TOWN OF LADYSMITH

Celebrate our Present. Embrace our Future. Honour our Past.

LADYSMITH

Parks, Recreation & Culture

Invitation to Tender

No. 2026-PRC-02

FRANK JAMESON COMMUNITY CENTRE (FJCC) 2026 ROOFING PROGRAM

For further information:
Richard Frost
Manager of Facility Operations
250.268.3583
rfrost@ladysmith.ca

Tender Issue Date: May 4th, 2026
Tender Closing: 1:30 p.m., Friday June 5th, 2026
Tender Opening: 1:45 p.m., Friday, June 5th, 2026
Ladysmith City Hall

TOWN OF LADYSMITH

INVITATION TO TENDER

1. Introduction

The Town of Ladysmith (the "Town") invites Tenders from qualified and experienced contractors for the supply of Frank Jameson Community Centre (FJCC) 2026 Roofing Program in accordance with the Tender Specifications attached as Schedule C.

2. Tender Submission

Proponents are to submit their Tenders **no later than 1:30pm on June 5th, 2026** by E-bidding on BCBid's secure portal or delivering by courier, mail, or in person. Proposals received after the deadline – whether through BCBid or courier, mail, or in person delivery will be rejected.

If submitting by courier, mail, or in person, proposals must be addressed to:

Attention: Sue Bouma, Manager of Corporate Services
Town of Ladysmith
410 Esplanade
PO BOX 220
Ladysmith, BC V9G 1A2

All submissions must be clearly marked "Request for Tenders No. 2026-PRC-02".

Submissions in response to this RFT will be opened publicly at the Town of Ladysmith City Hall on **June 5th at 1:45pm.**

3. Form of Tender

Tenders must be completed using the Form of Tender, Tender Specifications and any applicable schedules and addenda as supplied.

4. Tender Opening

Tenders received by the Tender Closing Date and Time noted above will be opened in public at the City Hall, at 410 Esplanade, Ladysmith at 1:45 p.m. PST on June 5th, 2026.

5. Mandatory Site Review

5.1 Bids will only be accepted from Prime Contractors who register for a mandatory site tour and walk-through, scheduled for **Tuesday, May 19th at 2:00 p.m.** at the Frank Jameson Community Centre, 810 - 6th Avenue, Ladysmith B.C.

5.2 The site visit is mandatory for contractors intending to act as Prime Contractors.

5.3 To register, contact Richard Frost, manager of Facility Operations, at 250-245-6430 or rfrost@ladysmith.ca

5.4 As the project primarily involves roof work, Roofing Contractors are invited to bid as Prime Contractors.

5.5 The person attending the mandatory walkthrough must be a principal of the firm, an estimator employed by the firm or has an understanding of the project requirements described by the Owner and Consultant.

5.6 The site tour is not mandatory for other subcontractors.

6. Late Submissions

Tenders received after the Closing Date and Time will be returned unopened to the Tenderer.

7. The lowest or any tender will not necessarily be accepted

Please review the Instructions and Conditions to Tenderers.

INSTRUCTIONS AND CONDITIONS TO TENDERERS

1. DEFINITIONS

1.1 In the Tender Documents the following words have the following meanings, unless the context otherwise requires:

"**Contract**" means an agreement for the performance of the Work to be executed by the Town and the Tenderer to whom the Work is awarded as applicable;

The Town of Ladysmith is referred to as "**the Town**";

The successful tenderer is referred to as "**the Supplier**";

The Director of Infrastructure Services is referred to as "**the Director**";

"**Tender Closing Date and Time**" means the date and time stipulated in section 2 for the receipt of Tenders;

"**Tender Documents**" means the Invitation to Tender, the Form of Tender, the Instructions and Conditions of Tendering, the Tender Specifications (Schedule "A"), and all addenda; and

"**Work**" means all work to be done, performed and completed by the Tenderer under the Contract if awarded the Tender by the Town.

2. TENDER CLOSING DATE AND TIME

2.1 Sealed Tenders, made on the Tender Form provided, together with all other Tender Documents required will be received by E-bidding on BCBid's secure portal or delivered by courier, mail, or in person, and late receipt of Tenders via BCBid or courier, mail, or in person will be cause for rejection of a Tender. If submitted by courier, mail, or in person, they must be submitted to the attention of:

Attention: Sue Bouma, Manager of Corporate Services
Town of Ladysmith
410 Esplanade
PO BOX 220
Ladysmith, BC V9G 1A2

2.2 Tenders will be received up to 1:30 p.m. PST, on June 5th, 2026.
Tenders received after the closing time will be returned unopened.

The Tender Form being submitted must be signed by an authorized representative of the tenderer.

An award from this tender may require the approval of Town Council which, at its sole and unfettered discretion, can accept or reject any tender offered.

No tenderer may withdraw their tender within 60 days after the actual date of opening.

Tenderers are responsible for all costs relating to the preparation and submission of tenders.

This tender and any subsequent contracts resulting from this tender shall be governed by and interpreted in accordance with the laws of the Province of British Columbia.

It is the Tenderer's responsibility to allow sufficient time for their agent to deliver their Tender by the time and date specified above. The Tenderer should instruct their delivery agent to have the receptionist at the main reception desk at the City Hall time and date stamp the Tender. The Town will apply its date stamp upon receipt of Tenders delivered by Canada Post or courier.

3. TENDER OPENING

3.1 Tenders will be opened publicly at 1:45 p.m. PST on June 5th, 2026, at Ladysmith City Hall, 410 Esplanade, Ladysmith (corner of Roberts Street and Trans-Canada Highway).

4. TENDOR SUBMISSION

4.1 Late Tenders will not be accepted, opened, or considered and will be returned unopened to the Tenderer upon the Town determining that the Tender was submitted after the Closing Date and Time.

5. FORM OF TENDER

5.1 Tenders must be submitted on the form of the Tender Documents provided.

6. AMENDMENT OR WITHDRAWAL

6.1 Tenders may be amended or withdrawn, provided written notice is received by the receptionist at the main reception desk at the City Hall prior to the stipulated closing time on the Closing Date.

6.2 Revisions to bid prices should state changes to unit prices only.

6.3 No revisions or withdrawals will be accepted after the Closing Date and Time.

7. Appendices To Be Completed

7.1 Tenderers must complete and submit as part of the Tender all Appendices that form part of the Tender Documents other than the Contract General Conditions attached as Schedule “A.”

7.2 Any deviations from the specifications shall be separately noted in the space provided on the specification sheets, with separate information required attached.

8. PRICES AND GST

8.1 Prices quoted are to be in Canadian dollars. Goods and Services Tax (GST) is to be shown as a separate item on the Form of Tender.

The prices shown as UNIT COSTS/HOURLY RATES on the Tender Form shall include all material costs, labour costs, and any other charges so as to be the final cost to the Town.

9. ORAL, EMAIL AND FACSIMILE TENDERS NOT ACCEPTED

9.1 Oral, electronic mail or facsimile Tenders or amendments to Tenders will not be accepted.

10. COMPLETION OF TENDER AND ERRORS

10.1 All prices and notations must be typewritten or written in ink. No erasures or additions to the Tender Documents are permitted. In the case of mistake in extension of price, unit price will govern.

10.2 In case of mistake by the Tenderer, the mistake must not be erased but crossed out with the correction typewritten or written in ink adjacent thereto and such corrections must be initialed by the Tenderer's authorized signing officer or employee referred to in section 10 of the Instructions to Tenderers.

11. SIGNATURE REQUIRED

All tenders must be signed in the place provided on the front page and on the Form of Tender by an officer or employee having authority to bind the Tenderer by his or her signature.

12. BID IRROVOCABLE

The Tenderer agrees that in submitting a Tender, the Tender will be irrevocable and remain open for acceptance by the Town for 60 (sixty) calendar days from the day following the Closing Date and Time.

No tender may be withdrawn after the Closing Date and Time without the written consent of the Town, which may be withheld in its sole discretion.

13. ADDENDUMS AND REQUESTS FOR CLARIFICATION

If deemed necessary by the Town, and in its sole discretion, an addendum will be issued to all parties that have indicated an interest in submitting a Tender. The Town

reserves the right to revise, expand or delete any portion of the Tender Documents as part of the addendum.

Requests for clarifications must be submitted to the Town in writing and received not less than five (5) working days before the Tender Closing Date.

An addendum issued under this section will be considered to form part of the Tender Documents.

14. TENDER AWARD

The Town reserves the right to reject any or all Tenders and the lowest or any Tender will not necessarily be accepted.

Without limiting the generality of section 8.1, the Town reserves the right to:

- waive any informality or irregularity in a Tender;
- reject a Tender which contains qualifying conditions or otherwise fails to conform to these Tender Documents;
- reject any single Tender if only one Tender is received;
- make decisions regarding Tender acceptance with regard to:
    - compliance with specifications, warranties, lead times, price and any other such factors as may be relevant factors in determining which Tender will provide the Town with the best value based on quality, service and price;
    - the overall cost impact of the Tender on the operations of the Town including, where applicable, factors such as acquisition cost, disposal cost, residual value, training cost, maintenance cost, product performance and environmental impact;
    - the reputation and experience of the Tenderer and of the Tenderer's staff to be allocated to the Work, the supply of the goods and services or the supply of any equipment required by this Tender;
    - the technical experience, financial resources, and environmental responsibility of the Tenderer;
    - the Town's assessment of the capability of the Tenderer to perform the Work within the time frame required by the Town; and
    - demonstration that the Work undertaken will meet or exceed requirements of environmental standards; and
    - award the Work based on the best value to the Town based on quality, service, and price, and any criteria set out herein based solely on the Town's assessment of the tender.

Refer to Schedule B for further clarification on the proposal evaluation process and scoring.

15. NO DUTY OF CARE

It is the responsibility of the Tenderer to thoroughly examine the Tender Documents including any attachments and appendices to satisfy itself regarding the full requirements of the Tender and the Work.

While the Town has made reasonable efforts in good faith to ensure an accurate representation of information in this Tender, the information contained herein is supplied solely as a guideline for Tenderers, and the Town does not warrant or represent such information to be accurate, or complete.

The Tenderer acknowledges and agrees that in the preparation of the Tender, supply of oral or written information to Tenderers, review of Tenders or the carrying out of the Town's responsibilities under this Tender, the Town does not owe a duty of care to the Tenderers, and waives for itself, its successors and assigns, the right to sue the Town in tort for any loss, including economic loss, costs, expenses, losses, damages, or liability incurred by the Tenderer as a result of or arising out of any error, omission or misrepresentation occurring in the preparation of the Tender Documents, supply of oral or written information to Tenderers, review of Tenders or any document submitted in response to the Invitation to Tender.

Tenderers are solely responsible for their own expenses in preparing a Tender and for subsequent negotiations, if any. If the Town elects to reject any or all Tenders, or to cancel the Tender for any reason, the Tenderer acknowledges and agrees that the Town will not be liable to any Tenderer for any claims, including, without limitation, costs or damages incurred by the Tenderer in preparing the Tender, or loss of any anticipated profit in connection with the Work contemplated by this Tender, or any other matter whatsoever.

16. Queries

16.1 All enquiries regarding the tender submission process may be directed to Sue Bouma, Manager of Corporate Services bid@ladysmith.ca.

16.2 All queries regarding the technical specifications forming part of this Tender may be made by contacting Joel Sharp, Alpine Roof Consulting Ltd. at jsharp@alpineroof.ca.

FORM OF TENDER

Date:_____

We the undersigned have received and carefully reviewed all of the Tender Documents, including the Addenda listed below, have full knowledge of the location of the Work and certify that we have complied with the Instructions to Tenderers.

Provided that this Tender is accepted within 60 calendar days from the Closing Date and Time, the undersigned offers and agrees to provide all labour and material to perform and complete the Work as specified in and in strict compliance with the Tender Documents, at the prices quoted in the Tender Documents, within the time specified, and in accordance with the terms and conditions set forth in the Tender Documents.

The undersigned undertakes to achieve substantial completion of the Work that is the subject of the Tender within _____ calendar days from award of the contract under this Tender.

The Tenderer is an [ ] Individual [ ] Partnership [ ] Corporation (check where applicable)

incorporated under the laws of ……..

Name and Address of Individual, Partnership, or Corporation Tendering:

_____

_____

_____

Signature and Title of person authorized to sign Tender:

(Print or type name under signature)

_____

_____

_____

_____

Telephone: _____

Facsimile: _____

Email: _____

Schedule "A"

Contract General Conditions

GENERAL CONDITIONS

1. PAYMENT

Payment by the Town, subject to any holdbacks under the Builder's Lien Act (British Columbia) or any amounts held back under the Contract for deficiencies or other reason will be made within thirty (30) days after completion of the Work and/or delivery of tendered equipment, receipt of invoice, and acceptance by the Town. The Work will not be accepted for payment until all conditions and tendered specifications have been met.

2. NOTICES

Any notice required to be given in this contract shall be deemed to be duly given to the Town if sent by registered mail addressed to the Town of Ladysmith, PO BOX 220, Ladysmith, BC V9G 1A2 and to the contractor if sent by registered mail at the address set forth in the Tender.

3. OWNERSHIP OF TENDER & FREEDOM OF INFORMATION AND CONFIDENTIALITY

All documents submitted in response to this Tender shall become the property of the Town and as such will be subject to the disclosure provisions of the Freedom of Information and Protection of Privacy Act.

The Tenderer should advise the Town in writing if any information is supplied as part of the Tender processing confidence and to which section 21 of the Freedom of Information and Protection of Privacy Act applies.

4. INDEMNIFICATION

4.1 In carrying out these works, the Supplier will act as an independent contractor and must agree to keep the Town indemnified against any and all claims, actions or demands that may be brought, made or arise in respect of anything done or omitted to be done by its employees who shall be and remain at all times and for all purposes, the servants or employees of the Supplier.

5. INSURANCE

5.1 The Supplier shall submit to the Town, upon acceptance of the tender, a Certificate of Insurance containing the following:

- a provision naming Town of Ladysmith as an additional insured to the Liability Policy;
- a Cross Liability Clause;
- Comprehensive General Liability in an amount not less than **$10,000,000.00**;
- A provision requiring the Insurer to give the Town 30 days' notice of cancellation or lapsing or any material change in the insurance policy;
- Liability insurance in an amount not less than **$10,000,000.00** with the Insurance Corporation of British Columbia on any licensed motor vehicles of any kind.

6. SAFETY

6.1 In tendering for this work, the Supplier, when called upon to enter into contract with the Town, will be bound to comply with and be subject to the provisions, rules, and regulations of the Workers' Compensation Act, and with all other Statutes and Municipal by-laws pertaining to the work.

6.2 All materials delivered and services provided must be in accordance with all laws, regulations and requirements of B.C. Workers' Compensation Board and Occupational Health and Safety Legislation.

6.3 Proof of WorkSafe registration must be submitted, along with proof of up-to-date assessment payment, prior to commencement of work.

7. SUB-CONTRACTING

7.1 Sub-contracting of work is not permitted without prior approval, in writing, from the Manager of Facility Operations.

8. QUANTITIES

8.1 Anticipated quantities listed in the tender forms are estimated annual requirements based on historical and anticipated usage. The Town will not be responsible for any variations in usage.

9. CANCELLATION

9.1 The Town reserves the right to cancel this Tender at any time and for any reason, and will not be responsible for any loss, damage, cost, or expense incurred or suffered by any Tenderer as a result of that cancellation.

9.2 The Town reserves the right to cancel the Contract, at its sole and absolute discretion, with 30 days' written notice to the Contractor, and the Contractor will have no rights or claims against the Town. Cancellation would not, in any manner whatsoever, limit the Town's right to bring action against the Contractor for damages for breach of

contract.

10. TENDERERS' EXPENSES

10.1 Tenderers are solely responsible for all their own costs/expenses relating to the preparation and submission of tenders. If the Town elects to reject all tenders, the Town will not be liable to any tenderer for any claims, whether for costs or damages incurred by the tenderer in preparing the tender, loss of anticipated profit in connection with any final Contract, or any other matter whatsoever.

11. LIMITATION OF DAMAGES

11.1 Without limiting the provision of the previous clause, the Tenderer, by submitting a Tender, agrees that it will not claim damages, for whatever reason, relating to the Contract or in respect of the competitive process, including any costs incurred by the Tenderer in preparing its Tender and the Tenderer, by submitting a Tender, waives any claim for loss of profits if no Contract is made with the Tenderer.

12. RESPONSIBILITY OF TENDERERS

12.1 Each tenderer is responsible for informing themselves as to the contents and requirement of this tender including the Town's Purchasing Policy, which governs the award of this tender. The Purchasing Policy may be requested from City Hall. Each tenderer is solely responsible to ensure that they have obtained and considered all information necessary to understand the requirements of the tender and to prepare and submit their tender. The Town will not be responsible for any loss, damage or expense incurred by a tenderer as a result of any inaccuracy or incompleteness in this tender, or as a result of any misunderstanding or misinterpretation of the terms of the tender on the part of any tenderer.

12.2 If a Tenderer is in doubt as to the true meaning of any part of this Tender, or finds omissions, discrepancies or ambiguities, a request for interpretation or correction may be submitted to the office of Manager of Legislative Services and, if deemed necessary by the Town, an addendum will be issued to all firms registered as having received this Tender. This procedure also applies should the Town, of its own accord, wish to expand or delete any part of this Tender.

13. ACCURACY OF INFORMATION

13.1 The Town makes no representation or warranty, either expressed or implied, with respect to the accuracy or completeness of any information contained in or referred to in the Tender.

14. DISPUTE RESOLUTION

14.1 In the event of a dispute between the Town and the Supplier, both parties agree to appoint representatives who, in good faith, will use their best efforts to resolve the dispute.

14.2 Should the representatives be unable to promptly resolve the dispute, both parties shall agree to continue the work as required, being understood that neither party will jeopardize any claim that they may have.

14.3 Further to clause 18.2, both parties agree to resolve the dispute using a single arbitrator as provided for under the Commercial Arbitration Act of British Columbia with the costs being split equally between the parties.

14.4 Any verbal representations, promises, statements or advice made by any employees of the Town, other than that offered through the Manager of Corporate Services, should not be relied upon.

SCHEDULE "B"

Evaluation

TECHNICAL EVALUATION

Tenders will be evaluated by a minimum of two Ladysmith staff. The scoring criteria shown below will be used to assist in the evaluation; however, the highest scoring tender will not necessarily be selected. Other evaluation criteria may impact the selection, such as an interview, reference checks, or value-added services.

COSTS INCLUDED IN TENDER EVALUATION

All personnel fees, salaries, wages and reimbursable expenses will be considered in the tender evaluation. Points will be awarded based on a combination of rates, proposed budget relative to scope, suitable budget allocation to tasks, and value.

MINIMUM TECHNICAL SCORE

Each technical presentation will be evaluated on the basis of the firm's experience, competence of its personnel and acceptability of the method proposed. Technical portions of tenders must achieve a score of at least 70% to be considered "technically qualified".

SCORING

The table below describes the weighting that will be used to evaluate all tenders.

THE METHOD	**40**
General Approach	8
Proposed list of activities and reporting	10
Understanding of objectives	12
Proposed level of effort	10
FIRM PROFILE	**10**
Experience with similar projects	5
Location of the firm	2
Practices and/or policies within the organization governing its work with First Nations	3
THE PERSONNEL	**15**

Project Manager - How will they support the delivery of services by the firm? - What is their experience with similar projects on Vancouver Island and within BC? - Provide details on times when they challenged conventional wisdom and/or engineering standards in order to provide the best solution for the client.	5
Project Members - Provide a half-page bio of why each key staff member is suited for this role. Include project examples showcasing experience, qualifications, and local knowledge.	5
Team Organization	5
PRESENTATION	**10**
Quality - clear and concise	5
Content -relevant information provided without redundancies	5
PRICE PROPOSAL	**25**
Cost	15
Breakdown of costs	10
TOTAL	**100**

INTERVIEWS AND REFERENCES

The Town may request an interview and/or reference check with any or all shortlisted firms. An interview format has not been determined and would likely focus on areas of a tender that are unclear to the evaluation team. The outcome of an interview would be used in the evaluation. If an interview is requested, an in-person or Microsoft Teams online meeting would be made available.

