

PROJECT OWNER:
 BARRETT + KRISTIN LAVERGNE
 4139 - 97TH AVE SE
 MERCER ISLAND, WA 98040

PROPERTY ADDRESS:
 SAME AS ABOVE

PROPERTY TAX ACCOUNT NO.:
 545600-0065

LEGAL DESCRIPTION:
 MERCER WOOD ADD
 PLAT BLOCK: H PLAT LOT: 13

LOT SIZE:
 8,939 SQ FT

ZONING:
 R-8.4

PROJECT TEAM:

DESIGN DRAWINGS:
 SHELLY JOHNSON
 4907 E MERCER WAY
 MERCER ISLAND, WA 98040
 TEL: 206.465.7221

GENERAL CONTRACTOR:
 ORION HOME RENOVATIONS
 28040 100TH AVE SE
 ALBURN, WA 98002
 # LIC NO. #0R01NR762P4
 TEL: 206.650.6052

STRUCTURAL ENGINEER:
 BRETT MOZDEN
 55F STRUCTURAL ENGINEERING
 2124 THIRD AVE, STE 100
 SEATTLE, WA 98121
 TEL: 206.443.6212

PROJECT DESCRIPTION:
 1,499 SQ FT. SECOND FLOOR ADDITION TO EXISTING 1-STORY SINGLE FAMILY HOME WITH ATTACHED GARAGE. ADDITION TO INCLUDE PRIMARY BEDROOM, BATH AND CLOSET, TWO ADDITIONAL BEDROOMS, FULL BATH AND PLAY ROOM. INTERIOR REMODEL AT EXISTING FIRST FLOOR TO INCLUDE NEW STAIR, RENOVATIONS TO 2 EXISTING BEDROOMS, 2 EXISTING BATHROOMS AND LAUNDRY ROOM.

REQUIRED SETBACKS:
 FRONT YARD: 20'-0"
 REAR YARD: 25'-0"
 SIDE YARDS:
 FOR IRREGULARLY SHAPED LOTS, THE LOT WIDTH CIRCLE METHOD IS USED TO DETERMINE LOT WIDTH. SEE DIAGRAM ON SHEET A1 FOR LOT WIDTH CIRCLE METHOD.
 LOT WIDTH = 88'-9" WHICH IS < 90'
 FOR LOTS LESS THAN 90' IN WIDTH THE SUM OF THE SIDE YARDS WIDTH SHALL BE NO LESS THAN 15' WITH NEITHER BEING LESS THAN 5'

GROSS FLOOR AREA

	EXISTING FLOOR AREA	PROPOSED ADDITIONS
MAIN FLOOR	1,483	0
GARAGE	435	0
NEW 2ND FLOOR	0	1,499
TOTAL	1,886	1,499
1,886 + 1,499 = 3,385 SQ.FT. OK		

LOT SLOPE CALCULATIONS:
 HIGH POINT 223.4' (SE PROPERTY CORNER)
 LOW POINT 211.5' (NW PROPERTY CORNER)
 DISTANCE BETWEEN HIGH AND LOW POINTS = 135.9'
 (223.4-211.5)/135.9 = 0.08 OK(8.7% LOT SLOPE)

LOT COVERAGE

ALLOWABLE COVERAGE (BUILDING + DRIVING SURFACES) = 40% LOT = 8,939 SQ.FT. X .40 = 3,576 SQ.FT.

PROPOSED BUILDING FOOTPRINT (TO EDGE OF EAVES): 2,128 SQ.FT.
 MAIN STRUCTURE ROOF AREA = 2,004 SQ.FT.
 FRONT PORCH = 124 SQ.FT.
 TOTAL HOUSE = 2,128 SQ.FT.
 EX. DRIVEWAY = 411 SQ.FT.
 TOTAL PROPOSED LOT COVERAGE = 2,539 SQ.FT. - OK

ALLOWABLE HARDSCAPE COVERAGE = 9% LOT SIZE = 8,939 SQ.FT. X .09 = 805 SQ.FT.
 EXIST. UNCOVERED PATIO = 567 SQ.FT.
 EXIST. WALKWAYS = 205 SQ.FT.
 TOTAL EXISTING HARDSCAPE = 772 SQ.FT.
 NEW HARDSCAPE @ FRONT PORCH NOT UNDER ENTRY ROOF = 4.7 SQ.FT.
 TOTAL FINAL HARDSCAPE = 772 + 4.7 = 776.7 SQ.FT. OK

ENERGY CODE COMPLIANCE - 2021 WA STATE ENERGY CODE

SMALL DWELLING UNIT - ADDITIONS GREATER THAN 500 SQ.FT. AND LESS THAN 1,500 HEATED SQ.FT. REQUIRE 5.0 CREDITS

2.0 CREDITS - 5 FOR HEATING SYSTEMS BASED ON ELECTRIC RESISTANCE WITH: 1. INVERTER-DRIVEN DUCTLESS MINI-SPLIT HEAT PUMP SYSTEM INSTALLED IN THE LARGEST ZONE IN THE DWELLING.
 1.0 CREDITS - 1.2 EFFICIENT BUILDING ENVELOPE
 2.0 CREDITS - 2.3 AIR LEAKAGE CONTROL AND EFFICIENT VENTILATION
 1.5 CREDITS - 3.5 HIGH EFFICIENCY HVAC

HEIGHT LIMIT
 30'-0" - SEE SHEET A1 FOR AVERAGE GRADE DIAGRAM + CALCS. SEE SHEET A4 FOR EXTERIOR ELEVATIONS.

ROOF VENTING

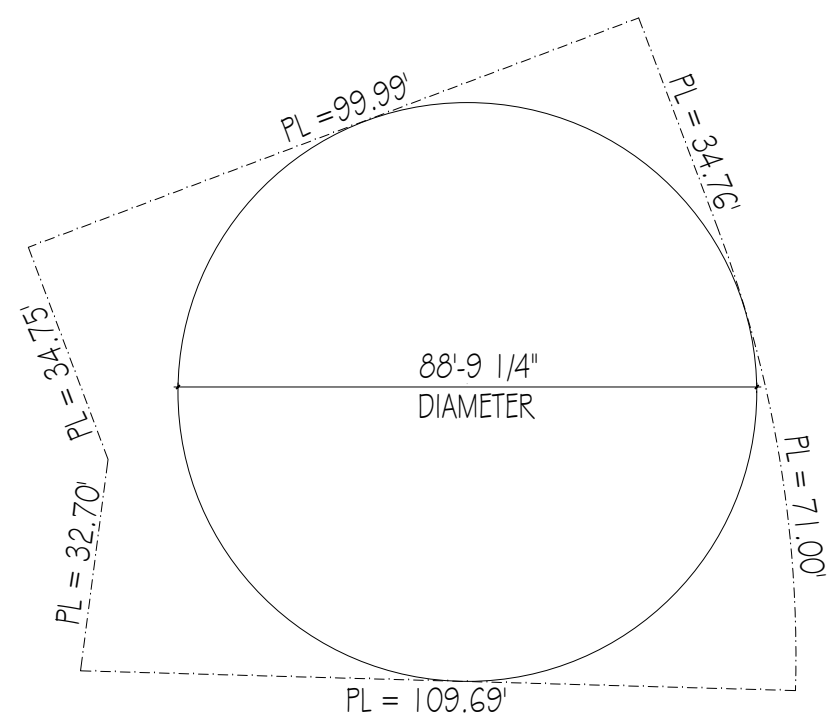
NEW SECOND FLOOR ROOF AREA TO BE VENTED W/CONTINUOUS RIDGE VENT + EAVE VENTS
 ROOF AREA = 1,460 SQ.FT / 50 = 9.7 SF = 1,401 SQ.IN. N.F.A. REQ.
 RIDGE VENT PROVIDES 1.6 SQ.IN/F' N.F.A. FOR 51.75'
 EAVE VENT PROVIDES 1.2 SQ.IN/F' N.F.A. FOR 68.5'
 (1.651.75) + (1.268.5) = 931.5 SQ.IN. + 1,062 SQ.IN. = 1,993.5 SQ.IN. = OK

FIRE CODE COMPLIANCE

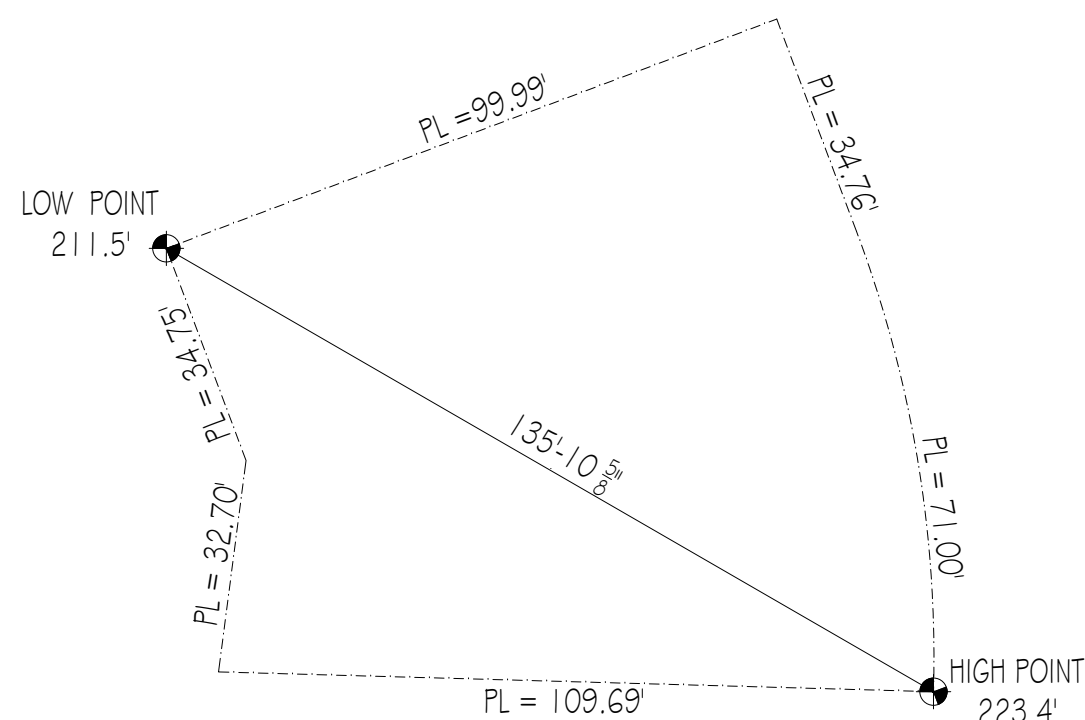
NFPA 13D FIRE SPRINKLER SYSTEM IN COMPLIANCE WITH NFPA 13D AND C&M STANDARDS SHALL BE INSTALLED THROUGHOUT THE RESIDENCE. A SEPARATE FIRE PERMIT IS REQUIRED.

DRAWING INDEX

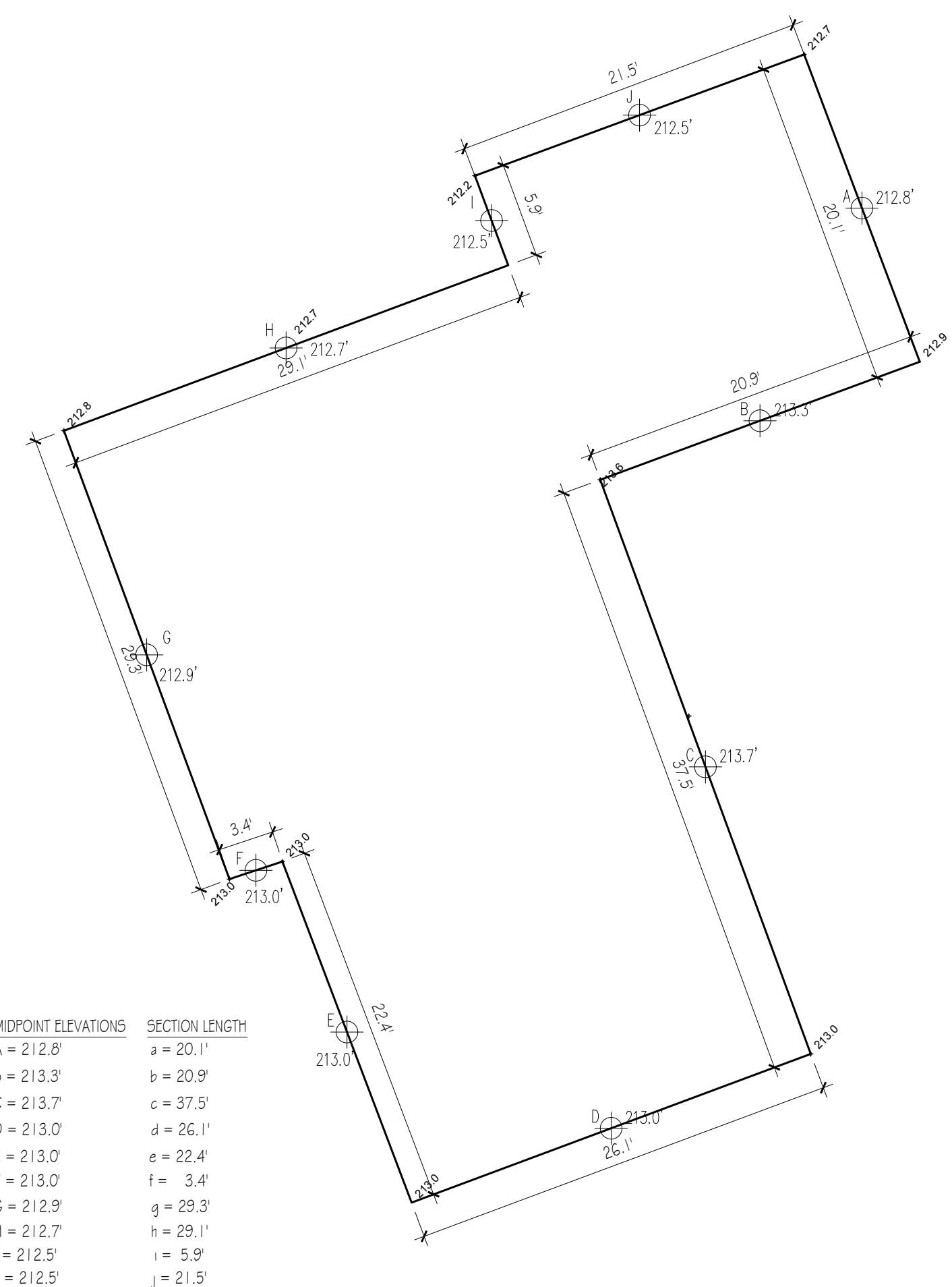
	TOPOGRAPHICAL SURVEY
A1	PROJECT INFORMATION, SITE PLAN, AVERAGE GRADE CALCS
A2	FIRST FLOOR DEMO PLAN, FIRST FLOOR PROPOSED PLAN
A3	SECOND FLOOR PLAN, ROOF PLAN
A4	ELEVATIONS, WINDOW SCHEDULE
A5	BUILDING SECTIONS
51.1	STRUCTURAL NOTES
52.1	FOUNDATION PLAN
52.2	FIRST FLOOR FRAMING PLAN
52.3	SECOND FLOOR FRAMING PLAN
52.4	ROOF FRAMING PLAN
53.1	FOUNDATION DETAILS
54.1	TYPICAL WOOD FRAMING DETAILS
54.2	WOOD FRAMING DETAILS
54.3	WOOD FRAMING DETAILS



Lot Width Circle Diagram
 no scale

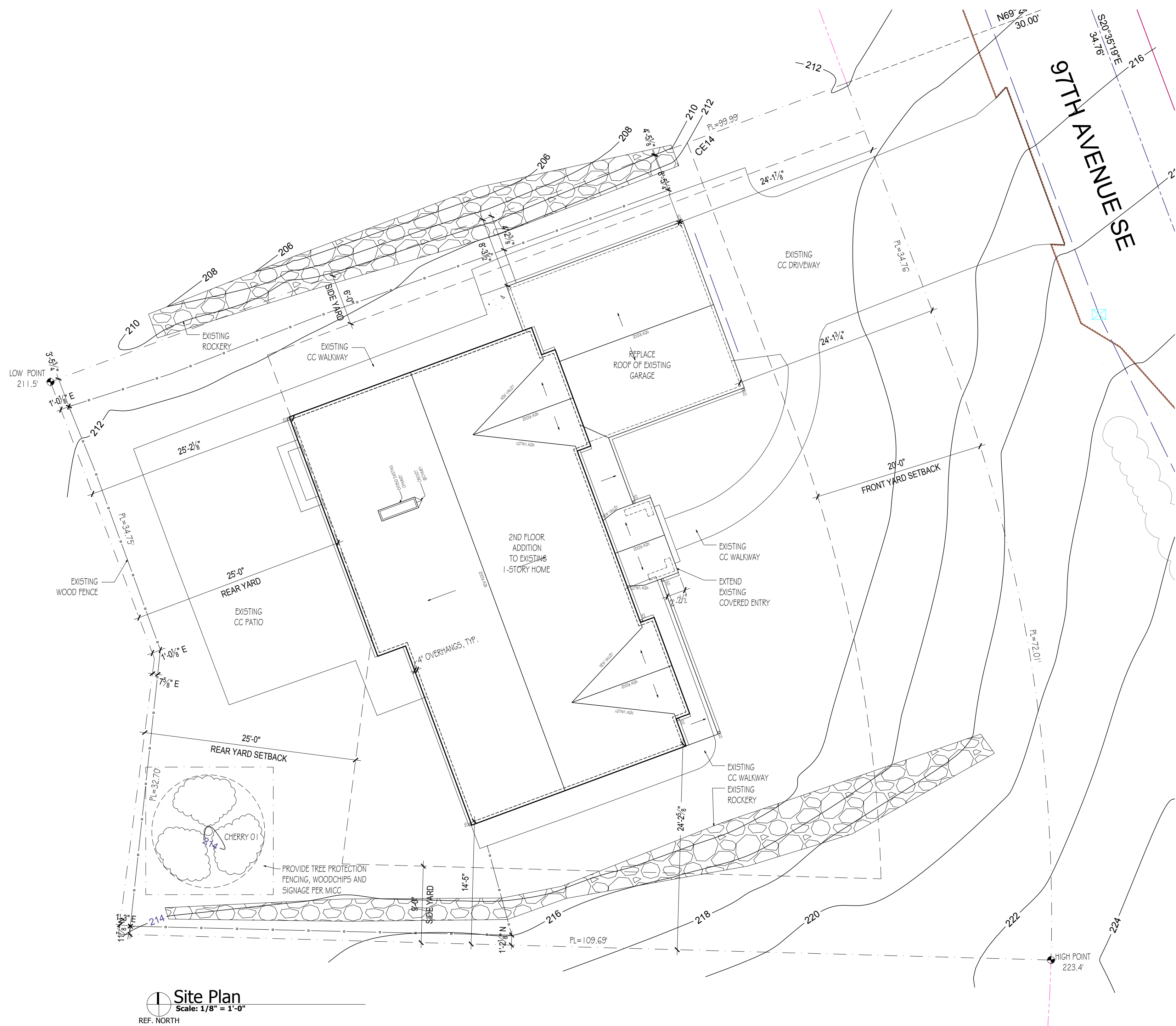


Lot Slope Diagram
 no scale



$(Ax) + (By) + (Cz) + (Dd) + \dots + (Jj)$
 $a+b+c+d+\dots+j$
 $(4277)+(4458)+(8014)+(5589)+(4771)+(724)+(6238)+(6190)+(1254)+(4569)$
 $201+20.9+37.5+26.1+22.4+3.4+29.3+29.1+5.9+21.5$

Average Grade Diagram & Calcs
 no scale



Site Plan
 Scale: 1/8" = 1'-0"
 REF. NORTH

TREE PROTECTION AREA (TPZ) KEEP OUT!

DO NOT REMOVE OR ADJUST THE APPROVED LOCATION OF THIS TREE PROTECTION AREA

Trees enclosed by this fence are protected and are subject to the conditions of the tree permit. Violation of tree conditions may lead to:

- Correction Notices or Stop Work Orders until compliance is achieved
- RE Inspection Fees/financial penalties
- Arborist reports recommending mitigation

Notes:

- No pruning shall be performed unless under the direction of the Project Arborist. Including limbing trees up.
- No grading, excavation, storage (materials, equipment, vehicles, etc.), or other unpermitted activity shall occur inside the protective fencing.
- Penalties for damaging by root damage/compaction or removing a saved tree may be a fine up to three times the value of the tree plus restoration (MICC 19.10.160).
- Any work in approved TPZ must be with the permission of the Land Use and Planning Division at landuse.planning@mercergov.org
- 5" course woodchips within the tree protection zone, but not against the tree trunk.

Tree protection fence: 4'-6" chain link fence, solidly anchored into the ground, or if authorized High-density polyethylene fencing with 3.5" x 1.5" openings; color orange. Steel posts installed at 8' o.c.


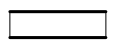
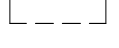




2" x 6" steel posts or approved equal

Maintain existing grade with the tree protection fence unless otherwise indication on the plans

Any Work in the protected area must be with the permission of the Land Use and Planning Division at landuse.planning@mercergov.org

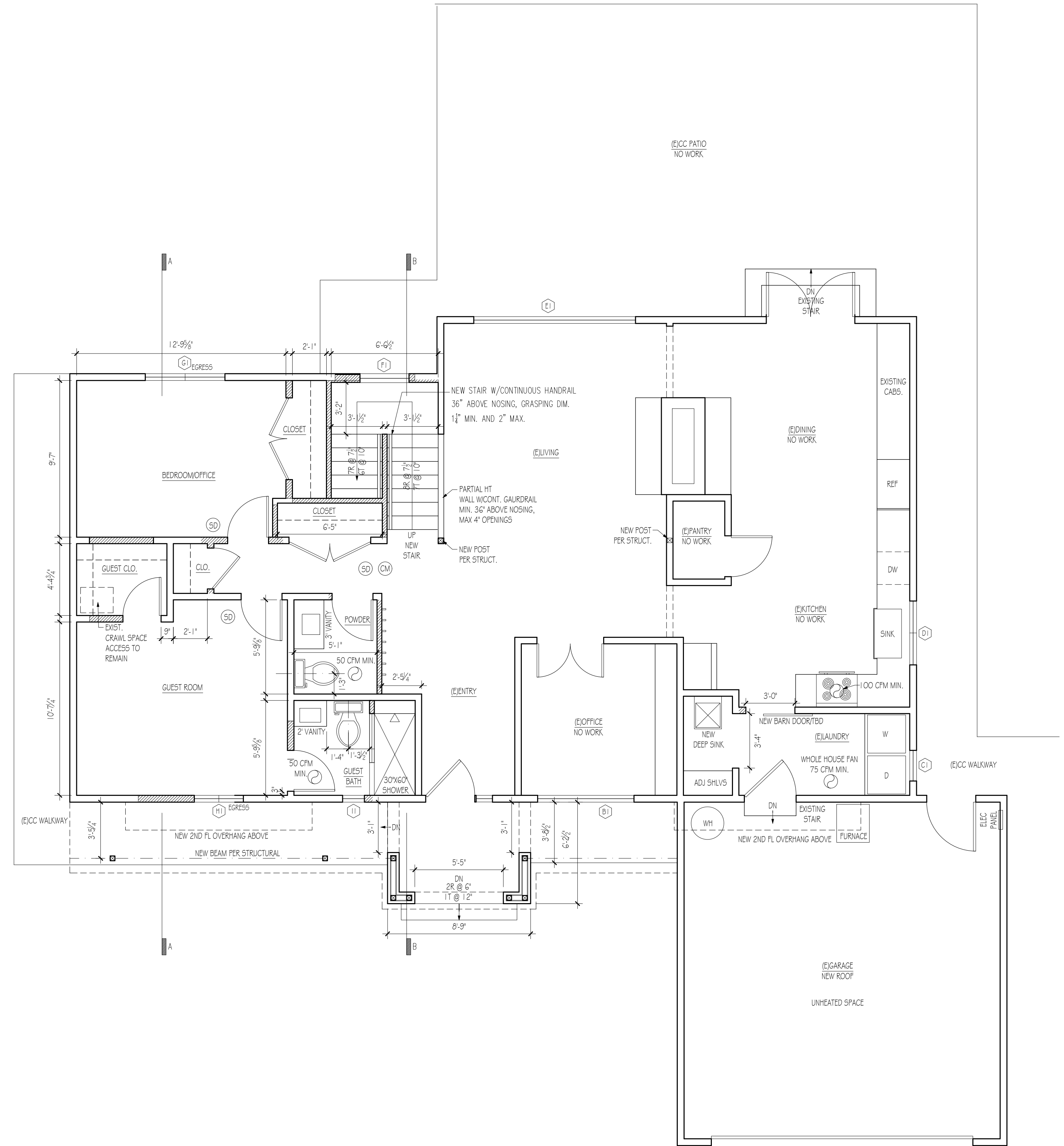
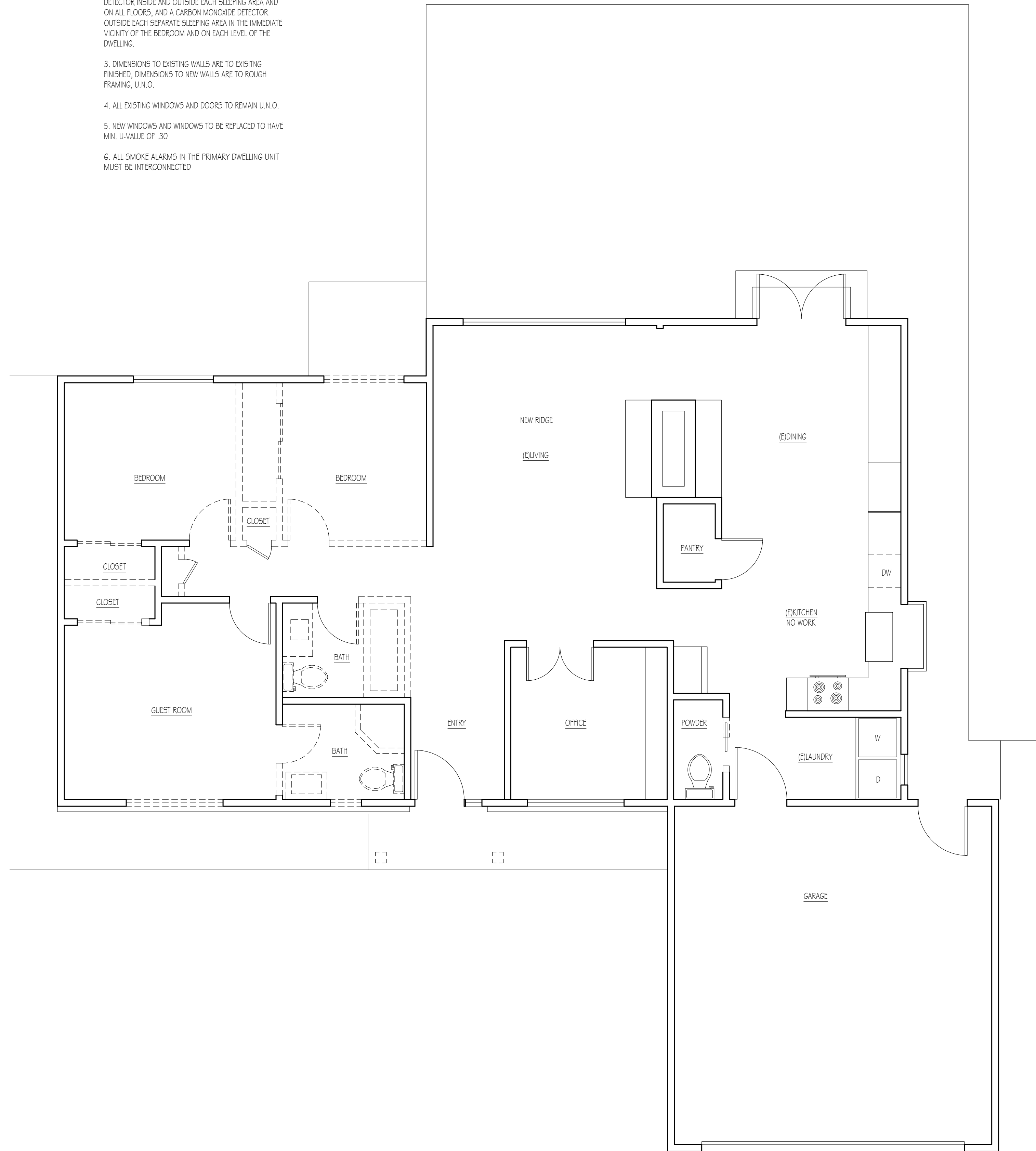
Tree Protection Guidelines and Signage Requirements

