

The meeting adjourned at 8:00 p.m.

The next meeting will be held on September 10, 2025, at 7:00 p.m.

REPORT TO COUNCIL

To: Mayor and Council

From: Geoffrey Kreek, Chief Financial Officer

Date: August 20, 2025

Re: Fire Hall Cost Comparison

Recommendation

1. That Council supports a District of Metchosin application to the UBCM Strategic Priorities Fund 2025 for up to $ 7 million in grant funding for the preferred option: Program Layout Option 1a in the Johnston Davidson Architecture (JDa) Metchosin Firehall Building Assessment Report dated May 28, 2025 to "*construct a new firehall on proposed new site."*

   And that the District of Metchosin will provide overall grant management and support to a successful grant application;

   And further that the District has received a Class D Construction Cost Estimate for the preferred option Program Layout Option 1a and will support any cost overruns to the project.

Executive Summary

This report has been prepared to consider the difference between two costed options for a new or refurbished fire hall.

Based on the estimates provided, Option 1A is $776K cheaper than Option 3.2, while also leaving the old building intact for future use by the District. The new build would also avoid any issues that might become apparent during the retrofitting of an older building along with providing more room in the apparatus bay to meet WorkSafeBC standards.

Background

The District of Metchosin has been studying the need to replace the Fire Hall and apparatus bay. Based on the feasibility study, engineer reports, and costing estimates, this report has been written to compare the costs of building a new hall and apparatus bay versus a new hall and renovate the apparatus bay.

Discussion

The Firehall steering committee and Council have seen the options presented by the engineer and architecture firms. The firm's preferred option is to build new, on land next to the current fire hall.

This option allows for use of the current hall while the new hall is being constructed and saves money by avoiding the construction of temporary facilities and demolition of the old fire hall allowing for future District use.

Options Considered

Two primary options were assessed based on estimates from engineers and architects:

1. Option 1A – Build new on land next to the current fire hall. Allows continued operation in the existing facility during construction and retains the current building for future non-post-disaster uses.

2. Option 3.2 – Demolish the current fire hall and rebuild on the same footprint, including seismic upgrades to the apparatus bay. Requires temporary facilities for vehicles, gear and decontamination.

If Council wants to consider other options, they will need to ask staff to seek out additional estimates or for staff to estimate based on the figures provided to come up with another option.

Financial Implications

Based on the costing estimates provided by JDa and associates, the table below was developed to compare the options:

Construction	Option 1A	Option 3.2
Fire Hall	$16,429,500	$17,026,620
Contingency	$4,928,850	$5,107,986
Total	**$21,358,350**	**$22,134,606**

Breakdown of Differences

Option 1A does not require demolition of the old site, which the District can keep for future uses that don't require post-disaster standards. A temporary facility is also not required as the Fire Department would continue to operate in the old building until the new building is complete.

Option 3.2 results in demolition of the old administration building, staff would work in the EOC building next door during construction, but this option will require a temporary facility for vehicles, gear, and decontamination resulting in additional costs.

Option 3.2 ends up costing $776,256 more than option 1A.

Both options end up with a new fire hall that will serve the community for the next 50 years and will reduce the District's annual greenhouse gas emissions which aligns with the OCP.

Operating Costs

This report will define operating costs as including the following:

1. Insurance
2. Utilities
3. Maintenance
4. Janitorial
5. Waste Disposal
6. Pest Control
7. General Supplies
8. Amortization

Current Operating Costs

During the past 5 years, current operating costs have ranged from $46,000 to $63,000.

Repairs, Utilities, and Janitorial have ranged from $35,000-$43,000, higher in years with roof and door repairs.

Insurance has increased from $6,200 to $8,200

Amortization has decreased from $12,000 to $5,000 as parts of the apparatus bay have run out of book value, the only portion of a building currently being amortized is the structure of the apparatus bay.

Future Operating Costs

The largest increase would relate to amortization as the District would have a new building. The structure of the building has historically been given a 50-year life span, with services and roof being given a 25-year life span.

Building Portion	Total Cost	Annual Amortization
Structure	$13,000,000	$260,000
Roof	$2,600,000	$104,000
Services	$5,758,350	$230,334
Total	**$21,358,350**	**$594,334**

As a comparison, the total budget for the Fire Department and Emergency Operations Centre in 2025 is $933,726 so the budget would increase by 61% to account for the increased amortization.

While amortization is not a cash expense, the District has historically treated amortization of its asset as a reserve contribution to pay for the eventual replacement. This is recommended to continue as cost of replacement, as shown during the Fire Hall feasibility study, increases each year.

Utilities along with Repairs and Maintenance should see a decrease as the building will have better efficiency along with generating some of its own power with solar panels. R&M should be minor for the first year, most items would be covered by warranty in the first year or two, then costs would start climbing from an estimated $0.50/sq ft ($8,000) to $3.50/sq ft by year 41 or $56,000/yr.

Janitorial would also see an increase due to the larger sized building, current annual janitorial is $9,900, estimated increase is $12,000.

Insurance would also increase due to the increased value, we received a rough estimate from our current insurance broker indicating it would cost $74,750/yr if the building was valued at $21,358,350, which works out to $3,500 per $1M, which is line with our current costs.

General supplies and waste disposal should see only nominal increases, while pest control would be an increase as there is currently no monthly expense, but it should be comparable to the school which is a $1,600/yr.

Overall operating costs are estimated to increase by $690,688, mostly due to the amortization of the new buildings. This would result in a tax increase of roughly $332 for the average residential property unless other revenue sources are found or expenses are lowered in other areas.

Conclusion

Based on the financial and operational analysis, Option 1A is the most cost-effective and operationally advantageous choice. It allows for uninterrupted fire service operations during construction, retains the current building for future community use, and reduces capital costs compared to Option 2.

Options for consideration:

1. ***Recommended Option***:
   That Council supports a District of Metchosin application to the UBCM Strategic Priorities Fund 2025 for up to $ 7 million in grant funding for the preferred option: Program Layout Option 1a in the Johnston Davidson Architecture (JDa) Metchosin Firehall Building Assessment Report dated May 28, 2025 to "*construct a new firehall on proposed new site."*

   And that the District of Metchosin will provide overall grant management and support to a successful grant application;

And further that the District has received a Class D Construction Cost Estimate for the preferred option Program Layout Option 1a and will support any cost overruns to the project.

2. **That Council** supports a District of Metchosin application to the UBCM Strategic Priorities Fund 2025 for up to $ 7 million in grant funding for Program Layout Option 3.2 for "*new construction of a firehall administration building and renovation/upgrade to the existing Apparatus Bay"*;

   And that the District of Metchosin will provide overall grant management and support to a successful grant application;

   And Further that the District has received a Class D Construction Cost Estimate for option 3.2 and will support any cost overruns to the project.

