

GENERAL STRUCTURAL NOTES

(The following apply unless shown otherwise on the plans)

CRITERIA

- ALL MATERIALS, WORKMANSHIP, DESIGN, AND CONSTRUCTION SHALL CONFORM TO THE DRAWINGS, SPECIFICATIONS, THE 2021 EDITION OF THE INTERNATIONAL BUILDING CODE (IBC).
- THIS STRUCTURE DOES NOT CONFORM TO PRESENT EARTHQUAKE CODE REQUIREMENTS. IT HAS BEEN ANALYZED AND REINFORCED FOR MINIMUM MAINTENANCE IN ACCORDANCE WITH THE INTERNATIONAL EXISTING BUILDING CODE (IEBC) SECTIONS 502, 503 & CHAPTER 4 AND IS WITHIN THE CURRENT PRACTICE FOR THE RENOVATION OF EXISTING BUILDINGS OF THIS AGE AND TYPE OF CONSTRUCTION. THIS STRUCTURE HAS NOT BEEN ANALYZED OR DESIGNED FOR A COMPLETE SEISMIC UPGRADE.
- DESIGN LOADING CRITERIA**

ROOF SNOW LOAD	25 PSF
ROOF DECK LIVE LOAD	60 PSF
FLOOR LIVE LOAD (RESIDENTIAL)	40 PSF
FLOOR LIVE LOAD (RESIDENTIAL EXTERIOR DECKS AND BALCONIES)	60 PSF
GUARDRAILS/BALCONY RAILS	50 PLF OR 200 LBS.

SNOW :

ROOF SNOW LOAD = 25 PSF	
GROUND SNOW LOAD = 20 PSF	
EXPOSURE Ce = 1.00	
IMPORTANCE FACTOR Is = 1.00	
THERMAL FACTOR Ct = 1.00	

WIND :

ANALYSIS PROCEDURE: ASCE 7-16 CHAPTER 27 "PART 1 - BUILDINGS OF ALL HEIGHTS"

	RISK CATEGORY II
	98 MPH
	EXPOSURE "B"
	TOPOGRAPHIC FACTOR Kzt = 1.0

CLADDING / WINDOW DESIGN PRESSURE (MAX.) 30 PSF
 ROOFING DESIGN PRESSURE NOT AT A CORNER (MAX.) 40 PSF
 ROOFING DESIGN PRESSURE AT CORNER (MAX.) 48 PSF

THE DESIGN WIND PRESSURES LISTED ABOVE ARE INWARD OR OUTWARD AND ARE BASED ON AN EFFECTIVE WIND AREA OF 10 SQUARE FEET NEAR A BUILDING CORNER, U.O.N. CORNER AND OTHER ZONES ARE DEFINED BY FIGURE 30.3-1, 30.3-2A TO 2I AND 30.3-5A TO 5B IN ASCE 7-16. REDUCED DESIGN PRESSURES MAY BE CALCULATED USING ASCE 7. NOTE THAT THE DESIGN WIND PRESSURES NOTED ABOVE ARE ULTIMATE VALUES PER THE 2018 IBC AND SHALL BE MULTIPLIED BY 0.6 FOR ALLOWABLE STRESS DESIGN.

EARTHQUAKE :

ANALYSIS PROCEDURE: IBC "EQUIVALENT LATERAL FORCE PROCEDURE"

	SEISMIC DESIGN CATEGORY (SDC) = D
	RISK CATEGORY = II
	SEISMIC SITE CLASS = D-(DEFAULT)
	IMPORTANCE FACTOR Ie = 1.0
	MAPPED MCE Ss = 1.428; S1 = 0.496
	DESIGN ACCELERATION Sds = 1.142; Sd1 = 0.597
	SEISMIC RESISTING SYSTEM: WOOD PANEL BEARING SHEAR WALL, R = 6.5
- LATERAL LOADS ARE TRANSFERRED BY THE ROOF AND FLOOR DIAPHRAGMS TO THE SHEAR WALLS. FORCES ARE BASED ON THE TRIBUTARY AREA FOR EACH SHEAR WALL AND ARE CARRIED BY THE SHEAR WALLS TO THE FOUNDATION.
- STRUCTURAL DRAWINGS SHALL BE USED IN CONJUNCTION WITH ARCHITECTURAL DRAWINGS FOR BIDDING AND CONSTRUCTION. CONTRACTOR SHALL VERIFY DIMENSIONS AND CONDITIONS FOR COMPATIBILITY AND SHALL NOTIFY ARCHITECT OF ANY DISCREPANCIES PRIOR TO CONSTRUCTION.
- 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.
- CONTRACTOR SHALL PROVIDE TEMPORARY BRACING FOR THE STRUCTURE AND STRUCTURAL COMPONENTS UNTIL ALL FINAL CONNECTIONS HAVE BEEN COMPLETED IN ACCORDANCE WITH THE PLANS.
- CONTRACTOR SHALL BE RESPONSIBLE FOR ALL SAFETY PRECAUTIONS AND THE METHODS, TECHNIQUES, SEQUENCES OR PROCEDURES REQUIRED TO PERFORM THEIR 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 OF THE OWNER, CONTRACTORS, OR OTHER ENTITIES OR PERSONS AT THE PROJECT SITE.
- 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.
- 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. WHERE INFORMATION ON THE DRAWINGS IS IN CONFLICT WITH THE SPECIFICATIONS, THE MORE STRINGENT SHALL APPLY, SUBJECT TO REVIEW AND APPROVAL BY THE ARCHITECT AND THE STRUCTURAL ENGINEER. DO NOT SCALE THE DRAWINGS.
- ALL STRUCTURAL SYSTEMS WHICH ARE COMPOSED OF FIELD ERECTED COMPONENTS SHALL BE SUPERVISED BY THE SUPPLIER DURING MANUFACTURING, DELIVERY, HANDLING, STORAGE AND ERECTION IN ACCORDANCE WITH INSTRUCTIONS PREPARED BY THE SUPPLIER.
- SHOP DRAWINGS FOR CONNECTOR PLATE WOOD ROOF JOISTS SHALL BE SUBMITTED TO THE ARCHITECT AND STRUCTURAL ENGINEER FOR REVIEW PRIOR TO FABRICATION OF THESE ITEMS.
- SHOP DRAWING REVIEW: DIMENSIONS AND QUANTITIES ARE NOT REVIEWED BY THE ENGINEER OF RECORD, AND 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.
- 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 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.

- DEFERRED SUBMITTALS OF DESIGN BUILD COMPONENTS SHALL BEAR THE STAMP AND SIGNATURE OF A STATE OF WASHINGTON REGISTERED PROFESSIONAL ENGINEER AND SHALL BE APPROVED BY THE COMPONENT DESIGNER PRIOR TO CURSORY REVIEW BY THE ENGINEER OF RECORD FOR LOADS IMPOSED ON THE BASIC STRUCTURE. THE COMPONENT DESIGNER IS RESPONSIBLE FOR CODE CONFORMANCE AND ALL NECESSARY CONNECTIONS NOT SPECIFICALLY CALLED OUT ON ARCHITECTURAL OR STRUCTURAL DRAWINGS. DEFERRED SUBMITTALS SHALL INDICATE MAGNITUDE AND DIRECTION OF ALL LOADS IMPOSED ON BASIC STRUCTURE AND SHALL INCLUDE DESIGN CALCULATIONS WITH THE ENGINEER'S STAMP.

THE FOLLOWING COMPONENTS SHALL BE DEFERRED SUBMITTALS FOR THIS PROJECT:

TJI JOIST,

- SPECIAL INSPECTION: EPOXY GROUTED INSTALLATIONS SHALL BE SUPERVISED IN ACCORDANCE WITH IBC SECTIONS 1704 & 1705 AND THE PROJECT SPECIFICATIONS BY A QUALIFIED TESTING AGENCY DESIGNATED BY THE OWNER. THE TESTING AGENCY SHALL SEND COPIES OF ALL STRUCTURAL TESTING AND INSPECTION REPORTS DIRECTLY TO THE OWNER, ARCHITECT, STRUCTURAL ENGINEER, CONTRACTOR AND BUILDING OFFICIAL. ANY MATERIALS WHICH FAIL TO MEET PROJECT SPECIFICATIONS SHALL BE BROU

March 4th, 2026

Project No: 2921-KIN

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- FOUNDATION NOTES: ALLOWAB VERIFIED IN THE FIELD. IF SC POSSIBLE FOUNDATION REDESIGN

Subject: Plans Review/Minimal Risk Letter
 4433 86th Ave SE,
 Mercer Island WA, 98040
 Parcel #759810-0733

FOOTINGS SHALL BEAR ON FIRM BELOW LOWEST ADJACENT FINI AND FOR GUIDANCE ONLY; TH FIELD. UNLESS OTHERWISE NOT

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

THE STRUCTURAL DESIGN IS BASED ON THE FOLLOWING ASSUMED VALUES:

ALLOWABLE SOIL PRESSURE: 1500 PSF
 GEOTECHNICAL REPORT REFERENCE: RENOVATION MBGS, PROJECT # 2921-KIN REVIEW LETTER, 03.04.2026

- DEMOLITION: VERIFY ALL EXISTING CONDITIONS BEFORE COMMENCING ANY DEMOLITION. SHORING SHALL BE INSTALLED TO SUPPORT EXISTING CONSTRUCTION AS REQUIRED AND IN A MANNER SUITABLE TO THE WORK SEQUENCES. 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. 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

- CHECK FOR DRYROT AT ALL EXTERIOR WALLS, EXISTING TOILET ROOM FLOORS AND WALLS, AREAS SHOWING WATER STAINS, AND ALL WOOD MEMBERS IN BASEMENT AND CRAWL SPACES. ALL ROT SHALL BE REMOVED AND DAMAGED MEMBERS SHALL BE REPLACED OR REPAIRED AS DIRECTED BY THE STRUCTURAL ENGINEER OR ARCHITECT.

CONCRETE

- CONCRETE SHALL BE MIXED, PROPORTIONED, CONVEYED AND PLACED IN ACCORDANCE WITH ACI 301. CONSTRUCTION TOLERANCES SHALL NOT EXCEED THOSE LISTED IN ACI 117. STRENGTHS AT 28 DAYS AND MIX CRITERIA SHALL BE AS FOLLOWS:

TYPE OF CONSTRUCTION	28 DAY STRENGTH (fc)	MAXIMUM SLUMP	MIN. CEMENT CONTENT PER CUBIC YARD	MAX. AGGREGATE SIZE
A. FOOTINGS, SLABS-ON-GRADE, TOPPING SLABS	2,500 PSI	5"	5-1/2 SACKS	1 1/4"

MIXES SHALL BE PROPORTIONED SO AS NOT TO EXCEED THE MAXIMUM SLUMPS INDICATED (BEFORE THE ADDITION OF ADMIXTURES). THE WATER/CEMENT RATIO SHALL NOT EXCEED 0.55 FOR FOOTINGS AND 0.45 FOR ALL SLABS AND EXPOSED CONCRETE. LIGHTWEIGHT CONCRETE SHALL HAVE A MAXIMUM DENSITY OF 110 PCF.

THE MINIMUM AMOUNT OF CEMENT AND THE MAXIMUM SLUMP MAY BE CHANGED IF A CONCRETE PERFORMANCE MIX IS SUBMITTED TO THE STRUCTURAL ENGINEER AND THE BUILDING DEPARTMENT FOR APPROVAL TWO WEEKS PRIOR TO PLACING ANY CONCRETE. (THE W/C RATIO LIMITS STILL APPLY). THE PERFORMANCE MIX SHALL INCLUDE THE AMOUNTS OF CEMENT, CEMENTITIOUS MATERIAL, FINE AND COARSE AGGREGATE, WATER AND ADMIXTURES AS WELL AS THE WATER/CEMENT RATIO, SLUMP, CONCRETE YIELD AND SUBSTANTIATING STRENGTH DATA IN ACCORDANCE WITH ACI 301. CHEMICAL ADMIXTURES AND FLY ASH SHALL CONFORM TO ASTM C494 AND C618 RESPECTIVELY. FLY ASH PERCENTAGE OF TOTAL CEMENTITIOUS MATERIAL SHALL NOT EXCEED 20%. THE USE OF A PERFORMANCE MIX REQUIRES BATCH PLANT INSPECTION, THE COST OF WHICH SHALL BE BROUGHT TO THE ATTENTION OF THE OWNER. REVIEW OF MIX SUBMITTALS BY THE ENGINEER OF RECORD INDICATES ONLY THAT INFORMATION PRESENTED CONFORMS GENERALLY TO CONTRACT DOCUMENTS. CONTRACTOR MAINTAINS FULL RESPONSIBILITY FOR SPECIFIED PERFORMANCE.

- REINFORCING STEEL SHALL CONFORM TO ASTM A615 (INCLUDING SUPPLEMENT S1), GRADE 60, fy = 60,000 PSI. GRADE 60 REINFORCING STEEL INDICATED ON DRAWINGS TO BE WELDED SHALL CONFORM TO ASTM A706. REINFORCING STEEL COMPLYING WITH ASTM A615 (S1) MAY BE WELDED ONLY IF MATERIAL PROPERTY REPORTS INDICATING CONFORMANCE WITH WELDING PROCEDURES SPECIFIED IN A.W.S. D1.4 ARE SUBMITTED. LONGITUDINAL REINFORCING STEEL IN DUCTILE FRAME MEMBERS AND IN SHEAR WALL BOUNDARY MEMBERS SHALL COMPLY WITH ASTM A706. ASTM A615 GRADE 60 REINFORCING STEEL IS ALLOWED IN THESE MEMBERS IF (A) THE ACTUAL YIELD STRENGTH BASED ON MILL TESTS DOES NOT EXCEED THE SPECIFIED YIELD STRENGTH BY MORE THAN 18,000 PSI (RETESTS SHALL NOT EXCEED THIS VALUE BY MORE THAN AN ADDITIONAL 3,000 PSI) AND (B) THE RATIO OF THE ACTUAL ULTIMATE TENSILE STRESS TO THE ACTUAL TENSILE YIELD STRENGTH IS NOT LESS THAN 1.25.

WELDED WIRE FABRIC SHALL CONFORM TO ASTM A1064. LAP ADJACENT MATS OF WELDED WIRE FABRIC A MINIMUM OF 8" AT SIDES AND ENDS.

SPIRAL REINFORCEMENT SHALL BE PLAIN WIRE CONFORMING TO ASTM A615, GRADE 60, fy = 60,000 PSI.

- REINFORCING STEEL SHALL BE DETAILED (INCLUDING HOOKS AND BENDS) IN ACCORDANCE WITH ACI 315 AND 318. LAP ALL CONTINUOUS REINFORCEMENT #5 AND SMALLER 60 BAR DIAMETERS, 2'-0" MINIMUM. PROVIDE CORNER BARS AT ALL WALL AND FOOTING INTERSECTIONS. LAP CORNER BARS #5 AND SMALLER 60 BAR DIAMETERS OR 2'-0" MINIMUM. LAPS OF LARGER BARS SHALL BE MADE IN ACCORDANCE WITH ACI 318, CLASS B. LAP ADJACENT MATS OF WELDED WIRE FABRIC A MINIMUM OF 8" AT SIDES AND ENDS. PROVIDE (2) #5 MIN. U.O.N. TRIM BARS AROUND ALL OPENINGS IN CONCRETE WALLS OR SLABS EXTENDING 2'-6" PAST CORNERS, TYPICAL

NO BARS PARTIALLY EMBEDDED IN HARDENED CONCRETE SHALL BE FIELD BENT UNLESS SPECIFICALLY SO DETAILED OR APPROVED BY THE STRUCTURAL ENGINEER. NO REINFORCING BARS SHALL BE "WET-SET" INTO THE CONCRETE. PROVIDE A 20' LONG REBAR GROUND (UFER GROUND) PER ELECTRICIAN.

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

FOOTINGS AND OTHER UNFORMED SURFACES CAST AGAINST EARTH	3"
FORMED SURFACES EXPOSED TO EARTH (i.e. WALLS BELOW GROUND) OR WEATHER (#5 BARS OR SMALLER)	1-1/2"
SLABS AND WALLS (INTERIOR FACE)	GREATER OF (BAR DIAMETER PLUS 1/8") OR 3/4"

- 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

- SCREW ANCHORS INTO CONCRETE SHALL BE "TITEN HD", AS MANUFACTURED BY SIMPSON STRONG-TIE ANCHOR SYSTEMS. INSTALL IN STRICT ACCORDANCE WITH I.C.C. REPORT NO. ESR-2713 INCLUDING STANDARD EMBEDMENT REQUIREMENTS U.O.N. PROPOSED SUBSTITUTIONS SHALL BE SUBMITTED FOR REVIEW WITH I.C.C. OR IAPMO UES REPORTS INDICATING EQUIVALENT OR GREATER LOAD CAPACITIES. SPECIAL INSPECTION IS REQUIRED FOR ALL SCREW ANCHOR INSTALLATION.

- EPOXY-GROUTED ITEMS (THREADED RODS OR REINFORCING BAR) INTO CONCRETE SHALL BE INSTALLED USING "SET-XP" ADHESIVE ANCHOR AS MANUFACTURED BY SIMPSON STRONG-TIE ANCHOR SYSTEMS. INSTALL IN STRICT ACCORDANCE WITH I.C.C. REPORT NO. ESR-2508, INCLUDING STANDARD EMBEDMENT REQUIREMENTS U.O.N. PROPOSED SUBSTITUTIONS SHALL BE SUBMITTED FOR REVIEW WITH I.C.C. OR IAPMO UES REPORTS INDICATING EQUIVALENT OR GREATER LOAD CAPACITIES. SPECIAL INSPECTION OF INSTALLATION IS REQUIRED.

STEEL

- STRUCTURAL STEEL DESIGN, FABRICATION, AND ERECTION SHALL BE BASED ON THE LATEST EDITIONS OF THE A.I.S.C. SPECIFICATIONS AND CODES:

- AISC - STEEL CONSTRUCTION MANUAL, 15TH EDITION
- AISC 303-16 - CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES.
- 2014 RCSC SPECIFICATION FOR STRUCTURAL JOINTS USING HIGH STRENGTH BOLTS.

- STRUCTURAL STEEL SHALL CONFORM TO THE FOLLOWING REQUIREMENTS:

TYPE OF MEMBER	ASTM SPECIFICATION	Fy
A. ANCHOR BOLTS AND THREADED RODS (EMBEDDED IN CONCRETE)	F1554 (GRADE 36) OR	36 KSI

SUBSTITUTION OF MEMBER SIZES OR STEEL GRADE SHALL NOT BE ALLOWED WITHOUT PRIOR APPROVAL OF THE ENGINEER. STEEL BEAMS ARE EQUALLY SPACED BETWEEN DIMENSIONED POINTS. ALL STEEL ANCHORS AND TIES AND OTHER MEMBERS EMBEDDED IN CONCRETE OR MASONRY SHALL BE LEFT UNPAINTED. ALL STEEL TO BE FIREPROOFED SHALL BE LEFT UNPAINTED. ALL OTHER STEEL SHALL HAVE ONE COAT OF APPROVED SHOP PAINT.

WOOD

- FRAMING LUMBER: SHALL BE KILN DRIED OR MC-19 (MOISTURE CONTENT LESS THAN 19%), AND GRADED AND MARKED IN CONFORMANCE WITH W.C.L.I.B. STANDARD NO. 17 GRADING RULES FOR WEST COAST LUMBER. FURNISH TO THE FOLLOWING MINIMUM STANDARDS:

JOISTS (2X AND 4X MEMBERS)	DOUGLAS FIR OR HEM-FIR NO. 2 (U.N.O. ON PLAN)
BEAMS AND STRINGERS (INCLUDING 6 X AND LARGER MEMBERS)	DOUGLAS FIR NO. 1
POSTS AND TIMBERS	DOUGLAS FIR NO. 1
STUDS, PLATES & MISCELLANEOUS LIGHT FRAMING (AS NOTED ON PLANS / DETAILS)	DOUGLAS FIR OR HEM-FIR NO. 2

- WOOD SETTLEMENT SHRINKAGE: DUE TO CROSS GRAIN WOOD SHRINKAGE, THIS BUILDING IS EXPECTED TO SETTLE APPROXIMATELY 1/8 TO 1/4 INCH PER STORY. ALL UTILITIES SHALL BE DESIGNED WITH FLEXIBLE JOINTS OR OTHER MEANS TO APPROPRIATELY ACCOMMODATE THIS NORMAL SETTLEMENT. ALL INTERIOR AND EXTERIOR SHEATHING AND FINISHES SHALL BE INSTALLED SUCH THAT NO DAMAGE WILL OCCUR. SHRINKAGE IS EXPECTED IN THE THICKNESS OF THE WALL PLATES AND NOT IN THE LENGTH OF THE WALL STUDS.

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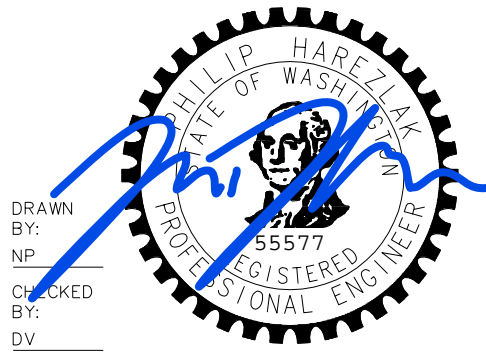


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04/27/2026

PROJECT INFORMATION:
XIAO ZHOU HOUSE ADDITION

PROJECT ADDRESS:
**4433 86TH AVE SE
 MERCER ISLAND, WA 98040**

REVISIONS:

NO.	DESCRIPTION	DATE
1	REV 1	04.27.2026

PROJECT NUMBER:	25-009
ISSUE DATE:	04.01.2025
CURRENT REVISION:	REV 1

SHEET NAME:

**GENERAL
 STRUCTURAL
 NOTES/SHEET
 INDEX**

SHEET NUMBER:

S1.0

GENERAL STRUCTURAL NOTES

(The following apply unless shown otherwise on the plans)

31. LAMINATED LUMBER (LVL) SHALL BE DESIGNED AND MANUFACTURED PER ASTM D5456. EACH PIECE SHALL BEAR A STAMP OR STAMPS NOTING THE NAME AND PLANT NUMBER OF THE MANUFACTURER, THE GRADE, AND THE INDEPENDENT INSPECTION AGENCY'S LOGO. ALL LAMINATED VENEER LUMBER SHALL BE MANUFACTURED USING DOUGLAS FIR VENEER GLUED WITH A WATERPROOF ADHESIVE MEETING THE REQUIREMENTS OF ASTM D2559 WITH ALL GRAIN PARALLEL WITH THE LENGTH OF THE MEMBER. MINIMUM STRUCTURAL PROPERTIES ARE AS FOLLOWS:

RIM JOISTS AND BLOCKING (1-1/2" MINIMUM THICKNESS):
FB = 1800 PSI, E = 1.4 X 10⁶ PSI, FV = 225 PSI

BEAMS AND HEADERS:
FB = 2800 PSI, E = 2.0 X 10⁶ PSI, FV = 285 PSI

STUDS AND COLUMN:
FB = 2800 PSI, E = 2.0 X 10⁶ PSI, FV = 190 PSI

DESIGN SHOWN ON PLANS IS BASED ON MATERIALS MANUFACTURED BY THE BOISE CASCADE CORPORATION. ALTERNATE MANUFACTURERS MAY BE USED SUBJECT TO REVIEW AND APPROVAL BY THE ARCHITECT AND STRUCTURAL ENGINEER.

32. LAMINATED STRAND LUMBER (LSL) SHALL BE DESIGNED AND MANUFACTURED PER ASTM D5456. EACH PIECE SHALL BEAR A STAMP OR STAMPS NOTING THE NAME AND PLANT NUMBER OF THE MANUFACTURER, THE GRADE, AND THE INDEPENDENT INSPECTION AGENCY'S LOGO. ALL LAMINATED STRAND LUMBER SHALL BE MANUFACTURED USING A WATERPROOF ADHESIVE MEETING THE REQUIREMENTS OF ASTM D2559. MINIMUM STRUCTURAL PROPERTIES ARE AS FOLLOWS:

RIM JOISTS AND BLOCKING (1-1/4" MINIMUM THICKNESS AT NON-SHEAR WALLS; SEE SCHEDULE FOR MINIMUM THICKNESS AT SHEAR WALLS):

FB = 1700 PSI, E = 1.3 X 10⁶ PSI, FV = 400 PSI

BEAMS AND HEADERS:
FB = 2325 PSI, E = 1.55 X 10⁶ PSI, FV = 310 PSI

STUDS:
2X4 & 2X6 FB = 1700 PSI, E = 1.3 X 10⁶ PSI, FV = 400 PSI
> 2X6 FB = 2425 PSI, E = 1.6 X 10⁶ PSI, FV = 400 PSI

COLUMNS:
FB = 1700 PSI, E = 1.3 X 10⁶ PSI, FV = 400 PSI

DESIGN SHOWN ON PLANS IS BASED ON MATERIALS MANUFACTURED BY THE WEYERHAEUSER CORPORATION. ALTERNATE MANUFACTURERS MAY BE USED SUBJECT TO REVIEW AND APPROVAL BY THE ARCHITECT AND STRUCTURAL ENGINEER.

33. WOOD I-JOISTS SHALL BE DESIGNED BY THE MANUFACTURER FOR THE SPANS AND CONDITIONS SHOWN ON THE PLANS AND SHALL BE FURNISHED AND INSTALLED IN CONFORMANCE WITH MANUFACTURER'S PUBLISHED SPECIFICATIONS. ALL NECESSARY BRIDGING, BLOCKING, BLOCKING PANELS, STIFFENERS, ETC., SHALL BE DETAILED AND FURNISHED BY THE MANUFACTURER. SUBMIT SHOP DRAWINGS AND DESIGN CALCULATIONS TO THE ARCHITECT AND STRUCTURAL ENGINEER FOR REVIEW PRIOR TO FABRICATION. DESIGN SUBMITTALS SHALL BEAR THE STAMP AND SIGNATURE OF A STATE OF WASHINGTON REGISTERED PROFESSIONAL ENGINEER. PERMANENT AND TEMPORARY BRIDGING SHALL BE INSTALLED IN CONFORMANCE WITH MANUFACTURER'S SPECIFICATIONS. GLUE FLOOR JOISTS TO SHEATHING AS REQUIRED BY THE JOIST MANUFACTURER.

DESIGN SHOWN ON PLANS IS BASED ON JOISTS MANUFACTURED BY THE WEYERHAEUSER CORPORATION. ALTERNATE WOOD I-JOIST MANUFACTURERS MAY BE USED SUBJECT TO REVIEW AND APPROVAL BY THE ARCHITECT AND STRUCTURAL ENGINEER. ALTERNATE JOIST HANGERS AND OTHER HARDWARE MAY BE SUBSTITUTED FOR ITEMS SHOWN PROVIDED THEY HAVE I.C.C. OR IAPMO USES APPROVAL FOR EQUAL OR GREATER LOAD CAPACITIES. ALL JOIST HANGERS AND OTHER HARDWARE SHALL BE COMPATIBLE IN SIZE WITH PLYWOOD WEB JOIST PROVIDED.

FLOOR JOIST: LOADING		
LIVE LOAD		40 PSF
DEAD LOAD		15 PSF

DEFLECTION		
LIVE LOAD		L/480
TOTAL LOAD		L/360

ROOF DECK JOIST: LOADING		
LIVE LOAD		60 PSF
DEAD LOAD		25 PSF

34. WOOD SHEATHING SHALL BE APA RATED, EXTERIOR GLUE; EXPOSURE 1, IN CONFORMANCE WITH THE REQUIREMENTS FOR THEIR TYPE IN DOC PS-1 OR PS-2. SEE PLANS FOR THICKNESS, PANEL IDENTIFICATION INDEX AND NAILING REQUIREMENTS.

UNLESS OTHERWISE NOTED ON THE PLANS, ROOF AND FLOOR SHEATHING SHALL BE LAID UP WITH FACE GRAIN PERPENDICULAR TO SUPPORTS. ALL FLOOR SHEATHING EDGES SHALL HAVE APPROVED TONGUE-AND-GROOVE 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 (2) 10d-F NAILS AT EACH END, UNLESS OTHERWISE NOTED. AT BLOCKED FLOOR AND ROOF DIAPHRAGMS PROVIDE FLAT 2X BLOCKING AT ALL UNFRAMED PANEL EDGES AND NAIL WITH EDGE NAILING SPACED PER PLANS. WHERE NOT NOTED OTHERWISE, NAIL PANEL EDGES WITH 8d NAILS @ 6" O.C. EDGES, 12" O.C. IN THE FIELD.

35. ALL WOOD EXPOSED TO WEATHER, OR BEARING ON UNPROTECTED CONCRETE BELOW GRADE, OR BEARING ON UNPROTECTED CONCRETE LESS THAN 8" FROM EXPOSED EARTH SHALL BE PRESSURE-TREATED, U.O.N. PRESSURE TREATMENT SHALL BE WITH AN APPROVED PRESERVATIVE AND BRANDED WITH A QUALITY CONTROL AGENCY MARK BY THE AMERICAN WOOD PRESERVERS BUREAU OR EQUAL. ALL METAL HARDWARE IN CONTACT WITH TREATED WOOD SHALL BE PROTECTED WITH A G185 GALVANIZED COATING (ZMAX) OR BETTER. ALL NAILS IN TREATED WOOD SHALL BE HOT-DIP GALVANIZED OR BETTER. PROVIDE 2 LAYERS OF 30# ASPHALT IMPREGNATED BUILDING PAPER BETWEEN NON-PRESSURE-TREATED LEDGERS, BLOCKING, ETC., AND CONCRETE

36. TIMBER CONNECTORS CALLED OUT BY LETTERS AND NUMBERS SHALL BE "STRONG-TIE" BY SIMPSON COMPANY, AS SPECIFIED IN THEIR CATALOG NO. C-C-2019. EQUIVALENT DEVICES BY OTHER MANUFACTURERS MAY BE SUBSTITUTED, PROVIDED THEY HAVE I.C.C. OR IAPMO USES APPROVAL FOR EQUAL OR GREATER LOAD CAPACITIES. CONNECTORS SHALL BE SIZED TO MATCH THE SIZE OF THE FRAMING MEMBERS BEING CONNECTED. PROVIDE NUMBER AND SIZE OF FASTENERS AS SPECIFIED BY MANUFACTURER. CONNECTORS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. WHERE CONNECTOR STRAPS CONNECT TWO MEMBERS, PLACE ONE-HALF OF THE NAILS OR BOLTS IN EACH MEMBER. ALL BOLTS IN WOOD MEMBERS SHALL CONFORM TO ASTM A307. 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 SHIMS SHALL BE SEASONED AND DRIED AND THE SAME GRADE (MINIMUM) AS MEMBERS CONNECTED. ALL BOLTS TIGHTENED TO SNUG TIGHT.

