FOR SALE

STRATEGIC INVESTMENT PROPERTY
(WITHIN ALR)

AREA:
Port Kells

ADDRESS:
20617 102B Ave.,
Langley, BC

SIZE:
10.55 Acres

PRICE:
$2,950,000

VARING MARKETING GROUP
HOMELIFE ADVANTAGE REALTY (CENTRAL VALLEY) LTD.

HOMELIFE ADVANTAGE REALTY (CENTRAL VALLEY) LTD.
Joe Varing - Personal Real Estate Corporation Ltd.
604.565.3478 | info@varinggroup.com
360-3033 Immel Street, Abbotsford, BC V2S 6S2

PROPERTY DESCRIPTION

CIVIC ADDRESS: 20617 102B Ave., Langley BC
PID: 002-994-313

AREA: Port Kells

SIZE: 10.55 Acres

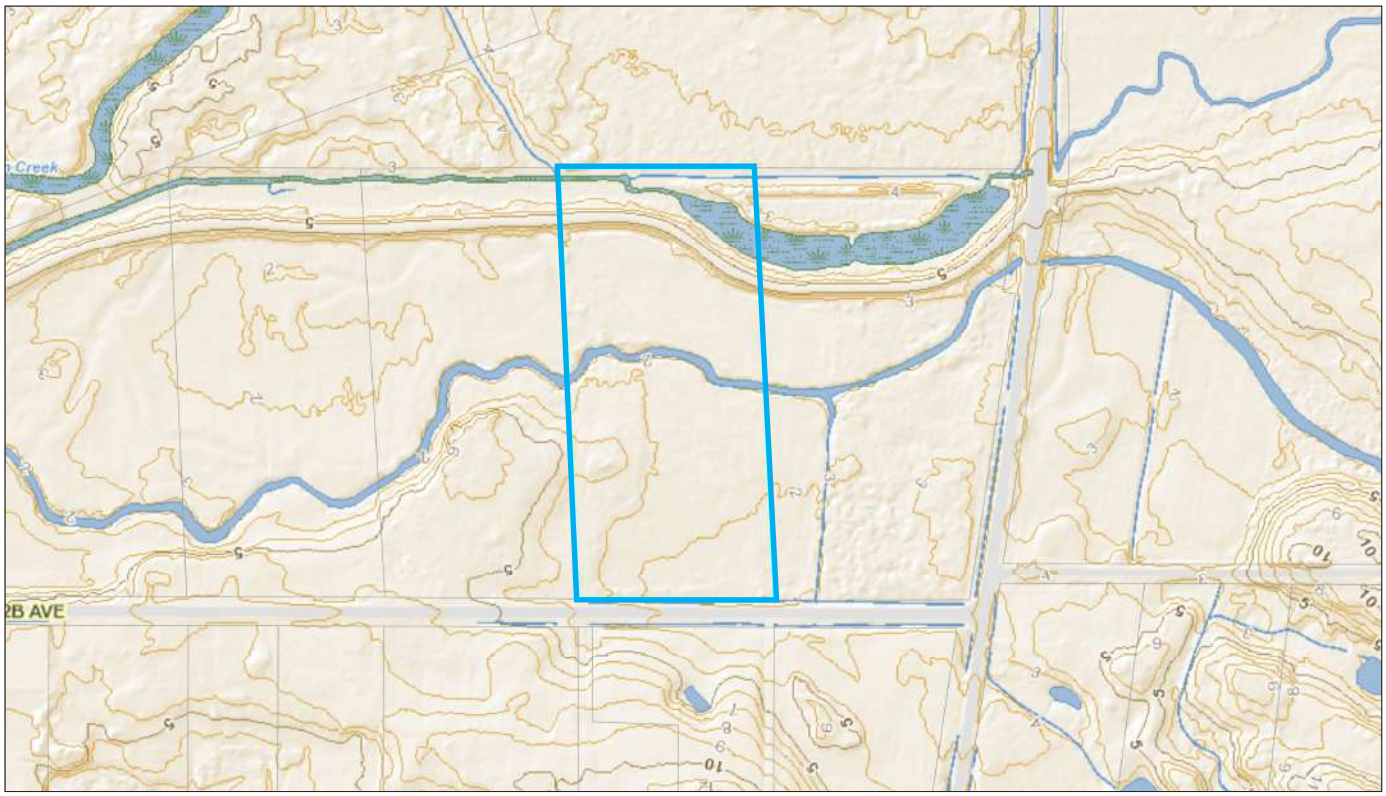
PRICE: $2,950,000

OPPORTUNITY:

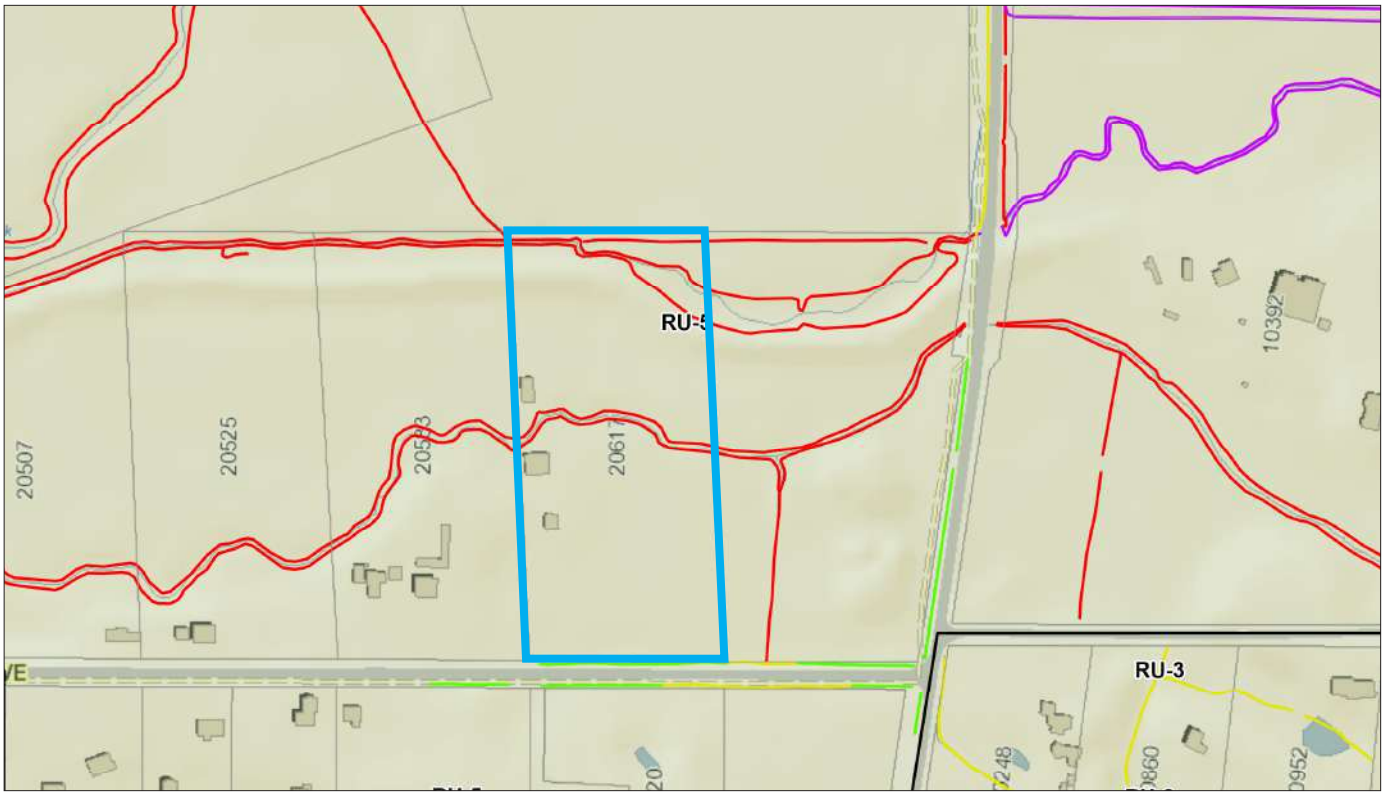
- Strategically located 10.55 acres in Walnut Grove (within ALR)
- Long term holding property with future potential being within close proximity to Industrial area
- Owners/Users to the West include: Cloverdale Fuel, Burnco & Eco-Agg Concrete Recycling
- Flat and clear parcel
- Quick access to Golden Ears Bridge and Highway 1 – Trans Canada Highway

AERIAL VIEW

TOPOGRAPHY



LEGAL VIEW



DIMENSIONS

SUBJECT DIMENSIONS SHOWN IN METERS

205 **RURAL FLOODPLAIN ZONE RU-5**

Uses Permitted

205.1 In the RU-5 Zone only the following *uses* are permitted and all other *uses* are prohibited:

1) all *uses* permitted in the Rural Zone RU-1
2) *marina class "B"*

Floodplain

205.2 The provisions of Section 105 shall apply except that in the RU-5 zone no part of any residential *building* shall be constructed at an elevation that is less than the Flood Construction Level. The Flood Construction Level may be achieved by structural elevation or the placement of not more than 0.91 metres of fill on the *building* site or a combination thereof. Prior to the issuance of a *building* permit, the applicant shall;

a) Provide the Municipality with certification from a Qualified Professional (as defined by the Ministry of Health Sewerage Disposal Regulation) with respect to the provision of a sewage disposal system; and
b) Provide the Municipality with certification from a British Columbia Land Surveyor that the final elevation of the *building* site is equal to or exceeds the Flood Construction Level.

Lot Coverage

205.3 1) Except for *commercial greenhouses*, *buildings* and *structures* shall not cover more than 33% of the *lot area*.
2) *Commercial greenhouses* shall not cover more than 66% of the *lot area* inclusive of all *buildings* and *structures* on the *lot*, provided the *buildings* and *structures* on the *lot* other than *commercial greenhouses* shall not cover more than 33% of the *lot area*.
3) *Accessory buildings* and *structures* not used for *agricultural* or *farm* purposes shall not exceed a total of 200 m^2 of ground floor *building* area.

Siting of Buildings and Structures

205.4 1) Except as provided for in Section 205.4 2), 3), 4) and 6) and Sections 104.4 and 105.1 2), no principal *building* or *structure* shall be sited less than:
a) 9.75 metres from a *front lot line*;
b) 7.5 metres from a *rear lot line*;
c) 3.0 metres from a *side lot line*; and
d) 7.5 metres where the *side lot line* abuts a *flanking street*.
2) No *building* or *structure* used to shelter or house any animals or poultry shall be sited less than 15 metres from any property line.
3) All *building* and *structures* used for *intensive swine operation* shall be sited in compliance with Section 109.
4) In a *feedlot*, all *buildings*, pens, enclosures, or places where cattle are kept or manure is stored shall be sited in accordance with the requirements of Section 201.7 4).

5) Except as provided for in Sections 101.4, 104.14, 104.15 and 105.1 2), no *accessory building* or *structure* shall be sited less than:
   a) 9.75 metres from a *front lot line*;
   b) 1.5 metres from a *rear lot line* except that where a through *lot* fronts onto 2 *streets* the setback shall be the same as for the front yard setback for the principal *building*;
   c) 1.5 metres from a *side lot line*; and
   d) 4.5 metres where the *side lot line* abuts a *flanking street*.
6) A commercial *greenhouse* shall be sited not less than 15 m from a *front, rear* or *side lot line* and not less than 30 m from the boundary of a *lot* zoned other than RU or M.

Height of Buildings and Structures

#4859 30/05/11 205.5 Except as provided for in Section 104.5
1) The *height* of a *single family dwelling* shall not exceed 9 metres
2) The *height* of all other *buildings and structures* not used for *agricultural* or *farm* purposes shall not exceed 9 metres or 2 *storeys*, whichever is lesser.

Parking and Loading

205.6 Parking and loading shall be provided in accordance with Section 107.

Subdivision Requirements

205.7 All *lots* created by *subdivision* shall comply with Section 110 of this Bylaw and the Subdivision and Development Servicing Bylaw 2019 No. 5382 as amended.

Landscaping, Screening and Fencing

#2845 25/06/90 205.8 Landscaping areas, landscaping screens and fencing shall comply with Section 111.

DRAWINGS

CONSULTANTS

OWNER:

-

ARCHITECTURAL DESIGN:

STRUCTURAL DESIGN:

CIVIL DESIGN:

MECHANICAL DESIGN:

ELECTRICAL DESIGN:

ENERGY DESIGN:

LANDSCAPE DESIGN:

LEGAL SURVEY:

Architectural Sheet List

Sheet Name	No.	Rev.
SITE PLAN	A1.0	5
MAIN FLOOR PLAN	A2.1	5
SECOND FLOOR MEZZANINE	A2.2	5
SECTIONS	A3.1	5
ELEVATIONS	A4.1	5

Issued for Building Permit

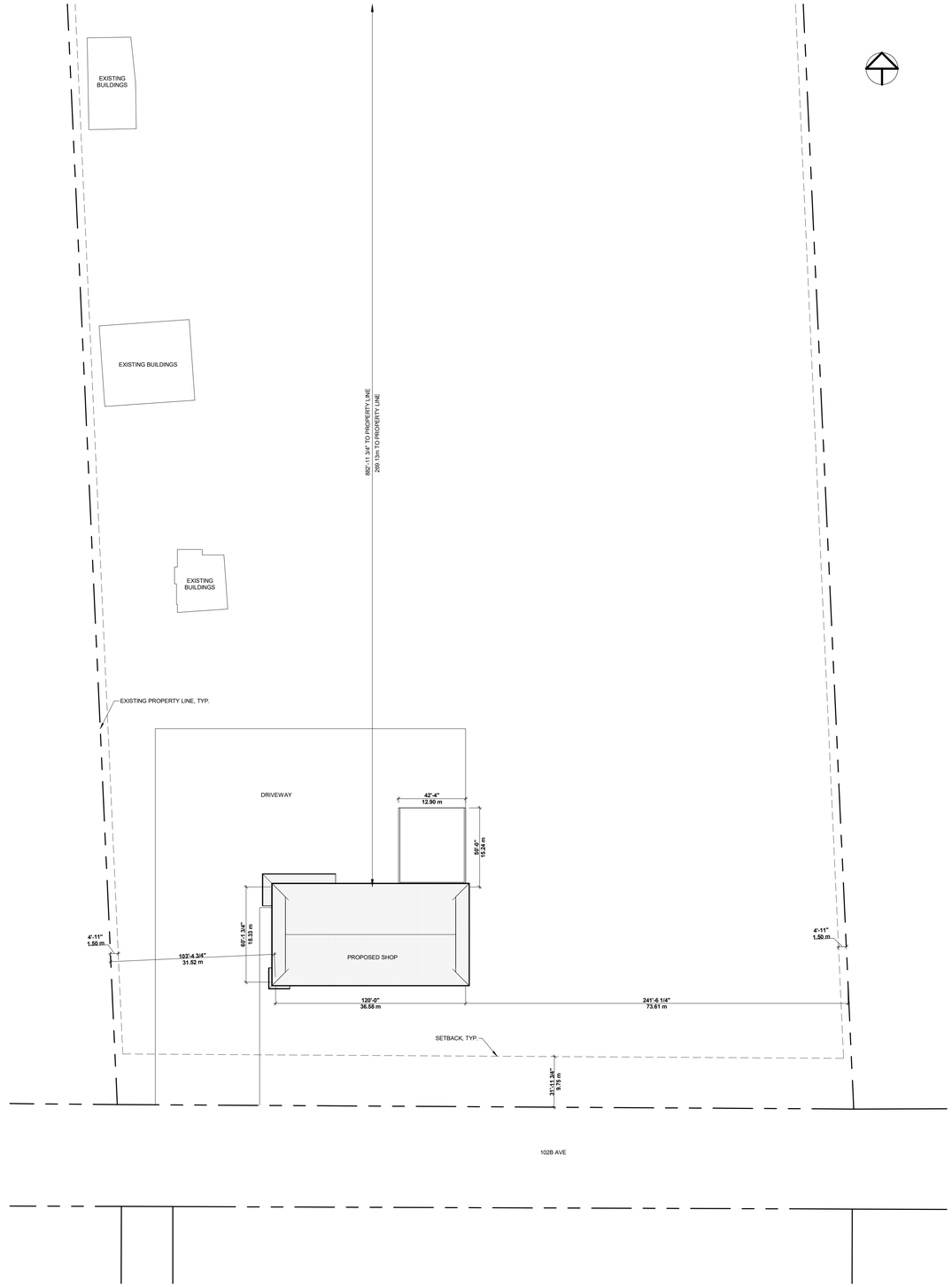
PROJECT NO:
22-093

DATE: **ISSUE DATE**

DATE PRINTED: **2023-01-11 9:55:19 AM**

LANGLEY SHOP

20617-102B AVE, LANGLEY, BC



1 A1.0 Site Plan
1" = 40'-0"

SITE RECONCILIATION

ZONING: RU-5 - MIN 8.0HA - RURAL

ADDRESS

CIVIC: 20617 102B AVE, LANGLEY, B.C.
LEGAL: OT 3, DISTRICT LOT 125, NEW WEST DISTRICT, PLAN NWP1115 GROUP 2

LOT COVERAGE

PROPOSED	ALLOWABLE
618M2	n/a

SETBACKS

	PROVIDED (#1)	REQUIRED
NORTH (REAR):	north distance from plan	1.5m
EAST (ISLL):	'X1' distance from site plan	1.5m
SOUTH (FRONT):	23.5m	9.75m
WEST (ISLL):	30.5m	1.5m

BUILDING HEIGHT

PROVIDED	ALLOWABLE
TBD	n/a

PROJECT NO:
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ISSUES

NO.	DRN:	CHK:	DATE:	DESCRIPTION:
1	SD	TK	DEC 09/22	Issued for Information
2	SD	TK	DEC 12/22	Re-Issued for Information
3	SD	TK	DEC 14/22	Re-Issued for Information
4	SD	TK	JAN 04/23	Issued for Building Permit
5	SD	TK	JAN 11/23	Issued for Building Permit

CLIENT:
MR. BUILD CONTRACTING LTD.

