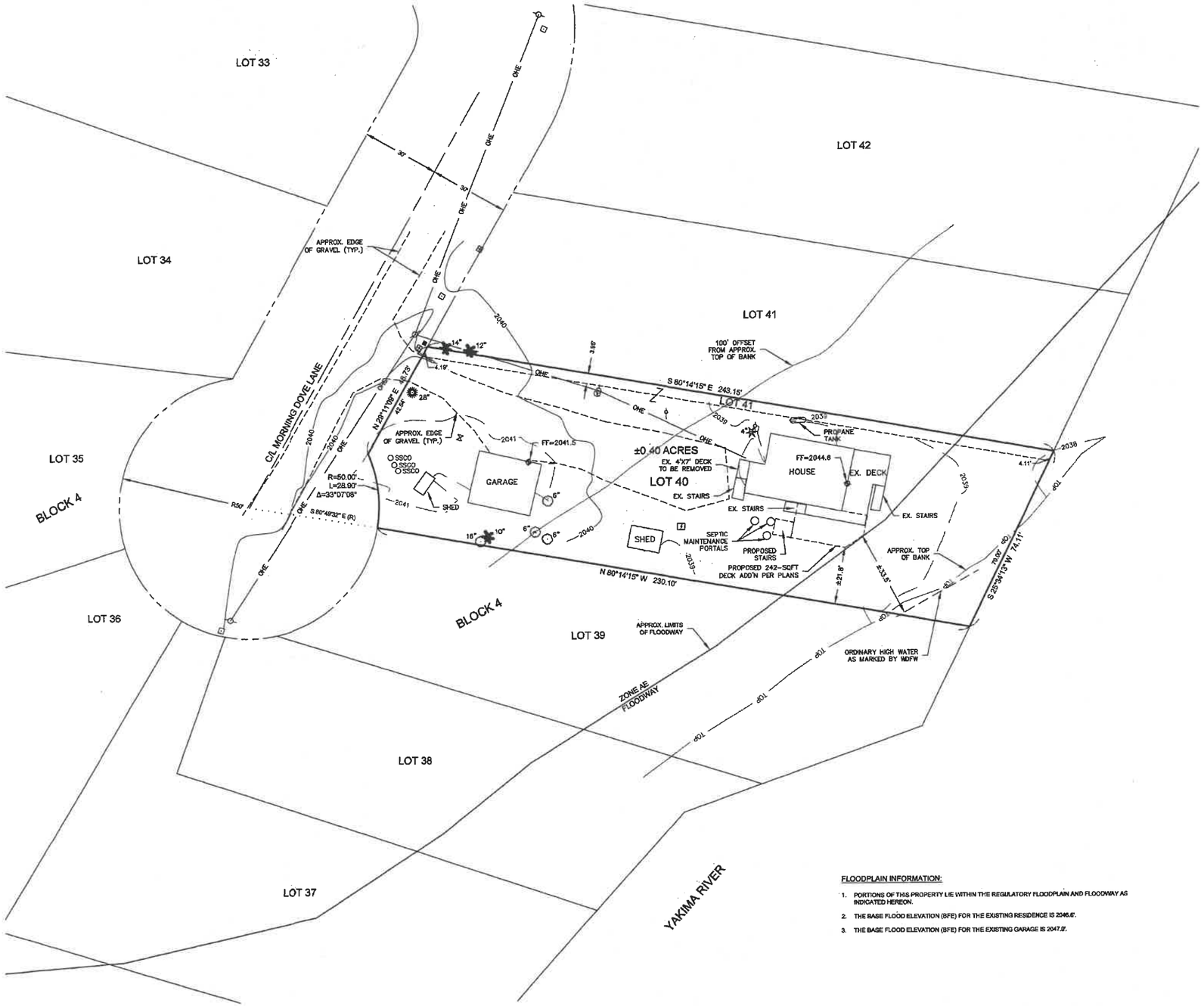
320 MORNING DOVE LANE

A PORTION OF THE SE 1/4 OF THE SE 1/4 OF SECTION 22, T. 20 N., R. 14 E., W.M.
KITTITAS COUNTY, STATE OF WASHINGTON



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SCALE: 1" = 20'

HORIZONTAL DATUM:

THE BASIS OF BEARINGS IS THE WASHINGTON STATE PLANE COORDINATE SYSTEM (SOUTH ZONE), N.A.D. 83 (11). ALL DISTANCES SHOWN HEREON ARE GROUND SCALE BASED ON A COMBINED SCALE FACTOR (CSF) OF 0.99988012867. MULTIPLY CSF BY GROUND DISTANCE TO OBTAIN GRID DISTANCES.

VERTICAL DATUM:

NAVD 88

CONTOUR INTERVAL = 1 FOOT

SURVEY NOTES AND STATEMENT OF TOPOGRAPHIC MAP ELEMENTS (WAC 332-130-145):

1. THE PURPOSE OF THIS SURVEY IS TO ILLUSTRATE EXISTING AND PROPOSED FEATURES TO FACILITATE AN APPLICATION FOR A SHORELINE VARIANCE PERMIT ON LOT 40 & THE SOUTH 3.95 FEET OF LOT 41, BLOCK 4 OF THE PLAT OF ELK MEADOWS, BOOK 3 OF PLATS, PAGES 67-71 FOR DESIGN.
2. THIS SURVEY WAS PERFORMED USING A TRIMBLE S7, 3" TOTAL STATION WITH RESULTING ACCURACY THAT MEETS OR EXCEEDS STANDARDS PER WAC 332-130-090.
3. THIS SURVEY WAS PERFORMED WITHOUT THE BENEFIT OF A CURRENT TITLE REPORT. THEREFORE, IT DOES NOT PURPORT TO SHOW ALL EASEMENTS, ENCUMBRANCES OR RESTRICTIONS OF RECORD OR OTHERWISE.
4. FOR ADDITIONAL SURVEY AND REFERENCE INFORMATION, SEE THE FOLLOWING:
   - BOOK 3 OF PLATS, PAGES 67-71, AFN: 306104
   - BOOK 5 OF SURVEYS, PAGE 47, AFN: 427432
   - BOOK 31 OF SURVEYS, PAGE 51, AFN: 200504080045
   - BOOK 31 OF SURVEYS, PAGE 164, AFN: 200508160016
   - BOOK 39 OF SURVEYS, PAGE 102, AFN: 201412120024

   AND THE SURVEYS REFERENCED THEREON, RECORDS OF KITTITAS COUNTY, STATE OF WASHINGTON.
5. THE CONTOURS SHOWN HEREON ARE BASED ON DIRECT FIELD OBSERVATIONS COMPLETED NOVEMBER 10, 2022.
6. THE ELEVATIONS AND CONTOURS SHOWN HEREON ARE ACCURATE TO ONE-HALF THE CONTOUR INTERVAL.
7. LOCATION OF EXISTING AND OBSERVABLE UTILITIES ARE FROM DIRECT FIELD OBSERVATIONS.
8. AGREED UPON SCOPE OF UTILITY INVESTIGATION BETWEEN THE PROJECT OWNER/AGENT AND SURVEYOR IS TO CAPTURE THE LOCATION OF EXISTING AND OBSERVABLE UTILITIES.

LEGAL DESCRIPTION PER STATUTORY WARRANTY DEED - AUDITOR'S FILE NO. 202107020007:

LOT 40 AND THE SOUTH 3.95 FEET OF LOT 41, BLOCK 4, ELK MEADOWS, IN THE COUNTY OF KITTITAS, STATE OF WASHINGTON, AS PER PLAT THEREOF RECORDED IN BOOK 3 OF PLATS, PAGES 67 THROUGH 71, RECORDS OF SAID COUNTY.

PARCEL INFORMATION:

PARCEL NO.	MAP NO.
822724	20-14-22052-0440

ADDRESS:

320 MORNING DOVE LANE
CLE ELUM, WA 98922

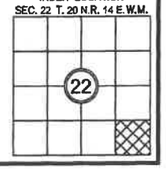
LEGEND

- CEDAR TREE
- FIR TREE
- DECIDUOUS TREE
- ORNAMENTAL TREE
- WATER VALVE
- FROST FREE HYDRANT
- WATER METER
- SSCO — SEWER CLEANOUT
- POWER METER
- POWER OUTLET
- POWER POLE
- TELEPHONE PEDESTAL
- POST
- ELEVATION MARKER
- FF — FINISH FLOOR
- (R) — RADIAL BEARING
- OHE — OVERHEAD POWER LINES

FLOODPLAIN INFORMATION:

1. PORTIONS OF THIS PROPERTY LIE WITHIN THE REGULATORY FLOODPLAIN AND FLOODWAY AS INDICATED HEREON.
2. THE BASE FLOOD ELEVATION (BFE) FOR THE EXISTING RESIDENCE IS 2046.6'.
3. THE BASE FLOOD ELEVATION (BFE) FOR THE EXISTING GARAGE IS 2047.0'.

INDEX LOCATION
SEC. 22 T. 20 N.R. 14 E.W.M.



REVISIONS

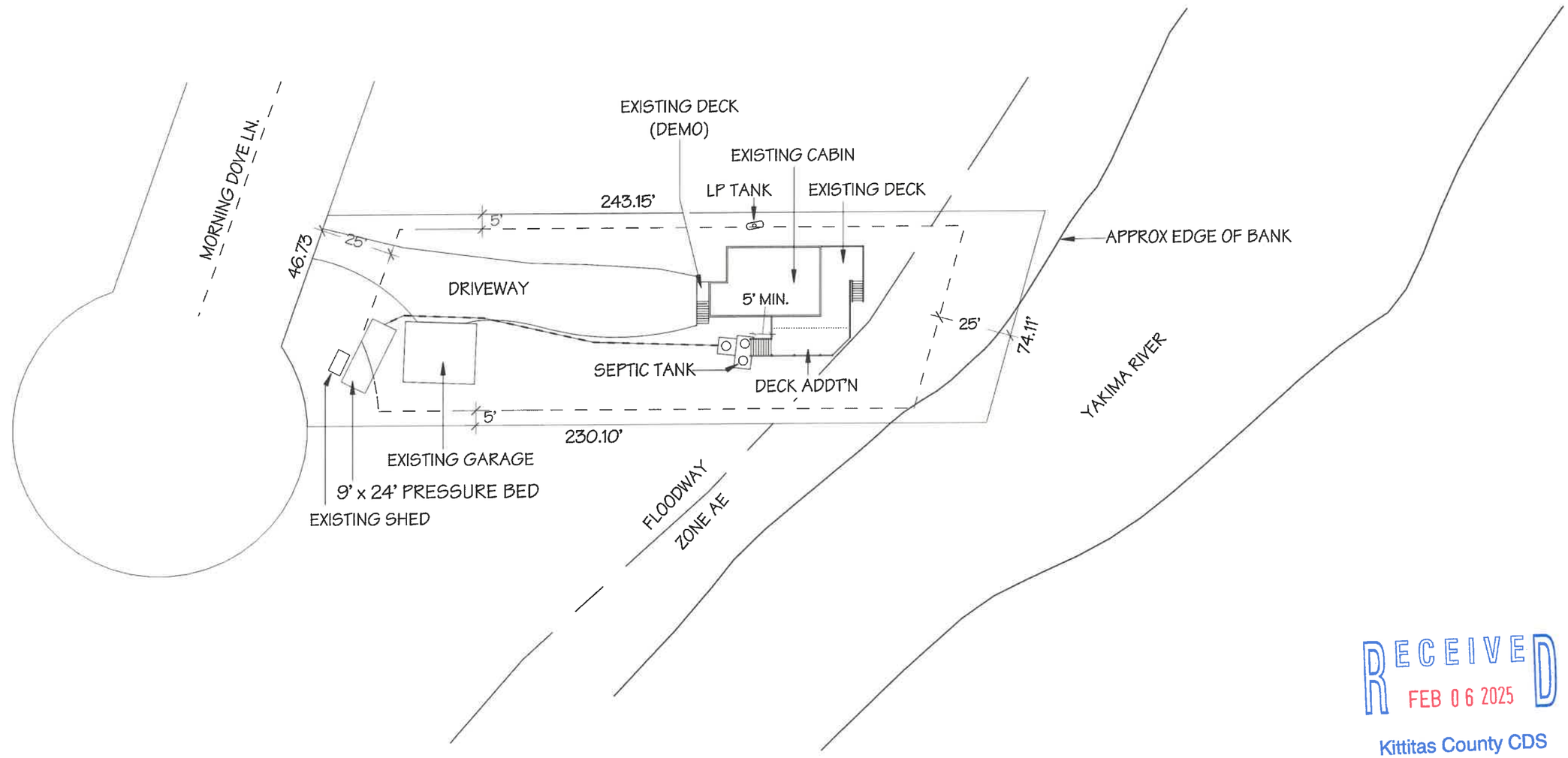
DESCRIPTION	DATE	BY

DUSTIN L. PIERCE — STATE OF WASHINGTON — 45503 — REGISTERED PROFESSIONAL LAND SURVEYOR
2/6/2025

JASON ALLEN
SITE PLAN

Encompass
ENGINEERING & SURVEYING
165 NE Juniper Street, Suite 201 • Issaquah, WA 98027 • Phone: (425) 392-0250
Western Washington Division
Eastern Washington Division
407 Swiftwater Blvd. • Cle Elum, WA 98922 • Phone: (509) 674-7433

