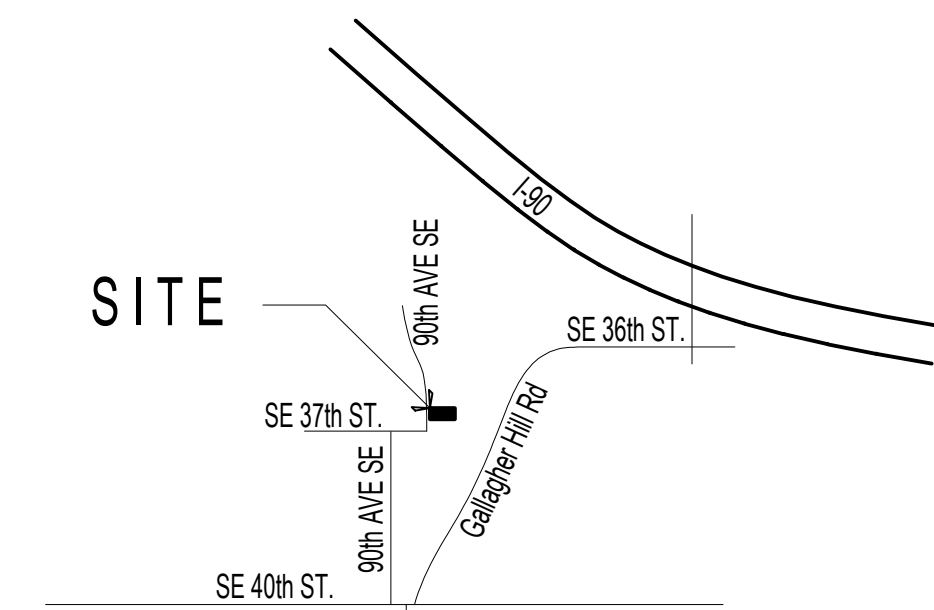


1 BASIN
+274.24
+272.33
+272.25

ASIN
3.46
3.81
3.01



VICINITY MAP

NTS

FIRE MARSHAL REQUIREMENTS

1. Installation of an NFPA 72 "Chapter 29" Monitored Fire Alarm System – Separate FIRE permit required
2. Installation of an NFPA 13R Fire Sprinkler System – Separate FIRE permit required.

LOT SLOPE

HIGH POINT = 272.12'
LOW POINT = 224.55'
LOT SLOPE = 47.57'/160' = 29.73%
LOT COVERAGE = 35%

F.A.R. CALCULATION

Main Floor FA = 2104.5 sf (inc. gar)
ADU Floor FA (lower floor) = 738 sf
Lower Floor Primary FA = 1439 sf
Upper Floor FA = 2017 sf
6298.5 sf total

excepted FA = (-1655.7 sf)
stairs = (74 sf x 2 = 148 sf)

TOTAL chargeable FA = 4494.8 sf
w/ adu = 4500 sf limit
4494.8 / 11,200 = 40.1%

Code Data

- 2018 International Building Code (IBC) - struct.
- 2018 International Residential Code (IRC)
- 2018 International Mechanical Code (IMC)
- 2018 International Fuel Gas Code (IFGC)
- 2018 Uniform Plumbing Code (UPC)
- 2018 International Fire Code (IFC)
- 2018 International Existing Building Code
- 2018 International Swimming Pool and Spa Code
- Washington State Energy Code (WCEC)
- ICC/ANSI A117.1-09, Accessible and Usable Buildings and Facilities, with statewide and City amendments

LOT COVERAGE (SHADED AREA)

House Roof to eaves = 2717.2 sf
covered porches/decks = 207 sf
driveway (shaded) = 614 sf
TOTAL = 3538.2 sf
allowable = 11,200 x .35 = 3,920 sf
amount available for hardscape = 381.8 sf

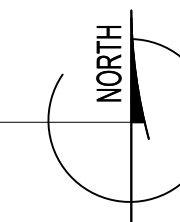
HARDSCAPE (DOTTED AREA)

DECKS = 448.3 sf
WALKS = 62.6 sf
RETAINING WALLS = 7 sf
TOTAL = 517.9 sf
allowable = 11,200 x .09 = 1008 sf
extra lot cov. = 381.8
TOTAL allow. = 1389.8 sf

A. SITE PLAN

1/10" = 1'-0"

- 327 = SPOT ELEVATION, FINAL
- = EAVE/ROOF LINE
- = EXTENT OF LIVING AREA
- = BUILDING FOOTPRINT (FOUNDATION EXTENTS)
- SHADED AREA = BLDG EXTENTS TO EAVE
- EXISTING HOUSE, DRIVEWAY AND ALL HARDSCAPE ON PROPERTY TO BE REMOVED
- = EXISTING TOPOGRAPHY



All Japanese knotweed (*Polygonum cuspidatum*) and Regulated Class A, Regulated Class B, and Regulated Class C weeds identified on the King County Noxious Weed list, as amended, shall be removed from the property.

development proposals for a new single-family home shall remove japanese knotweed (*polygonum cuspidatum*) and regulated class a, regulated class b, and regulated class c weeds identified on the king county noxious weed list, as amended, from required landscaping areas established pursuant to subsection 19.02.020(f)(3)(a). new landscaping associated with new single-family home shall not incorporate any weeds identified on the king county noxious weed list, as amended. provided, that removal shall not be required if the removal will result in increased slope instability or risk of landslide or erosion.

Civil Engineer

Nick Bossoff
191 NE Tari Lane
Stevenson WA 98648
425.881.5904

Geotechnical Engineer

Keith Johnson
Geo Group NW Inc.
Bel-Red Road, Bellevue, Washington 9800
(425) 649-8757 / E-mail: info@geogroupnw.com

Structural Engineer

Javid Abdi, PE, SE Atlas Consulting Structural Engineers
6810 NE 149th St Kenmore WA 98028
Phone: (206) 427-7233

Contractor

Mike Yeganeh
Aspen Homes NW
(206) 799-3016

Project Description

Demolish existing and build new single family residence with attached accessory dwelling unit.

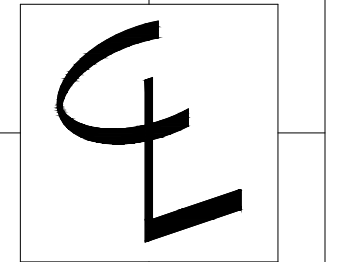
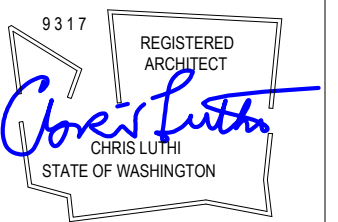
Parcel Number/Legal

Parcel # = 502190-0490
Legal Description:
MADRONA CREST ADD
Plat Block: 4
Plat Lot: 5
ZONING = R-8.4
lot size = 11,200 sf

Owner

ANANTA & SATYA GUDIPATY
3737 77TH AVE SE
MERCER ISLAND WA 98040

Geotechnical recommendations do not support wet weather foundation construction.



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Site Plan

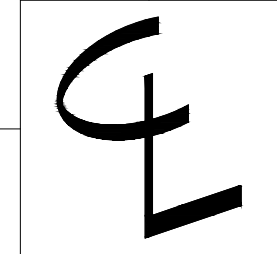
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4.28.23
7.21.23

1a



CONTENTS

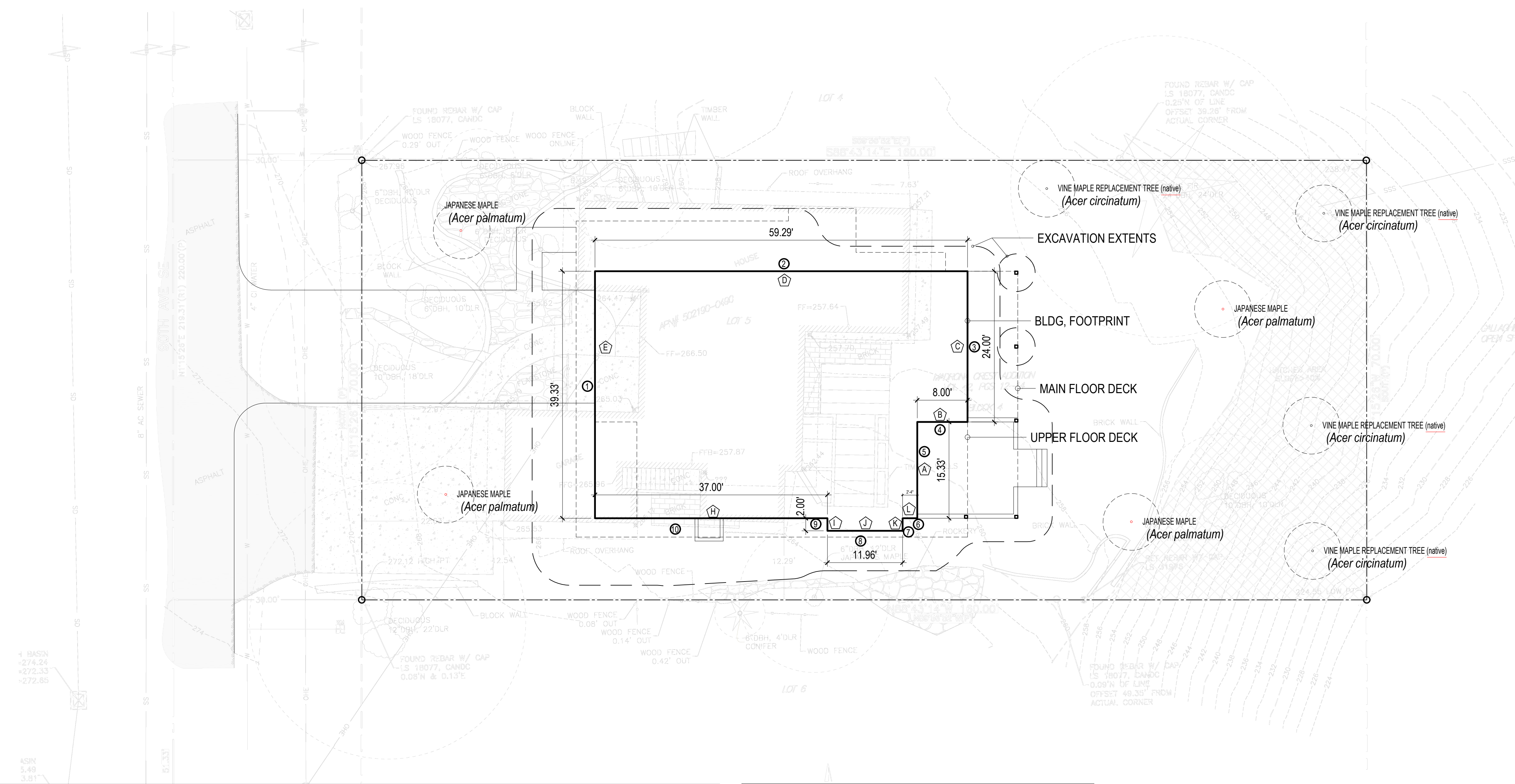
Site Plan

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DATE

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 4.28.23
 7.21.23
 9.1.23



BASEMENT AREA F.A. EXCEPTION CALCULATION

segment	length	beginning elev.	end elev.	begin cov	end cover	avg cover	%cover	wtd	
a	15.33	262	256	6.00	0.00	3	39.0%	5.97	
b	8	256	258.7	0.00	2.70	1.35	17.5%	1.40	
c	24	258.7	257.5	2.70	1.50	2.1	27.3%	6.55	
d	59.29	257.5	265.5	1.50	9.50	5.5	71.4%	42.35	
e	39.33	265.5	265.5	9.50	9.50	9.5	100.0%	48.52	
h	37	percentage determined graphically, see A-05						77.4%	32.63
i	2	263.5	263.5	7.50	7.50	7.5	88.2%	1.76	
j	11.96	263.5	262	7.50	6.00	6.75	87.7%	10.48	
k	2	262	262	6.00	6.00	6	77.9%	1.56	
l	2.33	262	262	6.00	6.00	6	77.9%	1.82	
perim=	201.24							153.05	
raw FAR	2177								
basement slab elev =	256								
full cover =	8.5 ft (fin. clg.)								
excepted area =	1655.697								
BOLD elevations are lower than existing grade segment is footprint on the ground or projected overhanging living space									

ELEVATION CALC.

	EL @ MIDPOINT	segment	wtd sgmnt
		(ft)	
1	265.50	39.33	10442.12
2	257.70	59.29	15279.03
3	257.50	24	6180.00
4	256.00	8	2048.00
5	256.00	15.33	3924.48
6	262.00	2.33	610.46
7	262.00	2	524.00
8	263.00	11.96	3145.48
9	263.00	2	526.00
10	265.00	37	9805.00
		201.24	52484.57

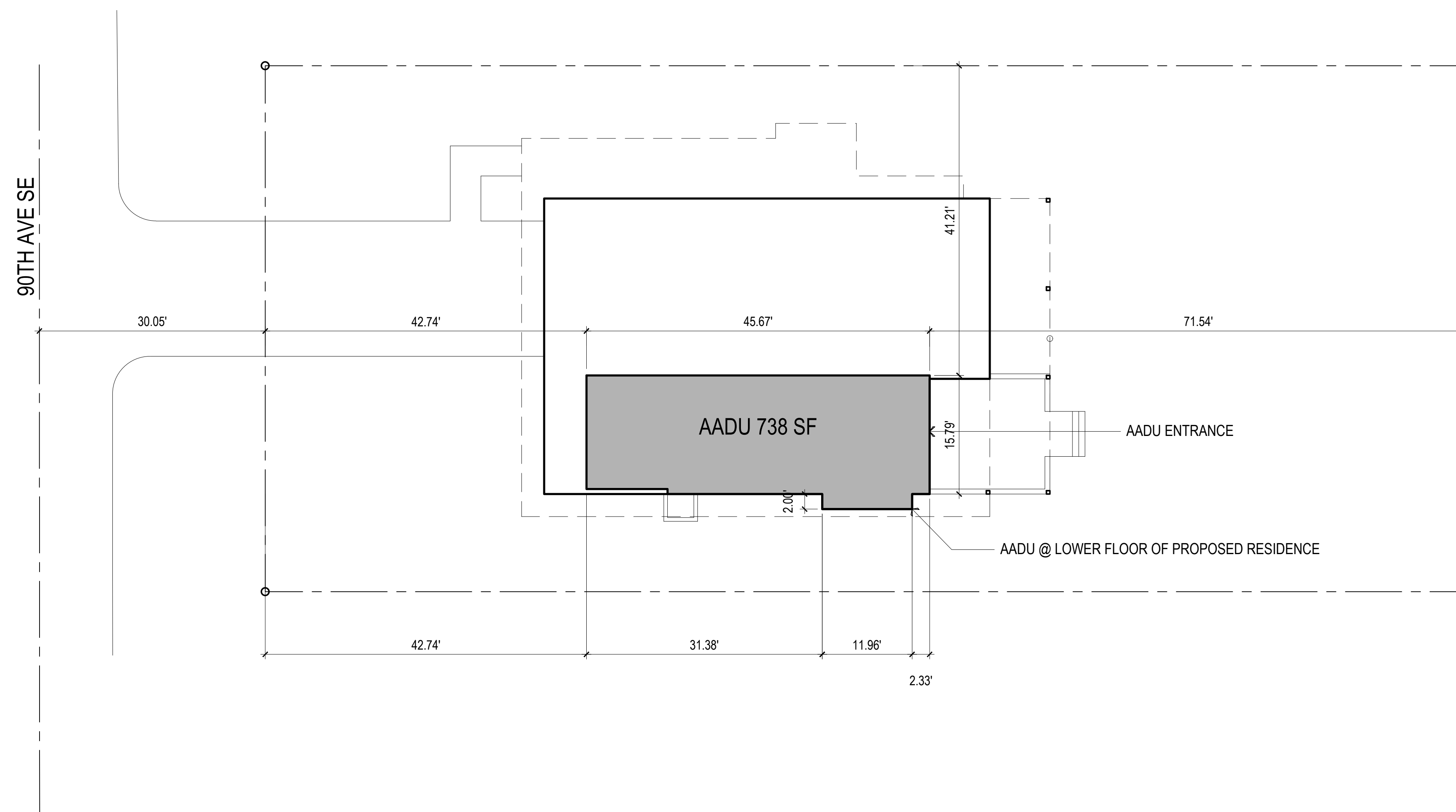
AVG. EL = **260.8058**
 BOLD = NEW EL LOWER THAN EXIST
 all others exist = final

A. SUPPLEMENTAL SITE PLAN

- 1/10" = 1'-0"
- (A) = WALL SEGMENT TAG FOR BASEMENT FAR EXCEPTION
 - (B) = WALL SEGMENT TAG FOR HEIGHT CALCULATION
 - = EAVE/ROOF LINE
 - = BUILDING FOOTPRINT (FOUNDATION EXTENTS)

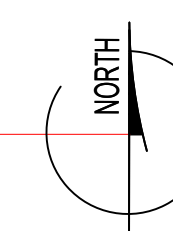
REPLACEMENT TREE WATERING PLAN

- NEW TREES WILL BE AT LEAST 6 FEET TALL FOR CONIFERS AND 1.5 INCHES IN CALIPER FOR DECIDUOUS SPECIES
- NEW TREES WILL BE PLANTED BETWEEN OCTOBER AND MARCH
- MINIMUM SPACING BETWEEN TREES AND DISTANCES FROM BUILDINGS OR INFRASTRUCTURE WILL BE 10 FEET
- EACH NEW TREE WILL BE WATERED FOR THE FIRST 2 YEARS ON THE FOLLOWING SCHEDULE:
- MINIMUM OF 5 GALLONS OF WATER PER WEEK FOR THE FIRST 4 WEEKS AFTER PLANTING
- EVERY 2 WEEKS WHEN WEEKLY DAYTIME MAXIMUM TEMPERATURES ARE BELOW 70°
- ONCE A WEEK WHEN WEEKLY DAYTIME MAXIMUM TEMPERATURES ARE OVER 70° (E.G. MAY THROUGH SEPTEMBER)



A. ADU LOCATION DIAGRAM

1/10" = 1'-0"
 --- = EAVE/ROOF LINE
 ——— = BUILDING FOOTPRINT (FOUNDATION EXTENTS)

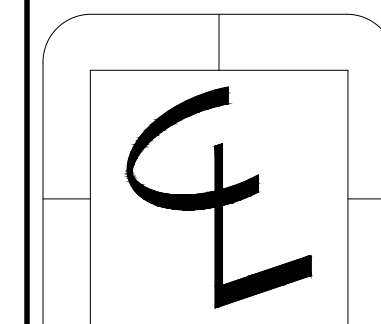
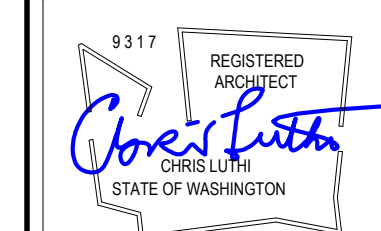


ADU project narrative

An ADU attached to a new SFR as part of the new construction project (permit 2210-198) will include 738.0 sq. ft of living space, it will include a full kitchen with its own dishwasher, sink, oven, refrigerator, microwave and washer and dryer. There will be a separate entrance that connects by walkway to 90th ave SE. The ADU will include a living room and bedroom with an attached full bathroom. Heating control will be separate from the main house.

The ADU is within the size limits of 19.02.030 B4.
 The location meets 19.02.030 B5.
 The entrance of the ADU meets 19.02.030 B6
 Parking for the ADU meets 19.02.030 B9

The ADU will be recorded as such with the King County Department of records and elections which runs with the land and identifies the address of the property, states the owner resides in either principle dwelling unit or the accessory dwelling unit, includes a statement that the owners will notify any prospective purchasers of the limitations of this section, and provides for the removal of the accessory dwelling unit if any of the requirements of this chapter are violated.



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ADU Site Plan

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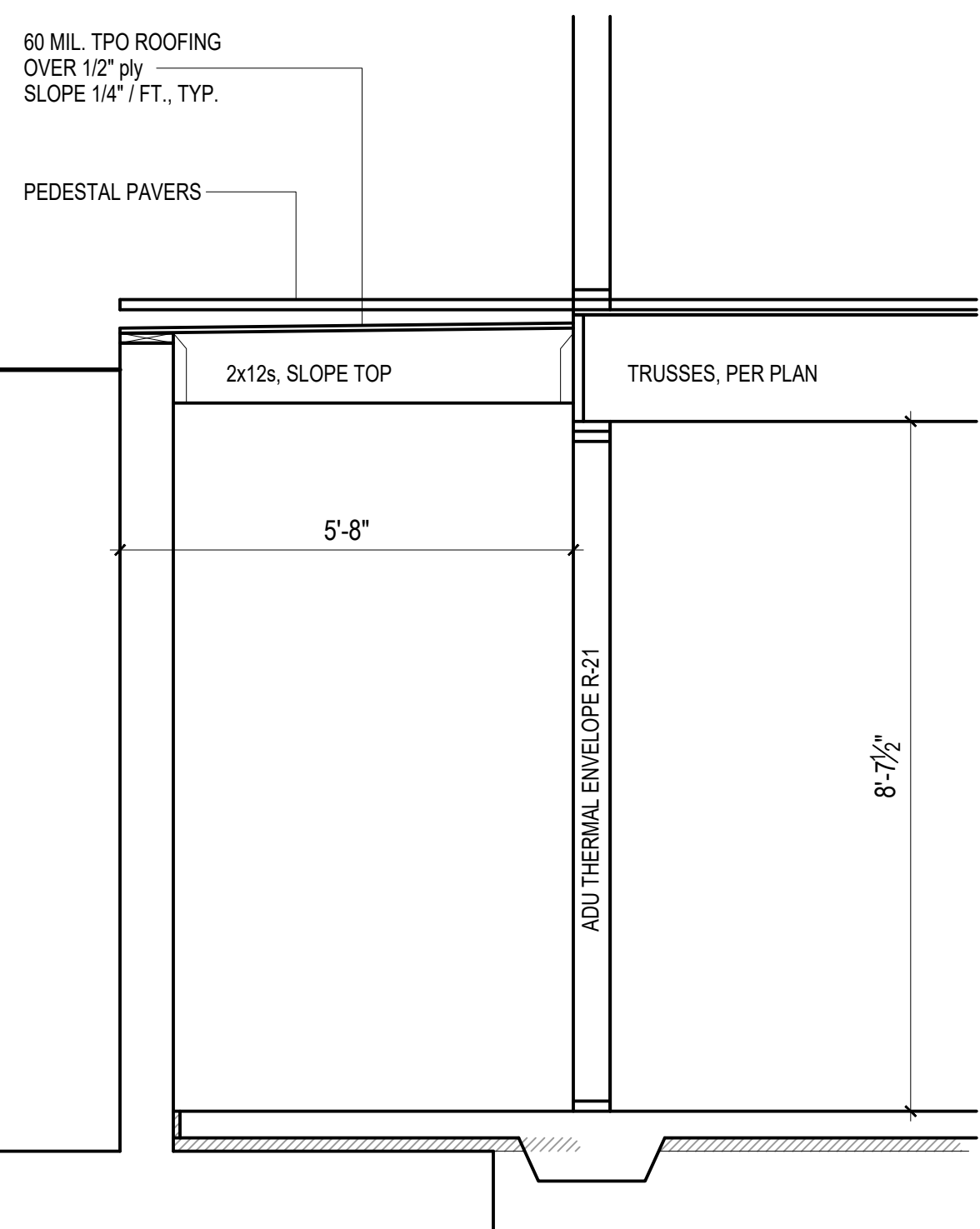
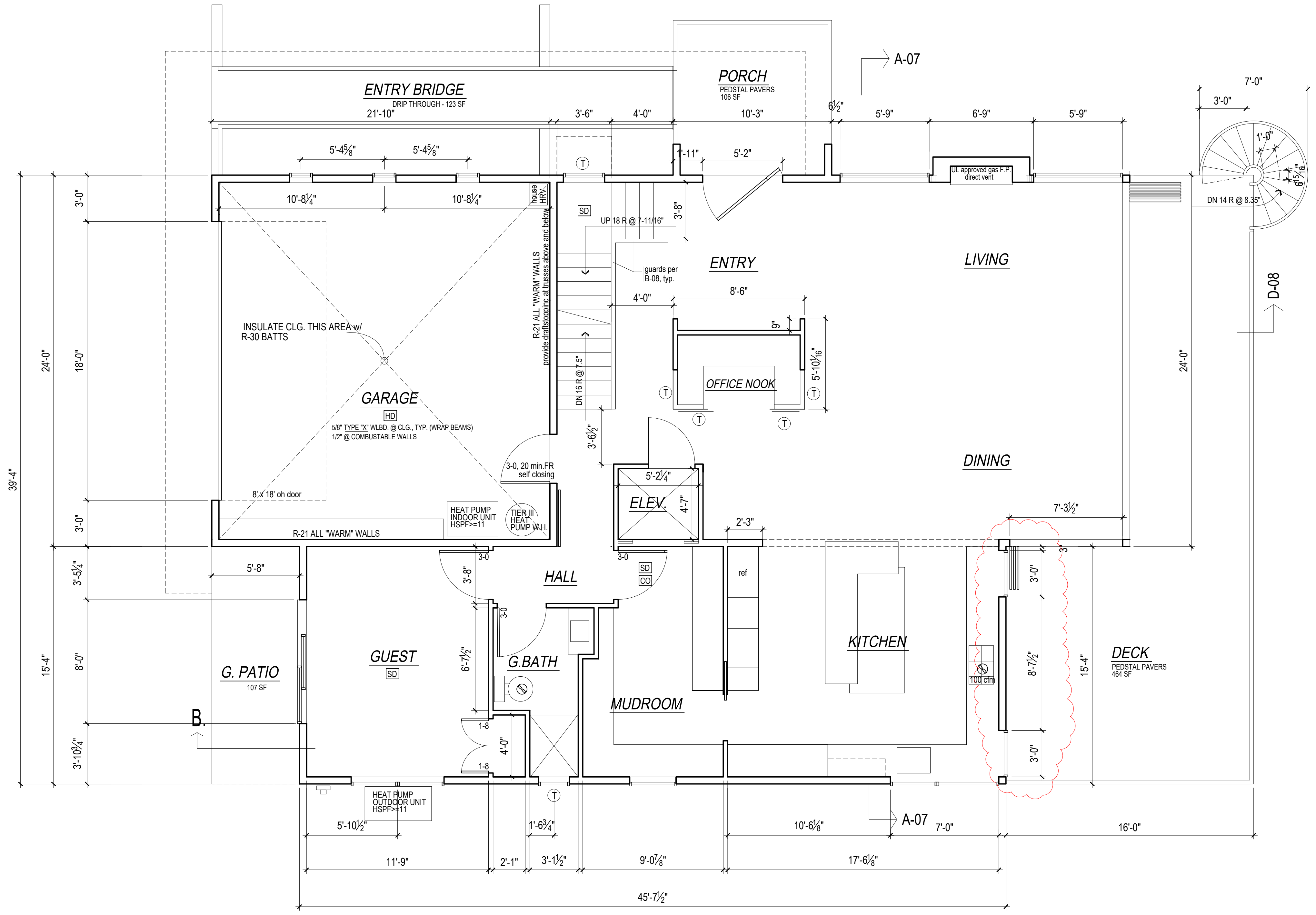
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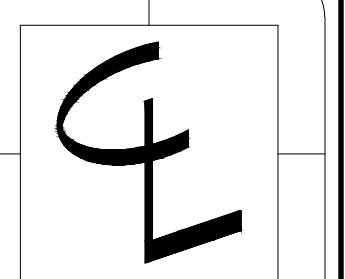
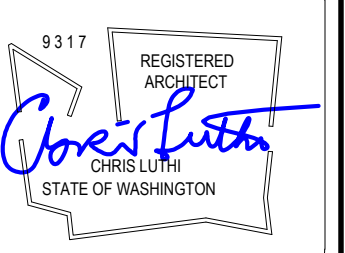
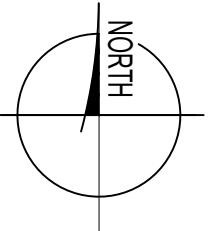
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NOTES

- SD** = SMOKE DETECTOR, HARDWIRE, INTERCONNECTED w/ BATTERY BACK-UP
- CO** = CARBON MONOXIDE DETECTOR, HARDWIRE w/ BATTERY BACK-UP
- HD** = HEAT DETECTOR, HARDWIRE w/ BATTERY BACK-UP
- DOORS ARE 3-0 x 6-8 (r.o. = 3'-2" x 6'-10") UNLESS OTHERWISE INDICATED
- F** = FAN, 50 CFM UNLESS OTHERWISE INDICATED
- FOR SHEAR WALL INFORMATION SEE STRUCTURAL PLANS
- ALL INTERIOR WALLS TO BE 2x4, EXTERIOR WALLS 2x6, EXCEPT AS INDICATED, OR EXISTING
- E** = EGRESS WINDOWS
- Contractor shall verify to Inspector all guards and railings shall be capable of resisting 200 lb load on top rail acting in any direction as required by IRC Table R301.5.
- ALL WALLS FULL HEIGHT UNLESS OTHERWISE INDICATED
- T** = TEMPER/SAFETY GLAZE WINDOWS
- ALL GAS F.P. TO BE APPROVED DIRECT VENT



A. MAIN FLOOR PLAN
 1/4" = 1'-0"
 LIVING SPACE (TO O.S. WALLS) = 1598.5 sf
 GARAGE (TO O.S. WALLS) = 506 sf
 TOTAL F.A. THIS FLOOR = 2104.5 sf
 STAIR AREA = 74 SF



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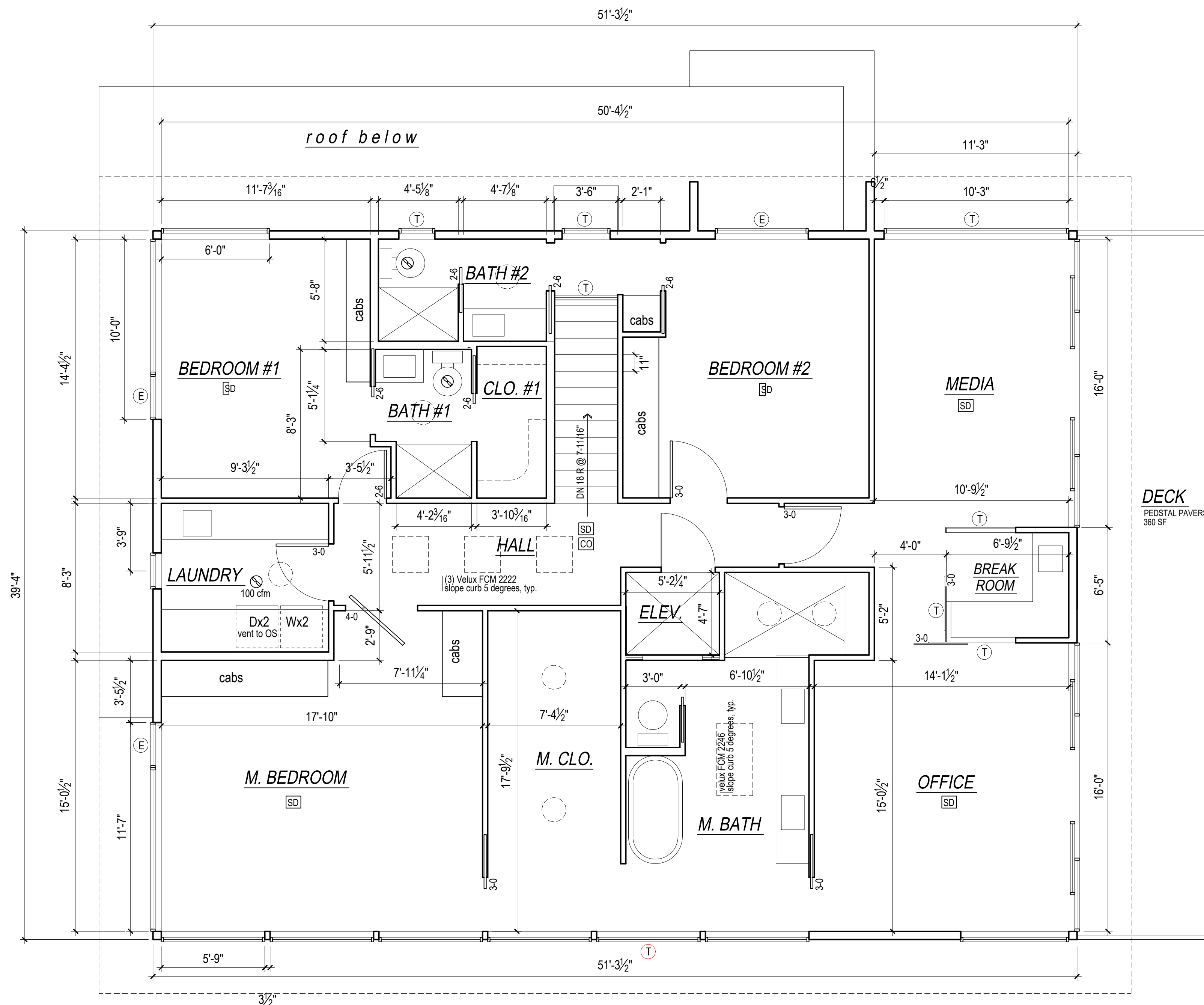
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 Main Floor

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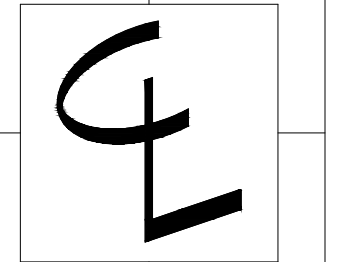
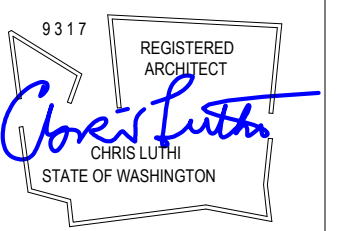
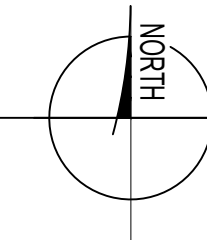
NOTES

- SD = SMOKE DETECTOR, HARDWIRE, INTERCONNECTED w/ BATTERY BACK-UP
- CO = CARBON MONOXIDE DETECTOR, HARDWIRE w/ BATTERY BACK-UP
- HD = HEAT DETECTOR, HARDWIRE w/ BATTERY BACK-UP
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- E = EGRESS WINDOWS
- Contractor shall verify to Inspector all guards and railings shall be capable of resisting 200 lb load on top rail acting in any direction as required by IRC Table R301.5.
- ALL WALLS FULL HEIGHT UNLESS OTHERWISE INDICATED
- T = TEMPER/SAFETY GLAZE WINDOWS
- ALL GAS F.P. TO BE APPROVED DIRECT VENT



A. UPPER FLOOR PLAN
 1/4" = 1'-0"
 FLOOR AREA (TO O.S. WALLS) = 2017 sf

○ = SOLAR TUBE LOCATION



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Upper Floor

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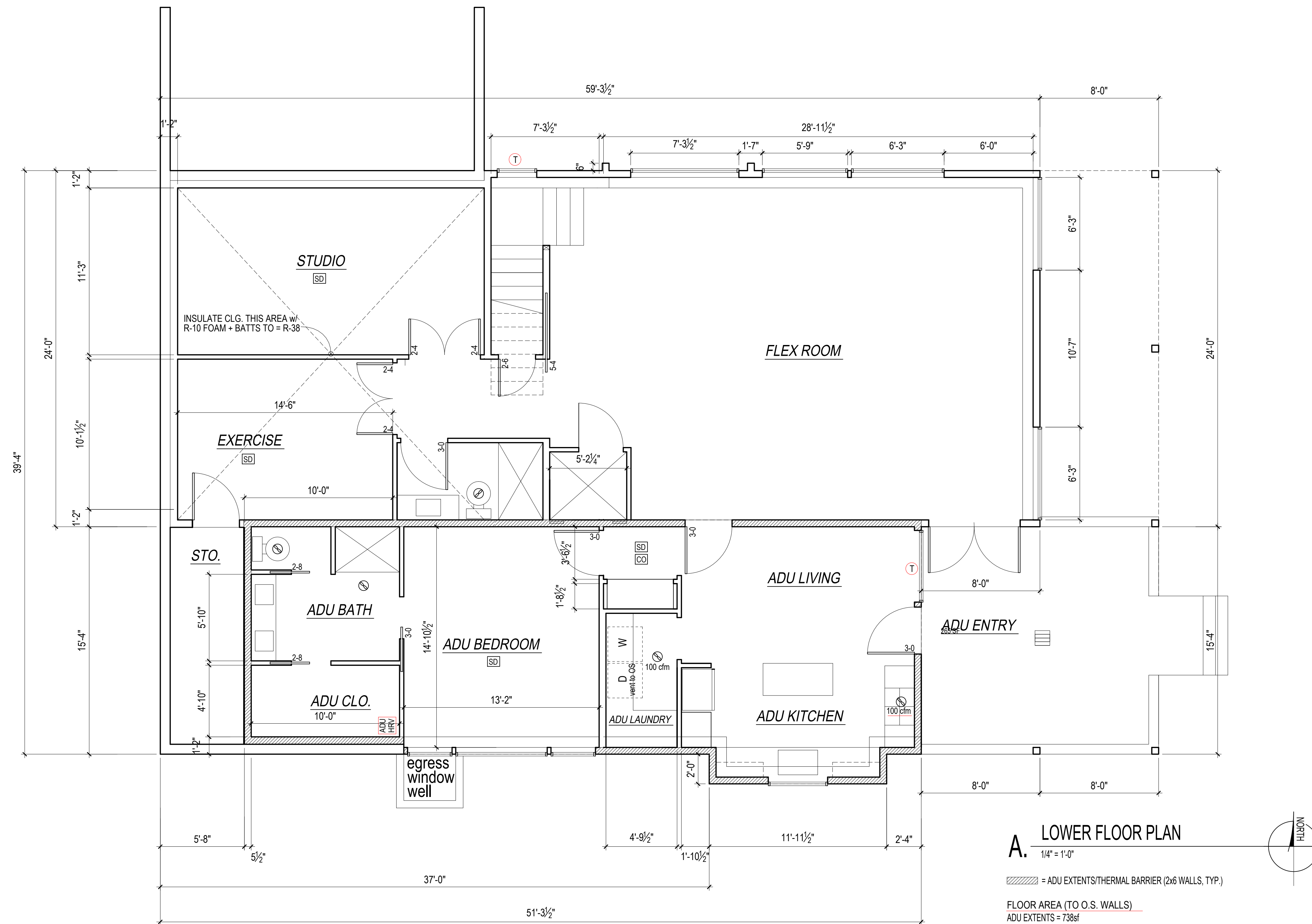
10.20.22

4.28.23

7.21.23

NOTES

- SD** = SMOKE DETECTOR, HARDWIRE, INTERCONNECTED w/ BATTERY BACK-UP
- CO** = CARBON MONOXIDE DETECTOR, HARDWIRE w/ BATTERY BACK-UP
- HD** = HEAT DETECTOR, HARDWIRE w/ BATTERY BACK-UP
- DOORS ARE 3-0 x 6-8 (r.o. = 3'-2" x 6'-10") unless otherwise indicated
- F** = FAN, 50 CFM UNLESS OTHERWISE INDICATED
- FOR SHEAR WALL INFORMATION SEE STRUCTURAL PLANS
- ALL INTERIOR WALLS TO BE 2x4, EXTERIOR WALLS 2x6, EXCEPT AS INDICATED, OR EXISTING
- E** = EGRESS WINDOWS
- Contractor shall verify to Inspector all guards and railings shall be capable of resisting 200 lb load on top rail acting in any direction as required by IRC Table R301.5.
- ALL WALLS FULL HEIGHT UNLESS OTHERWISE INDICATED
- T** = TEMPER/SAFETY GLAZE WINDOWS
- ALL GAS F.P. TO BE APPROVED DIRECT VENT



FOAM INSULATION NOTES

Closed cell spray foam directly applied to underside of sheathing (min R-10) + batts to = R-49 (R-38 min. @ vaulted areas)
 Spray foam product to be "Spraytite 178" as manufactured by BASF (ESR-2642), or equal.
 Spray foam insulation shall be installed per IRC 806.5.1.3.
 A copy of the ICC ESR report for the product used must be provided on the job site for field inspector verification
 The applied spray foam must be installed by a certified installer.

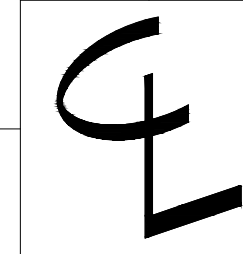
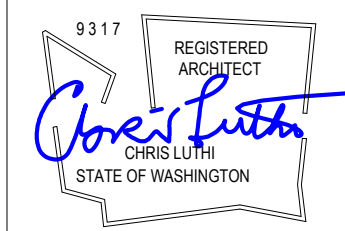
ADU CLG. SOUND/FIRE REQUIREMENTS

Provide sound insulation (STC rating of at least 45 & ICC rating of at least 50) and 1 hr fire resistance in the entire ADU ceiling (including under stairs) . See ESR-1153 Assembly B.
 Requirements:
 1. 48/24 tongue-and-groove span rated sheathing (Exposure 1).
 1. Two layers of 1/2 inch thick Type X gypsum board.
 2. TJI Joist.
 3. Optional minimum 3-1/2 inch thick glass fiber insulation or non-combustible insulation that is rated R-30 or less, with resilient channels

A. LOWER FLOOR PLAN
 1/4" = 1'-0"

/// = ADU EXTENTS/THERMAL BARRIER (2x6 WALLS, TYP.)

FLOOR AREA (TO O.S. WALLS)
 ADU EXTENTS = 738sf
 PRIMARY FLOOR AREA = 1439sf
 TOTAL FLOOR AREA = 2177sf



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Lower Floor

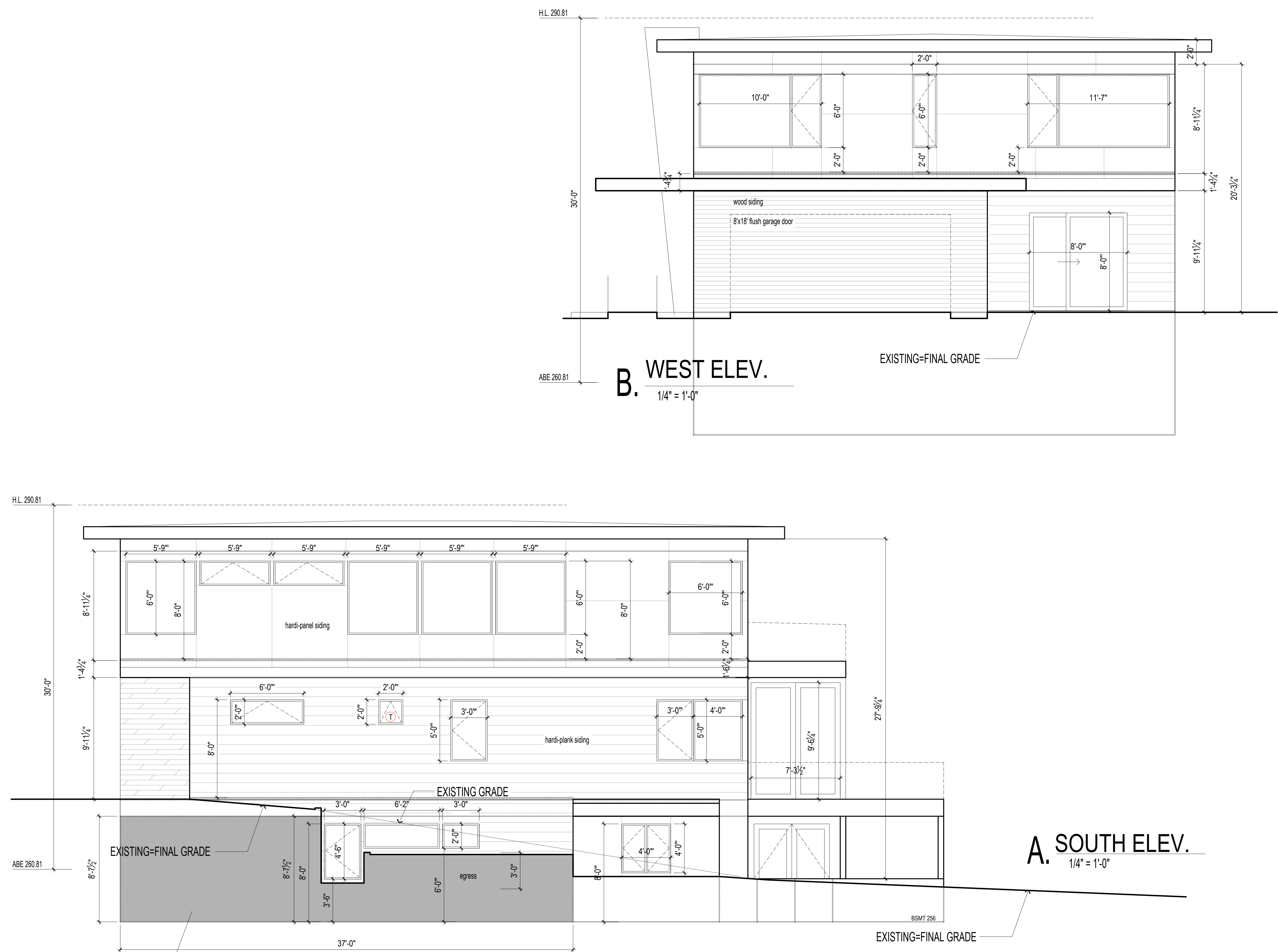
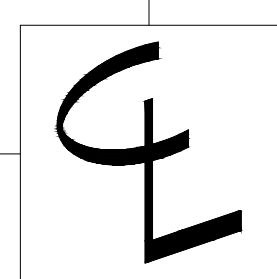
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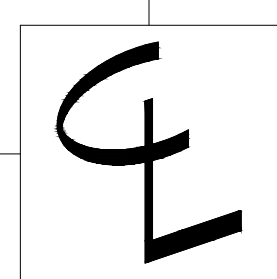
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B. WEST ELEV.
 1/4" = 1'-0"

A. SOUTH ELEV.
 1/4" = 1'-0"

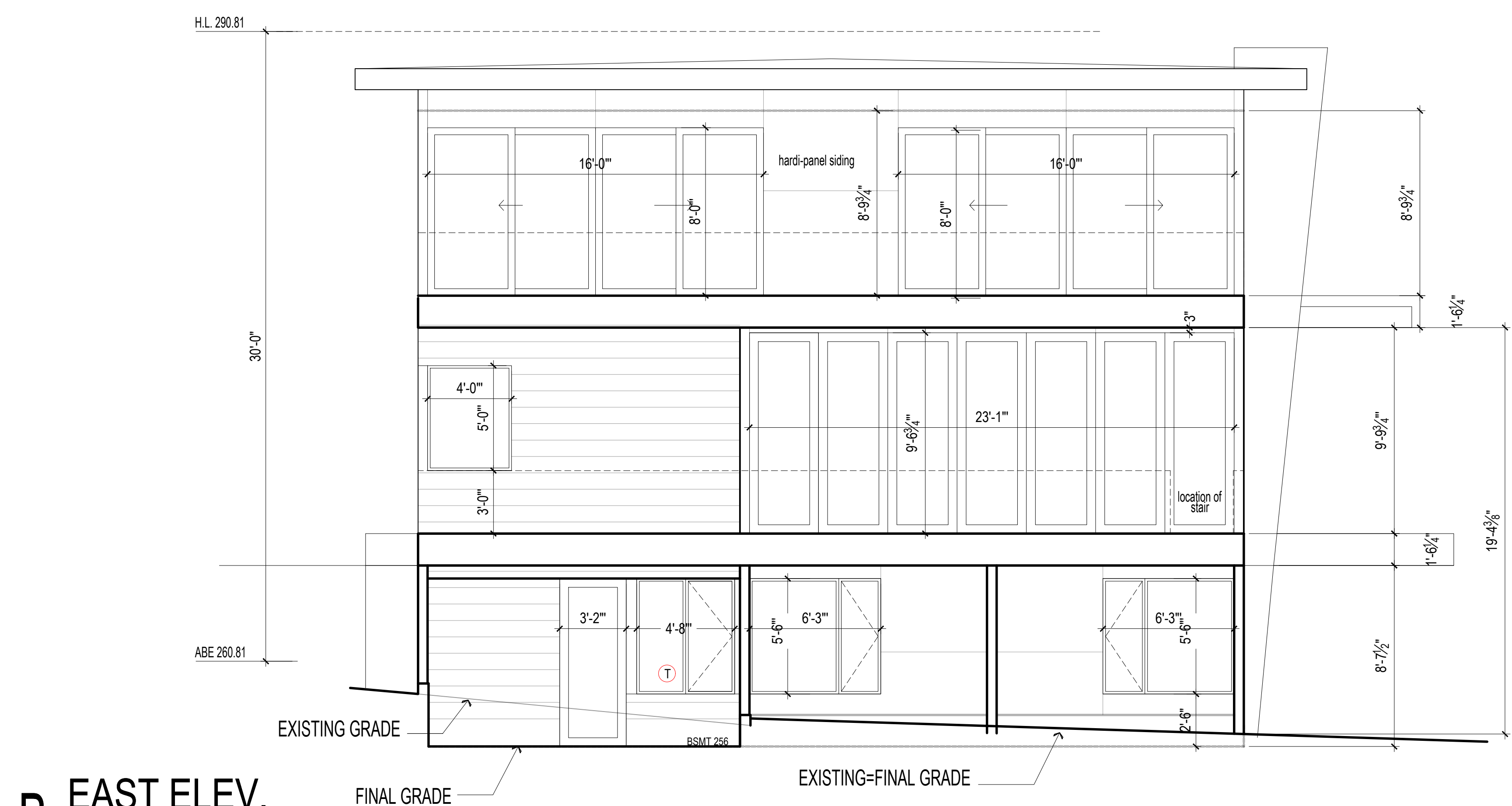
WALL SEGMENT H
 SHADED AREA = 247 sf
 BASEMENT AREA = 319 sf
 COVERAGE = 77.4%



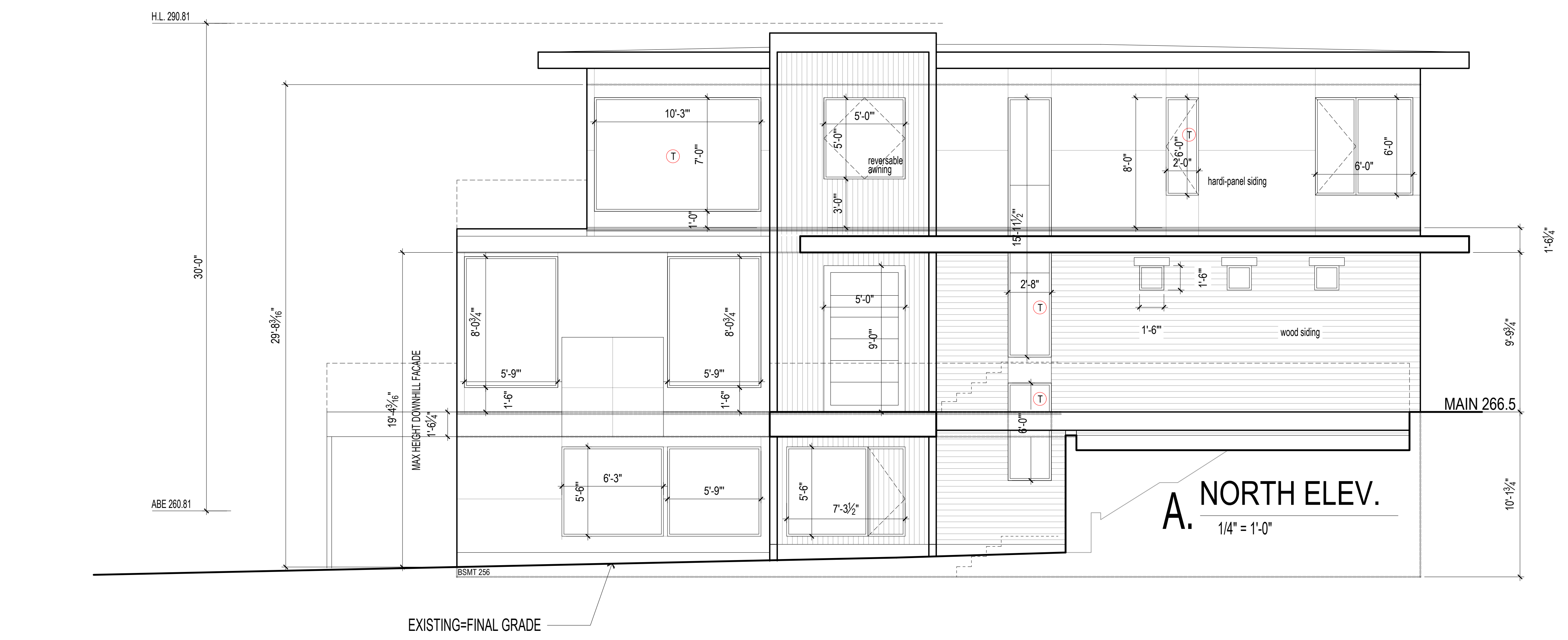
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CONTENTS
 Elevations

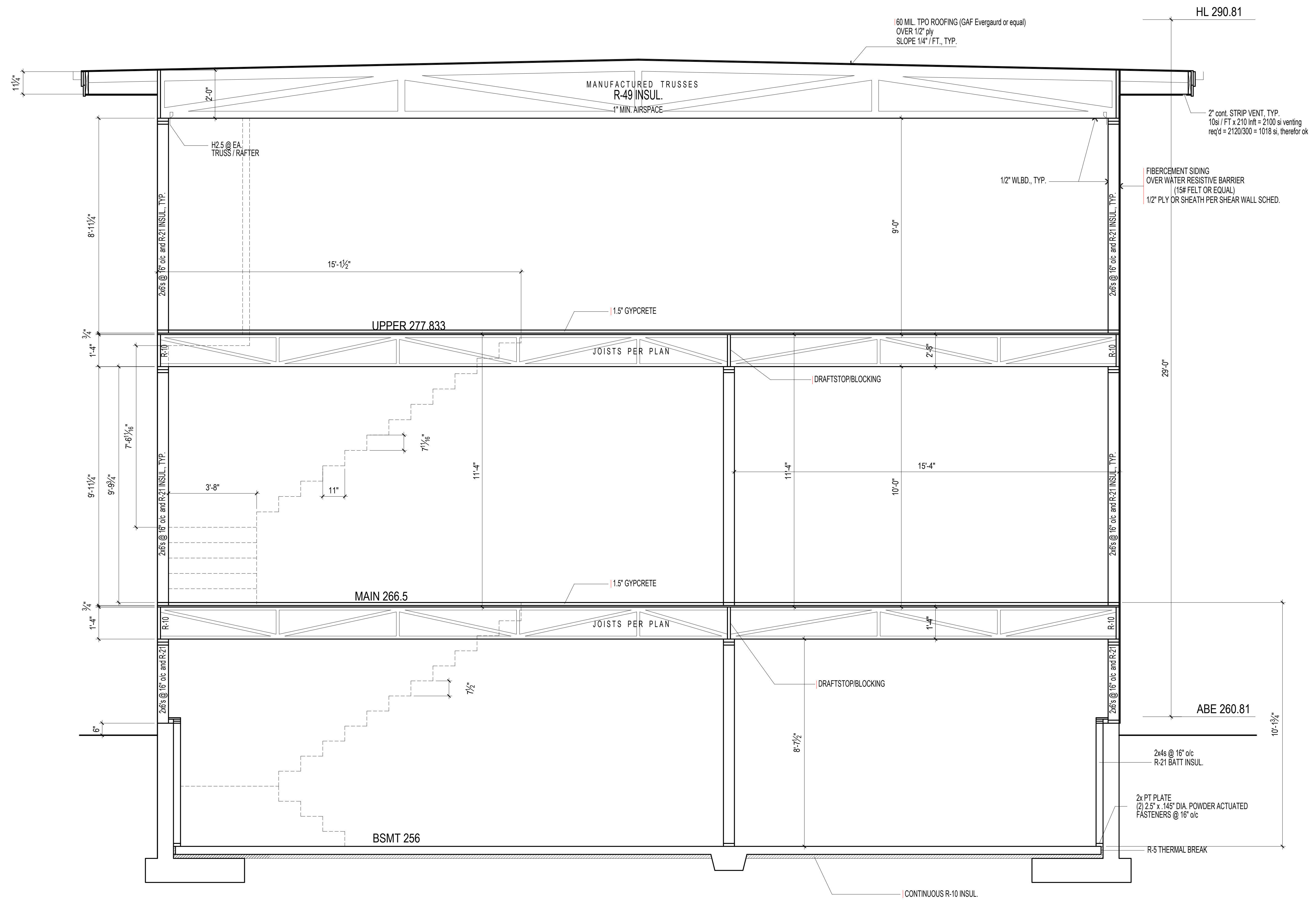
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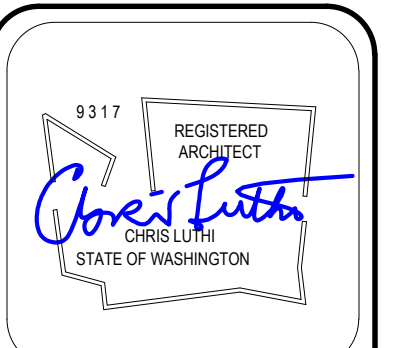
B. EAST ELEV.
 1/4" = 1'-0"