37. WOOD FASTENERS:

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

DRAWING ID	NAIL NAME	NAIL DIAMETER	NAIL LENGTH
*6d	6d Common	0.113"	2"
*8d Box	8d Box	0.113"	2-1/2"
*8d	8d Common	0.131"	2-1/2"
*10d-F	10d Frammer	0.131"	3"
*10d	10d Shear	0.148"	2-1/4"
*16d	16d Sinker	0.148"	3-1/4"

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

- B. NAILS - SHEATHING FASTENERS TO FRAMING SHALL BE DRIVEN FLUSH TO FACE OF SHEATHING WITH NO COUNTERSINKING PERMITTED.

- C. SCREWS SHALL BE WOOD SCREWS OF THE DIAMETER AND LENGTH NOTED ON THE DRAWINGS. SDS FASTENERS ARE SIMPSON STRONG DRIVE SCREWS.

- D. HOT DIPPED GALVANIZED NAILS, BOLTS AND METAL PLATES - ALL NAILS, BOLTS AND METAL PLATES IN CONTACT WITH PRESSURE TREATED (INCLUDING FIRE-RETARDANT TREATED) LUMBER SHALL BE HOT DIPPED GALVANIZED.

38. 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 IBC. MINIMUM NAILING, UNLESS OTHERWISE NOTED, SHALL CONFORM TO IBC TABLE 2304.10.1. COORDINATE THE SIZE AND LOCATION OF ALL OPENINGS WITH MECHANICAL AND ARCHITECTURAL DRAWINGS. PROVIDE WASHERS UNDER THE HEADS AND NUTS OF ALL BOLTS AND LAG SCREWS BEARING ON WOOD. TIGHTEN BOLTS AND LAG SCREWS SNUGLY AGAINST WOOD FRAMING AFTER WOOD HAS REACHED SPECIFIED MOISTURE CONTENT.

- B. WALL FRAMING: ALL BEARING AND SHEAR WALLS SHOWN AND NOT OTHERWISE NOTED SHALL BE 2 x 4 STUDS @ 16" O.C. AT INTERIOR WALLS AND 2 x 6 @ 16" O.C. AT EXTERIOR WALLS. TWO STUDS MINIMUM SHALL BE PROVIDED AT THE END OF ALL BEARING AND SHEAR WALLS AND AT EACH SIDE OF ALL OPENINGS. SOLID BLOCKING FOR WOOD COLUMNS SHALL BE PROVIDED THROUGH FLOORS TO SUPPORTS BELOW. ALL BEARING STUD WALLS SHALL HAVE THEIR LOWER WOOD PLATES ATTACHED TO WOOD FRAMING BELOW WITH 16d NAILS AT 8" O.C. STAGGERED OR BOLTED TO CONCRETE WITH 5/8" DIAMETER ANCHOR BOLTS WITH 3"x3"x1/4" PLATE WASHERS @ 4'-0" O.C., UNLESS INDICATED OTHERWISE. INDIVIDUAL MEMBERS OF BUILT-UP POSTS SHALL BE NAILED TO EACH OTHER WITH 10d-F NAILS @ 8" O.C. STAGGERED. REFER TO THE PLANS AND SHEAR WALL SCHEDULE FOR REQUIRED SHEATHING AND NAILING. WHEN NOT OTHERWISE NOTED, PROVIDE GYPSUM WALLBOARD ON INTERIOR SURFACES AND GYPSUM SHEATHING ON EXTERIOR SURFACES ATTACHED TO ALL STUDS, TOP AND BOTTOM PLATES AND BLOCKING WITH SCREWS AT 8" O.C. USE 1-1/4" W #6 SCREWS FOR 1/2" GWB AND 5/8" GWB WHERE OCCURS. USE 1-1/4" W #6 GALVANIZED SCREWS FOR 1/2" GWB AND 5/8" EXTERIOR GYPSUM SHEATHING, WHERE OCCURS. VERIFY THE FIRE ASSEMBLY REQUIREMENTS WHERE APPLICABLE WITH THE ARCHITECT.

- 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 AT ALL BEARING POINTS. NAIL ALL MULTI-JOIST BEAMS TOGETHER WITH 10d-F NAILS @ 8" O.C. STAGGERED UNLESS OTHERWISE NOTED.

- D. POSITIVE CONNECTIONS: PROVIDE THE FOLLOWING SIMPSON CONNECTORS AT TYPICAL FRAMING UNLESS OTHERWISE NOTED ON PLAN OR DETAIL. PROVIDE CCQ/ECCQ CAPS AND PBS BASES AT POSTS. PROVIDE BC BASE WHERE POST BEARS ON WOOD FRAMING BELOW. PROVIDE LUS SERIES HANGERS FOR 2X FLOOR AND ROOF JOISTS. CONNECTORS SHALL BE SIZED TO MATCH THE SIZE OF THE FRAMING MEMBERS BEING CONNECTED.

ABBREVIATIONS			
@	At	L	Angle
d	Penny (Nails)	LB.	Pound
Ø	Diameter	LL	Live Load
°	Degrees	LLH	Long Leg Horizontal
...#	Pounds	LLV	Long Leg Vertical
#..	Number	LONGIT.	Longitudinal
		LT. WT.	Lightweight
(A)	Above		
A.B.	Anchor Bolt	MAX.	Maximum
ADD'L	Additional	MECH.	Mechanical
ALT.	Alternate	MEZZ.	Mezzanine
APPROX.	Approximate	MF	Moment Frame
ARCH.	Architect	MFR.	Manufacturer
		MIN.	Minimum
(B)	Below	MISC.	Miscellaneous
B/	Bottom of	MK.	Mark
BF	Braced Frame		
BLKG.	Blocking	(N)	New
BLDG.	Building	N.	North
BM.	Beam	N.S.	Near Side
BOT.	Bottom	NOM.	Nominal
BRG.	Bearing	NTS	Not to Scale
BTWN.	Between		
		O.C.	On Center
Q	Centerline	O.D.	Outside Diameter
C	Camber	O.F.	Outside Face
CIP	Cast In Place	O.H.	Overhang
C.J.	Construction Joint or Control Joint	OPNG.	Opening
CJP	Complete Joint Penetration	OPP.	Opposite
CLG.	Ceiling		
CLR.	Clear	PAF	Powder Actuated Fastener
CMU	Concrete Masonry Unit	PC	Precast
COL.	Column	PERM.	Permanent
CONC.	Concrete	PERP.	Perpendicular
CONN.	Connections	PJP	Partial Joint Penetration
CONST.	Construction	PL or P _L	Plate
CONT.	Continuous	PLF	Pounds per linear Foot
CSK.	Countersink	PLYWD	Plywood
		PREFAB.	Prefabricated
DBA	Deformed Bar Anchor	PSF	Pounds per Square Foot
DBL	Double	PSI	Pounds per Square Inch
DEG.	Degree	P.T. or PT	Post-Tensioning
DF	Doug Fir-Larch	PT	Pressure-Treated
DIA.	Diameter		
DIAG.	Diagonal	RAD.	Radius
DIAPH.	Diaphragm	REF.	Reference
DIM.	Dimension	REINF.	Reinforce or Reinforcement
DN.	Down	REQD.	Required
DO	Ditto	REV.	Revise
DTL.	Detail	R.O.	Rough Opening
DWG.	Drawing		
		S.	South
(E)	Existing	SCH. or SCHED.	Schedule
E.	East	SECT.	Section
EA.	Each	SHT.	Sheet
E.F.	Each Face	SIM.	Similar
EL.	Elevation	SOG	Slab On Grade
ELEV.	Elevator	SPEC.	Specification
EMBED.	Embedment Length	SQ.	Square
ENGR.	Engineer	SQ. FT.	Square Feet
EQ.	Equal	SQ. IN.	Square Inch(es)
E.W.	Each Way	SPF	Spruce-Pine-Fir
EXP.	Expansion	S.S.	Stainless Steel
EXT.	Exterior	STD.	Standard
		STIFF.	Stiffener
FDN.	Foundation	STL.	Steel
FIN.	Finish	STR.	Structural
FLR.	Floor	SUB.	Substitute
FRP	Fiber Reinforced Polymer	SYM.	Symmetrical
F.S.	Far Side		
FT.	Foot or Feet	T/	Top of
FTG.	Footing	T&B	Top and Bottom
		T&G	Tongue & Groove
GA.	Gauge	TEMP.	Temporary
GALV.	Galvanized	THRU	Through
GL	Glue Laminated	T.O.C.	Top of Concrete
GWB	Gypsum Wall Board	T.O.S.	Top of Steel
		T.O.W.	Top of Wall
HDG	Hot Dipped Galvanized	TRANS.	Transverse
HF	Hem Fir	TS	Tube Steel
HGR.	Hanger	TYP.	Typical
HORIZ.	Horizontal		
HSS	Hollow Structural Section	U.O.N.	Unless Otherwise Noted
HT.	Height		
		VERT.	Vertical
I.D.	Inside Diameter	VIF	Verify in Field
I.F.	Inside Face		
IN.	Inch	W.	West
INFO.	Information	W/ or w/	With
INT.	Interior	W.H.S.	Welded Heated Stud
		W/O	Without
JT.	Joint	WP	Work Point
		W.T.S.	Welded Threaded Stud
K	Kips	WWF	Welded Wire Fabric
KSF	Kips per Square Foot		
KSI	Kips per Square Inch	X SECT.	Cross Section
		X-STR	Extra Strong
		XX-STR	Double Extra Strong



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APPROVED BY: **04/27/2026**

PROJECT INFORMATION:
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REVISIONS:

NO.	DESCRIPTION	DATE
△	REV 1	04.27.2026
	NO. DESCRIPTION	DATE

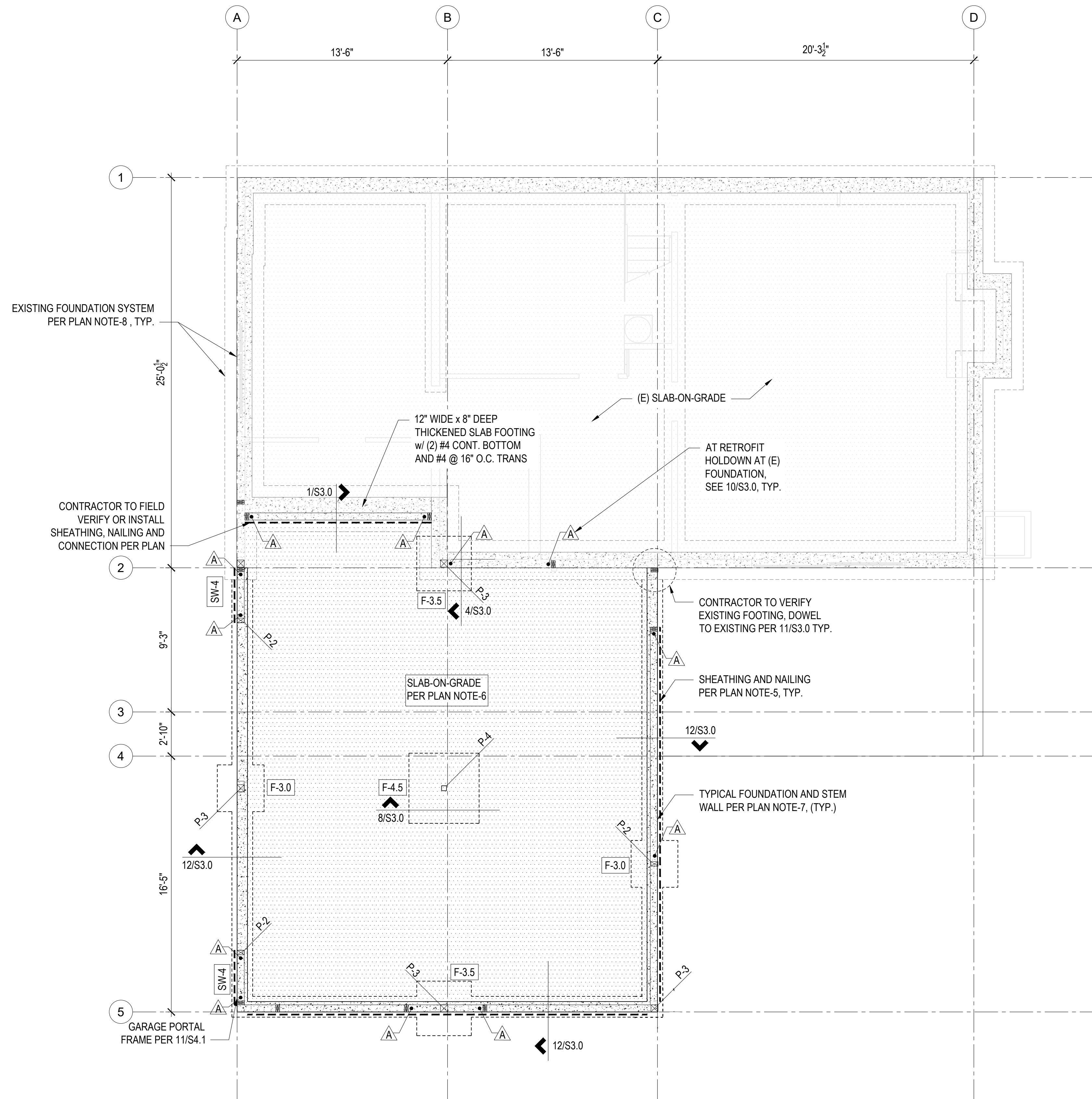
PROJECT NUMBER:
25-009
ISSUE DATE:
04.01.2025
CURRENT REVISION:
REV 1

SHEET NAME:

**GENERAL
STRUCTURAL
NOTES**

SHEET NUMBER:

S1.1



POST SCHEDULE	
MARK	SIZE
P-1	(3) 2x6
P-2	4x6
P-3	6x6
P-4	HSS 4x4x1/4"

NOTE: NOT ALL POSTS APPEAR ON ALL SHEETS.

FOOTING SCHEDULE	
MARK	SIZE
F-2.5	30" SQ. x 10" DEEP FOOTING w/ (3) #4 E.W. BOTTOM, TYP.
F-3.0	36" SQ. x 10" DEEP FOOTING w/ (4) #4 E.W. BOTTOM, TYP.
F-3.5	42" SQ. x 10" DEEP FOOTING w/ (4) #4 E.W. BOTTOM, TYP.
F-4.5	54" SQ. x 12" DEEP FOOTING w/ (6) #4 E.W. BOTTOM, TYP.

FOUNDATION PLAN NOTES:

- TOPS OF ALL EXTERIOR FOOTINGS ON THIS PLAN SHALL BE BURIED BELOW FINISHED GRADE AS SHOWN IN THE DETAILS. FOOTINGS SHALL BEAR ON DENSE NATIVE MATERIAL, AS THERE IS NO GEOTECHNICAL ENGINEER ON THE PROJECT, CONTRACTOR TO VERIFY SUITABLE SOIL CONDITIONS.
- FINAL SITE GRADES TO BE DETERMINED BY THE CONTRACTOR. CONTRACTOR SHALL COORDINATE UNDER SLAB PIPING REQUIREMENTS AS SHOWN IN 7/S3.0.
- POSTS AND STUD PACKS SHALL BE CONTINUOUS TO FOUNDATION. TYPICAL STUD WALLS SHALL BE FRAMED USING HEM-FIR #2x STUDS @ 16" O.C., U.O.N.
- ALL CONNECTIONS AND CONNECTORS IN CONTACT WITH PRESSURE-TREATED LUMBER TO BE HOT DIPPED GALVANIZED OR STAINLESS STEEL, PER GENERAL STRUCTURAL NOTES.
- ALL NEW EXTERIOR WALLS TO BE SHEATHED AND NAILED PER SW-6 SCHEDULE U.N.O.
- SLAB-ON-GRADE SHALL BE 4" THICK w/ WWF 6x6-W2.1xW2.1 MID-DEPTH OR #4 @ 16" O.C. E.W. MID-DEPTH, U.O.N. PROVIDE VAPOR BARRIER BELOW SLAB AS REQUIRED AND PER 2/S3.0. INSTALL CONSTRUCTION AND CONTROL JOINTS PER 2/S3.0.
- TYPICAL FOOTING TO BE 16"W x 8" DP. CONC. FTG. w/(2) #4 BOTTOM AND #4 @ 16" O.C. TRANS. TYP. STEM WALL TO BE 8" STEM WALL w/REINF. PER 12/S3.0, TYP.
- EXISTING FOUNDATION SYSTEM IS UNKNOWN AND WILL NEED TO BE FIELD VERIFIED.

TYPICAL REMODEL CONSTRUCTION NOTES:

- CONTRACTOR MUST REVIEW STRUCTURAL DRAWINGS PRIOR TO CONSTRUCTION & NOTIFY DESIGN TEAM/OWNER OF ANY DISCREPANCY IN COMPARISON WITH ARCHITECTURAL DOCUMENTS OR FIELD CONDITIONS.
- CONTRACTOR MUST FIELD VERIFY & NOTIFY DESIGN TEAM/OWNER OF EXISTING MECHANICAL, PLUMBING AND ELECTRICAL LINES THAT MAY INTERFERE WITH STRUCTURAL WORK PRIOR TO CONSTRUCTION. STRUCTURAL DRAWINGS MAY NOT REFLECT ALL EXISTING FRAMING CONDITIONS DUE TO LIMITED AVAILABILITY OF INFORMATION.
- CONTRACTOR IS SOLELY RESPONSIBLE IN PROVIDING PROPER TEMPORARY SHORING PRIOR TO REMOVING ANY STRUCTURAL ELEMENTS.
- ENGINEER IS NOT RESPONSIBLE FOR WATERPROOFING SYSTEM OR DETAILS. CONTRACTOR/OWNER SHALL CONSULT WITH QUALIFIED PROFESSIONALS AS REQUIRED.

DRAWING LEGEND	
MARK	DESCRIPTION
(E)	STUD WALL ABOVE
(E)	CONCRETE WALL
(N)	EXTERIOR STUD WALL ABOVE
(N)	CONCRETE WALL
(E)	FOOTING
(N)	FOOTING
	SLAB ON GRADE PER NOTE-6
	EXISTING SLAB ON GRADE
(N)	NEW
(E)	EXISTING
PA	POST ABOVE
TYP	TYPICAL
SW-X	SHEAR WALL TYPE 'X' PER SCHEDULE 8/S4.0
	HOLDOWN TYPE 'X' PER SCHEDULE 10/S3.0, 6/S3.0 & 12/S4.0

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PROJECT INFORMATION:
XIAO ZHOU HOUSE ADDITION
 PROJECT ADDRESS:
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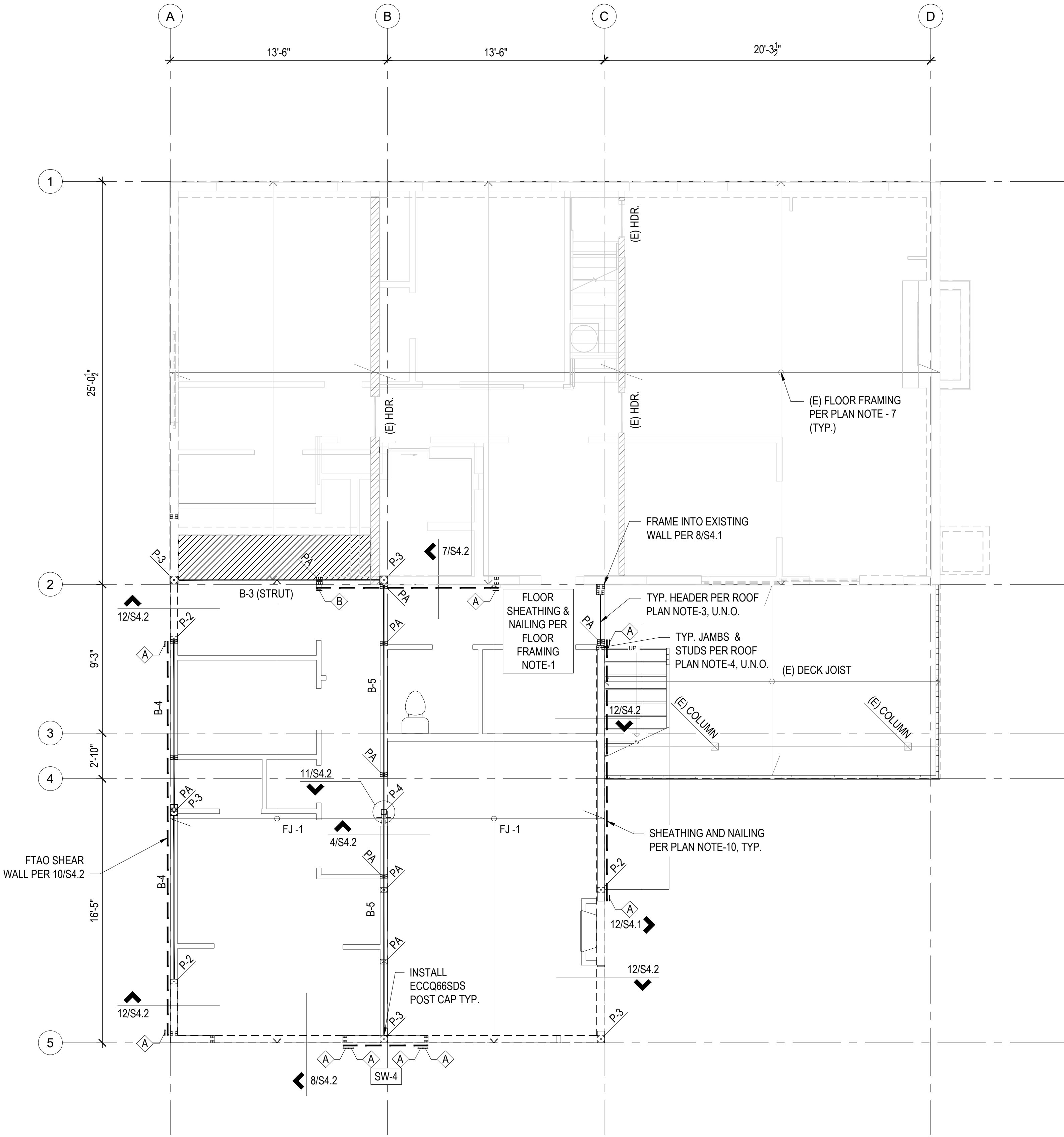
PROJECT NUMBER:
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REV 1

SHEET NAME:
FOUNDATION PLAN

SHEET NUMBER:
S2.0

FOUNDATION PLAN

SCALE: 1/4" = 1'-0"



SECOND FLOOR FRAMING PLAN
SCALE: 1/4" = 1'-0"

DRAWING LEGEND	
MARK	DESCRIPTION
—————	(N) HDR/BEAM
—————	(E) HDR/BEAM
(E)	EXISTING
(N)	NEW
-----	(E) STUD WALL BELOW
=====	(E) INTERIOR WALL BELOW
//////	(N) INTERIOR BEARING STUD WALL BELOW
//////	(E) INTERIOR BEARING STUD WALL BELOW
=====	(N) STUD WALL ABOVE
-----	(E) STUD WALL ABOVE
-----	(N) EXTERIOR STUD WALL BELOW
-----	(N) INTERIOR NON BEARING WALL BELOW
PA	POST ABOVE
TYP	TYPICAL
SW-X	SHEAR WALL TYPE 'X' PER SCHEDULE 8/S4.0
X	STRAP TYPE 'X' PER SCHEDULE 10/S4.0
↔	(N) FRAMING DIRECTION
↔	EXISTING FRAMING DIRECTION
	WOOD BLOCKED DIAPHRAGM: AT ALL BLOCKED DIAPHRAGM AREAS ALL INSTALL 2x FLAT BLOCKING (PER GENERAL STRUCTURAL NOTES) AT ALL UNFRAMED PANEL EDGES. NAILS SHALL BE LOCATED AT LEAST 3/8" FROM EDGES OF PANEL. NAIL SHEATHING AT ALL INTERMEDIATE SUPPORTS w/ 10d @ 12" O.C.

JOIST SCHEDULE		
MARK	SIZE	HANGER
FJ-1	9 1/2" TJI 110 JOIST @ 16" O.C. PER FLOOR PLAN NOTE-2	PER MFR.

NOTE: NOT ALL JOISTS APPEAR ON ALL SHEETS.
NOTE: ALL EXISTING FLOOR FRAMING TO BE FIELD VERIFIED AND CONFIRMED PRIOR TO CONSTRUCTION

- FLOOR FRAMING PLAN NOTES:**
- FLOOR SYSTEM SHALL CONSIST OF 2 3/4" PERFORMANCE CATEGORY, APA RATED SHEATHING, 49/24, EXPOSURE 1, NOMINAL 4x8' (T&G OR SQUARE EDGE) PERMANENT OUTDOOR SHEATHING GRADE SHALL BE "EXTERIOR" NAIL SHEATHING AT ALL FRAMED PANEL EDGES, DIAPHRAGM BOUNDARIES, BLOCKING AND EXTERIOR SHEAR WALLS BELOW WITH 8d @ 6" O.C. PROVIDE 1/8" GAP AT ALL PANEL EDGE. FASTENER EDGE DISTANCE TO PANEL EDGE OF 3/8" MINIMUM. NAIL SHEATHING IN PANEL FIELD TO ALL STRUTS, STRUT BLOCKING, AND INTERIOR SHEAR WALLS BELOW WITH 8d @ 3" O.C. STAGGERED. NAIL SHEATHING AT ALL INTERMEDIATE SUPPORTS WITH 8d @ 12" O.C. GLUE SHEATHING AT ALL SUPPORTS WITH ADHESIVE CONFORMING TO ASTM SPECIFICATIONS D3498.
 - FLOOR FRAMING TO BE 9 1/2" TJI JOISTS @ 16" O.C. PROVIDE HANGERS PER MFR. AS REQUIRED. ALLOWABLE HOLES IN JOIST PER SUPPLIER SPECIFICATIONS. SUBMIT JOIST SHOP DRAWINGS FOR REVIEW AND APPROVAL.
 - BEAMS OVER INTERIOR & EXTERIOR OPENINGS SHALL BE (2)-2x8 H.F. #2 U.N.O. & DROPPED BELOW STUD WALL TOP PLATES PER 10/S4.1. AT EXISTING FRAMING BELOW, CONTRACTOR TO VERIFY MIN. (2)-2x8 HDR OR INSTALL NEW HDR AS NOTED.
 - POST AND JAMB STUDS AT END OF SUPPORTING BEAMS, GIRDER TRUSSES OR BELOW POSTS SHALL BE (3) STUDS AT A MINIMUM. TYP. HEADER STUDS WILL BE (2) CRIPPLE STUDS AND (1) KING STUD.
 - OTHER TYPICAL FRAMING DETAILS SHOWN ON SHEET S4.1
 - DO NOT SCALE DRAWINGS, REFER TO ARCH. DRAWINGS FOR ALL DIMENSIONS.
 - EXISTING FLOOR FRAMING CONSISTS OF 2x10 @ 16" O.C. FRAMING AND INTERIOR SUPPORT LOCATIONS. CONTRACTOR TO CLARIFY INTERIOR BEARING LOCATIONS PRIOR TO CONSTRUCTION. CONTACT HAREZLAK ENGINEERING FOR FURTHER REVIEW AS NECESSARY.
 - ALL FRAMING CONDITIONS: SIZED, SPACING, FRAMING DIRECTION ASSUMED PROVIDED BY ARCH. DRAWINGS. CONTRACTOR TO FIELD VERIFY PRIOR TO CONSTRUCTION. CONTACT HAREZLAK ENGINEERING IF THERE ARE ANY DEVIATIONS FROM PLANS AS NOTED.
 - DO NOT SCALE DRAWINGS, REFER TO ARCH. DRAWINGS FOR ALL DIMENSIONS.
 - ALL NEW EXTERIOR WALLS TO BE SHEATHED AND NAILED PER SW-6 SCHEDULE, U.N.O.
 - TYPICAL POST CAPS, CONNECTORS, NOT SPECIFICALLY NOTED ON THE PLANS PER GENERAL STRUCTURAL NOTES.
 - FOR ALL DUCTS, CHASES, AND PIPES, REFERENCE MECHANICAL, ELECTRICAL & PLUMBING DRAWINGS.
 - AT NEW DOUBLE TOP PLATE INTERFACE WITH EXISTING, INSTALL STRAP PER 10/S4.1 TYP.

BEAM/HEADER SCHEDULE		
MARK	SIZE	HANGER
B-1	3 1/2" x 7 1/4" LVL	N/A
B-2	3 1/2" x 11 7/8" LVL	HUC412SDS
B-3	5 1/4" x 9 1/2" LVL	N/A
B-4	5 1/4" x 11 7/8" LVL	N/A
B-5	5 1/4" x 16" LVL	N/A

NOTE: NOT ALL BEAMS APPEAR ON ALL SHEETS.

POST SCHEDULE	
MARK	SIZE
P-1	(3) 2x6
P-2	4x6
P-3	6x6
P-4	HSS 4x4x1/4"

NOTE: NOT ALL POSTS APPEAR ON ALL SHEETS.