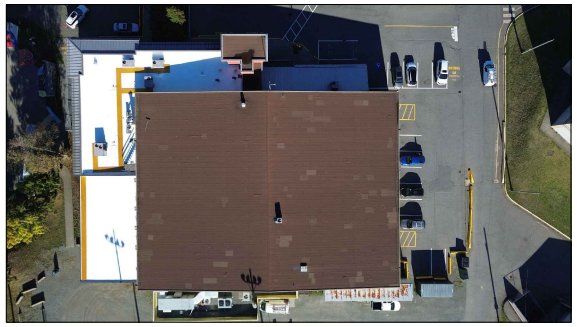
SCHEDULE "C"

Tender Specifications

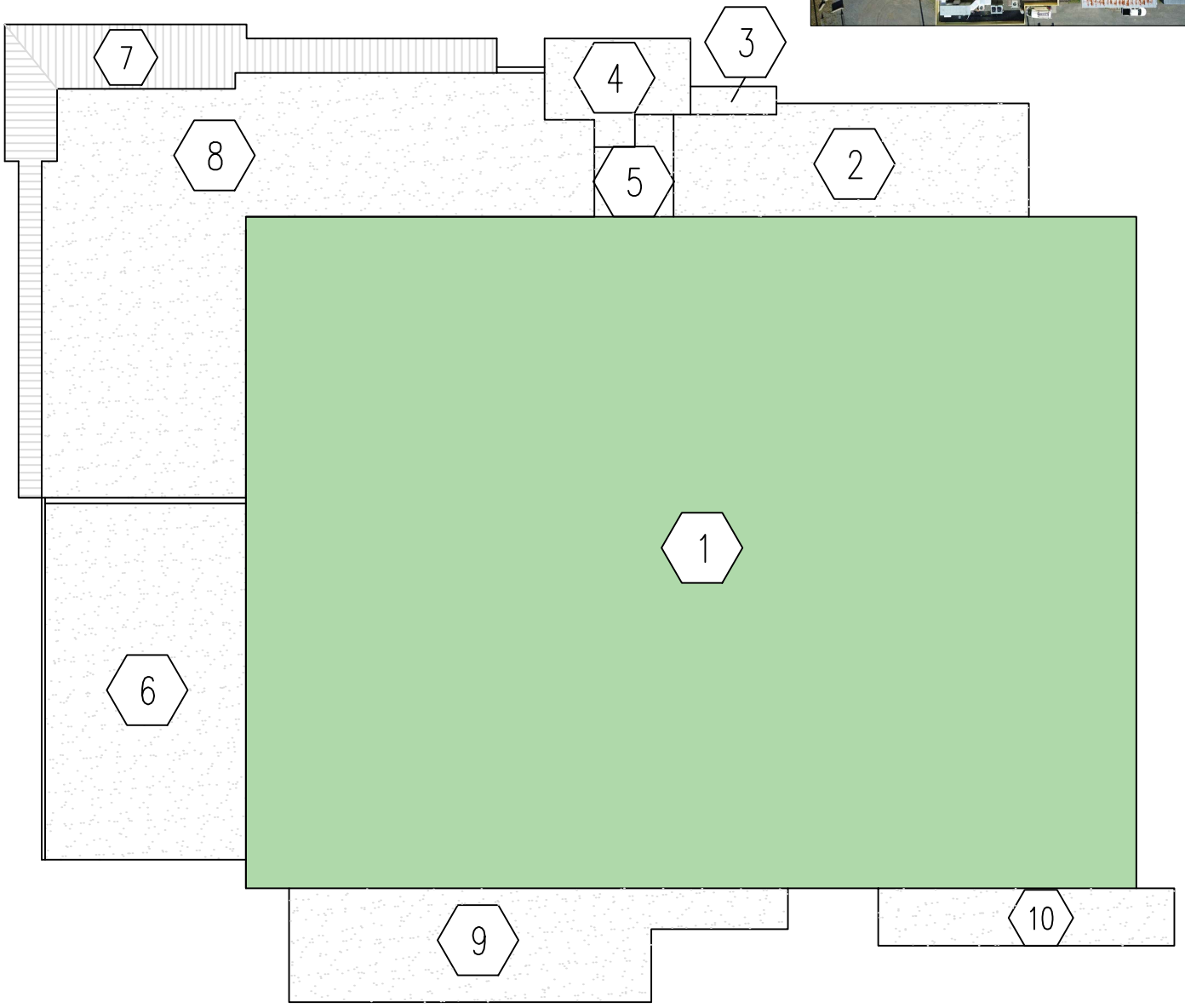
DIVISION	DESCRIPTION	SECTION NUMBER	SECTION NAME
DIVISION 00	BIDDING AND CONTRACT REQUIREMENTS	00 01 15	LIST OF DRAWINGS
		00 21 13	INSTRUCTIONS TO BIDDERS
		00 30 00	BID FORM
		00 43 13	BID SECURITY
		00 61 13	PERFORMANCE AND PAYMENT SECURITY
		00 72 00	GENERAL CONDITIONS
DIVISION 01	GENERAL REQUIREMENTS	01 10 61	GENERAL REQUIREMENTS
		01 11 00	SUMMARY OF WORK
		01 35 26	ENVIRONMENTAL PROTECTION
		01 35 29	HEALTH & SAFETY REQUIREMENTS
		01 41 00	REGULATORY REQUIREMENTS
DIVISION 02	EXISTING CONDITIONS	02 41 19	SELECTIVE DEMOLITION
		02 82 00	HAZARDOUS MATERIALS
DIVISION 06	WOOD, PLASTICS, AND COMPOSITES	06 10 00	MISCELLANEOUS ROUGH CARPENTRY
DIVISION 07	THERMAL AND MOISTURE PROTECTION	07 54 19	SINGLE PLY ROOFING
		07 62 00	SHEET METAL FLASHINGS
DIVISION 10	FRP FABRICATIONS	10 66 10	STAIR CROSSOVER
DIVISION 23	HVAC	23 05 00	MECHANICAL REQUIREMENTS
DIVISION 26	ELECTRICAL	26 05 00	ELECTRICAL REQUIREMENTS

1.1 LIST OF DRAWINGS

NUMBER	NAME/TITLE	DATE	REVISIONS
SHEET 1	ROOF KEY PLAN	APRIL 7, 2026	
SHEET 2	ROOF PLAN	APRIL 7, 2026	
SHEET 3	DETAILS	APRIL 7, 2026	
SHEET 4	DETAILS	APRIL 7, 2026	



2026 SCOPE OF WORK



CONSULTANT:

ALPINE ROOF CONSULTING LTD.

CLIENT:

LADYSMITH

PROJECT NAME:

FRANK JAMESON COMMUNITY CENTRE

810 - 6TH AVENUE
LADYSMITH, BC V9G 1A2

LEGEND:

DRAWING ISSUE	ISSUE DATE	DWG BY
ISSUED FOR TENDER	MAY.1.2026	P.F

INSPECTOR FILE NO.	26-003
SCALE:	N.T.S.
DWG. TITLE: **ROOF KEY PLAN**	DWG. NO.: **1 OF 4**

ROOF SECTION 1 - EXISTING ROOF ASSEMBLY

ER1
- 2-PLY SBS MEMBRANE
- 1" FIBREBOARD
- 2" POLYISO INSULATION
- FELT VAPOUR RETARDER
- ½" DRYWALL - MECHANICALLY FASTENED
- STEEL DECK (SLOPED)

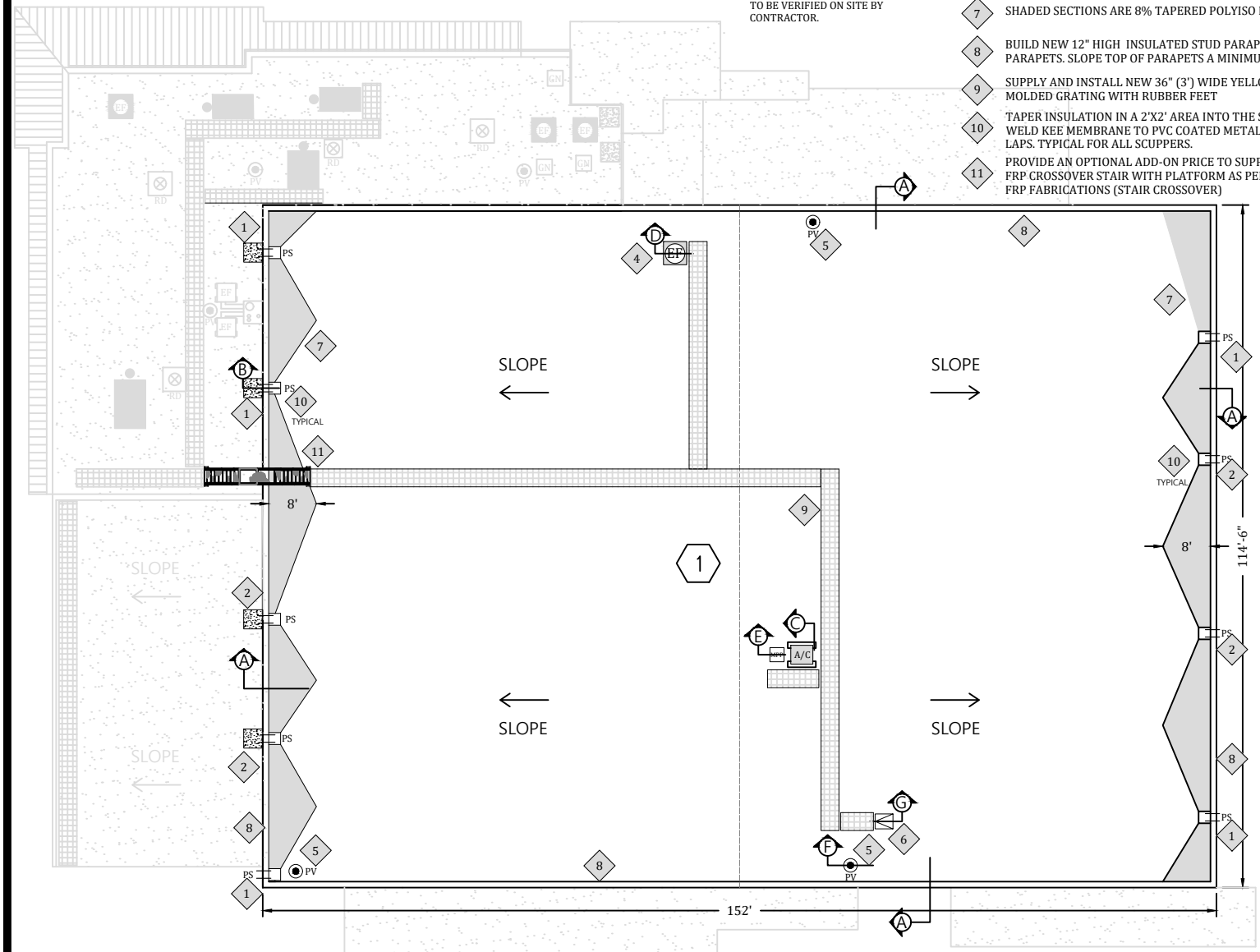
ROOF SECTION 1 - NEW ROOF ASSEMBLY

R1
- NEW 60MIL TREMCO KEE FLEECEBACK MEMBRANE - ADHERED
- NEW ½" DENSDECK PRIME - ADHERED
- NEW NON-ORGANIC POLYISO TAPERED INSULATION CRICKETS - ADHERED
- NEW 4" NON-ORGANIC POLYISO INSULATION - ADHERED
- NEW SELF-ADHERING VAPOUR RETARDER MEMBRANE
- NEW ½" DENSDECK PRIME SHEATHING - ADHERED
- EXISTING STEEL DECK (SLOPED)

- ALL DIMENSIONS AND CONDITIONS TO BE VERIFIED ON SITE BY CONTRACTOR.

CONSTRUCTION NOTES:

1. NEW SCUPPER AT EXISTING LOCATION. SUPPLY AND INSTALL NEW SCUPPER, HOPPER AND DOWNSPOUT
2. NEW SCUPPER AT NEW LOCATION. SUPPLY AND INSTALL NEW SCUPPER, HOPPER AND DOWNSPOUT
3. RAISE SLEEPER SUPPORTS TO 8" MINIMUM ABOVE ROOF MEMBRANE
4. RAISE CURB TO 8" ABOVE FINISHED ROOF MEMBRANE. RE-INSTALL EXHAUST FAN.
5. SUPPLY AND INSTALL NEW PIPE BOOT FLASHING WITH SEALANT AND CLAMPING RING
6. SUPPPLY AND INSTALL NEW BILCO S-20 ROOF HATCH. ENSURE WOOD BLOCKING IS FLUSH WITH ROOF MEMBRANE
7. SHADED SECTIONS ARE 8% TAPERED POLYISO INSULATION
8. BUILD NEW 12" HIGH INSULATED STUD PARAPET WALL ON ALL PARAPETS. SLOPE TOP OF PARAPETS A MINIMUM OF 5%.
9. SUPPLY AND INSTALL NEW 36" (3') WIDE YELLOW FIBERGRATE MOLDED GRATING WITH RUBBER FEET
10. TAPER INSULATION IN A 2'X2' AREA INTO THE SUMPED SCUPPER . WELD KEE MEMBRANE TO PVC COATED METAL WITH NO REVERSE LAPS. TYPICAL FOR ALL SCUPPERS.
11. PROVIDE AN OPTIONAL ADD-ON PRICE TO SUPPLY AND INSTALL NEW FRP CROSSOVER STAIR WITH PLATFORM AS PER SPEC SECTION 106610 FRP FABRICATIONS (STAIR CROSSOVER)



CONSULTANT:
ALPINE ROOF CONSULTING LTD.

CLIENT:
LADYSMITH

PROJECT NAME:
FRANK JAMESON COMMUNITY CENTRE

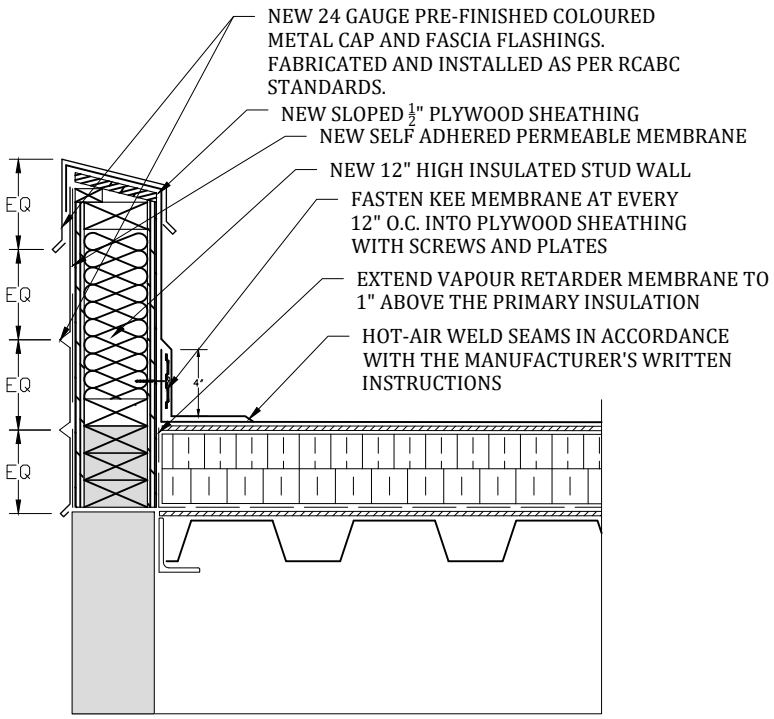
810 - 6TH AVENUE
LADYSMITH, BC V9G 1A2

LEGEND:

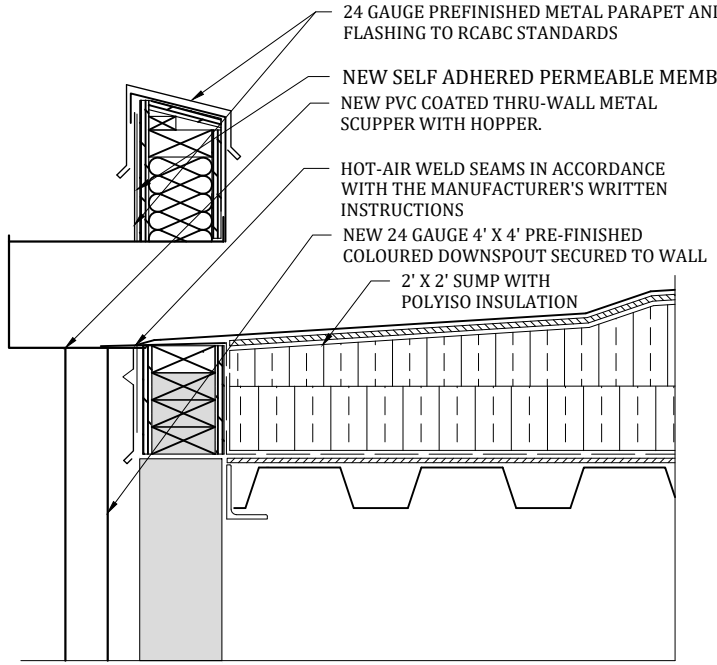
- ROOF DRAIN
- ROOF DRAIN WITH 4' X 4' SUMP
- PLUMBING VENT
- CURBED PLUMBING VENT
- RTU — ROOFTOP UNIT
- MUA — MAKE UP AIR UNIT
- A/C — AC UNIT
- MECHANICAL UNIT ON SLEEPERS
- VT — CURBED VENT
- CH — CURBED CHIMNEY
- MPP — CURB WITH METAL BIRDHOUSE FLASHING
- EF — EXHAUST FAN
- ROOF HATCH
- PS — PRIMARY SCUPPER DRAIN
- ES — EMERGENCY OVERFLOW SCUPPER
- GUM BOX
- ROOF ANCHOR
- CONCRETE PAVER
- CURB
- SAT — SATELLITE/TELECOM
- # — DRAWING NOTE

DRAWING ISSUE	ISSUE DATE	DWG BY
ISSUED FOR TENDER	MAY.1.2026	P.F

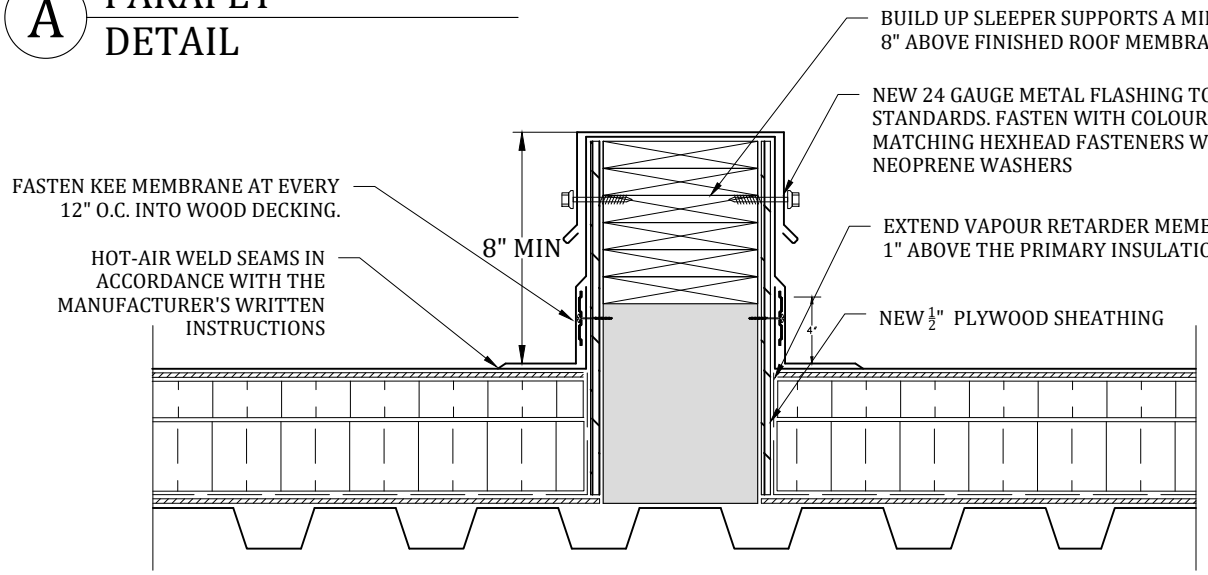
INSPECTOR FILE NO.	26-003
SCALE:	N.T.S.
DWG. TITLE: **ROOF PLAN**	DWG. NO.: **2 OF 4**



A PARAPET DETAIL



B PRIMARY SCUPPER DRAIN DETAIL



C SLEEPER SUPPORT DETAIL

CONSULTANT:

ALPINE ROOF CONSULTING LTD.

