

**MAIN ARENA ROOF REPLACEMENT**  
**TERRACE SPORTSPLEX 2023**  
**ITT# PRC-02-2023**



**Topside Consulting (2004) Ltd**

**FEBRUARY 2023**



**INVITATION TO TENDER**

**ITT# PRC-02-2023**

**MAIN ARENA ROOF REPLACEMENT TERRACE SPORTSPLEX 2023**

BIDS MUST BE RECEIVED BEFORE 2:00 P.M. (Pacific Time)

April 4th, 2023

CITY OF TERRACE

ATT: Monty Gill

Manager of Facilities & Operations

3320 Kalum Street

Terrace, BC V8G 2N6

(Email: [mjill@terrace.ca](mailto:mjill@terrace.ca) Ph: 250-615-3022 for inquiries)

**This bid is submitted by:**

Name of Contractor: \_\_\_\_\_

Address: \_\_\_\_\_

Phone: \_\_\_\_\_ Email: \_\_\_\_\_

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Name of authorized representative (Please Print): \_\_\_\_\_

Title: \_\_\_\_\_

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## Schedule A - Services

**Reference No.            PRC-02-2023**

- 1.0     These instructions apply to and govern the preparation for this Tender Bid. The Bid is generally for the following work:

The replacement of the Main Arena Roof at the Sportsplex building. Replacement. This tender agreement and its specifications provided by the Consultant outline the technical details that are to take place with the current main roof system.

1.1     **Term:**

The term of this Agreement commences on April 11<sup>th</sup>, 2023 and completion of this project is set for July 31<sup>st</sup>, 2023. This is if all **Terms and Specifications** are met accordingly, as specified in the specifications outlined by the Consultant.

1.2     **Services:**

The Bidders responding to this Invitation to Tender (ITT) must provide:  
Please see the attached specifications prepared by the representing Consultant Mel Hoffart, RRO.

The cut-off for submitting any questions related to this ITT to the City of Terrace contact will be four business (4) days before the Closing Time April 4<sup>th</sup>, 2023. Questions received after this time may not be answered. Any questions regarding specifications to be directed to:

Mel Hoffart RRO  
Topside Consulting (2004) Ltd.  
1717 - 93<sup>rd</sup> Ave.  
Dawson Creek, BC V1G 1E7  
Phone: 250-782-6878 Cell: 780-518-6106  
Email: [mel@topsideconsulting.ca](mailto:mel@topsideconsulting.ca)

1.3     **Site Meeting: (Mandatory)**

A site meeting will be held Wednesday March 21<sup>st</sup>, 2023 at 10:30am at 3320 Kalum Street, Terrace Sportsplex. (Please report to the main administration office).

Confirmation of attendance must be made one week in advance with the Manager of Facilities and Operations, 250-615-3022.

1.4     **Reporting Requirements:**

Please see the attached specifications prepared by the representing Consultant.



## Schedule B - Invitation to Tender: Terms and Conditions

1. Contractors must submit a Bid that complies with the instructions provided as a “Checklist for Bidders” found attached to this tender document.
2. By submitting a bid in response to this ITT, the bidder is deemed to have agreed to the terms and conditions of the Service Agreement and Specifications outlined, by the Consultant and including the schedules and appendixes embedded in this ITT document. If selected as the successful bidder, the bidder agrees to supply the services listed at the price quoted in the submitted Schedule C - Price Form.
3. Only complete Tenders received through BC Bid before the closing time will be considered to have been received on time. Hard copies will not be considered or evaluated.
4. Tenders will remain valid for 45 days from the closing date of this ITT, despite anything to the contrary of the Tender.
5. This Tender does not commit the City of Terrace, in any way to select a preferred Contractor. The City of Terrace reserves the right in its sole discretion to cancel this Tender, up until award, for any reason whatsoever
6. Lowest or any Tenders will not necessarily be accepted.
7. Contractors must comply with all applicable laws.
8. Contractors are solely responsible for their own expenses, if any, in preparing and submitting a Bid, and if successful, in finalizing a contract.
9. Bids must be submitted in English as the working language of the City of Terrace is English.
10. If a key resource is named in a Bid, the contractor represents and warrants that the key resource named meets all the requirements set out in this ITT.
11. Once an award is made, the successful contractor will be held to its Bid as of the closing date of the ITT even if the contractor later alleges a mistake was made in the bid process.
12. If a contractor discovers that it has made error in its Bid, the contractor may forward a correction notice to the City of Terrace or withdraw its Bid. The correction or withdrawal of the Bid must be received before the closing date and time of the ITT.
13. Before any award is made, if it appears that an error has been made in a Bid, the City may, in its sole discretion, communicate with the contractor to ascertain if it wishes to honour the Bid or permission to withdraw the Bid. If the contractor is permitted to withdraw its Bid, the Contractor will not be considered further.

14. The City reserves the right to award this order in part or in full, on the basis of Bids received unless the contractor specifies that its Bid is valid only for the complete order.
15. The City will not be obligated in any manner to any bidder whatsoever until an agreement has been executed and delivered by both the City and the successful Contractor.
16. Neither acceptance of a Bid nor execution of Service Agreement will constitute approval of any activity or development contemplated in any Tender that requires any approval, permit, license or other statutory authority pursuant to any federal, provincial, or municipal statute, regulation or bylaw.
17. All inquiries related to this ITT are to be directed to the City, to the contact person noted on the front cover page of this ITT. Information from any other source is not official and may be inaccurate. Inquiries and responses may be posted on the BC Bid website ([www.bcbid.ca](http://www.bcbid.ca)) or distributed to all bidders, at the City's option.
18. All documents submitted to the City are subject to the disclosure provisions of the *Freedom of Information and Protection of Privacy Act*.
19. While the City of Terrace has used considerable efforts to ensure an accurate representation of information in this ITT, all bidders are urged to conduct their own investigations into the material facts and specifications. The City will not be held liable or accountable for any error or omission in any part of this ITT.