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REV 1		04.27.2026

PROJECT NUMBER: 25-009
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SHEET NAME:
SECOND FLOOR FRAMING PLAN

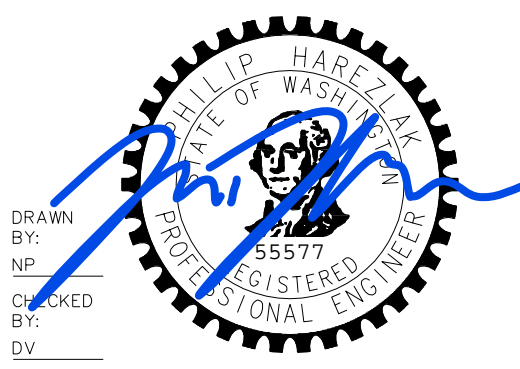
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S2.1



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1	REV 1	04.27.2026

PROJECT NUMBER:
25-009
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04.01.2025
CURRENT REVISION:
REV 1

SHEET NAME:

ROOF DECK FRAMING PLAN

SHEET NUMBER:

S2.2

POST SCHEDULE	
MARK	SIZE
P-1	(3) 2x6
P-2	4x6
P-3	6x6
P-4	HSS 4x4x1/4"

NOTE: NOT ALL POSTS APPEAR ON ALL SHEETS.

ROOF JOIST SCHEDULE	
MARK	SIZE
RJ-1	11 7/8" TJI 110 ROOF DECK JOIST @ 16" O.C.

NOTE: ALL EXISTING ROOF FRAMING TO BE FIELD VERIFIED AND CONFIRMED BY CONTRACTOR PRIOR TO CONSTRUCTION

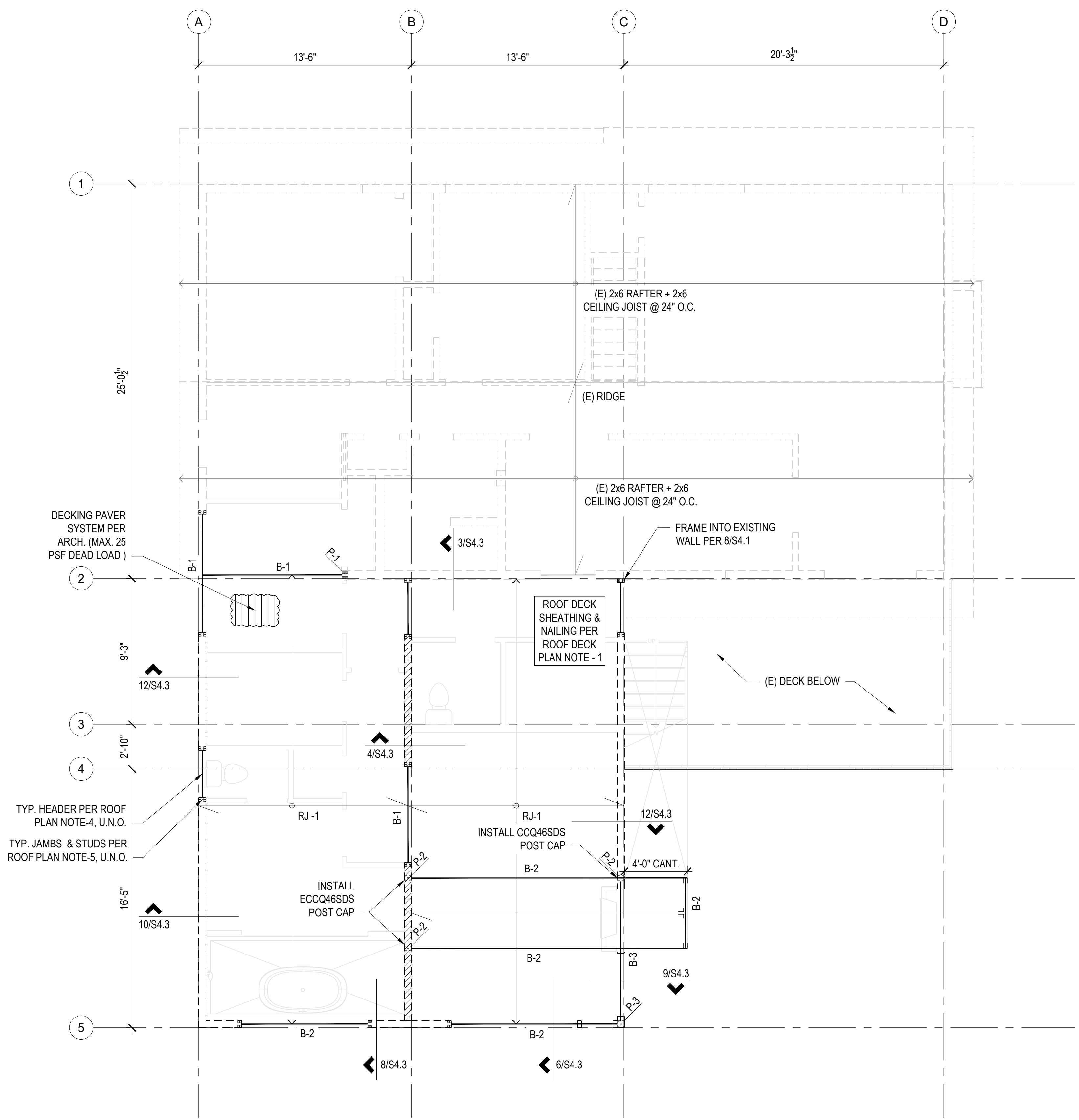
ROOF DECK PLAN NOTES:

- ROOF DECK SYSTEM SHALL CONSIST OF $2\frac{3}{4}$ " PERFORMANCE CATEGORY, APA RATED SHEATHING, $\frac{4}{32}$ " EXPOSURE 1, NOMINAL 4x8 (T&G OR SQUARE EDGE) PERMANENT OUTDOOR SHEATHING GRADE SHALL BE "EXTERIOR". NAIL SHEATHING AT ALL FRAMED PANEL EDGES, DIAPHRAGM BOUNDARIES, BLOCKING AND EXTERIOR SHEAR WALLS BELOW WITH 8d @ 6" O.C. PROVIDE $\frac{1}{8}$ " GAP AT ALL PANEL EDGE. FASTENER EDGE DISTANCE TO PANEL EDGE OF $\frac{3}{8}$ " MINIMUM. NAIL SHEATHING IN PANEL FIELD TO ALL STRUTS, STRUT BLOCKING, AND INTERIOR SHEAR WALLS BELOW WITH 8d @ 3" O.C. STAGGERED. NAIL SHEATHING AT ALL INTERMEDIATE SUPPORTS WITH 8d @ 12" O.C. GLUE SHEATHING AT ALL SUPPORTS WITH ADHESIVE CONFORMING TO ASTM SPECIFICATIONS D3498.
- ROOF DECK FRAMING TO BE TJI JOIST PER PLAN AND SCHEDULE BELOW. MFR. TO PROVIDE TEMPORARY AND PERMANENT BRACING, BRIDGING, AND RELATED CONNECTIONS DETAILS. REFER TO GENERAL STRUCTURAL NOTES FOR ADDITIONAL REQUIREMENTS AND ARCH. DRAWINGS FOR HEIGHTS AND CONFIGURATIONS. TJI'S SHALL BE DESIGNED FOR TYPICAL TJI LOADING AS SHOWN IN THE GENERAL STRUCTURAL NOTES.
- TJI SHOP DRAWINGS TO BE APPROVED BY HAREZLAK ENGINEERING PRIOR TO MANUFACTURING AND INSTALLATION.
- ALL EXTERIOR HEADERS TO BE (2)-2x8 H.F. #2 U.N.O. AT EXISTING FRAMING BELOW, CONTRACTOR TO VERIFY MIN. (2)-2x8 HDR OR INSTALL NEW HDR AS NOTED.
- POSTS OR JAMB STUDS AT END OF SUPPORTING BEAMS, GIRDER TRUSSES, OR BELOW POSTS SHALL BE (3) STUDS AT A MINIMUM. TYP. HEADER STUDS WILL BE (2) CRIPPLE STUDS AND (1) KING STUD.
- EXISTING ROOF FRAMING ASSUMED AND NOTED ON PLAN. CONTRACTOR TO FIELD VERIFY EXISTING FRAMING SIZE, SPACING, SPANS, BEARING LOCATIONS. CONTACT HAREZLAK ENGINEERING FOR ANY DISCREPANCIES.
- OTHER TYPICAL FRAMING DETAILS SHOWN ON SHEET S4.1
- AT NEW DOUBLE TOP PLATE INTERFACE WITH EXISTING, INSTALL STRAP PER 10/S4.1, TYP.
- OWNER AND ARCHITECT TO COORDINATE FRAMING WITH TJI SUPPLIER TO POSSIBLE ROOF INSTALLATION OVER ROOF DECK.
- NON-STRUCTURAL WALL CONNECTION TO TJI PER 2/S4.1

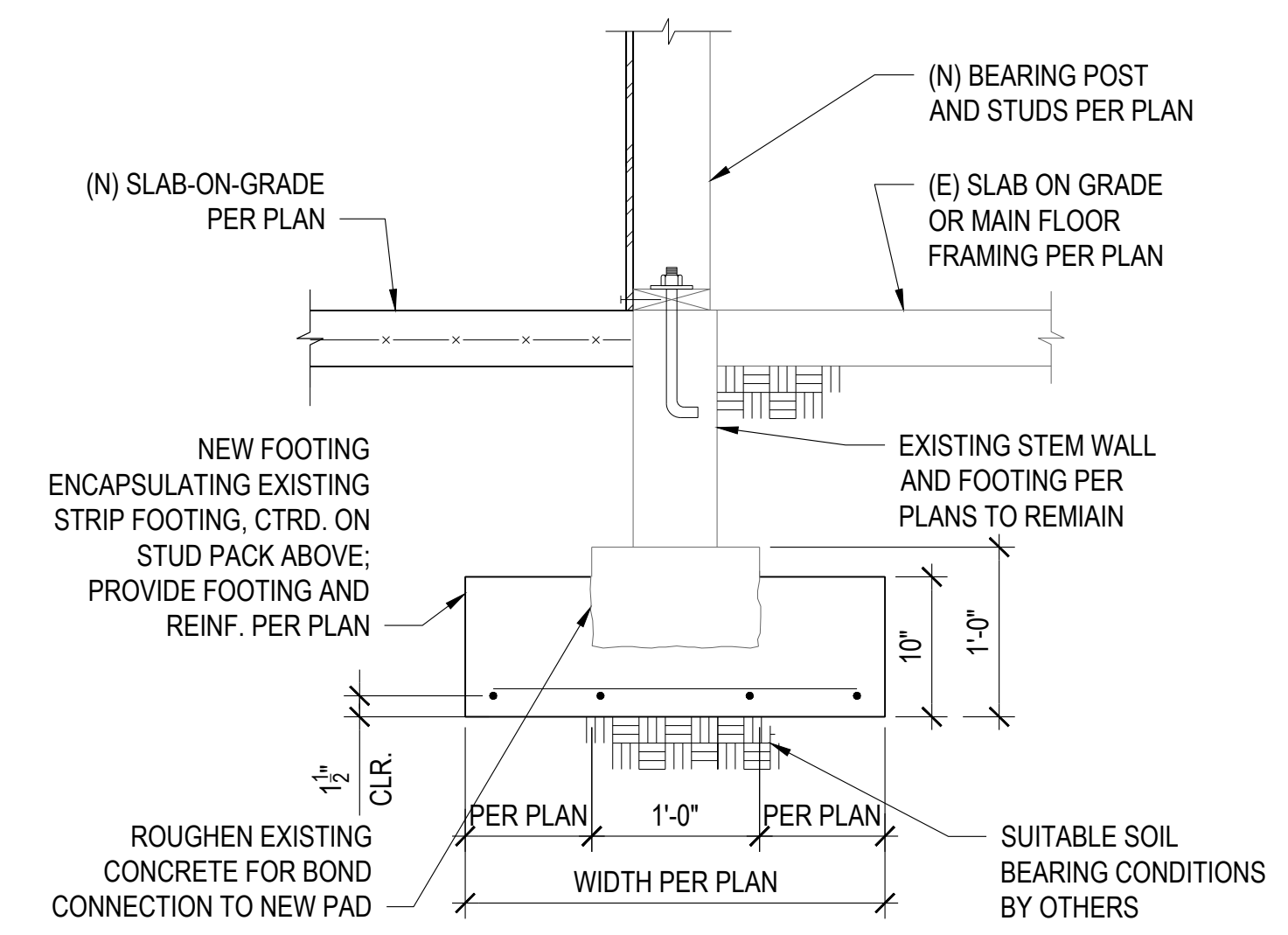
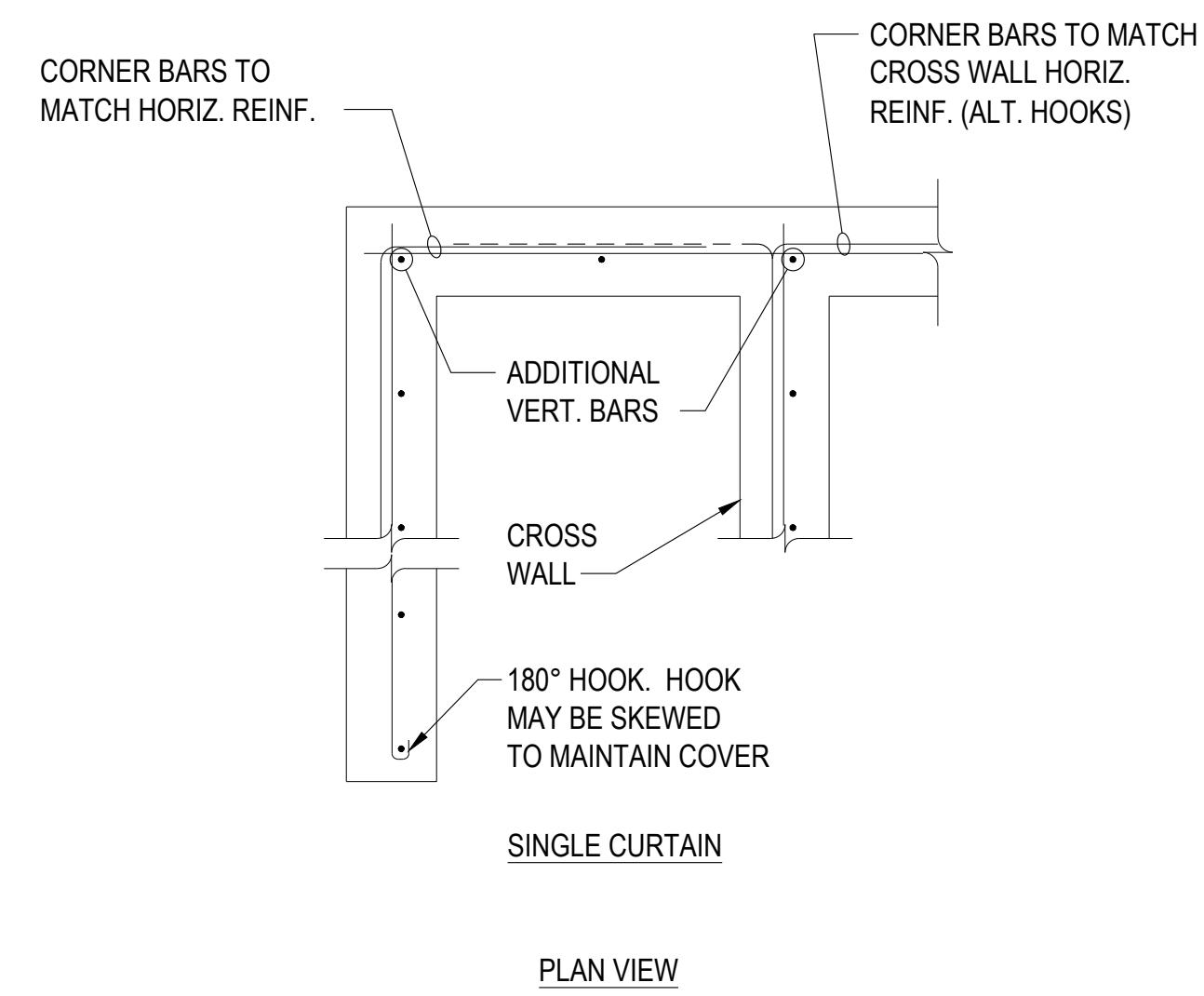
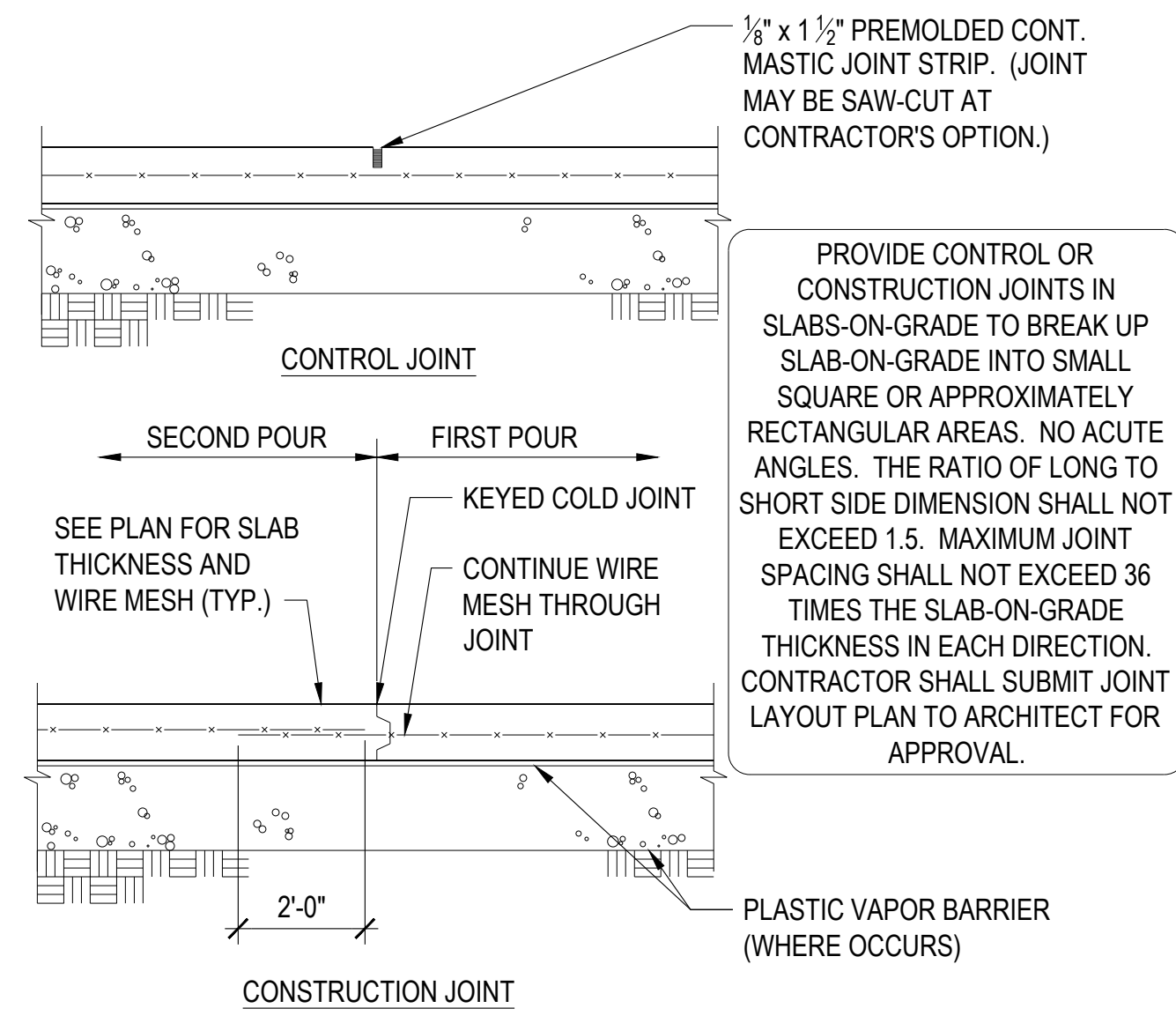
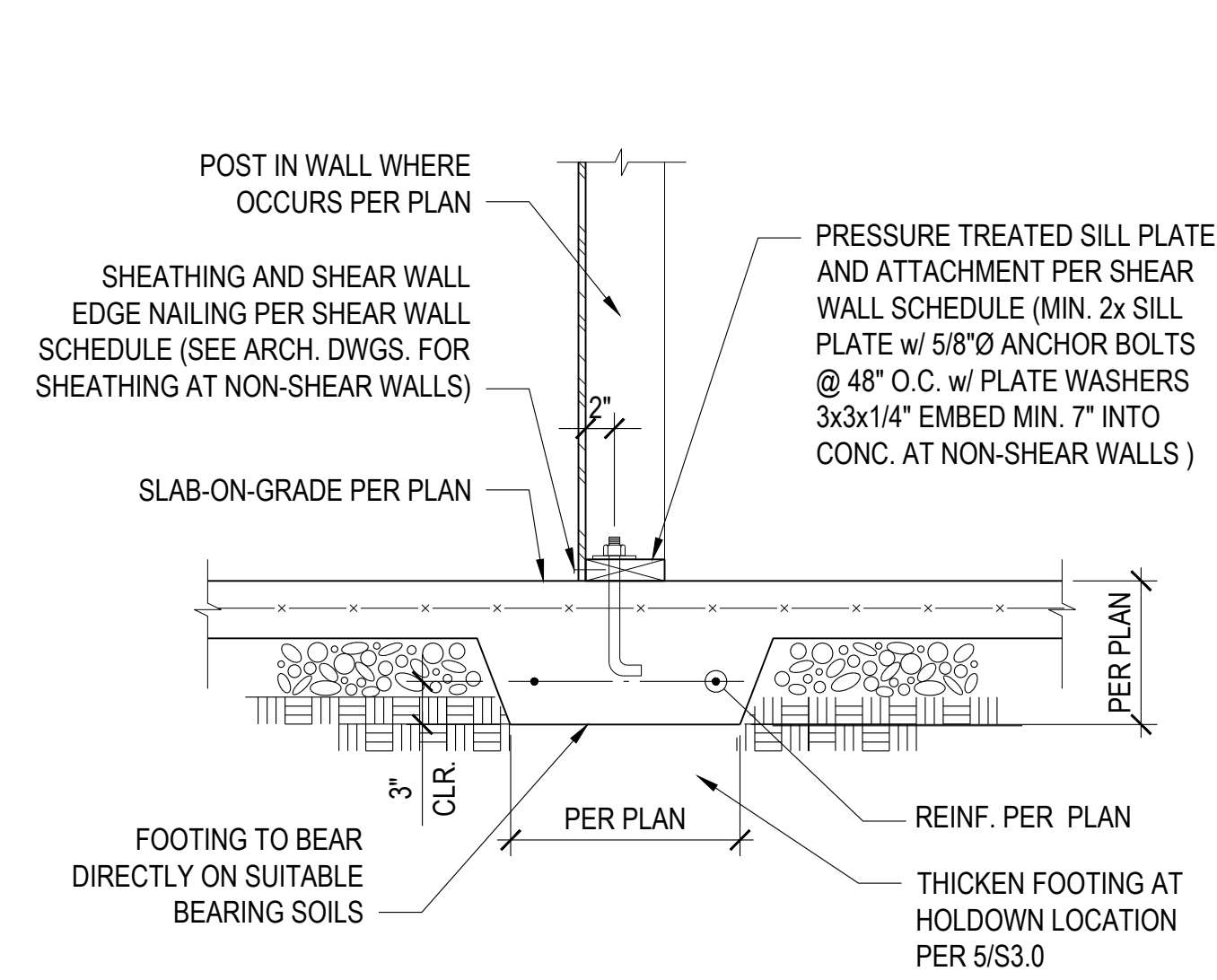
DRAWING LEGEND	
MARK	DESCRIPTION
—	(N) HDR/BEAM
—	(E) HDR/BEAM
(E)	EXISTING
(N)	NEW
----	(E) STUD WALL BELOW
----	(N) EXTERIOR STUD WALL BELOW
----	(N) INTERIOR NON BEARING WALL
zzzzzzzz	(N) INTERIOR BEARING STUD WALL BELOW
↔	(N) FRAMING DIRECTION
↔	EXISTING FRAMING DIRECTION

BEAM/HEADER SCHEDULE		
MARK	SIZE	HANGER
B-1	3 1/2" x 7 1/4" LVL	N/A
B-2	3 1/2" x 11 7/8" LVL	HUC412SDS
B-3	5 1/4" x 9 1/2" LVL	N/A
B-4	5 1/4" x 11 7/8" LVL	N/A
B-5	5 1/4" x 16" LVL	N/A

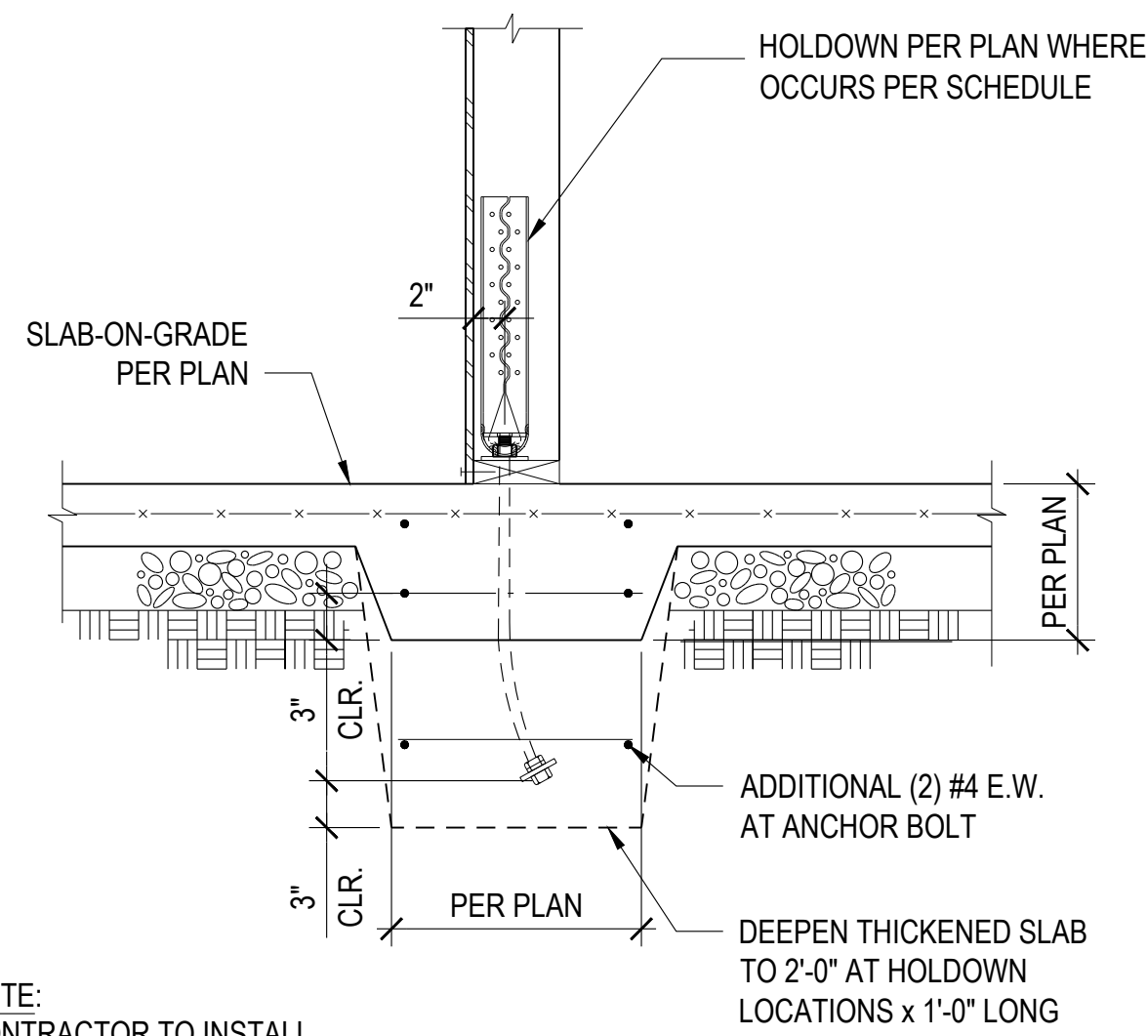
NOTE: NOT ALL BEAMS APPEAR ON ALL SHEETS.