A. NORTH ELEV.
 1/4" = 1'-0"



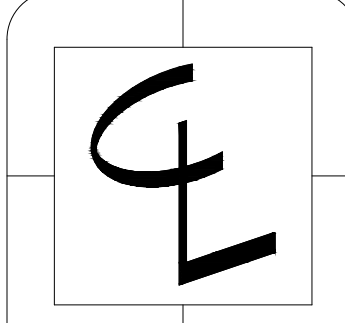
A. TYP. BUILDING SECTION
 1/2" = 1'-0"



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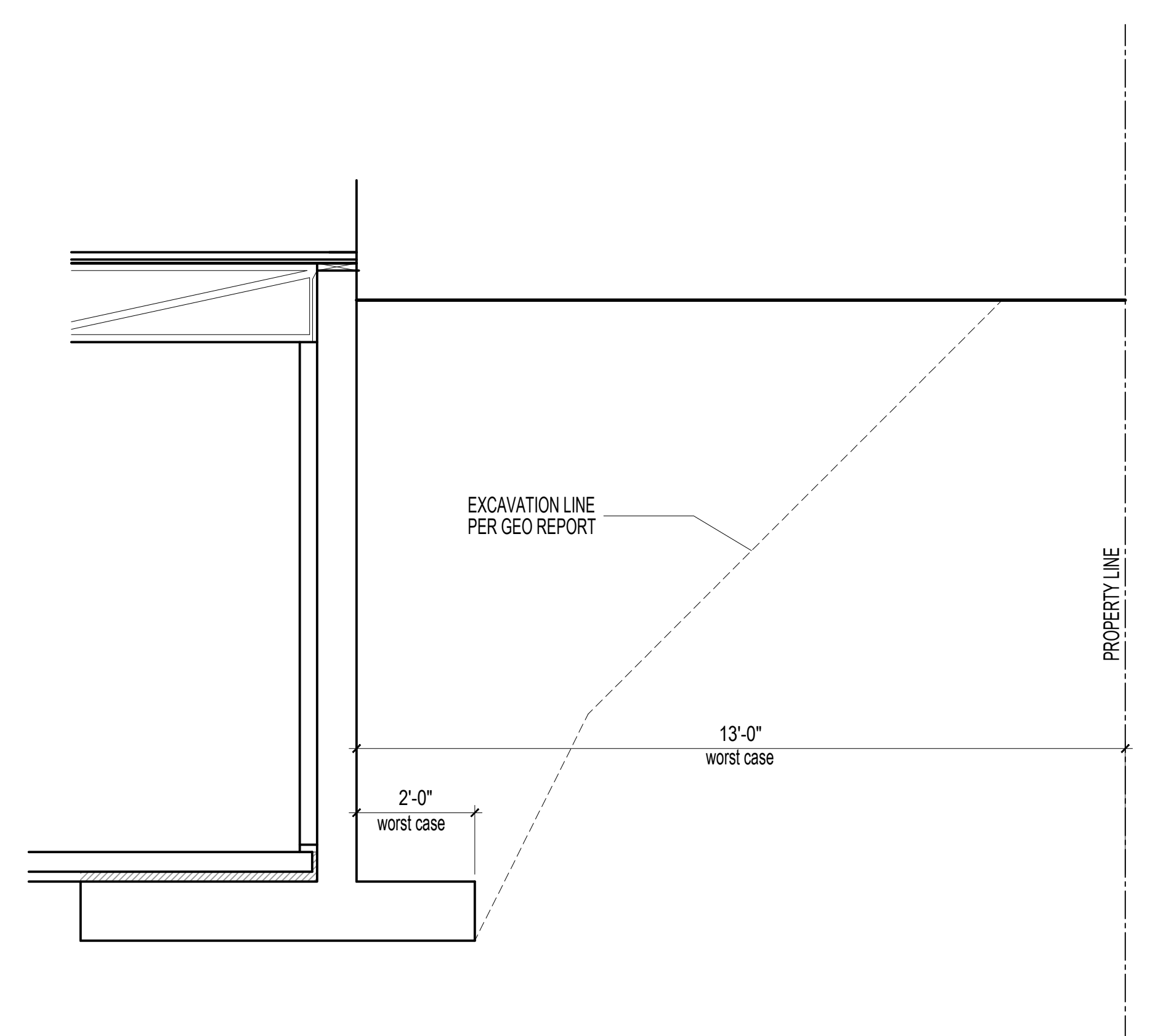


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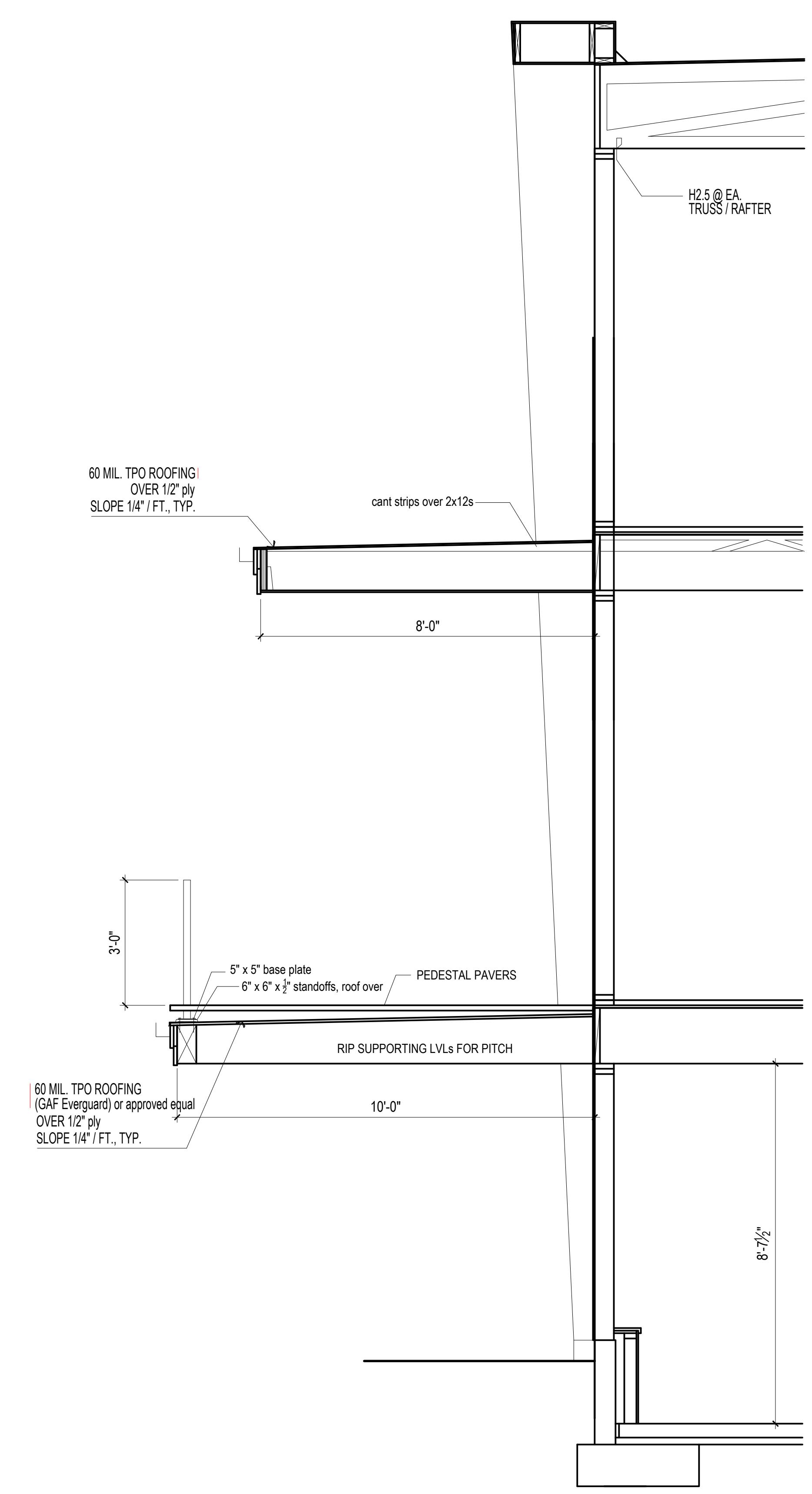
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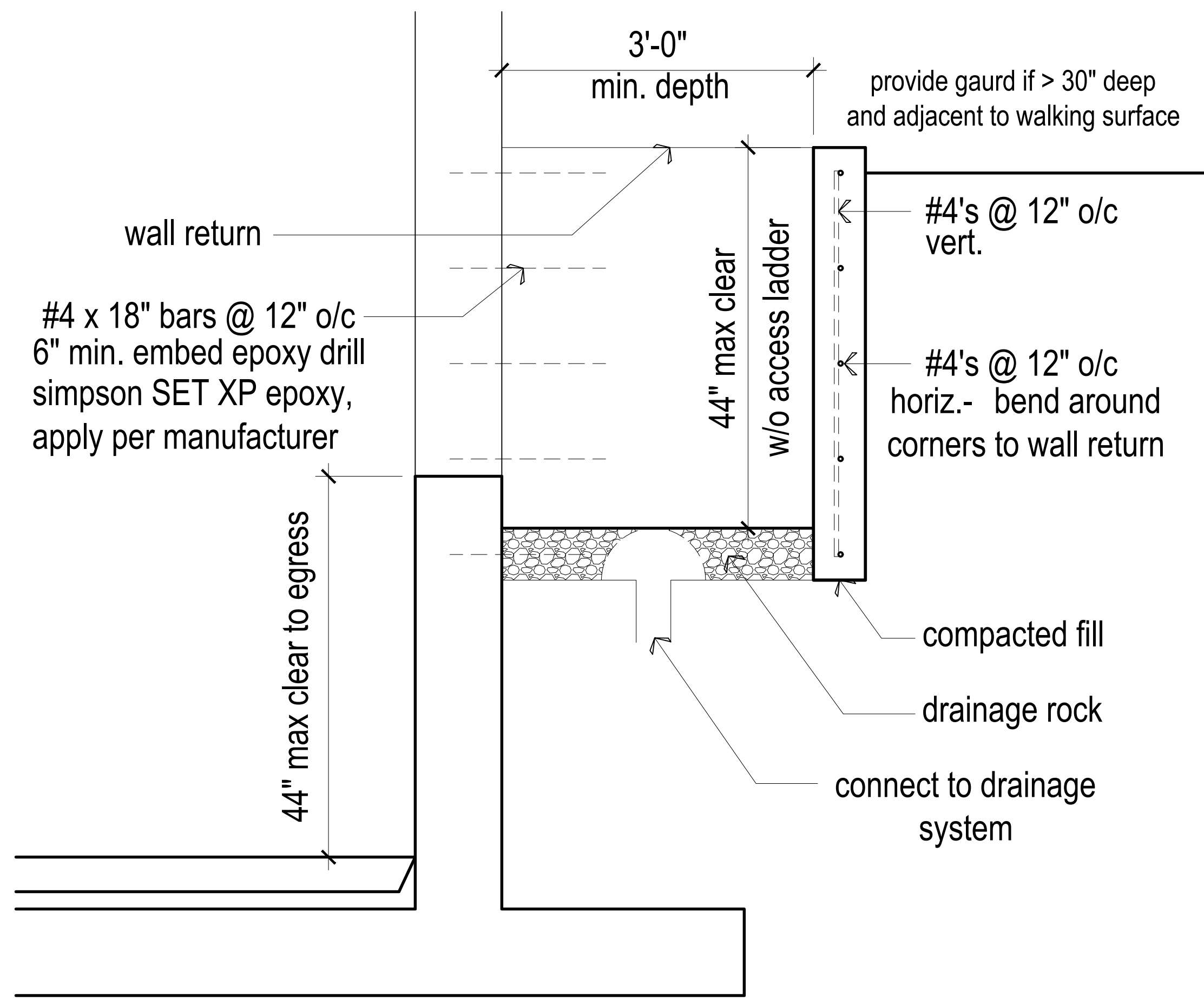
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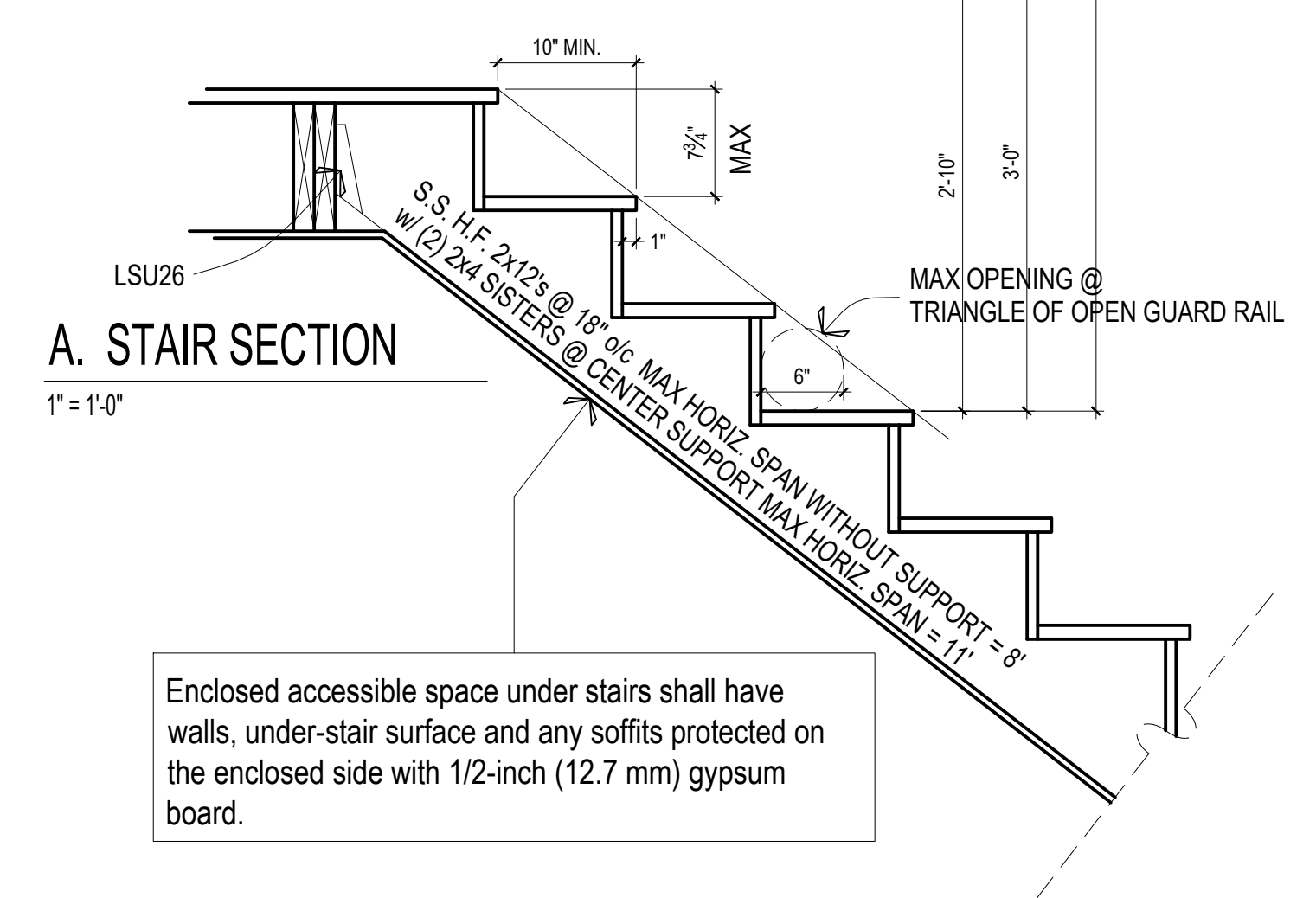
B. EXCAVATION AT SIDE YARD
 1/2" = 1'-0"



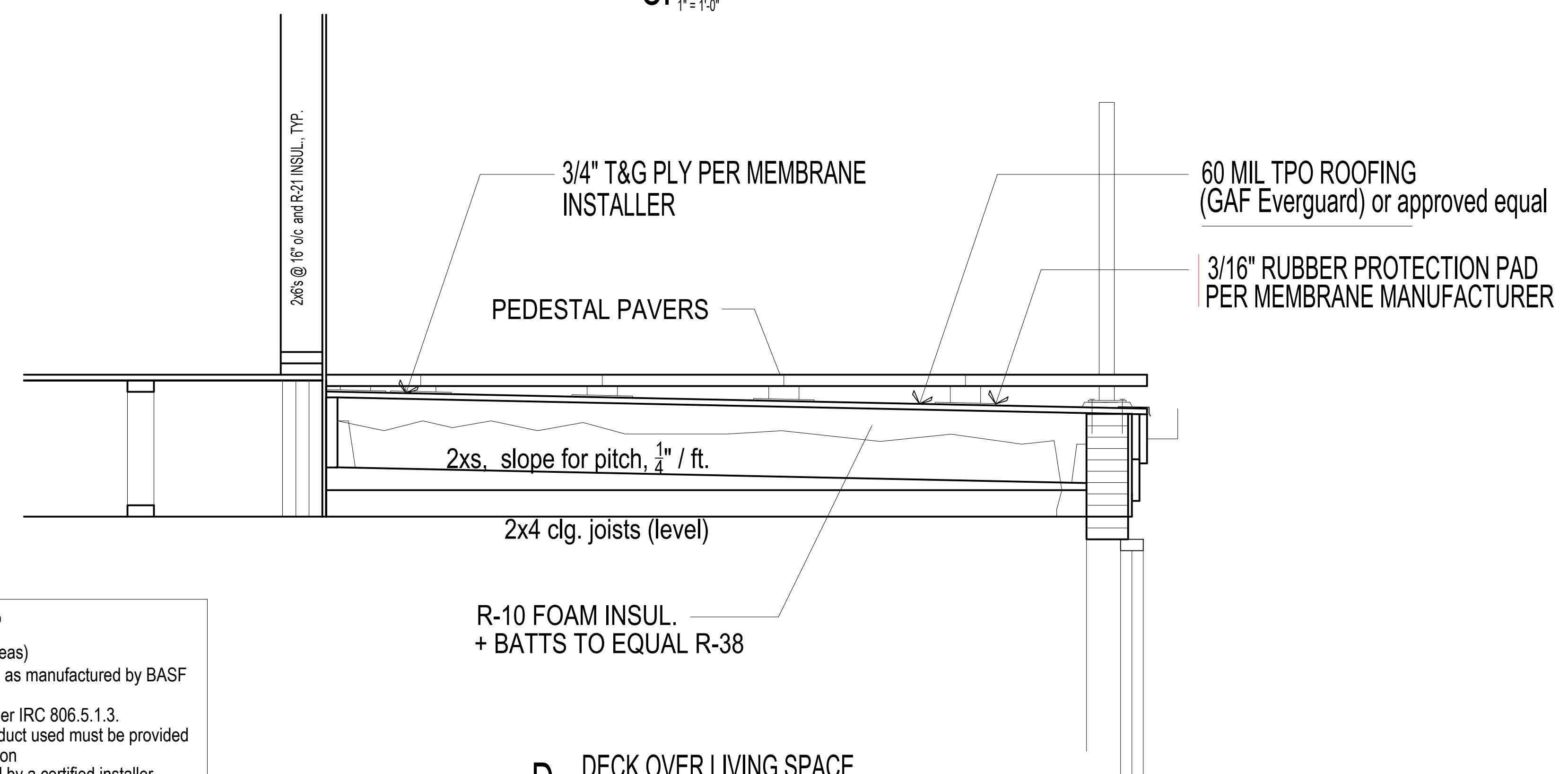
A. ENTRY SECTION
 1/2" = 1'-0"



MIN. STAIRWAY WIDTH = 3'-0" CLEAR
 STAIR RISE, RUN AND NOSING CANNOT VARY BY MORE THAN 3/8"
 HANDRAIL TERMINATIONS MUST RETURN TO WALL

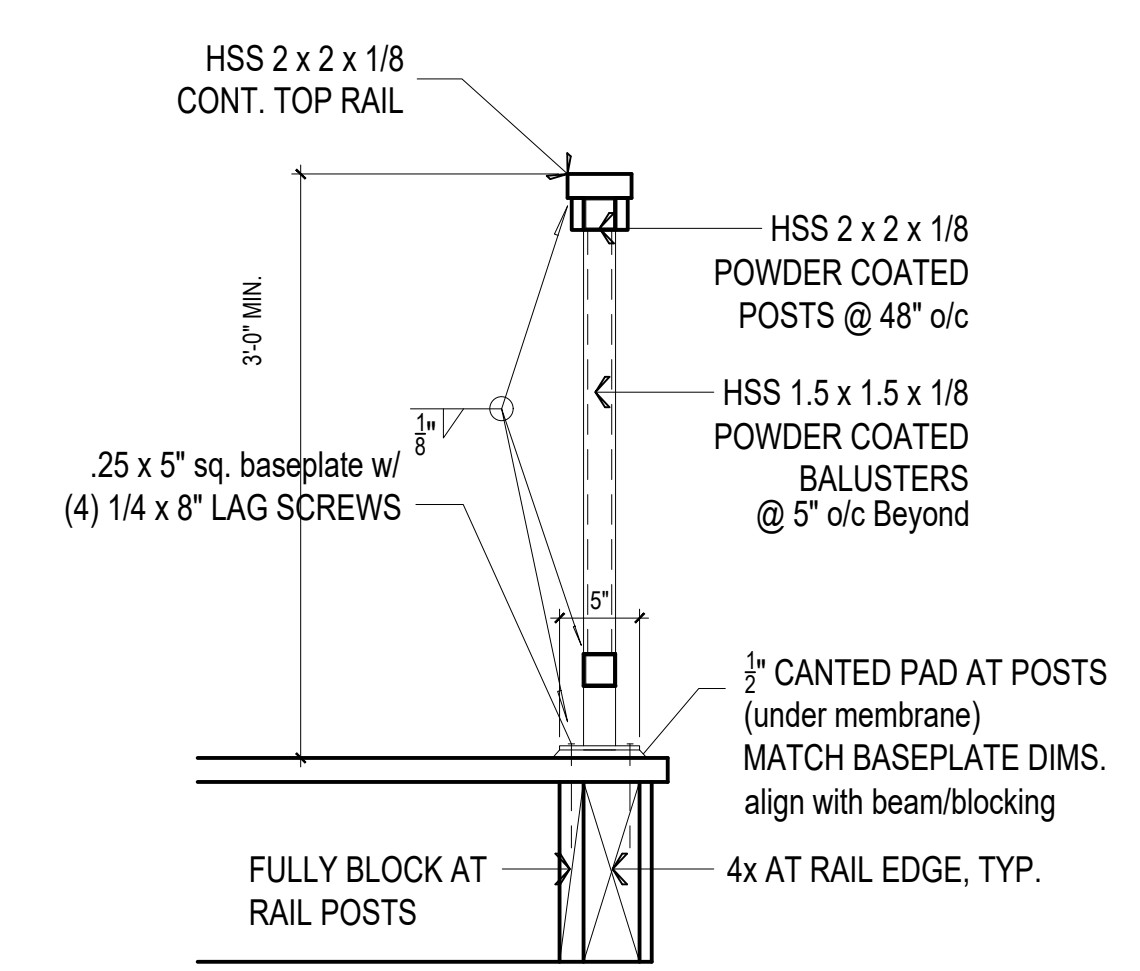


C. WINDOW WELL DETAIL
 1" = 1'-0"

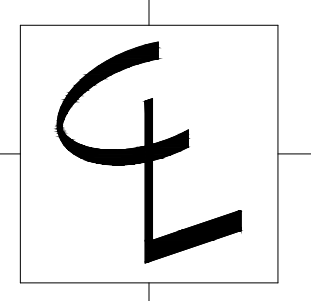


FOAM INSULATION NOTES
 Closed cell spray foam directly applied to underside of sheathing (min R-10)
 + batts to = r-49 (R-38 min. @ vaulted areas)
 Spray foam product to be "Spraytite 178" as manufactured by BASF (ESR-2642), or equal.
 Spray foam insulation shall be installed per IRC 806.5.1.3.
 A copy of the ICC ESR report for the product used must be provided on the job site for field inspector verification
 The applied spray foam must be installed by a certified installer.

D. DECK OVER LIVING SPACE
 1" = 1'-0"



B. RAILING DETAIL
 1" = 1'-0"



General Structural Notes (GSN's)

CRITERIA:

- ALL MATERIALS, WORKMANSHIP, DESIGN, AND CONSTRUCTION SHALL CONFORM TO THE DRAWINGS, SPECIFICATIONS, AND THE INTERNATIONAL BUILDING CODE (IBC) WITH WASHINGTON STATE ADMINISTRATIVE CODE AMENDMENTS, 2018 EDITION.
- DESIGN LOADING CRITERIA
RISK CATEGORY SBC TABLE 1604.5 II
ROOF SNOW LOAD 25 PSF (S_g = 1.0)
+ 5 PSF RAIN ON SNOW SURCHARGE
ROOF DEAD LOAD 15 PSF+10 PSF PV SYSTEM
LIVE LOAD 40 PSF
DECK LIVE LOAD 60 PSF
FLOOR DEAD LOAD 40 PSF (INCLUDES 1/2" GYPCRETE)
- EARTHQUAKE SEISMIC DESIGN CATEGORY D
S_s = 1.408, S₁ = 0.490, S_{0.5} = 0.939, S_{0.1} = 0.591
EQUivalent LATERAL FORCE PROCEDURE
LIGHT FRAME (WOOD WALLS AND ROOFS SHEATHED WITH WOOD STRUCTURAL PANELS RATED FOR SHEAR)
R = 6.5, O₂ = 2% (1.0/50), C_d = 0.14
BASE SHEAR V = 267 K, R₁ = 1.0
WIND 110 MPH, EXPOSURE "B", K_{z1} = 1.6
COMPONENTS & CLADDING -35.5/-21.3 PSF MAX. AT WALLS (LRFD/ASD)
-60.0/-36.0 GROSS UPLIFT AT ROOF (LRFD/ASD)
WIND PRESSURES BASED ON LESS THAN 10 SQUARE FOOT TRIANGULAR AREAS NEAR WALL CORNERS OR ROOF EDGES (EXCLUDING CORNER ZONES AT ROOF). REDUCED DESIGN PRESSURES MAY BE CALCULATED IN ACCORDANCE WITH ASCE 7-16 CHAPTER 30.

STRUCTURAL DRAWINGS SHALL BE USED IN CONJUNCTION WITH ALL OTHER CONTRACT DOCUMENTS FOR BIDDING AND CONSTRUCTION. CONTRACTOR SHALL VERIFY DIMENSIONS AND CONDITIONS FOR COMPATIBILITY AND SHALL NOTIFY ENGINEER OF ALL DISCREPANCIES PRIOR TO CONSTRUCTION. IT IS THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE BUILDING LAYOUT DIMENSIONS (GRID LAYOUTS, SITE COORDINATES, ETC.) AMONGST ALL TRADES, INCLUDING SHOP FABRICATED ITEMS.

CONTRACTOR SHALL PROVIDE TEMPORARY BRACING, BOTH FOR VERTICAL LOADS AND LATERAL STABILITY, FOR THE STRUCTURE AND STRUCTURAL COMPONENTS UNTIL ALL FINAL CONNECTIONS HAVE BEEN COMPLETED IN ACCORDANCE WITH THE DRAWINGS.

CONTRACTOR SHALL BE RESPONSIBLE FOR ALL SAFETY PRECAUTIONS AND THE METHODS, TECHNIQUES, SEQUENCES OR PROCEDURES REQUIRED TO PERFORM THE WORK.

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 STRUCTURAL SYSTEMS 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.

SEISMIC BRACING AND/OR GRAVITY SUPPORT AND ANCHORAGE OF ALL MECHANICAL OR ELECTRICAL EQUIPMENT SHALL BE DESIGNED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF WASHINGTON, EXCEPT FOR ELEMENTS SPECIFICALLY SHOWN AND DETAILED ON THE STRUCTURAL DRAWINGS. THE MECHANICAL/ELECTRICAL CONTRACTOR MUST HIRE THE ENGINEER AND IS RESPONSIBLE FOR ALL COSTS RELATED TO THE PURCHASE AND INSTALLATION OF NECESSARY SUPPORTS, BRACING AND ANCHORAGE. SEISMIC BRACING AND ANCHORAGE DESIGN AND CONSTRUCTION SHALL COMPLY WITH CHAPTER 13 OF ASCE 7-10.

SHOP DRAWING REVIEW: SHOP DRAWINGS FOR TRUSSES SHALL BE SUBMITTED TO THE CONTRACTOR, ARCHITECT, AND ENGINEER OF RECORD FOR REVIEW PRIOR TO FABRICATION OF THESE ITEMS. DIMENSIONS AND QUANTITIES ARE NOT REVIEWED BY THE ENGINEER OF RECORD, AND THEREFORE MUST BE VERIFIED BY THE CONTRACTOR. THE CONTRACTOR SHALL REVIEW AND STAMP DRAWINGS PRIOR TO REVIEW BY ENGINEER OF RECORD. SUBMITTALS SHALL INCLUDE A REPRODUCIBLE AND ONE COPY. THE REPRODUCIBLE SHALL BE MARKED AND RETURNED. 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 SHALL BE DESIGNED BY AN ENGINEER REGISTERED IN THE STATE OF WASHINGTON. THE COMPONENT DESIGNER SHALL BE A REGISTERED STRUCTURAL ENGINEER IF REQUIRED BY THE BUILDING OFFICIAL OF THE LOCAL JURISDICTION. BUILDING COMPONENT SUBMITTALS SHALL INCLUDE THE DESIGNING PROFESSIONAL ENGINEER'S STAMP 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 INCLUDING ACCOMMODATION FOR STRUCTURAL DISPLACEMENT PER ASCE 7-10 SECTION 13.3.2, 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. DESIGN CALCULATIONS SHALL BE INCLUDED IN THE SUBMITTAL. THE CONTRACTOR SHALL FORWARD DEFERRED SUBMITTALS TO THE BUILDING OFFICIAL AND HAVE THE DEFERRED SUBMITTALS ON SITE FOR THE GOVERNING JURISDICTIONS INSPECTORS USE AND REFERENCE. THE FOLLOWING BUILDING COMPONENTS SHALL BE DEFERRED SUBMITTALS FOR THIS PROJECT:
- CONNECTOR PLATE WOOD TRUSSES

GEOTECHNICAL:

- FOUNDATION NOTES: SUBGRADE PREPARATION INCLUDING DRAINAGE, EXCAVATION, COMPACTION, AND FILLING REQUIREMENTS, SHALL CONFORM STRICTLY WITH THE RECOMMENDATIONS GIVEN IN THE GEOTECHNICAL REPORT REFERENCED BELOW, THE SPECIFICATIONS, OR AS DIRECTED BY THE OWNER APPOINTED GEOTECHNICAL ENGINEER. FOOTINGS SHALL BEAR ON COMPETENT UNDISTURBED NATIVE SOILS OR STRUCTURAL FILL THAT IS PLACED ON COMPETENT NATIVE SOILS. EXTERIOR FOOTINGS AND FOOTINGS IN UNHEATED AREAS SHALL BEAR AT LEAST 18" BELOW ADJACENT EXTERIOR GRADE, AND AT LEAST 12" BELOW TOP OF FLOOR SLAB AT INTERIOR FOOTINGS. THE OWNER APPOINTED GEOTECHNICAL ENGINEER SHALL APPROVE FILLING EXCAVATION/PREPARATION PRIOR TO PLACEMENT OF ALL FOOTINGS. BACKFILL BEHIND ALL RETAINING WALLS WITH FREE DRAINING, GRANULAR FILL AND PROVIDE FOR SUBSURFACE DRAINAGE AS NOTED IN THE GEOTECHNICAL REPORT REFERENCED BELOW, THE SPECIFICATIONS, OR AS DIRECTED BY THE OWNER APPOINTED GEOTECHNICAL ENGINEER
ALLOWABLE SOIL PRESSURE 2,000 PSF
LATERAL EARTH PRESSURE (UNRESTRAINED, LEVEL) 35 PCF
(RESTRAINED, LEVEL) 45 PCF
SEISMIC SURCHARGE PRESSURE 84, UNIFORM
PASSIVE EARTH PRESSURE 350 PCF
BASE COEFFICIENT OF FRICTION 0.35
GEOTECHNICAL REFERENCE: "Geotechnical Engineering Investigation", 3626 90th Ave SE, Mercer Island, WA; GEO Group Northwest, Inc.; Project No. G-5661; April 18, 2023"
- NOT USED

ANCHORAGE:

- DRIVE PINS AND OTHER POWDER-ACTUATED FASTENERS SHALL BE ONE OF THE FOLLOWING INSTALLED IN STRICT ACCORDANCE WITH THE ICC-ES REPORTS INDICATED AND MANUFACTURER'S INSTRUCTIONS INCLUDING MINIMUM EMBED REQUIREMENTS: "E SERIES" (0.157" DIAMETER) AS MANUFACTURED BY ITW RAMSEY (ICC-ES NO. 1799); OR "X-U" (0.157" DIAMETER) AS MANUFACTURED BY HILTI, INC. (ICC-ES NO. 2269); OR "STRONG-TIE PDPA" (0.157" DIAMETER) AS MANUFACTURED BY SIMPSON STRONG-TIE COMPANY, INC. (ICC-ES NO. 2138); OR "SS" (0.157" DIAMETER) AS MANUFACTURED BY DENALI/POWERS (ICC-ES NO. 2024); OR AN APPROVED EQUIVALENT IN STRENGTH AND EMBEDMENT. MINIMUM EMBEDMENT IN CONCRETE SHALL BE 1" UNLESS OTHERWISE NOTED. MAINTAIN AT LEAST 3-1/2" TO NEAREST CONCRETE EDGE.

CONCRETE:

- CONCRETE SHALL BE MIXED, PROPORTIONED, CONVEYED AND PLACED IN ACCORDANCE WITH ACI 318-14 CHAPTER 26 AND ACI 301. CONCRETE SHALL ATTAIN A 28-DAY STRENGTH OF F_c = 2,500 PSI. THE CONTRACTOR SHALL USE 5-1/2" SACK 2500 PSI CONCRETE MIXES PER CODE ALTERNATE PARAGRAPH 2 IN THE SEATTLE RESIDENTIAL CODE, IN ACCORDANCE WITH INTERSTATE BUILDING CODE SECTION 1904.2. 5-1/2" SACK 2500 PSI CONCRETE MIXES ARE EQUIVALENT TO 3000 PSI CONCRETE FOR WEATHERING POTENTIAL. IN ADDITION, AIR-ENTRAINMENT IS NOT REQUIRED TO ADDRESS WEATHERING.

- REINFORCING STEEL SHALL CONFORM TO ASTM A615, GRADE 60, F_y = 60,000 PSI. GRADE 60 REINFORCING BARS WHICH ARE TO BE WELDED SHALL CONFORM TO ASTM A706. REINFORCEMENT 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. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A1064.
- REINFORCING STEEL SHALL BE DETAILED (INCLUDING HOOKS AND BENDS) IN ACCORDANCE WITH ACI 318-99 AND FIG. 14. LAP ALL CONTINUOUS REINFORCEMENT IN ACCORDANCE WITH "REINFORCEMENT SPLICE AND DEVELOPMENT LENGTH SCHEDULE" OF 10/53.1. PROVIDE CORNER BARS AT ALL WALL AND FOOTING INTERSECTIONS. LAP ADJACENT MATS OF WELDED WIRE FABRIC A MINIMUM OF 12" AT SIDES AND ENDS. NO BARS PARTIALLY EMBEDDED IN HARDENED CONCRETE SHALL BE FIELD BENT UNLESS OTHERWISE NOTED ON THE DRAWINGS OR APPROVED BY THE STRUCTURAL ENGINEER.
- 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
(i.e. WALLS BELOW GROUND)/ROOF WEATHER (#5 BARS OR SMALLER) 1/2"
- BONDING AGENCY SHALL BE "MASTERMAD ADH 306" BY BASF CORPORATION, OR EQUIVALENT, AND SHALL BE USED WHERE NEW CONCRETE IS PLACED AGAINST HARDENED CONCRETE. PLACE IN STRICT ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS, INCLUDING PREPARATION OF EXISTING SURFACES. CONCRETE SHALL BE CONSIDERED HARDENED AFTER 56 DAYS.
- NON-SHRINK GROUT SHALL BE FURNISHED BY AN APPROVED MANUFACTURER AND SHALL BE MIXED AND PLACED IN STRICT ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS. GROUT STRENGTH SHALL BE AT LEAST EQUAL TO THE MATERIAL ON WHICH IT IS PLACED (6,000 PSI MINIMUM).

REQUIRED?	VERIFICATION & INSPECTION	CONTINUOUS/PERIODIC	REF. STD.	IBC REF.
N/A	1. INSPECT REINFORCEMENT, INCLUDING PRESTRESSING TENDONS AND VERIFY PLACEMENT.	---	X ACI 318 CH. 20, 25.2, 25.3, 26.4.3, 26.4.4	1908.4
N/A	2. REINFORCING BAR WELDING: A. VERIFY WELDABILITY OF REINFORCING BARS OTHER THAN ASTM A 706. B. INSPECT SINGLE-PASS FILLET WELDS, MAXIMUM 5/16" AND C. INSPECT ALL OTHER WELDS	---	X AWS D1.4 ACI 318 26.5.4	---
YES	3. INSPECT ANCHORS CAST IN CONCRETE.	---	X ACI 318: 17.8.2	---
N/A	4. INSPECT ANCHORS POST-INSTALLED IN HARDENED CONCRETE MEMBERS: A. ADHERIVE ANCHORS INSTALLED IN HORIZONTALLY OR UPWARDLY INCLINED ORIENTATIONS TO RESIST SUSTAINED TENSION LOADS B. MECHANICAL ANCHORS AND ADHESIVE ANCHORS NOT DEFINED IN 4.A	X	X ACI 318: 17.8.2.4	---
N*	5. VERIFY USE OF REQUIRED DESIGN MIX.	---	X ACI 318: CH. 19, 26.4.3, 26.4.4	1904.1, 1904.2, 1908.2, 1908.3
N*	6. PRIOR TO CONCRETE PLACEMENT, FABRICATE SPECIMENS FOR STRENGTH TESTS, PERFORM SLUMP AND AIR CONTENT TESTS, AND DETERMINE THE TEMPERATURE OF THE CONCRETE.	X	---	ASTM C 172 ASTM C 31 ACI 318: 26.4.5, 26.12
N*	7. INSPECT CONCRETE AND SHOTCRETE PLACEMENT FOR PROPER APPLICATION TECHNIQUES.	X	---	ACI 318: 26.4.5
N*	8. VERIFY MAINTNANCE OF SPECIFIED CURING TEMPERATURE AND TECHNIQUES.	---	X ACI 318: 26.4.7-26.4.9	1908.8
N/A	9. INSPECT PRESTRESSED CONCRETE FOR: A. APPLICATION OF PRESTRESSING FORCES; AND B. GROUTING OF BONDED PRESTRESSING TENDONS	X	---	ACI 318: 26.9.2.1 ACI 318: 26.9.2.3
N/A	10. INSPECT ERECTION OF PRECAST CONCRETE MEMBERS	---	X ACI 318: CH. 26.8	---
N*	11. VERIFY <i>in-situ</i> CONCRETE STRENGTH PRIOR TO STRESSING OF TENDONS IN POST-TENSIONED CONCRETE AND PRIOR TO REMOVAL OF SHORES AND FORMS FROM BEAMS AND STRICT SLABS.	---	X ACI 318: 26.10.2	---
N*	12. INSPECT FORMWORK FOR SHAPE, LOCATION AND DIMENSIONS OF THE CONCRETE MEMBER BEING FORMED.	---	X ACI 318: 26.10.1(b)	---

* EXEMPTIONS TO PER IBC SECTION 1705.3 APPLIES TO CONCRETE WORK ON THIS PROJECT.

WOOD:

- FRAMING LUMBER SHALL BE KILN DRIED OR MC-19, AND GRADED AND MARKED IN CONFORMANCE WITH M.C.L.B. STANDARD GRADING RULES FOR WEST COAST LUMBER NO. 17 OR W.N.P.A. WESTERN LUMBER GRADING RULES. FURNISH TO THE FOLLOWING MINIMUM STANDARDS:
PLATES, LEDGERS & MISC. DOUGLAS FIR NO. 3 OR STUD GRADE
MIN. BASIC DESIGN STRESS, F_b = 525 PSI, E = 1,400 KSI
F_c = 775 PSI, F_t = 325 PSI
JOISTS & RAFTERS: DOUGLAS FIR NO. 2
MIN. BASIC DESIGN STRESS, F_b = 900 PSI, E = 1,600 KSI
F_c = 1,350 PSI, F_t = 575 PSI
BEAMS: DOUGLAS FIR NO. 1
4x... MIN. BASIC DESIGN STRESS, F_b = 1,000 PSI, E = 1,700 KSI
F_c = 1,500 PSI, F_t = 675 PSI
6x... MIN. BASIC DESIGN STRESS, F_b = 1,350 PSI, E = 1,600 KSI
F_c = 925 PSI, F_t = 675 PSI
COLUMNS: DOUGLAS FIR NO. 1
4x... MIN. BASIC DESIGN STRESS, F_b = 1,000 PSI, E = 1,700 KSI
F_c = 1,500 PSI, F_t = 675 PSI
6x... MIN. BASIC DESIGN STRESS, F_b = 1,200 PSI, E = 1,600 KSI
F_c = 1,000 PSI, F_t = 825 PSI

MANUFACTURED LUMBER SHALL BE AS MANUFACTURED BY TRUS JOIST OR APPROVED EQUAL. REQUESTS FOR APPROVAL AS EQUAL WILL REQUIRE SUBMITTAL OF ICC REPORT EQUIVALENT TO ESR-1387 FOR LAMINATED VENER LUMBER (LVL, LAMINATED STRAND LUMBER (LSL), OR PARALLEL STRAND LUMBER (PSL)). THE MINIMUM ALLOWABLE DESIGN VALUES ARE AS FOLLOWS:
LVL - F_b = 2,600 F_v = 290 PSI E = 2,000,000 PSI
LSL - F_b = 1,900 F_v = 150 PSI E = 1,300,000 PSI

GLUED LAMINATED MEMBERS SHALL BE FABRICATED IN CONFORMANCE WITH ASTM AND A.I.T.C. STANDARDS IN ACCORDANCE WITH SBC SECTION 2303.1.3. EACH MEMBER SHALL BEAR AN A.I.T.C. IDENTIFICATION MARK AND SHALL BE ACCOMPANIED BY AN A.I.T.C. CERTIFICATE OF CONFORMANCE. HORIZONTAL MEMBERS AND INCLINED MEMBERS OF LESS THAN 1:1 SLOPE SHALL HAVE A RADUSED CAMBER OF 3,500 FT. UNLESS OTHERWISE NOTED.
SIMPLE SPAN BEAMS DOUGLAS FIR COMBINATION 24F-V4
F_b = 2,400 PSI; F_v = 265 PSI; E = 1,800,000 PSI
CONTINUOUS OR DOUGLAS FIR COMBINATION 24F-V8
CANTILEVERED BEAMS F_b = 2,400 PSI; F_v = 265 PSI; E = 1,800,000 PSI
THESE MEMBERS ARE NOTED AS "X" IN PLAN
GLUED LAMINATED MEMBERS EXPOSED TO WEATHER OR MOISTURE SHALL BE TREATED WITH A NON-CORROSIVE, APPROVED PRESERVATIVE.

ACCORDANCE WITH ANS/TP1-2007 AND IBC SECTION 2303.4 FOR THE SPANS AND CONDITIONS SHOWN ON THE DRAWINGS. DESIGN LOADS SHALL BE AS FOLLOWS:
ROOF TRUSSES:
TOP CHORD LIVE LOAD 25 PSF, SNOW + 5 PSF, RAIN ON SNOW SURCHARGE
BOTTOM CHORD LIVE LOAD 0 PSF
TOP CHORD DEAD LOAD 15 PSF
BOTTOM CHORD DEAD LOAD 5 PSF
WIND UPLIFT (TOP CHORD) SEE NOTE#2 COMPONENTS & CLADDING ROOF LOADS

FLOOR TRUSSES:
TOP CHORD LIVE LOAD 40 PSF
BOTTOM CHORD LIVE LOAD 0 PSF
TOP CHORD DEAD LOAD 20 PSF
BOTTOM CHORD DEAD LOAD 5 PSF

THE TRUSS MANUFACTURER SHALL COORDINATE LOCATIONS AND SUPPORT CONFIGURATIONS OF PLUMBING, MECHANICAL UNITS, DUCTS, AND/OR OTHER MISCELLANEOUS ITEMS WITH THE CONTRACTOR PRIOR TO TRUSS FABRICATION. THE TRUSS MANUFACTURER SHALL DESIGN TRUSSES TO SUPPORT ALL LOADS ASSOCIATED WITH SUCH ITEMS. THE TRUSS SHOP DRAWINGS SHALL INCLUDE ALL DESIGN LOADS AND APPROVED HANGER CONNECTION DETAILS TO TRUSS CHORDS FOR SUPPORT OF HUNG MECHANICAL SYSTEM COMPONENTS AS APPLICABLE.

WOOD TRUSSES SHALL UTILIZE APPROVED CONNECTOR PLATES (GANGNAIL OR EQUAL). SHOP DRAWINGS AND CALCULATIONS SHALL BE PROVIDED AS A DEFERRED SUBMITTAL TO THE CONTRACTOR AND STRUCTURAL ENGINEER OF RECORD PER GENERAL STRUCTURAL NOTE 13. SHOP DRAWINGS SHALL INDICATE SHAPES, BEARING POINTS, INTERSECTIONS, HIPPS, VALLEYS, ETC. EXACT CONNECTION OF SPECIAL HIP, VALLEY, AND INTERSECTION AREAS (USE OF ORDER TRUSSES, JACK TRUSSES, STEP-DOWN TRUSSES, ETC.) SHALL BE DETERMINED BY THE MANUFACTURER UNLESS OTHERWISE NOTED ON THE DRAWINGS. THE TRUSS MANUFACTURER SHALL PROVIDE ALL TRUSS-TO-TRUSS BEAM/JOIST CONNECTION DETAILS AND REQUIRED CONNECTION MATERIALS. THE TRUSS MANUFACTURER SHALL DESIGN AND PROVIDE DETAILS FOR ALL TEMPORARY AND PERMANENT TRUSS BRACING AND BRIDGING.

ROOF & WALL SHEATHING SHALL BE APA RATED, EXTERIOR OR EXPOSURE 1 PLYWOOD OR ORIENTED STRAND BOARD (OSB) IN CONFORMANCE WITH SBC SECTION 2303.1.5. SHEATHING SHALL BE MANUFACTURED UNDER THE PROVISIONS OF VOLUNTARY PRODUCT STANDARDS DOC P1-09, PS 2-10, OR APA PRP-108 PERFORMANCE STANDARDS AND POLICIES FOR STRUCTURAL USE PANELS. SEE DRAWINGS FOR THICKNESS, SPAN RATING, AND NAILING REQUIREMENTS.

AT NON-SHEAR WALL EXTERIOR WALLS, UNLESS OTHERWISE NOTED, WALL SHEATHING SHALL BE 1/2" (NOMINAL) WITH SPAN RATING OF 3/8" WITH 8d @ 6" oc PANEL NAILING (APPLIES TO ALL SHEATHING PANEL EDGES); AND 8d @ 12" oc TO INTERMEDIATE FRAMING.

ALL PRESSURE-TREATED (P.T.) WOOD MEMBERS SPECIFIED ON THE DRAWINGS THAT OCCUR ABOVE GROUND AND CONTINUOUSLY PROTECTED FROM MOISTURE (INTERIOR LOCATIONS) SHALL BE PRESSURE-TREATED WITH DOT SODIUM BORATE (SBX) WITHOUT Na₂O₂ AT LOCATIONS PERMANENTLY EXPOSED TO WEATHER OR IN CONTACT WITH THE GROUND. WOOD MEMBERS SHALL BE PRESSURE-TREATED WITH ALKALINE COPPER QUAT (ACQ-C FOR DOUGLAS-FIR) PRESERVATIVE UNLESS OTHERWISE NOTED. AMMONIACAL COPPER ZINC ARSENATE (ACZA) PRESERVATIVE OR OTHER PRESERVATIVES WITH AMMONIA CARRIERS, SHALL NOT BE USED.
GLUED LAMINATED MEMBERS EXPOSED TO WEATHER OR MOISTURE SHALL BE TREATED WITH A NON-CORROSIVE, APPROVED PRESERVATIVE.
SEE NOTE #27 FOR MATERIAL REQUIREMENTS OF CONNECTORS AND FASTENERS IN CONTACT WITH PRESSURE-TREATED MEMBERS.

TIMBER CONNECTORS CALLED OUT BY LETTERS AND NUMBERS SHALL BE "STRONG-TIE" BY SIMPSON COMPANY, AS SPECIFIED IN THEIR WOOD CONNECTIONS CATALOG NO. C-C-2017-18. INSTALL NUMBER AND SIZE OF FASTENERS AS SPECIFIED BY MANUFACTURER. CONNECTORS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS. WHERE CONNECTOR STRIPS CONNECT TWO MEMBERS, CENTER STRAP ON JOINT AND INSTALL NUMBER AND SIZE OF FASTENERS AS SPECIFIED BY MANUFACTURER, WITH EQUAL NUMBER AND SIZE OF FASTENERS IN EACH MEMBER. ALL BOLTS IN WOOD MEMBERS SHALL CONFORM TO ASTM A307. INSTALL WASHERS UNDER THE HEADS AND NUTS OF ALL BOLTS AND LAG SCREWS BEARING ON WOOD. ALL SHIMS SHALL BE SEASONED AND DRIED AND THE SAME GRADE (MINIMUM) AS MEMBERS CONNECTED.

ALL TIMBER CONNECTORS IN CONTACT WITH PRESSURE-TREATED WOOD THAT USED PRESERVATIVE CHEMICALS OTHER THAN DOT SODIUM BORATE (SBX) WITHOUT Na₂O₂ SHALL BE MANUFACTURED FROM ZMAX STEEL BY SIMPSON (6185 STEEL PER ASTM A653), OR TYPE 304 OR 316 STAINLESS STEEL. ALTERNATIVELY, CONNECTORS CAN BE POST HOT DIP GALVANIZED PER ASTM A123 OR MECHANICALLY GALVANIZED PER ASTM B695, CLASS 55 OR GREATER. STAINLESS STEEL FASTENERS SHALL BE USED WITH STAINLESS STEEL CONNECTORS, AND HOT DIP GALVANIZED FASTENERS PER ASTM A153 SHALL BE USED WITH GALVANIZED CONNECTORS.

WOOD FRAMING NOTES: THE FOLLOWING SHALL APPLY UNLESS OTHERWISE NOTED ON THE DRAWINGS:
A. ALL WOOD FRAMING DETAILS SHALL BE CONSTRUCTED TO THE MINIMUM STANDARDS OF THE SBC. MINIMUM NAILING SHALL CONFORM TO SBC TABLE 2304.9.1 OR CURRENT ICC-ES REPORT NER-272. COORDINATE THE SIZE AND LOCATION OF ALL OPENINGS WITH MECHANICAL AND ARCHITECTURAL DRAWINGS. INSTALL WASHERS UNDER THE HEADS AND NUTS OF ALL BOLTS AND LAG SCREWS BEARING ON WOOD. INSTALLATION OF LAG SCREWS SHALL CONFORM TO 2012 NDS SECTION 11.1.4, AND INSTALLATION OF BOLTS SHALL CONFORM TO 2012 NDS SECTION 11.1.3.

WALL FRAMING: TWO STUDS MINIMUM SHALL BE INSTALLED AT THE ENDS OF ALL WALLS, UNLESS NOTED OTHERWISE NOTED. INSTALL SOLID BLOCKING FOR WOOD COLUMN THROUGH FLOOR SPACES TO SUPPORTS BELOW.
ALL STUD WALLS SHALL HAVE THEIR LOWER WOOD PLATES ATTACHED TO WOOD FRAMING BELOW WITH 16d NAILS @ 12" oc STAGGERED OR BOLTED TO CONCRETE WITH 3/8" ANCHOR BOLTS @ 4'-0" oc PER SBC SECTION 2308.6 (EMBED 7"), UNLESS OTHERWISE NOTED. 3" x 3" x 0.229" PLATE WASHERS SHALL BE USED WITH ALL SILL PLATE ANCHOR BOLTS AND INSTALLED PER AF&PA SDPW-2008 SECTION 4.3.6.4.3. INDIVIDUAL MEMBERS OF BUILT-UP STUD POSTS SHALL BE NAILED TO EACH OTHER WITH 16d @ 12" oc STAGGERED.

FLOOR AND ROOF FRAMING: INSTALL SOLID BLOCKING AT ALL BEARING POINTS. TOENAIL JOISTS TO SUPPORTS WITH (2)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 16d@12" oc STAGGERED.
ROOF AND FLOOR SHEATHING SHALL BE LAID UP WITH GRAN PERPENDICULAR TO SUPPORTS AND NAILED AS SHOWN ON THE DRAWINGS. INSTALL APPROVED PANEL EDGE CLIPS CENTERED BETWEEN JOISTS/TRUSSES AT UNLOCKED ROOF SHEATHING EDGES. 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 LOOR AND ROOF SHEATHING. TOENAIL BLOCKING TO SUPPORTS WITH 16d@12" oc. IN ACCORDANCE WITH SBC SECTION 1604.8.3, DECKS SHALL BE POSITIVELY ANCHORED TO THE STRUCTURE BY MEANS OTHER THAN NAILS SUBJECT TO WITHDRAWAL. ANCHOR WITH MINIMUM (1) C516 STRAP AT EACH END ATTACHED TO DECK JOISTS AND TO A SOLID BLOCKING MEMBER WITHIN THE BUILDING.