PROJECT:
LANGLEY SHOP

ADDRESS:
20617-102B AVE, LANGLEY, BC

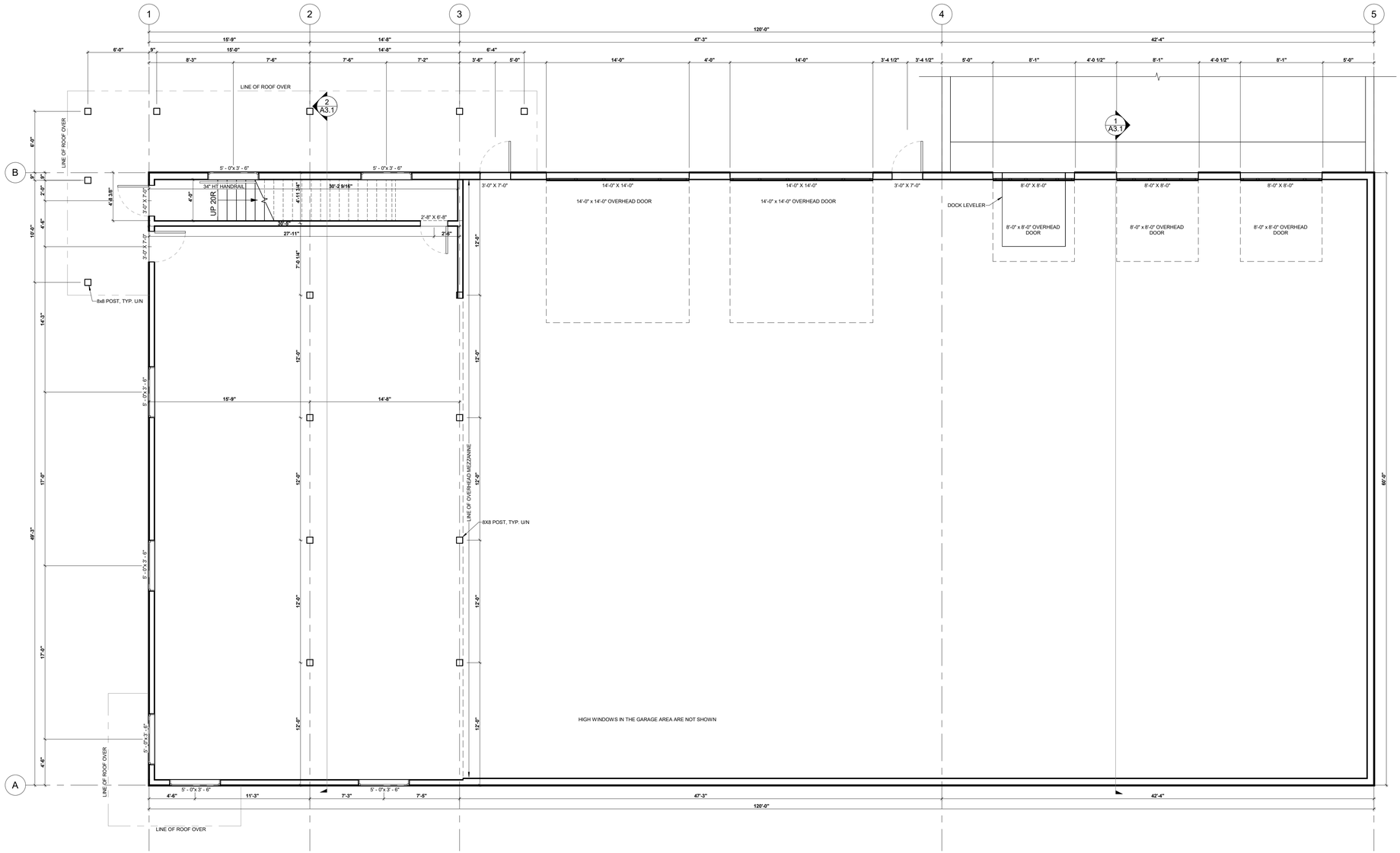
TITLE:
SITE PLAN

Issued for Building Permit

DRAWN BY: SD
CHECKED BY: TK
SCALE: AS NOTED
DATE: ISSUE DATE

SHEET NO:
A1.0

DATE PRINTED
2023-01-11 9:55:20 AM



1 A2.1 MAIN FLOOR PLAN
3/16" = 1'-0"

PROJECT NO:
22-093

ISSUES

NO.	DRN:	CHK:	DATE:	DESCRIPTION:
1	SD	TK	DEC 09/22	Issued for Information
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CLIENT:
MR. BUILD CONTRACTING LTD.

PROJECT:
LANGLEY SHOP

ADDRESS:
20617-102B AVE, LANGLEY, BC

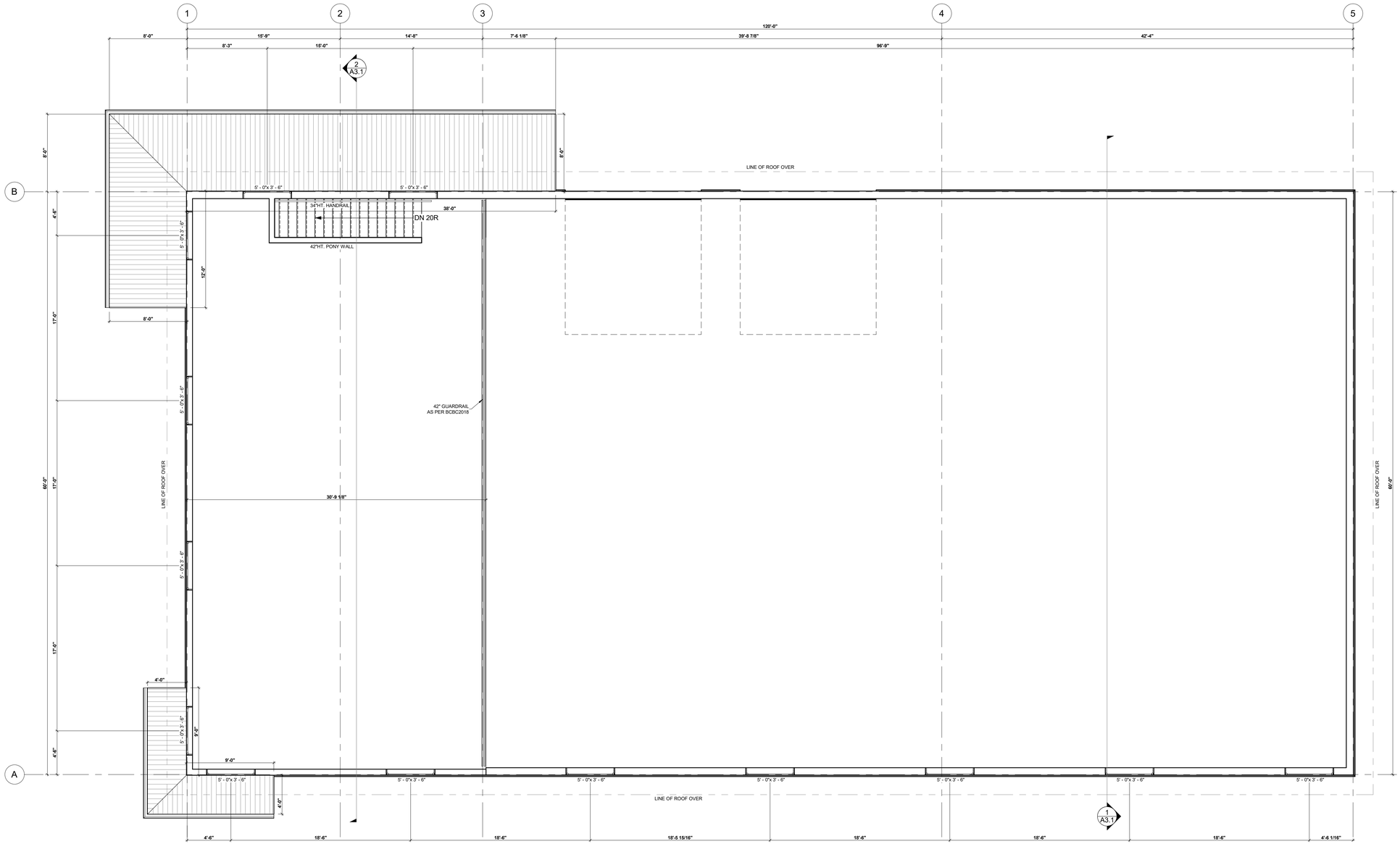
TITLE:
MAIN FLOOR PLAN

DRAWN BY: **SD**
CHECKED BY: **TK**
SCALE: **AS NOTED**
DATE: **ISSUE DATE**

SHEET NO:
A2.1

DATE PRINTED
2023-01-11 9:55:20 AM

Issued for Building Permit



1 A2.2 SECOND FLOOR MEZZANINE
3/16" = 1'-0"

PROJECT NO:
22-093

ISSUES

NO.	DRN:	CHK:	DATE:	DESCRIPTION:
1	SD	TK	DEC 09/22	Issued for Information
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3	SD	TK	DEC 14/22	Re-Issued for Information
4	SD	TK	JAN 04/23	Issued for Building Permit
5	SD	TK	JAN 11/23	Issued for Building Permit

CONTRACTOR:

CLIENT:
MR. BUILD CONTRACTING LTD.

PROJECT:
LANGLEY SHOP

ADDRESS:
20617-102B AVE, LANGLEY, BC

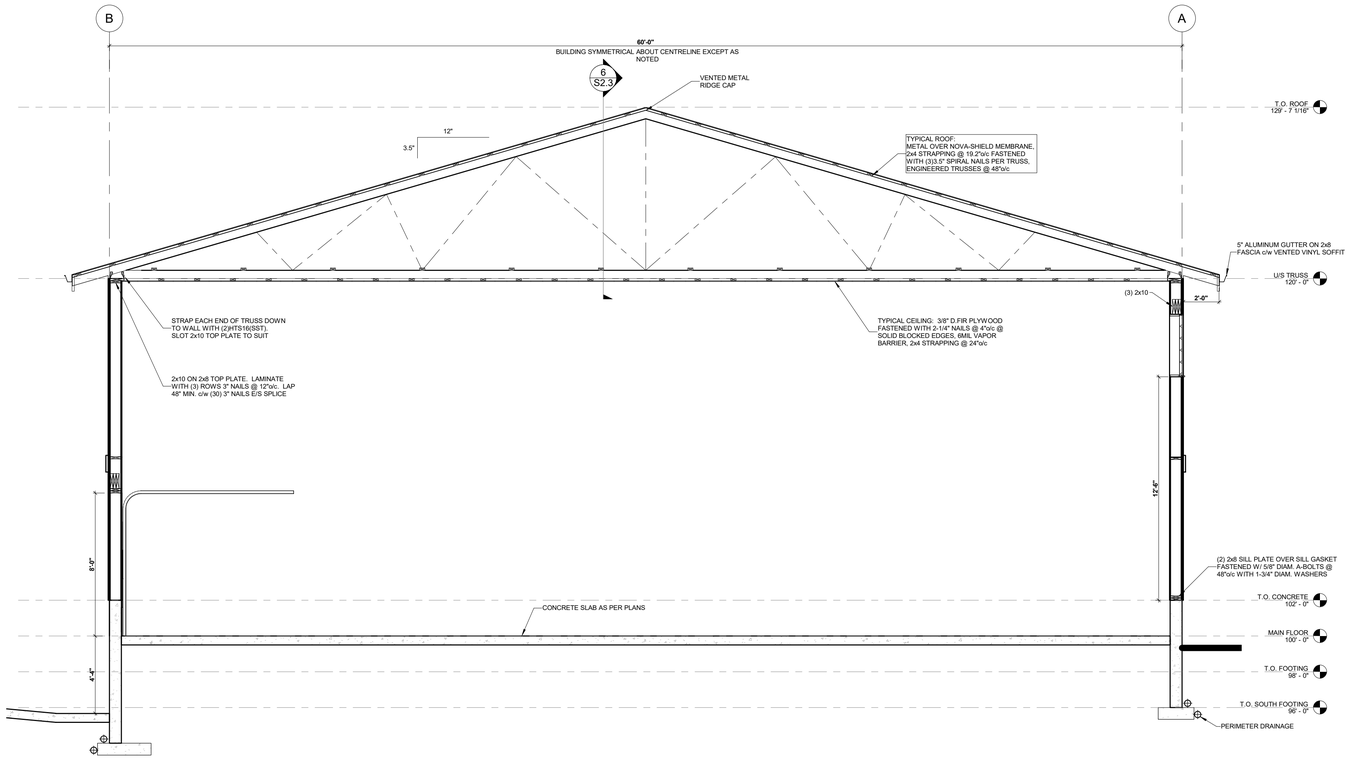
TITLE:
SECOND FLOOR MEZZANINE

Issued for Building Permit

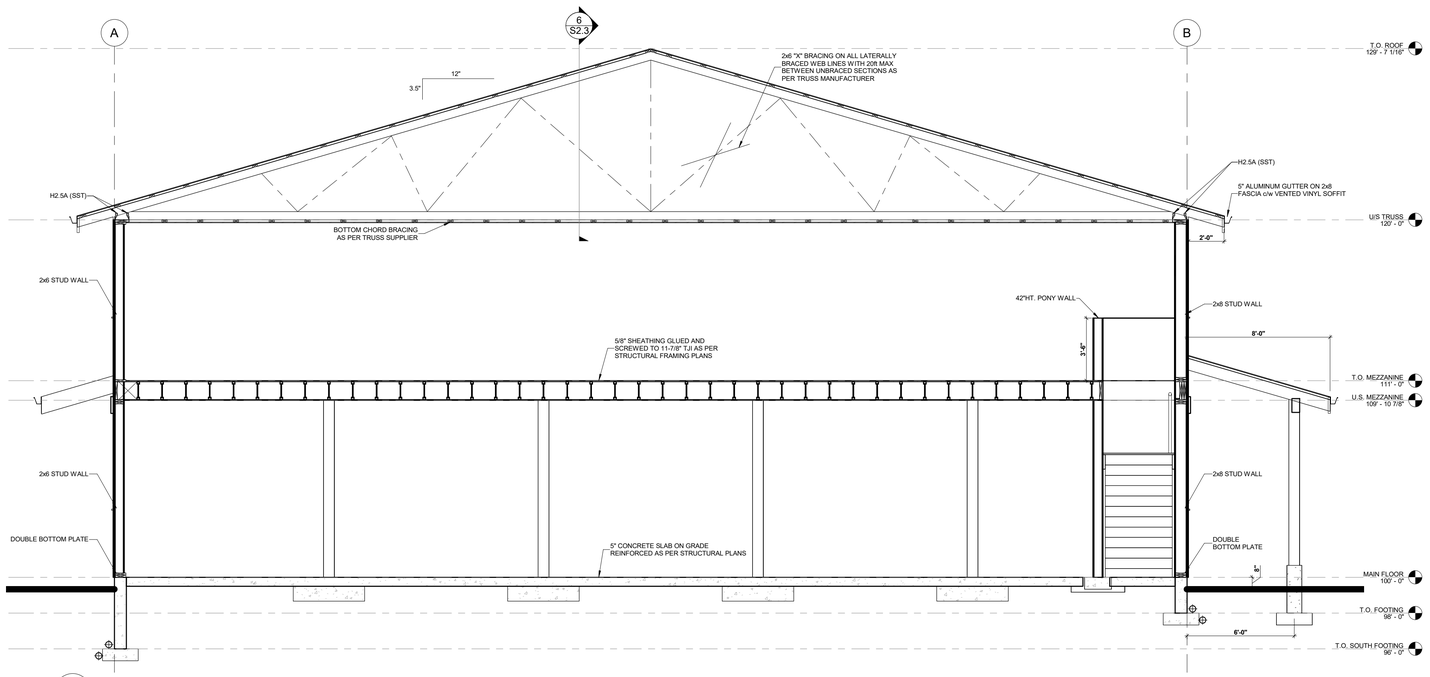
DRAWN BY:	SD
CHECKED BY:	TK
SCALE:	AS NOTED
DATE:	ISSUE DATE

SHEET NO:
A2.2

DATE PRINTED:
2023-01-11 9:55:21 AM



1 A3.1 WEST VIEW SECTION
1/4" = 1'-0"



2 A3.1 EAST VIEW SECTION
1/4" = 1'-0"

PROJECT NO:
22-093

ISSUES

NO.	DRN:	CHK:	DATE:	DESCRIPTION:
1	SD	TK	DEC 09/22	Issued for Information
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CONTRACTOR:

CLIENT:
MR. BUILD CONTRACTING LTD.

PROJECT:
LANGLEY SHOP

ADDRESS:
20617-102B AVE, LANGLEY, BC

TITLE:
SECTIONS

DRAWN BY: **SD**
CHECKED BY: **TK**
SCALE: **AS NOTED**
DATE: **ISSUE DATE**

SHEET NO:
A3.1

DATE PRINTED:
2023-01-11 9:55:21 AM

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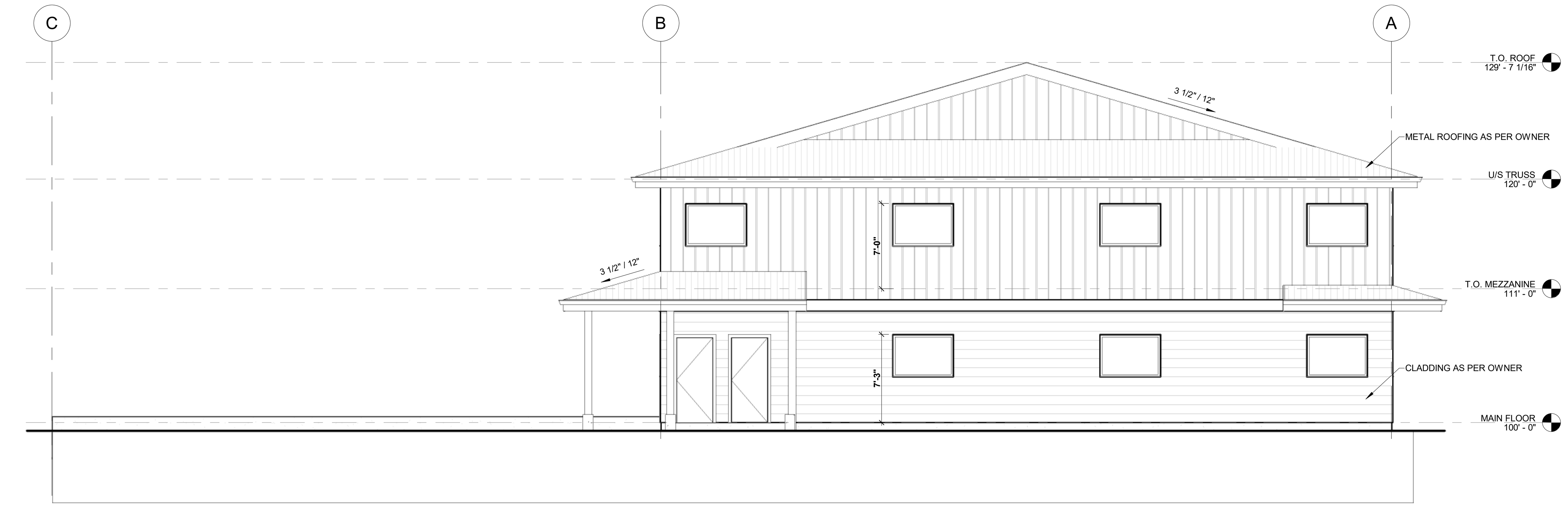
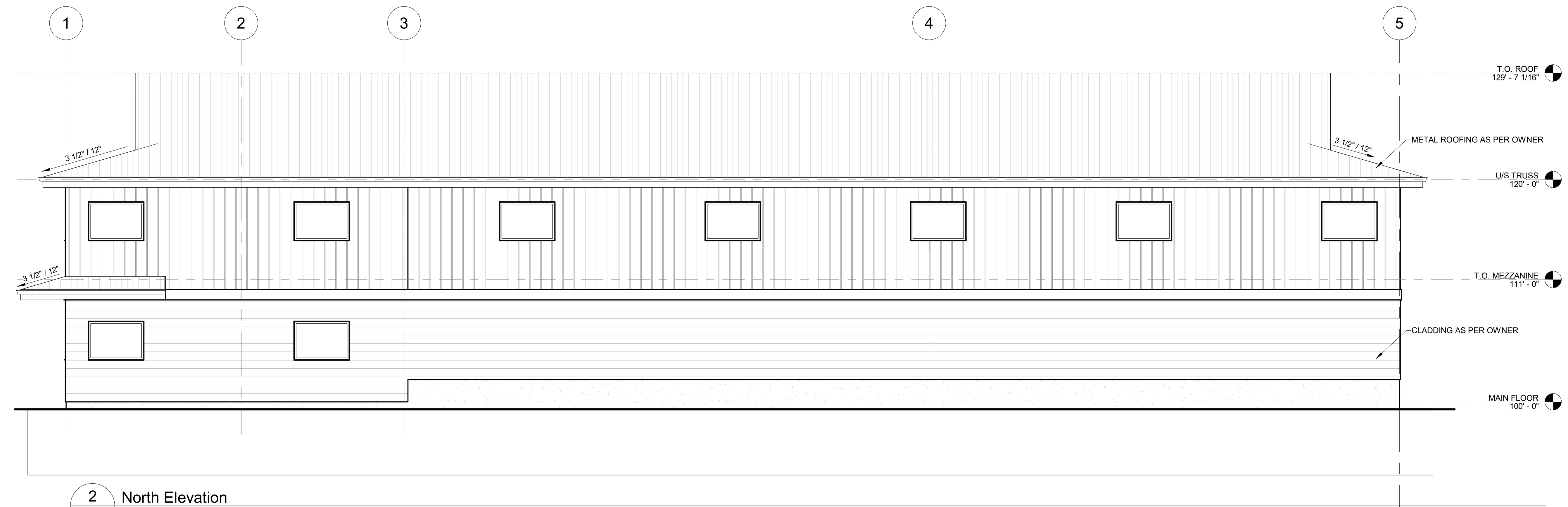
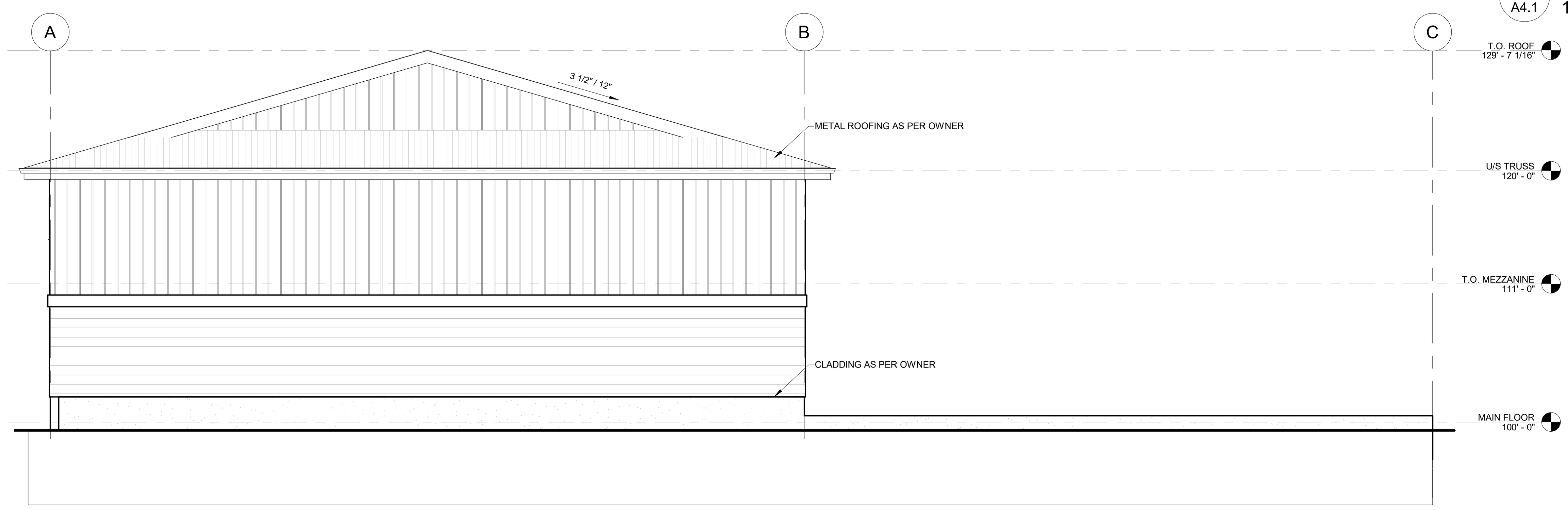


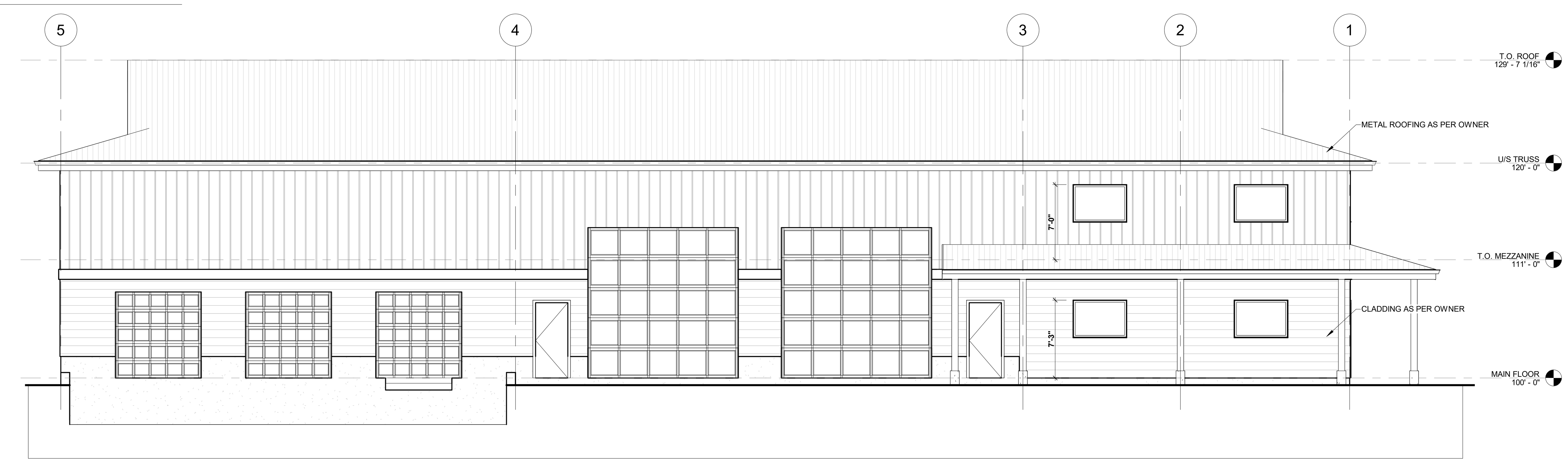
1 A4.1 East Elevation
1/8" = 1'-0"



2 A4.1 North Elevation
1/8" = 1'-0"



3 A4.1 West Elevation
1/8" = 1'-0"



4 A4.1 South Elevation
1/8" = 1'-0"

Issued for Building Permit

PROJECT NO:
22-093

ISSUES

NO.	DRN:	CHK:	DATE:	DESCRIPTION:
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CONTRACTOR:

CLIENT:
MR. BUILD CONTRACTING LTD.

PROJECT:
LANGLEY SHOP

ADDRESS:
20617-102B AVE, LANGLEY, BC

TITLE:
ELEVATIONS

DRAWN BY: SD
CHECKED BY: TK
SCALE: AS NOTED
DATE: ISSUE DATE

SHEET NO:
A4.1

DATE PRINTED
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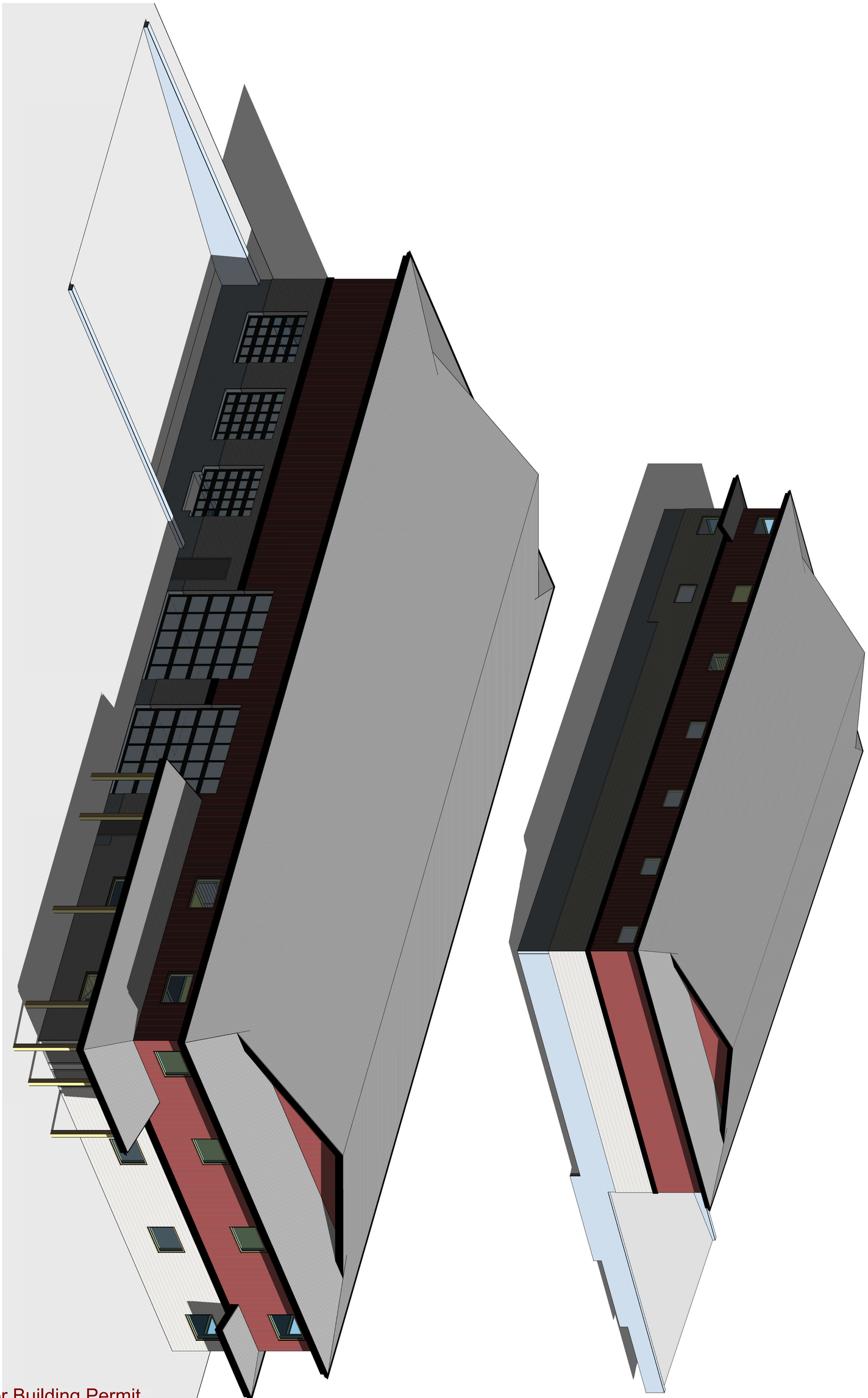


STRUCTURAL SHEET LIST

SHEET NAME	NO.	REV.
COVER PAGE	S0.0	5
STRUCTURAL NOTES	S0.1	5
FOUNDATION PLAN	S1.1	5
FOUNDATION PLANTER DETAILS	S1.2	5
SECOND FLOOR FRAMING PLAN	S2.1	5
ROOF FRAMING PLAN	S2.2	5
TYPICAL WOOD FRAME DETAILS	S3.1	5

Issued for Building Permit

LANGLEY SHOP

20617-102B AVE, LANGLEY, BC

DATE PRINTED: 2023-01-11 9:55:25 AM

DATE: ISSUE DATE

PROJECT NO. 22-093

GENERAL

The structural engineer shall arrange a pre-construction meeting to discuss various design requirements and expectations. The owner, superintendent, framer and other design consultants will be required to attend.