## Schedule C - Price Tender Form

### TENDER FORM

TO: CITY OF TERRACE  
3215 EBY STREET,  
TERRACE, BC V8G 2X8

FOR THE PROJECT SPECIFIED:

2023 ROOF REPLACEMENT – TERRACE SPORTSPLEX  
3320 KALUM STREET,  
TERRACE, BC.  
TENDER NO. PRC-02-2023

NAME OF CONTRACTOR: \_\_\_\_\_

ADDRESS: \_\_\_\_\_

\_\_\_\_\_

PHONE, FAX & E-MAIL; \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

To furnish and deliver all materials, to provide all necessary equipment and to do and perform all work in accordance with these Specifications and Drawings for the above named works.

TENDER NO. PRC-02-2023 \$ \_\_\_\_\_

GST @ 5%. \$ \_\_\_\_\_

TOTAL TENDER PRICE \$ \_\_\_\_\_

**PROOF OF SITE VISIT**

The following is to be filled out and signed by the appropriate persons. The Contractor's representative must familiarize himself with the work to be done; job site conditions; measurements; access to roof areas etc. This will involve inspection of each and every roof area.

Date of site inspection: \_\_\_\_\_

Contractor name: \_\_\_\_\_

Signature of Contractor Representative: \_\_\_\_\_

Signature of Owner's Representative: \_\_\_\_\_

**\*\*TO BE ENCLOSED WITH TENDER\*\***

## Schedule D – The Designation of the Prime Contractor

1. Project Information:

Project Name: \_\_\_\_\_

Project Number: \_\_\_\_\_

WCB Project Number: \_\_\_\_\_

2. Prime Contractor Information:

Name of Prime Contractor: \_\_\_\_\_

Address: \_\_\_\_\_

Phone: \_\_\_\_\_

Employer WorkSafe Account number: \_\_\_\_\_

Person in Charge of Project: \_\_\_\_\_

Person Responsible for Coordinating Health and Safety Activities: \_\_\_\_\_

3. Contractor's declaration as per Workers' Compensation Act

I/we acknowledge, in accordance with the Workers' Compensation Act (RSBC 1996) Chapter 492, Part 3, Division 3, Section 118 and 119 that I/we are the "Prime Contractor" and are qualified to act as the "Prime Contractor". I/we accept the duties and responsibilities for coordination of health and safety in accordance with the Workers Compensation Act. And further that I/we will do everything that is reasonably practicable to establish and maintain a system or process that will ensure compliance with the Workers Compensation Act and the Occupational Health and Safety Regulations. The Prime Contractor shall appoint a qualified coordinator for the purpose of ensuring the coordination of health and safety activities for the workplace. Prior to commencement of Construction, the Contractor shall complete and file a "Construction Notice of Project" with the Workers' Compensation Board and shall provide a copy of the same to the City of Terrace confirming that the contractor shall be the Prime Contractor responsible for coordination of safety and health under Part 3 of the Workers Compensation Act and Part 20 of the WCB Occupational Health & Safety Regulations.

\_\_\_\_\_ Date: \_\_\_\_\_

Contractors Representative

4. Name of Sub Contractor(s), Sub-Contractor's qualified person(s) and Sub-Contractor's Workers Representative(s):

(Please Print)

Sub-Contractor:	Sub-Contractor:
Qualified Person:	Qualified Person:
Worker Representative:	Worker Representative:

## Schedule E - Insurance:

1. The contractor must, without limiting its obligations or liabilities and at its own expense, provide and maintain throughout the contract term, Comprehensive General Liability in an amount not less than \$5,000,000 inclusive per occurrence insuring against bodily injury, personal injury and City of Terrace – Invitation To Tender Request for ITT# PRC-02-2023 Main Arena Roof Replacement Terrace Sportsplex 2023 Proposals - property damage and including liability assumed under contract in the forms and amounts acceptable to the City of Terrace. If, in the opinion of the City, the project contains added risks, the City reserves the right to increase the limit required. All required insurance will be endorsed to provide the City of Terrace with 30 days advance written notice of cancellation or material change. The contractor will provide the City of Terrace with evidence of the required insurance, in the form of a completed Certificate of Insurance, immediately following execution and delivery of the contract. The City of Terrace is to be added as Additional Named Insured.
2. All insurances described in Section 1.0 of this Schedule must:
  - a) be primary;
  - b) not require the sharing of any loss by any insurer of the City of Terrace.
3. The contractor must provide the City of Terrace with evidence of all required insurance as follows:
  - a) within ten (10) Business Days of commencement of the Services, the Contractor must provide to the City of Terrace evidence of all required insurance;
  - b) if any required insurance policy expires before the end of the Term, the Contractor must provide to the City of Terrace within ten (10) Business Days of the policy's expiration, evidence of a new renewal policy meeting the requirements of the expired insurance; and
  - c) despite paragraph (a) or (b) above, if requested by the City of Terrace at any time, the Contractor must provide to the City certified copies of the required insurance policies.
4. The contractor must obtain, maintain, and pay for any additional insurance which the Contractor is required by law to carry, or which the Contractor considers necessary to cover risks not otherwise covered by insurance specified in this Schedule in the Contractor's sole discretion.

## Appendix 1 – Bid and Contract Security:

1. A certified cheque in the amount of 10% of the tendered sum shall accompany the Tender. The cheque shall be held as Bid Security during the award period and the successful tenderer's cheque shall be retained as Contract Security. Unsuccessful Tenderer's Bid Security will be released after contract award.

2. As an alternative:

A Bid Bond in the amount of 10% of the tendered sum shall accompany the Tenders as Bid Security.

In the case that the Contractor has supplied a 10% Bid Bond, the Contractor shall provide and pay for 50% Labour and Material Bond and 50% Performance Bond as appropriate to be held as Contract Security.

## Appendix 2 – Work Safe BC

### **WorkSafeBC Requirements relating to multiple employer workplaces Page 2 of 2, Excerpt from Part 3 Division 3 of the Workers Compensation Act 118 Coordination at multiple-employer workplaces:**

- (1) In this section: "multiple-employer workplace" means a workplace where workers of 2 or more employers are working at the same time; "prime contractor" means, in relation to a multiple-employer workplace,
  - (a) the directing contractor, employer or other person who enters into a written agreement with the owner of that workplace to be the prime contractor for the purposes of this Part, or
  - (b) if there is no agreement referred to in paragraph (a), the owner of the workplace.
- (2) The prime contractor of a multiple-employer workplace must
  - (a) ensure that the activities of employers, workers and other persons at the workplace relating to occupational health and safety are coordinated, and
  - (b) do everything that is reasonably practicable to establish and maintain a system or process that will ensure compliance with this Part and the regulations in respect of the workplace.
- (3) Each employer of workers at a multiple-employer workplace must give to the prime contractor the name of the person the employer has designated to supervise the employer's workers at that workplace.