CLIENT:

LADYSMITH

PROJECT NAME:

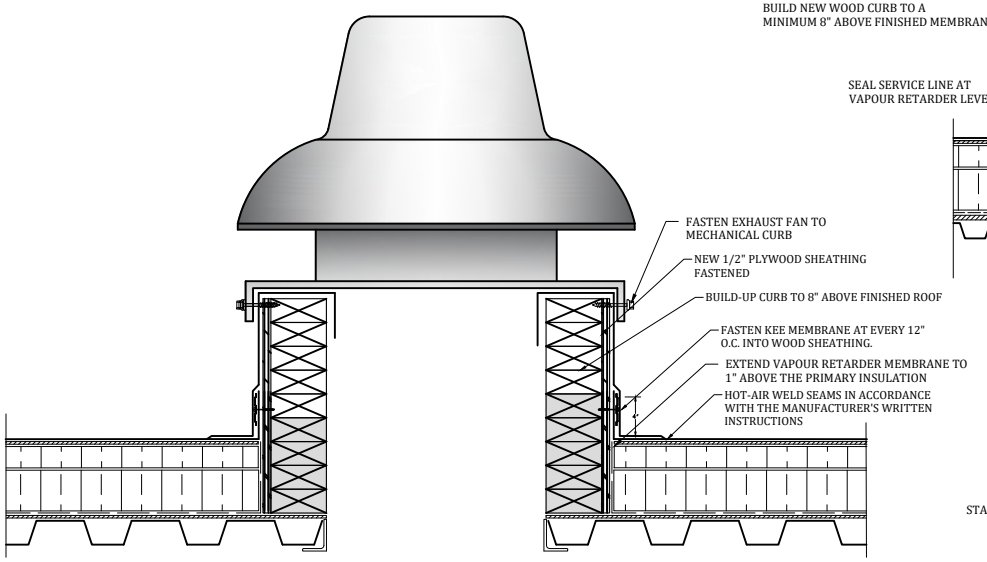
FRANK JAMESON COMMUNITY CENTRE

810 - 6TH AVENUE
LADYSMITH, BC V9G 1A2

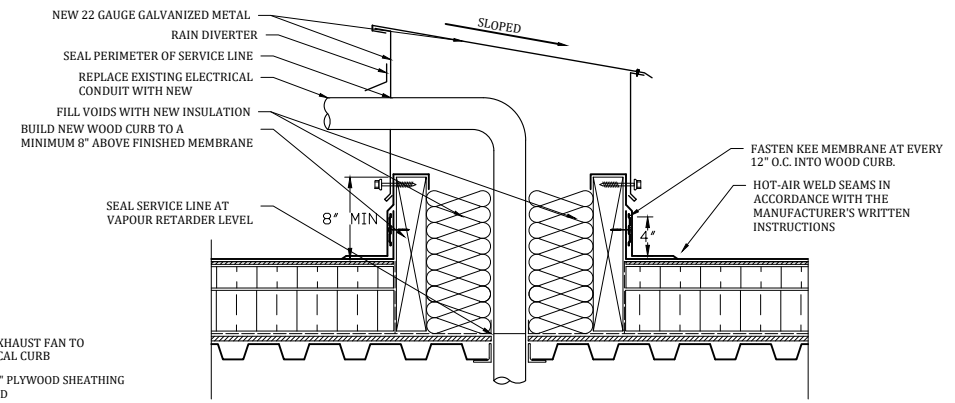
LEGEND:

DRAWING ISSUE	ISSUE DATE	DWG BY
ISSUED FOR TENDER	MAY.1.2026	P.F

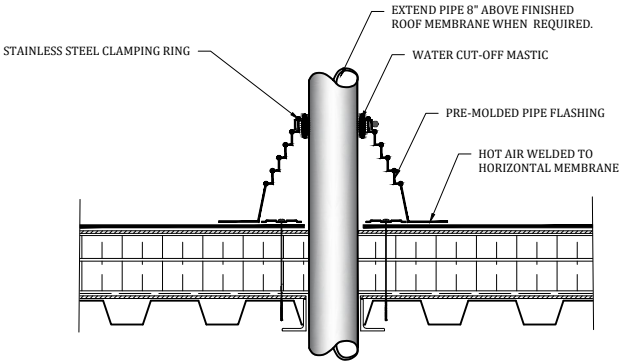
INSPECTOR FILE NO.	26-003
SCALE:	N.T.S.
DWG. TITLE: **DETAILS**	DWG. NO.: **3 OF 4**



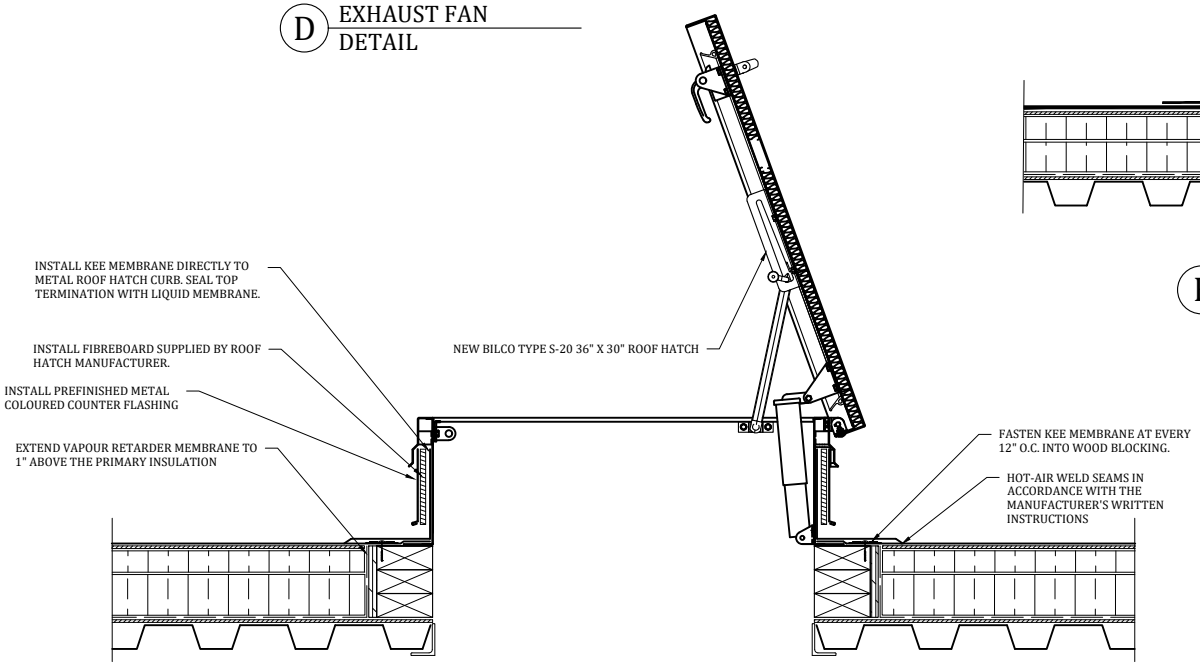
D EXHAUST FAN DETAIL



E SERVICEABLE ENCLOSURE DETAIL



F PIPE SEAL DETAIL



G ROOF HATCH DETAIL

CONSULTANT:

ALPINE ROOF CONSULTING LTD.

CLIENT:

LADYSMITH

PROJECT NAME:

FRANK JAMESON COMMUNITY CENTRE

810 - 6TH AVENUE
LADYSMITH, BC V9G 1A2

LEGEND:

DRAWING ISSUE	ISSUE DATE	DWG BY
ISSUED FOR TENDER	MAY.1.2026	P.F

INSPECTOR FILE NO.	26-003
SCALE:	N.T.S.
DWG. TITLE: **DETAILS**	DWG. NO.: **4 OF 4**

Part 1 General

1.1 PROJECT INFORMATION TABLE:

Project Name:	**Frank Jameson Community Centre (FJCC)** **2026 Roofing Program**
Roof Sections:	**Replace Roof Section 1**
Project Address:	810 - 6 Avenue, Ladysmith, BC V9G 1A2
Mandatory Site Meeting:	Refer to 'Invitation to Tender'
Project Inquiries:	Consultant: Joel Sharp, Civ. Tech., RRO Ph: 780-993-1323; Email: jsharp@alpineroof.ca
Owner and Address:	The Town of Ladysmith 410 Esplanade – PO Box 220 Ladysmith, BC V9G 1A2
Bid Bond Amount:	10% of Bid Price Refer to Section '00 43 13 Bid Security'
Surety Bonds:	50% Performance Bond 50% Labour and Materials Payment Bond Refer to Section '00 61 13 Performance and Payment Security'
Warranty:	Refer to Section '07 54 19 Single Ply Roofing'
Insurance:	Refer to 'Invitation to Tender'
Bid Submission:	Refer to 'Invitation to Tender'
Bid Closing Date and Time:	Refer to 'Invitation to Tender'
Bid Submission Documents:	The following documents are to be included with your bid submission on the above closing date: 1. Completed Bid Form 2. Bid Bond 3. Consent to Provide Surety Bonds (2) 4. Certificate of Insurance 5. WorkSafe BC Clearance Letter 6. WorkSafe BC COR or Equal 7. Compliance with Town of Ladysmith Prime Contractor Program
Commence Project By:	Refer to Section '01 11 00 Summary of Work'
Project Completion Date:	Refer to Section '01 11 00 Summary of Work'

1.2 INTENT

.1 The Town of Ladysmith is seeking proposals to perform work to complete the **Roof Replacement on Roof Section 1 at the Frank Jameson Community Centre (FJCC)** in Ladysmith, British Columbia in accordance with the Contract Documents.

.2 Perform Work within the time stated in Section '01 11 00 - Summary of Work'.

1.3 SITE ASSESSMENT

.1 A mandatory pre-bid meeting will be held at the project site. See 'Invitation to Tender' documents for pre-bid meeting information.

.2 Prior to submitting a bid, each individual firm must visit the project site and surrounding area to ensure that they are fully satisfied with the existing conditions, components, contract documents and drawings in their preparation of an accurate and complete bid.

.3 It is the bidders' responsibility to ensure that they have reviewed, checked and understood all site conditions, and under no circumstance will claims be accepted against the owner, consultant or their sub - consultants due to the contractors' insufficient due diligence and site examination at the time of tender.

.4 The bidder is to obtain and / or check all measurements, dimensions, or limits on site as they deem necessary to submit an accurate submission for the undertaking of this work.

1.4 CONTRACT/BID DOCUMENTS

.1 Bid Documents: The Contract Documents supplemented with Instructions to Bidders, Bid Form and Bid Supplementary Forms identified.

.2 The form of contract shall be Canadian Construction Documents Committee CCDC 2 (2020) Stipulated Price Contract.

.1 And as amended in the Owner's Supplementary Conditions

.3 The precedence of documents shall be as follows:

.1 Contract Agreement

.2 Addenda (if any)

.3 Specifications

.4 Drawings

1.5 DOCUMENT AVAILABILITY

.1 Bid Documents are made available only for purpose of obtaining offers for this project. Their use does not confer license or grant for other purposes.

.2 Upon receipt of Bid Documents all qualified bidders are to verify that documents are complete; notify Consultant should the documents be incomplete, or any discrepancies, omissions, ambiguities, inconsistencies, errors, etc. are found.

1.6 ADDENDA

.1 Addenda may be issued during Bidding period. Addenda will become part of the Contract Documents. Include any related costs in Bid Price.

.2 Verbal answers are only binding when confirmed by written addenda.

.3 Only mandatory site meeting attendees may submit requests for material and/or system alternates.

1.7 INSTALLER QUALIFICATIONS

.1 Bidders must be capable, competent, & qualified to perform the contractual work.

.2 Company specializing in performing the work as described in the Bid Documents with a minimum of five (5) years documented experience on projects of similar size and technical scope.

.3 Bidders must be a member of a recognized provincial roofing association (e.g., RCABC, ARCA, SRCA, or RCAM) or equivalent. Work must be performed to the standards of Roofing Manuals specific to those organizations.

.4 Pre-approved and certified by the Manufacturer(s) for the specified materials and installation type.

.5 Owner reserves right to reject proposed subcontractors for reasonable cause.

1.8 SAFETY PREQUALIFICATION

.1 Prime contract Bidders shall possess a valid Certificate of Recognition (COR) as issued by WorkSafe BC or another certifying organization authorized to issue CORs.

.2 Bidders not in possession of a valid COR may pre-qualify if in possession of a valid Temporary Letter of Certification (TLC).

.3 A bid from a Bidder who does not possess a valid COR or TLC will be declared invalid and will be rejected.

1.9 MATERIAL AND/OR SYSTEM ALTERNATES

.1 **Substitutions and Equivalents:** Where Bid Documents specify a particular product by trade name, brand, or manufacturer, such specifications are used to establish a standard of quality, performance, and design. Bidders may propose "or equivalent" substitutions.

.2 **Impact on Work:** When submitting substitutions, Bidders must include all necessary changes required in the Work to accommodate such substitutions. No later claims for an increase to the Contract Price resulting from changes necessitated by the use of substitutions will be considered.

.3 **Documentation:** Submissions for substitutions must provide sufficient technical information, performance data, and test results to enable the Consultant to determine the acceptability and equivalence of such products. Such documents may include, but are not limited to the following:

.1 Bidders proposing alternate materials and/or systems must submit a comprehensive technical data package no later than the timelines outlined in 1.9.6. This package shall include architectural details, material data sheets, & installation specifications that demonstrate full compatibility with project-specific conditions and integration with adjacent assemblies.

.4 **Financial and Scope Adjustments:** Bidders shall provide complete information regarding required revisions to other work to accommodate each substitution, including the dollar amount of additions to or reductions from the Bid Price.

.5 **Default to Specified Products:** Bidders must provide the specified products unless a substitution has been submitted according to these procedures and formally accepted via Addendum.

.6 **Prior Approval & Transparency:**

.1 To ensure all Bidders compete on an equal basis, requests for approval of substitutions must be submitted in writing no later than **TEN (10) DAYS** prior to the date set for receipt of Bids.

.2 The Consultant will evaluate all timely requests based on objective technical and performance criteria.

.3 Accepted substitutions will be formally communicated to all Bidders via Addendum no later than **FIVE (5) DAYS** prior to Bid closing.

.4 If a substitution request is rejected, the Consultant shall, upon written request from the Bidder, provide a brief explanation of the technical or performance reasons why the proposed product was not deemed equivalent.

.5 Decisions regarding equivalency shall be made in a non-discriminatory manner, regardless of the province of origin of the manufacturer or supplier.

1.10 BID ENCLOSURES/REQUIREMENTS

.1 Bid Form:

.1 Bid Form to be signed under seal by Bidder.

.2 Bidder, in submitting an offer, accepts time period stated in the documents for performing the Work.

.3 State in Bid Form, time required to complete Work. Completion date in Agreement must be completion time added to commencement date.

.4 Consideration will be given to time of completion when reviewing Bids.

.2 Security Deposit:

.1 Refer to Section '00 43 13 Bid Security'.

.3 Consent of Surety or Agreement to Bond:

.1 Refer to Section '00 61 13 Performance and Payment Security'.

.4 Insurance:

.1 Provide a Certificate of Insurance proving that the Bidder has a valid insurance policy in place with the insurance required in accordance with Contract Documents.

.5 WorkSafe BC Clearance Letter.

.6 WorkSafe BC Certificate of Recognition (COR) or Equal.

.7 Safety Program Submittals.

FROM (Bidder): _____
(Legal Name)

_____
(Legal Address)

_____ _____ _____
(Representative Name) (Phone Number) (E-Mail Address)

TO (Owner): The Town of Ladysmith
410 Esplanade – PO Box 220
Ladysmith, BC V9G 1A2

PROJECT: **Frank Jameson Community Centre (FJCC) 2026 Roofing Program**

We, the undersigned, have examined the Bid Documents, Specifications, and Drawings, including all addendums up to and including Addendum(s) No._____, and we do hereby offer to provide all equipment, materials, labour, supervision and project management to perform the construction of the **Frank Jameson Community Centre 2026 Roofing Program (Roof Section 1)** in its entirety, according to the RFP Documents, Specifications, and Drawings, for the Stipulated Price of:

BASE BID ROOF REPLACEMENT **WRITTEN LUMP SUM (GST EXCL.)**	**CANADIAN DOLLARS**
BASE BID ROOF REPLACEMENT **NUMERIC LUMP SUM (GST EXCL.)**	CAD $

OPTIONAL CROSSOVER STAIR **WRITTEN LUMP SUM (GST EXCL.)**	**CANADIAN DOLLARS**
OPTIONAL CROSSOVER STAIR **NUMERIC LUMP SUM (GST EXCL.)**	CAD $

1. We do hereby declare that we are competent and qualified to perform all the Work of the Contract in accordance with the Bid Documents, Specifications, and Drawings.
2. We do hereby declare that this bid is based upon and includes performance of all the Work of the Contract in complete accordance with the Bid Documents, Specifications, and Drawings without exception.
3. We do hereby declare that this bid price includes all of our costs and obligations stemming from the complete performance of all of the Work of the Contract, in accordance with the Bid Documents, Specifications, and Drawings
4. We acknowledge and agree that the Owner is not obligated to accept this or any bid, nor to accept the lowest priced bid, but may accept any bid or reject all bids at its sole discretion.
5. This Bid shall be open to acceptance by the Owner for a period of sixty (60) days from the time and date of the bid closing.
6. If this Bid is accepted, then we shall enter into a Contract Agreement with the Owner for the performance of the Work in accordance with the Bid Documents, Specifications, and Drawings.
7. If this Bid is accepted, then we accept the role of Prime Contractor for the Work Site for the purposes of the Occupational Health and Safety Act of British Columbia.
8. We agree to accept the costs of any injury or damage to any persons or property resulting from actions, errors, or omissions of our company, our employees, or subcontractors during the performance of the Work of the Contract.
9. We agree to comply with all applicable laws, bylaws, codes, and regulations of the authorities having jurisdiction during the performance of the Work of the Contract.

HOURLY RATES

In the event that chargeable time work is authorized by the Owner, the following rates shall apply.

Supervisor	$_____ per hour
Qualified Tradesperson	$_____ per hour
Labourer	$_____ per hour

PROJECT SCHEDULE

Roof Replacement will begin by no later than: _____
(Date)

All work as specified will be 100% complete by no later than: _____
(Date)

Executed this _____ day of _____, 2026.

Signature of Authorized Representative(s):

_____ _____
(Signature) (Name and Title)

_____ _____
(Signature) (Name and Title)

Witness Signature or Corporate Seal

_____

Part 1 General

1.1 TYPE AND AMOUNT OF BID SECURITY

.1 Provide bid security in the amount of ten percent (10%) in the form of a bid bond.

.2 Submit bid security with Bid Form. Bids not accompanied by bid security will be rejected.

1.2 BID BONDS

.1 Bid bonds shall be in accordance with the Canadian Construction Documents Committee (CCDC) Standard Form of Bid Bond, CCDC Document No. 220.

.1 Consign Bid Bond to **The Town of Ladysmith.**

.2 Bid bonds shall be issued by a duly incorporated surety company authorized to transact business of suretyship in the Province of British Columbia.

.3 Bid bonds shall be properly executed by Bidder and surety.

1.3 DEFAULT BY BIDDER

.1 If a Bidder whose bid is accepted by the Owner in writing, without qualification, and within the acceptance period specified in the Bid Documents, refuses or fails, within 15 calendar days after the date of issuance of the written acceptance of the bid:

.1 to sign a formal agreement with the Owner for the performance of the Work

and

.2 to provide contract performance security as required by the Bid Documents,

the Bidder shall be liable to the Owner for the difference in money between the amount of his bid and the greater amount for which a contract for the Work is entered into with some other Bidder, up to the maximum amount of the bid security provided.

Part 1 General

1.1 TYPE AND AMOUNT OF SECURITY

.1 Contractor shall provide security for performance of the Contract in the form of one of the following:

.1 Performance Bond for fifty percent (50%) of the Contract Price.

.2 Security in the form of a bank letter of credit is not acceptable.

.3 Submit security to the Owner within fifteen (15) days of the date after issuance of Letter of Acceptance of bid.

1.2 SECURITY FOR PAYMENT OF CLAIMS

.1 Contractor shall provide security for payment to claimants for labour and material used or reasonably required for use in the performance of the Contract. Such security shall be in the form of one of the following:

.1 Labour and Material Payment Bond for 50% of the Contract Price

1.3 CERTIFIED CHEQUES

.1 Certified cheques shall be drawn on a financial institution authorized to conduct business in the Province of British Columbia and shall be made payable to **The Town of Ladysmith.**

.2 Contractor shall not be entitled to, or receive, accrued interest on a certified cheque provided as security.

