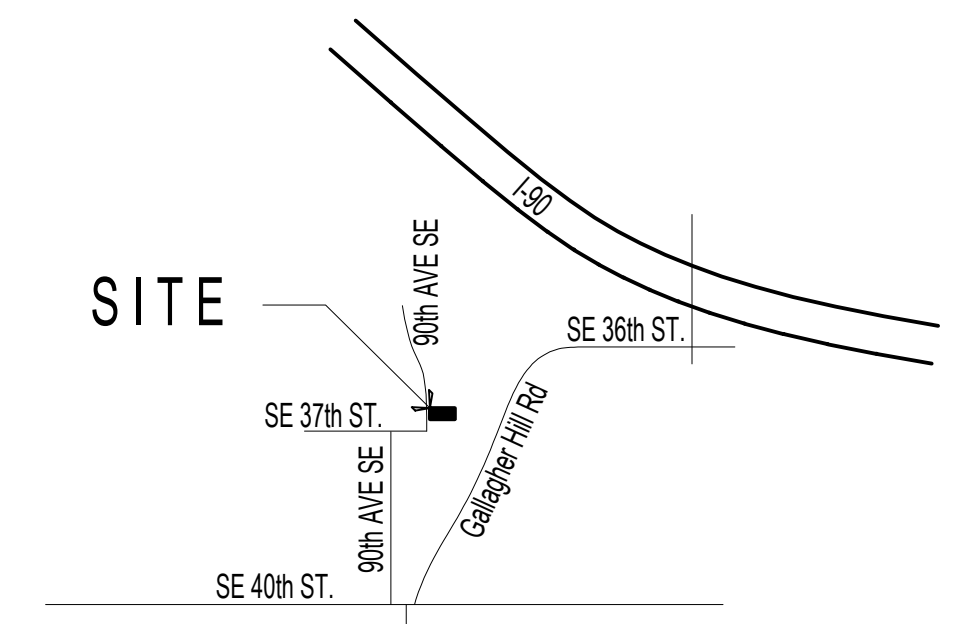


1 BASIN  
+274.24  
+272.33  
+272.25

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)**

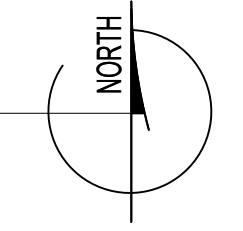
House Roof to eaves = 2717.2 sf  
covered porches/decks = 207 sf  
driveway (shaded) = 614 sf  
TOTAL = 3538.2 sf  
allowable = 11,200 x .35 = 3,920 sf  
amount available for hardscape = 381.8 sf

**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.

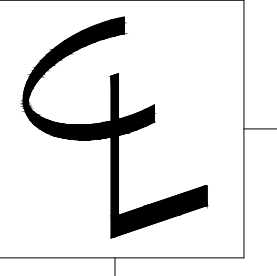
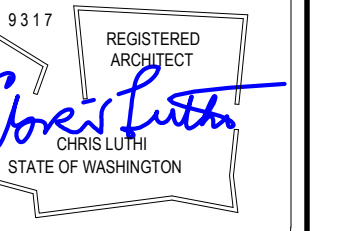
**Parcel Number/Legal**

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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1a

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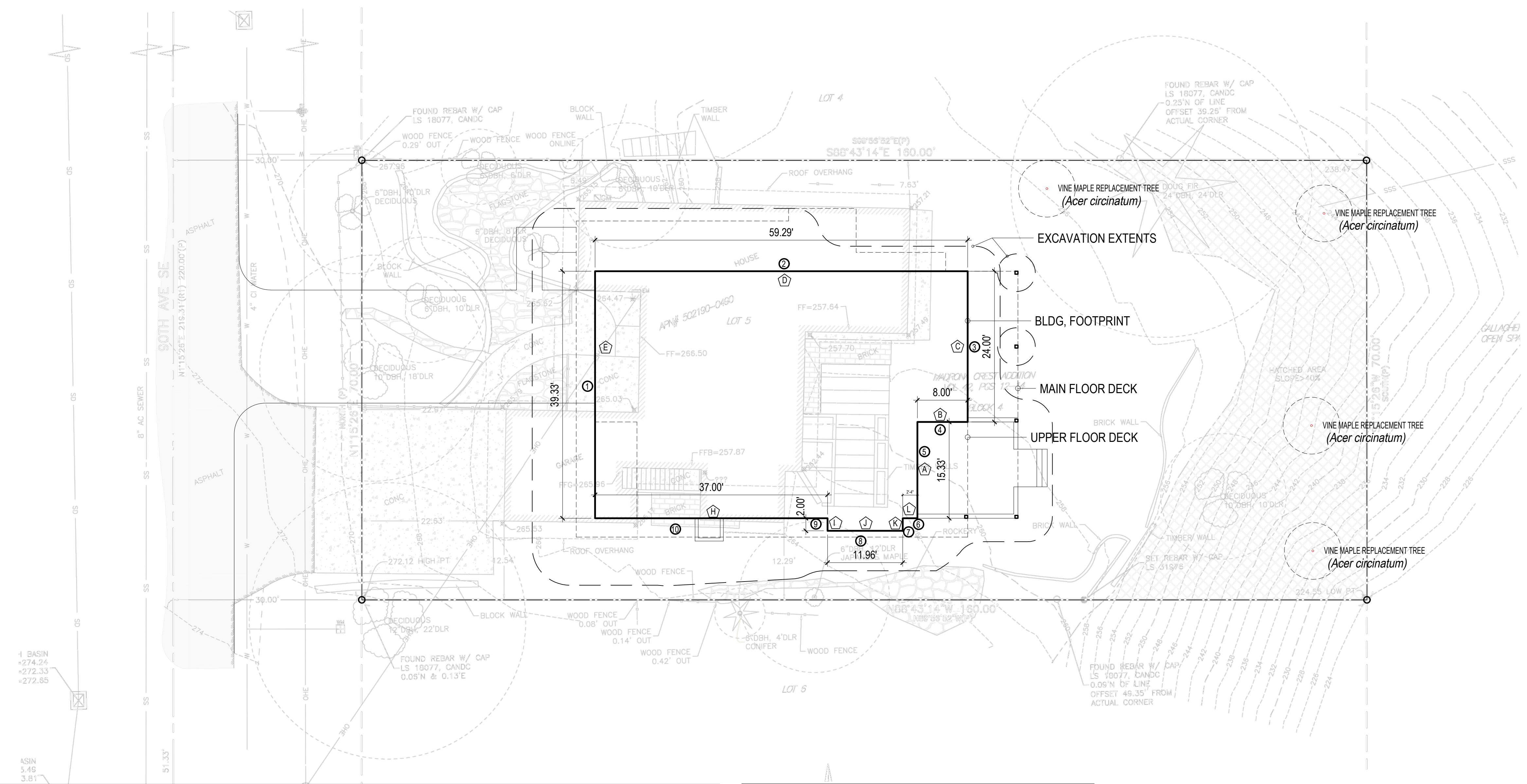
Site Plan

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DATE

10.20.22  
 4.28.23  
 7.21.23



BASEMENT AREA F.A. EXCEPTION CALCULATION

segment	length	beginning elev.	end elev.	begin cov	end cover	avg cover	%cover	wtd	
a	15.33	262	<b>256</b>	6.00	0.00	3	39.0%	5.97	
b	8	<b>256</b>	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								
avg.							76.1%		

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 (ft)	wtd sgmt
1	265.50	39.33	10442.12
2	257.70	59.29	15279.03
3	257.50	24	6180.00
4	<b>256.00</b>	8	2048.00
5	<b>256.00</b>	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

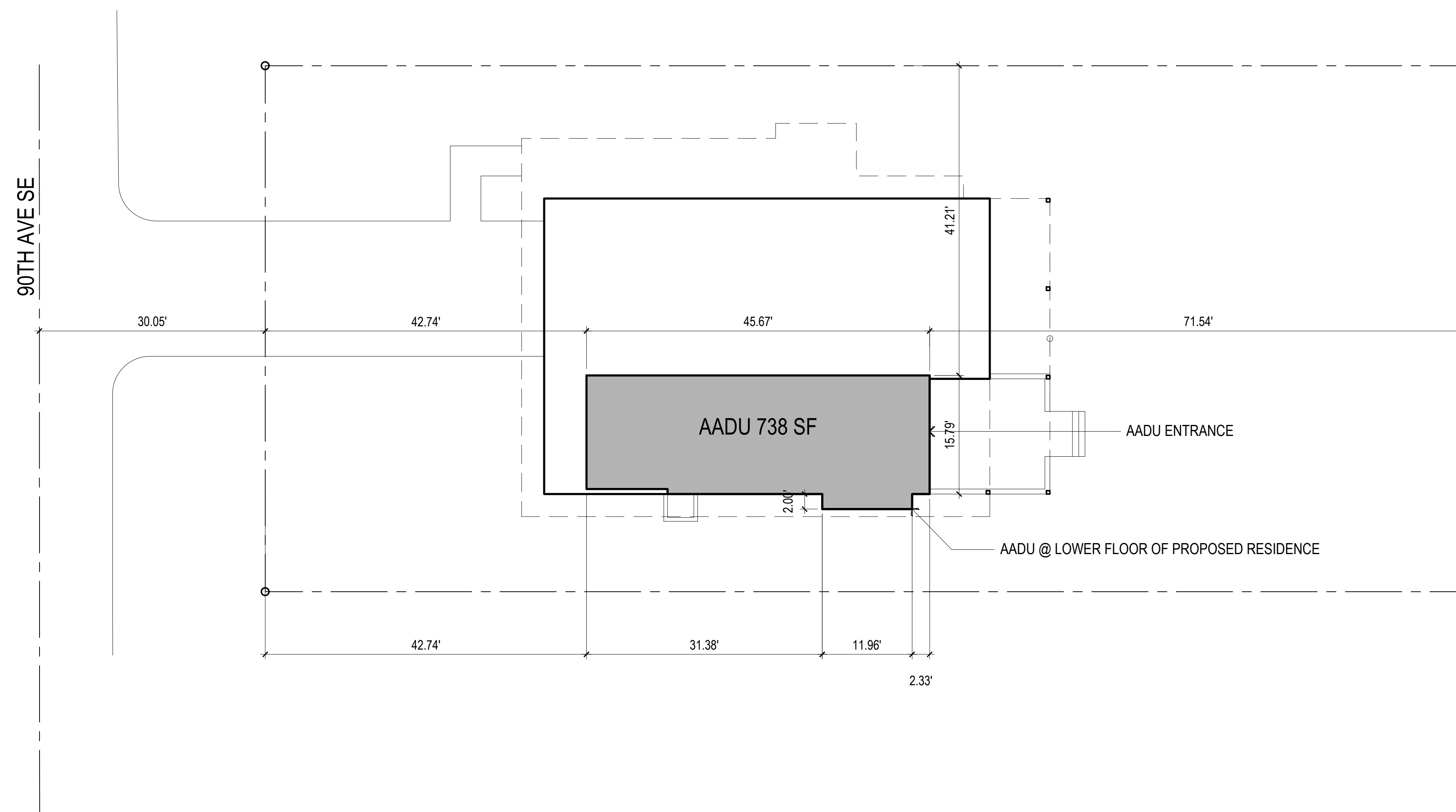
AVG. EL = **260.8058**  
 BOLD = NEW EL LOWER THAN EXIST  
 all others exist = final

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)

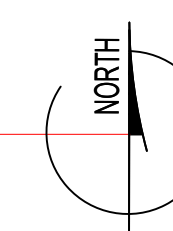
REPLACEMENT TREE WATERING PLAN

1. NEW TREES WILL BE AT LEAST 6 FEET TALL FOR CONIFERS AND 1.5 INCHES IN CALIPER FOR DECIDUOUS SPECIES
2. NEW TREES WILL BE PLANTED BETWEEN OCTOBER AND MARCH
3. MINIMUM SPACING BETWEEN TREES AND DISTANCES FROM BUILDINGS OR INFRASTRUCTURE WILL BE 10 FEET
4. EACH NEW TREE WILL BE WATERED FOR THE FIRST 2 YEARS ON THE FOLLOWING SCHEDULE:
5. MINIMUM OF 5 GALLONS OF WATER PER WEEK FOR THE FIRST 4 WEEKS AFTER PLANTING
6. EVERY 2 WEEKS WHEN WEEKLY DAYTIME MAXIMUM TEMPERATURES ARE BELOW 70°
7. 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)

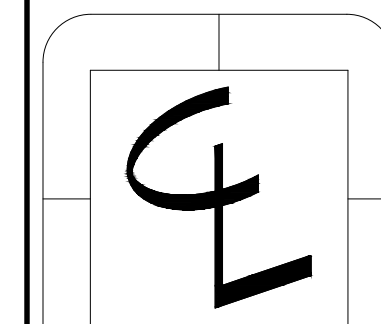
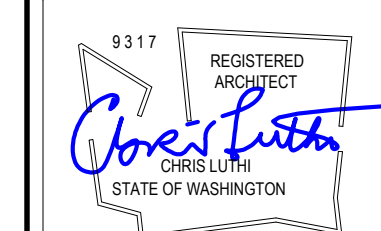


### ADU project narrative

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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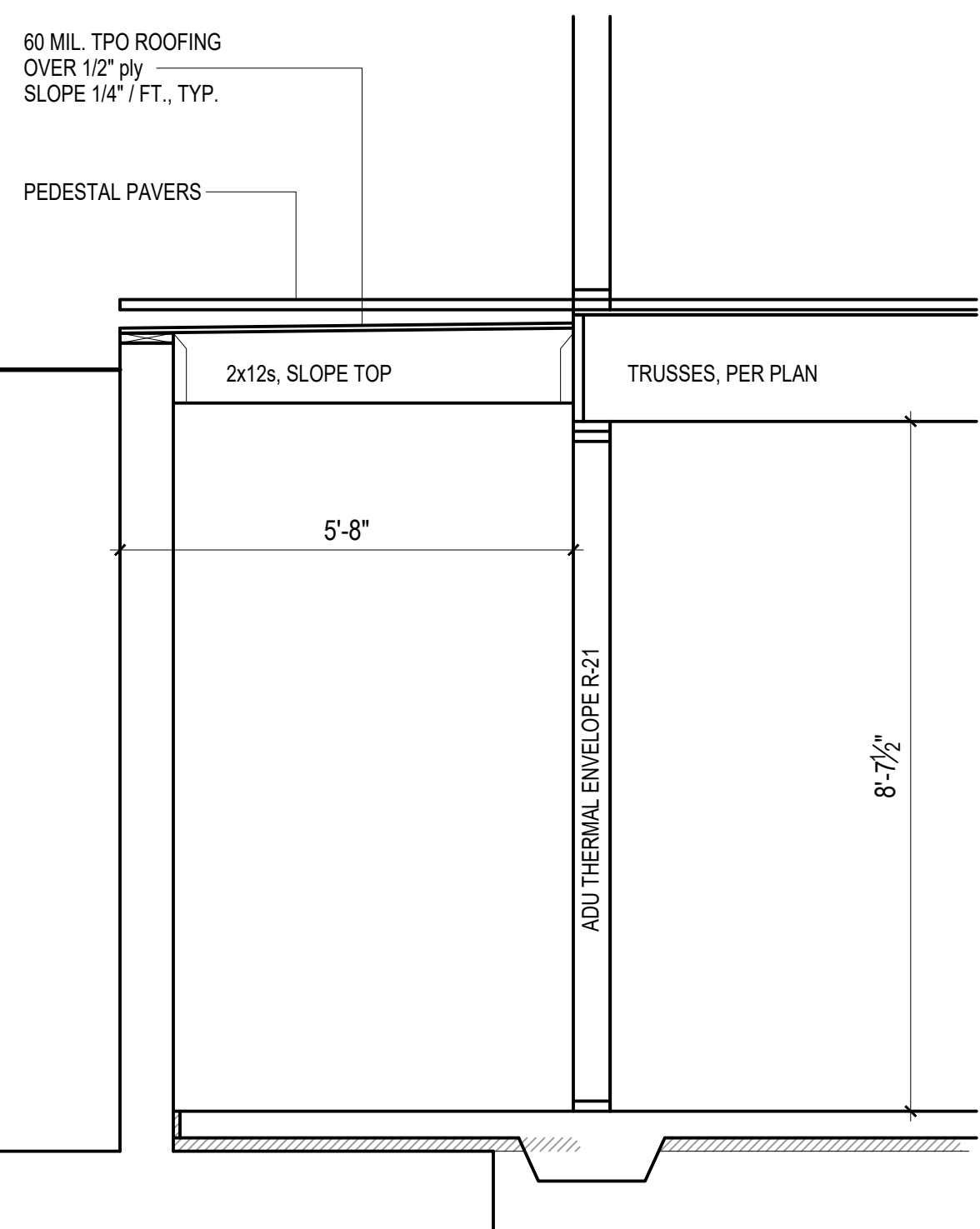
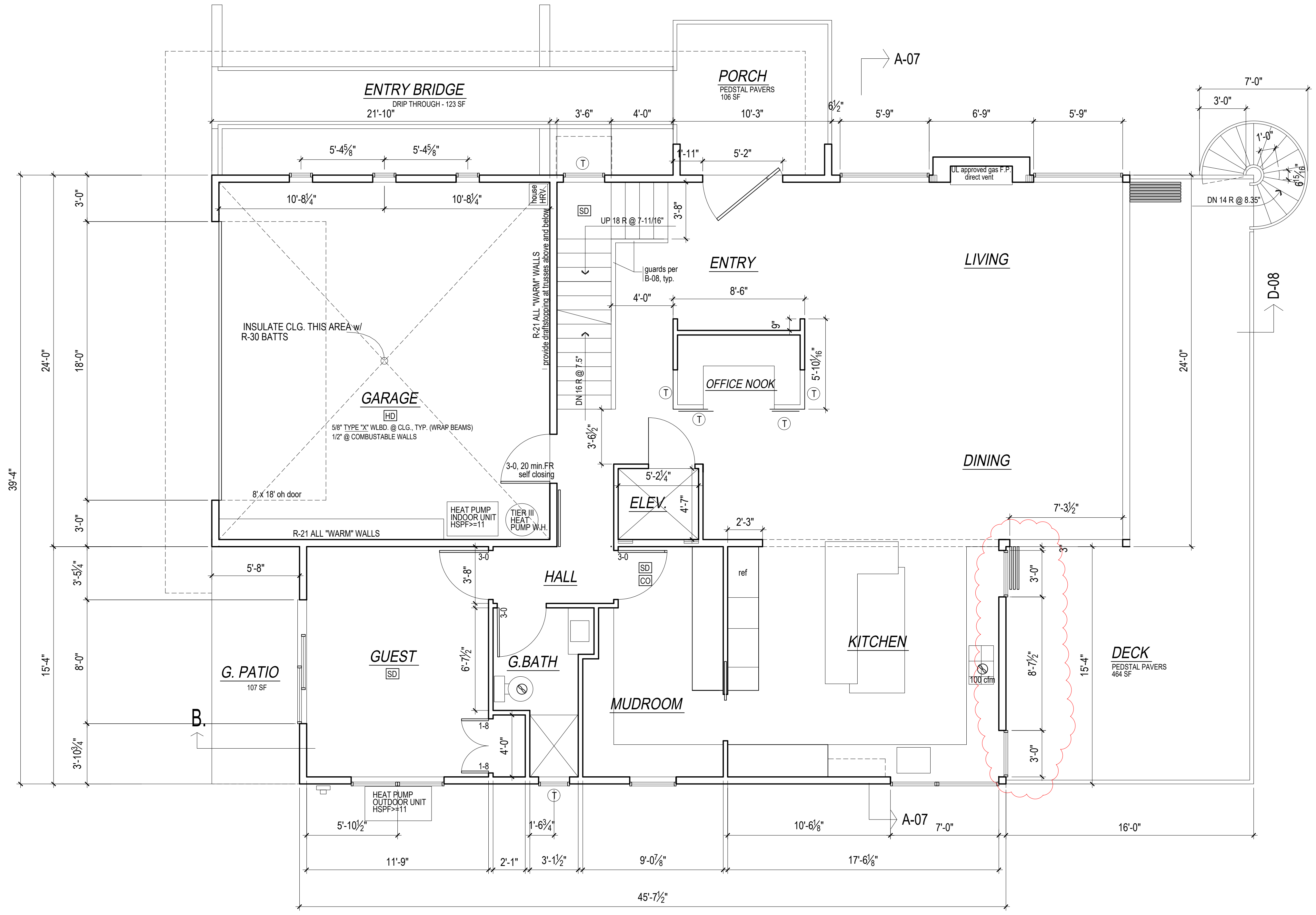
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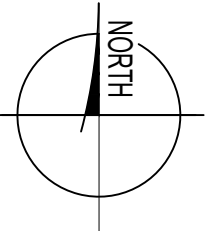
NOTES