JOB NO.	22123
DATE	02/2025
SCALE	1"=20'
DESIGNED	N/A
DRAWN	D.L.P./G.W.
CHECKED	D.L.P.
APPROVED	D.L.P.
SHEET	1 of 1



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SITE PLAN

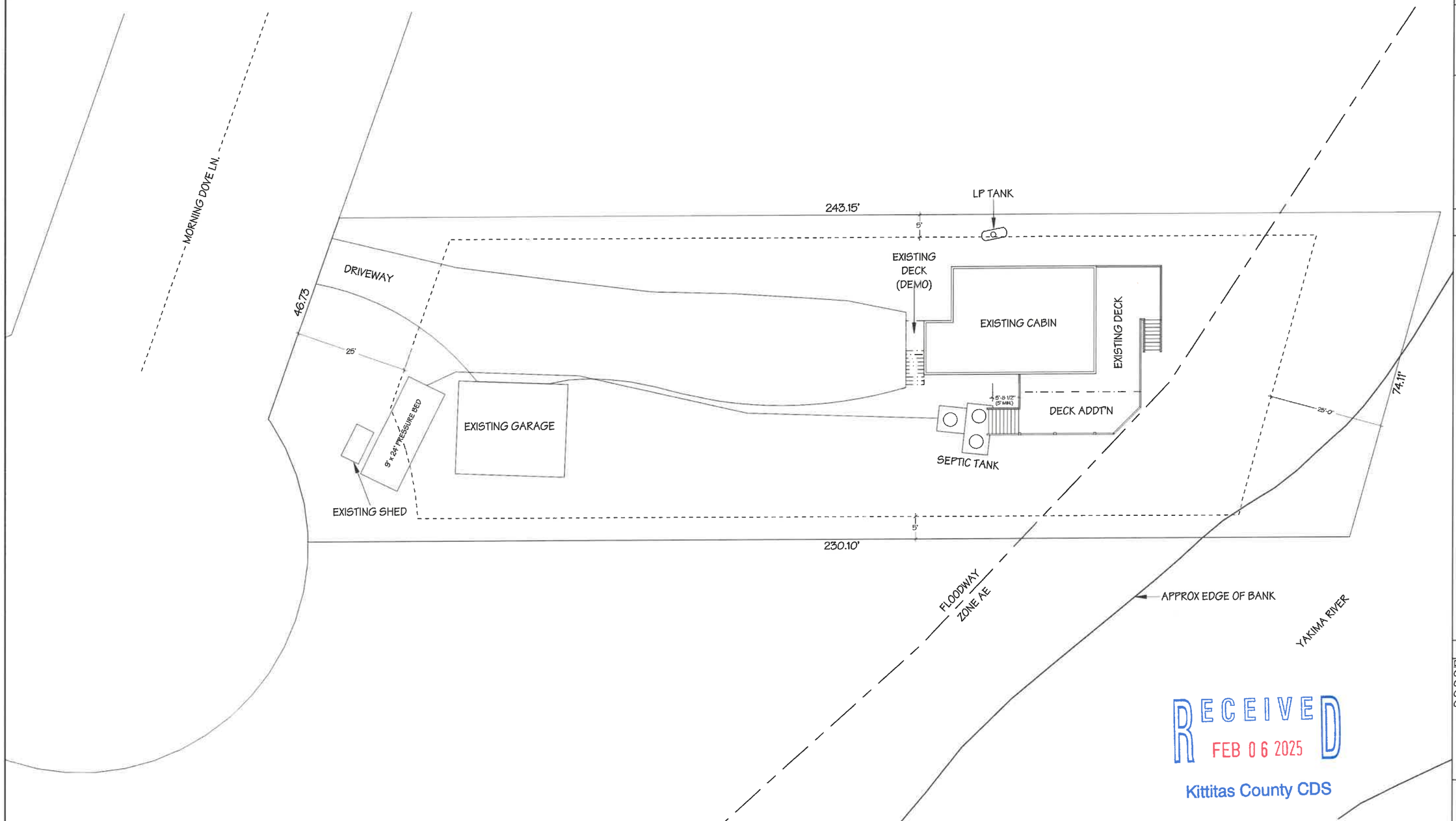
1" = 50'

N

JASON ALLEN
REMODEL/ADDITION
320 MORNING DOVE LN.
CLE ELUM, WA
PARCEL ID # 820734

HENTRICHSEN
Design, LLC
509-260-0614
HOUSE-PLANS@HOTMAIL.COM
WWW.HDESIGNLLC.COM

DEFENSIBLE SPACE & FIRE PROTECTION REQUIREMENTS PER
WILDLAND URBAN INTERFACE (WUI) PLAN REVIEW



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HENRICHSEN
Design, LLC

PO BOX 364
SOUTH CLE ELUM
WA, 98943
house-plans@hotmail.com
509-260-0614

ENGINEER OF RECORD

PARCEL ID #
820734

JASON ALLEN
ADDITION
320 MORNING DOVE LN, CLE ELUM, WA

ARCH D (24x36)

DATE:	PURPOSE:
05/08/24	V1 REVIEW
05/13/24	V2 REVIEW
06/17/24	TO ENGR'G
07/10/24	MARKUPS

SITE PLAN

WWW.HDESIGNLLC.COM

JOB # 24044

A1

GENERAL NOTES

GOVERNING CODE: The 2021 International Building Code shall govern design and construction.

CONTRACTOR RESPONSIBILITIES: The contractor is responsible for the means and methods of construction, job related safety standards, and the strength and stability of the structure during construction. He shall provide temporary shoring, bracing and other elements required to maintain stability until the structure is complete. The contractor shall be familiar with the work required in these documents and the requirements for executing it properly.

DISCREPANCIES: Discrepancies in these drawings shall be brought to the attention of Henrichsen Design, LLC and Engineer of record prior to beginning the work in question.

SITE VERIFICATION: The contractor shall verify all dimensions and conditions at the site.

ADJACENT UTILITIES: The contractor shall determine the location of all adjacent underground utilities prior to excavation and drilling.

SOILS and FOUNDATIONS

REFERENCE STANDARDS: Design and construction shall conform to IBC Chapter 18 "Soils and Foundations."

SOILS INSPECTION: The Building Official or a licensed Geotechnical Engineer shall inspect all prepared soil bearing surfaces prior to placement of concrete and reinforcing steel and shall verify the following DESIGN SOIL VALUES.

Allowable bearing pressure:	2000 psf
(assumes silty soil w/ gravel & rock, contractor to notify engineer if otherwise)	
Passive lateral pressure:	350PCF e.f.p.
Active lateral pressure — unrestrained:	40PCF e.f.p.
Active lateral pressure — restrained"	60PCF e.f.p.
Coefficient of sliding friction	0.25

FOOTING DEPTH: Exterior footings shall bear at least (24") below finish grade.

FOOTING CONSTRUCTION: Except where noted otherwise in these plans, concrete footings shall be constructed as follows: Footing shall be reinforced with #4 bars spaced at 8" OC located between the bottom third and mid-depth of footings. Strip (continuous) footings require reinforcement in the long direction only. Spread footing shall be reinforced in both directions. Vertical reinforcement for stem walls shall be cast in place extending to within 3" of footing bottom.

CONCRETE STEM WALLS: Except where noted otherwise in the plans, concrete stem walls shall be 6" wide and shall be reinforced with #4 bars spaced at 12" OC in the vertical and horizontal direction. One bar shall be located 4" from the top of wall with the hook end of anchor bolts held below this bar. Vertical reinforcement shall be cast in place in the footing concrete extending to 3" from bottom of footing (except for 24" tall monolithic footing / stem walls which require only (1) #4 horizontal at 4" from top, footing same as above.)

CONCRETE SLABS-ON-GRADE: Except where noted otherwise in these plans, concrete floor slabs shall be no less than 4" thick and shall be reinforced with W1.4 x W1.4 6x6 welded wire fabric (or #3 bars spaced at 18" e.w.) supported to remain in place between mid-depth of the slab and the upper third. Slabs shall be cast over a prepared compacted sub-base of 4" thick clean graded sand, gravel, or crushed stone passing a 2" sieve. A base course is not required over soils having a percolation rate greater than 4" per hour - Ref R506.2.2 exception & Table R405.1 Group 1 & footnote "a".)

WOOD

GRADING: All sawn lumber and engineered wood products shall be identified by a grade mark or a certificate of inspection by an approved agency complying with DOC PS20 or equivalent.

LUMBER and TIMBER: Except where noted otherwise the species and grade of lumber and timber shall be as follows:
- Hem Fir No. 2 - Preservative-treated lumber and timber
- Douglas Fir No. 2 - All other lumber and timber

STRUCTURAL GLUE-LAMINATED TIMBER:
Conform to AITC 190.1 & ASTM D3737
Glulam - simple span DF/DF 24F-V4
Glulam - cantilever or continuous DF/DF 24F-V8
Camber simple span beams to 2000' radius unless noted otherwise.

RECTANGULAR ENGINEERED WOOD:
Conform to ASTM 5456
PSL - parallel strand lumber 2.0 E
LSL - laminated strand lumber 1.5 E
LVL - laminated veneer lumber 1.8 E

WOOD STRUCTURAL PANELS (Sheathing): Conforming to DOC PS1 or PS2 according to type and shall be identified by the trademarks of an approved testing & inspection agency. Unless noted otherwise horizontal panels shall be installed with the long dimension perpendicular to supporting framing with panels continuous over two or more spans with adjacent rows of sheathing having staggered joints.

Use:	Roof	Floor	Walls
Thickness:	5/8"	3/4"	7/16"
Span rating:	40/20	48/24	24/16
Panel grade:	C-D	C-D	C-D
Exposure:	1	1	1

CONNECTORS: Prefabricated connectors shall be by the Simpson Strong-Tie Company as specified in their catalog No. C-C 2024. Connectors shall be installed per the manufacturer's instructions. Where connector straps connect two members, place one-half of the nails or bolts in each member. Provide washers under the heads and nuts of all bolts and lag screws bearing on wood. Unless noted otherwise all nails shall be common. All exterior Simpson connectors to have HDG or ZMAX coating.

GALVANIZED FASTENERS:
Conform to ASTM A653 designation G185

NAILS: Conform to IBC 2304.10 "Connections and Fasteners"
Unless noted otherwise all nails shall be common. Nails shall be driven flush and shall not fracture the surface of sheathing. Nail sizes specified on the drawings are based on the following specifications:

Size	Length	Diameter
6d	2"	.113"
8d	2 ½"	.131"
10d	3"	.148"
12d	3 ¼"	.148"
16d	3 ½"	.162"

LAG and MACHINE BOLTS:
Conform to ASTM A307

STUD WALL CONSTRUCTION: Conform to IBC 2304. Unless noted otherwise, studs shall be spaced at 16" OC, exterior studs shall be 2x6, and interior studs shall be 2x4, interior headers shall be 4x8, exterior headers shall be 6x8. Provide two studs minimum at the end of all walls and at each side of all openings. Attach the lower plates of all stud walls to concrete with 5/8" diameter A307 anchor bolts x 7" embedment spaced per plan and shearwall schedule. All anchor bolts to have 1/4"x 3" square galvanized washers. Spacing shall not exceed 48" O.C. Nail together individual members of built up posts with two rows of 16d @ 12" O.C. staggered. Refer to the plans and shearwall schedule for required sheathing and nailing. When not otherwise noted, provide 1/2" gypsum wallboard on interior surfaces.

PRESERVATIVE TREATMENT: Wood materials specified as "pressure treated" shall be "treated wood." "Decay and Termite Protection" shall conform to the appropriate standards of the American Wood-Preservers Association (AWPA) for sawn lumber, glued laminated timber, round poles, wood piles and marine piles. Follow American Lumber Standards Committee (ALSC) quality assurance procedures. Use hot dipped galvanized or stainless steel fasteners and connectors for preservative treated wood products.

ROOF COVERINGS

MINIMUM REQUIREMENTS: Install per manufacturer's written instructions. See also section R905 for additional requirements and flashing requirements.

SHINGLES:
Asphalt shingles shall be fiberglass-reinforced class A shingles with self-sealing strips or interlocking design conforming with ASTM D 225 or D 3462 and installed on slopes between 3:12 and 20:12 fastened over underlayment or ice-protection as indicated below.
FASTENERS: Shingles shall be fastened over underlayment to solid wood deck with 12 gage galvanized steel roofing nails with 3/8" diameter heads meeting ASTM F 1667 and penetrating the roof sheathing surface at least 3/4". Quantity of fasteners shall be per shingle manufacturer but no less than four per strip or 2 per shingle.

UNDERLAYMENT: 15 lb felt paper or equivalent underlayment shall comply with ASTM D 226 type I or ASTM 4869 type I. Install 36" wide strips perpendicular to roof slope overlapping 2" except provide double layer with 19" overlaps at slopes of 4:12 or less.

ICE PROTECTION: Install of self-adhering polymer modified bitumen sheet, in lieu of underlayment, beginning at roof eaves and extending at least 24" inside the exterior wall line of the building per manufacturer's written instructions.

FLASHING: Install a base, cap, valley, and sidewall flashing per manufacturer's written installation instructions.

METAL ROOF COVERINGS

MINIMUM REQUIREMENTS: Install per manufacturer's written instructions. See also section R905 for additional requirements and flashing requirements.

DECKING: Metal roofing material shall be applied over solid roof sheathing per plan.

MINIMUM SLOPE:
25% for lapped, non-soldered seam without sealant
4% for lapped, non-soldered seams with sealant
2% for standing seam roof systems

MATERIALS: Materials shall be naturally corrosion-resistant or treated to be so per Table R905.10.3(2)

ATTACHMENT: Attach to to supports per manufacturer's instruction with galvanized fasteners for steel roofing and 300-series stainless steel for copper and other metal roofing,

FLASHING: Install base, cap, valley, and sidewall flashing per manufacturer's written instructions.