1.4 GOVERNMENT BONDS

.1 Government bonds shall be unconditionally guaranteed as to principal and interest and shall be payable to bearer.

.2 Contractor shall be entitled to and shall receive accrued interest on government bonds provided as security.

1.5 SURETY BONDS

.1 Performance Bond shall be in accordance with the Canadian Construction Documents Committee (CCDC) Standard Form of Performance Bond, CCDC Document No. 221.

.2 Labour and Material Payment Bond shall be in accordance with the Canadian Construction Documents Committee (CCDC) Standard Form of Labour and Material Payment Bond, CCDC Document No. 222

.3 Consign bonds to **The Town of Ladysmith.**

1.6 SUBMISSION OF SECURITY

.1 Submit security to the Owner within fifteen (15) days after bid is accepted.

1.7 RELEASE OF SECURITY

.1 Where security is in the form of a certified cheque or government bonds, such security will be released progressively as follows:

.1 Four (4) months after Substantial Performance of the Work, not more than one third of the amount of the security will be released to the Contractor.

.2 Eight (8) months after Substantial Performance of the Work a further amount not exceeding one third of the amount of security will be released.

.3 Twelve (12) months after Substantial Performance of the Work, the balance of the security will be released, subject to deficiencies in materials and workmanship arising during the warranty period having been corrected to the Owners satisfaction.

.2 Intermediate releases of security will be made only upon written request by the Contractor. In the case of security in the form of Government bonds, the Contractor may stipulate which bonds are to be released at each stage.

Part 1 General

1.1 OWNERS REPRESENTATIVE

.1 Owner shall appoint, in writing, a representative who shall, unless Contractor is expressly advised otherwise by a duly authorized officer of the Owner, have full authority to act on behalf of and bind the Owner under the Contract.

1.2 CONTRACT DOCUMENTS

.1 The Contract Documents consist of Letter of Acceptance of Contractor's bid; executed Bid and Contract Form; these General Conditions, other documents, or parts thereof, contained in Division 0 of the Specifications which have application during performance of the Contract; Divisions 01 00 00 – 22 00 00 of the Specifications; Drawings; Schedules; and such other documents as may be identified as Contract Documents, and including amendments thereto made in accordance with provisions of the Contract.

.2 The Contract Documents are complementary, and what is required by anyone shall be as binding as if required by all.

.3 The Consultant, in the first instance, shall provide interpretations of the Contract Documents and be the judge of the performance thereunder by both parties,

.4 The Contractor shall be responsible for coordinating the Work of sub-contractors. The Contractor's responsibility for providing items not specifically identified is limited to those items that are reasonably inferable from the Contract Documents as being necessary to produce the intended results.

1.3 ASSIGNMENT

.1 Contractor shall not assign the Contract, in whole or in part, nor shall it sublet the Contract as a whole, without previous written consent of Owner, which consent shall be at Owner's sole discretion.

1.4 SUBCONTRACTS

.1 Owner will recognize Contractor only. Nothing contained in the Contract Documents shall create any contractual relationship between any Subcontractor and the Owner.

.2 Contractor agrees to bind every Subcontractor by the terms of the Contract Documents, as far as applicable to work of the subcontract.

1.5 PROTECTION OF WORK AND PROPERTY

.1 Contractor shall take all reasonable precautions necessary to protect the Work and Owner's property from damage during performance of the Contract and shall make good any damage to the Work or to Owner's property caused by Contractor or any of its Subcontractors.

1.6 DEFECTIVE WORK

.1 Defective work is work that has been rejected by Owner as failing to conform to the Contract Documents. Contractor shall promptly correct defective work, as required to conform to the Contract Documents, with no change in Contract Price.

.2 If, in the Owner's opinion, it is not expedient to correct defective work, Owner may deduct from the Contract Price the difference in value between the work as performed and that required by the Contract Documents, the amount of which will be determined in the first instance by the Owner.

.3 The Contractor shall be given the first right of refusal to repair any interior damages. If the Contractor fails to commence repairs within 48 hours of notice, the Owner may proceed with repairs by others, provided costs are commercially reasonable and documented.

1.7 CONTRACT TIME

.1 Time and all time limits stated in the Contract Documents are of the essence of the Contract. Contractor shall perform work expeditiously and with adequate forces to complete Work of the Contract within time specified in the Contract. If specified in number of days, weeks, or months, time for completion shall commence running on date of issuance of Letter of Bid Acceptance.

1.8 MATERIALS AND EQUIPMENT

.1 Unless otherwise specified, Contractor shall provide, maintain, and pay for all materials, tools, machinery, equipment, temporary facilities, controls, and conveniences, necessary for execution of the Work. Unless otherwise specified, all materials shall be new of merchantable quality and suitable for the intended purpose.

1.9 WARRANTY

.1 Neither the final payment, nor any provision in the Contract Documents shall relieve Contractor from responsibility for faulty materials or workmanship which appear within a period of two (2) years from the date of acceptance of the Work, or such other periods as may be specified for parts of the Work, and Contractor shall remedy any defects due thereto and pay for any damage to other work resulting therefrom which appear within such periods.

1.10 UNFORESEEN CONDITIONS

.1 The contractor shall notify the Owner’s Representative and the Consultant immediately upon discovery of any unforeseen condition.

1.11 CHANGES IN THE WORK

.1 Owner may order changes in the Work. Changes shall be authorized by written order from Owner.

.2 The contractor shall notify the Owner's Representative and the Consultant if he wishes to propose a change to the design of any detail.

.3 If changes to the scope of work are proposed or found to be necessary, then the Consultant shall issue a Contemplated Change Notice to the Contractor.

.4 The Contractor shall promptly submit a written price quotation in response to a Contemplated Change Notice.

.5 If the Contractor's quote in response to a Contemplated Change Notice is accepted by the Owner, then the Consultant shall issue a Change Order to the Contractor.

.6 No changes to the Contract Price, the Scope of Work, nor the Schedule, shall be considered to be valid unless authorized by a Change Order.

1.12 VALUATION OF CHANGES ON STIPULATED PRICE WORK

.1 On extra work authorized by Owner, allowance for overhead and profit shall be as follows:

.1 For work performed by Contractor's own forces, Contractor shall be entitled to 5% for overhead on actual cost of material and labour and an additional 5% for profit on above total.

.2 For work performed by Subcontractors:

.1 each Subcontractor shall be entitled to 5% for overhead on actual cost of material and labour and an additional 5% for profit on above total, and

.2 Contractor shall be entitled to 5% of Subcontractors' total.

.3 For work performed by Sub-subcontractors:

.1 each Sub-subcontractor shall be entitled to 5% for overhead on actual cost of material and labour and an additional 5% for profit on above total,

.2 Subcontractor shall be entitled to 5% of Sub subcontractors' total, and

.3 Contractor shall be entitled to 5% of above total. If a change results in a decrease in cost, amount of credit to be given to Owner shall be amount of actual decrease, without overhead and profit.

.4 If a change involves both extras and credits and results in an increase in cost, overhead and profit shall be allowed on increase only.

1.13 TIME AND MATERIALS WORK

.1 In the event that extra work is required on a time and materials basis, then the Contractor shall submit in writing to the Owner's Representative and the Consultant the reason it is necessary.

.2 Charges for time and materials work shall not be accepted without prior written authorization from the Owner's Representative.

.3 If chargeable time work is authorized, then the Contractor shall submit a record of the chargeable hours worked at the end of each day on which they are worked.

.1 The rates for chargeable time shall be in accordance with the rates submitted on the Bid Form. Overhead and profit shall be included in the hourly rates. There shall be no mark up on time charged at hourly rates.

.4 If the installation of chargeable extra material is authorized, then the Contractor shall promptly submit a detailed accounting of the quantity of all extra material installed.

.1 The base cost for the extra materials shall be indicated. The base cost shall not exceed the price for which the same materials may be purchased at a retail store.

.2 Percentage for overhead and profit, not to exceed that specified in 1.13.

1.14 INVOICING/PAYMENT

.1 Applications for payment may be made monthly, as the Work progresses, and shall be dated the last day of each payment period.

.2 Consultant will assume the role of Payment Authorizer.

.3 The Consultant shall evaluate the invoice in consideration of work completed and make recommendation to the Owner on whether or not to accept the invoice. Payment shall not be authorized in excess of the value of work completed on the date of invoice. Payment shall be made to the Contractor within thirty (30) days of the date of the Application for Payment, provided the application is complete.

.4 Amount payable shall be amount claimed, adjusted by Owner, if necessary, less 10% holdback.

.5 The Contractor shall provide an invoice to the primary consultant including a listing of the activities, level of involvement, and deliverables completed in the month preceding the date of application for payment. Contractor shall submit with the second and any subsequent applications a Statutory Declaration, CCDC 9A-2018.

.6 All invoices shall be accompanied by a Clearance Letter from WorkSafe BC.

.7 All approved invoicing will be forwarded the Owner or Owner's representative for payment.

.8 Unless the Owner is a listed tax-free Government of British Columbia agency and is not subject to GST:

.1 the Contractor shall, on each application for payment, indicate as an amount separate from the Contract Price, the amount of GST payable by the Owner,

.2 and the Owner shall pay the Contractor the GST amount payable with each payment.

.9 Final payment and release of holdback monies shall be payable provided that:

.1 Requirements for Ready for Takeover as per CCDC GC 12.1 have been attained;

.2 The Consultant has issued a final certificate for payment;

.3 the Builders Lien Act (BC) statutory period has expired;

.4 CCDC 9A-2018 and WorkSafe BC clearance have been submitted.

1.15 CLAIMS

.1 If Contractor intends to claim any additional payment, Contractor shall give notice of its intention to Owner as soon as possible and not later than 7 days after the event giving rise to the claim first arises or Contractor first becomes aware of such event.

.2 The parties shall make bona fide efforts to resolve a claim as soon as possible after receipt thereof. When the Owner issues a final written position on the claim or fails to do so within a reasonable period of time, and the claim is not resolved to the satisfaction of both parties, the claim shall be considered a dispute and shall be settled in accordance with 1.17.

1.16 DISPUTES

.1 If a dispute of any kind arises between Owner and Contractor in connection with the Contract, the matter in dispute shall be settled per the Dispute Resolution Processes for Government of British Columbia Construction Contracts.

1.17 FREEDOM OF INFORMATION & PROTECTION OF PRIVACY ACT

.1 Proponents are advised that parts or all of their RFPs may be subject to the provisions of British Columbia's Freedom of Information and Protection of Privacy Act (FIPPA). Proponents who wish to ensure particular parts of their proposal are protected from disclosure under this Act should specifically identify any information or records provided with their RFP that:

.1 constitute trade secrets;

.2 are supplied in confidence; and,

.3 the release of which could significantly harm their competitive position.

.2 Information which does not meet all three of the foregoing categories may be subject to disclosure to third parties.

1.18 LAW

.1 This Contract and the Contractor's submitted proposal shall be governed by and construed in accordance with the laws of the Province of British Columbia, Canada.

1.19 CONFLICT OF INTEREST

.1 At no time during the proposal stage, evaluation stage, after award, or during the performance of the services shall an Owner employee or member be in any way connected with the proponent. Proponents shall include with their initial proposal, and at any subsequent time where requested to do so by the Owner, full details of any employee, person, firm or corporation that could be considered in a conflict of interest.

Part 1 General

1.1 PROJECT INFORMATION

.1 The name of the project is:

Frank Jameson Community Centre (FJCC) 2026 Roofing Program

.2 The location of the work site is:

810 - 6 Avenue, Ladysmith, BC V9G 1A2

1.2 PARTIES

.1 The Owner is:

The Town of Ladysmith
410 Esplanade – PO Box 220
Ladysmith, BC V9G 1A2

.2 The Consultant is:

Alpine Roof Consulting Ltd.
Joel Sharp, Civ. Tech., RRO
Email: jsharp@alpineroof.ca

.3 Direct inquiries to the Consultant.

Part 2 Administrative

2.1 SUBMITTALS

.1 Work Schedule: Prior to start of work, submit a schedule indicating scheduled start and completion dates for each construction activity.

.2 Shop Drawings and Product Data: Submit shop drawings and product data required by the Contract Documents and for such other items as the Owner may reasonably request. Do not proceed with work until related submission has been reviewed.

.3 Samples: Submit duplicate samples required by the Contract Documents and for such other items as the Owner may reasonably request.

Part 3 Use of the Premises

3.1 HOURS OF WORK

.1 The hours of work shall be at the discretion of the Owner, and in accordance with the local bylaws.

3.2 WORKER CONDUCT

.1 Workers are strictly forbidden from attending the property while under the influence of alcohol, cannabis, or other intoxicants. Possession, use, or consumption of alcohol, cannabis, or other intoxicating drugs on the property is strictly forbidden.

.2 Smoking and vaping are not permitted on the property. Workers wishing to smoke or vape must do so off the property.

.3 Workers shall be required to refrain from using loud and profane language.

.4 Workers shall be fully clothed. Shirts are mandatory. Short sleeved shirts are permitted. Sleeveless shirts are not permitted.

.5 Clothing bearing offensive images or text are not permitted on the property. At the discretion of the Owner's Representative, workers shall, upon request, remove objectionable clothing.

.6 Workers shall comply with the above rules. Any violation of the above rules may result in the person being asked to leave the property or further discipline.

3.3 PROTECTION OF PROPERTY

.1 Protect property, incl. but not limited to sidewalks and curbs, landscaping, windows, and building exterior finishes, from damage during the performance of the work.

.2 Repair any damages caused as a result of the performance of the work to the acceptance of the Owner's Representative.

3.4 PARKING

.1 At the discretion of the Owner, trucks, trailers, and equipment may be parked on the property as may be necessary for the performance of the work. Obtain permission from the Owner's Representative for all parking on the property.

.2 Worker's personal vehicles may not be parked on the property. They shall park on the public roads in accordance with the posted bylaw signage.

3.5 SECURITY

.1 The Contractor shall be solely responsible for securing all object on the Work Site from blowing in wind. At all times, the Contractor shall prevent all objects on the Work Site from moving out of control due to wind.

.2 The Contractor shall be solely responsible for the security of the Work Site while it is under his control, and for the security of his property. The contractor leaves his property on the Owner's property at his own peril, including but not limited to vehicles, tools, equipment, and construction materials.

.3 The Contractor accepts that the Owner shall not be liable for any loss of or damage to the Contractor's property from any cause, including but not limited to theft, vandalism, fire, lightning, or weather event.

3.6 ACTIVITIES GENERATING VIBRATION, NOISE OR SAFETY CONCERNS

.1 Operations considered by the Owner to generate vibration, noise or safety concerns include, but are not limited to, the following:

.1 Cutting of existing roof material

.2 Use of powder actuated fasteners

.3 Removal of Existing material from roof

.2 Do the following when work generating vibration, noise or safety concerns may affect user or user operations.

.1 Coordinate with the Owner and user representative

.2 Schedule and coordinate hours of work with user representative

.3 Provide the Owner with minimum twenty-four (24) hours advance notice for all excessive noise generating activities.

Part 4 Temporary Facilities

4.1 DESIGN OF TEMPORARY FACILITIES

.1 Contractor shall be responsible for design and safety of temporary facilities. Temporary facilities of such nature that engineering proficiency is required for their design to ensure safety during construction shall be designed by a Professional Engineer in the employ of the Contractor. Before the temporary structure is used, the person responsible for the design or his representative, shall inspect the structure and issue a certificate stating that it has been constructed according to his design.

4.2 ACCESS TO THE ROOF

.1 Access to the roof shall be by exterior temporary ladder, scaffold tower, or other approved form of access, which shall be supplied by and shall be the sole responsibility of the Contractor.

.2 Workers shall not be permitted to enter the building except for specifically necessary tasks related to the performance of the work. Prior to entering the building, workers shall obtain permission from the Owner's Representative and comply with the Owner's instructions.

4.3 SANITARY FACILITIES

.1 Workers may not use the facilities inside the building.

.2 The Contractor shall provide and maintain during the work, temporary toilets for the use of all workmen employed on the work. Toilets in the finished portion of the building shall not be used by workmen. Comply with the Provincial Board of Health Regulations under the Public Health Act. Provide separate facilities for both sexes as required.

4.4 BARRIERS

.1 Contractor shall erect a temporary fence to enclose and limit access by the public to all areas on the ground adjacent to the building and below the work site on the roof.

.2 Placement of the fence shall be at the discretion of the Owner's Representative. Co-ordinate the placement of the fence with the Owner's Representative.

.3 Supply, erect and maintain barricades, sidewalk sheds, catch platforms, and accessories as required by authorities having jurisdiction. When no longer required, remove from the site. Demolished material shall become property of Contractor.

4.5 FIELD OFFICES AND SHEDS

.1 Contractor's Office: Provide and maintain, during the entire progress of the work, a suitable office on the site, for own use, with suitable tables or benches for the examination of drawings, specifications, etc., and where all notices and instructions from the Owner may be received and acknowledged.

.2 Materials Storage: Provide suitable weather and waterproof storage buildings for the storage and protection of materials. These buildings shall be under lock and key maintained in good condition until the completion of the building.

4.6 ELECTRICITY

.1 The Contractor shall use his own portable generators and fuel to produce all electricity required for the performance of the work.

.2 Use of the Owner's electricity shall be at the sole discretion of the Owner. Obtain permission from the Owner prior to using the Owner's electricity.

4.7 TEMPORARY ENCLOSURES

.1 Provide temporary barriers and enclosures as required to ensure that construction work and activities continue uninterrupted and unhampered by adverse weather conditions for duration of construction period.

.2 Protect all wall surfaces to ensure no damages to the wall surfaces during construction. All noted deficient item prior to construction are to be document and sent to the Owner for confirmation.

.3 Cold Weather Conditions:

.1 In advance of expected cold weather and freezing temperatures, take necessary action to protect construction from adverse effects of weather and able to maintain interior building temperatures at specified levels. Temporary heating and / or cooling is to be included in the bid.

.2 During storage, handling & installation, maintain materials at specified temperatures. Don't allow materials to freeze or become coated with ice or snow.

.3 Provide enclosures for each phase of construction so that work may be carried out under temperature-controlled conditions.

4.8 TEMPORARY FACILITIES REMOVAL AND RESTORATION

.1 Remove temporary facilities specified in this Section, prior to request for inspection for Final Acceptance.

.2 Clean and repair damage caused by installation or use of temporary facilities. Restore existing facilities used during construction to their original condition.

Part 5 Construction Requirements

5.1 EQUIPMENT

.1 The Contractor shall supply all required ladders, hoists, tools, power cords, generators, and equipment to perform and execute the work of the contract.

5.2 WASTE MANAGEMENT

.1 The Contractor shall remove all demolished materials, packaging, and other waste from the site and dispose of in accordance with the requirements of the authority having jurisdiction.

.2 Comply with Provincial and Municipal laws, rules and regulations pertaining to disposal operations.

.3 Provide on-site metal containers with lids, for collection and temporary storage of waste material, rubbish, and debris.

.4 Dispose of waste material, rubbish, and debris at disposal areas away from site.

.5 Do not burn or bury waste material, rubbish and debris on site.

.6 Do not dispose of wastes into brooks, streams, rivers, waterways, lakes or ponds.

.7 Do not dispose of volatile wastes such as mineral spirits, oil, or paint thinner in storm or sanitary drains.

.8 The cost of all waste disposal shall be included in the Bid Price.

5.3 QUALITY CONTROL

.1 The Consultant shall conduct periodic visual reviews of the work. Correct any deficiencies identified by the Consultant.

.2 The Contractor shall be solely responsible for ensuring that the finished construction conforms to the specifications, drawings, and the referenced standards.

.3 Construction which does not conform to the specifications, drawings, and the referenced standards shall be deemed to be deficient. Deficient construction shall be promptly corrected by the Contractor. No claims for extras shall be considered for correction of deficient work. Payment shall not be authorized for deficient construction.

5.4 PROGRESS CLEANING

.1 Contain waste and debris. Do not allow waste material, rubbish, and debris to accumulate and become an unsightly or hazardous condition. Maintain site in a clean and orderly condition.

.2 Do not allow waste material, rubbish, and windblown debris to reach and contaminate adjacent properties.

.3 Lower waste material in a controlled manner; do not drop or throw materials from heights without chute and tarp containment.

.4 Ensure that each Subcontractor engaged on the Work bears his full responsibility for cleaning up during and upon completion of his work in accordance with provisions of this article.

.5 Maintain the work site is a neat and tidy condition acceptable to the Owner.

5.5 FINAL CLEANING

.1 Use cleaning materials only on surfaces recommended by cleaning material manufacturer.