The use of these drawings is limited to that identified in the revision column. Any revisions made to the design drawings prior to "issue for tender" & "issued for construction" resulting in construction cost changes are the responsibility of the owner/contractor.

Contractors are to ensure they are working from current "Issued for Construction" plans.

The contractor shall check and verify all dimensions and details on the structural drawings for compatibility with architectural and other consultants' drawings before commencing with the work.

All structural specifications to take precedence over architectural.

The contractor shall inform the engineer in writing during the bidding period of any discrepancies or omissions noted on the drawings or in the specifications. Upon receipt of such information the engineer will provide additional instructions. Any such discrepancy, omission, or variation not reported shall be the responsibility of the contractor, and corrective work shall be performed as directed by the engineer.

The contractor is responsible for all costs associated with the correction of deficiencies, as determined by the engineer.

All dimensions to take precedence over scale shown on plans, sections, and details.

Engineering services presented on these drawings are for permanent structure only. The contractor is responsible for all temporary bracing required for structure stability and for construction loading until the project is completed.

Refer to architectural/building envelope consultant drawings for all specifications regarding water proofing(roof, exterior walls, below grade foundation walls, suspended slabs, etc). Any special concrete mix designs required for water proofing is the responsibility of the materials consultant

Architectural Design, Electrical, Mechanical, Civil, and Geotechnical Engineering are the responsibility of others.

All formwork, shoring for the excavation, and underpinning of adjacent structures, if required, is the responsibility of the contractor and shall be designed and inspected by others to current Worker's Compensation Board regulations.

The contractor is responsible for safety on the job site during construction and shall ensure compliance to current WorkSafe BC regulations.

See mechanical, electrical, and/or manufacturer's drawings for size, location, and anchor bolt requirements of all machine bases and holes in walls and floors. All design of machine and equipment bases responsibility of others, unless specifically detailed on drawings. Subcontractors to furnish templates to general contractor showing anchor bolt location for equipment furnished by them. Co-ordinate with architectural, mechanical, and electrical drawings for openings, slopes, curbs, drainage, and waterproofing, etc.

In cases of discrepancies on structural drawings, the more stringent requirements shall govern.

The completed base structural components have been designed to Part 4/Part 9 of B.C. Building Code 2018, and the 1995 Canadian Farm Building Code.

Refer to additional notes regarding "Elements Designed By Others" for items not the direct responsibility of Kerkhoff Engineering.

Design Loads

This structure has been designed for the following superimposed, service loads:

	Live Loads (psf)	Dead Loads (psf)
Roof	Ss = 50.1 (2.4kPa) Sr= 4.2 (0.2kPa) SL_{top} = 43.0 (2.06kPa) SL_{bot} = 44.2 (2.12kPa) Cs = 0.97 & Ca = 1.06	15.0 (0.72kPa)
Second Floor	100.0 (4.8kPa)	15.0 (0.72kPa)
Wind (q50)	9.2 (0.44kPa)	-
Seismic	Sa (0.2) = 0.77 Sa (0.5) = 0.67 Sa (1.0) = 0.39 Sa (2.0) = 0.24 Sa (5.0) = 0.08 Sa (10.0) = 0.03	

ELEMENTS DESIGNED BY OTHERS

The architectural specifications require the review of a professional engineer for the structural capacity of all non-structural components. These components include interior & exterior steel studding, glazing & windows frames, skylights, guardrails/handrails, and masonry veneer. The design of these components is the responsibility of the general contractor's subtrades professional engineers. All shop drawings for these items are to be sealed and signed by the professional engineer who is responsible for these items.

Canopies may be specified as steel or aluminum framed in accordance with architectural specifications. All canopies to be designed by canopy contractor, to resist code snow loads and wind loads. Sealed shop drawings shall be submitted for review prior to fabrication.

All shop drawings shall be submitted to Kerkhoff Engineering for review prior to fabrication. Shop drawings not bearing the seal of a Professional Engineer Registered in BC will not be reviewed. The sub-consultant shall submit Schedules SB & SC upon satisfactory completion.

Kerkhoff Engineering has designed the base structure to support the intended load of the secondary elements assuming generally accepted construction practices. Adequate separation shall be provided between the base structure and secondary components so as not to provide additional rigidity to the primary structural resisting system. Expansion & deflection mechanisms shall be built into the structure, and shall be clearly shown on component drawings.

Mechanical and Electrical Contractors shall engage Professional Engineers for siesmic restraint of components not part of the Base Building and submit Schedules SB & SC, including Field Review Reports.

FOUNDATIONS

Foundation design based on the following assumption:

Soil bearing pressure: SLS = 1500psf
ULS = 3000psf

Site Class: D

Prepare site for foundations in accordance with geotechnical report recommendations.

Copies of all field review reports and materials testing (compaction tests, etc), shall be forwarded to Kerkhoff Engineer minimum 24hrs. prior to placement of concrete and/or backfilling.

Soil conditions to be inspected by the geotechnical engineer to verify the conditions and confirm the allowable bearing pressure after excavation and prior to construction of formwork for foundations. Site report and recommendations shall be forwarded to Structural Engineer.

Approval to pour concrete during an inspection does not imply assurance of assumed bearing capacity or subgrade conditions used in the structural design of footings and foundations for this project.

Bottom of footings to be minimum 18" below final finished grade for frost cover.

Footing elevations and sizes are subject to revision where site conditions differ from anticipated soil conditions. Where footings are stepped down for mechanical and electrical services (where allowances have not been provided for in the drawings), additional structural requirements may be required at the discretion of the engineer.

All footings to bear on firm, undisturbed material. Grass, roots, top soil, etc., are to be removed from foundation area.

Footings or slab-on-grade bearing on compacted, granular structural fill shall be compacted to a standard proctor as outlined in the geotechnical engineer's report. Standard proctor value to be verified by compaction testing and results to be submitted to the engineer.

All footings shall be centred below walls and columns unless detailed otherwise. Dowels to match vertical bars.

Backfill walls only after a minimum of 7 days following the completion of interior level floor system (unless walls are adequately braced) with clean, free-draining, moderately compacted, granular material or as specified by the geotechnical engineer and slope grade to drain away from building.

Coordinate with architectural and other consultants' drawings for ground elevations, openings, drainage slopes, waterproofing, etc.

Inspection of foundation drainage, waterproofing, excavation and shoring is the responsibility of others.

FIELD REVIEWS

The Contractor's Superintendent is required to pre-inspect the work to confirm work is completed as per documents and provide the Engineer (Kerkhoff Engineering Ltd., 604-858-3730) or their representative with a minimum of 24 hours notice in accordance with B.C.Building Code 2018 and municipal bylaws for routine Field Reviews of:

1. General site conditions prior to forming.
2. Reinforcing steel and pour conditions prior to each concrete pour
3. Wood framing, roof, floor, and wall sheathing after mechanical electrical rough-in is complete.

Field reviews performed by Kerkhoff Engineering are only for the base building structure as specified on these drawings. These reviews are periodic and are to be performed at the discretion of the engineer, in order to ascertain the construction is in general conformance with structural documents. Field reviews are performed on behalf of the client and not for the benefit of quality control of the contractor. The contractor retains full responsibility for ensuring all requirements specified on structural drawings and all amendments are strictly adhered too.

The contractor shall notify the truss manufacturer to inspect all trusses and provide a sealed certificate for installation of trusses, bracing, hangers, and all pertinent hardware prior to installation of any roof membrane. See also additional requirements under "Pre-fabricated trusses/joists".

The geotechnical engineer shall review final plans and inspect the site preparation work to confirm that the soil conditions are consistent with design assumptions and design recommendations. Inspection to include the following:

1. Base materials for confirmation of assumed soil bearing.
2. Testing for compaction of any structural fill required under footings, slab-on-grade, or retaining walls.
3. Backfill behind foundation & retaining walls.

The geotechnical engineer to be notified minimum 24 hours prior to any footing pours for inspection as noted above.

Reinspection required by the engineer due to incomplete work and/or deficiencies from previous Field Reviews, shall be at the expense of the contractor.

All work shall be made accessible for inspection. Failure to give required notification and accessibility may result in the Engineer requesting the removal and replacement of the work at the contractor's expense.

Review of the work, or any portion thereof, by the engineer shall not in any way relieve the contractor of his responsibility and obligation to comply with the contract drawings and specifications.

LIMITS OF LIABILITY

Engineering judgement has been applied in developing this design in an attempt to strike a reasonable balance between risk of failure and economic factors. Beyond a certain level of cost, increments of security are attained only by disproportionate increases in cost. A more conservative approach could be adopted in return for increased design and construction costs.

These designs have been prepared in accordance with generally accepted structural engineering practices and to the requirements of all applicable Codes. No other warranty is made, either expressed or implied.

Structural design of all architectural components, and their seismic restraint is to be reviewed by others.

CONCRETE EMBEDMENTS

Install conduits and ducts embedded in concrete in accordance with the following guidelines except with the approval of the Structural Engineer.

1. Conduits
   a. Locate between reinforcing steel layers.
   b. Maximum size in one layer to be 1/3 of the concrete slab thickness.
   c. Maximum size in two layers crossing to be 1/4 of the slab thickness.
   d. Crossing of three layers will not be permitted.
   e. Clear space between parallel conduits shall be one diameter or 1 1/2" minimum horizontally and vertically.
2. Ducts
   a. Locate between reinforcing steel layers.
   b. Maximum size to be 1/3 of the slab thickness.
   c. Crossing of ducts will not be permitted.
   d. Clear space between ducts to be 12".
3. Columns
   a. The maximum size of conduit or fittings not to exceed 4 percent of the column area. Embedded piping will not be allowed unless approved by Engineer.
4. Beams
   a. The maximum size of conduit not to exceed 4 percent of the area. Sleeves and embedded piping as directed by Engineer.

Co-ordinate with architectural and mechanical drawings for openings, curbs, sleeves, waterproofing, etc.

The contractor shall provide 1000 pounds of 15M steel reinforcement for the engineer to use at his discretion during construction. The contractor shall reimburse the owner for the unused portion.

CONCRETE

Provide concrete and perform work to CAN/CSA A23.3-14. Provide copy of standard at site for reference.

The contractor shall arrange for the taking and testing of concrete cylinders by an independent testing agency in accordance with CAN/CSA-A23.2-14 at the expense of the contractor. A minimum of 3 test cylinders shall be cast for each 100 c.m. (minimum 3 test cylinders for each day's pour), and each class of concrete. Test 1 cylinder at 7 days and 2 cylinders at 28 days. One cylinder shall be field cured and tested at 7 days. Copies of all concrete test results to be sent to the structural engineer.

CONCRETE MIX REQUIREMENTS

LOCATION	COMPRESSIVE STRENGTH	SLUMP +/- 3/4"	MAX AGG. SIZE	AIR	EXP CLASS
Foundation & footings	3600 PSI (25MPa)	3"	3/4"	5-8%	F2
Int'r Columns & Walls	3600 PSI (25MPa)	3"	3/4"	1-4%	F2
Ext'r Columns & Walls	3600 PSI (25MPa)	3"	3/4"	4-7%	F2
Int'r S.O.G. General	4350 PSI(30MPa)	3"	3/4"	1-4%	--

All concrete normal weight 2400 kg/m3, type 50 sulphate resistace cement, type F flyash, unless otherwise noted.

Slumps noted are before the addition of superplastisizer.

No more than 120 minutes shall elapse between concrete batching and concrete placement unless approved by the testing agency and the structural engineer. Contractor's superintendent to monitor this period. Testing agency has the authority to reject concrete if not in accordance with specifications.

Do not use admixtures other than air entrainment and standard water reducers or superplastisizers.

Maximum chloride as to CAN/CSA-A23.1-14. Concrete temperatures as delivered shall comply with Table 14 of CAN/CSA-A23.1-14.

Provide storage facility on site for the initial 24 hour curing of test cylinders.

The contractor shall be responsible for design of all formwork. Forms shall be built of sufficient strength and rigidity to carry the weight or fluid pressure of the concrete and additionally all construction loads including those due to wind, equipment, and runways. The forms shall be clean and free of any accumulation of debris. All water shall be removed from the place of concrete deposit.

Provide 3/4" chamfer on all exposed column corners. Unless noted otherwise, slabs and beams shall be cambered 1/8" for each 8'-0" of span.

Compact concrete throughout with mechanical vibrators. Work concrete around all embedded material and into corners of forms. Embedded material shall be free from grease, scale and other coatings.

All hot and cold weather concrete work to be carried out in accordance with CAN/CSA-A23.1-14. When temperature is expected to fall below 0 degrees Celsius within 3 days of pouring concrete, the Contractor shall notify the Engineer of the following:

1. Provisions for heating fresh concrete
2. Provisions for heating concrete in forms
3. Alterations to mix design
4. Provisions for curing

Concrete shall be protected from all harmful effects during construction. Concrete shall be cured by approved means for at least 5 days subsequent to pour.

Cold Weather Requirements:
1. Place and protect concrete in accordance with CAN/CSA-A23.1-14.
2. Air Temperature not below 5 degrees Celsius.
   a. If concrete temperature drops below 10 degrees C at point of pouring, the mixing water shall be heated to maintain a minimum concrete temperature of 10 degrees C.
   b. Concrete shall not be placed on or against any surface which is at a temperature less than 5 degrees C.
   c. Contractor shall be prepared to cover slab if air temperature falls below 5 degrees C.
3. Air Temperature below 0 degrees C but not below 0 degrees C
   a. Forms and steel shall be free from ice and snow.
   b. Mixing water shall be heated to give to a minimum concrete temperature of 10 degrees C at point of pour.
   c. Concrete shall not be placed on or against any surface which is at a temperature less than 5 degrees C.
   d. Slabs shall be covered with canvas or similar, kept a few inches clear of surface.
   e. Storey below slab shall be enclosed.
   f. Protection shall be maintained for at least 5 days.
4. Temperatures below 0 degrees C (See item iii above for a, b, c, d.)
   a. Storey below shall be enclosed and supplementary heat provided.
   b. Heating to be started at least one hour ahead of pouring and maintained for a minimum of 3 days after.
   c. Temperature of the concrete at all surfaces shall be kept at 10 degrees C for 7 days.
   d. Enclosure to be constructed so that air can circulate around all structural members.