ROOF DECK FRAMING PLAN
SCALE: 1/4" = 1'-0"

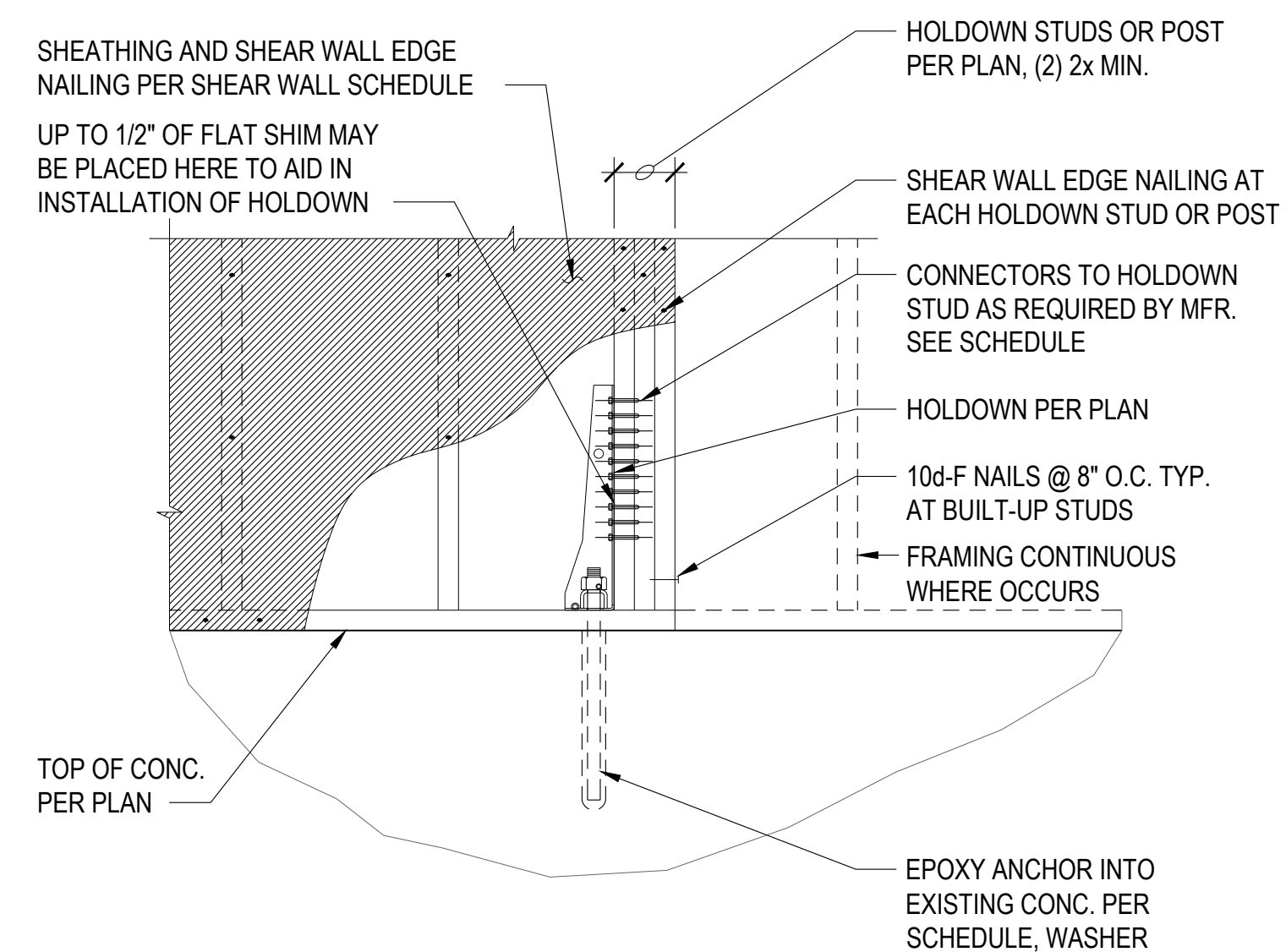
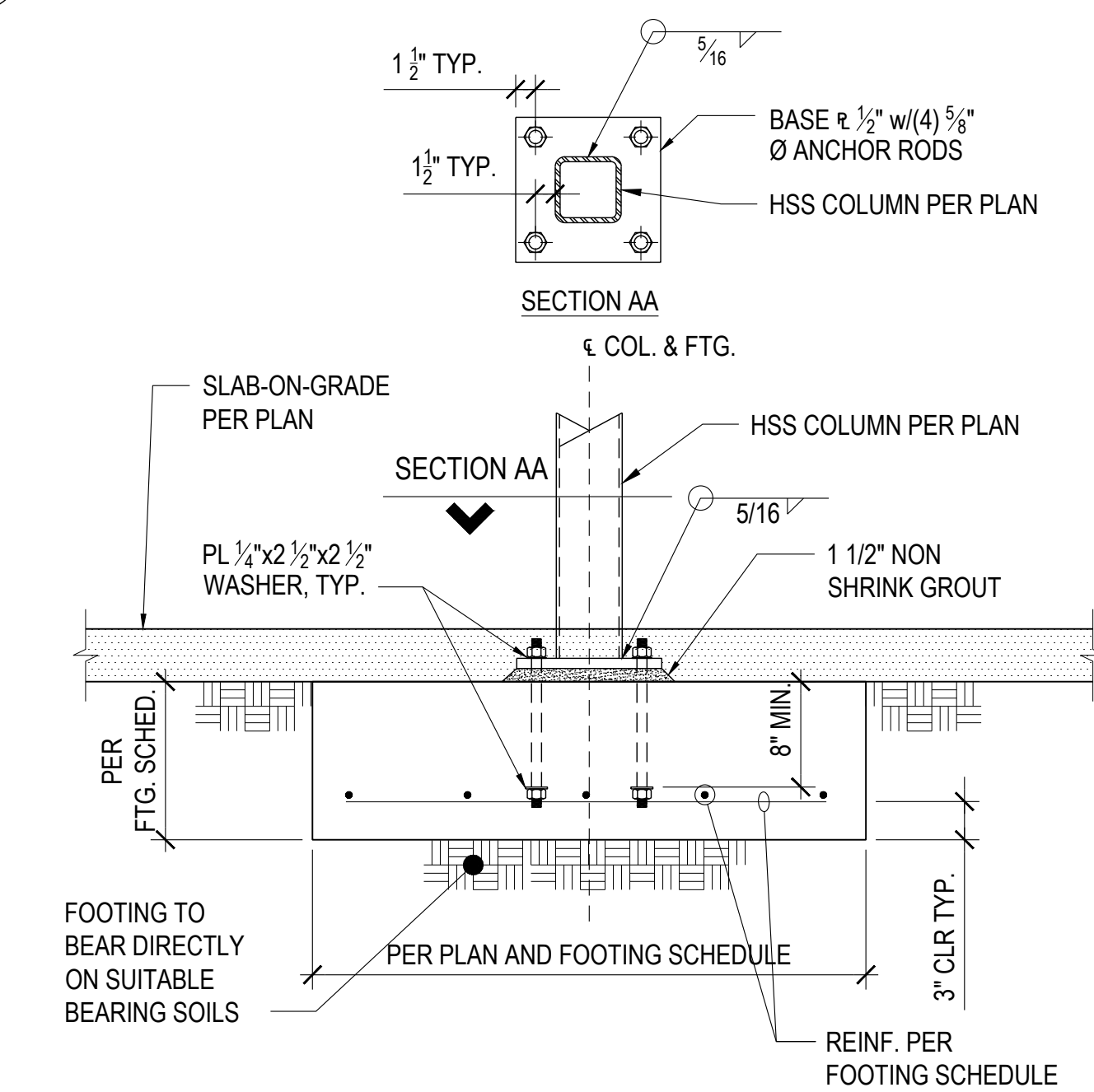
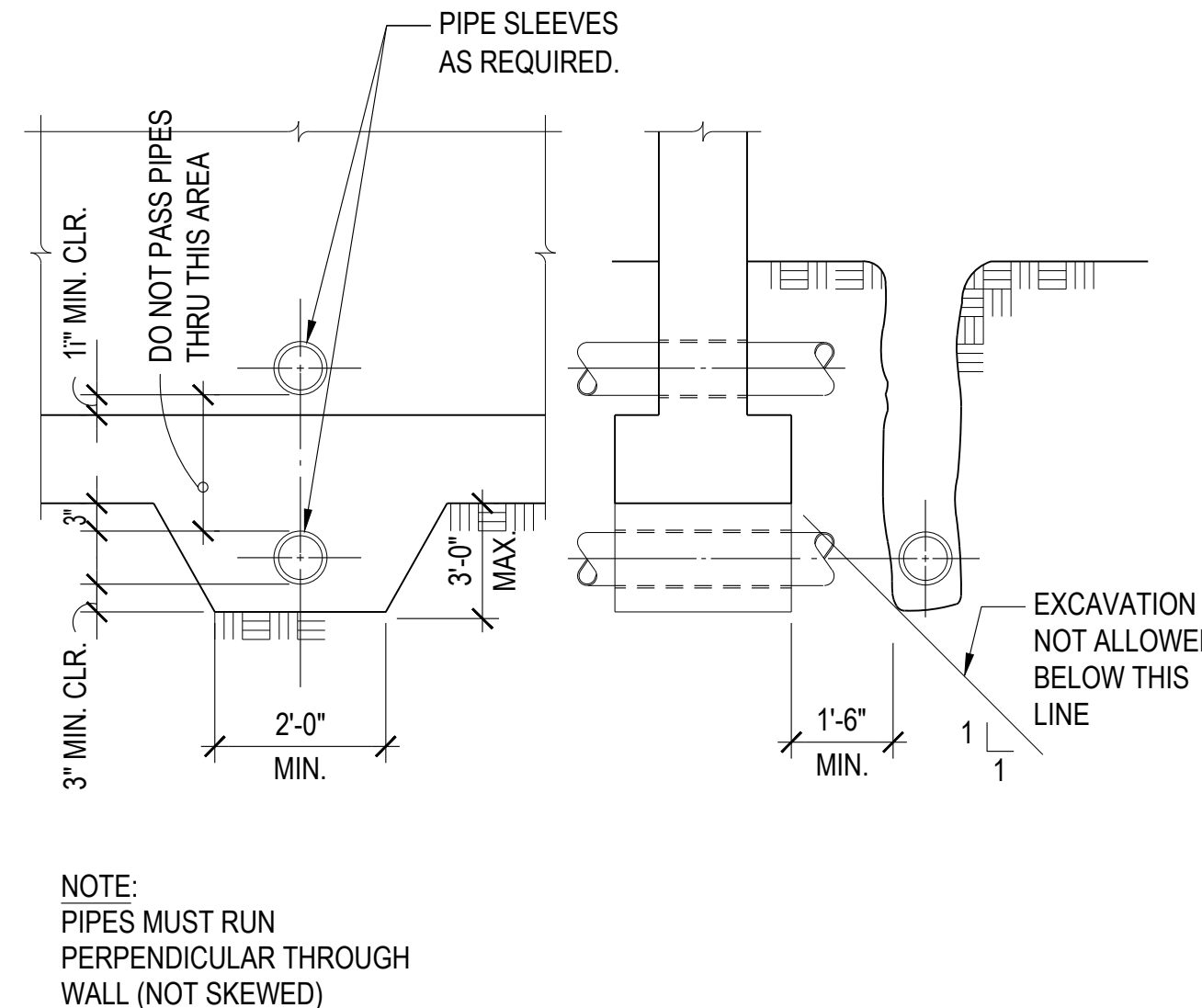
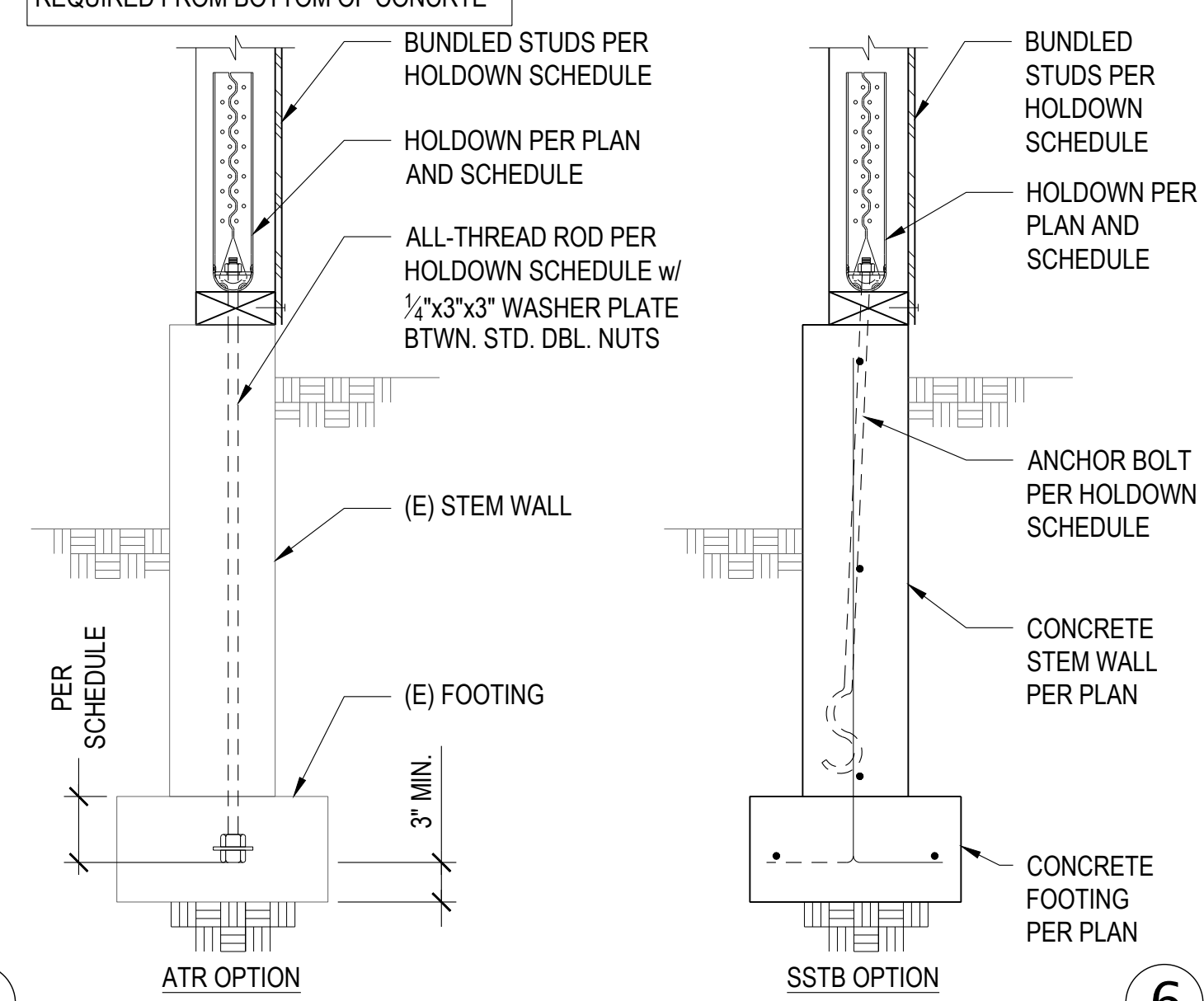


NOTE:
FOR INFORMATION NOT NOTED, SEE 1/S3.0



NOTE:
CONTRACTOR TO INSTALL 3/8" Ø ALL - THREAD ROD x 22" LONG w/ NUT & WASHER.

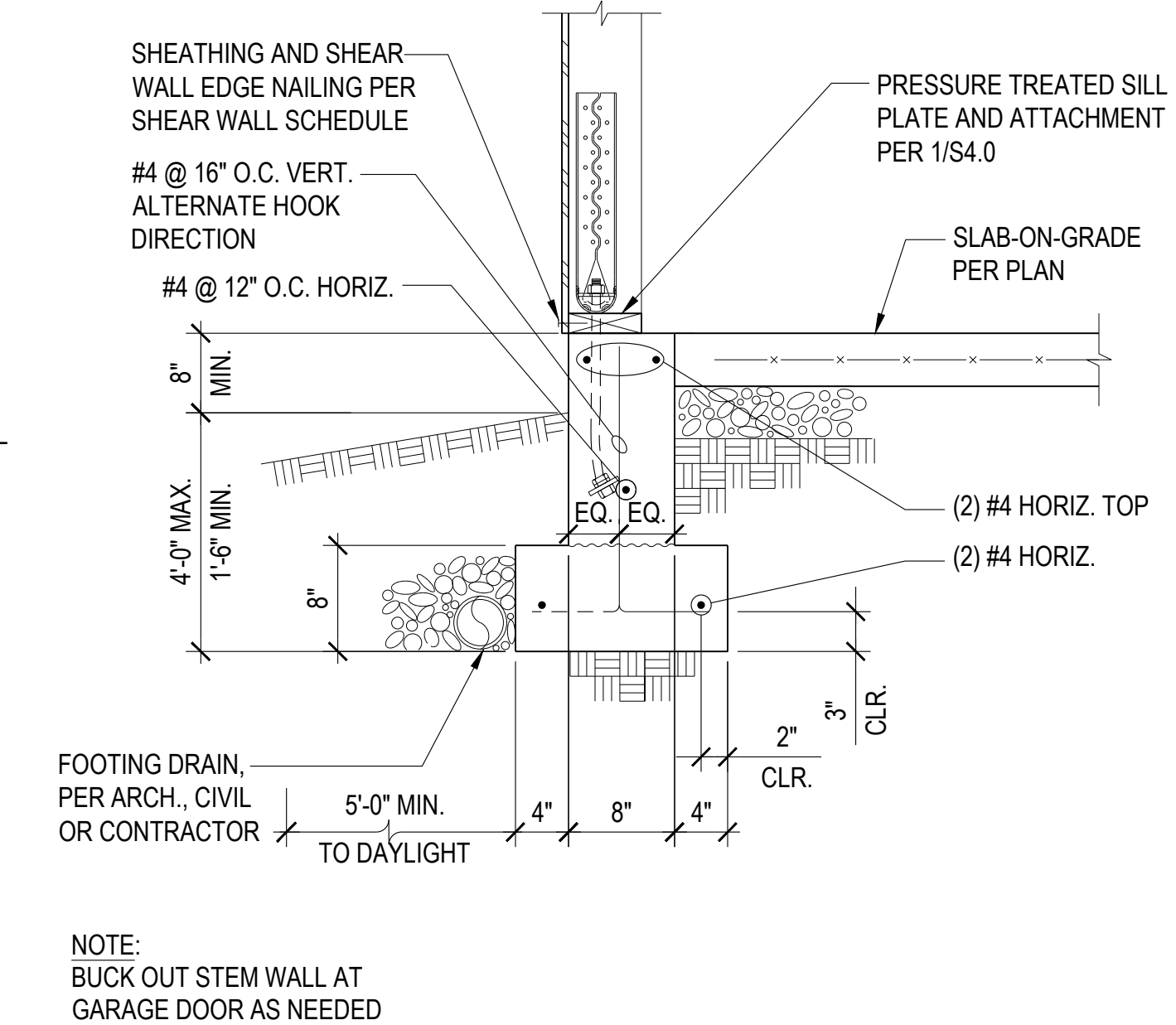
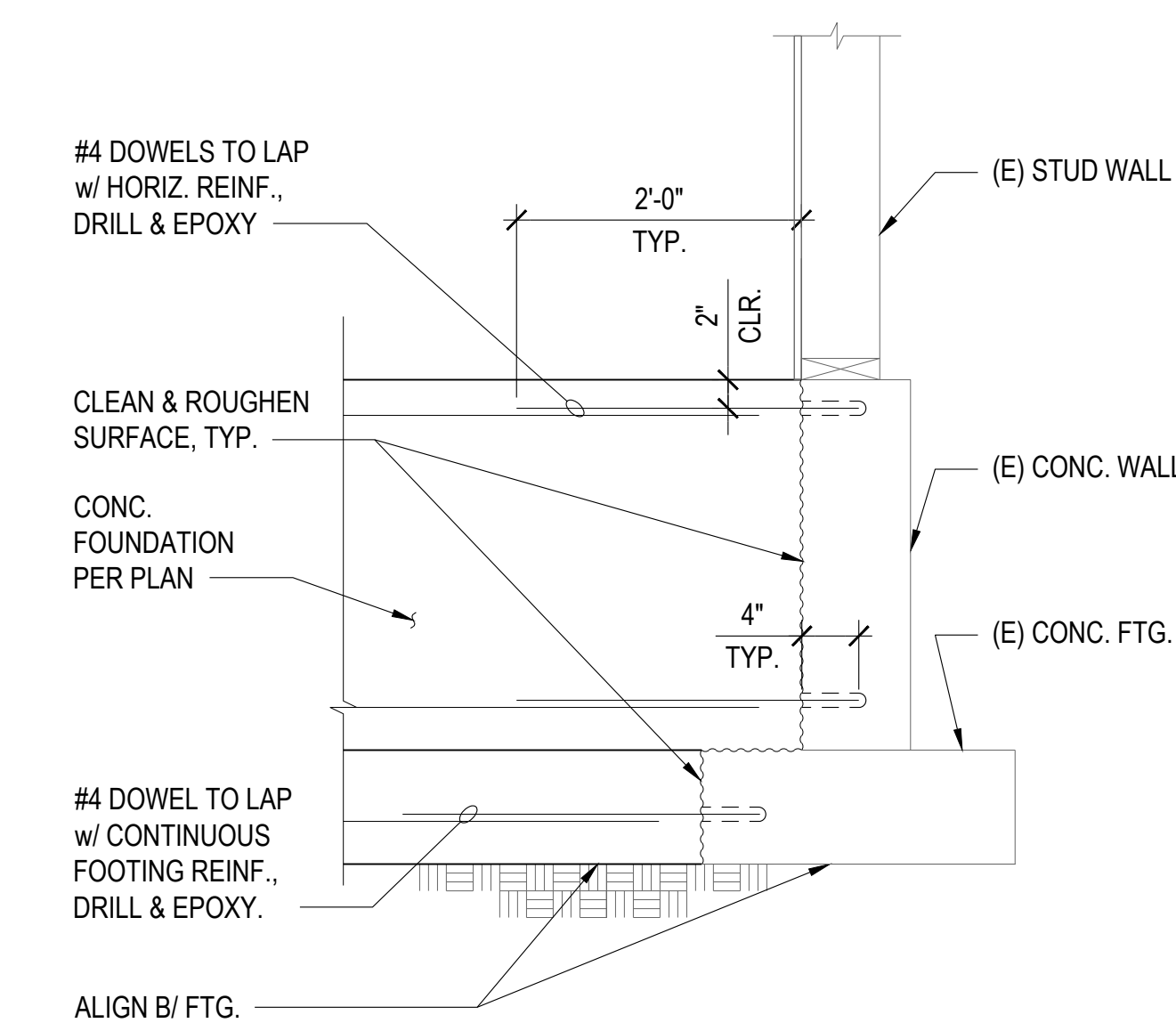
NOTE:
THICKEN FOOTING AT HOLDDOWN ANCHOR WHERE REQUIRED. MIN. 3" CLR. REQUIRED FROM BOTTOM OF CONCRETE

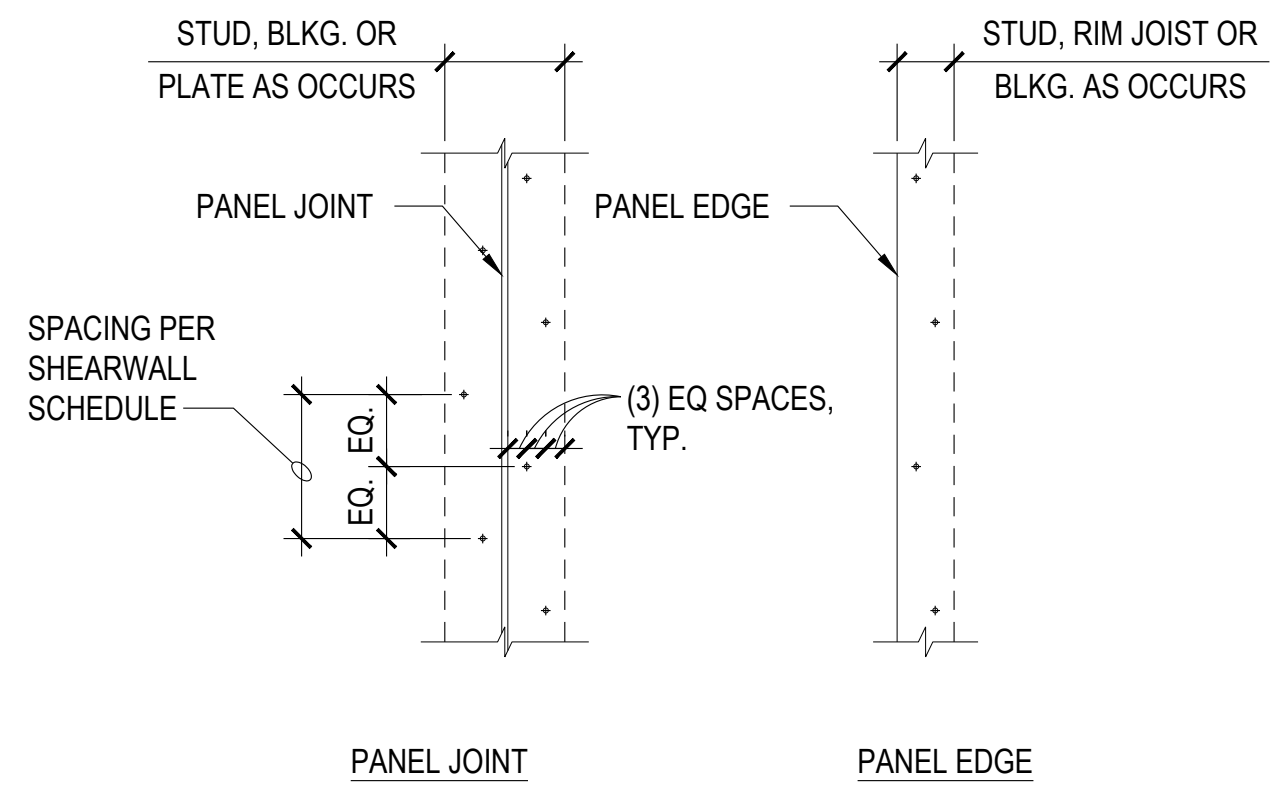
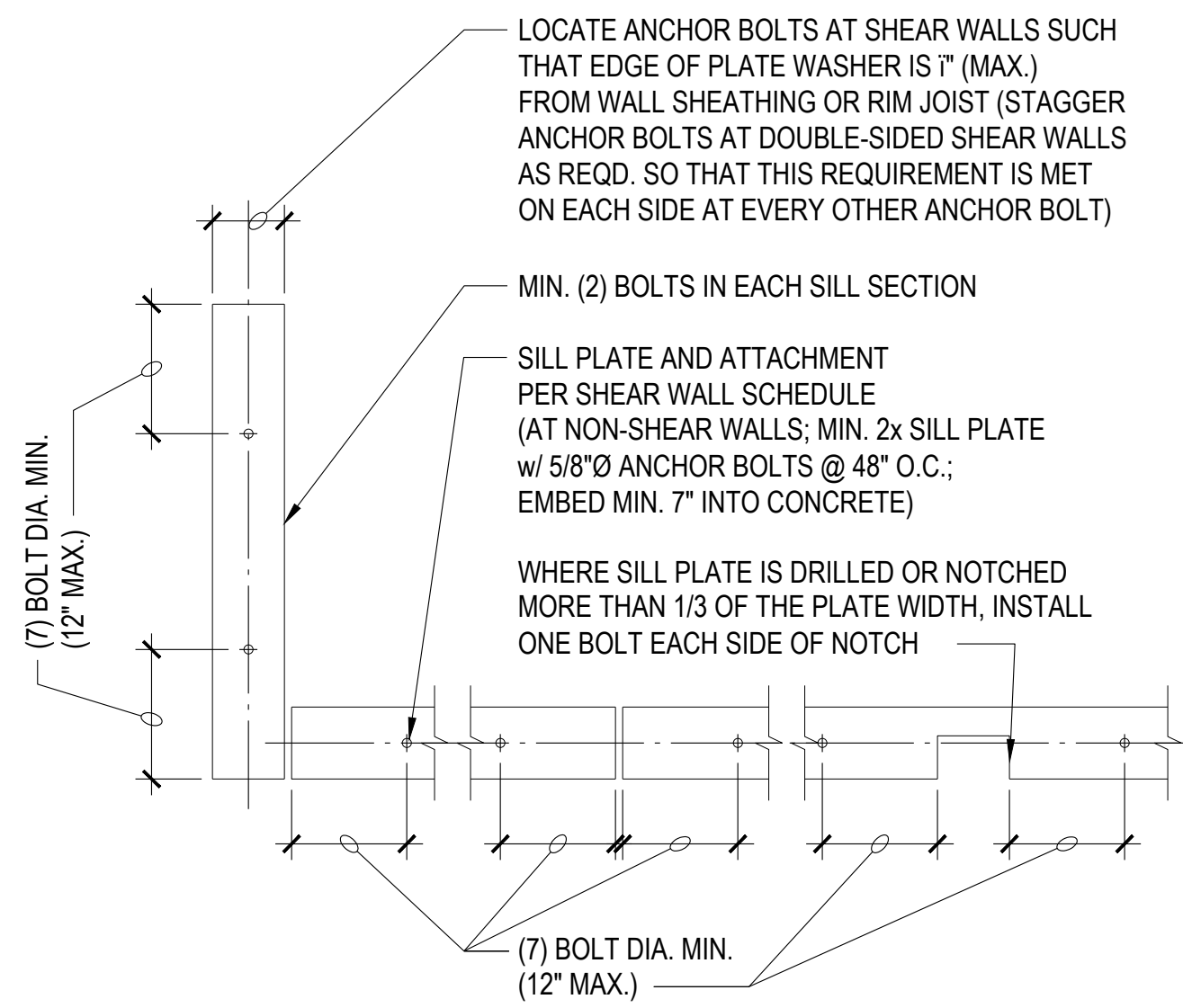


MARK	HOLDDOWN	ANCHOR BOLT *	CONNECTORS TO HOLDDOWN STUDS	END STUDS / POST
A	HDU5	SEE BELOW	(14) SDS 1/4"x2 1/2" SCREWS	(2) 2x

NOTE:
PROVIDE HOT DIPPED GALVANIZED NAILS, BOLTS, OR METAL PLATES FOR ALL CONNECTORS IN CONTACT WITH PRESSURE TREATED MEMBERS.