CRICKETS AND SADDLES: Install on uphill side of chimneys and other similar protrusions.

METAL-PLATE-CONNECTED WOOD TRUSSES

Reference IBC Section 2303.4
Trusses shall be designed by a qualified specialty engineer licensed to practice in the governing municipality. The designs shall account for the loads indicated under DESIGN PARAMETERS and any other specialty loads such a drifts, mechanical equipment, and axial drag loads that may be shown on the plans and details. Designs shall account for unbalanced loading, drifting, and wind loads as applicable in combination per the 2018 IBC. At a minimum, the designs shall consider 15 psf uniform dead load. Attic trusses shall be designed with an additional 10 psf uniform dead load on bottom chord. Roof designs shall consider at 10 psf uniform net uplift. The designs shall include all permanent and temporary bracing, and truss-to-truss and truss-to-bearing connections.
Calculations and shop drawings stamped by the specialty engineer shall be submitted to the contractor for review. The contractor and specialty engineer are responsible for details and accuracy including specific conformance to these documents.
Contractor is responsible to request additional details not shown on these plans if desired. Specialty engineer is not responsible for connections not specifically detailed on this set of plans.

CONCRETE

REFERENCE STANDARDS:
- ACI 318-14 "Building Code Requirements for Concrete"
- IBC Chapter 19

MIX DESIGN:
2500 psi - footings protected from weather
3000 psi - vertical concrete exposed to weather
3500 psi - flat concrete exposed to weather including garage floors
- Strength: 28-day strength - Fc' design strength (psi)
- Maximum Aggregate Size shall be 1"
- W/C: Water/Cement Ratio shall not exceed .48 based on the total weight of cementitious materials
- Air content of concrete exposed to weather shall be 5% measured at point of placement.
- Pozzolans: may be used in accordance with ACI 318-14.
- Chloride content shall conform to ACI 318-14.

CONSTRUCTION JOINTS: See the plan for location and details.

SHRINKAGE: Concrete will shrink after initial placement. The contractor shall coordinate jointing and finishes to provide adequate tolerance for shrinkage.

TESTING FOR CONCRETE STRENGTH:
When required by the building official obtain samples and conduct tests in accordance with ACI 318-14. For each test mold and cure 3 cylinders. Test (1) at 7 days and (2) at 28 days. The strength is satisfactory if the averages of all sets of 3 consecutive tests equal or exceed the specified strength and no individual test falls below the specified strength by more than 500 psi.

REINFORCING STEEL:
Reinforcing Bars - deformed ASTM A615, Grade 60
Smooth Welded Wire Fabric ASTM A185
Deformed Welded Wire Fabric ASTM A497
Bar Supports CRSI MSP-1, Chapter 3
Tie Wire - black annealed 16.5 gauge or heavier

CONCRETE COVER: Conform to 318-14
Concrete cast against earth 3"
Concrete exposed to earth or weather 1-1/2"
Bars in slabs and walls 3/4"

BAR SPLICES: Conform to ACI 318-14 for class "B" splices or 40 bar diameters, whichever is greater.

DESIGN PARAMETERS

LIVE LOADS:

Snow — Pg:	127psf
Snow — Pf:	118 psf - heated
Snow — Pf:	129 psf - non heated
Exposure factor:	1.2
Thermal factor:	1.1 (heated)
	1.2 (unheated)
FLOOR LIVE:	40 psf

DEAD LOADS:

Floor Dead:	10 psf
Roof Dead:	15 psf

WIND DESIGN:

Basic wind speed:	110 mph
Exposure:	B

SEISMIC DESIGN:

Site classification:	D1
Ss:	0.63
S1:	0.25
Importance factor:	1.0
Response modification:	6.5

DEFLECTION LIMITS:

Total load:	L/240
Live Roof:	L/360
Live Floor:	L/480

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FEB 06 2025
Kittitas County CDS

HENRICHSEN Design, LLC
PO BOX 364
SOUTH CLE ELUM
WA, 98943
house-plans@hotmail.com
509-260-0614

RICHARD JAMES ALLEN — STATE OF WASHINGTON — 20151 — REGISTERED PROFESSIONAL ENGINEER
07/17/2024

ENGINEER OF RECORD
PARCEL ID # 820734

JASON ALLEN ADDITION
320 MORNING DOVE LN, CLE ELUM, WA

ARCH D (24x36)

DATE:	PURPOSE:
05/08/24	V1 REVIEW
05/13/24	V2 REVIEW
06/17/24	TO ENGR'G
07/10/24	MARKUPS

GENERAL NOTES

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JOB # 24044

S2

TABLE 2304.10.2 FASTENING SCHEDULE

ROOF

DESCRIPTION OF BUILDING ELEMENTS	NUMBER AND TYPE OF FASTENERS(^G)	SPACING AND LOCATION
1. Blocking between ceiling joists, rafters or trusses to top plate or other framing below	(4) 8d box (2-1/2" x 0.113"); or (3) 8d common (2-1/2" x 0.131"); or (3) 10d box (3" x 0.128"); or (3) 3" x 0.131" nails; or (3) 3" 14 gage staples, 7/16" crown	Each end, toenail
Blocking between rafters or truss not at the wall top plate, to rafter or truss	(2) 8d common (2-1/2" x 0.131"); or (2) 3" x 0.131" nails; or (2) 3" 14 gage staples; or	Each end, toenail
	(2) 16d common (3-1/2" x 0.162"); or (3) 3" x 0.131" nails; or (3) 3" 14 gage staples	End nail
Flat blocking to trues and web filler	16d common (3-1/2" x 0.162") @ 6" o.c.; or 3" x 0.131" nails @ 6" o.c.; or 3" x 14 gage staples @ 6" o.c	Face nail
2. Ceiling joists to top plate	(4) 8d box (2-1/2" x 0.113"); or (3) 8d common (2-1/2" x 0.131"); or (3) 10d box (3" x 0.128"); or (3) 3" x 0.131" nails; or (3) 3" 14 gage staples, 7/16" crown	Each joist, toenail
3. Ceiling joist not attached to parallel rafter, laps over partitions (no thrust) (see Section 2308.7.3.1, Table 2308.7.3.1)	(3) 16d common (3-1/2" x 0.162"); or (4) 10d box (3" x 0.128"); or (4) 3" x 0.131" nails; or (4) 3" 14 gage staples, 7/16" crown	Face nail
4. Ceiling joist attached to parallel rafter (heel joint) (see Section 2308.7.3.1, Table 2308.7.3.1)	Per Table 2308.7.3.1	Face nail
5. Collar tie to rafter	(3) 10d common (3" x 0.148"); or (4) 10d box (3" x 0.128"); or (4) 3" x 0.131" nails; or (4) 3" 14 gage staples, 7/16" crown	Face nail
6. Rafter or roof truss to top plate (See Section 2308.7.5, Table 2308.7.5)	(3) 10 common (3" x 0.148"); or (3) 16d box (3-1/2" x 0.135"); or (4) 10d box (3" x 0.128"); or (4) 3" x 0.131 nails; or (4) 3" 14 gage staples, 7/16" crown	(2) toenails on one side and (1) toenail on opposite side of rafter or truss(^C)
7. Roof rafters to ridge valley or hip rafters; or roof rafter to 2-inch ridge beam	(2) 16d common (3-1/2" x 0.162"); or (3) 16d box (3-1/2" x 0.135"); or (3) 10d box (3" x 0.128"); or (3) 3" x 0.131" nails; or (3) 3" 14 gage staples, 7/16" crown	End nail
	(3) 10d common (3-1/2" x 0.148"); or (4) 16d box (3-1/2" x 0.135"); or (4) 10d box (3" x 0.128"); or (4) 3" x 0.131" nails; or (4) 3" 14 gage staples, 7/16" crown	Toenail

WALL

DESCRIPTION OF BUILDING ELEMENTS	NUMBER AND TYPE OF FASTENERS(G)	SPACING AND LOCATION
8. Stud to stud (not at braced wall panels)	16d common (3-1/2" x 0.162");	24" o.c. face nail
	10d box (3" x 0.128"); or 3" x 0.131" nails; or (3) 3" 14 gage staples, 7/16" crown	16" o.c. face nail
9. Stud to stud and abutting studs at intersecting wall corners (at braced wall panels)	16d common (3-1/2" x 0.162")	16" o.c. face nail
	16d box (3-1/2" x 0.135"); or 3" x 0.131" nails; or (3) 3" 14 gage staples, 7/16" crown	12" o.c. face nail
10. Built-up header (2" to 2" header)	16d common (3-1/2" x 0.162")	16" o.c. each edge, face nail
	16d box (3-1/2" x 0.135")	12" o.c. each edge, face nail
11. Continuous header to stud	(4) 8d common (2-1/2" x 0.131"); or (4) 10d box (3" x 0.128"); or (5) 8d box (2-1/2" x 0.113")	Toenail
12. Top plate to top plate	16d common (3-1/2" x 0.162")	16" o.c. face nail
	10d box (3" x 0.128"); or 3" x 0.131" nails; or 3" 14 gage staples, 7/16" crown	12" o.c. face nail
13. Top plate to top plate, at end joints	(8) 16d common (3-1/2" x 0.162"); or (12) 16d box (3-1/2" x 0.135"); or (12) 10d box (3" x 0.128"); or (12) 3" x 0.131" nails; or (12) 3" 14 gage staples, 7/16" crown	Each side of end joint, face nail (minimum 24" lap splice length each side of end joint)
	16d common (3-1/2" x 0.162")	16" o.c. face nail
14. Bottom plate to joist, rim joist, band joist or blocking (not at braced wall panels)	16d box (3-1/2" x 0.135"); or 3" x 0.131" nails; or 3" 14 gage staples, 7/16" crown	12" o.c. face nail
15. Bottom plate to joist, rim joist, band joist or blocking at braced wall panels	(2) 16d common (3-1/2" x 0.162"); or (3) 16d box (3-1/2" x 0.135"); or (4) 3" x 0.131" nails; or (4) 3" 14 gage staples, 7/16" crown	16" o.c. face nail
16. Stud to top or bottom plate	(3) 16d box (3-1/2" x 0.135"); or (4) 8d common (2-1/2" x 0.131"); or (4) 10d box (3" x 0.128"); or (4) 3" x 0.131" nails; or (4) 8d box (2-1/2" x 0.113"); or (4) 3" 14 gage staples, 7/16" crown	Toenail
	(2) 16d common (3-1/2" x 0.162"); or (3) 16d box (3-1/2" x 0.135"); or (3) 10d box (3" x 0.128"); or (3) 3" x 0.131" nails; or (4) 3" 14 gage staples, 7/16" crown	End nail
17. Top plates, laps at corners and intersections	(2) 16d common (3-1/2" x 0.162"); or (3) 10d box (3" x 0.128"); or (3) 3" x 0.131" nails; or (3) 3" 14 gage staples, 7/16" crown	Face nail
18. 1" brace to each stud and plate	(3) 8d box (2-1/2" x 0.113"); or (2) 8d common (2-1/2" x 0.131"); or (2) 10d box (3" x 0.128"); or (2) 3" x 0.131" nails; or (2) 3" 14 gage staples, 7/16" crown	Face nail
19. 1" x 6" sheathing to each bearing	(3) 8d box (2-1/2" x 0.113"); or (2) 8d common (2-1/2" x 0.131"); or (2) 10d box (3" x 0.128"); or (2) 1-3/4" 16 gage staples, 1" crown	Face nail
20. 1" x 8" and wider sheathing to each bearing	(3) 8d common (2-1/2" x 0.131"); or (3) 8d box (2-1/2" x 0.113"); or (3) 10d box (3" x 0.128"); or 3) 1-3/4" 16 gage staples 1" crown	Face nail
	Wider than 1" x 8": (3) 8d common (2-1/2" x 0.131"); or (4) 8d box (2-1/2" x 0.113"); or (4) 10d box (3" x 0.128"); or (4) 1-3/4" 16 gage staples, 1" crown	

FLOOR

21. Joist to sill, top plate, or girder	(4) 8d box (2-1/2" x 0.113"); or (3) 8d common (2-1/2" x 0.131"); or floor (3) 10d box (3" x 0.128"); or (3) 3" x 0.131" nails; or (3) 3" 14 gage staples, 7/16" crown	Toenail
	8d box (2-1/2" x 0.113")	4" o.c., toenail
22. Rim joist, band joist, or blocking to top plate, sill or other framing below	8d common (2-1/2" x 0.131"); or 10d box (3" x 0.128"); or 3" x 0.131" nails; or 3" 14 gage staples, 7/16" crown	6" o.c., toenail
23. 1" x 6" subfloor or iose to each joist	(3) 8d box (2-1/2" x 0.113"); or (2) 8d common (2-1/2" x 0.131"); or (2) 10d box (3" x 0.128"); or (2) 1-3/4" 16 gage staples, 1" crown	Face nail
24. 2" subfloor to joist or girder	(3) 16d box (3-1/2" x 0.135"); or (2) 16d common (3-1/2" x 0.162")	Blind and face nail
25. 2" planks (plank & beam – floor & roof)	(3) 16d box (3-1/2" x 0.135"); or (2) 16d common (3-1/2" x 0.162")	Each bearing, face nail
26. Built-up girders and beams, 2" lumber layers	20d common (4" x 0.192")	32" o.c., face nail at top and bottom staggered on opposite sides
	10d box (3" x 0.128"); or 3" x 0.131" nails; or 3" 14 gage staples, 7/16" crown	24" o.c. face nail at top and bottom staggered on opposite sides
	And: (2) 20d common (4" x 0.192"); or (3) 10d box (3" x 0.128"); or (3) 3" x 0.131" nails; or (3) 3" 14 gage staples, 7/16" crown	Ends and at each splice, face nail
27. Ledger strip supporting joists or rafters	(3) 16d common (3-1/2" x 0.162"); or (4) 16d box (3-1/2" x 0.135"); or (4) 10d box (3" x 0.128"); or (4) 3" x 0.131" nails; or (4) 3" 14 gage staples, 7/16" crown	Each joist or rafter, face nail
28. Joist to band joist or rim joist	(3) 16d common (3-1/2" x 0.162"); or (4) 10d box (3" x 0.128"); or (4) 3" x 0.131" nails; or (4) 3" 14 gage staples, 7/16" crown	End nail
29. Bridging or blocking to joist, rafter or truss	(2) 8d common (2-1/2" x 0.131"); or (2) 10d box (3" x 0.128"); or (2) 3" x 0.131" nails; or (2) 3" 14 gage staples, 7/16" crown	Each end, toenail