PLAN KEY:

-  NEW WALL
-  EXISTING WALL TO REMAIN
-  TO BE DEMOLISHED
-  OVERHEAD
-  SMOKE DETECTOR
-  CARBON MONOXIDE DETECTOR
-  EXHAUST FAN


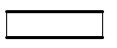
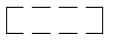
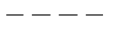



PLAN NOTES:

1. INSULATE ALL EXISTING 2x4 EXTERIOR WALLS OPENED DURING CONSTRUCTION TO BE INSULATED TO A MINIMUM OF R-15. NEW WALLS TO BE INSULATED TO A MINIMUM OF R-20 CAVITY+R-5 CONTINUOUS INSULATION.
2. CONTRACTOR TO VERIFY THAT THERE IS A SMOKE DETECTOR INSIDE AND OUTSIDE EACH SLEEPING AREA AND ON ALL FLOORS, AND A CARBON MONOXIDE DETECTOR OUTSIDE EACH SEPARATE SLEEPING AREA IN THE IMMEDIATE VICINITY OF THE BEDROOM AND ON EACH LEVEL OF THE DWELLING.
3. DIMENSIONS TO EXISTING WALLS ARE TO EXISTING FINISHED. DIMENSIONS TO NEW WALLS ARE TO ROUGH FRAMING, U.N.O.
4. ALL EXISTING WINDOWS AND DOORS TO REMAIN U.N.O.
5. NEW WINDOWS AND WINDOWS TO BE REPLACED TO HAVE MIN. U-VALUE OF .30
6. ALL SMOKE ALARMS IN THE PRIMARY DWELLING UNIT MUST BE INTERCONNECTED

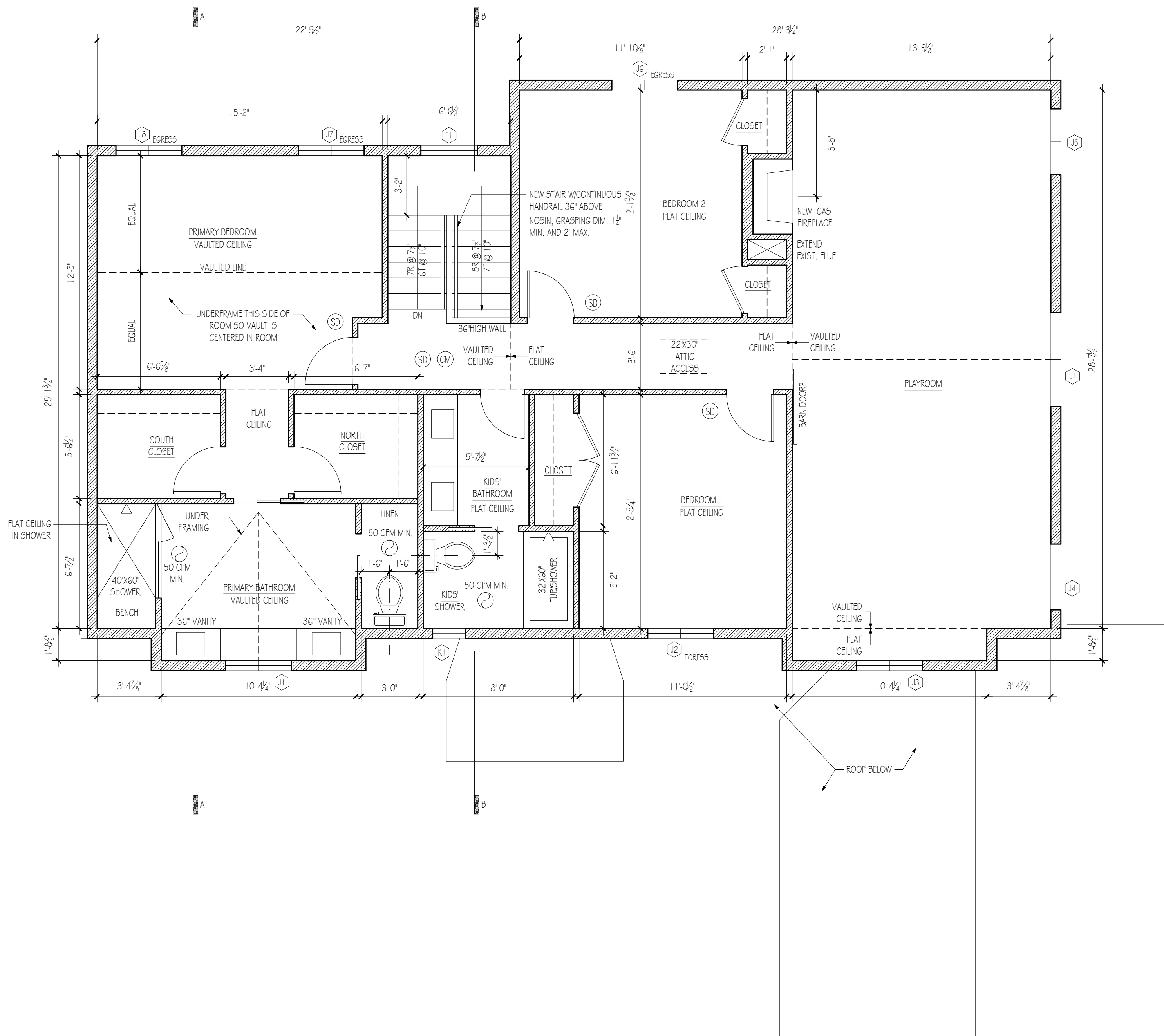


First Floor Demo Plan
Scale: 1/4" = 1'-0"
REF. NORTH

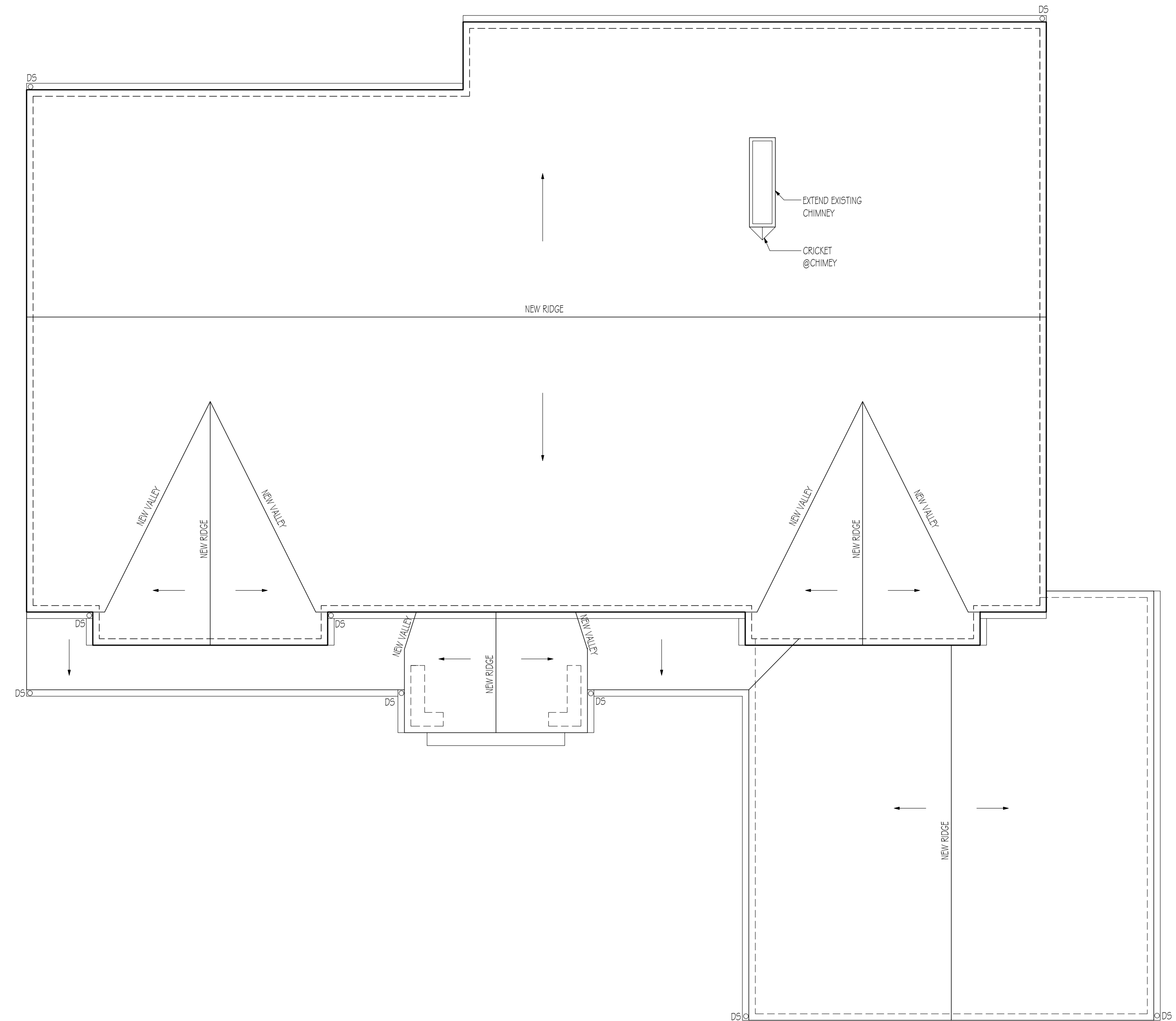
First Floor Proposed Plan
Scale: 1/4" = 1'-0"
REF. NORTH

- PLAN KEY:**
-  NEW WALL
 -  EXISTING WALL TO REMAIN
 -  TO BE DEMOLISHED
 -  OVERHEAD
 -  SMOKE DETECTOR
 -  CARBON MONOXIDE DETECTOR
 -  EXHAUST FAN

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 6. ALL SMOKE ALARMS IN THE PRIMARY DWELLING UNIT MUST BE INTERCONNECTED



Proposed 2nd Floor Plan
Scale: 1/4" = 1'-0"
REF. NORTH



Proposed Roof Plan
Scale: 1/4" = 1'-0"
REF. NORTH

Lavergne Addition
Proposed 2nd Floor and Roof Plan

4139 97th Ave SE
Mercer Island, WA 98040
Permit 9.5.25

Shelly Johnson
206.465.7221

TAG	SIZE	TYPE	JAMB	U-VALUE	NOTES	AREA (SF)
B1	5'-10" X 3'-10" V.L.F.	CEASEMENT / FIXED / CEASEMENT	V.L.F.	.30	NEW WINDOW IN EXIST. OPENING	22.7
C1	1'-10" X 2'-10" V.L.F.	DOUBLE HUNG	V.L.F.	.30	NEW WINDOW IN EXIST. OPENING	5.3
D1	4'-4" X 2'-10" V.L.F.	PAIR OF CASEMENTS	V.L.F.	.30	NEW WINDOW IN EXIST. OPENING	12.5
E1	9'-10" X 5'-8" V.L.F.	3 EQUAL FIXED	V.L.F.	.30	NEW WINDOW IN EXIST. OPENING / TEMPERED GLASS	56.7
F1	3'-0" X 6'-0"	FIXED	7"	.30		15.0
G1	4'-10" X 3'-8"	PAIR OF CASEMENTS	V.L.F.	.30	NEW WINDOW IN EXIST. OPENING / EGRESS	17.9
H1	3'-4" X 4'-10"	PAIR OF CASEMENTS	V.L.F.	.30	EGRESS	13.4
I1	1'-4" X 2'-0"	AWNING	V.L.F.	.30		2.7
J1	3'-4" X 3'-10"	PAIR OF CASEMENTS	7"	.30		13.4
J2	3'-4" X 3'-10"	PAIR OF CASEMENTS	7"	.30	EGRESS	13.4
J3	3'-4" X 3'-10"	PAIR OF CASEMENTS	7"	.30		13.4
J4	3'-4" X 3'-10"	PAIR OF CASEMENTS	7"	.30		13.4
J5	3'-4" X 3'-10"	PAIR OF CASEMENTS	7"	.30		13.4
J6	3'-4" X 3'-10"	PAIR OF CASEMENTS	7"	.30	EGRESS	13.4
J7	3'-4" X 3'-10"	PAIR OF CASEMENTS	7"	.30	EGRESS	13.4
J8	3'-4" X 3'-10"	PAIR OF CASEMENTS	7"	.30	EGRESS	13.4
K1	1'-9" X 3'-10"	CEASEMENT	7"	.30		6.7
L1	5'-0" X 5'-10"	(2) 2" H FIXED OVER (2) 3'-10" H CSMTS	7"	.30		29.2

NOTE: VERIFY ALL SIZES IN FIELD MANUFACTURER TO BE DETERMINED WOOD CLAD OR FIBERGLASS UNITS WARGON FILLED LOW E DOUBLE GLAZING TO BE U VALUE .30 OR BETTER



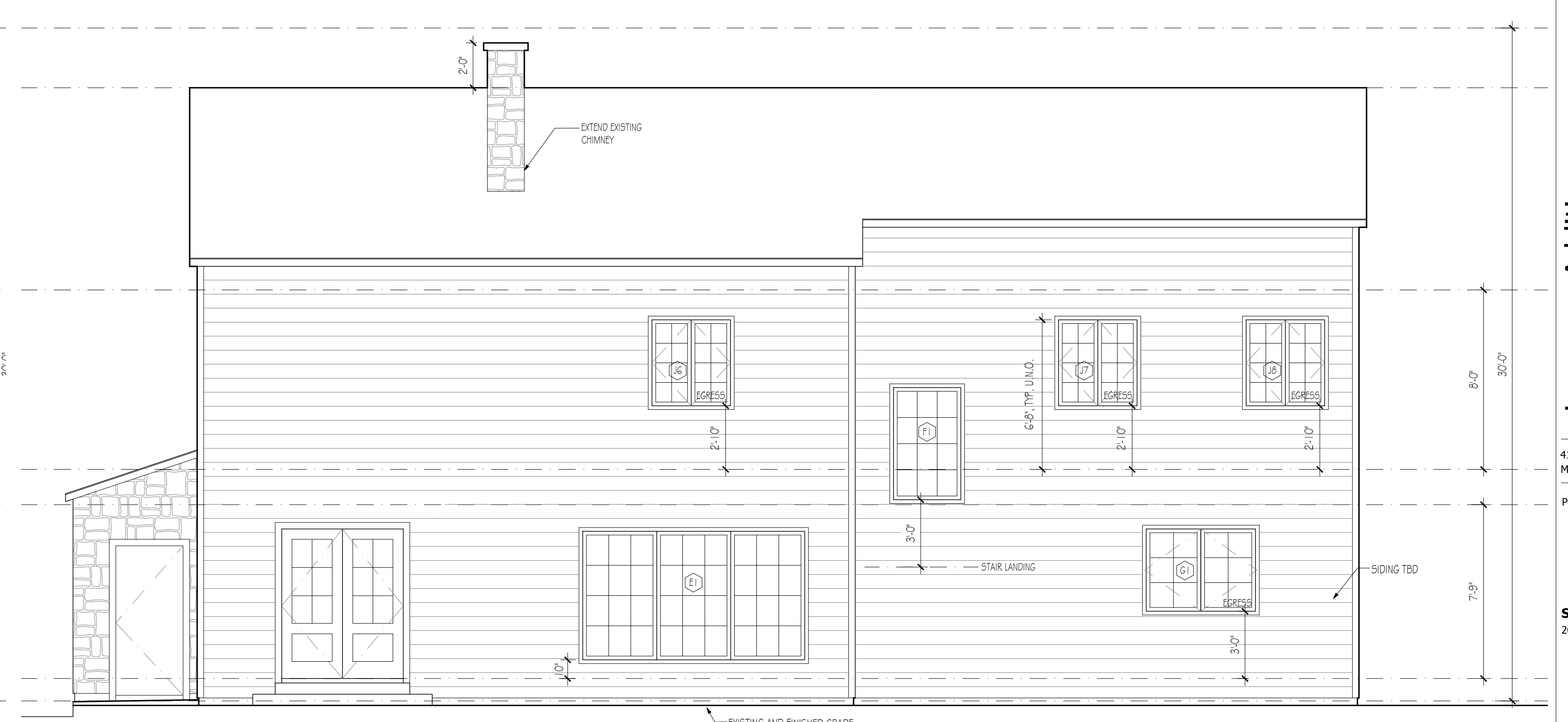
North Elevation
Scale: 1/4" = 1'-0"



East Elevation
Scale: 1/4" = 1'-0"



South Elevation
Scale: 1/4" = 1'-0"



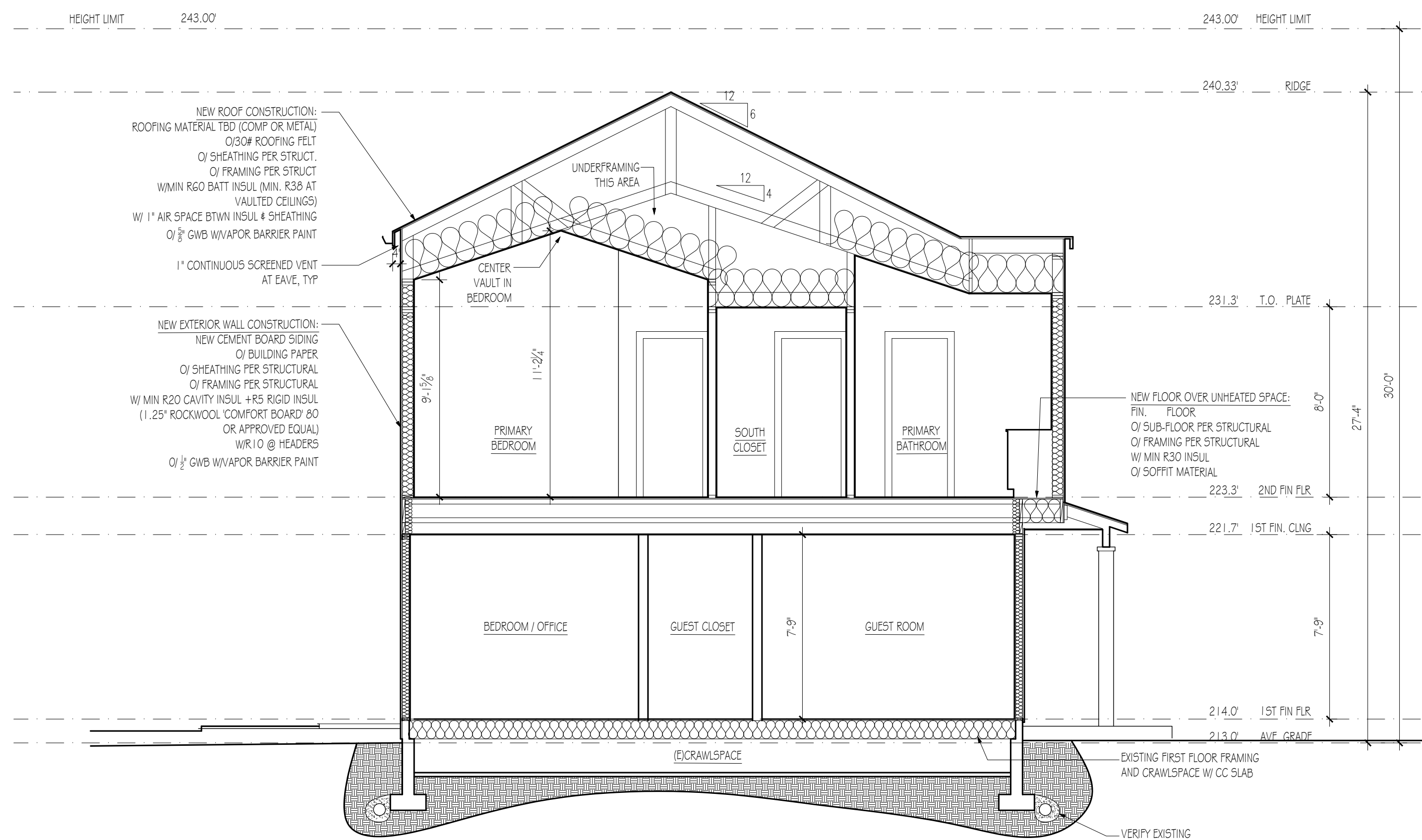
West Elevation
Scale: 1/4" = 1'-0"

