JANUARY 9, 2026



SMITHERS VISITOR CENTRE STRUCTURAL CONDITION ASSESSMENT

TOWN OF SMITHERS

STRUŌ CONSULTING INC. | 250.961.6445. | 1829 Sommerville Rd., Prince George, BC. V2N 6T5 | struo.ca

STRUCTURAL ASSESSMENT

Client	Town of Smithers	**Project #**	366-001
EOR	Tomas Horalek, P.Eng	**Pages**	12
Address	1411 Court St., Smithers, BC	**Date**	2026-01-09

ASSIGNMENT SUMMARY

Struō Consulting Inc. (“Struō”) was retained by the Town of Smithers to undertake a structural condition assessment of the existing single-storey building located at 1411 Court Street, Smithers, British Columbia.

The scope of work included a visual, non-destructive evaluation of accessible structural components and a desktop review of available information. The purpose of this assessment was to identify observable structural deficiencies and provide recommendations for repair where deficiencies were identified.

No intrusive investigation, removal of finishes, material testing, or geotechnical assessment was performed as part of this assignment.

EXECUTIVE SUMMARY

Struō Consulting Inc. was engaged by the Town of Smithers to perform a structural assessment of the Visitor Information Centre located at 1411 Court St., Smithers, BC.

The evaluation, conducted on November 14, 2025, included a visual inspection and desktop review of the single-story, light wood-frame building constructed in the late 1950s. No invasive testing or geotechnical investigation was performed.

The following summarizes key observations and professional opinions formed during the assessment:

General Condition:

Interior finishes are in acceptable condition, and no significant settlement or water damage was observed. However, exterior cladding and fascia have deteriorated, posing a risk of future water ingress.

Significant Structural Deficiencies Identified:

- A cracked concrete lintel in the crawlspace requires immediate replacement.
- The brick chimney is at end-of-life and should be removed.
- The northeast wing wall shows deflection, likely from prior utility connection damage.
- The mechanical room floor system is structurally inadequate, exhibiting severe deflection and framing deficiencies.

Structural Performance:

Roof and floor joists generally meet historical code requirements and are acceptable for current use. However, mechanical room joists do not satisfy deflection criteria under current loading assumptions.

Recommended Repair Scope:

Short Term - Replace cracked lintel, reroute furnace intake/exhaust, remove chimney, and reconstruct mechanical room floor system.

Medium Term - Repair wing wall framing, replace exterior cladding, sheathing, and fascia.

Long Term - Regular inspection and maintenance of roof membrane**.**

The contractor must notify the engineer if additional damage is discovered and shall allow for a compliance review upon completion.

Professional Opinion:

The structure retains sufficient value to justify repairs. With recommended interventions and ongoing maintenance, the building's primary structural components are anticipated to achieve a remaining service life exceeding 25 years.

EVALUATION AND OBSERVATIONS

Tomas Horalek, P.Eng., and Adrian Baker, E.I.T., attended the subject property on November 14, 2025, to evaluate the condition of the structure. The assessment was carried out based on visual observation only and was limited to non-destructive inspection. No record drawings, maintenance records, or prior structural reports were made available at the time of the assessment.

The building was constructed in the late 1950s, based on information provided by Town staff, and is of conventional light wood-frame construction. The foundation consists of a concrete perimeter frost wall and concrete strip footings. The roof structure is composed of light timber rafters.

The structure is approximately 53 ft x 31 ft. The ground floor sits above an approximately 46-inch-deep crawlspace. The perimeter frost wall of the building consists of 8-inch-thick concrete walls with 1 in. of open-cell foam applied to the interior face. The crawlspace floor is finished with a concrete skim-coat. At the time of inspection, crawlspace vents were observed to be open. The building's gravity load-carrying elements bear on the concrete perimeter walls as well as three interior 8-in.-wide concrete bearing walls. Refer to Appendix B for the structural general arrangement drawings.

The floor framing consists of primarily 2×10 wood joists at 16 in. on centre, bearing on exterior perimeter walls and interior concrete bearing walls. The roof framing consists of 2×12 wood rafters at 24 in. on centre. Roof rafter spacing was determined via thermal imaging from the interior. The roof rafters cantilever past the exterior bearing walls to form roof overhangs and additionally bear on two interior bearing walls, as indicated on the drawings.

The interior finishes were generally observed to be in acceptable condition. No evidence of differential settlement or significant interior water damage was noted at the time of inspection. The exterior cladding, however, has reached the end of its service life. Several areas of cladding were observed to be failing, patched, or previously repaired. The fascia and cap flashing are

damaged in multiple locations around the building. Failure of the exterior envelope components could result in future water ingress and deterioration of structural elements.

The existing brick chimney, currently used to route the intake and exhaust for the condensing gas furnace, has reached the end of its service life. Mortar deterioration and bond loss were observed where the chimney projects above the roof surface.

One concrete lintel within the crawlspace, supporting loads from both floor joists and roof rafters above, was observed to be cracked and failing. Based on visual observation, this condition represents a structural deficiency requiring remediation. The remaining accessible portions of the concrete bearing walls were observed to be in acceptable condition.

The exterior cantilevered wing wall located at the northeast corner of the building was observed to exhibit lateral deflection. Based on information provided by Town staff, this wall was previously damaged due to a utility connection at the outer edge of the wing wall. Removal of exterior cladding and sheathing is required to confirm the full extent of framing damage.

The mechanical room floor includes an approximately 2-in.-thick concrete topping. Both permanent and live-load deflection of this floor were observed during the site visit. Investigation of the framing below revealed the use of approximately 5-in.-deep floor joists spaced at 4 in. on centre to accommodate the concrete topping. Improper framing was also observed around the furnace plenum. Several toe-nailed connections were found to be failing and contributing to excessive deflection. Temporary 2×4 shoring supports were present but exhibited deterioration due to fungal decay and no longer provide effective support.

Numerical Evaluation:

Selected structural components were evaluated against the requirements of the 2024 British Columbia Building Code (BCBC 2024), where applicable, recognizing that the building predates current code editions and was originally constructed under the National Building Code of Canada 1965 (NBC 1965). The building is classified as a Part 9 structure.

DESIGN LOADS (ALL UNFACTORED)	
FLOOR LIVE LOAD	3.5 kPa
ROOF SELF-WEIGHT	0.72 kPa
FLOOR SELF-WEIGHT	0.72 kPa
SPECIFIED SNOW LOAD	2.1 kPa
CLIMATIC DESIGN DATA	
GROUND SNOW LOAD (1/50 yr)	3.5 kPa
ASSOCIATED RAIN LOAD (1/50 yr)	0.2 kPa
HOURLY WIND PRESSURE (1/50 yr)	0.4 kPa

Note: A floor live load of 3.5 kPa was considered appropriate based on the current and anticipated use of the building, consisting of low-occupancy office spaces.

Roof Rafters - 2x12 at 24-in. on centre:

The longest roof rafters span is approximately 18.75 ft with an exterior cantilever of approximately 4 ft. When evaluated under BCBC 2024 loading, the calculated flexural bending demand exceeds the assumed allowable bending capacity by approximately 26%, assuming SPF No.1/No.2 lumber grade. Lumber grade of the roof rafters was not verified at the time of inspection.

When evaluated under NBC 1965 loading criteria, the same roof rafter satisfies applicable code requirements. Based on observed in-service performance and numerical evaluation, the roof rafters are considered acceptable for continued use under existing loading conditions.

Floor Joists - 2x10 at 16-in on centre:

The longest floor joist span is approximately 13.5 ft. Blocking is provided at bearing points and at mid-span. Under a 3.5 kPa live load, these joists satisfy both strength and deflection criteria and are acceptable for existing and anticipated use.

Mechanical Room Floor Joists – 5 in. Depth at 4 in. on centre

These joists span approximately 13.5 ft beneath the mechanical room. While bending capacity utilization was calculated at approximately 97% of allowable capacity, the joists exceed deflection limits by approximately 54% for permanent deflection and 117% for live-load deflection.

The observed excessive deflection and deficient framing configuration are considered incompatible with the imposed loads.