- 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



**B.** SECTION AT GUEST PATIO  
1/2" = 1'-0" see also 9-S3.2

**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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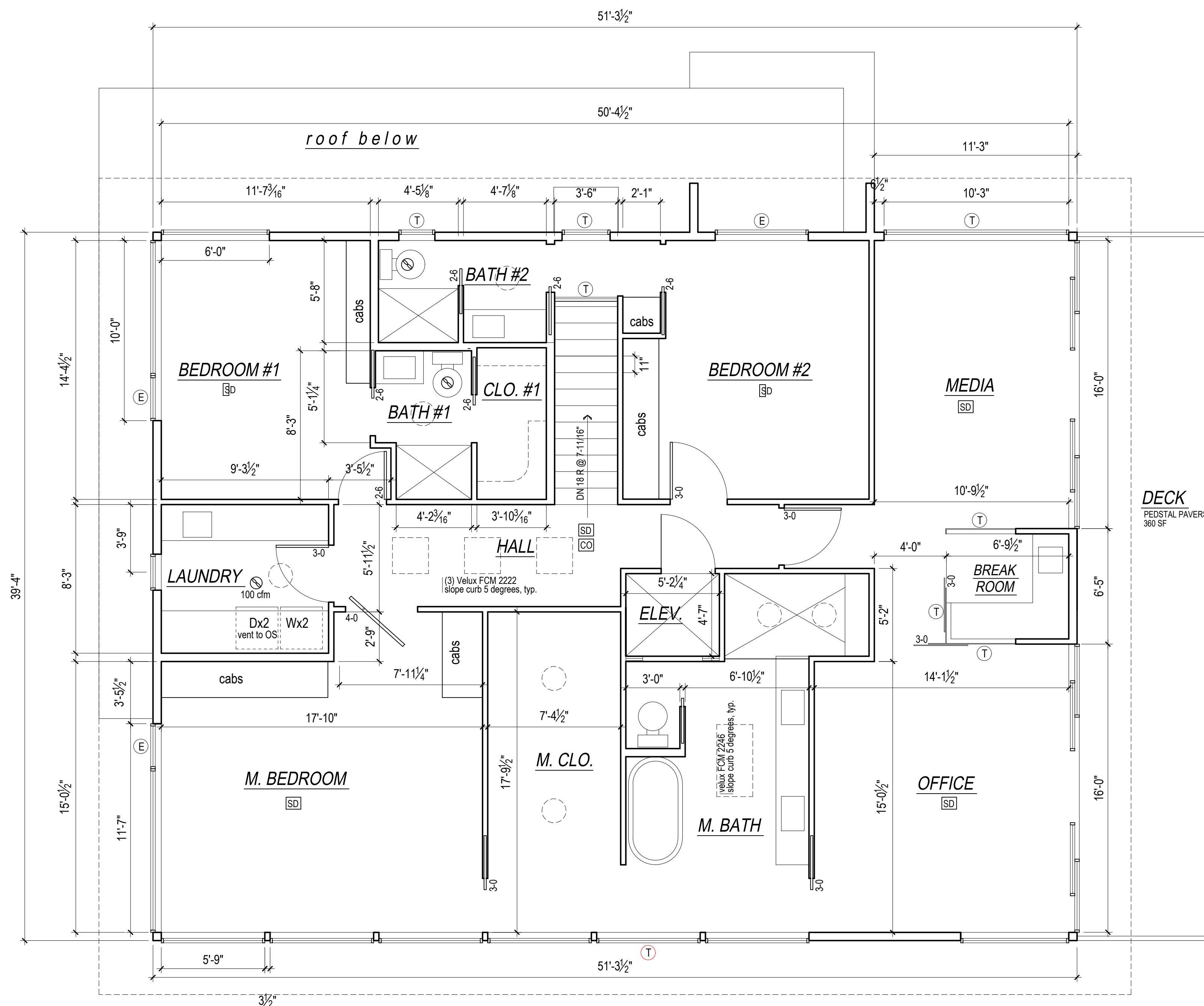
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Main Floor
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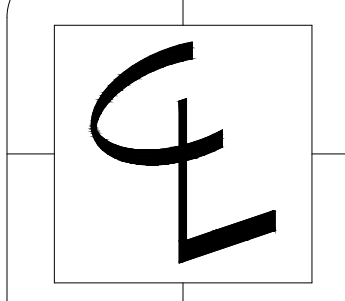
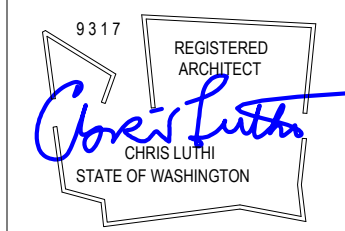
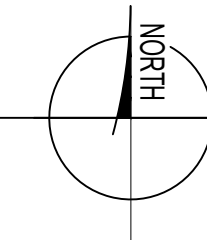
NOTES

- SD = SMOKE DETECTOR, HARDWIRE, INTERCONNECTED w/ BATTERY BACK-UP
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- 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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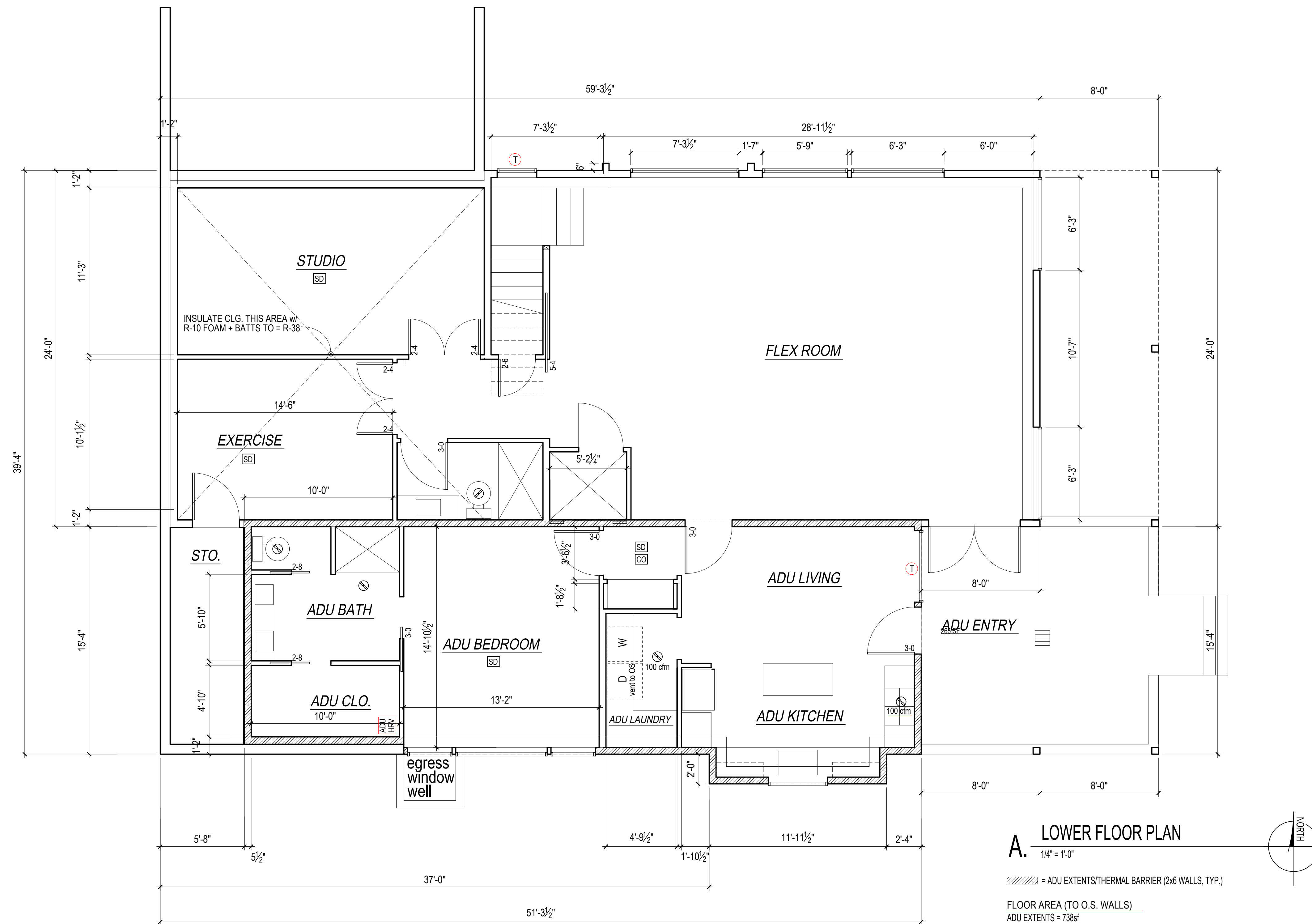
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CONTENTS  
 Upper Floor

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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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- FAN** = 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
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- 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.

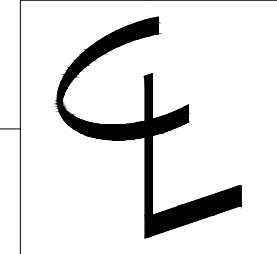
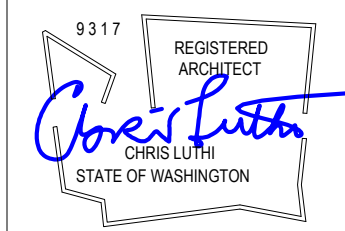
**ADU CLG. SOUND/FIRE REQUIREMENTS**

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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**CONTENTS**

Lower Floor

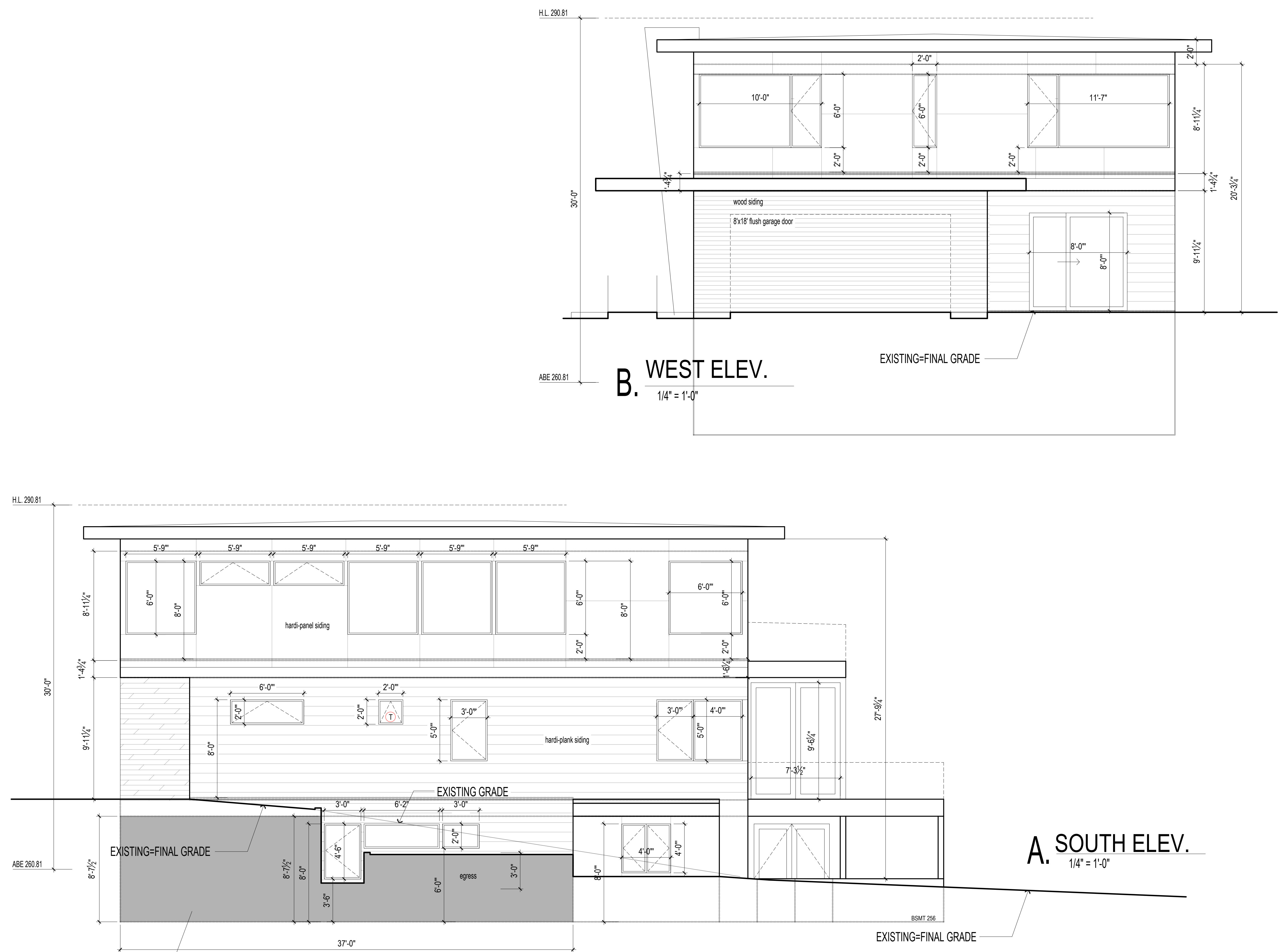
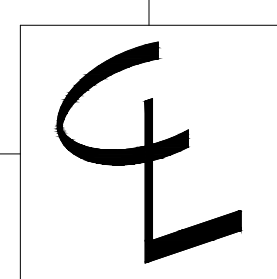
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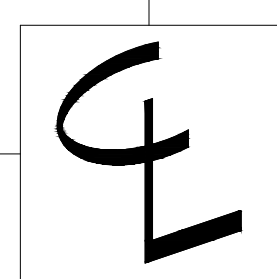
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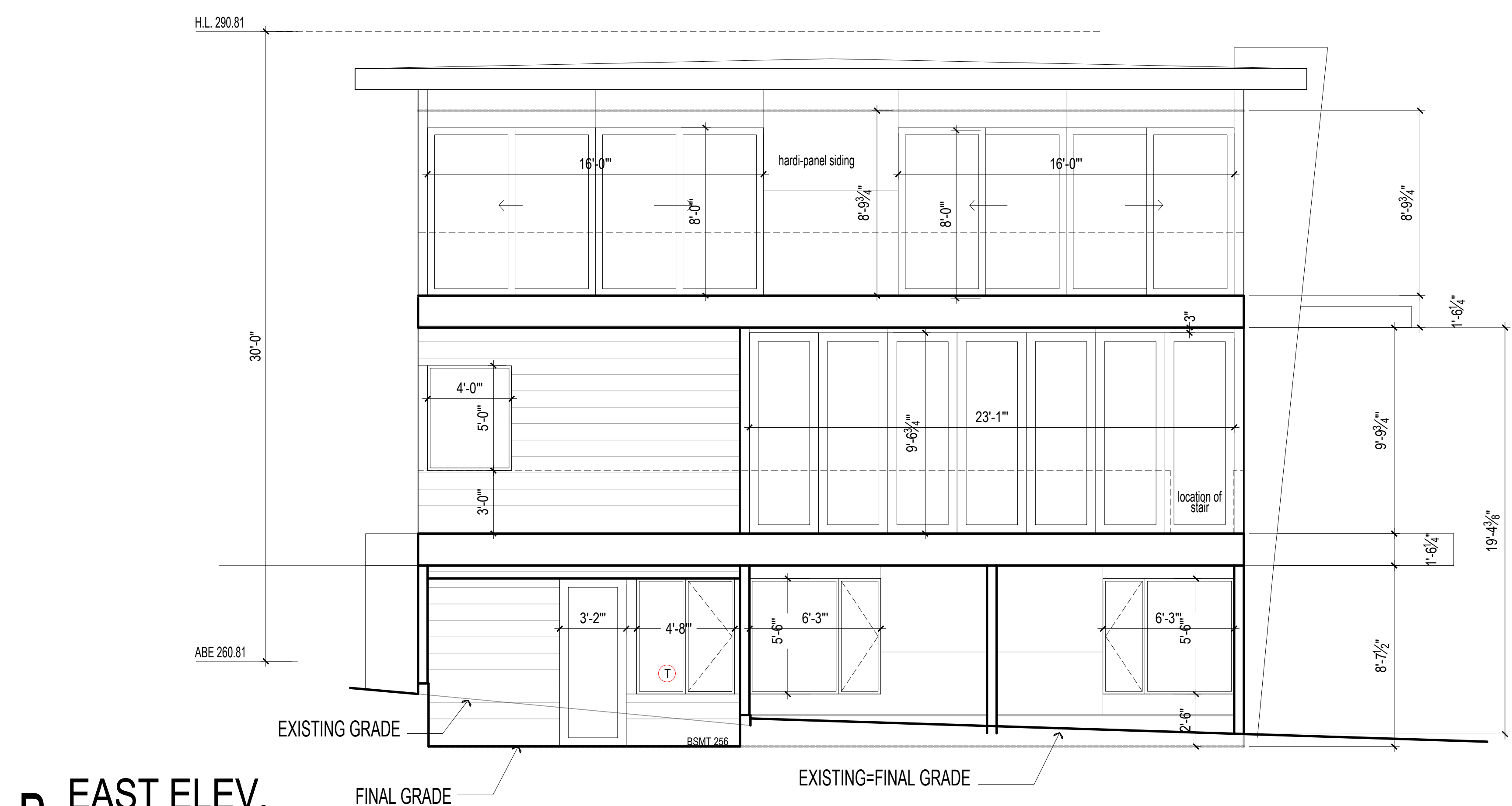
WALL SEGMENT H  
 SHADED AREA = 247 sf  
 BASEMENT AREA = 319 sf  
 COVERAGE = 77.4%



