



Box 968, 150 Mile House, BC V0K 2G0

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**Estimate:** **Anahim Lake Airport Terminal Expansion**

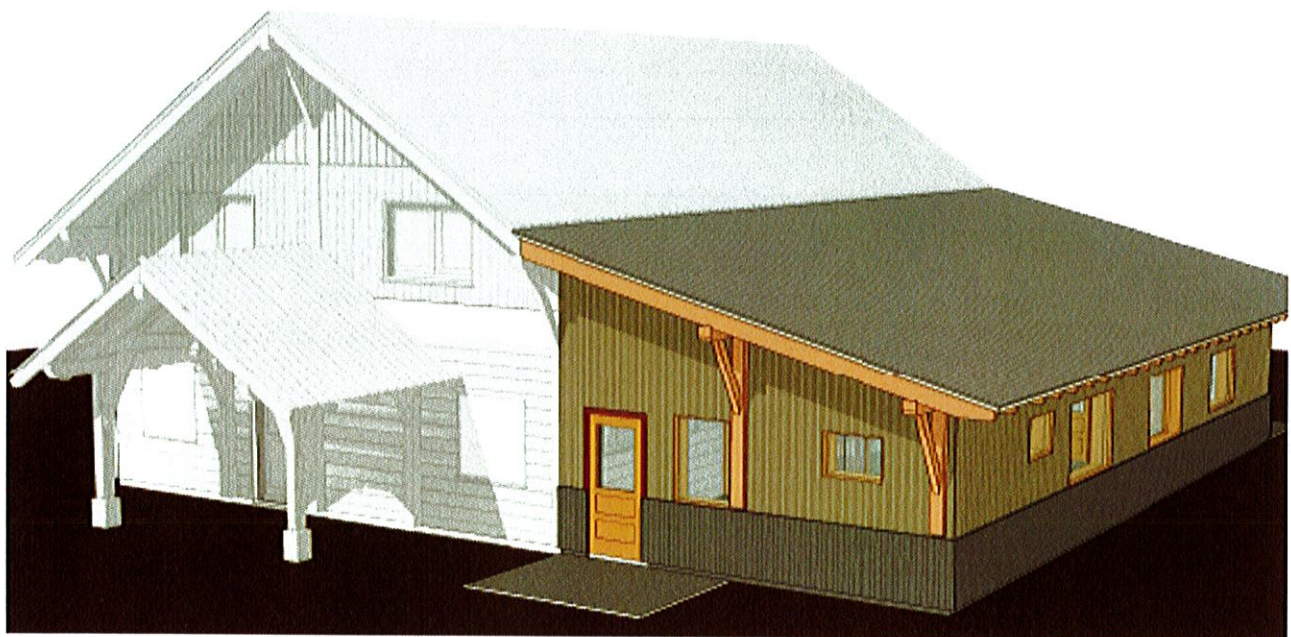
**Prepared for:** Cariboo Regional District

Site Address: 827 Airport Rd

**Date:** November 24, 2022

**Attention:** Darron Campbell – Manager of Community Services  
[dcampbell@cariboord.ca](mailto:dcampbell@cariboord.ca)  
P: 250-392-3351

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## GENERAL

This cost estimate is to construct a 20' x 50' (1000 square foot) single storey addition to the existing Anahim Lake airport terminal building at 827 Airport Rd Anahim Lake BC.

The addition is to be constructed to maintain the aesthetic and energy efficiency values of the existing building. The key elements also listed below are wood siding and timbers stained to match the existing building and timber frame construction with exposed rafters and beams on the interior.

The costing assumes a 2023 construction start date. If all or a portion of construction occurs in 2024 an annualized inflation factor should be added likely in the order of 6-8%.

It is recommended that the availability of local compactable fill material to be confirmed prior contract issuance.

SUMMARY	
DESIGN & ENGINEERING	\$21,100.00
GENERAL CONDITIONS	\$55,980.00
SITWORKS	\$25,800.00
PRE-FAB BUILDING PACKAGE	\$209,125.15
ON-SITE ROUGH CARPENTRY	\$53,500.00
PLUMBING, HEATING, MECHANICAL	\$91,095.18
INTERIOR FINISHING	\$93,110.00
<b>Total (pre-GST)</b>	<b>\$549,710.32</b>
GST	\$27,485.52
<b>Total with GST (if applicable)</b>	<b>\$577,195.84</b>