D. NAILING: A MINIMUM NAIL DIAMETER AND LENGTH SHALL BE AS FOLLOWS:

	NAIL SIZE ON DRAWINGS	DIAMETER x LENGTH
SHEATHING NAILS	8d	0.131" x 2 1/2"
	10d	0.148" x 2 1/2"
FRAMING NAILS	10d	0.148" x 3"
	16d	0.148" x 3 1/2"

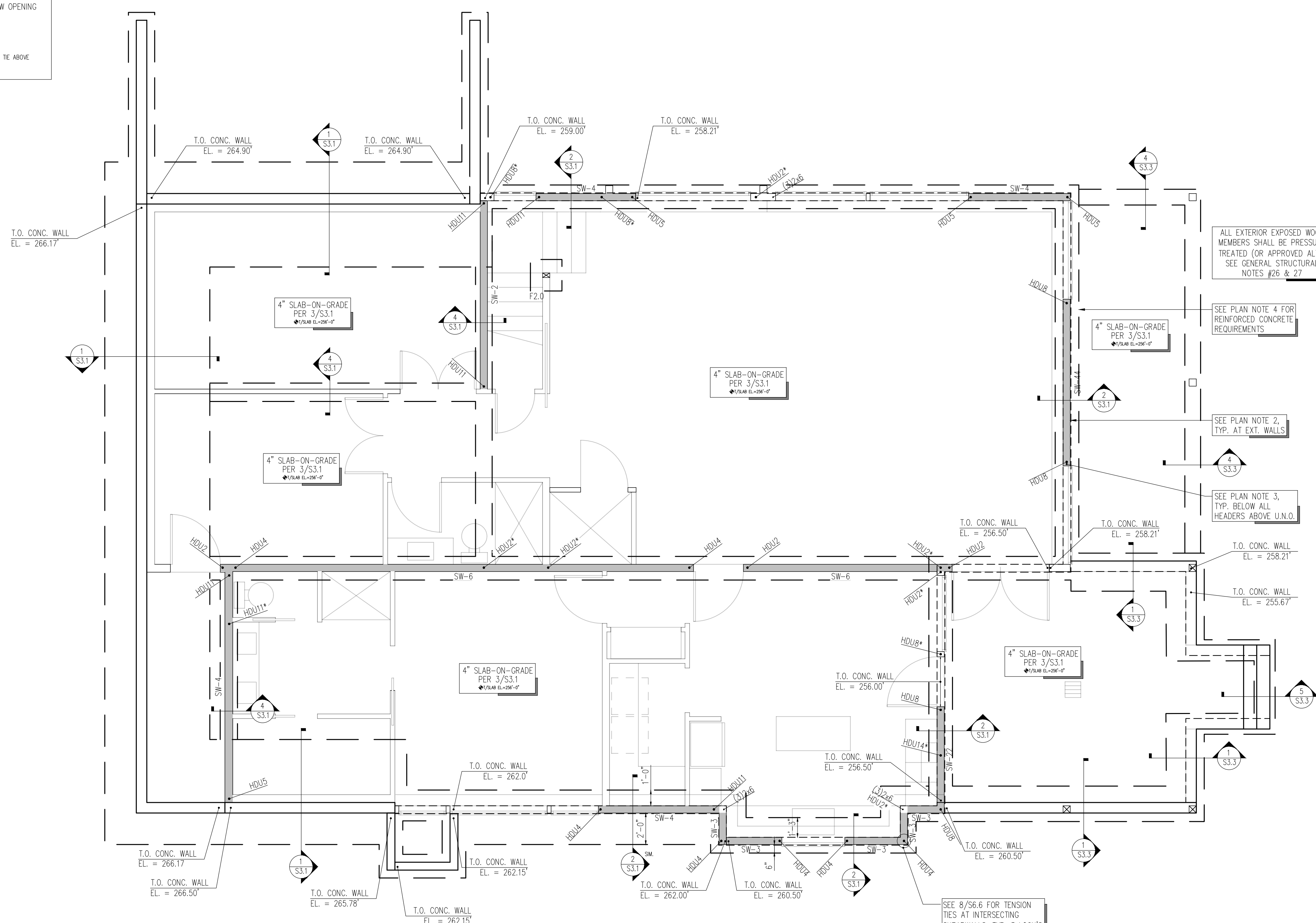
Minimum Connectors and Fasteners for Wood Members per IBC 2018

DESCRIPTION OF BUILDING ELEMENT	NUMBER AND TYPE OF FASTENERS	SPACING & LOCATION
ROOF		
1. BLOCKING BETWEEN CEILING JOISTS, RAFTERS, OR TRUSSES TO TOP PLATE OR OTHER FRAMING BELOW	3-8d COMMON (2 1/2" x 0.131"); or 3-10d BOX (3" x 0.128"); or 3-3" x 0.131" NAILS; or 3-3" x 14 GAGE STAPLES, 3/16" CROWN	EACH END, TOENAIL
BLOCKING BETWEEN RAFTERS OR TRUSS NOT AT THE WALL TOP PLATE, TO RAFTER OR TRUSS	2-8d COMMON (2 1/2" x 0.131") 2-3" x 0.131" NAILS 2-3" x 14 GAGE STAPLES	EACH END, TOENAIL
FLAT BLOCKING TO TRUSS AND WEB FILLER	2-16d COMMON (3 1/2" x 0.162") 3-3" x 0.131" NAILS	END NAIL
2. CEILING JOISTS TO TOP PLATE	16d COMMON (3 1/2" x 0.162") @ 6" oc 3" x 0.131" NAILS @ 6" oc 3" x 14 GAGE STAPLES @ 6" oc	FACE NAIL
3. CEILING JOIST NOT ATTACHED TO PARALLEL RAFTER, LAPS OVER PARTITION (NO THRUST) (SEE 2308.7.3.1, TABLE 2308.7.3.1)	3-8d COMMON (2 1/2" x 0.131"); or 3-10d BOX (3" x 0.128"); or 3-3" x 0.131" NAILS; or 3-3" x 14 GAGE STAPLES, 3/16" CROWN	EACH JOIST, TOENAIL
4. CEILING JOIST ATTACHED TO PARALLEL RAFTER (HEEL JOINT)	3-16d COMMON (3 1/2" x 0.162"); or 4-10d BOX (3" x 0.128"); or 4-3" x 0.131" NAILS; or 4-3" x 14 GAGE STAPLES, 3/16" CROWN	FACE NAIL
5. COLLAR TIE TO RAFTER	PER TABLE 2308.7.3.1	FACE NAIL
6. RAFTER OR ROOF TRUSS TO TOP PLATE (SEE 2308.7.5, TABLE 2308.7.5)	3-10d COMMON (3" x 0.148"); or 3-16d BOX (3 1/2" x 0.135"); or 4-10d BOX (3" x 0.128"); or 4-3" x 0.131" NAILS; or 4-3" x 14 GAGE STAPLES, 3/16" CROWN	TOENAIL
7. ROOF RAFTERS TO RIDGE VALLEY OR HIP RAFTERS, OR ROOF RAFTER TO 2" RIDGE BEAM	2-16d COMMON (3 1/2" x 0.162"); or 3-10d BOX (3" x 0.128"); or 3-3" x 0.131 NAILS; or 3-3" x 14 GAGE STAPLES, 3/16" CROWN	END NAIL
	3-10d COMMON (3 1/2" x 0.148"); or 3-16d BOX (3 1/2" x 0.135"); or 4-10d BOX (3" x 0.128"); or 4-3" x 0.131 NAILS; or 4-3" x 14 GAGE STAPLES, 3/16" CROWN	TOENAIL
WALL		
8. STUD TO STUD (NOT AT SHEARWALL CHORDS)	16d COMMON (3 1/2" x 0.162")	24" oc FACE NAIL
	10d BOX (3" x 0.128"); or 3" x 0.131" NAILS; or 3-3" x 14 GAGE STAPLES, 3/16" CROWN	16" oc FACE NAIL
9. STUD TO STUD AND BUTTING STUDS AT INTERSECTION WALL CORNERS	16d COMMON (3 1/2" x 0.162"); or 16d BOX (3 1/2" x 0.135"); or 3" x 0.131" NAILS; or 3-3" x 14 GAGE STAPLES, 3/16" CROWN	16" oc FACE NAIL 12" oc FACE NAIL
10. BUILT-UP HEADER (2" TO 2" HDR.)	16d COMMON (3 1/2" x 0.162"); or 16d BOX (3 1/2" x 0.135")	16" oc EA. EDGE, FACE NAIL 12" oc EA. EDGE, FACE NAIL
11. CONTINUOUS HEADER TO STUD	4-8d COMMON (2 1/2" x 0.131"); or 4-10d BOX (3" x 0.128")	TOENAIL
12. TOP PLATE TO TOP PLATE	16d COMMON (3 1/2" x 0.162"); or 10d BOX (3" x 0.128"); or 3" x 0.131" NAILS; or 3" x 14 GAGE STAPLES, 3/16" CROWN	16" oc FACE NAIL 12" oc FACE NAIL
13. TOP PLATE TO TOP PLATE, AT END JOINTS	8-16d COMMON (3 1/2" x 0.162"); or 12-10d BOX (3" x 0.128"); or 12-3" x 0.131" NAILS; or 12-3" x 14 GAGE STAPLES, 3/16" CROWN	EACH SIDE OF END JOINT, FACE NAIL (MINIMUM 24" LAP SPlice LENGTH EA. SIDE OF END JOINT)
14. BOTTOM PLATE TO JOIST, RIM JOIST, BAND JOIST, OR BLOCKING NOT AT SHEARWALL	16d COMMON (3 1/2" x 0.162"); or 16d BOX (3 1/2" x 0.135"); or 3" x 0.131" NAILS; or 3" x 14 GAGE STAPLES, 3/16" CROWN	16" oc FACE NAIL 12" oc FACE NAIL
15. BOTTOM PLATE TO JOIST, RIM JOIST, BAND JOIST, OR BLOCKING AT SHEARWALL	2-16d COMMON (3 1/2" x 0.162"); or 3-16d BOX (3 1/2" x 0.135"); or 4-3" x 0.131" NAILS; or 4-3" x 14 GAGE STAPLES, 3/16" CROWN	16" oc FACE NAIL
16. STUD TO TOP OR BOTTOM PLATE	4-8d COMMON (2 1/2" x 0.131"); or 4-10d BOX (3" x 0.128"); or 4-3" x 0.131" NAILS; or 4-3" x 14 GAGE STAPLES, 3/16" CROWN	TOENAIL
	2-16d COMMON (3 1/2" x 0.162"); or 3-10d BOX (3" x 0.128"); or 3-3" x 0.131" NAILS; or 3-3" x 14 GAGE STAPLES, 3/16" CROWN	END NAIL
17. TOP OR BOTTOM PLATE TO STUD	2-16d COMMON (3 1/2" x 0.162"); or 3-10d BOX (3" x 0.128"); or 3-3" x 0.131" NAILS; or 3-3" x 14 GAGE STAPLES, 3/16" CROWN	END NAIL

DESCRIPTION OF BLDG. ELEMENT	NUMBER AND TYPE OF FASTENERS	SPACING & LOCATION
WALL (CONTINUED)		
18. TOP PLATES, LAPS AT CORNERS AND INTERSECTIONS	2-16d COMMON (3 1/2" x 0.162"); or 3-10d BOX (3" x 0.128"); or 3-3" x 0.131" NAILS; or 3-3" x 14 GAGE STAPLES, 3/16" CROWN	FACE NAIL
19. 1" BRACE TO EACH STUD AND PLATE	2-8d COMMON (2 1/2" x 0.131"); or 2-10d BOX (3" x 0.128"); or 2-3" x 0.131" NAILS; or 2-3" x 14 GAGE STAPLES, 3/16" CROWN	FACE NAIL
20. 1" x 6" SHEATHING TO EACH BEARING	2-8d COMMON (2 1/2" x 0.131"); or 2-10d BOX (3" x 0.128"); or	FACE NAIL

LEGEND

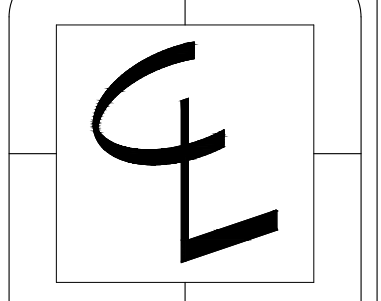
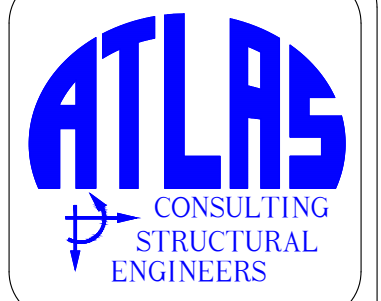
	CONCRETE FOOTING		DENOTES SPREAD FOOTING PER 5/S3.1
	CONCRETE WALL		POST ABOVE
	STEP IN FOOTING PER 9/S3.1		DENOTES EXTENT OF SHEARWALL TYPE SW- PER 1/S6.6
	DENOTES TOP OF FOOTING ELEVATION		DENOTES STRAPPED SHEARWALL PER 7/S6.6, WITH Q DENOTING STRAP PER SCHEDULE ABOVE & BELOW OPENING
	STRUCTURAL WOOD STUDWALL BELOW		DENOTES SHEARWALL TENSION TIE PER 4/S6.6
	STRUCTURAL WOOD STUDWALL ABOVE		* - DENOTES TRANSFER TIE FROM TIE ABOVE



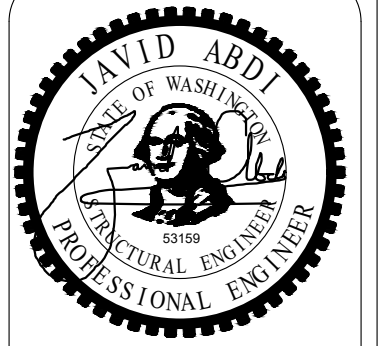
FOUNDATION & FIRST FLOOR PLAN NOTES

- SOLID WALLS AND SHEARWALLS SHOWN IN PLAN ARE ABOVE FIRST FLOOR LEVEL (FROM FIRST FLOOR TO SECOND FLOOR).
- EXTERIOR STUDWALLS SHALL BE 2x6 STUDS @ 16" oc (MAX). SEE ARCHITECTURAL FOR INTERIOR STUDWALLS. SEE 6/6.02, 5/S6.2, AND 2/S6.2 FOR ALLOWABLE HOLES & NOTCHES IN STUDWALL STUDS AND TOP & BOTTOM PLATES.
- ALL HEADERS ABOVE (SEE 1/S2.2) SHALL HAVE A MINIMUM NUMBER OF POSTS PER 4/S6.1 AT NON-LOAD BEARING EXTERIOR WALLS, AND PER 6/S6.1 AT LOAD BEARING EXTERIOR WALLS.
- SEE STRUCTURAL GENERAL NOTES #13 - 18 FOR CONCRETE AND CONCRETE REINFORCING REQUIREMENTS.

1 FOUNDATION AND FIRST FLOOR PLAN
 S2.1 1/4" = 1'-0"



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 Foundation and Lower Floor Plan

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S2.1

LEGEND

--- STRUCTURAL WOOD STUDWALL BELOW

— STRUCTURAL WOOD STUDWALL ABOVE

□ POST BELOW

⊗ POST ABOVE

— WOOD JOIST

— WOOD BEAM or HEADER

--- WOOD RAFTER

SW- DENOTES EXTENT OF SHEARWALL TYPE SW- PER 1/S6.6

SW- DENOTES STRAPPED SHEARWALL PER 7/S6.6, WITH □ DENOTING STRAP PER SCHEDULE ABOVE & BELOW OPENING

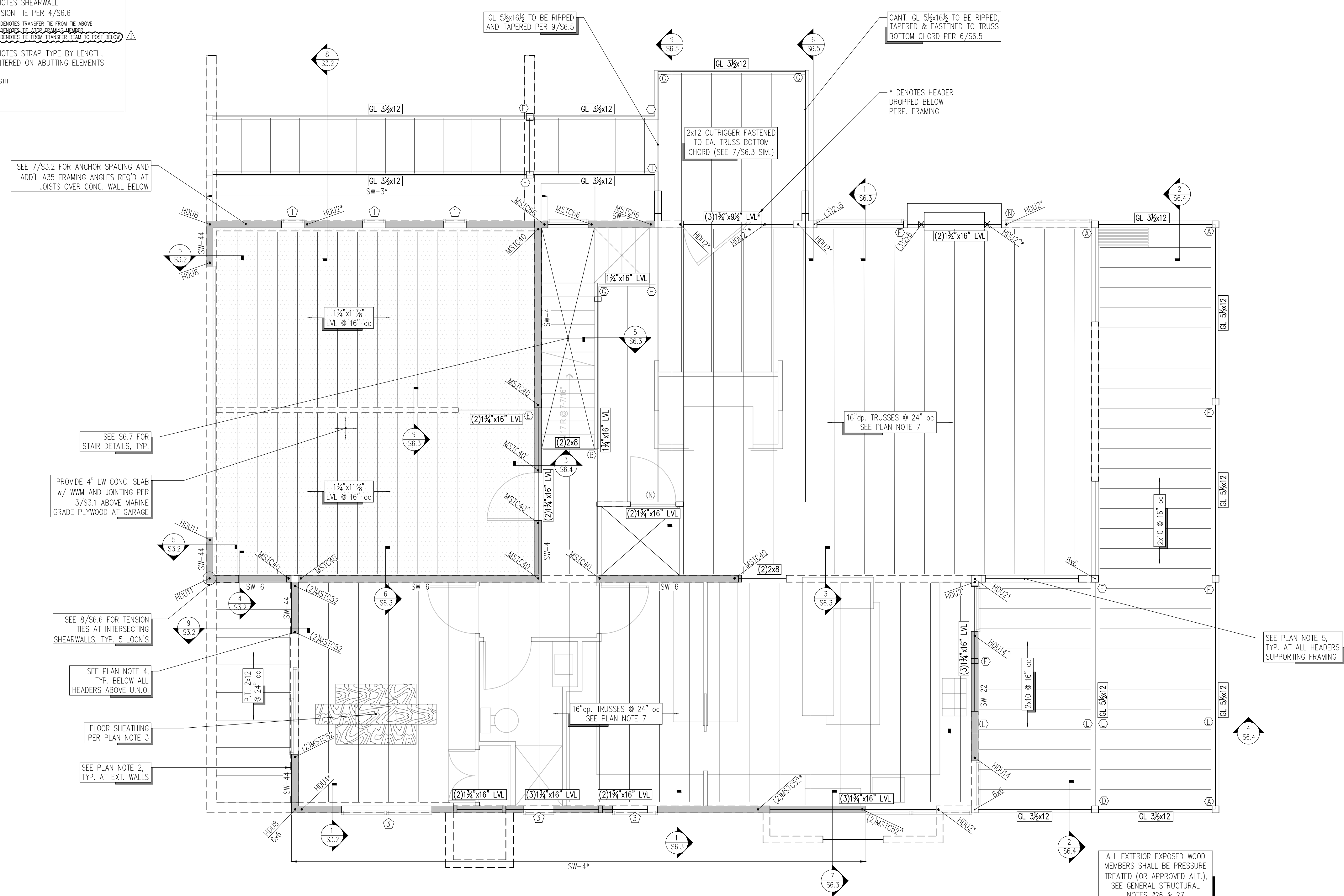
HDU DENOTES SHEARWALL TENSION TIE PER 4/S6.6
 * DENOTES TENSION TIE FROM THE ABOVE
 * DENOTES TIE FROM TRANSFER BEAM TO POST BELOW

HDU DENOTES STRAP TYPE BY LENGTH, CENTERED ON ABUTTING ELEMENTS

STRAP x LENGTH

CONNECTOR TABLE

SIMPSON DESIGNATION	NOTES
ECCLQ, ECCRO	L-POST CAP
HUS ~or~ BU	HANGER
HGU ~or~ EGU	HANGER
CCT	T-POST CAP
IUS ~or~ ITS	HANGER
CCQ	COLUMN CAP
HUCQ	CONCEALED FLANGE HANGER
IUS ~or~ MIT	HANGER
LUS ~or~ HWPH	HANGER
HHUS	HANGER



SEE 7/S3.2 FOR ANCHOR SPACING AND ADD'L A35 FRAMING ANGLES REQ'D AT JOISTS OVER CONC. WALL BELOW

SEE S6.7 FOR STAIR DETAILS, TYP.

PROVIDE 4" LW CONC. SLAB w/ W/M AND JOINTING PER 3/S3.1 ABOVE MARINE GRADE PLYWOOD AT GARAGE

SEE 8/S6.6 FOR TENSION TIES AT INTERSECTING SHEARWALLS, TYP. 5 LOCN'S

SEE PLAN NOTE 4, TYP. BELOW ALL HEADERS ABOVE U.N.O.

FLOOR SHEATHING PER PLAN NOTE 3

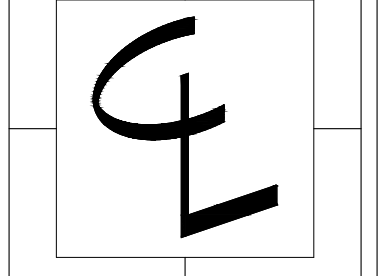
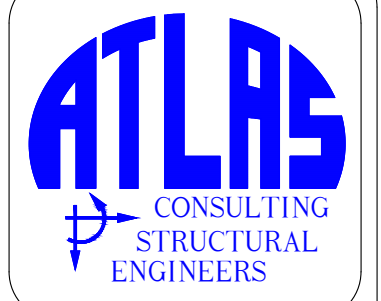
SEE PLAN NOTE 2, TYP. AT EXT. WALLS

- MAIN FLOOR PLAN NOTES**
- SOLID WALLS AND SHEARWALLS SHOWN IN PLAN ARE ABOVE FRAMING LEVEL. DASHED WALLS SHOWN IN PLAN ARE BELOW FRAMING LEVEL.
 - EXTERIOR STUDWALLS SHALL BE 2x6 STUDS @ 16" oc (MAX). SEE ARCHITECTURAL FOR INTERIOR STUDWALLS. SEE 6/6.1, 5/S6.2, AND 2/S6.2 FOR ALLOWABLE HOLES & NOTCHES IN STUDWALL STUDS AND TOP & BOTTOM PLATES.
 - FLOOR SHEATHING SHALL CONSIST OF 3/4" T&G SHEATHING (PANEL SPAN RATING 48/24). NAIL SHEATHING AT ALL FRAMED PANEL EDGES, DIAPHRAGM BOUNDARIES, BLOCKING, AND SHEAR WALLS w/ 10d @ 6" oc; AND AT ALL INTERMEDIATE SUPPORTS w/ 10d @ 12" oc (SEE 3/S6.2). GLUE SHEATHING AT ALL SUPPORTS w/ ADHESIVE CONFORMING TO ASTM SPECIFICATION D3498.
 - ALL HEADERS ABOVE (SEE 1/S2.3) SHALL HAVE A MINIMUM NUMBER OF POSTS PER 4/S6.1 AT NON-LOAD BEARING EXTERIOR WALLS, AND PER 6/S6.1 AT LOAD BEARING EXTERIOR WALLS
 - HEADERS IN EXTERIOR WALLS SHALL BE PER DETAIL 6/S6.1 U.N.O. IN PLAN.
 - AT AREA(S) INDICATED AS BLOCKED DIAPHRAGM, INSTALL 2x FLAT BLOCKING AT ALL UNFRAMED PANEL EDGES. NAIL SHEATHING PER PLAN NOTE 3.
 - SEE GENERAL STRUCTURAL NOTE #23 FOR FLOOR TRUSS REQUIREMENTS.

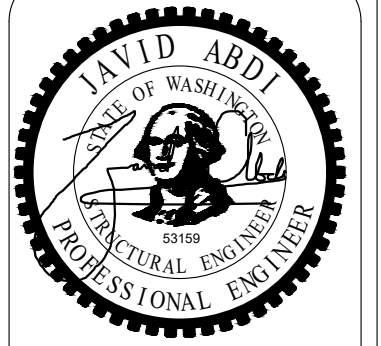
ALL EXTERIOR EXPOSED WOOD MEMBERS SHALL BE PRESSURE TREATED (OR APPROVED ALT.), SEE GENERAL STRUCTURAL NOTES #26 & 27

1 MAIN FLOOR FRAMING PLAN
 S2.2 1/4" = 1'-0"

NORTH



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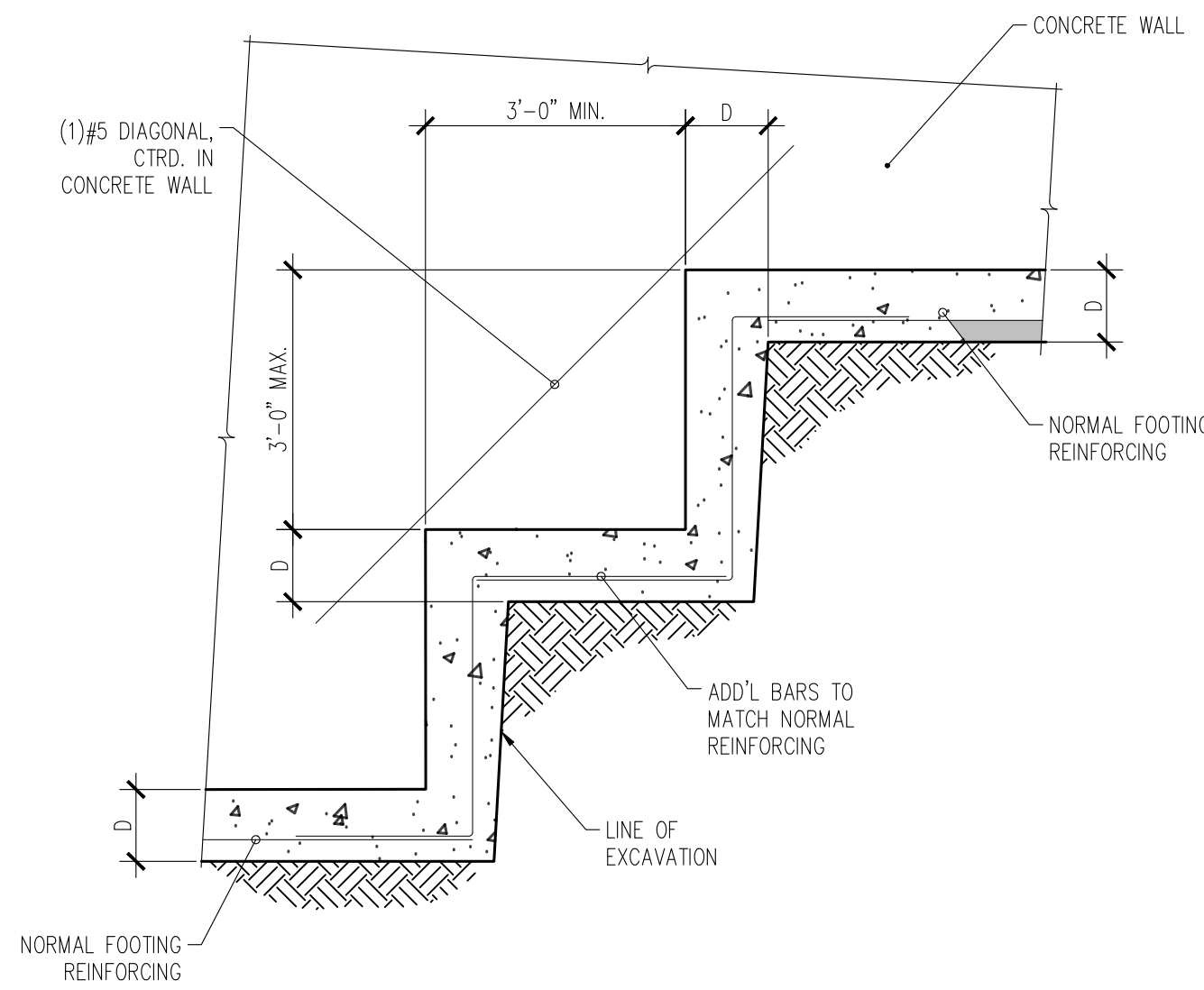


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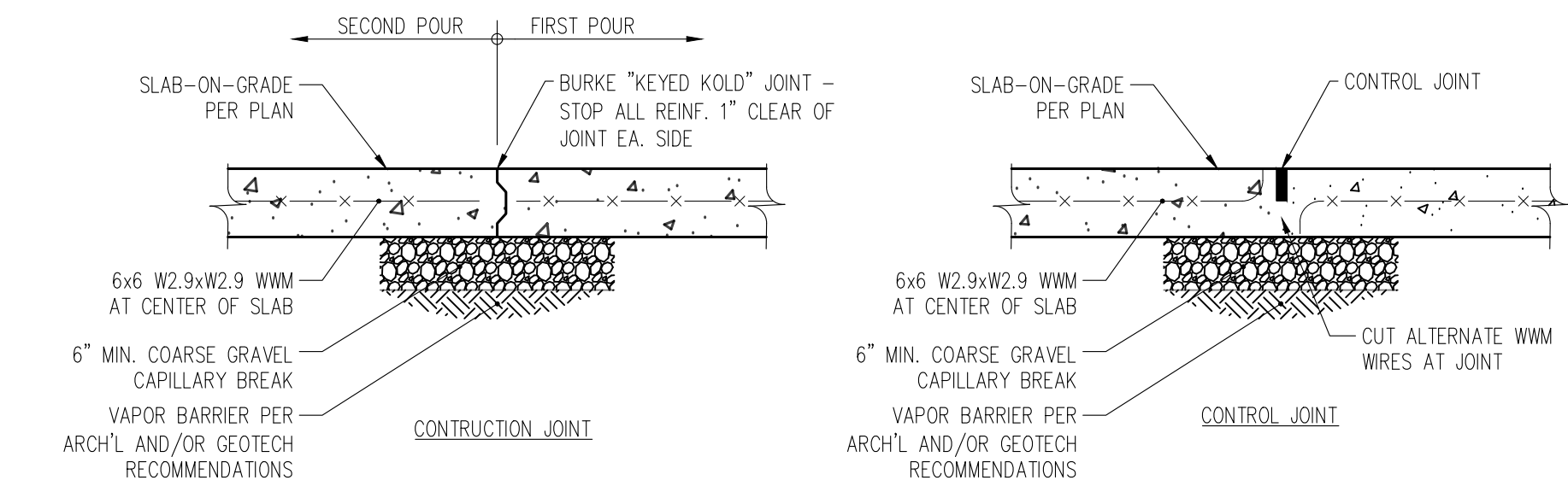
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 Main Floor Framing Plan

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S2.2

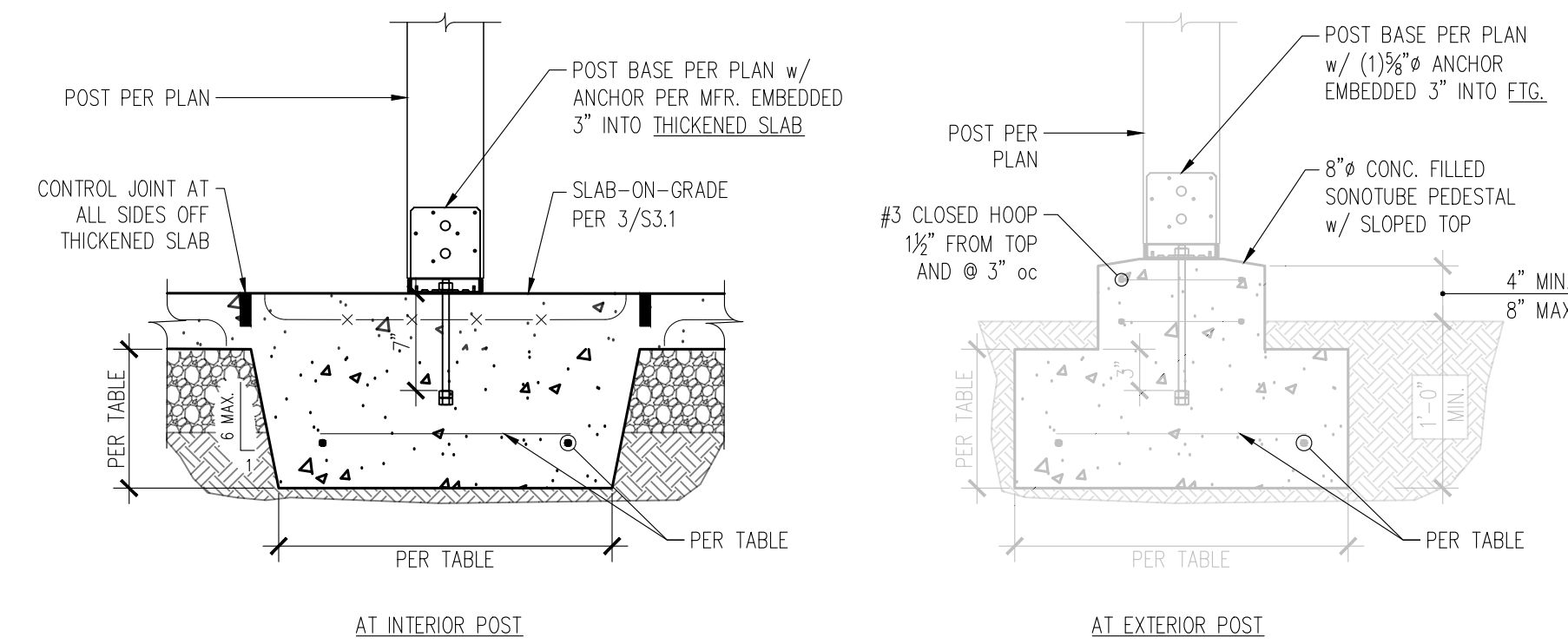


6 TYPICAL STEPPED FOOTING
S3.1 N.T.S.

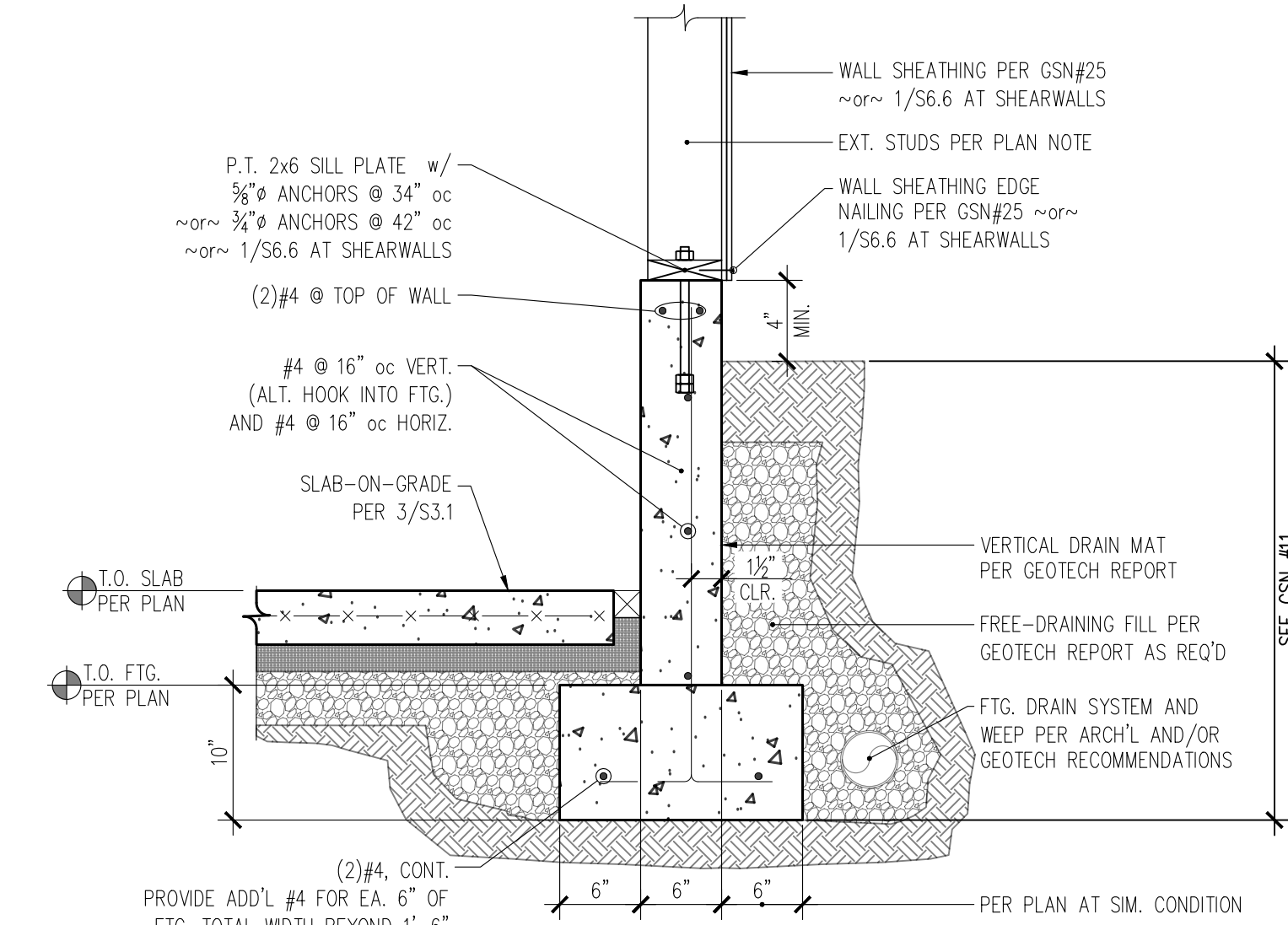


3 TYPICAL SLAB-ON-GRADE JOINTING
S3.1 1" = 1'-0"

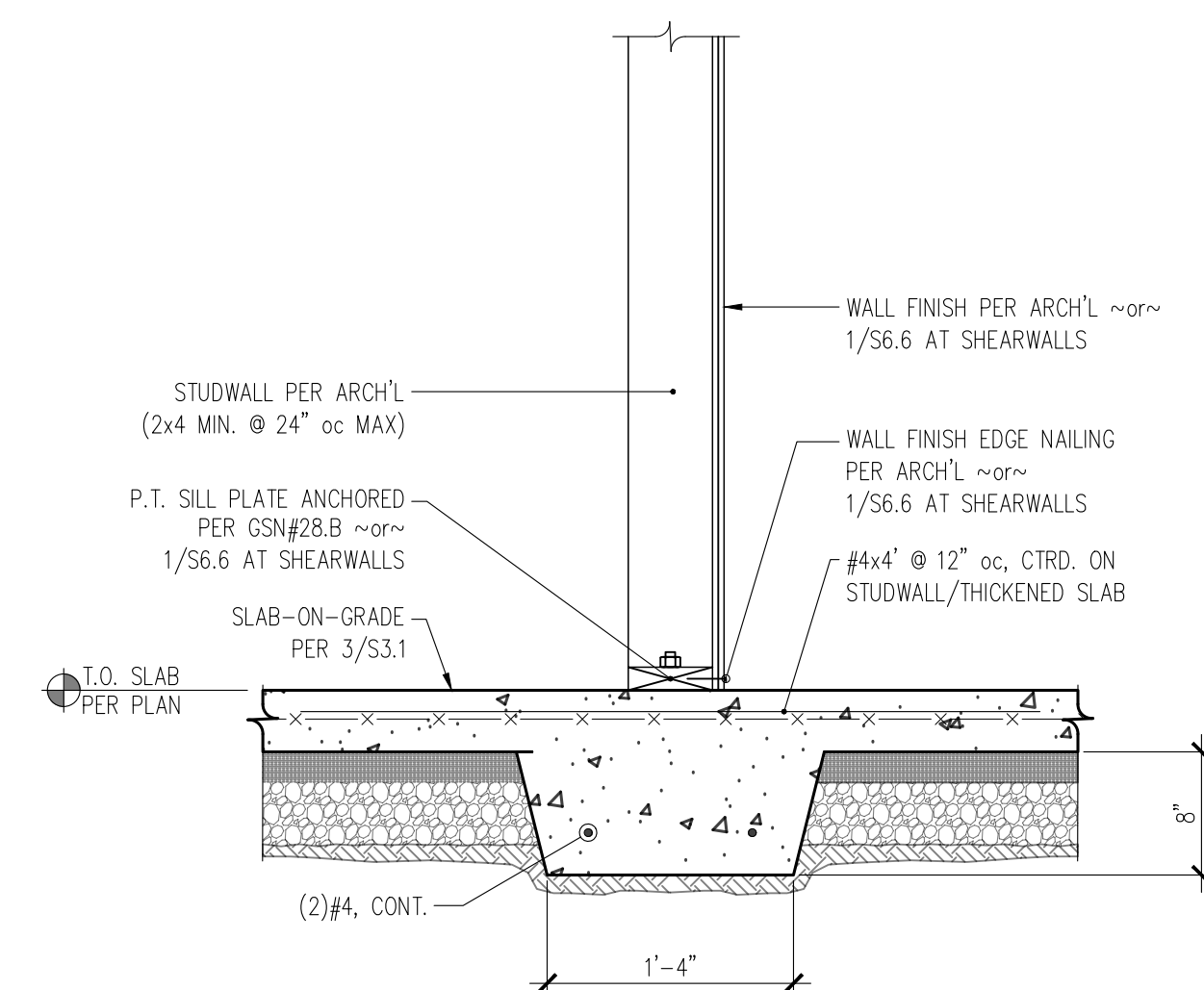
FTG. MARK	DIMENSIONS			REINFORCING DIRECTION	
	LENGTH	WIDTH	DEPTH	SHORT	LONG
F2.0	2'-0"	2'-0"	10"	(3)#4	(3)#4
F2.5	2'-6"	2'-6"	10"	(4)#4	(4)#4
F3.0	3'-0"	3'-0"	10"	(4)#4	(4)#4
F3.6	3'-6"	3'-6"	12"	(5)#4	(5)#4
F4.0	4'-0"	4'-0"	12"	(6)#4	(6)#4



5 SPREAD FOOTING
S3.1 1" = 1'-0"

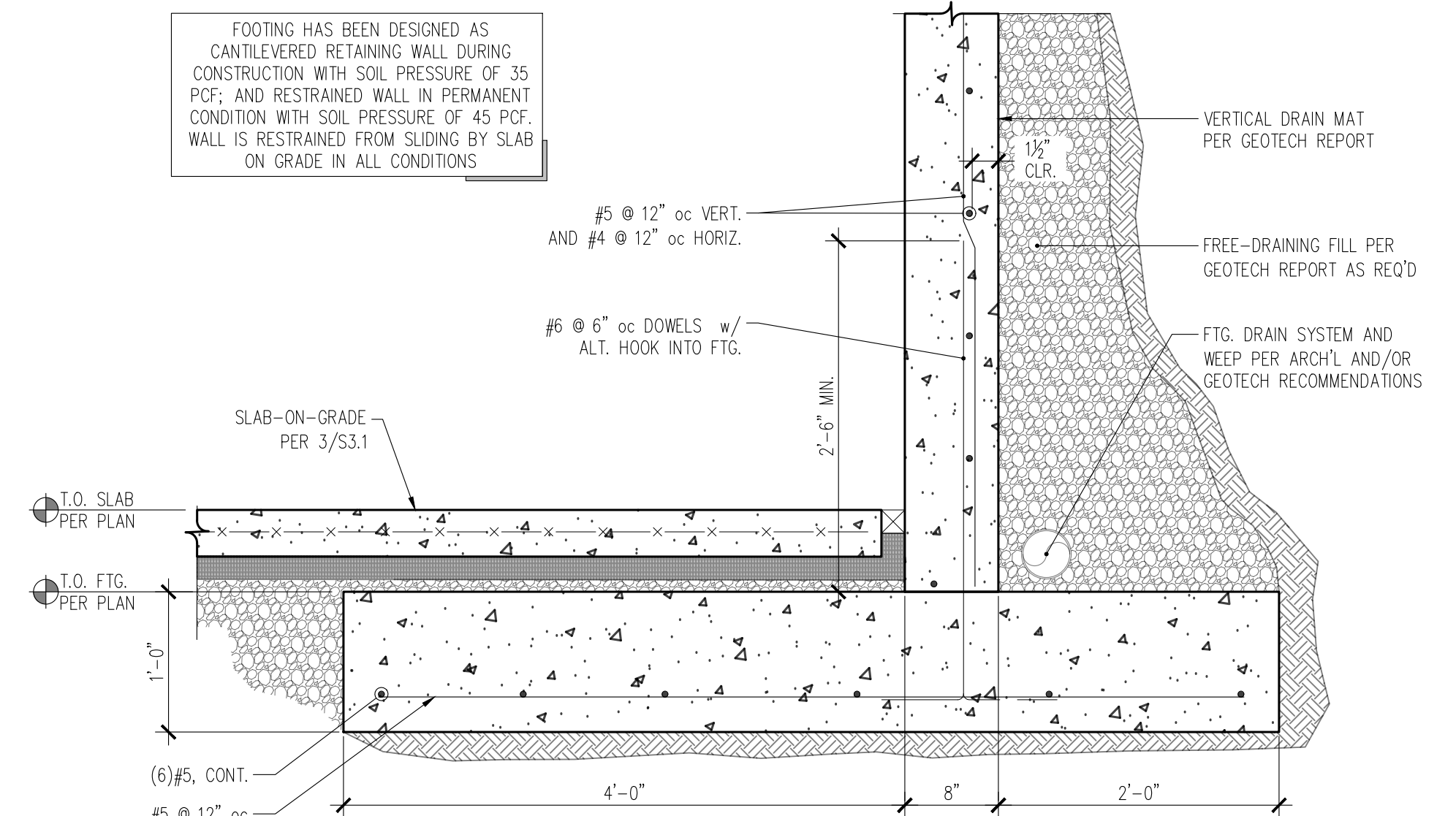


2 SECTION THROUGH PARTIAL HEIGHT FOUNDATION WALL
S3.1 1" = 1'-0"



4 SECTION THROUGH THICKENED SLAB AT INTERIOR STRUCTURAL WALL
S3.1 1" = 1'-0"

FOOTING HAS BEEN DESIGNED AS CANTILEVERED RETAINING WALL DURING CONSTRUCTION WITH SOIL PRESSURE OF 35 PCF; AND RESTRAINED WALL IN PERMANENT CONDITION WITH SOIL PRESSURE OF 45 PCF. WALL IS RESTRAINED FROM SLIDING BY SLAB ON GRADE IN ALL CONDITIONS



1 SECTION THROUGH FOUNDATION WALL
S3.1 1" = 1'-0"

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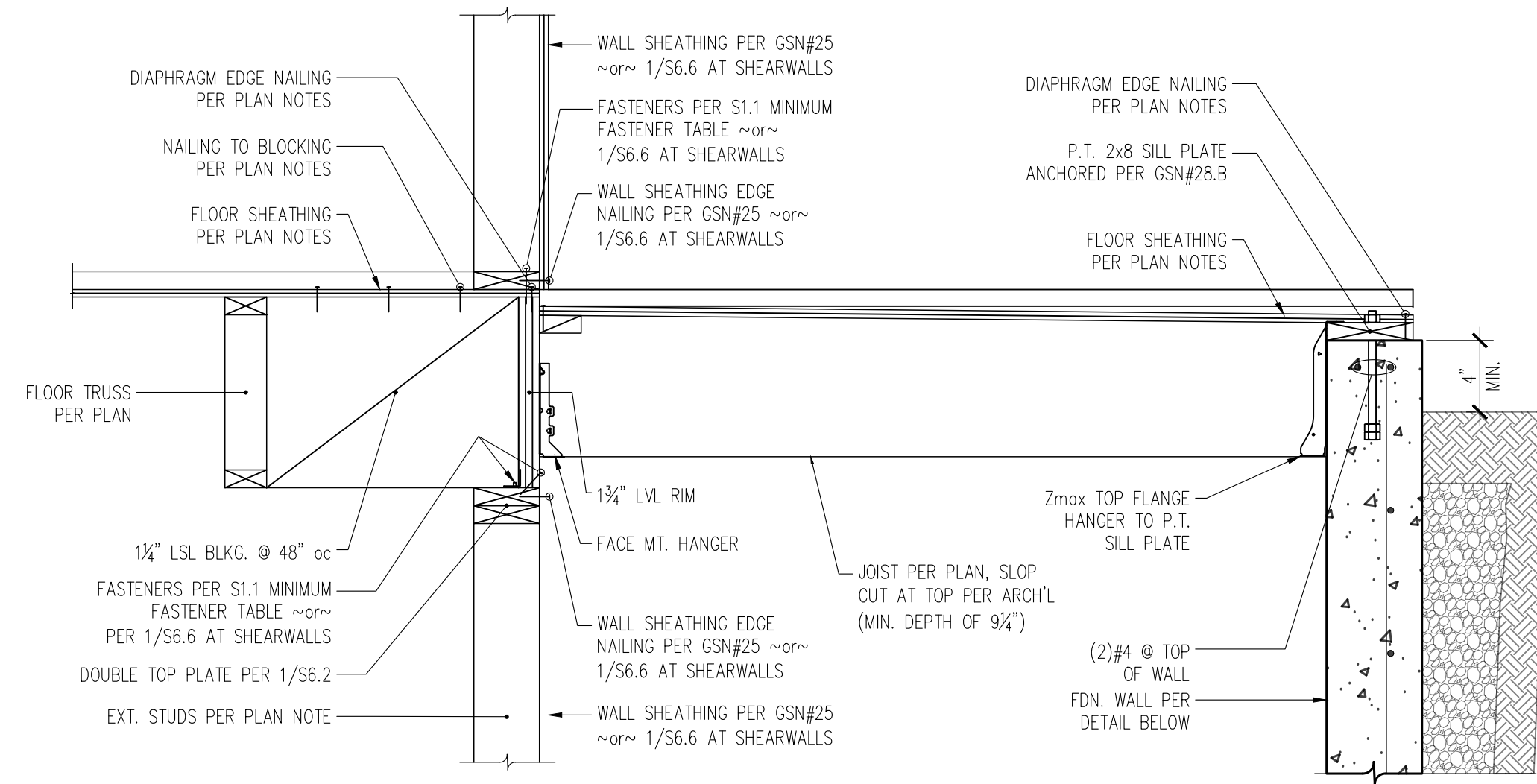
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S3.1



9 SECTION THROUGH GUEST PATIO PERPENDICULAR JOISTS
S3.2 1" = 1'-0"

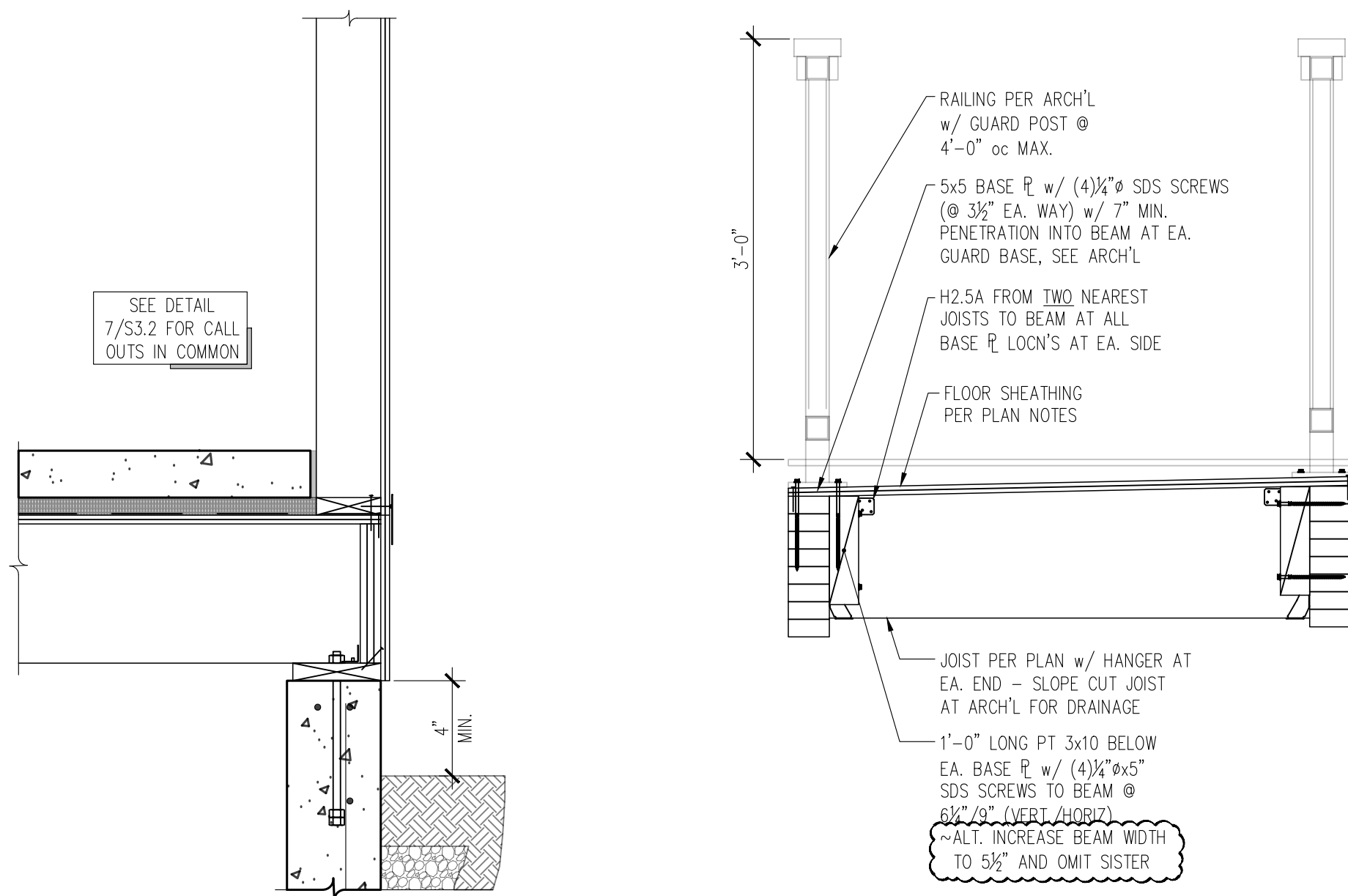
MIN. STRAIGHT DEVELOPMENT LENGTH			MIN. LAP SPLICE LENGTH (CLASS B)		
BAR SIZE	TOP BARS	OTHER BARS	BAR SIZE	TOP BARS	OTHER BARS
#4	25"	19"	#4	33"	25"
#5	31"	24"	#5	41"	31"

*TOP BARS ARE HORIZONTAL BARS WITH MORE THAN 12" DEPTH OF CONCRETE CAST BELOW THEM
IF CLEAR CONCRETE COVER IS LESS THAN 1x THE DIAMETER OF THE BAR OR THE CENTER-TO-CENTER SPACING IS LESS THAN (3) BAR DIAMETERS, THEN VALUES SHALL BE INCREASED BY 50%

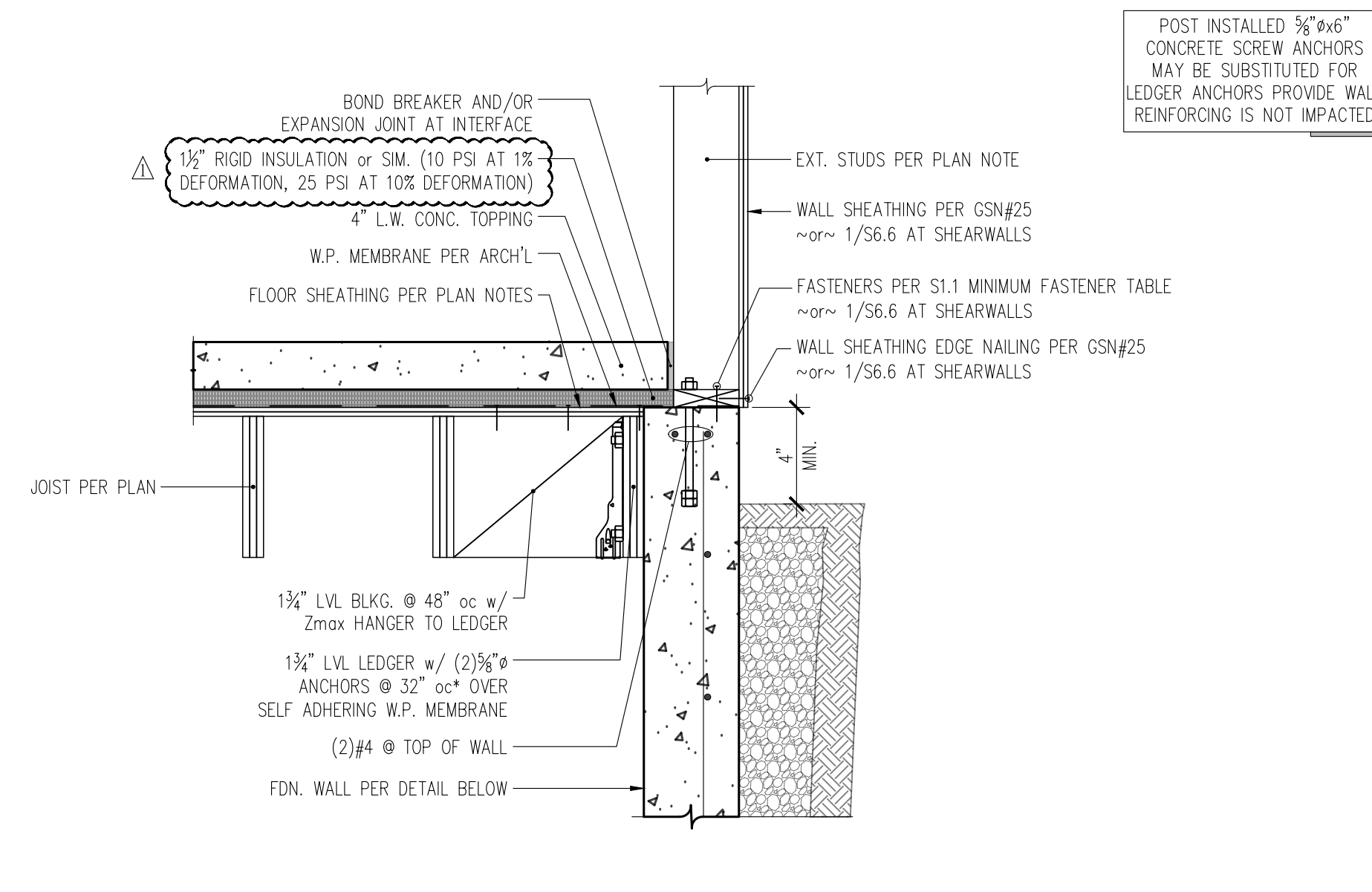
MIN. EMBEDMENT LENGTH FOR STANDARD END HOOKS	
BAR SIZE	LENGTH
#4	7"
#5	9"