Lavergne Addition
Proposed 2nd Floor and Roof Plan

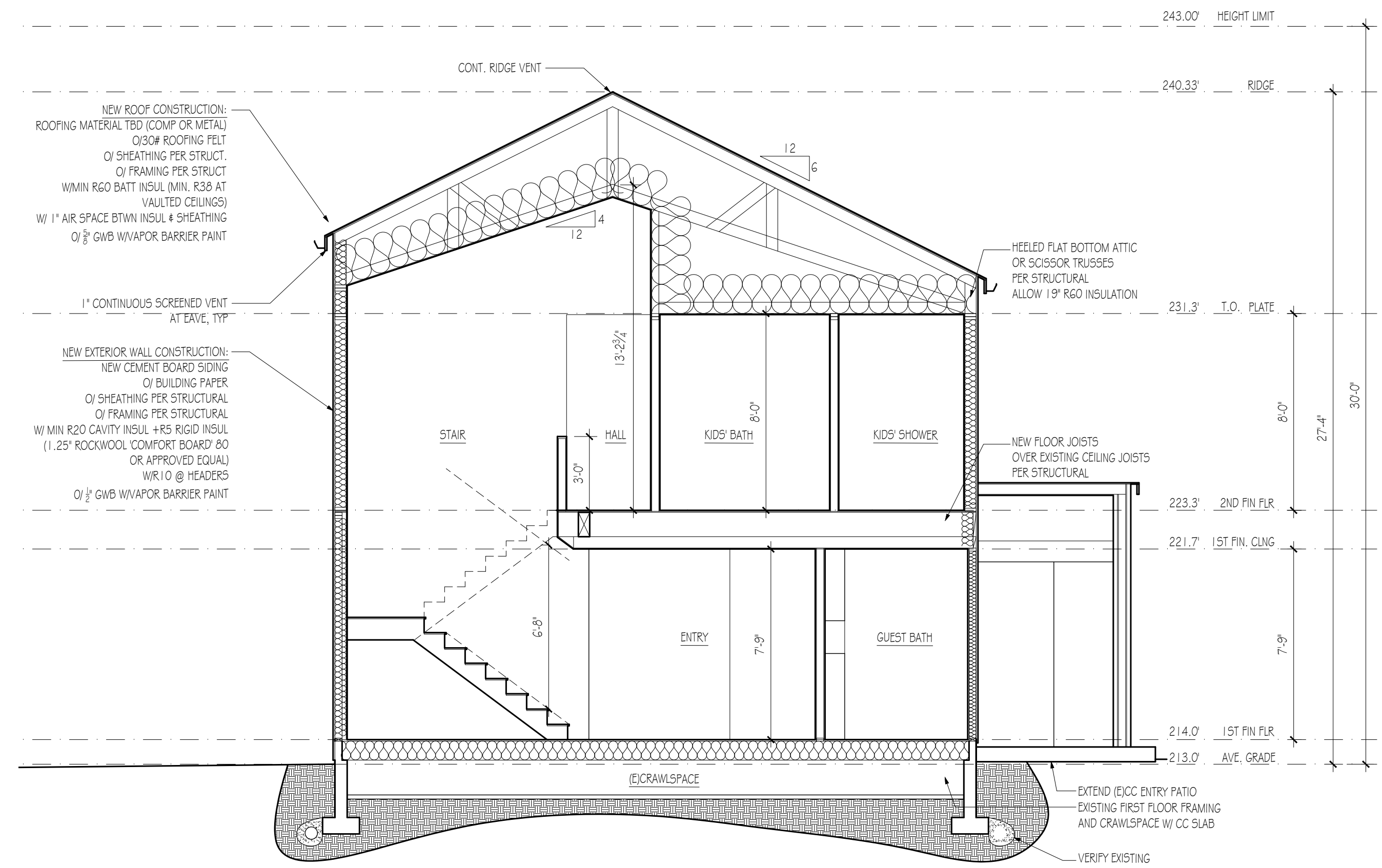
4139 97th Ave SE
Mercer Island, WA 98040

Permit 9.5.25

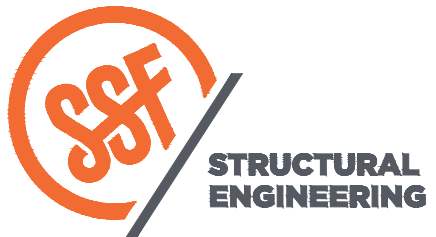
Shelly Johnson
206.465.7221



Section A
Scale: 1/4" = 1'-0"



Section B
Scale: 1/4" = 1'-0"



STRUCTURAL ENGINEERING

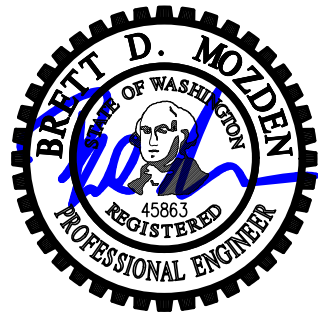
SEATTLE
2124 Third Avenue, Suite 100
Seattle, WA 98121

TACOMA
1818 Tacoma Ave S., Suite 200
Tacoma, WA 98402

CENTRAL WASHINGTON
414 N Pearl Street, Suite 8
Ellensburg, WA 98926

206.443.6212
ssfengineers.com

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DESIGN: BDM

DRAWN: NHD

CHECKED: BDM

APPROVED: BDM

REVISIONS:

DPD:

PROJECT TITLE:

Lavergne Addition

4139 97th Ave SE

Mercer Island, WA 98040

ARCHITECT:

ISSUE:

PERMIT

SHEET TITLE:

General Structural Notes

SCALE:

DATE: July 3, 2025

PROJECT NO: 13590-2025-01

SHEET NO:

S1.1

General Structural Notes

THE FOLLOWING APPLY UNLESS SHOWN OTHERWISE ON THE DRAWINGS

CRITERIA

- 1. ALL MATERIALS, WORKMANSHIP, DESIGN, AND CONSTRUCTION SHALL CONFORM TO THE DRAWINGS, SPECIFICATIONS, AND THE INTERNATIONAL BUILDING CODE (2021 EDITION).
2. DESIGN LOADING CRITERIA: FLOOR LIVE LOAD 40 PSF, ROOF LIVE LOAD 25 PSF, LIVE LOAD DEFLECTION L/360, TOTAL LOAD DEFLECTION L/240, RISK CATEGORY II, SNOW . . Ce=1.0, Is=1.0, Ct=1.1, Cs=1.0, Pg=25 PSF, Pf=25 PSF, Ps=25 PSF, WIND Gcp=0.18, 100 MPH, EXPOSURE "C" EARTHQUAKE: ANALYSIS PROCEDURE: EQUIVALENT LATERAL FORCE PROCEDURE, LATERAL SYSTEM: LIGHT FRAMED SHEAR WALLS, SITE CLASS=D (DEFAULT), Ss=1.41, Sds=1.13, S1=0.49, Sd1=0.89, Cs=0.173, SDC D, Ie=1.0, R=6.5

SEE PLANS FOR ADDITIONAL LOADING CRITERIA

- 3. STRUCTURAL DRAWINGS SHALL BE USED IN CONJUNCTION WITH ARCHITECTURAL DRAWINGS FOR BIDDING AND CONSTRUCTION. ARCHITECTURAL DRAWINGS ARE THE PRIME CONTRACT DRAWINGS. ANY DISCREPANCIES FOUND AMONG THE DRAWINGS, THE SPECIFICATION, THESE GENERAL NOTES AND THE SITE CONDITIONS SHALL BE REPORTED TO THE ARCHITECT, WHO SHALL CORRECT SUCH DISCREPANCY IN WRITING. ANY WORK DONE BY THE GENERAL CONTRACTOR AFTER DISCOVERY OF SUCH DISCREPANCY SHALL BE DONE AT THE GENERAL CONTRACTOR'S RISK.
4. PRIMARY STRUCTURAL ELEMENTS NOT DIMENSIONED ON THE STRUCTURAL PLANS AND DETAILS SHALL BE LOCATED BY THE ARCHITECTURAL PLANS AND DETAILS. VERTICAL DIMENSION CONTROL IS DEFINED BY THE ARCHITECTURAL WALL SECTIONS, BUILDING SECTION, AND PLANS. DETAILING AND SHOP DRAWING PRODUCTION FOR STRUCTURAL ELEMENTS WILL REQUIRE DIMENSIONAL INFORMATION CONTAINED IN BOTH ARCHITECTURAL AND STRUCTURAL DRAWINGS.

- 5. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL SAFETY PRECAUTIONS AND THE METHODS, TECHNIQUES, SEQUENCES OR PROCEDURES REQUIRED TO PERFORM THE CONTRACTORS WORK. THE STRUCTURAL ENGINEER HAS NO OVERALL SUPERVISORY AUTHORITY OR ACTUAL AND/OR DIRECT RESPONSIBILITY FOR THE SPECIFIC WORKING CONDITIONS AT THE SITE AND/OR FOR ANY HAZARDS RESULTING FROM THE ACTIONS OF ANY TRADE CONTRACTOR. THE STRUCTURAL ENGINEER HAS NO DUTY TO INSPECT, SUPERVISE, NOTE, CORRECT, OR REPORT ANY HEALTH OR SAFETY DEFICIENCIES TO THE OWNER, CONTRACTORS, OR OTHER ENTITIES OR PERSONS AT THE PROJECT SITE.

- 6. CONTRACTOR SHALL PROVIDE TEMPORARY BRACING FOR THE STRUCTURE AND STRUCTURAL COMPONENTS UNTIL ALL FINAL CONNECTIONS HAVE BEEN COMPLETED IN ACCORDANCE WITH THE PLANS. CONFORM TO ASCE 37-14 "DESIGN LOADS ON STRUCTURES DURING CONSTRUCTION".

- 7. CONTRACTOR-INITIATED CHANGES SHALL BE SUBMITTED IN WRITING TO THE ARCHITECT AND STRUCTURAL ENGINEER FOR APPROVAL PRIOR TO FABRICATION OR CONSTRUCTION. CHANGES SHOWN ON SHOP DRAWINGS ONLY WILL NOT SATISFY THIS REQUIREMENT.

- 8. DRAWINGS INDICATE GENERAL AND TYPICAL DETAILS OF CONSTRUCTION. WHERE CONDITIONS ARE NOT SPECIFICALLY INDICATED BUT ARE OF SIMILAR CHARACTER TO DETAILS SHOWN, SIMILAR DETAILS OF CONSTRUCTION SHALL BE USED, SUBJECT TO REVIEW AND APPROVAL BY THE ARCHITECT AND THE STRUCTURAL ENGINEER. ALL TYPICAL NOTES AND DETAILS SHOWN ON DRAWINGS SHALL APPLY, UNLESS NOTED OTHERWISE. TYPICAL DETAILS MAY NOT NECESSARILY BE INDICATED ON THE PLANS BUT SHALL STILL APPLY AS SHOWN OR DESCRIBED IN THE DETAILS. WHERE TYPICAL DETAILS ARE NOTED ON THE PLANS, THE SPECIFIED TYPICAL DETAIL SHALL BE USED. WHERE NO TYPICAL DETAIL IS NOTED, IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO CHOOSE THE APPROPRIATE TYPICAL DETAIL FROM THOSE PROVIDED OR REQUEST ADDITIONAL INFORMATION. THE CONTRACTOR SHALL SUBMIT ALL PROPOSED ALTERNATE TYPICAL DETAILS TO THOSE PROVIDED WITH RELATED CALCULATIONS TO THE ENGINEER FOR APPROVAL PRIOR TO SHOP DRAWING PRODUCTION AND FIELD USE.

- 9. ALL STRUCTURAL SYSTEMS, WHICH ARE TO BE COMPOSED OF COMPONENTS TO BE FIELD ERRECTED, SHALL BE SUPERVISED BY THE SUPPLIER DURING MANUFACTURING, DELIVERY, HANDLING, STORAGE AND ERECTION IN ACCORDANCE WITH INSTRUCTIONS PREPARED BY THE SUPPLIER.

- 10. SHOP DRAWINGS FOR THE FOLLOWING ITEMS SHALL BE SUBMITTED TO THE ARCHITECT AND STRUCTURAL ENGINEER FOR REVIEW PRIOR TO FABRICATION OF THESE ITEMS.

CONNECTOR PLATE WOOD ROOF TRUSSES
MANUFACTURED LUMBER (PSL'S, LSL'S, LVL'S)
PLYWOOD WEB JOISTS

- 11. SHOP DRAWING REVIEW: DIMENSIONS AND QUANTITIES ARE NOT REVIEWED BY THE ENGINEER OF RECORD, THEREFORE MUST BE VERIFIED BY THE CONTRACTOR. CONTRACTOR SHALL REVIEW AND STAMP DRAWINGS PRIOR TO REVIEW BY ENGINEER OF RECORD. CONTRACTOR SHALL REVIEW DRAWINGS FOR CONFORMANCE WITH THE MEANS, METHODS, TECHNIQUES, SEQUENCES AND OPERATIONS OF CONSTRUCTION, AND ALL SAFETY PRECAUTIONS AND PROGRAMS INCIDENTAL THERETO. SUBMITTALS SHALL INCLUDE A REPRODUCIBLE AND ONE COPY; REPRODUCIBLE WILL BE MARKED AND RETURNED WITHIN TWO WEEKS OF RECEIPT WITH A NOTATION INDICATING THAT THE SUBMITTAL HAS BEEN FOUND TO BE IN GENERAL CONFORMANCE WITH THE DESIGN OF THE BUILDING. THE SUBMITTED ITEMS SHALL NOT BE INSTALLED UNTIL THEY HAVE BEEN APPROVED BY THE BUILDING OFFICIAL.

SHOP DRAWING SUBMITTALS PROCESSED BY THE ENGINEER ARE NOT CHANGE ORDERS. THE PURPOSE OF SHOP DRAWING SUBMITTALS BY THE CONTRACTOR IS TO DEMONSTRATE TO THE ENGINEER THAT THE CONTRACTOR UNDERSTANDS THE DESIGN CONCEPT, BY INDICATING WHICH MATERIAL IS INTENDED TO BE FURNISHED AND INSTALLED AND BY DETAILING THE INTENDED FABRICATION AND INSTALLATION METHODS. IF DEVIATIONS, DISCREPANCIES, OR CONFLICTS BETWEEN SHOP DRAWING SUBMITTALS AND TO THE CONTRACT DOCUMENTS ARE DISCOVERED EITHER PRIOR TO OR AFTER SHOP DRAWING SUBMITTALS ARE PROCESSED BY THE ENGINEER, THE DESIGN DRAWINGS AND SPECIFICATIONS SHALL CONTROL AND SHALL BE FOLLOWED.

QUALITY ASSURANCE

- 12. SPECIAL INSPECTION SHALL BE PROVIDED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS AND SECTIONS 110 AND 1705 OF THE INTERNATIONAL BUILDING CODE BY A QUALIFIED TESTING AGENCY DESIGNATED BY THE ARCHITECT, AND RETAINED BY THE BUILDING OWNER, THE ARCHITECT, STRUCTURAL ENGINEER, AND BUILDING DEPARTMENT SHALL BE FURNISHED WITH COPIES OF ALL INSPECTION AND TEST RESULTS. SPECIAL INSPECTION OF THE FOLLOWING TYPES OF CONSTRUCTION IS REQUIRED UNLESS NOTED OTHERWISE.
EXPANSION BOLTS AND THREADED EXPANSION INSERTS PER MANUFACTURER
EPOXY GROUTED INSTALLATIONS PER MANUFACTURER

PERIODIC INSPECTION: INSPECTION SHALL BE PERFORMED AT INTERVALS NECESSARY TO CONFIRM THAT WORK REQUIRING SPECIAL INSPECTION IS IN COMPLIANCE WITH REQUIREMENTS.

CONTINUOUS INSPECTION: INSPECTOR SHALL BE ONSITE AND OBSERVE THE WORK REQUIRING INSPECTION AT ALL TIMES THAT WORK IS PERFORMED.

GEOTECHNICAL

- 13. FOUNDATION NOTES: ALLOWABLE SOIL PRESSURE AND LATERAL EARTH PRESSURE ARE ASSUMED AND THEREFORE MUST BE VERIFIED BY A QUALIFIED SOILS ENGINEER OR APPROVED BY THE BUILDING OFFICIAL. IF SOILS ARE FOUND TO BE OTHER THAN ASSUMED, NOTIFY THE STRUCTURAL ENGINEER FOR POSSIBLE FOUNDATION REDESIGN.

FOOTINGS SHALL BEAR ON FIRM, UNDISTURBED EARTH AT LEAST 18" BELOW ADJACENT FINISHED GRADE. UNLESS OTHERWISE NOTED, FOOTINGS SHALL BE CENTERED BELOW COLUMNS OR WALLS ABOVE.

BACKFILL BEHIND ALL RETAINING WALLS WITH FREE DRAINING, GRANULAR FILL AND PROVIDE FOR SUBSURFACE DRAINAGE.

ALLOWABLE SOIL PRESSURE. 1500 PSF

RENOVATION

- 14. DEMOLITION: CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS BEFORE COMMENCING ANY DEMOLITION. SHORING SHALL BE INSTALLED TO SUPPORT EXISTING CONSTRUCTION AS REQUIRED IN A MANNER SUITABLE TO THE WORK SEQUENCES. DEMOLITION DEBRIS SHALL NOT BE ALLOWED TO DAMAGE OR OVERLOAD THE EXISTING STRUCTURE. LIMIT CONSTRUCTION LOADING (INCLUDING DEMOLITION DEBRIS) ON EXISTING FLOOR SYSTEMS TO 40 PSF.

- 15. CONTRACTOR SHALL VERIFY ALL EXISTING DIMENSIONS, MEMBER SIZES, AND CONDITIONS PRIOR TO COMMENCING ANY WORK. ALL DIMENSIONS OF EXISTING CONSTRUCTION SHOWN ON THE DRAWINGS ARE INTENDED AS GUIDELINES ONLY AND MUST BE VERIFIED. THE CONTRACTOR SHALL NOTIFY THE ARCHITECT AND STRUCTURAL ENGINEER IF EXISTING CONDITIONS DETERMINED DURING WORK VARY FROM THE EXISTING CONSTRUCTION SHOWN ON THE DRAWINGS.

- 16. EXISTING REINFORCING SHALL BE SAVED WHERE AND AS NOTED ON THE PLANS. SAW CUTTING, IF AND WHERE USED, SHALL NOT CUT EXISTING REINFORCING THAT IS TO BE SAVED.

- A. ALL NEW OPENINGS THROUGH EXISTING WALLS, SLABS AND BEAMS SHALL BE ACCOMPLISHED BY SAW CUTTING WHEREVER POSSIBLE. CORNERS SHALL NOT BE OVERTUT.
B. CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS AND LOCATION OF MEMBERS PRIOR TO CUTTING ANY OPENINGS.
C. SMALL ROUND OPENINGS SHALL BE ACCOMPLISHED BY CORE DRILLING.
D. WHERE NEW REINFORCING TERMINATES AT EXISTING CONCRETE, DRILL AND EPOXY DOWELS MATCHING THE NEW REINFORCING INTO THE EXISTING CONCRETE WITH 6" EMBED, UNLESS OTHERWISE NOTED ON PLANS.

- 17. CONTRACTOR SHALL CHECK FOR DRY ROT AT ALL AREAS OF NEW WORK. ALL ROT SHALL BE REMOVED AND DAMAGED MEMBERS SHALL BE REPLACED OR REPAIRED AS DIRECTED BY THE STRUCTURAL ENGINEER OR ARCHITECT.

CONCRETE

- 18. CONCRETE SHALL BE MIXED, PROPORTIONED, CONVEYED AND PLACED IN ACCORDANCE WITH ACI 301, INCLUDING TESTING PROCEDURES. CONCRETE SHALL ATTAIN A 28-DAY STRENGTH OF f'c = 3,000 PSI AND MIX SHALL CONTAIN NOT LESS THAN 5-1/2 SACKS OF CEMENT PER CUBIC YARD AND SHALL BE PROPORTIONED TO PRODUCE A SLUMP OF 5" OR LESS. REQUIRED CONCRETE STRENGTH IS BASED ON THE DURABILITY REQUIREMENTS OF SECTION 1904 OF THE IBC. DESIGN STRENGTH IS f'c = 2,500 PSI.

- 19. ALL CONCRETE WITH SURFACES EXPOSED TO WEATHER OR STANDING WATER SHALL BE AIR-ENTRAINED WITH AN AIR-ENTRAINING AGENT CONFORMING TO ASTM C260, C494, AND C618. TOTAL AIR CONTENT FOR FROST-RESISTANT CONCRETE SHALL BE IN ACCORDANCE WITH ACI 318-19, TABLE 19.3.2.1 MODERATE EXPOSURE, F1.

- 20. REINFORCING STEEL SHALL CONFORM TO ASTM A615 (INCLUDING SUPPLEMENT S1), GRADE 60, FY = 60,000 PSI. EXCEPTIONS: ANY BARS SPECIFICALLY SO NOTED ON THE DRAWINGS SHALL BE GRADE 40, FY = 40,000 PSI. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A-185. SPIRAL REINFORCEMENT SHALL BE DEFORMED WIRE CONFORMING TO ASTM A615, GRADE 60, FY = 60,000 PSI.

- 21. DETAILING OF REINFORCING STEEL (INCLUDING HOOKS AND BENDS) SHALL BE IN ACCORDANCE WITH ACI 315R-18 AND 318-19. LAP ALL CONTINUOUS REINFORCEMENT #5 AND SMALLER 40 BAR DIAMETERS OR 2'-0" MINIMUM. PROVIDE CORNER BARS AT ALL WALL AND FOOTING INTERSECTIONS. LAP CORNER BARS #5 AND SMALLER 40 BAR DIAMETERS OR 2'-0" MINIMUM. LAPS OF LARGER BARS SHALL BE MADE IN ACCORDANCE WITH ACI 318-19, CLASS B. LAP ADJACENT MATS OF WELDED WIRE FABRIC A MINIMUM OF 8" AT SIDES AND ENDS.

NO BARS PARTIALLY EMBEDDED IN HARDENED CONCRETE SHALL BE FIELD BENT UNLESS SPECIFICALLY SO DETAILED OR APPROVED BY THE STRUCTURAL ENGINEER.

- 22. CONCRETE PROTECTION (COVER) FOR REINFORCING STEEL SHALL BE AS FOLLOWS:

FOOTINGS AND OTHER UNFORMED SURFACES CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH 3"
FORMED SURFACES EXPOSED TO EARTH OR WEATHER (#6 BARS OR LARGER) 2"
FORMED SURFACES EXPOSED TO EARTH OR WEATHER (#5 BARS OR SMALLER) 1-1/2"
COLUMN TIES OR SPIRALS AND BEAM STIRRUPS. 1-1/2"
SLABS AND WALLS (INT. FACE) GREATER OF BAR DIAMETER PLUS 1/8" OR 3/4"

- 23. CONCRETE WALL REINFORCING--PROVIDE THE FOLLOWING UNLESS DETAILED OTHERWISE:

Table with 4 columns: Wall Size, Horizontal Bar Size/Spacing, Vertical Bar Size/Spacing, and Number of Curtains.

- 24. CAST-IN-PLACE CONCRETE: SEE ARCHITECTURAL DRAWINGS FOR EXACT LOCATIONS AND DIMENSIONS OF DOOR AND WINDOW OPENINGS IN ALL CONCRETE WALLS. SEE MECHANICAL DRAWINGS FOR SIZE AND LOCATION OF MISCELLANEOUS MECHANICAL OPENINGS THROUGH CONCRETE WALLS. SEE ARCHITECTURAL DRAWINGS FOR ALL GROOVES, NOTCHES, CHAMFERS, FEATURE STRIPS, COLOR, TEXTURE, AND OTHER FINISH DETAILS AT ALL EXPOSED CONCRETE SURFACES, BOTH CAST-IN-PLACE AND PRECAST.

ANCHORAGE

- 25. EXPANSION BOLTS INTO CONCRETE SHALL BE "STRONG-BOLT 2" WEDGE ANCHORS AS MANUFACTURED BY THE SIMPSON STRONG TIE COMPANY AND INSTALLED IN STRICT CONFORMANCE TO ICC-ES REPORT NUMBER ESR-3037 FOR CONCRETE AND IAPMO ER-240 FO MASONRY, INCLUDING MINIMUM EMBEDMENT REQUIREMENTS. BOLTS INTO CONCRETE MASONRY OR BRICK MASONRY UNITS SHALL BE INTO FULLY GROUTED CELLS. PERIODIC SPECIAL INSPECTION IS REQUIRED TO VERIFY ANCHOR TYPE, ANCHOR DIMENSIONS, ANCHOR LOCATION, TIGHTENING TORQUE, HOLE DIMENSIONS, ANCHOR EMBEDMENT, AND ADHERENCE TO THE INSTALLATION INSTRUCTIONS.

- 26. EPOXY-GROUTED ITEMS (THREADED RODS OR REINFORCING BAR) INTO CONCRETE SPECIFIED ON THE DRAWINGS SHALL BE INSTALLED USING "SET-36" HIGH STRENGTH EPOXY AS MANUFACTURED BY THE SIMPSON STRONG TIE COMPANY. INSTALL IN STRICT ACCORDANCE WITH ICC-ES REPORT NO. ESR-4057. MINIMUM BASE MATERIAL TEMPERATURE IS 40 DEGREES, F. RODS SHALL BE ASTM A-36 UNLESS OTHERWISE NOTED. PERIODIC SPECIAL INSPECTION OF INSTALLATION IS REQUIRED TO VERIFY ANCHOR OR EMBEDDED BAR TYPE AND DIMENSIONS, LOCATION, ADHESIVE IDENTIFICATION AND EXPIRATION, HOLE DIMENSIONS, HOLE CLEANING PROCEDURE, ANCHOR EMBEDMENT, AND ADHERENCE TO THE INSTALLATION INSTRUCTIONS. CONTINUOUS SPECIAL INSPECTION IS REQUIRED FOR HORIZONTAL AND OVERHEAD INSTALLATIONS.

- 27. CONCRETE SCREW ANCHORS INTO CONCRETE AND CONCRETE MASONRY UNITS SHALL BE "TITEN HD" SCREW ANCHOR AS MANUFACTURED BY THE SIMPSON STRONG-TIE COMPANY, INSTALLED IN STRICT ACCORDANCE WITH ICC-ES REPORT NO. ESR-2713 (CONCRETE), NO. ESR-1056 (CMU), INCLUDING MINIMUM EMBEDMENT REQUIREMENTS. SCREW ANCHORS INTO CONCRETE MASONRY UNITS SHALL BE INTO FULLY GROUTED CELLS. SPECIAL INSPECTION IS REQUIRED.