DESIGN & ENGINEERING	
Design	Allowance included for minor alterations/updates (e.g. window and door supplier changes)
Architect	Not required based on consultation with <i>Authority Having Jurisdiction (AHJ)</i>
Engineering - structural	Structural engineering for construction phase includes site inspections and schedules
Engineering - geotechnical	Based on 2 trips (excavation and pre-pour) with reports and schedules
Engineering - mechanical	Not required based on consultation with <i>AHJ</i>
Engineering - electrical	Not required based on consultation with <i>AHJ</i>



<b>GENERAL CONDITIONS</b>	
Warranty	Standard commercial 1 year
Safety	General contractor to act as Prime Contractor including appropriate signage
Bonding	Commercial construction bonding required
Emergency Transport Vehicle	Provided by contractor
Security Fencing	By contractor
Bonding	Not required
Energy efficiency	Minimum effective R-values: R32 walls and R45 roof.
Construction insurance	Broad form coverage assuming 4 months build time
Building permit	NA
BC Hydro rebate	NA
Scaffold	Included by contractor
Telehandler/skid steer	Included by contractor
Toilet rental	NA on-site already
Dump fees	NA
Project manager site visits	Project manager to attend the site four times including a project commencement and project completion review with the Client.
LOA/food	Included by contractor
Crew accommodation	Included by contractor

<b>SITEWORKS</b>	
Excavation	Assume removal of existing fill material 1 meter below frost wall depth
Backfill and compaction	Import 18 loads local compactable material to bring the site subgrade up to the new footing level
Gravel	6 loads pit run for mud abatement (access & parking area)
Septic	Remove & reconnect. Assumes new pump or other alternations not required.
Well	N/A unless relocation of lines required
Landscaping	not included
Fencing	not included
Parking area	not included

<b>PREFABRICATED BUILDING PACKAGE</b>	
Set-up	Delivery and installation for pre-fab package include crane & trucking; removal and reconnect to existing roof.
Staining	Timbers prefinished with Timber pro natural gold traditional exterior and clear interior ; siding with grey stain to match existing building.
Framing exterior walls	Pre-fabricated 2x8 panelized wall system with 2" mineral wood exterior insulation
Siding	Board and batten fir - stained grey to match existing building; corrugated steel below
Timber frame	Per plans; Douglas fir
Roof	Concealed fastener steel (charcoal), T&G pine soffits, pre-finished T&G ceiling, 9" EPS insulation; charcoal flashings; add snow blocks to the main building on the addition side as well as on the addition
Doors & windows	Triple glazed low-e Plygem fusion wrap or All-weather charcoal colour aluminum clad exterior with wicker interior; fibreglass exterior doors with panic hardware on emergency exists and self close

<b>ON-SITE ROUGH CARPENTRY</b>	
Foundation with slab & drainage	4' ICF frost wall and concrete slab
Subfloor	Seal & wax finished concrete floor.
Decks/exterior slabs	Exterior patio slab at entrance and new baggage claim area
Interior framing	Cut opening and refinish between existing and new building; interior framing new build per plans

<b>MECHANICAL (PLUMBING, HEATING, HVAC, ELECTRICAL)</b>	
Plumbing - rough in & finish	In slab heat, Moen kindred and Kohler fixtures, 1 hose bib, re-pipe boiler feed from existing building, disconnect/reconnect sewer
Mechanical	Vanee HRV & bathroom fans
Electrical rough in & finish	LED lighting, subpanel to addition from main building; assumes existing service and underground remains



FINISHING	
Insulation & vapor barrier	R30 bibbs blow-in exterior walls; sound batt interior walls between rooms; exterior 2" mineral wool (Roxul or equivalent) board
Drywall	Level 4 finish
Painting	2 colours - Sherwin Williams (or equivalent); clear coat interior doors, window liners and trim
Interior doors	3 panel hemlock shaker or knotty pine t.b.d.
Flooring	Floor protection, cleaning, seal and wax
Cabinetry	Counter in new arrivals area
Millwork	Benches in new waiting area
Trim & mouldings	Fir window liners, door trim & baseboards to match existing building
Renovation in existing building	Build new wall with door & finish out in existing office area.
Misc finishing	Shelving, towel bars, mirrors, blinds in offices
Clean-up	Final cleaning

Thankyou for the opportunity to provide this estimate.