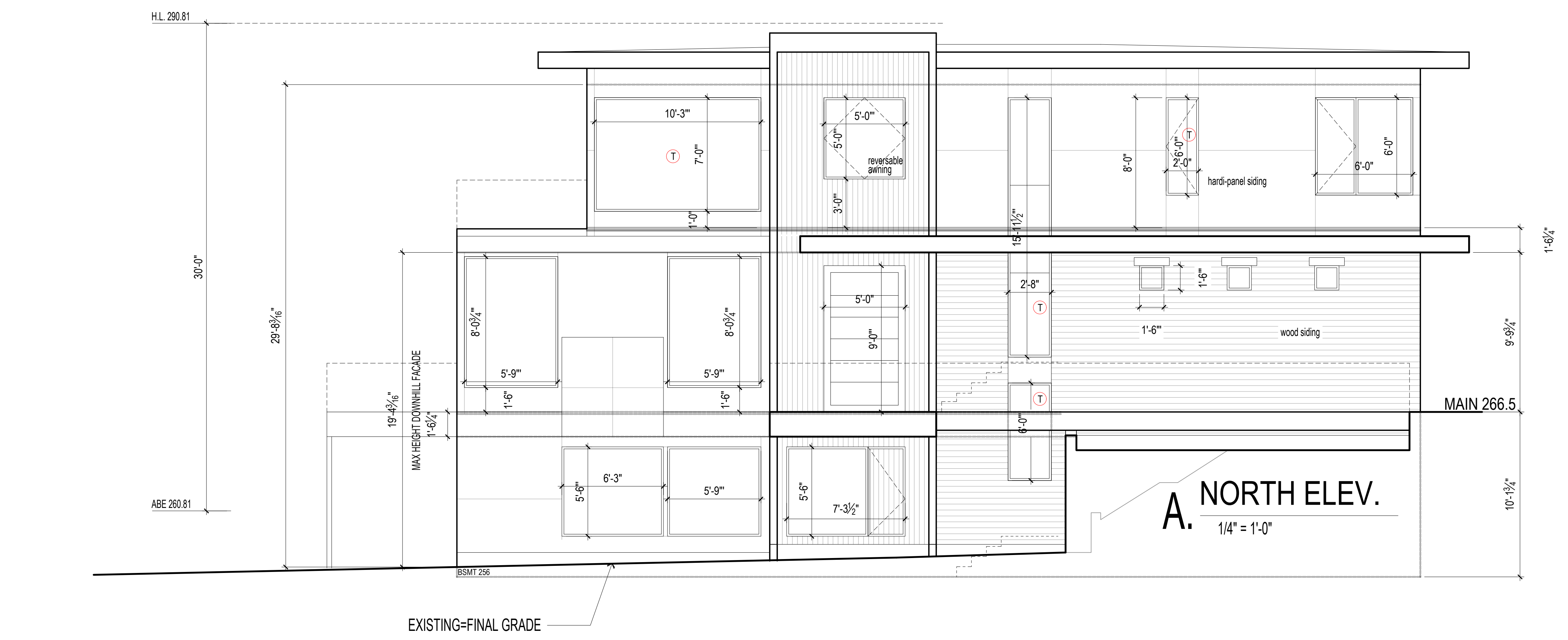
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CONTENTS  
 Elevations

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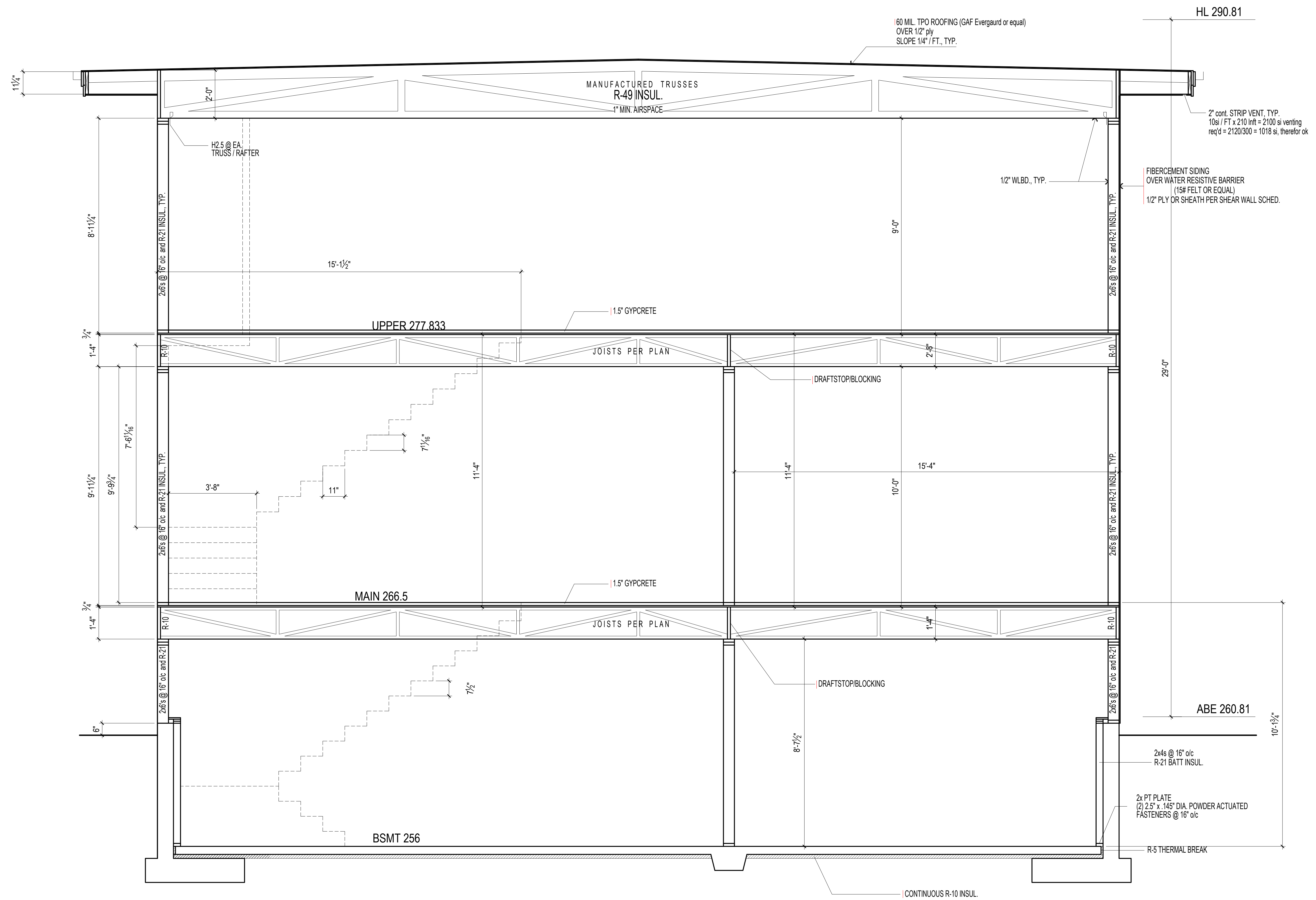


**B. EAST ELEV.**  
 1/4" = 1'-0"

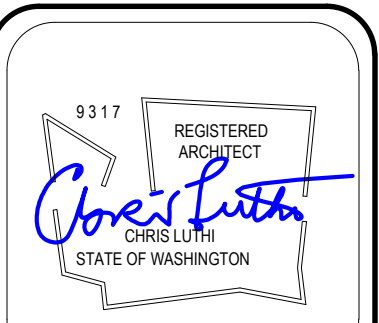


**A. NORTH ELEV.**  
 1/4" = 1'-0"





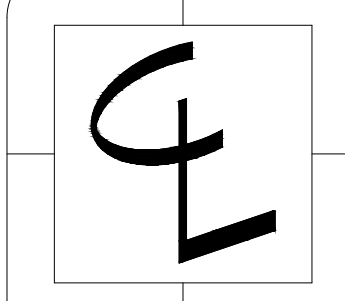
**A.** TYP. BUILDING SECTION  
 1/2" = 1'-0"



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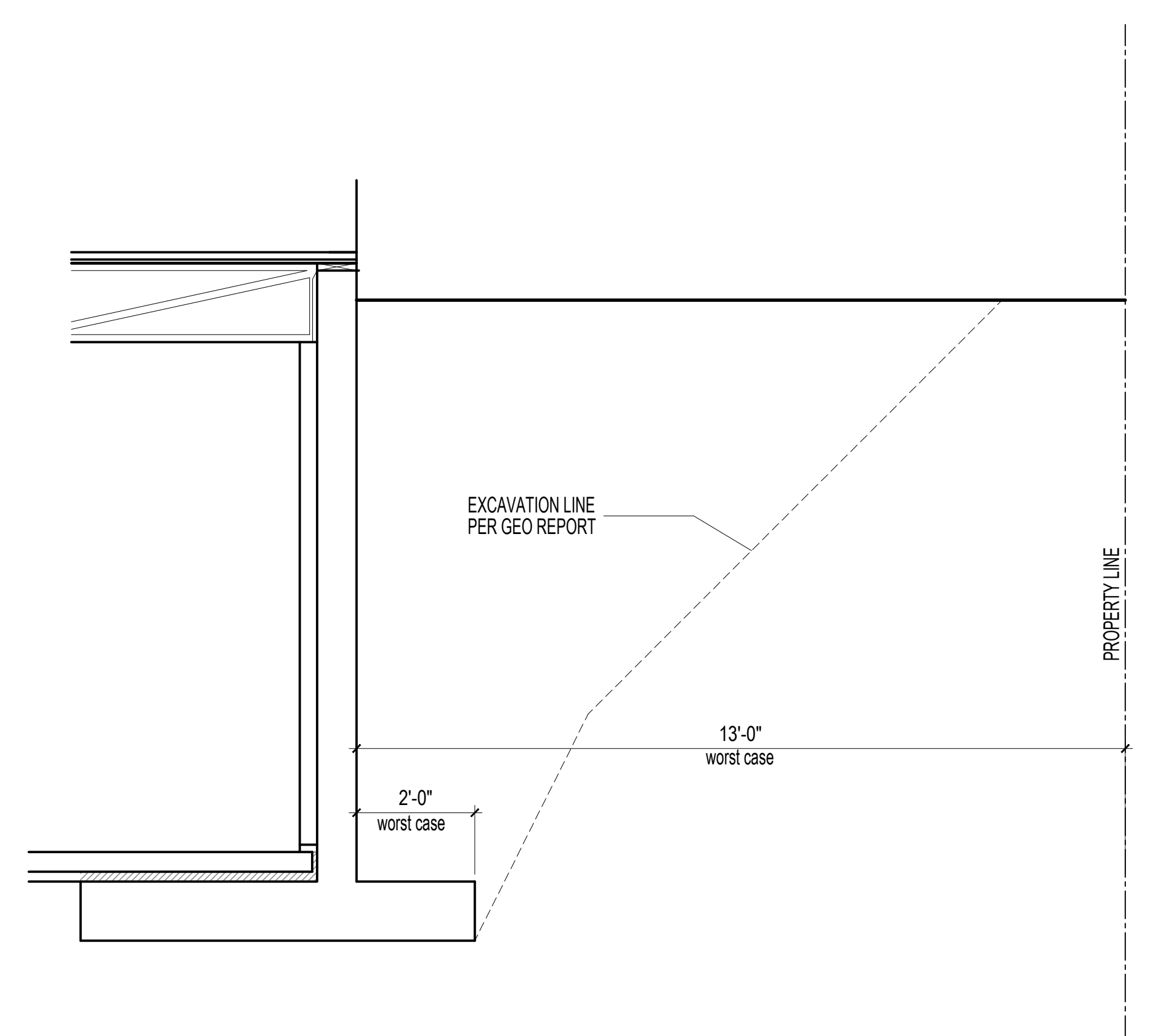