WOOD

- 28. FRAMING LUMBER SHALL BE S-DRY, KD, OR MC-19, AND GRADED AND MARKED IN CONFORMANCE WITH WCLIB STANDARO No. 17, GRADING RULES FOR WEST COAST LUMBER, 2018, OR WMPA STANDARD, WESTERN LUMBER GRADING RULES 2021. FURNISH TO THE FOLLOWING MINIMUM STANDARDS:

Table with 4 columns: Component, Size/Type, Species, and Minimum Base Value/Fb or Fc.

- 29. MANUFACTURED LUMBER, PSL, LVL, AND LSL SHOWN ON PLAN ARE BASED PRODUCTS MANUFACTURED BY THE WEYERHAEUSER CORPORATION IN ACCORDANCE WITH ICC-ES REPORT ESR-1387. MEMBERS SHALL HAVE THE FOLLOWING MINIMUM PROPERTIES:

Table with 4 columns: Product Name, Dimensions, Fb, E, Fv, Fc, and Fv/Fc.

ALTERNATE MANUFACTURED LUMBER MANUFACTURERS MAY BE USED SUBJECT TO REVIEW AND APPROVAL BY THE ARCHITECT AND STRUCTURAL ENGINEER. ALTERNATE MANUFACTURER'S PRODUCTS SHALL BE COMPATIBLE WITH THE JOIST HANGERS AND OTHER HARDWARE SPECIFIED ON PLANS, OR ALTERNATE HANGERS AND HARDWARE SHALL SUBMITTED FOR REVIEW AND APPROVAL. SUBSTITUTED ITEMS SHALL HAVE ICC-ES REPORT APPROVAL FOR EQUAL OR GREATER LOAD CAPACITIES.

MANUFACTURED LUMBER PRODUCTS SHALL BE INSTALLED WITH A MOISTURE CONTENT OF 12% OR LESS. THE CONTRACTOR SHALL MAKE PROVISIONS DURING CONSTRUCTION TO PREVENT THE MOISTURE CONTENT OF INSTALLED BEAMS FROM EXCEEDING 12%. EXCESSIVE DEFLECTIONS MAY OCCUR IF MOISTURE CONTENT EXCEEDS THIS VALUE.

- 30. PREFABRICATED PLYWOOD WEB JOIST DESIGN SHOWN ON PLANS IS BASED ON JOISTS MANUFACTURED BY THE WEYERHAEUSER CORPORATION, IN ACCORDANCE WITH ICC-ES REPORT ESR-1153. ALTERNATE PLYWOOD WEB JOIST MANUFACTURERS MAY BE USED SUBJECT TO REVIEW AND APPROVAL BY THE ARCHITECT AND STRUCTURAL ENGINEER. ALTERNATE MANUFACTURER'S PRODUCTS SHALL BE COMPATIBLE WITH THE JOIST HANGERS AND OTHER HARDWARE SPECIFIED ON PLANS, OR ALTERNATE HANGERS AND HARDWARE SHALL SUBMITTED FOR REVIEW AND APPROVAL. SUBSTITUTED ITEMS SHALL HAVE ICC-ES REPORT APPROVAL FOR EQUAL OR GREATER LOAD CAPACITIES.

- 31. PREFABRICATED CONNECTOR PLATE WOOD TRUSSES SHALL BE DESIGNED BY THE MANUFACTURER IN ACCORDANCE WITH THE "NATIONAL DESIGN STANDARD FOR METAL PLATE-CONNECTED WOOD TRUSS CONSTRUCTION, ANSI/TPI-1" BY THE TRUSS PLATE INSTITUTE FOR THE SPANS AND CONDITIONS SHOWN ON THE PLANS. LOADING SHALL BE AS FOLLOWS:

Table with 4 columns: Load Type, TYP ROOF, ATTIC ROOF, and Value.

WIND UPLIFT (TOP CHORD) 5 PSF 5 PSF
BOTTOM CHORD LIVE LOAD 10 PSF
(BOTTOM CHORD LIVE LOAD DOES NOT ACT CONCURRENTLY WITH THE ROOF OR FLOOR LIVE LOAD)

WOOD TRUSSES SHALL UTILIZE APPROVED CONNECTOR PLATES (MITEK OR EQUAL). SUBMIT SHOP DRAWINGS INCLUDING TRUSS PLACEMENT DIAGRAM AND DESIGN CALCULATIONS TO THE ARCHITECT AND STRUCTURAL ENGINEER FOR REVIEW PRIOR TO FABRICATION. SUBMITTED DOCUMENTS SHALL BE SIGNED AND STAMPED BY A STRUCTURAL ENGINEER REGISTERED IN THE STATE OF WASHINGTON. PROVIDE FOR SHAPES, BEARING POINTS, INTERSECTIONS, HIPPS, VALLEYS, ETC., SHOWN ON THE DRAWINGS. EXACT COMPOSITION OF SPECIAL HIP, VALLEY, AND INTERSECTION AREAS (USE OF GIRDER TRUSSES, JACK TRUSSES, STEP-DOWN TRUSSES, ETC.) SHALL BE DETERMINED BY THE MANUFACTURER UNLESS SPECIFICALLY INDICATED ON THE PLANS. PROVIDE ALL TRUSS TO TRUSS AND TRUSS TO GIRDER TRUSS CONNECTION DETAILS AND REQUIRED CONNECTION MATERIALS.

TEMPORARY AND PERMANENT RESTRAINT/BRACING SHALL BE IN ACCORDANCE WITH BC51-B3 AND BC51-B7.

TEMPORARY AND PERMANENT RESTRAINT/BRACING SHALL BE A PROJECT SPECIFIC DESIGN PER 2.3.3.1.3 OF ANSI/TPI-1 AND SHALL BE PREPARED BY AN INDEPENDENT REGISTERED DESIGN PROFESSIONAL LICENSED IN THE STATE OF WASHINGTON. RESTRAINT/BRACING DESIGN SHALL BE A DEFERRED SUBMITTAL.

- 32. PLYWOOD SHEATHING SHALL BE EXPOSURE 1, PANEL GRADE C-D, AND EITHER SHEATHING, SINGLE-FLOOR, OR STRUCTURAL I GRADE IN CONFORMANCE WITH DOC PS 1 AND PS 2. ORIENTED STRAND BOARD OF EQUIVALENT THICKNESS, EXPOSURE RATING AND PANEL INDEX MAY BE USED IN LIEU OF PLYWOOD.

ROOF SHEATHING SHALL BE 1/2" (NOMINAL) WITH SPAN RATING 32/16.

FLOOR SHEATHING SHALL BE 3/4" (NOMINAL) WITH SPAN RATING 48/24.

WALL SHEATHING SHALL BE 1/2" (NOMINAL) WITH SPAN RATING 24/0.

PROVIDE APPROVED PLYWOOD EDGE CLIPS CENTERED BETWEEN JOISTS/TRUSSES AT UNBLOCKED ROOF SHEATHING EDGES. ALL FLOOR SHEATHING EDGES SHALL HAVE APPROVED 1x6 JOINTS OR SHALL BE SUPPORTED WITH SOLID BLOCKING. ALLOW 1/8" SPACING AT ALL PANEL EDGES AND ENDS OF FLOOR AND ROOF SHEATHING.

REFER TO WOOD FRAMING NOTES BELOW FOR TYPICAL NAILING REQUIREMENTS.

- 33. ALL WOOD IN DIRECT CONTACT WITH CONCRETE OR MASONRY SHALL BE PRESSURE-TREATED WITH AN APPROVED PRESERVATIVE OR (2) LAYERS OF ASPHALT IMPREGATED BUILDING PAPER SHALL BE PROVIDED BETWEEN UNTREATED WOOD AND CONCRETE OR MASONRY.

- 34. PRESERVATIVE TREATED WOOD SHALL BE TREATED PER AWPA STANDARD U1-20 TO THE USE CATEGORY EQUAL TO OR HIGHER THAN THE INTENDED APPLICATION. TREATED WOOD FOR ABOVE GROUND USE SHALL BE TREATED TO AWPA UC3B. WOOD IN CONTINUOUS CONTACT WITH FRESH WATER OR SOIL SHALL BE TREATED TO AWPA UC4A. WOOD FOR USE IN PERMANENT FOUNDATIONS SHALL BE TREATED TO AWPA UC4B.

- 35. FASTENERS AND TIMBER CONNECTORS USED WITH TREATED WOOD SHALL HAVE CORROSION RESISTANCE AS INDICATED IN THE FOLLOWING TABLE, UNLESS OTHERWISE NOTED.

Table with 3 columns: Wood Treatment, Condition, and Protection.

INTERIOR DRY CONDITIONS SHALL HAVE WOOD MOISTURE CONTENT LESS THAN 19%. WOOD MOISTURE CONTENT IN OTHER CONDITIONS (INTERIOR WET, EXTERIOR WET, AND EXTERIOR DRY) IS EXPECTED TO EXCEED 19%. CONNECTORS AND THEIR FASTENERS SHALL BE THE SAME MATERIAL. COMPLY WITH THE TREATMENT MANUFACTURERS RECOMMENDATIONS FOR PROTECTION OF METAL.

- 36. TIMBER CONNECTORS CALLED OUT BY LETTERS AND NUMBERS SHALL BE "STRONG-TIE" BY SIMPSON COMPANY, AS SPECIFIED IN THEIR CATALOG NUMBER C-C-2021. EQUIVALENT DEVICES BY OTHER MANUFACTURERS MAY BE SUBSTITUTED, PROVIDED THEY HAVE ICC-ES APPROVAL FOR EQUAL OR GREATER LOAD CAPACITIES. PROVIDE NUMBER AND SIZE OF FASTENERS AS SPECIFIED BY MANUFACTURER FOR MAXIMUM LOAD CARRYING CAPACITY. CONNECTORS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.

ALL 2X JOISTS SHALL BE CONNECTED TO FLUSH BEAMS WITH "LUS" SERIES JOIST HANGERS. ALL TJI JOISTS SHALL BE CONNECTED TO FLUSH BEAMS WITH "TIS" SERIES JOIST HANGERS. ALL DOUBLE-JOIST BEAMS SHALL BE CONNECTED TO FLUSH BEAMS WITH "MIT" SERIES JOIST HANGERS.

WHERE CONNECTOR STRAPS CONNECT TWO MEMBERS, PLACE ONE-HALF OF THE NAILS OR BOLTS IN EACH MEMBER.

ALL SHIMS SHALL BE SEASONED AND DRIED AND THE SAME GRADE (MINIMUM) AS MEMBERS CONNECTED.

- 37. WOOD FASTENERS

- A. NAIL SIZES SPECIFIED ON DRAWINGS ARE BASED ON THE FOLLOWING SPECIFICATIONS:

Table with 3 columns: Size, Length, and Diameter.

IF CONTRACTOR PROPOSES THE USE OF ALTERNATE NAILS, THEY SHALL SUBMIT NAIL SPECIFICATIONS TO THE STRUCTURAL ENGINEER (PRIOR TO CONSTRUCTION) FOR REVIEW AND APPROVAL.

NAILS - PLYWOOD (APA RATED SHEATHING) FASTENERS TO FRAMING SHALL BE DRIVEN FLUSH TO FACE OF SHEATHING WITH NO COUNTERSINKING PERMITTED. TOE-NAILS SHALL BE DRIVEN AT AN ANGLE OF 30 DEGREES WITH THE MEMBER AND STARTED 1/3 THE LENGTH OF THE NAIL FROM THE MEMBER END.

- B. ALL BOLTS IN WOOD MEMBERS SHALL CONFORM TO ASTM A307. PROVIDE WASHERS UNDER THE HEADS AND NUTS OF ALL BOLTS AND LAG BOLTS BEARING ON WOOD. INSTALLATION OF LAG BOLTS SHALL CONFORM TO THE NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION WITH A LEAD BORE HOLE OF 60 TO 70 PERCENT OF THE SHANK DIAMETER. LEAD HOLES ARE NOT REQUIRED FOR 3/8" AND SMALLER LAG SCREWS.

- 38. NOTCHES AND HOLES IN WOOD FRAMING:

- A. NOTCHES ON THE ENDS OF SOLID SAWN JOISTS AND RAFTERS SHALL NOT EXCEED ONE-FOURTH THE JOIST DEPTH. NOTCHES IN THE TOP OR BOTTOM OF SOLID SAWN JOISTS SHALL NOT EXCEED ONE-SIXTH THE DEPTH AND SHALL NOT BE LOCATED IN THE MIDDLE THIRD OF THE SPAN. HOLES BORED IN SOLID SAWN JOISTS AND RAFTERS SHALL NOT BE WITHIN 2 INCHES OF THE TOP OR BOTTOM OF THE JOIST, AND THE DIAMETER OF ANY SUCH HOLE SHALL NOT EXCEED ONE-THIRD THE DEPTH OF THE JOIST.

- B. IN EXTERIOR WALLS AND BEARING PARTITIONS, ANY WOOD STUD IS PERMITTED TO BE CUT OR NOTCHED TO A DEPTH NOT EXCEEDING 25 PERCENT OF ITS WIDTH. A HOLE NOT GREATER IN DIAMETER THAN 40 PERCENT OF THE STUD WIDTH IS PERMITTED TO BE BORED IN ANY WOOD STUD. IN NO CASE SHALL THE EDGE OF THE BORED HOLE BE NEARER THAN 5/8" INCH TO THE EDGE OF THE STUD. BORED HOLES SHALL NOT BE LOCATED AT THE SAME SECTION OF STUD AS A CUT OR NOTCH.

- C. NOTCHES AND HOLES IN MANUFACTURED LUMBER AND PREFABRICATED PLYWOOD WEB JOISTS SHALL BE PER THE MANUFACTURERS RECOMMENDATIONS UNLESS OTHERWISE NOTED.

- 39. WOOD FRAMING NOTES--THE FOLLOWING APPLY UNLESS OTHERWISE SHOWN ON THE PLANS:

- A. ALL WOOD FRAMING DETAILS NOT SHOWN OTHERWISE SHALL BE CONSTRUCTED TO THE MINIMUM STANDARDS OF THE INTERNATIONAL BUILDING CODE, THE ATTC "TIMBER CONSTRUCTION MANUAL" AND THE AWC "NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION". MINIMUM NAILING, UNLESS OTHERWISE NOTED, SHALL CONFORM TO IBC TABLE 2304.10.2. COORDINATE THE SIZE AND LOCATION OF ALL OPENINGS WITH MECHANICAL AND ARCHITECTURAL DRAWINGS.

- B. WALL FRAMING: REFER ARCHITECTURAL DRAWINGS FOR THE SIZE OF ALL WALLS. ALL STUDS SHALL BE SPACED AT 16" O.C. UNO. TWO STUDS MINIMUM SHALL BE PROVIDED AT THE END OF ALL WALLS AND AT EACH SIDE OF ALL OPENINGS, AND AT BEAM OR HEADER BEARING LOCATIONS. TWO 2x8 HEADERS SHALL BE PROVIDED OVER ALL OPENINGS NOT OTHERWISE NOTED. SOLID BLOCKING FOR WOOD COLUMNS SHALL BE PROVIDED THROUGH FLOORS TO SUPPORTS BELOW. PROVIDE CONTINUOUS SOLID BLOCKING AT MID-HEIGHT OF ALL STUD WALLS OVER 10'-0" IN HEIGHT.

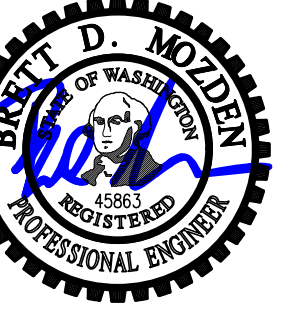
ALL WALLS SHALL HAVE A SINGLE BOTTOM PLATE AND A DOUBLE TOP PLATE. END NAIL TOP PLATE TO EACH STUD WITH TWO 16d NAILS, AND TOENAIL OR END NAIL EACH STUD TO BOTTOM PLATE WITH TWO 16d NAILS. FACE NAIL DOUBLE TOP PLATE WITH 16d @ 12" O.C. LAP TOP PLATES AT JOINTS A MINIMUM 4'-0" AND NAIL WITH TWELVE 16d NAILS @ 4" O.C. EACH SIDE JOINT.

ALL STUD WALLS SHALL HAVE THEIR LOWER WOOD PLATES ATTACHED TO WOOD FRAMING BELOW WITH TWO ROWS OF 16d NAILS @ 12" ON-CENTER, OR ATTACHED TO CONCRETE BELOW WITH 5/8" DIAMETER ANCHOR BOLTS @ 4'-0" ON-CENTER EMBEDDED 7" MINIMUM, UNLESS INDICATED OTHERWISE. INDIVIDUAL MEMBERS OF BUILT-UP POSTS SHALL BE NAILED TO EACH OTHER WITH TWO ROWS OF 16d @12" ON-CENTER. UNLESS OTHERWISE NOTED, GYPSUM WALLBOARD SHALL BE FASTENED TO THE INTERIOR SURFACE OF ALL STUDS AND PLATES WITH NO. 6 X 1-1/4" TYPE S OR W SCREWS @ 8" ON-CENTER, UNLESS INDICATED OTHERWISE. 1/2" (NOMINAL) APA RATED SHEATHING (SPAN RATING 24/0) SHALL BE NAILED TO ALL EXTERIOR SURFACES WITH 8d NAILS @ 6" ON-CENTER AT PANEL EDGES AND TOP AND BOTTOM PLATES (BLOCK UN-SUPPORTED EDGES) AND TO ALL INTERMEDIATE STUDS AND BLOCKING WITH 8d NAILS @ 12" ON-CENTER ALLOW 1/8" SPACING AT ALL PANEL EDGES AND PANEL ENDS.

- C. FLOOR AND ROOF FRAMING: PROVIDE DOUBLE JOISTS UNDER ALL PARALLEL PARTITIONS THAT EXTEND OVER MORE THAN HALF THE JOIST LENGTH AND AROUND ALL OPENINGS IN FLOORS OR ROOFS UNLESS OTHERWISE NOTED. PROVIDE SOLID BLOCKING BETWEEN RAFTERS AND JOISTS AT ALL BEARING POINTS WITH A MINIMUM OF (3) 16d TOE NAILS EACH END. TOE-NAIL JOISTS TO SUPPORTS WITH TWO 16d NAILS. ATTACH TIMBER JOISTS TO FLUSH HEADERS OR BEAMS WITH SIMPSON METAL JOIST HANGERS IN ACCORDANCE WITH NOTES ABOVE. NAIL ALL MULTI JOIST BEAMS TOGETHER WITH TWO ROWS 16d @ 12" ON-CENTER.

UNLESS OTHERWISE NOTED ON THE PLANS, PLYWOOD ROOF AND FLOOR SHEATHING SHALL BE LAID UP WITH GRAIN PERPENDICULAR TO SUPPORTS AND NAILED AT 6" ON-CENTER WITH 8d NAILS TO FRAMED PANEL EDGES, STRUTS AND OVER STUD WALLS AS SHOWN ON PLANS AND @ 12" ON-CENTER TO INTERMEDIATE SUPPORTS. PROVIDE APPROVED PLYWOOD EDGE CLIPS CENTERED BETWEEN JOISTS/TRUSSES AT UNBLOCKED ROOF SHEATHING EDGES. ALL FLOOR SHEATHING EDGES SHALL HAVE APPROVED 1x6 JOINTS OR SHALL BE SUPPORTED WITH SOLID BLOCKING. ALLOW 1/8" SPACING AT ALL PANEL EDGES AND ENDS OF FLOOR AND ROOF SHEATHING. TOENAIL BLOCKING TO SUPPORTS WITH 16d @ 12" ON-CENTER, MINIMUM TWO NAILS PER BLOCK, UNLESS OTHERWISE NOTED.

- D. WOOD SHRINKAGE: MECHANICAL, ELECTRICAL, PLUMBING FIRE PROTECTION, CLADDING, AND OTHER SYSTEMS INSTALLED WITHIN THE BUILDING SHALL BE DESIGNED AND CONSTRUCTED TO ACCOMMODATE 3/8" OF VERTICAL MOVEMENT PER FLOOR LEVEL.



DESIGN: BDM
 DRAWN: NHD
 CHECKED: BDM
 APPROVED: BDM

REVISIONS:

DPD:

PROJECT TITLE:

Lavergne Addition
 4139 97th Ave SE
 Mercer Island, WA 98040

ARCHITECT:

ISSUE:

PERMIT

SHEET TITLE:

Foundation Plan

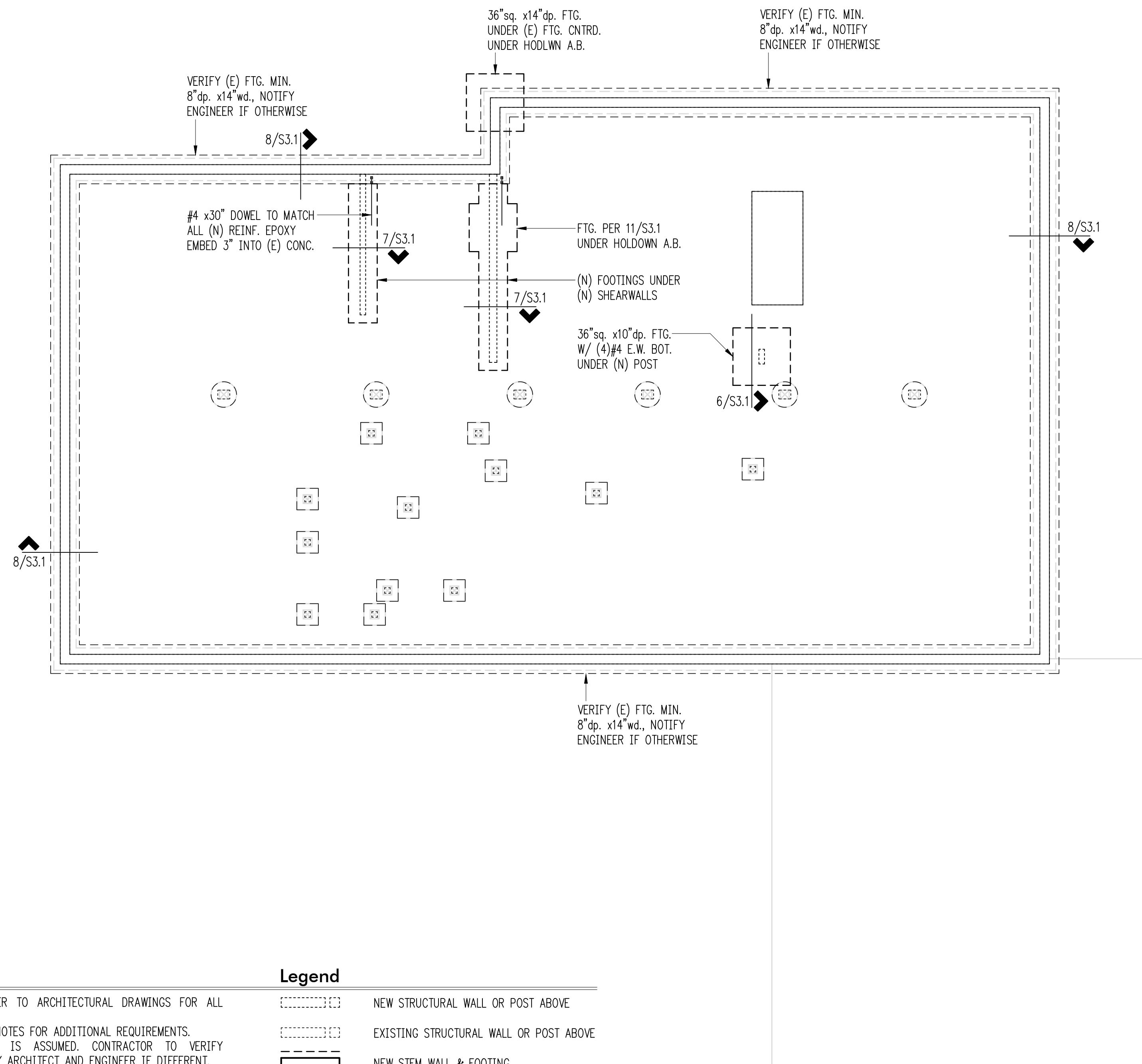
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DATE: July 3, 2025

PROJECT NO: 13590-2025-01

SHEET NO:

S2.1

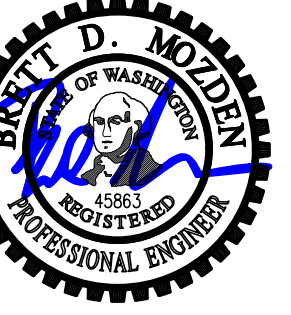


Plan Notes

- DO NOT SCALE DRAWINGS. REFER TO ARCHITECTURAL DRAWINGS FOR ALL DIMENSIONS.
- REFER TO GENERAL STRUCTURAL NOTES FOR ADDITIONAL REQUIREMENTS.
- EXISTING FRAMING ON PLANS IS ASSUMED. CONTRACTOR TO VERIFY DIRECTIONS AND EXTENTS. NOTIFY ARCHITECT AND ENGINEER IF DIFFERENT.
- THE BOTTOM OF ALL NEW EXTERIOR FOOTINGS SHALL BE 18" MINIMUM BELOW EXTERIOR GRADE.
- ALL NEW POSTS ABOVE SHALL BEAR FULLY ON BEAMS OR POSTS BELOW AND SHALL HAVE FULL CONTINUOUS BEARING THROUGH FLOORS TO FOUNDATION.