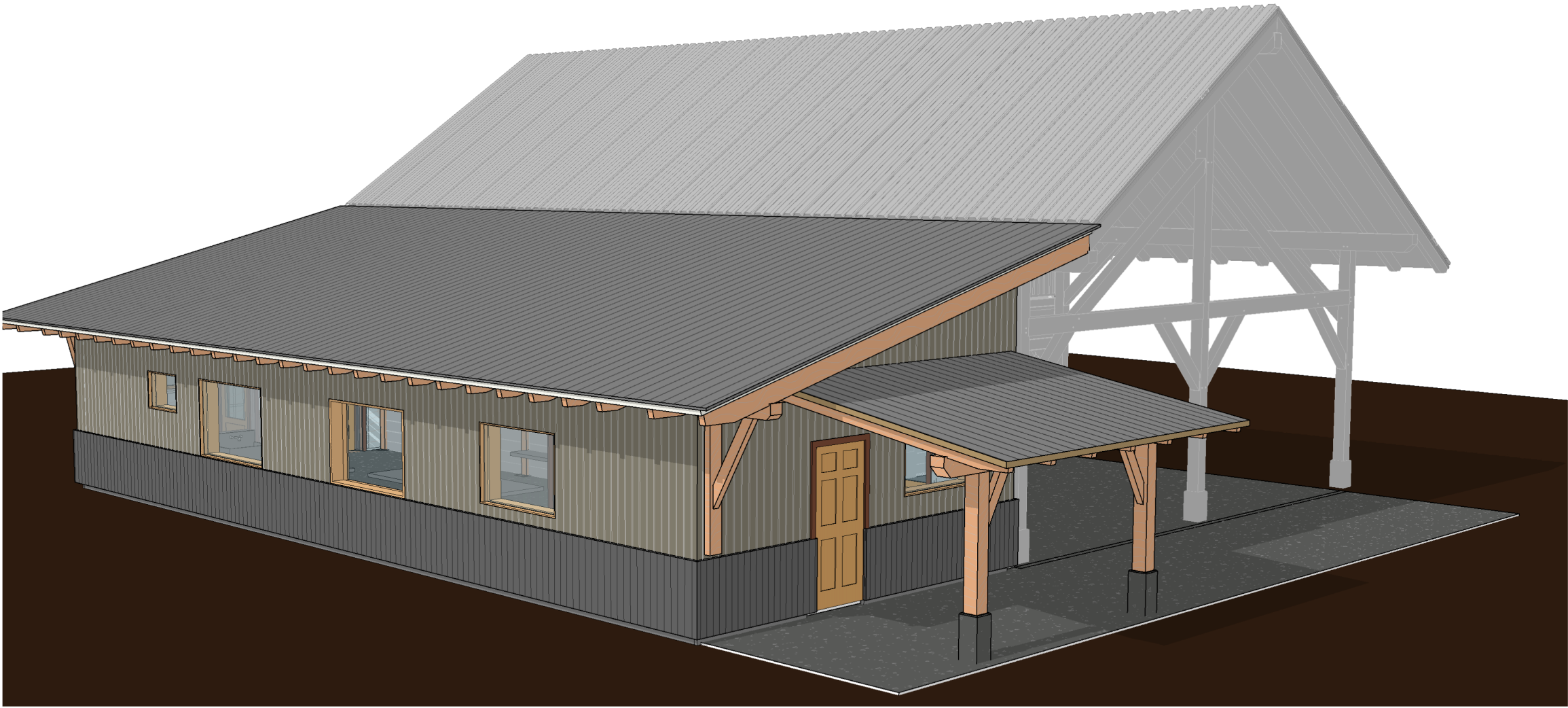


Sam Zirnhelt

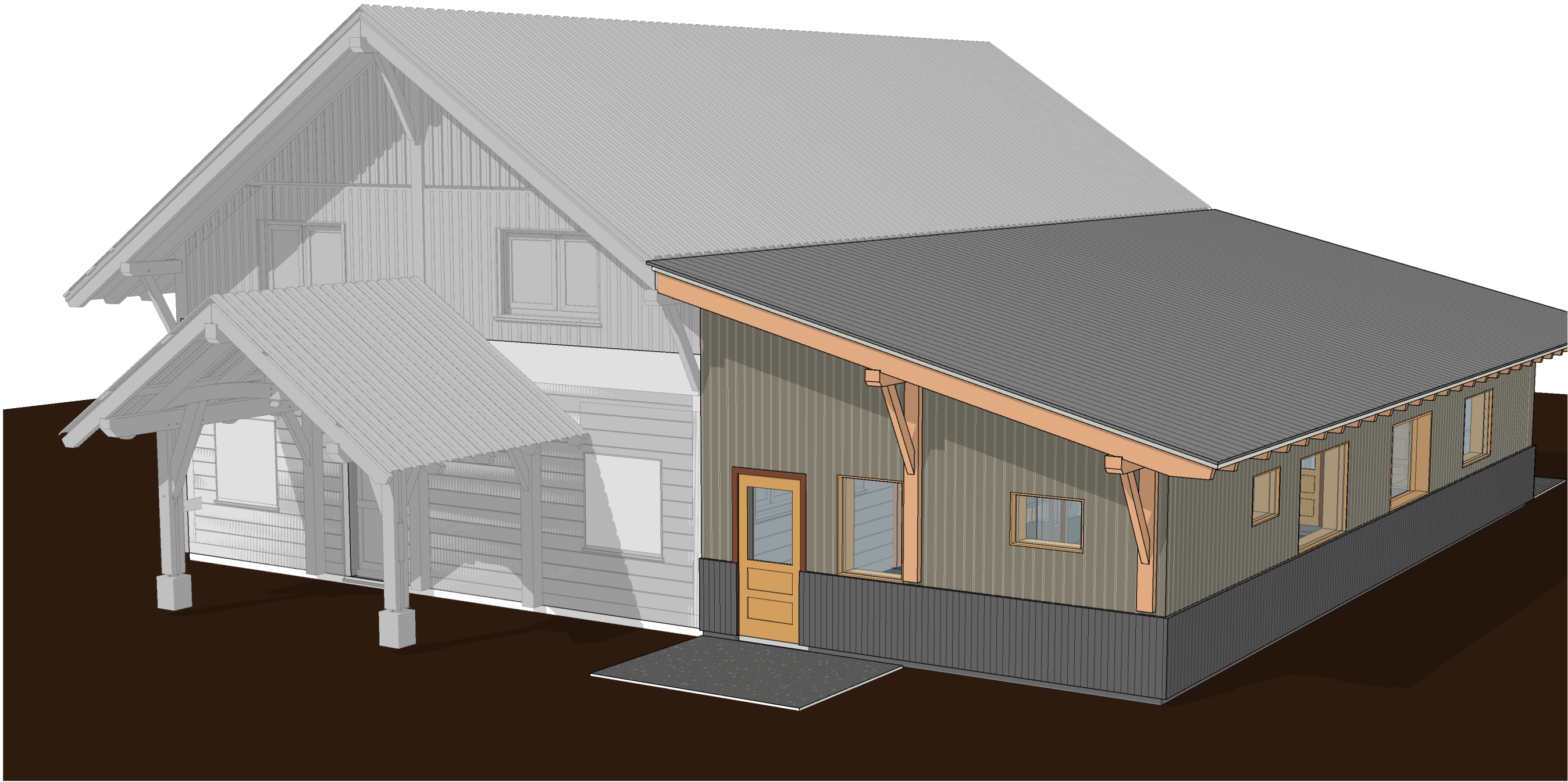
Zirnhelt Timber Frames Ltd.



# PROPOSED AHAHIM LAKE AIRPORT EXPANSION



1  
A100 VIEW 1



2  
A100 VIEW 2

## GENERAL NOTES

ALL CONSTRUCTION AND DESIGNS CONFIRM WITH THE STRUCTURAL REQUIREMENTS SET FORTH IN PART 9 OF THE 2018 B.C.B.C. WITH STRUCTURAL COMPONENTS DESIGNED IN ACCORDANCE WITH PART 4.

DRAWINGS ARE TO BE USED FOR STATED PURPOSE ONLY AT THE STATED SITE. RELOCATION OR USE OF THE STRUCTURE IN ANOTHER LOCATION IS NOT PERMITTED WITHOUT DIRECT WRITTEN PERMISSION. USE ONLY DRAWINGS CLEARLY LABELED "FOR CONSTRUCTION" FOR ACTUAL CONSTRUCTION.

THE CONTRACTOR SHALL CLEARLY AND LEGIBLY MARK UP A SET OF STRUCTURAL DRAWINGS, WITH AS-BUILT DIMENSIONS AND DETAILS MODIFIED DURING THE COURSE OF CONSTRUCTION, AND PROVIDE COPIES TO THE ENGINEER OF RECORD. NO ALTERATIONS TO THE DESIGN, DETAILING, OR STRUCTURAL MEMBERS IS PERMITTED WITHOUT PRIOR APPROVAL.