.2 Perform final cleaning operations specified herein prior to request for inspection for Interim Acceptance of the Work.

.3 Use experienced workers or professional cleaners for final cleaning.

.4 Remove grease, paint spots, dirt, dust, stains, labels, fingerprints and other foreign matter from interior and exterior surfaces; vacuum and dust behind grilles, louvres and screens; wash floor surfaces not otherwise finished; clean metal doors and frames; clean metal work; clean equipment; clean hardware; clean and polish glass on both sides; clean and polish mirrors.

.5 Repair, patch and touch-up marred surfaces to match adjacent finishes.

.6 Ensure that cleaning agents and methods do not remove finishes and permanent protective coatings on surfaces being cleaned. Follow manufacturer's printed maintenance requirements for cleaning.

.7 Broom clean or remove snow and ice from all exterior paved areas designed for pedestrian or vehicular traffic, including parking areas.

.8 Leave all surfaces in clean and unsoiled condition to the Owner's satisfaction.

.9 Remove all equipment, waste, and debris from the site.

.10 Clean surfaces or property which were marred during the performance of the work.

.11 Leave the site in a condition acceptable to the Owner.

1.1 PREREQUISITES

.1 Conduct a thorough site examination to verify existing conditions and confirm acceptance of the specifications and drawings. Promptly notify the Consultant of any discrepancies, omissions, or design concerns.

.2 Assume the role of Prime Contractor for the Work Site in full compliance with the Occupational Health and Safety Act.

.3 Maintain close and continuous coordination with the Owner's Representative and the Consultant for the duration of the project.

1.2 SCHEDULE

.1 Commencement of Work to begin immediately upon receipt of the Notice to Proceed.

.2 Mobilize, deliver all required materials, and commence the work no later than **August 10th, 2026.** Some mobilization or preparatory work may commence prior to that date at the sole discretion of the Owner. For any work prior to that date, request permission and closely co-ordinate with the Owner's Representative.

.3 The Contractor shall achieve Substantial Performance of the Work and fully demobilize from the site no later than **September 6th, 2026**

.4 Minor detail work and metal flashing installation may continue after **September 7th, 2026**, at the sole discretion of the Owner. For any work after that date, request permission and closely co-ordinate with the Owner's Representative.

.5 Failure to maintain the Progress Schedule may result in the Owner providing written notice to the Contractor's surety provider, if applicable, regarding unsatisfactory progress and/or seeking damages as permitted by the Contract Documents.

1.3 EXTENT OF WORK

.1 Work of this Contract comprises the replacement of Roof Section 1 down to the metal deck for the Frank Jameson Community Centre, located at 810 – 6 Avenue, Ladysmith, British Columbia in accordance with these specifications and drawings.

.2 The Work shall include, but not be limited to, the supply of labour, the supply of necessary subcontractors, the materials, effective – appropriate – safe equipment, and all transportation and freight in order to complete the stated scope of work found in the contract documents.

1.4 SCOPE OF WORK

.1 Remove the existing roofing systems on the specified roof sections in accordance with these specifications, drawings, and details.

.1 Refer to 'Section 02 41 19 Selective Demolition' and related drawings/details.

.2 Supply and install all related carpentry on the specified roof sections in accordance with these specifications, drawings, and details.

.1 Refer to 'Section 06 10 00 Rough Carpentry' and related drawings/details.

.3 Apply membrane roofing systems on the specified roof sections in accordance with these specifications, drawings and details.

.1 Refer to 'Section 07 54 19 Single Ply Roofing' and related drawings/details.

.4 Supply and install all sheet metal flashings systems on the specified roof sections in accordance with these specifications, drawings and details.

.1 Refer to Section '07 62 00' Sheet Metal Flashings' and related drawings/details.

.5 Complete all related mechanical work on the specified roof sections in accordance with these specifications, drawings, and details.

.1 Refer to 'Section 23 05 00 Mechanical Requirements and related drawings/details.

.6 Complete all related electrical work on the specified roof sections in accordance with these specifications, drawings, and details.

.1 Refer to 'Section 26 05 00 Electrical Requirements and related drawings/details.

.7 Optional Add-on Scope of Work:

.1 Complete all related electrical work on the specified roof sections in accordance with these specifications, drawings, and details.

.1 Refer to 'Section 10 66 10 FRP Fabrications (Stair Crossover) and related drawings/details.

Part 1 General

1.1 SECTION INCLUDES

.1 Environmental Controls.

.2 Site Fires.

.3 Site Drainage.

.4 Work Adjacent to Waterways.

.5 Pollution Control.

1.2 ENVIRONMENTAL CONTROLS

.1 Obtain Federal, Provincial and Local Municipality regulations pertaining to waste, air, solid waste, chemical waste, sanitary waste, sediment and noise pollution.

.2 Land resources:

.1 Prior to construction, identify all land resources to be preserved within the work area, with the Owner.

.2 Do not remove, cut, deface, injure, or destroy land resources including trees, shrubs, vines, grasses, topsoil, and landforms without written permission from the Owner.

1.3 FIRES

.1 Fires and burning of rubbish on site not permitted.

1.4 PROTECTION

.1 Protect interior materials from water intrusion or penetration.

.2 Where interior products are not intended for wet applications but are exposed to moisture, immediately remove from site and dispose of properly.

.3 Protect installed products using methods that do not support growth of moulds and mildews.

1.5 DRAINAGE

.1 Prohibit pumping water containing suspended materials into waterways, sewers, or drainage systems.

.2 Ensure proper disposal or runoff control for water containing suspended materials or other harmful substances, adhering to all local authority regulations.

1.6 SITE CLEARING AND PLANT PROTECTION

.1 Protect trees and plants on site and adjacent properties where indicated.

.2 Protect the root zones of designated trees to their drip line during excavation and grading. Avoid unnecessary traffic, dumping, and material storage within these areas.

.3 Minimize the removal of topsoil and vegetation.

1.7 WORK ADJACENT TO WATERWAYS

.1 Do not dump excavated fill, waste material or debris in waterways.

.2 Design and construct temporary crossings to minimize erosion to waterways.

1.8 POLLUTION CONTROL

.1 Maintain temporary erosion and pollution control features installed under this contract.

.2 Control emissions from equipment and plant to local authorities' emission requirements.

.3 Prevent sandblasting and other extraneous materials from contaminating air beyond application area, by providing temporary enclosures.

.4 Cover or wet down dry materials and rubbish to prevent blowing dust and debris. Provide dust control for temporary roads.

.5 Provide and maintain protection from accumulation of dust in the air, and damage to all existing air intake vents.

.6 Contractor shall provide all necessary dust and noise barriers within the building to adequately protect the existing facilities.

.7 Contractor shall provide all necessary protection within the facility, to protect the occupants from exhaust fumes and toxic odors.

1.9 DELIVERY, STORAGE AND HANDLING

.1 Take special care to prevent accumulation of moisture on materials and within packaging during delivery, storage and handling to prevent development of mould and mildew on packaging and on products.

.2 Request that suppliers give special attention to minimizing the packaging of materials and equipment:

.1 Deliver materials in recyclable, or in reusable packaging, such as cardboard, wood paper, or reusable blankets which will be reclaimed by supplier or manufacturer for recycling.

.2 Minimize packaging materials to maximum extent possible while still ensuring protection of materials during delivery, storage and handling.

.3 Minimize the use of the following packaging materials: Polyurethane, polyisocyanurate, polyethylene, and similar plastic materials such as “foam” plastics and “shrink-fit” plastics.

.4 Reusable blankets: Deliver and store materials in reusable blankets and mats reclaimed by manufacturers or suppliers for reuse where a program exists or where program can be developed for such reuse.

.5 Pallets: Ensure pallets are removed from site for reuse or for recycling.

1.10 PROJECT CONDITIONS

.1 Ventilation:

.1 Temporary Construction Ventilation: Maintain sufficient temporary ventilation in areas where materials that emit VOC’s are used. Maintain ventilation continuously during installation, and until emissions dissipate after installation. If continuous ventilation is not possible with building’s HVAC system(s), then ventilate spaces with open windows and temporary fans, sufficient to provide no less than three air changes per hour.

.2 The period after installation shall be sufficient to dissipate odours from elevated concentrations of VOC’s. Where no specific periods are stated in these Specifications, a time period of 72 hours shall be used.

.3 Ventilate areas directly to outside; ventilation to other enclosed areas is not acceptable.

.4 During dust producing activities (e.g. drywall installation and finishing) turn ventilation system off and protect openings in supply and return HVAC system from dust infiltration. Provide temporary ventilation as required.

.2 Preconditioning:

.1 Store products, which have odours, and which have significant VOC emissions to off-gas, in dry, well ventilated space for sufficient period to allow for reasonable dissipation of odours and emissions prior to delivery to Project.

.2 Condition products without containers and packaging to maximize off gassing of VOC’s.

.3 Condition products in a ventilated warehouse or other building.

1.11 DISPOSAL OF WASTES

.1 Do not bury rubbish and waste materials on site unless approved by the Owner.

.2 Do not dispose of waste or volatile materials, such as mineral spirits, oil or paint thinner into waterways, storm or sanitary sewers.

1.12 HISTORICAL / ARCHAEOLOGICAL CONTROL

.1 Perform historical, archaeological, cultural resources biological resources and wetlands control Work to Plan submitted.

.2 Provide monitoring and reporting to assure that control measures are in compliance with Plan and authority (Federal, Provincial, and Municipal) laws and regulations.

.3 Make correction to errors or omissions identified in reporting to the satisfaction of the Owner.

1.13 NOTIFICATION

.1 The Owner will notify the Contractor in writing of observed noncompliance with Federal, Provincial or Municipal environmental laws or regulations, permits, and other elements of Contractor's Environmental Protection plan.

.2 Contractor: after receipt of such notice, inform the Owner of proposed corrective action and take such action for approval by the Owner.

.3 The Owner will issue stop order of work until satisfactory corrective action has been taken.

.4 No time extensions granted, or equitable adjustments allowed to Contractor for such suspensions.

Part 1 General

1.1 WORKSAFE BC ACCOUNT

.1 At the time of bid submission, and for the duration of the project, the Contractor shall be registered and in good financial standing with WorkSafeBC.

.2 A Clearance Letter from WorkSafeBC shall be submitted prior to the Owner's entering into a contract agreement, and upon request for the duration of the project.

1.2 PRIME CONTRACTOR

.1 The Contractor shall, for the purposes of the Workers Compensation Act and the BC Occupational Health and Safety Regulation, and for the duration of the Work of this Contract:

.1 be the "prime contractor" for the "work site", and

.2 do everything that is reasonably practicable to establish and maintain a system or process that will ensure compliance with the Act and its regulations, as required to ensure the health and safety of all persons at the "work site".

.2 The Contractor shall direct all Subcontractors, Sub-subcontractors, Other Contractors, employers, workers and any other persons at the "work site" on safety related matters, to the extent required to fulfill its "prime contractor" responsibilities pursuant to the Act, regardless of:

.1 whether or not any contractual relationship exists between the Contractor and any of these entities, and

.2 whether or not such entities have been specifically identified in this Contract.

.3 Contractor shall comply with the BC OHS Regulation and ensure employees are WHMIS 2015 trained and follow WorkSafeBC Guidelines. The Contractor should maintain COR (Certificate of Recognition) or SECOR certification through the BC Construction Safety Alliance (BCCSA) or equivalent.

.4 By submitting a Bid, the Bidder agrees to accept the role of Prime Contractor.

.5 The Contractor shall file a Notice of Project (NOP) with WorkSafeBC (at least 24 hours prior to starting work) as required by OHS Regulation 20.2 and provide a copy to the Consultant.

.6 Any failure to meet the safety requirements of the contract would result in cancellation of the contract.

.7 The Work Site shall be defined as the roof, all interior areas required for access or protection, and any areas on the ground used for staging, material storage, or equipment operation.

.8 The Prime Contractor must have in place a written safety program and written safe work procedures specific to the work being performed.

.9 The Prime Contractor shall be solely responsible for defining, identifying, limiting access to, or otherwise controlling the Work Site.

.10 The safety program and all written safe work procedures must be available at the workplace prior to the commencement of the work.

.11 Contractor to have toolbox safety meetings at least weekly and formal safety meetings monthly.

.12 The Prime Contractor shall be solely responsible for the safety of all persons on the Work Site.

.13 The Prime Contractor shall dictate the rules and policies regarding safety on the Work Site.

.14 The Prime Contractor shall be solely responsible for enforcing the requirements of the Occupational Health and Safety Act on the Work Site.

1.3 CONTRACTOR SAFETY PROGAM

.1 To comply with WorkSafe OHS Regulation the following elements of a basic Contractor's Safety Program **must be present** and functioning:

.1 Policy statement:

.1 The policy clearly states the employer's aims and the responsibilities of the employer, managers, supervisors, and workers.

.2 Inspection of premises:

.1 Provision for Regular inspection of the premises, equipment, work methods and work practices, including specific instruction that states the intent of inspections, who is to inspect, what is to be inspected and inspection frequency.

.3 Supplementary instructions:

.1 Appropriate written instructions to supplement the WorkSafe BC or WCB Occupational Health and Safety Regulation.

.4 Management meetings:

.1 Provision for holding periodic meetings for the purpose of reviewing health and safety activities and accident trends, and for determining necessary action.

.5 Investigation of accidents:

.1 Provision for the prompt investigation of accidents including what to report to WorkSafe BC, which accidents to investigate, the intent of the investigation, and the content, distribution, and follow-up of reports.

.6 Records and statistics:

.1 Instruction is given to maintain records and statistics that include reports of inspections and accident investigations and make this information available to the Joint Health and Safety Committee and workers.

.7 Joint Health & Safety Committee:

.1 Provisions is made for establishing and maintaining a committee including membership, function, and detailed duties.

.8 Instruction and supervision of workers

.1 Provision is made for instruction and supervision of workers in the safe performance of their work.

.9 First Aid

.1 Written instructions directing the services and equipment to be provided, the maintenance of a treatment record book, the procedure to follow to summon a first aid attendant and the reporting of injuries.

.10 WHMIS 2015

.1 Written instructions that assign responsibility for the program, provide direction on maintaining material safety data sheets and labels, and detail the education and training.

1.4 SAFETY RECORD KEEPING

.1 The documents required to be maintained and available by the Prime Contractor will include, but will not be limited to:

.1 The Prime Contractor's safety program.

.2 All notices which the Prime Contractor is required to provide to WorkSafe BC by the OHS Regulation.

.3 Any written summary of remedial actions taken to reduce occupational health and safety hazards within the area of responsibility.

.4 All directives and inspection reports issued by WorkSafe BC.

.5 Reports on incidents and accidents occurring within the Prime Contractor's area of responsibility for which notification to WorkSafe BC is required.

.6 Records of all safety meetings held between contractors and their workers.

.7 Records of workplace health and safety orientation.

.8 Written evidence of' inspections within the workplace.

.9 Occupational first aid records.

.10 Worker training records.

1.5 WORKER QUALIFICATIONS

.1 At least one worker on every shift shall possess a valid WorkSafeBC Occupational First Aid (OFA) certificate at the level required by the BC OHS Regulation Part 3.

.2 The Prime Contractor is responsible for occupational first aid services as per BC OHS Regulation Part 3.

.3 All other designated first aiders shall hold at least a Basic First Aid certificate.

.4 WHMIS 2015 (GHS): All workers must provide proof of training. Ensure on-site "Safety Folder" contains updated Safety Data Sheets (SDS).

.5 All roofing personnel must hold valid fall protection training that meets BC OHS Regulation Part 11 requirements.

1.6 SAFETY CERTIFICATION & EQUIPMENT

.1 First Aid Kits: Provide kits meeting WorkSafeBC requirements.

.2 Certificate of Recognition (COR): Maintain a valid COR recognized by the BC Construction Safety Alliance (BCCSA).

.3 Permits: The Contractor is responsible for obtaining all municipal and provincial permits; costs must be included in the contract price.

1.7 WIND

.1 The Prime Contractor shall be solely responsible for securing all object on the Work Site from blowing in wind.

.2 At all times, the Prime Contractor shall prevent all objects on the Work Site from moving out of control due to wind.

1.8 OVERLOADING

.1 The Prime Contractor shall be solely responsible for not overloading any part of the structure.

.2 Do not place materials, equipment, or other objects on top of the structure in excess of the structure’s capacity to bear the load.

.3 Accept responsibility for any damages resulting from overloading the structure.

1.9 FIRE PREVENTION

.1 Contractor personnel are not permitted to smoke on property.

.2 No use of any open flame heat source.

.3 Ensure that all workers are trained on fire safety protocols.

.4 Hot Works Restrictions

.1 The Contractor shall implement a hot work permit system if any hot work must occur within a 50-foot boundary. All hot work activities must be supervised by a designated fire watch, and suitable fire-extinguishing equipment must be available at all times during these activities.

.5 Fire Protection Measures

.1 All roofing materials and systems shall be selected, and installed in accordance with this specification, manufacturers instructions, and applicable fire safety codes and regulations. Special attention shall be given to preventing ignition sources during installation and to using fire-resistant or fire-retardant materials as specified.

.6 Flammable Materials Handling

.1 Handling and storage of all flammable materials, including roofing adhesives and solvents, shall be in compliance with the manufacturer's safety data sheets (SDS), local fire code regulations, OHS requirements, and this specification. Proper fire extinguishing equipment shall be on-site at all times during the installation process.

.7 Permits and Planning:

.1 Hot Work Permit: A permit is mandatory before any hot work begins. This ensures a thorough risk assessment and implementation of safety measures.

.2 Detailed Plan: A plan should outline the work scope, hazards, precautions, and emergency procedures.

.8 Work Area Preparation:

.1 Clearance: Remove all flammable materials (debris, vegetation, etc.) within a minimum of 50 feet of the hot work area.

.2 Protection: Cover or shield any combustible materials that cannot be removed with fire-resistant tarps or blankets.

.3 Barriers: Erect barriers to contain sparks and hot materials.

.9 Equipment and Materials:

.1 Approved Equipment: Use only approved and well-maintained equipment.

.2 Fuel Safety: Store and handle fuel safely, away from the work area.

.3 Fire Extinguishers: Keep appropriate fire extinguishers readily available and ensure workers know how to use them.

.10 Worker Safety:

.1 Training: Workers must be trained in hot work procedures, fire safety, and emergency response.

.2 Protective Gear: Workers must wear appropriate PPE, including fire-resistant clothing, gloves, eye protection, and footwear.

.11 During Hot Work:

.1 Fire Watch: Designate a fire watcher to monitor the work area for potential fire hazards.

.2 Constant Vigilance: Be alert for any signs of fire (smoke, flames, or unusual odors).

.3 No Unattended Equipment: Never leave hot work equipment unattended.

.12 Post-Work Procedures:

.1 Cool Down: Allow materials and equipment to cool down completely before leaving the work area.

.2 Fire Watch Continuation: Maintain a fire watch for at least 60 minutes after hot work is completed and a final check after the 4-hour mark, or longer if deemed necessary.

.3 Inspection: Thoroughly inspect the work area for any signs of smoldering or hidden fires.

.13 Specific Restrictions:

.1 Weather Conditions: Avoid hot work during high winds or extreme heat.

.2 Flammable Atmospheres: Do not perform hot work in areas with flammable vapors or dust.

.3 Prohibited Areas: Some areas may be completely restricted from hot work due to high fire risk.

.14 Additional Considerations:

.1 Local Regulations: Comply with all local fire codes and regulations related to hot work.

.2 Insurance Requirements: Check with your insurance provider for any specific hot work restrictions or requirements.