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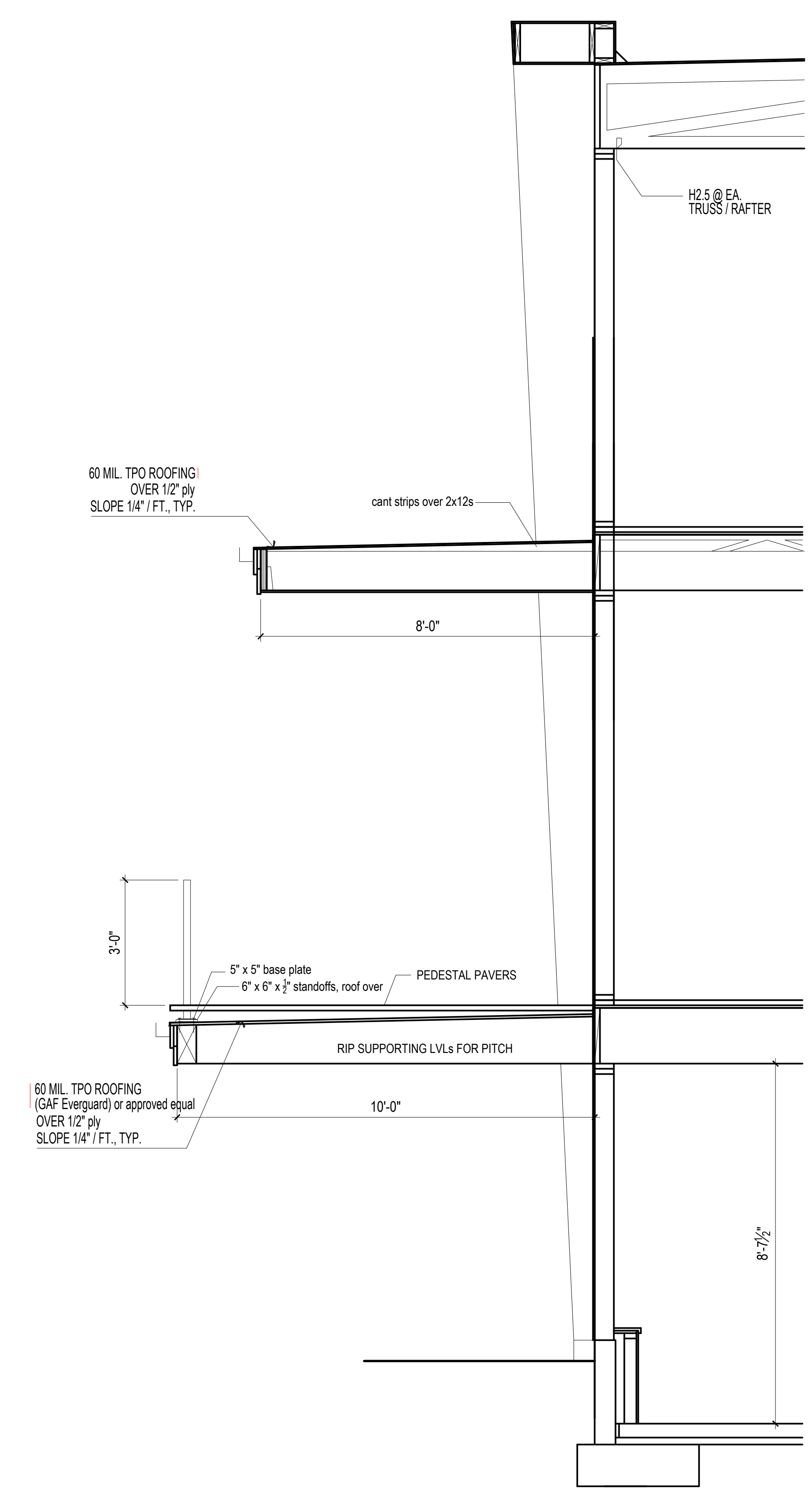
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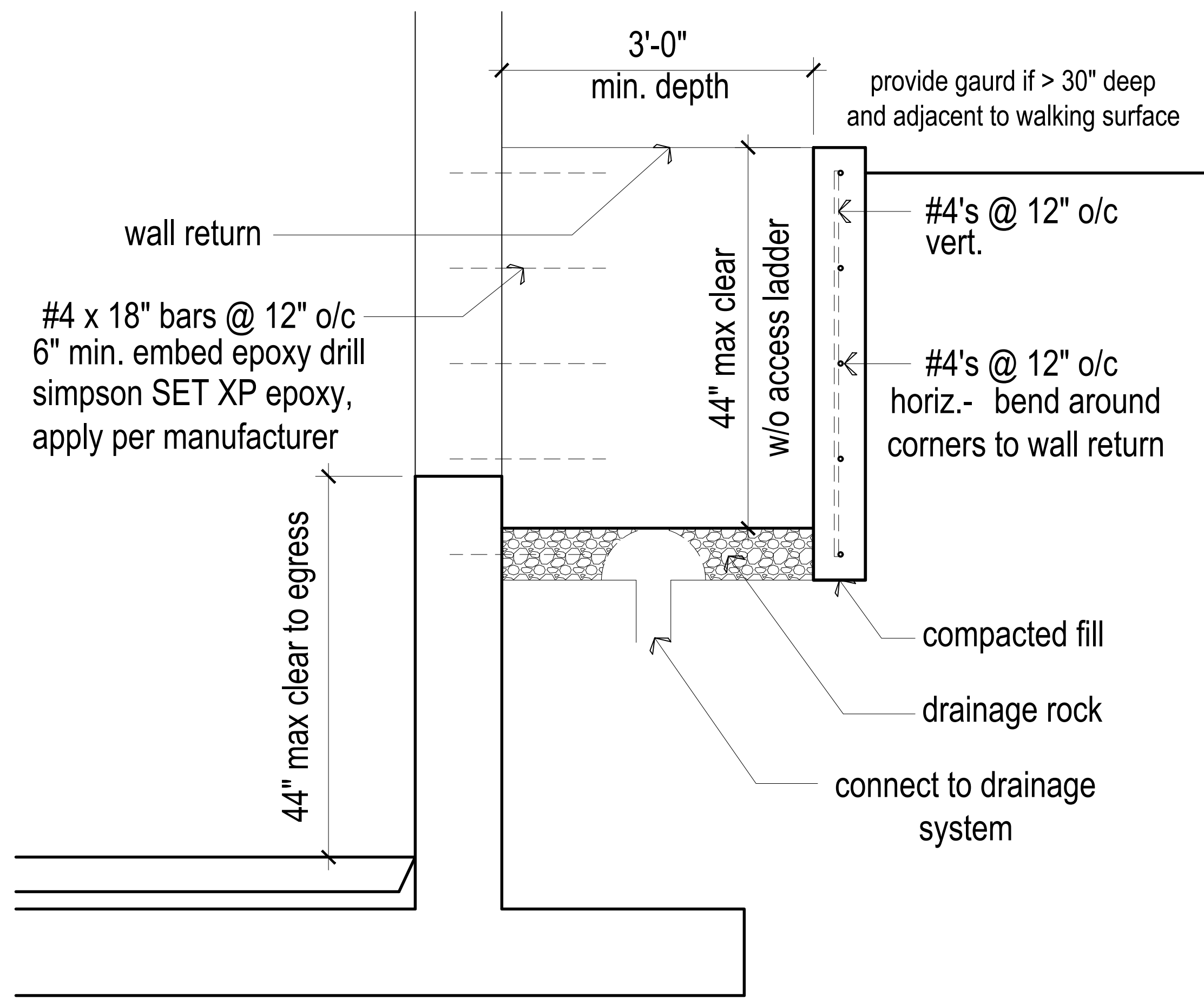
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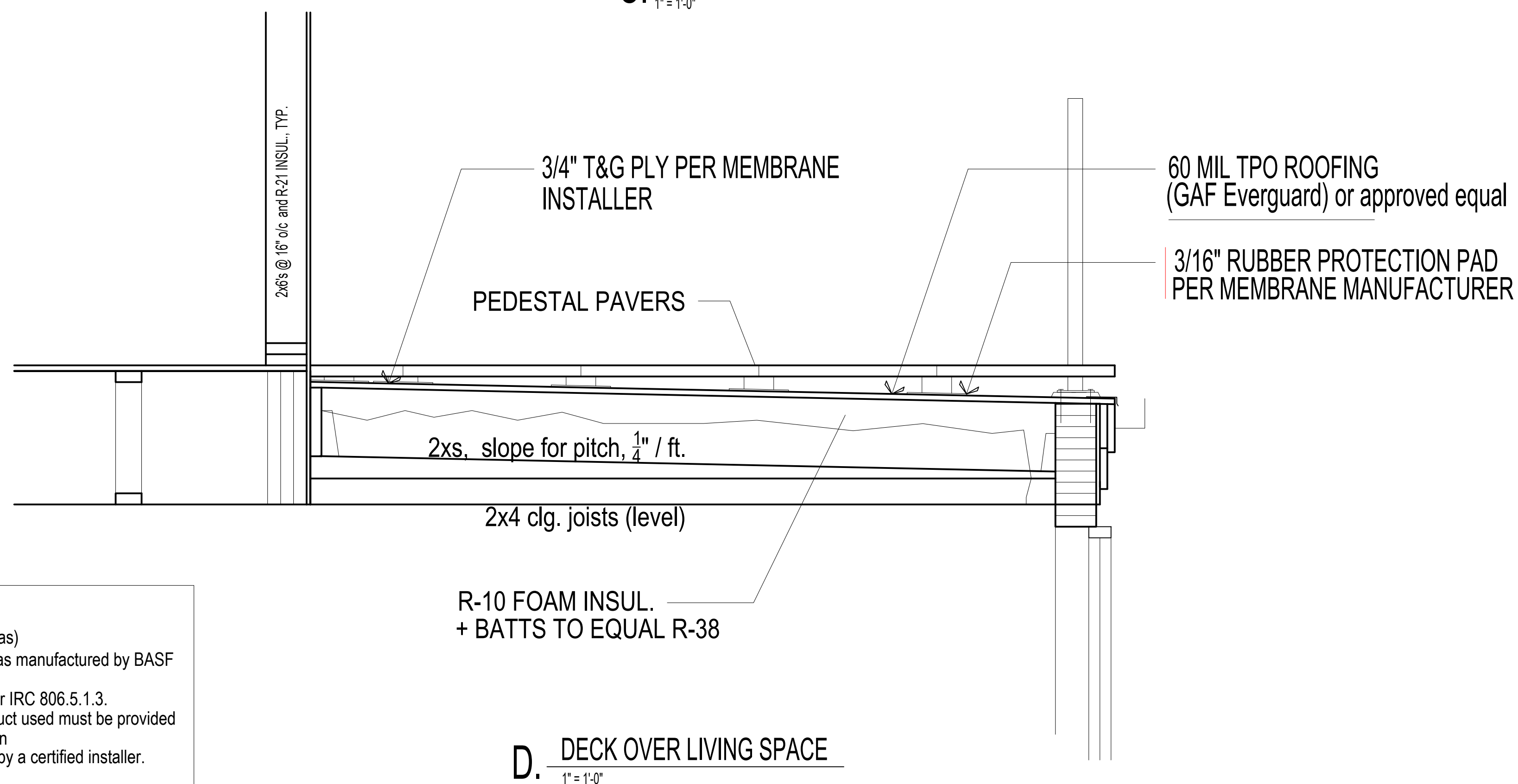
**B.** EXCAVATION AT SIDE YARD  
 1/2" = 1'-0"



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



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

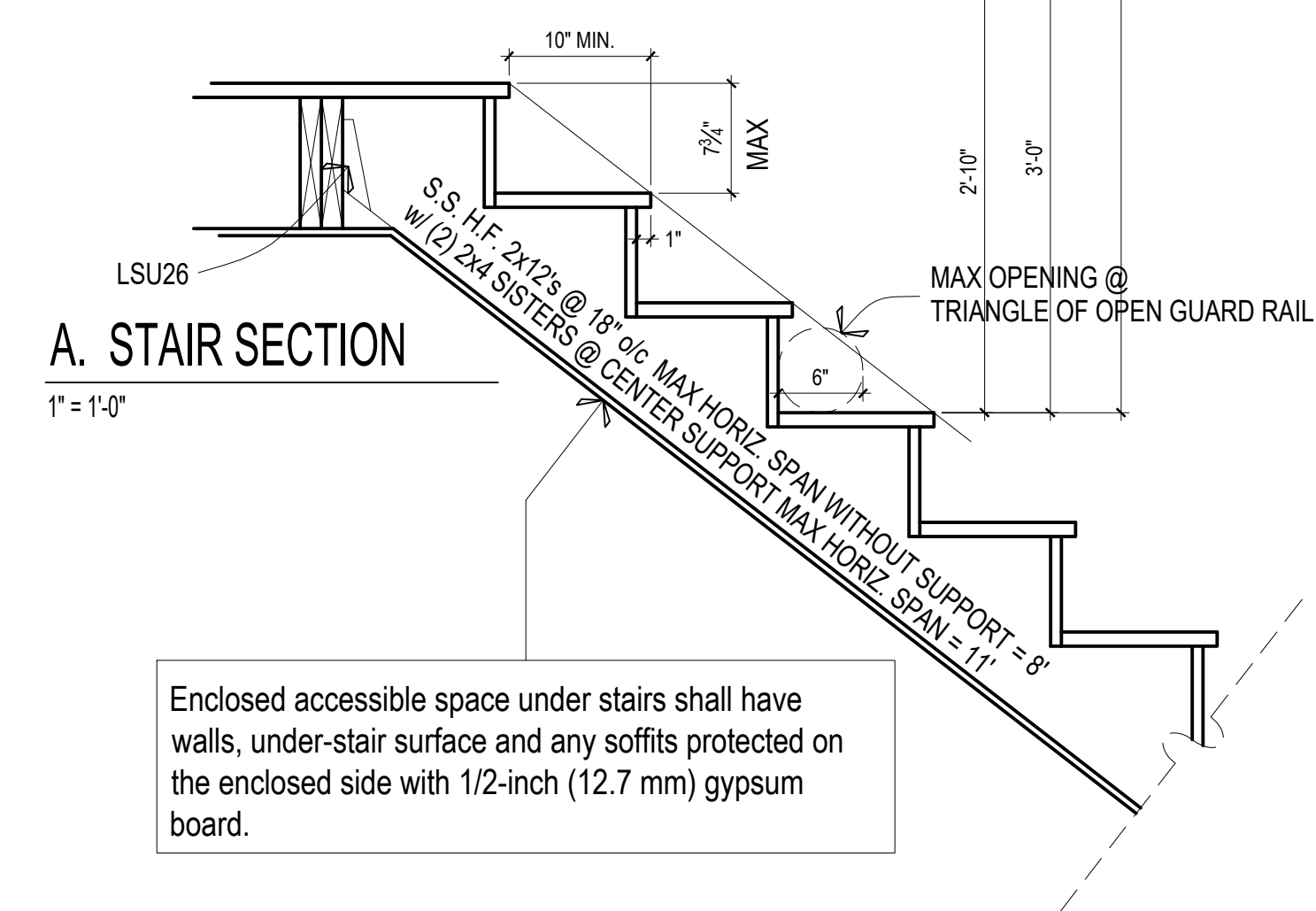


D. DECK OVER LIVING SPACE  
1" = 1'-0"

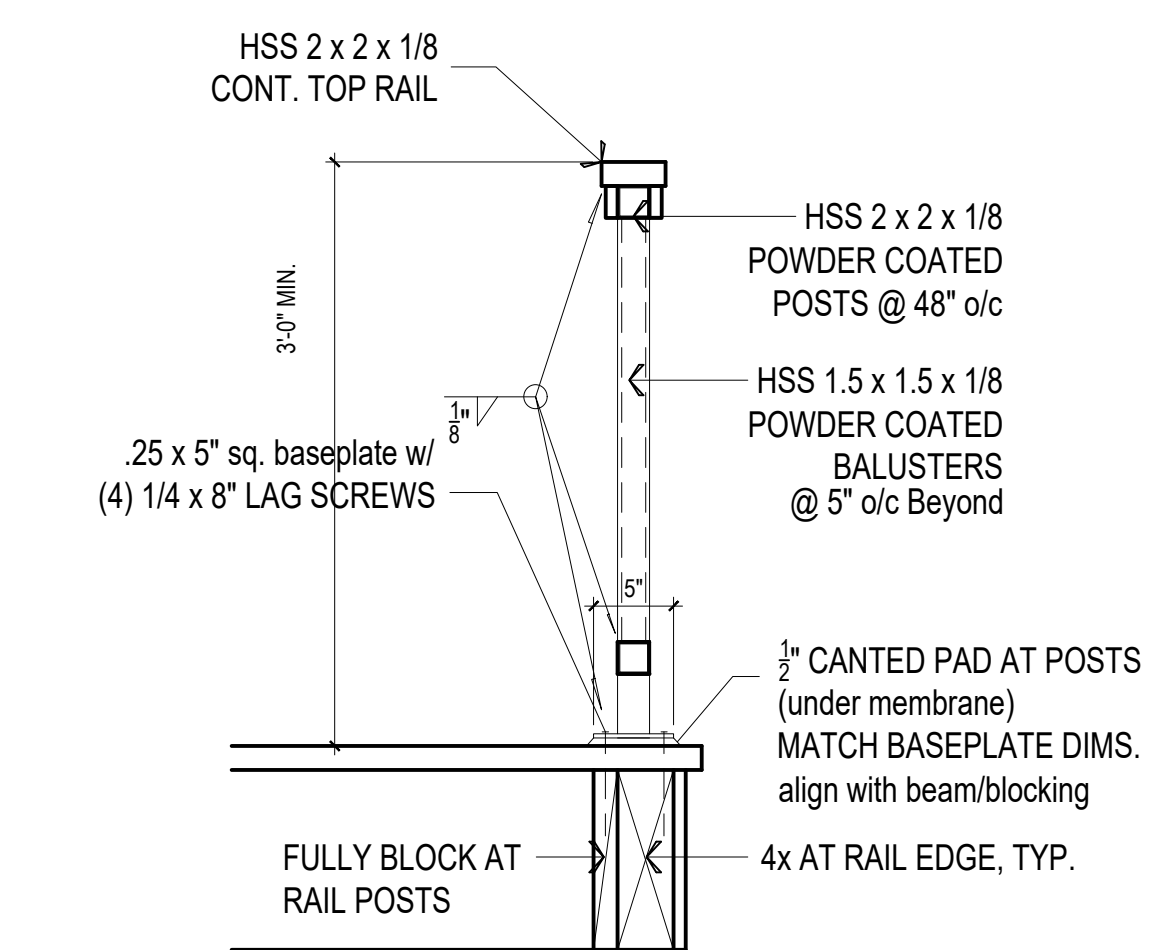
FOAM INSULATION NOTES

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.

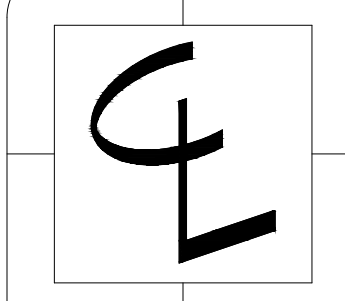
MIN. STAIRWAY WIDTH = 3'-0" CLEAR  
STAIR RISE, RUN AND NOSING CANNOT VARY BY MORE THAN 3/8"  
HANDRAIL TERMINATIONS MUST RETURN TO WALL



A. STAIR SECTION  
1" = 1'-0"



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



CONTENTS

Details

DRAWN BY

CRL

DATE

10.20.22

4.28.23

7.21.23



General Structural Notes (GSN's)

CRITERIA

1. 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.

2. DESIGN LOADING CRITERIA
RISK CATEGORY SBC TABLE 1604.5 ..... II
ROOF SNOW LOAD ..... 25 PSF (Sg = 1.0)
+ 5 PSF RAIN ON SNOW SURCHARGE

3. 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.

4. 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.

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

6. DRAWINGS INDICATE GENERAL AND TYPICAL DETAILS OF CONSTRUCTION. WHERE CONDITIONS ARE NOT SPECIFICALLY INDICATED BUT ARE OF SIMILAR CHARACTER TO THOSE SHOWN, SIMILAR DETAILS OF CONSTRUCTION SHALL BE USED, SUBJECT TO REVIEW AND APPROVAL BY THE ARCHITECT AND THE STRUCTURAL ENGINEER.

7. 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.

8. 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.

9. 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.

10. 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.

11. FOUNDATION NOTES: SUBGRADE PREPARATION INCLUDING DRAINAGE, EXCAVATION, COMPACTION, AND FILLING REQUIREMENTS, SHALL CONFORM STRICTLY WITH THE RECOMMENDATIONS GIVEN IN THE GEOTECHNICAL REPORT REFERENCED BELOW.

12. NOT USED

ANCHORAGE:

13. 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

15. REINFORCING STEEL SHALL CONFORM TO ASTM A615, GRADE 60, fy = 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.

IBC TABLE 1705.3 REQUIRED SPECIAL INSPECTIONS AND TESTS OF CONCRETE CONSTRUCTION. Table with columns: REQUIRE?, VERIFICATION & INSPECTION, CONTINUOUS/PERIODIC, REF. STD., IBC REF.

EXCEPTIONS TO 2 PER IBC SECTION 1703.3 APPLIES TO CONCRETE WORK ON THIS PROJECT.

WOOD:
16. FRAMING LUMBER SHALL BE KILN DRIED OR MC-19, AND GRADED AND MARKED IN CONFORMANCE WITH M.C.I.B.E. STANDARD GRADING RULES FOR WEST COAST LUMBER NO. 17 OR W.N.P.A. WESTERN LUMBER GRADING RULES.

20. 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 VENEER LUMBER (LVL, LAMINATED STRAND LUMBER (LSL), OR PARALLEL STRAND LUMBER (PSL).

21. 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.

14. CONCRETE SHALL BE MIXED, PROPORTIONED, CONVEYED AND PLACED IN ACCORDANCE WITH ACI 318-14 CHAPTER 26 AND ACI 301.

ACCORDANCE WITH ANSI/TPI-1-2007 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 0 PSF

FLOOR TRUSSES
TOP CHORD LIVE LOAD 40 PSF
BOTTOM CHORD LIVE LOAD 0 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.