3. **That** the District of Metchosin not proceed with an application to the UBCM Strategic Priorities Fund 2025.

Respectfully,

_____
Geoffrey Kreek, CPA
Chief Financial Officer

Attachments:
1. Class D Estimate Metchosin Firehall New Construction, Preferred Option Program Layout Option 1a

2. Class D Estimate Metchosin Firehall New Admin/Quarters and Renovation/Upgrades to existing Apparatus Bay Program Layout Option 3.2

3. Herold Engineering, Metchosin Firehall Costing Review (existing Apparatus Bay)

CLASS D ESTIMATE

METCHOSIN FIRE HALL
NEW CONSTRUCTION
METCHOSIN, BRITISH COLUMBIA

Prepared for:
Johnson Davidson Architecture

July 24, 2025

Hanscomb
QUANTITY SURVEYORS

July 24, 2025 Ref # VAN3699

Johnson Davidson Architecture
Suite 301 - 877 East Hastings Street
Vancouver, British Columbia V6A 3Y1
T: (604) 684-3338
E: ed@jdarch.ca

Attn: Edward Craig

Re: Metchosin Fire Hall, New Construction, Metchosin, British Columbia

Dear Edward Craig:

Please find attached our Class D Estimate for the Metchosin Fire Hall, New Construction in Metchosin, British Columbia.

This Class D Estimate is intended to provide a realistic allocation of direct construction costs and is a determination of fair market value. Pricing shown reflects probable construction costs obtainable in the Metchosin, British Columbia area on the effective date of this report and is not a prediction of low bid. Pricing assumes competitive bidding for every portion of the work.

Hanscomb has prepared this estimate(s) in accordance with generally accepted principles and practices. Our general assumptions are included in Section 3 of this report and any exclusions are identified in Section 1.6. For quality assurance, this estimate has been reviewed by the designated Team Lead, as signed below. Hanscomb staff are available and pleased to discuss the contents of this report with any interested party.

Requests for modifications of any apparent errors or omissions to this document must be made to Hanscomb within ten (10) days of receipt of this estimate. Otherwise, it will be understood that the contents have been concurred with and accepted.

We trust our estimate is complete and comprehensive and provides the necessary information to allow for informed capital decisions for moving this project forward. Please do not hesitate to contact us if you have any questions or require additional information.

Yours truly,

Hanscomb Limited
Team Lead

Albert Allan O. Antolin
BSc.CE, PQS
Technical Manager

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EXECUTIVE SUMMARY

This Class D Estimate is intended to provide a realistic allocation of direct construction costs for the Metchosin Fire Hall, New Construction, located in Metchosin, British Columbia. Hanscomb recommends that the Owner and design team carefully review this document, including line-item descriptions, unit prices, exclusions, inclusions, assumptions, contingencies, escalation, and mark-ups. If the project is over budget or has unresolved budgeting issues, alternatives should be evaluated before proceeding to the next design phase.

The following are the highlights of this Class D Estimate:

Project Cost Highlights:

Gross Floor Area (GFA)	1,618 m2
Unit (count, linear measure, etc.)	N/A
Total Construction Cost	**$16,429,500**
Cost per GFA	$10,154.20/m2

Allowances included in the estimate:

- **15.0%** design & pricing contingency
- **10.0%** escalation from July 2025 to the approaching construction start in 2027
- **5.0%** construction contingency (excluded in the above construction cost and provided separately as an Owner's contingency on the summary page)

The Degree of Accuracy expected for this Class D Estimate is **+/-20-30%**. In other words, bid results might vary by this amount if the construction budget were set at this milestone estimate. In today's market, projects are trending to the higher end of the plus range.

Base Assumptions:

All costs are estimated on the basis of **competitive bids** (a minimum of at least 3 general contractor bids and at least 3 subcontractor bids for each trade) being received in Metchosin, British Columbia in **July 2025** based on a **stipulated sum** form of contract. If these conditions are not met, bids received could be expected to exceed this estimate.

Exclusions

- Geotechnical consideration (soil improvement, piling, dewatering, rock excavation, etc)
- Back-up Generator equipment
- PV solar panel system requirements
- Equipment beyond that identified in this estimate
- Decanting / Relocation of temporary relocation of occupants, operations, or equipment from an existing facility to an alternate location.
- Overtime premiums for work done outside normal working hours
- Escalation contingency beyond that identified in this estimate
- Financing costs
- Loose furniture, furnishings and equipment
- Third party commissioning costs
- Winter Construction (Concrete foundation and masonry heating & hoarding)
- Value-added tax (e.g. Goods and Services Tax, or other)
- Soft Costs (e.g. professional fees, building permit, development charges, owner's staff and management, relocation costs, etc.)
- Unexpected labour unavailability and productivity disruptions leading to delays and added costs
- Supply chain disruptions leading to delays and added costs
- Any premiums resulting from Canadian or Foreign government-imposed tariffs

Note:

The construction cost included in the executive summary excludes the cost of the temporary facility and demolition of the existing buildings.

The details of this estimate are provided in the subsequent pages of this report for your review, comment and acceptance.

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Appendices

1. INTRODUCTION

1.1 PURPOSE

This Class D Estimate is intended to provide a realistic allocation of direct construction costs for the Metchosin Fire Hall, New Construction, located in Metchosin, British Columbia, with the exception of the items listed in 1.6 Exclusions.

1.2 DESCRIPTION

The Metchosin Fire Hall, New Construction located in Metchosin, British Columbia is comprised of the following key elements:

This project involves the new construction of a two-storey Fire Hall with a total gross floor area of 1,618 m². The facility will be built using conventional wood framing on a slab-on-grade foundation supported by standard pad and strip footings. The primary structural system will feature glulam (glued-laminated timber) columns and beams, supporting a metal deck roof structure.

The building envelopes, interior finishes, and mechanical and electrical systems will align with standard fire hall design and performance specifications, ensuring functionality, durability, and compliance with applicable codes.

Sitework includes site clearing, cutting and removal of existing trees, rough grading, hardscaping/ landscaping and site furnishings including associated mechanical and electrical site services.

The required estimate for new construction also includes separate pricing as follows:
- *Temporary Fire Hall facility*
- *Demolition of existing Fire Hall office building/quarter and Apparatus Bay.*

1.3 METHODOLOGY

Hanscomb has prepared this estimate(s) in accordance with generally accepted principles and practices. Hanscomb staff are available to discuss its contents with any interested party.

From the documentation and information provided, quantities of all major elements were assessed or measured where possible and priced at rates considered competitive for a project of this type under a stipulated sum form of contract in Metchosin, British Columbia.