Removal and replacement of the mechanical room floor system is therefore recommended.

STRUCTURAL REPAIR SCOPE RECOMMENDATIONS

Based on the observations and numerical evaluation described herein, the following repair scope is recommended to maintain the structural integrity of the building.

Short-Term Recommendations:

- Provide temporary shoring to support the floor and roof structures down to the concrete slab. Remove the failed concrete lintel and replace it with a new engineered wood product (EWP) beam designed for the imposed loads. The beam shall be protected with a peel-and-stick waterproof membrane where in contact with concrete and anchored using proprietary hardware in accordance with manufacturer requirements.
- Reroute furnace intake and exhaust piping. Remove and dispose of the existing brick chimney. Repair roof penetrations.
- Temporarily remove mechanical equipment. Remove and dispose of the existing mechanical room floor system. Install new 9-in.-deep EWP floor joists, new sheathing, and finishes. Reinstall mechanical equipment.

Medium-Term Recommendations:

- Remove cladding and sheathing from wing wall and min. 48" back from northeast corner of building. Repair damaged framing as required. Install new sheathing and cladding.
- Remove and replace exterior wall cladding around the building perimeter. Inspect exposed framing and sheathing; repair or replace components as required. Install new air- and water-resistive barriers and new exterior cladding.
- Remove and replace existing fascia and cap flashing around the building perimeter.

Long Term Recommendations:

- Ensure roof membrane is inspected regularly and replaced as required. Inspection of the current condition of the roof membrane was outside of the scope of this structural assessment.

PROFESSIONAL OPINION

Based on the visual observations made during the assessment, the structural analysis undertaken, and within the scope and limitations described herein, it is our professional engineering opinion, provided to a reasonable degree of engineering certainty, that the structure retains sufficient value to justify the recommended repairs.

Provided that the recommended repairs are completed and ongoing maintenance, particularly of the building envelope, is performed, the primary structural components of the building are anticipated to achieve a remaining service life exceeding 25 years. This opinion is contingent upon conditions remaining consistent with those observed at the time of assessment.

Refer to attached Appendix A for photographs relevant to this file and Appendix B for the referenced drawings.

Prepared by:



Adrian Baker, E.I.T.

Reviewed by:



2026-01-09

Tomas Horalek, P.Eng

EGBC Permit to Practice #: 1001619

APPENDIX A

SITE PHOTOS

Item 1.1

Overall view of the building:

South façade:



West façade:



Item 1.2

Damaged cantilevered wing wall at northeast corner:



Item 1.3

Chimney with mortar bond failure and typical fascia damage



Item 1.4

Typical cladding condition:



Item 1.5

Damaged concrete lintel in crawlspace:



Item 1.6

Framing of mechanical room floor



Item 1.7

Framing deficiencies at HVAC plenum:





APPENDIX B

Structural General Arrangement Drawings

STRUCTURAL NOTES

1. GENERAL:

- THE BUILDING WAS EVALUATED AGAINST THE REQUIREMENTS OF THE 2024 BRITISH COLUMBIA BUILDING CODE (BCBC 2024), WHERE APPLICABLE, RECOGNIZING THAT THE BUILDING PREDATES CURRENT CODE EDITIONS AND WAS ORIGINALLY CONSTRUCTED UNDER THE NATIONAL BUILDING CODE OF CANADA 1965 (NBC 1965).
- THE BUILDING IS CLASSIFIED AS A PART 9 STRUCTURE.
- THE REMAINDER OF THE GENERAL NOTES APPLY ONLY TO NEW CONSTRUCTION
- READ DRAWINGS IN CONJUNCTION WITH ALL OTHER CONTRACT DOCUMENTS AND DISCIPLINES
- THE DRAWINGS SHOW COMPLETED STRUCTURES ONLY. TEMPORARY BRACING FOR CONSTRUCTION LOADING CONDITIONS IS THE RESPONSIBILITY OF THE CONTRACTOR.
- DO NOT CONSTRUCT FROM THIS SET UNLESS MARKED 'ISSUED FOR CONSTRUCTION'
- DO NOT SCALE DRAWINGS.
- VERIFY ALL DIMENSIONS IN THE FIELD. INFORM THE ENGINEER OF ANY VARIATIONS FROM THE DIMENSIONS AND CONDITIONS SHOWN ON THE DRAWINGS.
- THE ENGINEER'S REVIEW OF SHOP DRAWINGS DOES NOT RELIEVE THE CONTRACTOR OF THE SOLE RESPONSIBILITY FOR ERRORS OR OMISSIONS ASSOCIATED WITH THE PREPARATION OF THE SHOP DRAWINGS.

DESIGN LOADS (ALL UNFACTORED)	
FLOOR LIVE LOAD	3.5 kPa
SPECIFIED SNOW LOAD	2.1 kPa
FLOOR SELF-WEIGHT	0.7 kPa
ROOF SELF-WEIGHT	0.7 kPa
CLIMATIC DESIGN DATA	
GROUND SNOW LOAD (1/50 yr)	3.5 kPa
ASSOCIATED RAIN LOAD (1/50 yr)	0.2 kPa
HOURLY WIND PRESSURE (1/50 yr)	0.4 kPa

FIELD REVIEWS:

- THE CONTRACTOR SHALL PROVIDE STRUO WITH A MINIMUM OF 72 HOUR NOTICE PRIOR TO REQUIRING A FIELD REVIEW.
- FIELD REVIEWS ARE CARRIED OUT TO CONFIRM GENERAL CONFORMANCE WITH THE STRUCTURAL DESIGN DOCUMENTS. FIELD REVIEWS DO NOT RELIEVE THE CONTRACTOR OR SUB-TRADES OF THEIR RESPONSIBILITY TO ADHERE TO THE SPECIFICATIONS AND ARE NOT A QUALITY CONTROL CHECK.
- ALL UNSATISFACTORY WORK DUE TO POOR WORKMANSHIP, FAULTY MATERIALS, NONCOMPLIANCE WITH PROJECT DOCUMENTS AND OTHER CAUSES SHALL BE REMEDIATED AS PER STRUCTURAL ENGINEER'S RECOMMENDATIONS. ALL COST OF REMEDIATION INCLUSIVE OF ADDITIONAL ENGINEERING COSTS SHALL BE AT THE CONTRACTOR'S EXPENSE.
- ALL WORK TO BE REVIEWED SHALL BE SUBSTANTIALLY COMPLETE AT TIME OF REVIEW. THE FOLLOWING ITEMS ARE CONSIDERED TO BE THE MINIMUM STRUCTURAL HOLD POINT REQUIRED FOR THE PROJECT:

CONCRETE:

REINFORCING STEEL SHALL BE REVIEWED PRIOR TO 'BUTTONING UP FORMS AND PLACING ANY CONCRETE

WOOD FRAMING:

WOOD FRAMING SHALL BE REVIEWED PERIODICALLY AFTER COMPLETION OF ALL LOAD CARRYING WALLS AND MECHANICAL AND ELECTRICAL ROUGH INS.

IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO APPROPRIATELY SCHEDULE FIELD REVIEWS. FAILURE TO DO SO MAY RESULT IN FINAL CERTIFICATION OF THE PROJECT NOT BEING ISSUED.