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.

24. 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.

25. 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" @ 6" PANEL NAILING (APPLIES TO ALL SHEATHING PANEL EDGES); AND 8d @ 12" @ TO INTERMEDIATE FRAMING.

26. 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 Na2SO4.

27. TIMBER CONNECTORS CALLED OUT BY LETTERS AND NUMBERS SHALL BE "STRONG-TIE" BY SIMPSON COMPANY, AS SPECIFIED IN THEIR WOOD CONNECTIONS CATALOG NO. CC-C-2017-18.

ALL TIMBER CONNECTORS IN CONTACT WITH PRESSURE-TREATED WOOD THAT USED PRESERVATIVE CHEMICALS OTHER THAN DOT SODIUM BORATE (SBX) WITHOUT Na2SO4, SHALL BE MANUFACTURED FROM ZMAX STEEL BY SIMPSON (6165 STEEL PER ASTM A653), OR TYPE 304 OR 316 STAINLESS STEEL.

28. 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.

B. 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.

C. 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.

D. NAILING: A MINIMUM NAIL DIAMETER AND LENGTH SHALL BE AS FOLLOWS:
SHEATHING NAILS: 8d, 0.131" x 2 1/2"; 10d, 0.148" x 2 1/2"

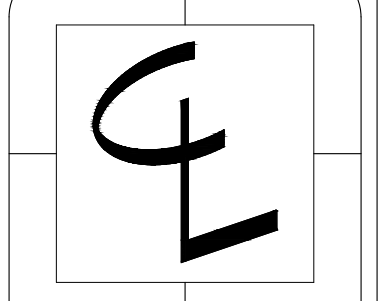
Minimum Connectors and Fasteners for Wood Members per IBC 2018

Table with columns: DESCRIPTION OF BUILDING ELEMENT, NUMBER AND TYPE OF FASTENERS, SPACING & LOCATION. Rows include Roof Trusses, Floor Trusses, Ceiling Joists, Stud to Stud, Top Plate to Top Plate, Bottom Plate to Joist, Stud to Stud and Abutting Studs, Built-Up Header, Continuous Header to Stud, Top Plate to Top Plate, Bottom Plate to Joist, Stud to Top or Bottom Plate, Top or Bottom Plate to Stud.

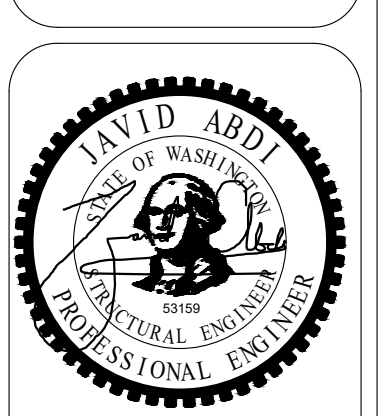
Table with columns: DESCRIPTION OF BLDG. ELEMENT, NUMBER AND TYPE OF FASTENERS, SPACING & LOCATION. Rows include Top Plates, Laps at Corners and Intersections, Brace to Each Stud and Plate, Sheathing to Each Bearing, Sheathing to Each Bearing, Joist to Sill, Top Plate, or Girder, Joist or Girder, Subfloor to Joist or Girder, Planks (Plank & Beam - Floor & Roof), Built-Up Orders and Beams, 2" Lumber Layers, Ledger Strip Supporting Joists or Rafters, Joist to Band Joist or Rim Joist, Bridging or Blocking to Joist, Rafter, or Truss.

MULTIPLE LVL MEMBER FASTENING PER WEYERHAUSER. Table with columns: PIECE WIDTH, NUMBER OF PILES, NUMBER OF PILES, TYPE, MIN. LENGTH, # ROWS, O.C. SPACING, LOCATION.

(1) 10d NAILS ARE 0.128" DIAMETER; 12d - 16d NAILS ARE 0.148" - 0.162" DIAMETER; SCREWS ARE 5dS, USP #16, TRUSS-OK, 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.



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CONTENTS

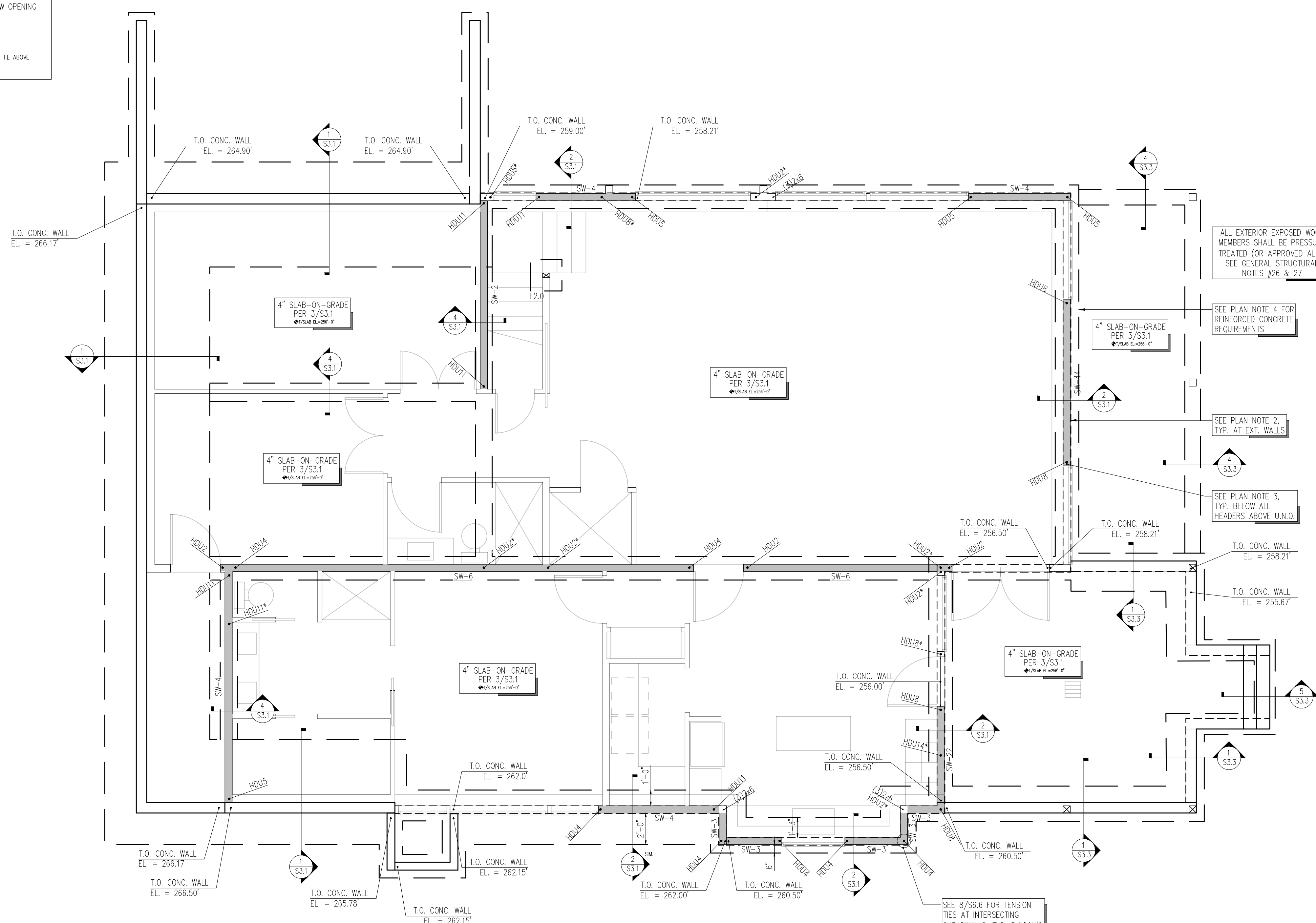
General Structural Notes

DRAWN BY JDA DATE 10.18.22 06.09.23

S1.1

**LEGEND**

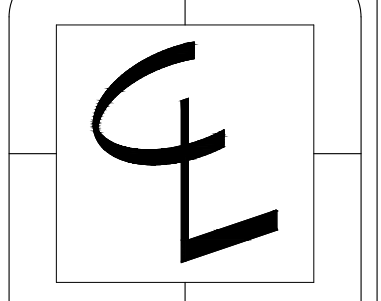
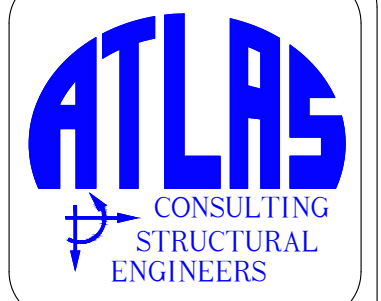
	CONCRETE FOOTING		DENOTES SPREAD FOOTING PER 5/S3.1
	CONCRETE WALL		POST ABOVE
	STEP IN FOOTING PER 9/S3.1		DENOTES EXTENT OF SHEARWALL TYPE SW- PER 1/S6.6
	DENOTES TOP OF FOOTING ELEVATION		DENOTES STRAPPED SHEARWALL PER 7/S6.6, WITH $\square$ DENOTING STRAP PER SCHEDULE ABOVE & BELOW OPENING
	STRUCTURAL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



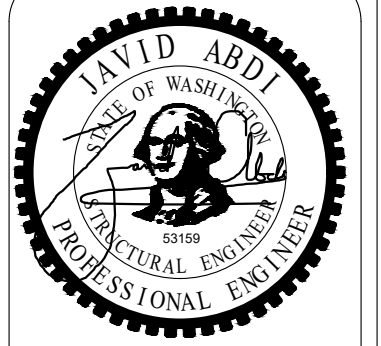
**FOUNDATION & FIRST FLOOR PLAN NOTES**

- 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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CONTENTS  
 Foundation and Lower Floor Plan

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 DATE  
 10.18.22  
 06.09.23

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

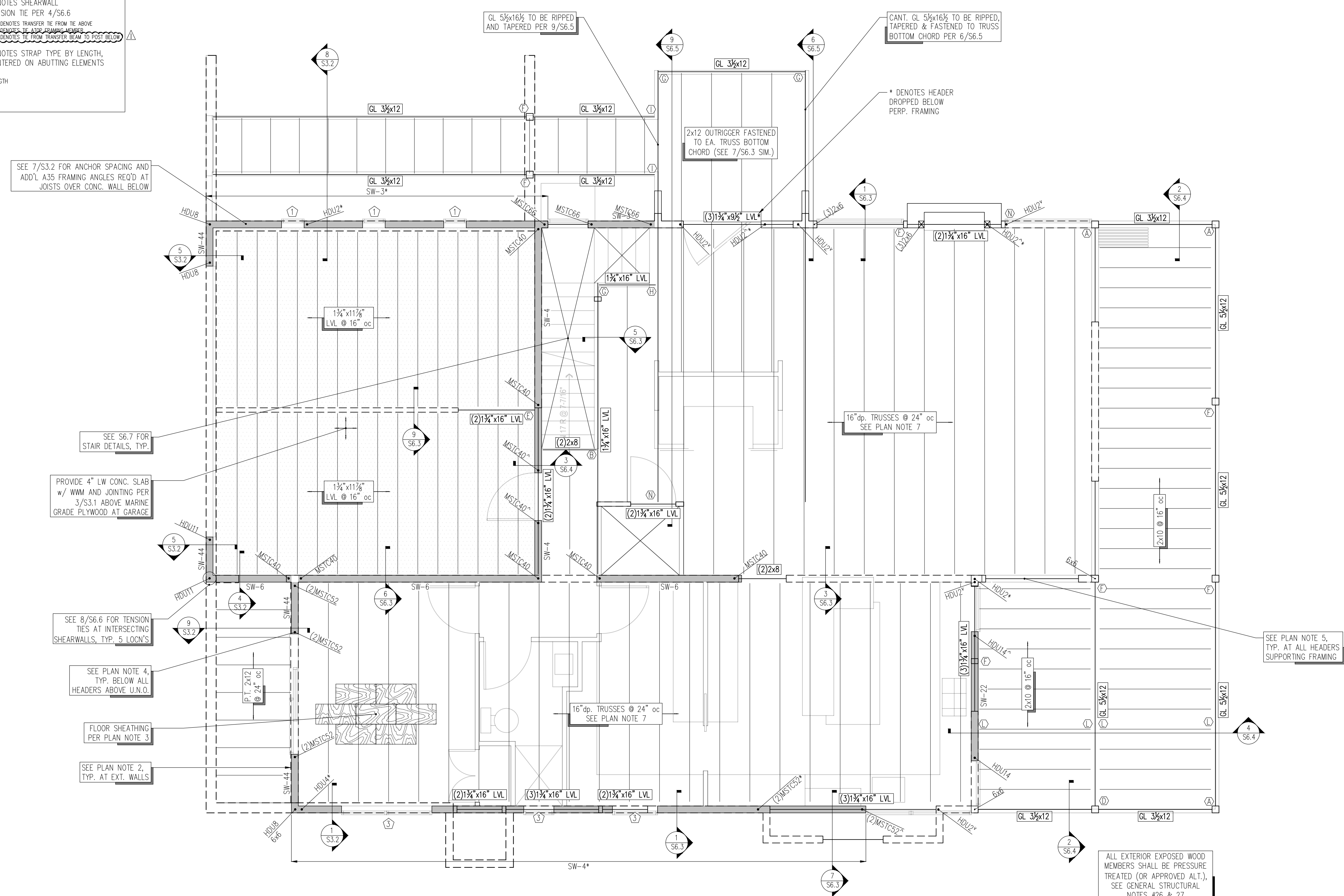
HDU DENOTES SHEARWALL TENSION TIE PER 4/S6.6  
 \* DENOTES TENSION TIE FROM THE ABOVE  
 \* DENOTES TIE FROM TRANSFER BEAM TO POST BELOW

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' LOC'N'S

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

FLOOR SHEATHING PER PLAN NOTE 3

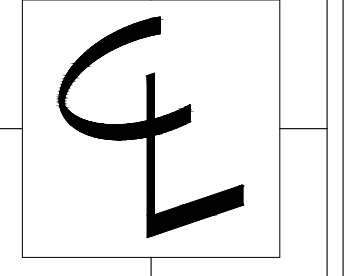
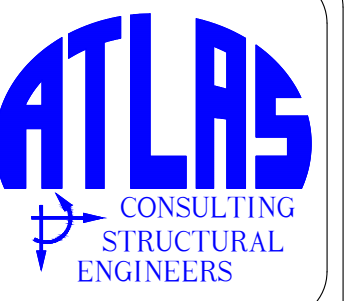
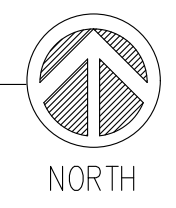
SEE PLAN NOTE 2, TYP. AT EXT. WALLS

**MAIN FLOOR PLAN NOTES**

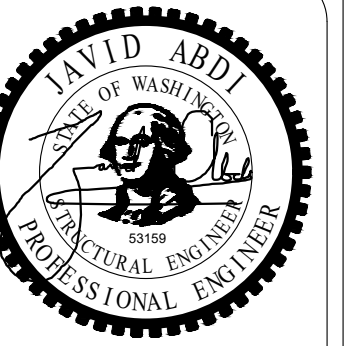
- SOLID WALLS AND SHEARWALLS SHOWN IN PLAN ARE ABOVE FRAMING LEVEL. DASHED WALLS SHOWN IN PLAN ARE BELOW FRAMING LEVEL.
- EXTERIOR STUDWALLS SHALL BE 2x6 STUDS @ 16" oc (MAX). SEE ARCHITECTURAL FOR INTERIOR STUDWALLS. SEE 6/6.1, 5/S6.2, AND 2/S6.2 FOR ALLOWABLE HOLES & NOTCHES IN STUDWALL STUDS AND TOP & 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"



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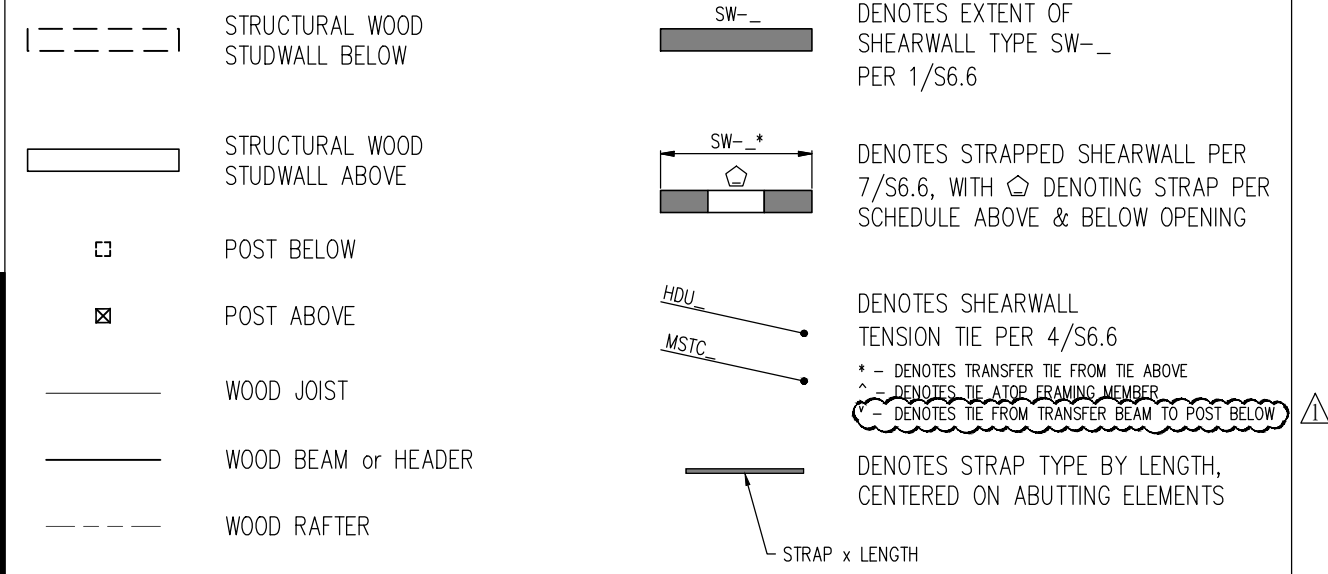
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CONTENTS  
 Main Floor Framing Plan