Hot Weather Requirements
1. Place and protect concrete in accordance with CAN/CSA-A23.1-14. When air temperature is greater than 25 degrees C, protect concrete so that its temperature does not exceed 30 degrees C.
2. Protect from drying, which causes shrinkage cracking, by effective means as required by conditions. Effective measures include windshield, dampen, cover, place and finish at night.

Do not remove forms for footings and walls until a minimum of 48 hours after placing concrete and after the concrete has attained a strength of at least 10 MPa. Forms for suspended slabs may be removed and reshoring installed after the concrete has attained at least 75% of the specified strength. Strength of concrete at time of stripping forms to be determined by testing field cured concrete cylinders.

Recess walls to full width of wall where required to support beams.

Construction joints to be keyed and doweled. Joints below grade to have continuous 6" P.V.C. "RB6-316" waterstop. The location of construction joints shall be approved by the engineer and additional reinforcement and keys added as requested.

All concrete slabs on grade shall be placed on 6 mil polyethylene lapped 12", on 6" minimum approved granular material compacted to geotechnical engineers' recommendations (minimum 95% standard proctor density). Provide 1/8" by 1 1/4" DP, perforated or sawcut control joints around columns and at 20' o.c. maximum spacing.

Openings in slabs to be as far away as possible from columns. No openings or cans for pipes in any case to be closer than 16" to face of column without prior approval from the engineer. Reinforcing at openings shall not be cut or bent but shall be fanned where possible or crowded to either side to clear opening.

REINFORCING REQUIREMENTS

Use clean new deformed reinforcing bars conforming to CSA G30.18, grade 400 MPa unless noted. Welded wire fabrics to CSA G30.5. At the engineer's discretion, rebar mill certificates shall be provided. Reinforcement that is suspect may be required to be tested as directed by the engineer at the expense of the contractor.

Fabricate and place reinforcing steel to CAN/CSA-A23.1-14.

All reinforcing steel to be secured in final position before concrete is placed. Support reinforcing steel on approved supports, spacers, or hangers provided. Maximum free end of reinforcing bars to be 4'-0". Where concrete surfaces are to be exposed, only non-corrosive type reinforcing chairs shall be used to support reinforcing. Reinforcing steel must be inspected by the Engineer before concrete is placed. Formwork shall be inspected by Temporary Works Engineer and copies of report to be forwarded to Kerkhoff Engineering Ltd.

Any reinforcing substitutions to welded wire mesh must be reviewed and confirmed by Kerkhoff Engineering Ltd.

Clear concrete cover for reinforcing (unless otherwise noted):

Footings (Top and sides)	2"
(Bottom)	3"
Walls inside face	1"
Walls outside face and exposed surfaces	2"
Beams to stirrups	1 1/2"
Column to ties	1 1/2"
Slabs top and bottom	3/4"

Designation of reinforcing bars:
_____ (solid line) denotes top steel or near face of wall
– – – – – – (dashed line) denotes bottom steel or far face of wall

Straight bar lengths: 4-15M 5000 means 5-15M bars 5000 long (metric)
4-15M 10.9 means 4-15M bars 10'-9" long (imperial)

Splice Reinforcement as follows (unless otherwise noted):

Bar Size	Comp Splice	Tension Splice 20MPa	25MPa	30MPa	35MPa
10M	18"	21"	19"	18"	18"
15M	19"	30"	27"	25"	23"
20M	23"	37"	33"	30"	28"
25M	29"	60"	54"	49"	45"
30M	35"	71"	64"	58"	54"
35M	42"	85"	76"	69"	64"

Welded wire mesh ------ 12 inches.

No splices are permitted without the engineer's approval where the length of bars has been given on the drawings.

All slabs to have temperature steel perpendicular to and immediately above slab bottom reinforcing as follows:

greater than 6"-7" slab	10M @ 12" o/c I 15M @ 20" o/c
greater than 7"-8" slab	10M @ 10" o/c I 15M @ 20" o/c
greater than 8"-9" slab	15M @ 17" o/c
greater than 9"-10" slab	15M @ 15" o/c
greater than 10"-11" slab	15M @ 14" o/c
greater than 11"-12" slab	15M @ 12" o/c

Temperature reinforcement shall have a lap of 18" and splices in adjacent bars shall be staggered to be no less than 4' apart.

All concrete to be reinforced. Reinforce unspecified slab areas with 15M @ 18" o/c each way bottom. Minimum wall reinforcing (including planters, sumps, pits, trenches, architectural walls, etc.) unless noted otherwise:

6" wall	10M @ 18" E.W.
8" wall	15M @ 20" E.W.
10" wall	15M @ 16" E.W.
12" wall	15M @ 20" E.W./E.F.

Cross-lap strip footing steel 12" minimum at corners or provide corner bars.

All walls and columns shall be doweled into footings, walls, beams, or slabs with bars of the same size and spacing as the bars above. Unless noted, provide:

1. Corner bars to match horizontal wall reinforcement at all wall intersections.
2. Two 15M bars at ends of walls.
3. Two 15M bars at all free edges of suspended slab.
4. Two 15M bars around all wall and slab openings extending 2'-0" past corners, plus 2-15M by 4'-0" diagonal bars at corners and placed at centre of wall or slab.

Install column reinforcement accurately with templates.

Hooks shown are to be CSA standard hooks, unless otherwise noted.

Unless shown otherwise:
1. Top reinforcing in slabband to be centered over columns.
2. Top slab reinforcing to be centered over slabband.
3. Bottom reinforcing to be centered between supports except at end spans where all bars shall extend a minimum of 6" into exterior supports.

PLYWOOD & SAWN TIMBER

Plywood sheathing (Roof, Floor, Walls) Structural or approved equal.

	Grade	Thickness (Min)
Roof	D.Fir	1/2" + "H" clips
Floor	D.Fir	5/8" T&G
Walls	OSB (structural)	3/8"

All D.Fir plywood shall conform to requirements of CSA Standard 0121, and softwood to CSA Standard 0151. Design rated OSB shall conform to CSA Standard 0437

All wall and roof sheathing material and thickness to be confirmed satisfactory for architectural, building envelope, and warranty requirements prior to pricing or construction. All thicknesses/grades specified on structural drawings are minimum requirements.

Equivalent panel marks for CSA 0325 construction sheathing
Minimum nominal thickness(mm) Minimum panel mark
9.5 2R24
12.5 2R32/2F16 or 1FI16
15.5 2R40/2F20

Provide a minimum gap of 2mm shall be left between panels to accommodate swelling.

Minimum nailing of plywood sheathing on walls, roofs and floors (unless noted otherwise on plans):
2 1/2" nails @ 6" o/c at sheet edges.
2 1/2" nails @ 12" o/c intermediate support members
(Staples are not permitted u.n.o.)

Sawn timber to be SPF #2 or better u.n.o.

All sawn timber exposed to the exterior or in contact with concrete to be given a preservative treatment approved by the designer. (This treatment to be a minimum of 2 coats of green cuprinol or equivalent).

Building Movements: Although attempts of specifying and designing with all structural wood components to be 19% or less in moisture content, wood will dry up to 9% in services. Under these circumstances, wood will shrink. Also under load conditions, structural elements will deflect. Although within the allowable limits as outline in the Building Code, the movements induced by loads or shrinkage will damage brittle finishes attached directly to structural elements. Movement joints including water proofing for these brittle finishes shall be provided by a building envelope specialist.

Any lumber not grade marked will be rejected.

PRE-FABRICATED WOOD TRUSSES/JOISTS

Design prefabricated wood trusses in accordance with B.C.Building Code 2018 Part 4, CSA 086, TPIC standards, and Local Bylaws. Design trusses for unbalanced loading in accordance with B.C.B.C Structural Commentaries.

Prefabricated wood trusses and built-up areas on wood trusses not detailed on structural drawings, joists, and/or beams to be engineered by manufacturer to design loads specified plus snow build up as per B.C.B.C. 2018

See General notes for design load requirements.

In addition, the Truss manufacturer shall design trusses for:
Mechanical unit weights specified by mechanical subcontractor/mechanical engineer.
Camber to be equal to dead load deflection u.n.o
Live load deflections shall not exceed span/360 for roof trusses u.n.o.
All canopy areas to be designed for a minimum net uplift pressure of 20 psf.

Truss tie-down clips to be provided at ends of all roof trusses as spec'd by Engineer. Minimum H2.5A(SST) tie down unless noted on structural drawings.

Manufacturer is responsible for design and supply of all bridging, blocking accessories, and metal connection hardware required for stability of the truss or joist assembly, including details for bearing, where required truss bearing lengths exceed those given on the structural drawings.

Submit 2 sets of shop drawings and layout drawings to engineer for review minimum 10 working days prior to fabrication and start of any framing. Drawings must include:
1. Project name and location.
2. Design loads and all applicable details.

Truss/joist layout cross referenced to individual shop drawings.
Professional Engineer's original seal registered in B.C.

Changes to truss/joist types and layouts to those indicated on drawings may require additional review and structural revisions at the expense of the contractor.

The manufacturer shall inspect the truss/joist installation and provide sealed engineer's certificate, certifying that the trusses and joists have been manufactured in accordance with the truss design and CSA standards and that all bracing, hangers, layout and applicable details have been installed as per approved shop drawings.

GLUE LAMINATED TIMBER (GLULAM)

Glulam members shall be Douglas Fir 24f-E stress grade with quality appearance grade. Industrial appearance grade may be used where beams are to be concealed

Glulam shall be manufactured in conformance with CAN/CSA 0177

Camber simple span beams 10mm (3/8") per 3000 (10'-0") of span

Affix authorized label to all members supplied. Also identify each member with mark number.

Store glulam off the ground with spacer blocks placed between members. Keep wrapping on the members until permanent protection from the weather is in place, but cut holes on underside of wrapping to prevent the accumulation of condensation

All pressure treated glulam to be treated according to CAN/CSA 080 Series M-89 "Wood Preservation". Treat using CCA Vacuum Pressure impregnation to be 0.4pcf or to refusal. All cutting and drilling to be completed before the treatment. Field apply preservative to equivalent standard to all areas to be cut or drilled.

FRAMING

All timber work shall conform to the requirements of CAN/CSA-086-14.

All framing details shall conform to B.C.B.C. 2018 sections 9.23 and 9.24.

Air nailers are permitted, but all nail diameters/lengths shall be as specified on drawings. The contractor is responsible for installing nails into all metal hangers in accordance with suppliers specifications (all nails to be positioned in supplied holes).

Provide continuous cross bridging between floor joists at 7'- 0" o/c max. u.n.o.

Provide double joists (or solid cross blocking @ 24" o/c) under all partition walls parallel to joist span. Provide solid blocking between joists at all loadbearing walls, top of beams or headers, and at all supports for cantilevered joists.

Provide solid blocking @ 24" o/c or double trimmer joists at locations where bearing walls run parallel with the joist span.

All floor joists to be 2x10 KD SPF #2 @ 16" o/c unless noted otherwise.

Pressure blocking not permitted for joist spans over 10'-0" or joist spacing less than 16" o/c or laminated joists. Minimum 7 - 3 1/4" toe nails and 4 -3 1/4" nails per joist and 8 - 3 1/4" nails per pressure block to beam.

Use approved joist hangers at all flush beams each having a minimum of 1200 lb. capacity. Use Simpson Strongtie LUS210 or pre-approved alternative. Nailing as per manufacturer's specifications.

Align joists with studs where possible.

All built-up sawn timber beams or headers to be nailed together with 3 rows - 3 1/4" nails @16" o/c min. per lamination or 1/2" dia. thru bolts with washers @ 36" o/c staggered.

All beam splices are to occur at supports, unless noted otherwise.

All built-up beams to have full bearing at top plate.

Cantilevered beams greater than 2-ply nail with 3 rows of 3 1/4" nails @ 6" o/c each ply.

Laminate studs solid under all beams to full beam width.

All laterally unsupported built-up posts to have the following nailing:

2 ply 2 x 4 - 3" nails @ 8" o/c staggered (1-1/8" offset)
2 x 6 - 2 rows 3" nails @ 8" o/c (1-1/2" between rows)
2 x 8 - 2 rows 3" nails @ 8" o/c (2-1/8" between rows)

3 ply 2 x 4 - 4-1/2" nails @ 8" o/c staggered (1-1/8" offset)
2 x 6 - 2 rows 4-1/2" nails @ 8" o/c (1-1/2" between rows)
2 x 8 - 2 rows 4-1/2" nails @ 8" o/c (2-1/8" between rows)

4 ply 2 x 4 - 6" nails @ 8" o/c staggered (1-1/8" offset)
2 x 6 - 2 rows 6" nails @ 8" o/c (1-1/2" between rows)
2 x 8 - 2 rows 6" nails @ 8" o/c (2-1/8" between rows)

Where sheathing fastened to built up posts, fasten sheathing to each ply of post with minimum 2-1/2" nails @ 4" o/c, and laminate each ply with (2) rows 3-1/4" nails @ 8" o/c.

All loadbearing stud walls to be anchored to concrete at the base with 5/8" dia. Hilti-Hit Kwik Bolts @ 4' -0" o/c. u.n.o.

Fasten non-loadbearing partition walls with power-activated fasteners @ 24" o/c maximum.

Provide cripples to each side of cut top plate.

Provide backing in walls and floors for handrail connections. All drop beams, lintels and flush beams to be 2-2x10 KD SPF #2 unless noted otherwise.

Pressure Treated Material:

Pressure treated wood can be highly corrosive to metal fasteners and connectors that are in contact with the wood. Metal fasteners and connectors including nails, screws, anchor bolts, bolts, washers, etc may need to be stainless steel or galvanized in certain situations.

As a minimum connectors used for ACZ or CA treated wood must be manufactured from steel either hot-dipped galvanized in accordance with ASTM A653, G185 designations, or hot dipped galvanized after manufacture in accordance with ASTM A123.

The Building Envelope consultant is responsible for the specifications of pressure treated material, and the type of corrosion protection for the metal fasteners and connectors.

Galvanized fasteners must be used for galvanized connectors, and Stainless fasteners must be used for stainless connectors.

HANDRAILS & GUARDRAILS

Handrails, guardrails and balustrades to be designed and detailed in accordance with B. C. Building Code Section 4.1.5.14 by the supplier. The minimum specified horizontal load applied outward at the top of every required guard shall be 1.0kN(225lbs) point load, or 0.75kN/m(51.4plf). The minimum specified horizontal load applied inward at the top of every required guard shall be 0.5kN (113lbs) or 0.375 kN/m. Provide sealed shop drawings of all handrails and connections showing all design loads to project engineer prior to fabrication. Contractor to co-ordinate with supplier for installation of all necessary backing material.

SHOP DRAWINGS

Shop drawings for the following items shall be submitted for the engineer's review prior to any fabrication:
1. ENG. WOOD TRUSSES

The engineer's review will be for the sole purpose of ascertaining conformance with the general design concept only and such review does not relieve the contractor of responsibility for errors and omissions in the shop drawings or of his responsibility for meeting all requirements of the contract documents.

The contractor is responsible for verifying and correlating site dimensions, fabrication processes, methods of construction and installation, and co-ordination of all sub-trade work.

Shop drawings shall include:
1. Date and revision dates
2. Project title and number
3. Name of contractor and supplier
4. Identification of product or material
5. Applicable standards and codes that have been used in the preparation of the drawings.

Provide clear cross-reference between layout and individual member shop drawings.

Letters of Certification and the stamp of a Professional Engineer are required on shop drawings as indicated under the appropriate sections elsewhere in the notes and specifications.

Shop drawings shall be submitted to the engineer by the contractor or architect only and shall be returned to the same unless directed otherwise. One copy of shop drawings will be retained for the engineer's records.

Allow a minimum of 10 working days for the engineer's review of shop drawings.