2. FOUNDATIONS:

- PREPARATION FOR FOUNDATIONS SHALL BE IN ACCORDANCE WITH THE GEOTECHNICAL CONSULTANT'S REPORT.
- AFTER EXCAVATION BUT BEFORE BACKFILLING, ENSURE THE GEOTECHNICAL ENGINEER INSPECTS THE BEARING SOILS AND CONFIRMS THE LOAD CARRYING CAPACITY.
- FOOTINGS SHALL BEAR ON APPROVED NATIVE, UNDISTURBED SOIL OR ROCK, FREE OF ORGANIC MATERIAL, WITH A MINIMUM FROST PROTECTION OF 4' TO THE UNDERSIDE OF THE FOOTING.
- BACKFILL WITH CLEAN GRANULAR SOILS, FREE OF ORGANICS OR OTHER DELETERIOUS MATERIALS WITH MAXIMUM 5% PASSING #200 SIEVE. COMPACT ALL STRUCTURAL BACKFILL TO 98% STANDARD PROCTOR DENSITY UNLESS NOTED OTHERWISE.
- CENTER FOOTINGS UNDER WALLS AND COLUMNS UNLESS NOTED OTHERWISE ON THE DRAWINGS.
- TIE ALL DOWELS AND ANCHOR BOLTS IN PLACE BEFORE POURING CONCRETE. USE TEMPLATES TO ENSURE CORRECT LAYOUT.
- FOOTINGS ELEVATIONS IF SHOWN ARE NOT FINAL AND MAY VARY ACCORDING TO SITE CONDITIONS. ALL FOOTINGS MUST BE TAKEN TO BEARING LAYER AND APPROVED BY THE SOILS ENGINEER.
- BASEMENT WALLS SHALL NOT BE BACKFILLED UNTIL THE FLOOR FRAMING IS COMPLETE AND THE CONCRETE HAS REACHED 7-DAY STRENGTH.
- FOUNDATION WALLS AND GRADE BEAMS SHALL BE BACKFILLED EVENLY ON BOTH SIDES WITH A MAXIMUM ELEVATION DIFFERENCE OF 2'.
- PROTECT BEARING SURFACES FROM FREEZING BEFORE AND AFTER FOOTINGS ARE POURED.

3. REINFORCEMENT:

- REINFORCING STEEL SHALL CONFORM TO CSA-G30.18 GRADE 400.
- PLACE REINFORCEMENT, HARDWARE AND EMBEDDED ITEMS IN ACCORDANCE WITH CSA-A23.1. TIE ALL BARS SECURELY IN PLACE TO PREVENT DISPLACEMENT. SUPPORT SLAB REINFORCING ON PLASTIC OR CONCRETE CHAIRS AT MAXIMUM 4' CENTRES. PROVIDE CORNER BARS FOR ALL WALL REBAR.

  PROVIDE CLEAR CONCRETE COVER FOR REBAR AS FOLLOWS:

SURFACE POURED AGAINST GROUND	3"
FORMED SURFACES EXPOSED TO GROUND	2"
BEAMS	2" TO MAIN STEEL
COLUMNS	2" TO MAIN STEEL
SLABS, WALLS	1"

SPLICE REBAR AS FOLLOWS (UNLESS NOTED OTHERWISE):								
		TENSION SPLICE (CLASS B)						
		CONCRETE STRENGTH (MPa)						
BAR SIZE	COMP. SPLICE	20	25	30	35	40	45
10M	330 (13")	473 (19")	423 (17")	390 (15")	390 (15")	390 (15")	390 (15")
15M	470 (19")	670 (26")	599 (24")	547 (22")	506 (20")	474 (19")	446 (18")
20M	570 (23")	816 (32")	730 (29")	666 (26")	617 (24")	577 (23")	544 (21")
25M	740 (29")	1319 (52")	1179 (46")	1077 (42")	997 (39")	932 (37")	879 (35")
30M	870 (34")	1564 (62")	1399 (55")	1277 (50")	1183 (47")	1106 (44")	1043 (41")
35M	1050 (41")	1868 (74")	1671 (66")	1525 (60")	1412 (56")	1321 (52")	1245 (49")

- MINIMUM (2)-15M REINFORCING AROUND OPENINGS LARGER THAN 12" AT EACH SIDE OF OPENING, EXTEND 2'-0" PAST CORNER. PROVIDE (1)-15M DIAGONAL AT EACH CORNER OF ALL OPENINGS EXTENDING 24" PAST CORNER.
- SMOOTH STEEL WELDED WIRE REINFORCEMENT SHALL CONFORM TO ASTM A185 UNLESS NOTED OTHERWISE.
- DEFORMED STEEL WELDED WIRE REINFORCEMENT SHALL CONFORM TO ASTM A497 UNLESS NOTED OTHERWISE.
- WELDING OF REINFORCING STEEL IS NOT PERMITTED UNLESS SPECIFIED OR AUTHORIZED BY THE ENGINEER. REINFORCING STEEL TO BE WELDED SHALL CONFORM TO CSA-G30.18 GRADE 400W UNLESS NOTED OTHERWISE. WELDING OF REINFORCING BARS SHALL CONFORM TO AND BE CARRIED OUT BY COMPANIES CERTIFIED IN ACCORDANCE WITH CSA-W186.
- EPOXY COATED REINFORCEMENT SHALL CONFORM TO AND BE HANDLED IN ACCORDANCE WITH ASTM A775M AND D3963M. THE CURED THICKNESS OF THE COATING SHALL BE A MINIMUM OF 180 µm [7 mil].
- DAMAGES TO EPOXY COATED REINFORCEMENT SHALL BE REPAIRED IN ACCORDANCE WITH ASTM A775M, SECTION 12. PATCHING MATERIAL SHALL BE APPLIED IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS, AND BE ALLOWED TO CURE BEFORE PLACING CONCRETE.
- CONCRETE SHALL NOT BE POURED UNTIL THE ENGINEER, OR HIS/HER REPRESENTATIVE, HAS INSPECTED THE REINFORCING STEEL AND FOUR CONDITIONS.

4. CONCRETE:

- PROVIDE CONCRETE AND PERFORM WORK IN ACCORDANCE WITH CSA-A23.1.
- MINIMUM 28 DAY COMPRESSIVE STRENGTH AS INDICATED BELOW. ALL CONCRETE NORMAL WEIGHT, 150 PCF, TYPE 10 CEMENT, TYPE F FLYASH, 3/4" AGGREGATE FOR ALL CONCRETE UNLESS NOTED OTHERWISE. MIX DESIGNS SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW AND APPROVAL AT LEAST ONE WEEK PRIOR TO BATCHING:

LOCATIONS	STRENGTH (MPa)	AIR%	SLUMP ± 20mm	EXPOSURE	AGGR.
FOOTINGS	25	4-7	70	F2	20mm
ICF WALLS	25	4-7	70	-	9.5mm
CIP WALLS	25	4-7	70	F2	20mm
GARAGE SOG	25	4-7	70	C2	20mm
INTERIOR SOG	25	4-7	70	-	20mm

- DO NOT USE ADMIXTURES OTHER THAN AIR ENTRAINMENT, STANDARD WATER REDUCERS, OR SUPER PLASTICIZERS WITHOUT PRIOR APPROVAL OF THE ENGINEER.
- REJECT ALL CONCRETE WHEN TIME BETWEEN BATCHING AND PLACING EXCEEDS TWO (2) HRS.
- DO NOT ADD WATER TO THE MIX ON SITE.
- CONCRETE QUALITY SHALL BE TESTED IN ACCORDANCE WITH CSA-A23.2.
- CONSTRUCT FORMWORK AS PER REQUIREMENTS OF WORKSAFE BC AND LEAVE IN PLACE UNTIL THE CONCRETE HAS ATTAINED SUFFICIENT STRENGTH TO CARRY ITS OWN WEIGHT. CONTACT ENGINEER FOR RECOMMENDED STRIPPING TIMES.
- CONSOLIDATE CONCRETE USING MECHANICAL VIBRATORS.
- SAWCUT CONTROL JOINTS FOR SLABS ON GRADE AS SOON AS POSSIBLE AT MAXIMUM 20' SPACING OR AS SHOWN ON THE DRAWINGS.
- CONTRACTOR SHALL INSTALL ICF PRODUCT IN STRICT ACCORDANCE WITH MANUFACTURERS SPECIFICATIONS
- CONCRETE FINISHES SHALL BE IN ACCORDANCE WITH CSA A23.1 AND AS FOLLOWS UNLESS NOTED OTHERWISE IN THE ARCHITECTURAL DRAWINGS AND SPECIFICATIONS:

INTERIOR SLABS	TROWEL FINISH
EXTERIOR SLABS	BROOM FINISH
SLABS TO RECEIVE CONCRETE TOPPING	1/2" AMPLITUDE FREE OF DEBRIS
WALLS	FILL ALL HOLES & DEFECTS LARGER THAN 25mm DIA. AND GRIND SMOOTH & FLUSH WITH SURROUNDING SURFACE
SUSPENDED SLABS	FILL ALL HOLES & DEFECTS LARGER THAN 12.5mm DIA. AND GRIND SMOOTH & FLUSH WITH SURROUNDING SURFACE
BEAMS & COLUMNS	FILL ALL HOLES & DEFECTS LARGER THAN 12.5mm DIA. AND GRIND SMOOTH & FLUSH WITH SURROUNDING SURFACE

- CONCRETE TOPPING IS CONSIDERED NON-STRUCTURAL. REVIEW OF FINISH, MIX DESIGN, LOCATION AND SPACING OF CRACK CONTROL JOINTS AND FIELD REVIEWS ARE RESPONSIBILITY OF THE ARCHITECT AND/OR CONTRACTOR.