WOOD STRUCTURAL PANELS

WOOD STRUCTURAL PANELS (WSP), subfloor, roof and interior wall sheathing to framing and particleboard wall sheathing to framing(^A)

		EDGES(INCHES)	INTERMEDIATE SUPPORTS (INCHES)
30. 3/8" - 1/2"	6d common or deformed (2" x 0.113"); or 2-3/8" x 0.113" nail (subfloor and wall)	6	12
	8d common or deformed (2-1/2" x 0.131"x 0.281" head) (roof) or RSRS-01 (2-3/8" x 0.113") nail (roof)D	6(^E)	6(^E)
	1-3/4" 16 gage staple, 7/16" crown (subfloor and wall)	4	8
	2-3/8" x 0.113"x 0.266" head nail (roof)	3(^F)	3(^F)
	1-3/4" 16 gage staple, 7/16" crown (roof)	3(^F)	3(^F)
31. 19/32" - 3/4"	8d common (2-1/2" x 0.131"); or deformed (2" x 0.113") (subfloor and wall)	6	12
	8d common or deformed (2-1/2" x 0.131"x 0.281" head) (roof) or RSRS-01 (2-3/8" x 0.113") nail (roof)D	6(^E)	6(^E)
	2-3/8" x 0.113"x 0.266" head nail; or 2" 16 gage staple, 7/16" crown	4	8
32. 7/8" - 1-1/4"	10d common (3" x 0.148"); or deformed (2-1/2" x 0.131" x 0.281" head)	6	12

OTHER EXTERIOR WALL SHEATHING

33. 1/2" fiberboard sheathing(^B)	1-1/2" x 0.120", galvanized roofing nail (7/16" head diameter); or 1-1/4" 16 gage staple with 7/16" or 1" crown	3	6
34. 25/32" fiberboard sheathing(^B)	1-3/4" x 0.120" galvanized roofing nail (7/16" diameter head); or 1-1/2" 16 gage staple with 7/16" or 1" crown	3	6

WOOD STRUCTURAL PANELS, COMBINATION SUBFLOOR UNDERLAYMENT TO FRAMING

35. 3/4" and less	8d common (2-1/2" x 0.131"); or deformed (2" x 0.113"); or deformed (2" x 0.120")	6	12
36. 7/8" – 1"	8d common (2-1/2" x 0.131"); or deformed (2-1/2" x 0.131"); or deformed (2-1/2" x 0.120")	6	12
37. 1-1/8" – 1-1/4"	10d common (3" x 0.148"); or deformed (2-1/2" x 0.131"); or deformed (2-1/2" x 0.120")	6	12

PANEL SIDING TO FRAMING

38. 1/2" or less	8d corrosion-resistant siding (1-7/8" x 0.106"); or 8d corrosion-resistant casing (2" x 0.099")	6	12
39. 5/8"	8d corrosion-resistant siding (2-3/8" x 0.128"); or 8d corrosion-resistant casing (2-1/2" x 0.113")	6	12
		EDGES(INCHES)	INTERMEDIATE SUPPORTS (INCHES)

INTERIOR PANELING

40. 1/4"	4d casing (1-1/2" x 0.080"); or 4d finish (1-1/2" x 0.072")	6	12
41. 3/8"	6d casing (2" x 0.099"); or 6d finish (2" x 0.092") (Panel supports at 24 inches)	6	12

For SI: 1 inch = 25.4 mm.

FOOTNOTES

^A	Nails spaced at 6 inches at intermediate supports where spans are 48 inches or more. For ring or wood structural panel and particleboard diaphragms and shear walls, refer to Section 2305. Nails for wall sheathing are permitted to be common, box or casing.
^B	Spacing shall be 6 inches on center on the edges and 12 inches on center at intermediate supports for nonstructural applications. Panel supports at 16 inches (203 inches if sheathing is used in the long direction of the panel, unless otherwise marked).
^C	Where a rafter is fastened to an adjacent parallel ceiling joist in accordance with this schedule and the ceiling joist is fastened to the top plate in accordance with the schedule, the number of toenails in the rafter shall be permitted to be reduced by one nail.
^D	Where a rafter is fastened to an adjacent parallel ceiling joist in accordance with this schedule and the ceiling joist is fastened to the top plate in accordance with this schedule, the number of toenails in the rafter shall be permitted to be reduced by one nail.
^E	Tabulated fastener requirements apply where the ultimate design wind speed is less than 140 mph. For wood structural panel roof sheathing attached to gable end roof framing and to intermediate supports within 48 inches of roof edges and ridges, nails shall be spaced at 4 inches on center where the ultimate design wind speed is greater than 130 mph in Exposure B or greater than 110 mph in Exposure C. Spacing exceeding 6 inches on center at intermediate supports shall be permitted where the fastening is designed per the AWC NDS.
^F	Fastening is only permitted where the ultimate design wind speed is less than or equal to 130 mph.
^G	Nails and staples are carbon steel meeting the specifications of ASTM F1667. Corrections using nails and staples of other materials, such as stainless steel, shall be designed by acceptable engineering practice or approved under Section 104.11.

2021 WSEC REQUIREMENTS

All Climate Zones Table 402.1.3			U-Factor a
Fenestration U-Factor b,j		n/a	0.50
Skylight U-Factor b		n/a	0.50
Ceiling c		60	0.024
Wood Frame Wall g,j		20x5 or 13+10	0.056
Floor		30	0.029
Below Grade Wall c,h		10/15/21 int + ETB	
Slab d,f R-Value & Depth		10, 4 ft	
a	R-values are minimums. U-factors and SHGC are maximums. When insulation is installed in a cavity which is less than the label or design thickness of the insulation, the compressed R-value of the insulation from Appendix Table A101.4 shall not be less than the R-value specified in the table.		
b	The fenestration U-factor column excludes skylights.		
c	"10/15/21 +5TB" means R-10 continuous insulation on the exterior of the wall, or R-15 continuous insulation on the interior of the wall, or R- 21 cavity insulation plus a thermal break between the slab and the basement wall at the interior of the basement wall. "10/15/21 +5TB" shall be permitted to be met with R-13 cavity insulation on the interior of the basement wall plus R-5 continuous insulation on the interior or exterior of the wall. "5TB" means R-5 thermal break between floor slab and basement wall.		
d	R-10 continuous insulation is required under heated slab on grade floors. See Section R402.2.9.1.		
e	For single rafter- or joist-vaulted ceilings, the insulation may be reduced to R-38 if the full insulation depth extends over the top plate of the exterior wall.		
f	R-7.5 continuous insulation installed over an existing slab is deemed to be equivalent to the required perimeter slab insulation when applied to existing slabs complying with Section R503.1.1. If foam plastic is used, its shall meet the requirements for thermal barriers protecting foam plastics.		
g	For log structures developed in compliance with Standard ICC 400, log walls shall meet the requirements for climate zone 5 of ICC 400.		
h	Int. (intermediate framing) denotes framing and insulation as described in Section A103.2.2 including standard framing 16 inches on center, 75 percent of the wall cavity insulated and headers insulated with a minimum of R-10 insulation.		
i	The first value is cavity insulation, the second value is continuous insulation. Therefore, as an example, "R13+10" means R-13 cavity insulation plus R-10 continuous insulation		
j	A maximum U-factor of 0.32 shall apply to vertical fenestration products installed in buildings located above 4000 feet in elevation above sea level, or in windborne debris regions where protection of openings is required under Section R301.2.1.2 of the International Residential Code.		

Table R406.2 ENERGY EQUALIZATION CREDITS		ADDITIONS < 150 SQ. FT. ARE EXEMPT	Credits
Heating Options	Description of Primary Heating Source		
1	For combustion heating equipment meeting minimum federal efficiency standards for the equipment listed in Table C403.3.2(5) or C403.3.2(6)		0
2	For an initial heating system using a heat pump that meets federal standards for the equipment listed in Table C403.3.2(2) and supplemental heating provided by electric resistance or a combustion furnace meeting minimum standards listed in Table C403.3.2(5)b found in the 2021 WSEC- COMMERCIAL ENERGY CODE		1.5
3	For heating system based on electric resistance only (either forced air or Zonal)		0.5
4 c	For heating system using a heat pump that meets federal standards for the equipment listed in Table C403.3.2(2) or C403.3.2(9) or Air to water heat pump units that are configured to provide both heating and cooling and are rated in accordance with AHRI 550/590		3.0
5	For heating system based on electric resistance with: 1. Inverter-driven ductless mini-split heat pump system installed in the largest zone in the dwelling, OR 2. With 2kW or less total installed heating capacity per dwelling		2.0

a. See Section R401.1 and residential building in Section R202 for Group R-2 scope.
b. The gas back-up furnace will operate as fan-only when the heat pump is operating. The heat pump shall operate at all temperatures above 38°F (3.3°C) (or lower). Below that "changeover" temperature, the heat pump would not operate to provide space heating. The gas furnace provides heating below 38°F (3.3°C) (or lower).
c. Additional points for the HVAC systems are included in Table R406.3.

CREDITS REQ.		ADDITIONS < 150 SQ. FT. ARE EXEMPT	
1.)	Small Dwelling Units:		5
Dwelling units less than 1500 square feet in conditioned floor area with less than 300 square feet of fenestration area. Additions to existing building greater than 500 square feet of heated floor area but less than 1500 square feet.			
2.)	Medium Dwelling Units:		8
All dwelling units that are not included in #1, #3 or #4.			
3.)	Large Dwelling Units:		9
Dwelling units exceeding 5000 square feet of conditioned floor area.			
4.)	Dwelling units serving Group R-2 occupancies		6.5
Section R401.1 and residential building Section R202 for Group R-2.			
5.)	Additions 150 square feet to 500 square feet		2

Summary of Table R406.3		
Energy Options	Energy Credit Option Descriptions	Credits - select ONE energy option from each category d
1.1	Efficient Building Envelope	0.5
1.2	Efficient Building Envelope	1.0
1.3	Efficient Building Envelope	1.5
1.4	Efficient Building Envelope	2.5
2.1	Air Leakage Control and Efficient Ventilation	1.0
2.2	Air Leakage Control and Efficient Ventilation	1.5
2.3	Air Leakage Control and Efficient Ventilation	2.0
3.1 a	High Efficiency HVAC	1.0
3.2 a	High Efficiency HVAC	0.5
3.3 a,c,d	High Efficiency HVAC	0.5
3.4 a,d	High Efficiency HVAC	1.5
3.5 a	High Efficiency HVAC	1.5
3.6a	High Efficiency HVAC	1.0
3.7 a,d,e	High Efficiency HVAC	2.0
3.8 a,d	High Efficiency HVAC	1.0
3.9	High Efficiency HVAC	0.5
3.10 f	High Efficiency HVAC	1.5
3.11 c	High Efficiency HVAC	2.5
4.1	High Efficiency HVAC Distribution System	0.5
5.1	Efficient Water Heating	0.5
5.2	Efficient Water Heating	0.5
5.3	Efficient Water Heating	0.5
5.4	Efficient Water Heating	1.0
5.5	Efficient Water Heating	1.5
5.6	Efficient Water Heating	2.0
5.7	Efficient Water Heating	2.5
5.8	Efficient Water Heating	2.5
6.1	Renewable Electric Energy (4.5 credits max)	0.5 - 4.5
7.1	Appliance Package	0.5
Total Credits:		ADDITIONS < 150 SQ. FT. ARE EXEMPT

a. An alternative heating source sized as a maximum of 0.13 Watts/ft2 (sq.meters) of heated floor area or 500 Watts, whichever is bigger, may be installed in the dwelling unit.
b. See Section R401.1 and residential building in Section R202 for Group R-2 scope.
c. Option 3.11 can only be taken with Options 3.1 and 3.2. To qualify to claim Option 3.11 with 3.2, the system shall be a 1-2 speed heat pump system. Variable capacity heat pumps are ineligible from claiming this option.
d. The option may only be claimed if serving System Type 4 or 5 from Table R406.2.
e. Primary living areas include living, dining, kitchen, family rooms, and similar areas.
f. Option 3.10 may only be taken with Efficient Water Heating Options 5.1 or 5.2. Equipment sizing for space heating shall be calculated as provided in Section R403.7 or an increased capacity to provide a minimum of 75 percent of peak hot water demand or shall be sized in accordance with approved manufacturer's specifications or guidance. Supplementary heats for water heating system shall be in accordance with Section R403.5.7.