STRUCTURAL COMPOSITE MEMBERS (SCM)

To be manufactured to CSA Standards by Truss Joist or Louisiana Pacific. Alternative manufactured products will be allowed if supporting Documentation (sealed by P. Eng.) are forwarded to Kerkhoff Engineering to confirm the proposed product is equal or better than specified.

Manufacturer to supply layout drawings showing location and specifications for their product.

Manufacturer to provide upon request appropriate documentation endorsed by a registered professional engineer to support the proposed strength values set out in the manufacturer's technical literature.

Parallam (PSL):
Laminations of 3 1/2",5 1/4", and 7"x 9 1/4,"9 1/2",11 1/2",14",16",18 3/4" 6
E = 2.0 x 10 psi/ Fb=5360psi, Fc(perp)=1365psi
Fasten laminations together with minimum of 2 rows of 1/2" dia. thru bolts @ 24" o/c for top loaded beams or as noted.

Timberstrand (LSL):
Laminations of 3 1/2",5 1/4", and 7"x 9 1/4", 9 1/2",11 1/2",14",16",18 3/4" 6
E = 1.7 x 10 psi/ Fb = 3510psi, Fc(perp) = 1600psi 6 E = 1.3 x 10 psi/ Fb = 3140psi, Fc(perp) = 1240psi
Fasten laminations together with minimum of 2 rows of 1/2" dia. thru bolts @ 24" o/c for top loaded beams or as noted.

Gang-Lam (LVL):
Laminations of 3 1/2",5 1/4", and 7"x 9 1/4", 9 1/2",11 1/2",14",16",18 3/4" 6
E = 2.0 x 10 psi/ Fb = 2950psi, Fc(perp) = 1857psi
E = 1.8 x 10 psi/ Fb = 2650psi, Fc(perp) = 1365psi
Fasten laminations together with minimum of 2 rows of 1/2" dia. thru bolts @ 24" o/c for top loaded beams or as noted.

Any other S.C.M. to be approved by engineer upon submission of Documentation of proposed strength values endorsed by a registered professional engineer 3 weeks prior to ordering material.

Delivery, Storage and Handling
All materials shall be delivered to the site in consultation with the supplier and contractor to suit the construction schedule.

All materials shall be stored level on the site and shall be raised off the ground, stacked using separating spacers, and covered with a waterproof material. In the case of wrapped members, the wrapping shall be slit on the underside to prevent the accumulation of condensation.

Members that will be exposed to view in the finished building shall be handled using nylon or fabric slings to prevent surface damage.

PROJECT NO:
22-093

ISSUES

NO.	DRN:	CHK:	DATE:	DESCRIPTION:
4	SD	TK	JAN 04/23	Issued for Building Permit
5	SD	TK	JAN 11/23	Issued for Building Permit

CLIENT:
MR. BUILD CONTRACTING LTD.

PROJECT:
LANGLEY SHOP

ADDRESS:
20617-102B AVE, LANGLEY, BC

TITLE:
STRUCTURAL NOTES

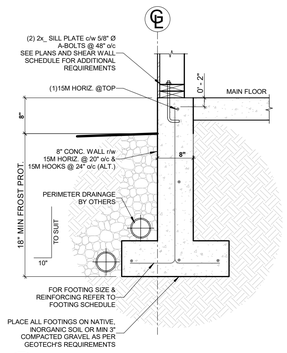
EGBC PERMIT TO PRACTICE PN-1002535

DRAWN BY: SD
DESIGNED BY: TK
SCALE: AS NOTED
DATE: JAN 11/23

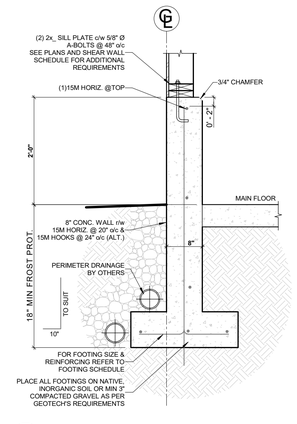
SHEET NO:
S1.1

DATE PRINTED
2023-01-11 9:55:25 AM

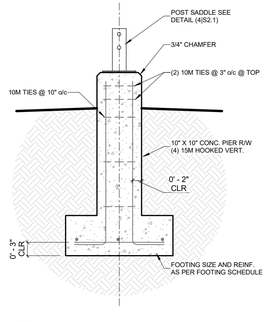
Issued for Building Permit



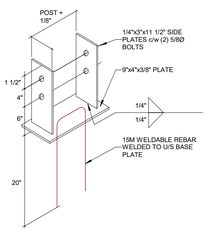
1 S2.1A TYP. EXT. FDN WALL
3/4" = 1'-0"



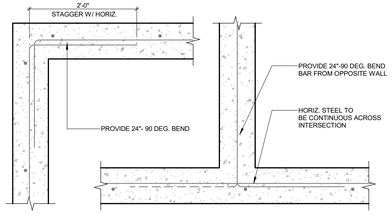
2 S2.1A EXT. FDN WALL
3/4" = 1'-0"



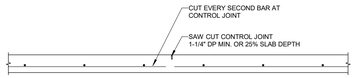
3 S2.1A TYP. FDN. PAD SECTION
3/4" = 1'-0"



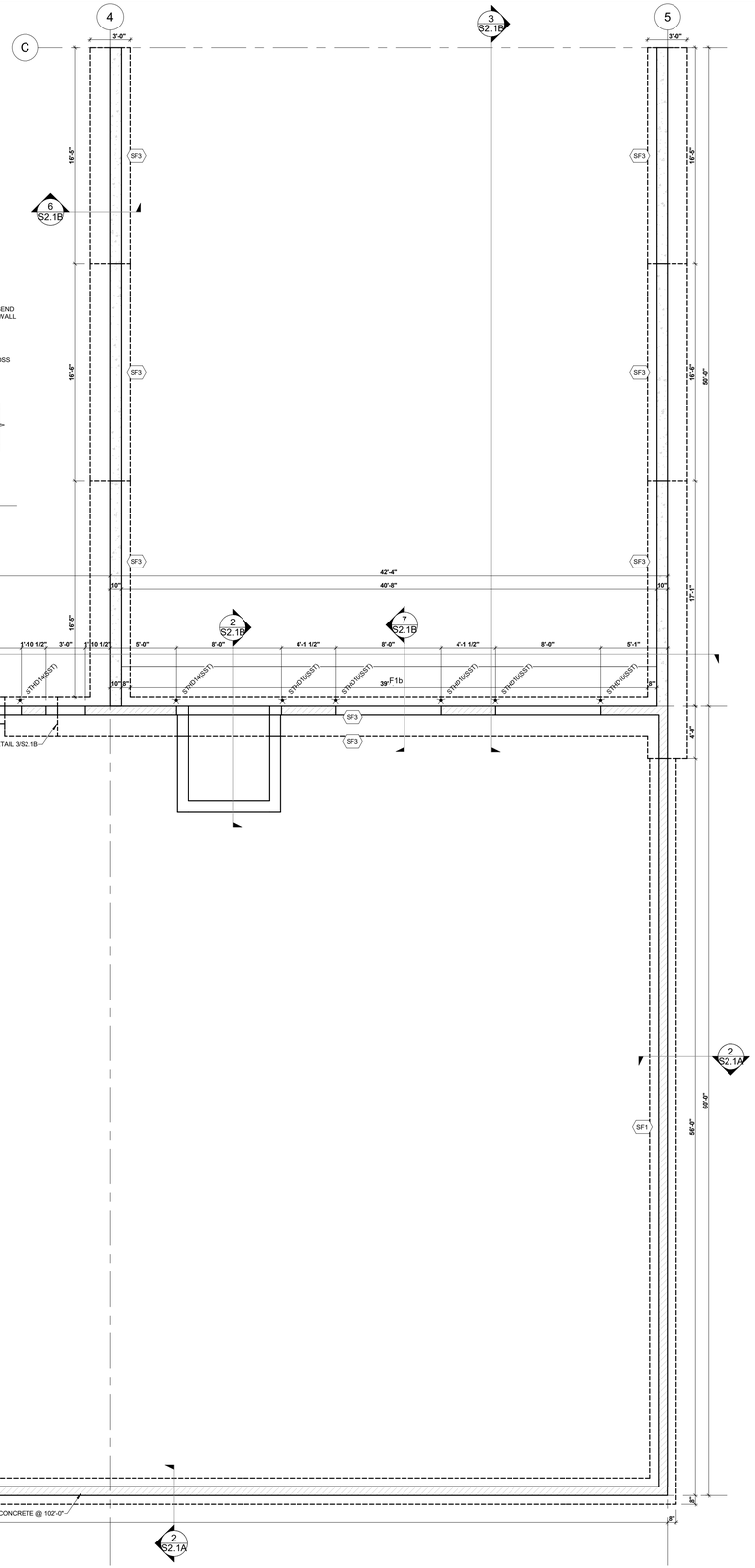
4 S2.1A POST SADDLE
1" = 1'-0"



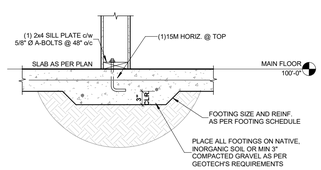
9 S2.1A TYPICAL TEE & CORNER REINFORCING
3/4" = 1'-0"



6 S2.1A Slab Control Joint
1/2" = 1'-0"



5 S2.1A FOUNDATION PLAN
3/16" = 1'-0"



7 S2.1A TYP INTERIOR CURB SECTION
3/4" = 1'-0"

PAD FOOTING SCHEDULE

TYPE	DIMENSIONS WIDTH	LENGTH	DEPTH	REINFORCING
PF1	2' - 0"	2' - 0"	0' - 8"	(3)15M x 26"@ E/W
PF2	3' - 0"	3' - 0"	0' - 10"	(3)15M x 32"@ E/W
PF3	4' - 0"	4' - 0"	0' - 10"	(4)15M X 44"@ E/W

STRIP FOOTING SCHEDULE

TYPE	DIMENSIONS WIDTH	DEPTH	REINFORCING
SF1	2' - 0"	0' - 8"	(2)15M CONT.
SF2	1' - 6"	0' - 8"	(2)15M CONT.
SF3	3' - 0"	0' - 8"	(3)15M CONT.

PROJECT NO: **22-093**

ISSUES

NO.	DRN:	CHK:	DATE:	DESCRIPTION:
4	SD	TK	JAN 04/23	Issued for Building Permit
5	SD	TK	JAN 11/23	Issued for Building Permit

CLIENT:
MR. BUILD CONTRACTING LTD.

PROJECT:
LANGLEY SHOP

ADDRESS:
20617-102B AVE, LANGLEY, BC

TITLE:
FOUNDATION PLAN

EGBC PERMIT TO PRACTICE PN-1002535

DRAWN BY:	SD
DESIGNED BY:	TK
SCALE:	AS NOTED
DATE:	JAN 11/23

SHEET NO:
S2.1A

DATE PRINTED:
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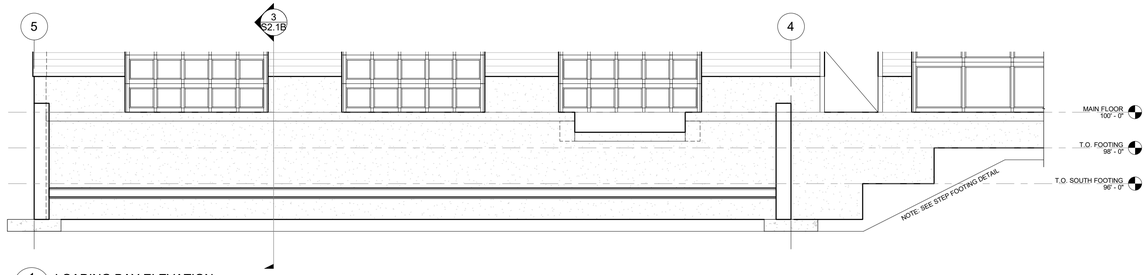
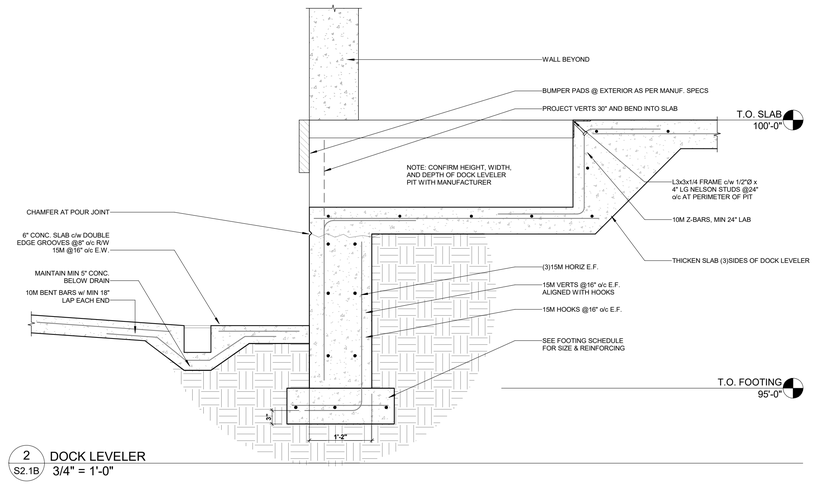
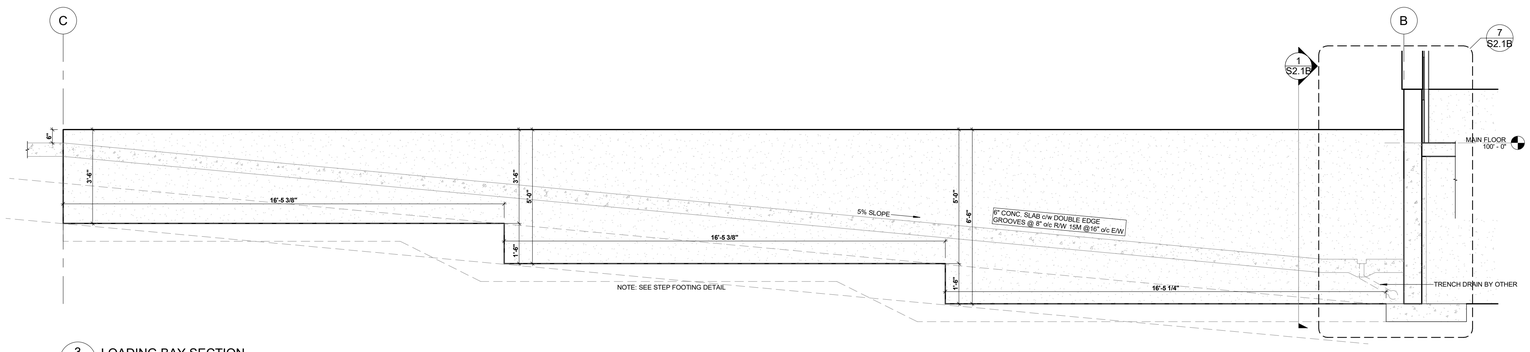
Issued for Building Permit



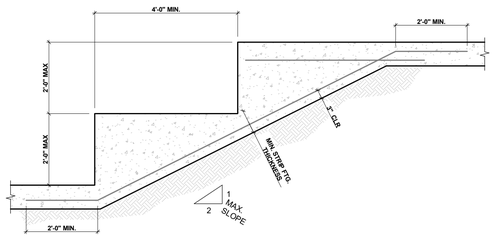
1 S2.1B LOADING BAY ELEVATION
1/4" = 1'-0"



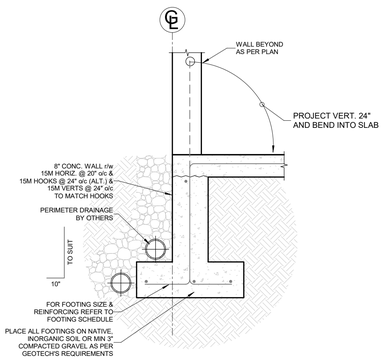
2 S2.1B DOCK LEVELER
3/4" = 1'-0"