Legend

- NEW STRUCTURAL WALL OR POST ABOVE
- EXISTING STRUCTURAL WALL OR POST ABOVE
- NEW STEM WALL & FOOTING
- EXISTING STEM WALL & FOOTING



DESIGN: BDM
 DRAWN: NHD
 CHECKED: BDM
 APPROVED: BDM

REVISIONS:

DPD:

PROJECT TITLE:
Lavergne Addition
 4139 97th Ave SE
 Mercer Island, WA 98040

ARCHITECT:

ISSUE:
PERMIT

SHEET TITLE:

First Floor Framing Plan

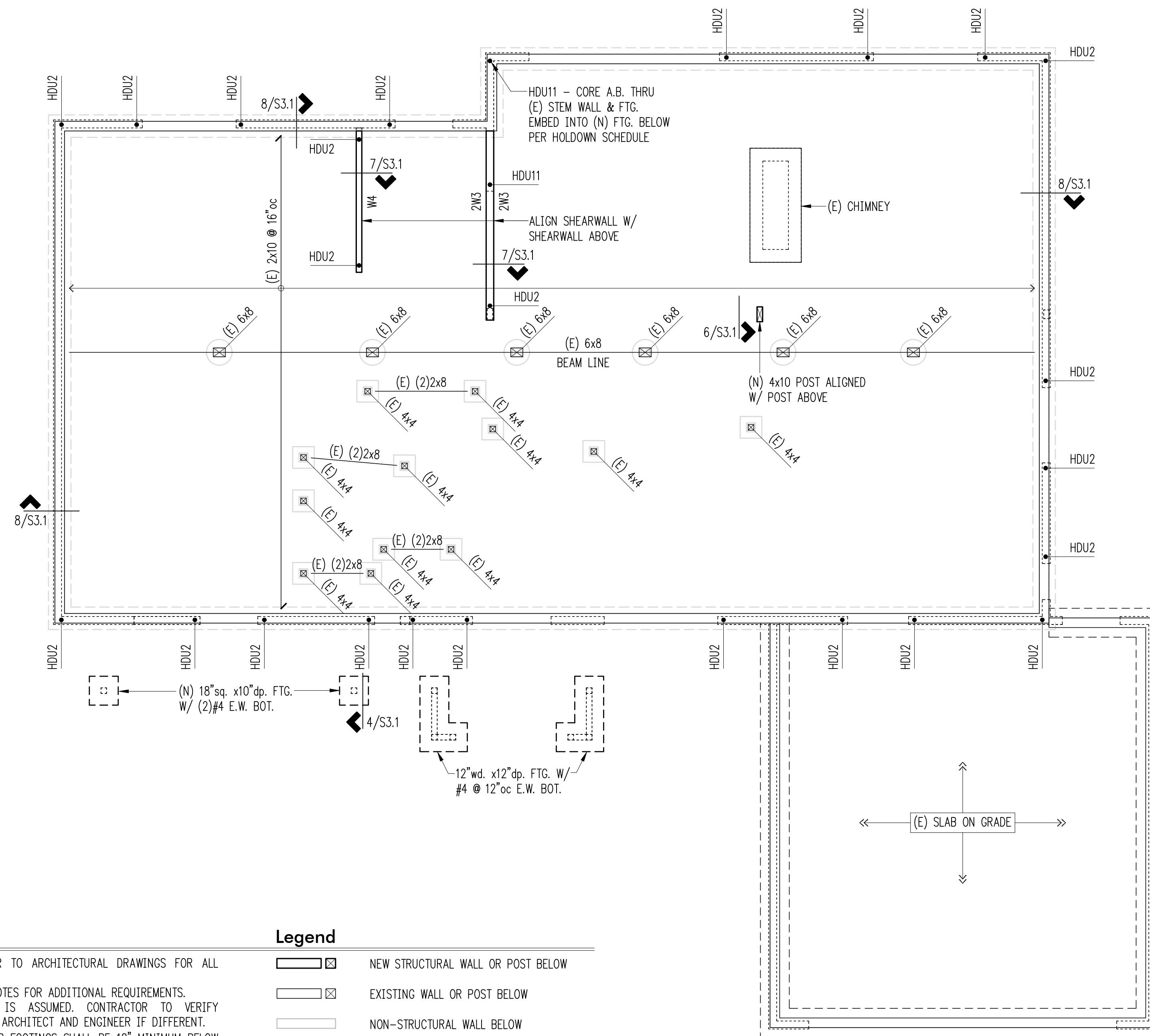
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DATE: July 3, 2025

PROJECT NO: 13590-2025-01

SHEET NO:

S2.2



Plan Notes

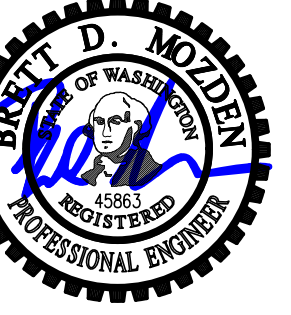
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- EXISTING FRAMING ON PLANS IS ASSUMED. CONTRACTOR TO VERIFY DIRECTIONS AND EXTENTS. NOTIFY ARCHITECT AND ENGINEER IF DIFFERENT.
- THE BOTTOM OF ALL NEW EXTERIOR FOOTINGS SHALL BE 18" MINIMUM BELOW EXTERIOR GRADE.
- ALL NEW POSTS ABOVE SHALL BEAR FULLY ON BEAMS OR POSTS BELOW AND SHALL HAVE FULL CONTINUOUS BEARING THROUGH FLOORS TO FOUNDATION.
- PROVIDE AC, ACE, PC, EPC, LPC, OR LCE COLUMN CAP AND BASE AT ALL NEW BEAM TO COLUMN CONNECTIONS U.O.N.
- PROVIDE (2) BEARING STUDS AT EACH END OF ALL GIRDER TRUSSES, HEADERS AND BEAMS OVER 3'-0" IN LENGTH, U.O.N.

Legend

- NEW STRUCTURAL WALL OR POST BELOW
- EXISTING WALL OR POST BELOW
- NON-STRUCTURAL WALL BELOW
- NEW STRUCTURAL WALL OR POST ABOVE
- EXISTING STRUCTURAL WALL OR POST ABOVE
- NEW STEM WALL & FOOTING
- EXISTING STEM WALL & FOOTING
- SHEARWALL PER 4/S4.1
- SPAN DIRECTION
- EXTENT OF JOISTS
- NEW HEADER/BEAM PER PLAN
- EXISTING HEADER/BEAM
- HANGER
- HOLDOWN PER 11 OR 12/S3.1

First Floor Framing Plan
 Scale: 1/4" = 1'-0"





DESIGN: BDM
 DRAWN: NHD
 CHECKED: BDM
 APPROVED: BDM

REVISIONS:

DPD:

PROJECT TITLE:

Lavergne Addition
 4139 97th Ave SE
 Mercer Island, WA 98040

ARCHITECT:

ISSUE:

PERMIT

SHEET TITLE:

Roof Framing Plan

SCALE:

1/4" = 1'-0" U.N.O.

DATE:

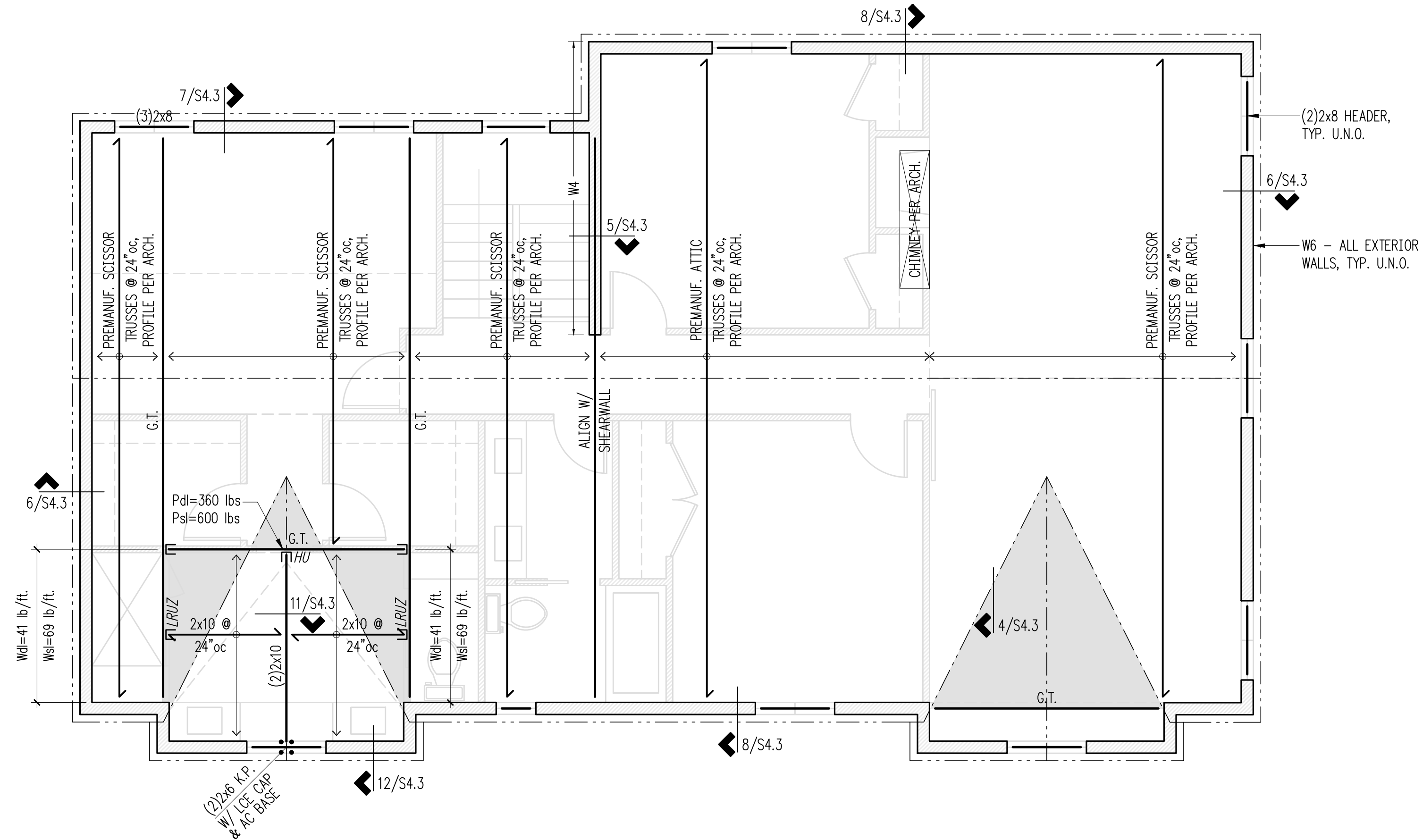
July 3, 2025

PROJECT NO:

13590-2025-01

SHEET NO:

S2.4



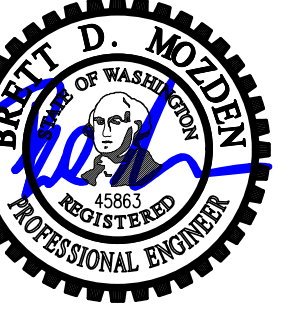
Plan Notes

- DO NOT SCALE DRAWINGS. REFER TO ARCHITECTURAL DRAWINGS FOR ALL DIMENSIONS.
- REFER TO GENERAL STRUCTURAL NOTES FOR ADDITIONAL REQUIREMENTS.
- ALL POSTS SHALL BEAR FULLY ON BEAMS OR POSTS BELOW AND SHALL HAVE FULL CONTINUOUS BEARING THROUGH FLOORS TO FOUNDATION.
- PROVIDE AC, ACE, PC, EPC, LPC, OR LCE COLUMN CAP AND BASE AT ALL BEAM TO COLUMN CONNECTIONS U.O.N.
- MANUFACTURED LUMBER PRODUCTS (LSL, LVL, PSL, GL) SHALL BE INSTALLED WITH A MOISTURE CONTENT OF 12% OR LESS. THE CONTRACTOR SHALL MAKE PROVISIONS DURING CONSTRUCTION TO PREVENT THE MOISTURE CONTENT OF INSTALLED BEAMS FROM EXCEEDING 12%.
- TYPICAL ROOF FRAMING CONSISTS OF ROOFING PER ARCHITECTURAL DRAWINGS OVER 1/2" CDX APA RATED SHEATHING (EXPOSURE 1), FACE GRAIN PERPENDICULAR TO FRAMING PER PLAN, U.O.N.
- NAIL ROOF SHEATHING WITH 8D AT 6" O.C. AT ALL FRAMED PANEL EDGES AND OVER SHEARWALLS, AND AT 12" O.C. FIELD.
- PROVIDE H1 AT ENDS OF ALL NEW TRUSSES/RAFTERS, U.O.N.
- "W." INDICATES PLYWOOD SHEARWALL BELOW FRAMING SHOWN. REFER TO SHEARWALL SCHEDULE FOR WALL ATTACHMENTS. ALL EXTERIOR WOOD FRAMED WALLS ARE W6, U.O.N.
- PROVIDE (2) BEARING STUDS AT EACH END OF ALL GIRDER TRUSSES, HEADERS AND BEAMS OVER 3'-0" IN LENGTH, U.O.N.

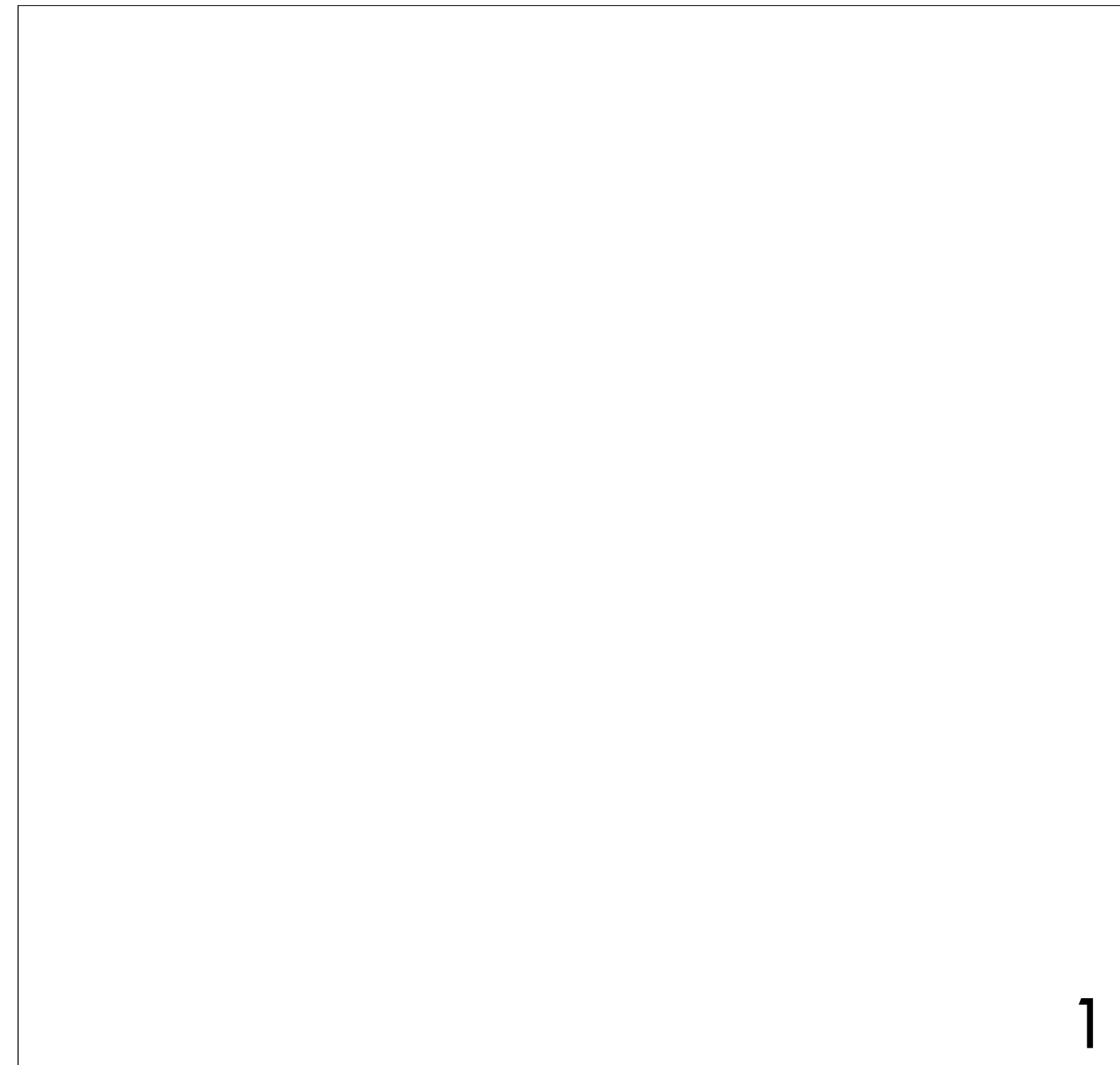
Legend

- NEW STRUCTURAL WALL OR POST BELOW
- NON-STRUCTURAL WALL BELOW
- SHEARWALL PER 4/S4.1
- SPAN DIRECTION
- EXTENT OF JOISTS
- NEW HEADER/BEAM PER PLAN
- HANGER
- OVERFRAME W/ 2x6 @ 24" OC. POST DOWN TO FRAMING BELOW AS NECESSARY @ 6'-0" OC. MAX.