5. STRUCTURAL WOOD/TIMBER FRAMING:

- WOOD FRAMING TO CONFORM TO THE BC BUILDING CODE 2024 AND CSA-O86.
- LUMBER SHALL BE SPRUCE-PINE-FIR (S-P-F) No. 2 OR BETTER CONFORMING TO CSA-O141
- GLUE-LAMINATED TIMBER (GLULAM) SHALL BE MANUFACTURED ACCORDING TO CSA-O122 BY MANUFACTURERS QUALIFIED IN ACCORDANCE WITH CSA-O177.
- GLULAM MEMBERS IN FLEXURAL BENDING SHALL BE DOUGLAS FIR-LARCH (D.FIR-L) 24f-E STRESS GRADE
- GLULAM MEMBERS IN COMPRESSION SHALL BE D.FIR-L 16c-E UNLESS NOTED OTHERWISE.
- PREFABRICATED WOOD I-JOIST SHALL CONFORM TO ASTM D5055.
- STRUCTURAL COMPOSITE LUMBER PRODUCTS SHALL CONFORM TO ASTM D5456.
- PLYWOOD SHALL BE STRUCTURAL GRADE DOUGLAS FIR PLYWOOD (DFP) CONFORMING TO CSA-O121 OR CANADIAN SOFTWOOD PLYWOOD (CSP) CONFORMING TO CSA-O151, AND BE MANUFACTURED BY MEMBER COMPANIES OF THE CANADIAN PLYWOOD ASSOCIATION (CANPLY).
- ORIENTED STRANDBOARD (OSB) SHALL CONFORM TO CSA-O437.
- OSB CONSTRUCTION SHEATHING SHALL CONFORM TO CSA-O325.
- WALL SHEATHING SHALL BE EXTERIOR GRADE AND BE MIN. 3/8" THICK
- FLOOR AND ROOF SHEATHING SHALL BE SUPPORTED ON ALL EDGES. PLYWOOD FLOOR AND ROOF SHEATHING SHALL BE TONGUE AND GROOVE.
- SHEATHING SHALL BE INSTALLED WITH THE STRONG AXIS AT RIGHT ANGLES TO THE SUPPORTING MEMBER. END JOINTS PARALLEL TO THE SUPPORTING MEMBER SHALL BE STAGGERED.
- NAIL SHEATHING TO FRAMING MEMBERS WITH 2-1/2" NAILS @ 6" O/C ON ALL PANEL EDGES AND 12" O/C INTERMEDIATE BEARING MEMBERS. BLOCK ALL EDGES UNLESS T&G JOINT IS PROVIDED.
- WOOD CONNECTORS SHALL BE MADE BY SIMPSON STRONG-TIE OR APPROVED EQUIVALENT. THE CONNECTOR FINISH OR MATERIAL SHALL COMPLY WITH THE RECOMMENDATION OF THE MANUFACTURER TO PROVIDE APPROPRIATE CORROSION PROTECTION. CONTACT THE ENGINEER FOR FURTHER GUIDANCE.
- BEARING POINTS FOR POSTS, BEAMS, AND COLUMNS TO BE CARRIED SOLID AT FULL SIZE TO THE FOUNDATIONS. BLOCK SOLID AT ALL FLOORS.
- WOOD FRAMING EXPOSED TO EXTERIOR WEATHER, OR IN CONTACT WITH THE GROUND OR CONCRETE, SHALL BE PRESERVATIVE-TREATED IN ACCORDANCE WITH CSA-O80 UNLESS NOTED OTHERWISE. FASTENERS USED IN PRESERVATIVE-TREATED WOOD SHALL HAVE APPROPRIATE CORROSION PROTECTION. CONTACT THE ENGINEER FOR FURTHER GUIDANCE.
- NAILS SHALL CONFORM TO CSA-B111 AND BE COMMON NAILS UNLESS SPECIFIED OTHERWISE. THIN GAUGE NAILING GUN STAPLES OR NAILS ARE NOT ACCEPTABLE. NAILING GUN NAILS SHALL HAVE A MINIMUM DIAMETER OF 3.2 mm [1/8"].
- BOLTS AND THREADED RODS FOR WOOD CONNECTIONS SHALL CONFORM TO ASTM A307. BOLTS AND THREADED RODS FOR EXTERIOR WOOD CONNECTIONS SHALL BE HOT-DIP GALVANIZED IN ACCORDANCE WITH ASTM A153.
- LUMBER IN CONTACT WITH CONCRETE SHALL BE PROTECTED USING MOISTURE BARRIER

6. ENGINEERED WOOD TRUSSES

- THE DRAWINGS SHOW CONCEPTUAL WOOD TRUSS FRAMING, REFER TO ARCHITECTURAL DRAWINGS FOR DIMENSIONS, ROOF SLOPES, ROOF OVERHANGS, ELEVATIONS, OPENINGS, ETC.
- THE WOOD TRUSSES SHALL BE DESIGNED FOR THE LOADS SPECIFIED IN THE GENERAL NOTES, OR AS SHOWN ON PLAN. SNOW LOADS SHALL BE BASED ON PART 4 OF THE BUILDING CODE, INCLUDING THE EFFECT OF SLIDING OR DRIFTING SNOW, PLUS ANY ADDITIONAL REQUIREMENTS SET OUT IN THE LOCAL AHJ.
- THE DESIGN, PREPARATION OF SHOP DRAWINGS, REVIEW OF FABRICATION, AND FIELD REVIEW OF INSTALLATION SHALL BE CARRIED OUT BY A SPECIALTY STRUCTURAL ENGINEER. THE TRUSS SUPPLIER SHALL PROVIDE SIGNED AND SEALED SCHEDULE S-B AND SCHEDULE S-C.
- TRUSS SUPPLIER SHALL CARRY OUT THE DESIGN AND SUPPLY THE ENTIRE TRUSS SYSTEM, INCLUDING THE FOLLOWING ELEMENTS:
  - PERMANENT AND TEMPORARY LATERAL BRACING AND BRIDGING.
  - CONNECTING HARDWARE
  - BEARING PLATES, HOLD DOWNS, AND TENSION TIES SHOWN ON SHOP DRAWINGS
- TRUSS SHOP DRAWINGS SHALL INCLUDE THE FOLLOWING:
  - PLAN LAYOUT SHOWING ALL TRUSSES, BEAMS, THEIR ORIENTATION AND SPACING
  - DESIGN LOADS.
  - ALL HANGERS, TIE DOWNS FOR WIND UPLIFT, AND CONNECTING HARDWARE.
  - ALL BEAMS, BLOCKING, RIMBOARDS.
  - END REACTIONS OF GIRDER TRUSSES ON THE SUPPORTING STRUCTURE IN KIPS (UNFACTORED); NOTE THAT IT IS THE SPECIALTY STRUCTURAL ENGINEER'S RESPONSIBILITY TO CHECK BEARING CONDITIONS AT THE SUPPORT POINTS OF ALLTRUSSES BUT ESPECIALLY GIRDERS. BEARING ENHANCERS SHALL BE DESIGNED AND SUPPLIED IN BOTH THE TOP PLATES AND THE GIRDERS AS REQUIRED.
- THE TRUSS SHOP DRAWINGS SHALL BE SUBMITTED SIGNED AND SEALED TO THE ENGINEER AND THE ARCHITECT FOR REVIEW AND COORDINATION. REVIEWS, LAYOUT REVISIONS, CHANGES, ETC, SHALL BE DOCUMENTED THROUGHOUT THE PROJECT.
- THE WOOD TRUSS MANUFACTURER SHALL RECEIVE A WRITTEN CONFIRMATION OF DESIGN ACCEPTANCE FROM THE ENGINEER PRIOR TO THE MATERIALS SOLICITING AND ENGINEERED WOOD TRUSS PRODUCTION. THE ENGINEER IS NOT LIABLE FOR DELAYS DUE TO MATERIAL AVAILABILITY.
- THE ENGINEERED WOOD TRUSSES SHALL BE STORED, KEPT DRY, PROTECTED FROM THE ENVIRONMENT AND HANDLED AT THE MANUFACTURER AND PROJECT SITES AS PER 'BCSI CANADA - GUIDE TO GOOD PRACTICE FOR HANDLING, INSTALLING, RESTRAINING & BRACING OF METAL PLATE CONNECTED WOOD TRUSSES'.