Pricing shown reflects probable construction costs obtainable in the Metchosin, British Columbia area on the effective date of this report. This estimate is a determination of fair market value for the construction of this project. It is not a prediction of low bid. Pricing assumes competitive bidding for every portion of the work.

1.4 SPECIFICATIONS

For building components and systems where specifications and design details are not available, quality standards have been established based on discussions with the design team.

1. INTRODUCTION

1.5 ESTIMATE CLASSIFICATION AND COST PREDICTABILITY

Estimates are defined and classified based on the stage of a project's development and the level of information available at the time of the milestone estimate.

> *This Class D Estimate is considered to have an expected degree of accuracy of* ***+/-20-30%****. In other words, bid results might vary by this amount if the construction budget were set at this milestone estimate. Under stable market conditions, fierce competition and scope reduction might result in costs coming in under the milestone estimate. However, in today's market, projects are trending to the higher end of the plus range.*

At the initial stages of a contemplated project, the cost accuracy of the estimate is low as there may be little or no information available to inform a first high-level concept estimate or order of magnitude estimate. As a project nears design completion and is ready to be released to market for tender, the level of accuracy of the estimate is high as the detail is generally extensive and typically represents the information on which contractors will bid.

Milestone cost estimates or "checks" are recommended as the project design develops to keep track of scope and budget. Early detection of potential budget overruns will allow for remedial action before design and scope are locked in. The number of milestone estimates will depend on a project's size and schedule and cost predictability will improve as the design advances.

According to the Canadian Joint Federal Government/Industry Cost Predictability Taskforce, industry standards for estimate classification and cost estimate accuracy may be summarized as follows:

COST ESTIMATE CLASSIFICATIONS							
GOC	OME	D	C	← B	→ A		
DND		Indicative			Substantive		
	ROME	D	C	← B	→ A		
AACE	5		4	3	2	1	
RAIC			Sketch Design	Design Development	Contract Documents	Tender Documents	
Design Documentation % Complete			12.5%	25%		95.0%	100%
Cost Estimate Accuracy (+/-%)	+/-30%		+/-20% <30%	+/-15% <20%		+/-10% <15%	+/-5% <10%

Legend

GOC	Government of Canada
DND	Department of National Defence
AACE	Association for the Advancement of Cost Engineering
RAIC	Royal Architectural Institute of Canada
OME	Order of Magnitude Estimate
ROME	Rough Order of Magnitude Estimate

While the classification categories differ from one authority to the next, the overarching principle for cost predictability remains the same – as the level of detail and design development increases, so does the level of accuracy of the estimate.

1. INTRODUCTION

1.6 EXCLUSIONS

This Class D Estimate does not provide for the following, if required:

- Geotechnical consideration (soil improvement, piling, dewatering, rock excavation, etc)
- Back-up Generator equipment
- PV solar panel system requirements
- Equipment beyond that identified in this estimate
- Decanting / Relocation of temporary relocation of occupants, operations, or equipment from an existing facility to an alternate location.
- Overtime premiums for work done outside normal working hours
- Escalation contingency beyond that identified in this estimate
- Financing costs
- Loose furniture, furnishings and equipment
- Third party commissioning costs
- Winter Construction (Concrete foundation and masonry heating & hoarding)
- Value-added tax (e.g. Goods and Services Tax, or other)
- Soft Costs
  - Building permit
  - Development charges
  - Easement costs
  - Fund raising costs
  - Land acquisition costs and impost charges
  - Legal fees and expenses
  - Owner's staff and associated management
  - Preventative maintenance contracts
  - Professional fees and expenses
  - Relocation of existing facilities, including furniture and equipment
  - Right of way charges
  - Value-added tax (e.g. Harmonized Sales Tax, Goods and Services Tax, or other)
- Unexpected labour unavailability and productivity disruptions leading to delays and added costs
- Supply chain disruptions leading to delays and added costs
- Any premiums resulting from Canadian or Foreign government-imposed tariffs

2. DOCUMENTATION

This Class D Estimate has been prepared from the documentation included in Appendix AA of this report.

All of the above documentation was received from Johnston Davidson Architecture and was supplemented with information gathered in meeting(s) and telephone conversations with the design team, as applicable.

Design changes and/or additions made subsequent to this issuance of the documentation noted above have not been incorporated in this report.

3. COST CONSIDERATIONS

3.1 COST BASE

All costs are estimated on the basis of competitive bids (a minimum of at least 3 general contractor bids and at least 3 subcontractor bids for each trade) being received in July 2025 from general contractors and all major subcontractors and suppliers based on a stipulated sum form of contract. If these conditions are not met, bids received could be expected to exceed this estimate.

3.2 UNIT RATES

The unit rates in the preparation of this Class D Estimate include labour and material, equipment, subcontractor's overheads and profit. Union contractors are assumed to perform the work with the fair wage policy in effect.

3.3 GENERAL REQUIREMENTS AND FEE

General Requirements and Fee cover the General Contractor's indirect costs, which may include but not be limited to supervision, site set up, temporary utilities, equipment, utilities, clean up, etc., as covered in Division 1 General Conditions of the Contract Documents. It also includes the contractor's fees and should not be confused with Design or Consultant fees, which are excluded from the Construction Costs and carried separately in the Owner's Total Project Costs.

3.4 DESIGN AND PRICING ALLOWANCE

An allowance of 15.0% has been included to cover design and pricing unknowns. This allowance is not intended to cover any program space modifications but rather to provide some flexibility for the designers and cost planners during the remaining contract document stages.

It is expected that this allowance amount will be absorbed into the base construction costs as the design advances. The amount with which this allowance is reduced corresponds to an increase in accuracy and detailed design information. Hanscomb recommends that careful consideration be made at each milestone estimate to maintain adequate contingency for this allowance.

As a project nears completion of design, Hanscomb recommends retaining some contingency for this allowance for the final coordination of documents.

3.5 ESCALATION ALLOWANCE

All costs are based on July 2025 dollars with 10.0% construction cost escalation included to cover increases that may occur between July 2025 and the approaching construction start for the project in 2027.

The budgeted amount will typically decline as the time to award nears. If escalation is taken to the start of construction, escalation during construction is included in the unit rates. If escalation is taken to the midpoint of construction, it is because the market is volatile or the project is considerably large with a construction duration of more than 2-3 years, making it difficult to secure firm pricing at tender.

Forecasting escalation requires careful assessment of a continually changing construction market, which, at best, is difficult to predict. The escalation rate should be monitored.