* INSTALL 3/8" Ø GALVANIZED ALL - THREAD ROD w/ 8" EMBED INTO (E) STEM WALL, STD. WASHER AND NUT ALL-THREAD INTO (E) SILL PLATE AT HOLDDOWN LOCATIONS



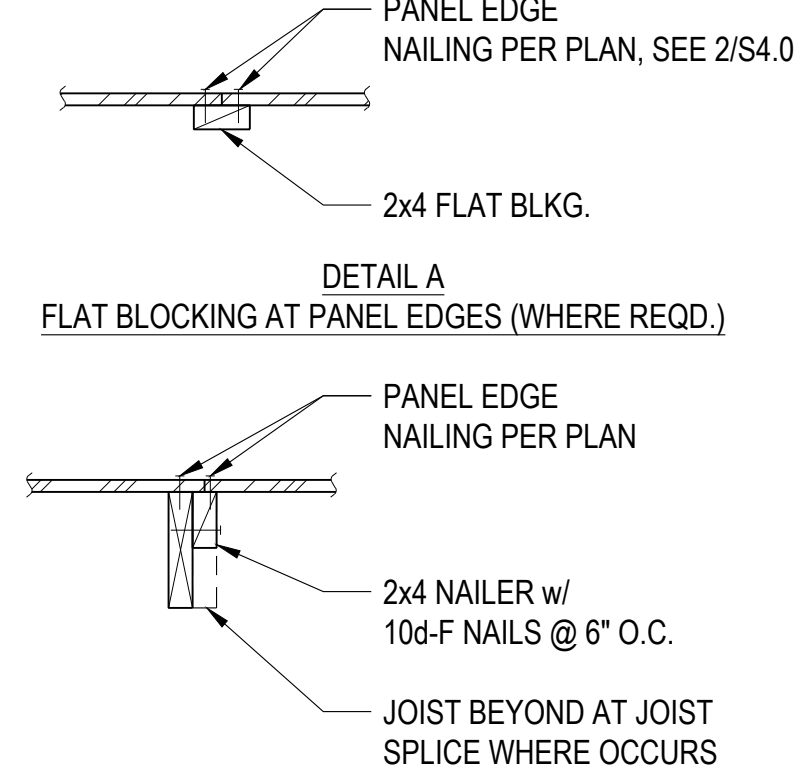
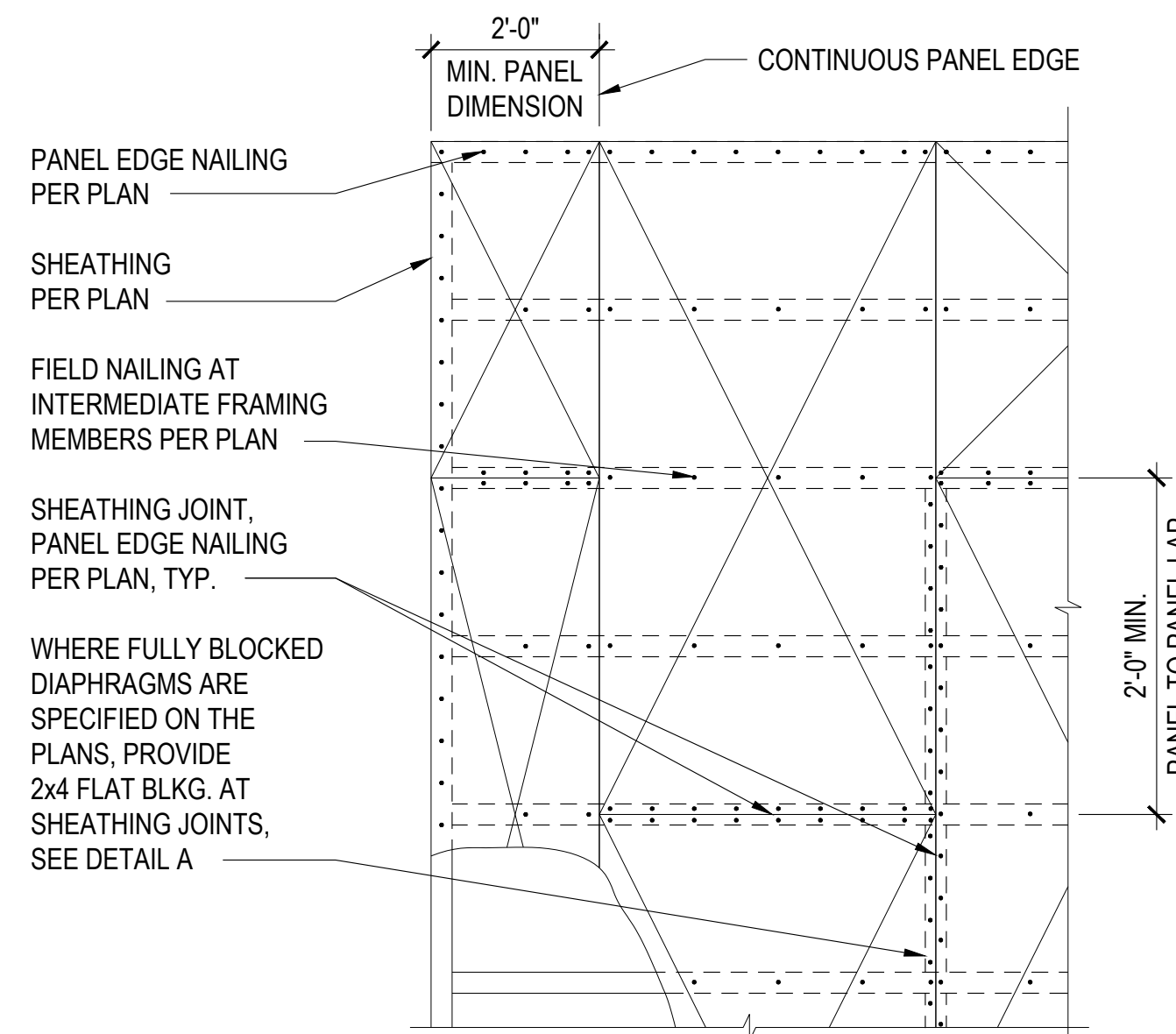


NOTE:
STAGGER EA. LINE OF NAILING (AT ALL PANEL EDGES) AS INDICATED

SHEAR WALL SCHEDULE (HEM-FIR, 10d NAILING)										
SHEAR WALL TYPE	SHEAR WALL SHEATHING ①	PANEL EDGE FRAMING ② ⑦	PANEL EDGE NAILING ③	BOTTOM PLATE ATTACHMENT		TOP PLATE ATTACHMENT		ALLOWABLE SHEAR WALL CAPACITY (PLF)		
				2x BOTTOM PLATE CONNECTION TO RIM JOIST OR BLOCKING BELOW	ANCHOR BOLTING OF SILL PLATE TO CONCRETE BELOW ④ ⑤		RIM JOIST OR BLOCKING CONNECTION TO TOP PLATE ⑥		SEISMIC	WIND
					3x PLATE	2x PLATE	INTERIOR WALL	EXTERIOR WALL		
SW-6	15/32" APA ONE-SIDE SHTG.	2x	0.148"Øx2 1/4" @ 6" O.C. ⑧	0.148"Øx3 1/4" @ 6" O.C. ⑨	5/8"Ø @ 48" O.C.	5/8"Ø @ 48" O.C.	A35 @ 16" O.C.	LTP4 @ 16" O.C.	288	405
SW-4	15/32" APA ONE-SIDE SHTG.	3x OR (2) 2x	0.148"Øx2 1/4" @ 4" O.C. ⑧	0.148"Øx3 1/4" @ 4" O.C. ⑨	5/8"Ø @ 48" O.C.	5/8"Ø @ 32" O.C.	A35 @ 16" O.C.	LTP4 @ 16" O.C.	428	600

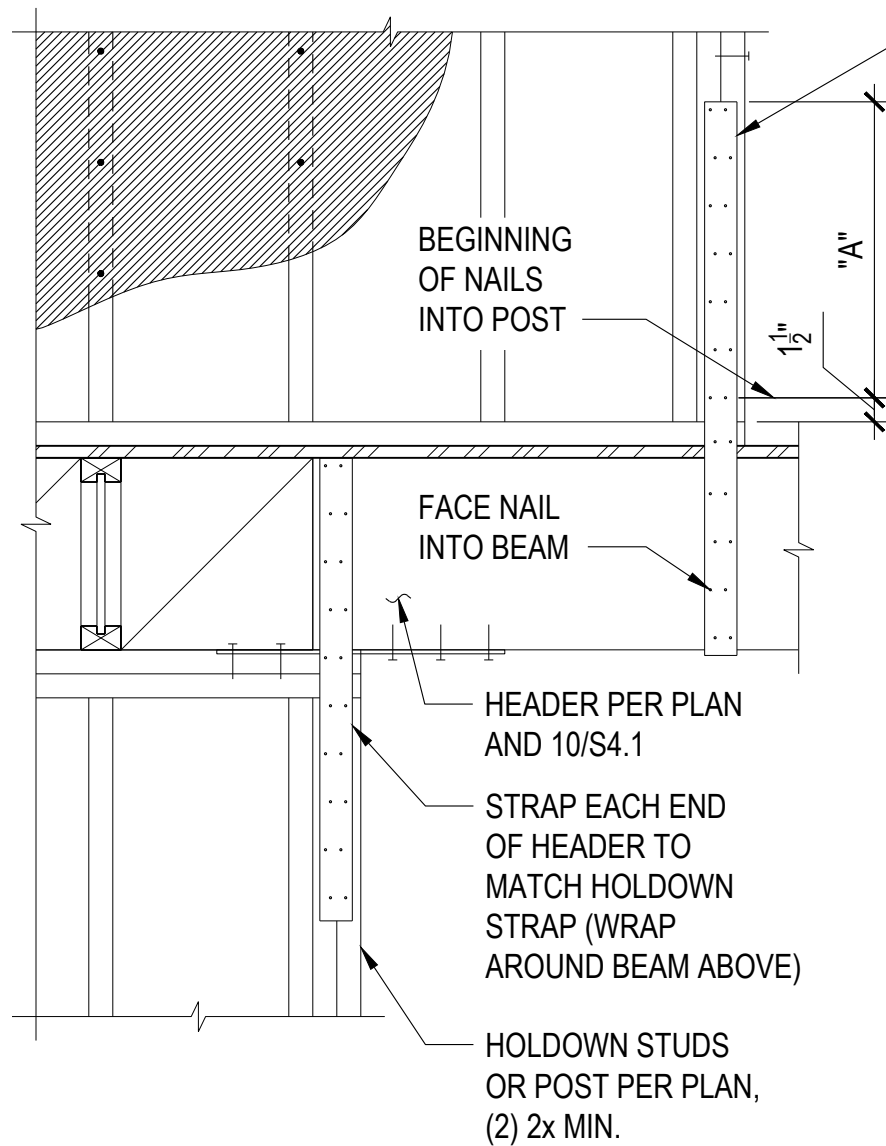
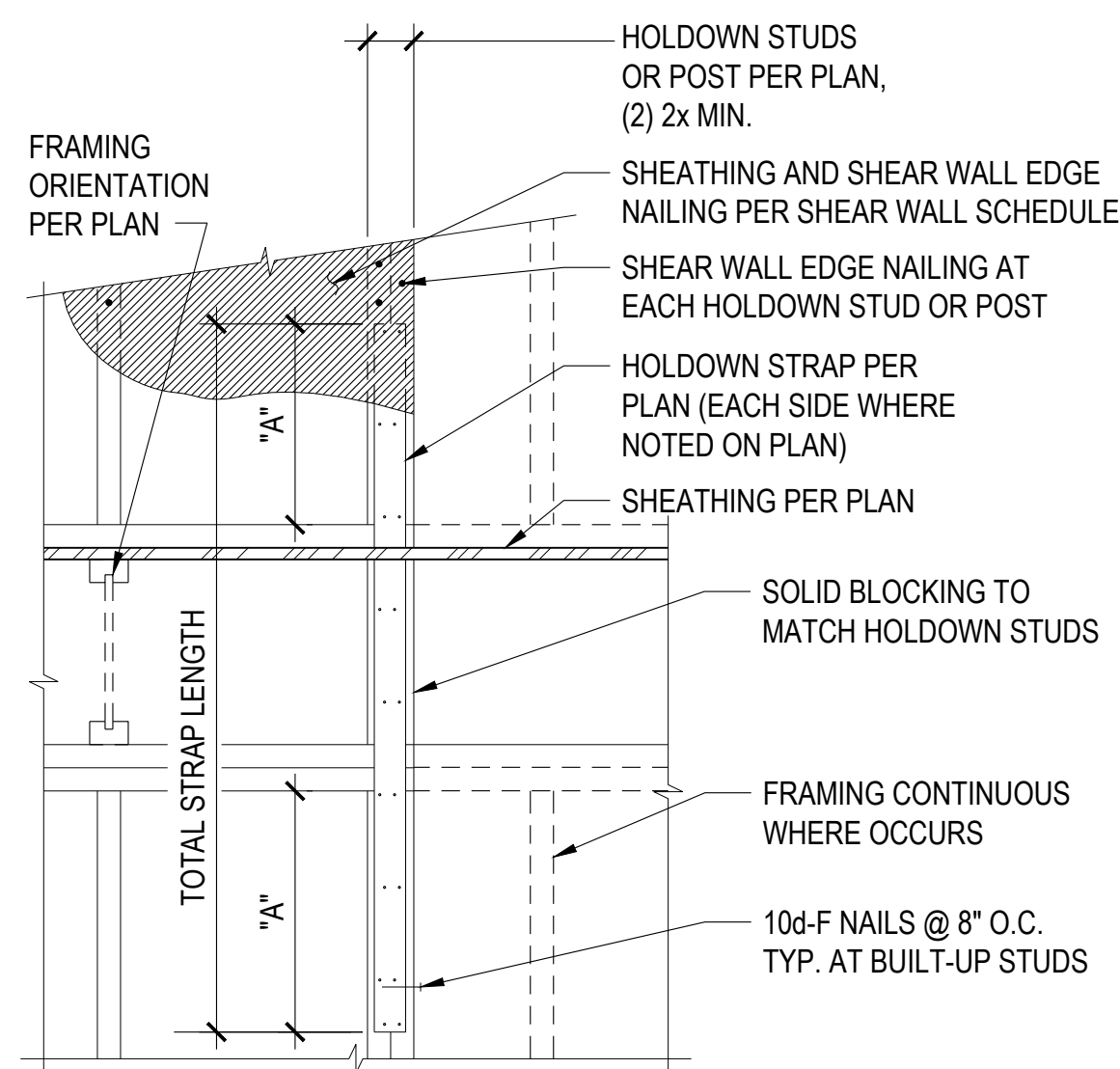
NOTES:

- INSTALL PANEL SHEATHING EITHER HORIZONTALLY OR VERTICALLY FOR THE ENTIRE LENGTH OF THE WALL PER PLAN.
- ALL INTERMEDIATE WALL STUDS SHALL BE PER PLAN. PROVIDE BACKING FRAMING AT ALL PANEL EDGES INCLUDING HORIZONTAL BLOCKING PER THE SCHEDULE.
- PROVIDE NAILING TO ALL PANEL EDGES, TOP & BOTTOM PLATES AND HORIZONTAL BLOCKING. PROVIDE THE SAME NAILING PATTERN TO EACH MULTIPLE STUD OF THE BUILT-UP HOLD DOWN POST. NAIL PANEL TO INTERMEDIATE FRAMING MEMBERS w/ 0.131"Ø x 2 1/2" @ 12" O.C.
- EMBED CAST-IN-PLACE 5/8"Ø ANCHOR BOLTS 7" MIN. (OR EMBED ADHESIVE ANCHOR BOLTS 5 1/2" IN (E) CONCRETE; SEE STRUCTURAL NOTES). PROVIDE PLATE WASHER 3" x 3" x 1/4" AT EACH ANCHOR BOLT. SILL PLATES SHALL BE TREATED PER GENERAL NOTES, AND SHALL BE 2x OR 3x PER THE SCHEDULE. SEE DETAIL 1/S4.0 FOR OTHER REQUIREMENTS.
- PROVIDE HOT DIPPED GALVANIZED NAILS, BOLTS, OR METAL PLATES FOR ALL CONNECTORS IN CONTACT WITH PRESSURE TREATED MEMBERS.
- PROVIDE 0.131"Ø x 1-1/2" LONG NAILS FOR CLIPS DIRECTLY ATTACHED TO FRAMING MEMBERS; PROVIDE 0.131"Ø x 2-1/2" LONG NAILS FOR CLIPS INSTALLED OVER FLOOR OR WALL SHEATHING ON FRAMING MEMBERS. SEE 6/S4.1 FOR TOP PLATE SPLICE.
- ALTERNATIVE TO 3x STUDS AND 3x HORIZ. BLOCKING IS (2) 2x STUDS/BLKG. NAILED TOGETHER WITH 0.148"Ø x 3" LONG NAILS WITH THE SAME SPACING AS THE PANEL EDGE NAILING PER THE SCHEDULE (STAGGER).
- STAGGER NAILS PER 2/S4.0.
- RIM JOIST/BLOCKING MINIMUM WIDTH OF 1 3/4". STAGGER NAILS PER 2/S4.0 WHERE SPACING IS LESS THAN 6" O.C.
- RIM JOIST/BLOCKING MINIMUM WIDTH OF 1 3/4" AT EXTERIOR WALLS, 3 1/2" AT INTERIOR WALLS. STAGGER NAILS PER 2/S4.0.
- STAGGER ANCHOR BOLTS ON EITHER SIDE OF SILL PLATE AS NOTED ON 1/S4.0.



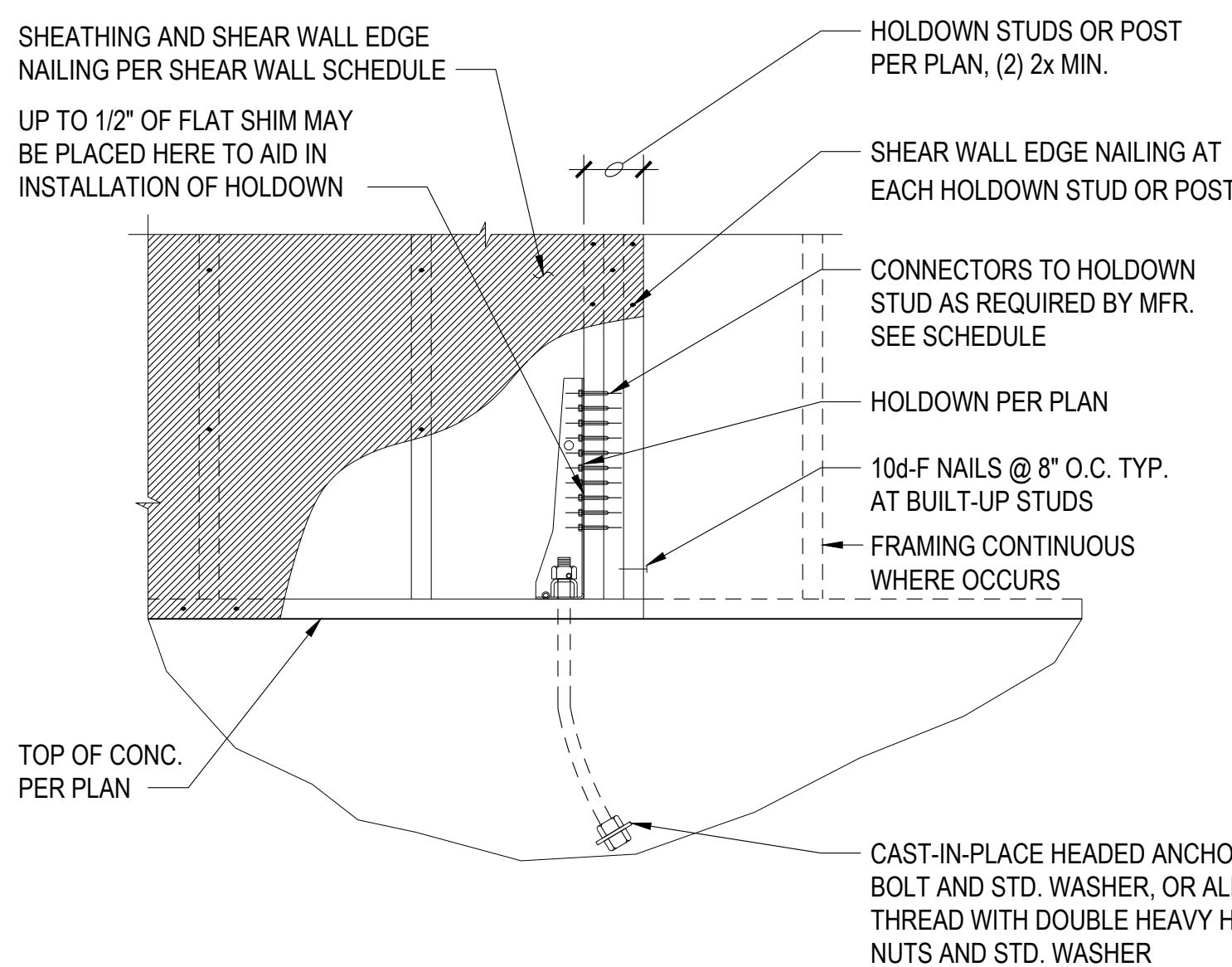
DETAIL B
PANEL EDGE NAILING AT JOIST SPLICE

- NOTES:
- RUN LONG DIMENSION OF SHEATHING PANELS PERPENDICULAR TO FRAMING.
 - WHERE FRAMING LAP SPLICE AND SHEATHING JOINTS ARE OFFSET, SEE DETAIL B ABOVE.



MARK	HOLDOWN STRAP	MIN. NUMBER OF NAILS EACH END	MIN. STRAP END LENGTH "A"
A	CS16	(15) 8d	1'-4"
B	MSTC66B3	(12) 10d FACE (4) 10d FACE	1'-0"

NOTE:
SEE 10/S3.0 FOR RETROFIT HOLDOWN AND 6/S3.0



MARK	HOLDOWN	ANCHOR BOLT*	CONNECTORS TO HOLDOWN STUDS	END STUDS / POST
A	HDU5	SB 5/8 x 24"	(14) SDS 1/4"x2 1/2" SCREWS	(2) 2x

NOTE:
PROVIDE HOT DIPPED GALVANIZED NAILS, BOLTS, OR METAL PLATES FOR ALL CONNECTORS IN CONTACT WITH PRESSURE TREATED MEMBERS.

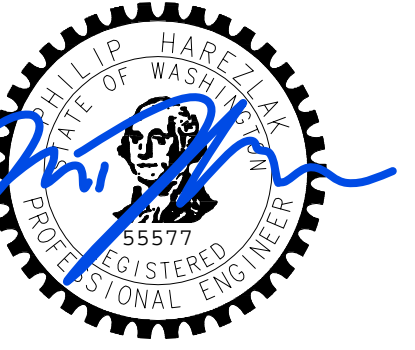
* CONTRACTOR OPTION TO PROVIDE THREADED ROD IN LIEU OF ANCHOR IN SCHEDULE. DIAMETER TO BE AS INDICATED, CONTACT HAREZLAK ENGINEERING FOR PROJECT SPECIFIC EMBED REQUIREMENTS.



HAREZLAK ENGINEERING
Covington, WA 98042

PH: 360.224.0627
E: phil@harezlakengineering.com

CONSULTANT STAMP:



04/27/2026

PROJECT INFORMATION:
XIAO ZHOU HOUSE ADDITION

PROJECT ADDRESS:
4433 86TH AVE SE
MERCER ISLAND, WA 98040

REVISIONS:

NO.	DESCRIPTION	DATE
1	REV 1	04.27.2026

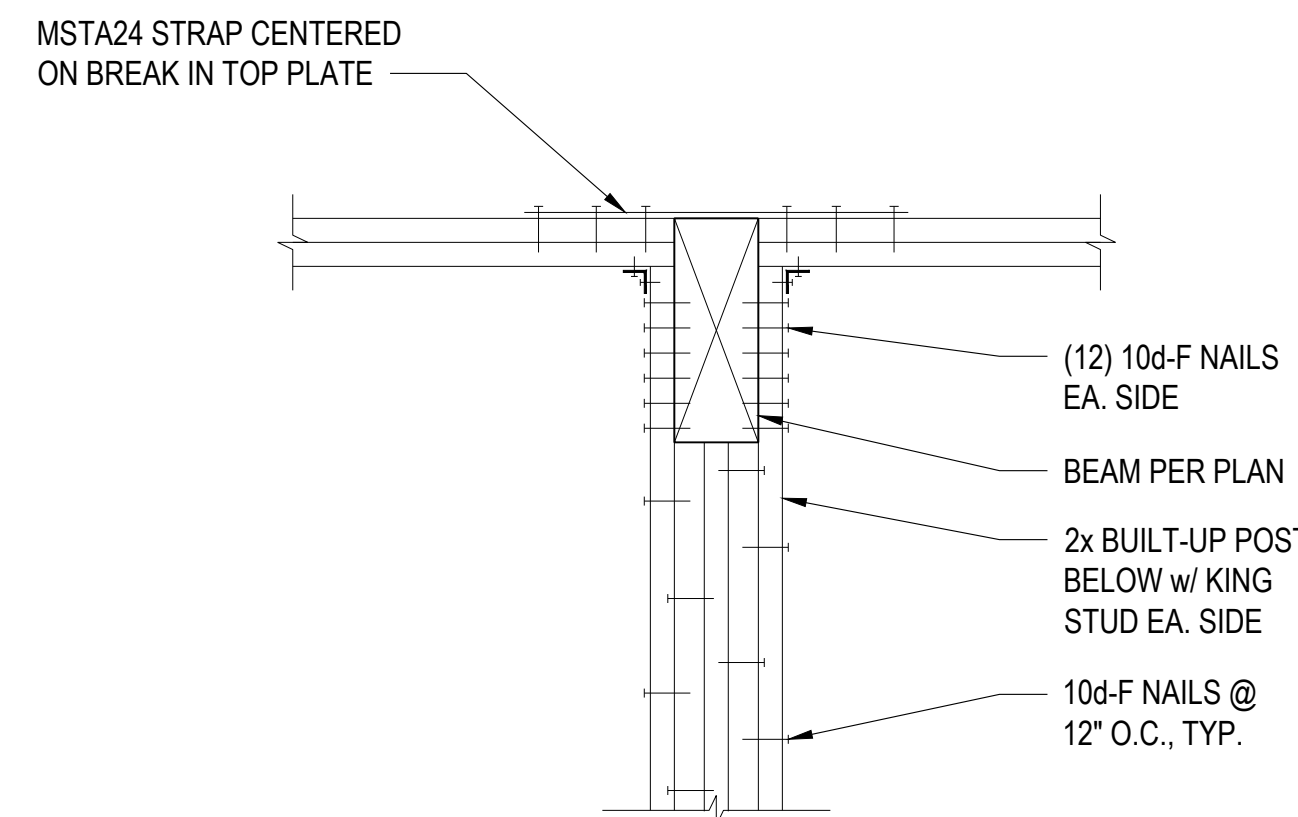
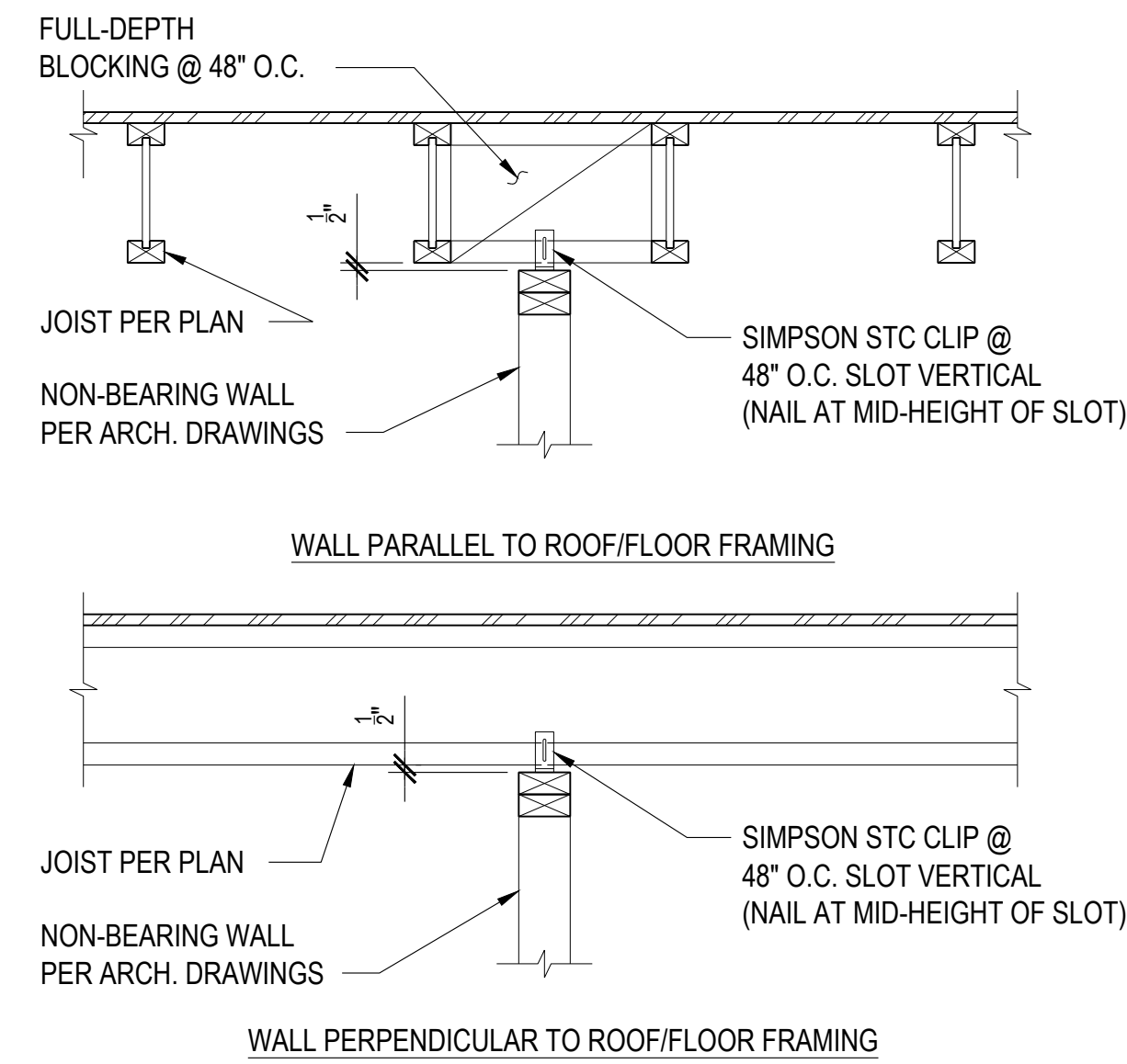
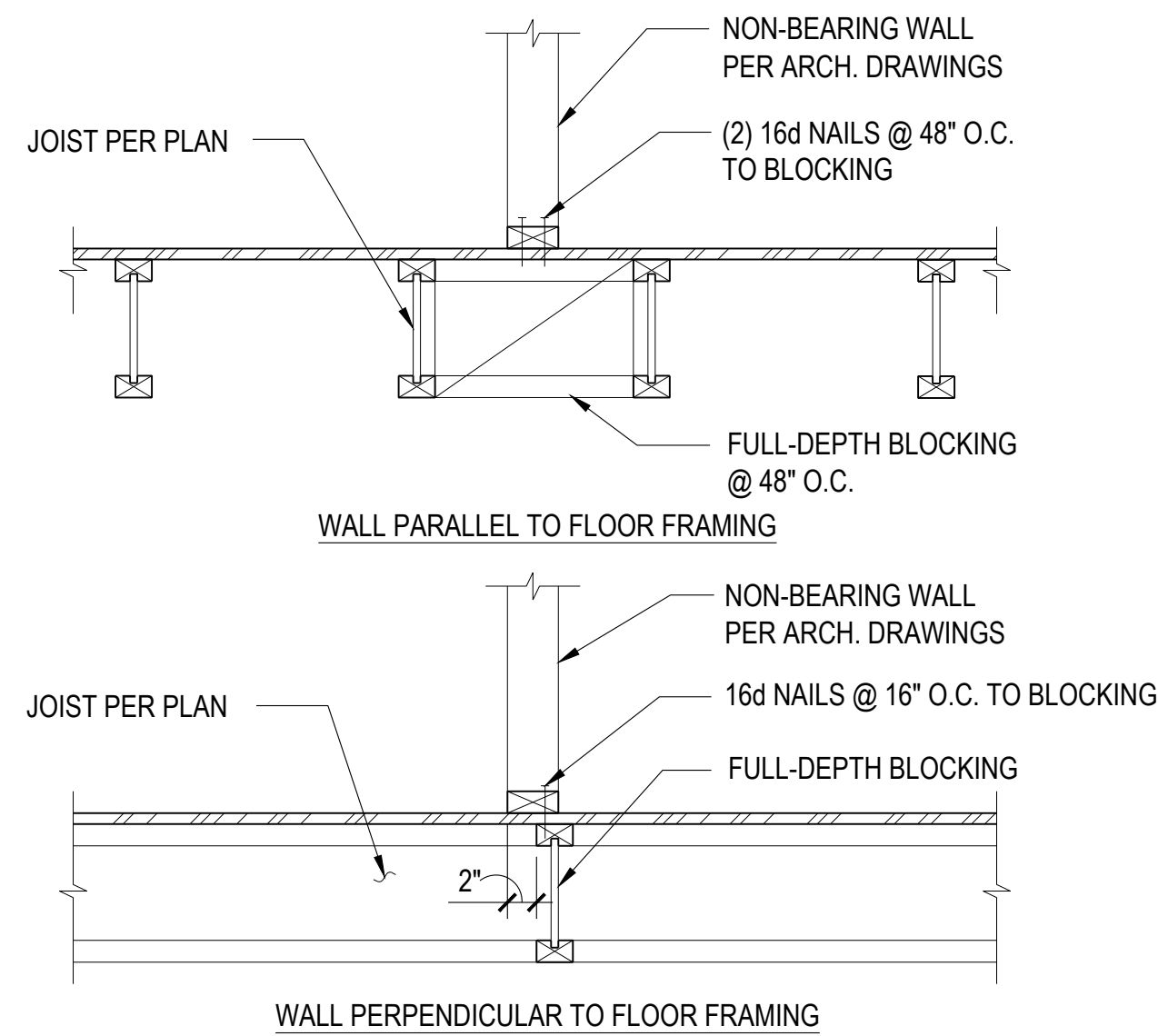
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25-009
ISSUE DATE:
04.01.2025
CURRENT REVISION:
REV 1