7. ENGINEERED WOOD PRODUCTS:

- ENGINEERED WOOD PRODUCTS INCLUDE ALL PRE-MANUFACTURED BEAMS, COLUMNS, AND I-JOISTS AS SHOWN ON PLAN.
- ALL MANUFACTURED BEAMS, COLUMNS, AND I-JOISTS SHALL HAVE A MOISTURE CONTENT OF LESS THAN 12%. ALL EWPS SHALL BE PROTECTED FROM MOISTURE UNTIL INSTALLED.
- SIZES OF BEAMS AND POSTS SHALL BE AS SPECIFIED ON PLANS.
- COLUMNS: COLUMNS SHALL BE PSL 1.8E GRADE, MINIMUM, UNLESS NOTED OTHERWISE ON PLANS.

8. PRE-ENGINEERED I-JOISTS (INTERIOR USE ONLY):

- I-JOISTS SHALL BE DESIGNED FOR THE LOADS SPECIFIED IN THE GENERAL NOTES, OR AS SHOWN ON PLAN. SNOW LOADS SHALL BE BASED ON PART 4 OF THE BUILDING CODE, INCLUDING THE EFFECT OF SLIDING OR DRIFTING SNOW, PLUS ANY ADDITIONAL REQUIREMENTS SET OUT BY THE AHJ.
- I-JOIST SUPPLIER SHALL CARRY OUT DESIGN AND SUPPLY THE ENTIRE FLOOR SYSTEM WHICH INCLUDES THE FOLLOWING ELEMENTS:
  - I-JOIST HANGERS AND CONNECTING HARDWARE.
  - BRIDGING AND BLOCKING.
  - RIM/BOX JOISTS.
  - SQUASH BLOCKS AND WEB STIFFENERS.
- I-JOIST SUPPLIER SHALL SUBMIT SHOP DRAWINGS FOR REVIEW AND APPROVAL BY THE ENGINEER AND THE ARCHITECT PRIOR TO MATERIALS SOLICITING AND FABRICATION.
- FLOOR FRAMING ON THESE DRAWINGS SHALL NOT BE CHANGED WITHOUT THE APPROVAL OF THE ENGINEER AND THE ARCHITECT.
- THE SHOP DRAWINGS SHALL INCLUDE THE FOLLOWING ELEMENTS:
  - PLAN LAYOUT SHOWING ALL JOISTS AND BEAMS WITH THEIR ORIENTATION AND SPACING.
  - DESIGN LOADS.
  - ALL HANGERS AND CONNECTING HARDWARE.
  - ALL BEAMS, BLOCKING, RIM BOARD, POSTS, SQUASH BLOCKING, WEB STIFFENERS, AND CROSS BRIDGING.
  - MATERIAL STRENGTHS AND SPECIFICATIONS.
- I-JOIST SPACING SHALL NOT EXCEED 19.2" O/C FOR FLOORS AND 24" O/C FOR NON-OCCUPIED ROOFS.
- THE I-JOISTS SHALL BE BLOCKED AND NAILED AS PER MANUFACTURERS REQUIREMENTS IN ADDITION TO THE GENERAL NOTES.
- I-JOISTS SHALL MEET A MINIMUM DEFLECTION OF SPAN/480 FOR LIVE LOAD AND SPAN/240 FOR TOTAL LOAD. DESIGN SHALL ACCOUNT FOR VIBRATION CONTROL IN ACCORDANCE WITH THE APPROPRIATE BUILDING CODE.
- FLOOR SYSTEM SHALL MEET THE UNDERWRITERS LABORATORIES OF CANADA (ULC) AND SOUND TRANSMISSION CLASS (STC) RATINGS FOR THE FLOOR ASSEMBLY. REFER TO ARCHITECTURAL DRAWINGS FOR REQUIRED RATINGS.
- DO NOT CUT, NOTCH, OR DAMAGE I-JOIST FLANGES AND REFER TO MANUFACTURERS SPECIFICATIONS FOR ALLOWABLE HOLES THROUGH JOIST WEBS.
- PROVIDE MINIMUM 5/8" PLYWOOD WEB STIFFENER TO EACH SIDE OF I-JOIST AT LOCATIONS WHERE I-JOISTS ARE CONTINUOUS OVER SUPPORTS AND THE SUPPORT WIDTH IS LESS THAN 5-1/4" WIDE. IN ADDITION, REFER TO MANUFACTURERS SPECIFICATIONS FOR WEB STIFFENER ATTACHMENT REQUIREMENTS, DETAILING AND RECOMMENDATIONS.
- UNLESS NOTED OTHERWISE ON PLAN, STEEL CONNECTING HARDWARE FOR LSL, LVL, AND PSL BEAMS SHALL BE CAPABLE OF DEVELOPING 100% OF THE BEAM SHEAR CAPACITY.
- PRODUCT SUBSTITUTIONS SHALL BE APPROVED AND RECORDED BY THE ENGINEER AND THE ARCHITECT.
- DO NOT SUBSTITUTE BUILT-UP MEMBERS OF SAWN TIMBER FOR ENGINEERED WOOD PRODUCTS.
- PSL USED IN EXTERIOR APPLICATIONS SHALL MEET THE EXPOSURE REQUIREMENTS SPECIFIED BY THE MANUFACTURER. DO NOT USE LSL OR LVL FOR EXTERIOR APPLICATIONS.
- ALL ENGINEERED WOOD PRODUCTS SHALL BE STORED, KEPT DRY, PROTECTED FROM THE ENVIRONMENT AND HANDLED AT THE MANUFACTURER AND PROJECT SITES IN ACCORDANCE WITH BEST PRACTICES.
- PROTECTIVE COVERING SHALL NOT BE REMOVED UNTIL SUFFICIENT PROTECTION FROM ENVIRONMENT HAS BEEN ACHIEVED.