### **Excerpt from OHS Regulation Part 20 20.3 Coordination of multiple employer workplaces:**

- (1) If a construction project involves the work of 2 or more employers or their workers, each employer must notify the owner, or the person engaged by the owner to be the prime contractor, in advance of any undertaking likely to create a hazard for a worker of another employer.
- (2) If a work location has overlapping or adjoining work activities of 2 or more employers that create a hazard to workers, and the combined workforce at the workplace is more than (5)
  - (a) the owner, or if the owner engages another person to be the prime contractor, then that person must
    - (i) appoint a qualified coordinator for the purpose of ensuring the coordination of health and safety activities for the location, and
    - (ii) provide up-to-date information as specified in subsection (4), readily available on site, and
  - (b) each employer must give the coordinator appointed under paragraph (a)(i) the name of a qualified person designated to be responsible for that employer's site health and safety activities.
- (3) The duties of the qualified coordinator appointed under paragraph (2)(a)(i) include:
  - (a) informing employers and workers of the hazards created, and
  - (b) ensuring that the hazards are addressed throughout the duration of the work activities.
- (4) The information required by subsection (2)(a)(ii) includes:
  - (a) the name of the qualified coordinator appointed under subsection (2)(a)(i).
  - (b) a site drawing, which must be posted, showing project layout, first aid location, emergency transportation provisions, and the evacuation marshalling station, and



(c) a set of construction procedures designed to protect the health and safety of workers at the workplace, developed in accordance with the requirements of this Regulation.

**Note:** The information required by subsection (4) is a part of the overall health and safety program required by Part 3 of this Regulation (Rights and Responsibilities). See sections 118 and 119 of Part 3 of the Workers Compensation Act for the statutory requirements for coordination at multiple employer workplaces and the general duties of owners.

Appendix 3 – References

**REFERENCES**

List contact names, phone numbers, and project names in which the contractor has provided similar services in the last two years.

Project & Location	Contact Person	Phone No.
<hr/>		
<hr/>		
<hr/>		
<hr/>		
<hr/>		

The successful bidder must have a proven history of being capable to perform the necessary work both safely and to quality standards.

Tenders will only be considered from bidders that have proven capabilities to perform this type of work to the satisfaction of the owner.  
:

## Appendix 4 – Checklist for Bidders:

Read all terms and conditions according to this ITT and Specifications by the Consultant.

1. Complete the following schedules that make up your Bid:
  - A signed front cover page of this ITT (or signed cover page with the ITT number and information requested in this ITT front cover page).
  - A completed Schedule “C” - Price Form
  - A completed Schedule “E” - The Designation of the Prime Contractor
  - Mandatory Site Visit
  - Appendix “1” - Bid and Contract Security
  - A completed Appendix “3” - References
2. Submit all completed documents before the closing date and time set out on the front cover page of this ITT on BC Bid.

## GENERAL INSTRUCTIONS

### 1. PERMITS, REGULATIONS

The Contractor shall obtain permits, pay all fees therefore, and comply with all Provincial, Municipal and other legal regulations and by-laws applicable to the work. If no local regulations exist, comply with the latest revision of the National Building Codes of Canada.

### 2. EXISTING FEATURES

The location of existing features has been determined from available records, but is not guaranteed. The location of all such features shall be investigated and verified in the field by the Contractor.

### 3. PROTECTION OF PUBLIC FACILITIES

Protect existing road, paving, buildings, finished surfaces, equipment, trees, utilities, heating, lighting, power and telephone services during the work. Any damage resulting to the aforementioned by the contractors forces shall be made good, repaired or replaced at the contractor's costs to Owner's approval.

### 4. WORKER/SUBCONTRACTOR SAFETY

The Contractor shall, as part of the Site Safety Plan, for the duration of the Work of this Contract shall be considered "prime contractor" as under Section 118 and 119 of Part of the *Workers Compensation Act* of BC and regulation 20.3 of Worksafe BC and as such will:

- .1 Do everything that is reasonably practicable to establish and maintain a system or process to ensure compliance with Worksafe BC regulations, as required to ensure the health and safety of all persons at the "work site".
- .2 Direct all workers and subcontractors and any other persons at the "work site" on safety related matters 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.

### 5. WORK AREAS

Provide, maintain, and remove upon completion, hoardings, barriers, warning signs and way finding signs for the protection of workmen and the public as required and approved by the Owner or the Authority having jurisdiction. All the necessary precautions shall be taken to protect the public at all times. **No hoisting or lowering of roofing materials will be permitted in areas accessible to the public or the Owners employees. All of this work will be executed in a safe manner inside of a barrier set up prior to work commencing as agreed upon with the owner and contractor.** Conform to all Worksafe BC regulations.

### 6. MATERIALS

All materials shall be new unless specific approval has been given by the Specifying Authority for any component.

## 2023 ROOF REPLACEMENT – TERRACE SPORTSPLEX

### GENERAL INSTRUCTIONS

#### 7. CLIMATIC CONDITIONS

Provide protection at all times against weather so as to maintain work, material, and equipment and property free from injury or damage, and as necessary to ensure work is carried out expeditiously in accordance with agreed time schedule and completion date.

#### 8. PARKING

Parking for workers employed on the site shall be restricted to the area assigned for the purpose by the Owner or Authority having jurisdiction.

#### 9. PROGRESS SCHEDULE

Submit to the Specifying Authority prior to the award of the contract, an application schedule, satisfactory to all parties. Schedule to indicate commencement of the contract, progress and planned date of completion. All work must be coordinated in such a manner as to be continuous to completion.