SHEET NAME:

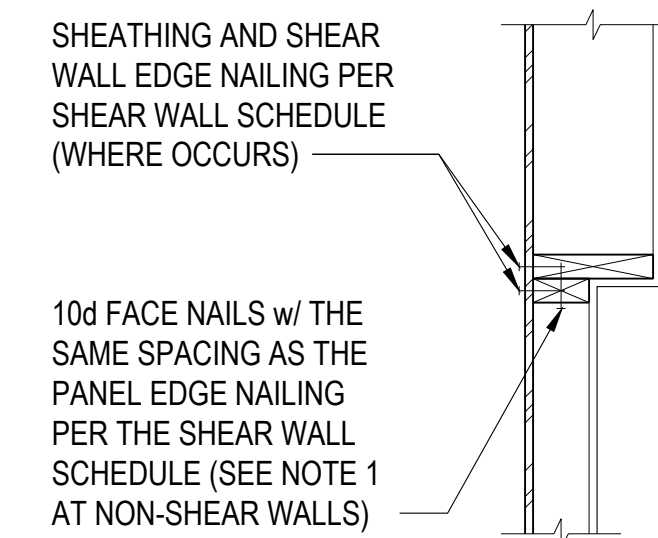
FRAMING SCHEDULES

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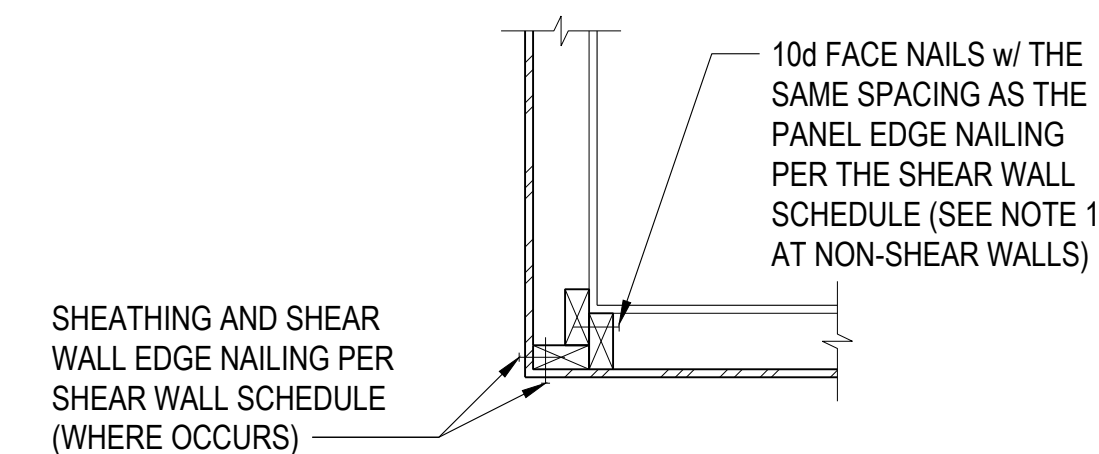
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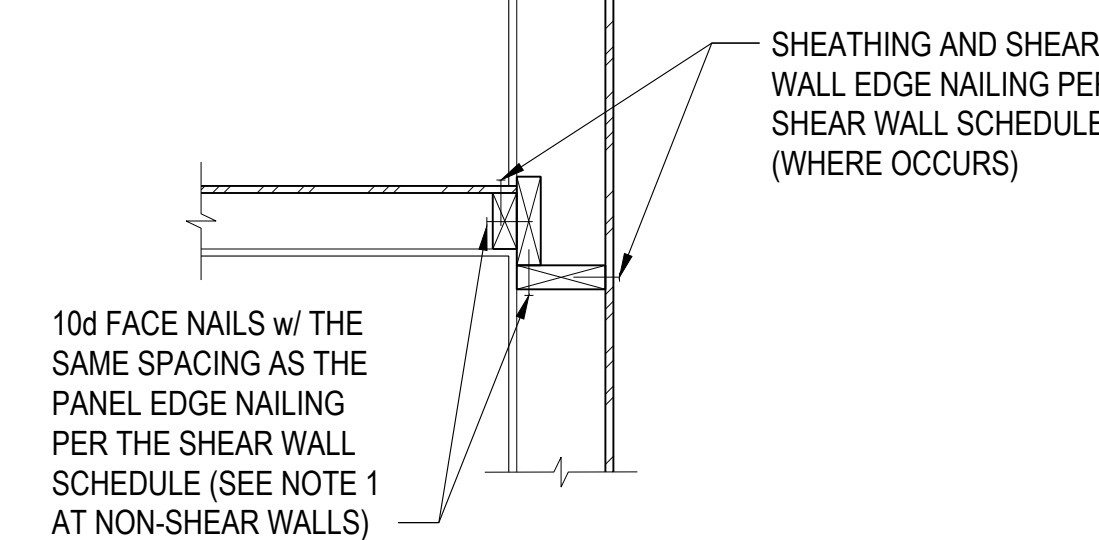
- NOTES:
- AT NON-SHEAR WALLS, NAIL STUDS TOGETHER WITH 10d-F NAILS @ 8" O.C.
 - ADDITIONAL STUDS REQUIRED AS NAILERS, ETC. ARE NOT SHOWN.



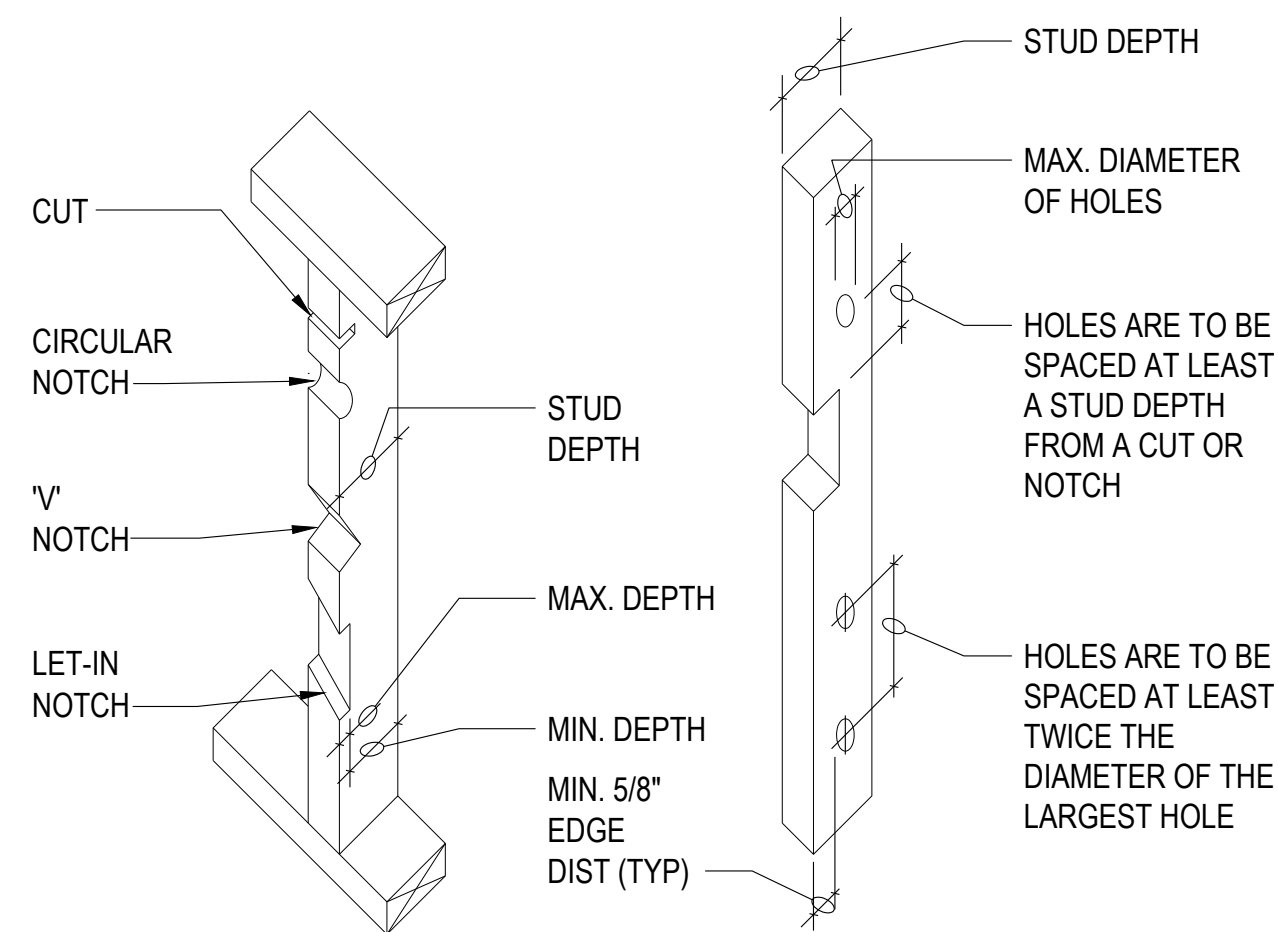
VARYING WALL SIZE



WALL CORNER



WALL INTERSECTION



A. CUTTING AND NOTCHING WOOD STUDS
(DO NOT NOTCH MORE THAN 3 ADJACENT STUDS w/o REVIEW BY ENGINEER)

BEARING WALL STUDS:

STUD SIZE	MAX. DEPTH OF SAW CUT OR NOTCH	MIN. DEPTH REMAINING AFTER CUT OR NOTCH
2x4	7/8"	2-3/8"
2x6	1-3/8"	4-1/8"
2x8	1-7/8"	5-3/8"

NON-BEARING WALL STUDS:

STUD SIZE	MAX. DEPTH OF SAW CUT OR NOTCH	MIN. DEPTH REMAINING AFTER CUT OR NOTCH
2x4	1-1/2"	2"
2x6	2-3/8"	3-1/8"
2x8	3"	4-1/4"

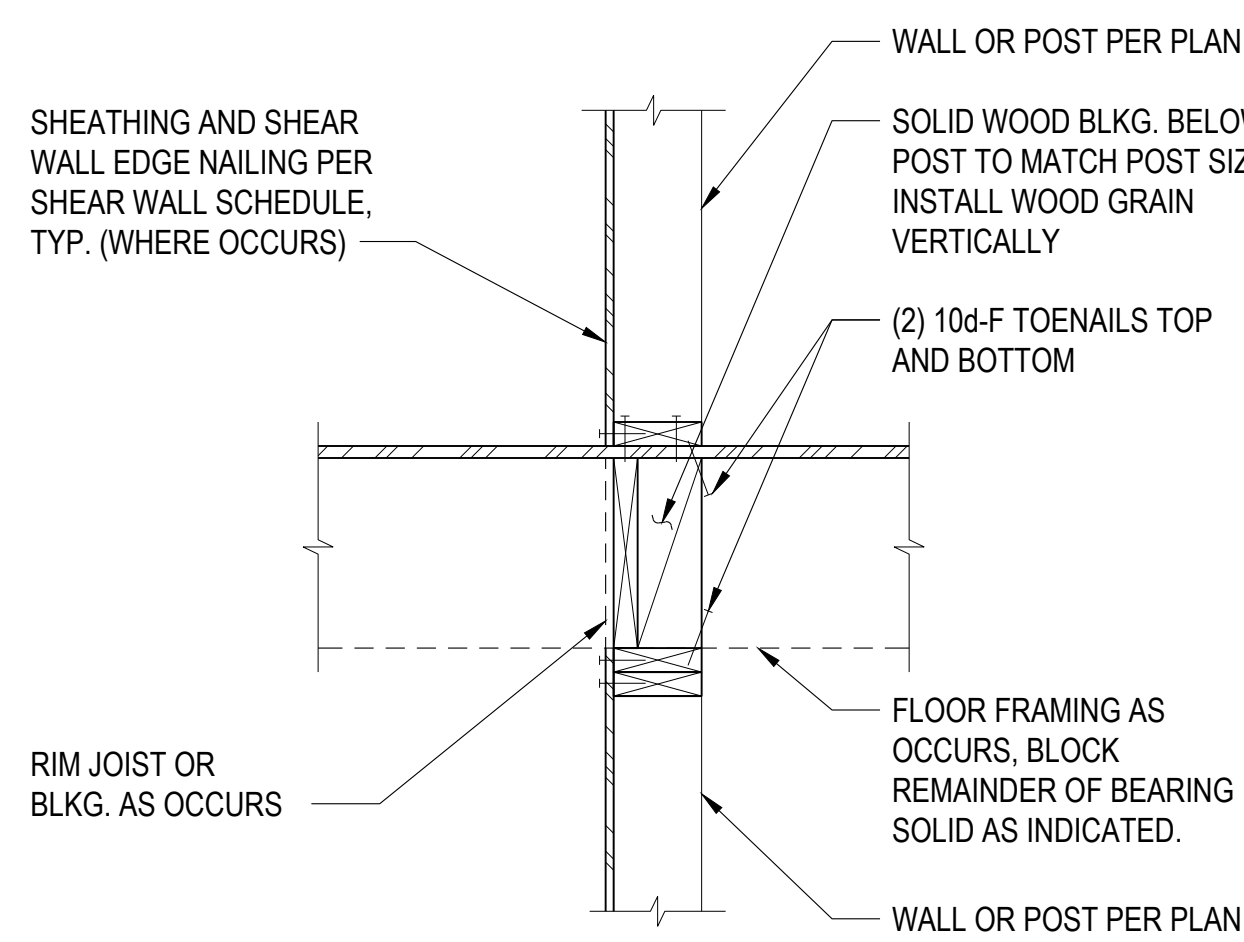
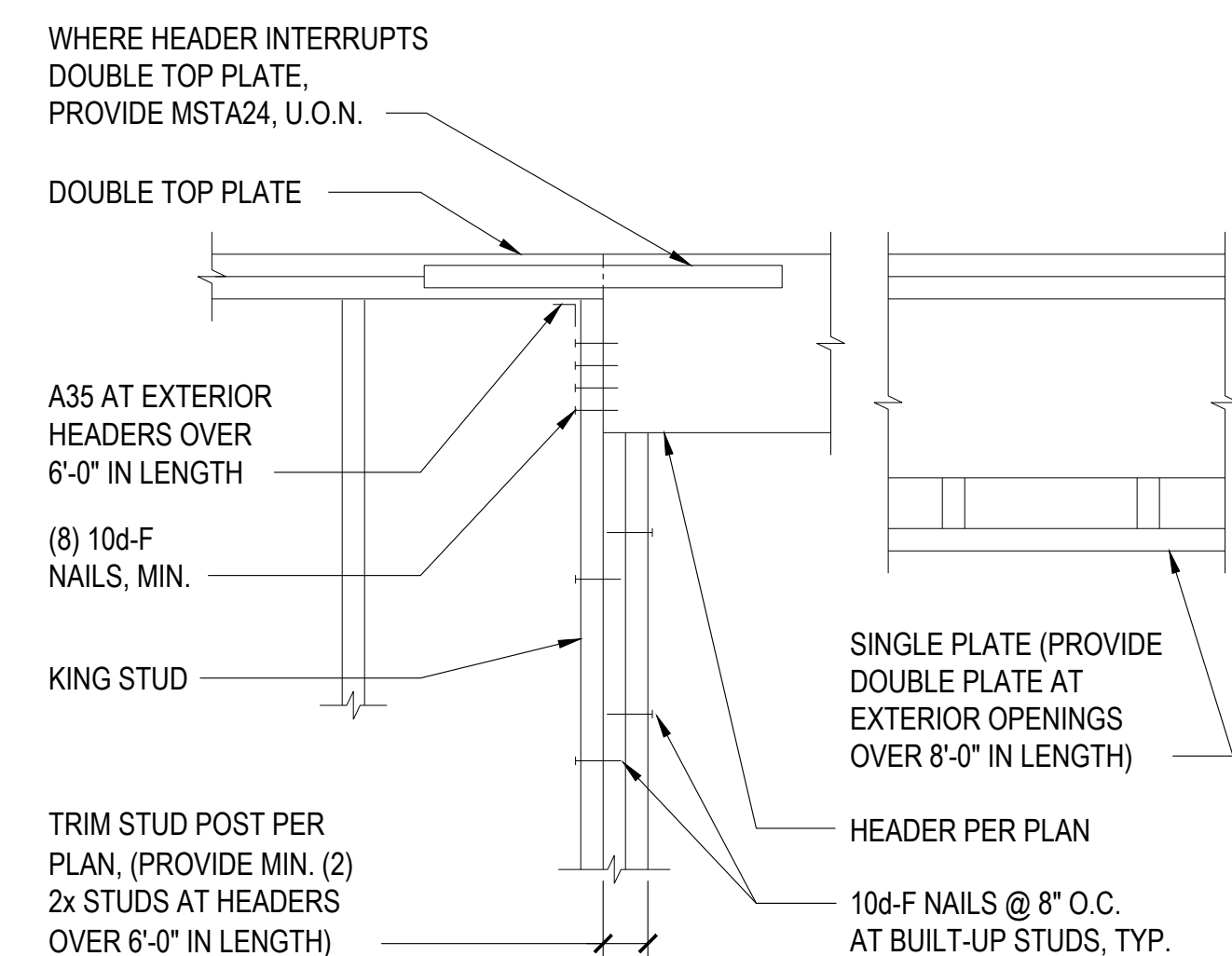
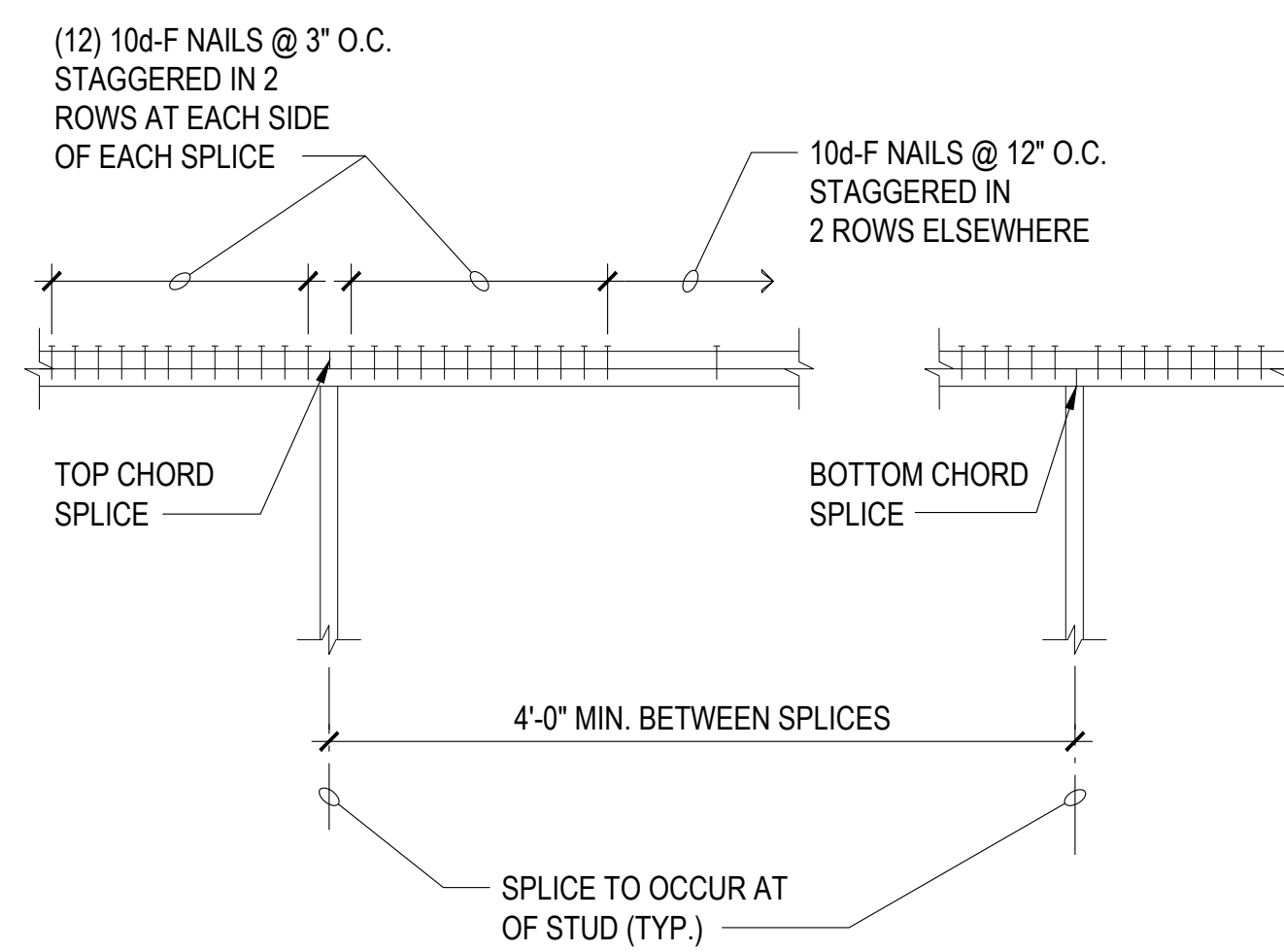
B. HOLES IN WOOD STUDS

BEARING WALL:

STUD SIZE	MAX. DIAMETER OF HOLE
2x4	1-1/2"
2x6	2-3/8"
2x8	3"

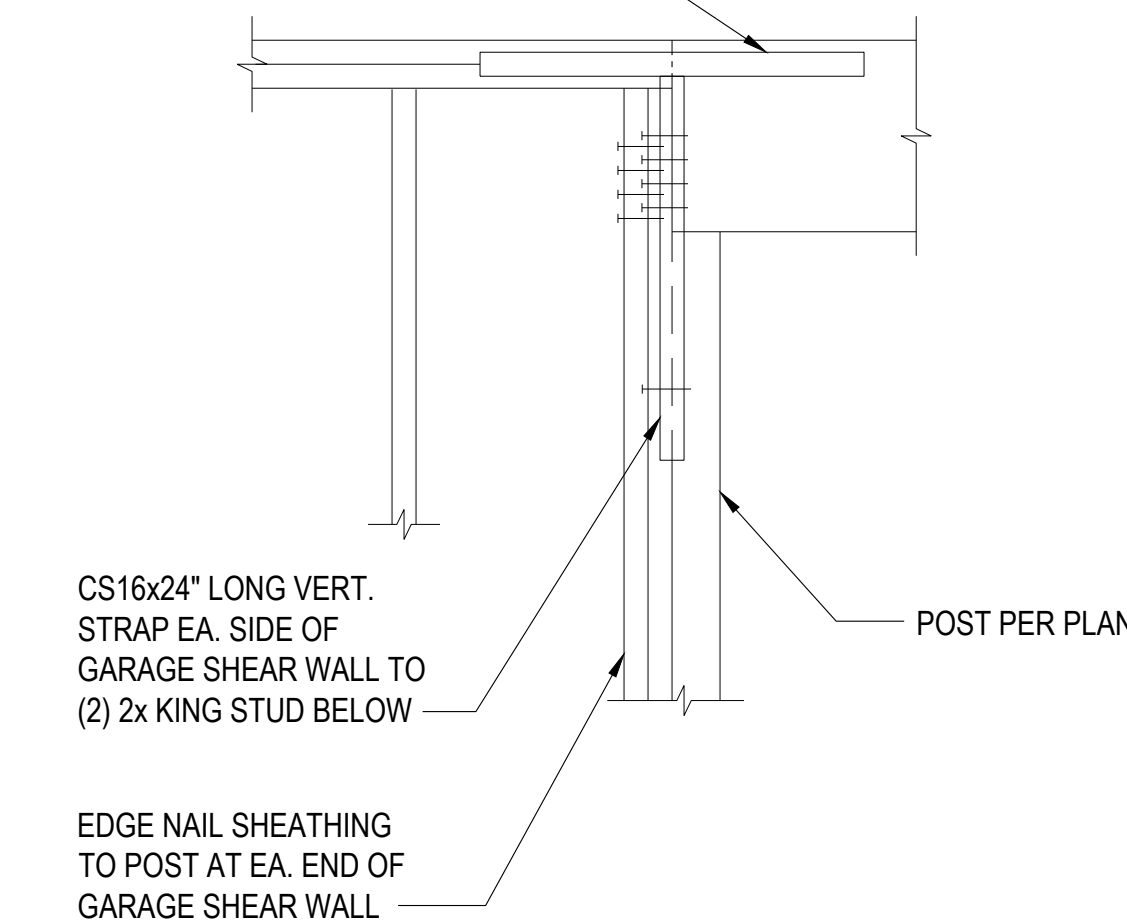
NON-BEARING WALL:

STUD SIZE	MAX. DIAMETER OF HOLE
2x4	2-1/4"
2x6	3-3/8"
2x8	4-1/2"