- SIDE COVER MUST BE EQUAL TO OR GREATER THAN 2d
- END COVER FOR 90° HOOKS MUST BE EQUAL TO OR GREATER THAN 2d

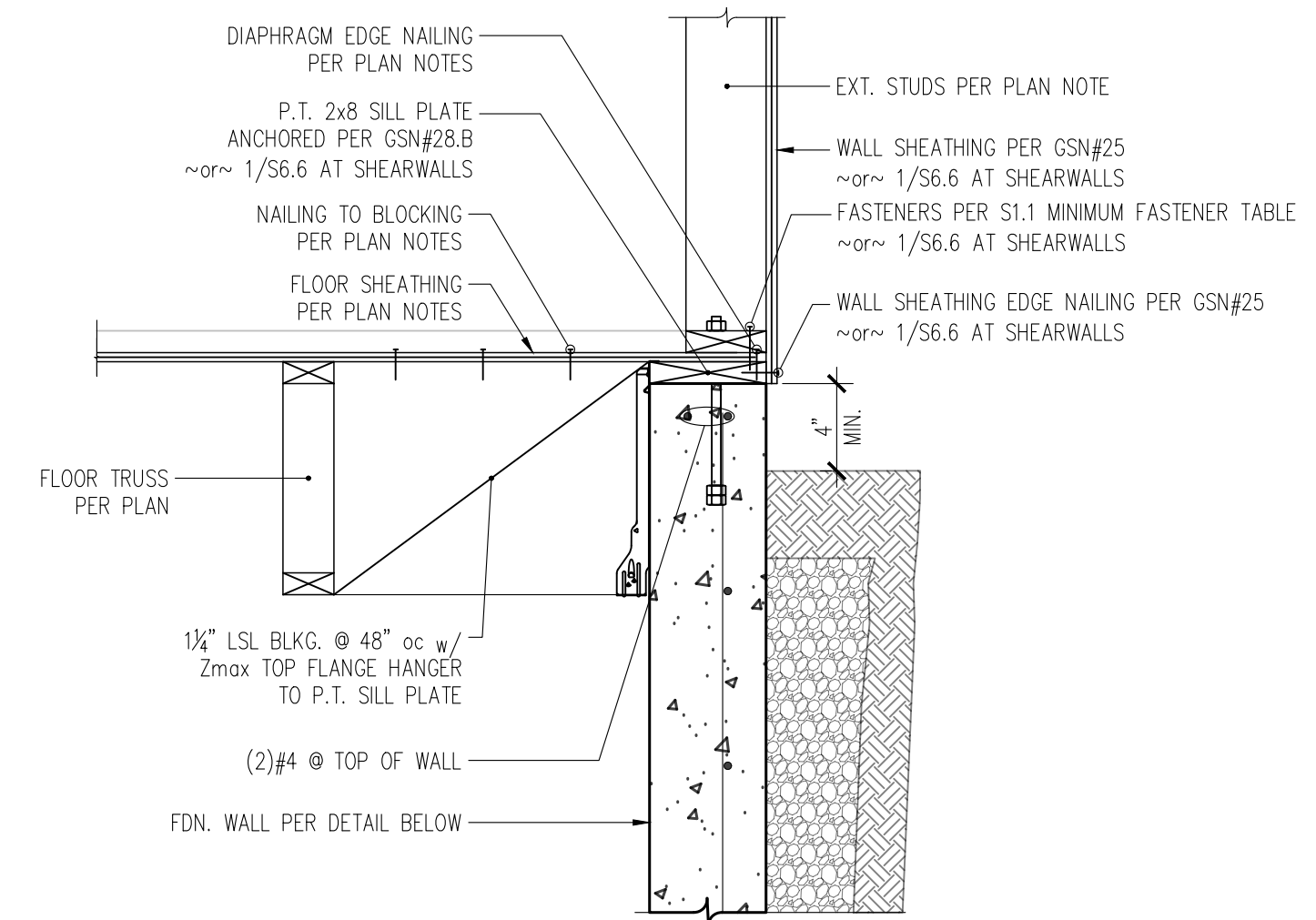
3 CONCRETE REINFORCING DEVELOPMENT AND SPLICE LENGTH TABLES
S3.2 N/A



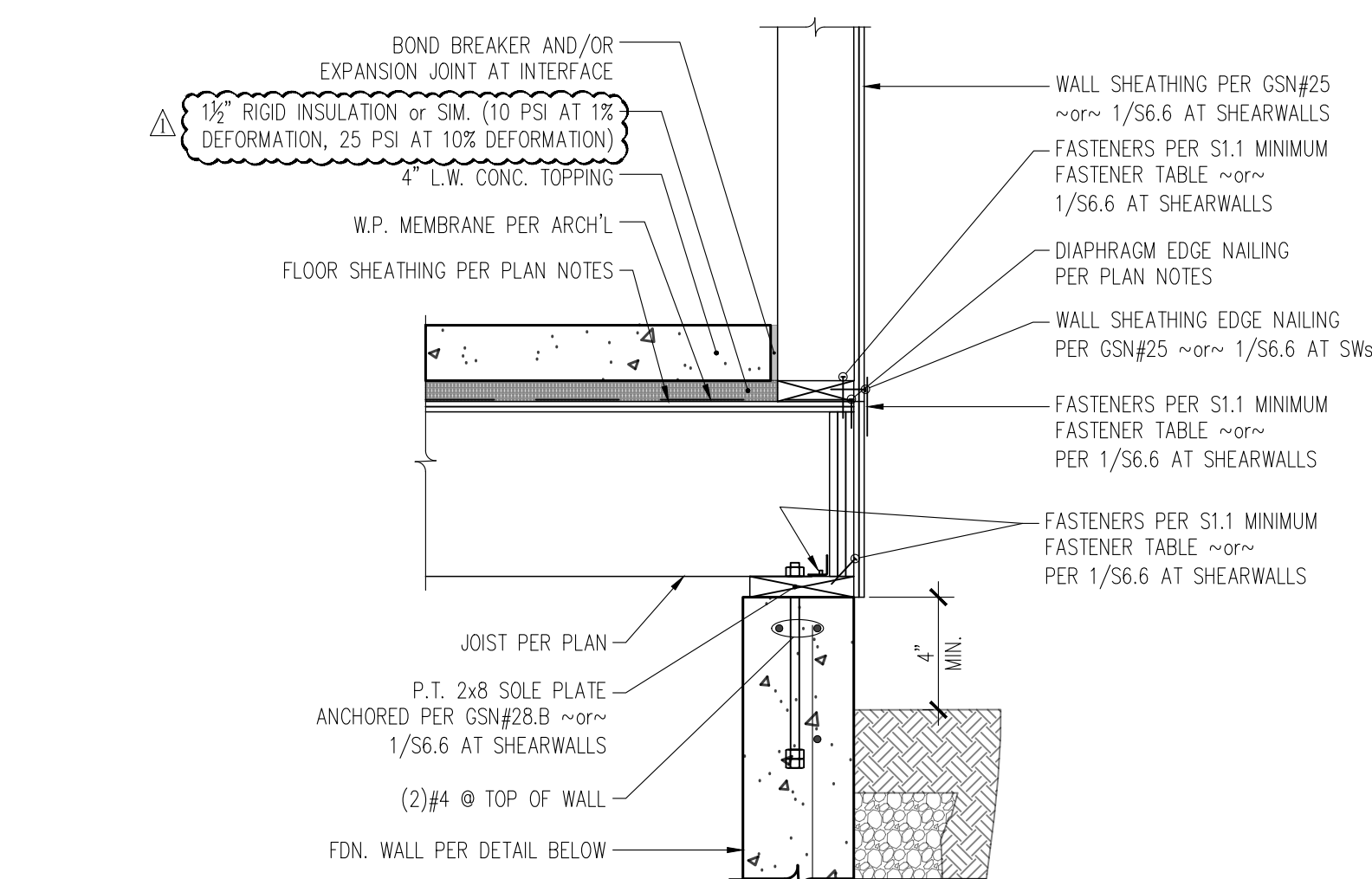
8 SECTION THROUGH HIGH FOUNDATION WALL AND HUNG PERPENDICULAR GARAGE JOISTS
S3.2 1" = 1'-0"



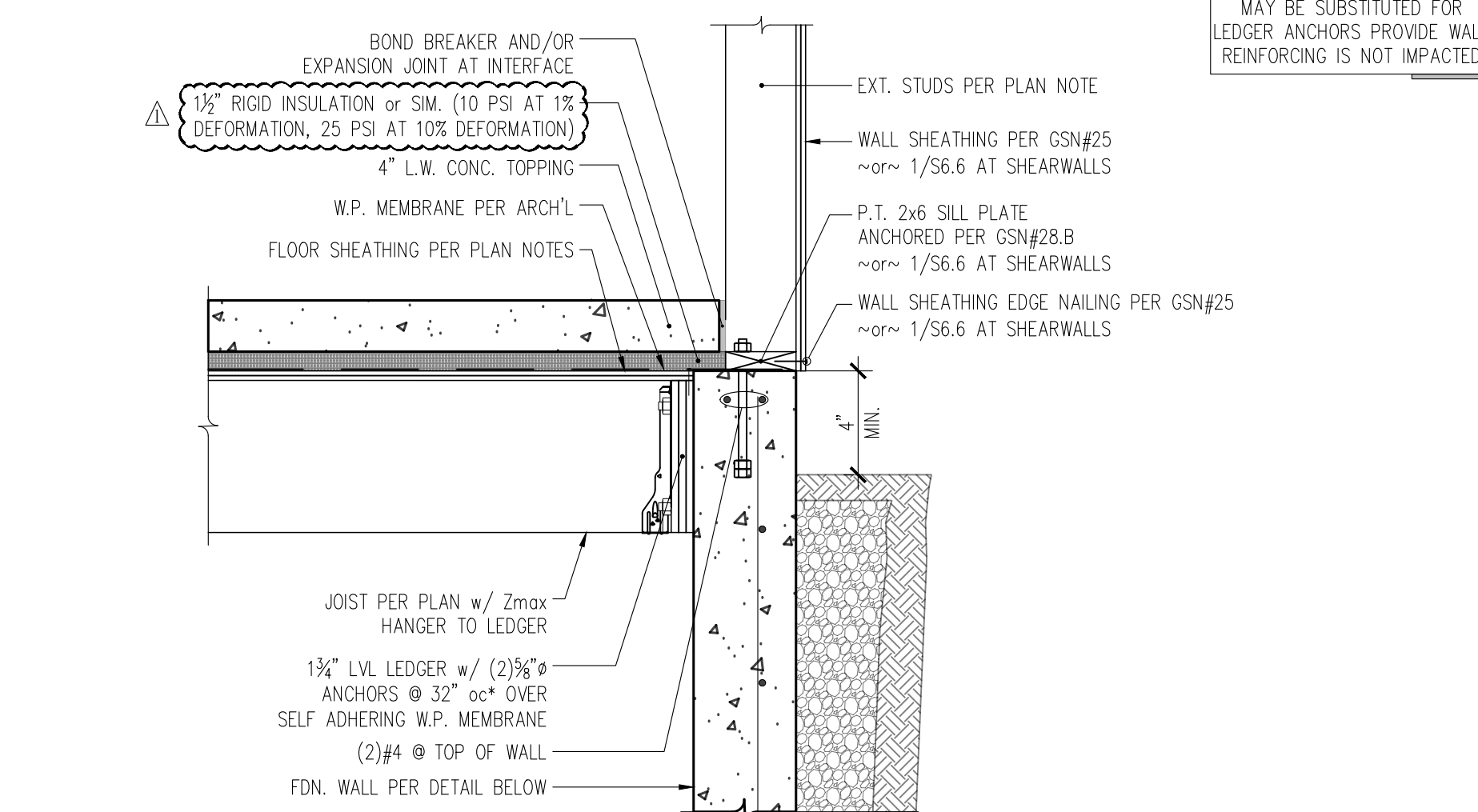
5 SECTION THROUGH HIGH FOUNDATION WALL AND HUNG PERPENDICULAR GARAGE JOISTS
S3.2 1" = 1'-0"



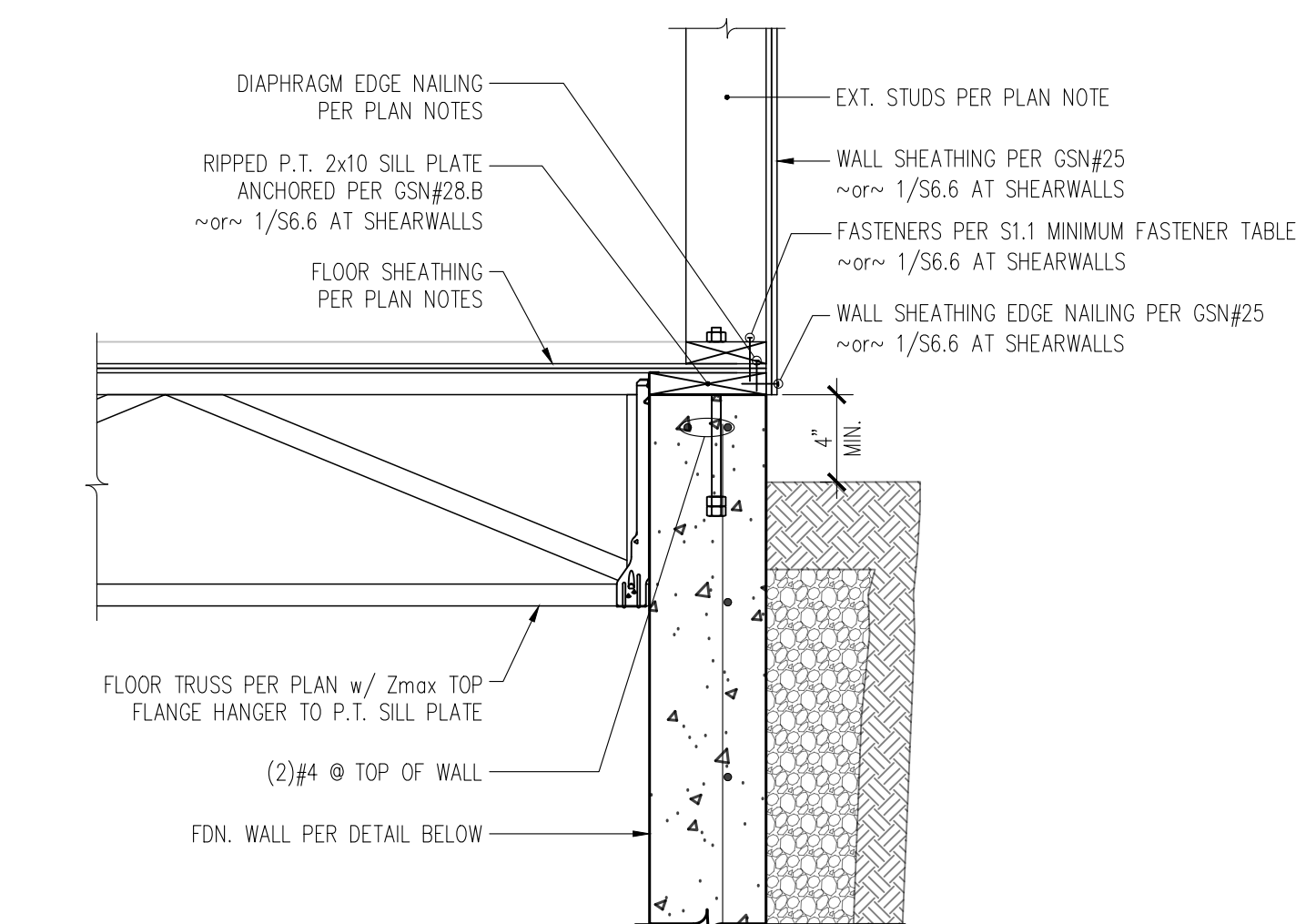
2 SECTION THROUGH HIGH FOUNDATION WALL AND HUNG PERPENDICULAR FLOOR TRUSS
S3.2 1" = 1'-0"



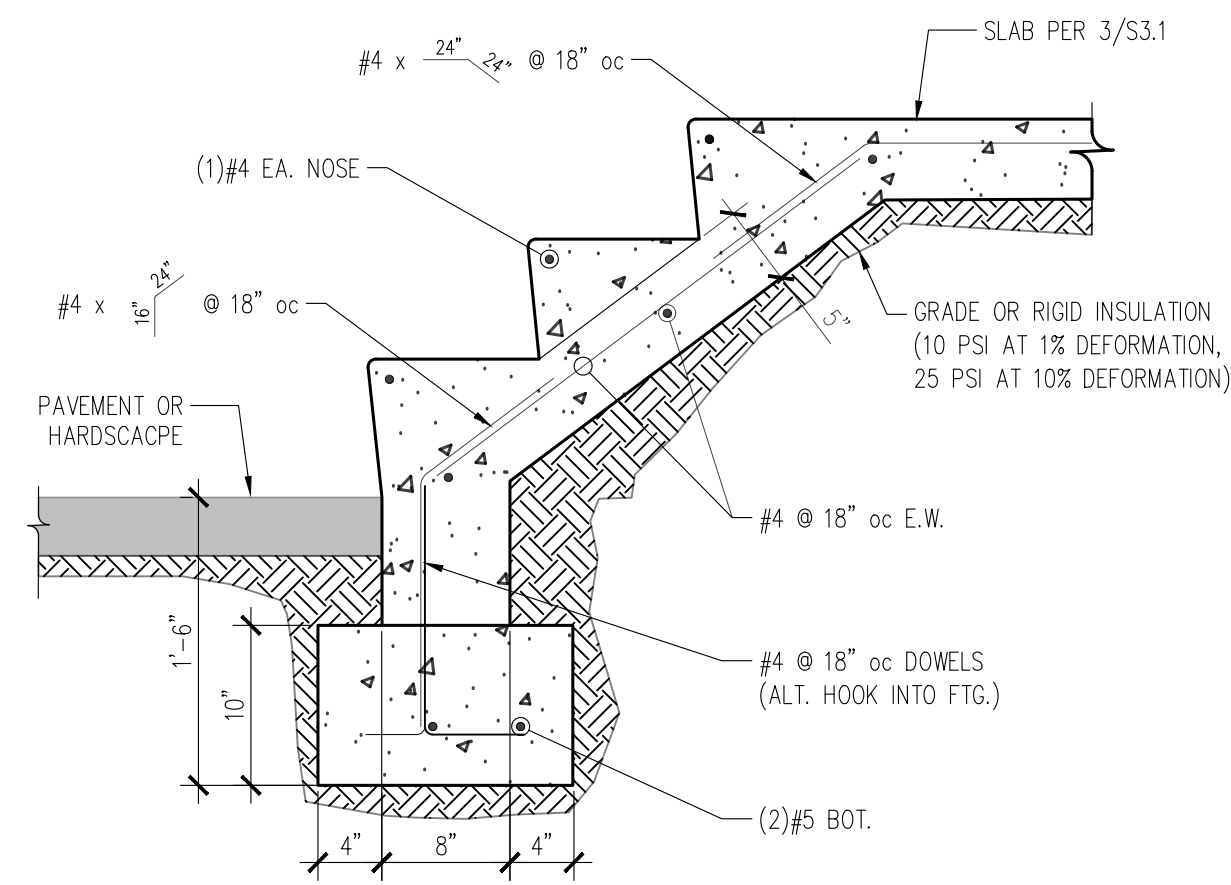
7 SECTION THROUGH HIGH FOUNDATION WALL
S3.2 1" = 1'-0"



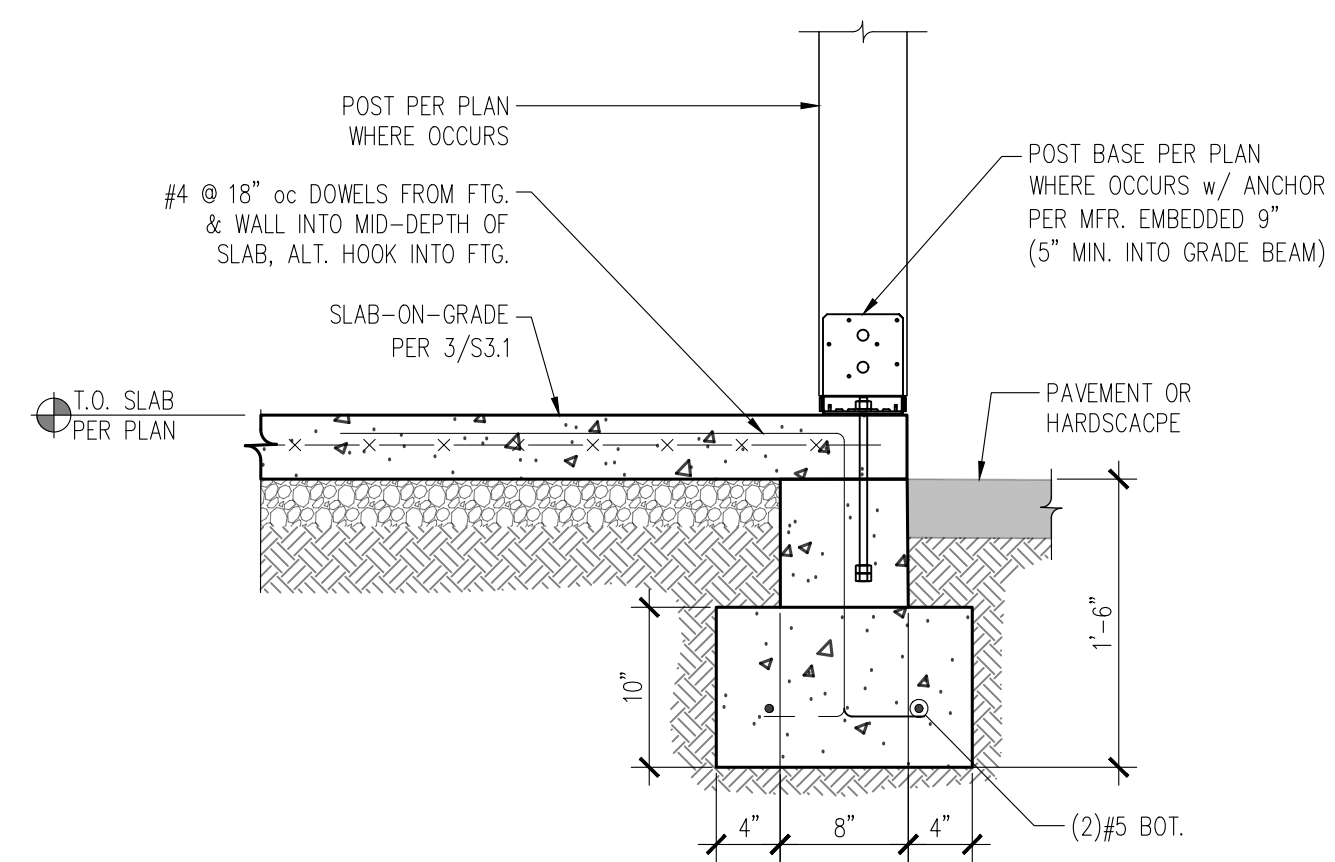
4 SECTION THROUGH HIGH FOUNDATION WALL AND HUNG PERPENDICULAR GARAGE JOISTS
S3.2 1" = 1'-0"



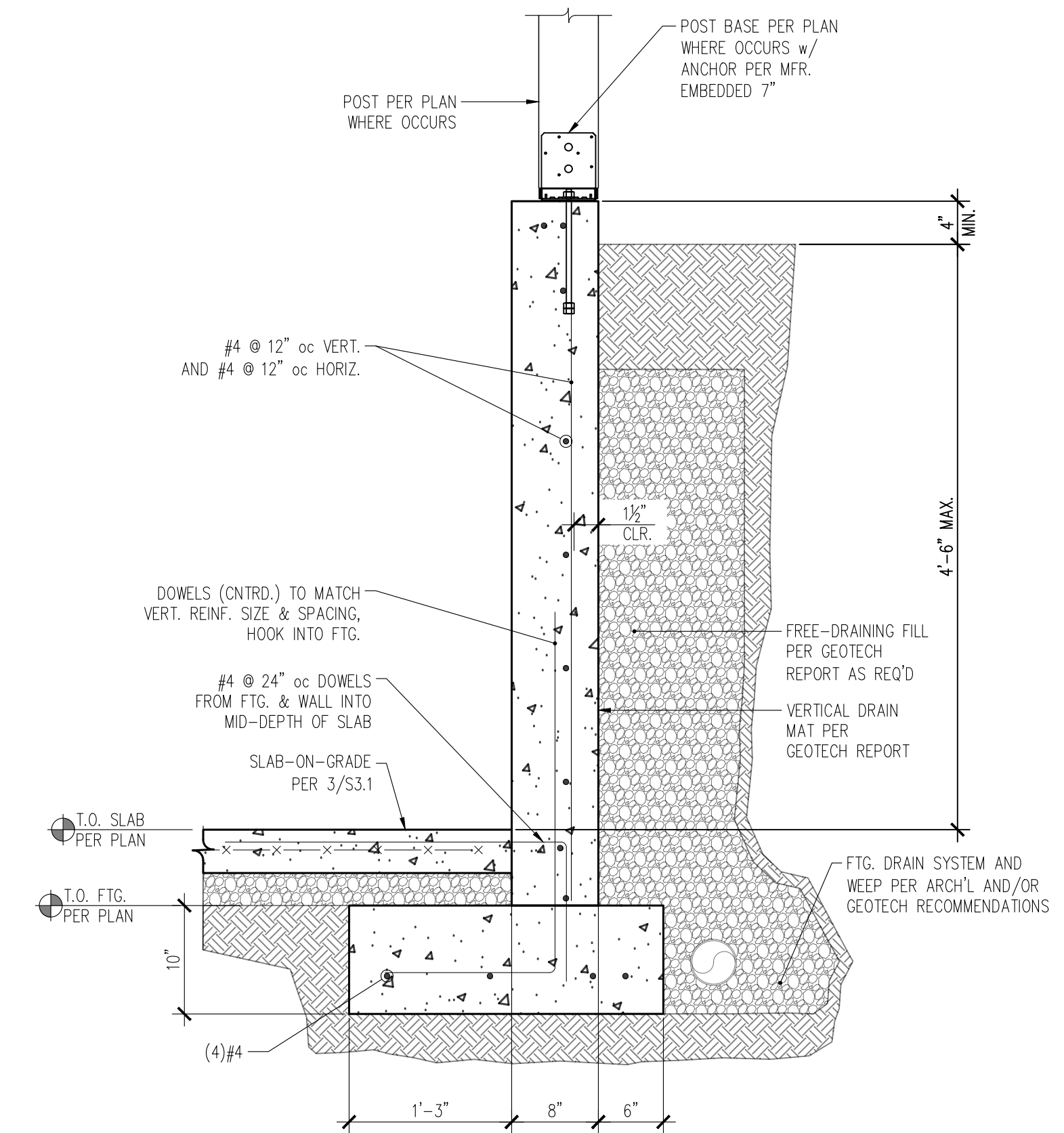
1 SECTION THROUGH HIGH FOUNDATION WALL AND HUNG PERPENDICULAR FLOOR TRUSS
S3.2 1" = 1'-0"



5 CAST-IN-PLACE STAIR
S3.3 1" = 1'-0"



4 EXTERIOR SLAB
S3.3 1" = 1'-0"



1 SECTION THROUGH SOUTH RETAINING WALL
S3.3 1" = 1'-0"

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Typical Wood Details

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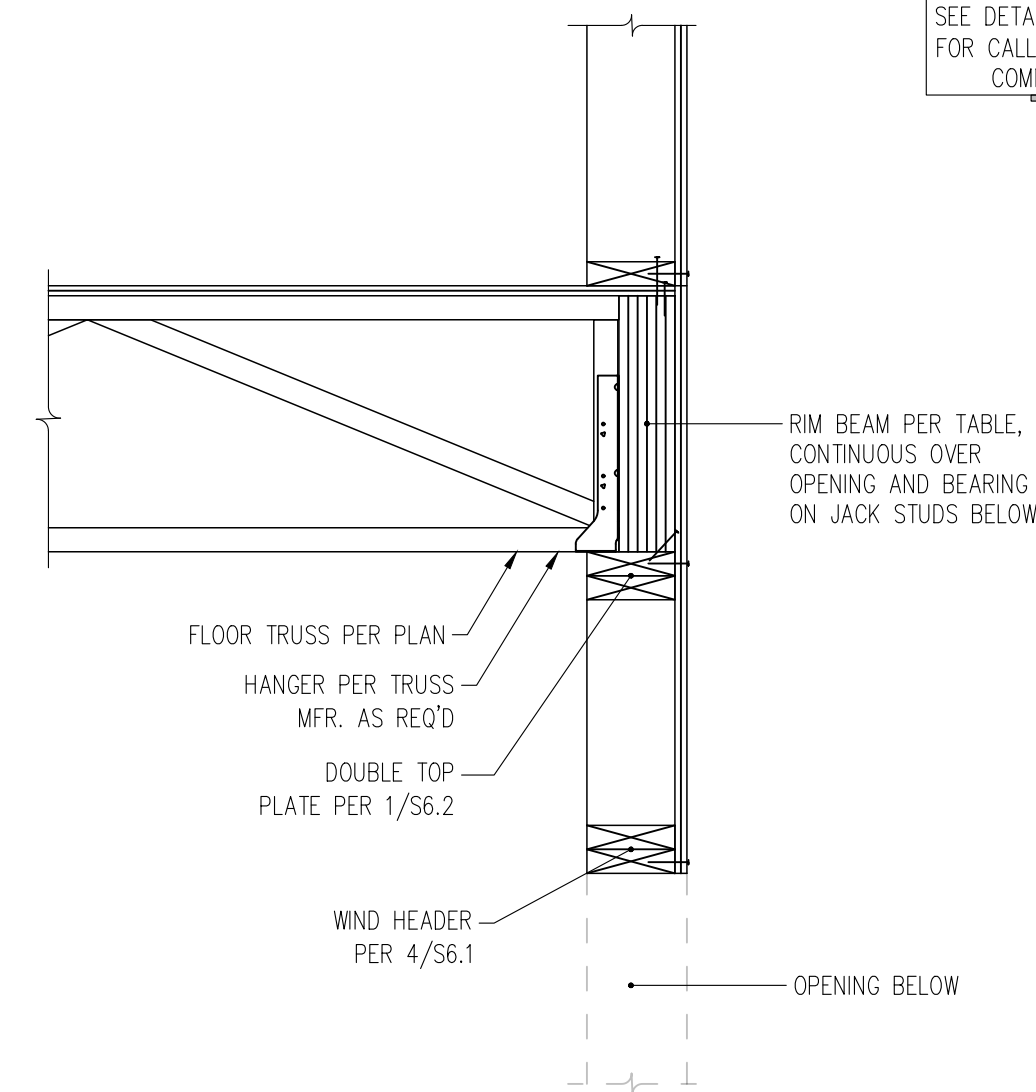
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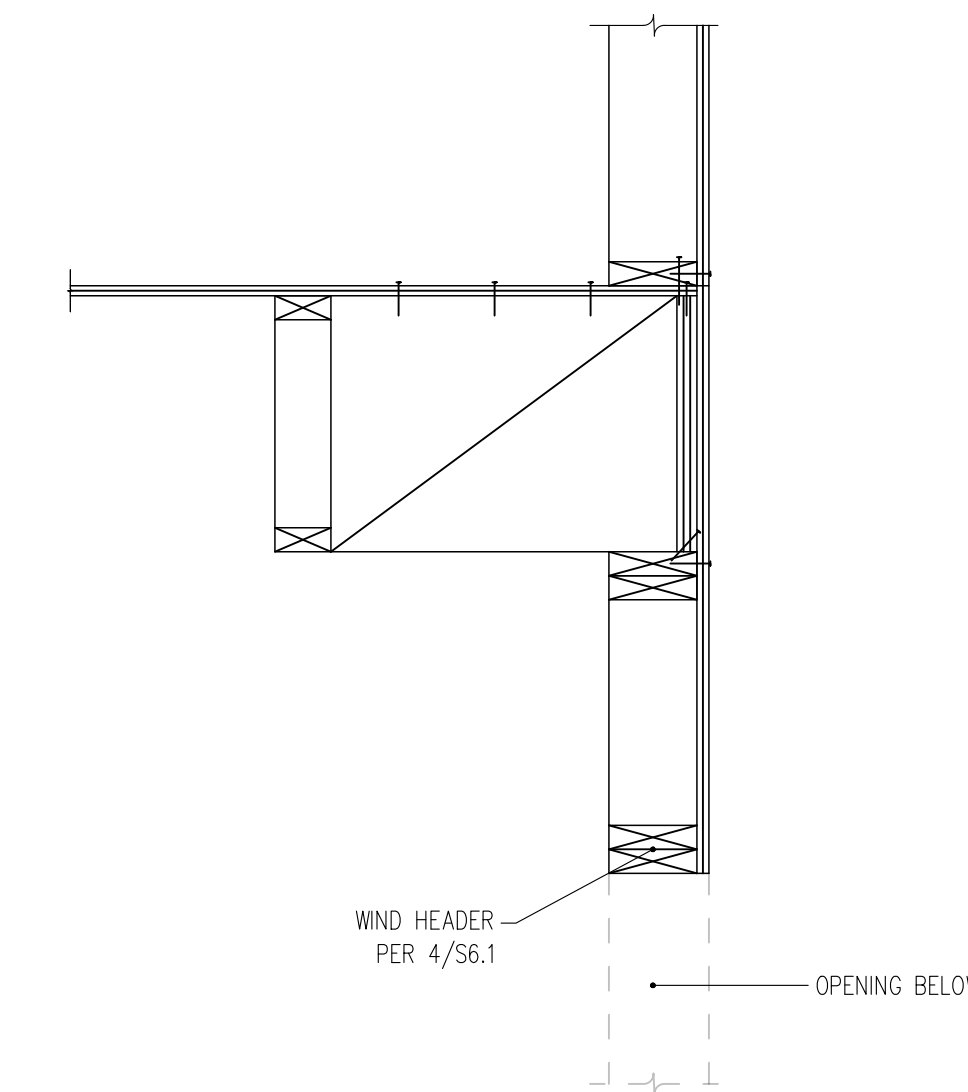
10.18.22

S6.1

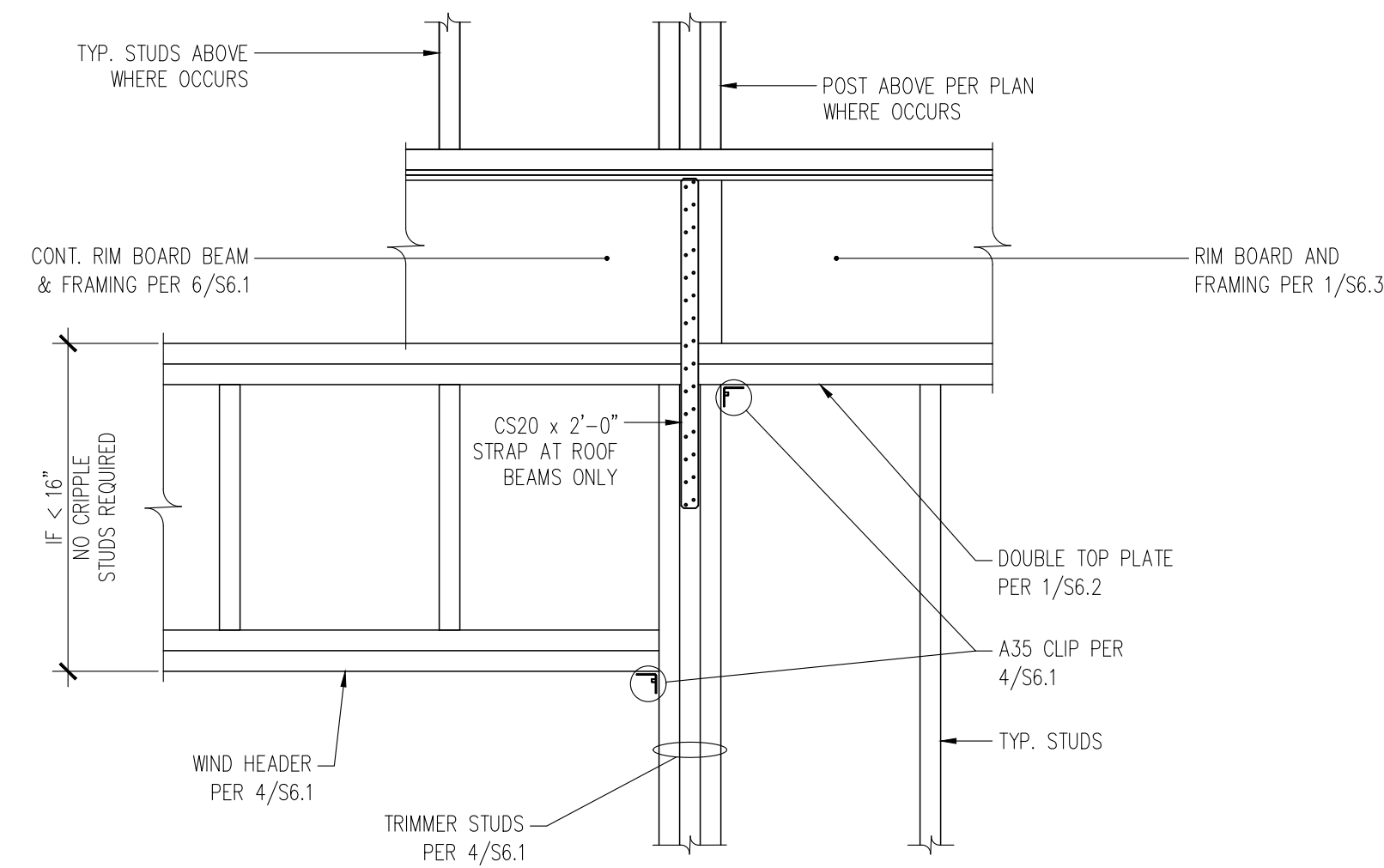
UPPER FLOOR		
OPENING WIDTH, L	RIM/HEADER SIZE	MINIMUM No. OF STUD
L ≤ 3'-6"	1 3/4"x16" LVL	(1)2x6
L ≤ 6'-6"	1 3/4"x16" LVL	(2)2x6
MAIN FLOOR		
L ≤ 3'-6"	1 3/4"x16" LVL	(1)2x6
L ≤ 6'-6"	1 3/4"x16" LVL	(2)2x6



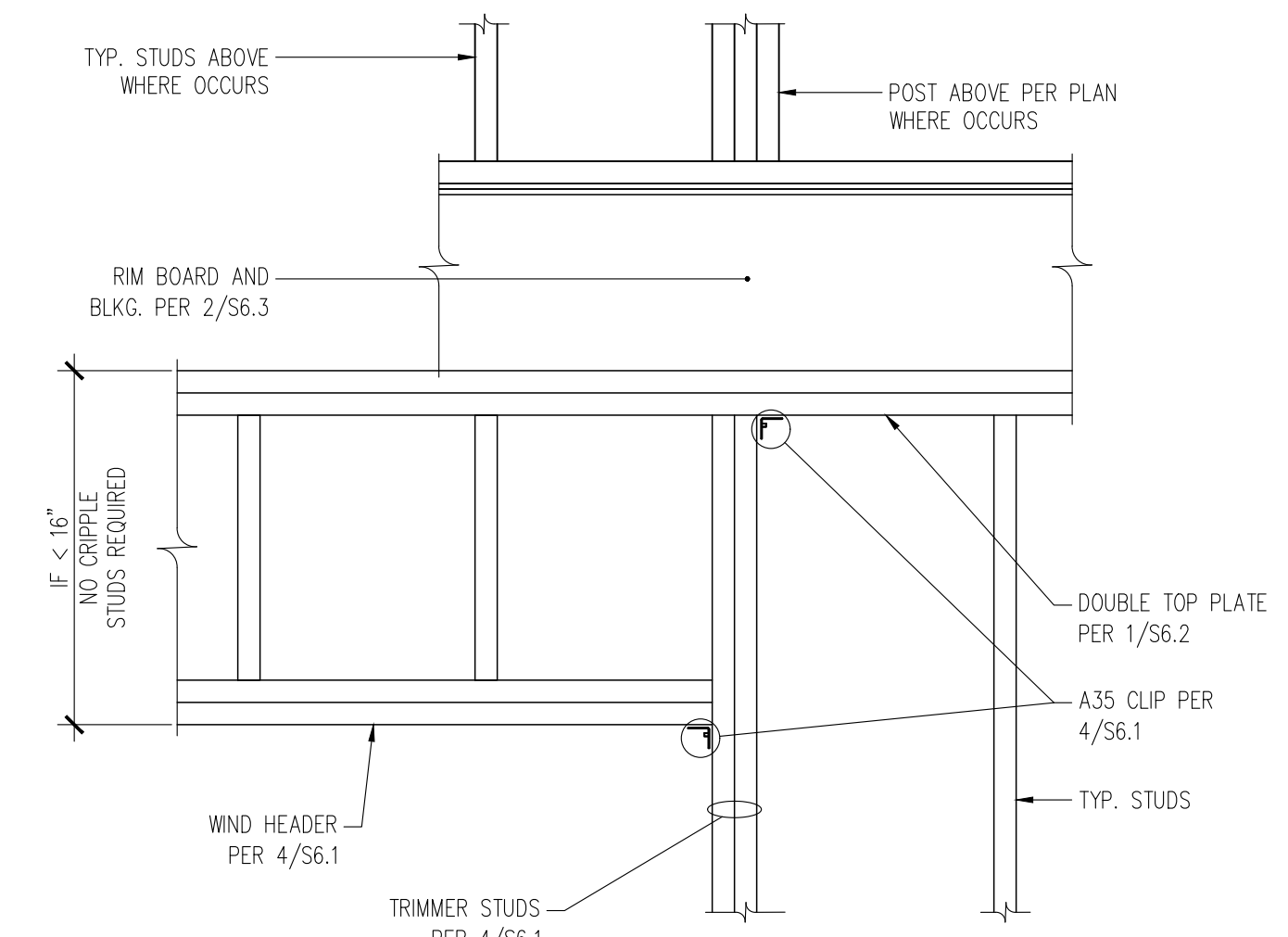
6 TYPICAL RIMBOARD HEADER & WIND HEADER IN LOAD BEARING EXTERIOR WALL
S6.1 NTS



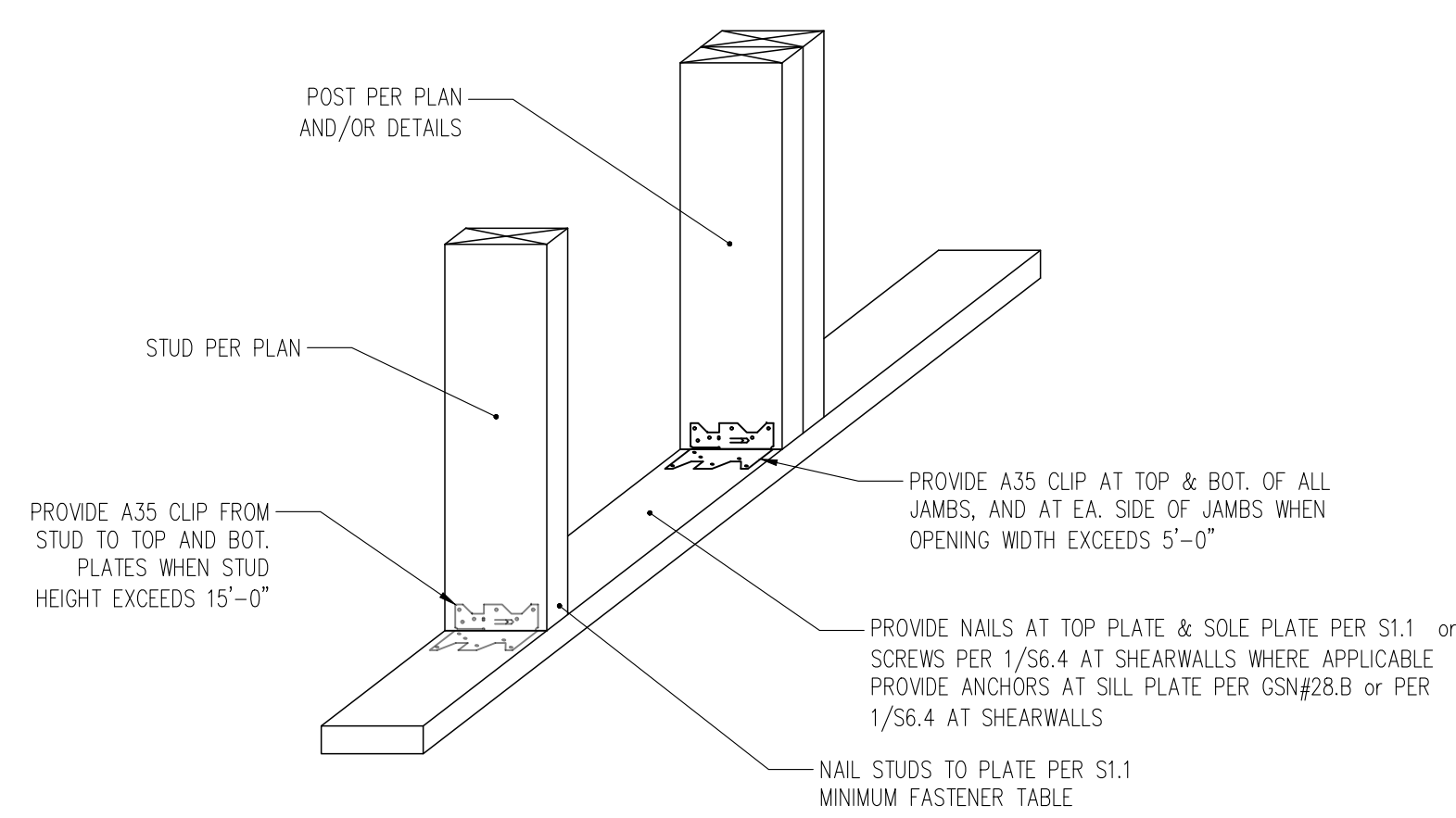
3 TYPICAL WIND HEADER IN NON-LOAD BEARING EXTERIOR WALL
S6.1 NTS



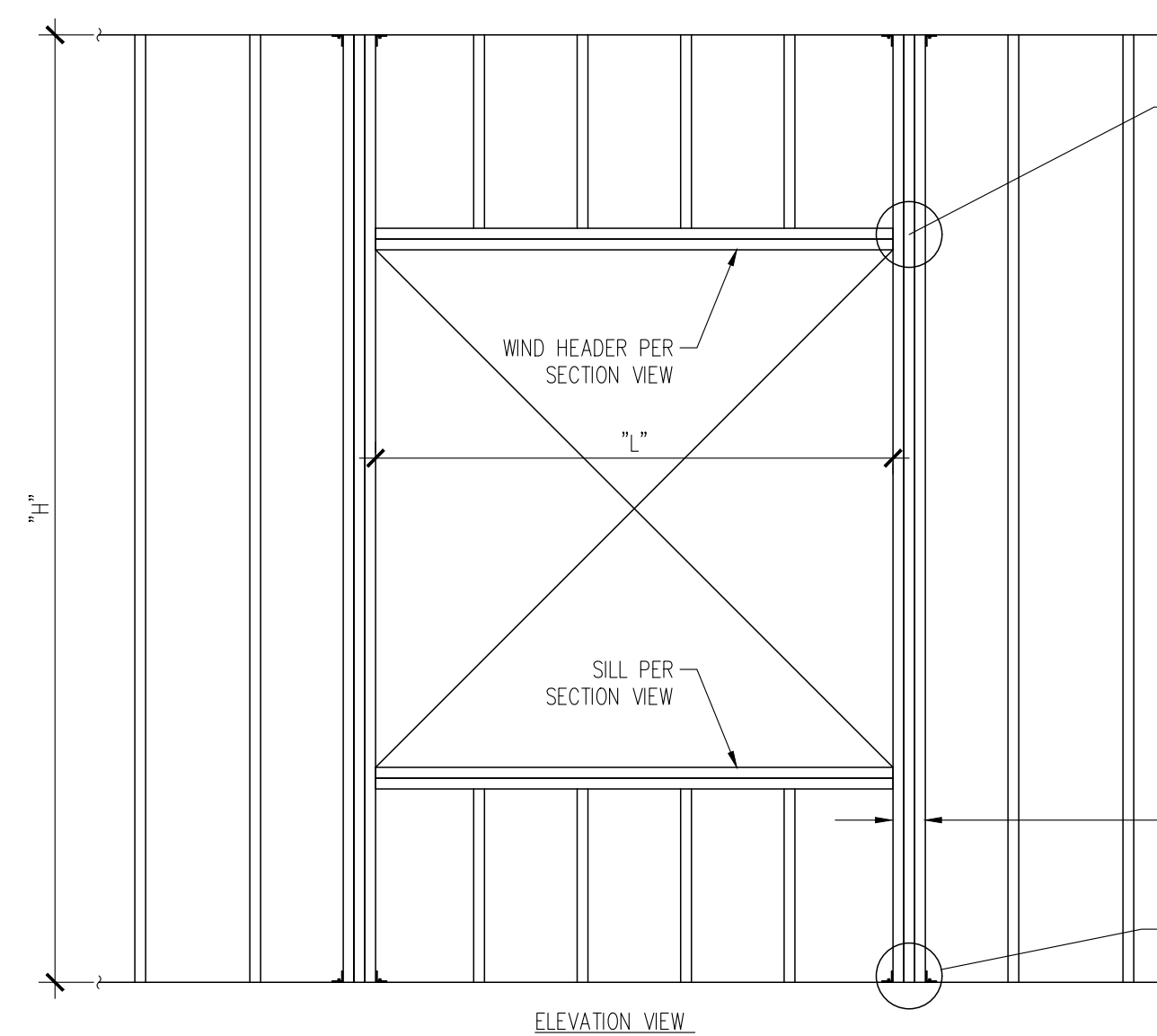
5 TYPICAL FLUSH BEAM/HEADER IN EXTERIOR WALL
S6.1 NTS



2 TYPICAL WIND HEADER DETAIL
S6.1 NTS



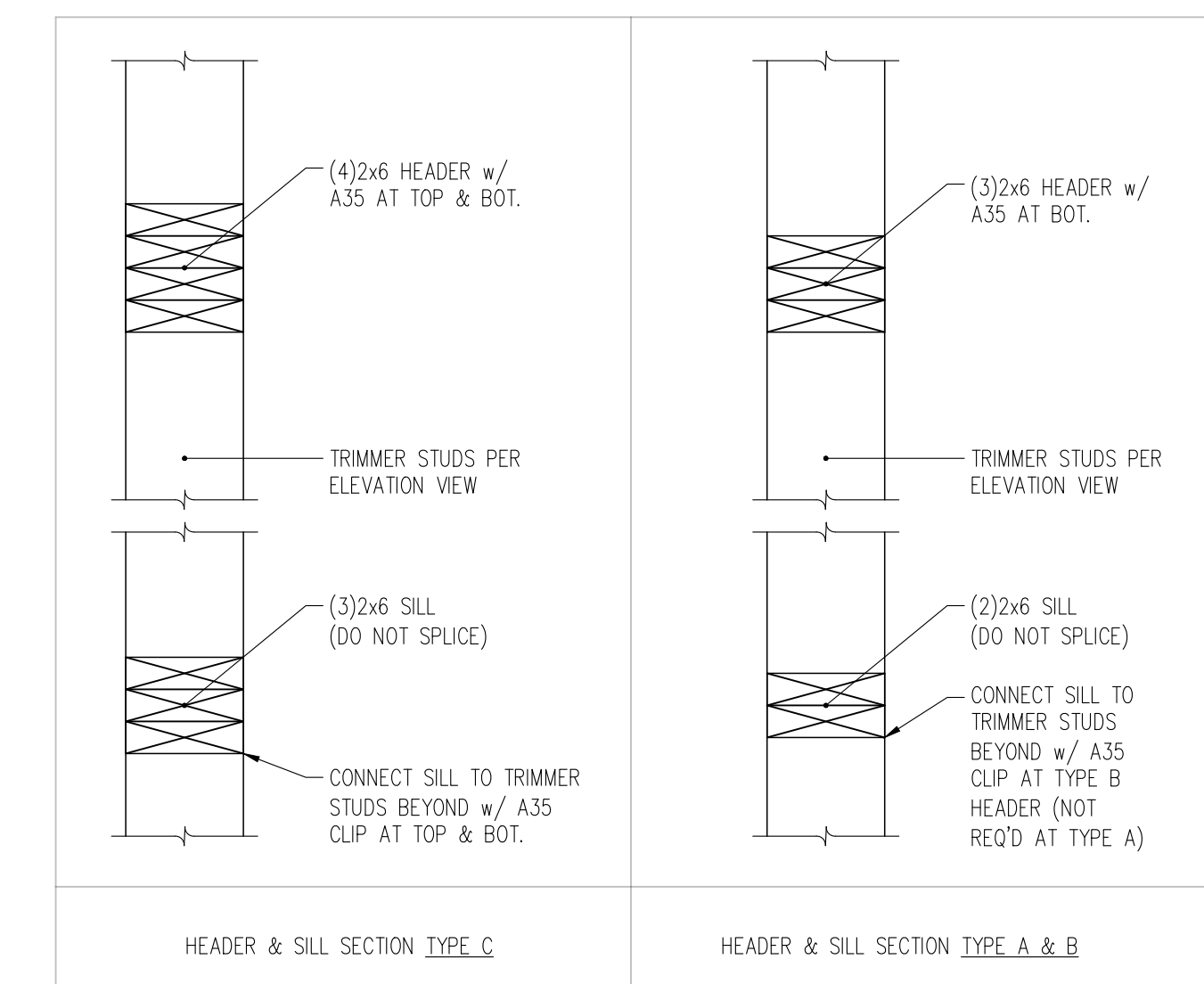
7 CONNECTION OF EXTERIOR STUDS AT TOP & BOTTOM PLATES
S6.1 NTS



4 TYPICAL WIND HEADER
S6.1 NTS

CLEAR HEIGHT "H"	OPENING WIDTH "L"	HDR./SILL TYPE PER SECTION AT RIGHT	No. OF FULL HEIGHT TRIMMER STUDS "D"
H < 12'	L ≤ 6'-0"	A	2
	6' < L < 10'	B	2
	10' ≤ L ≤ 15'	C	3
12' < H < 16'	L ≤ 10'	B	3
	10' ≤ L ≤ 15'	C	6x8

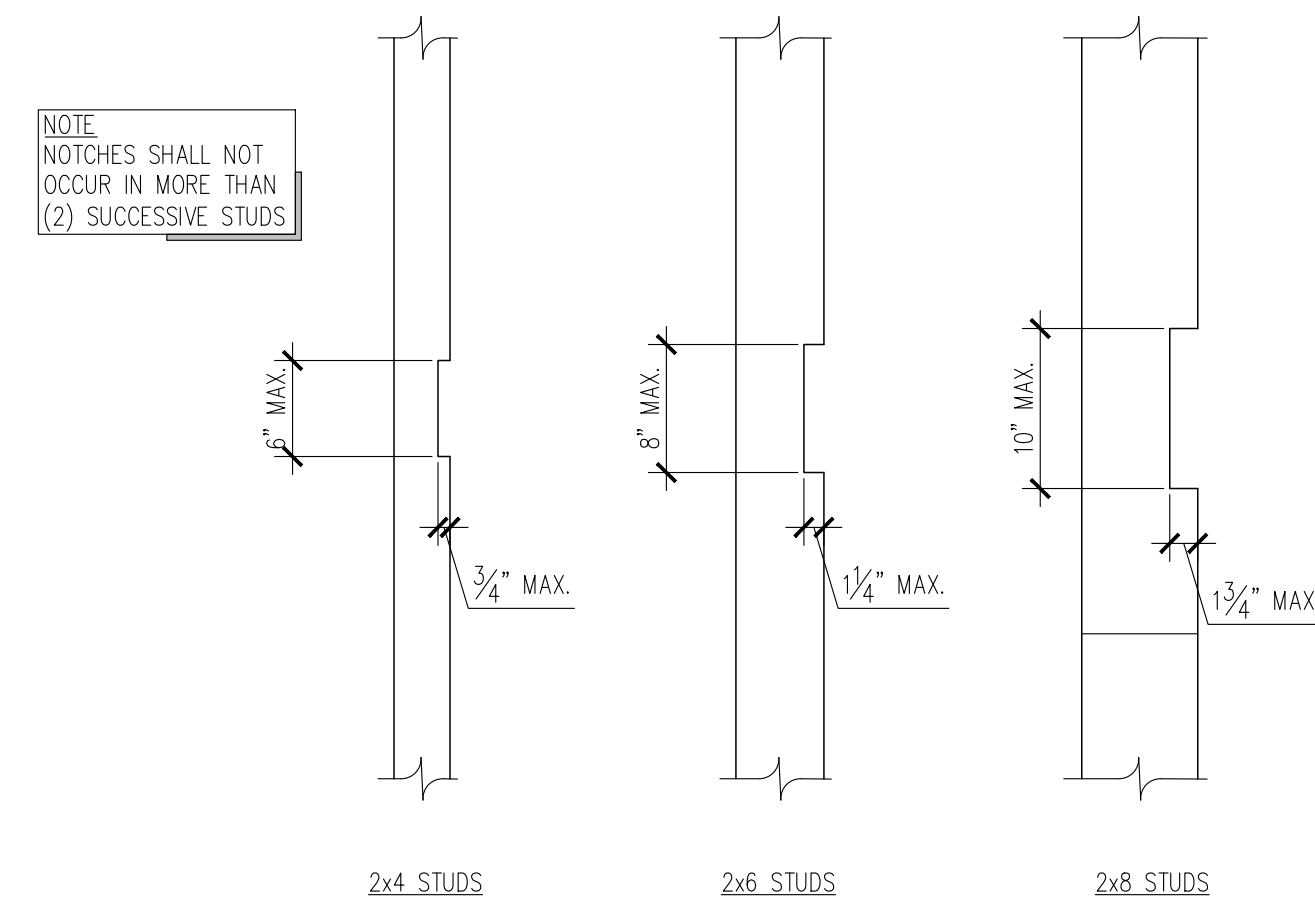
- ALL TRIMMER STUDS, HEADERS, AND SILLS SHALL BE NAILED TOGETHER PER S1.1
- ALL STRUCTURAL TRIMMER STUDS, SILLS, AND HEADERS SHALL BE DOUGLAS FIR #2 OR BETTER
- SEE PLANS FOR LVL STUD WALL LOCATIONS, WHERE APPLICABLE