SHEARWALL SCHEDULE

AA = SHEARWALL DESIGNATION
O = HOLD DOWN CALLOUT

MARK	WALL SHEATHING, FASTENER	EDGE	FIELD	SOLE PLATE	BLOCKING/RIM JOIST	5/8"X10" A.B.	SEE NOTES
AA	7/16" O.S.B. OR 1/2" PLY. UNBLKD, 8d	6" O.C.	12" O.C.	16d @ 8" O.C.	A35 @ 32" O.C.	48" O.C.	3
A	7/16" O.S.B. OR 1/2" PLY. BLK'D, 8d	6" O.C.	12" O.C.	16d @ 8" O.C.	A35 @ 16" O.C.	48" O.C.	2,5
B	7/16" O.S.B. OR 1/2" PLY. BLK'D, 8d	4" O.C.	12" O.C.	16d @ 4" O.C.	A35 @ 16" O.C.	32" O.C.	2,5,6
C	7/16" O.S.B. OR 1/2" PLY. BLK'D, 8d	3" O.C.	12" O.C.	16d @ 3" O.C.	A35 @ 12" O.C.	24" O.C.	2,5,6
D	7/16" O.S.B. OR 1/2" PLY. BLK'D, 8d	2" O.C.	12" O.C.	16d @ 2 1/2" O.C.	A35 @ 8" O.C.	18" O.C.	1, 2, 5
E	7/16" O.S.B. OR 1/2" PLY. (2) FACES, BLK'D, 8d	6" O.C.	12" O.C.	(2) ROWS 16d @ 6" O.C.	A35 @ 8" O.C.	24" O.C.	2,5,6
F	7/16" O.S.B. OR 1/2" PLY. (2) FACES, BLK'D, 8d	4" O.C.	12" O.C.	(2) ROWS 16d @ 4" O.C.	A50 @ 6" O.C.	16" O.C.	2,4,5,6
G	7/16" O.S.B. OR 1/2" PLY. (2) FACES, BLK'D, 8d	3" O.C.	12" O.C.	(2) ROWS 16d @ 3" O.C.	A35 @ 6" O.C.	12" O.C.	2,4,5,6
H	7/16" O.S.B. OR 1/2" PLY. (2) FACES, BLK'D, 8d	2" O.C.	12" O.C.	(2) ROWS 16d @ 2 1/2" O.C.	LPTA @ 6" O.C. EA.SIDE	9" O.C.	1, 2, 4, 5
I	7/16" O.S.B. OR 1/2" PLY. BLK'D, 10d	3" O.C.	12" O.C.	16d @ 2 1/2" O.C.	A35 @ 8" O.C.	12" O.C.	2,5,6
K	1/2" GYP. UNBLKD, 8d COOLER OR #6-1 1/4" SCREW	7" O.C.	7" O.C.	16d @ 8" O.C.	16d TOENAIL @ 6" O.C.	48" O.C.	3
L	5/8" GYP. BLK'D, 8d COOLER OR #6-1 1/4" SCREW	7" O.C.	7" O.C.	16d @ 8" O.C.	16d TOENAIL @ 6" O.C.	48" O.C.	3
M	5/8" GYP. BLK'D, 8d COOLER OR #6-1 1/4" SCREW	4" O.C.	4" O.C.	16d @ 8" O.C.	16d TOENAIL @ 6" O.C.	48" O.C.	3
N	1/2" GYP. (2) SIDES, UNBLK'D, 8d COOLER OR #6-1 1/4" SCREW	7" O.C.	7" O.C.	16d @ 8" O.C.	16d TOENAIL @ 6" O.C.	48" O.C.	3
P	5/8" GYP. (2) SIDES, BLK'D, 8d COOLER OR #6-1 1/4" SCREW	7" O.C.	7" O.C.	16d @ 8" O.C.	A35 @ 32" O.C.	48" O.C.	3
Q	5/8" GYP. (2) SIDES, BLK'D, 8d COOLER OR #6-1 1/4" SCREW	4" O.C.	4" O.C.	16d @ 8" O.C.	A35 @ 16" O.C.	32" O.C.	3
PERF	SPECIFIED SHEARWALL CONSTRUCTION ALSO APPLIES ABOVE AND BELOW ALL OPENINGS BETWEEN THE FIRST AND LAST HATCHED WALL SEGMENTS						
F.T.	SPECIFIED SHEARWALL CONSTRUCTION APPLIES TO HATCHED WALL SEGMENT BESIDE OPENING, FOR THE FULL HEIGHT OF THE OPENING.						

GENERAL NOTES:

- SOLE PLATES ARE TO BE 2x MIN. THICKNESS.
- PANELS SHALL BE BACKED W/ 2x OR WIDER FRAMING.
- HOT DIPPED OR TUMBLED GALVANIZED NAILS ONLY.
- BOX NAILS MAY BE USED FOR PANELS, COMMON NAILS ONLY E. SEW-ERE

FRAMING SPECIFIC NOTES:

1. FRAMING AT ADJOINING PANEL EDGES SHALL BE 3X OR WIDER AND PANEL EDGE NAILING SHALL BE STAGGERED.
2. MAXIMUM STUD SPACING FOR SHEARWALL IS 16" O.C. OR 24" O.C. WITH LONG PANEL DIMENSION ACROSS STUDS
3. MAXIMUM STUD SPACING FOR SHEARWALL IS 16"O.C.
4. PANEL JOINTS ON OPPOSITE SIDES OF WALL SHALL BE OFFSET TO FALL ON DIFFERENT FRAMING MEMBERS OR FRAMING SHALL BE 3X OR WIDER AT ADJOINING PANEL EDGES AND PANEL EDGE NAILING SHALL BE STAGGERED
5. MIN. 229x3x3" STEEL PLATE WASHERS REQ'D @ EACH ANCHOR BOLT
6. FRAMING AT ADJOINING PANEL EDGES SHALL BE 3X OR WIDER AND PANEL EDGE NAILING SHALL BE STAGGERED UNLESS SDC IS NOTED AS A, B, OR C UNDER PROJECT DESIGN CRITERIA IN THE GENERAL NOTES

HOLD-DOWN SCHEDULE

MARK	HD ANCHOR	HD STUD	FASTENERS, NOTES
0	NOT REQ'D	N/A	N/A
1	HDU2 W/SSTB16 (5/8" ø)	(2)2X	(6) SDS 1/4X2-1/2 SCREWS
2	HDU4 W/SSTB16 (5/8" ø)	(2)2X	(10) SDS 1/4X2-1/2 SCREWS
3	HDU8 W/SSTB20 (5/8" ø)	(2)2X	(14) SDS 1/4X2-1/2 SCREWS
4	HDU8 W/SSTB24 (5/8" ø)	(3)2X	(14) SDS 1/4X2-1/2 SCREWS
5	HDU8 W/SSTB28 (7/8" ø)	(3)2X	(20) SDS 1/4X2-1/2 SCREWS
6	HDU8 W/SSTB28 (7/8" ø)	(3)2X	(20) SDS 1/4X2-1/2 SCREWS
7	HDU11 W/SSTB30 (1" ø)	6X OR (4) 2X	(30) SDS 1/4X2-1/2 SCREWS
8	HDU11 W/SSTB30 (1" ø)	6X OR (5) 2X	(30) SDS 1/4X2-1/2 SCREWS
9	HDU14 W/PABB (1" ø) OR ALT. PER NOTE 7	6X OR (4) 2X	(36) SDS 1/4X2-1/2 SCREWS-11-1/2" EMBED. W/17-1/2" COVER HORIZ. ALL SIDES
10	HD19 W/PABB (1-1/8" ø) OR ALT. PER NOTE 7	6X OR (4) 2X	(51) 1" A307 BOLTS 12-1/2" EMBED. W/19" COVER HOR.Z. ALL SIDES
11	MSTC28	(2)2X	(18) 16d SINKERS
12	MSTC40	(2)2X	(32) 16d SINKERS
13	MSTC52	(2)2X	(48) 16d SINKERS
14	MSTC66	(2)2X	(68) 16d SINKERS
CP_D	COUPLE HOLD-DOWNS ACROSS FLOOR, GRADE A36 THD'D ROD OF SAME ø LIEU OF ANCHOR		

NOTES:

1) HOLD-DOWN MARKS ON PLAN APPLY THE BASE OF FRAMED WALLS ON THAT PLAN, OR TO TOP OF CONC. U.N.O.
2) PANELS FROM INTERSECTING SHEAR WALLS SHALL BE EDGE NAILED TO ALL HOLD-DOWN MEMBERS TO SHARE CORNER HOLD-DOWNS. THE LARGER OF THE HOLD-DOWNS SPEC.IFIED SHALL BE USED U.N.O.
3) EDGE NAIL SHEATHING TO THE FOUNDATION MUD-SILL PLATE
4) HOLD-DOWNS OCCUR AT EACH END OF EACH SHEARWALL SEGMENT
5) HOLD-DOWN LOCATION AS SHOWN ON THE PLAN SUPERCEDES NOTE#4
6) PANEL EDGE NAILING SHALL BE EVENLY DISTRIBUTED AMONG MEMBERS IN HOLD-DOWN STUDS, WHICH SHALL BE LAMINATED TOGETHER WITH 12ø @6" O.C. U.N.O.
7) GRADE A36 THD'D ROD OF SAME ø MAY BE USED IN LIEU OF 9"A9". 3x8x2-1/2x2-1/2" PL WASHER SHALL BE INSTALLED AT THE BASE, NUTTED BOTH SIDES WITH A HEAVY HEX NUT AT THE BOTTOM SIDE

TABLES OF EQUIVALENT FASTENERS STAPLES, NAILS, AND T-NAILS (VALID FOR LATERAL LOAD ONLY)

COMMON NAIL SPACING		EQUIV. SPACING OF APPLIED FASTENER				
		STAPLES			NAILS	T-NAILS
	GAUGE	16	15	14	113	131
	PENETRATION	1"	1"	1"	1 1/4"	1 1/2"
6d @	4"	3 1/2"	4"	5"	4"	5"
	6"	5"	6"	7"	6"	7 1/2"
	8"	6 1/2"	8"	9 1/2"	8"	10"
	10"	8 1/2"	10"	12"	10"	12"
	12"	10"	12"	14 1/2"	12"	14 1/2"
8d @	4"	2 1/2"	3 1/2"	4"	3 1/2"	4"
	6"	4"	5"	6"	5"	6"
	8"	5 1/2"	6 1/2"	8"	6 1/2"	8"
	10"	6 1/2"	8"	10"	8"	10"
	12"	8"	10"	12"	9 1/2"	12"
10d @	4"	2"	2 1/2"	3"	2 1/2"	3 1/2"
	6"	3 1/2"	4"	5"	4"	5"
	8"	4 1/2"	5 1/2"	6 1/2"	5 1/2"	7"
	10"	5 1/2"	7"	8"	6 1/2"	8 1/2"
	12"	6 1/2"	8"	9 1/2"	8"	10"

NOTE: PENETRATION IS THE DEPTH OF EMBEDMENT OF THE STAPLE OR NAIL INTO THE MAIN MEMBER REQUIRED TO ATTAIN ITS FULL CAPACITY (SHEAR VALUE) FOR LATERAL LOADING

REBAR LAP SCHEDULE

BAR#	CONCRETE			MASONRY
	3000 PSI	4000 PSI	5000 PSI	
#3	25"	21"	19"	15"
#4	33"	28"	25"	24"
#5	41"	36"	32"	30"
#6	49"	43"	38"	36"
#7	58"	50"	45"	42"
#8	66"	57"	51"	48"
#9	74"	64"	57"	54"
#10	82"	71"	64"	60"
#11	90"	78"	70"	66"

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RICHARD JAMES ALLEN — STATE OF WASHINGTON — 20013331 — REGISTERED PROFESSIONAL ENGINEER
07/17/2024
ENGINEER OF RECORD

PARCEL ID # 820734

JASON ALLEN ADDITION
320 MORNING DOVE LN, CLE ELUM, WA

ARCH D (24x36)