1.10 CONFIRMATION OF RESPONSIBILITIES

The following is to be completed and confirmed prior to work commencing:

Discussion with Contractor Supervisor/Coordinator

Date: _____ Meeting Location: _____

Contractors: _____

Contractor Representative: _____

Town of Ladysmith Representative: _____

Acknowledges the appointment.	☐ yes ☐ no
Understands that in any conflict of directions, WCB OHS Regulation and/or the Act shall prevail.	☐ yes ☐ no
Understands and will direct that all supervisors/coordinators must immediately report any apparent conflict as described above.	☐ yes ☐ no
The supervisor shall immediately notify **Town of Ladysmith** of any reported conflict.	☐ yes ☐ no
Has requested and received information to eliminate or control hazards to the health and safety of persons at the workplace.	☐ yes ☐ no
Has conducted an inspection of the workplace to verify the presence of any hazards.	☐ yes ☐ no
Will communicate hazards to any persons who may be affected and ensure that appropriate measures are taken to effectively control or eliminate the hazards.	☐ yes ☐ no
Accepts that written documentation (e.g. notes, records, inspections, meetings etc.) on all health and safety issues must be available upon request to **Town of Ladysmith** and/or to a Board officer at the workplace.	☐ yes ☐ no
Will confirm that all workers are suitably trained and competent to perform the duties for which they have been assigned.	☐ yes ☐ no
Safety orientation of all new workers will be conducted.	☐ yes ☐ no
Contractor's written Safety Program has been provided.	☐ yes ☐ no
Meetings to exchange any safety issues, concerns, hazards, or safety directives will be conducted weekly (or more often if required).	☐ yes ☐ no
Before the commencement of work crews will attend a daily crew safety meeting	☐ yes ☐ no
The supervisor has assessed and will coordinate the first aid requirements.	☐ yes ☐ no
Transport of Injured Worker procedure is established.	☐ yes ☐ no

Notes/Follow-up:

Contractor Rep. _____ Town of Ladysmith Rep._____

Signature: _____ Signature: _____

Part 1 General

1.1 SECTION INCLUDES

.1 Laws, notices, permits and fees.

.2 Discovery of hazardous materials.

.3 Codes and standards.

1.2 DEFINITIONS

.1 Regulatory Requirements: Refers to all laws, by-laws, ordinances, rules, regulations, codes, and orders of authorities having jurisdiction (AHJ) applicable to the Work. This includes requirements in force at the time of tender and any that become effective during the performance of the Work.

1.3 GENERAL

.1 The Contractor shall comply with all applicable laws, ordinances, rules, regulations, and codes related to the Work, public health, and construction safety, both existing and those enacted during the performance of the Work. The Contractor shall provide all required notices.

.2 Except as otherwise specified, apply for, obtain, and pay all fees associated with, permits, licenses, certificates, and approvals required by regulatory requirements and the Contract Documents, based on:

.1 regulatory requirements and fees in force on date of tender submission, and

.2 any change in regulatory requirements or fees scheduled to become effective after date of tender submission and of which public notice has been given prior to date of tender submission.

.3 The Owner will obtain permanent easements and rights of servitude which may be required for performance of the work.

.4 Contractor shall give all notices required by regulatory requirements.

1.4 LAWS, NOTICES, PERMITS AND FEES

.1 The laws of the Province of British Columbia shall govern the execution and performance of the Work.

.2 The Contractor shall be responsible for obtaining and maintaining all permits, licenses, and certificates required for the performance of the Work as of the Agreement's execution date. All related costs to be included.

.3 Contractor shall display the building permit and such other permits in a conspicuous location at the Place of the Work.

.4 If the Contractor knowingly performs or allows work to be performed in violation of any applicable laws, ordinances, rules, regulations, or codes, the Contractor shall be solely responsible for correcting the violations and shall bear all associated costs, expenses, and damages.

.5 The Contractor shall determine the specific requirements of all authorities having jurisdiction.

.6 The Contractor shall pay all construction damage deposits levied by the municipality in connection with the issuance of a building permit.

1.5 CODES AND STANDARDS

.1 Execute and perform the work to meet or exceed with, but not limited to, the following latest editions of:

.1 BC Building Code 2024.

.2 BC Fire Code 2024.

.3 BC Electrical Code (Current Edition).

.4 Workers Compensation Act and the BC Occupational Health and Safety Regulation (B.C. Reg. 296/97).

.5 National Building Code of Canada (NBC) 2020 (where referenced by BCBC).

.6 NFPA 241, Standard for Safeguarding Construction, Alteration, and Demolition Operations, and the BC Fire Code 2024.

.7 Rules and regulations of all Authorities having jurisdiction at Place of Work.

.2 All materials shall be new and shall conform to the minimum applicable standards of the CSA, CGSB, CGA, ULC, etc. Compliance with these standards is required as a minimum. Any failure to do so will result in the rework of rejected materials and / or workmanship at no additional cost to the owner or consultant.

1.6 HAZARDOUS MATERIAL DISCOVERY

.1 Pre-existing Survey: Refer to the Hazardous Materials Survey provided by the Owner (if applicable).

.2 Asbestos: If material suspected to contain asbestos is encountered, immediately stop work in the affected area and notify the Consultant and the Owner. Do not resume work until an assessment is performed and written clearance is provided.

.3 Mould: Stop work immediately if significant mould growth is uncovered during the removal of the existing roof membrane or interior partitions.

.4 Compliance: All abatement or handling of discovered hazardous materials must strictly follow WorkSafeBC Part 6 protocols.

1.7 NOTIFICATION OF NON-COMPLIANCE

.1 The Owner or Consultant will notify the Contractor in writing of any observed non-compliance with regulatory requirements.

.2 Upon receipt of such notice, the Contractor shall immediately inform the Consultant of proposed corrective actions and take such action as approved. .

.3 Failure to correct non-compliance may result in a Stop Work Order at the Contractor's expense.

Part 1 General

1.1 REGULATORY REQUIREMENTS

.1 Conform to applicable code for demolition work, dust control, products requiring electrical disconnection and reconnection.

.2 Obtain required permits from authorities.

.3 Do not close or obstruct egress width to any building or site exit.

.4 Do not disable or disrupt building fire or life safety systems without prior written approval from the Owner.

.5 Conform to applicable regulatory procedures when discovering hazardous or contaminated materials.

.6 Conform to Section 014100 Regulatory Requirements.

1.2 REFERENCE STANDARDS

.1 CSA S350-M1980 (R2003), Code of Practice for Safety in Demolition of Structures.

1.3 EXISTING CONDITIONS

.1 Visit and examine the site and note all characteristics and irregularities affecting the work of this Section.

.2 Conduct demolition to minimize interference with adjacent and occupied building areas.

.3 Cease operations immediately if structure appears to be in danger and notify Consultant. Do not resume operations until directed.

Part 2 Products

2.1 MATERIALS AND EQUIPMENT

.1 Provide materials and equipment as required to perform work of this section.

2.2 DEMOLITION - GENERAL

.1 Carefully remove and dispose of sheet metal flashings in necessary locations, required components, and related accessories necessary for the successful completion of the work on all Roof Sections.

.2 Remove and dispose of existing roofing assemblies down to the existing metal deck.

Part 3 Execution

3.1 PREPARATION & PROTECTION

.1 Protect existing materials which are not to be demolished.

.2 Notify affected utility companies before starting work and comply with their requirements.

.3 Mark location and termination of utilities.

.4 Prevent movement or settlement of adjacent work. Provide and place bracing or shoring and be responsible for safety and support of such work. Be liable for any such movement or settlement, and any damage or injury caused.

.5 Cease operations and notify Owner if safety of any adjacent work or structure appears to be endangered. Take all precautions to support the structure. Do not resume operations until reviewed with the Owner.

.6 Ensure safe passage of building occupants around area of demolition.

.7 Cease operations and notify the Owner immediately for special protective and disposal instructions when asbestos materials or other hazardous materials, other than those identified, are uncovered during the work of this project.

.8 Prevailing weather conditions and weather forecasts shall be considered. Demolition work shall not proceed when weather conditions constitute a hazard to the workers and site.

.9 Prevent debris from blocking surface drainage inlets and mechanical and electrical systems which remain in operation.

.10 Temporarily suspended work that is without continuous supervision, shall be closed to prevent entrance of unauthorized persons.

3.2 TEMPORARY PARTITIONS

.1 Erect and maintain dustproof partitions, seal off ducts as required to prevent the spread of dust and fumes to other parts of the building. On completion, remove partitions and make good surfaces to match adjacent surfaces.

.2 To reduce the quantity of material otherwise destined for disposal at a landfill, the Contractor is encouraged to consider utilizing the services of businesses and non-profit organizations that specialize in salvage and recycling of used building materials but does so at his own option and risk.

3.3 DEMOLITION

.1 Carry out demolition in an orderly and careful manner.

.2 Carry out demolition work in accordance with CSA S350, unless otherwise specified.

.3 Carry out demolition in a manner to minimize inconvenience to adjacent occupied space.

.4 Lower waste materials in a controlled manner; do not drop or throw materials from heights.

.5 Protect and do not damage, mar, or deface existing building elements which are to remain in place.

.6 Remove all related accessories including but not limited to sheet metal flashings, bird spikes, etc.

.7 Remove and/or maintain existing roofing materials as described in Section 2.2 above.

.8 Remove demolished materials from site except where specifically noted otherwise. Dispose of in accordance with the requirements of the authority having jurisdiction.

.9 Do not burn or bury materials on site.

.10 Remove materials as Work progresses. Upon completion of Work, leave areas in clean condition.

3.4 RESTORATION

.1 Restore to its original condition any portion of the building demolished unnecessarily, at no expense to the Owner.

.2 Immediately as the work progresses, repair all vibration and excavation damage to existing adjacent properties and active underground services.

3.5 CLEAN-UP

.1 For clean-up during demolition and for final cleaning, comply with the requirements of Division 01, if applicable.

Part 1 General

1.1 REFERENCE STANDARDS

.1 Canadian Environmental Protection Act, 1999 (CEPA 1999)

.1 Export and Import of Hazardous Waste and Hazardous Recyclable Material Regulations (SOR/2005-149).

.2 Department of Justice Canada

.1 Transportation of Dangerous Goods Act, 1992 (TDG Act) [1992], (c. 34).

.2 Transportation of Dangerous Goods Regulations (T-19.01-SOR/2001-286).

.3 Health Canada/Workplace Hazardous Materials Information System (WHMIS)

.1 WHMIS 2015 Safety Data Sheets (SDS).

.4 National Research Council Canada (NRC)

.1 BC Fire Code 2024.

1.2 DEFINITIONS

.1 Dangerous Goods: product, substance, or organism specifically listed or meets hazard criteria established in Transportation of Dangerous Goods Regulations.

.2 Hazardous Material: product, substance, or organism used for its original purpose; and is either dangerous goods or material that will cause adverse impact to environment or adversely affect health of persons, animals, or plant life when released into environment.

.3 Hazardous Waste: hazardous material no longer used for its original purpose and that is intended for recycling, treatment or disposal.

1.3 SUBMITTALS

.1 Submit hazardous materials management plan to Consultant that identifies hazardous materials, usage, location, personal protective equipment requirements, and disposal arrangements.

.2 Hazardous waste classification: identify waste codes applicable to each hazardous waste material based on applicable federal and provincial acts, regulations, and guidelines. Waste profiles, analyses, and classification submitted to contract offices for review and approval.

.3 Record keeping: contractor is responsible for maintaining adequate records of handling, storing, and shipping of hazardous materials.

1.4 DELIVERY, STORAGE AND HANDLING

.1 Store and handle hazardous materials and wastes, prior to the removal from site, in accordance with applicable federal and provincial laws, regulations, codes, and guidelines.

.2 Store and handle flammable and combustible materials in accordance with National Fire Code of Canada (NFC) requirements.

.3 Keep no more than 45 litres of flammable and combustible liquids such as gasoline, kerosene and naphtha for ready use.

.1 Store flammable and combustible liquids in approved safety cans bearing the Underwriters Laboratory of Canada.

.4 Transfer of flammable and combustible liquids is prohibited within buildings.

.5 Transfer flammable and combustible liquids away from open flames or heat-producing devices.

.6 Solvents or cleaning agents: non-flammable or have flash point above 38 degrees C.

.7 Store flammable and combustible waste liquids for disposal in approved containers located in safe, ventilated areas. Keep quantities to a minimum.

.8 Observe smoking regulations, smoking is prohibited in areas where hazardous materials are stored, used, or handled.

.9 Storage requirements for quantities of hazardous materials and wastes in excess of 5 kg for solids, and 5 litres for liquids:

.1 Store hazardous materials and waste in closed and sealed containers.

.2 Label containers of hazardous materials and wastes in accordance with WHMIS.

.3 Store hazardous materials and waste in containers compatible with that material or waste.

.4 Segregate incompatible materials and wastes.

.5 Ensure that different hazardous materials or hazardous wastes are stored in separate containers.

.6 Store hazardous materials and waste in secure storage area with controlled access.

.7 Maintain clear egress from storage area.

.8 Store hazardous materials and wastes in location that will prevent them from spilling into environment.

.9 Have appropriate emergency spill response equipment available near storage area, including personal protective equipment.

.10 Maintain inventory of hazardous materials and wastes, including product name, quantity, and date when storage began.

.11 When hazardous waste is generated on site:

.1 Comply with applicable federal, provincial and municipal laws and regulations for generators of hazardous waste.

.2 Use licensed carrier authorized by provincial authorities to accept subject material.

.3 Before shipping material obtain written notice from intended hazardous waste treatment or disposal facility it will accept material, and it is licensed to accept this material.

.4 Label container[s] with legible, visible safety marks as prescribed by federal and provincial regulations.

.5 Only trained personnel handle, offer for transport, or transport dangerous goods.

.6 Provide photocopy of shipping documents and waste manifests to the Consultant.

.7 Track receipt of completed manifest from consignee after shipping dangerous goods. Provide photocopy of completed manifest to the Owner.

.8 Report discharge, emission, or escape of hazardous materials immediately to the Consultant and appropriate provincial authority. Take reasonable measures to control release.

.12 Ensure personnel have been trained in accordance with Workplace Hazardous Materials Information System (WHMIS) requirements.

.13 Report spills or accidents immediately to Consultant. Submit a written spill report to Consultant within 24 hours of incident.

Part 2 Products

2.1 MATERIALS

.1 Description:

.1 Bring on site only quantities hazardous material required to perform Work.

.2 Maintain WHMIS Safety Data Sheets (SDS) in proximity to where materials are being used. Communicate this location to personnel who may have contact with hazardous materials.

.3 Spill Response Materials: provide spill response materials which can be used for absorbing/shoveling and containing hazardous materials.

.4 Provide personal protective equipment.

Part 3 Execution

3.1 CLEANING

.1 Leave Work area clean at end of each day.

.2 Waste Management:

.1 Dispose of hazardous waste materials in accordance with applicable federal and provincial acts, regulations, and guidelines.

.2 Recycle hazardous wastes for which there is approved, cost effective recycling process available.

.3 Send hazardous wastes to authorized hazardous waste disposal or treatment facilities.

.4 Burning, diluting, or mixing hazardous wastes for purpose of disposal is prohibited.

.5 Disposal of hazardous materials in waterways, storm or sanitary sewers, or in municipal solid waste landfills is prohibited.

.6 Dispose of hazardous wastes in timely fashion in accordance with applicable provincial regulations.

.7 Minimize generation of hazardous waste to maximum extent practicable. Take necessary precautions to avoid mixing clean and contaminated wastes.

.8 Identify and evaluate recycling and reclamation options as alternatives to land disposal, such as:

.1 Hazardous wastes recycled in manner constituting disposal.

.2 Hazardous waste burned for energy recovery.

.3 Lead-acid battery recycling.

.4 Hazardous wastes with economically recoverable precious metals.

Part 1 General

1.1 REFERENCES

.1 Local Building Codes, current editions.

.2 National Lumber Grades Authority- Standard Grading Rules for Canadian Lumber.

.3 Canadian Roofing Contractors Association – Roofing Systems Application Standards.

1.2 QUALITY ASSURANCE

.1 Lumber by grade stamp of an agency certified by Canadian Lumber Standards Accreditation Board.

.2 Plywood, particleboard, OSB and wood based composite panels in accordance with CSA and ANSI standards.

1.3 DELIVERY, STORAGE AND HANDLING

.1 Store materials off ground; keep clean and dry.

.2 Deliver and store materials to manufacturer's instructions.

.3 Store and protect wood from moisture, mud, or other defects.

.4 Replace defective or damaged materials with new.

.5 Do not store material on roof in a manner which may overload the structure.

.6 Store materials away from open flame or ignition sources.

.7 Deliver and store materials in original packages with labels intact.

1.4 REFERENCE STANDARDS

.1 Lumber: Softwood, S4S, moisture content 19% (S-dry) or less in accordance with CSA O141 and NLGA Standard Grading Rules for Canadian Lumber.

.2 Canadian softwood plywood (CSP): to CSA O151, standard construction.

.3 CANPLY (Canadian Plywood Association) - Canadian Plywood Handbook.

.4 CAN/CSA-O80 Series-15 - Wood Preservation.

.5 CSA-O121-08 (R2013) – Douglas Fir Plywood.

.6 CSA-O151-17 – Canadian Softwood Plywood.

.7 CSA-0141-05 (R2014) – Softwood Lumber.

.8 CSA O325.0-92 (R2003) Construction Sheathing.

.9 National Lumber Grades Authority (NLGA).

.10 Canadian Lumber Standards Accreditation Board (CLSAB).

1.5 QUALITY ASSURANCE

.1 Lumber identification to be by grade stamp of an agency certified by Canadian Lumber Standards Accreditation Board.

.2 Plywood identification to be by grade mark in accordance with applicable CSA standards.

.3 Plywood, OSB and wood based composite panel construction sheathing identification to be by grade mark in accordance with applicable CSA standards.

Part 2 Products

2.1 LUMBER MATERIALS

.1 Lumber: to CAN/CSA 0141, softwood, S-P-F, S4S, surface-dry, graded and stamped in accordance with current National Lumber Grades Authority (NLGA) Standard Grading Rules for Canadian Lumber.

.1 Moisture Content: maximum 19% at time of installation.

.2 Finger jointed lumber is not acceptable.

.2 Furring, Blocking, Nailing Strips, Grounds and Rough Bucks, Cants, Curbs, Fascia, and Sleepers: Grade Standard, species: SPF

2.2 PANEL MATERIALS

.1 Douglas Fir Plywood: to CSA 0121, standard construction, thickness as indicated on Drawings.

.2 Oriented Strand Board (OSB) shall not be accepted.

.3 All materials directly exposed to the exterior to receive pressure treatment. This includes all materials that will be in contact with concrete and / or the exterior environment.

2.3 FASTENERS

.1 Wood-wood fasteners – Wood Screw #12 or as indicated. Galvanized flat head and of sufficient length to completely penetrate through base a minimum of 25mm (1”)

.2 Securement of wood lumber-sheet metal/steel deck: Corrosion coated screws, #14 thread, and of sufficient length to penetrate through base minimum of 19mm (0.75”)

.3 Securement of wood to structural steel: Teks #12 Philips wood to metal self tapping screws with wings.

.4 Securement of wood lumber to masonry or brick: Masonry screws, Tapcon anchors of sufficient length to penetrate through a minimum of 32mm (1.25”).

.5 Securement of wood lumber to solid Concrete: Tapcon anchors or Lag bolts complete with expansion shields.

.6 Nails: Minimum 6d, hot dip galvanized spiral or ring shank nails, of sufficient length to penetrate through base a minimum of 38mm (1.5”)

.7 For securement to hollow gypsum walls utilize galvanized toggle bolts.

.8 Nails, spikes, and staples in accordance with CSA B111

.9 Staples shall not be accepted.

Part 3 Execution

3.1 EXAMINATION

.1 Verification of Conditions: Verify that conditions of substrates are acceptable for product installation in accordance with manufacturer's written instructions.

.1 Visually inspect substrate.

.2 Inform Consultant of unacceptable conditions immediately upon discovery.

.3 Proceed with installation only after unacceptable conditions have been remedied and reviewed by the Consultant.

.4 Proceeding with work indicates acceptance of existing conditions.

3.2 INSTALLATION

.1 Install wooden elements as required to construct the details in accordance with the intent of the detail drawings.

.2 Comply with the requirements of the BC Building Code 2024, supplemented by the following:

.1 Ensure that all existing wood blocking to be incorporated into the work is in good condition and properly secured to existing surfaces. Notify Consultant up notice of any deteriorated, rotted, or damaged material, and replace as directed.

.2 Set members level and plumb, in correct position. Place horizontal members, crown side up.

.3 Place horizontal members, crown side up.

.4 Curb roof openings except where prefabricated curbs are provided. Form corners by alternating lapping side members.

.5 Complete all wood blocking and sheathing installation as noted and indicated on the drawings.

.6 Wood blocking to be secured into the existing surfaces to meet local or facility wind uplift requirements.

.7 Securement of wood to have a staggered pattern and sufficient to prevent warping and deflection.

.8 Countersink all fasteners flush with surface of wood blocking being secured.

.9 Use length of fastener recommended by the manufacturer, as per engineered shop drawings, and as required by the BC Building Code 2024.

3.3 ERECTION TOLERANCES

.1 Frame, anchor, fasten, tie and brace members to provide necessary strength and rigidity.

3.4 PROTECTION

.1 Protect installed products and components from damage during construction.