9. STRUCTURAL STEEL:

- FABRICATE AND ERECT STRUCTURAL STEEL IN ACCORDANCE TO CSA-S16 AND THE CISC CODE OF STANDARD PRACTICE.
- STRUCTURAL STEEL AND FASTENERS SHALL CONFORM TO FOLLOWING UNLESS NOTED OTHERWISE:

BARS & PLATES	CSA-G40.21 GRADE 300W (44W)
W, WT, M & S SHAPES	CSA-G40.21 GRADE 350W (50W)
HSS	CSA-G40.21 GRADE 350W (50W) CLASS C
CHANNELS & ANGLES	CSA-G40.21 GRADE 300W (44W)
PIPES	ASTM A53 GRADE B
BEARING PILES	CSA-G40.21 GRADE 300W (44W)
PIPE PILES	ASTM A252 GRADE 3
STRUCTURAL BOLTS	ASTM A325
BOLTS CONNECTING PURLINS, GIRTS, HANDRAILS, LADDERS, DOOR AND WINDOWFRAMING	ASTM A307
ANCHOR BOLTS	ASTM A193 GRADE B7
SHEAR CONNECTORS	ASTM A108

- TIGHTEN ALL BOLTS WITH IMPACT WRENCH UNLESS SPECIFIED OTHERWISE.
- PROVIDE CONTINUOUS NON-SHRINK, NON-METALLIC 40MPa GROUT BED BENEATH ALL BASE PLATES AND OTHER CONNECTIONS BEARING ONTO CONCRETE.
- WELDING TO CONFORM TO CSA-W59, AND BE CARRIED OUT BY FABRICATORS CERTIFIED TO CSA-W47.1. WELDERS AND WELDING OPERATORS SHALL BE QUALIFIED BY THE CWB.
- WELDS SHALL BE CONTINUOUS AND GROUND SMOOTH UNLESS NOTED OTHERWISE. BLEMISHES, WELD SPATTER AND SHOP MARKS SHALL BE REMOVED.
- MINIMUM SIZE OF FIELD WELDS 1/16" LESS THAN THE THICKNESS OF MATERIAL BUT NOT LESS THAN 1/4".
- TOUCH UP ALL FIELD WELDS WITH PRIMER AFTER SLAG HAS BEEN REMOVED.
- THE CONTRACTOR SHALL BE RESPONSIBLE AND PAY FOR FOLLOWING NON-DESTRUCTIVE TESTING (NDT) OF WELDS. NDT SHALL CONFORM TO CSA-W59. THE TEST REPORTS SHALL BE SUBMITTED TO THE ENGINEER.

BUTT WELDS	100 % RADIOLOGY OR ULTRASONIC
FLANGE TO WEB FILLET WELDS	100 % MAGNETIC PARTICLE
ALL OTHER WELDS	100 % VISUAL INSPECTION

- GALVANIZING SHALL CONFORM TO CSA-G164, ASTM A123 OR ASTM A153 AS APPLICABLE.
- PAINT STEEL SURFACES INTENDED FOR HEATED INTERIOR AREAS WITH ONE COAT OF PRIMER TO CISC/CPMA 1-73A. USE ONE COAT OF EXTERIOR APPROVED PRIMER FOR ALL STEEL SURFACES EXPOSED DIRECTLY TO WEATHER AND FOR STEEL IN UNHEATED BUT COVERED AREAS SUCH AS CANOPIES. PRIMERS MAY BE EXCLUDED ONLY WHERE SPRAYED FIRE PROOFING IS SPECIFIED OR SPECIFICALLY APPROVED BY THE ENGINEER AND THE ARCHITECT.
- FASTENERS FOR EXTERIOR STRUCTURAL STEEL SHALL BE HOT-DIP GALVANIZED IN ACCORDANCE WITH ASTM A153 UNLESS NOTED OTHERWISE.
- MISCELLANEOUS STEEL NOT DETAILED ON THE DRAWINGS, SUCH AS STAIRS, HANDRAILS, ETC. SHALL BE DETAILED BY THE CONTRACTOR.
- THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS OF ALL STRUCTURAL STEEL TO THE ENGINEER FOR REVIEW AT LEAST TWO WEEKS PRIOR TO FABRICATION.

10. STRUCTURAL STEEL - CONNECTION DESIGN BY FABRICATOR

- ALL CONNECTIONS TO BE DESIGNED BY FABRICATOR UNLESS NOTED OTHERWISE. ALL BEAM CONNECTIONS TO BE STANDARD FRAME BEAM CONNECTIONS OR EQUIVALENT, UNLESS NOTED OTHERWISE.
- DESIGN CONNECTIONS IN ACCORDANCE WITH THE LATEST EDITION OF CAN/CSA-S16.1, UNLESS NOTED OTHERWISE. DESIGN END CONNECTIONS FOR NON-COMPOSITE BEAMS FOR A FACTORED SHEAR LOAD OF 60% OF THE TOTAL BEAM LOAD TABULATED IN THE LATEST CISC HANDBOOK OF STEEL CONSTRUCTION. DESIGN BRACE CONNECTIONS FOR THE LOADS SHOWN ON THE DRAWINGS.
- USE MINIMUM TWO (2) BOLTS PER CONNECTION AND DESIGN FOR BEARING CONNECTIONS WITH THREADS INCLUDED IN THE SHEAR PLANE.
- SUBMIT SHOP DRAWINGS TO THE ENGINEER AND RECEIVE APPROVAL PRIOR TO FABRICATION. SHOW ALL DETAILS, INCLUDING FIELD WELDS, AND MATERIAL SPECIFICATIONS. SHOP DRAWINGS TO BE SEALED BY A BC PROFESSIONAL ENGINEER FOR DESIGN OF CONNECTIONS.

11. POST-INSTALLED ADHESIVE ANCHORS

- ADHESIVE ANCHORS SHALL CONFORM TO ACI 355.4.
- FIELD DRILLED EXPANSION ANCHORS SHALL BE HILTI KWIK BOLT 1, UNLESS NOTED OTHERWISE.
- FIELD DRILLED ADHESIVE ANCHORS SHALL BE HILTI HAS RODS, UNLESS NOTED OTHERWISE.
- ADHESIVE FOR FIELD DRILLED ANCHOR RODS INTO CONCRETE SHALL BE HILTI HIT-HY 200.
- ADHESIVE FOR FIELD DRILLED ANCHOR RODS INTO CONCRETE BLOCK SHALL BE HILTI HIT-HY 270.
- ADHESIVE FOR FIELD DRILLED REINFORCING BARS INTO CONCRETE SHALL BE HILTI HIT-RE 500V3.
- HOLES DRILLED IN CONCRETE SHALL BE THE SIZE AND DEPTH SPECIFIED BY THE MANUFACTURER FOR EACH SPECIFIC ANCHOR. ALL HOLES SHALL BE CLEANED PRIOR TO ANCHOR INSTALLATION IN ACCORDANCE WITH RECOMMENDATIONS.
- ADHESIVES SHALL BE STORED AND INSTALLED IN STRICT ACCORDANCE WITH THE MANUFACTURERS SPECIFICATIONS. CLEANED HOLES SHALL BE PROTECTED FROM CONTAMINATION UNTIL ADHESIVE IS INSTALLED.
- CONCRETE TO HAVE A MINIMUM AGE OF 21 DAYS AND A MINIMUM COMPRESSIVE STRENGTH OF 17.5 MPa AT THE TIME OF ANCHOR INSTALLATION.
- THREADED AND REINFORCING BARS SHALL NOT BE BENT AFTER BEING INSTALLED UNLESS SPECIFIED OR AUTHORIZED BY THE ENGINEER.

12. MASONRY

- PROVIDE PLAIN AND UNREINFORCED CONCRETE BLOCK TO CSA S304.1 'DESIGN OF MASONRY STRUCTURES'.
- HOLLOW LOAD BEARING UNITS SHALL CONFORM TO CSA A165.1 NORMAL WEIGHT, 2000 PSI UNITS BASED ON NET AREA.
- MASONRY GROUT DESIGN STRENGTH SHALL BE 20MPa, WEIGHT 150PCF, CEMENT TYPE 10, AIR 2-4%, SLUMP 6"-8".
- REINFORCING STEEL:

  SPLICE REBAR AS FOLLOWS (UNLESS NOTED OTHERWISE):