#### 10. CO-OPERATION

The Contractor and Sub-contractor shall read the Specifications for all trades, properly, to acquaint themselves with the nature of the work. Cooperation between trades is required to coordinate the work and prevent delay.

#### 11. DEMOLITION

It is to be distinctly understood that the Contractor will be held responsible for the work of the Sub-contractors and to see that they carry out the provisions of the contract. All demolished material to be carefully contained and removed by chutes or other approved means from roof surfaces in order of procedure listed generally.

#### 12. PROCEDURE

All roof areas to be made water-tight as soon as possible before proceeding. No roof membrane area is to be removed which is greater in area than can be made water-tight by end of same working day, under climatic conditions existing at the time.

#### 13. ACCESS TO WORK

Access to building roofs and the exact means of access, are to be confirmed by the Owner or his representative at the required site visit. Contractor shall ensure that the work is carried out such that there is minimal interference with the proper functioning of the facility. Noise levels must be kept to acceptable levels during business hours. All safety concerns of the owner will be immediately addressed by the contractor.

## **2023 ROOF REPLACEMENT – TERRACE SPORTSPLEX**

### **GENERAL INSTRUCTIONS**

#### **14. PROTECTION & CLEANUP OF PROPERTY**

This Contractor shall provide protection to the property under this contract and the surrounding properties and public areas, from damages resulting from his work, particularly during the removal of any of the existing roofs. All damages caused by this Contractor shall be made good by the contractor at no cost to the Owner or other parties.

This Contractor shall maintain the site in as clean a condition as possible during his work, to the satisfaction of the Consultant. The contractor shall remove from this site, and the surrounding properties, any debris from his work on a daily basis. Failure to do this will result in the cleaning and removal being executed by the Owner and the cost then deducted from the amount owing the Contractor.

#### **15. QUALITY CONTROL**

On-site Inspector is to be Topside Consulting (2004) Ltd.

#### **16. QUALIFICATIONS OF TENDER**

Tenders will be accepted only from those Roofing Contractors who are authorized to carry on business in the Province of British Columbia and who have qualified Roofing Tradesmen.

#### **18. COMMENCEMENT OF WORK**

Contractor may commence work on facilities roof project roof as soon as possible after signing of contracts.

#### **19. UTILITIES & FACILITIES**

The Contractor shall make provisions for sanitary facilities, telephone, and domestic power. Access to one or more of these requirements can be given by the owner, but must be agreed upon prior to commencement of work.

## TECHNICAL SPECIFICATIONS

### PART 1 - GENERAL

#### 1.1 SCOPE OF WORK

- .1 This contractor shall furnish all labour, materials, and equipment necessary to:
  - remove and dispose of all roofing materials, flashings, etc., as required to complete the work to specifications.
  - install new wood blocking, scuppers, protrusion flashings, insulation, membrane, sheet metal flashings, etc. as required by the written specifications, roof plans, membrane manufacturers requirements, and details enclosed.
  - inspect the remaining insulation/substrate or deck. Any and all deterioration found in the above is to be reported to the Consultant. All necessary repairs are to be the responsibility of the Owner.
- .2 This contractor shall provide a roofing/sheet metal crew, employed by the contractor, that is:- a minimum of Fifty (50%) per cent qualified tradespeople
  - these people must have past experience applying the products specified.

#### 1.2 REFERENCE STANDARDS

- .1 Do roofing work to applicable standards, as detailed by the RCABC Roofing Practices Manual and the membrane manufacturer's Roofer's Guide, and as herein after specified.
- .2 CSA A123.23 Standard - *Product Specification for Polymer-Modified Bitumen Sheet, Prefabricated and Reinforced.*

#### 1.3 AREAS OF WORK (R6 - Refer to Roof Plan Drawings)

Remove metal flashings. Thoroughly clean existing membrane and ensure it is dry. Install one layer of 3/16" Asphaltic core board, mechanically fastened; install 180 base sheet, 180 cap sheet, and custom fabricated metal flashings, all as specified herein.

#### 1.4 PRODUCT DELIVERY, STORAGE & HANDLING

- .1 Deliver and store all materials in their original containers in undamaged condition, sealed with labels intact, having manufacturer's name, brand, weight, CSA and other references to accepted standards clearly shown.
- 2 Protect all materials from weather. In particular, insulations and roofing membranes must be kept absolutely dry and only as much removed from storage as can be applied and made watertight in the same day.

#### 1.5 PROJECT CONDITIONS

1. The building space underneath the roof areas covered by this specification will be utilized for concurrent and ongoing operations. These operations shall not be interrupted by the contractor unless prior written approval is received from the Owner.
1. All electrical and mechanical disconnects will be by the Contractor for electrical lines, antennas and mechanical units as required to facilitate this work. **The Contractor will advise Owner a minimum of 48 hours prior to disconnects being required and also the approximate duration of the disconnect.**
3. No installation work shall be performed during rainy or inclement weather.
3. Protection:
  - (a)The roofing assembly shall be sealed in a watertight manner on the day of installation.
  - (b)Exercise extreme care to avoid spilling roofing material on exposed finished surfaces. All costs of correction for spills, debris, and damage to the building or the grounds shall be borne by the roofing contractor.