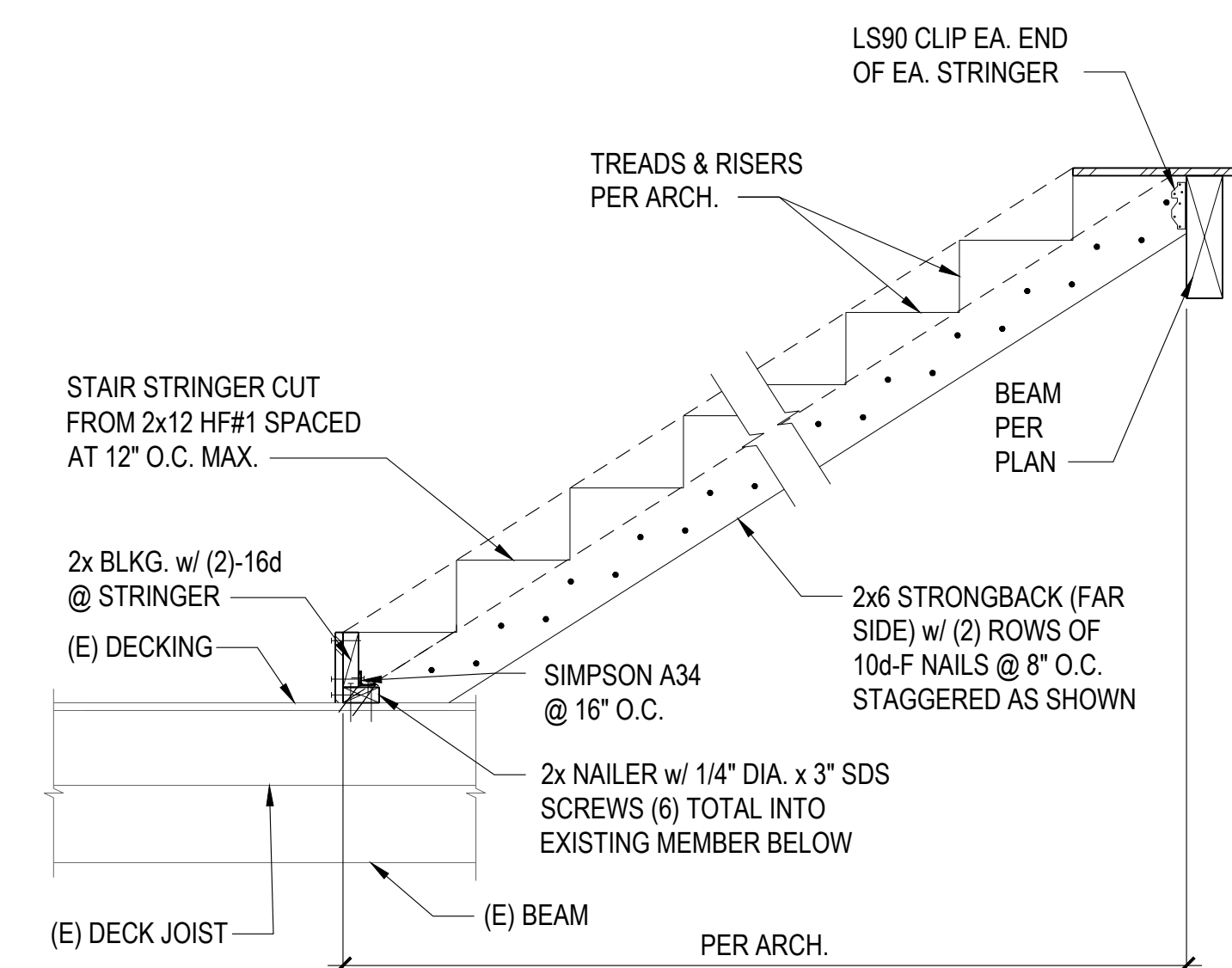


NOTE:
FRAMING CONDITIONS VARY,
FOR INFORMATION NOT
NOTED SEE PLAN &
APPROPRIATE DETAILS

PROVIDE CS16x36" LONG
STRAP DOUBLE TOP PLATE TO
GARAGE HDR., TYP. EA. SIDE



NOTE:
FOR INFORMATION NOT
NOTED, SEE 10/S4.1



NOTE:
CONTRACTOR TO FIELD VERIFY EXISTING DECK
FRAMING. INSTALL NEW DOUBLE JOIST AND BLKG EA.
SIDE OF WHERE LANDING FRAMES INTO EXISTING STAIR

REVISIONS:

NO.	DESCRIPTION	DATE
1	REV 1	04.27.2026

PROJECT NUMBER:
25-009
ISSUE DATE:
04.01.2025
CURRENT REVISION:
REV 1

SHEET NAME:
FRAMING DETAILS

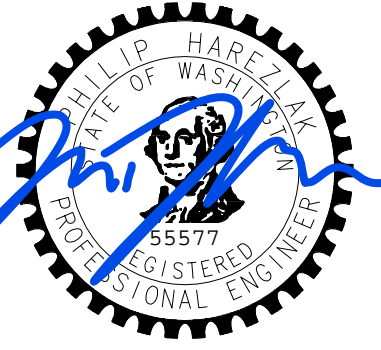


**HAREZLAK
ENGINEERING**

HAREZLAK ENGINEERING
Covington, WA 98042

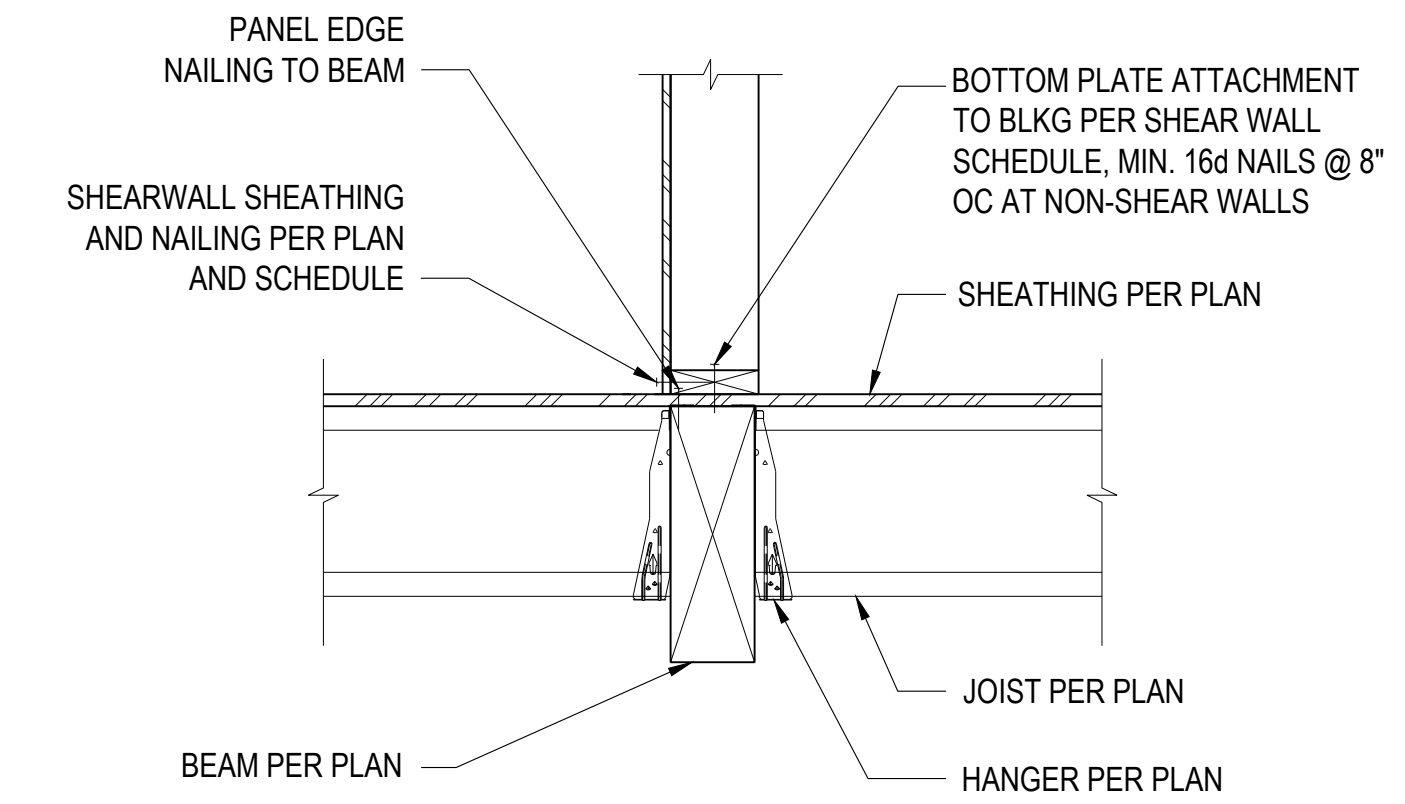
PH: 360.224.0627
E: phil@harezlakengineering.com

CONSULTANT STAMP:



DRAWN BY:
PH
CHECKED BY:
PH
DATE:
04/27/2026

APPROVED BY:
PH

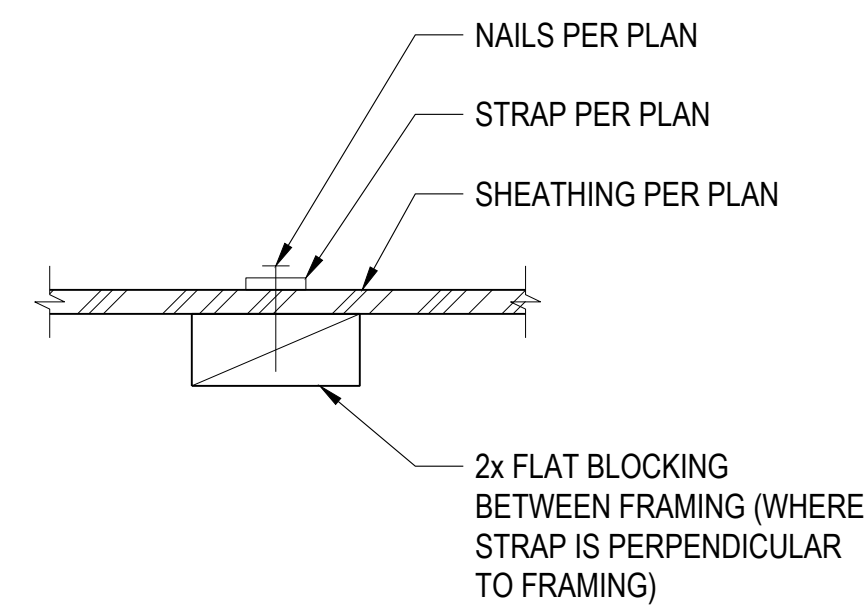


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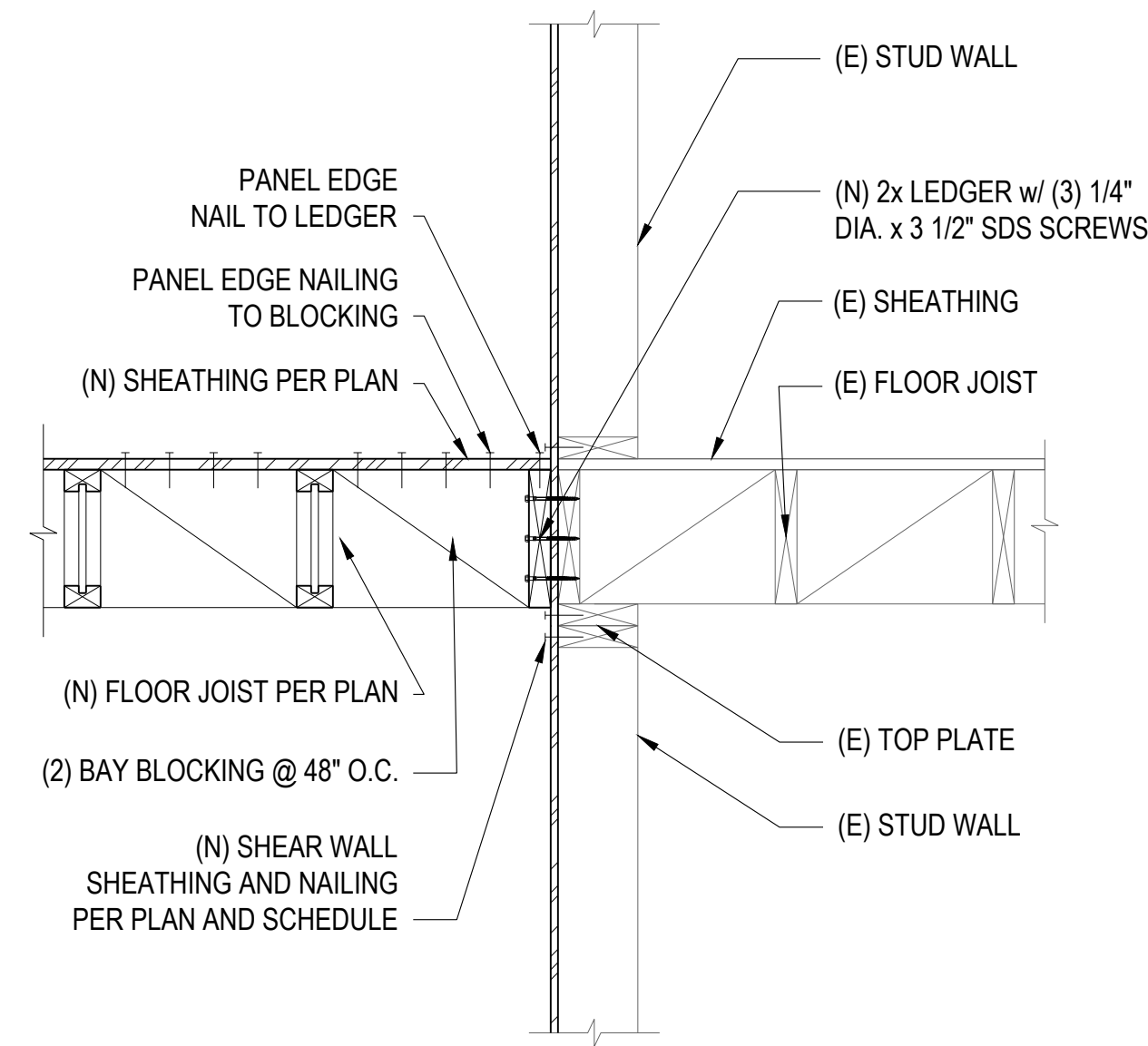
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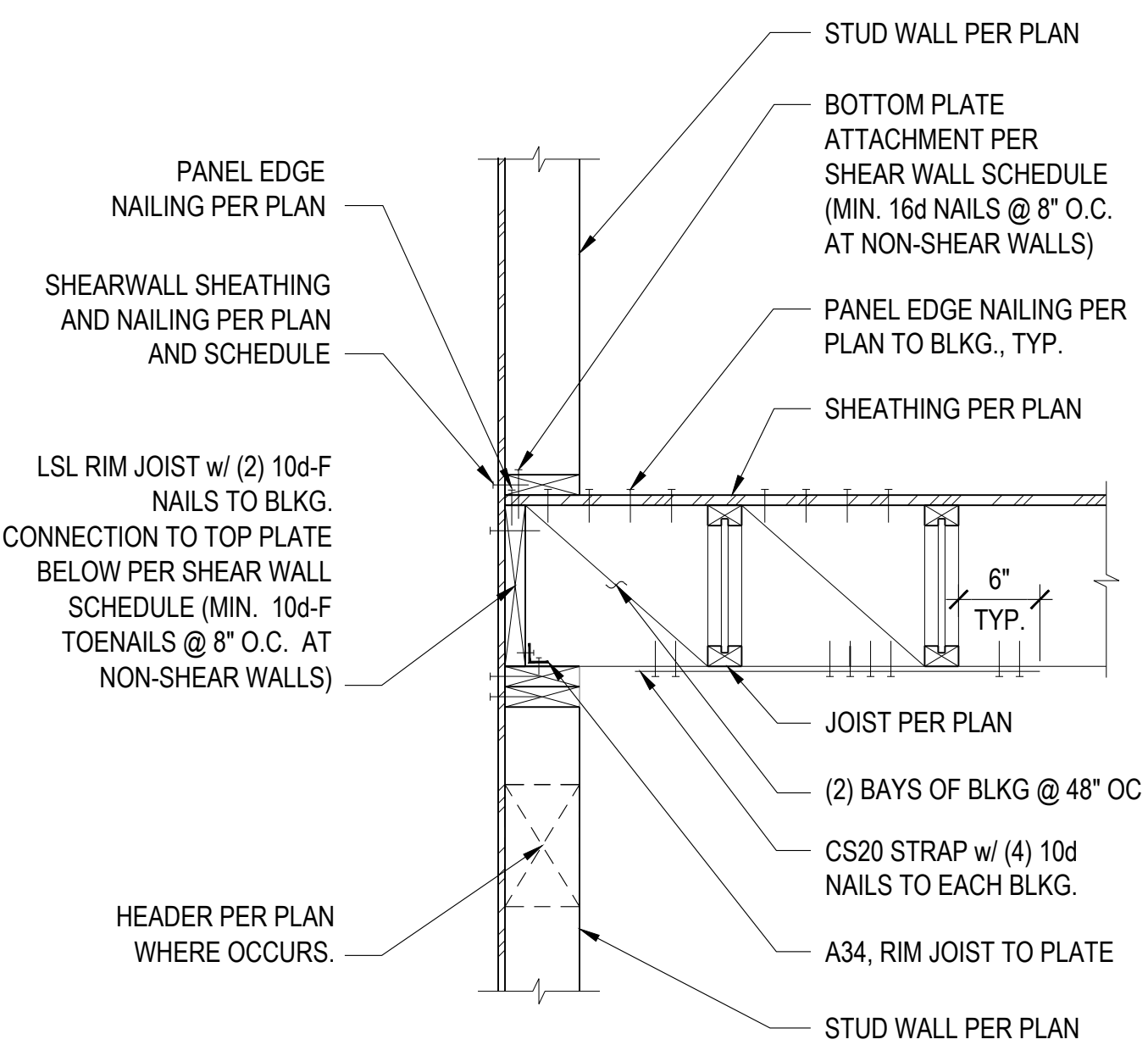


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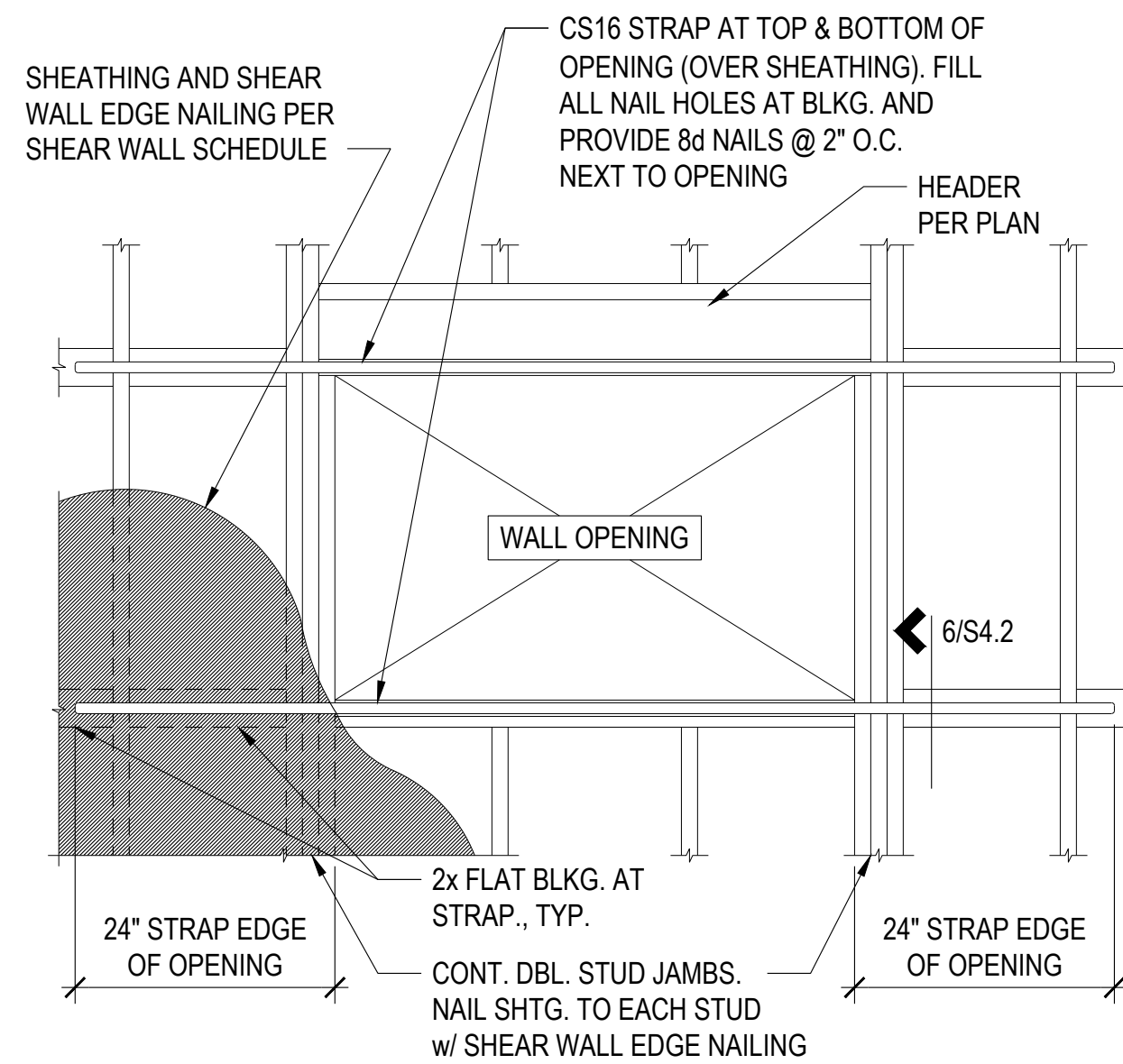
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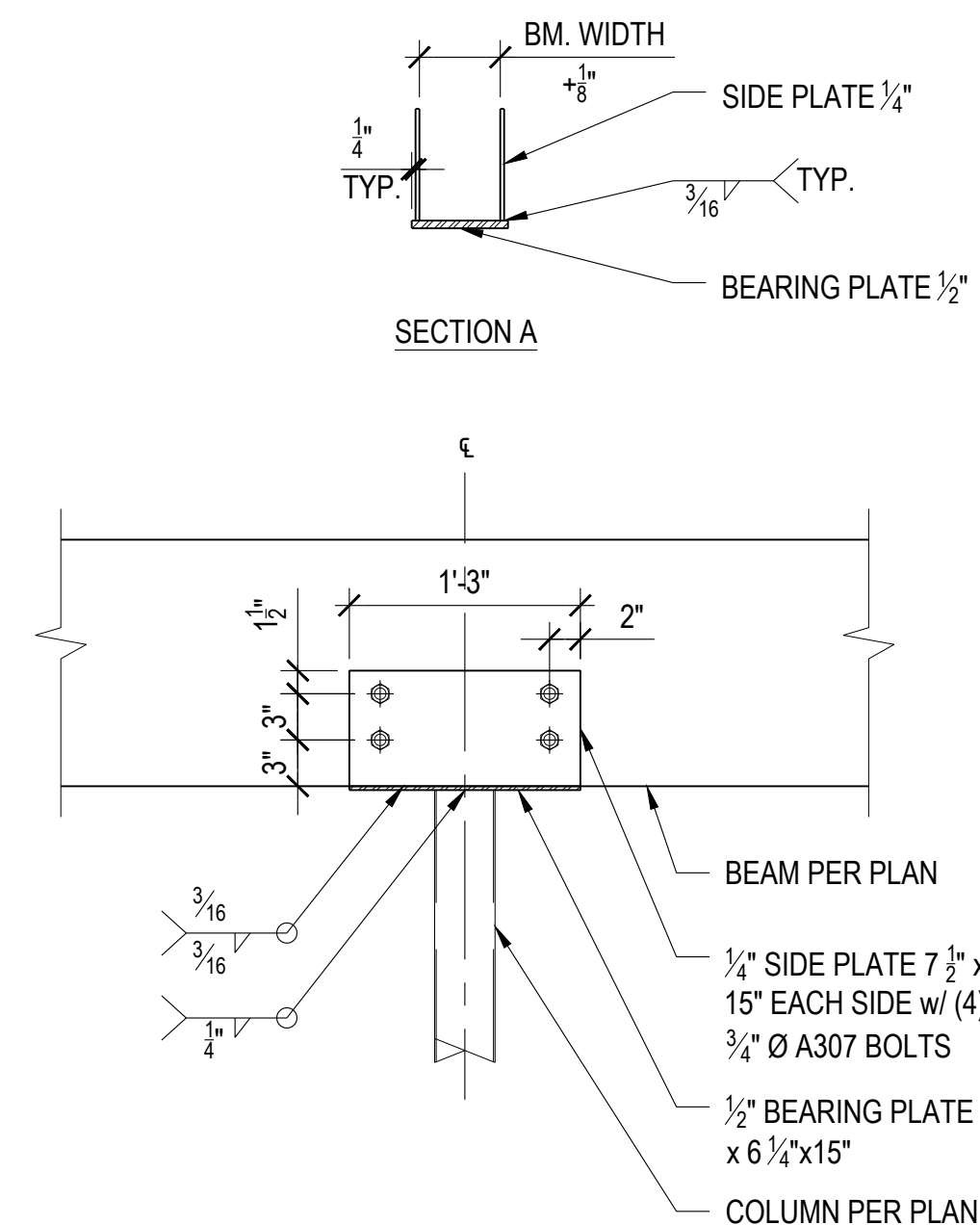


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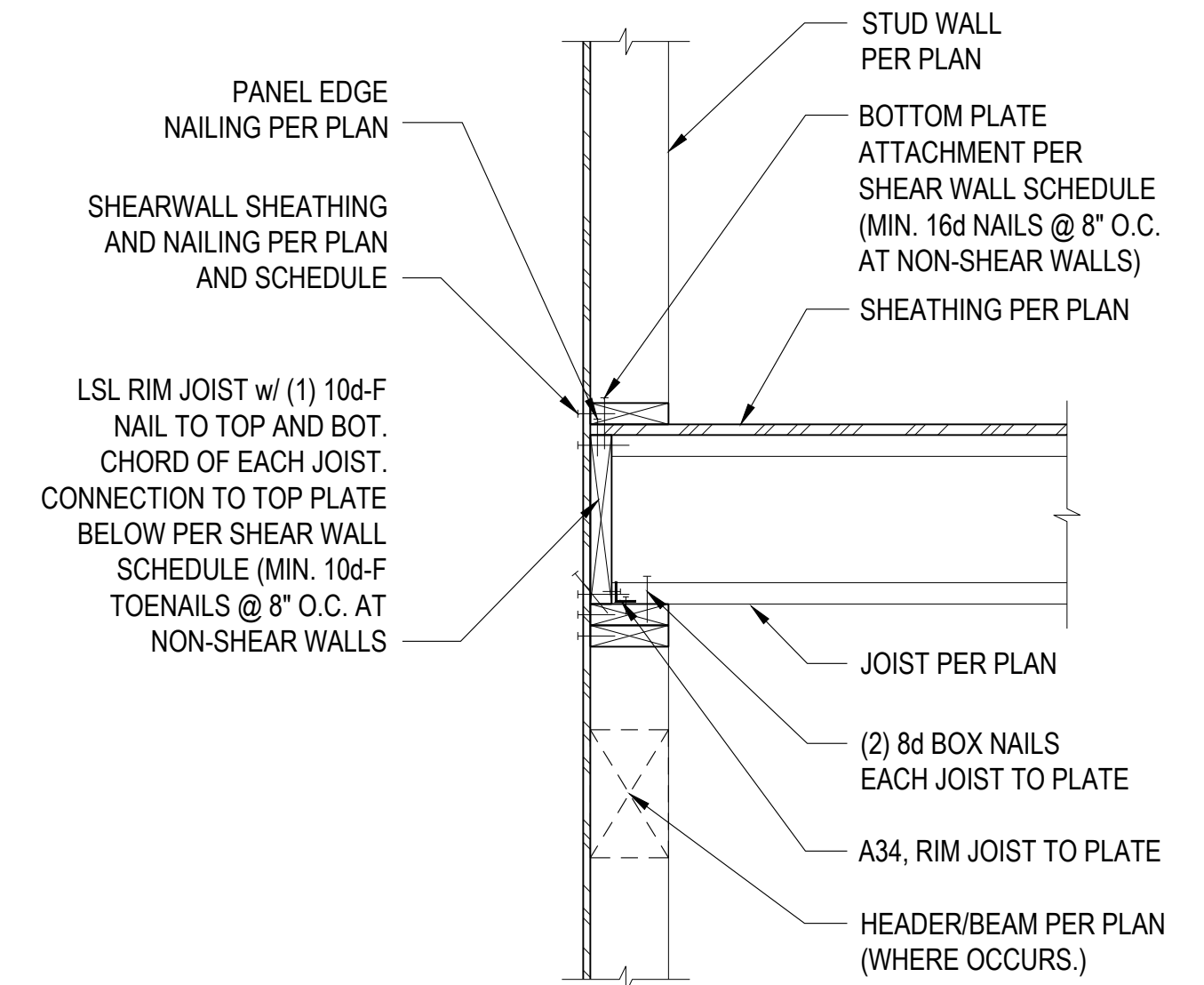


9

10



11



12

NOTE:
• CONTRACTOR TO FIELD VERIFY EXISTING FRAMING PRIOR TO CONSTRUCTION

PROJECT INFORMATION:
XIAO ZHOU HOUSE ADDITION

PROJECT ADDRESS:
**4433 86TH AVE SE
MERCER ISLAND, WA 98040**

REVISIONS:

NO.	DESCRIPTION	DATE
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PROJECT NUMBER:	25-009
ISSUE DATE:	04.01.2025
CURRENT REVISION:	REV 1