DATE:	PURPOSE:
05/08/24	V1 REVIEW
05/13/24	V2 REVIEW
06/17/24	TO ENGR'G
07/10/24	MARKUPS

GENERAL NOTES

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JOB # 24044

S3

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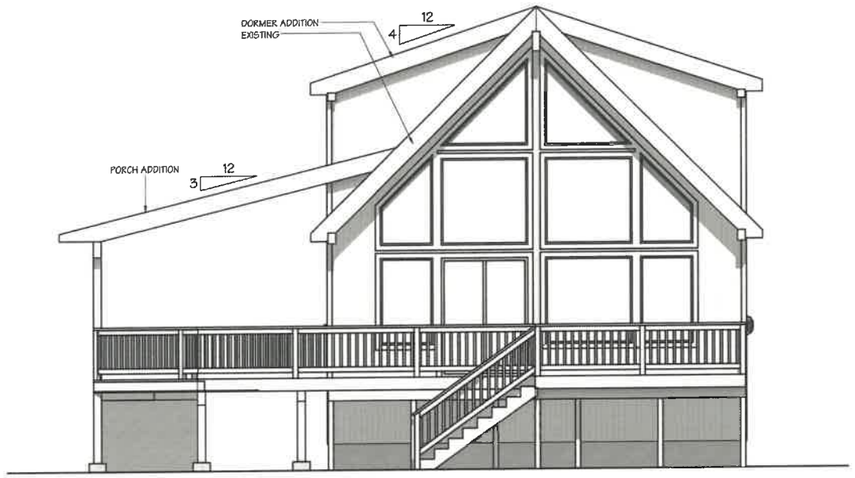
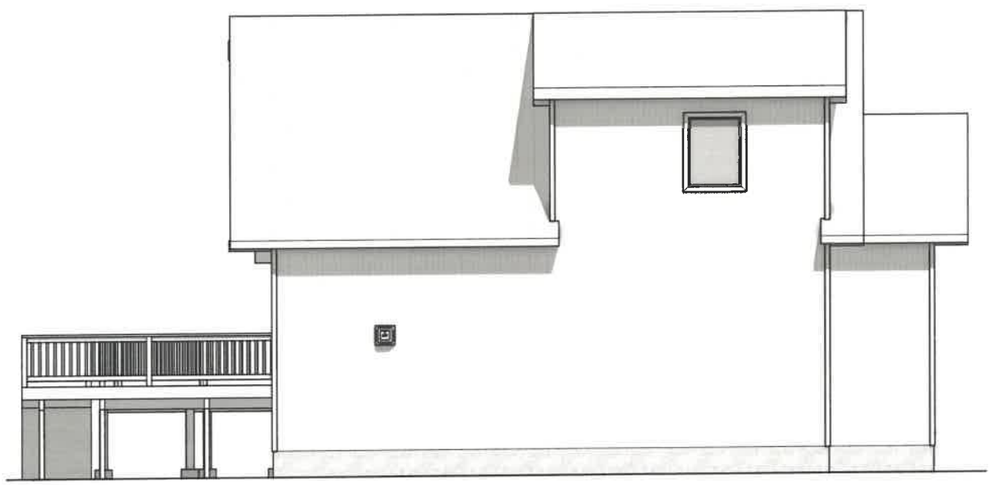
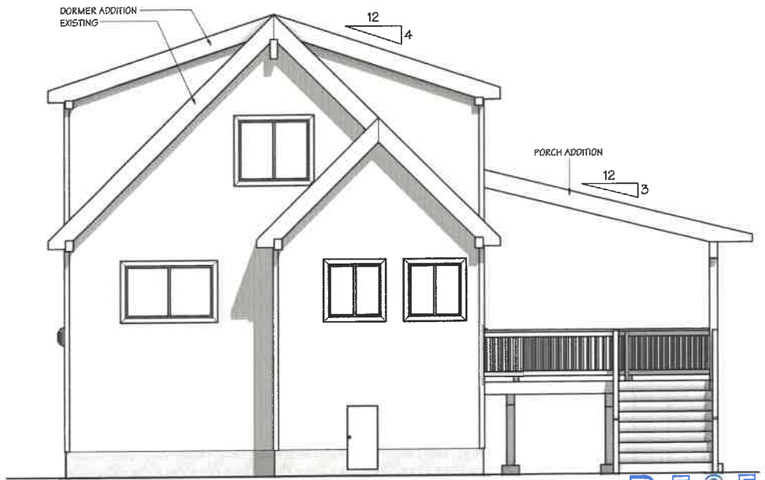


EAST ELEVATION 1/4"= 1'

SOUTH ELEVATION 1/4"= 1'



NORTH ELEVATION 1/4"= 1'



WEST ELEVATION 1/4"= 1'

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ADDITION
320 MORNING DOVE LN, CLE ELUM, WA

ARCH D (24x36)

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ELEVATIONS

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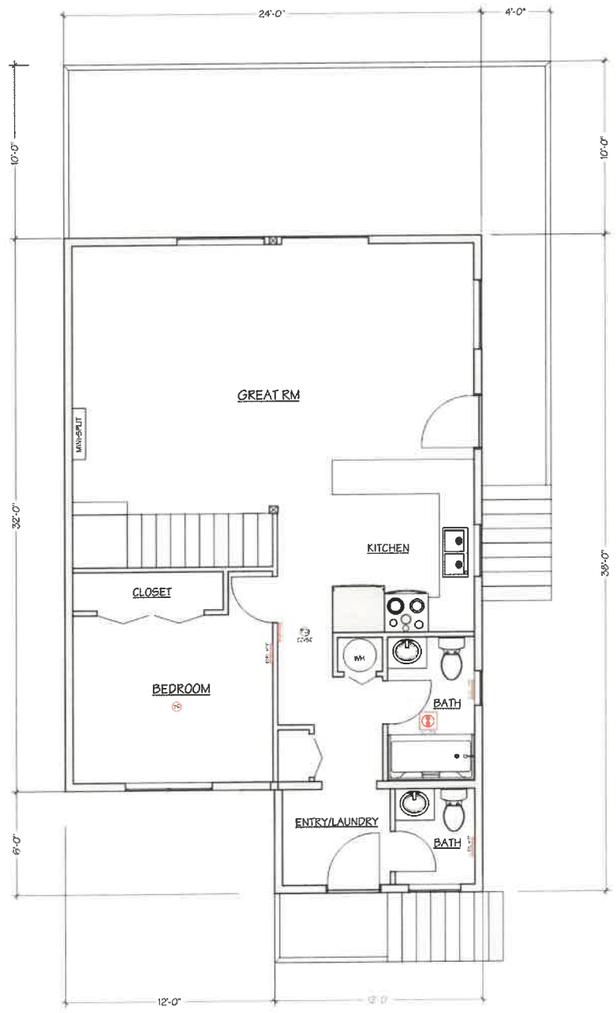
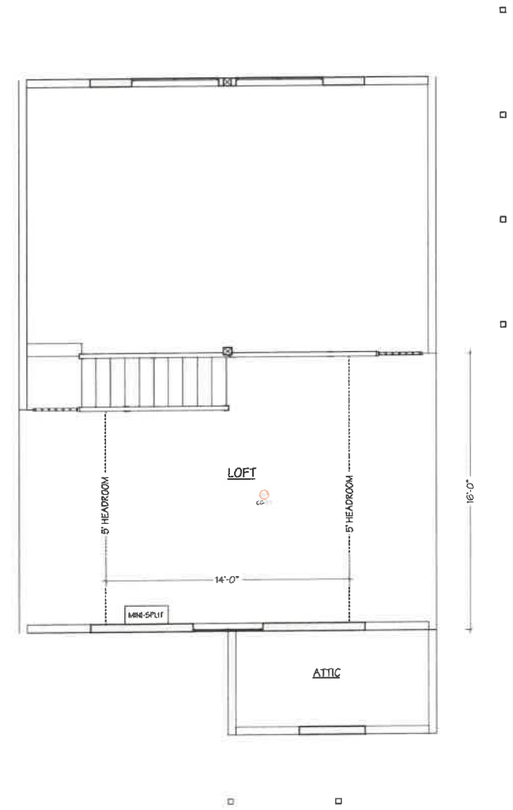
JOB # 24044

A4



MAIN FLOOR PLAN 1/4"= 1'

EXISTING 840 SQ. FT.



SECOND FLOOR PLAN 1/4"= 1'

EXISTING 203 SQ. FT.

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ADDITION
320 MORNING DOVE LN, CLE ELUM, WA

ARCH D (24x36)

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07/10/24	MARKUP'S

EXISTING
FLOOR PLANS

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JOB # 24044

A5

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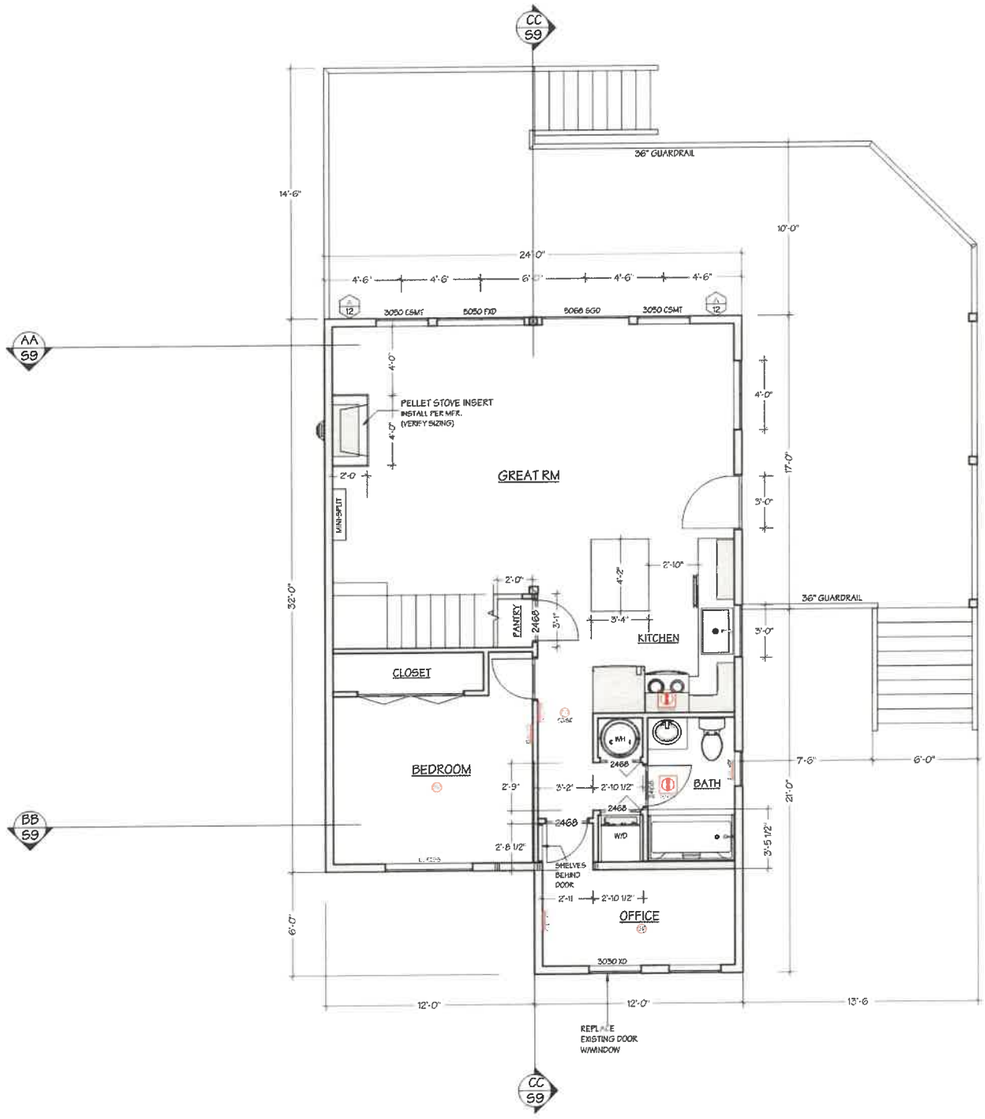


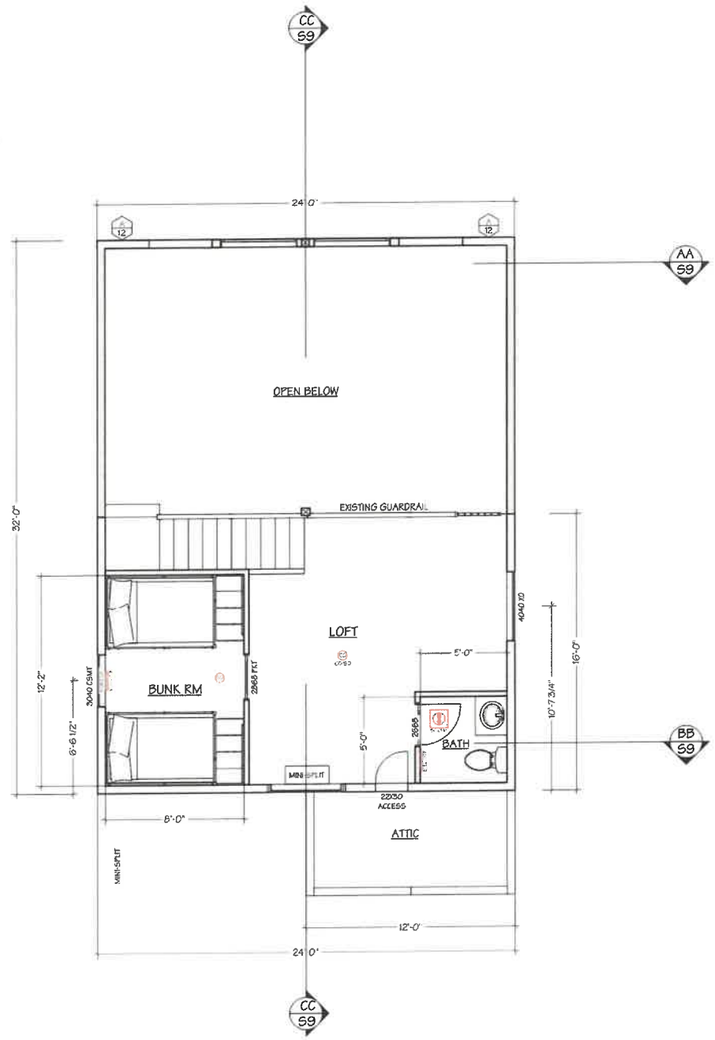
MAIN FLOOR PLAN 1/4"= 1'

PROPOSED 840 SQ. FT.

N

AA/0 =TYP. EXT. SHEARWALL U.N.O.

=NAILING PER SHEARWALL SCHEDULE (SEE S3)



SECOND FLOOR PLAN 1/4"= 1'

PROPOSED 348 SQ. FT.