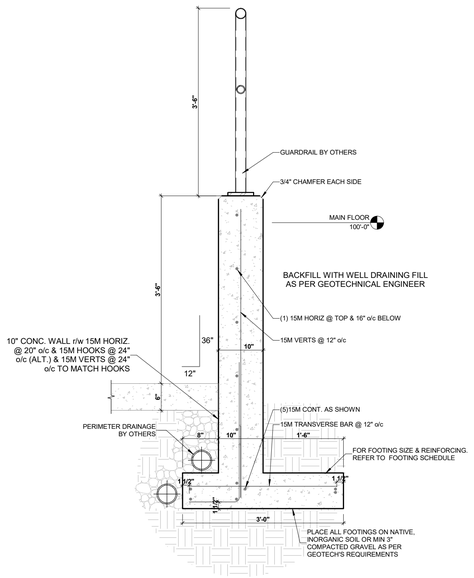
3 S2.1B LOADING BAY SECTION
3/8" = 1'-0"



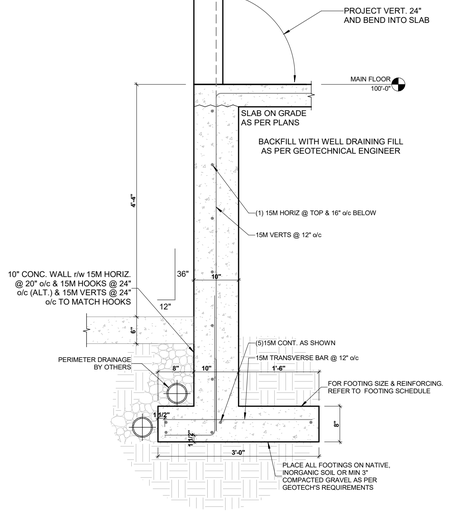
4 S2.1B FDN STEPPED FOOTING DETAIL
1/2" = 1'-0"



5 S2.1B TYP FDN AT DOORS
3/4" = 1'-0"



6 S2.1B TYP LOADING BAY RETAINING WALL
3/4" = 1'-0"



7 S2.1B TYP FDN AT DOORS
3/4" = 1'-0"

PROJECT NO:
22-093

ISSUES

NO.	DRN:	CHK:	DATE:	DESCRIPTION:
4	SD	TK	JAN 04/23	Issued for Building Permit
5	SD	TK	JAN 11/23	Issued for Building Permit

STRUCTURAL SHEET LIST

SHEET NAME	NO.	REV.
COVER	S0.0	5
STRUCTURAL NOTES	S1.1	5
FOUNDATION PLAN	S2.1A	5
FOUNDATION PLAN DETAILS	S2.1B	5
UPPER FLOOR FRAMING PLAN	S2.2	5
ROOF FRAMING PLAN	S2.3	5
TYPICAL WOOD FRAME DETAILS	S3.1	5

CLIENT:
MR. BUILD CONTRACTING LTD.

PROJECT:
LANGLEY SHOP

ADDRESS:
20617-102B AVE, LANGLEY, BC

TITLE:
FOUNDATION PLAN DETAILS

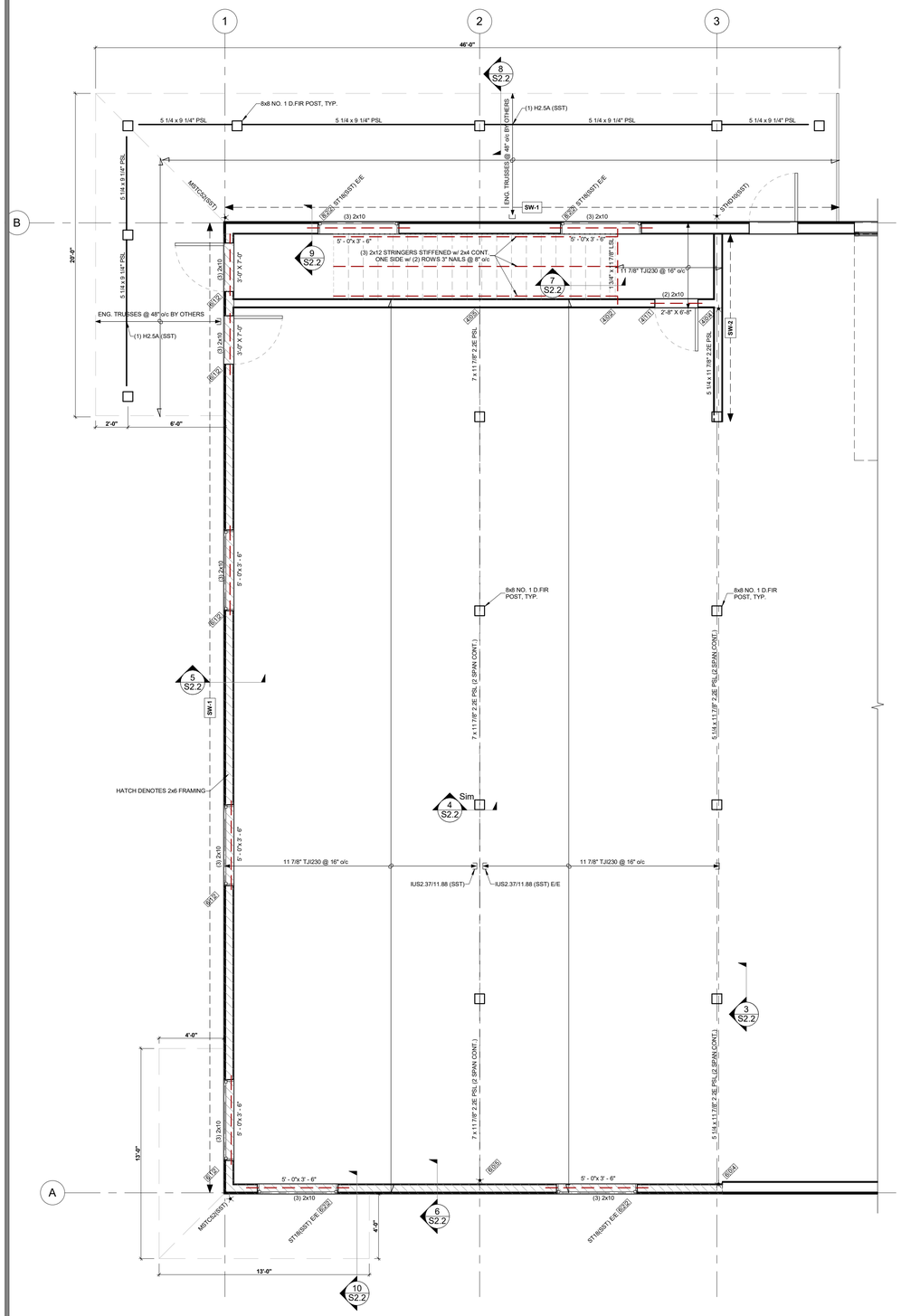
EGBC PERMIT TO PRACTICE PN-1002535

DRAWN BY:	SD
DESIGNED BY:	TK
SCALE:	AS NOTED
DATE:	JAN 11/23

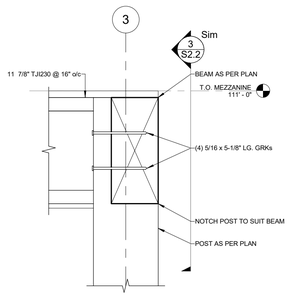
SHEET NO:
S2.1B

DATE PRINTED
2023-01-11 9:55:27 AM

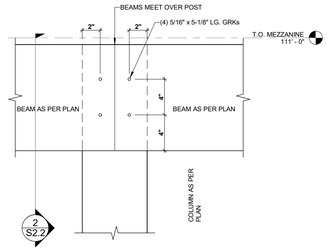
Issued for Building Permit



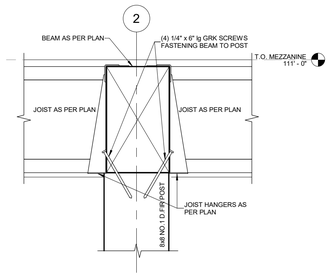
1 S2.2 MAIN FLOOR WITH MEZZANINE FRAMING OVER
1/4" = 1'-0"



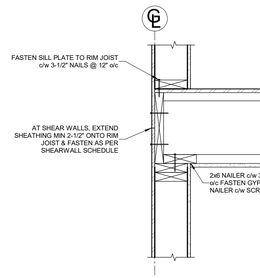
2 S2.2 BEAM TO POST SECTION
1 1/2" = 1'-0"



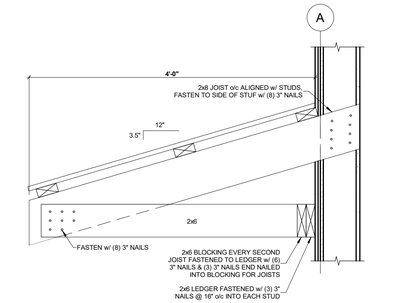
3 S2.2 BEAM TO POST
1 1/2" = 1'-0"



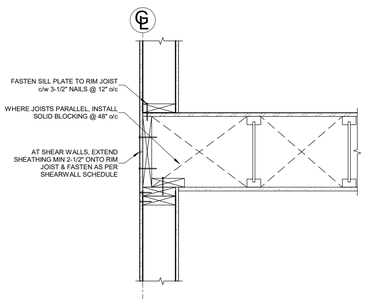
4 S2.2 BEAM TO POST SECTION AT 2
1 1/2" = 1'-0"



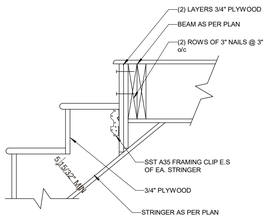
5 S2.2 S WALL TO FLOOR CONN. PERPENDICULAR
1" = 1'-0"



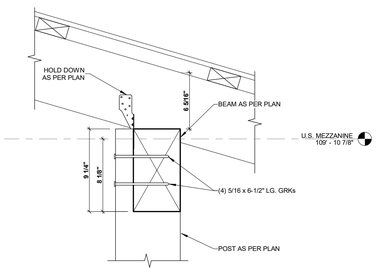
10 S2.2 LOWER ROOF OVERHANG SECTION
1" = 1'-0"



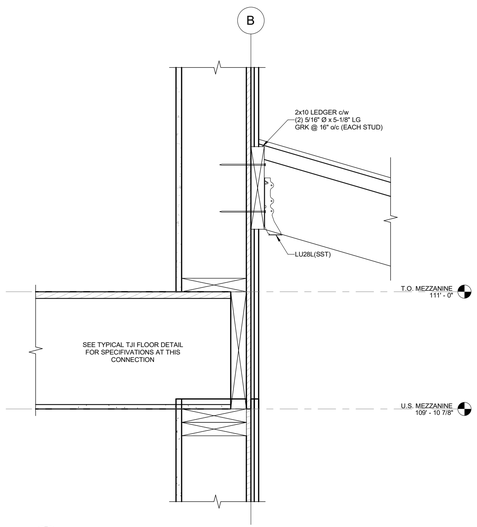
6 S2.2 S WALL TO FLOOR CONN. PARALLEL
1" = 1'-0"



7 S2.2 FRA. TYP STAIR TOP CONN.
1" = 1'-0"



8 S2.2 EXTERIOR POST TO ROOF BEAM
1 1/2" = 1'-0"



9 S2.2 ROOF LEDGER GL B AND 1
1 1/2" = 1'-0"

Shearwall Schedule

Mark	Sheathing	Blocking	Nail Length	Nailing		A-bolts
				Intermediate	Edge	
SW-1	7/16" OSB	YES	2-1/2" x 0.128"	10"	5"	5/8" @32" o/c
SW-2	7/16" OSB	YES	2-1/2" x 0.128"	6"	3"	5/8" @32" o/c

ISSUES

NO.	DRN:	CHK:	DATE:	DESCRIPTION:
4	SD	TK	JAN 04/23	Issued for Building Permit
5	SD	TK	JAN 11/23	Issued for Building Permit

STRUCTURAL SHEET LIST

SHEET NAME	NO.	REV.
COVER	S0.0	5
STRUCTURAL NOTES	S1.1	5
FOUNDATION PLAN	S2.1A	5
FOUNDATION PLAN DETAILS	S2.1B	5
UPPER FLOOR FRAMING PLAN	S2.2	5
ROOF FRAMING PLAN	S2.3	5
TYPICAL WOOD FRAME DETAILS	S3.1	5

CLIENT:
MR. BUILD CONTRACTING LTD.

PROJECT:
LANGLEY SHOP

ADDRESS:
20617-102B AVE, LANGLEY, BC

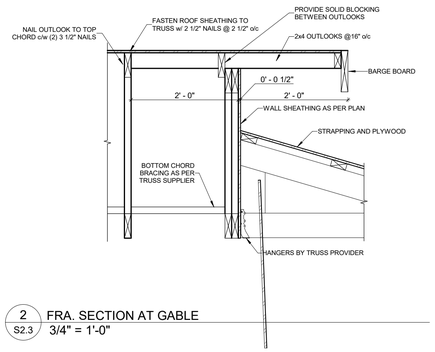
TITLE:
UPPER FLOOR FRAMING PLAN

EGBC PERMIT TO PRACTICE PN-1002535

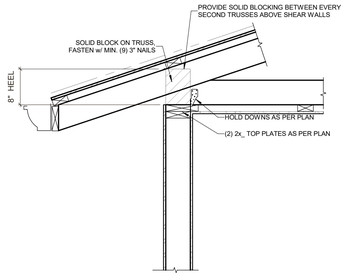
DRAWN BY:	SD
DESIGNED BY:	TK
SCALE:	AS NOTED
DATE:	JAN 11/23
SHEET NO:	S2.2
DATE PRINTED	2023-01-11 9:55:28 AM

PROJECT NO:
22-093

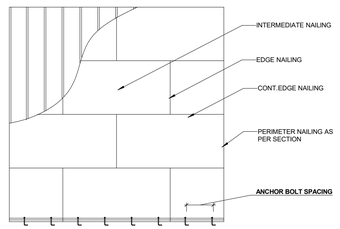
Issued for Building Permit



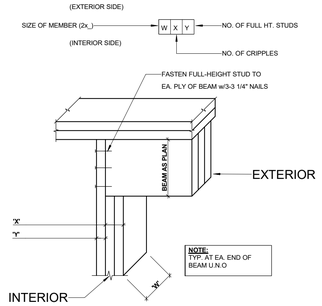
2 S2.3 FRA. SECTION AT GABLE
3/4" = 1'-0"



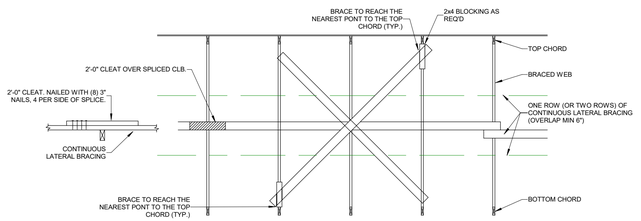
3 S2.3 FRA. WALL/TRUSS SECTION
3/4" = 1'-0"