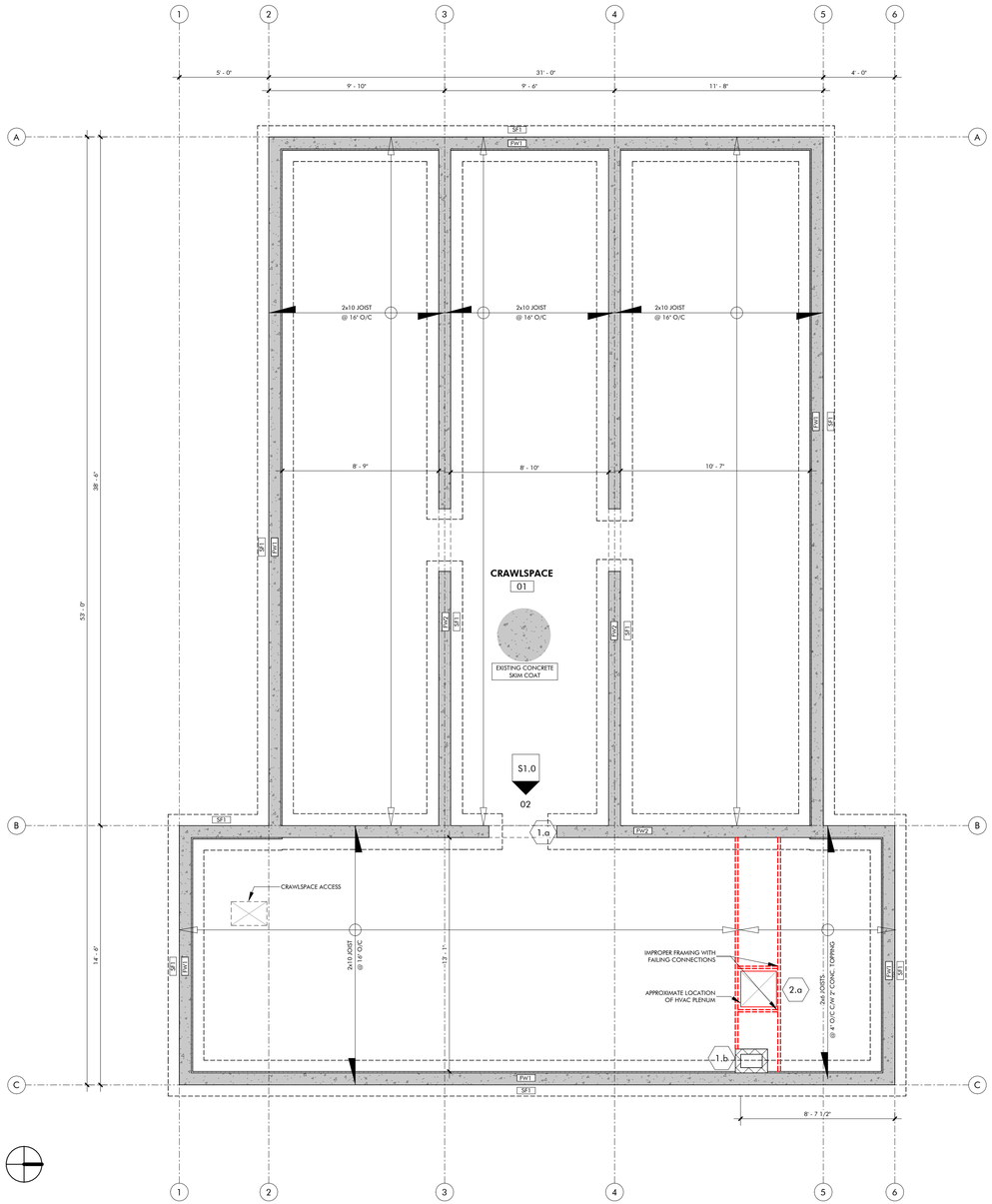
BAR SIZE	10M	15M	20M	25M
LAP SPLICE	18"	24"	36"	48"

- LADDER TYPE JOINT REINFORCING, GALVANIZED, WITH 9 GA. SIDE AND CROSS WIRES, CONTACT WELDED, MINIMUM 12" LAP.
- BRICK TIES TO BE HOT DIP GALVANIZED TO CAN3-A370. SPACE TIES AT 16" HORIZONTAL AND 24" VERTICAL.
- LINTEL REQUIREMENTS: (2)-15M CONTINUOUS REINFORCEMENT EXTEND MINIMUM 2'-0" BEYOND EDGE OF OPENING.

SPAN	UP TO 5'-0"	5'-0" TO 8'-0"
LINTEL DEPTH	8"	16"

- PROVIDE KNOCK-OUT TYPE BOND BEAMS AT ALL FLOOR AND ROOF LINES AND PARAPETS AND AT A MAX OF 8'-0" O/C. REINFORCE WITH (2)-15M, CONTINUOUS AROUND CORNERS.
- VERTICAL REINFORCED CORES SHALL BE AS FOLLOWS:

  MINIMUM (1)-15M REINFORCING FULL HEIGHT AT END OF WALL, CORNERS AND WALL INTERSECTIONS
  MINIMUM (1)-15M AT EACH SIDE OF DOOR OR WINDOW OPENINGS AND 4'-0" MAX. O/C
- PROVIDE DOWELS AT FOUNDATION LEVEL TO MATCH VERTICAL REBAR, TIE DOWELS IN PLACE BEFORE POUR.
- INSTALL JOINT REINFORCING IN HORIZONTAL JOINTS AT 2'-0" O/C.
- BUILD MASONRY TRUE-TO-LINE, PLUMB, SQUARE AND LEVEL WITH VERTICAL JOINT IN PROPER ALIGNMENT.
- MAXIMUM JOINT WIDTH 3/



01 / S1.0 Foundation Plan
1/4" = 1'-0"

CONCRETE WALL SCHEDULE

MARK	DESCRIPTION	NOTES
FW1	8" CIP FND WALL	EXISTING. 1" CONT. INTERIOR OPEN CELL FOAM INSULATION
FW2	8" CIP FND WALL	EXISTING

STRIP FOOTING SCHEDULE

MARK	NOTES
SF1	ASSUMED EXISTING STRIP FOOTING. NOT ACCESSIBLE DURING INSPECTION

PROPOSED STRUCTURAL REPAIR SCOPE

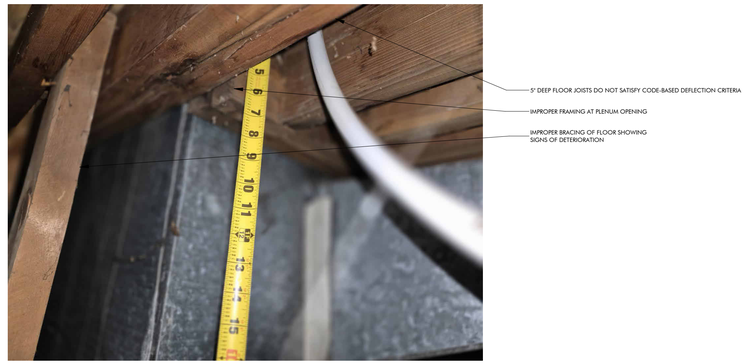
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NOTE: EXTERIOR WALLS APPROX 9' TALL

MARK	TASK	SCOPE DESCRIPTION
1.a	MASONRY	PROVIDE TEMPORARY SHORING TO SUPPORT FLOOR AND ROOF ABOVE DOWN TO CONC. SLAB. CUT OUT CRACKED LINTEL AND REPLACE WITH NEW EWP BEAM.
1.b	MASONRY	REROUTE FURNACE INTAKE AND EXHAUST. REMOVE AND DISPOSE OF EXISTING BRICK CHIMNEY. MAKE GOOD ROOF PENETRATION.
2.a	FRAMING	TEMPORARILY REMOVE MECHANICAL EQUIPMENT. REMOVE AND DISPOSE OF EXISTING FLOOR SYSTEM IN ENTIRE MECHANICAL ROOM. INSTALL NEW 9" DEEP EWP FLOOR JOISTS AND NEW FLOOR SHEATHING. REINSTALL MECHANICAL EQUIPMENT
2.b	FRAMING	REMOVE CLADDING AND SHEATHING FROM WING WALL AND MIN. 48" BACK FROM CORNER OF BUILDING. REPAIR DAMAGED FRAMING AS REQUIRED. INSTALL NEW SHEATHING AND CLADDING.
3.a	CLADDING	REMOVE AND DISPOSE OF EXISTING EXTERIOR WALL CLADDING. INSTALL NEW AIR AND WATER BARRIER, INSTALL NEW EXTERIOR CLADDING
3.b	CLADDING	REMOVE AND DISPOSE OF EXISTING CAP FLASHING AND FASCIA. INSTALL NEW METAL CAP FLASHING AND FASCIA AROUND ENTIRE PERIMETER OF BUILDING



02 / S1.0 Item 1.a
N.T.S.