NET: 145 SQ. FT. ADDITION

N

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RICHARD JAMES ALLEN
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JASON ALLEN
ADDITION
320 MORNING DOVE LN, CLE ELUM, WA

ARCH D (24x36)

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07/10/24	MARKUPS

PROPOSED FLOOR PLANS

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JOB # 24044

S6

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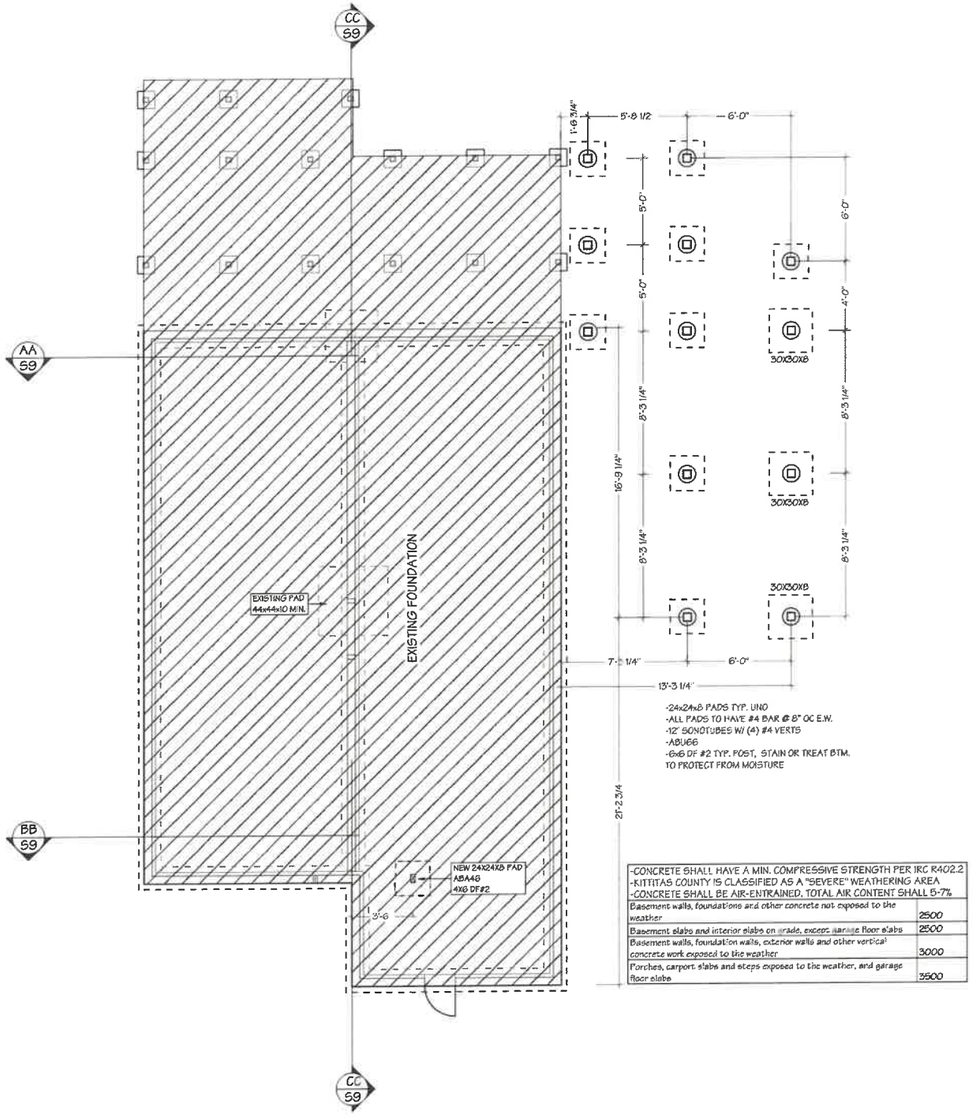
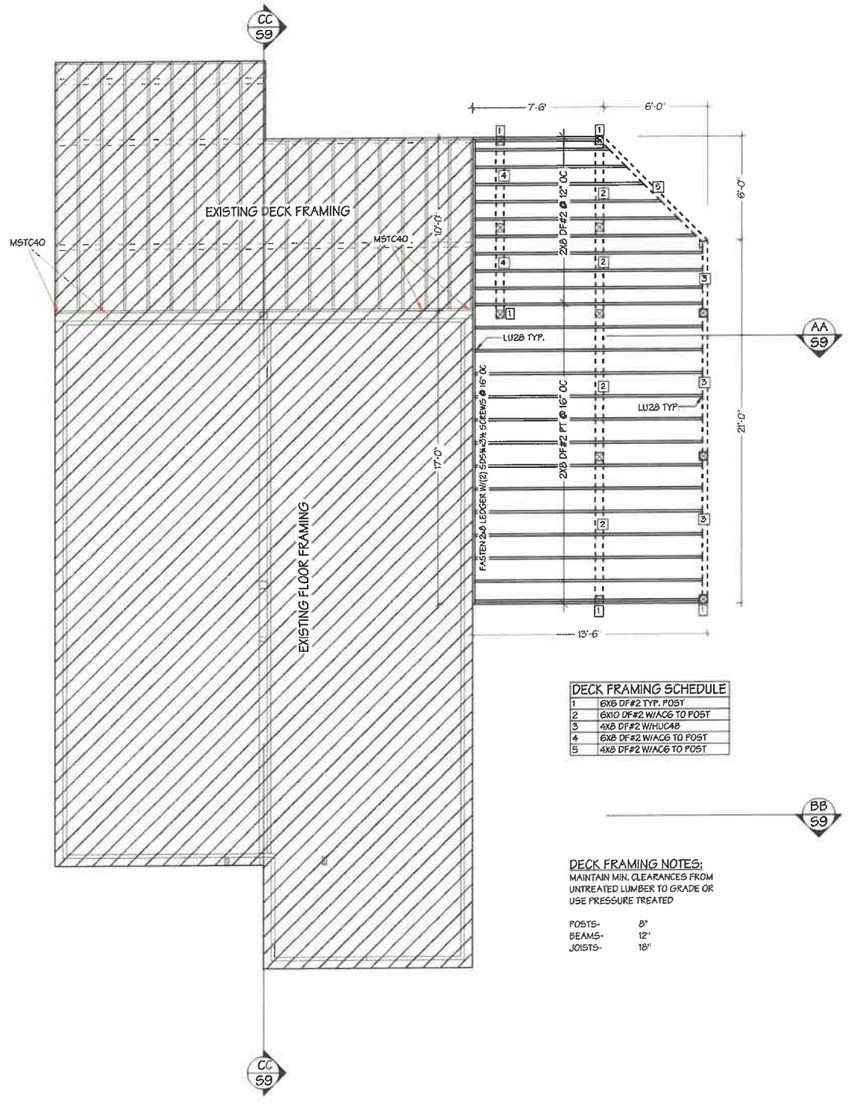


-CONCRETE SHALL HAVE A MIN. COMPRESSIVE STRENGTH PER IRC R402.2 -KITTITAS COUNTY IS CLASSIFIED AS A "SEVERE" WEATHERING AREA -CONCRETE SHALL BE AIR-ENTRAINED. TOTAL AIR CONTENT SHALL 5-7%	
Basement walls, foundations and other concrete not exposed to the weather	2500
Basement slabs and interior slabs on grade, except garage floor slabs	2500
Basement walls, foundation walls, exterior walls and other vertical concrete work exposed to the weather	3000
Porches, carport slabs and steps exposed to the weather, and garage floor slabs	3500

FOUNDATION PLAN 1/4"= 1'



DECK FRAMING SCHEDULE	
1	6X6 DF#2 TYP. POST
2	6X10 DF#2 W/ACG TO POST
3	4XB DF#2 W/HUC48
4	6XB DF#2 W/ACG TO POST
5	4XB DF#2 W/ACG TO POST

DECK FRAMING NOTES:
MAINTAIN MIN. CLEARANCES FROM UNTREATED LUMBER TO GRADE OR USE PRESSURE TREATED

POSTS- 8"
BEAMS- 12"
JOISTS- 18"

DECK FRAMING PLAN 1/4"= 1'

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RICHARD JAMES ALLEN STATE OF WASHINGTON 19311 REGISTERED PROFESSIONAL ENGINEER
07/17/2024

ENGINEER OF RECORD
PARCEL ID # 820734

JASON ALLEN
ADDITION
320 MORNING DOVE LN, CLE ELUM, WA

ARCH D (24x36)

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FOUNDATION/ DECK FRAMING

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JOB # 24044

S7

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GENERAL FRAMING NOTES

-DOUBLE TRIMMERS ON OPENINGS OF 5' OR GREATER
-TYP POST IS 6x6 DF#2 UNO
-TRANSFER ALL FT. LDS FROM POSTS OR DBL. TRIMMERS DOWN TO THE FOUNDATION W/SOLID SQUASH BLKG OR POSTS AS NEC.
-SIMPSON CC TYP @ POST TO BEAM CONNECTIONS (EXCEPT IN WALL), USE ECCL/LR WHERE NEC.
-ALL GLULAM BEAMS GRADE 24F-V4 UNO
-ALL GLULAM POSTS GRADE 21F-V3 UNO
-H2.5s @ 24" OC TYP. @ EAVES, RAFTER TO BEAM

VENTILATION NOTES

V1 (3) 2" DEPTH V-NOTCHES PER BLOCK, SCREENED

V2 2X BLOCKING HELD DOWN 1", HOLD BACK ROOF SHEATHING 1" EA. SIDE & SCREEN

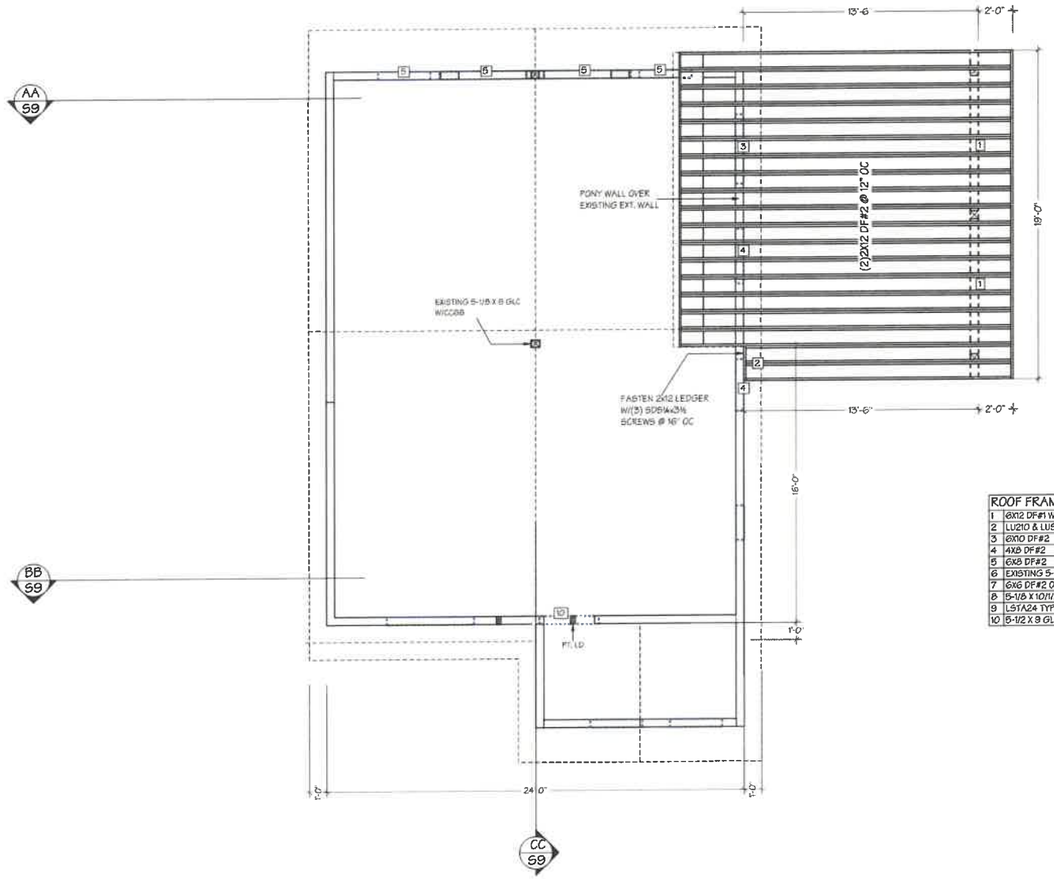
MIN. ROOF VENTILATION

1 sq ft per 150 sq ft area

exceptions: 1/300 rate shall be permitted, provided that at least 50% but not more than 80% of the ventilation is provided by vent openings located in the upper portion of the roof or attic space, at least 3 feet above the eave or cornice vents