.2 Protect installed products and components from moisture immediately after installation.

.3 Repair damage to adjacent materials caused by rough carpentry installation.

Part 1 GENERAL

1.1 SECTION INCLUDES

.1 Adhered Single-Ply Roof Membrane and Associated Components.

1.2 REFERENCE STANDARDS

.1 Applicable Provincial Building Code or National Building Code of Canada and CRCA or equivalent regional roofing association standards.

1.3 SYSTEM DESCRIPTION

.1 <u>Roof Section 1:</u>

.1 Basis of Design: New 60mil Single-Ply KEE Fleece back Membrane, Adhered.

.2 New ½" Gypsum Coverboard, Adhered.

.3 New 4" Non-Organic Polyisocyanurate Insulation, Adhered.

.4 New Min. 8% Non-Organic Polyisocyanurate Insulation Backslopes, Adhered.

.5 New Self-Adhered Vapour Retarder Membrane.

.6 New ½" Gypsum Auxiliary Levelling Surface, Adhered.

.7 Existing Steel Decking.

1.4 SUBMITTALS FOR REVIEW

.1 Products data and shop drawings for tapered insulation.

1.5 QUALITY ASSURANCE

.1 Perform Work to the applicable reference standards, and in accordance with the manufacturer's written instructions. Obtain and maintain on-site access to manufacturer's written recommendations and instructions for installation of products.

.2 Installer Qualifications: Installer shall be a company specializing in the work of this section able to demonstrate completion of 3 projects of similar scope and complexity, and capable of meeting the manufacturer's requirements for warranty issuance. Workers to be trained and certified by the manufacturer or able to demonstrate equivalent competency, including a full-time on-site supervisor, able to communicate verbally with Contractor, Owner's Consultant and employees, and qualified by the roofing system manufacturer to install manufacturer's product and furnish warranty of type specified.

.3 Manufacturer Qualifications: Approved manufacturer with UL listed roofing systems comparable to those specified, with minimum five years' experience. Manufacturer must be willing to provide warranty coverage for any qualified installer meeting the performance requirements.

.4 All workers performing hot air welding shall provide proof of competency through industry-recognized training or a valid third-party certification equivalent to the standards required for the specified membrane system.

1.6 DELIVERY, STORAGE, AND HANDLING

.1 Deliver roofing materials to Project site in original containers with seals unbroken and labeled with manufacturer's name, product brand name and type, date of manufacture, approval or listing agency markings, and directions for storing and mixing with other components.

.2 Store liquid materials in their original undamaged containers in a clean, dry, protected location and within the temperature range required by roofing system manufacturer. Protect stored liquid material from direct sunlight.

.1 Discard and legally dispose of liquid material that cannot be applied within its stated shelf life.

.3 Protect roof insulation materials from physical damage and from deterioration by sunlight, moisture, soiling, and other sources. Store in a dry location. Comply with insulation manufacturer's written instructions for handling, storing, and protecting during installation.

.4 Handle and store roofing materials and place equipment in a manner to avoid permanent deflection of deck.

1.7 PROJECT / FIELD CONDITIONS

.1 Protect building, adjacent buildings, walkways, site improvements, exterior plantings, and landscaping from damage or soiling from roofing operations.

.2 Maintain access to existing walkways, corridors, and other adjacent occupied or used facilities.

.3 Weather Limitations: Proceed with installation only when existing and forecasted weather conditions permit roofing system to be installed according to manufacturer's written instructions and warranty requirements.

.4 Store all materials prior to application at temperatures between 5 and 32 deg. C (40 and 90 deg. F).

.5 Apply materials within range of ambient and substrate temperatures recommended by manufacturer. Do not apply materials when air temperature is below 5 or above 43 deg. C (40 and 110 deg. F).

.6 Do not apply roofing in snow, rain, fog, or mist.

.7 Weather Limitations: Proceed with installation only when existing and forecasted weather conditions permit roofing system to be installed according to manufacturer's written instructions and warranty requirements.

.8 Daily Protection: Coordinate installation of roofing so insulation and other components of roofing system not permanently exposed are not subjected to precipitation or left uncovered at the end of the workday or when rain is forecast.

.1 Provide tie-offs at end of each day's work to cover exposed roofing and insulation with a course of roofing sheet securely in place with joints and edges sealed.

.2 Complete terminations and base flashings and provide temporary seals to prevent water from entering completed sections of roofing.

.3 Remove temporary plugs from roof drains at end of each day.

.4 Remove and discard temporary seals before beginning work on adjoining roofing.

1.8 WARRANTY

.1 Manufacturer's Warranty: Roof System Manufacturer's standard form in which Manufacturer agrees to repair or replace components of the roofing system that fail in materials or workmanship within warranty period, as follows.

.1 Form of Warranty: Manufacturer's standard warranty form.

.2 Scope of Warranty: The warranty covers material and workmanship.

.3 Warranty inspection and maintenance program provided with warranty at a minimum of 5-year intervals. (Provided and included by the manufacturer)

.4 Warranty Extension: Warranty extension program available at the end of the warranty period.

.5 Transfers: No limitation on number of warranty transfers.

.6 Scope of Warranty: Work of this Section and including sheet metal details and termination details installed by the roof system Installer and approved by the Roof System Manufacturer.

.7 Warranty Period: **30 years from date of completion.**

.2 Manufacturer Inspection and Preventive Maintenance Service: To report maintenance responsibilities necessary for preservation of Owner's warranty rights and to perform periodic routine maintenance required, as described in Manufacturer's standard form. The cost of manufacturer's inspections and preventive maintenance is included in the Contract Sum.

.1 Scope of Service: Manufacturer's standard form.

.2 Inspections to occur in years: 2, 5, 10, 15, 20, and 25 following completion.

Part 2 PRODUCTS

2.1 MATERIALS, GENERAL

.1 Material Compatibility: Roofing materials shall be compatible with one another and adjacent materials under conditions of service and application required, as demonstrated by roof membrane manufacturer based on testing and field experience.

.2 The following noted system is based on a Ketone Ethylene Ester (KEE) Membrane system. Basis of Design is Tremco KEE; alternative products by other manufacturers will be considered based on objective performance data and provided they meet/exceed the performance criteria specified in Articles 2.2, 2.3, & 2.4.

.1 Bidders must provide side-by-side technical comparisons, performance data, and a written confirmation from the alternative manufacturer that they will meet the warranty requirements.

2.2 PERFORMANCE REQUIREMENTS

.1 General Performance: Installed membrane roofing and base flashings shall withstand specified uplift pressures, thermally induced movement, and exposure to weather without failure due to defective manufacture, fabrication, installation, or other defects in construction. Membrane roofing and base flashings shall remain watertight.

.1 Dynamic Impact/Puncture Resistance, ASTM D5635: >35.

.2 Static Puncture Resistance ASTM D 5602 (99 lbf): >150.

2.3 ROOF MEMBRANE:

.1 Thermoplastic Ketone Ethylene Ester (KEE) coated polyester fabric-reinforced sheet, ASTM D6754.

.1 Basis of design product, or approved equivalent:

.1 Tremco, TremPly KEE FB (Fleece Backed) Single Ply Roof Membrane.

.2 Breaking Strength, minimum, ASTM D751: Machine direction, 87 kN/m (500 lbf); Cross machine direction, 70 kN/m (400 lbf).

.3 Tear Strength, minimum, ASTM D751: Machine direction, 21 kN/m (125 lbf); Cross machine direction, 25 kN/m (145 lbf).

.4 Elongation at Break, ASTM D751: 20 percent.

.5 Dynamic Impact/Puncture Resistance, ASTM D5635: 35.

.6 Minimum Membrane Thickness, nominal, less backing, ASTM D751: 1.5 mm (60 mils)

.7 Thickness over fiber, optical method: 0.016 inches.

.8 Accelerated Weathering, ASTM G155 and ASTM G154: 15,000 hr., no cracking or crazing.

.9 Abrasion Resistance, ASTM D3389: Not greater than 2,000 cycles, H-18 wheel, 1,000 g load.

.10 Colour: White

.2 Membrane Flashing: Manufacturer's standard, smooth-backed, sheet flashing of same material, type, reinforcement, thickness, and colour as PVC sheet membrane.

.1 Basis of design, or approved equivalent:

.1 Tremco, TremPly KEE 60mil Non-Reinforced (Smooth Non-FB)

2.4 AUXILIARY ROOFING MATERIALS

.1 Adhesives and sealants that are not on the exterior side of weather barrier shall comply with the following limits for VOC content when calculated according to 40 CFR 59, Subpart D (EPA Method 24):

.1 Single-Ply Roof Membrane Sealants: 450 g/L.

.2 Nonmembrane Roof Sealants: 300 g/L.

.3 Sealant Primers for Nonporous Substrates: 250 g/L.

.4 Sealant Primers for Porous Substrates: 775 g/L.

.2 Roof Membrane and Flashing Membrane Adhesive:

.1 Bonding adhesive, solvent based fast drying, VOC-compliant, for bonding KEE fleece-backed single ply membranes and flashings to substrates.

.2 Field Membrane (Fleece Backed):

.1 Tremco, TremPly POWERply Endure BIO Bonding Adhesive, or approved equivalent.

.3 Membrane Flashings (Smooth):

.1 Tremco, TremPly KEE LV Bonding Adhesive, or approved equivalent.

.3 Metal Termination Bars: Manufacturer's standard, predrilled stainless-steel, approximately 25 mm by 3 mm (1 by 1/8 inch) thick; with anchors.

.4 Fasteners: All fasteners, anchors, and plates shall be Type 304 or 316 Stainless Steel, or high-performance polymer-coated steel fasteners meeting or exceeding FM Approvals 4470 corrosion resistance requirements

.5 Joint Sealant: Elastomeric joint sealant compatible with roofing materials, with movement capability appropriate for application.

.1 Joint Sealant, Polyurethane: ASTM C920, Type S, Grade NS, Class 50 single-component moisture curing sealant, formulated for compatibility and use in dynamic and static joints; paintable.

.1 Basis of design product: Tremco, TremSEAL Pro, or approved equivalent.

.6 Scuppers: To be fabricated from compatible PVC coated metal.

.7 Miscellaneous Accessories: Provide pourable sealers, preformed cone and vent sheet flashings, preformed inside and outside corner sheet flashings, T-joint covers, lap sealants, termination reglets, and other accessories.

.8 Insulation Adhesive: Low-Rise two-part foam adhesive approved by the membrane manufacturer.

2.5 DECK LEVELLING SURFACE AND INSULATION COVERBOARD

.1 ½" thick glass faced 4'x 8' glass faced gypsum boards.

.2 Basis of design product, or approved equivalent:

.1 ½" Thick Densdeck Prime Gypsum Sheathing, by Georgia Pacific.

2.6 VAPOUR RETARDER

.1 Description: Self-adhesive vapour barrier membrane composed of a tri-laminated woven polyethylene facer and SBS modified bitumen. The underface is covered with a silicone release film.

.1 Basis of design product, or approved equivalent:

.1 Sopravap'R, by Soprema.

.2 Elastocol Stick Primer, by Soprema.

2.7 ROOF INSULATION

.1 Flat Non-Organic PolyISO Insulation:

.1 One (1) layer of 4" thick non-organic polyisocyanurate insulation boards.

.2 Board Size, 4' x 4'.

.3 Accepted Products: Any approved non-organic PolyISO insulation listed on the Accepted Products list by the RCABC or equivalent regional roofing association.

.2 Tapered Backslope Insulation:

.1 Non-organic polyisocyanurate insulation boards.

.2 Slope: 8%.

.3 Board size: 4' x 4'.

.4 Accepted Products: Any approved non-organic PolyISO insulation listed on the Accepted Products list by the RCABC or equivalent regional roofing association.

2.8 WALKWAY

.1 Basis of design product, or approved equivalent:

.1 36" x 120" Wide Fibergrate Molding Grating with rubber feet, by Tremco.

2.9 ROOF HATCH

.1 Basis of design product, or approved equivalent:

.1 Bilco Type S-20, 36” x 30”

2.10 VAPOUR PERMEABLE AIR BARRIER AT PARAPETS

.1 Basis of design product, or approved equivalent:

.1 Sopraseal Stick VP, by Soprema.

Part 3 EXECUTION

3.1 EXAMINATION

.1 Examine substrates, areas, and conditions for compliance with the following requirements & other conditions affecting performance of roofing system:

.1 Verify roof openings & penetrations are in place and curbs are set & braced.

.2 Verify that blocking, curbs, and nailers are securely anchored to roof deck at penetrations and terminations and that nailers match thicknesses of insulation.

.3 Verify that deck is sound and dry and securely fastened with no projecting fasteners and with no adjacent units in excess of 1.6 mm (1/16 inch) out of plane relative to adjoining deck.

.2 Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

.1 Clean substrate of dust, debris, moisture, and other substances detrimental to roofing installation according to roofing system manufacturer's written instructions. Remove sharp projections.

.2 Prevent materials from entering and clogging roof drains and conductors and from spilling or migrating onto surfaces of other construction. Remove roof-drain plugs when no work is taking place or when rain is forecast.

.3 Complete terminations and base flashings and provide temporary seals to prevent water from entering completed sections of roofing system at the end of the workday or when rain is forecast. Remove and discard temporary seals before beginning work on adjoining roofing.

3.3 INSTALLATION, GENERAL

.1 Install roofing system in accordance with manufacturer’s written instructions and approved details.

.2 Install blocking, curbs, and nailers in accordance with requirements of Division 06 Section "Miscellaneous Rough Carpentry."

.3 Install roofing system to applicable Building Codes and CRCA or equivalent regional roofing association standards.

3.4 GYPSUM BOARD DECK LEVELLING SURFACE

.1 Fully cover the steel deck with the new gypsum board cover board.

.2 Offset joints minimum of 12" in both directions.

.3 Tightly butt the board joints leaving no gaps.

.4 Apply low-rise two-part foam adhesive to every steel deck top flute.

.5 Ensure all boards are laying flat and flush with all adjacent boards.

3.5 VAPOUR RETARDER APPLICATION

.1 Apply primer to the full area of the deck levelling surface at the manufacturer's recommended rate of application. Allow to flash off gas in strict accordance with the manufacturer's requirements.

.2 Fully adhere the self-adhering vapour retarder membrane, free of wrinkles, air pockets, or other defects.

.3 Extend the vapour retarder up the walls at perimeters and penetrations to minimum 1" above the insulation.

.4 Seal vapour retarder to all pipe penetrations.

3.6 FLAT AND TAPERED INSULATION APPLICATION

.1 Ensure the vapour retarder surface is clean, dry, and free of any debris or contaminants that would impair adhesive bond.

.2 Apply the low-rise two-part polyurethane foam adhesive, applied in strict compliance with the manufacturer's instructions and wind uplift calculations, or in the following application rate and pattern, whichever is more stringent:

.1 Bead Size: Minimum 13 mm (1/2") diameter wet ribbons.

.2 Field Area: Max. 300 mm (12") O/C spacing.

.3 Perimeter Area: Max. 150 mm (6") O/C spacing (outer 2.4 m (8') of roof).

.4 Corner Area: Max. 100 mm (4") O/C spacing (2.4 m x 2.4 m (8' x 8') area).

.3 Immediately place the 4'x4' insulation boards into wet adhesive before it reaches its "tack-free" state or begins to "skin over."

.4 Stagger all end joints a minimum of 300 mm (12").

.5 Apply temporary ballast (weights) as required to ensure 100% contact with adhesive, especially at board corners and any slightly uneven insulation transitions.

.6 Tightly abut all insulation board joints; maximum allowable gap is 6 mm (1/4").

.7 Any gaps exceeding 6 mm (1/4") must be filled with tightly fit slivers of insulation or compatible spray foam.

.8 Create a minimum 24" x 24" x 1" deep sump at each drain/primary scupper location.

3.7 GYPSUM BOARD INSULATION COVER BOARD

.1 Ensure the underlying insulation is clean, dry, and securely adhered. Remove any dust or "raspings" from the insulation surface that could interfere with the polyurethane adhesive bond.

.2 Apply the low-rise two-part polyurethane foam adhesive, applied in strict compliance with the manufacturer's instructions and wind uplift calculations, or in the following application rate and pattern, whichever is more stringent:

.1 Bead Size: Minimum 13 mm (1/2") diameter wet ribbons.

.2 Field Area: Max. 300 mm (12") O/C spacing.

.3 Perimeter Area: Max. 150 mm (6") O/C spacing (outer 2.4 m (8') of roof).

.4 Corner Area: Max. 100 mm (4") O/C spacing (2.4 m x 2.4 m (8' x 8') area).

.3 Immediately place the boards into wet adhesive before it reaches its "tack-free" state or begins to "skin over."

.4 Stagger all end joints a minimum of 300 mm (12").

.5 Apply temporary ballast (weights) as required to ensure 100% contact with adhesive, especially at board corners and any slightly uneven insulation transitions.

.6 Tightly abut the board joints leaving no gaps.

.7 Ensure all boards are laying flat and flush with all adjacent boards.

3.8 ADHERED MEMBRANE ROOFING INSTALLATION

.1 Adhere membrane roofing over area to receive roofing and install according to membrane roofing system manufacturer's written instructions.

.2 Start installation of membrane roofing in presence of membrane roofing system manufacturer's technical personnel.

.3 Accurately align membrane roofing and maintain uniform side and end laps of minimum dimensions required by manufacturer. Stagger end laps.

.4 Bonding Adhesive: Apply to substrate at rate required by manufacturer. Install membrane immediately into adhesive, avoiding any air entrapment; do not allow adhesive to dry. Do not apply adhesive to splice area of membrane.

.5 Membrane must be rolled with a minimum 75lb (34kg) weighted roller immediately after being laid into the wet adhesive.

.6 In addition to adhering, mechanically fasten membrane roofing securely at terminations, penetrations, and 4" (12" O/C) up the perimeter of roofing.

.7 Apply membrane roofing with side laps shingled with slope of roof deck where possible.

.8 Welded Seams: Clean seam areas, overlap membrane roofing, and hot-air weld side and end laps of membrane roofing and sheet flashings according to manufacturer's written instructions to ensure a watertight seam installation.

.9 Test lap edges with probe to verify seam weld continuity. Apply lap sealant to seal cut edges of sheet membrane.

.10 Verify field strength of seams a minimum of twice daily and repair seam sample areas.

.11 Repair tears, voids, and lapped seams in roofing that do not comply with requirements.

.12 Spread sealant bed over deck drain flange at roof drains and securely seal membrane roofing in place with clamping ring.

.13 Install membrane roofing and auxiliary materials to tie into existing roofing to maintain weathertightness of transition.

3.9 PERIMETER FLASHING INSTALLATION

.1 Install sheet flashings and preformed flashing accessories and adhere to substrates according to membrane roofing system manufacturer's written instructions.

.2 Apply bonding adhesive to substrate and underside of sheet flashing at required rate and allow to partially dry. Do not apply to seam area of flashing.

.3 Flash penetrations and field-formed inside and outside corners with cured or uncured sheet flashing.

.4 Clean seam areas, overlap, and firmly roll sheet flashings into the adhesive. Hot-air weld side and end laps to ensure a watertight seam installation.

.5 Seal top termination of base flashing with a metal termination bar and a continuous bead of joint sealant.

3.10 WALKWAYS

.1 Install new Fibergrate walkway in according to manufacturer's written instructions.

3.11 FIELD QUALITY CONTROL

.1 Final Roof Inspection: Arrange for roofing system manufacturer's technical personnel to inspect roofing installation at commencement and upon completion.

.1 Notify Owner's Consultant and Owner 48 hours in advance of date and time of inspection.

.2 Additional testing and inspecting, at Contractor's expense, will be performed to determine if replaced or additional work complies with specified requirements.

3.12 PROTECTING AND CLEANING

.1 Protect roofing system from damage and wear during remainder of construction period. When remaining construction will not affect or endanger roofing, inspect roofing for deterioration and damage, describing its nature and extent in a written report, with copies to Owner's Consultant and Owner.

.2 Correct deficiencies in or remove roofing system that does not comply with requirements, repair substrates, and repair or reinstall roofing system to a condition free of damage and deterioration at time of Substantial Completion and according to warranty requirements.

.3 Clean overspray and spillage from adjacent construction using cleaning agents and procedures recommended by manufacturer of affected construction.

Part 1 General

1.1 REFERENCES

.1 ASTM A653/A653M-13 - Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process.

.2 Canadian Roofing Contractors Association (CRCA) – Roofing Specifications Manual.

.3 SMACNA 1120-2012 - Architectural Sheet Metal Manual, latest edition.