## TECHNICAL SPECIFICATIONS

### PART 2 – PRODUCTS

#### 2.1 MATERIALS

1. **Asphalt Overlay Board (Asphaltic core board):** Shall be a semi-rigid protection board with a fortified Asphaltic core between fiberglass reinforcing mats, min. 3/16" thickness. Std of acceptance: Sopraboard by Soprema; Protectoboard by IKO
2. **Fasteners for wood blocking:** Screws for wood blocking shall be #8 by 3" climacoat deck screws having pullout values for 1-1/4" penetration of 645 lbs, Standard of acceptance Dec-King Exterior Wood screws by Buildex.
3. **Fasteners for core board:** shall suit RCABC and manufacturer's standards and requirements of the work. All fasteners shall be corrosion resistant to FM Standard 4470 and #14 size. Length of fastener shall be only long enough to penetrate the wood deck by min. 1". Standard of Acceptance: Dekfast #14 screws by SFS Intec or approved equal, acceptable to membrane manufacturer.
4. **Fasteners for flashing:** Shall be #14 self-drilling weatherhead screws having aneoprene & steel washer under the hex head to seal the screw hole from weather infiltration of sufficient length to penetrate the wood 1" minimum.
5. **Fire Guard Tape:** Shall be SBS modified bitumen, self-adhesive tape. Standard of Acceptance: Sopraguard Tape or Torchflex Tape
6. **Base Membrane Flashing (flammable substrates):** Shall be self-adhesive SBS modified bitumen membrane, having a composite fiberglass/polyester mat, with silicone release plastic film on the under-face and thermofusible plastic film on the top face, conforming to CGBS 37-GP-56-9<sup>th</sup> Draft. Sopralene Flam Stick or ArmourBond Flash HD. Primer requirement: as recommended by the membrane manufacturer.
7. **Base Membrane Flashing (non-flammable substrates):** Shall be SBS modified bitumen membrane, with thermofusible plastic film on both faces, conforming to CGBS 37-GP-56-9<sup>th</sup> Draft. Standard of acceptance: Sopralene Flam 180 or TP180FF. Primer required as recommended by membrane manufacturer.
8. **Membrane Primer (Non-Flammable substrates, base membrane flashings):** Shall be made with SBS modified bitumen, fast evaporating solvents and adhesive enhancing additives. Standard of acceptance: Elastocol 500 or Aqua Primer.
9. **Membrane Cap Sheet:** Shall be SBS modified bitumen, slate granular coated, colour Grey, having a 180 gm/sq. metre polyester mat reinforcement, meeting requirements of CAN/CGBS 37.56-M-9<sup>th</sup> Draft. Standard of acceptance: Sopralene Flam 180 granular by Soprema, & TP180 Cap by IKO.
10. **Membrane Cap Flashings:** Shall be SBS modified bitumen, slate granular coated, colour Grey, having a 180 gm/sq. metre polyester mat reinforcement, meeting requirements of CAN/CGBS 37.56-M-9<sup>th</sup> Draft. Standard of acceptance: Sopralene Flam 180 granular by Soprema, & TP180 Cap by IKO.



## TECHNICAL SPECIFICATIONS

### PART 2 – PRODUCTS

#### 2.1 MATERIALS (cont'd)

11. **Wood Products:** To be construction grade spruce or fir, free of deterioration. Plywood sheathing for walls and parapets shall be construction grade spruce, **not OSB**. Weather exposed materials shall be PWF pressure treated lumber or plywood.
12. **B-vent Cone flashings:** Shall be either: galvanized hot-weld at base of cone to flange, using proven proprietary welding method. Std of acceptance: Menzies hot weld galvanized chimney flashings; OR one-piece 12 gauge spun aluminum B-vent cone Std of Acceptance: Menzies spun aluminum B-vent.
13. **Plumbing Vent Flashings: Thaler Specialties Products Inc. Model SJ-19.** Pipe required for plumbing vent extensions to suit stack jacks shall match existing vent piping. Foam insulation shall be installed around pipes.
14. **Metal Flashing:** Shall be 24 gauge galvanized iron with G90 designation zinc coating. Metal flashing shall be pre-finished with 70% PVDF (polyvinylidene fluoride) coil coated, Kynar 500/Hylar 5000 flouorocarbon resin for all applications; passing the ASTM D3361 and ASTM G53 accelerated weathering tests with a chalk rating of 8 or better. Colour to match existing cladding. Prime metal flange where used in the roof.
15. **Fasteners - Wall flashing to Brick:** shall be a drill and hammer application – no explosive or impact actuated fasteners allowed in this application. They will be 1/4” in diameter and penetrate the brick face 1 1/4”. Standard of acceptance: HPS -1 1/4x2 5/8 Impact Anchor system by Hilti
16. **Exterior sealant:** shall be industrial grade exterior caulking. Standard of Acceptance: Tremco 555 or Sika flex.

## TECHNICAL SPECIFICATIONS

### PART 3 – EXECUTION

#### 3.1 ROOF APPLICATION

1. Thoroughly clean existing roof membrane of all dirt, algae growth, loose granules, etc. Ensure roof is dry and blown free of dust. Remove and dispose of metal flashings. Removal of obsolete curbing, sleepers, and penetration detailing may be required. (Refer to roof plan).
2. Fasten insulation and woodwork at eaves with screws as required for smooth solid surface over existing membrane on wall. See Detail Drawing.
3. Install slope top wood on top of existing membrane to ensure parapet cap slopes 1: 50 inward onto roof area. See detail drawing. *This sloped top requirement is for all widths of parapet – no exceptions.* Prime wood with membrane compatible primer as per manufacturer's recommendations where membrane will be installed.
4. Over the existing roof membrane install the coverboard using plates and screws into the wood deck below. Make the run of coverboard over the eaves continuous all the way to the lower roof surface. (See Eaves/Wall Detail). The coverboard shall cover the entire roof and stop at the top of the expansion joint at the peak. (See Peak Detail)
5. Install Fire Guard Tape at all perimeters and penetrations as recommended by the manufacturer.
6. Torch weld 180 base membrane to the asphaltic core board, staggering all end laps with a consistent pattern. The rolls will run up and over the barrel as the current roof is laid.
7. Base Membrane Flashings are to be self-adhered or torch-applied into place as the substrate type allows, with the proper primer applied and allowed to dry adequately, as per manufacturer's instructions. If asphaltic core board is used on the inside and top of parapet walls, ensure the existing roof membrane will keep any flames from contact with flammable surface.
8. All plumbing vents to receive new aluminium stack flashings as specified and set in SBS mastic prior to stripping. Extend plumbing vent piping to accommodate new flashings. Insulate with foam insulation as cap sheet is completed.
9. Heat-weld Membrane Cap Sheet and Membrane Cap Flashing to base sheet as specified and to manufacturer's instructions. Do not delay application of Membrane Cap Sheet.
10. Install new sleepers under units as required for existing roof top equipment.
11. Install new roof curbs as required around openings for remaining existing roof top equipment and hatches. Ensure that remaining roof curbs will terminate a minimum of 8" above the finished roof surface. Base membrane flashing to extend up and over top of wood curbs, with cap membrane to terminate at top edge of curb.