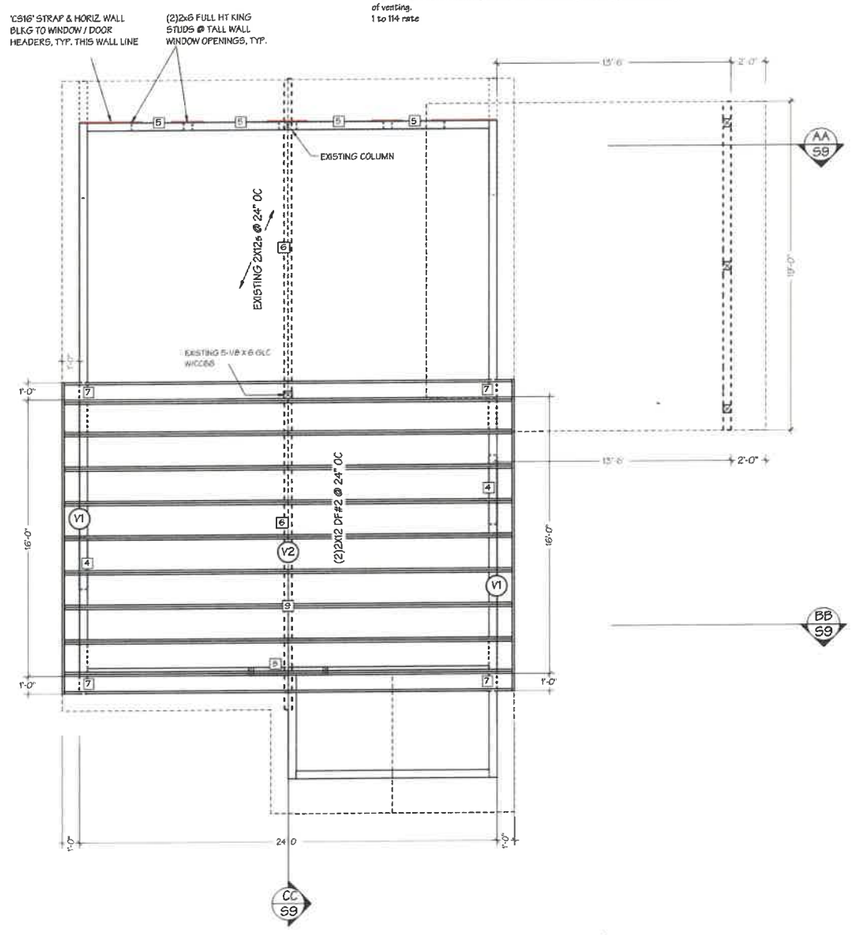
1/300 rate shall be permitted where a vapor retarder having a transmission rate not exceeding 1 perm is installed on the warm-in-winter-side of the ceiling. Roof/ceiling assemblies where the ventilation space above the insulation is less than an average of 12 inches shall be provided with a vapor barrier.

582 sq ft below roof heated area X 144 sq in/300 = 279 sq in required.
32 lineal feet of eave venting and 16 lineal feet of ridge venting provide 485 sq in of venting.
1 to 114 rate



ROOF FRAMING SCHEDULE	
1	6X12 DF#1 W/CC66
2	LU210 & LUS210-2
3	6X10 DF#2
4	4X8 DF#2
5	6X8 DF#2
6	EXISTING 5-1/8 X 13-1/2 GLB
7	6X6 DF#2 OUTRIGGERS W/DBL. BACKSPAN
8	5-1/8 X 10 1/2 GLB W/(2) TRIMMER STUDS
9	LSTA24 TYP. @ RAFTER PEAKS
10	5-1/2 X 8 GLB W/(2) TRIMMER STUDS

LOWER ROOF FRAMING PLAN 1/4"= 1'



UPPER ROOF FRAMING PLAN 1/4"= 1'

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JASON ALLEN ADDITION
320 MORNING DOVE LN, CLE ELUM, WA

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ROOF FRAMING

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S8

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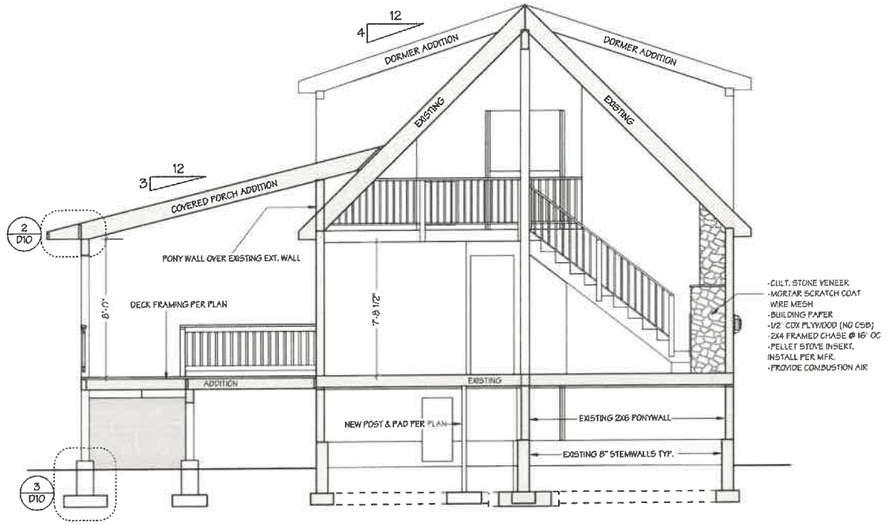
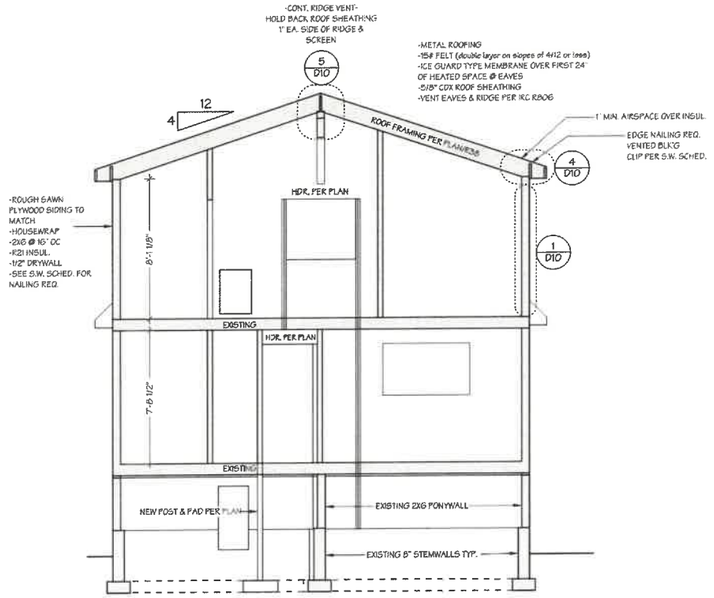
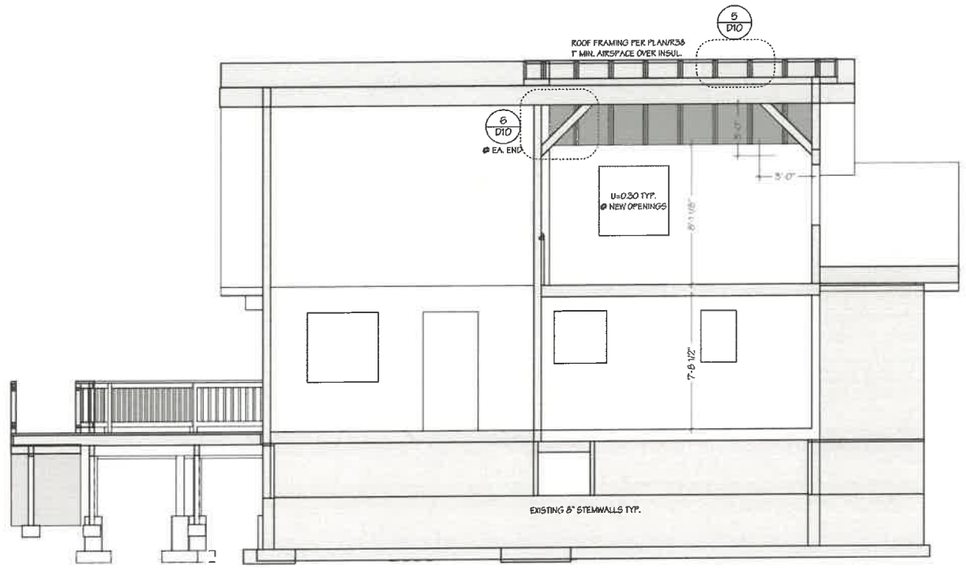


SECTION AA 1/4" = 1'



SECTION BB 1/4" = 1'



SECTION CC 1/4" = 1'

JASON ALLEN

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07/17/2024

ENGINEER OF RECORD

PARCEL ID #
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BUILDING SECTIONS

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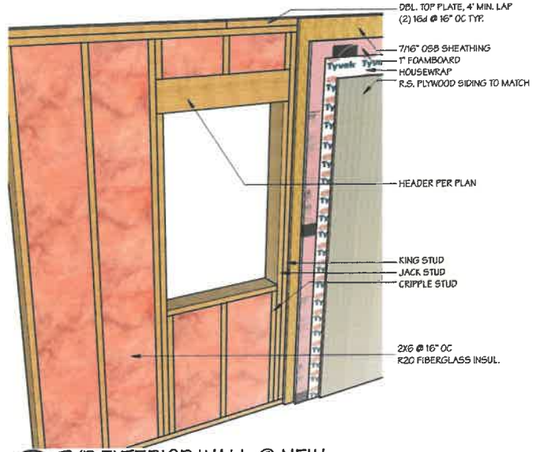
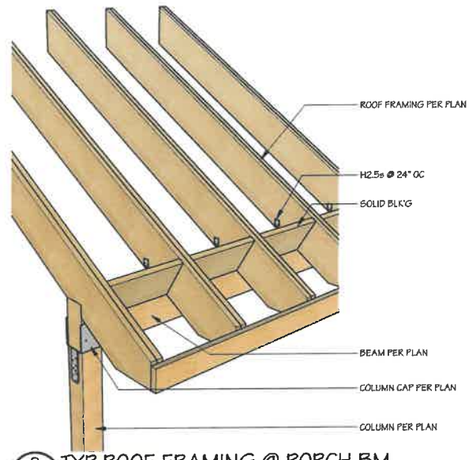
JOB # 24044

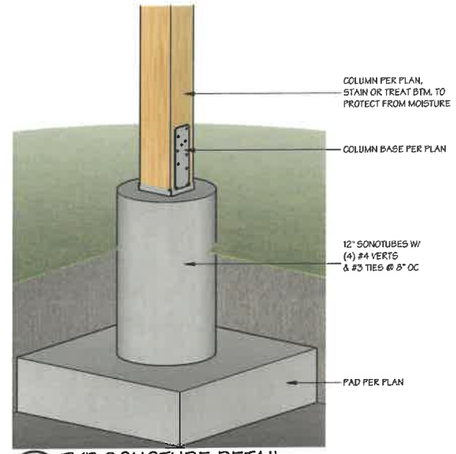
S9



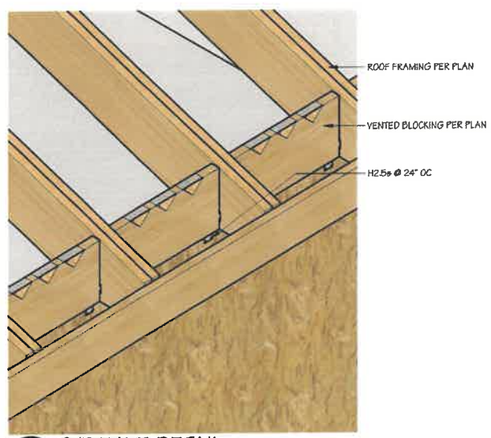
1 D10 TYP. EXTERIOR WALL @ NEW
NOT TO SCALE



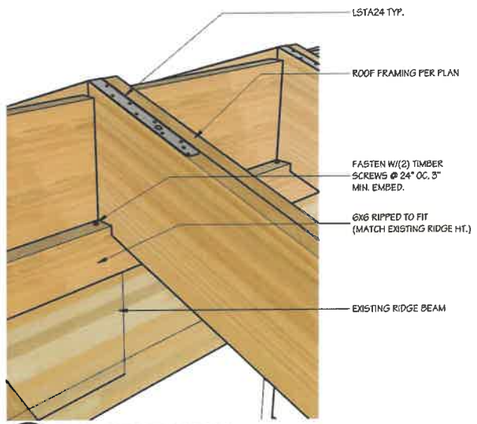
2 D10 TYP. ROOF FRAMING @ PORCH BM.
NOT TO SCALE



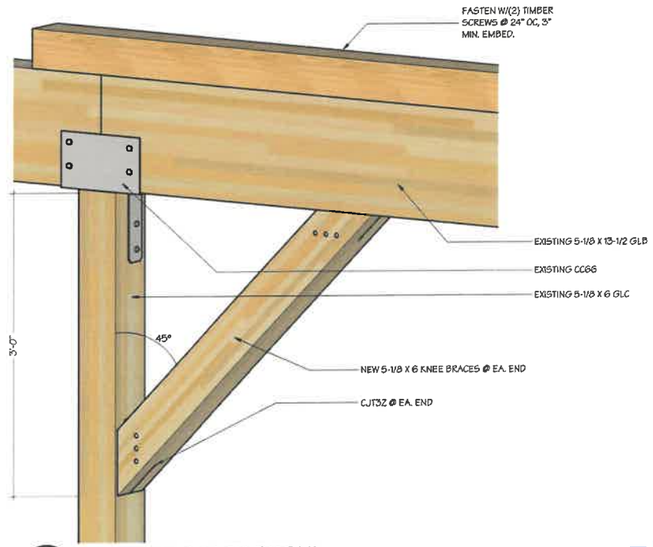
3 D10 TYP. SONOTUBE DETAIL
NOT TO SCALE



4 D10 TYP. EAVE DETAIL
NOT TO SCALE



5 D10 TYP. RIDGE DETAIL
NOT TO SCALE



6 D10 TYP. KNEE BRACE DETAIL
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07/17/2024

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DETAILS

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