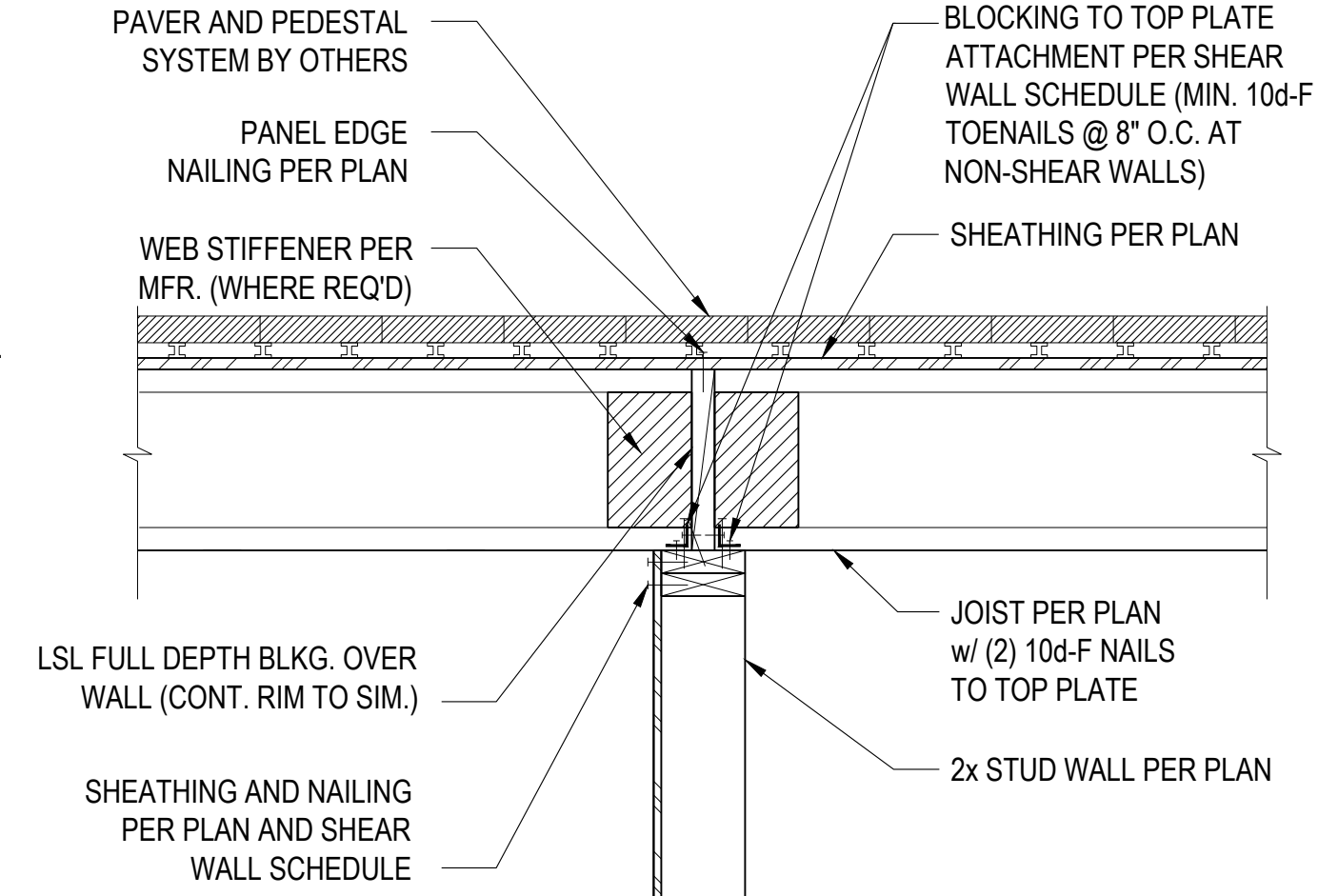
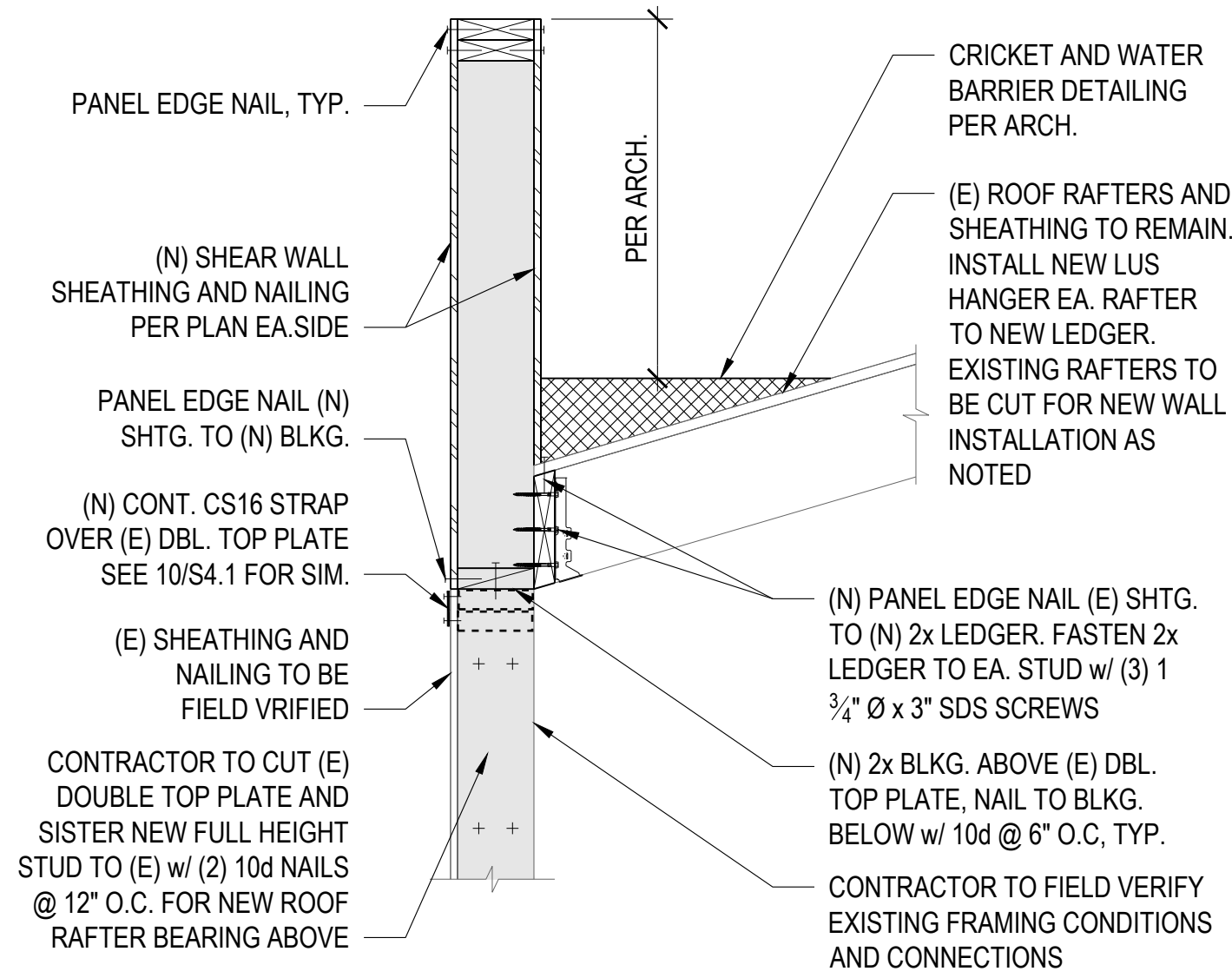
SHEET NAME:

**FLOOR
FRAMING
DETAILS**

SHEET NUMBER:

S4.2

NOTES:
1. SHORING OF ROOF SYSTEM IS BY CONTRACTOR.



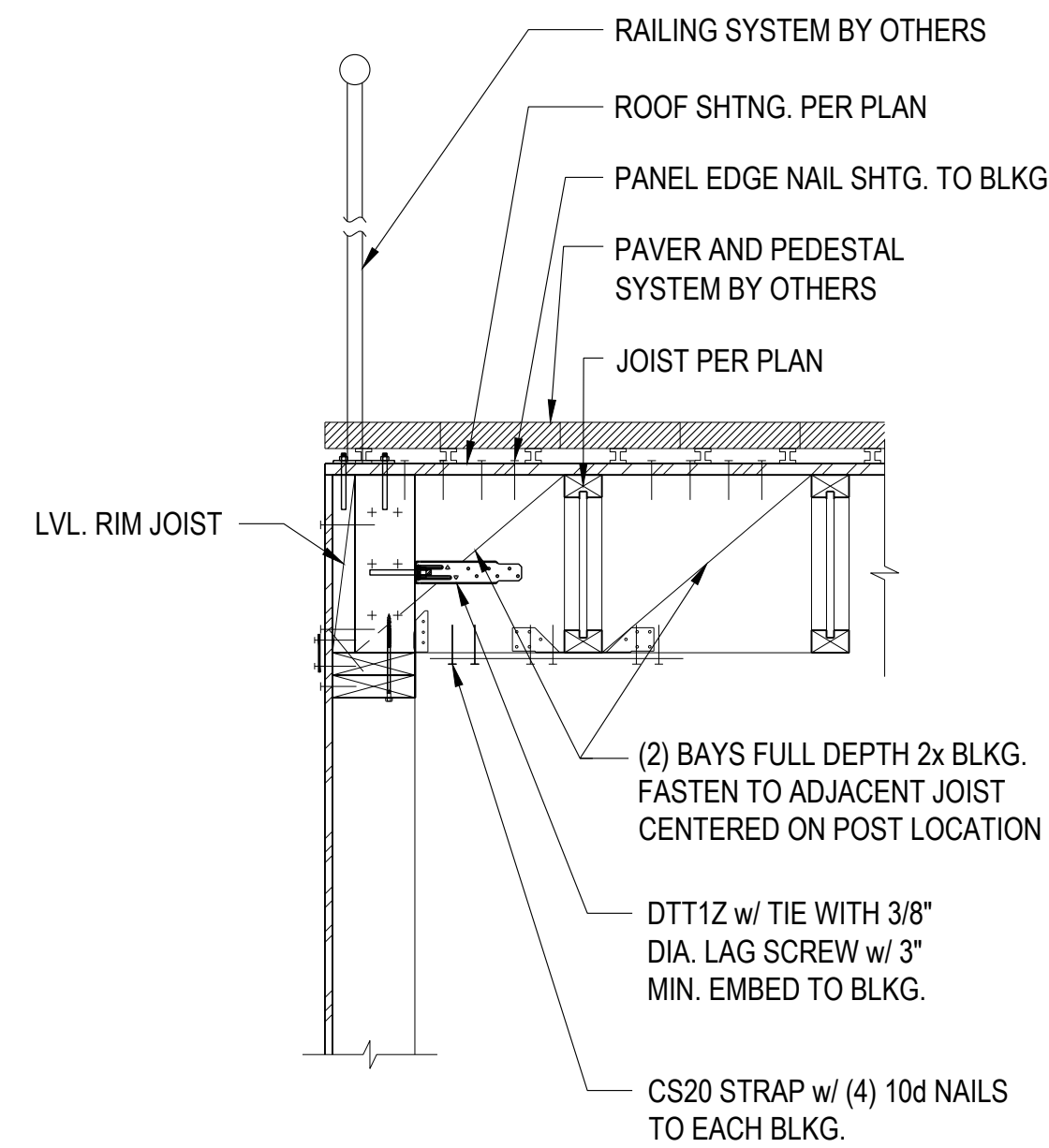
NOTES:
SEE ARCHITECT OR CONTRACTOR DESIGN FOR VENTING REQUIREMENTS (DO NOT INTERRUPT NAILING)

1

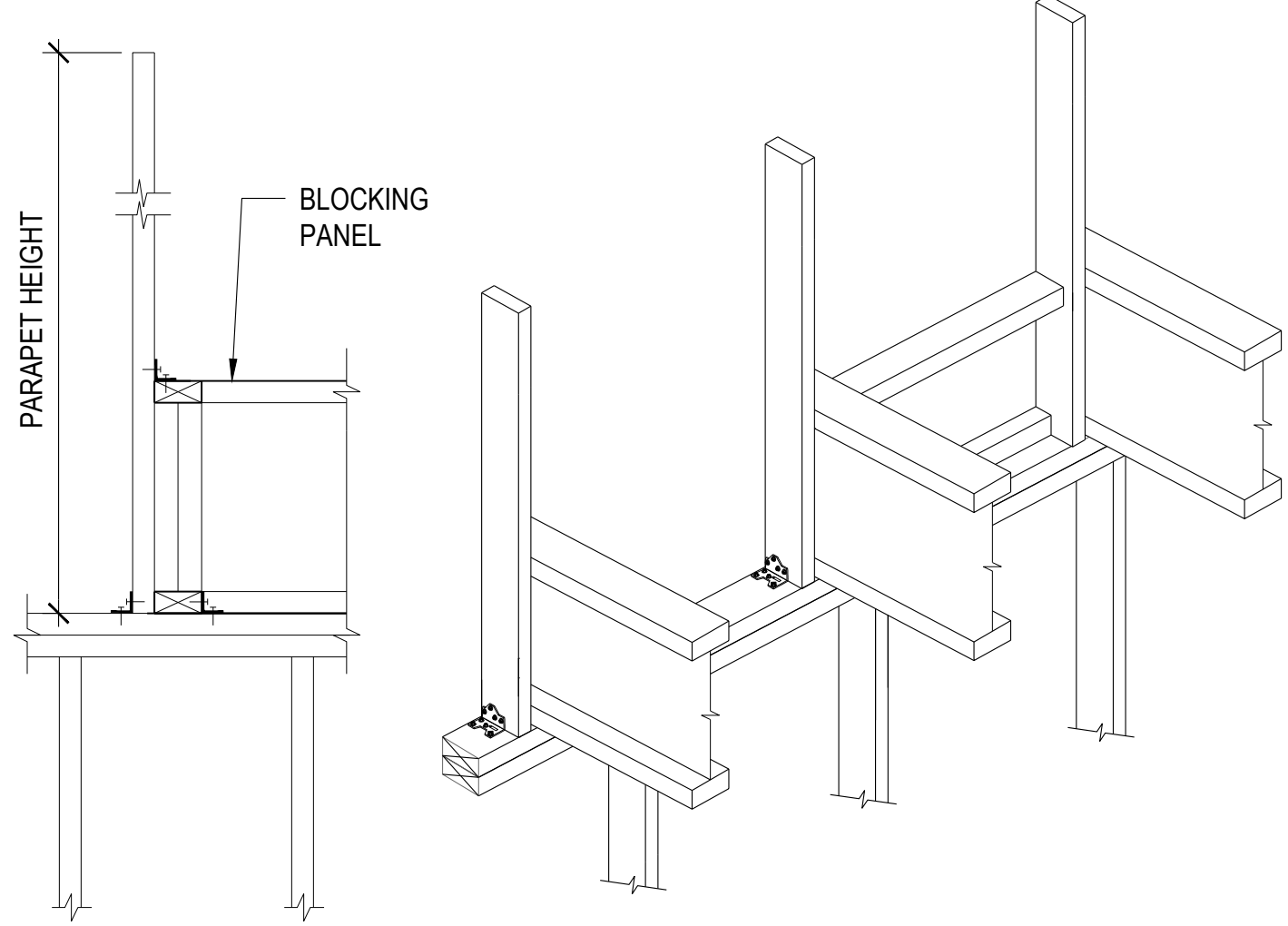
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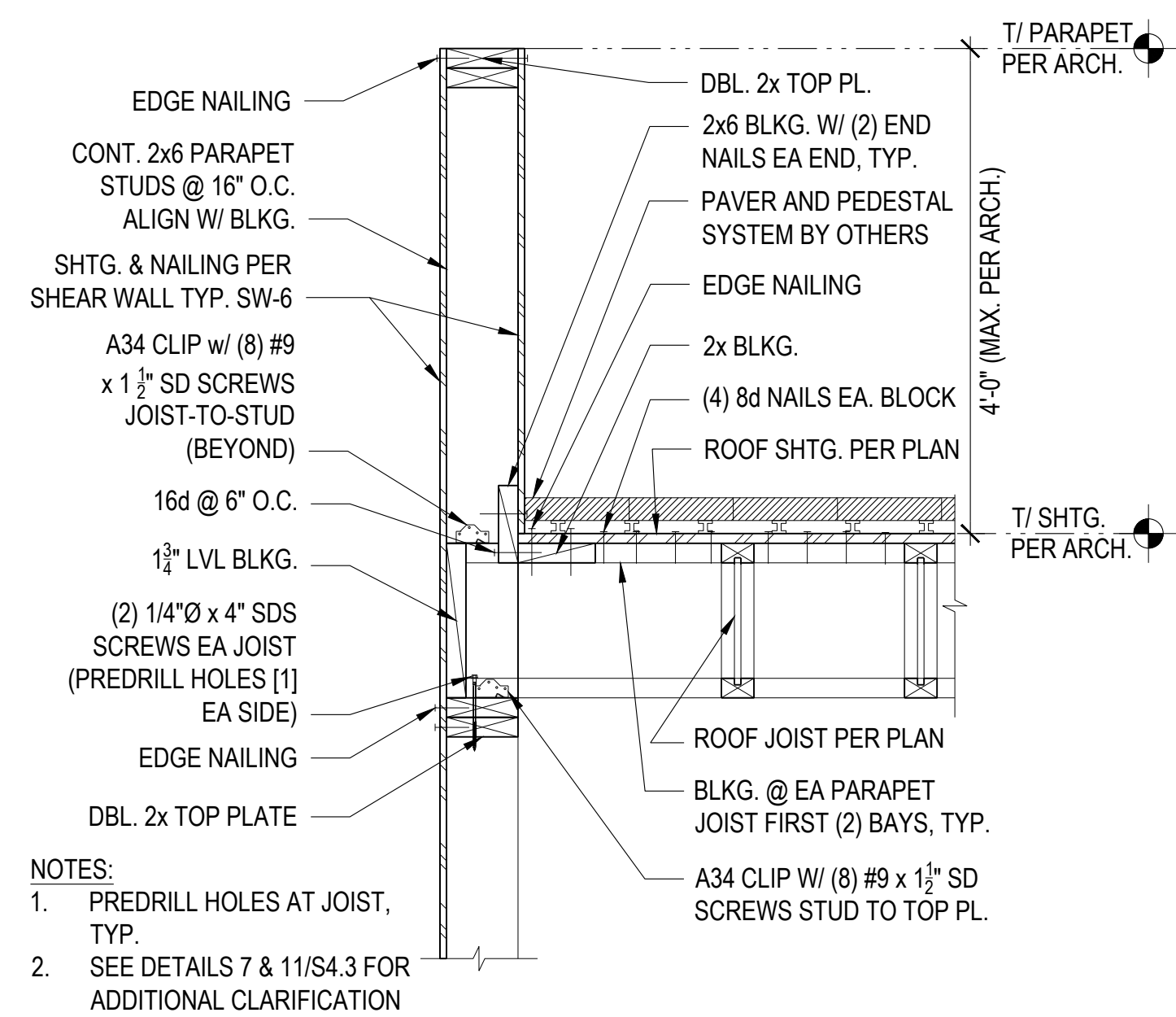
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NOTES:
FOR SIMILAR CALLOUTS, SEE 10/S4.3 & 8/S4.2



DETAIL FOR REFERENCE ONLY



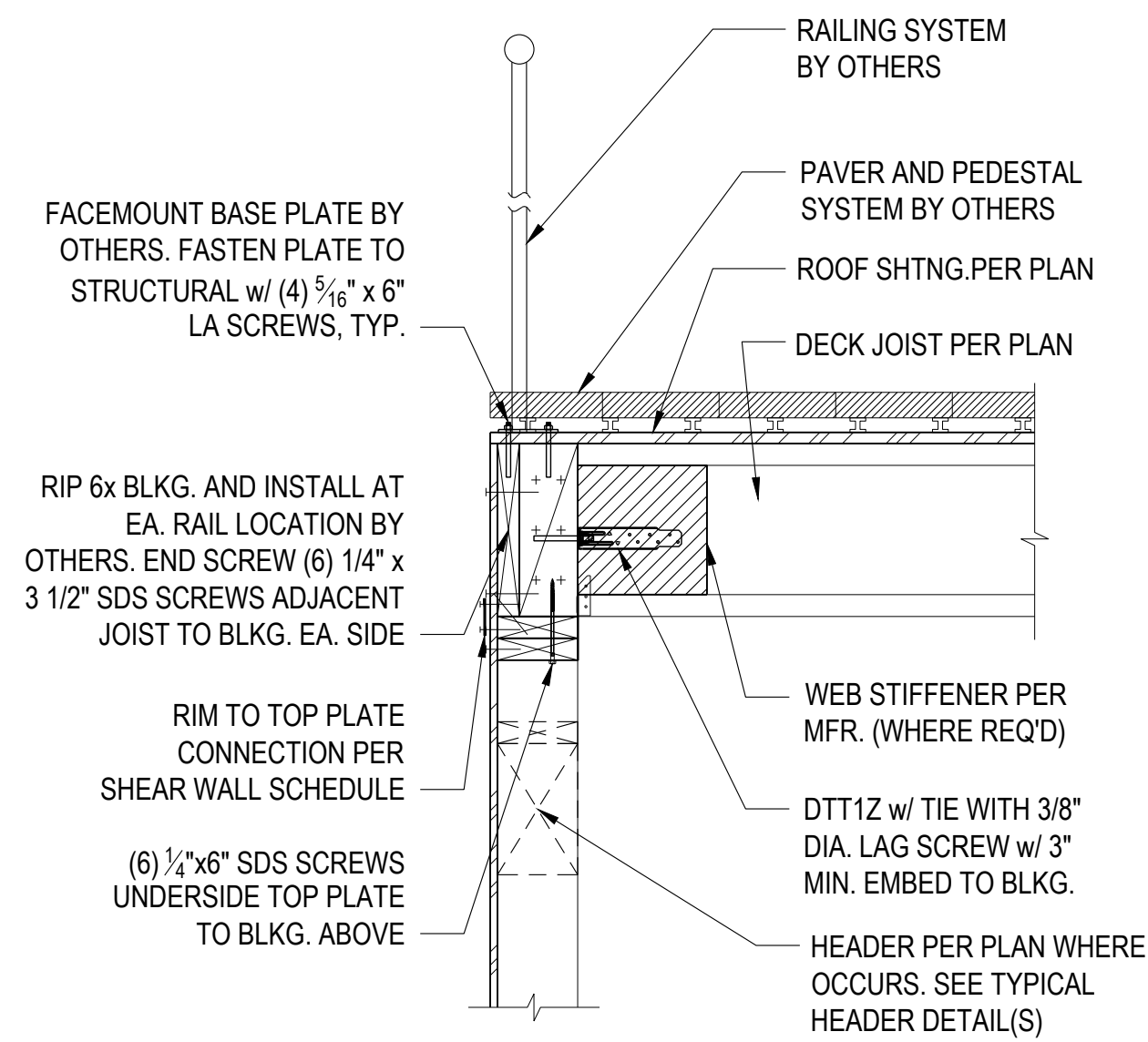
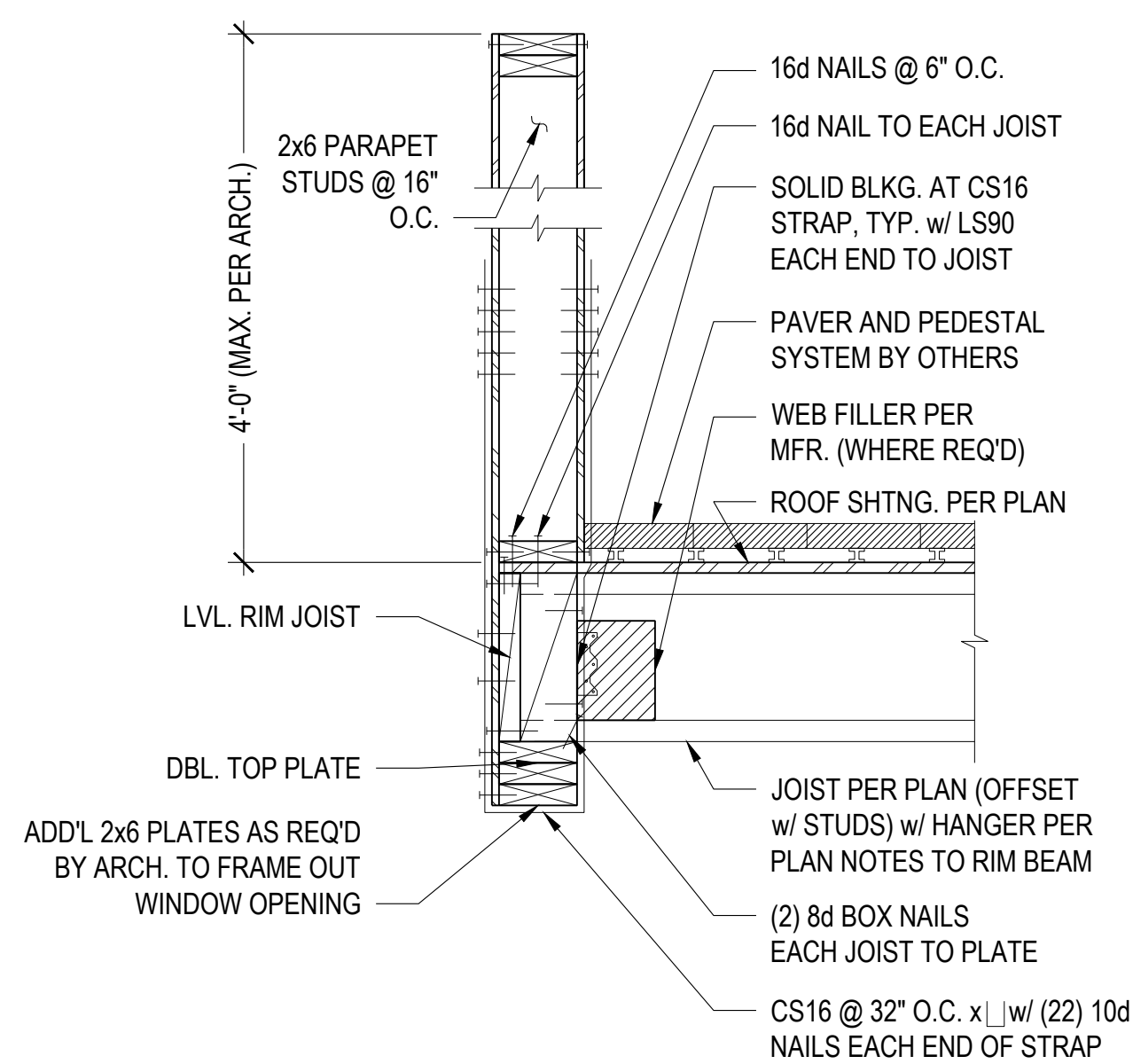
NOTES:
1. PREDRILL HOLES AT JOIST, TYP.
2. SEE DETAILS 7 & 11/S4.3 FOR ADDITIONAL CLARIFICATION

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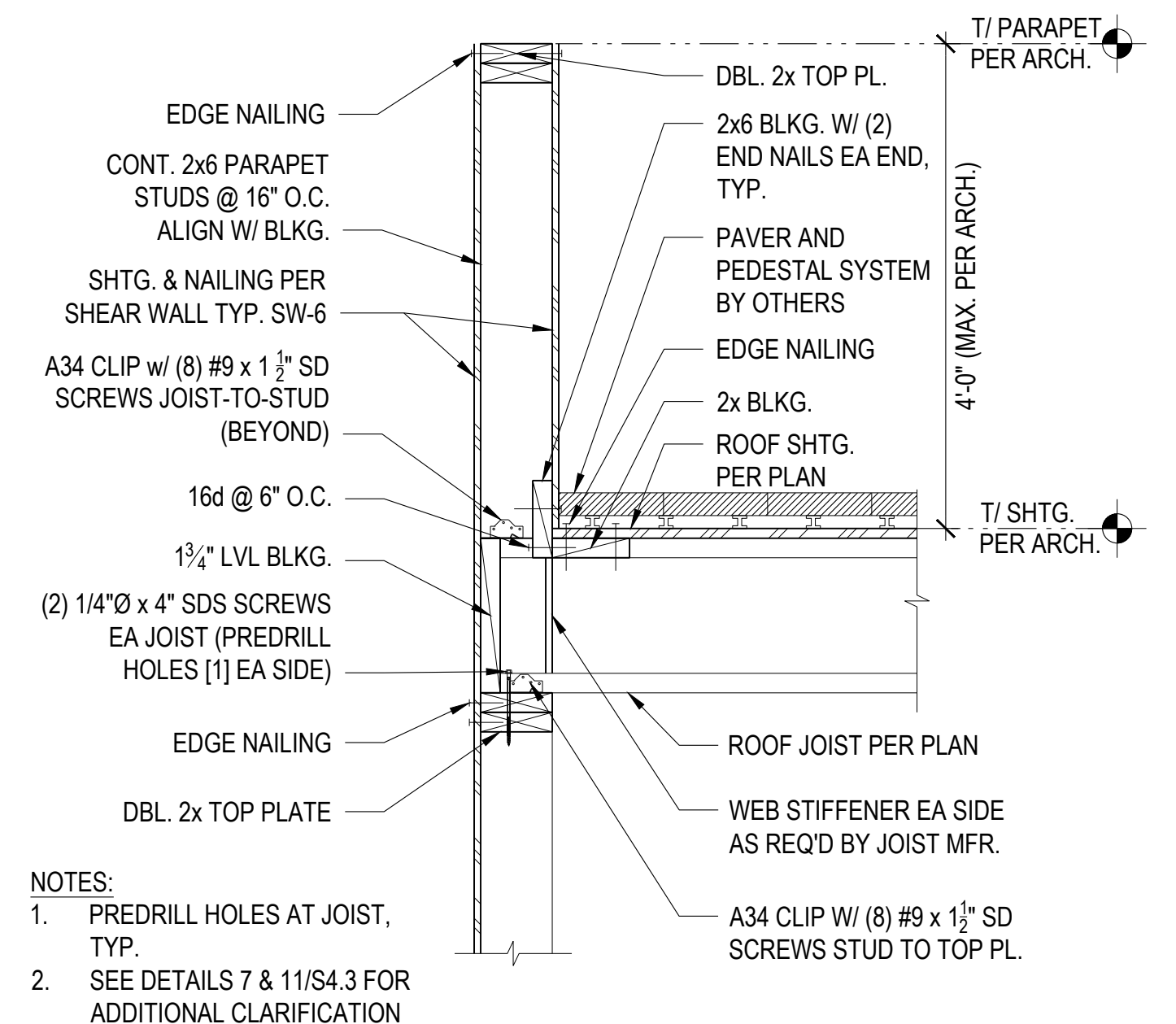
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DETAIL FOR REFERENCE ONLY



NOTES:
1. PREDRILL HOLES AT JOIST, TYP.
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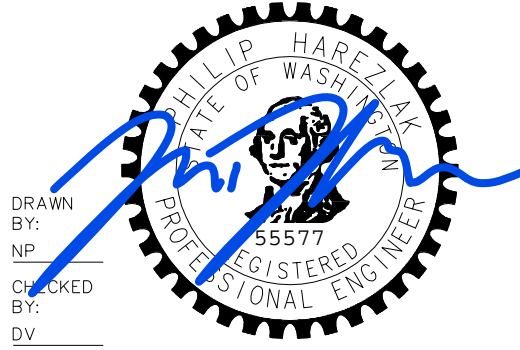
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04/27/2026

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REVISIONS:

NO.	DESCRIPTION	DATE
1	REV 1	04.27.2026

PROJECT NUMBER:
25-009
ISSUE DATE:
04.01.2025
CURRENT REVISION:
REV 1

SHEET NAME:

ROOF DECK
FRAMING
DETAILS

SHEET NUMBER:

S4.3