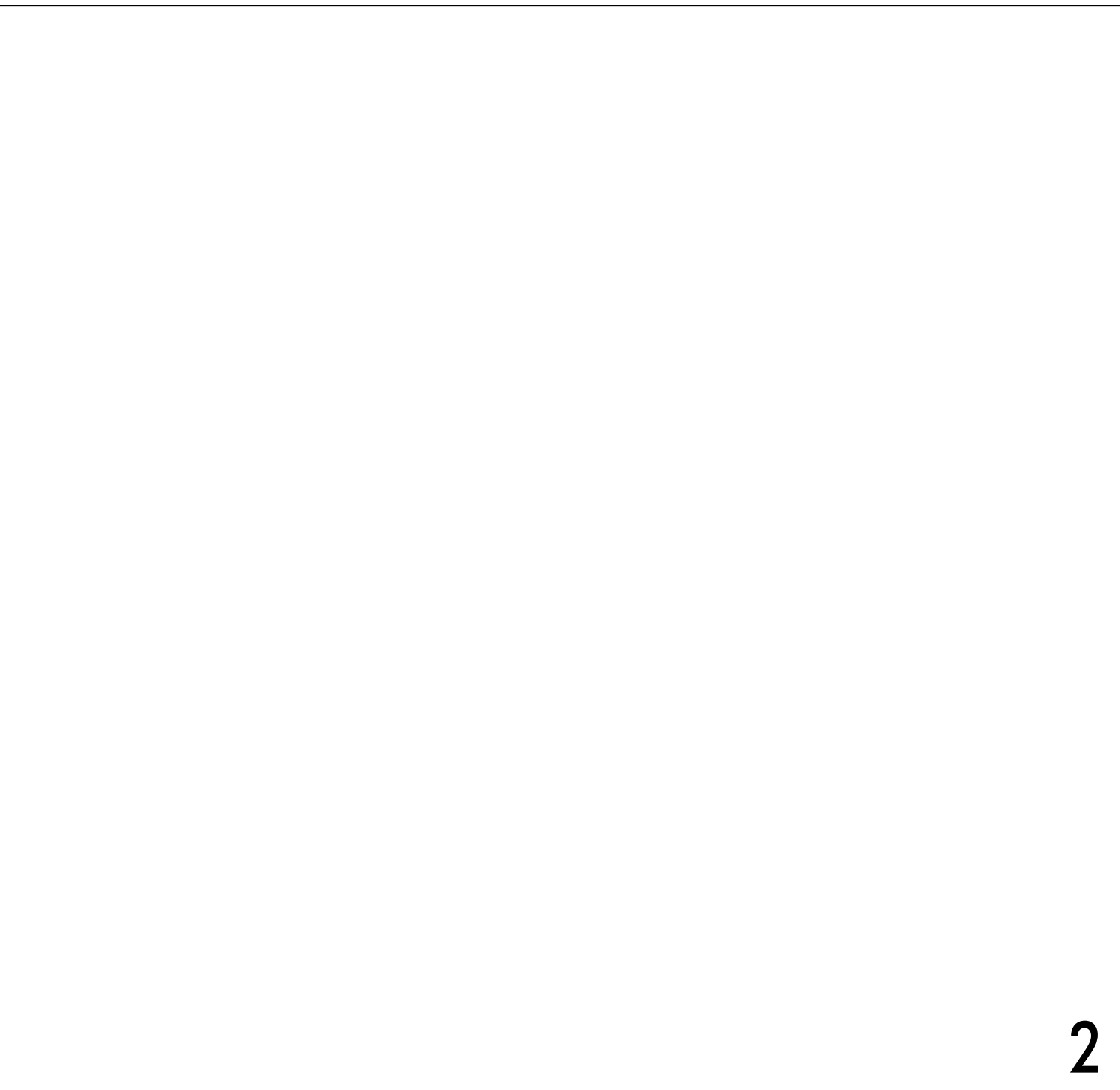




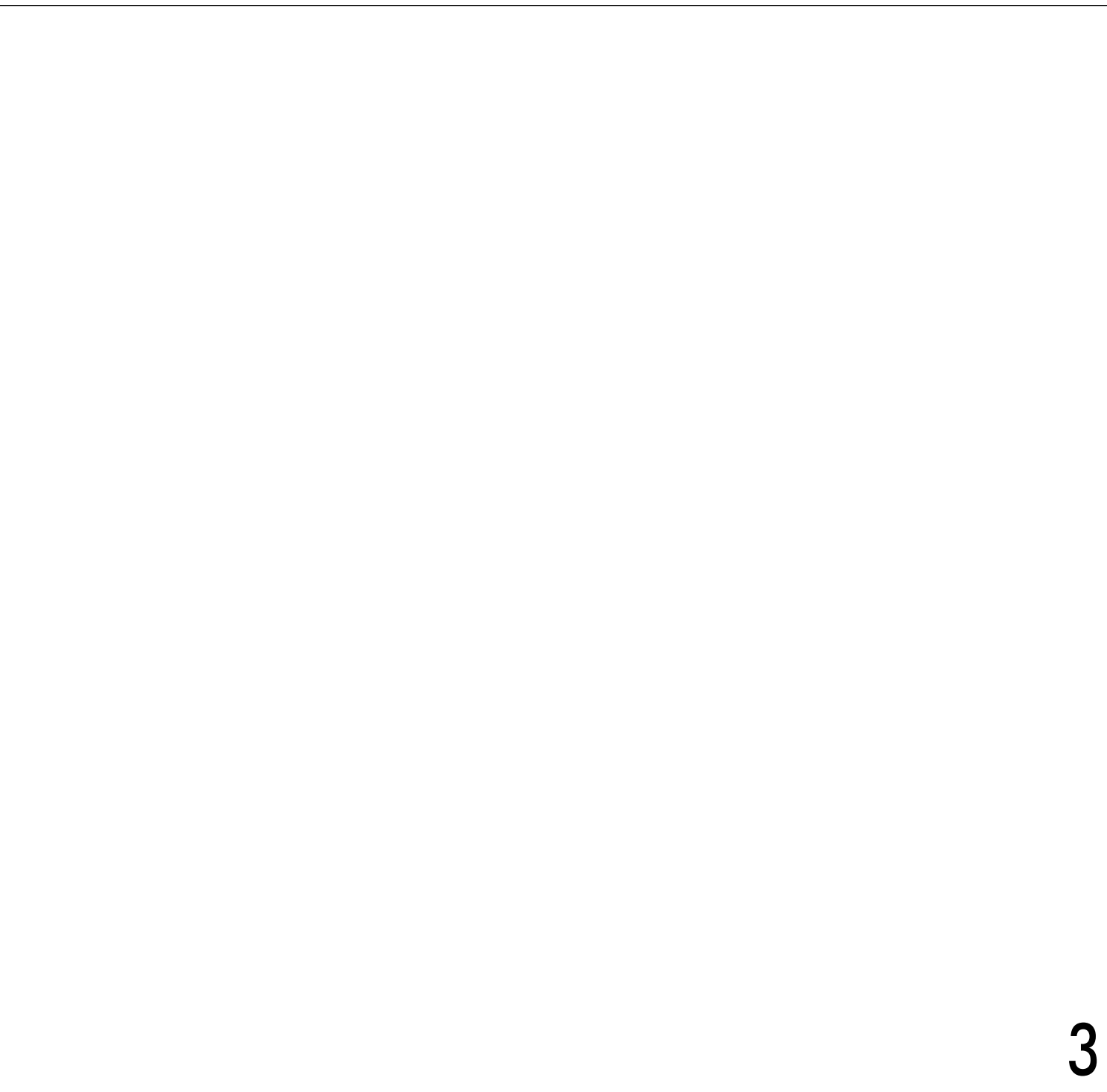
DESIGN: BDM
 DRAWN: NHD
 CHECKED: BDM
 APPROVED: BDM



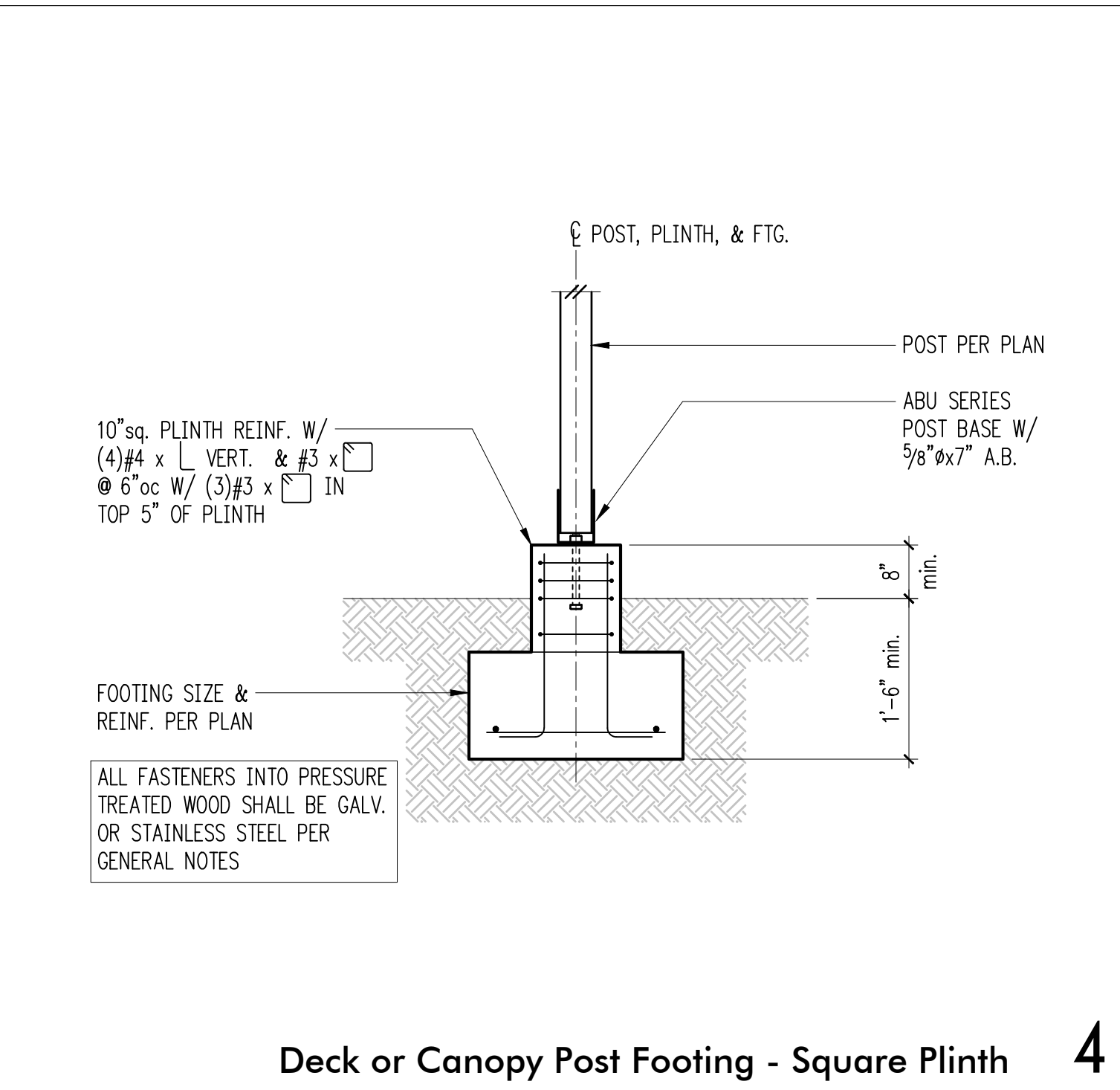
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2



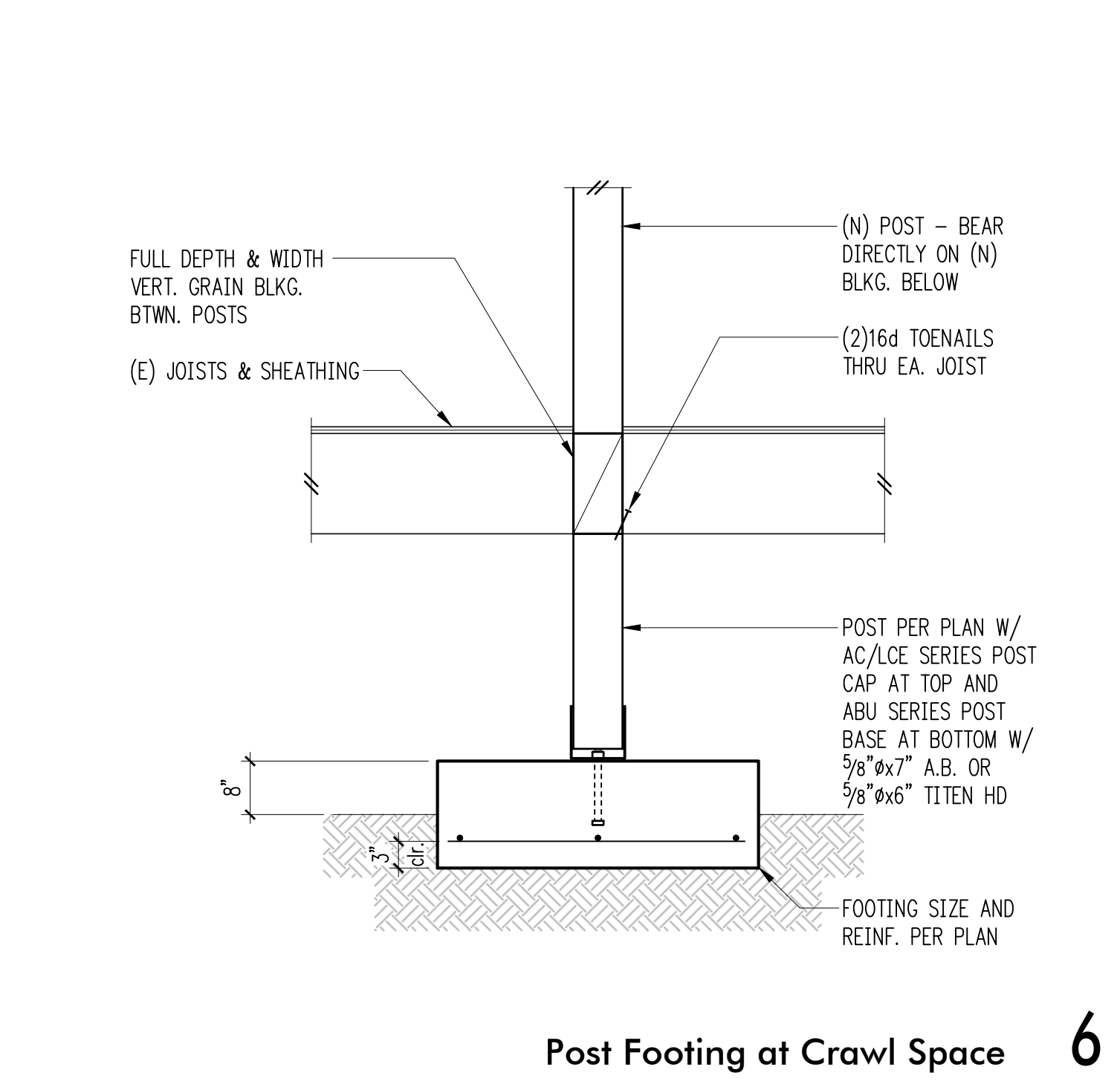
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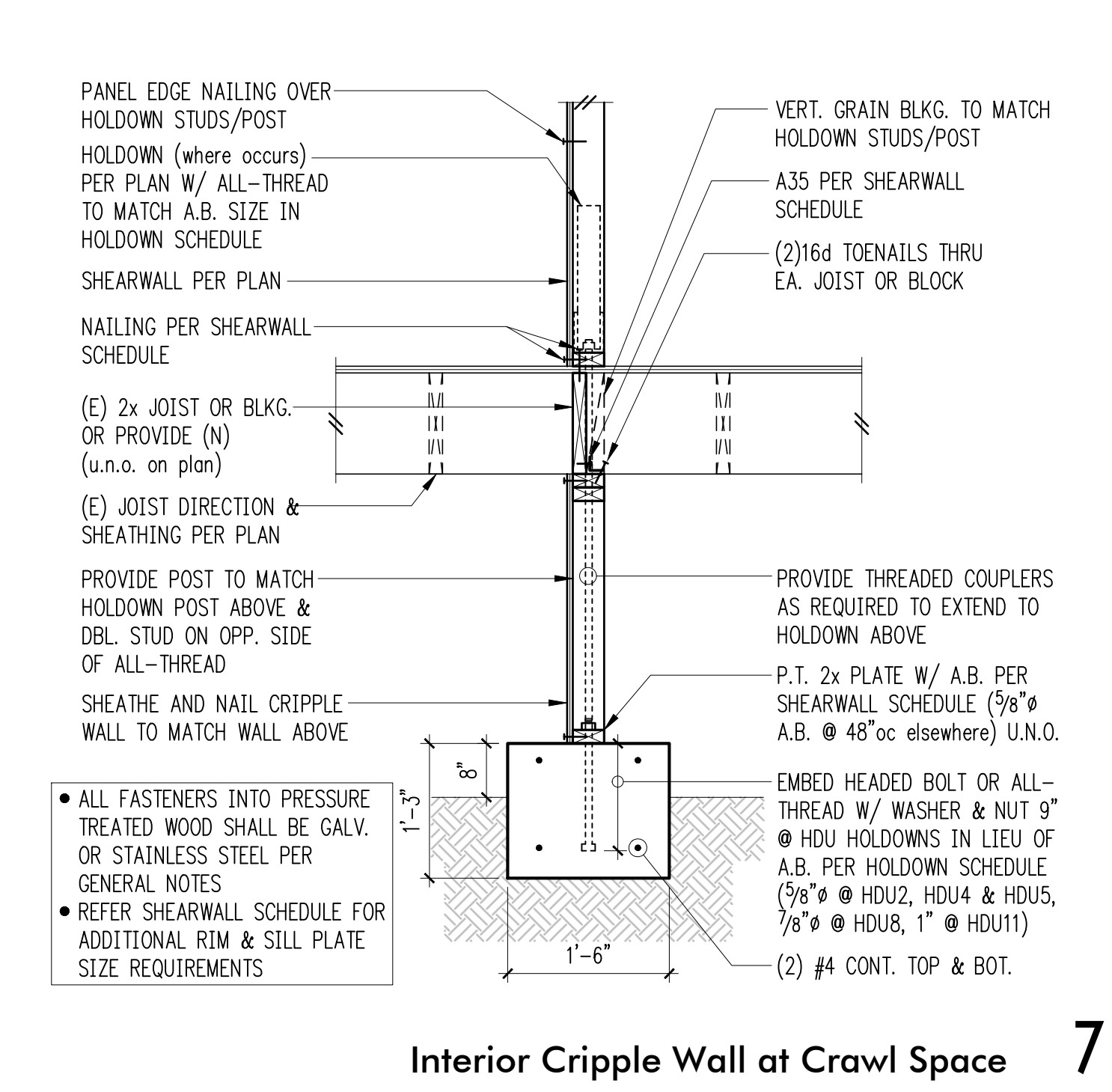
Deck or Canopy Post Footing - Square Plinth



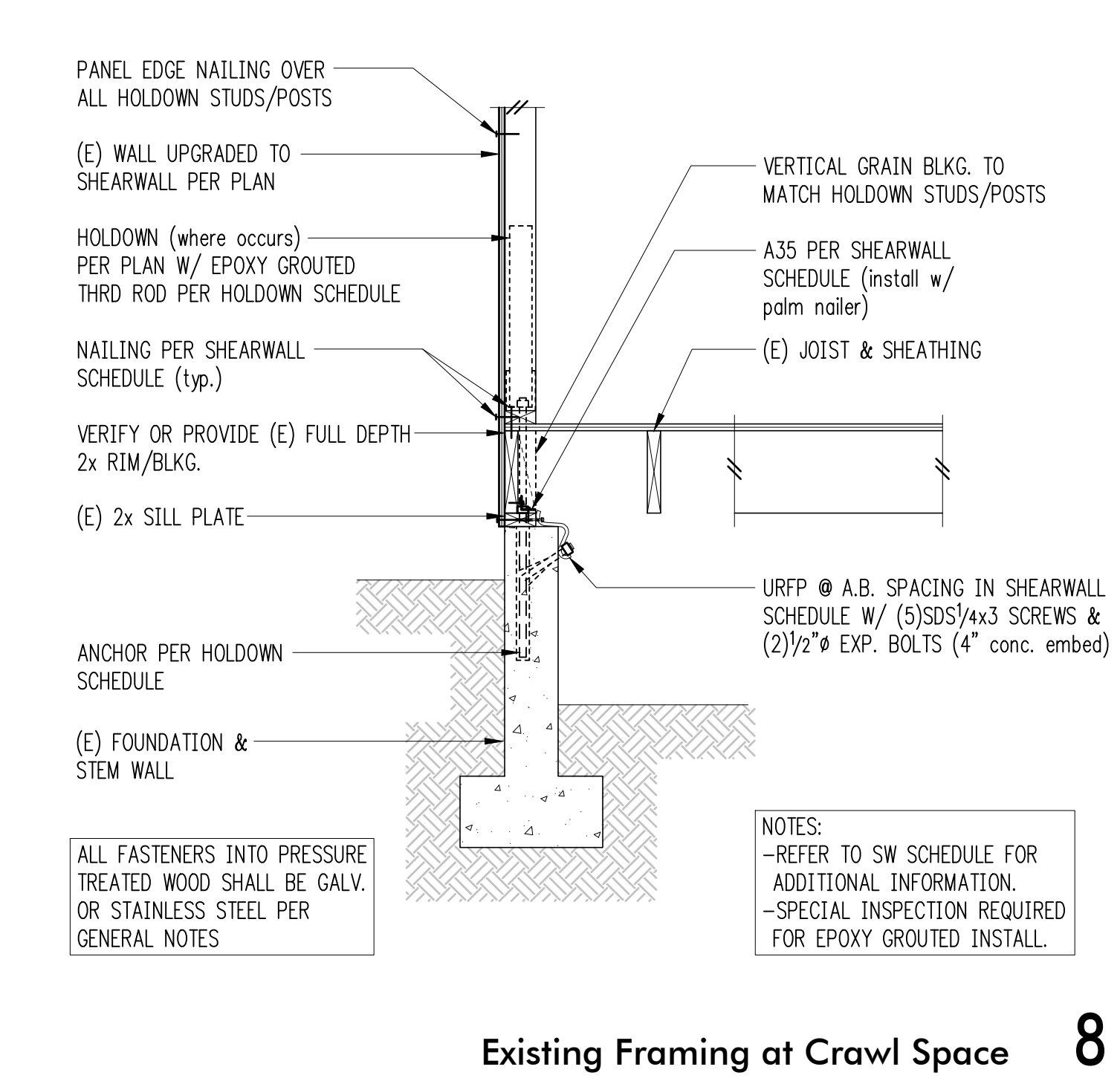
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Post Footing at Crawl Space



Interior Cripple Wall at Crawl Space



Existing Framing at Crawl Space

REVISIONS:

DPD:

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ARCHITECT:

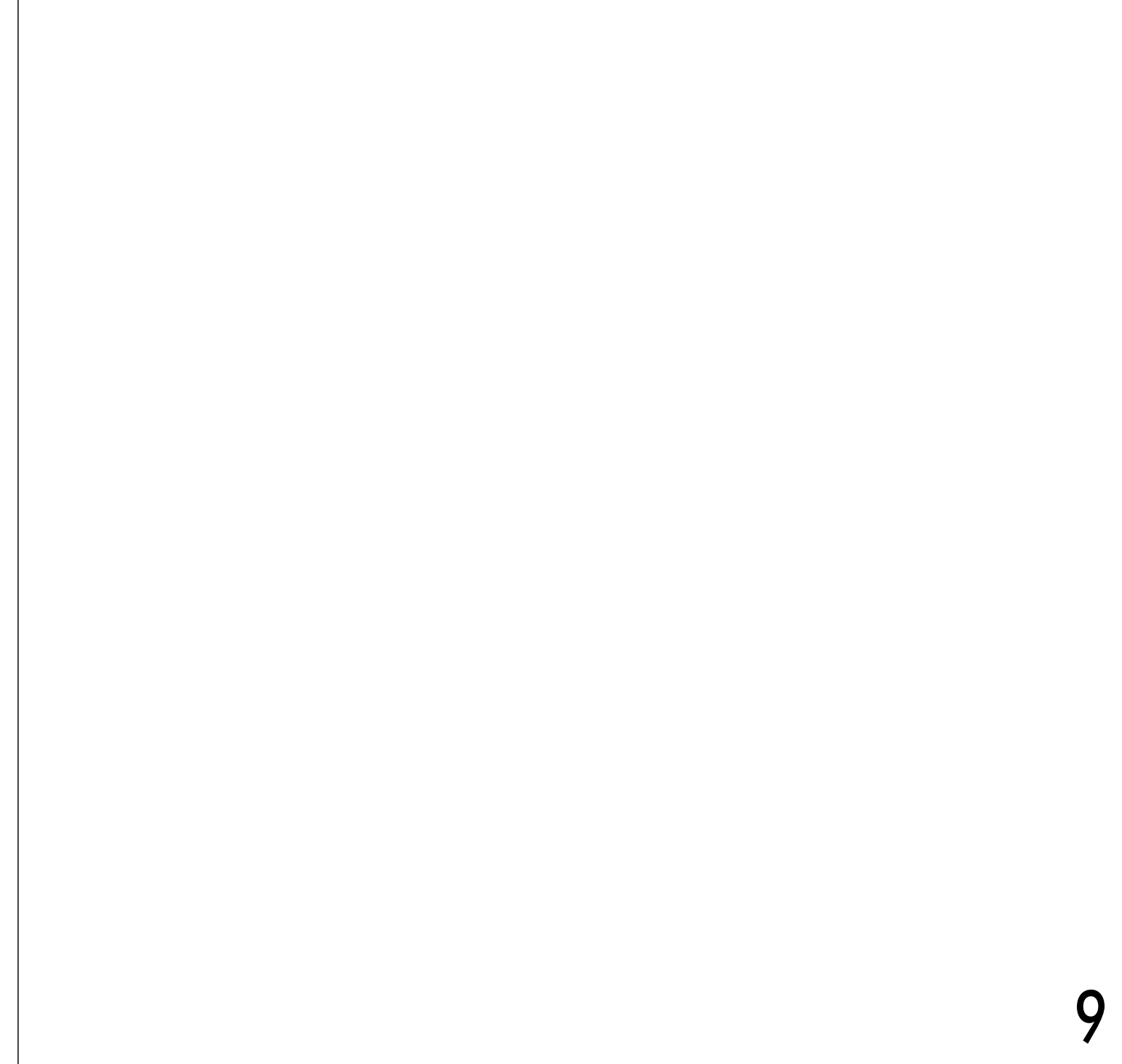
ISSUE:
PERMIT

SHEET TITLE:

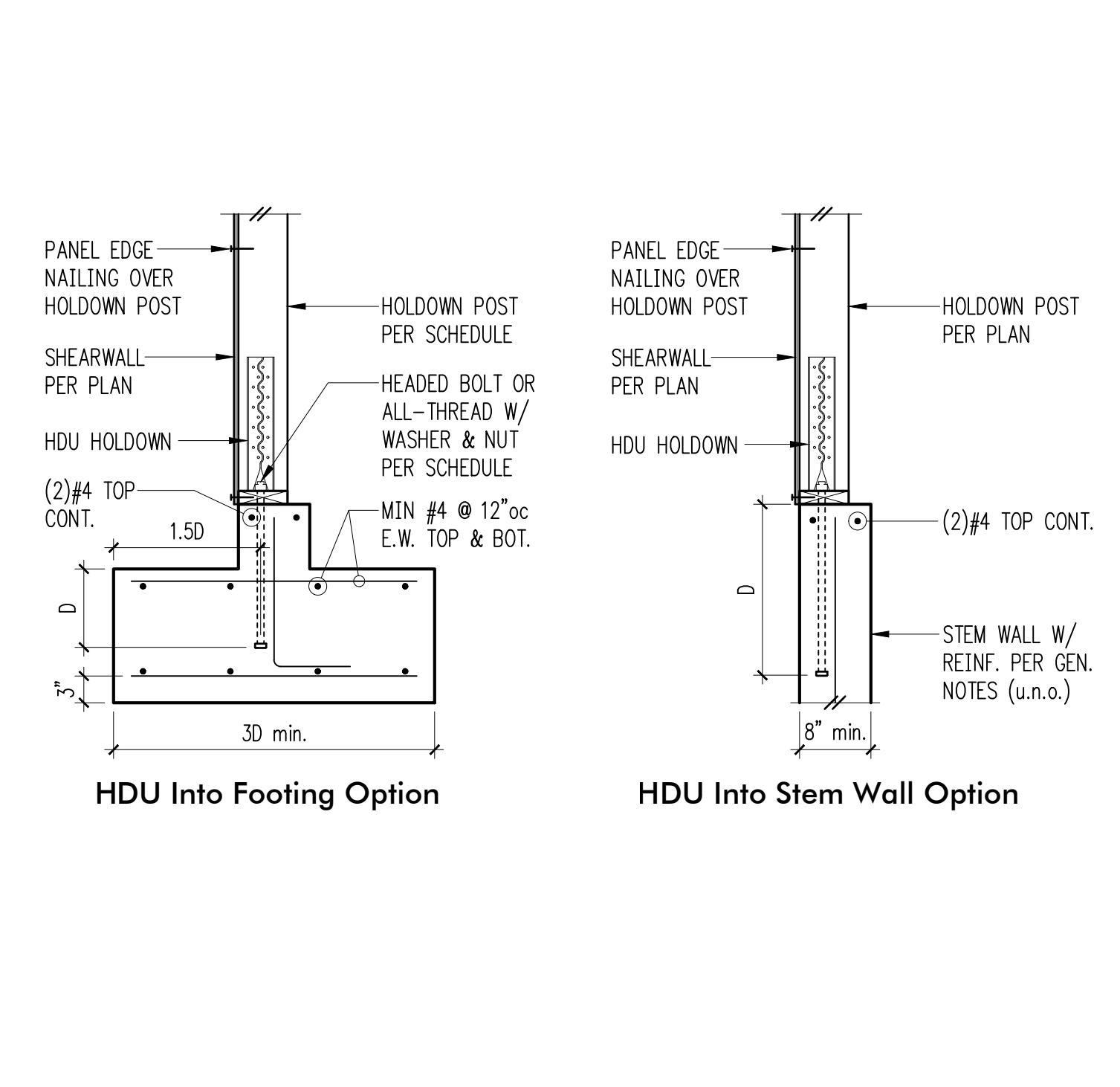
Foundation Details

SCALE: 3/4" = 1'-0" U.N.O.
 DATE: July 3, 2025
 PROJECT NO: 13590-2025-01
 SHEET NO:

S3.1



9

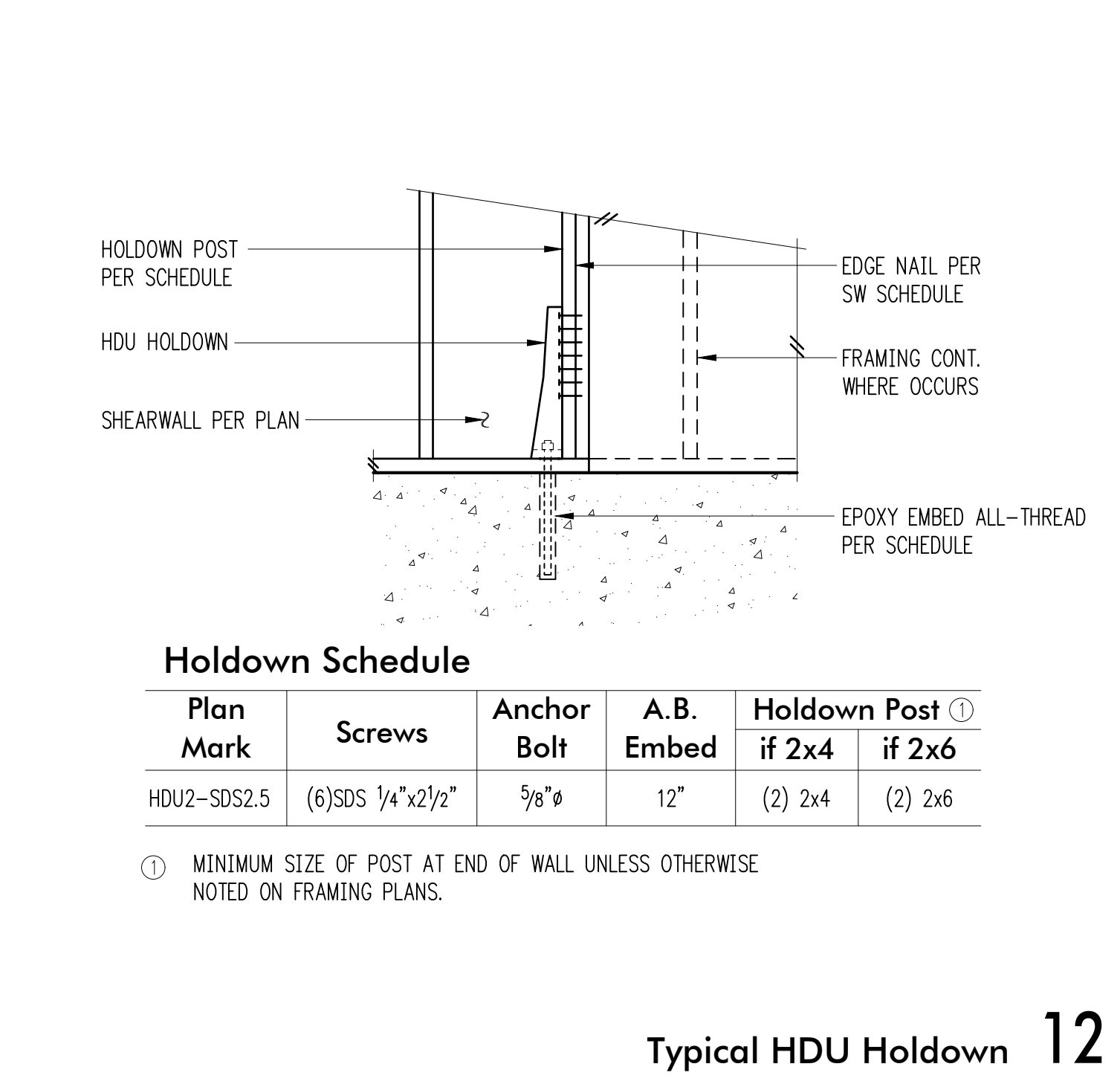


Holdown Schedule

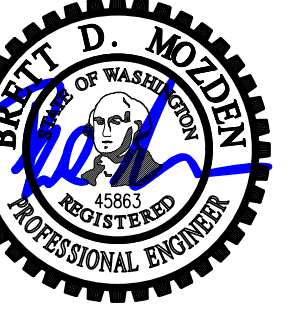
Plan Mark	Screws	Anchor Bolt	Min. A.B. Embed (D)	Stem Wall	Footing	Holdown Post ①
HDU2-SDS2.5	(6) SDS 1/4" x 2 1/2"	5/8" φ	12"	4"	(2) 2x4	(2) 2x6
HDU4-SDS2.5	(10) SDS 1/4" x 2 1/2"	5/8" φ	18"	6"	4x4	4x6
HDU5-SDS2.5	(14) SDS 1/4" x 2 1/2"	5/8" φ	SB9x24	7"	4x4	4x6
HDU8-SDS2.5	(20) SDS 1/4" x 2 1/2"	7/8" φ	SSTB28	8"	4x6	6x6
HDU11-SDS2.5	(30) SDS 1/4" x 2 1/2"	1" φ	SB1x30	10"	4x8	6x6
HDU14-SDS2.5	(36) SDS 1/4" x 2 1/2"	1" φ	N/A	12"	4x8	6x6

① MINIMUM SIZE OF POST AT END OF WALL UNLESS OTHERWISE NOTED ON FRAMING PLANS.

Typical HDU Holdown 11



Typical HDU Holdown 12



DESIGN: BDM
 DRAWN: NHD
 CHECKED: BDM
 APPROVED: BDM

REVISIONS:

DPD:

PROJECT TITLE:
Lavergne Addition
 4139 97th Ave SE
 Mercer Island, WA 98040

ARCHITECT:

ISSUE:

PERMIT

SHEET TITLE:

Wood Framing Details

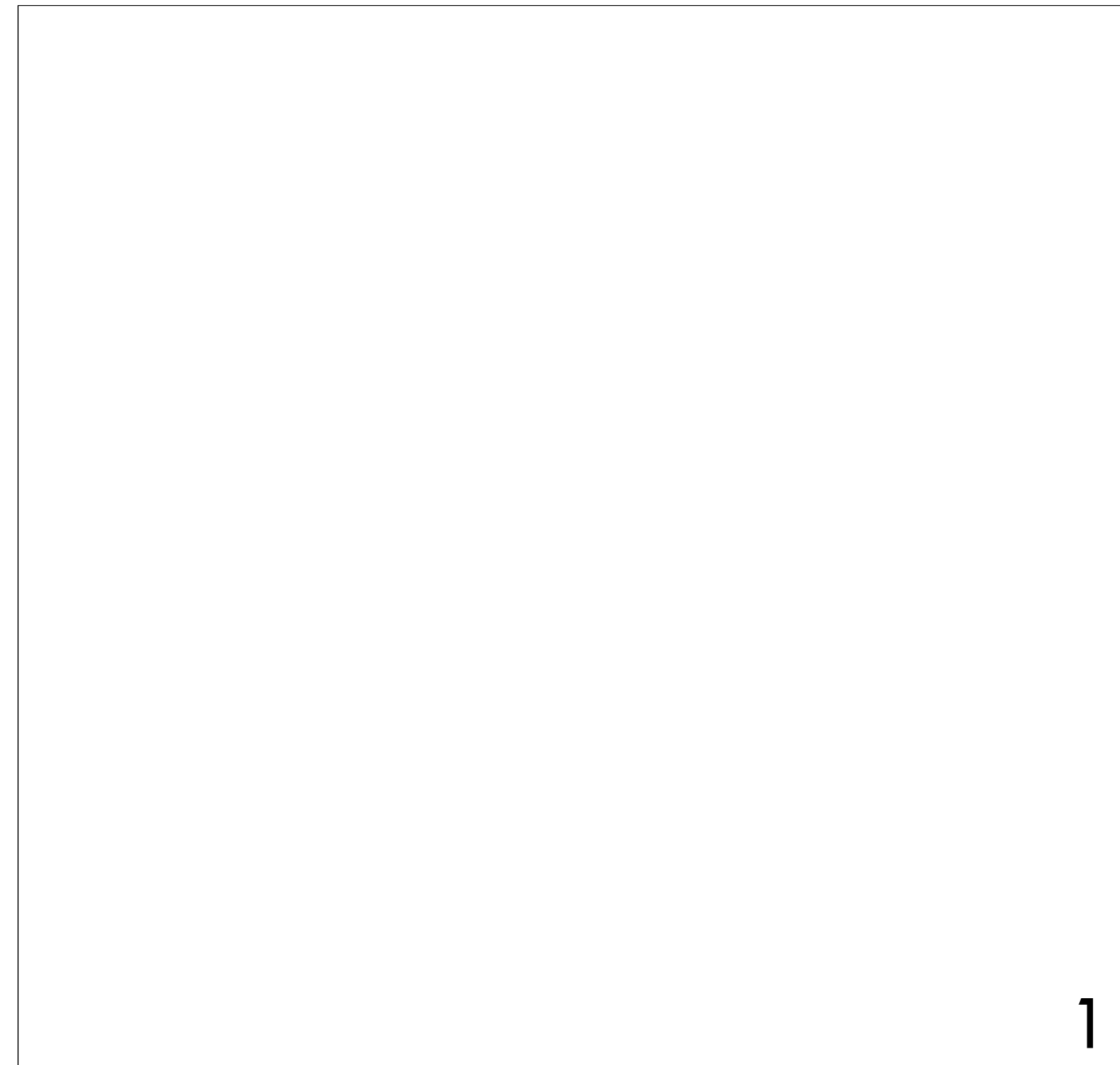
SCALE: 3/4" = 1'-0" U.N.O.

DATE: July 3, 2025

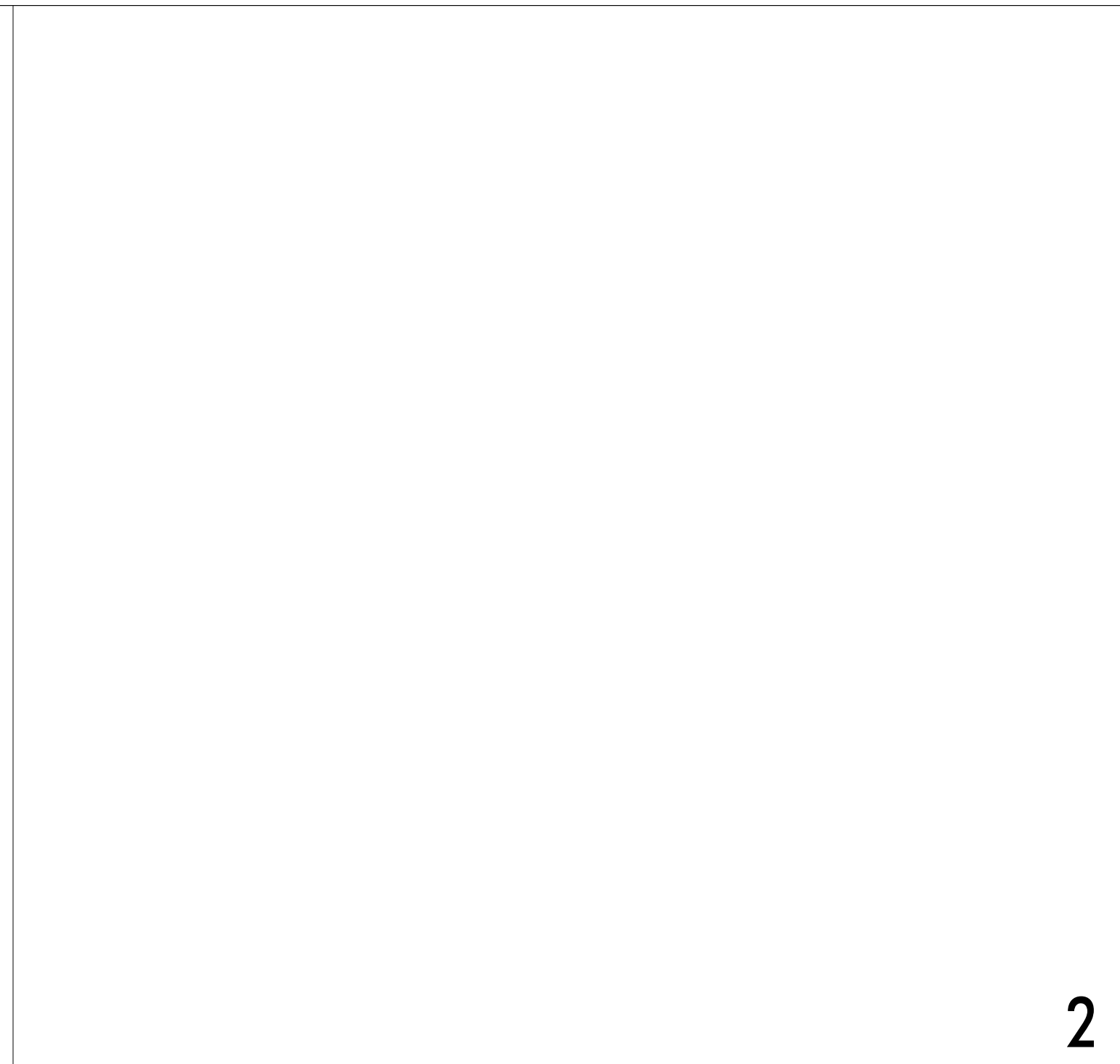
PROJECT NO: 13590-2025-01

SHEET NO:

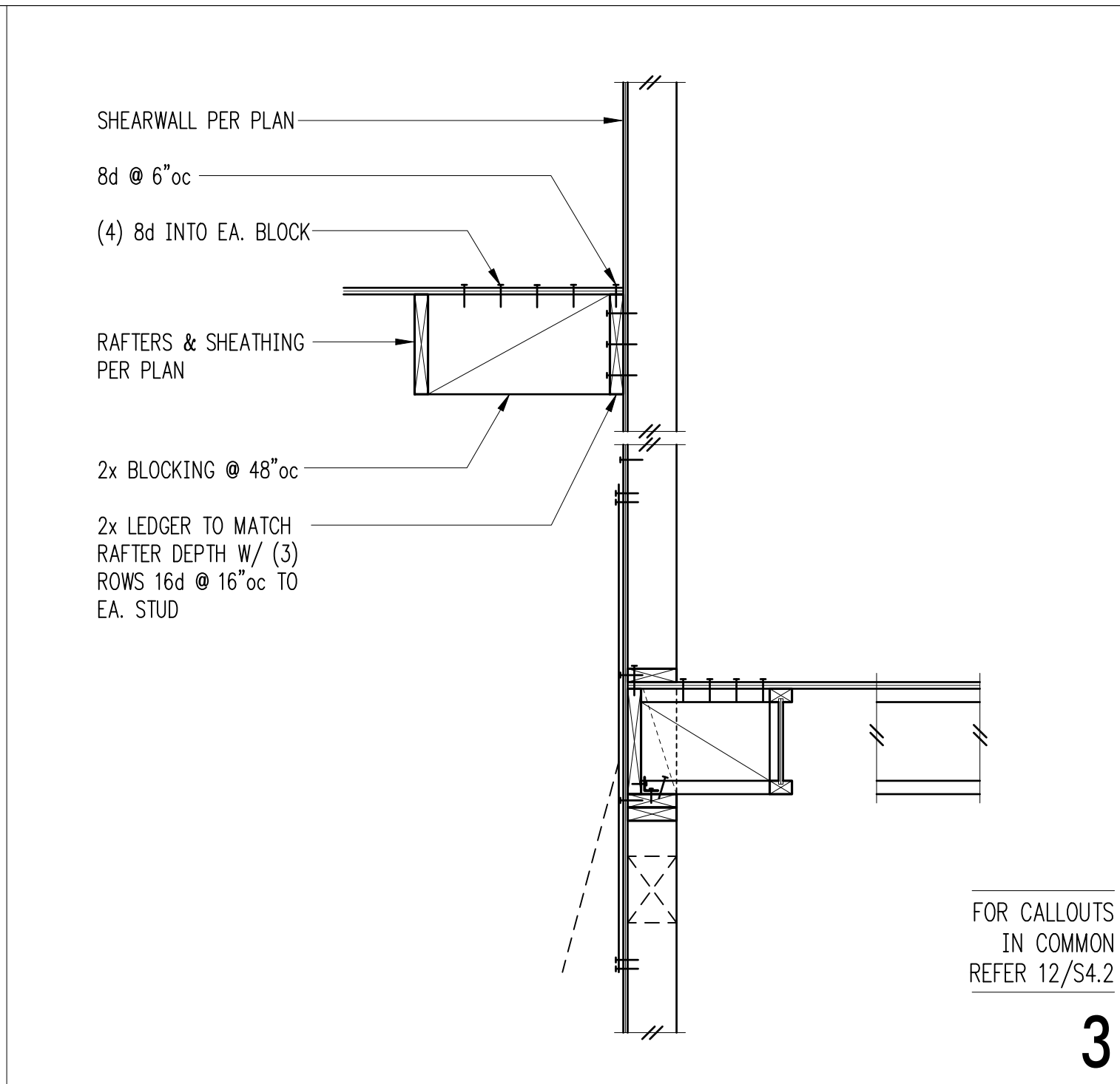
S4.3



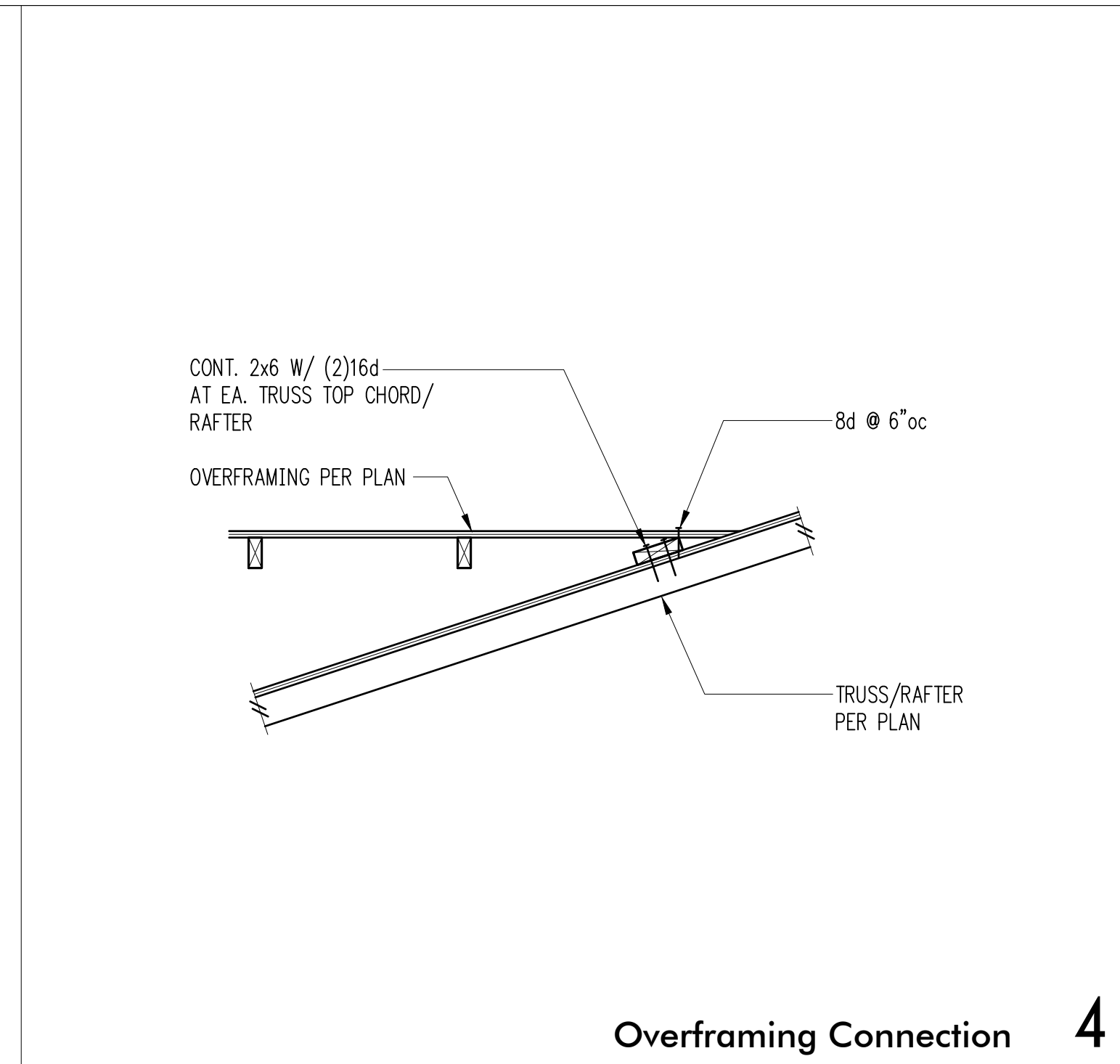
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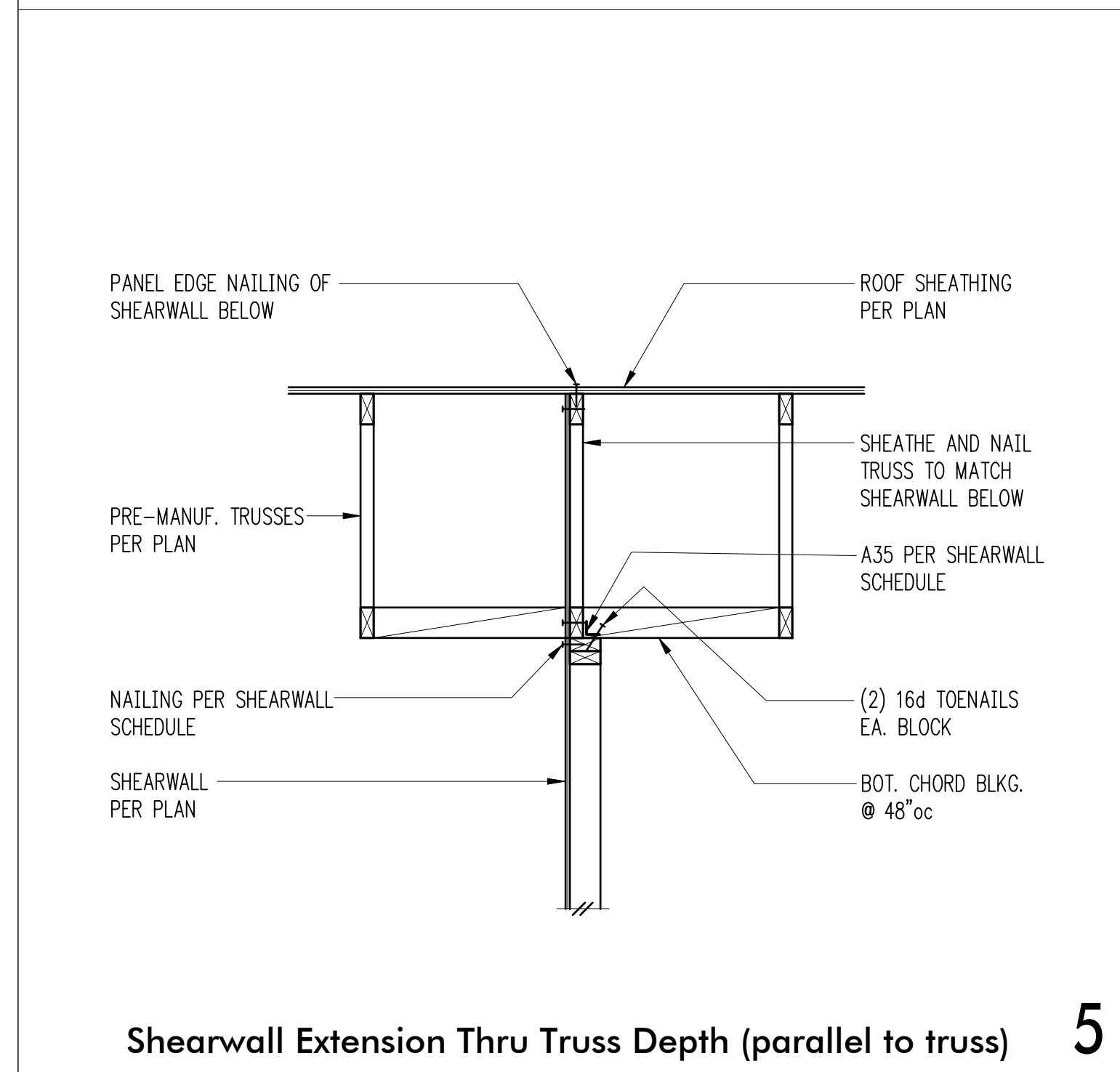
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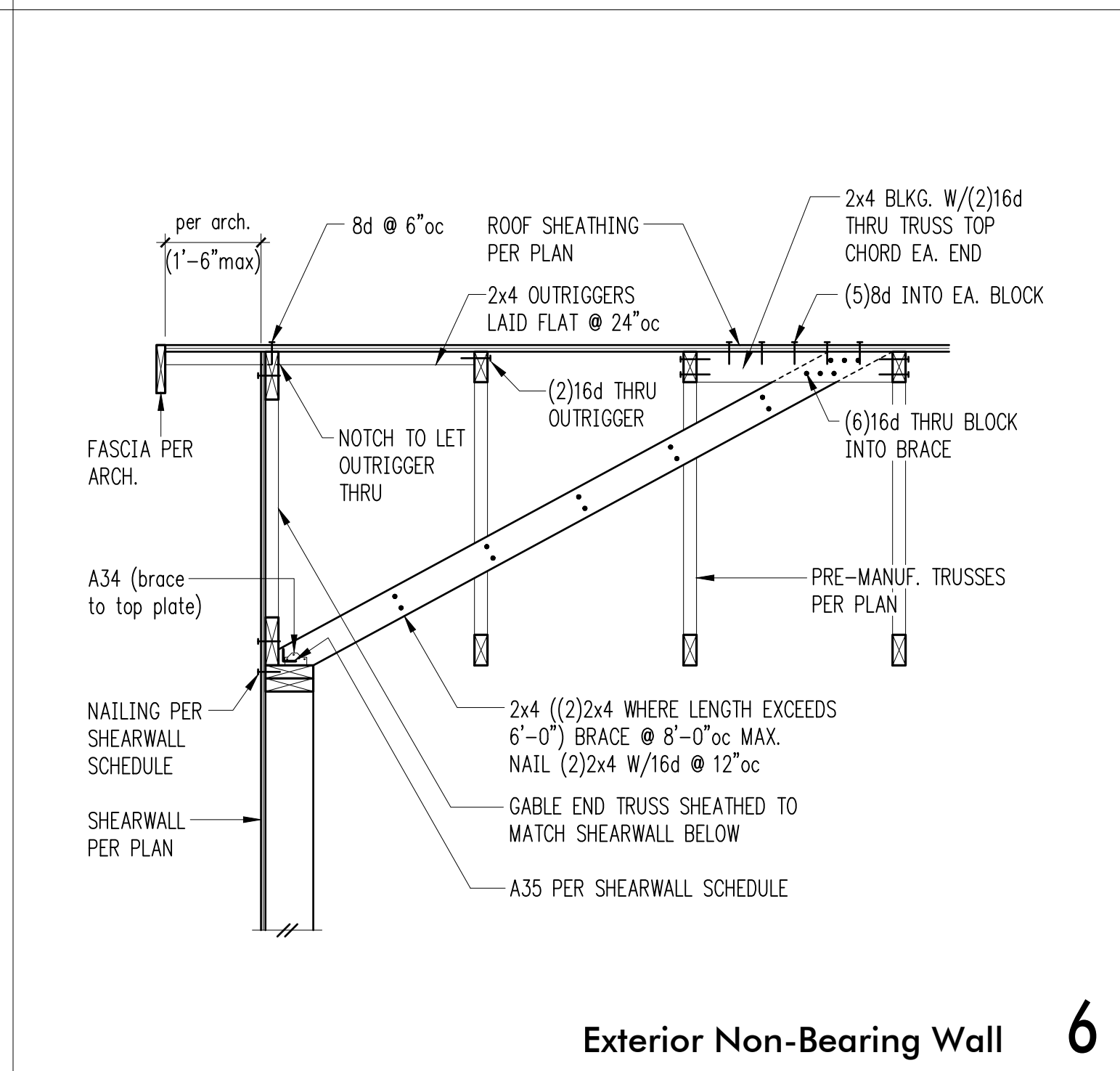
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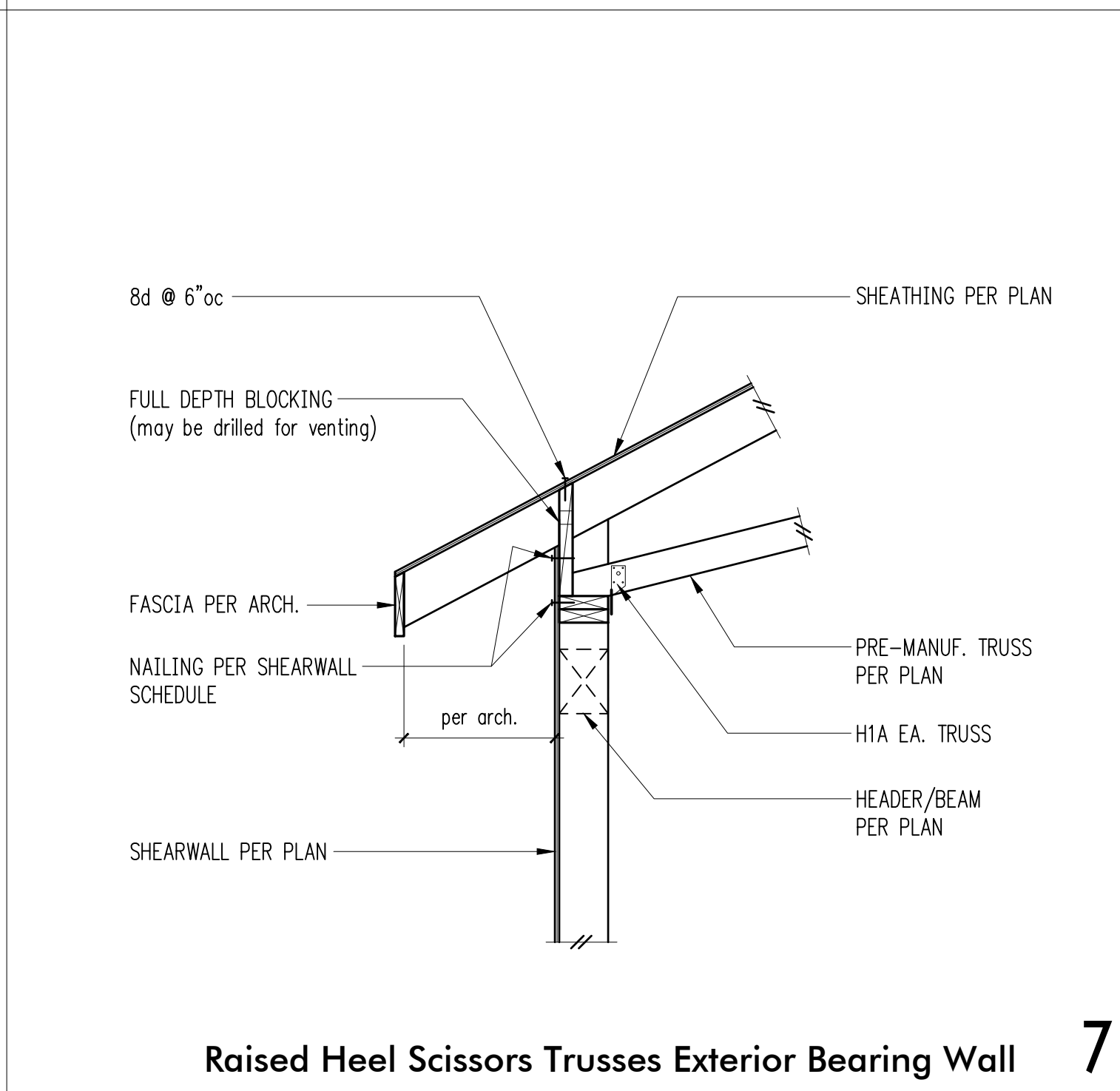
Overframing Connection 4