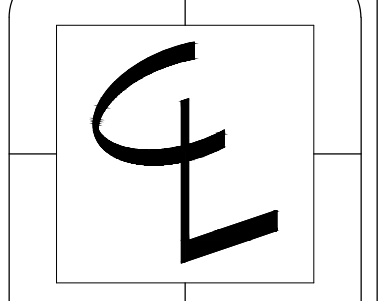
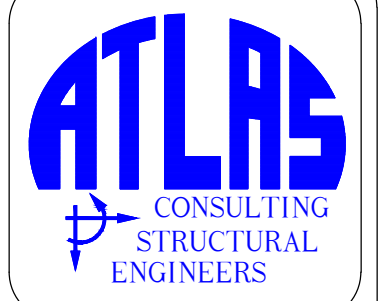
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 DATE  
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 06.09.23

S2.2

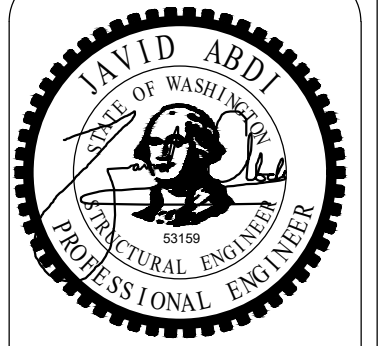
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CONNECTOR TABLE		
SIMPSON DESIGNATION		NOTES
ECCLQ, ECCRO		L-POST CAP
HUS ~or~ BU		HANGER
HGU ~or~ EGQ		HANGER
CCT		T-POST CAP
IUS ~or~ ITS		HANGER
CCQ		COLUMN CAP
HUCO		CONCEALED FLANGE HANGER
IUS ~or~ MIT		HANGER
LUS ~or~ HHPH		HANGER



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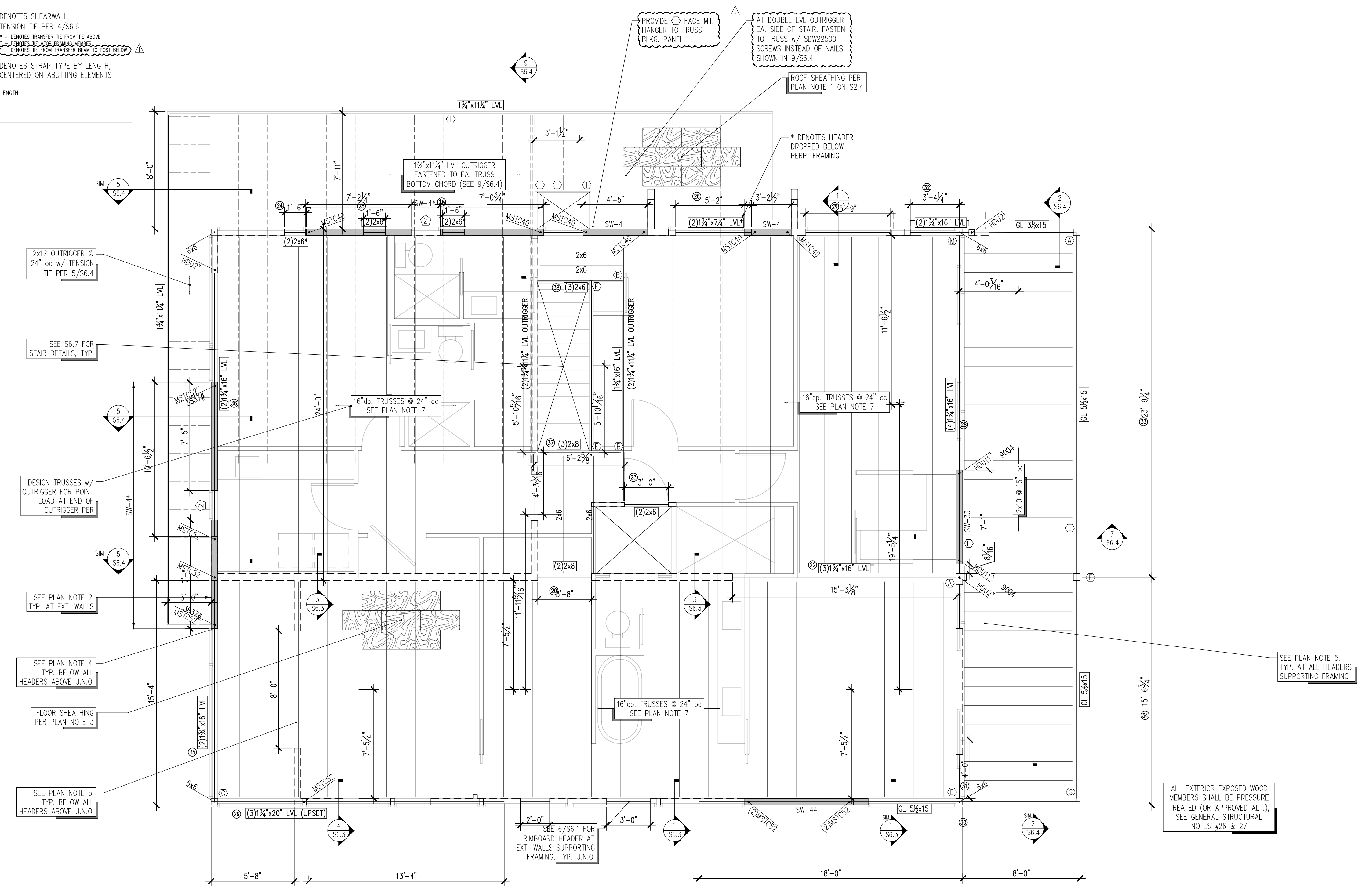


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Upper Floor Framing Plan

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06.09.23

S2.3



UPPER 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/S2.4) 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 NOT SUPPORTING RAFTERS, JOISTS, OR BEAMS SHALL BE PER DETAIL 4/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.

1 UPPER FLOOR FRAMING PLAN  
S2.3 1/4" = 1'-0"

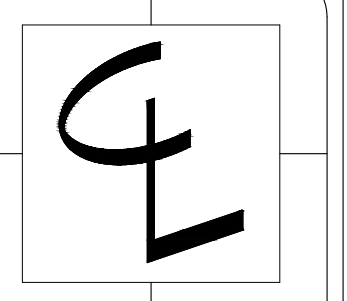
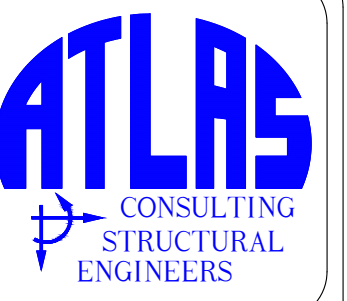
NORTH



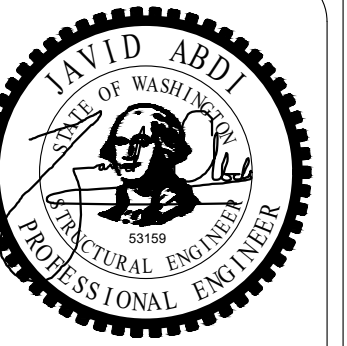
**LEGEND**

- STRUCTURAL WOOD STUDWALL BELOW
- POST BELOW
- WOOD RAFTER
- WOOD BEAM or HEADER
- DENOTES STRAP TYPE BY LENGTH, CENTERED ON ABUTTING ELEMENTS
- STRAP x LENGTH

CONNECTOR TABLE		
SIMPSON DESIGNATION		NOTES
Ⓐ	ECCLQ, ECCRO	L-POST CAP
Ⓑ	HUS ~gr= BU	HANGER
Ⓒ	HGU ~gr= EGQ	HANGER
Ⓓ	CCT	T-POST CAP
Ⓔ	IUS ~gr= ITS	HANGER
Ⓕ	CCQ	COLUMN CAP
Ⓖ	HUCQ	CONCEALED FLANGE HANGER
Ⓗ	IUS ~gr= MIT	HANGER
Ⓙ	LUS ~gr= HWPB	HANGER
Ⓚ	HHUS	HANGER



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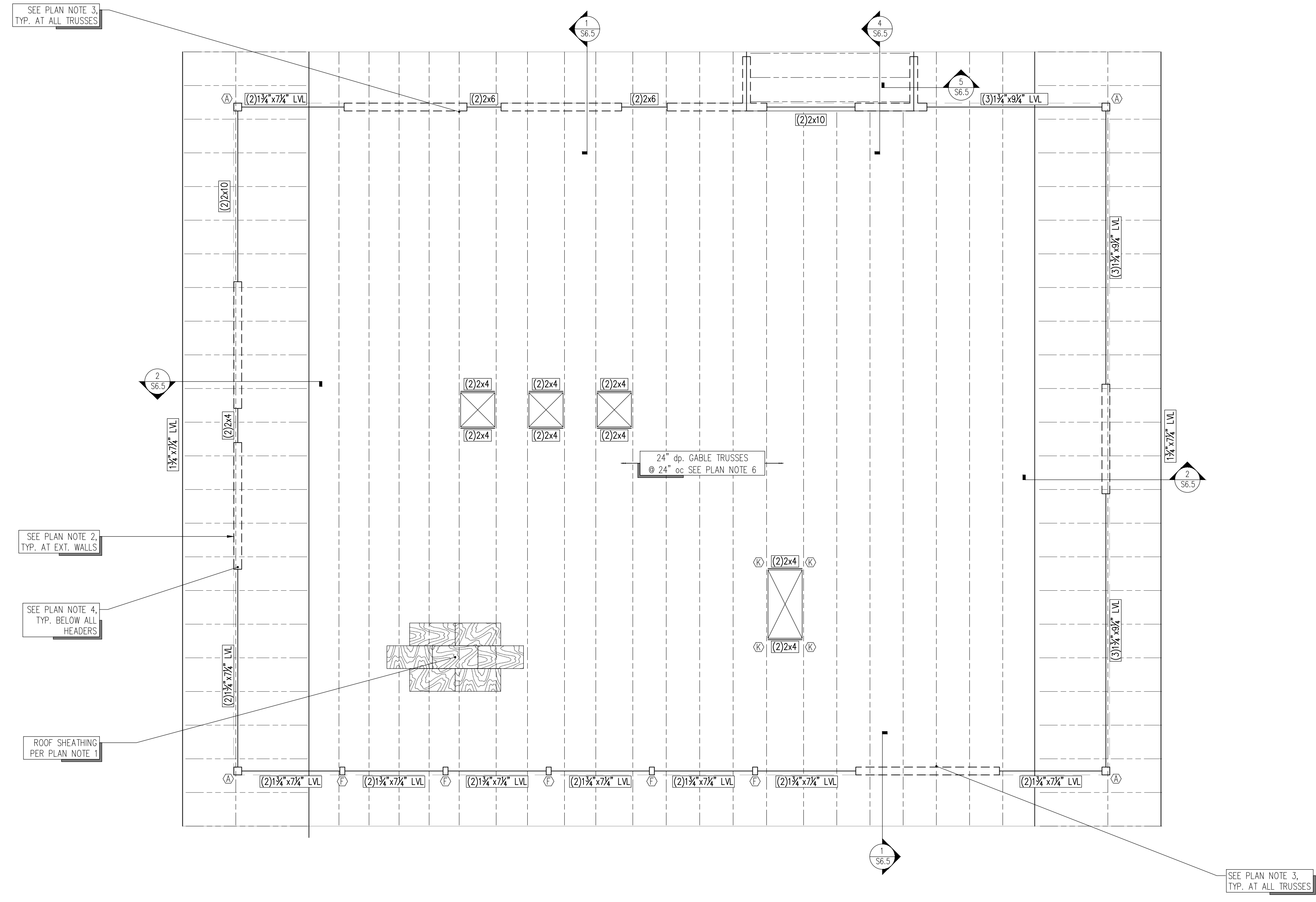


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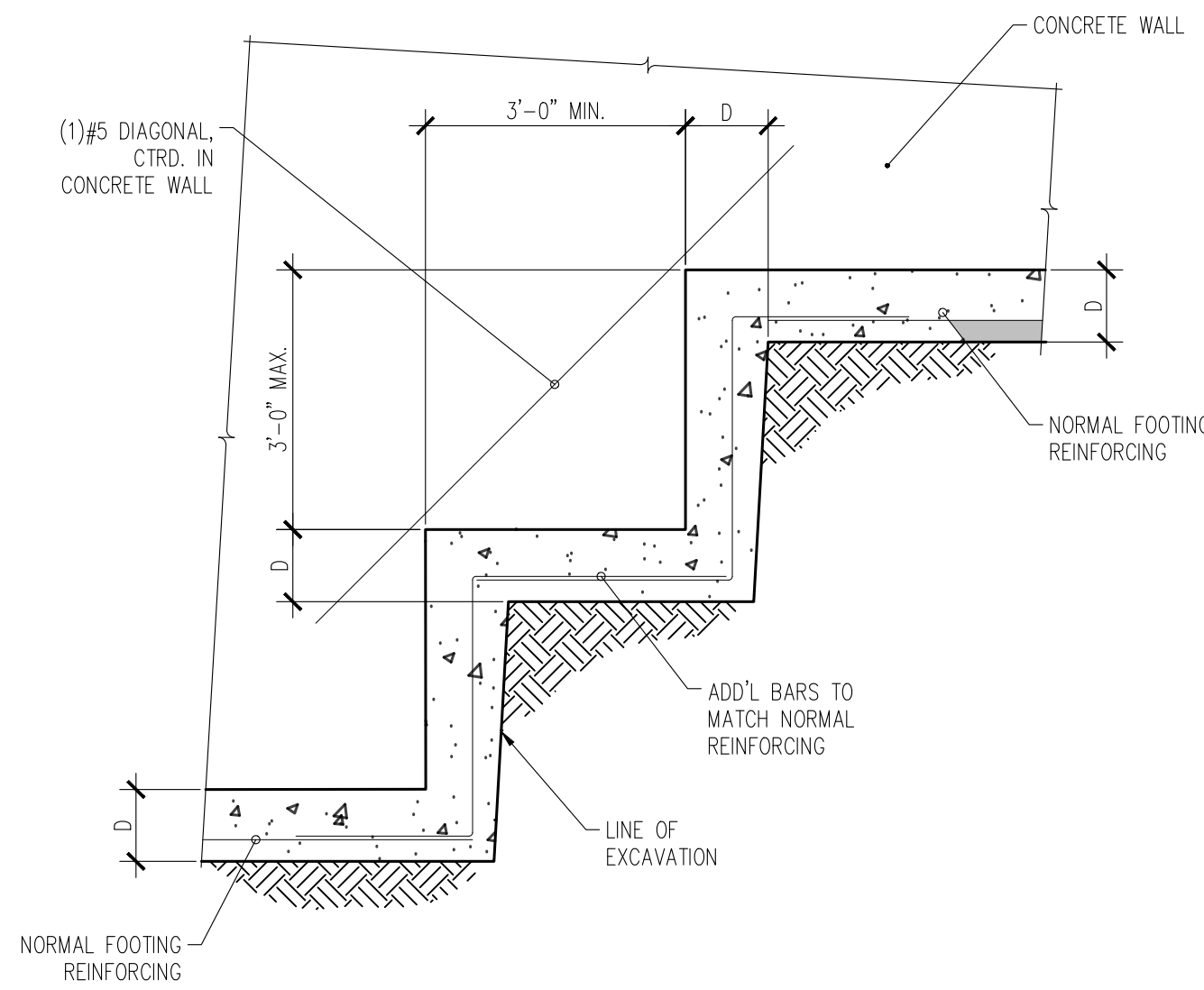
**CONTENTS**  
Roof Framing Plan

**DRAWN BY**  
JDA  
**DATE**  
10.18.22  
~~06.09.23~~

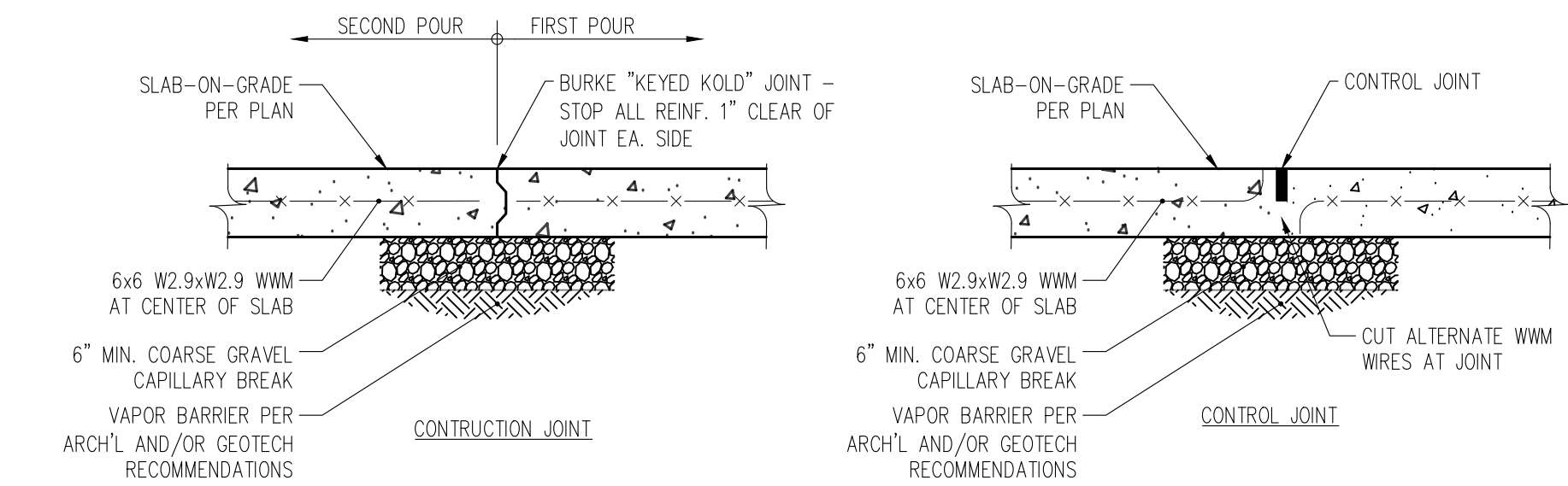
**S2.4**



- ROOF PLAN NOTES**
1. ROOF SHEATHING SHALL CONSIST OF 5/8" SHEATHING (PANEL SPAN RATING 32/16) NAILED 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).
  2. DASHED WALLS AND SHEARWALLS SHOWN IN PLAN ARE BELOW ROOF FRAMING ELEVATION (i.e. FROM THIRD FLOOR TO UNDERSIDE OF ROOF).
  3. PROVIDE H2.5A HURRICANE TIES AT END OF ALL EXISTING RAFTERS.
  4. ALL HEADERS 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
  5. HEADERS IN EXTERIOR WALLS NOT SUPPORTING RAFTERS, JOISTS, OR BEAMS SHALL BE PER DETAIL 4/S6.1 U.N.O. IN PLAN.
  6. SEE GENERAL STRUCTURAL NOTE #23 FOR ROOF TRUSS REQUIREMENTS.