03 / S1.0 Item 2.a
N.T.S.

WALL TYPE LEGEND:

- FW1 — CONCRETE WALL
- BW1 — CONCRETE BLOCK WALL
- SW1 — LOAD BEARING STUD WALL
- NON-LOAD BEARING STUD WALL
- WALL BELOW
- TW1 — SHEAR WALL

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PROFESSIONAL ENGINEER — PROVINCE OF BRITISH COLUMBIA — HORALEK # 42792

2026-01-09
EGBC PERMIT TO PRACTICE #1001619

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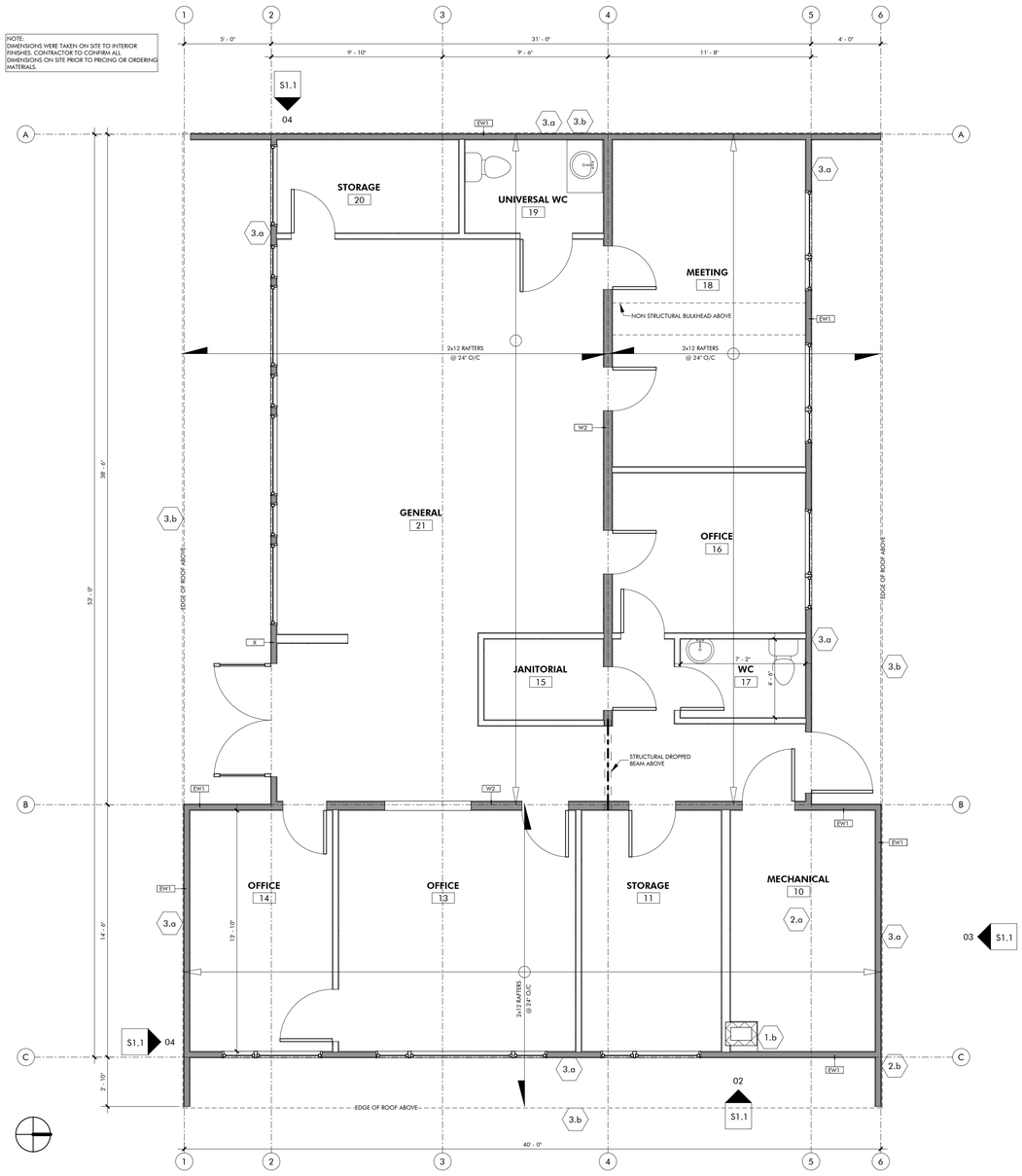
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rev.	date	remark
A	25-12-09	Issued for Class 'C' Est.
B	26-01-08	Issued for Record

drawn by: **AB** checked by: **TH**

Foundation Plan

S1.0



01 S1.1 Ground Floor Plan
1/4" = 1'-0"

FRAMED WALL SCHEDULE

MARK	DESCRIPTION
EW1	2x4 EXTERIOR STUD WALL
W2	2x6 INTERIOR LOAD BEARING STUD WALL

PROPOSED STRUCTURAL REPAIR SCOPE

0.o NOTE: EXTERIOR WALLS APPROX 9' TALL

MARK	TASK	SCOPE DESCRIPTION
1.a	MASONRY	PROVIDE TEMPORARY SHORING TO SUPPORT FLOOR AND ROOF ABOVE DOWN TO CONC. SLAB. CUT OUT CRACKED LINTEL AND REPLACE WITH NEW EWP BEAM.
1.b	MASONRY	REROUTE FURNACE INTAKE AND EXHAUST. REMOVE AND DISPOSE OF EXISTING BRICK CHIMNEY. MAKE GOOD ROOF PENETRATION.
2.a	FRAMING	TEMPORARILY REMOVE MECHANICAL EQUIPMENT. REMOVE AND DISPOSE OF EXISTING FLOOR SYSTEM IN ENTIRE MECHANICAL ROOM. INSTALL NEW 9" DEEP EWP FLOOR JOISTS AND NEW FLOOR SHEATHING. REINSTALL MECHANICAL EQUIPMENT
2.b	FRAMING	REMOVE CLADDING AND SHEATHING FROM WING WALL AND MIN. 48" BACK FROM CORNER OF BUILDING. REPAIR DAMAGED FRAMING AS REQUIRED. INSTALL NEW SHEATHING AND CLADDING.
3.a	CLADDING	REMOVE AND DISPOSE OF EXISTING EXTERIOR WALL CLADDING. INSTALL NEW AIR AND WATER BARRIER, INSTALL NEW EXTERIOR CLADDING
3.b	CLADDING	REMOVE AND DISPOSE OF EXISTING CAP FLASHING AND FASCIA. INSTALL NEW METAL CAP FLASHING AND FASCIA AROUND ENTIRE PERIMETER OF BUILDING



ITEM 1.b
EXISTING FURNACE INTAKE AND EXHAUST TO BE REROUTED.
CHIMNEY GROUT FAILING.

ITEM 3.b
TYPCAL DAMAGE FASCIA AND CAP FLASHING.

02 S1.1 Item 1.b
N.T.S.



ITEM 3.b
TYPCAL DAMAGE FASCIA AND CAP FLASHING.

ITEM 3.a
TYPCAL DAMAGE EXTERIOR CLADDING

ITEM 2.b
APPROXIMATE EXTENT OF CLADDING AND SHEATHING TO BE REMOVED TO ALLOW FOR INSPECTION AND REPAIR OF FRAMING

03 S1.1 Item 2.b
N.T.S.



ITEM 3.a
TYPCAL DAMAGE EXTERIOR CLADDING. NOTE SOME SECTIONS REPLACED WITH ALTERNATE MATERIALS.

04 S1.1 Item 3.a
N.T.S.

WALL TYPE LEGEND:

FW1	CONCRETE WALL
BW1	CONCRETE BLOCK WALL
SW1	LOAD BEARING STUD WALL
	NON-LOAD BEARING STUD WALL
	WALL BELOW
TW1	SHEAR WALL

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drawn by: AB checked by: TH

Ground Floor Plan

S1.1