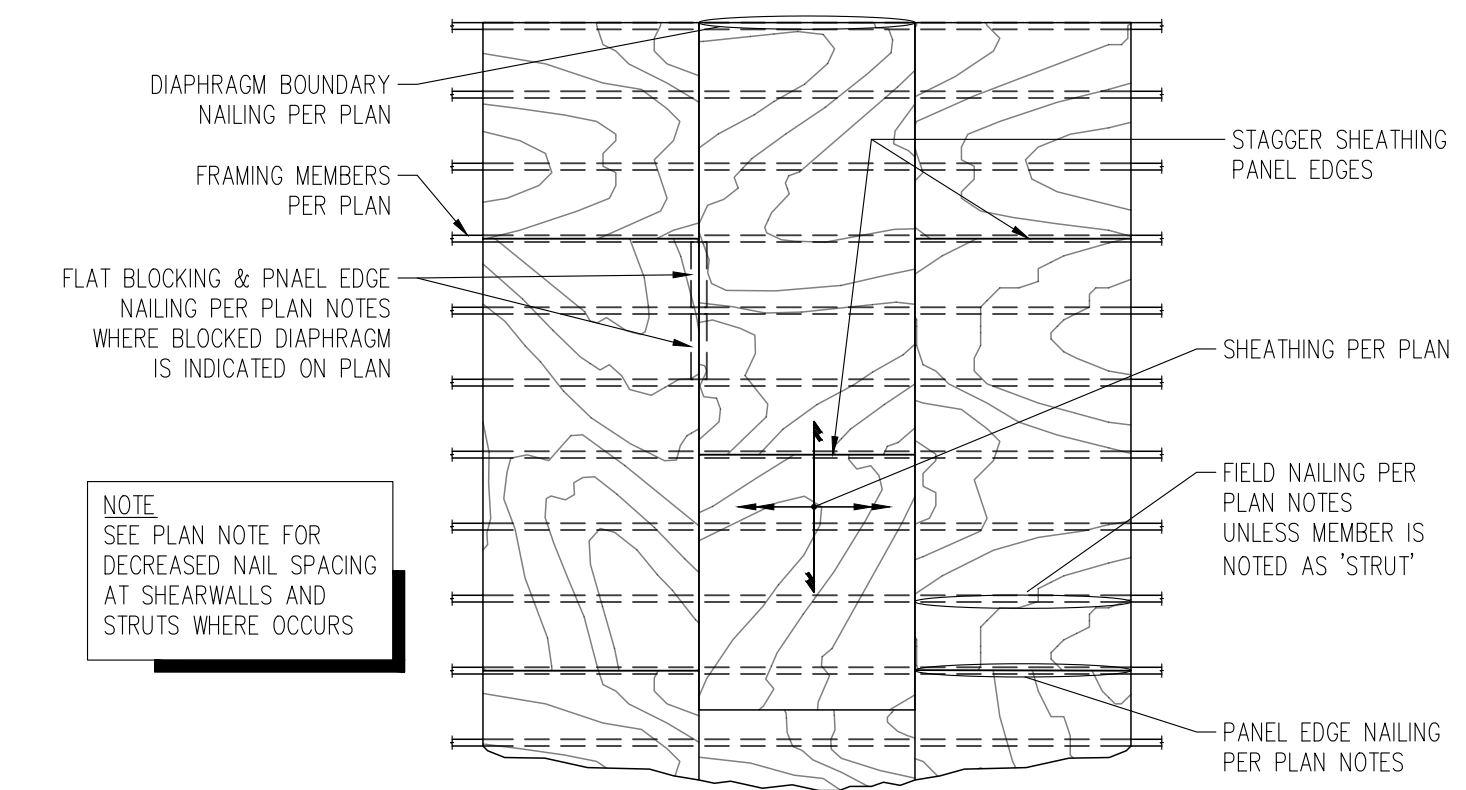
PIECE WIDTH	NUMBER OF PLYS	TYPE ⁽¹⁾	FASTENER			LOCATION
			MIN. LENGTH	# ROWS	O.C. SPACING	
1 3/4"	2	10d NAILS	3"	3 ⁽²⁾	12"	ONE SIDE
		12d - 16d NAILS	3 3/4"	2 ⁽²⁾	24"	
	3	10d NAILS	3"	3 ⁽²⁾	12"	BOTH SIDES
		12d - 16d NAILS	3 3/4"	2 ⁽²⁾	24"	
	4	10d NAILS	3"	3 ⁽²⁾	12"	ONE SIDE (PER PLY)
		12d - 16d NAILS	3 3/4"	2 ⁽²⁾	24"	
3 1/2"	2	SCREWS	5" or 6"	2	24"	BOTH SIDES
		1/2" Ø BOLTS	8"	2	24"	ONE SIDE

- (1) 10d NAILS ARE 0.128" DIAMETER; 12d - 16d NAILS ARE 0.148" - 0.162" DIAMETER; SCREWS ARE SDS, USP WP, TRUSSLOK, OR SDW
(2) AN ADDITIONAL ROW OF NAILS IS REQUIRED WITH DEPTHS OF 14" OR GREATER
(3) WHEN CONNECTING 4-PLY MEMBERS, NAIL EACH PLY TO THE OTHER AND OFFSET NAIL ROWS BY 2" FROM ROWS IN THE PLY BELOW

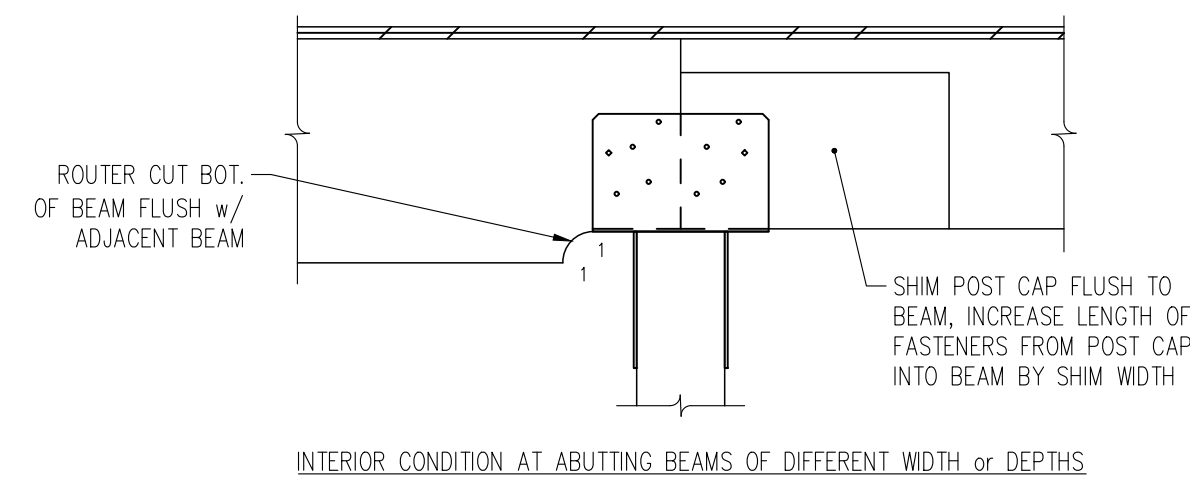
9 MULTIPLE LVL MEMBER FASTENING FOR TOP-LOADED BEAM PER WEYERHAUSER
S6.2 NTS



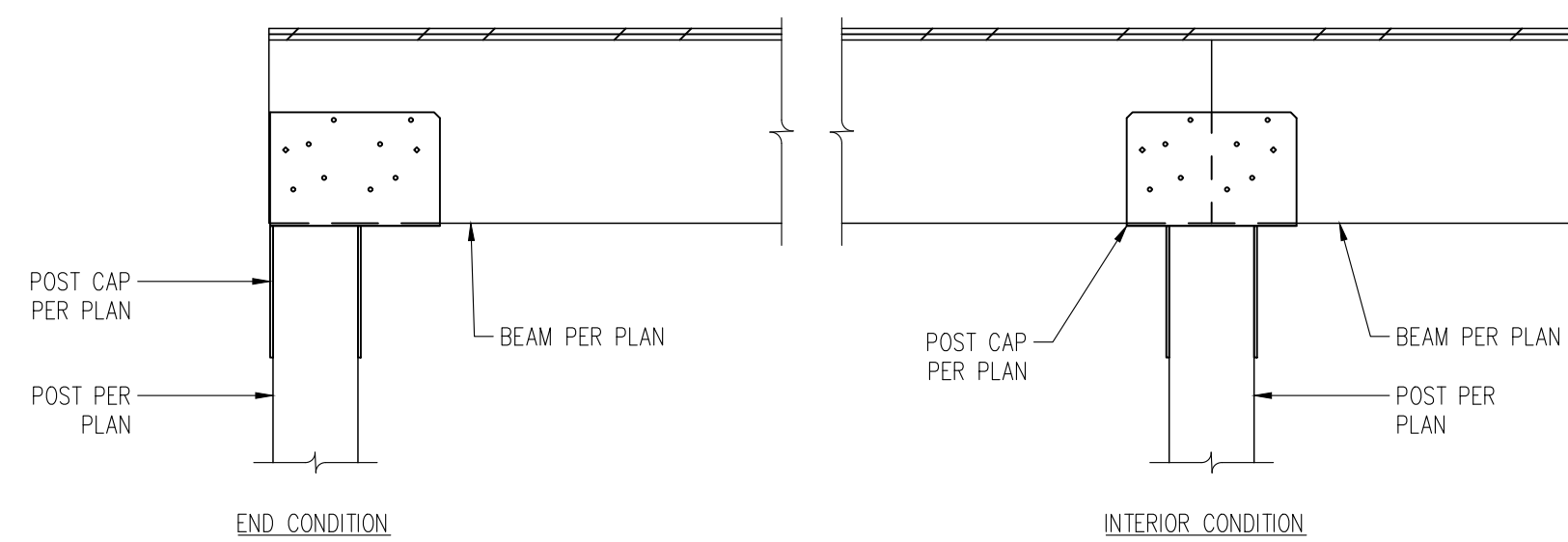
6 ALLOWABLE HOLES IN STUDWALL STUDS
S6.2 NTS



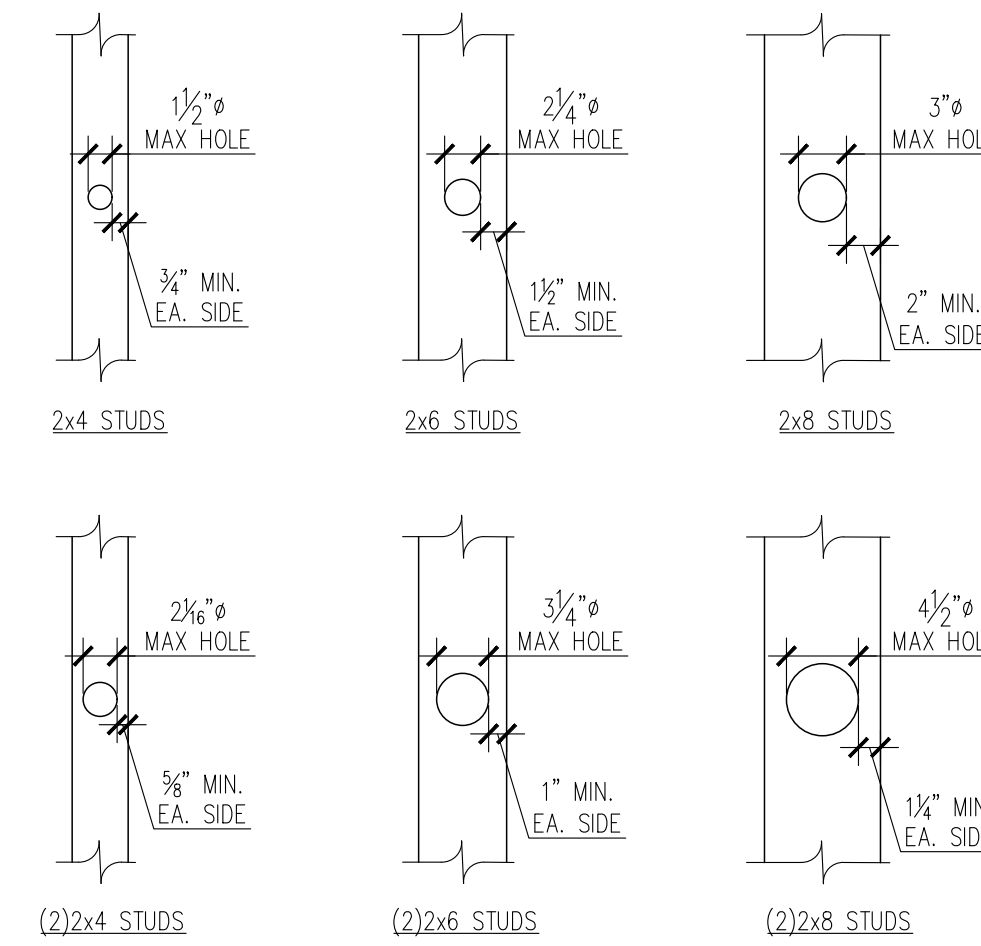
3 TYPICAL DIAPHRAGM NAILING
S6.2 NTS



INTERIOR CONDITION AT ABUTTING BEAMS OF DIFFERENT WIDTH or DEPTHS



8 TYPICAL POST CAP INSTALLATION
S6.2 NTS

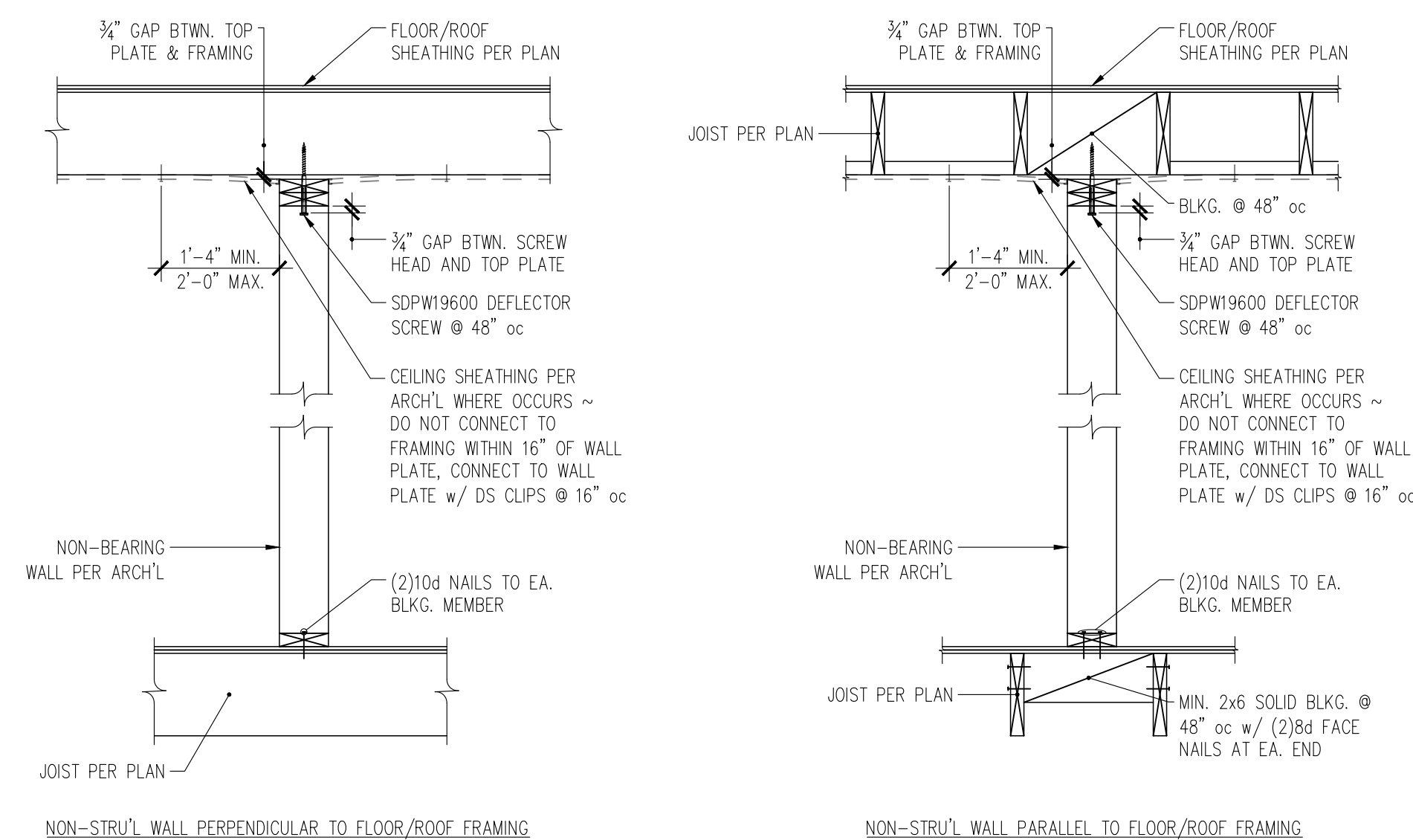


NOTE NO MORE THAN TWO SUCCESSIVE STUDS MAY BE BORED AT DOUBLE STUD CONDITION

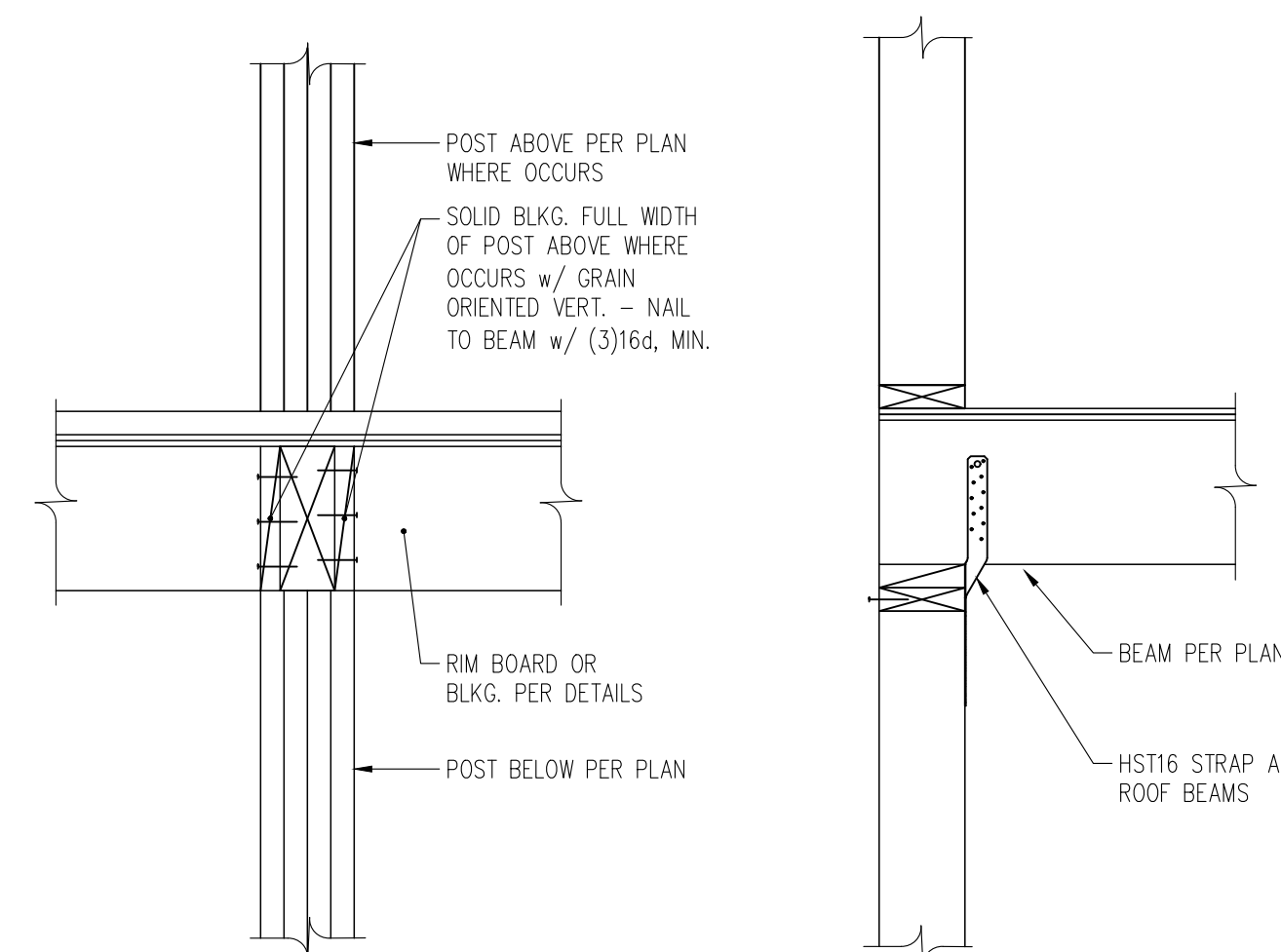
5 ALLOWABLE HOLES IN STUDWALL STUDS
S6.2 NTS

	NO REINF. REQUIRED	STRAP REINF. REQUIRED
2x4 PLATES	1 1/2" MAX. HOLE 3/4" MIN. EA. SIDE	2 5/8" MAX. HOLE 3/8" MIN. EA. SIDE CMSTC16x3'-0" (CS16x2'-0" AT BOT. PLATES)
2x6 PLATES	2 1/4" MAX. HOLE 1 1/2" MIN. EA. SIDE	3 3/4" MAX. HOLE 3/4" MIN. EA. SIDE CMSTC16x3'-0" (CS16x2'-0" AT BOT. PLATES)
2x8 PLATES	3 3/4" MAX. HOLE 2" MIN. EA. SIDE	5" MAX. HOLE 1 1/4" MIN. EA. SIDE CMSTC16x3'-0" (CS16x2'-0" AT BOT. PLATES)

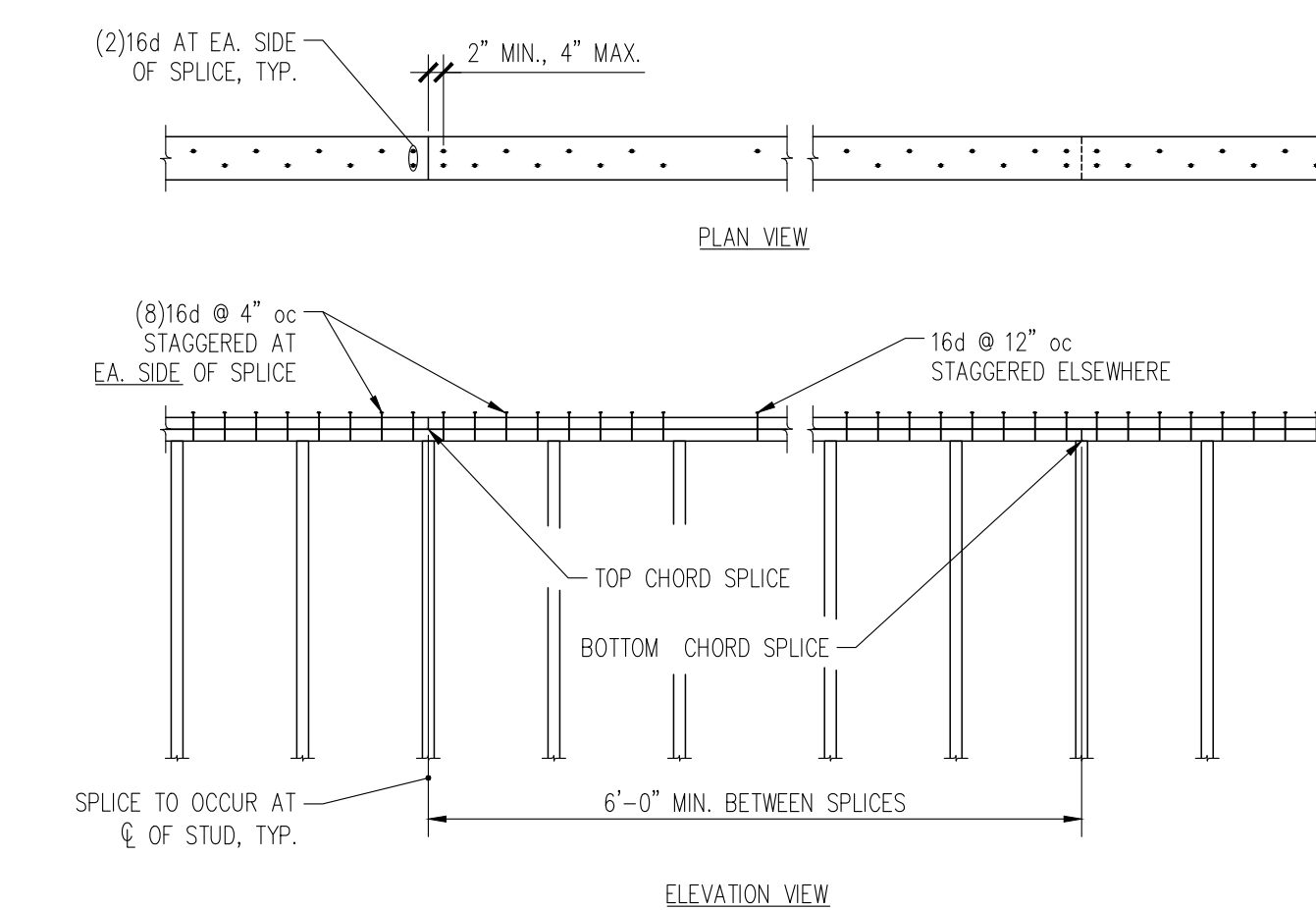
2 ALLOWABLE HOLES THROUGH TOP PLATES
S6.2 NTS



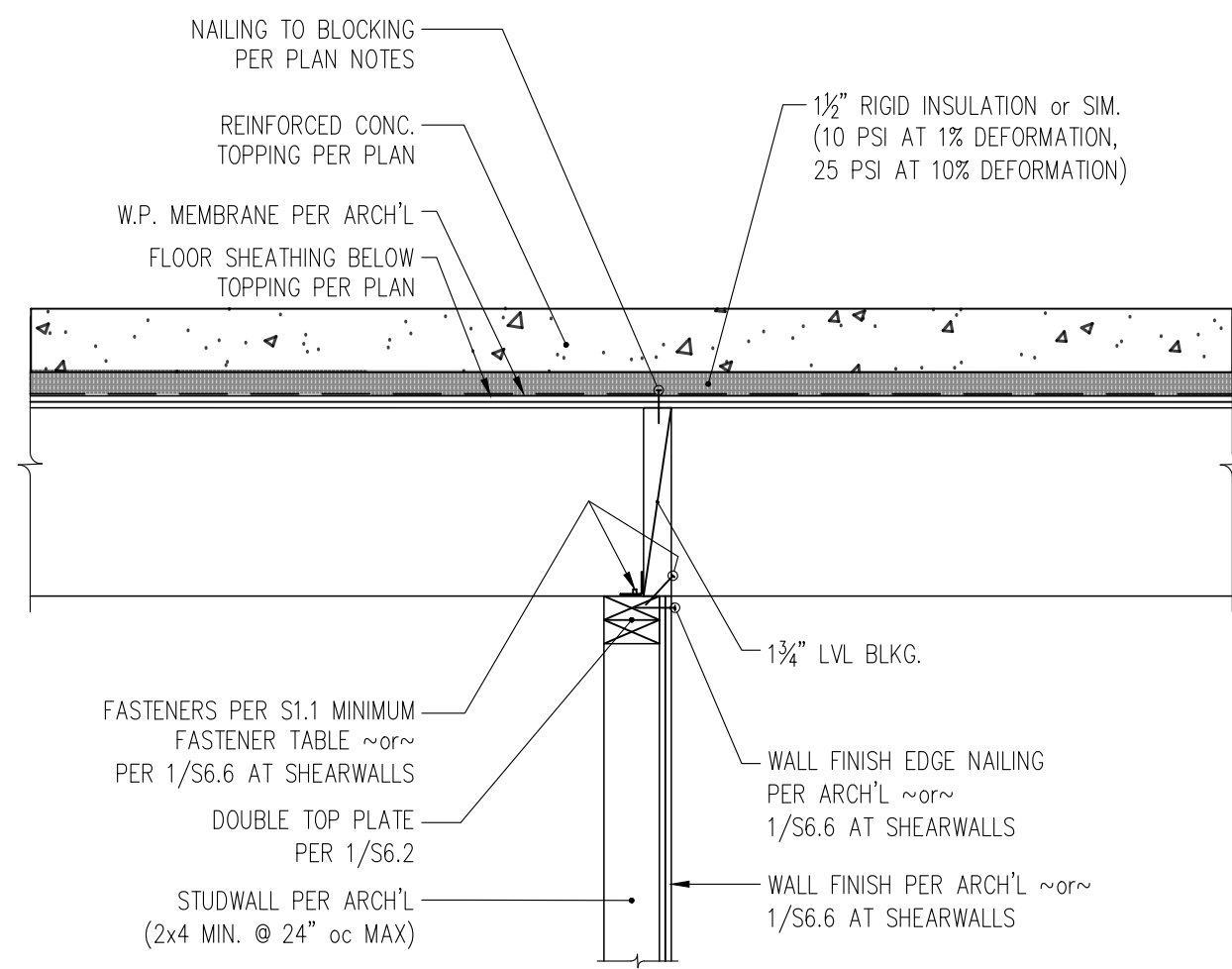
7 CONNECTION OF NON-STRUC'L PARTITION WALL TO STRUCTURE
S6.2 NTS



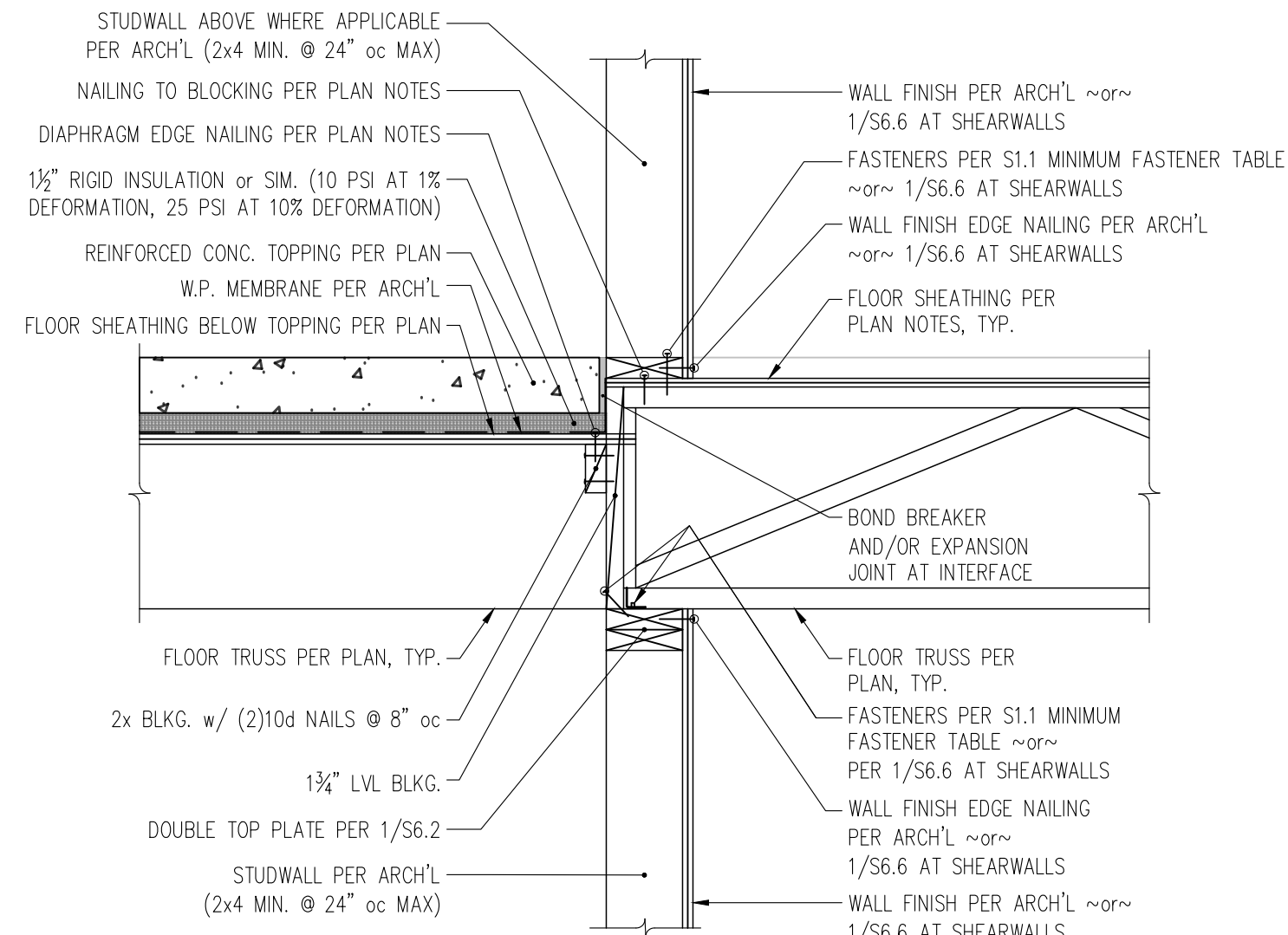
4 TYPICAL BEAM PERPENDICULAR TO WALL
S6.2 NTS



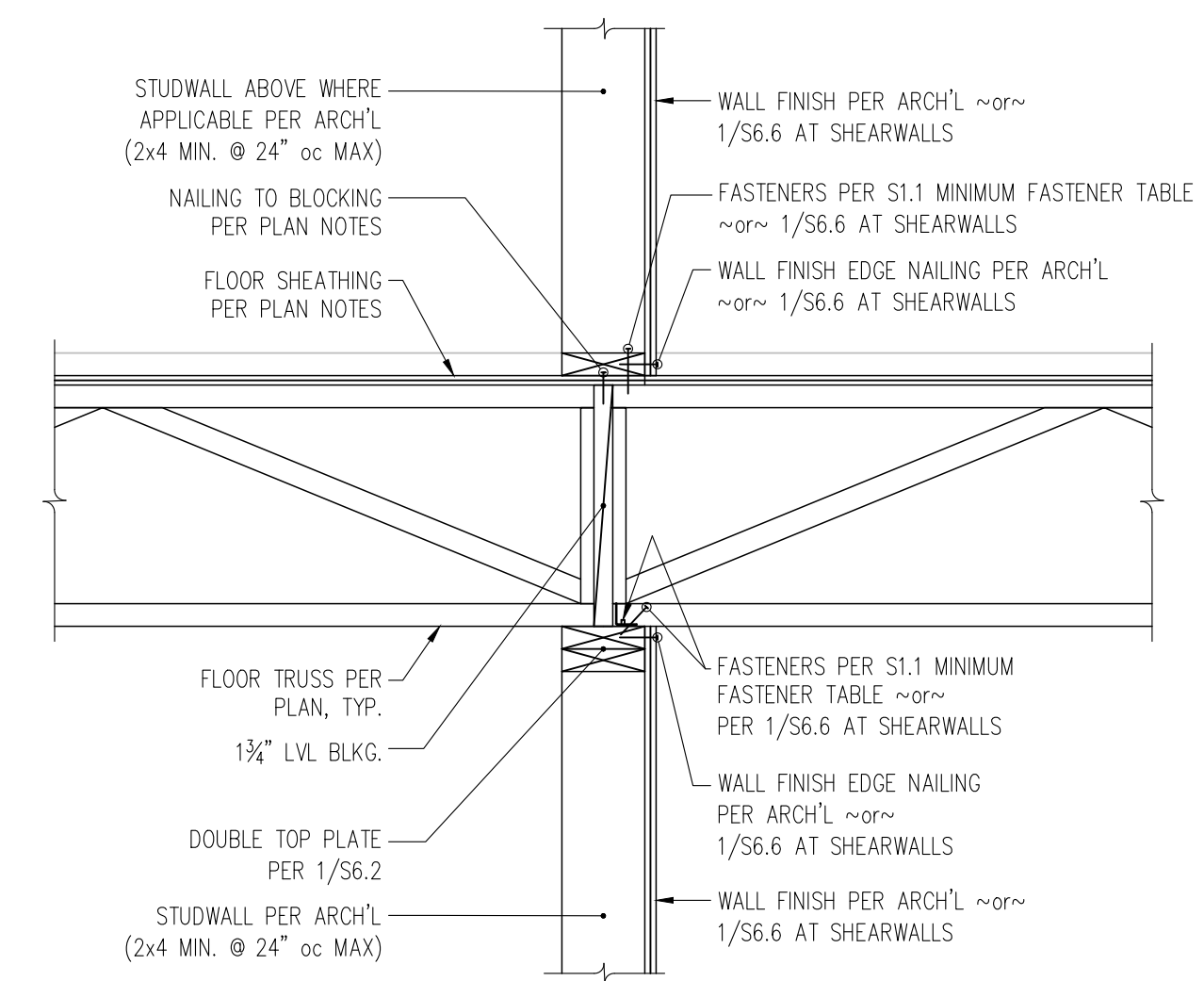
1 TOP PLATE SPLICE
S6.2 NTS



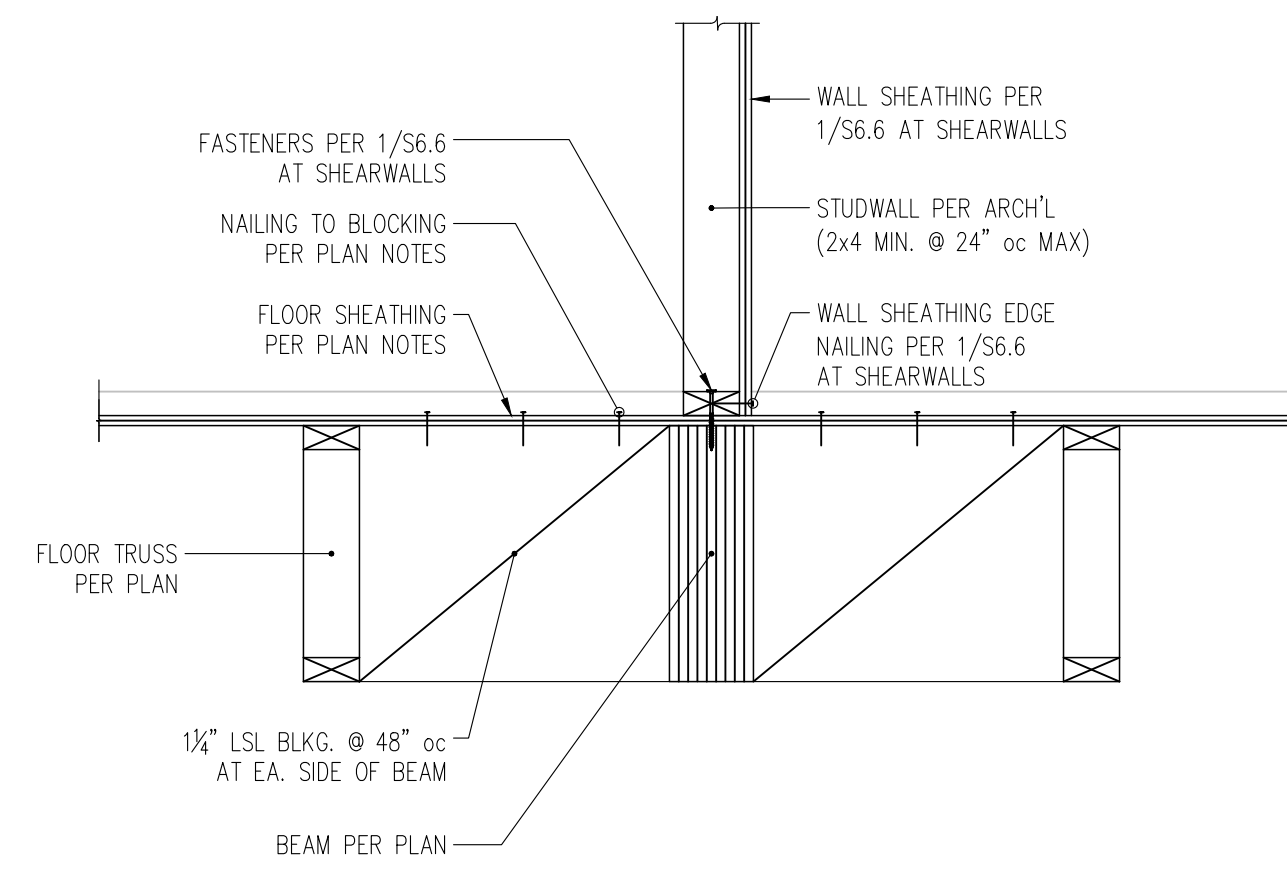
9 SECTION THROUGH INTERIOR STRUC'L WALL w/ PERPENDICULAR GARAGE JOISTS AT EA. SIDE
S6.3 1" = 1'-0"



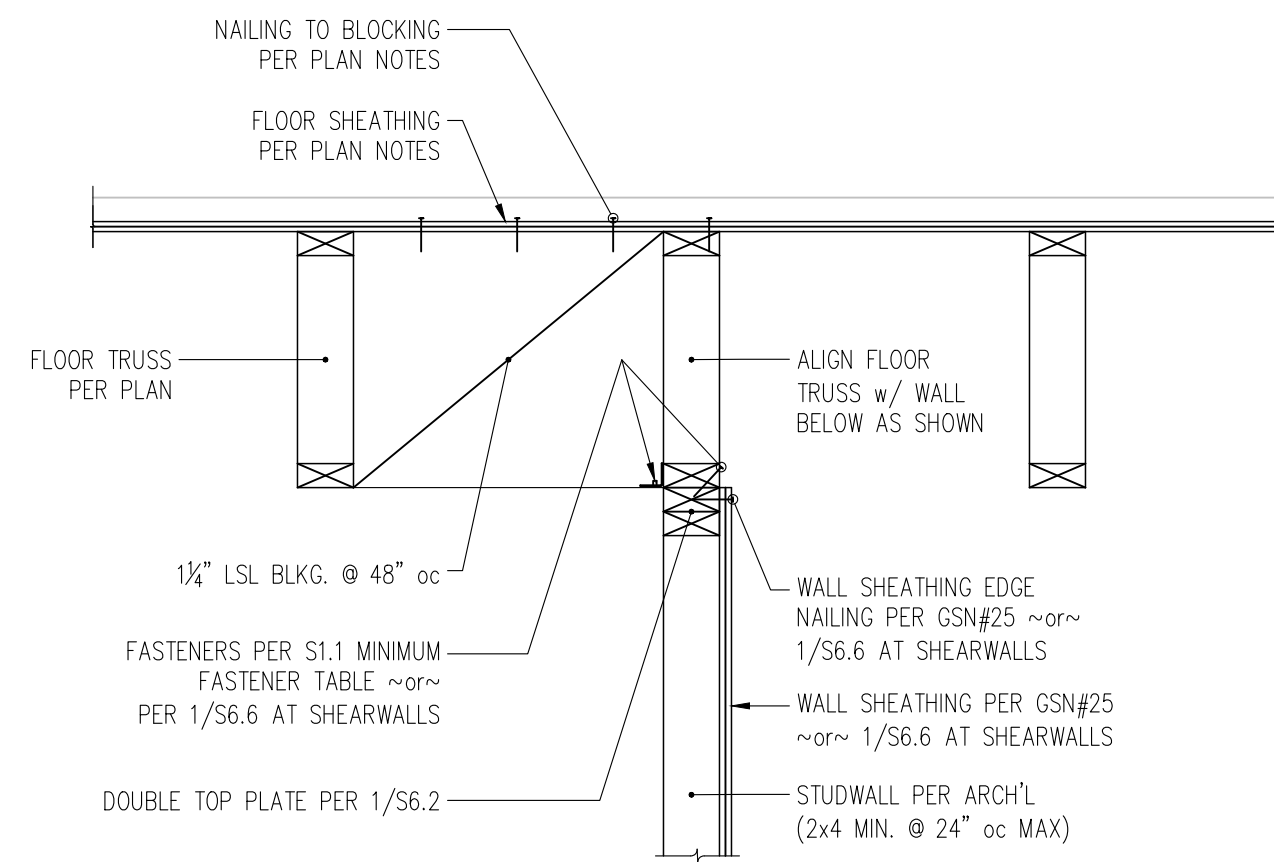
6 SECTION THROUGH INTERIOR STRUC'L WALL w/ PERPENDICULAR TRUSS AND JOIST AT OPP. SIDE
S6.3 1" = 1'-0"



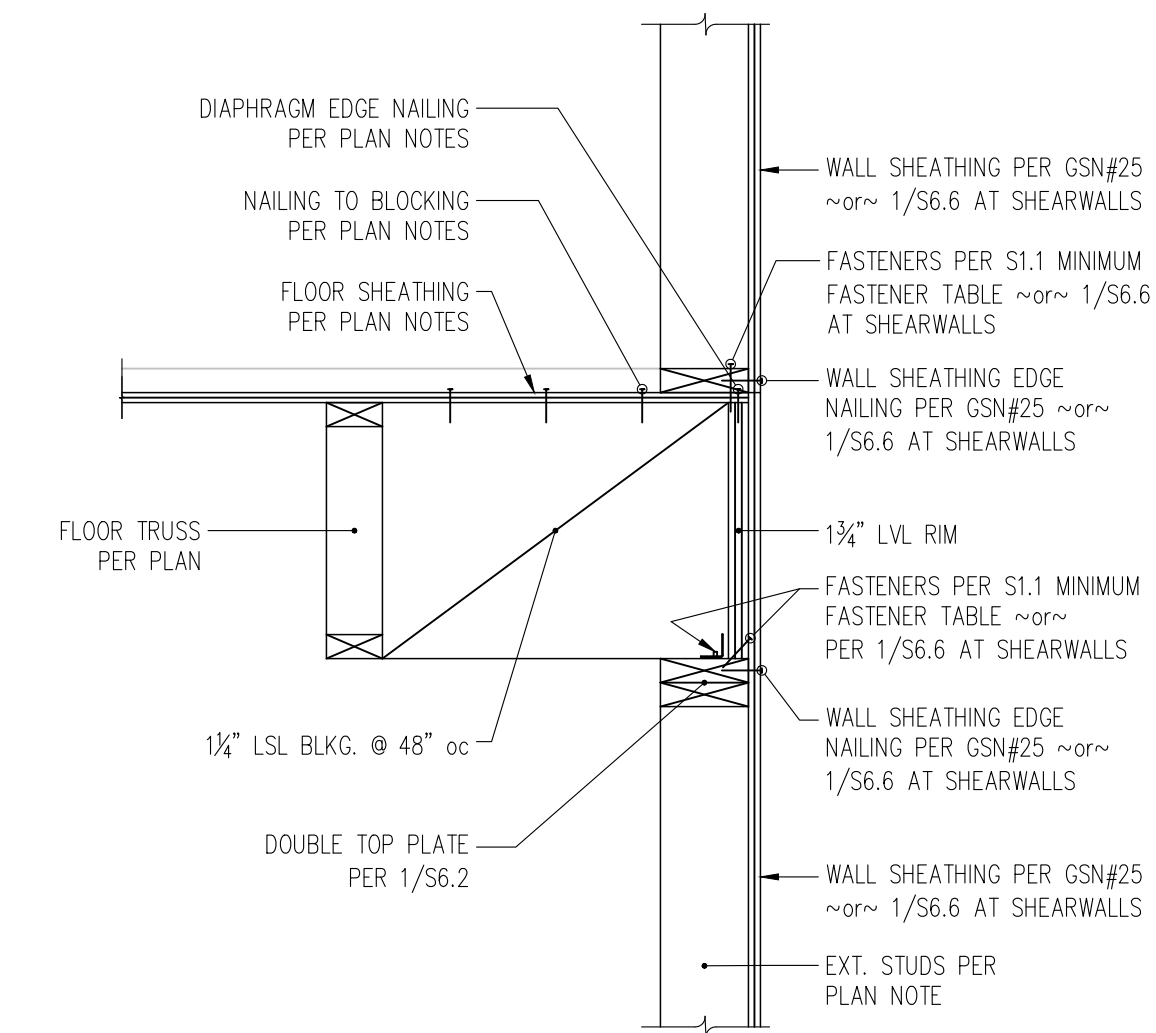
3 SECTION THROUGH INTERIOR STRUC'L WALL w/ PERPENDICULAR TRUSSES AT EA. SIDE
S6.3 1" = 1'-0"



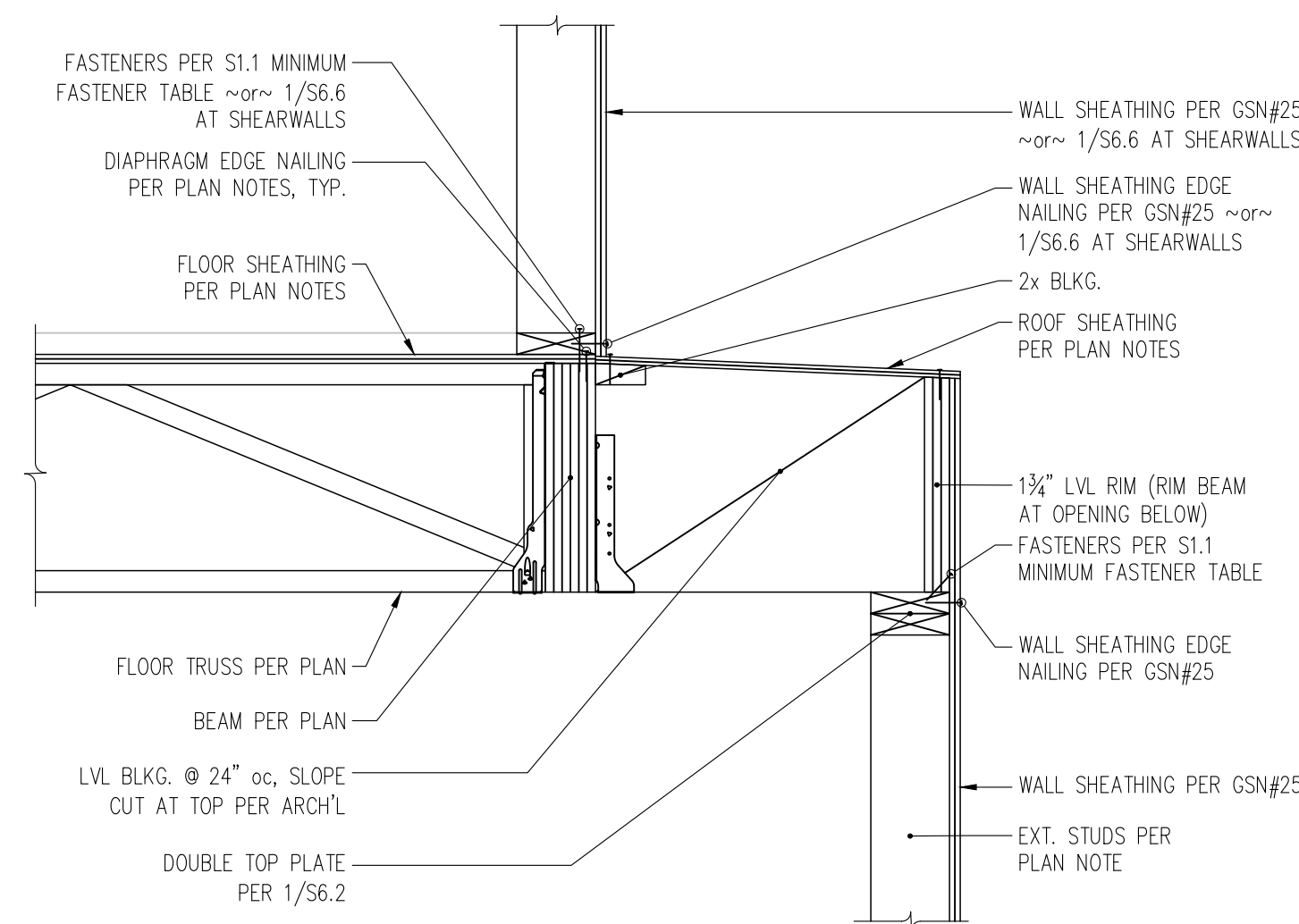
8 SECTION THROUGH FLUSH FRAMED BEAM w/ JOIST AT EACH SIDE
S6.3 1" = 1'-0"



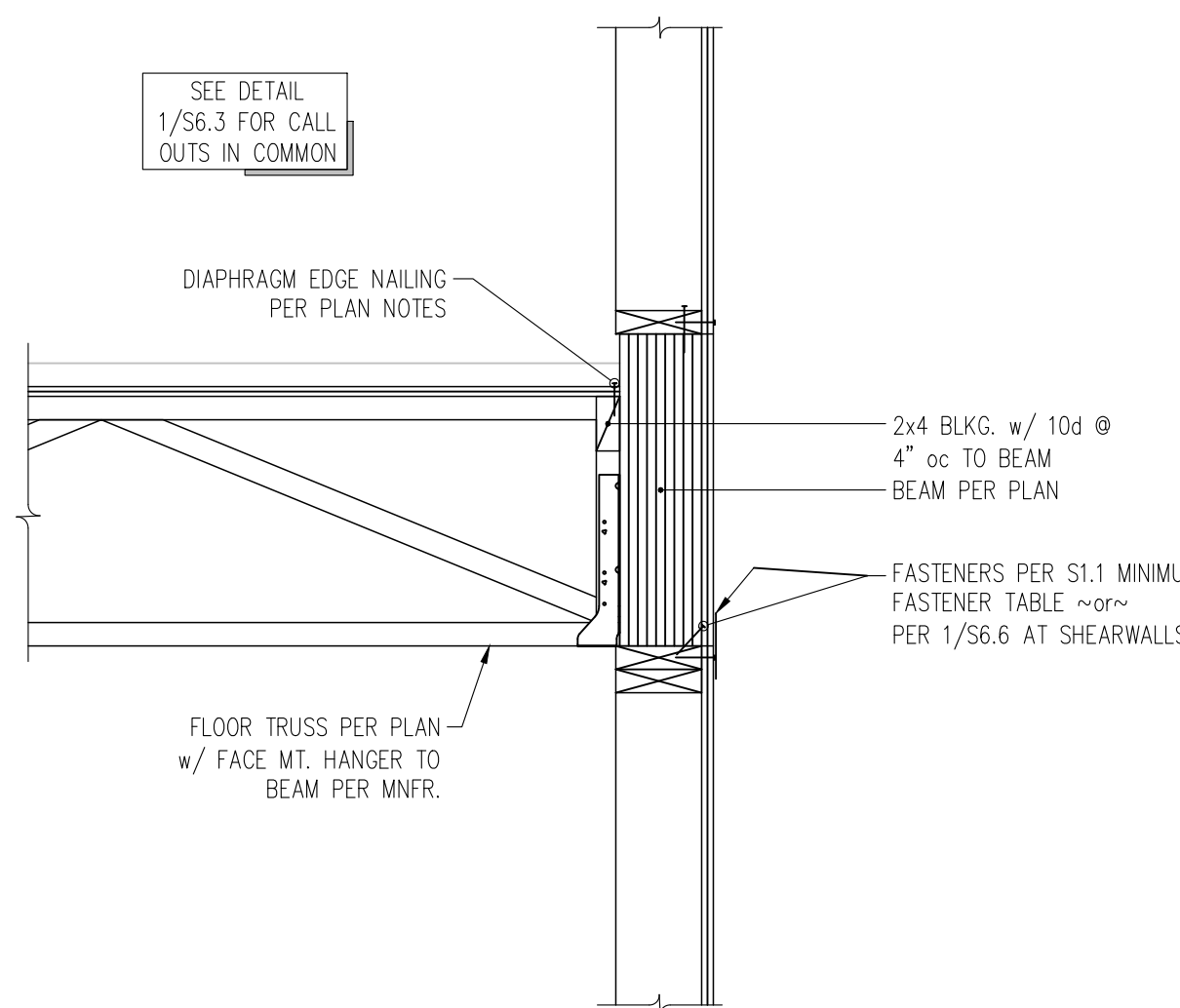
5 SECTION THROUGH INTERIOR STRUC'L WALL w/ PARALLEL TRUSSES AT EA. SIDE
S6.3 1" = 1'-0"