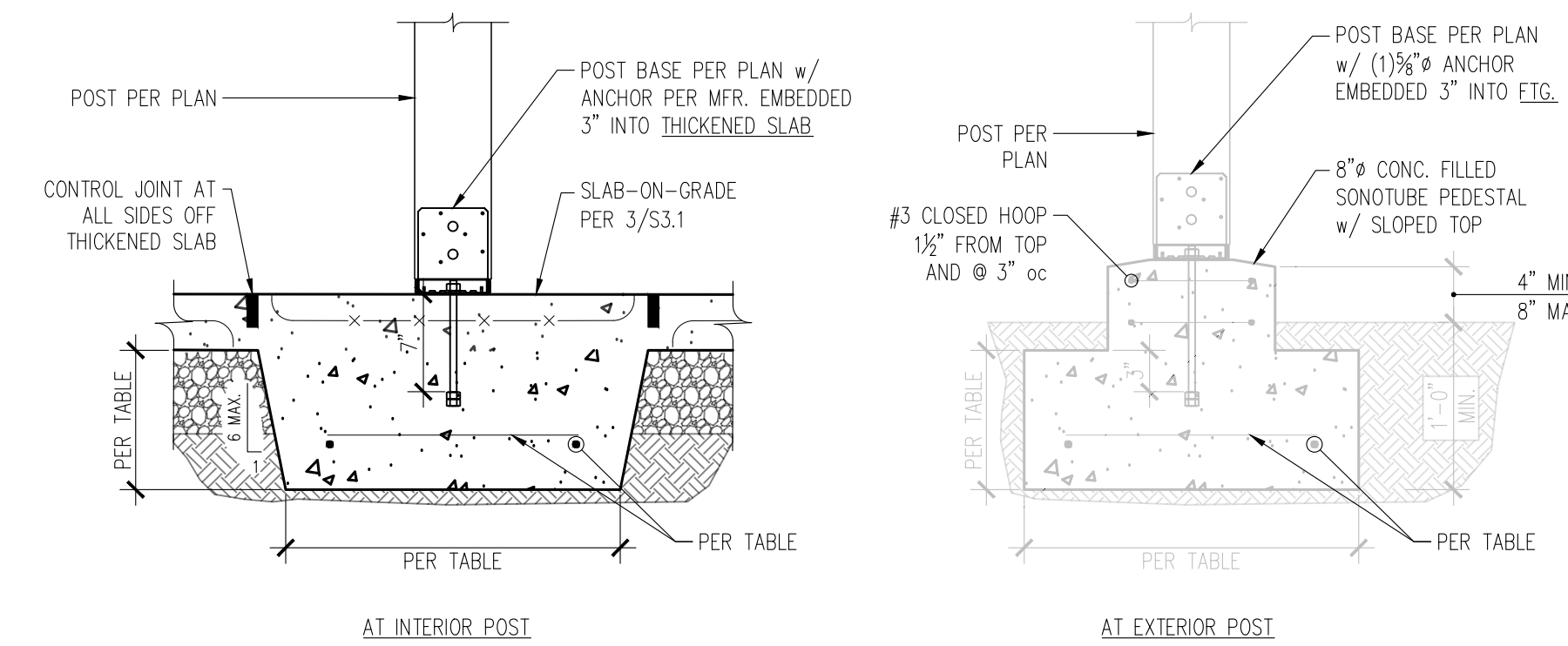


6 TYPICAL STEPPED FOOTING  
S3.1 N.T.S.

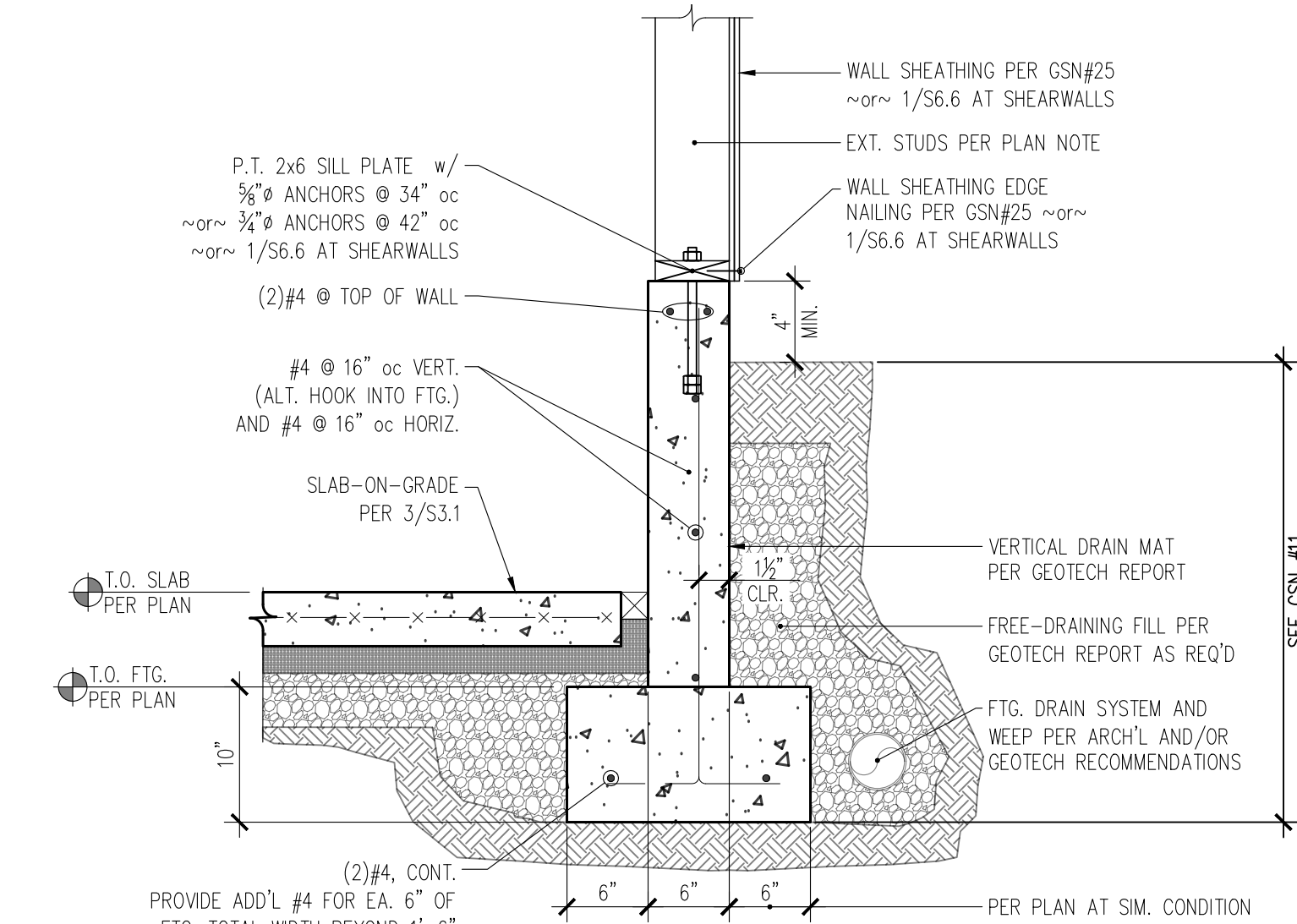


3 TYPICAL SLAB-ON-GRADE JOINTING  
S3.1 1" = 1'-0"

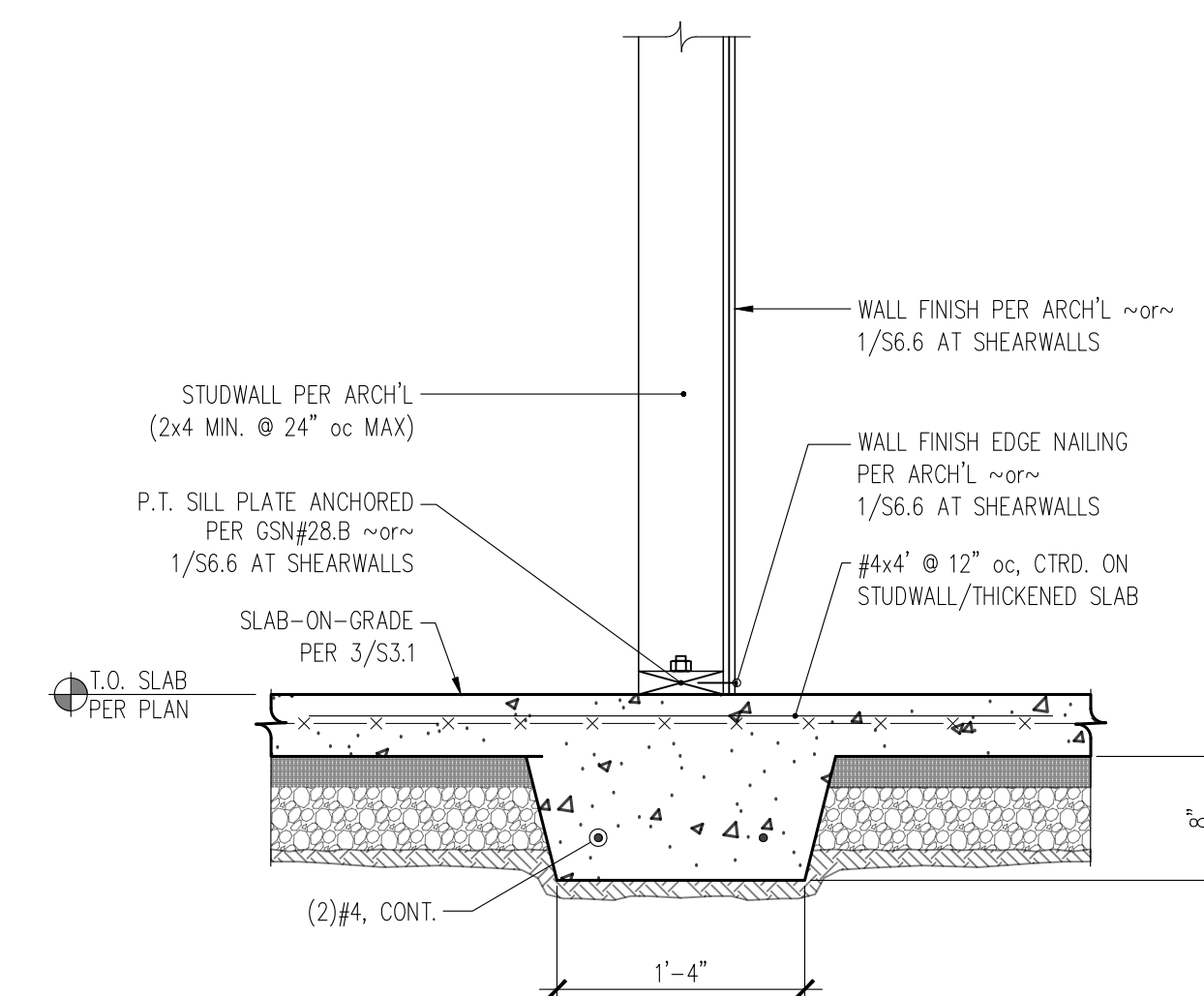
FTG. MARK	DIMENSIONS			REINFORCING DIRECTION	
	LENGTH	WIDTH	DEPTH	SHORT	LONG
F2.0	2'-0"	2'-0"	10"	(3)#4	(3)#4
F2.5	2'-6"	2'-6"	10"	(4)#4	(4)#4
F3.0	3'-0"	3'-0"	10"	(4)#4	(4)#4
F3.6	3'-6"	3'-6"	12"	(5)#4	(5)#4
F4.0	4'-0"	4'-0"	12"	(6)#4	(6)#4



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

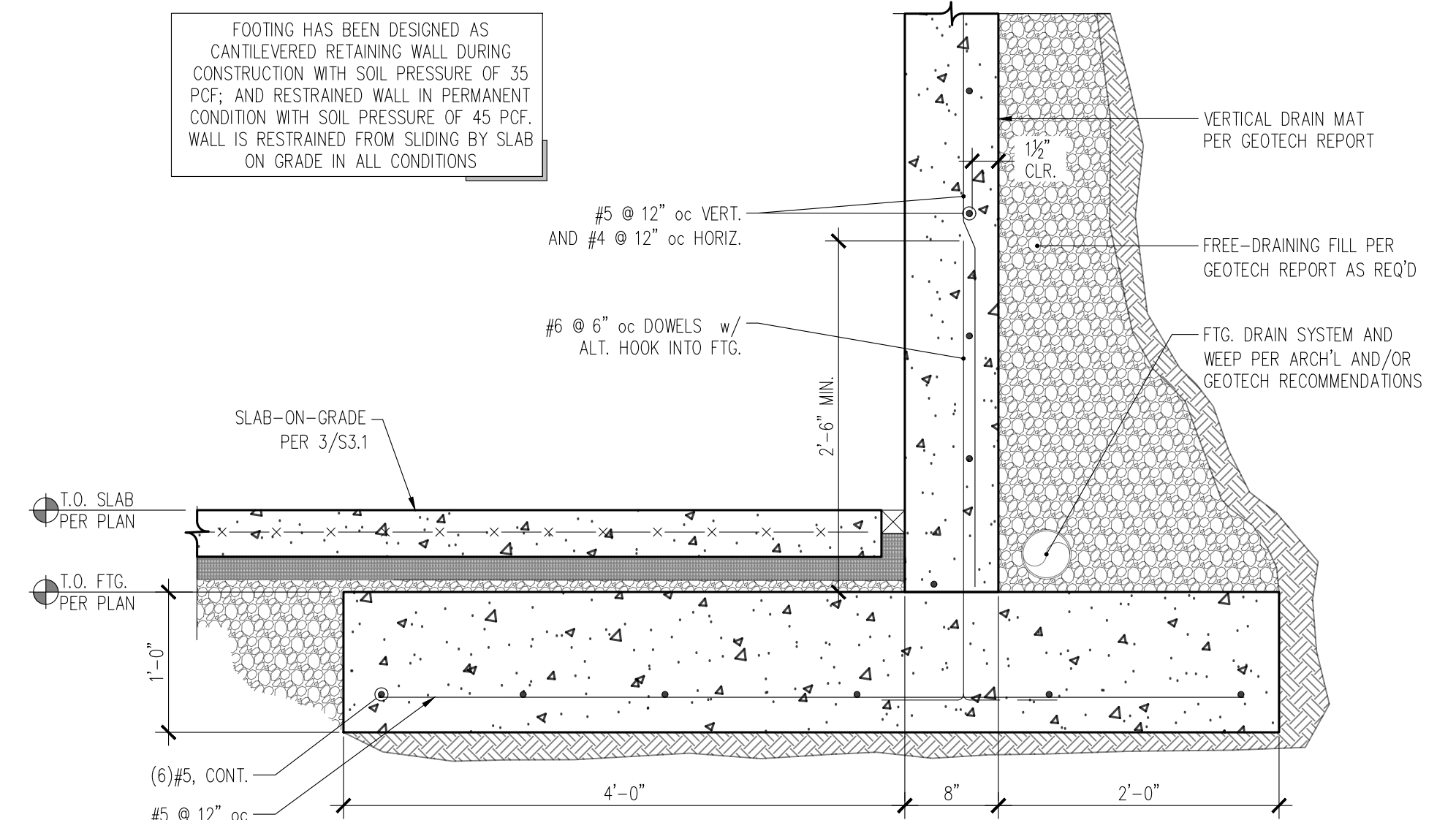


2 SECTION THROUGH PARTIAL HEIGHT FOUNDATION WALL  
S3.1 1" = 1'-0"



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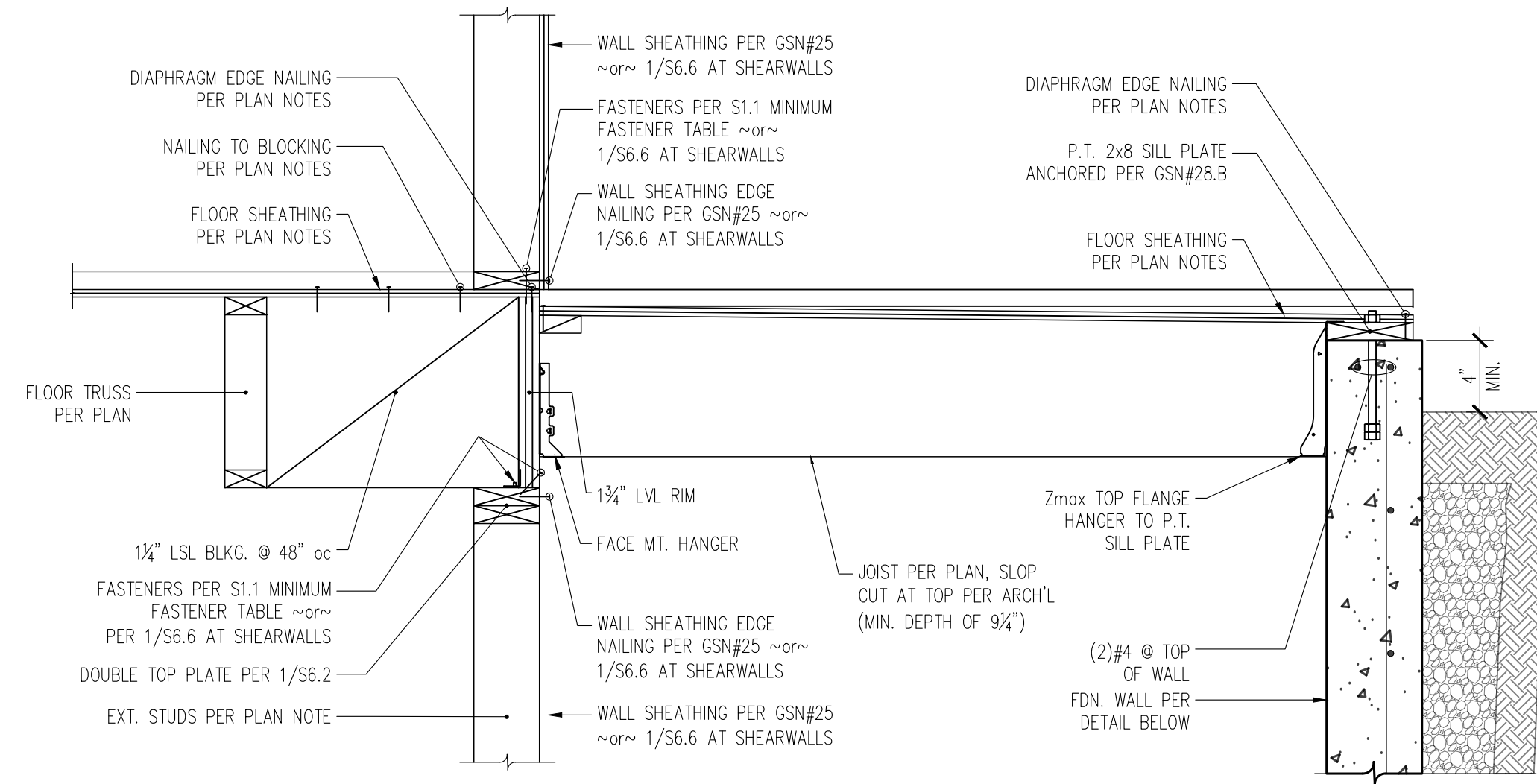
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9 SECTION THROUGH GUEST PATIO PERPENDICULAR JOISTS  
S3.2 1" = 1'-0"