EXIT SIGNS AND EMERGENCY LIGHTING REQUIRED ABOVE ALL DOORS

## WALL TYPES

W1

**TYPICAL EXT WALL CONSTRUCTION**  
Exterior Vertical Board and Batten wall finish on  
3/4" Horizontal stapping @ 16" O.C. on  
3/4" Vertical strapping @ 24" O.C. on  
2" Semi rigid insulation on  
1/2" Plywood on  
2x8 Stud wall (SPF #2 or Better) w/ insulation on  
Vapour Barrier on  
1/2" Drywall

W2

**2X6 INT WALL CONSTRUCTION**  
1/2" Drywall on  
2x6 Stud wall @ 16" O.C. (SPF #2 or Better) on  
1/2" Drywall

W4

**FOUNDATION WALL CONSTRUCTION**  
1/2" PT Plywood on  
Peel & Stick membrane on on  
11 3/4" Logix ICF Concrete foundation wall per structurals

Wx

**SHEAR WALL CONSTRUCTION**  
See structural drawings for details

## ROOF TYPES

R1

**VAULTED CONDITIONED ROOF CONSTRUCTION**  
Standing seam metal roof on  
Titanium UDL 30 underlayment on  
1/2" Plywood on  
1"x6" Strapping @ 16" O.C. on  
1"x6" Sleepers @ 24" O.C. on  
4 layers 3" Rigid Insulation on  
1x6 T&G Pine/Fir w/ Clr Sansin Purity or approved alternate on  
Timber Beams per plan

R2

**EAVE ROOF CONSTRUCTION**  
Standing seam metal roof on  
Titanium UDL 30 underlayment on  
1/2" Plywood on  
1"x6" Strapping @ 16" O.C. on  
1"x6" Sleepers @ 24" O.C. on  
1x6 T&G Pine/Fir w/ Clr Sansin Purity or approved alternate on  
Timber rafters per plan

R3

**EXTERIOR SHED ROOF CONSTRUCTION**  
Standing seam metal roof on  
Titanium UDL 30 underlayment on  
1/2" Plywood on  
1"x6" Sleepers @ 24" O.C. on  
1x6 T&G Pine/Fir w/ Clr Sansin Purity or approved alternate on  
Timber Beams per plan

## FLOOR TYPES

F1

**TYPICAL SLAB CONSTRUCTION**  
4" concrete slab on  
6 mil Poly vapour barrier  
3" rigid insulation (R20) on  
Min. 5" compacted crushed gravel on  
Undisturbed or compacted soil  
See structurals

F2

**EXTERIOR SLAB CONSTRUCTION**  
4" concrete slab on  
Min. 5" compacted crushed gravel on  
Undisturbed or compacted soil  
See structurals

SHEET LIST	
SHEET NUMBER	SHEET NAME
A100	VIEWS
A101	VIEWS
A101	Sheet
A102	VIEWS
A200	FOUNDATION PLAN
A201	MAIN FLOOR PLAN
A202	ROOF PLAN
A203	REFLECTED CEILING PLAN
A300	SECTIONS
A400	ELEVATIONS
A401	ELEVATIONS
A500	DETAILS
A501	DETAILS

THIS DRAWING MUST NOT BE SCALED. REFER TO NOTED DIMENSIONS ONLY. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL DIMENSIONS ON THIS DRAWING. ANY DISCREPANCIES SHALL BE REPORTED TO THE OFFICE OF ZIRNHELT TIMBER FRAMES FOR CLARIFICATION. THIS DRAWING IS THE EXCLUSIVE PROPERTY OF ZIRNHELT TIMBER FRAMES, AND CAN ONLY BE REPRODUCED WITH WRITTEN PERMISSION.

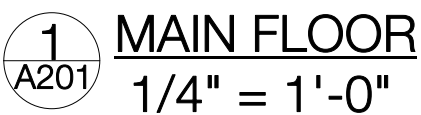


#	REVISION / ISSUE	DATE:	DESIGNED BY:	AM	CONTENT:	VIEWS
1	REVIEW	2022.8.17	DRAWN BY:	Author	SCALE:	3/4" = 1'-0"
2	REVIEW	2022.10.24	ENGINEER:	Approver		
3	REVIEW	2022.11.24	CHECKED BY:	Checker		

PROJECT: ANAHIM LAKE AIRPORT  
CLIENT:  
ADDRESS: ANAHIM LAKE, BC

A100





# A201