3. COST CONSIDERATIONS

3.6 CONSTRUCTION ALLOWANCE

An allowance of 5.0% has been made to cover construction (post contract) unknowns. This allowance, also known as the Post Contract Contingency (PCC), is intended to cover costs for change orders during construction that are not foreseeable. It is not intended to cover scope changes to the contract. The amount carried in the budget for this allowance is typically set at the initial planning stage and should be based on the complexity of the project and the probability of unknowns and retained risks.

3.7 CASH ALLOWANCE

Cash allowances are intended to allow the contractor to include in the bid price the cost for work that is difficult to fully scope at the time of tendering based on factors that are beyond the Owner and Prime Consultant's control. Cash allowances attempt to reduce the risks by dedicating a set amount for use against a certain cost that cannot yet be detailed. The Contractor is obligated to work as best as possible within the limitations of the Cash Allowance.

Examples of Cash Allowances include hardware, inspection and testing, site conditions, replacement of existing elements during demolition for renovation, hazardous materials abatement, signage, etc.

Any Cash Allowances, if applicable, are included either in the details of this estimate under the appropriate discipline or at the summary level.

3.8 TAXES

No provision has been made for the Goods and Services Tax. It is recommended that the owner make separate provision for GST in the project budget.

3.9 SCHEDULE

Pricing assumes a standard work schedule appropriate to the size and scope of this project. Premiums for off-hour work, working in an operational facility, accelerated schedule, etc., if applicable, are identified separately in the body of the estimate.

3.10 CARBON QUANTIFICATION AND PRICING

The significance and understanding of carbon costs in construction is growing. These costs arise from two main sources: the 'embodied' carbon present in the materials and emitted during the construction activities, and the 'operational' carbon emissions resulting from the asset's use over time. The unit rates in this estimate are inclusive of carbon taxes during construction where applicable. Evaluation of embodied carbon, operational carbon, and its costs is an additional service that can be provided on request.

3.11 STATEMENT OF PROBABLE COSTS

Hanscomb has no control over the cost of labour and materials, the contractor's method of determining prices, or competitive bidding and market conditions. This opinion of probable cost of construction is made on the basis of experience, qualifications and best judgment of the professional consultant familiar with the construction industry. Hanscomb cannot and does not guarantee that proposals, bids or actual construction costs will not vary from this or subsequent cost estimates.

3. COST CONSIDERATIONS

3.12 ONGOING COST CONTROL

Hanscomb recommends that the Owner and design team carefully review this document, including line item description, unit prices, clarifications, exclusions, inclusions and assumptions, contingencies, escalation, and mark-ups. If the project is over budget, or if there are unresolved budgeting issues, alternative systems/schemes should be evaluated before proceeding into the next design phase.

It is recommended that a final updated estimate at the end of the design stage be produced by Hanscomb using Bid Documents to determine overall cost changes which may have occurred since the preparation of this estimate. The final updated estimate will address changes and additions to the documents, as well as addenda issued during the bidding process. Hanscomb cannot reconcile bid results to any estimate not produced from bid documents, including all addenda.

This estimate does not constitute an offer to undertake the work, nor is any guarantee given that an offer to undertake the work at the estimate(s) price will subsequently be submitted by a construction contractor. Unless explicitly stated otherwise, it is assumed that competitive bids will be sought when tender documents have been completed. Any significant deviation between bids received and a pre-tender estimate prepared by Hanscomb from the same tender documents should be evaluated to establish the possible cause(s).

3.13 CURRENT RISKS TO CONSTRUCTION ESCALATION:

The construction market is relatively heated across the country. Because of the significant volume of activity, Hanscomb has observed that the normal number of general contractors and sub-trades bidding on projects has been reduced. Less competition during tendering often results in elevated project pricing. We expect this trend to continue for the following reasons:

- The volume of work exceeds the capacity of available resources
- An aging workforce contributes to pressure through the ever-increasing retirement of trade workers
- All members within the construction community are actively looking for new personnel and are having trouble finding qualified candidates
- Contractors are generally competing for the same tradespeople, offering higher than normal salaries and benefits, translating into higher costs
- Global conflicts affecting the global commodity pricing and supply chain

The above risks may be amplified under the following conditions:

- Any premiums resulting from Canadian or Foreign government-imposed tariffs.
- Global events, including pandemics such as COVID-19, adverse weather events, etc.
- Remote or less densely populated areas where materials and labour cannot be sourced locally and transportation, accommodation and incentives impact schedule and cost

Where any of the above may be a factor, Hanscomb highly recommends conducting appropriate risk analyses, including market sounding. Hanscomb can assist; however, this level of risk assessment is outside the scope of this estimate.

4. GROSS FLOOR AND SITE DEVELOPED AREAS

The following areas have been measured in accordance with the Canadian Institute of Quantity Surveyors' Measurement of Buildings by Area and Volume.

4.1 GROSS FLOOR AREA (GFA)

Description	GFA
New Construction	
Admin / Quarters / Spine	1,049 m2
Apparatus Bay	533 m2
Hose Tower	36 m2
Total GFA	**1,618 m2**
Temporary Facility	
Office / Quarters	134 m2
Apparatus Bay	540 m2
Decon Washroom / Storage	150 m2
Total GFA	**824 m2**
Building Demolition	
Office / Quarters	530 m2
Apparatus Bay	372 m2
Total GFA	**902 m2**

4.2 SITE DEVELOPED AREA

Description	SDA
Project Site Area (+/-)	3,850 m2
Building footprint	-1,183 m2
Total Site Developed Area	**2,667 m2**

Site Developed Area is the area of the site, less the foot-print area of the building.

5. CONSTRUCTION COST ESTIMATE SUMMARY

Description	Building (Admin/Quarters + Apparatus) GFA	Building (Admin/Quarters + Apparatus) 1,618 m2	Site Work 2,667 m2	Total 1,618 m2
Main Building		$8,660,800	$798,000	$9,458,800
Hose Tower		$649,700		$649,700
Site Work				
A - Net Construction Cost		**$9,310,500**	**$798,000**	**$10,108,500**
	$/m2	*$5,754.33*	*$299.21*	*$6,247.53*
General Requirements	8.0%	$744,800	$63,800	$808,600
Contractor's Overhead & Fee	3.0%	$301,700	$25,900	$327,600
B - Construction Cost (including G/R & Fees)		**$10,357,000**	**$887,700**	**$11,244,700**
	$/m2	*$6,401.11*	*$332.85*	*$6,949.75*
Location Factor	10.0%	$1,035,700	$88,800	$1,124,500
Design & Pricing Allowance	15.0%	$1,708,900	$146,500	$1,855,400
Escalation Allowance	10.0%	$1,310,200	$112,300	$1,422,500
Construction Allowance	5.0%	$720,600	$61,800	$782,400
C - Total Contingency		**$4,775,400**	**$409,400**	**$5,184,800**
	$/m2	*$2,951.42*	*$153.51*	*$3,204.45*
Tax (GST)	Excluded	$0	$0	$0
Total Construction Cost (B + C)		**$15,132,400**	**$1,297,100**	**$16,429,500**
	$/m2	*$9,352.53*	*$486.35*	*$10,154.20*