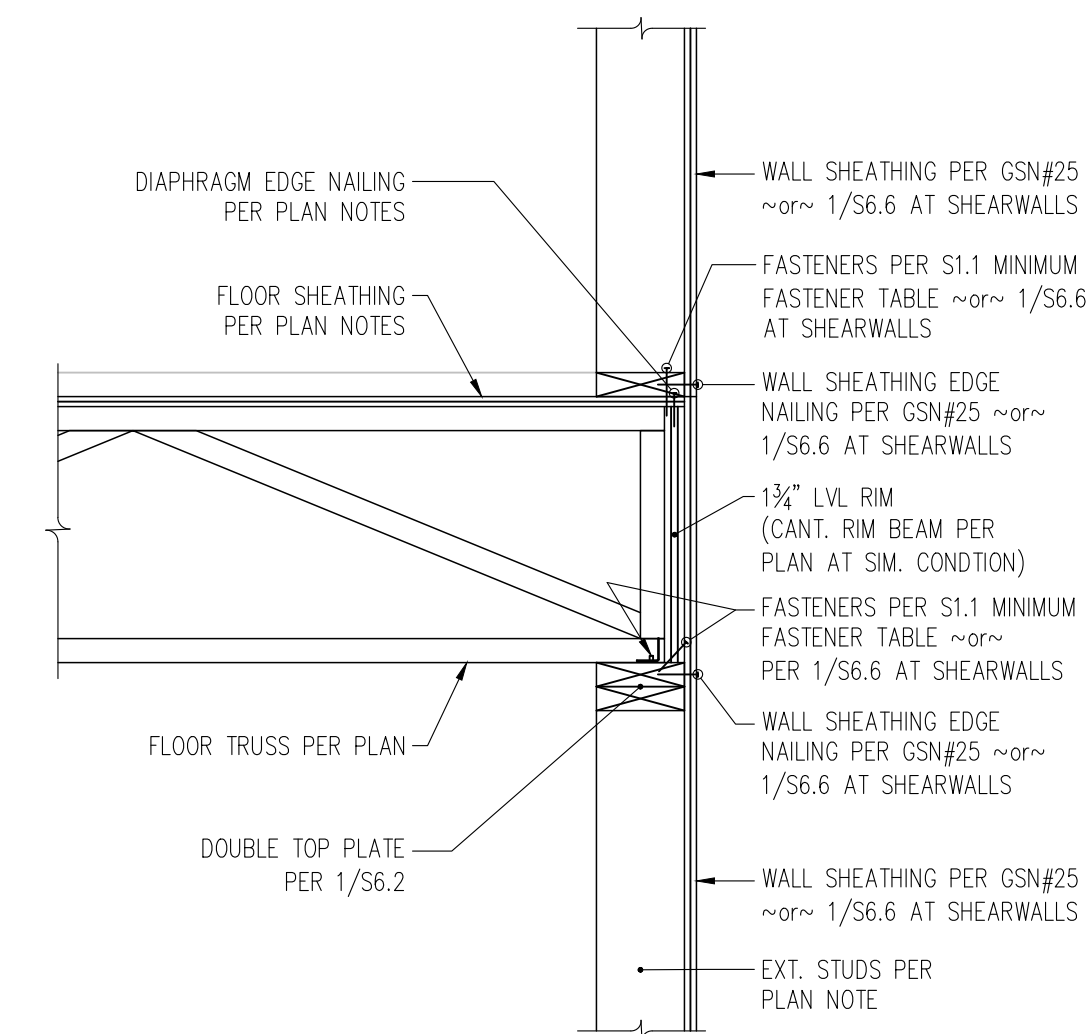
2 SECTION THROUGH EXTERIOR WALL AT PARALLEL FLOOR JOISTS
S6.3 1" = 1'-0"



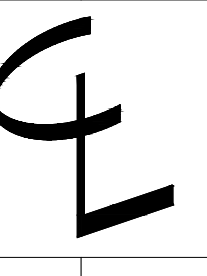
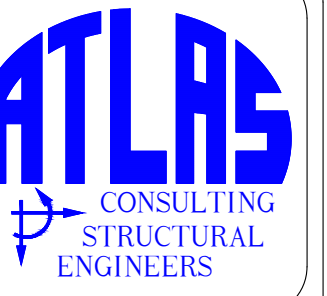
7 SECTION THROUGH UPSET BEAM IN EXTERIOR WALL AT PERPENDICULAR FLOOR TRUSS
S6.3 1" = 1'-0"



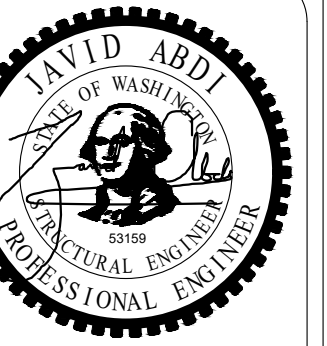
4 SECTION THROUGH INTERIOR STRUC'L WALL w/ PERPENDICULAR TRUSSES AT EA. SIDE
S6.3 1" = 1'-0"



1 SECTION THROUGH EXTERIOR WALL AT PERPENDICULAR FLOOR TRUSS
S6.3 1" = 1'-0"



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CONTENTS

Wood Framing
Details

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JDA

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06.09.23

S6.3

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Details

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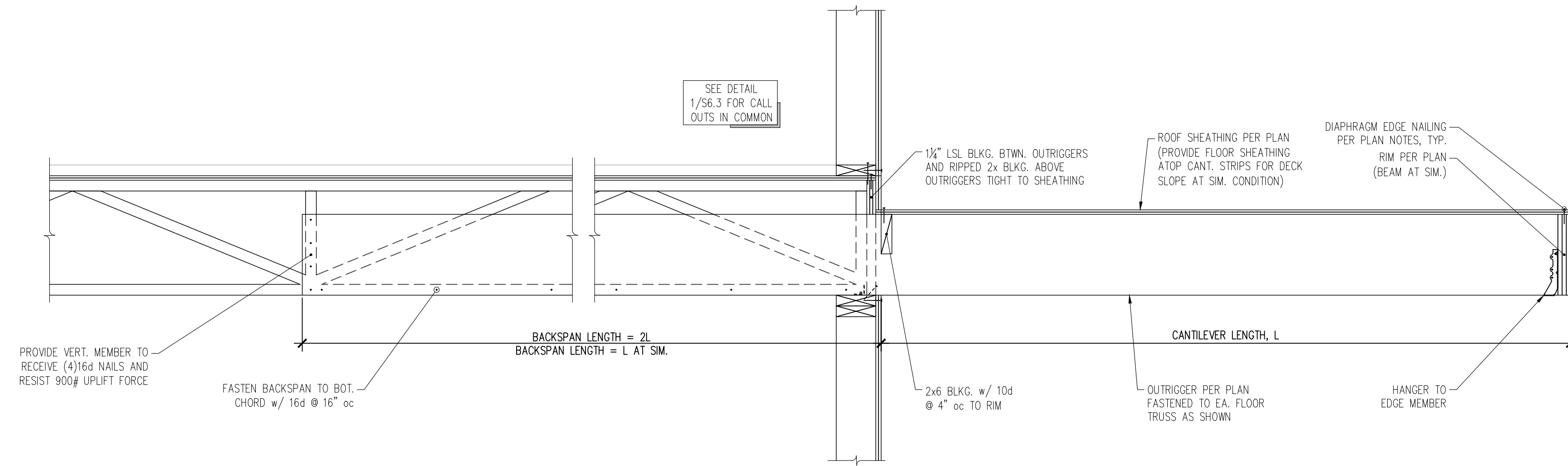
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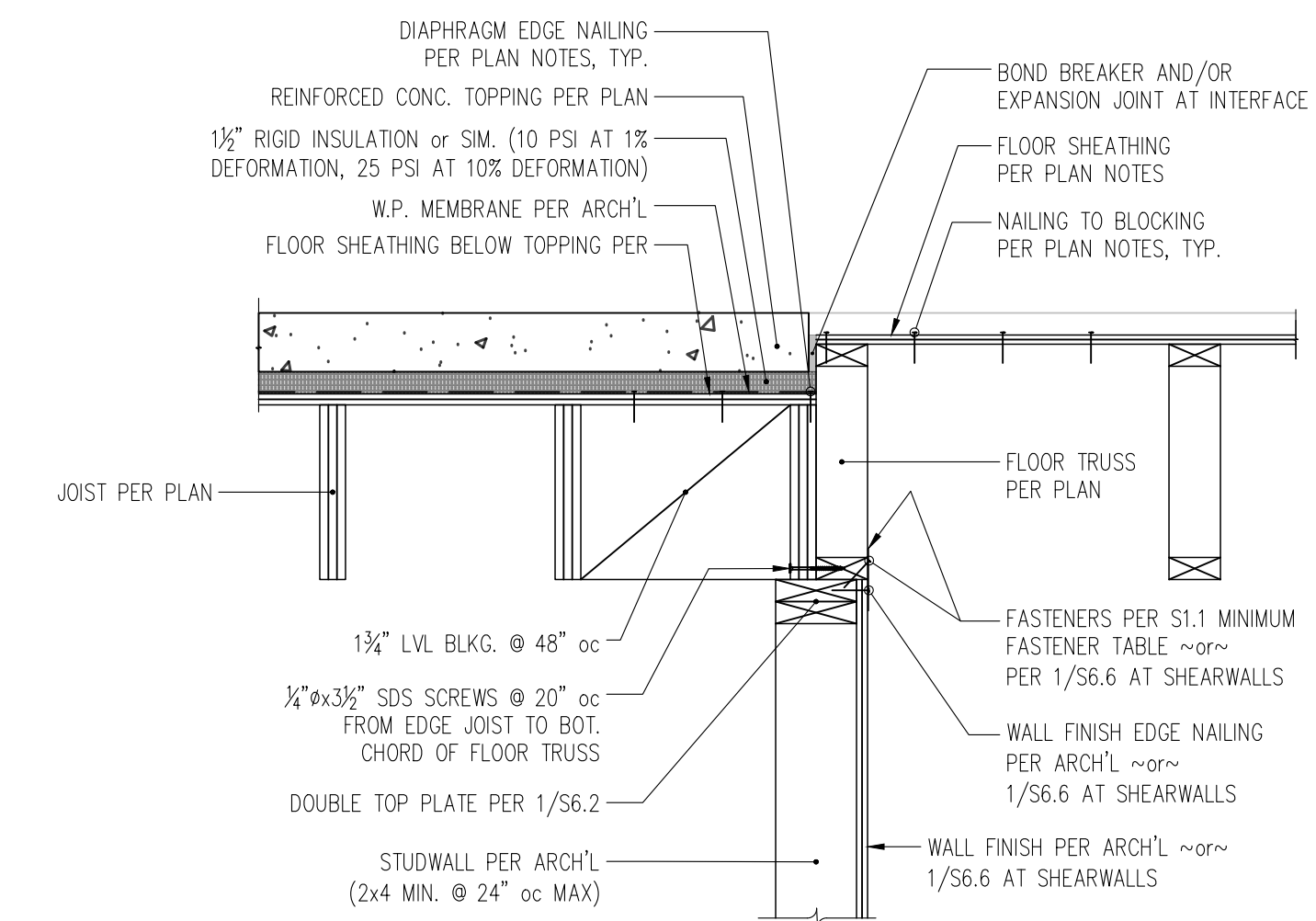
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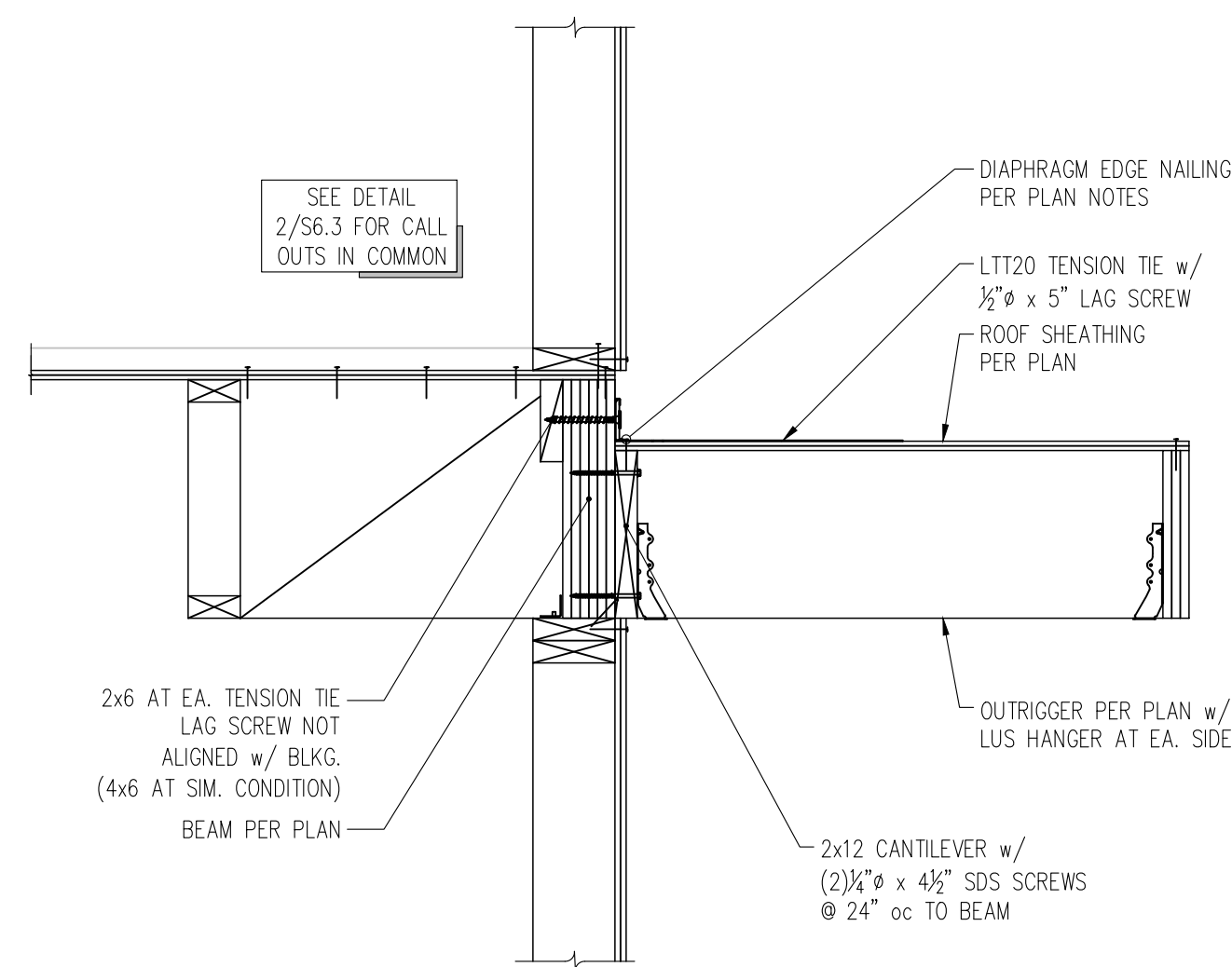
S6.4



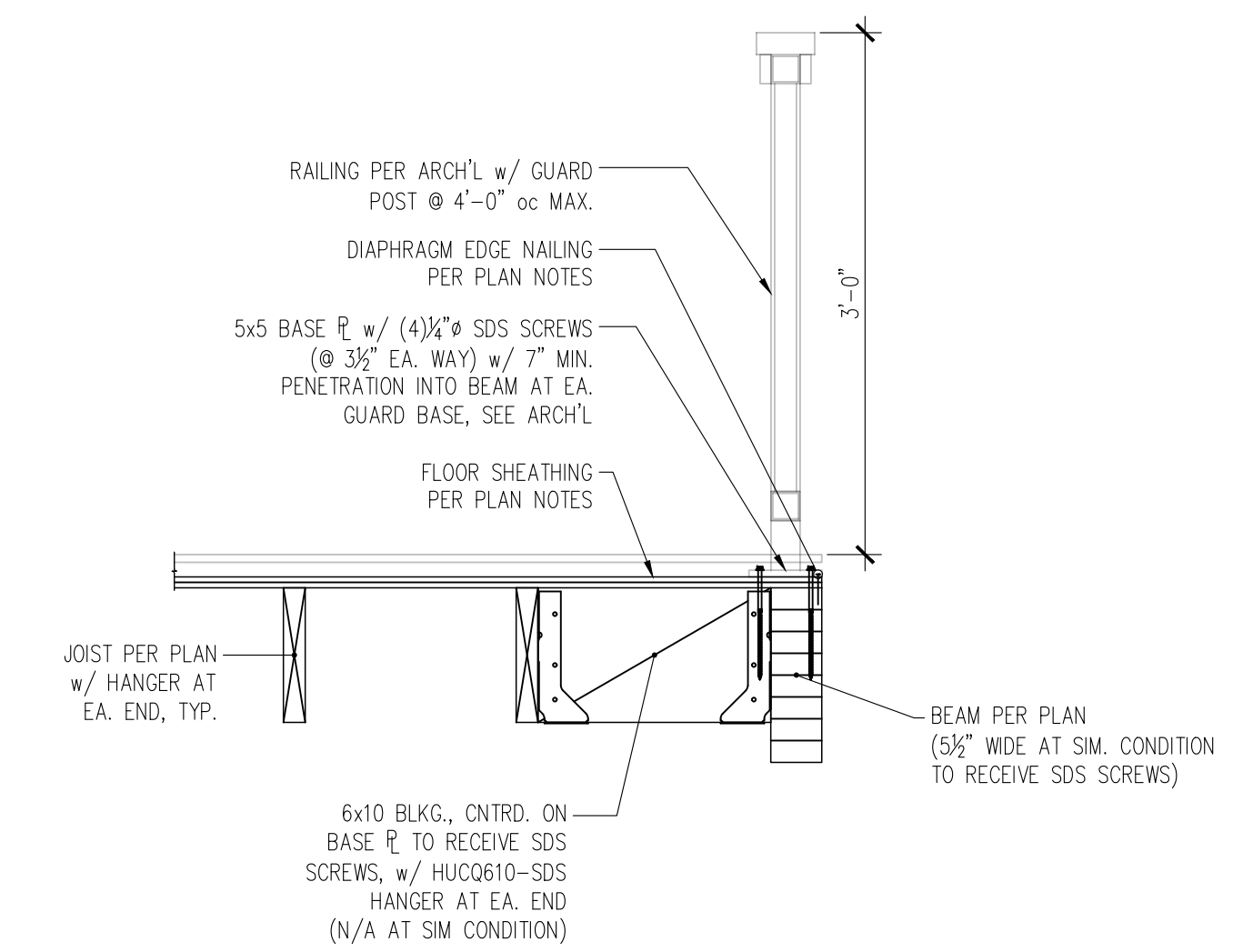
9 SECTION AT CANTILEVERED FRAMING AND PERPENDICULAR INTERIOR FRAMING
S6.4 1" = 1'-0"



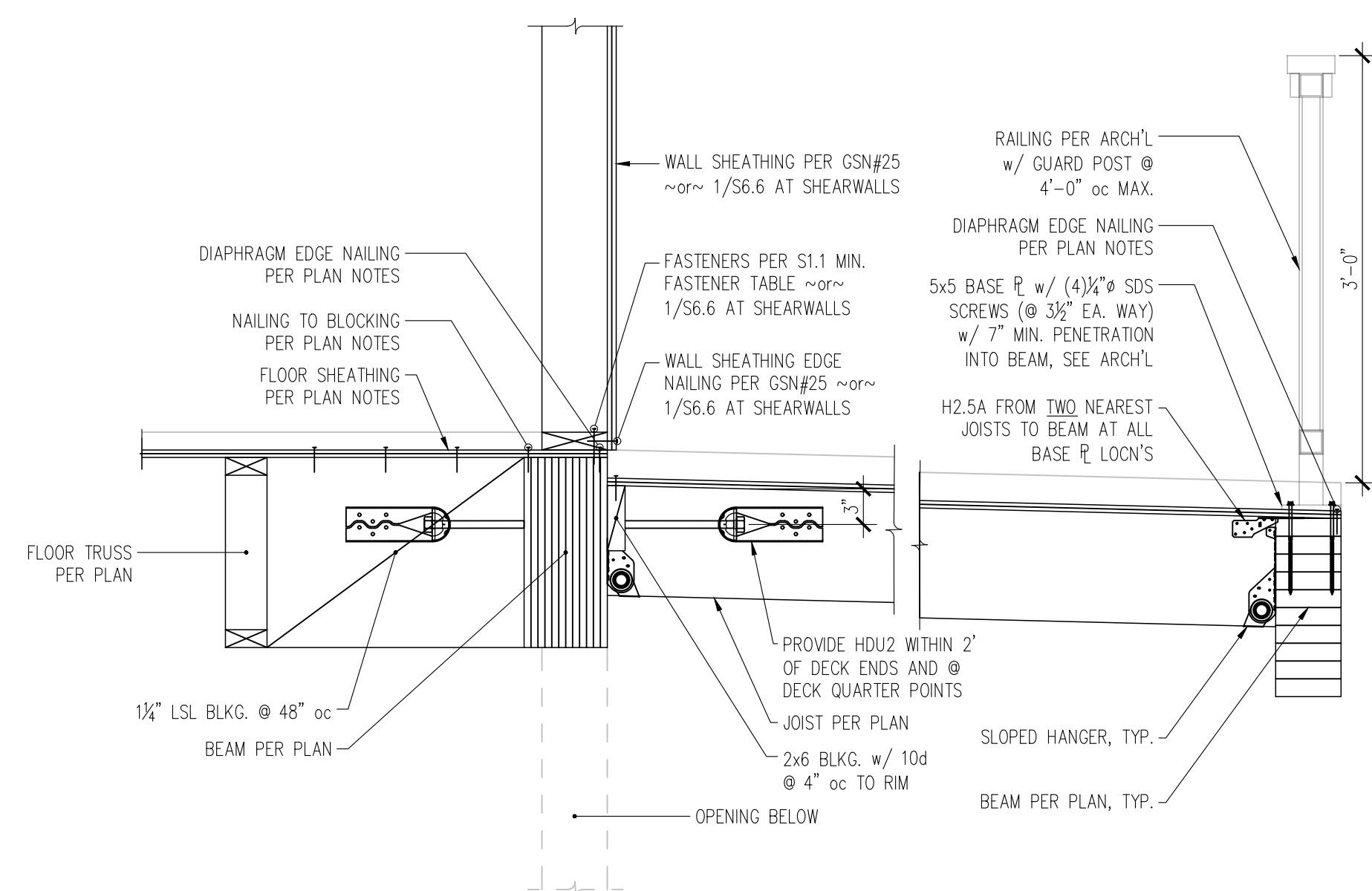
3 SECTION THROUGH INTERIOR STRUC'L WALL w/ PARALLEL TRUSS AND JOIST AT OPP. SIDE
S6.4 1" = 1'-0"



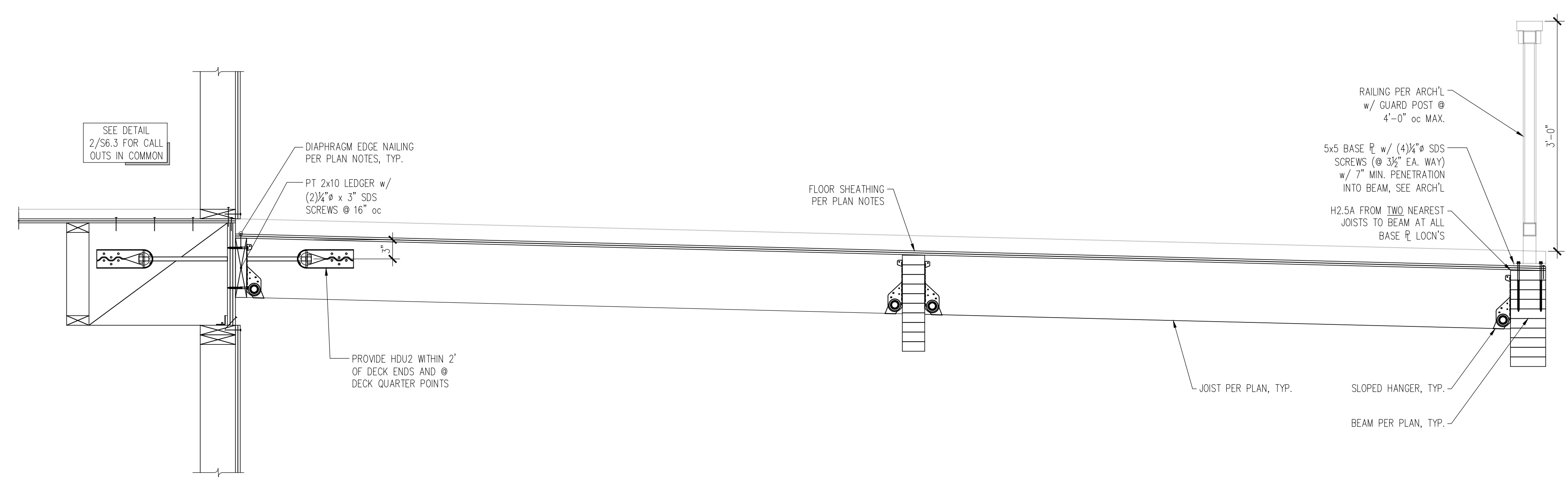
5 SECTION AT CANTILEVERED LOW ROOF AND UPPER FLOOR PARALLEL FRAMING
S6.4 1" = 1'-0"



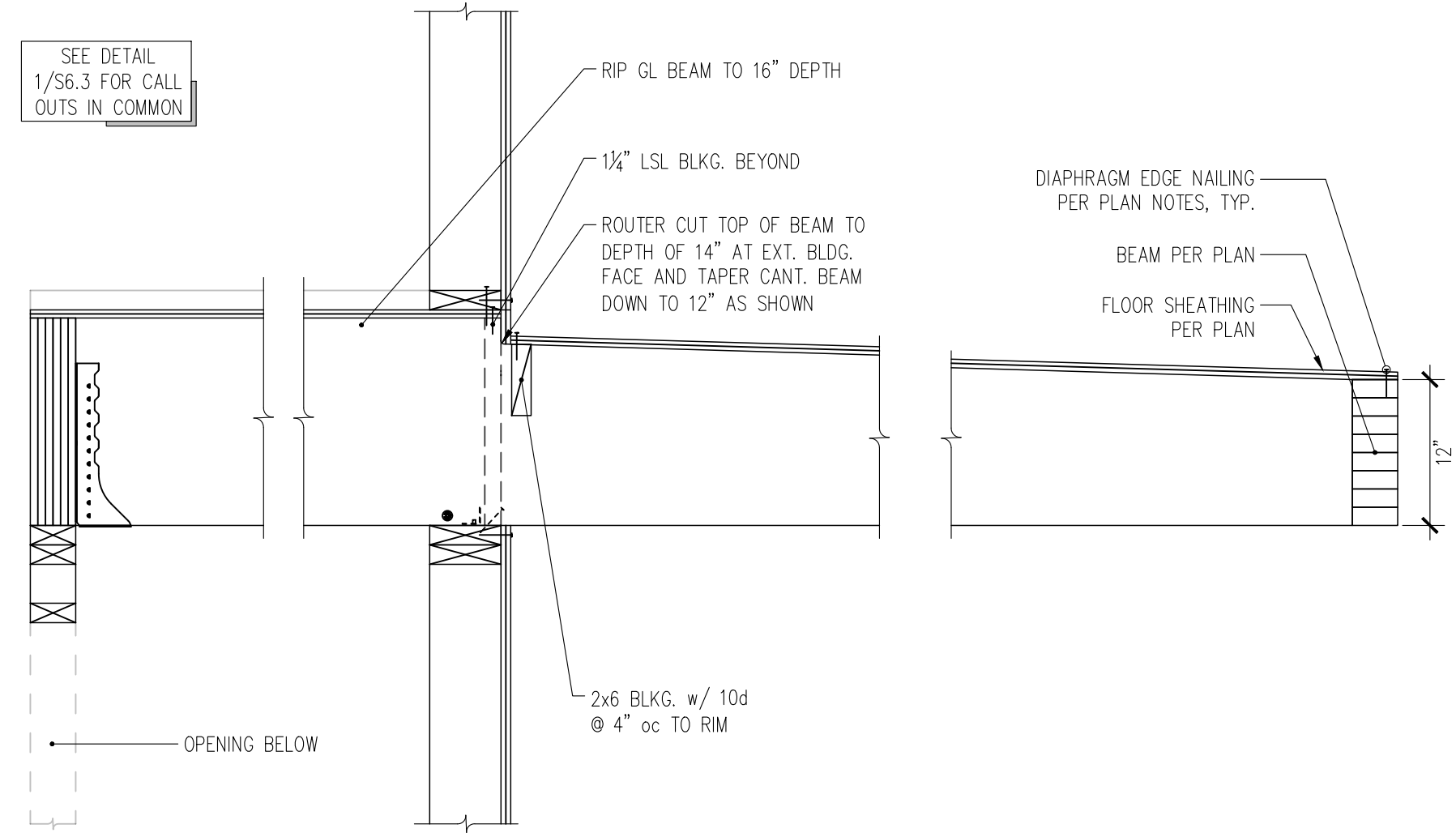
2 SECTION AT RAILING ABOVE PARALLEL FRAMING
S6.4 1" = 1'-0"



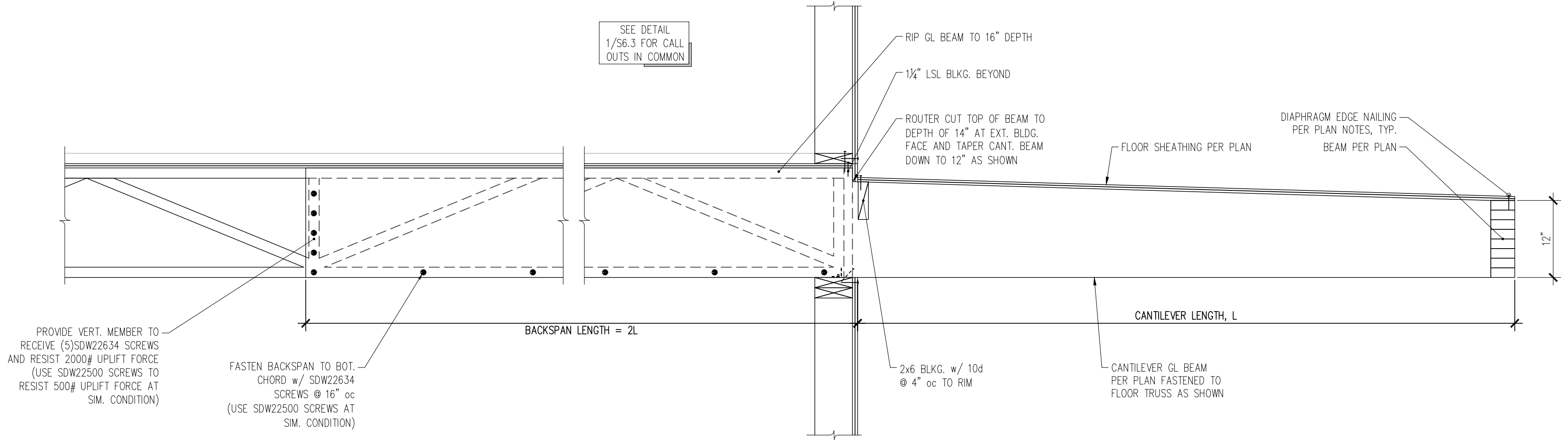
7 SECTION AT UPPER FLOOR DECK PERPENDICULAR JOISTS
S6.4 1" = 1'-0"



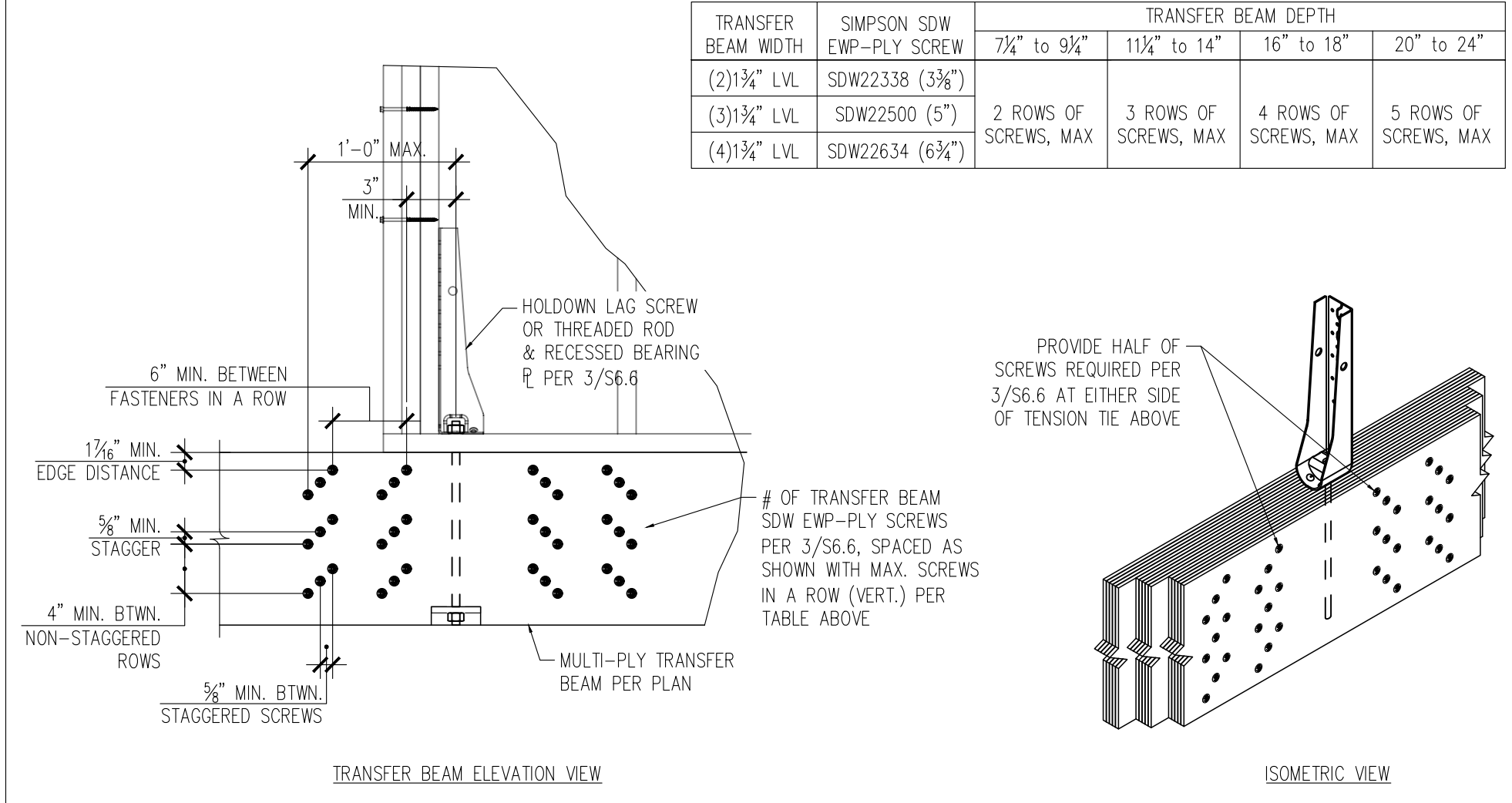
4 SECTION AT MAIN FLOOR DECK PERPENDICULAR JOISTS
S6.4 1" = 1'-0"



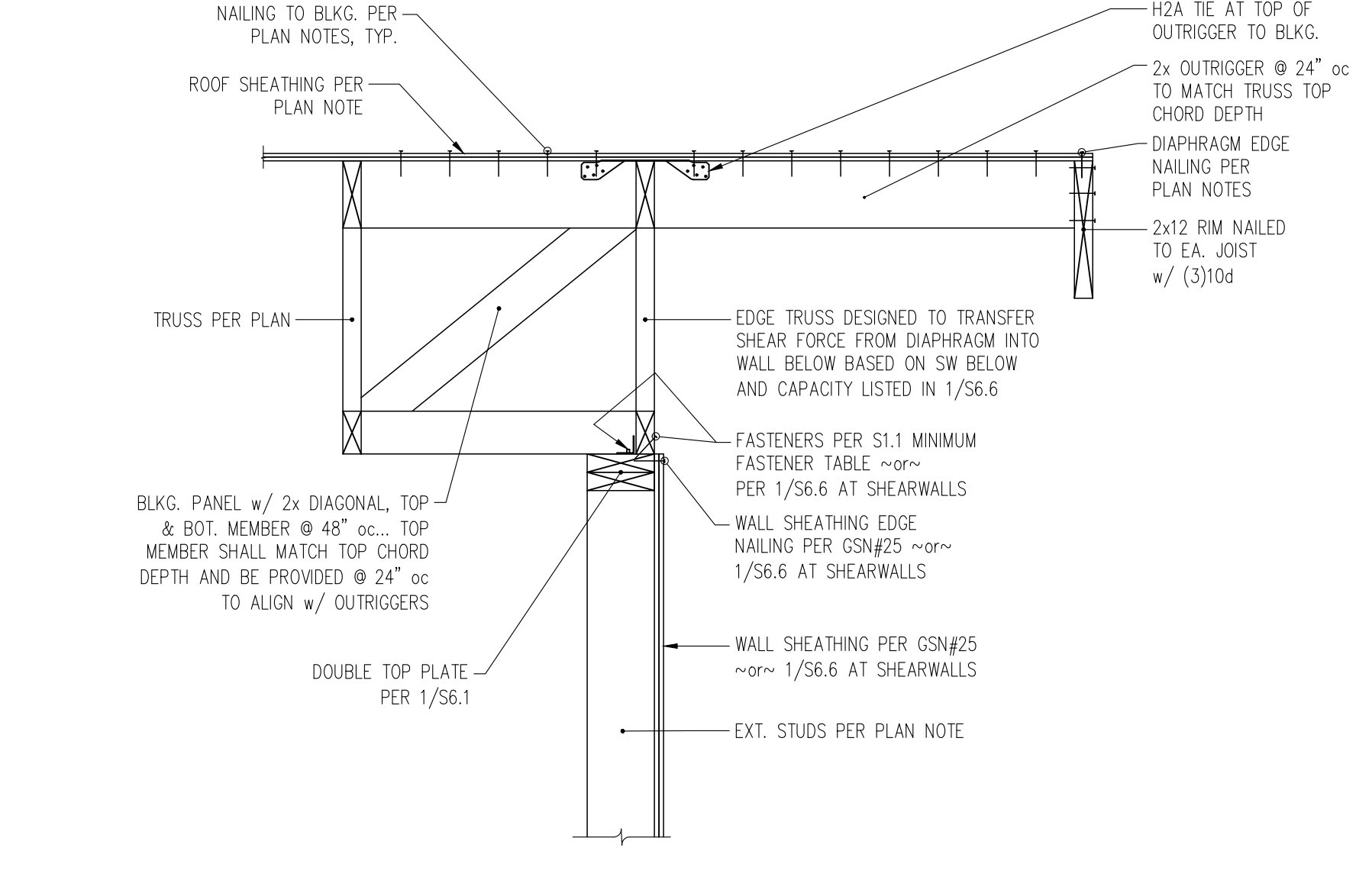
9 SECTION AT CANTILEVERED FRAMING AND PERPENDICULAR INTERIOR FRAMING
S6.5 1" = 1'-0"



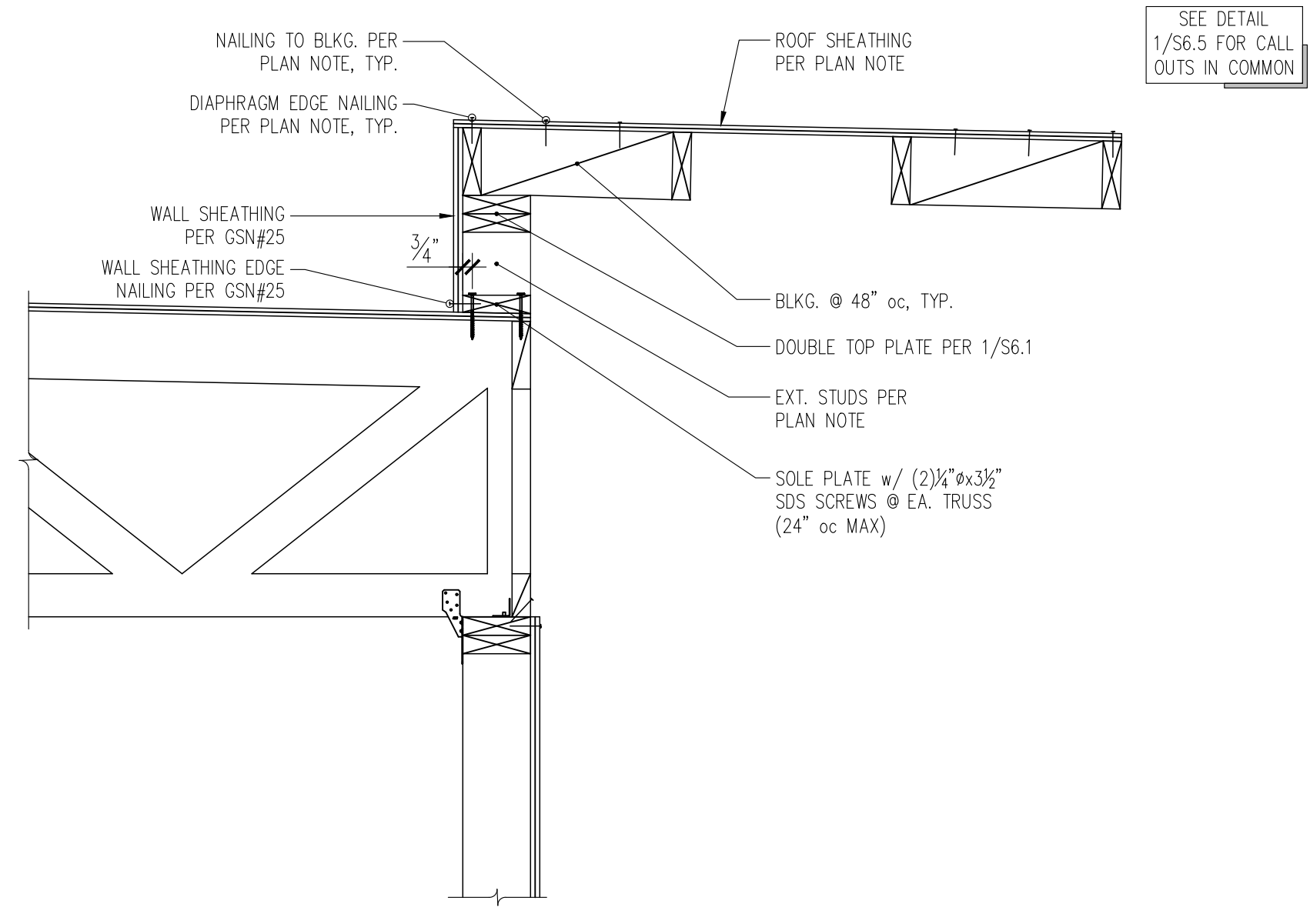
6 SECTION AT CANTILEVERED FRAMING AND PERPENDICULAR INTERIOR FRAMING
S6.5 1" = 1'-0"



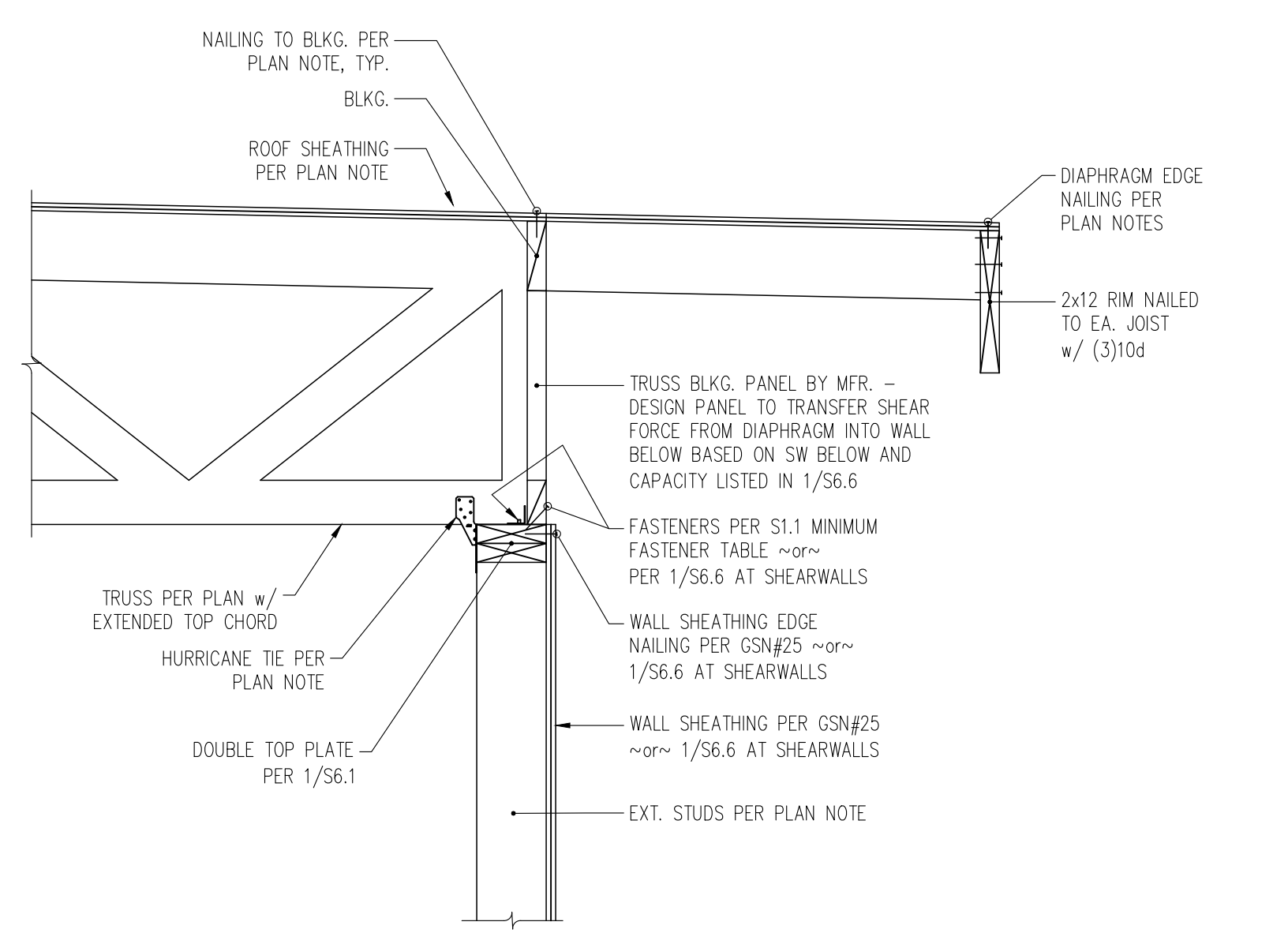
5 MULTI-PLY TRANSFER BEAM CONNECTION DETAILS
S6.5 1" = 1'-0"



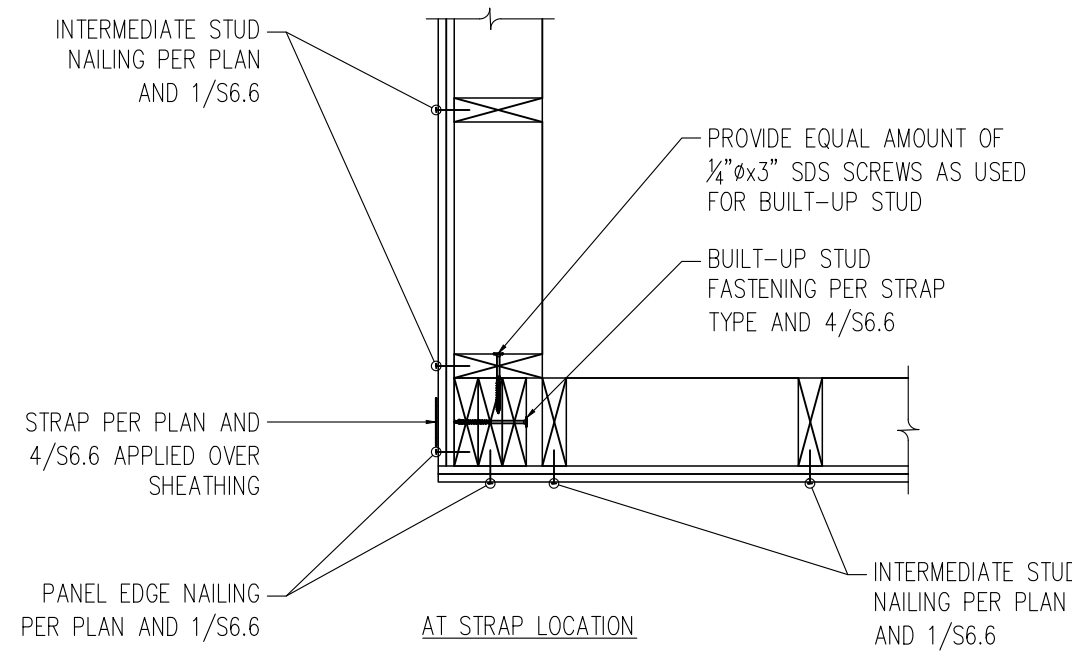
2 SECTION THROUGH EXTERIOR WALL AT PARALLEL ROOF TRUSSES
S6.5 1" = 1'-0"



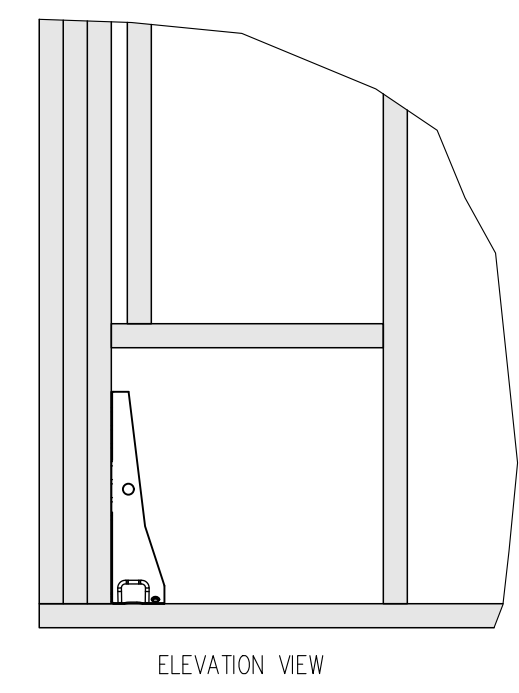
4 SECTION THROUGH RAISED ROOF AT PERPENDICULAR ROOF TRUSSES
S6.5 1" = 1'-0"



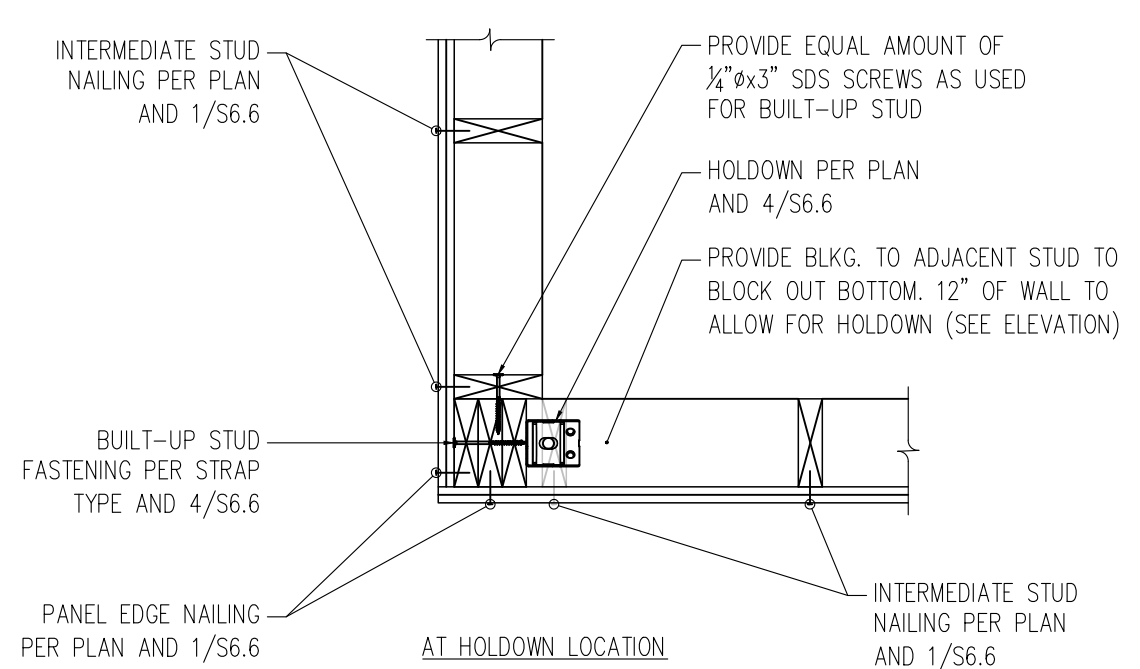
1 SECTION THROUGH EXTERIOR WALL AT PERPENDICULAR ROOF TRUSSES
S6.5 1" = 1'-0"



AT STRAP LOCATION



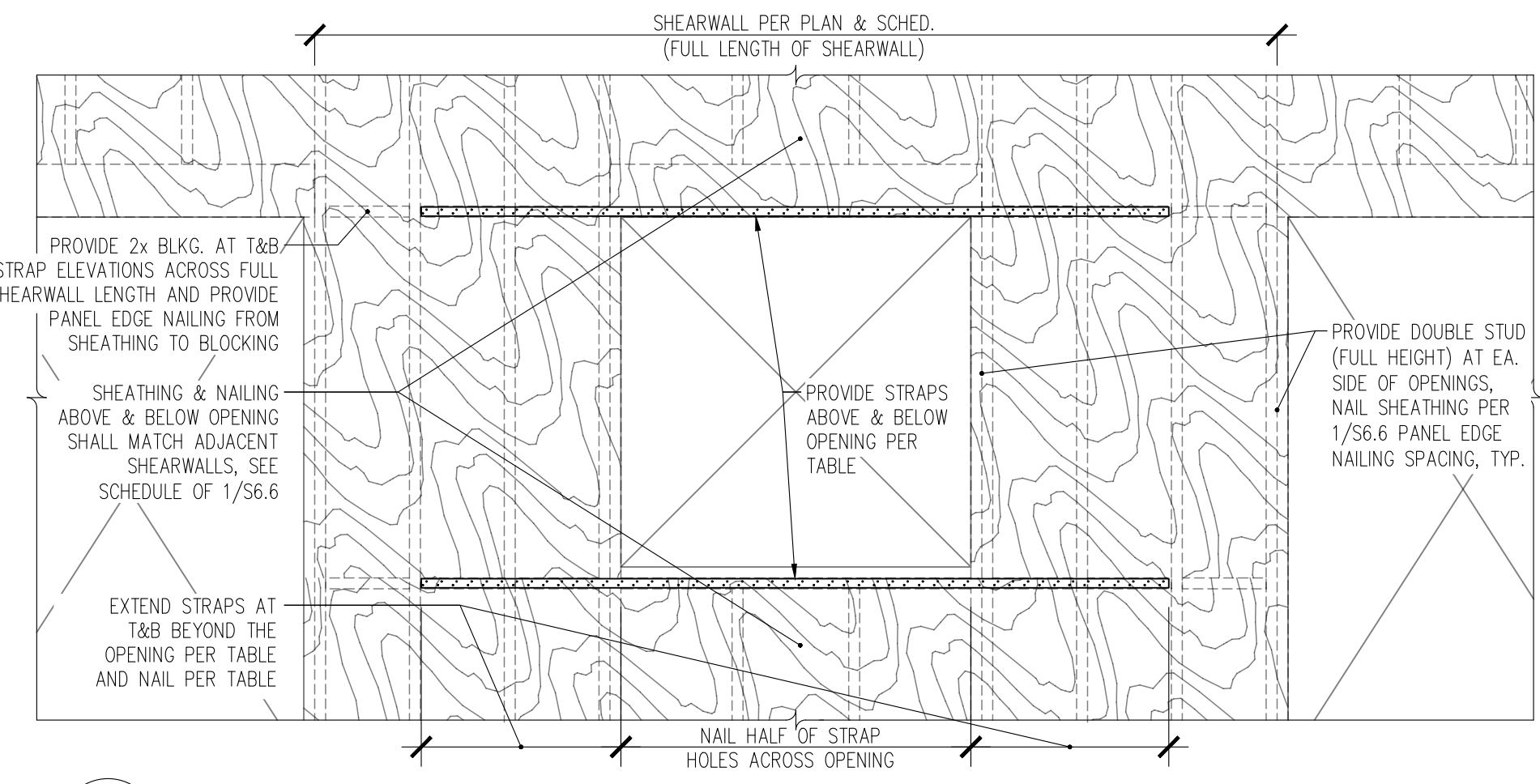
ELEVATION VIEW



AT HOLD-DOWN LOCATION

8 SHEAR WALL INTERSECTION AND TENSION TIE POSITIONING
S6.6 N.T.S.

TYPE	STRAP	END LENGTH	NAILS
①	CS20	8"	(12)0.148"x2 1/2"
②	CS20	18"	(12)0.148"x2 1/2"
③	CS14	45"	(26)0.148"x2 1/2"



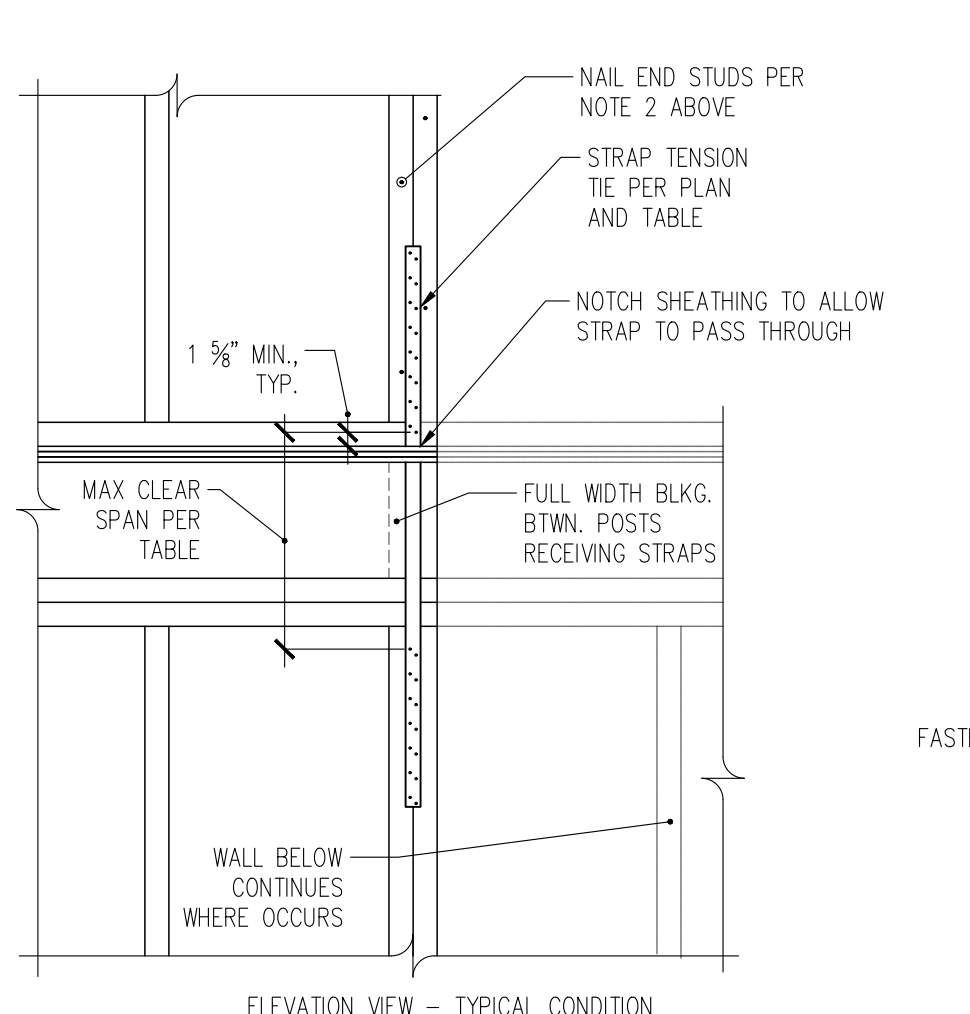
7 STRAPPED SHEARWALL DETAIL
S6.6 N.T.S.