## TECHNICAL SPECIFICATIONS

### PART 3 – EXECUTION (cont'd)

#### 3.2 SHEET METAL APPLICATION

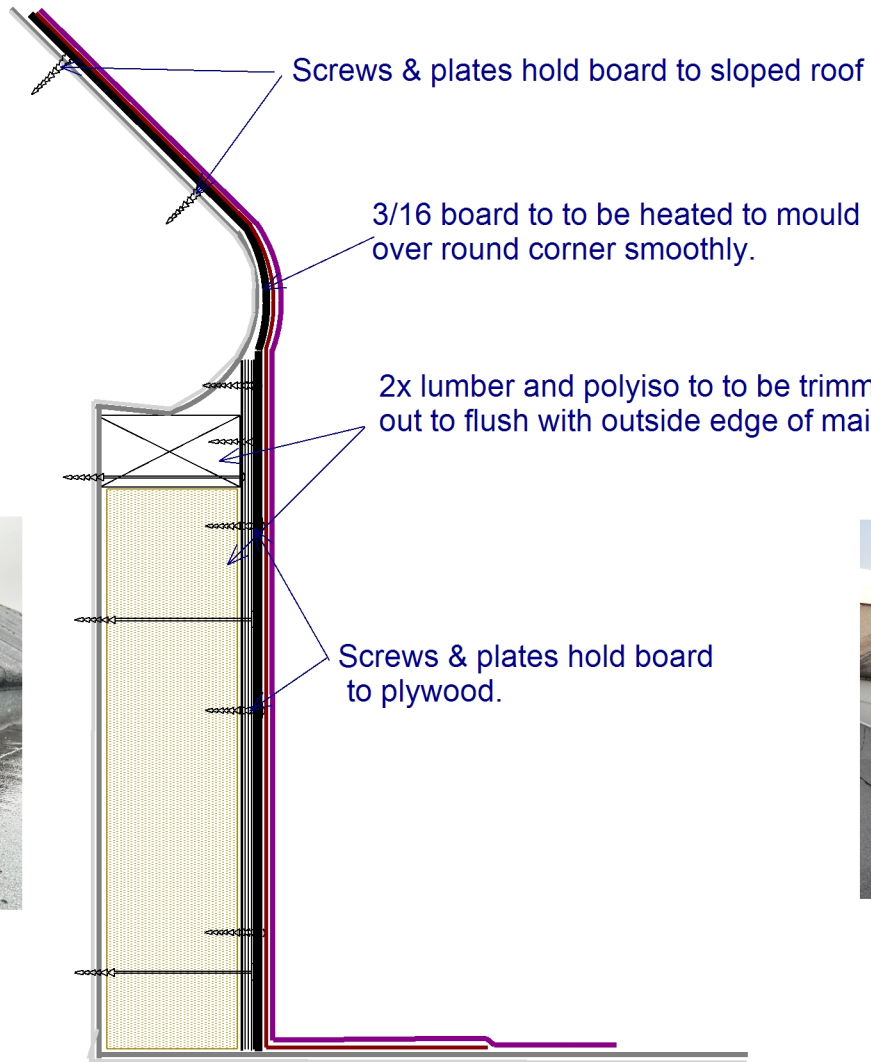
1. Sheet metal flashing shall be installed over the completed membrane as required to complete the project and as detailed on drawings. Install all metal flashings in accordance with RCABC specifications.
2. *New 24 ga fascia covers will be required on all areas where unfinished plywood is currently exposed. This will be installed at the same time as the cap flashing with no face fasteners save in the s-lock end laps on under the edge of the fascia.*
3. For parapet cap flashings form pieces in 10 foot maximum lengths. Make allowance for expansion at joints. Ensure all parapet tops are sloped 1:50 to inside of roof area.
4. All exposed edges of flashings shall be hemmed to form a drip edge.
5. All metal to be joined by "S" locks, or standing seams: lap joints will be permitted on drip edge and gable edge flashing only. All flashings require screw type fasteners, the use of nails will not be permitted.
6. All metal flashings shall be pre-finished material to a colour as confirmed by the Owner prior to fabrication of metal flashings.
7. All flexible cables and service lines are to be housed in either insulated curbs with sheet metal hoods or purpose made goose neck flashings. **Gum pan detailing will NOT be permitted.**

### PART 3 – EXECUTION

#### 3.3 INSPECTION, TESTING & GUARANTEE

1. Inspection to be carried out by Topside Consulting (2004) Ltd. A minimum of 2 days prior to commencement of work, the Contractor shall submit the application and forms to provide a 10 year manufacturer's *materials and workmanship* guarantee, OR Ten (10) Year RCABC RoofStar Guarantee to the Owner. Final documentation for both will be submitted as required by the contractor and Topside Consulting upon completion of the contract for issuance of guarantees aforementioned.
2. Advise owner & Topside Consulting (2004) Ltd. of start of work, a minimum of five (5) business days prior to commencement of project.

\*\*\*\*\*END OF SECTION\*\*\*\*\*



North Side existing



South Side existing

Both sides will have the same detail installed when complete.

Legend	Design Authority	Project	Building Owner	Drawing Name	Submitted by:	Drawing
<ul style="list-style-type: none"> <li><span style="color: red;">—</span> - 24 ga. flashing</li> <li><span style="color: magenta;">—</span> - SBS Cap Sht</li> <li><span style="color: brown;">—</span> - SBS Base Sht</li> <li><span style="color: black;">—</span> - 3/16 Core bd</li> <li><span style="color: green;">—</span> - P&amp;S memb.</li> <li><span style="background-color: yellow; border: 1px solid black; display: inline-block; width: 10px; height: 10px;"></span> - Polyiso</li> <li><span style="background-color: black; border: 1px solid black; display: inline-block; width: 10px; height: 10px;"></span> - 1/2" plywood</li> <li><span style="border-bottom: 1px solid gray; display: inline-block; width: 10px;"></span> - Existing 2-ply</li> </ul>	Topside Consulting (2004) Ltd. 1717 - 93rd Ave.. Dawson Creek BC V1G 1E7 Phone: 250-782-6878 E-mail: mel@topsideconsulting.ca	Terrace Sportsplex 3320 Kalum Street, Terrace, BC	City of Terrace 3215 Eby St., Terrace, BC	<b>Eaves Wall            Detail</b>	Mel Hoffart	
					<b>Scale</b>	<b>Date</b>
					Not to Scale	February 2023