Separate Price:

Below construction cost is excluded from the above total construction cost (refer to page 12 for the cost summary):

1. Temporary Facility $4,021,900.00
2. Demilition of existing buildings $626,400.00

Note:

1. The mark-up for General Requirements is calculated by multiplying the net construction cost by the applicable percentage (8%). While, the Contractor's Overhead and Fee is calculated by applying the fee percentage (3%) to the compounded amount (example for New Admin/Quarters: compounded $9,310,500 + $744,800 = $10,055,300 x 3% = $301,659, rounded to $301,700)

2. The mark-up for Contingency is also calculated based on compounded total amount multiply by the applicable percent.
   - Location Factor: 10% of the Construction cost (including G/R & Fee)
   - Design & Pricing Allowance: 15% of the compounded total amount (Construction Cost + Location Factor)
   - Escalation Allowance: 10% of the compunded total amount (Construction Cost + Location Factor + Design & Pricing)
   - Construction allowance: 5% of the compounded total amount (Construction Cost + Location Factor + Design & Pricing + Escalation)

5. CONSTRUCTION COST ESTIMATE SUMMARY

Description	GFA	Temporary Facility 824 m2	Building Demolition 902 m2
Temporary Building (Tent/Trailers)		$2,410,300	$338,300
Site Work		$300,000	$83,800
A - Net Construction Cost		**$2,710,300**	**$422,100**
	$/m2	*$3,289.20*	*$467.96*
General Requirements	8.0%	$216,800	$33,800
Contractor's Overhead & Fee	3.0%	$87,800	$13,700
B - Construction Cost (including G/R & Fees)		**$3,014,900**	**$469,600**
	$/m2	*$3,658.86*	*$520.62*
Location Factor	5.0%	$150,700	$23,500
Design & Pricing Allowance	10.0%	$316,600	$49,300
Escalation Allowance	10.0%	$348,200	$54,200
Construction Allowance	5.0%	$191,500	$29,800
C - Total Contingency		**$1,007,000**	**$156,800**
	$/m2	*$1,222.09*	*$173.84*
Tax (GST)	Excluded	$0	$0
Total Construction Cost (B + C)		**$4,021,900**	**$626,400**
	$/m2	*$4,880.95*	*$694.46*

Note:

1. The mark-up for General Requirements is calculated by multiplying the net construction cost by the applicable percentage (8%). While, the Contractor's Overhead and Fee is calculated by applying the fee percentage (3%) to the compounded total amount (example for Temp. Facility: compounded $2,710,300 + $216,800 = $2,927,100 x 3% = $87,813, rounded to $87,800)

2. The mark-up for Contingency is also calculated based on compounded total amount multiply by the applicable percent.
   - Location Factor: 5% of the Construction cost (including G/R & Fee)
   - Design & Pricing Allowance: 10% of the compounded total amount (Construction Cost + Location Factor)
   - Escalation Allowance: 10% of the compunded total amount (Construction Cost + Location Factor + Design & Pricing)
   - Construction allowance: 5% of the compounded total amount (Construction Cost + Location Factor + Design & Pricing + Escalation)

CLASS D ESTIMATE
Program layout option 3.2:
New Admin/Quarters and Renovation/Upgrade to existing Apparatus Bay

METCHOSIN FIRE HALL
NEW CONSTRUCTION / RENOVATION
METCHOSIN, BRITISH COLUMBIA

Prepared for:
Johnson Davidson Architecture

August 08, 2025

Hanscomb
QUANTITY SURVEYORS

August 08, 2025 Ref # VAN3699

Hanscomb
QUANTITY SURVEYORS

Johnson Davidson Architecture
Suite 301 - 877 East Hastings Street
Vancouver, British Columbia V6A 3Y1
T: (604) 684-3338
E: ed@jdarch.ca

Attn: Edward Craig

Re: Metchosin Fire Hall, New Construction / Renovation, Metchosin, British Columbia

Dear Edward Craig:

Please find attached our Class D Estimate for the Metchosin Fire Hall, New Construction / Renovation in Metchosin, British Columbia.

This Class D Estimate is intended to provide a realistic allocation of direct construction costs and is a determination of fair market value. Pricing shown reflects probable construction costs obtainable in the Metchosin, British Columbia area on the effective date of this report and is not a prediction of low bid. Pricing assumes competitive bidding for every portion of the work.

Hanscomb has prepared this estimate(s) in accordance with generally accepted principles and practices. Our general assumptions are included in Section 3 of this report and any exclusions are identified in Section 1.6. For quality assurance, this estimate has been reviewed by the designated Team Lead, as signed below. Hanscomb staff are available and pleased to discuss the contents of this report with any interested party.

Requests for modifications of any apparent errors or omissions to this document must be made to Hanscomb within ten (10) days of receipt of this estimate. Otherwise, it will be understood that the contents have been concurred with and accepted.

We trust our estimate is complete and comprehensive and provides the necessary information to allow for informed capital decisions for moving this project forward. Please do not hesitate to contact us if you have any questions or require additional information.

Yours truly,

Hanscomb Limited
Team Lead

Albert Allan O. Antolin
BSc.CE, PQS
Technical Manager

Hanscomb Limited
Principal / Estimate Reviewer

Indu Elapatha
PQS(F), MRICS
Manager

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EXECUTIVE SUMMARY

This Class D Estimate is intended to provide a realistic allocation of direct construction costs for the Metchosin Fire Hall, New Construction / Renovation, located in Metchosin, British Columbia. Hanscomb recommends that the Owner and design team carefully review this document, including line-item descriptions, unit prices, exclusions, inclusions, assumptions, contingencies, escalation, and mark-ups. If the project is over budget or has unresolved budgeting issues, alternatives should be evaluated before proceeding to the next design phase.

The following are the highlights of this Class D Estimate:

Project Cost Highlights:

New Admin/ Quarters	$8,747,600
Reno Apparatus Bay	$3,260,700
Site Work	$1,284,000
Temporary Facility	$4,021,900
Demolition of Admin/Quarters	$424,800
Total Construction Cost	**$17,739,000**

Allowances included in the estimate:

- **15.0%** design & pricing contingency
- **10.0%** escalation from August 2025 to the approaching construction start in 2027
- **5.0%** construction contingency (excluded in the above construction cost and provided separately as an Owner's contingency on the summary page)

The Degree of Accuracy expected for this Class D Estimate is **+/-20-30%**. In other words, bid results might vary by this amount if the construction budget were set at this milestone estimate. In today's market, projects are trending to the higher end of the plus range.