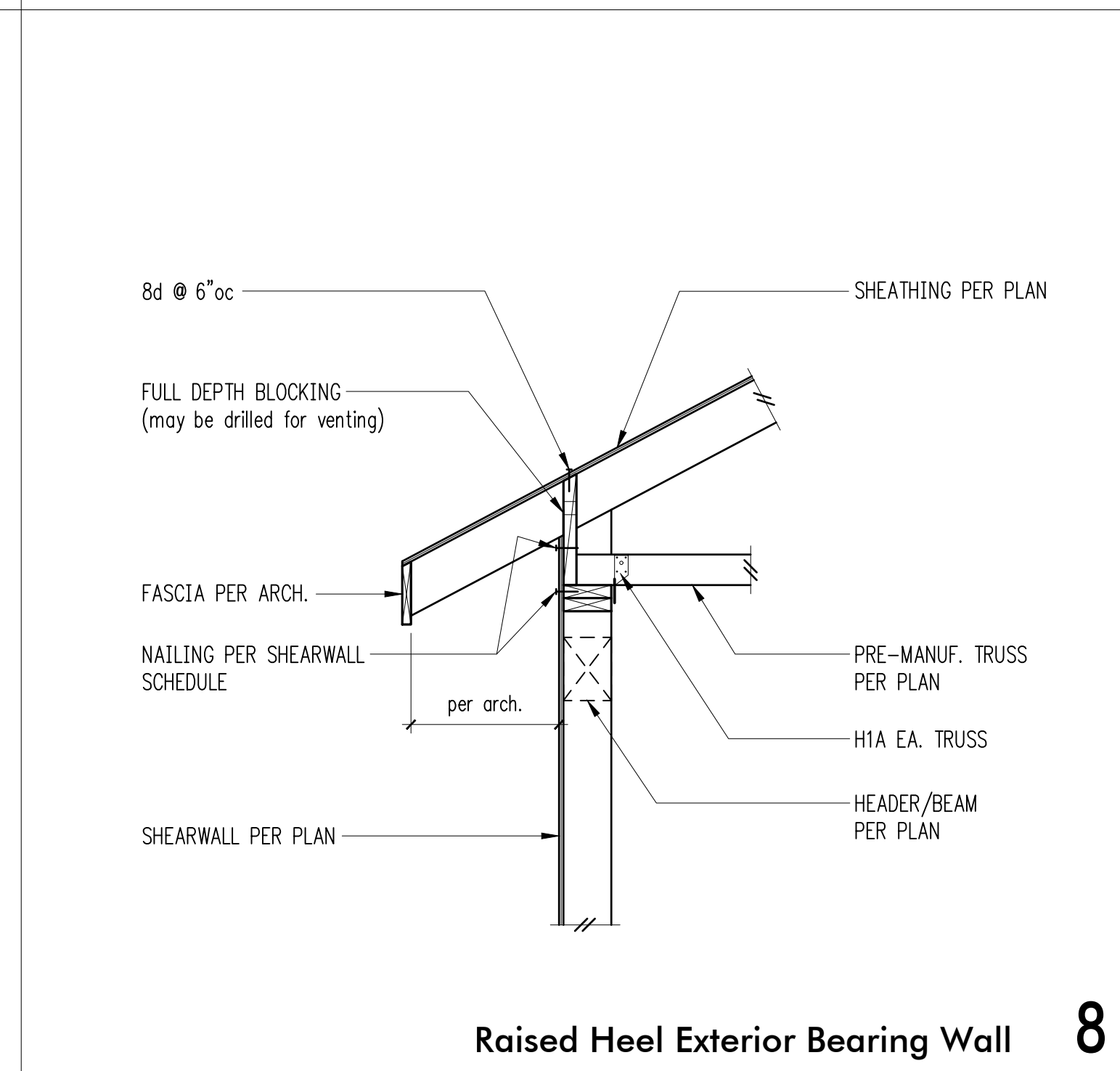
Shearwall Extension Thru Truss Depth (parallel to truss) 5



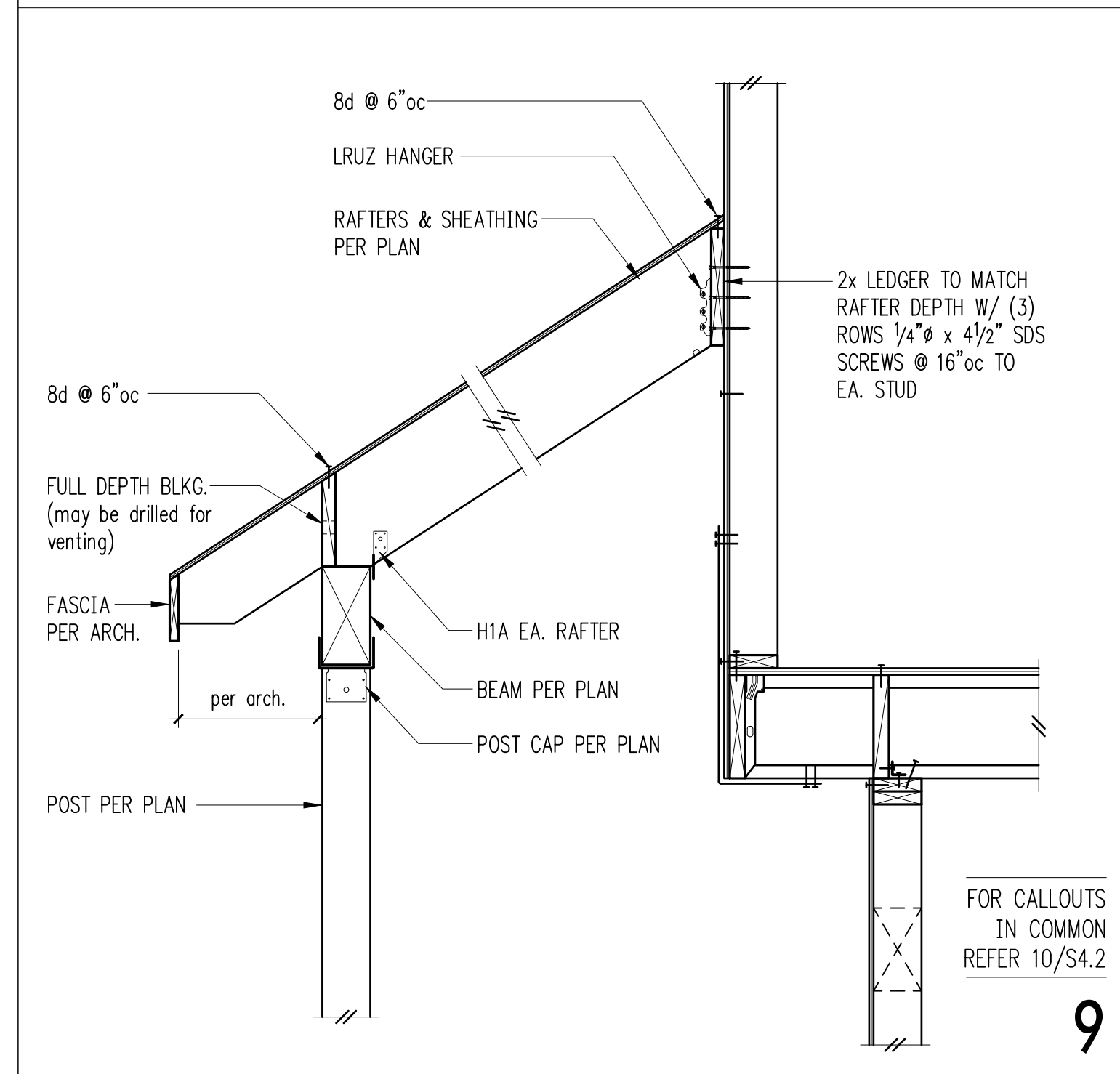
Exterior Non-Bearing Wall 6



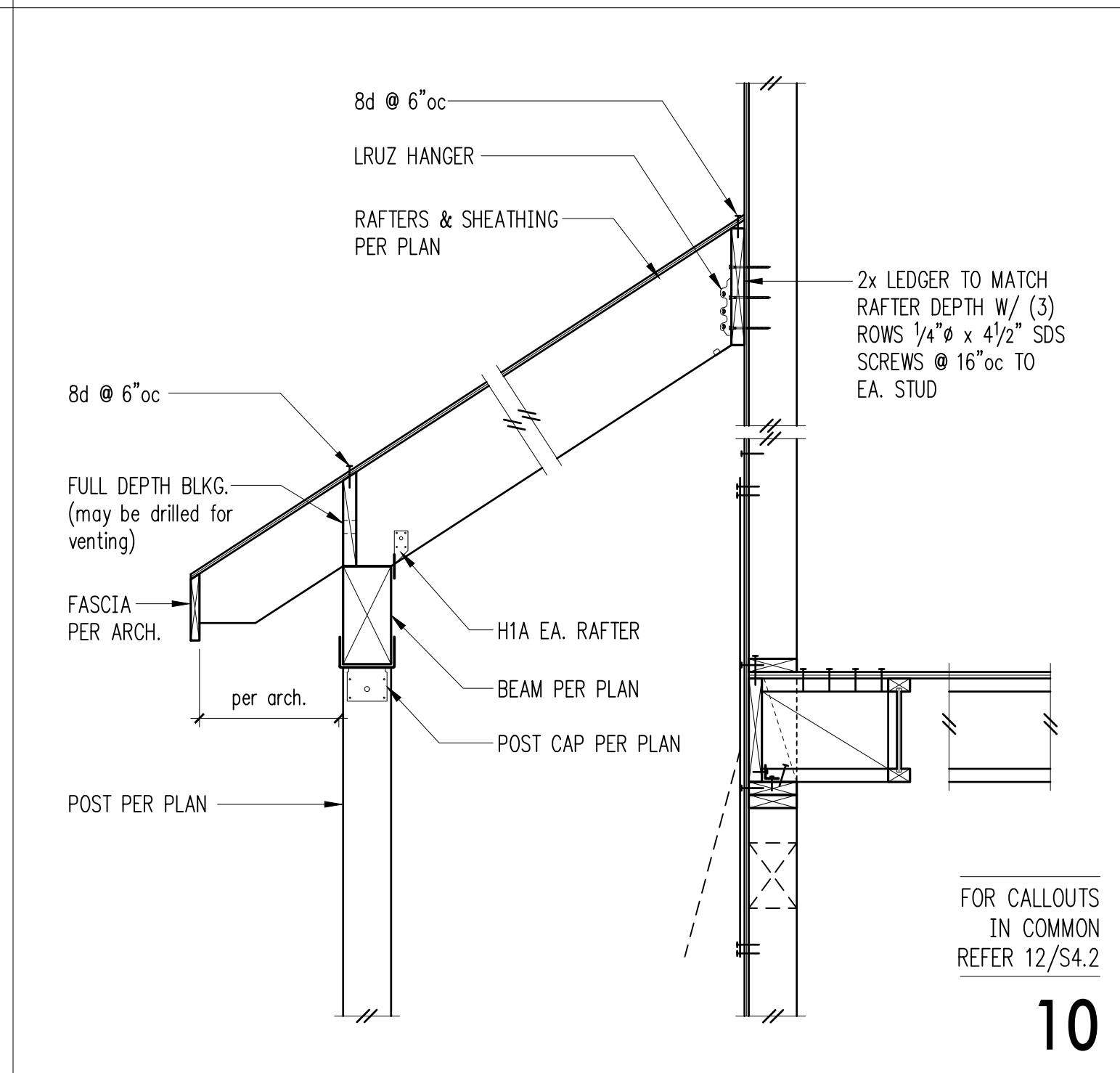
Raised Heel Scissors Trusses Exterior Bearing Wall 7



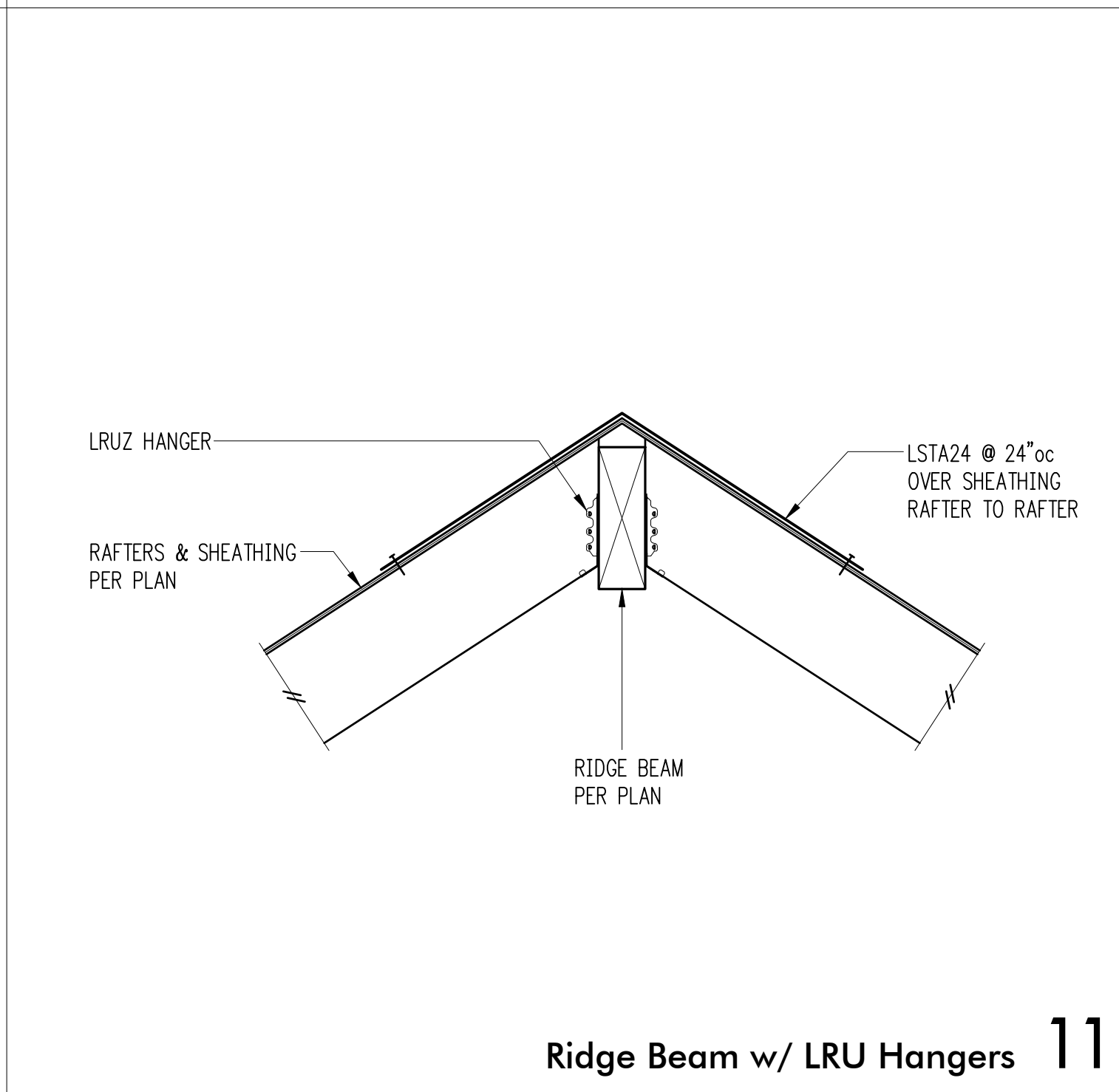
Raised Heel Exterior Bearing Wall 8



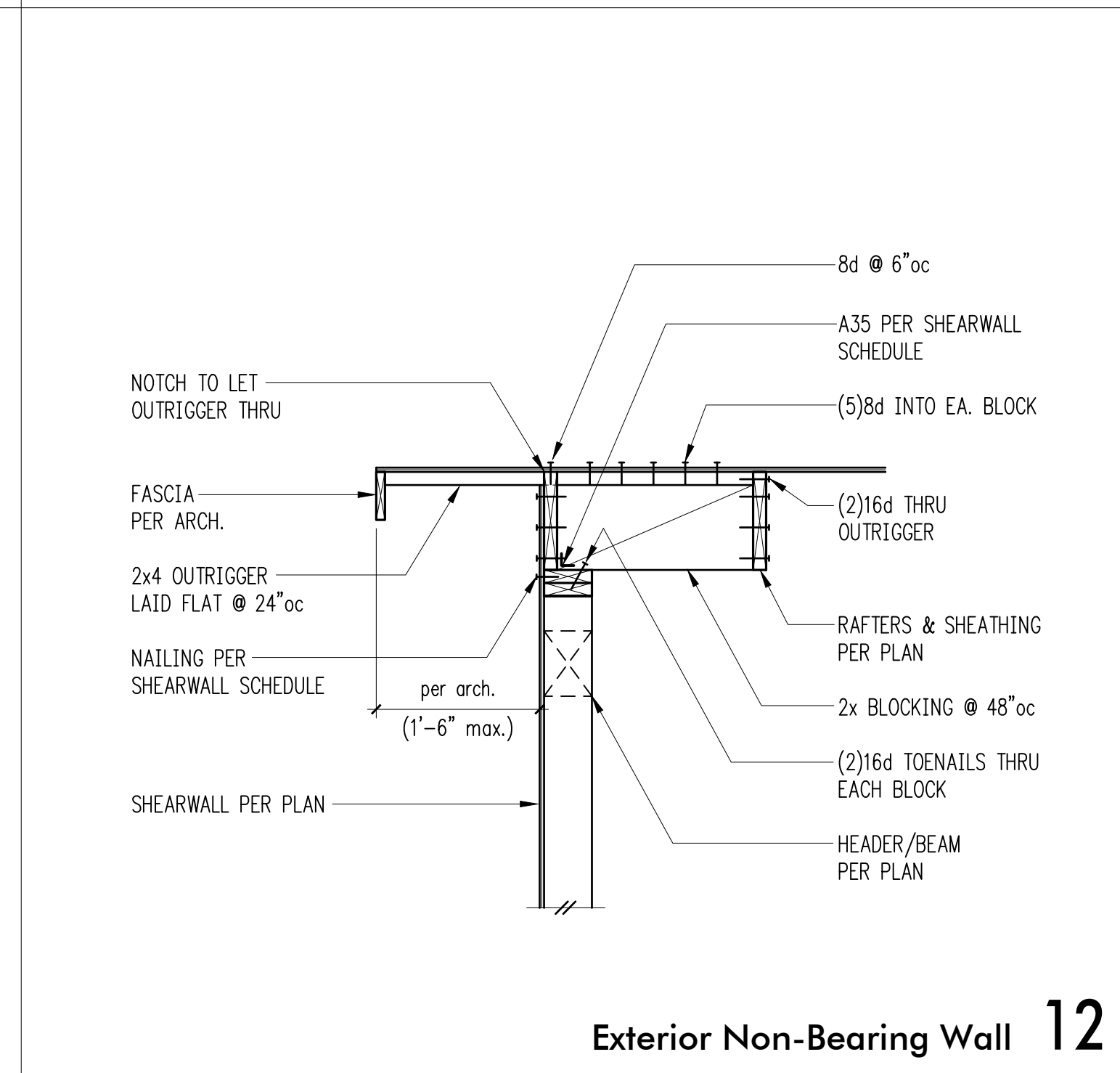
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10



Ridge Beam w/ LRU Hangers 11



Exterior Non-Bearing Wall 12