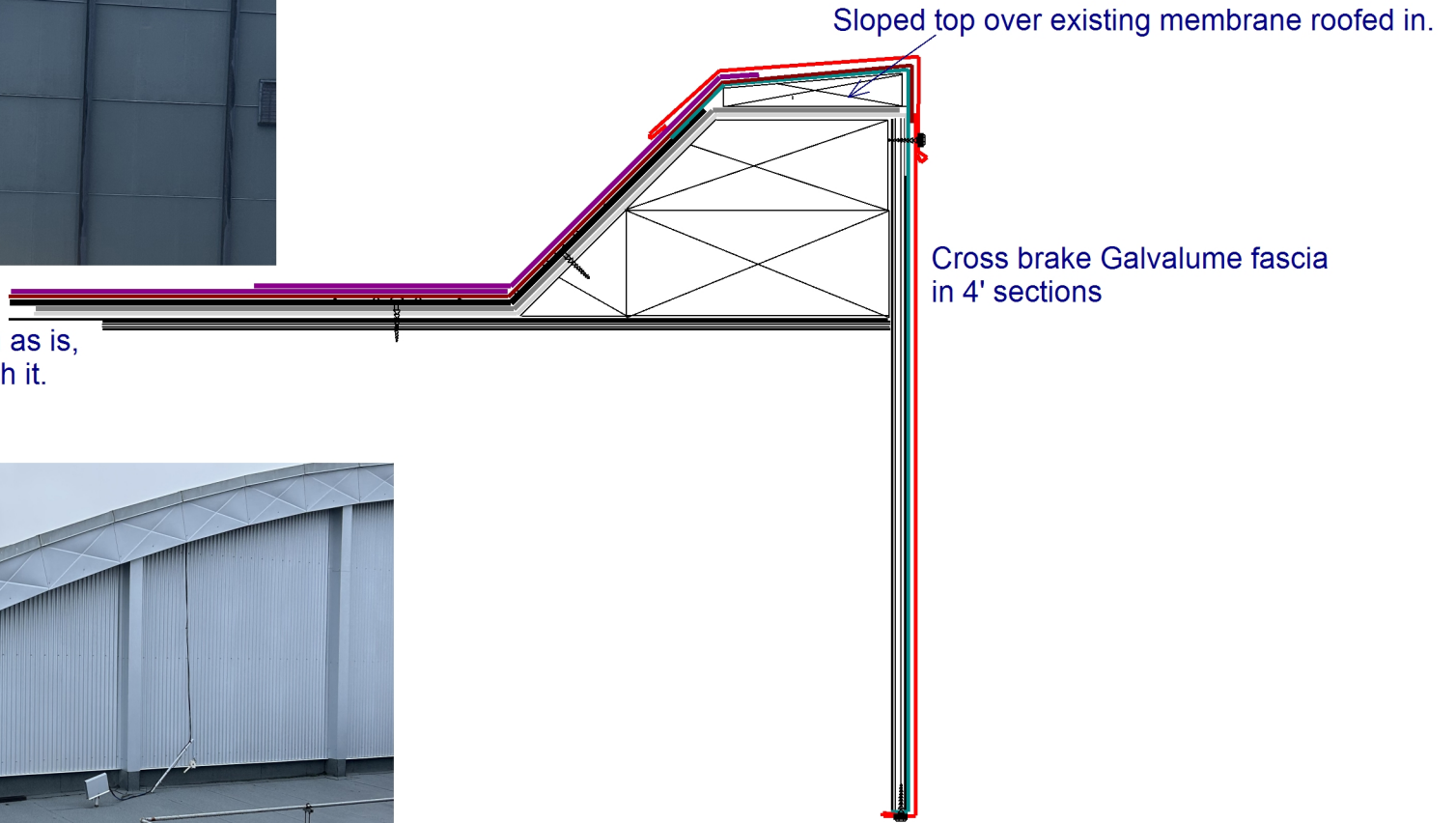
East End

The west end fascia can remain as is, the east end fascia should match it.

West end



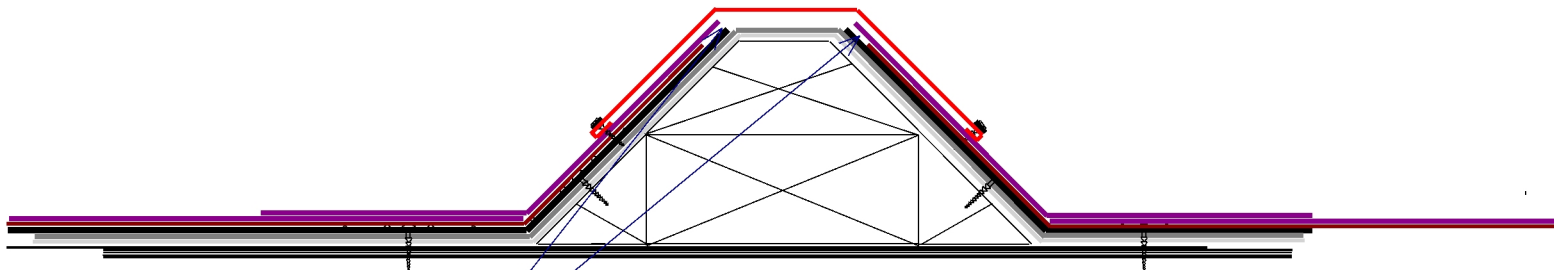
**Gable Detail**



Legend	Design Authority	Project	Building Owner	Drawing	Submitted by:	
<ul style="list-style-type: none"> <li><span style="color: red;">—</span> - 24 ga. flashing</li> <li><span style="color: purple;">—</span> - SBS Cap Sht</li> <li><span style="color: orange;">—</span> - SBS Base Sht</li> <li><span style="color: green;">—</span> - P&amp;S memb.</li> <li><span style="color: black;">/</span> - 3/16 board</li> <li><span style="color: grey;">—</span> - Exist 2-ply</li> </ul>	Topside Consulting (2004) Ltd. 1717 93 Ave., Dawson Creek, BC V1G 1E7 Phone: 250-782-6878 Cell: 780-518-6106 mel@topsideconsulting.ca	Terrace Sportsplex 3320 Kalum Street, Terrace, BC	City of Terrace 3215 Eby Street Terrace, BC	<b>Gable Detail</b>	Mel Hoffart	
					Scale	Date
					Not to Scale	February 2023









### Peak Detail



Top of coverboard to remain open - no membrane seal over.  
This allows vapour escape under the flashing.