Base Assumptions:

All costs are estimated on the basis of **competitive bids** (a minimum of at least 3 general contractor bids and at least 3 subcontractor bids for each trade) being received in Metchosin, British Columbia in **August 2025** based on a **stipulated sum** form of contract. If these conditions are not met, bids received could be expected to exceed this estimate.

Exclusions

- Geotechnical consideration (soil improvement, piling, dewatering, rock excavation, etc)
- Back-up Generator equipment
- PV solar panel system requirements
- Equipment beyond that identified in this estimate
- Decanting / Relocation of temporary relocation of occupants, operations, or equipment from an existing facility to an alternate location.
- Overtime premiums for work done outside normal working hours
- Escalation contingency beyond that identified in this estimate
- Financing costs
- Loose furniture, furnishings and equipment
- Third party commissioning costs
- Winter Construction (Concrete foundation and masonry heating & hoarding)
- Value-added tax (e.g. Goods and Services Tax, or other)
- Soft Costs (e.g. professional fees, building permit, development charges, owner's staff and management, relocation costs, etc.)
- Unexpected labour unavailability and productivity disruptions leading to delays and added costs
- Supply chain disruptions leading to delays and added costs
- Any premiums resulting from Canadian or Foreign government-imposed tariffs

The details of this estimate are provided in the subsequent pages of this report for your review, comment and acceptance.

TABLE OF CONTENTS

Appendices

1. INTRODUCTION

1.1 PURPOSE

This Class D Estimate is intended to provide a realistic allocation of direct construction costs for the Metchosin Fire Hall, New Construction / Renovation, located in Metchosin, British Columbia, with the exception of the items listed in 1.6 Exclusions.

1.2 DESCRIPTION

The Metchosin Fire Hall, New Construction / Renovation located in Metchosin, British Columbia is comprised of the following key elements:

This project involves the new construction of a two-storey Fire Hall Admin/Quarter and renovation/upgrade to the existing Apparatus Bay with a total gross floor area of 1,278 m². The facility will be built using conventional wood framing on a slab-on-grade foundation supported by standard pad and strip footings. The primary structural system will feature glulam (glued-laminated timber) columns and beams, supporting a metal deck roof structure.

The building envelopes, interior finishes, and mechanical and electrical systems will align with standard fire hall design and performance specifications, ensuring functionality, durability, and compliance with applicable codes.

Sitework includes site clearing, cutting and removal of existing trees, rough grading, hardscaping/ landscaping and site furnishings including associated mechanical and electrical site services.

The required estimate for new construction also includes separate pricing as follows:
- *Temporary Fire Hall facility*
- *Demolition of existing Fire Hall office building/quarter*

1.3 METHODOLOGY

Hanscomb has prepared this estimate(s) in accordance with generally accepted principles and practices. Hanscomb staff are available to discuss its contents with any interested party.

From the documentation and information provided, quantities of all major elements were assessed or measured where possible and priced at rates considered competitive for a project of this type under a stipulated sum form of contract in Metchosin, British Columbia.

Pricing shown reflects probable construction costs obtainable in the Metchosin, British Columbia area on the effective date of this report. This estimate is a determination of fair market value for the construction of this project. It is not a prediction of low bid. Pricing assumes competitive bidding for every portion of the work.

1.4 SPECIFICATIONS

For building components and systems where specifications and design details are not available, quality standards have been established based on discussions with the design team.

1. INTRODUCTION

1.5 ESTIMATE CLASSIFICATION AND COST PREDICTABILITY

Estimates are defined and classified based on the stage of a project's development and the level of information available at the time of the milestone estimate.

> *This Class D Estimate is considered to have an expected degree of accuracy of* ***+/-20-30%****. In other words, bid results might vary by this amount if the construction budget were set at this milestone estimate. Under stable market conditions, fierce competition and scope reduction might result in costs coming in under the milestone estimate. However, in today's market, projects are trending to the higher end of the plus range.*

At the initial stages of a contemplated project, the cost accuracy of the estimate is low as there may be little or no information available to inform a first high-level concept estimate or order of magnitude estimate. As a project nears design completion and is ready to be released to market for tender, the level of accuracy of the estimate is high as the detail is generally extensive and typically represents the information on which contractors will bid.

Milestone cost estimates or "checks" are recommended as the project design develops to keep track of scope and budget. Early detection of potential budget overruns will allow for remedial action before design and scope are locked in. The number of milestone estimates will depend on a project's size and schedule and cost predictability will improve as the design advances.

According to the Canadian Joint Federal Government/Industry Cost Predictability Taskforce, industry standards for estimate classification and cost estimate accuracy may be summarized as follows:

COST ESTIMATE CLASSIFICATIONS							
GOC	OME	D	C	← B	→ A		
DND		Indicative		Substantive			
	ROME	D	C	← B	→ A		
AACE	5		4	3	2	1	
RAIC			Sketch Design	Design Development	Contract Documents	Tender Documents	
Design Documentation % Complete			12.5%	25%		95.0%	100%
Cost Estimate Accuracy (+/-%)	+/-30%		+/-20% <30%	+/-15% <20%		+/-10% <15%	+/-5% <10%

Legend

GOC	Government of Canada
DND	Department of National Defence
AACE	Association for the Advancement of Cost Engineering
RAIC	Royal Architectural Institute of Canada
OME	Order of Magnitude Estimate
ROME	Rough Order of Magnitude Estimate

While the classification categories differ from one authority to the next, the overarching principle for cost predictability remains the same – as the level of detail and design development increases, so does the level of accuracy of the estimate.

1. INTRODUCTION

1.6 EXCLUSIONS

This Class D Estimate does not provide for the following, if required:

- Geotechnical consideration (soil improvement, piling, dewatering, rock excavation, etc)
- Back-up Generator equipment
- PV solar panel system requirements
- Equipment beyond that identified in this estimate
- Decanting / Relocation of temporary relocation of occupants, operations, or equipment from an existing facility to an alternate location.
- Overtime premiums for work done outside normal working hours
- Escalation contingency beyond that identified in this estimate
- Financing costs
- Loose furniture, furnishings and equipment
- Third party commissioning costs
- Winter Construction (Concrete foundation and masonry heating & hoarding)
- Value-added tax (e.g. Goods and Services Tax, or other)
- Soft Costs
  - Building permit
  - Development charges
  - Easement costs
  - Fund raising costs
  - Land acquisition costs and impost charges
  - Legal fees and expenses
  - Owner's staff and associated management
  - Preventative maintenance contracts
  - Professional fees and expenses
  - Relocation of existing facilities, including furniture and equipment
  - Right of way charges
  - Value-added tax (e.g. Harmonized Sales Tax, Goods and Services Tax, or other)
- Unexpected labour unavailability and productivity disruptions leading to delays and added costs
- Supply chain disruptions leading to delays and added costs
- Any premiums resulting from Canadian or Foreign government-imposed tariffs

2. DOCUMENTATION

This Class D Estimate has been prepared from the documentation included in Appendix AA of this report.