STRAP TENSION TIE SCHEDULE

TIE MARK	Min. # of studs	CLEAR SPAN AND TOTAL FASTENERS	ASD CAPACITY	BUILT-UP STUD FACE NAILS or SCREWS
MSTC28	(2)2x	18" - (12)0.148" x 3/4"	1,150#	10d @ 6" oc
MSTC40	(2)2x	18" - (28)0.148" x 3/4"	2,690#	10d @ 4" oc
MSTC52	(3)2x	18" - (44)0.148" x 3/4"	4,225#	(8)1/4"x4 1/2" SDS
MSTC66	(3)2x	18" - (64)0.148" x 3/4"	5,850#	(12)1/4"x6" SDS
(2)MSTC52	(4)2x	18" - (44)0.148" x 3/4"	7,750#	(14)1/4"x6" SDS
(2)MSTC66	6x8	18" - (64)0.148" x 3/4"	9,800#	(12)1/4"x6" SDS

- TENSION TIE TYPES REFER TO SIMPSON STRONG-TIE CATALOG CALLOUTS.
- NAIL PLYWOOD SHEATHING TO STUDS RECEIVING HOLD-DOWN WITH SCHEDULED PANEL EDGE NAILING. STAGGER NAILS SO THAT EACH STUD IS NAILED.
- FASTENERS NOTED IN TABLE ABOVE REPRESENT THE TOTAL AMOUNT. FOR STRAPS, HALF OF THE FASTENERS SHALL BE PROVIDED INTO EACH STUD.
- SCREWS SHALL BE SPACED EQUALLY ALONG FULL HEIGHT OF STUD ABOVE TENSION TIE. PROVIDE SCREWS AS NOTED IN TABLE AT ONE FACE OF BUILT-UP STUD, AND 10d @ 6" oc NAILS AT OPPOSITE FACE OF BUILT UP STUD.

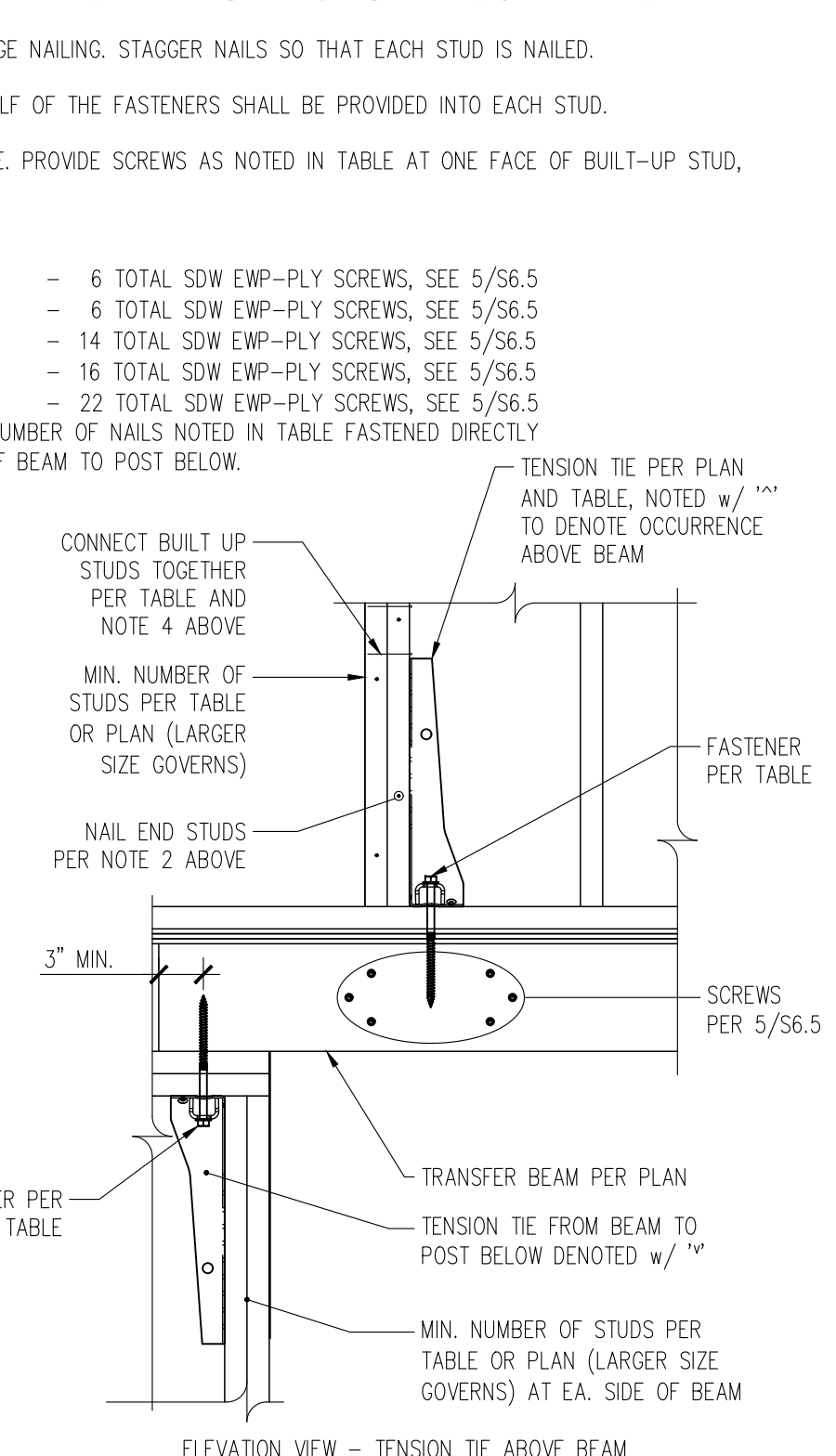
^ DENOTES TENSION TIE THAT OCCURS ATOP OF A FRAMING MEMBER BELOW. FOR:
 HDU2^ - 3/8" LAG SCREW WITH 7" MINIMUM PENETRATION INTO BEAM - 6 TOTAL SDW EWP-PLY SCREWS, SEE 5/56.5
 HDU4^ - 3/8" LAG SCREW WITH 10" MINIMUM PENETRATION INTO BEAM - 6 TOTAL SDW EWP-PLY SCREWS, SEE 5/56.5
 HDU8^ - 7/8" LAG SCREW WITH 14" MINIMUM PENETRATION INTO BEAM - 14 TOTAL SDW EWP-PLY SCREWS, SEE 5/56.5
 HDU11^ - 1" ROD w/ BEARING PLATE 1/2"x5"x0"-5" AND RECESSED NUT & WASHER - 16 TOTAL SDW EWP-PLY SCREWS, SEE 5/56.5
 HDU14^ - 1" ROD w/ BEARING PLATE 1/2"x5"x0"-5" AND RECESSED NUT & WASHER - 22 TOTAL SDW EWP-PLY SCREWS, SEE 5/56.5
 MSTC40^, MSTC52^, AND (2)MSTC52^ THE STRAP SHALL BE SET TO HAVE THE NUMBER OF NAILS NOTED IN TABLE FASTENED DIRECTLY TO BEAM AND DIRECTLY TO THE POST ABOVE; REPLICATE AT BEARING END OF BEAM TO POST BELOW.



ELEVATION VIEW - TYPICAL CONDITION

TENSION TIE ABOVE BEAM

TIE MARK	Min. # of studs	FASTENERS	ASD CAPACITY	BUILT-UP STUD FACE NAILS or SCREWS
HDU2^	(2)2x	(6)1/4" x 2 1/2" SDS	2,750#	10d @ 4" oc
HDU4^	(3)2x	(10)1/4" x 2 1/2" SDS	3,750#	(10)1/4"x4 1/2" SDS
HDU8^	(4)2x	(20)1/4" x 2 1/2" SDS	7,750#	(15)1/4"x6" SDS
HDU11^	6x6	(30)1/4" x 2 1/2" SDS	9,800#	N/A
HDU14^	6x6	(36)1/4" x 2 1/2" SDS	12,000#	N/A
MSTC40^	(2)2x	(28)0.148" x 3/4"	2,690#	10d @ 4" oc
MSTC52^	(3)2x	(44)0.148" x 3/4"	4,225#	(8)1/4"x4 1/2" SDS
(2)MSTC52^	(4)2x	(44)0.148" x 3/4"	7,750#	(14)1/4"x6" SDS

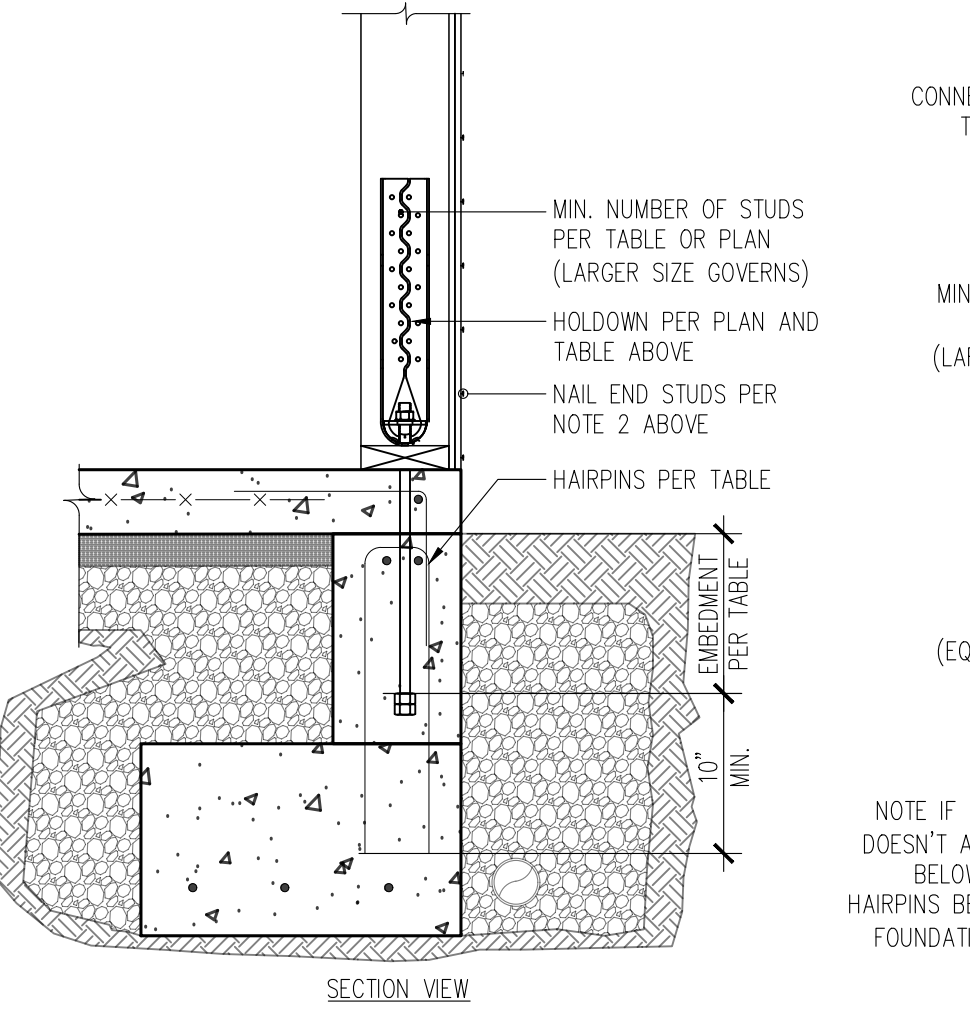


ELEVATION VIEW - TENSION TIE ABOVE BEAM

HOLD-DOWN TENSION TIE SCHEDULE

TIE MARK	MIN. NUMBER OF STUDS	ANCHOR (ø x EMBEDMENT) and No. OF HAIRPIN DOWELS	FASTENERS FROM TIE TO STUD	ASD CAPACITY	BUILT-UP STUD FACE NAILS or SCREWS
HDU2	(2)2x	3/8" ø x 10" - (2)#4 HAIRPIN	(6)1/4" x 2 1/2" SDS SCREWS	3,075#	10d @ 4" oc
HDU4	(3)2x	3/8" ø x 10" - (2)#4 HAIRPIN	(10)1/4" x 2 1/2" SDS SCREWS	4,565#	(9)1/4"x4 1/2" SDS
HDU5	(3)2x	3/8" ø x 10" - (2)#4 HAIRPIN	(14)1/4" x 2 1/2" SDS SCREWS	5,645#	(10)1/4"x4 1/2" SDS
HDU8	(4)2x	3/8" ø x 10" - (4)#4 HAIRPIN	(20)1/4" x 2 1/2" SDS SCREWS	7,870#	(15)1/4"x6" SDS
HDU11	6x6	1" ø x 10" - (4)#4 HAIRPIN	(30)1/4" x 2 1/2" SDS SCREWS	11,175#	N/A
HDU14	6x6	1" ø x 10" - (6)#4 HAIRPIN	(36)1/4" x 2 1/2" SDS SCREWS	14,445#	N/A

- TENSION TIE TYPES REFER TO SIMPSON STRONG-TIE CATALOG CALLOUTS.
- NAIL PLYWOOD SHEATHING TO STUDS RECEIVING HOLD-DOWN WITH SCHEDULED PANEL EDGE NAILING. STAGGER NAILS SO THAT EACH STUD IS NAILED.
- ANCHORS SHALL BE HEAVY HEX HEAD WITH DOUBLE NUT CAST INTO CONCRETE. ASTM F 1554 Gr. 36 FOR 3/8" ANCHOR. ASTM F 1554 Gr. 55 FOR 1" ø AND 1" ø ANCHORS.
- SCREWS SHALL BE SPACED EQUALLY ALONG FULL HEIGHT OF STUD ABOVE TENSION TIE. PROVIDE SCREWS AS NOTED IN TABLE AT ONE FACE OF BUILT-UP STUD, AND 10d @ 6" oc NAILS AT OPPOSITE FACE OF BUILT UP STUD.



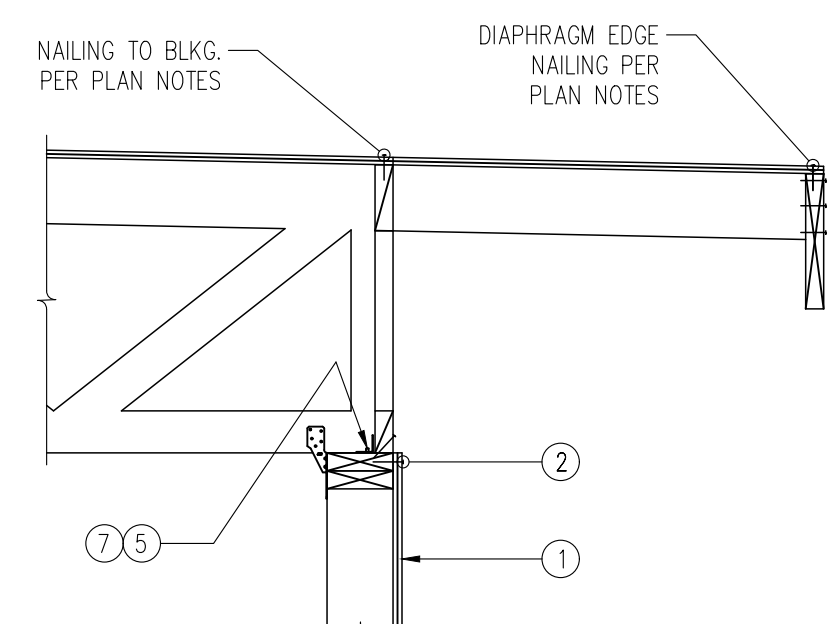
SECTION VIEW

ELEVATION VIEW

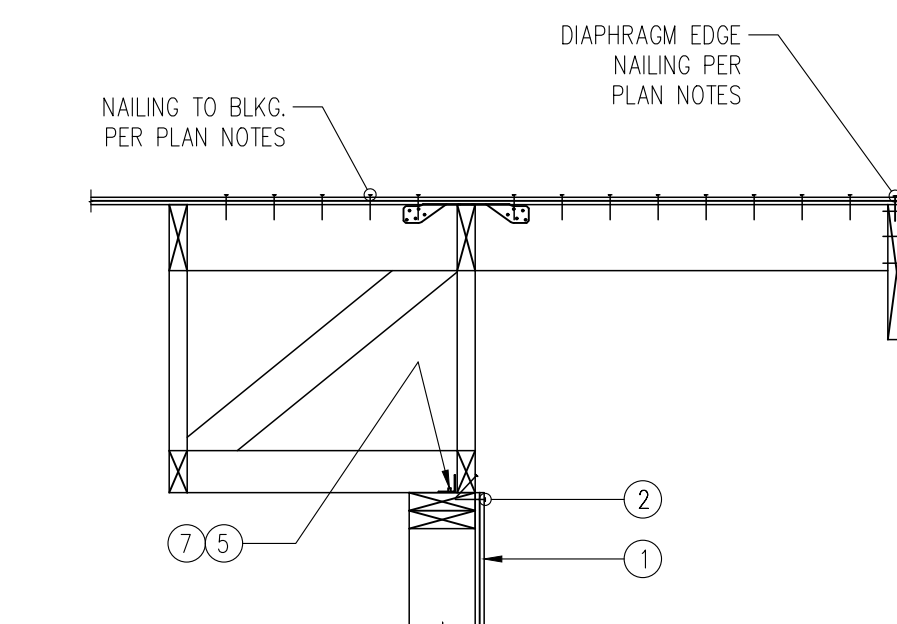
4 HOLD-DOWN DETAIL AND SCHEDULE
S6.6 1" = 1'-0"

SHEARWALL PANEL TYPE	① SHEATHING THICKNESS	② 0.148" x 2 1/2" PANEL NAILING	③ STUD/BLKG. AT ABUTTING PANEL EDGES & SILL PLATE THICKNESS	⑦ CONN. OF BLKG. OR FRAMING TO TOP PLATE, AND SOLE PLATE TO SILL PLATE			⑧ ANCHOR BOLTS TO CONC.	⑨ ASD CAPACITY, PLF
				④ 1/4" ø x 3 1/2" SDS SCREWS	⑤ A35 CLIPS	⑥ LTP4 PLATES		
SW-6	1/2"	6" oc	2x	15" oc	25" oc	24" oc	48" oc 48" oc	310
SW-4	1/2"	4" oc	3x	10" oc	16" oc	16" oc	38" oc 48" oc	460
SW-3	1/2"	3" oc	3x	8" oc	13" oc	12" oc	29" oc 40" oc	600
SW-2	1/2"	2" oc	3x	6" oc	10" oc	9" oc	23" oc 31" oc	770
SW-44	1/2"	4" oc EA. SIDE	3x	5" oc	8" oc	8" oc	19" oc 26" oc	920
SW-33	1/2"	3" oc EA. SIDE	3x	4" oc	6" oc	6" oc	14" oc 20" oc	1200
SW-22	1/2"	2" oc EA. SIDE	3x	3" oc	5" oc	4" oc	11" oc 15" oc	1540

- SHEATHING SHALL CONSIST OF 1/2" PLYWOOD AND HAVE A MINIMUM SPAN RATING OF 2/8" AT INTERIOR SHEARWALLS ONLY. 1/8" OSB MAY BE USED.
- PANEL NAILING APPLIES TO ALL SHEATHING PANEL EDGES. INSTALL BLOCKING AT ALL UNFRAMED PANEL EDGES. ENSURE SHEATHING IS NAILED TO ALL INTERMEDIATE STUDS/BLOCKING WITH PANEL NAILS AT 12" oc.
- DOUBLE 2x MEMBERS MAY BE SUBSTITUTED FOR 3x MEMBERS AT WALLS WITH ONLY ONE LAYER OF SHEATHING. 2x MEMBERS SHALL BE NAILED TOGETHER WITH 8d FACE: ø 4" oc FOR SW-4, ø 3" oc FOR SW-3, AND (2)ø 3" oc FOR SW-2 (116#/NAIL).
- ROWS OF NAILS AND SDS SCREWS SHALL BE OFFSET AT LEAST 1/2" AND STAGGERED. MINIMUM EDGE DISTANCE FOR NAILS AND SDS SCREWS INTO EDGE OF MEMBERS SHALL BE 3/8" (400#/SCREW).
- A35 CLIPS SHALL BE INSTALLED w/ (12)0.131 x 1 1/2" NAILS (650#/CLIP).
- LTP4 LATERAL LIP PLATES MAY BE INSTALLED OVER SHEATHING w/ (12)0.131 x 2 1/2" NAILS (625#/CLIP).
- CONTRACTOR SHALL USE A35 CLIPS TO CONNECT ROOF TRUSS TO DOUBLE TOP PLATE. SDS SCREWS OR LTP4 CLIPS TO CONNECT SOLE PLATE TO FLOOR TRUSS RIM BOARD. A35 OR LTP4 CLIPS TO CONNECT FLOOR TRUSS TIM BOARD TO DOUBLE TOP PLATE.
- PLATE WASHERS IN 2x4 STUD WALLS AND ALL SINGLE SIDED SHEAR WALLS SHALL BE 3"x3"x0.229". DOUBLE SIDED 2x6 SHEAR WALLS SHALL HAVE 4 1/2"x3"x0.229" PLATE WASHERS. THE EDGE OF PLATE WASHERS SHALL BE LOCATED WITHIN 1/2" OF THE EDGE OF BOTTOM PLATE ON THE SIDE WITH SHEATHING.
- CAST ANCHORS A MINIMUM OF 7" INTO CONCRETE. INSTALL ADDITIONAL ANCHOR BOLTS AT EACH SIDE OF PLATE BRACKETS AND PENETRATIONS EXCEEDING THE "NO REINFORCING" HOLE SIZE PER 2/56.1.

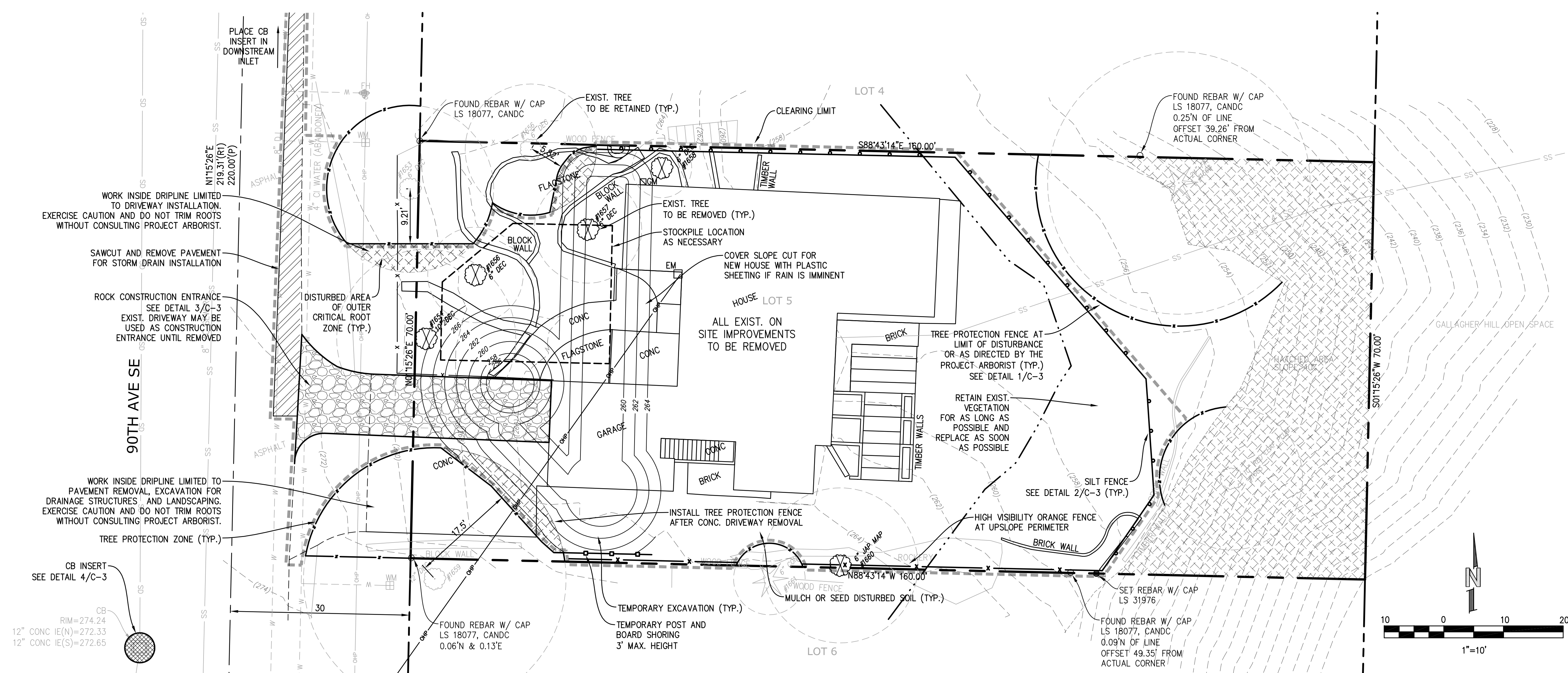


SHEARWALL SECTION AT PERPENDICULAR FRAMING



SHEARWALL SECTION AT PARALLEL FRAMING

1 SHEARWALL SECTION AND SCHEDULE
S6.6 1" = 1'-0"



BASIS OF BEARINGS

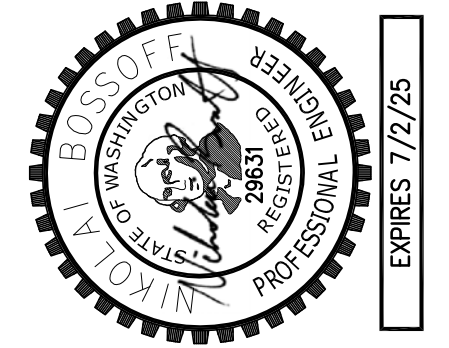
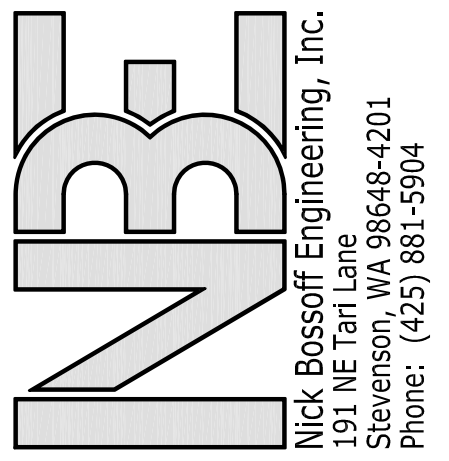
BEARINGS AND COORDINATES USED FOR THIS SURVEY ARE BASED ON THE NORTH AMERICAN DATUM OF 1983 (NAD83) WASHINGTON NORTH ZONE AND WERE ESTABLISHED USING RTK GPS WITH SMARTNET REFERENCE NETWORK.

LEGAL DESCRIPTION

LOT 5, BLOCK 4 OF MADRONA CREST ADDITION ACCORDING TO THE PLAT THEREOF RECORDED IN VOLUME 42 OF PLATS, PAGES 12-14, RECORDS OF KING COUNTY WASHINGTON. SITUATE IN COUNTY OF KING, STATE OF WASHINGTON.

VERTICAL DATUM

ELEVATIONS SHOWN ON THIS DRAWING ARE BASE ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88) AND WERE ESTABLISHED USING RTK GPS.



NO.	DATE	REVISION
1	06/11/22	PERMIT SUBMITTAL
2	04/10/23	CITY REVISIONS
3	07/11/23	CITY REVISIONS
4	07/14/23	CITY REVISIONS
5	09/07/23	CITY REVISIONS

N. BOSSOFF, P.E.
 PROJECT MANAGER:
 DESIGNED: TKB
 DRAWN: GUDI-2201
 JOB NUMBER: GUDI-2201
 FILE NAME: GUDI-2201.pln.dwg

EROSION AND SEDIMENT CONTROL NOTES

- APPROVAL OF THIS EROSION AND SEDIMENT CONTROL (ESC) PLAN DOES NOT CONSTITUTE AN APPROVAL OF PERMANENT ROAD OR DRAINAGE DESIGN (E.G., SIZE AND LOCATION OF ROADS, PIPES, RESTRICTORS, CHANNELS, RETENTION FACILITIES, UTILITIES, ETC.).
- THE IMPLEMENTATION OF THESE ESC PLANS AND THE CONSTRUCTION, MAINTENANCE, REPLACEMENT, AND UPGRADING OF THESE ESC FACILITIES IS THE RESPONSIBILITY OF THE APPLICANT/ESC SUPERVISOR UNTIL ALL CONSTRUCTION IS APPROVED.
- THE BOUNDARIES OF THE CLEARING LIMITS SHOWN ON THIS PLAN SHALL BE CLEARLY FLAGGED BY A CONTINUOUS LENGTH OF SURVEY TAPE (OR FENCING, IF REQUIRED) PRIOR TO CONSTRUCTION. DURING THE CONSTRUCTION PERIOD, NO DISTURBANCE BEYOND THE CLEARING LIMITS SHALL BE PERMITTED. THE CLEARING LIMITS SHALL BE MAINTAINED BY THE APPLICANT/ESC SUPERVISOR FOR THE DURATION OF CONSTRUCTION.
- THE ESC FACILITIES SHOWN ON THIS PLAN MUST BE CONSTRUCTED PRIOR TO OR IN CONJUNCTION WITH ALL CLEARING AND GRADING SO AS TO ENSURE THAT THE TRANSPORT OF SEDIMENT TO SURFACE WATERS, DRAINAGE SYSTEMS, AND ADJACENT PROPERTIES IS MINIMIZED.
- THE ESC FACILITIES SHOWN ON THIS PLAN ARE THE MINIMUM REQUIREMENTS FOR ANTICIPATED SITE CONDITIONS. DURING THE CONSTRUCTION PERIOD, THESE ESC FACILITIES SHALL BE UPGRADED AS NEEDED FOR UNEXPECTED STORM EVENTS AND MODIFIED TO ACCOUNT FOR CHANGING SITE CONDITIONS (E.G., ADDITIONAL SUMP PUMPS, RELOCATION OF DITCHES AND SILT FENCES, ETC.).
- THE ESC FACILITIES SHALL BE INSPECTED DAILY BY THE APPLICANT/ESC SUPERVISOR AND MAINTAINED TO ENSURE CONTINUED PROPER FUNCTIONING. WRITTEN RECORDS SHALL BE KEPT OF WEEKLY REVIEWS OF THE ESC FACILITIES DURING THE WET SEASON (OCT. 1 TO APRIL 30) AND OF MONTHLY REVIEWS DURING THE DRY SEASON (MAY 1 TO SEPT. 30).
- ANY AREAS OF EXPOSED SOILS, INCLUDING ROADWAY EMBANKMENTS, THAT WILL NOT BE DISTURBED FOR TWO DAYS DURING THE WET SEASON OR SEVEN DAYS DURING THE DRY SEASON SHALL BE IMMEDIATELY STABILIZED WITH THE APPROVED ESC METHODS (E.G., SEEDING, MULCHING, PLASTIC COVERING, ETC.).
- ANY AREA NEEDING ESC MEASURES NOT REQUIRING IMMEDIATE ATTENTION SHALL BE ADDRESSED WITHIN FIFTEEN (15) DAYS.
- THE ESC FACILITIES ON INACTIVE SITES SHALL BE INSPECTED AND MAINTAINED A MINIMUM OF ONCE A MONTH OR WITHIN FORTY-EIGHT (48) HOURS FOLLOWING A STORM EVENT.
- AT NO TIME SHALL MORE THAN ONE (1) FOOT OF SEDIMENT BE ALLOWED TO ACCUMULATE WITHIN A CATCH BASIN. ALL CATCH BASINS AND CONVEYANCE LINES SHALL BE CLEANED PRIOR TO PAVING. THE CLEANING OPERATION SHALL NOT FLUSH SEDIMENT-LADEN WATER INTO THE DOWNSTREAM SYSTEM.
- STABILIZED CONSTRUCTION ENTRANCES AND ROADS SHALL BE INSTALLED AT THE BEGINNING OF CONSTRUCTION AND MAINTAINED FOR THE DURATION OF THE PROJECT. ADDITIONAL MEASURES, SUCH AS WASH PADS, MAY BE REQUIRED TO ENSURE THAT ALL PAVED AREAS ARE KEPT CLEAN FOR THE DURATION OF THE PROJECT.
- ANY PERMANENT FLOW CONTROL FACILITY USED AS A TEMPORARY SETTLING BASIN SHALL BE MODIFIED WITH THE NECESSARY EROSION CONTROL MEASURES AND SHALL PROVIDE ADEQUATE STORAGE CAPACITY. IF THE FACILITY IS TO FUNCTION ULTIMATELY AS AN INFILTRATION SYSTEM, THE TEMPORARY FACILITY MUST BE GRADED SO THAT THE BOTTOM AND SIDES ARE AT LEAST THREE FEET ABOVE THE FINAL GRADE OF THE PERMANENT FACILITY.
- WHERE STRAW MULCH FOR TEMPORARY EROSION CONTROL IS REQUIRED, IT SHALL BE APPLIED AT A MINIMUM THICKNESS OF 2 TO 3 INCHES.
- PRIOR TO THE BEGINNING OF THE WET SEASON (OCT. 1), ALL DISTURBED AREAS SHALL BE REVIEWED TO IDENTIFY WHICH ONES CAN BE SEEDED IN PREPARATION FOR THE WINTER RAINS. DISTURBED AREAS SHALL BE SEEDED WITHIN ONE WEEK OF THE BEGINNING OF THE WET SEASON. A SKETCH MAP OF THOSE AREAS TO BE SEEDED AND THOSE AREAS TO REMAIN UNCOVERED SHALL BE SUBMITTED TO THE DDES INSPECTOR. THE DDES INSPECTOR CAN REQUIRE SEEDING OF ADDITIONAL AREAS IN ORDER TO PROTECT SURFACE WATERS, ADJACENT PROPERTIES, OR DRAINAGE FACILITIES.

POLLUTION PREVENTION AND SPILL CONTROL

- STORAGE AND HANDLING OF LIQUIDS**
- MINIMIZE AMOUNT OF LIQUIDS STORED ON SITE.
 - STORE AND CONTAIN LIQUID MATERIALS IN SUCH A MANNER THAT IF A VESSEL IS RUPTURED OR LEAKS, THE CONTENTS WILL NOT DISCHARGE, FLOW, OR BE WASHED INTO THE STORM DRAINAGE SYSTEM, SURFACE WATERS, OR GROUNDWATER. TYPICALLY THIS MEANS INSTALLING SECONDARY CONTAINMENT, SUCH AS A LINED EXCAVATION, LARGER CONTAINER, OR USING A DOUBLE-WALLED TANK OR SIMILAR COMMERCIALLY AVAILABLE CONTAINMENT FACILITY.
 - PLACE TIGHT-FITTING LIDS ON ALL CONTAINERS.
 - ENCLOSE OR COVER THE CONTAINERS WHERE THEY ARE STORED TO PROTECT FROM RAIN. THE LOCAL FIRE DISTRICT MUST BE CONSULTED FOR LIMITATIONS ON CLEARANCE OF ROOF COVERS OVER CONTAINERS USED TO STORE FLAMMABLE MATERIALS.
 - RAISE THE CONTAINERS OFF THE GROUND BY USING A SPILL CONTAINMENT PALLET OR SIMILAR METHOD THAT HAS PROVISIONS FOR SPILL CONTROL.
 - PLACE DRIP PANS OR ABSORBENT MATERIALS BENEATH ALL MOUNTED CONTAINER TAPS, AND AT ALL POTENTIAL DRIP AND SPILL LOCATIONS DURING FILLING AND UNLOADING OF CONTAINERS. ANY COLLECTED LIQUIDS OR SOILED ABSORBENT MATERIALS MUST BE REUSED, RECYCLED, OR PROPERLY DISPOSED OF.
 - STORE AND MAINTAIN ABSORBENT PADS OR APPROPRIATE SPILL CLEANUP MATERIALS NEAR THE CONTAINER STORAGE AREA, IN A LOCATION KNOWN TO ALL. ENSURE THAT EMPLOYEES ARE FAMILIAR WITH THE SITE'S SPILL PLAN AND/OR PROPER SPILL CLEANUP PROCEDURES.
 - CHECK CONTAINERS (AND ANY CONTAINMENT SUMPS) DAILY FOR LEAKS AND SPILLS. REPLACE CONTAINERS THAT ARE LEAKING, CORRODED, OR OTHERWISE DETERIORATING. IF THE LIQUID CHEMICALS ARE CORROSIVE, CONTAINERS MADE OF COMPATIBLE MATERIALS MUST BE USED INSTEAD OF METAL DRUMS. NEW OR SECONDARY CONTAINERS MUST BE LABELED WITH THE PRODUCT NAME AND HAZARDS.
 - PLACE DRIP PANS OR ABSORBENT MATERIALS BENEATH A CONTAINER THAT IS FOUND TO BE LEAKING. REMOVE THE DAMAGED CONTAINER AS SOON AS POSSIBLE. MOP UP THE SPILLED LIQUID WITH ABSORBENT PADS OR RAGS. ANY COLLECTED LIQUIDS OR SOILED ABSORBENT MATERIALS MUST BE REUSED, RECYCLED, OR PROPERLY DISPOSED OF.
- FUELING**
- LOCATE THE FUELING OPERATION TO ENSURE LEAKS OR SPILLS WILL NOT DISCHARGE, FLOW, OR BE WASHED INTO THE STORM DRAINAGE SYSTEM, SURFACE WATER, OR GROUNDWATER.
 - USE DRIP PANS OR ABSORBENT PADS TO CAPTURE DRIPS OR SPILLS DURING FUELING OPERATIONS.
 - IF FUELING IS DONE DURING EVENING HOURS, LIGHTING MUST BE PROVIDED.
 - STORE AND MAINTAIN APPROPRIATE SPILL CLEANUP MATERIALS IN THE MOBILE FUELING VEHICLE. ENSURE THAT EMPLOYEES ARE FAMILIAR WITH PROPER SPILL CONTROL AND CLEANUP PROCEDURES.
 - IMMEDIATELY MOP UP ANY SPILLED FUEL WITH ABSORBENT PADS OR RAGS. ANY COLLECTED LIQUIDS OR SOILED ABSORBENT MATERIALS MUST BE REUSED, RECYCLED, OR PROPERLY DISPOSED OF.
- CONCRETE SAW CUTTING, SLURRY, AND WASHWATER DISPOSAL**
- SLURRY FROM SAW CUTTING THE SIDEWALK SHALL BE VACUUMED SO THAT IT DOES NOT ENTER NEARBY STORM DRAINS.
 - CONCRETE TRUCK CHUTES, PUMPS, AND INTERNALS SHALL BE WASHED OUT ONLY INTO FORMED AREAS AWAITING INSTALLATION OF CONCRETE.
 - UNUSED CONCRETE REMAINING IN THE TRUCK AND PUMP SHALL BE RETURNED TO THE ORIGINATING BATCH PLANT FOR RECYCLING.
 - HAND TOOLS INCLUDING, BUT NOT LIMITED, SCREEDS, SHOVELS, RAKES, FLOATS, AND TROWELS SHALL BE WASHED OFF ONLY INTO FORMED AREAS AWAITING INSTALLATION OF CONCRETE OR IMPERMEABLE ASPHALT.
 - EQUIPMENT THAT CANNOT BE EASILY MOVED, SUCH AS CONCRETE PAVERS, SHALL ONLY BE WASHED IN AREAS THAT DO NOT DIRECTLY DRAIN TO NATURAL OR CONSTRUCTED STORMWATER CONVEYANCES.
 - WASHDOWN FROM AREAS SUCH AS CONCRETE AGGREGATE DRIVEWAY SHALL NOT DRAIN DIRECTLY TO NATURAL OR CONSTRUCTED STORMWATER CONVEYANCES.
 - WHEN NO FORMED AREAS ARE AVAILABLE, WASHWATER AND LEFTOVER PRODUCT SHALL BE CONTAINED IN A LINED CONTAINER. CONTAINED CONCRETE SHALL BE DISPOSED OF IN A MANNER THAT DOES NOT VIOLATE GROUNDWATER OR SURFACE WATER QUALITY STANDARDS.
 - CONTAINERS SHALL BE CHECKED FOR HOLES IN THE LINER DAILY DURING CONCRETE POURS AND REPLACED THE SAME DAY.

WASHINGTON

MERCER ISLAND

MITHILA
3632 90TH AVE SE

TITLE:
T.E.S.C.
PLAN

SHEET:
C-1

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POST-CONSTRUCTION SOIL QUALITY AND DEPTH NOTES

THE LAWN AND LANDSCAPE AREAS ARE REQUIRED TO PROVIDE POST-CONSTRUCTION SOIL QUALITY AND DEPTH IN ACCORDANCE WITH BMP 15.13. THE PROJECT GEOTECHNICAL ENGINEER MUST PROVIDE A LETTER OF CERTIFICATION TO ENSURE THAT THE LAWN AND LANDSCAPE AREAS ARE MEETING THE POST-CONSTRUCTION SOIL QUALITY AND DEPTH REQUIREMENTS SPECIFIED ON THE APPROVED PLAN SET PRIOR TO FINAL INSPECTION OF THE PROJECT.

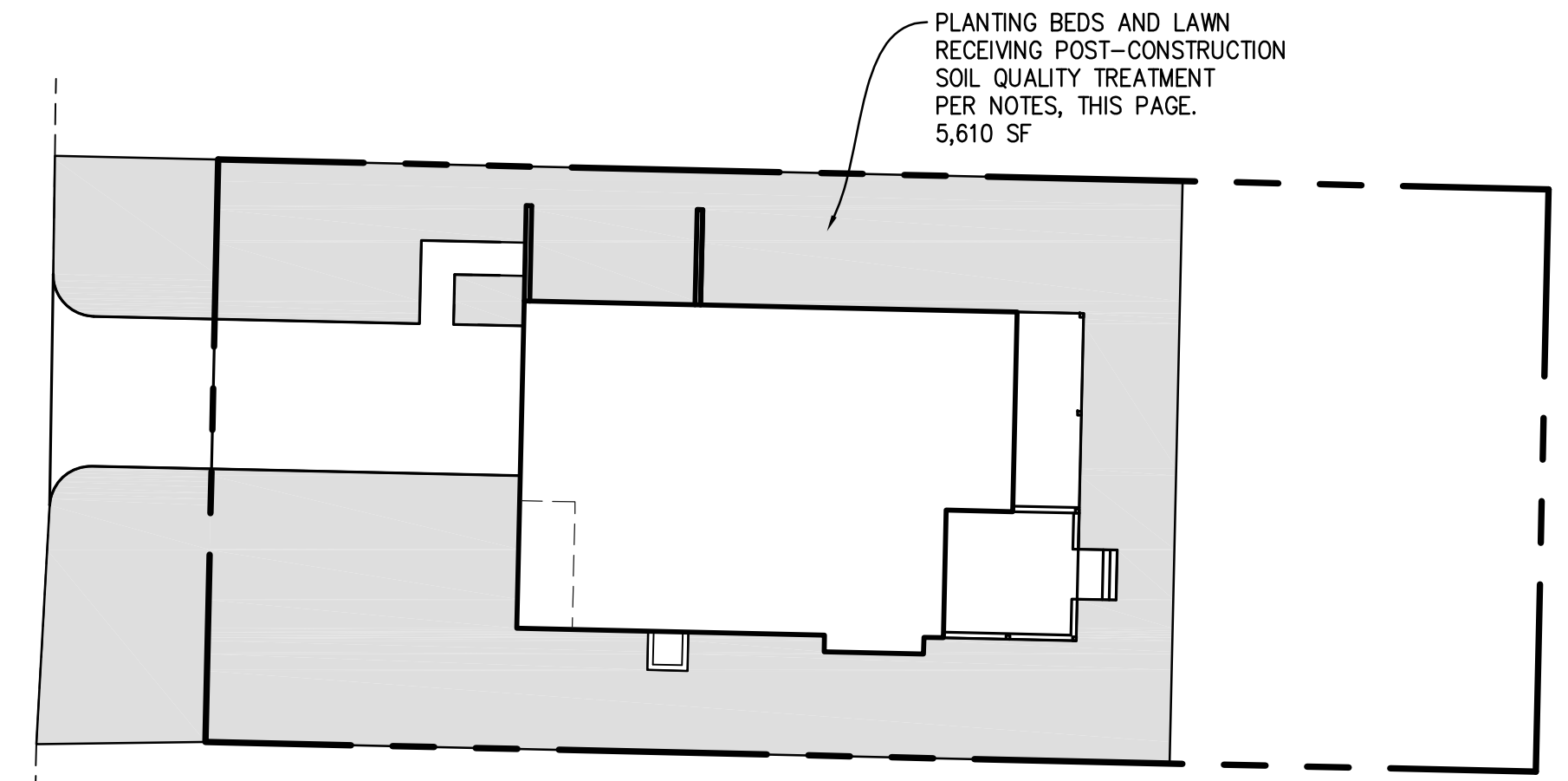
- A. SOIL RETENTION. RETAIN, IN AN UNDISTURBED STATE, THE DUFF LAYER AND NATIVE TOPSOIL TO THE MAXIMUM EXTENT PRACTICABLE. IN ANY AREAS REQUIRING GRADING REMOVE AND STOCKPILE THE DUFF LAYER AND TOPSOIL ON SITE IN A DESIGNATED, CONTROLLED AREA, NOT ADJACENT TO PUBLIC RESOURCES AND CRITICAL AREAS, TO BE REAPPLIED TO OTHER PORTIONS OF THE SITE WHERE FEASIBLE.
- B. SOIL QUALITY. ALL AREAS SUBJECT TO CLEARING AND GRADING THAT HAVE NOT BEEN COVERED BY IMPERVIOUS SURFACE, INCORPORATED INTO A DRAINAGE FACILITY OR ENGINEERED AS STRUCTURAL FILL OR SLOPE SHALL, AT PROJECT COMPLETION, DEMONSTRATE THE FOLLOWING:
- A TOPSOIL LAYER WITH A MINIMUM ORGANIC MATTER CONTENT OF 10% DRY WEIGHT IN PLANTING BEDS, AND 5% ORGANIC MATTER CONTENT IN TURF AREAS, AND A PH FROM 6.0 TO 8.0 OR MATCHING THE PH OF THE UNDISTURBED SOIL. THE TOPSOIL SHALL HAVE A MINIMUM DEPTH OF EIGHT INCHES EXCEPT WHERE TREE ROOTS LIMIT THE DEPTH OF INCORPORATION OF AMENDMENTS. NEED TO MEET THE CRITERIA. SUBSOILS BELOW THE TOPSOIL LAYER SHOULD BE SCARIFIED AT LEAST 4 INCHES WITH SOME INCORPORATION OF THE UPPER MATERIAL TO AVOID STRATIFIED LAYERS, WHERE FEASIBLE.
 - MULCH PLANTING BEDS WITH 2 INCHES OF ORGANIC MATERIAL
 - USE COMPOST AND OTHER MATERIALS THAT MEET THESE ORGANIC CONTENT REQUIREMENTS:
 - THE ORGANIC CONTENT FOR "PRE-APPROVED" AMENDMENT RATES CAN BE MET ONLY USING COMPOST MEETING THE DEFINITION OF "COMPOSTED MATERIALS" IN WAC 173-350-220, WITH THE EXCEPTION THAT THE COMPOST MAY HAVE UP TO 35% BIOSOLIDS OR MANURE. THE COMPOST MUST ALSO HAVE AN ORGANIC MATTER CONTENT OF 40% TO 65%, AND A CARBON TO NITROGEN RATIO BELOW 25:1. THE CARBON TO NITROGEN RATIO MAY BE AS HIGH AS 35:1 FOR PLANTINGS COMPOSED ENTIRELY OF PLANTS NATIVE TO THE PUGET SOUND LOWLANDS REGION.
 - CALCULATED AMENDMENT RATES MAY BE MET THROUGH USE OF COMPOSTED MATERIAL MEETING (A) ABOVE; OR OTHER ORGANIC MATERIALS AMENDED TO MEET THE CARBON TO NITROGEN RATIO REQUIREMENTS, AND NOT EXCEEDING THE CONTAMINANT LIMITS IDENTIFIED IN TABLE 220-B, TESTING PARAMETERS, IN WAC 173-350-220.

THE RESULTING SOIL SHOULD BE CONDUCTIVE TO THE TYPE OF VEGETATION TO BE ESTABLISHED.

- C. IMPLEMENTATION OPTIONS: THE SOIL QUALITY DESIGN GUIDELINES LISTED ABOVE CAN BE MET BY USING ONE OF THE METHODS LISTED BELOW.
- LEAVE UNDISTURBED NATIVE VEGETATION AND SOIL AND PROTECT FROM COMPACTION DURING CONSTRUCTION.
 - AMEND EXISTING SITE TOPSOIL OR SUBSOIL EITHER AT DEFAULT "PREAPPROVED" RATES, OR AT CUSTOM CALCULATED RATES BASED ON TESTS OF THE SOIL AND AMENDMENT.
 - STOCKPILE EXISTING TOPSOIL DURING GRADING AND REPLACE IT PRIOR TO PLANTING. STOCKPILED TOPSOIL MUST ALSO BE AMENDED IF NEEDED TO MEET THE ORGANIC MATTER OR DEPTH REQUIREMENTS, EITHER AT A DEFAULT "PRE-APPROVED" RATE OR AT A CUSTOM CALCULATED RATE.
 - IMPORT TOPSOIL MIX OF SUFFICIENT ORGANIC CONTENT AND DEPTH TO MEET THE REQUIREMENTS. MORE THAN ONE METHOD MAY BE USED ON DIFFERENT PORTIONS OF THE SAME SITE. SOIL THAT ALREADY MEETS THE DEPTH AND ORGANIC MATTER QUALITY STANDARDS, AND IS NOT COMPACTED, DOES NOT NEED TO BE AMENDED.