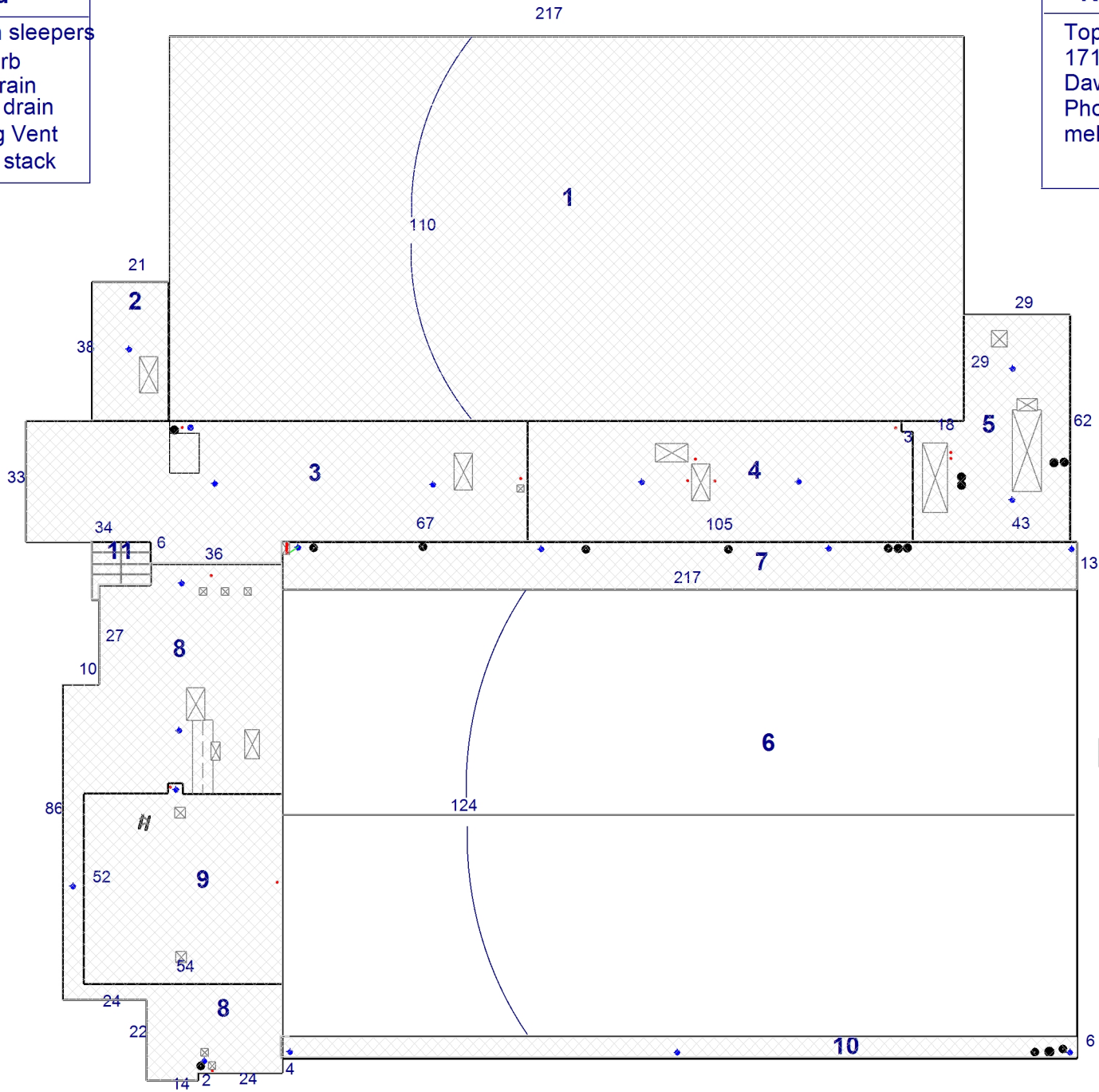
Legend	Design Authority	Project	Building Owner	Drawing	Submitted by:	
<ul style="list-style-type: none"> <li><span style="color: red;">—</span> - 24 ga. flashing</li> <li><span style="color: purple;">—</span> - SBS Cap Sht</li> <li><span style="color: orange;">—</span> - SBS Base Sht</li> <li><span style="color: green;">—</span> - P&amp;S memb.</li> <li><span style="color: black;">/</span> - 3/16 board</li> <li><span style="color: grey;">—</span> - Exist 2-ply</li> </ul>	Topside Consulting (2004) Ltd. 1717 93 Ave., Dawson Creek, BC V1G 1E7 Phone: 250-782-6878 Cell: 780-518-6106 mel@topsideconsulting.ca	Terrace Sportsplex 3320 Kalum Street, Terrace, BC	City of Terrace 3215 Eby Street Terrace, BC	<b>Peak Detail</b>	Mel Hoffart	
					Scale	Date
					Not to Scale	February 2023



Legend	
	- Unit on sleepers
	- Roof curb
	- Roof Drain
	-Scupper drain
	-Plumbing Vent
	-Chimney stack

**Roof Inspection Firm**  
 Topside Consulting (2004) Ltd.  
 1717 - 93rd Ave.  
 Dawson Creek, BC V1G 1E7  
 Phone: 250-782-6878  
 mel@topsideconsulting.ca

**Project**  
 Terrace Sportsplex  
 3320 Kalum Street,  
 Terrace, BC

Submitted by:	Drawing
Mel Hoffart	Roof Plan
Scale	Date
Not to Scale	February 2023



  
 N  
 - not in tender