All of the above documentation was received from Johnston Davidson Architecture and was supplemented with information gathered in meeting(s) and telephone conversations with the design team, as applicable.

Design changes and/or additions made subsequent to this issuance of the documentation noted above have not been incorporated in this report.

3. COST CONSIDERATIONS

3.1 COST BASE

All costs are estimated on the basis of competitive bids (a minimum of at least 3 general contractor bids and at least 3 subcontractor bids for each trade) being received in August 2025 from general contractors and all major subcontractors and suppliers based on a stipulated sum form of contract. If these conditions are not met, bids received could be expected to exceed this estimate.

3.2 UNIT RATES

The unit rates in the preparation of this Class D Estimate include labour and material, equipment, subcontractor's overheads and profit. Union contractors are assumed to perform the work with the fair wage policy in effect.

3.3 GENERAL REQUIREMENTS AND FEE

General Requirements and Fee cover the General Contractor's indirect costs, which may include but not be limited to supervision, site set up, temporary utilities, equipment, utilities, clean up, etc., as covered in Division 1 General Conditions of the Contract Documents. It also includes the contractor's fees and should not be confused with Design or Consultant fees, which are excluded from the Construction Costs and carried separately in the Owner's Total Project Costs.

3.4 DESIGN AND PRICING ALLOWANCE

An allowance of 15.0% has been included to cover design and pricing unknowns. This allowance is not intended to cover any program space modifications but rather to provide some flexibility for the designers and cost planners during the remaining contract document stages.

It is expected that this allowance amount will be absorbed into the base construction costs as the design advances. The amount with which this allowance is reduced corresponds to an increase in accuracy and detailed design information. Hanscomb recommends that careful consideration be made at each milestone estimate to maintain adequate contingency for this allowance.

As a project nears completion of design, Hanscomb recommends retaining some contingency for this allowance for the final coordination of documents.

3.5 ESCALATION ALLOWANCE

All costs are based on August 2025 dollars with 10.0% construction cost escalation included to cover increases that may occur between August 2025 and the approaching construction start for the project in 2027.

The budgeted amount will typically decline as the time to award nears. If escalation is taken to the start of construction, escalation during construction is included in the unit rates. If escalation is taken to the midpoint of construction, it is because the market is volatile or the project is considerably large with a construction duration of more than 2-3 years, making it difficult to secure firm pricing at tender.

Forecasting escalation requires careful assessment of a continually changing construction market, which, at best, is difficult to predict. The escalation rate should be monitored.

3. COST CONSIDERATIONS

3.6 CONSTRUCTION ALLOWANCE

An allowance of 5.0% has been made to cover construction (post contract) unknowns. This allowance, also known as the Post Contract Contingency (PCC), is intended to cover costs for change orders during construction that are not foreseeable. It is not intended to cover scope changes to the contract. The amount carried in the budget for this allowance is typically set at the initial planning stage and should be based on the complexity of the project and the probability of unknowns and retained risks.

3.7 CASH ALLOWANCE

Cash allowances are intended to allow the contractor to include in the bid price the cost for work that is difficult to fully scope at the time of tendering based on factors that are beyond the Owner and Prime Consultant's control. Cash allowances attempt to reduce the risks by dedicating a set amount for use against a certain cost that cannot yet be detailed. The Contractor is obligated to work as best as possible within the limitations of the Cash Allowance.

Examples of Cash Allowances include hardware, inspection and testing, site conditions, replacement of existing elements during demolition for renovation, hazardous materials abatement, signage, etc.

Any Cash Allowances, if applicable, are included either in the details of this estimate under the appropriate discipline or at the summary level.

3.8 TAXES

No provision has been made for the Goods and Services Tax. It is recommended that the owner make separate provision for GST in the project budget.

3.9 SCHEDULE

Pricing assumes a standard work schedule appropriate to the size and scope of this project. Premiums for off-hour work, working in an operational facility, accelerated schedule, etc., if applicable, are identified separately in the body of the estimate.

3.10 CARBON QUANTIFICATION AND PRICING

The significance and understanding of carbon costs in construction is growing. These costs arise from two main sources: the 'embodied' carbon present in the materials and emitted during the construction activities, and the 'operational' carbon emissions resulting from the asset's use over time. The unit rates in this estimate are inclusive of carbon taxes during construction where applicable. Evaluation of embodied carbon, operational carbon, and its costs is an additional service that can be provided on request.

3.11 STATEMENT OF PROBABLE COSTS

Hanscomb has no control over the cost of labour and materials, the contractor's method of determining prices, or competitive bidding and market conditions. This opinion of probable cost of construction is made on the basis of experience, qualifications and best judgment of the professional consultant familiar with the construction industry. Hanscomb cannot and does not guarantee that proposals, bids or actual construction costs will not vary from this or subsequent cost estimates.

3. COST CONSIDERATIONS

3.12 ONGOING COST CONTROL

Hanscomb recommends that the Owner and design team carefully review this document, including line item description, unit prices, clarifications, exclusions, inclusions and assumptions, contingencies, escalation, and mark-ups. If the project is over budget, or if there are unresolved budgeting issues, alternative systems/schemes should be evaluated before proceeding into the next design phase.

It is recommended that a final updated estimate at the end of the design stage be produced by Hanscomb using Bid Documents to determine overall cost changes which may have occurred since the preparation of this estimate. The final updated estimate will address changes and additions to the documents, as well as addenda issued during the bidding process. Hanscomb cannot reconcile bid results to any estimate not produced from bid documents, including all addenda.

This estimate does not constitute an offer to undertake the work, nor is any guarantee given that an offer to undertake the work at the estimate(s) price will subsequently be submitted by a construction contractor. Unless explicitly stated otherwise, it is assumed that competitive bids will be sought when tender documents have been completed. Any significant deviation between bids received and a pre-tender estimate prepared by Hanscomb from the same tender documents should be evaluated to establish the possible cause(s).