ADDITIONAL NOTES:

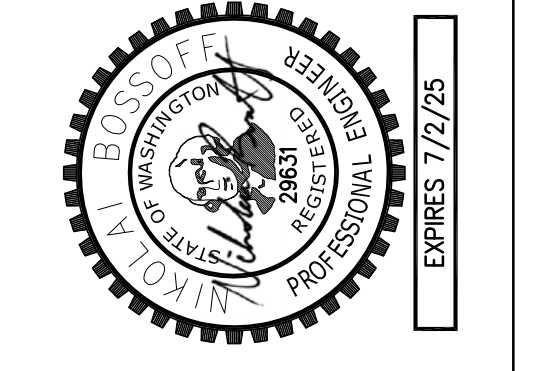
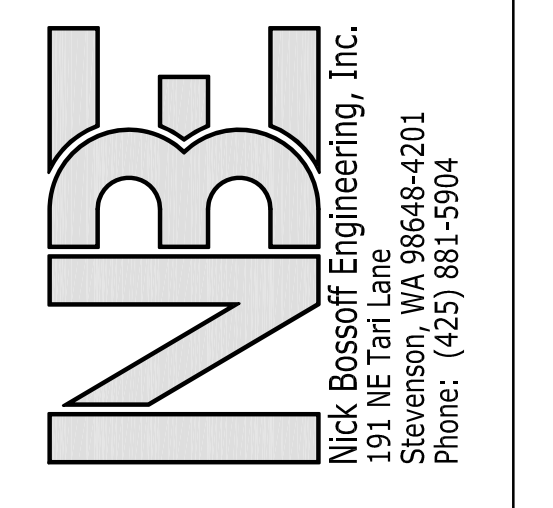
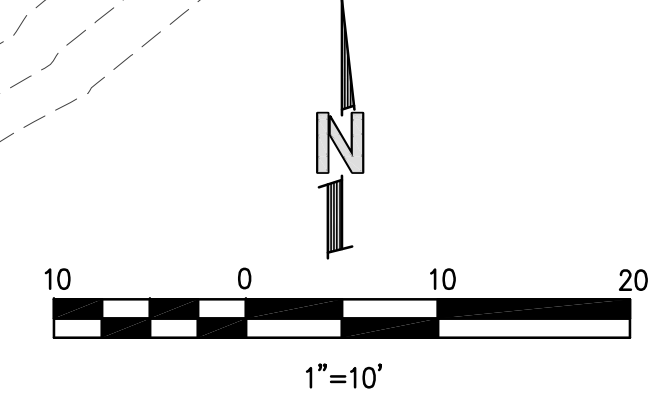
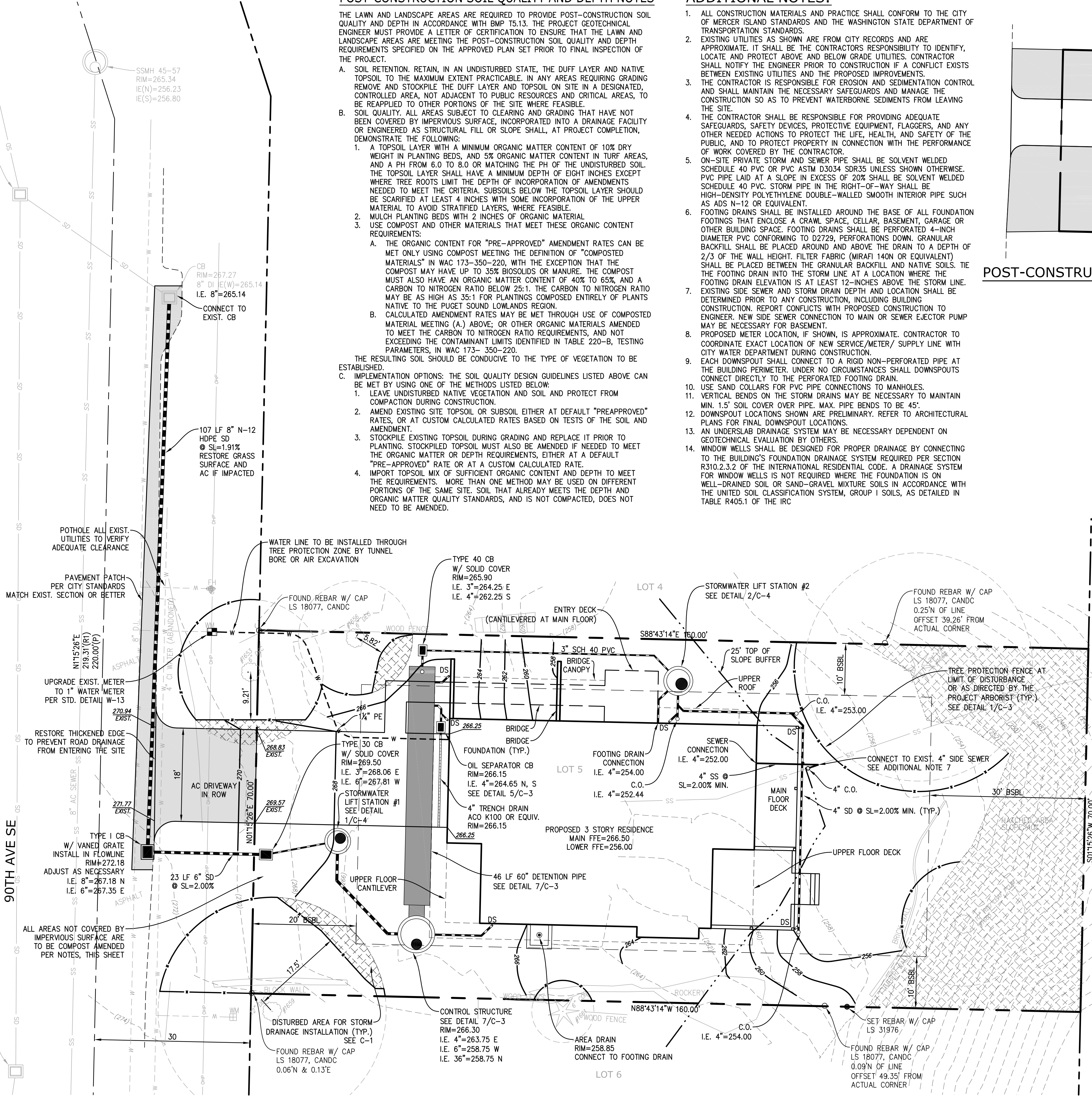
- ALL CONSTRUCTION MATERIALS AND PRACTICE SHALL CONFORM TO THE CITY OF MERCER ISLAND STANDARDS AND THE WASHINGTON STATE DEPARTMENT OF TRANSPORTATION STANDARDS.
- EXISTING UTILITIES AS SHOWN ARE FROM CITY RECORDS AND ARE APPROXIMATE. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO IDENTIFY, LOCATE AND PROTECT ABOVE AND BELOW GRADE UTILITIES. CONTRACTOR SHALL NOTIFY THE ENGINEER PRIOR TO CONSTRUCTION IF A CONFLICT EXISTS BETWEEN EXISTING UTILITIES AND THE PROPOSED IMPROVEMENTS.
- THE CONTRACTOR IS RESPONSIBLE FOR EROSION AND SEDIMENTATION CONTROL AND SHALL MAINTAIN THE NECESSARY SAFEGUARDS AND MANAGE THE CONSTRUCTION SO AS TO PREVENT WATERBORNE SEDIMENTS FROM LEAVING THE SITE.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ADEQUATE SAFEGUARDS, SAFETY DEVICES, PROTECTIVE EQUIPMENT, FLAGGERS, AND ANY OTHER NEEDED ACTIONS TO PROTECT THE LIFE, HEALTH, AND SAFETY OF THE PUBLIC, AND TO PROTECT PROPERTY IN CONNECTION WITH THE PERFORMANCE OF WORK COVERED BY THE CONTRACTOR.
- ON-SITE PRIVATE STORM AND SEWER PIPE SHALL BE SOLVENT WELDED SCHEDULE 40 PVC OR PVC ASTM D3034 SDR35 UNLESS SHOWN OTHERWISE. PVC PIPE LAID AT A SLOPE IN EXCESS OF 20% SHALL BE SOLVENT WELDED SCHEDULE 40 PVC. STORM PIPE IN THE RIGHT-OF-WAY SHALL BE HIGH-DENSITY POLYETHYLENE DOUBLE-WALLED SMOOTH INTERIOR PIPE SUCH AS ADS N-12 OR EQUIVALENT.
- FOOTING DRAINS SHALL BE INSTALLED AROUND THE BASE OF ALL FOUNDATION FOOTINGS THAT ENCLOSE A CRAWL SPACE, CELLAR, BASEMENT, GARAGE OR OTHER BUILDING SPACE. FOOTING DRAINS SHALL BE PERFORATED 4-INCH DIAMETER PVC CONFORMING TO D2729, PERFORATIONS DOWN. GRANULAR BACKFILL SHALL BE PLACED AROUND AND ABOVE THE DRAIN TO A DEPTH OF 2/3 OF THE WALL HEIGHT. FILTER FABRIC (MIRAFIL 140N OR EQUIVALENT) SHALL BE PLACED BETWEEN THE GRANULAR BACKFILL AND NATIVE SOILS. TIE THE FOOTING DRAIN INTO THE STORM LINE AT A LOCATION WHERE THE FOOTING DRAIN ELEVATION IS AT LEAST 12-INCHES ABOVE THE STORM LINE.
- EXISTING SIDE SEWER AND STORM DRAIN DEPTH AND LOCATION SHALL BE DETERMINED PRIOR TO ANY CONSTRUCTION, INCLUDING BUILDING CONSTRUCTION. REPORT CONFLICTS WITH PROPOSED CONSTRUCTION TO ENGINEER. NEW SIDE SEWER CONNECTION TO MAIN OR SEWER EJECTOR PUMP MAY BE NECESSARY FOR BASEMENT.
- PROPOSED METER LOCATION, IF SHOWN, IS APPROXIMATE. CONTRACTOR TO COORDINATE EXACT LOCATION OF NEW SERVICE/METER/ SUPPLY LINE WITH CITY WATER DEPARTMENT DURING CONSTRUCTION.
- EACH DOWNSPOUT SHALL CONNECT TO A RIGID NON-PERFORATED PIPE AT THE BUILDING PERIMETER. UNDER NO CIRCUMSTANCES SHALL DOWNSPOUTS CONNECT DIRECTLY TO THE PERFORATED FOOTING DRAIN.
- USE SAND COLLARS FOR PVC PIPE CONNECTIONS TO MANHOLES.
- VERTICAL BENDS ON THE STORM DRAINS MAY BE NECESSARY TO MAINTAIN MIN. 1.5' SOIL COVER OVER PIPE. MAX. PIPE BENDS TO BE 45'.
- DOWNSPOUT LOCATIONS SHOWN ARE PRELIMINARY. REFER TO ARCHITECTURAL PLANS FOR FINAL DOWNSPOUT LOCATIONS.
- AN UNDERSLAB DRAINAGE SYSTEM MAY BE NECESSARY DEPENDENT ON GEOTECHNICAL EVALUATION BY OTHERS.
- WINDOW WELLS SHALL BE DESIGNED FOR PROPER DRAINAGE BY CONNECTING TO THE BUILDING'S FOUNDATION DRAINAGE SYSTEM REQUIRED PER SECTION R310.2.3.2 OF THE INTERNATIONAL RESIDENTIAL CODE. A DRAINAGE SYSTEM FOR WINDOW WELLS IS NOT REQUIRED WHERE THE FOUNDATION IS ON WELL-DRAINED SOIL OR SAND-GRAVEL MIXTURE SOILS IN ACCORDANCE WITH THE UNITED SOIL CLASSIFICATION SYSTEM, GROUP I SOILS, AS DETAILED IN TABLE R405.1 OF THE IRC



POST-CONSTRUCTION SOIL QUALITY

SCALE: 1"=20'

1



NO.	DATE	REVISION
1	06/11/22	PERMIT SUBMITTAL
2	04/03/23	CITY REVISIONS
3	07/11/23	CITY REVISIONS
4	07/14/23	CITY REVISIONS
5	09/07/23	CITY REVISIONS

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PROJECT MANAGER: NB
DESIGNED: TKB
DRAWN: GUDI-2201
JOB NUMBER: GUDI-2201pin.dwg
FILE NAME:

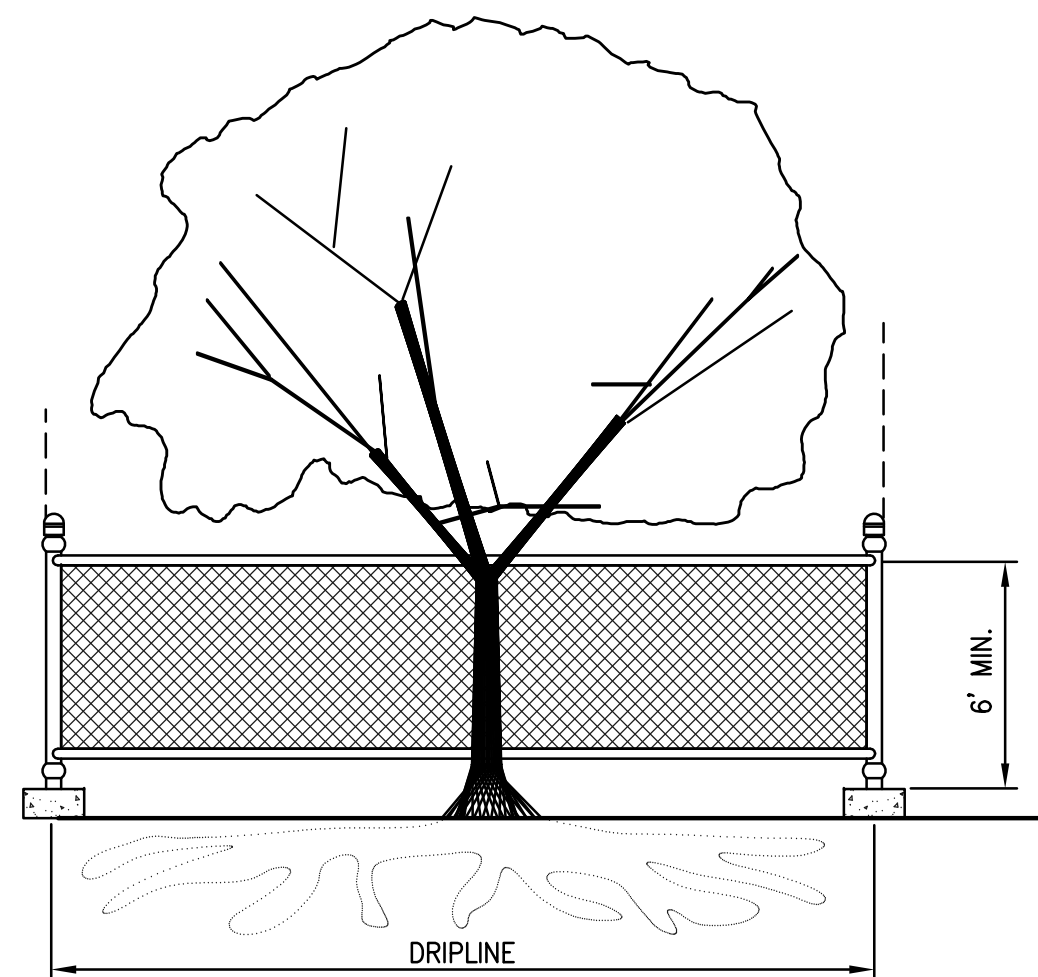
MITHILA
3632 90TH AVE SE

WASHINGTON

MERCER ISLAND

TITLE: DRAINAGE PLAN

SHEET: C-2



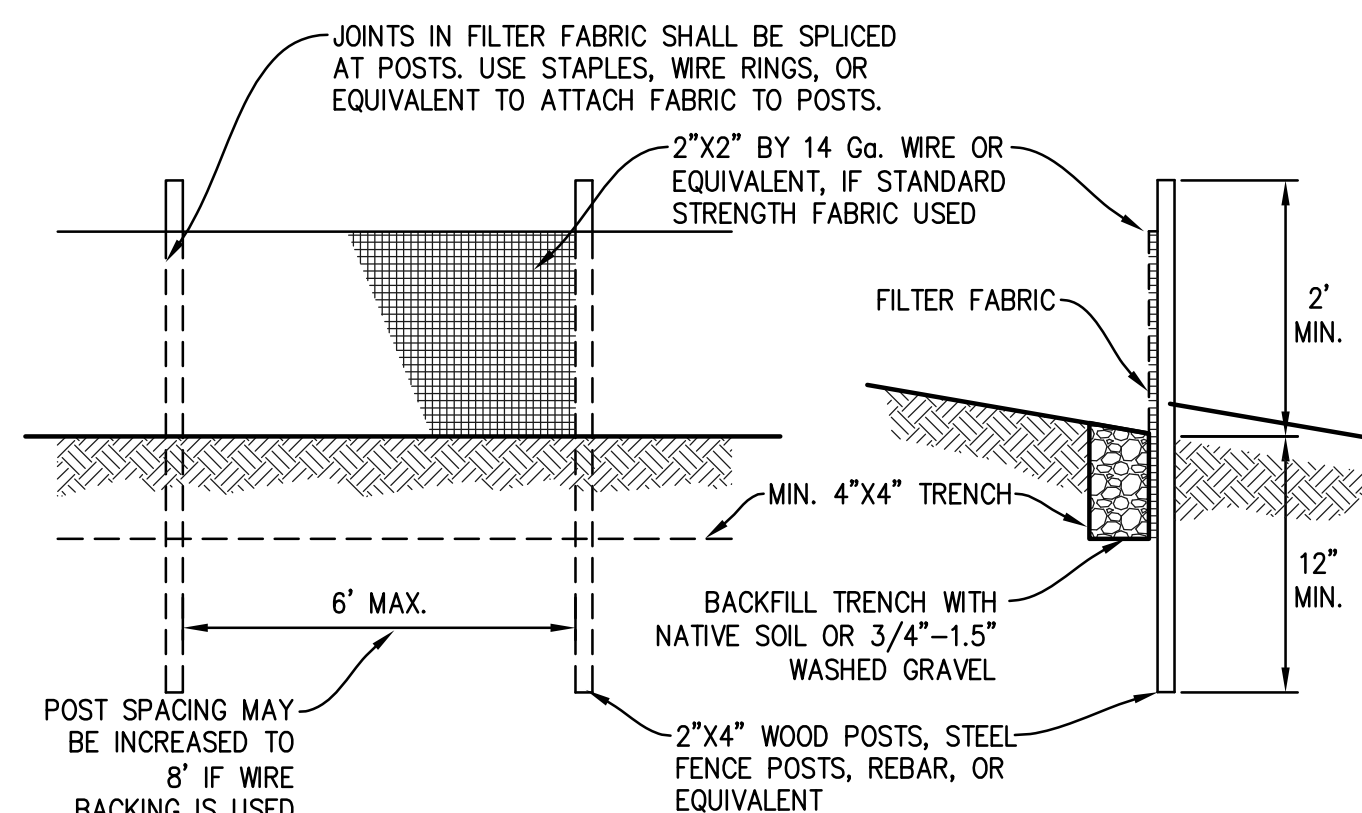
TREE PROTECTION DURING CONSTRUCTION

- 6-FT. HIGH TEMPORARY CHAIN LINK FENCE SHALL BE PLACED AT THE DRIPLINE OF THE TREE TO BE SAVED. FENCE SHALL COMPLETELY ENCIRCLE THE TREE(S). INSTALL FENCE POSTS USING PIER BLOCKS ONLY. AVOID DRIVING POSTS OR STAKES INTO MAJOR ROOTS.
- FOR ROOTS OVER 1-IN DIA. THAT ARE DAMAGED DURING CONSTRUCTION, MAKE A CLEAN, STRAIGHT CUT TO REMOVE THE DAMAGED PORTION. ALL EXPOSED ROOTS SHALL BE TEMPORARILY COVERED WITH DAMP BURLAP TO PREVENT DRYING, AND SHALL BE COVERED WITH SOIL AS SOON AS POSSIBLE.
- WORK WITHIN PROTECTION FENCE SHALL BE DONE MANUALLY. NO STOCKPILING OF MATERIALS, VEHICULAR TRAFFIC, OR STORAGE OF EQUIPMENT OR MACHINERY SHALL BE ALLOWED WITHIN THE LIMIT OF THE FENCING.

TREE PROTECTION

SCALE: NTS

1



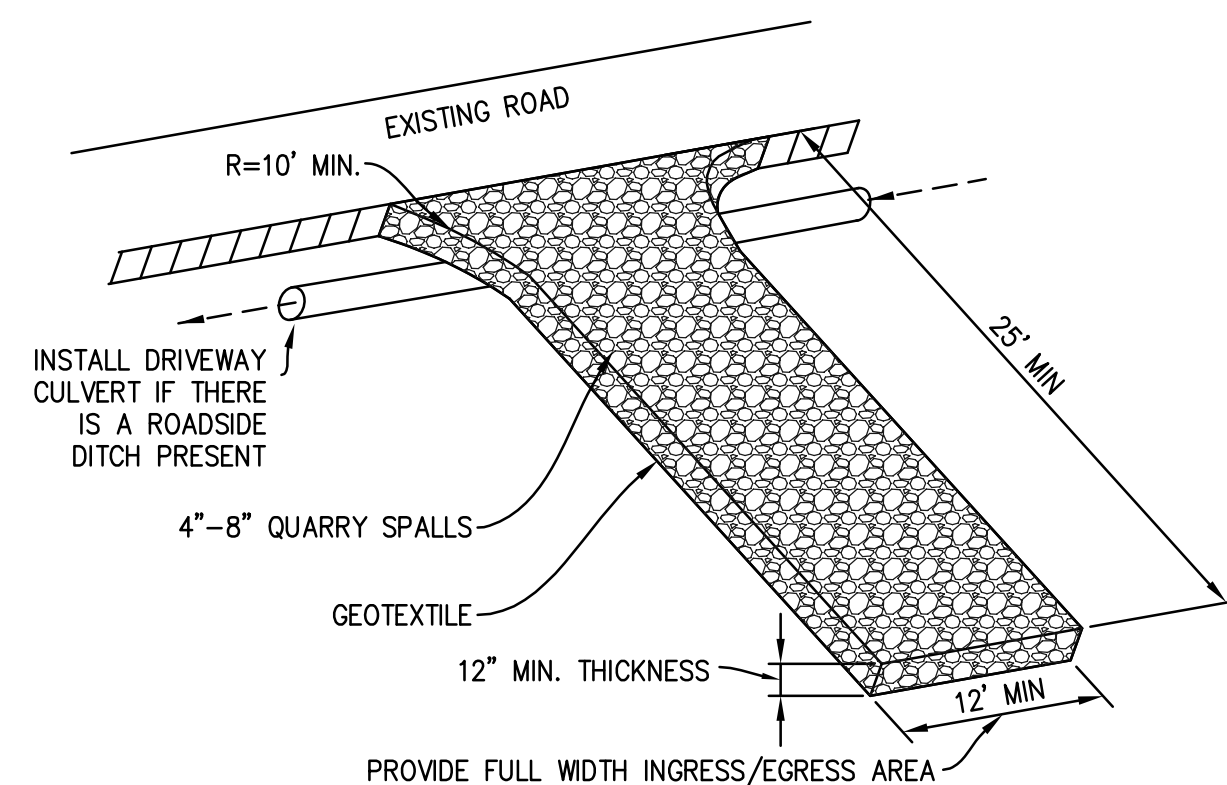
MAINTENANCE STANDARDS

- ANY DAMAGE SHALL BE REPAIRED IMMEDIATELY.
- IF CONCENTRATED FLOWS ARE EVIDENT UPHILL OF THE FENCE, THEY MUST BE INTERCEPTED AND CONVEYED TO A SEDIMENT TRAP OR POND.
- IT IS IMPORTANT TO CHECK THE UPHILL SIDE OF THE FENCE FOR SIGN OF THE FENCE CLOGGING AND ACTING AS A BARRIER TO FLOW AND THEN CAUSING CHANNELIZATION OF FLOWS PARALLEL TO THE FENCE. IF THIS OCCUR, REPLACE THE FENCE AND/OR REMOVE THE TRAPPED SEDIMENT.
- SEDIMENT MUST BE REMOVED WHEN THE SEDIMENT IS 6" HIGH.
- IF THE FILTER FABRIC HAS DETERIORATED DUE TO ULTRAVIOLET BREAKDOWN, IT SHALL BE REPLACED.

SILT FENCE

SCALE: NTS

2



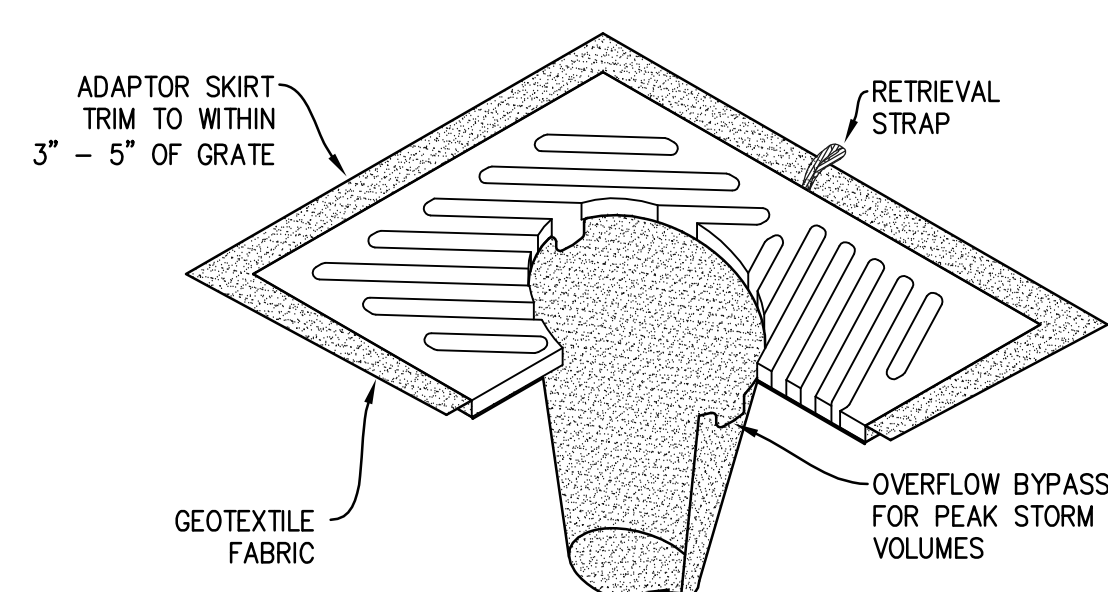
MAINTENANCE STANDARDS

- QUARRY SPALLS (OR HOG FUEL) SHALL BE ADDED IF THE PAD IS NO LONGER IN ACCORDANCE WITH THE SPECIFICATIONS.
- IF THE ENTRANCE IS NOT PREVENTING SEDIMENT FROM BEING TRACKED ONTO PAVEMENT, THEN ALTERNATIVE MEASURES TO KEEP THE STREETS FREE OF SEDIMENT SHALL BE USED. THIS MAY INCLUDE STREET SWEEPING, AN INCREASE IN THE DIMENSIONS OF THE ENTRANCE, OR THE INSTALLATION OF A WHEEL WASH. IF WASHING IS USED, IT SHALL BE DONE ON AN AREA COVERED WITH CRUSHED ROCK, AND WASH WATER SHALL DRAIN TO A SEDIMENT TRAP OR POND.
- ANY SEDIMENT THAT IS TRACKED ONTO PAVEMENT SHALL BE REMOVED IMMEDIATELY BY SWEEPING. THE SEDIMENT COLLECTED BY SWEEPING SHALL BE REMOVED OR STABILIZED ON-SITE. THE PAVEMENT SHALL NOT BE CLEANED BY WASHING DOWN THE STREET, EXCEPT WHEN SWEEPING IS INEFFECTIVE AND THERE IS A THREAT TO PUBLIC SAFETY. IF IT IS NECESSARY TO WASH THE STREET, THE CONSTRUCTION OF A SMALL SLUMP SHALL BE CONSIDERED. THE SEDIMENT WOULD THEN BE WASHED INTO THE SLUMP.
- ANY ROCK SPALLS THAT ARE LOOSENED FROM THE PAD AND END UP ON THE ROADWAY SHALL BE REMOVED IMMEDIATELY.
- IF VEHICLES ARE ENTERING OR EXITING THE SITE AT POINTS OTHER THAN THE CONSTRUCTION ENTRANCE(S), FENCING (SECTION 5.4.1) SHALL BE INSTALLED TO CONTROL TRAFFIC.

ROCK CONSTRUCTION ENTRANCE

SCALE: NTS

3



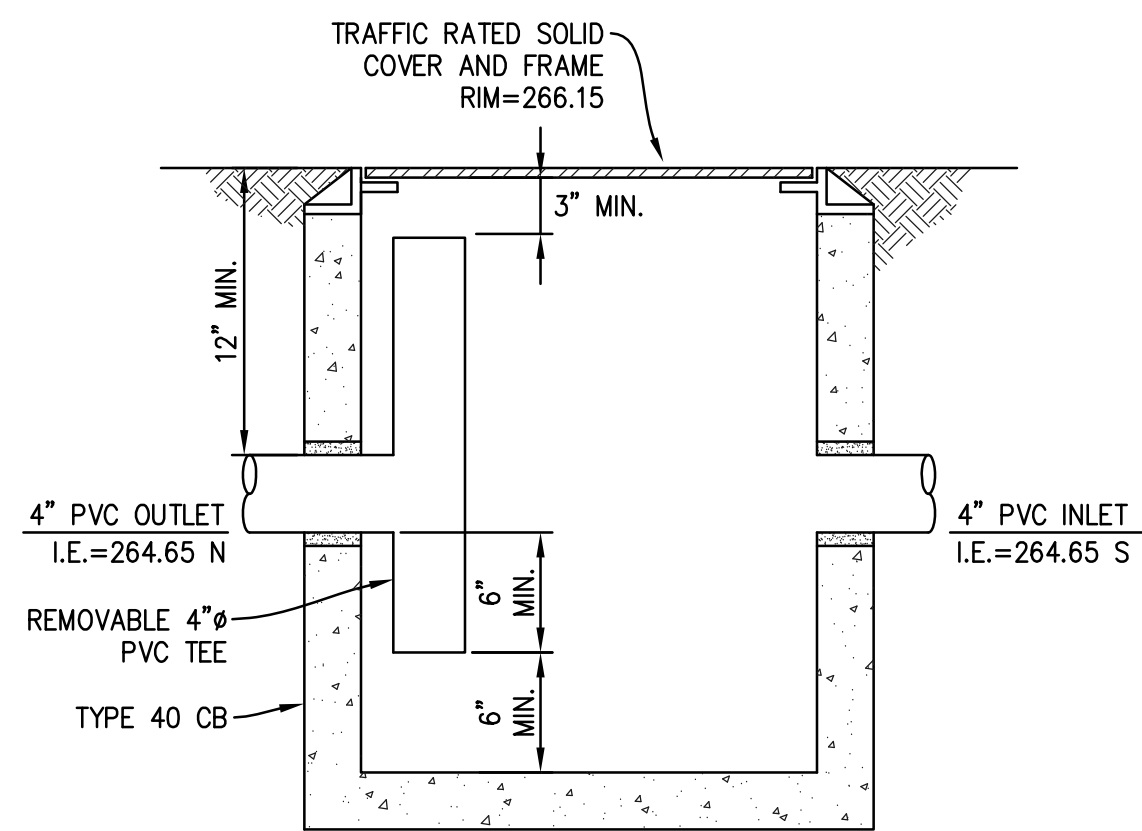
NOTES

- INSERT SHALL BE INSTALLED PRIOR TO CLEARING AND GRADING ACTIVITY, OR UPON PLACEMENT OF A NEW CATCH BASIN.
- SEDIMENT SHALL BE REMOVED FROM THE UNIT WHEN IT BECOMES HALF FULL.
- SEDIMENT REMOVAL SHALL BE ACCOMPLISHED BY REMOVING THE INSERT, EMPTYING, AND RE-INSERTING IT INTO THE CATCH BASIN.

CB INSERT

SCALE: NTS

4



OIL SEPARATOR CB

SCALE: NTS

5

**ATTACHMENT 1
CITY OF MERCER ISLAND
ON-SITE DETENTION SYSTEM WORKSHEET
(FOR NEW PLUS REPLACED IMPERVIOUS
AREA OF 9,500 SF OR LESS)**

OWNER: GUDIPTY	ADDRESS: 3632 90TH AVE SE	PREPARED BY: NICK BOSSOFF ENG
PERMIT #: _____	MERCER ISLAND	PHONE: (425) 881-5904
DESIGNED: NB	DATE: _____	
TKB		
DRAWN: GUDI-2201		
JOB NUMBER: GUDI-2201		
FILE NAME: GUDI-2201.pln.dwg		

NEW PLUS REPLACED IMPERVIOUS SURFACE AREA (SF): 4,796	DETENTION PIPE DIA (INCH): 60"	DETENTION PIPE LENGTH (FT): 46	ORIFICE #1 DIA 0.5 INCH, ELEV 256.75
SOIL TYPE: B	PIPE MATERIAL: ADS N-12		ORIFICE #2 DIA 1.6 INCH, ELEV 263.35

PLAN VIEW

ELBOW RESTRICTOR DETAIL

SECTION A-A

CONTROL STRUCTURE DETAIL

ON-SITE DETENTION SYSTEM
NOT TO SCALE (ENGINEER TO FILL IN BLANKS)

CONTROL STRUCTURE NOTES:

- USE A MINIMUM OF A 54 IN. DIAM TYPE 2 CATCH BASIN. THE ACTUAL SIZE IS DEPENDENT ON CONNECTING PIPE MATERIAL AND DIAMETER.
- OUTLET PIPE: MIN. 6 INCH.
- METAL PARTS: CORROSION RESISTANT, NON-GALVANIZED PARTS PREFERRED. GALVANIZED PIPE PARTS TO HAVE ASPHALT TREATMENT 1.
- FRAME AND LADDER OR STEPS OFFSET SO:
 - A. CLEANOUT GATE IS VISIBLE FROM TOP.
 - B. CLIMB-DOWN SPACE IS CLEAR OF RISER AND CLEANOUT GATE.
 - C. FRAME IS CLEAR OF CURB.
- IF METAL OUTLET PIPE CONNECTS TO CEMENT CONCRETE PIPE, OUTLET PIPE TO HAVE SMOOTH O.D. EQUAL TO CONCRETE PIPE I.D. LESS 1/4 IN.

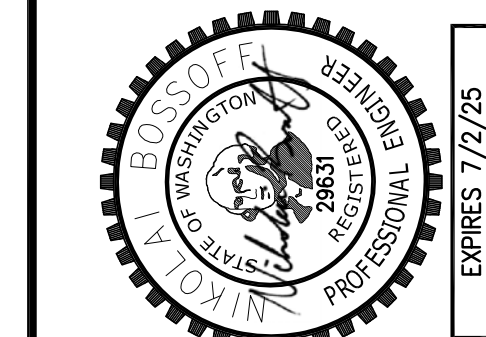
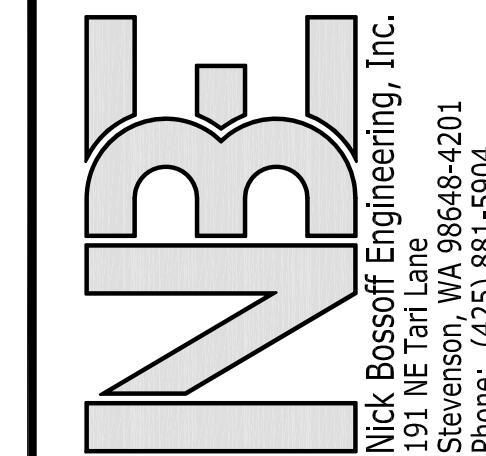
ON-SITE DETENTION SYSTEM NOTES:

- CALL DEVELOPMENT SERVICES (206-275-7605) 24 HOURS IN ADVANCE FOR A DETENTION SYSTEM INSPECTION BEFORE BACKFILLING AND FOR FINAL INSPECTIONS.
- RESPONSIBILITY FOR OPERATION AND MAINTENANCE OF DRAINAGE SYSTEMS ON PRIVATE PROPERTY IS RESPONSIBILITY OF THE PROPERTY OWNER. MATERIAL ACCUMULATED IN THE STORAGE PIPE MUST BE REMOVED FROM CATCH BASINS TO ALLOW PROPER OPERATION. THE OUTLET CONTROL ORIFICE MUST BE KEPT OPEN AT ALL TIMES.
- PIPE MATERIAL, JOINT, AND PROTECTIVE TREATMENT SHALL BE IN ACCORDANCE WITH SECTION 7.04 AND 9.05 OF THE WSDOT STANDARD SPECIFICATION FOR ROAD, BRIDGE, AND MUNICIPAL CONSTRUCTION, LATEST VERSION. SUCH MATERIALS INCLUDE THE FOLLOWING: LINED CORRUGATED POLYETHYLENE PIPE (LCP), ALLOWED TYPE 2 CORRUGATED STEEL PIPE AND PIPE ARCH (MEETS AASHTO DESIGNATIONS M274 AND M36), CORRUGATED OR SPIRAL RIB ALUMINUM PIPE, OR REINFORCED CONCRETE PIPE. CORRUGATED STEEL PIPE IS NOT ALLOWED.
- FOOTING DRAINS SHALL NOT BE CONNECTED TO THE DETENTION SYSTEM.

DETENTION PIPE AND CONTROL STRUCTURE

SCALE: NTS

7



NO.	DATE	REVISION
1	06/11/22	PERMIT SUBMITTAL
2	04/10/23	CITY REVISIONS
3	07/11/23	CITY REVISIONS
4	07/14/23	CITY REVISIONS
5	09/01/23	CITY REVISIONS

N. BOSSOFF, P.E.
PROJECT MANAGER: NB
DESIGNED: TKB
DRAWN: GUDI-2201
JOB NUMBER: GUDI-2201
FILE NAME: GUDI-2201.pln.dwg

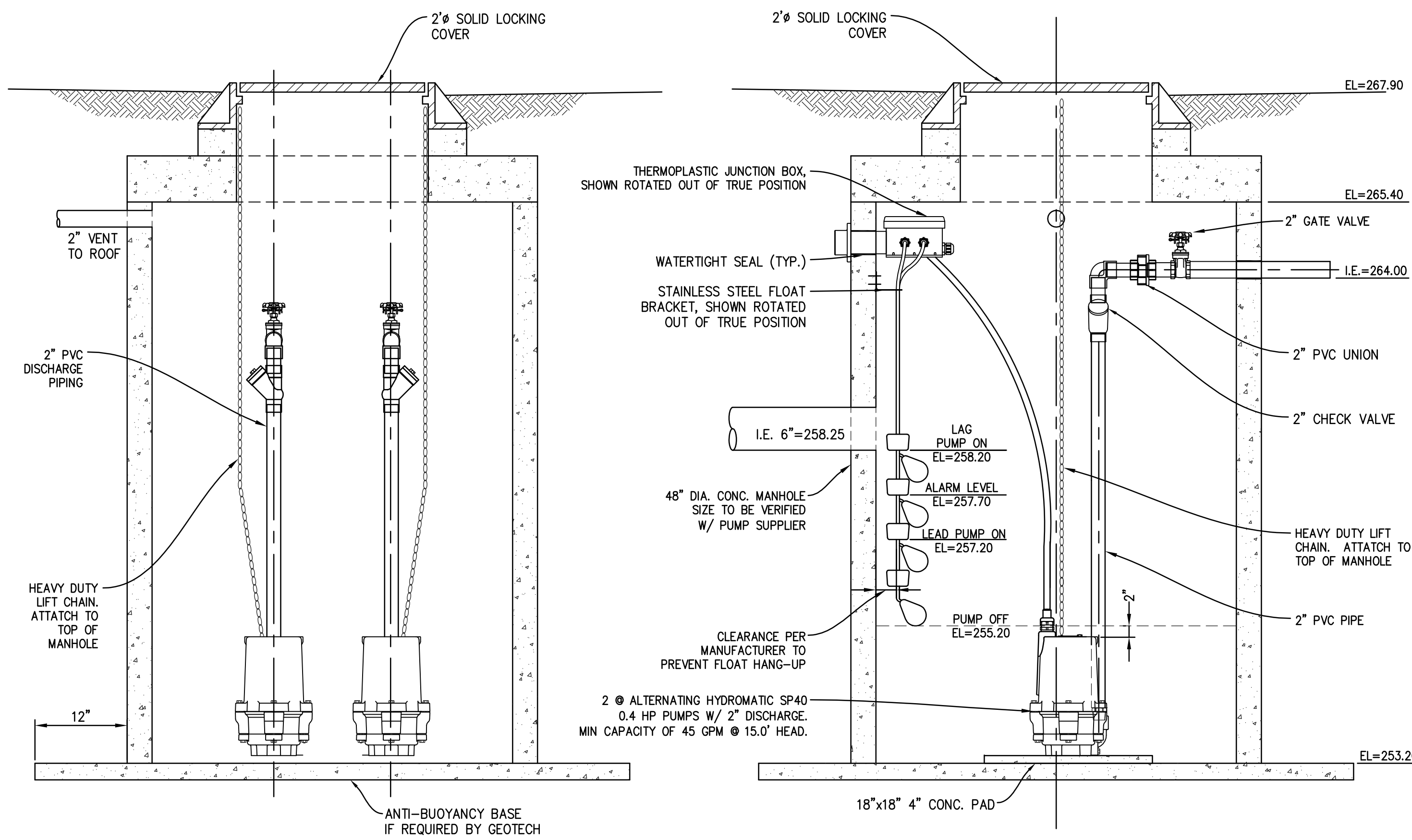
WASHINGTON

MITHILA
3632 90TH AVE SE

MERCER ISLAND

TITLE: DETAILS

SHEET: C-3



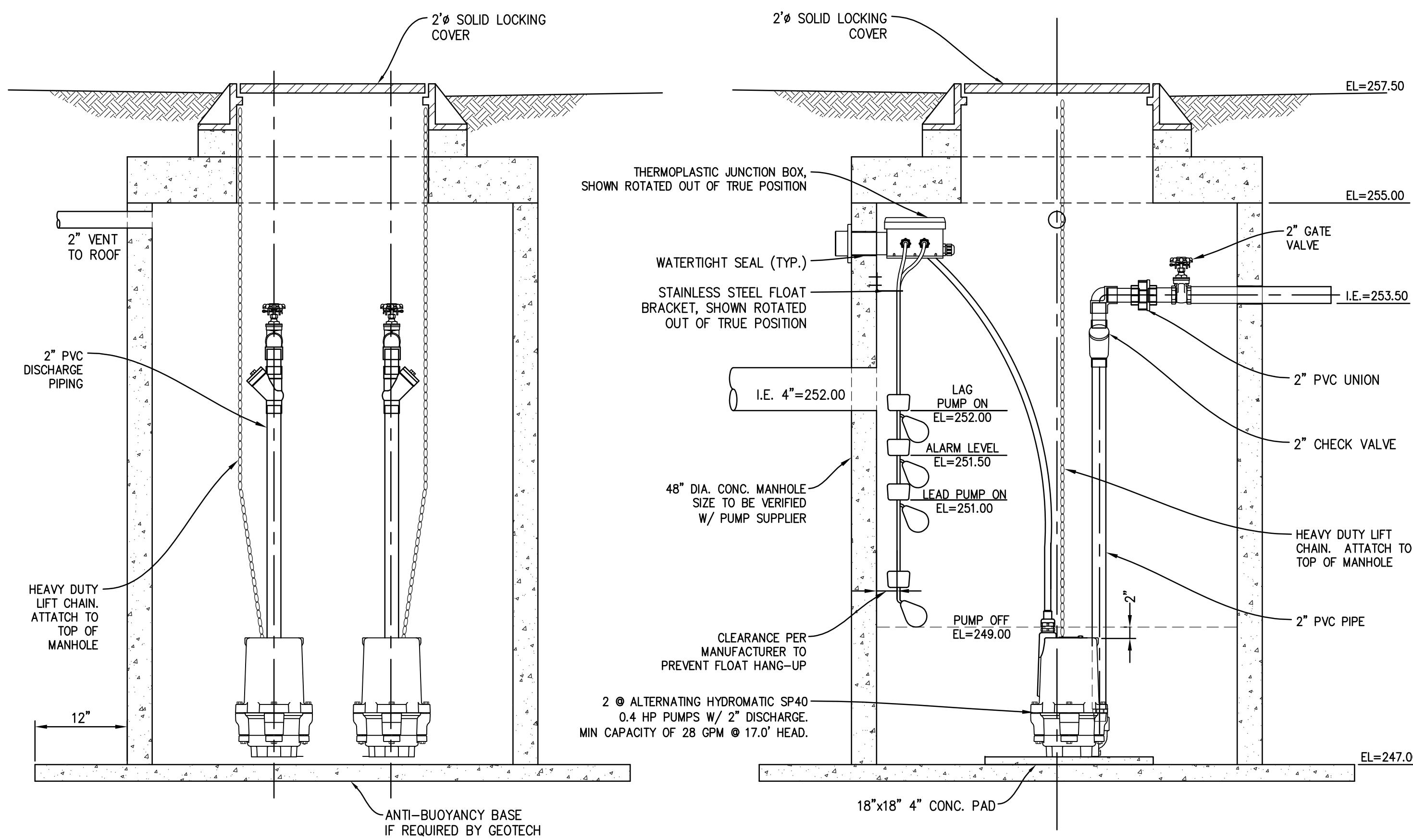
STORMWATER LIFT STATION #1

NOTES:

- THE SYSTEM IS TO BE AN ALTERNATING DUPLEX SYSTEM.
- LOCATE CONTROL PANEL AND ALARM ON EXTERIOR BUILDING WALL. USE HYDRAMATIC PANEL OR APPROVED EQUIVALENT.
- SYSTEM TO BE FULLY AUTOMATIC WITH MANUAL OVERRIDE.
- AN EMERGENCY ON-SITE, BACK-UP POWER SUPPLY AND AN EXTERNAL ALARM SYSTEM FOR SYSTEM FAILURE AND HIGH-WATER LEVEL INDICATOR ARE REQUIRED FOR THE PUMP SYSTEM.
- ALARM TO BE AUDIO (BELL) AND VISUAL (LIGHT).
- BOTH PUMPS TO OPERATE AT "LAG PUMP ON" FLOAT LEVEL.
- SCH 80 PVC PIPE INSIDE MANHOLE.
- FOLLOW MANUFACTURER'S INSTRUCTIONS FOR ALL INSTALLATION.
- PROVIDE ELECTRICAL SUPPLY TO PANEL AND LIFT STATION PER MANUFACTURER'S SPECIFICATIONS. POWER TO PANEL AND PUMP SHALL BE ON A DEDICATED CIRCUIT.
- ELECTRICAL CONNECTIONS AND SERVICES WITHIN THE PUMP WETWELL SHOULD BE WATERTIGHT.
- THE PRIVATE PROPERTY OWNER(S) SHALL BE RESPONSIBLE FOR ANY AND ALL CLAIMS FOR INJURIES AND DAMAGE DUE TO THE OPERATION OR NON-OPERATION OF THE PUMP SYSTEM.

SCALE: NTS

1



STORMWATER LIFT STATION #2

NOTES:

- THE SYSTEM IS TO BE AN ALTERNATING DUPLEX SYSTEM.
- LOCATE CONTROL PANEL AND ALARM ON EXTERIOR BUILDING WALL. USE HYDRAMATIC PANEL OR APPROVED EQUIVALENT.
- SYSTEM TO BE FULLY AUTOMATIC WITH MANUAL OVERRIDE.
- AN EMERGENCY ON-SITE, BACK-UP POWER SUPPLY AND AN EXTERNAL ALARM SYSTEM FOR SYSTEM FAILURE AND HIGH-WATER LEVEL INDICATOR ARE REQUIRED FOR THE PUMP SYSTEM.
- ALARM TO BE AUDIO (BELL) AND VISUAL (LIGHT).
- BOTH PUMPS TO OPERATE AT "LAG PUMP ON" FLOAT LEVEL.
- SCH 80 PVC PIPE INSIDE MANHOLE.
- FOLLOW MANUFACTURER'S INSTRUCTIONS FOR ALL INSTALLATION.
- PROVIDE ELECTRICAL SUPPLY TO PANEL AND LIFT STATION PER MANUFACTURER'S SPECIFICATIONS. POWER TO PANEL AND PUMP SHALL BE ON A DEDICATED CIRCUIT.
- ELECTRICAL CONNECTIONS AND SERVICES WITHIN THE PUMP WETWELL SHOULD BE WATERTIGHT.
- THE PRIVATE PROPERTY OWNER(S) SHALL BE RESPONSIBLE FOR ANY AND ALL CLAIMS FOR INJURIES AND DAMAGE DUE TO THE OPERATION OR NON-OPERATION OF THE PUMP SYSTEM.

SCALE: NTS

2

TOPOGRAPHIC SURVEY NOTES

- UTILITIES SHOWN ON THIS SURVEY ARE BASED UPON ABOVE GROUND OBSERVATIONS, UTILITY LOCATES BY THIRD PARTIES, AND AS-BUILT PLANS WHERE AVAILABLE. ACTUAL LOCATIONS OF UNDERGROUND UTILITIES MAY VARY AND UTILITIES NOT SHOWN ON THIS SURVEY MAY EXIST ON THIS SITE.
- CONTOURS SHOWN ARE BASED ON A FIELD SURVEY.
- TREE IDENTIFICATION WAS PERFORMED BY SURVEY FIELD PERSONNEL AND SHOULD BE CONSIDERED A BEST GUESS. AN ARBORIST SHOULD BE RELIED UPON FOR MORE ACCURATE AND DETAILED IDENTIFICATION OF TREE SPECIES AND HEALTH.
- MERCER ISLAND LOT SLOPE IS CALCULATED FROM THE HIGH POINT OF THE LOT AT THE SW CORNER (EL=272.12) TO THE LOW POINT OF THE LOT AT THE SE CORNER (EL=224.55) OVER A DISTANCE OF 160.00'. THE RESULTING SLOPE = 29.7%.

BOUNDARY SURVEY NOTES

- INSTRUMENTATION FOR THIS SURVEY WAS A 3-SECOND LEICA VIVA TS15 SMART POLE TOTAL STATION/RTK GPS.
- PROCEDURES USED IN THIS SURVEY MEET OR EXCEED STANDARDS SET BY WAC 332-130-090. SURVEY WAS COMPLETED BY A FIELD TRAVERSE.
- ALL MONUMENTS WERE LOCATED DURING THIS SURVEY UNLESS OTHERWISE NOTED.
- ENCROACHMENTS NOTED AS "IN" OR "OUT" ARE RELATIVE TO THE SUBJECT PROPERTY.
- FENCE DIMENSIONS ARE GENERALLY TO THE CENTERLINE OF THE FENCE UNLESS OTHERWISE NOTED.
- STRUCTURE LOCATIONS ARE MEASURED TO THE FINISHED FASCIA UNLESS OTHERWISE NOTED.
- TREE LOCATIONS ARE MEASURED TO THE ESTIMATED CENTER OF THE TREE.
- ALL DIMENSIONS ARE IN DECIMAL FEET.

VERTICAL DATUM & CONTOUR INTERVAL

ELEVATIONS SHOWN ON THIS DRAWING ARE BASE ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88) AND WERE ESTABLISHED USING RTK GPS.

2.0' CONTOUR INTERVAL - THE EXPECTED VERTICAL ACCURACY IS EQUAL TO 1/2 THE CONTOUR INTERVAL OR ± 1.0' FOR THIS PROJECT.

LEGAL DESCRIPTION

LOT 5, BLOCK 4 OF MADRONA CREST ADDITION ACCORDING TO THE PLAT THEREOF RECORDED IN VOLUME 42 OF PLATS, PAGES 12-14, RECORDS OF KING COUNTY WASHINGTON.

SITUATE IN COUNTY OF KING, STATE OF WASHINGTON.

PROJECT INFORMATION

SURVEYOR: PLOG ENGINEERING, PLLC
P.O. BOX 412
RAVENSDALE, WA 98051
PH.: (206) 420-7130

PROPERTY OWNER: ELIZABETH TUBBS
3532 90TH AVE SE
MERCER ISLAND, WA 98040

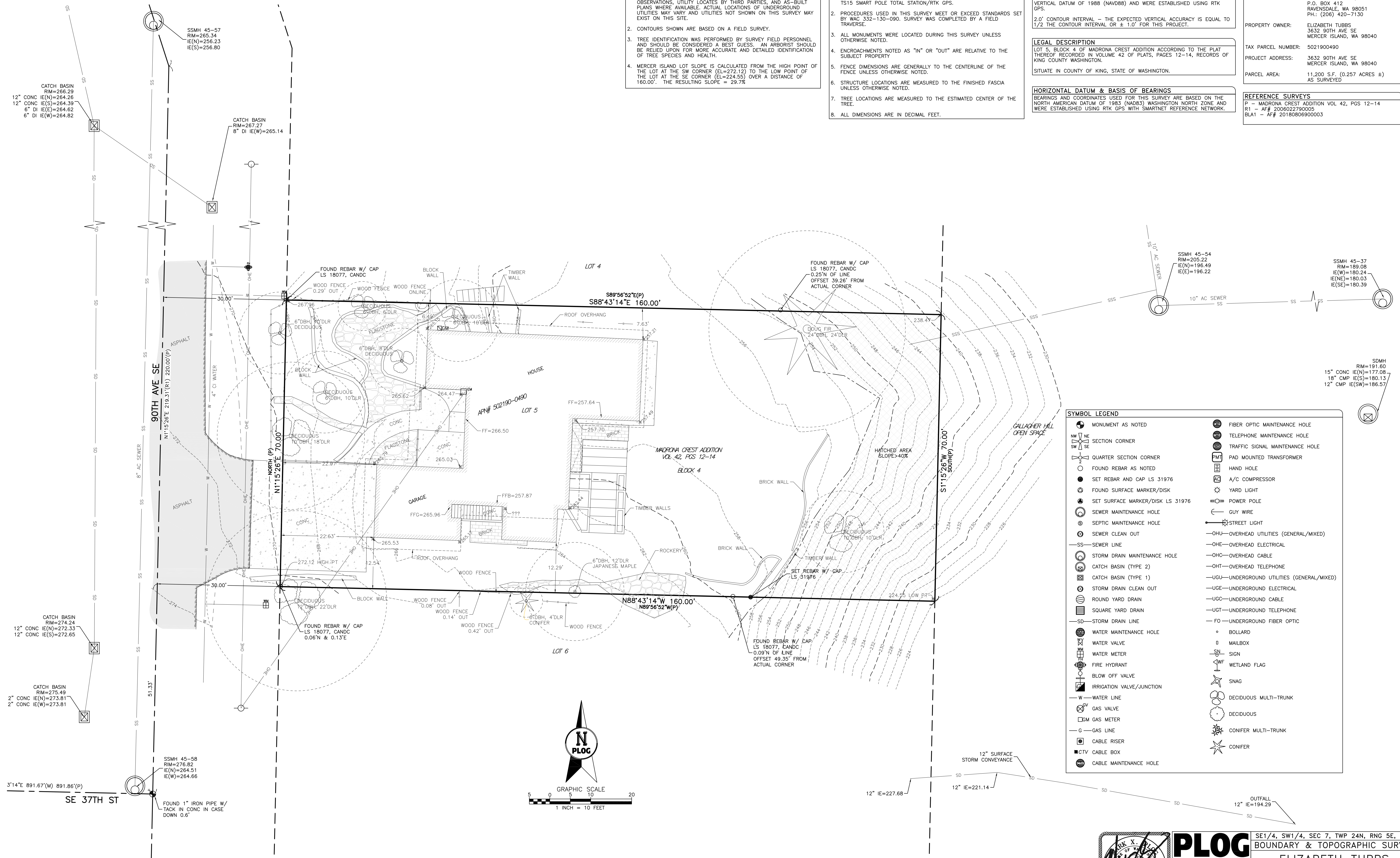
TAX PARCEL NUMBER: 5021900490

PROJECT ADDRESS: 3632 90TH AVE SE
MERCER ISLAND, WA 98040

PARCEL AREA: 11,200 S.F. (0.257 ACRES ±)
AS SURVEYED

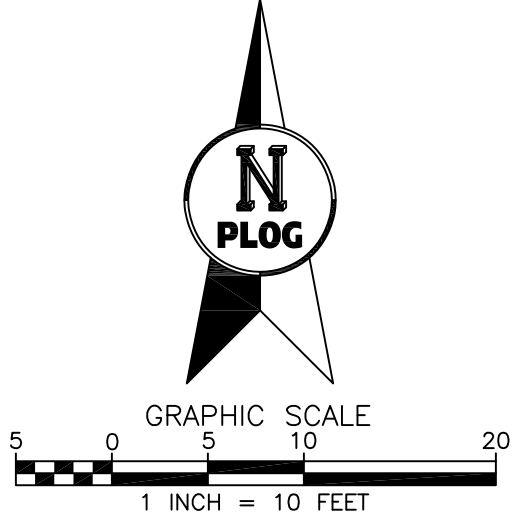
REFERENCE SURVEYS

P - MADRONA CREST ADDITION VOL 42, PGS 12-14
R1 - AF# 2006022790005
BLA1 - AF# 2018080690003



SYMBOL LEGEND

MONUMENT AS NOTED	FIBER OPTIC MAINTENANCE HOLE
SECTION CORNER	TELEPHONE MAINTENANCE HOLE
QUARTER SECTION CORNER	TRAFFIC SIGNAL MAINTENANCE HOLE
FOUND REBAR AS NOTED	PAD MOUNTED TRANSFORMER
SET REBAR AND CAP LS 31976	HAND HOLE
FOUND SURFACE MARKER/DISK	A/C COMPRESSOR
SET SURFACE MARKER/DISK LS 31976	YARD LIGHT
SEWER MAINTENANCE HOLE	POWER POLE
SEPTIC MAINTENANCE HOLE	GUY WIRE
SEWER CLEAN OUT	STREET LIGHT
SEWER LINE	OVERHEAD UTILITIES (GENERAL/MIXED)
STORM DRAIN MAINTENANCE HOLE	OVERHEAD ELECTRICAL
CATCH BASIN (TYPE 2)	OVERHEAD CABLE
CATCH BASIN (TYPE 1)	OVERHEAD TELEPHONE
STORM DRAIN CLEAN OUT	UNDERGROUND UTILITIES (GENERAL/MIXED)
ROUND YARD DRAIN	UNDERGROUND ELECTRICAL
SQUARE YARD DRAIN	UNDERGROUND CABLE
STORM DRAIN LINE	UNDERGROUND TELEPHONE
WATER MAINTENANCE HOLE	UNDERGROUND FIBER OPTIC
WATER VALVE	BOLLARD
WATER METER	MAILBOX
FIRE HYDRANT	SIGN
BLOW OFF VALVE	WETLAND FLAG
IRRIGATION VALVE/JUNCTION	SNAG
WATER LINE	DECIDUOUS MULTI-TRUNK
GAS VALVE	DECIDUOUS
GAS METER	CONIFER MULTI-TRUNK
GAS LINE	CONIFER
CABLE RISER	
CABLE BOX	
CABLE MAINTENANCE HOLE	



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SE1/4, SW1/4, SEC 7, TWP 24N, RNG 5E, W.M.
BOUNDARY & TOPOGRAPHIC SURVEY
ELIZABETH TUBBS
3632 90TH AVE SE, MERCER ISLAND, WA

PROJECT NO.:	REVISION DATE:	REVISION NO.:	SHEET
254-21	12/25/2021	0	1 OF 1