4 S2.3 SHEARWALL DIAGRAM
3/16" = 1'-0"



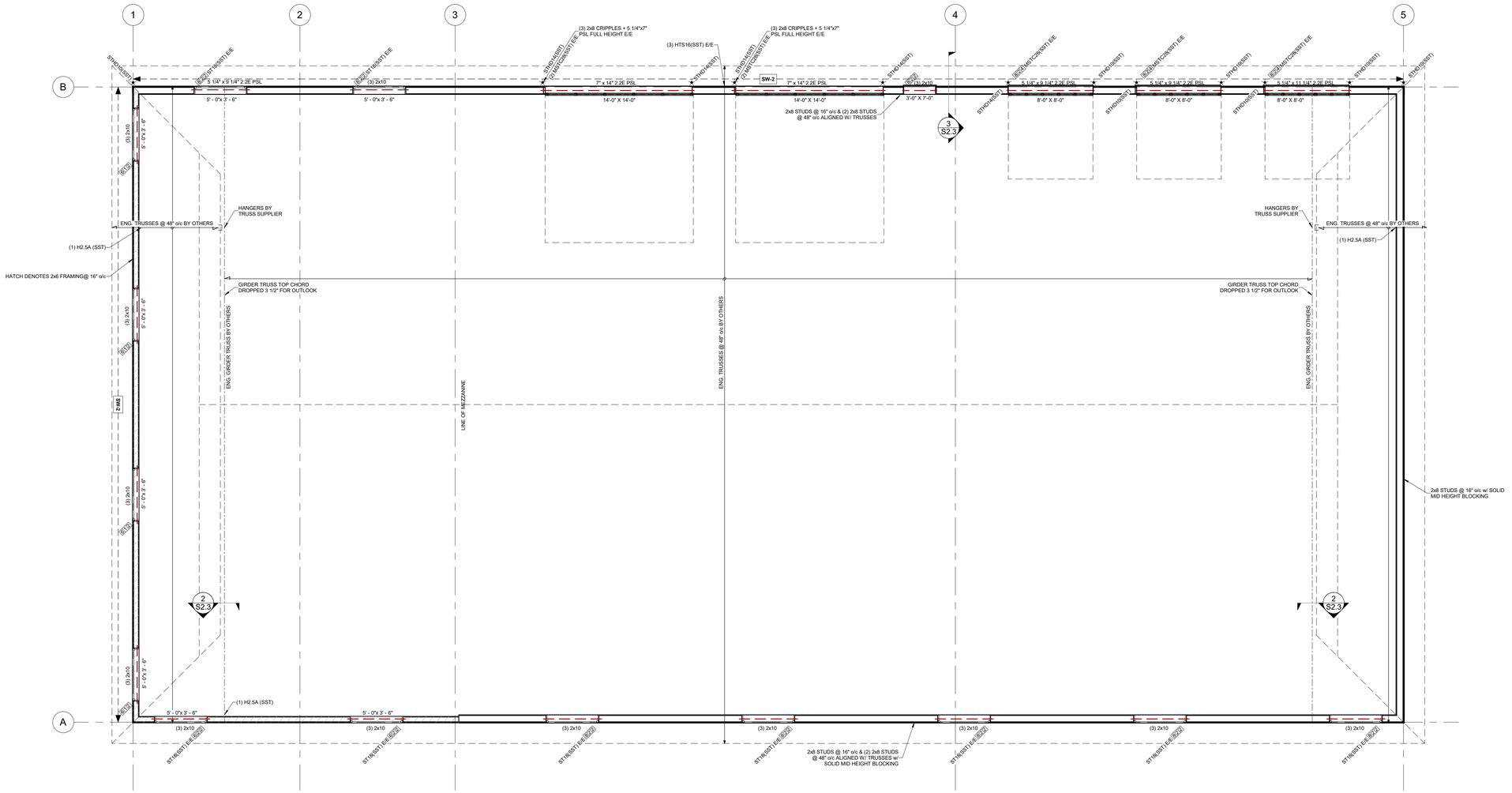
5 S2.3 TYP B/U POST DETAIL
1/2" = 1'-0"



2x6 ON FLAT CROSS- BRACING TO BRACED WEB AT INTERNAL NOT EXCEEDING 24'-0" o/c (AND AT END OF RUN OF TRUSSES/END OF BUILDING) BRACING MATERIAL TO BE SUPPLIED AND INSTALLED BY ERECTION CONTRACTOR

NOTES:
1. CROSS-BRACING TO BE AT THE SAME PLANE AS THE BRACED
2. CROSS-BRACING TO CROSS OVER MINIMUM 3 TRUSSES TO APPROXIMATE 45° ANGLE
3. USE MINIMUM (3) 3" COMMON NAILS TO INTERSECTION OF BRACE EACH CONT. LATERAL BRACING AND EACH TRUSS (PROVIDE BLOCKING WHERE REQUIRED)

6 S2.3 FRA. CROSS BRACING TYP
1/4" = 1'-0"



1 S2.3 ROOF FRAMING PLAN
3/16" = 1'-0"

Shearwall Schedule

Mark	Sheathing	Blocking	Nail Length	Nailing		A-bolts
				Intermediate	Edge	
SW-1	7/16" OSB	YES	2-1/2" x 0.128"	10"	5"	5/8" @32" o/c
SW-2	7/16" OSB	YES	2-1/2" x 0.128"	6"	3"	5/8" @32" o/c

PROJECT NO:
22-093

ISSUES

NO.	DRN:	CHK:	DATE:	DESCRIPTION:
4	SD	TK	JAN 04/23	Issued for Building Permit
5	SD	TK	JAN 11/23	Issued for Building Permit

CLIENT:
MR. BUILD CONTRACTING LTD.

PROJECT:
LANGLEY SHOP

ADDRESS:
20617-102B AVE, LANGLEY, BC

TITLE:
ROOF FRAMING PLAN

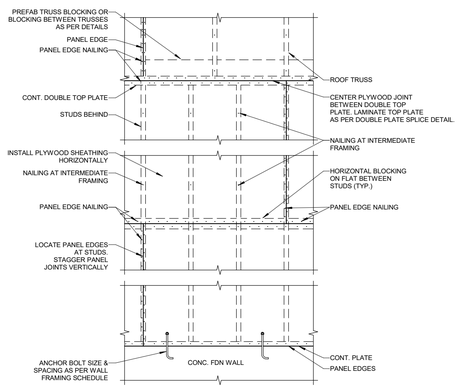
EGBC PERMIT TO PRACTICE PN-1002535

DRAWN BY: **SD**
DESIGNED BY: **TK**
SCALE: **AS NOTED**
DATE: **JAN 11/23**

SHEET NO:
S2.3

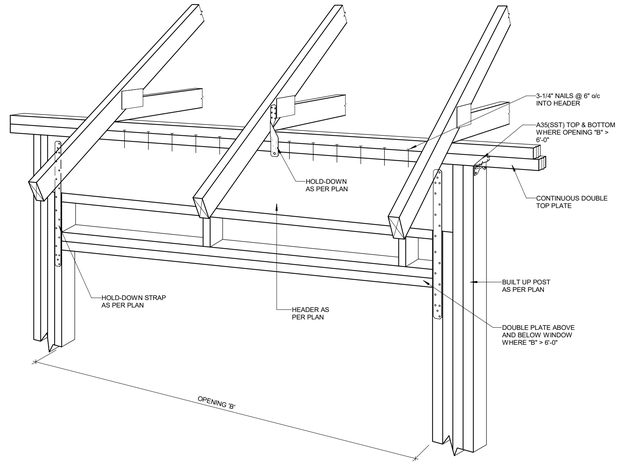
DATE PRINTED
2023-01-11 9:55:30 AM

Issued for Building Permit

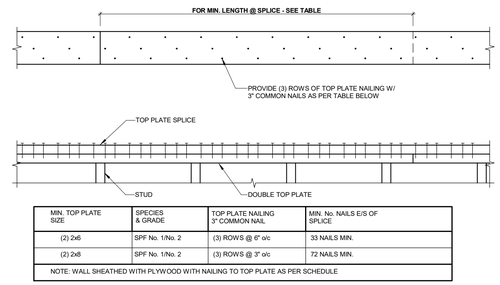


SHEARWALL ELEVATION

1 S3.1 SHEARWALL PANEL NAILING DETAILS
1/2" = 1'-0"

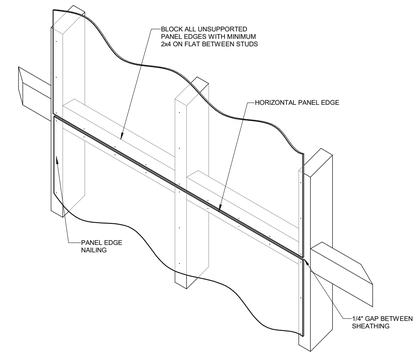


2 S3.1 WALL/HEADER FRAMING DETAIL
1" = 1'-0"

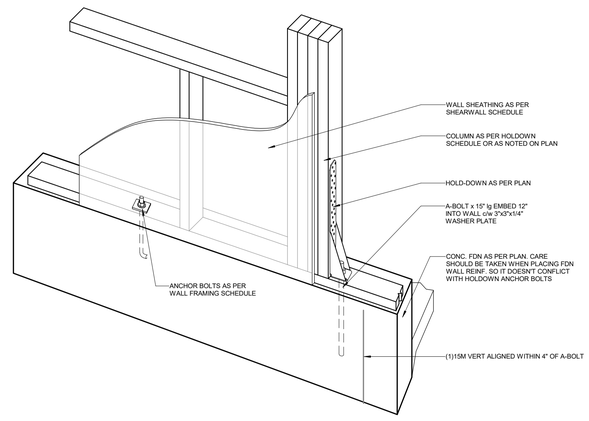


MIN. TOP PLATE SIZE	SPECIES & GRADE	TOP PLATE NAILING 3" COMMON NAIL	MIN. No. NAILS E/S OF SPLICE
(2) 2x6	SPF No. 1/No. 2	(3) ROWS @ 6" o/c	33 NAILS MIN.
(2) 2x8	SPF No. 1/No. 2	(3) ROWS @ 3" o/c	72 NAILS MIN.
NOTE: WALL SHEATHED WITH PLYWOOD WITH NAILING TO TOP PLATE AS PER SCHEDULE			

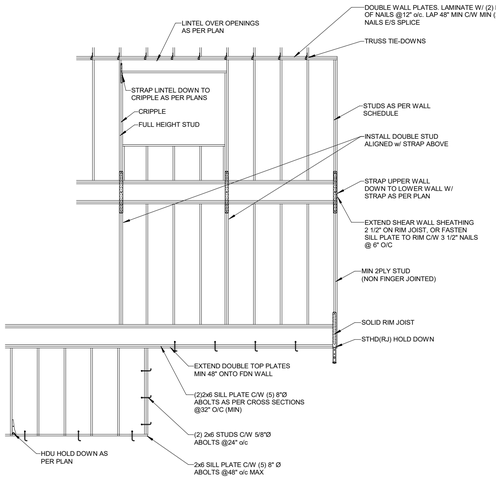
3 S3.1 DOUBLE TOP PLATE SPLICE DETAIL
1" = 1'-0"



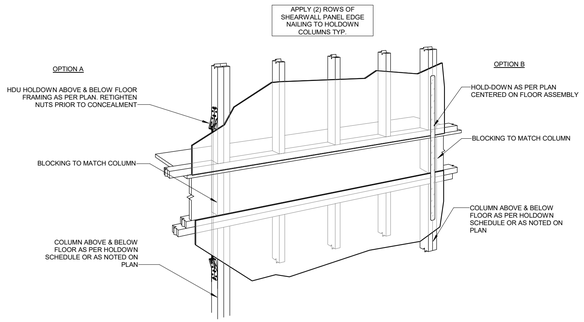
4 S3.1 SHEARWALL PANEL EDGE NAILING TO BLOCKING
1 1/2" = 1'-0"



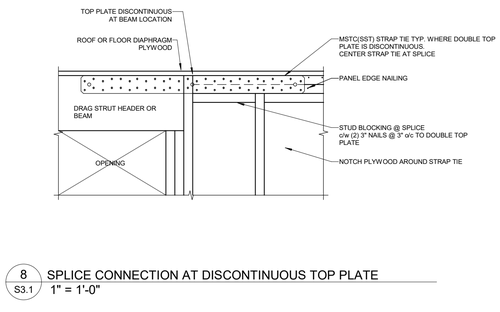
5 S3.1 SHEARWALL HDU(SST) HOLDDOWN @ FOUNDATION LEVEL
1" = 1'-0"



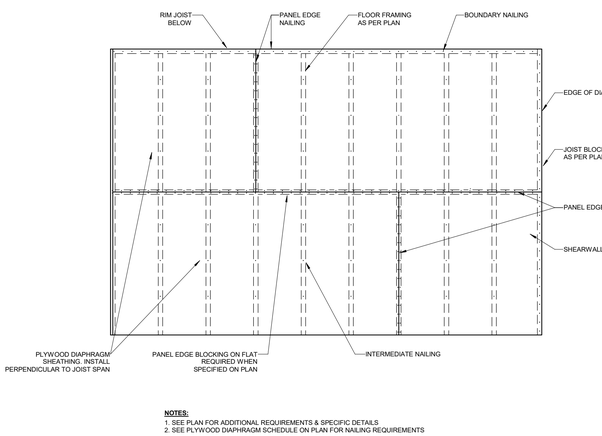
6 S3.1 TYPICAL WALL FRAMING
3/16" = 1'-0"



7 S3.1 SHEARWALL HOLDDOWN THROUGH FLOOR FRAMING
3/4" = 1'-0"

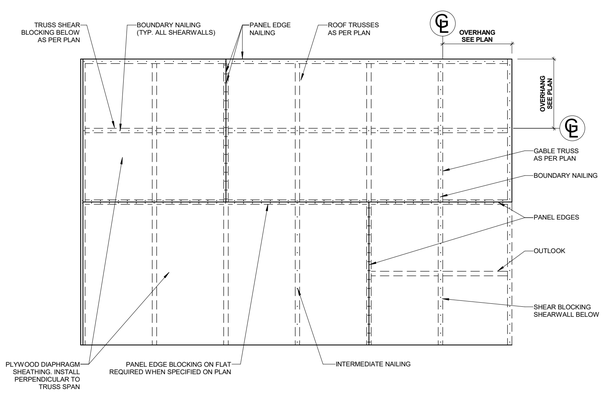


8 S3.1 SPLICE CONNECTION AT DISCONTINUOUS TOP PLATE
1" = 1'-0"



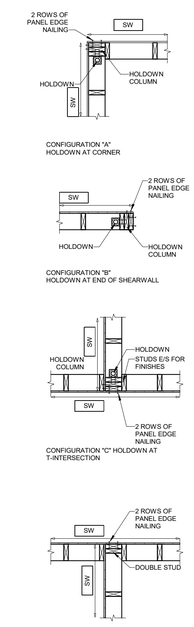
NOTES:
1. SEE PLAN FOR ADDITIONAL REQUIREMENTS & SPECIFIC DETAILS
2. SEE PLYWOOD DIAPHRAGM SCHEDULE ON PLAN FOR NAILING REQUIREMENTS

9 S3.1 FLOOR DIAPHRAGM NAILING PLAN U.N.O.
1/2" = 1'-0"

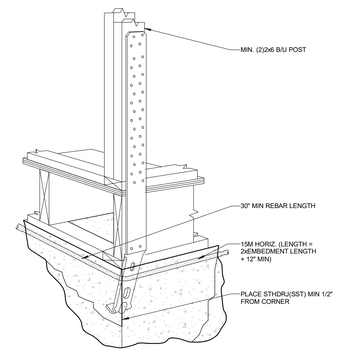


NOTES:
1. SEE PLAN FOR ADDITIONAL REQUIREMENTS & SPECIFIC DETAILS
2. SEE PLYWOOD DIAPHRAGM SCHEDULE ON PLAN FOR NAILING REQUIREMENTS

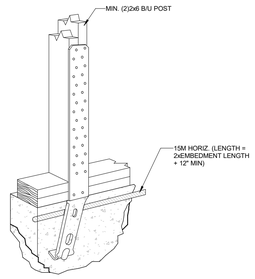
10 S3.1 ROOF DIAPHRAGM NAILING PLAN U.N.O.
1/2" = 1'-0"



11 S3.1 VARIED HOLDDOWN CONFIGURATIONS
1/2" = 1'-0"



12 S3.1 STHDRJ(SST) TYP DETAIL
1" = 1'-0"



13 S3.1 STHD(SST) TYP DETAIL
1" = 1'-0"

PROJECT NO: **22-093**

ISSUES

NO.	DRN:	CHK:	DATE:	DESCRIPTION:
5	SD	TK	JAN 11/23	Issued for Building Permit

CLIENT:
MR. BUILD CONTRACTING LTD.

PROJECT:
LANGLEY SHOP

ADDRESS:
20617-102B AVE, LANGLEY, BC

TITLE:
TYPICAL WOOD FRAME DETAILS

EGBC PERMIT TO PRACTICE PN-1002535

DRAWN BY:	SD
DESIGNED BY:	TK
SCALE:	AS NOTED
DATE:	JAN 11/23

SHEET NO: **S3.1**

DATE PRINTED: **2023-01-11 9:55:31 AM**

Issued for Building Permit

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