1.2 SHOP DRAWINGS

.1 Submit shop drawings in accordance with GENERAL REQUIREMENTS SPEC SECTION 01 10 61.

.2 Clearly indicate bending, folding, jointing, fastening installation details.

.3 Shop Drawings: Indicate material profile, jointing pattern, jointing details, fastening methods, flashings, terminations, and installation details.

1.3 QUALITY ASSURANCE

.1 Perform Work to SMACNA, and CRCA or equivalent regional roofing association standards.

.2 Fabricator Qualifications: Company specializing in manufacturing the Products specified in this section with minimum five (5) years documented experience.

.3 Installer Qualifications: Company specializing in performing the work of this section with minimum five (5) years documented experience and approved by the manufacturer.

.4 The completed work shall be visually reviewed by the Consultant. Correct any deficiencies.

.5 The Contractor shall be solely responsible for ensuring that the work conforms to the specifications and referenced standard.

1.4 DELIVERY, STORAGE AND HANDLING

.1 Deliver, store and handle materials in accordance with manufacturer's written instructions.

.2 Store materials off ground and under cover in a dry, well-ventilated enclosure.

.3 Stack preformed material in manner to prevent twisting, bending, and rubbing.

.4 Provide protection for galvanized and pre-painted surfaces.

.5 Prevent contact of dissimilar metals during storage and protect from acids, flux, and other corrosive materials and elements.

Part 2 Products

2.1 STEEL SHEET

.1 Pre-Coated Galvanized Steel: ASTM A653/A653M (Z275) G90 zinc coating designation; 24-gauge core steel. Shop pre-coated with Dofasco Perspectra Series or Valspar Weather X factory-baked finish.

.2 Hook strips and cleats: Fabricate from metal two gauge heavier than the sheet metal flashing material, 22-gauge zinc-coated steel, to ASTM A-446 Grade A with G90 (Z 275) zinc coating with Series 5000 baked enamel finish. Use ONLY material compatible with material being secured.

.3 All pre-finished flashings are to match adjacent colours unless otherwise indicated on the drawings or approved by the Owner.

2.2 ACCESSORIES

.1 Fasteners:

.1 Use galvanized, copper, aluminum or stainless-steel nails or screws most compatible with materials being employed. Use fasteners as most generally suitable to not cause a galvanic reaction.

.2 Exposed Fasteners: Where exposed fasteners are specified or as shown, use #10 screws with metal and neoprene washers pre-finished to match colour of flashing.

.3 Use only fasteners required and approved as per the shop drawings.

.2 Sealant: Mulco Supra Expert Thermoplastic Sealant, colour to match. No clear sealant will be accepted.

.3 Joint Filler: Extruded polyethylene closed cell – 25-30% wider than joint to be caulked.

.4 Touch up paint – as recommend by manufacturer.

2.3 FABRICATION

.1 Fabricate all flashings and trims in accordance with the project details and in accordance with standard detail practices outlined in the SMACNA handbook.

.2 Fabrication of metal shall be formed on a bending brake, shaping trimmed and hard seaming shall be done on bench, as far as practicable, with proper sheet metal working tools.

.3 Form sections square, true and accurate to size, free from distortion and other defects detrimental to appearance or performance.

.4 Construct flashing joints to allow for flashing movement, using flat "S" lock seams.

.5 Maintain minimum of 22 mm lap at all joints. Provide 25 mm anchor projection of "S" locks.

.6 Layout, angles, bends, locks etc. shall consider the possible expansion and contractor of the specified material, to avoid buckling, oil canning, and damage.

.7 Form pieces in shop to a maximum 2.4m (8’-0”) in length.

.8 Hem exposed edges on underside 13 mm (1/2); mitre and seam corners.

.9 Back paint sheet metal with bituminous paint on surface in contact with concrete, masonry, cementitious materials, or dissimilar metal.

Part 3 Execution

3.1 EXAMINATION

.1 Examine surfaces to receive flashings. Notify the Consultant of surfaces which are considered unacceptable to receive the work of this Section.

.2 Verify roof openings, curbs, pipes, sleeves, ducts, or vents through roof are solidly set, reglets in place, and nailing strips located.

.3 Verify roofing termination and base flashings are in place, sealed, and secure.

3.2 INSTALLATION

.1 Install to SMACNA, and Canadian Roofing Contractors Association (C.R.C.A.) Specifications Manual standard details and requirements.

.2 Sheet metal work shall be installed to cover the entire area it protects and shall be watertight under all service and weather conditions. Install in a uniform manner, true to line, free of dents, warping and distortion.

.3 Conceal fastenings in the S-locked joints.

.4 Join sheet metal by means of "S" lock seams, to allow thermal movement. Space joints evenly where exposed to view.

3.3 CLEANING

.1 On completion and verification of performance of installation, remove surplus materials, excess materials, rubbish, tools, and equipment.

.2 Leave work areas clean, free from asphalt, grease, finger marks and stains.

Part 1 General

1.1 SCOPE OF WORK

.1 This specification is for a pultruded fiberglass stair system in compliance with OSHA 1910.27.

1.2 REFERENCES

.1 The publications listed below (latest revision applicable) form a part of this specification to the extent referenced herein. The publications are referred to within the text by the designation only.

.1 AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM) Test Methods:

.1 ASTM D-638-Tensile Properties of Plastics.

.2 ASTM D-790-Flexural Properties of Unreinforced and Reinforced Plastics.

.3 ASTM D-2344-Apparent Interlaminar Shear Strength of Parallel Fiber Composites by Short Beam Method.

.4 ASTM D-495-High Voltage, Low-Current, Dry Arc Resistance of Solid Electrical Insulation.

.5 ASTM D-696-Coefficient of Linear Thermal Expansion for Plastics.

.6 ASTM E-84-Surface Burning Characteristics of Building Materials.

.7 THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) Code of Federal Regulations (CFR), Title 29, Section 1910.27.

1.3 CONTRACTOR SUBMITTALS

.1 The CONTRACTOR shall furnish shop drawings of all fabricated ladder, cages and accessories in accordance with the provisions of this Section.

.2 The CONTRACTOR shall furnish manufacturer's shop drawings clearly showing material sizes, types, styles, part or catalog numbers, complete details for the fabrication of and erection of components including, but not limited to, location, lengths, type and sizes of fasteners, clip angles, member sizes, and connection details.

.3 The CONTRACTOR shall submit the manufacturer’s published literature including structural design data, structural properties data, corrosion resistance tables, certificates of compliance, test reports as applicable, and design calculations for systems not sized or designed in the contract documents, sealed by a Professional Engineer.

.4 The CONTRACTOR may be required to submit sample pieces of each item specified herein for acceptance by the ENGINEER as to quality and color. Sample pieces shall be manufactured by the method to be used in the WORK.

1.4 QUALITY ASSURANCE

.1 All items to be provided under this Section shall be furnished only by manufacturers having a minimum of ten (10) years experience in the design and manufacture of similar products and systems. Additionally, if requested, a record of at least five (5) previous, separate, similar successful installations in the last five (5) years shall be provided.

.2 Manufacturer shall offer a 20 year limited warranty on all FRP products against defects in materials and workmanship.

.3 Manufacturer shall be certified to the ISO 9001-2008 standard.

.4 Manufacturer shall provide proof of certification from at least two other quality assurance programs for its facilities or products (DNV, ABS, USCG, AARR).

1.5 PRODUCT DELIVERY AND STORAGE

.1 Delivery of Materials: Manufactured materials shall be delivered in original, unbroken pallets, packages, containers, or bundles bearing the label of the manufacturer. Adhesives, resins and their catalysts and hardeners shall be crated or boxed separately and noted as such to facilitate their movement to a dry indoor storage facility.

.2 Storage of Products: All materials shall be carefully handled to prevent them from abrasion, cracking, chipping, twisting, other deformations, and other types of damage. Adhesives, resins and their catalysts are to be stored in dry indoor storage facilities between 70 and 85 degrees Fahrenheit (21 to 29 degrees Celsius) until they are required.

PART 2 - PRODUCTS

1.6 MANUFACTURER

.1 The FRP Crossover System is based on a fiberglass stair system. Basis of Design is Tremco Fibergrate Pultruded Dynarail Fiberglass Stair Platform with Molded Grating Steps.

.2 Alternative products by other manufacturers will be considered based on objective performance data and provided they meet/exceed the performance criteria specified in Articles 2.2, 2.3, & 2.4.

.1 Bidders must provide side-by-side technical comparisons, performance data, and a written confirmation from the alternative manufacturer that they will meet the warranty requirements.

1.7 GENERAL

.1 All stair side rails, steps, mounting brackets and structural components are to be FRP structural shapes manufactured by the pultrusion process. All structural shapes shall be composed of fiberglass reinforcement and resin in qualities, quantities, properties, arrangements and dimensions as necessary to meet the design requirements and dimensions as specified in the Contract Documents.

.2 Fiberglass reinforcement shall be a combination of continuous roving, continuous strand mat, bi-directional roving mat and surfacing veil in sufficient quantities as needed by the application and/or physical properties required.

.3 Basis of Design: Resins shall be DYNAFORM® {ISOFR, an isophthalic polyester or VEFR, a vinyl ester - choose one} with chemical formulation necessary to provide the corrosion resistance, strength and other physical properties as required.

.4 All finished surfaces of FRP items and fabrications shall be smooth, resin-rich, free of voids and without dry spots, cracks, crazes or unreinforced areas. All glass fibers shall be well covered with resin to protect against their exposure due to wear or weathering.

.5 All pultruded stair handrail components shall be further protected from ultraviolet (UV) attack with 1) integral UV inhibitors in the resin and 2) a synthetic surfacing veil to help produce a resin rich surface

.6 All FRP products shall have a tested flame spread rating of 25 or less per ASTM E-84 Tunnel Test.

.7 The stair platform side rail shall be 1-3/4" square tube with a wall thickness of 1/4" or greater.

.8 Basis of Design: All side rail and hand rail components are to be integrally pigmented yellow. All structural components, molded grating steps, and floor mount brackets shall be Dynaform® ISOFR light gray.

.9 Pultruded structural shapes used in the stair platform system are to have the minimum longitudinal mechanical properties listed below:

Property	**ASTM Method**	**Value**	**Units**
Tensile Strength	D-638	30,000 (206)	psi (MPa)
Tensile Modulus	D-638	2.5×10^6 (17.2)	psi (GPa)
Flexural Strength	D-790	30,000 (206)	psi (MPa)
Flexural Modulus	D-790	1.8×10^6 (12.4)	psi (GPa)
Flexural Modulus (Full Section)	N/A	2.8×10^6 (19.3)	psi (GPa)
Short Beam Shear (Transverse)	D-2344	4,500 (31)	psi (MPa)
Shear Modulus (Transverse)	N/A	4.5×10^5 (3.1)	psi (GPa)
Coefficient of Thermal Expansion	D-696	8.0×10^{-6} (1.4×10^{-6})	in/in/°F (cm/cm/°C)
Flame Spread	E-84	25 or less	N/A

.10 All fasteners used in the stair platform system are to be 316 SS. Rivets will be 18-8 stainless steel.

1.8 MOLDED FRP GRATING

.1 Manufacture: Grating shall be of a one piece molded construction with tops and bottoms of bearing bars and cross bars in the same plane. Grating shall have *(*a square mesh pattern providing bidirectional strength *or* a rectangular mesh pattern providing unidirectional strength - *choose one)*. Grating shall be reinforced with continuous rovings of equal number of layers in each direction. The top layer of reinforcement shall be no more than 1/8" below the top surface of the grating so as to provide maximum stiffness and prevent resin chipping of unreinforced surfaces. Percentage of glass (by weight) shall not exceed 35% so as to achieve maximum corrosion resistance, and as required to maintain the structural requirements of the CONTRACT.

After molding, no dry glass fibers shall be visible on any surface of bearing bars or cross bars. All bars shall be smooth and uniform with no evidence of fiber orientation irregularities, interlaminar voids, porosity, resin rich or resin starved areas.

.2 Non−slip surface Grating shall be manufactured with an integrally applied grit to the top surface of each bar providing maximum slip resistance.

.3 Grating bar intersections are to be filleted to a minimum radius of 1/16" to eliminate local stress concentrations and the possibility of resin cracking at these locations.

.4 Fire rating: Grating shall be fire retardant with a tested flame spread rating of 25 or less when tested in accordance with ASTM E 84. Data performed only on the resin shall not be acceptable.

.5 Basis of Design Resin system: The resin system used in the manufacture of the grating shall be {Vi-Corr®, FGI-AM®, Corvex®, ELS, XFR *or* Super Vi-Corr® - *choose one, use NSF specialty formula for NSF Standard 61 certified products*}.

.6 Manufacturer may be required to submit corrosion data from tests performed on actual grating products in standard chemical environments. Corrosion resistance data of the base resin from the manufacturer is not a true indicator of grating product corrosion resistance and shall not be accepted.

.7 Color: standard colour chosen by owner.

.8 G. Depth: 1" with a tolerance of plus or minus 1/16".

.9 H. Mesh Configuration: 1.5 " x 1.5" with a tolerance of plus or minus 1/16" mesh centerline to centerline.

.10 Load/Deflection: Grating design loads shall be less than manufacturers published maximum recommended loads. Maximum recommended loads shall be determined by acoustic emission testing. Grating shall be designed for a uniform load of 100 psf or concentrated load of 300 lb. Deflection is not to exceed 0.375" or L/D = 120, whichever is less.

.11 The manufacturer shall certify that the stiffness of all panels manufactured are never more than 2.5% below the published load-deflection values.

.12 Substitutions: Other products of equal strength, stiffness, corrosion resistance and overall quality may be submitted with the proper supporting data to the engineer for approval.

2.4 GRATING FABRICATION

.13 Measurements: Grating supplied shall meet the dimensional requirements and tolerances as shown or specified. The Contractor shall provide and/or verify measurements in field for work fabricated to fit field conditions as required by grating manufacturer to complete the work. When field dimensions are not required, contractor shall determine correct size and locations of required holes or cutouts from field dimensions before grating fabrication.

.14 Layout: Each grating section shall be readily removable, except where indicated on drawings. Manufacturer to provide openings and holes where located on the contract drawings. Grating openings which fit around protrusions (pipes, cables, machinery, etc.) shall be discontinuous at approximately the centerline of opening so each section of grating is readily removable.

.15 Sealing: All shop fabricated grating cuts shall be coated with vinyl ester resin to provide maximum corrosion resistance. All field fabricated grating cuts shall be coated similarly by the contractor in accordance with the manufacturer's instructions.

.16 Hardware: Type 316 stainless steel hold-down clips shall be provided and spaced at maximum of four feet apart with a minimum of four per piece of grating, or as recommended by the manufacturer.

PART 3 - EXECUTION

1.9 FABRICATION

.1 All ladders and cages shall be designed and laid out in strict accordance with OSHA 1910.27.

.2 All rungs shall penetrate the wall of the tube side rails and shall be connected to the rails with both epoxy and rivets to provide both a chemical and mechanical lock, respectively.

.3 Ladders shall be fully shop assembled. Ladder cages shall be test assembled and drilled to ensure a proper fit in the field. Ladder cage brackets shall remain attached to the ladder for shipping, but ladder cage components shall be disassembled, packaged, and shipped separately to ensure the lowest freight costs and to prevent damage in transit. Cage components shall be bundled with each respective ladder.

.4 The hoop brackets shall be shop attached to the ladder with bolts. The hoops shall be field attached to the hoop brackets.

.5 All cut or machined edges, holes and notches shall be sealed to provide maximum corrosion resistance. All field fabricated cuts shall be coated similarly by the contractor in accordance with the manufacturer's instructions.

1.10 PERFORMANCE REQUIREMENTS

.1 The completed ladder and cage system installation shall meet the following load requirements set forth in OSHA 1910.27. The ladder shall also be capable of supporting a concentrated vertical load of 1,200 pounds applied at the mid-span of the rung. Manufacturer shall be required to provide supporting test data for rung capacity.

1.11 INSTALLATION

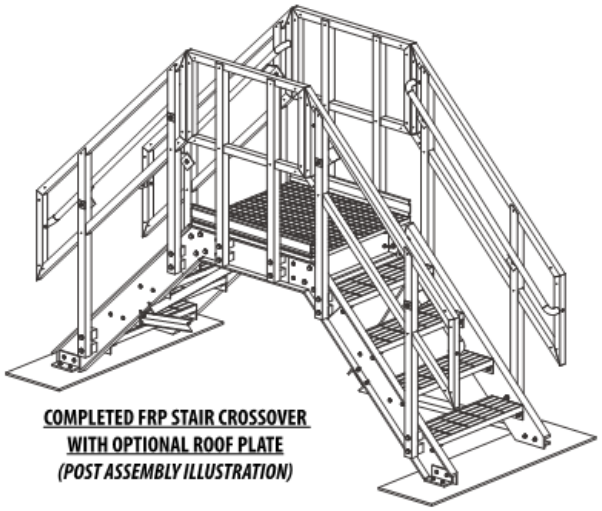
.1 Contractor shall be required to assemble and install stair platform in strict accordance with manufacturer's assembly drawing and installation brochure.

.2 Seal cut or drilled surfaces in accordance with manufacturer's instructions. Follow manufacturer's instructions when cutting or drilling fiberglass products or using resin products; provide adequate ventilation.

1.12 WARRANTY

.1 Manufacturer shall offer a 20-year limited warranty on all FRP products against defects in materials and workmanship

1.13 EXAMPLE PHOTO



COMPLETED FRP STAIR CROSSOVER WITH OPTIONAL ROOF PLATE
(POST ASSEMBLY ILLUSTRATION)

Part 1 General

1.1 INTENT

.1 Temporarily disconnect, remove, raise, or reinstall mechanical system components and ductwork as necessary to facilitate the execution of the work.

1.2 CO-ORDINATION AND INSTALLER QUALIFICATIONS

.1 All mechanical installations and gas line work shall be undertaken exclusively by qualified technicians.

1.3 REFERENCE STANDARD

.1 Strict adherence to all applicable codes, including the National Plumbing Code of Canada, is mandatory for all work.

.2 Sheet Metal and Air Conditioning Contractors National Association (SMACNA) Standard 2020 – HVAC Duct Construction Standards, 4th Edition

Part 2 Execution

2.1 EXAMINATION

.1 Prior to commencement, inspect all HVAC units, existing drain piping, vent piping, chimneys, chimney caps, air extractors, hoods, and sheet metal specialties.

.2 Notify the Owner's representative of any components or systems which are damaged or otherwise unacceptable for re-use.

.3 Commencement of work indicates acceptance of existing conditions.

.4 Cut holes in the roof deck as required to complete the pipe connections.

.5 Insulate the undersides of the drain assemblies. Lap and seal drain insulation onto existing pipe insulation.

2.2 H.V.A.C. UNITS, AIR EXTRACTORS, GAS LINES, ETC.

.1 Closely co-ordinate this work with the building operations staff.

.2 Obtain permission for system shutdowns and provide notification of shutdowns as dictated by the building operations staff.

.3 Temporarily decommission HVAC units, air extractors, gas lines as required to perform roofing work.

.4 Raise the HVAC units up as required to conduct roofing work.

.5 Recommission all systems as soon as possible after roofing work.

Part 1 General

1.1 GENERAL REQUIREMENTS

.1 Any electrical work is to be conducted only by competent and qualified electricians.

.2 Any electrical work is to be conducted in accordance with the Local Building and Electrical Codes.

.3 Temporarily disconnect, remove, raise, re-install, etc. electrical system components as required to conduct roofing and raise curb heights to a minimum of 8 inches above finished roof system. Refer to drawings for further instructions.

.4 Notify the Owner of any existing electrical systems or components which do not conform to current applicable Codes.

.5 Obtain any required permits and inspections. The cost of any such permits or inspections is to be included in the contract price.

.6 Co-ordinate any required electrical work with the building owner's representative. Provide notice for shutdowns in accordance with the owner's requirements.

1.2 ELECTRICAL SCOPE

.1 Disconnect and temporarily remove any electrical devices and services as required to conduct roofing work, and re-install and re-commission afterwards.

.2 Temporarily terminate any electrical services in a safe condition.

.3 Protect any temporarily removed electrical devices from damage. Re-install in a condition equal to or better than that found prior to removal.

.4 Be responsible for any damages caused to any components during the performance of the work of the contract.

.5 Any component of any lightning rod grounding system which is disconnected and reconnected shall be inspected by a qualified lightning system inspector. The cost of such inspection shall be included in the contract price. Submit the lightning grounding system re-certification to the Owner's representative at project close out.