3.13 CURRENT RISKS TO CONSTRUCTION ESCALATION:

The construction market is relatively heated across the country. Because of the significant volume of activity, Hanscomb has observed that the normal number of general contractors and sub-trades bidding on projects has been reduced. Less competition during tendering often results in elevated project pricing. We expect this trend to continue for the following reasons:

- The volume of work exceeds the capacity of available resources
- An aging workforce contributes to pressure through the ever-increasing retirement of trade workers
- All members within the construction community are actively looking for new personnel and are having trouble finding qualified candidates
- Contractors are generally competing for the same tradespeople, offering higher than normal salaries and benefits, translating into higher costs
- Global conflicts affecting the global commodity pricing and supply chain

The above risks may be amplified under the following conditions:

- Any premiums resulting from Canadian or Foreign government-imposed tariffs.
- Global events, including pandemics such as COVID-19, adverse weather events, etc.
- Remote or less densely populated areas where materials and labour cannot be sourced locally and transportation, accommodation and incentives impact schedule and cost

Where any of the above may be a factor, Hanscomb highly recommends conducting appropriate risk analyses, including market sounding. Hanscomb can assist; however, this level of risk assessment is outside the scope of this estimate.

4. GROSS FLOOR AND SITE DEVELOPED AREAS

The following areas have been measured in accordance with the Canadian Institute of Quantity Surveyors' Measurement of Buildings by Area and Volume.

4.1 GROSS FLOOR AREA (GFA)

Description	GFA
New Construction	
Admin / Quarters	870 m2
Hose Tower	36 m2
Total GFA	**906 m2**
Renovation	
Apparatus Bay/Spline	372 m2
Total GFA	**372 m2**
Temporary Facility	
Office / Quarters	134 m2
Apparatus Bay	540 m2
Decon Washroom / Storage	150 m2
Total GFA	**824 m2**
Building Demolition	
Office / Quarters	530 m2
Total GFA	**530 m2**

4.2 SITE DEVELOPED AREA

Description	SDA
Site Area	3,850 m2
Building footprint	-829 m2
Total Site Developed Area	**3,021 m2**

Site Developed Area is the area of the site, less the foot-print area of the building.

5. CONSTRUCTION COST ESTIMATE SUMMARY

Description		New Admin/Quarter	Reno Apparatus	Site Work	Total
	GFA	906 m2	372 m2	2,667 m2	1,278 m2
Main Building		$4,732,300	$2,006,200		$6,738,500
Hose Tower		$649,700			$649,700
Site Work				$790,000	$790,000
A - Net Construction Cost		**$5,382,000**	**$2,006,200**	**$790,000**	**$8,178,200**
	$/m2	*$5,940.40*	*$5,393.01*	*$296.21*	*$6,399.22*
General Requirements	8.0%	$430,600	$160,500	$63,200	$654,300
Contractor's Overhead & Fee	3.0%	$174,400	$65,000	$25,600	$265,000
B - Construction Cost (including G/R & Fees)		**$5,987,000**	**$2,231,700**	**$878,800**	**$9,097,500**
	$/m2	*$6,608.17*	*$5,999.19*	*$329.51*	*$7,118.54*
Location Factor	10.0%	$598,700	$223,200	$87,900	$909,800
Design & Pricing Allowance	15.0%	$987,900	$368,200	$145,000	$1,501,100
Escalation Allowance	10.0%	$757,400	$282,300	$111,200	$1,150,900
Construction Allowance	5.0%	$416,600	$155,300	$61,100	$633,000
C - Total Contingency		**$2,760,600**	**$1,029,000**	**$405,200**	**$4,194,800**
	$/m2	*$3,047.02*	*$2,766.13*	*$151.93*	*$3,282.32*
Tax (GST)	Excluded	$0	$0	$0	$0
Total Construction Cost (B + C)		**$8,747,600**	**$3,260,700**	**$1,284,000**	**$13,292,300**
	$/m2	*$9,655.19*	*$8,765.32*	*$481.44*	*$10,400.86*

D - Temporary Facility (refer to page 12 for the cost summary)	**$4,021,900**
E - Demolition of existing Admin/Quarters Building (refet to page 12 for the cost summary)	**$424,800**
Total Construction Cost (B + C + D +E)	**$17,739,000**

Note:

1. The mark-up for General Requirements is calculated by multiplying the net construction cost by the applicable percentage (8%). While, the Contractor's Overhead and Fee is calculated by applying the fee percentage (3%) to the compounded amount (example for New Admin/Quarters: compounded $5,382,000 + $430,600 = $5,812,600 x 3% = $174,378, rounded to $174,400)

2. The mark-up for Contingency is also calculated based on compounded total amount multiply by the applicable percent.
   - Location Factor: 10% of the Construction cost (including G/R & Fee)
   - Design & Pricing Allowance: 15% of the compounded total amount (Construction Cost + Location Factor)
   - Escalation Allowance: 10% of the compunded total amount (Construction Cost + Location Factor + Design & Pricing)
   - Construction allowance: 5% of the compounded total amount (Construction Cost + Location Factor + Design & Pricing + Escalation)

5. CONSTRUCTION COST ESTIMATE SUMMARY

Description	GFA	Temporary Facility 824 m2	Demo. Admin/Quarters 530 m2
Temporary Building (Tent/Trailers)		$2,410,300	$225,300
Site Work		$300,000	$61,000
A - Net Construction Cost		**$2,710,300**	**$286,300**
	$/m2	*$3,289.20*	*$540.19*
General Requirements	8.0%	$216,800	$22,900
Contractor's Overhead & Fee	3.0%	$87,800	$9,300
B - Construction Cost (including G/R & Fees)		**$3,014,900**	**$318,500**
	$/m2	*$3,658.86*	*$600.94*
Location Factor	5.0%	$150,700	$15,900
Design & Pricing Allowance	10.0%	$316,600	$33,400
Escalation Allowance	10.0%	$348,200	$36,800
Construction Allowance	5.0%	$191,500	$20,200
C - Total Contingency		**$1,007,000**	**$106,300**
	$/m2	*$1,222.09*	*$200.57*
Tax (GST)	Excluded	$0	$0
Total Construction Cost (B + C)		**$4,021,900**	**$424,800**
	$/m2	*$4,880.95*	*$801.51*

Note:

1. The mark-up for General Requirements is calculated by multiplying the net construction cost by the applicable percentage (8%). While, the Contractor's Overhead and Fee is calculated by applying the fee percentage (3%) to the compounded total amount (example for Temp. Facility: compounded $2,710,300 + $216,800 = $2,927,100 x 3% = $87,813, rounded to $87,800)

2. The mark-up for Contingency is also calculated based on compounded total amount multiply by the applicable percent.
   - Location Factor: 5% of the Construction cost (including G/R & Fee)
   - Design & Pricing Allowance: 10% of the compounded total amount (Construction Cost + Location Factor)
   - Escalation Allowance: 10% of the compunded total amount (Construction Cost + Location Factor + Design & Pricing)
   - Construction allowance: 5% of the compounded total amount (Construction Cost + Location Factor + Design & Pricing + Escalation)