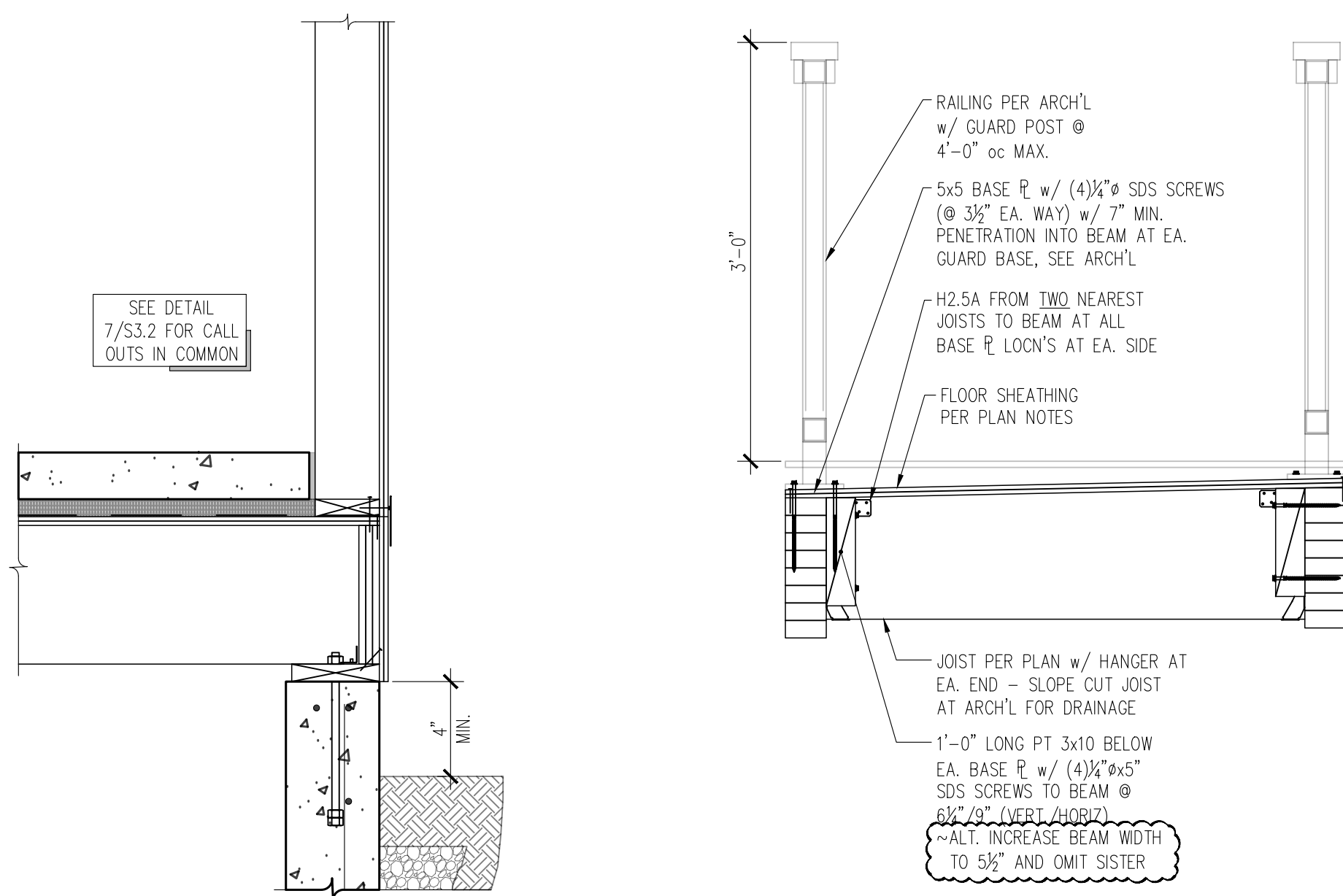
MIN. STRAIGHT DEVELOPMENT LENGTH			MIN. LAP SPLICE LENGTH (CLASS B)		
BAR SIZE	TOP BARS	OTHER BARS	BAR SIZE	TOP BARS	OTHER BARS
#4	25"	19"	#4	33"	25"
#5	31"	24"	#5	41"	31"

\*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%

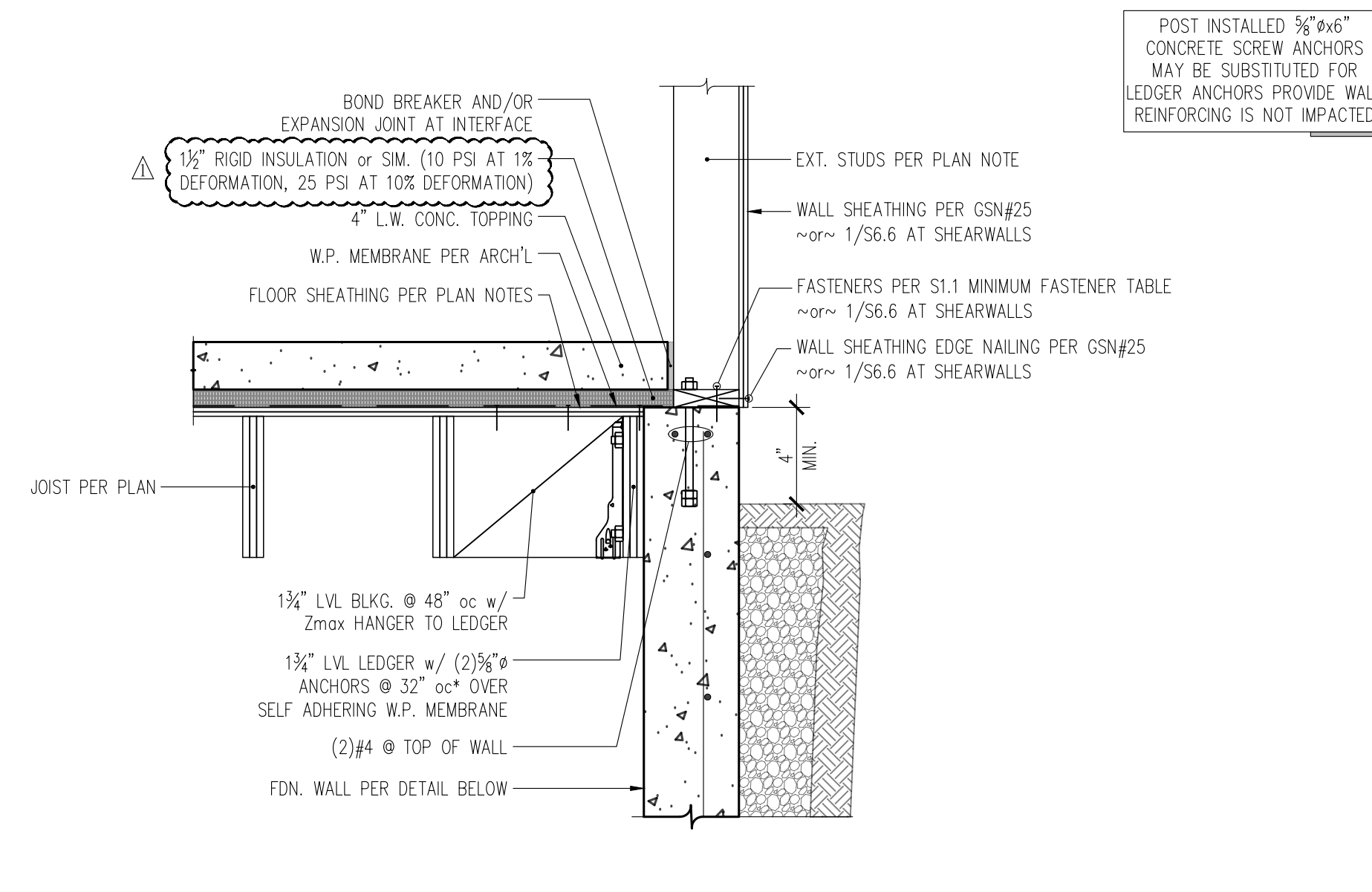
MIN. EMBEDMENT LENGTH FOR STANDARD END HOOKS	
BAR SIZE	LENGTH
#4	7"
#5	9"

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

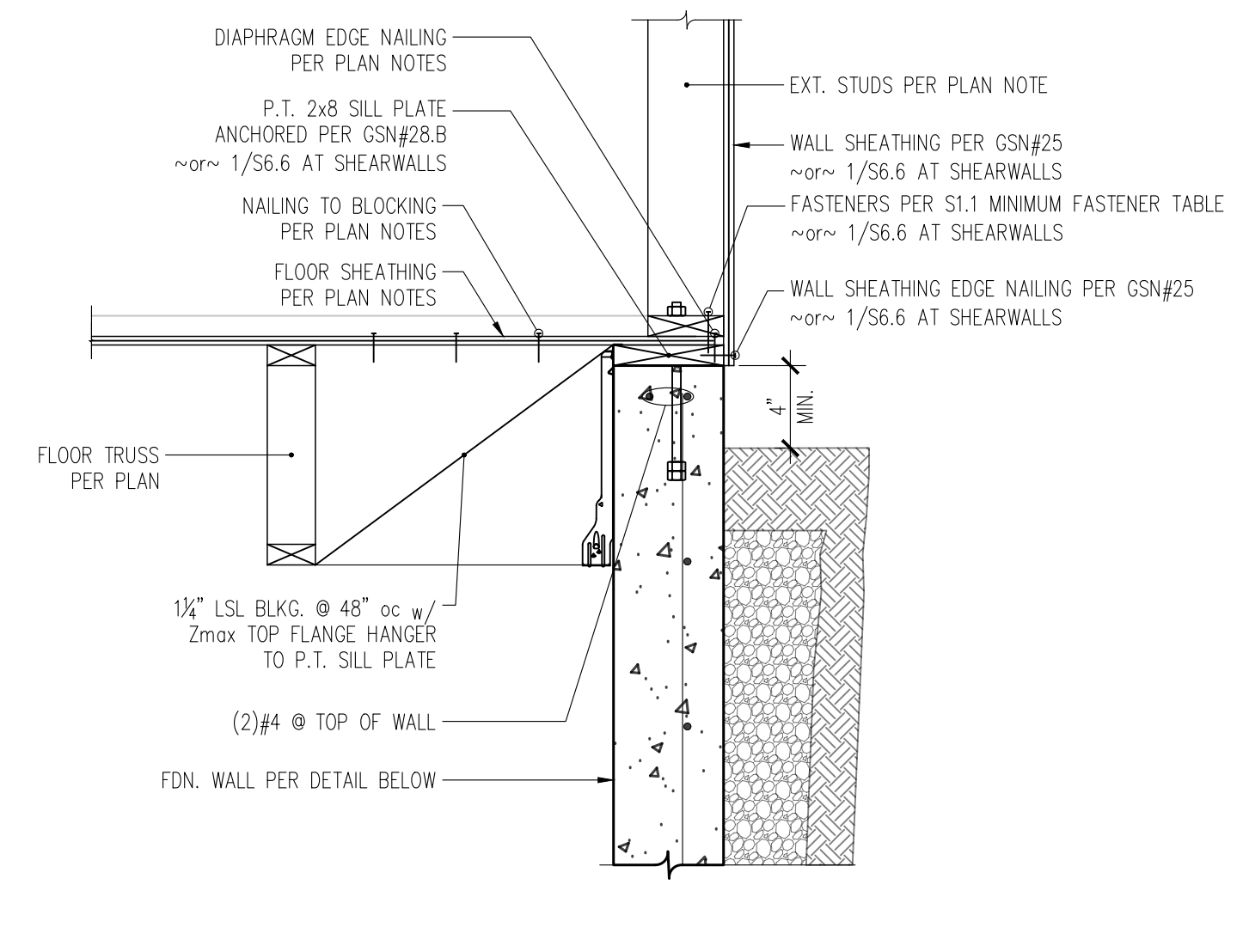
3 CONCRETE REINFORCING DEVELOPMENT AND SPLICE LENGTH TABLES  
S3.2 N/A



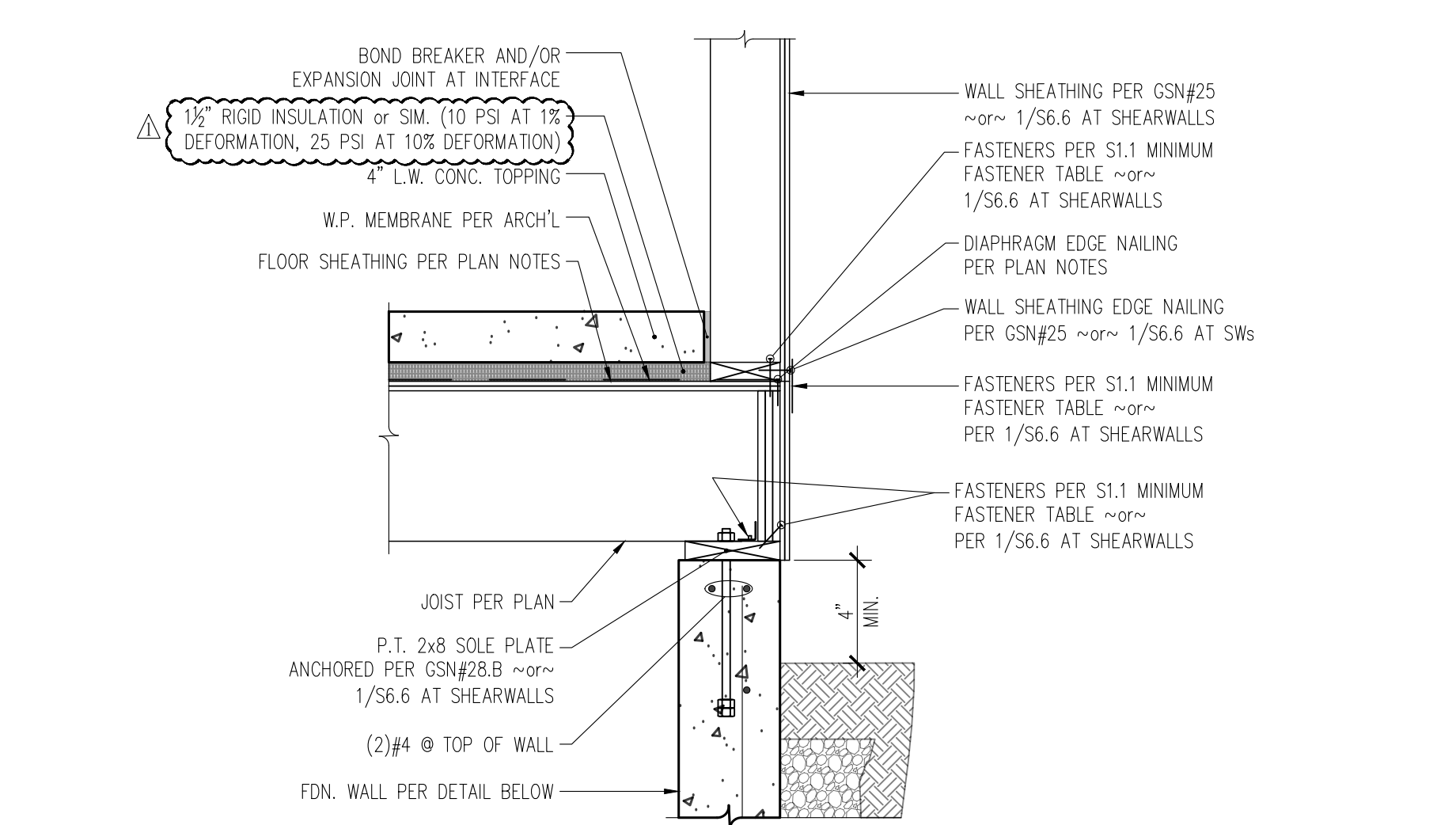
8 SECTION THROUGH HIGH FOUNDATION WALL AND HUNG PERPENDICULAR GARAGE JOISTS  
S3.2 1" = 1'-0"



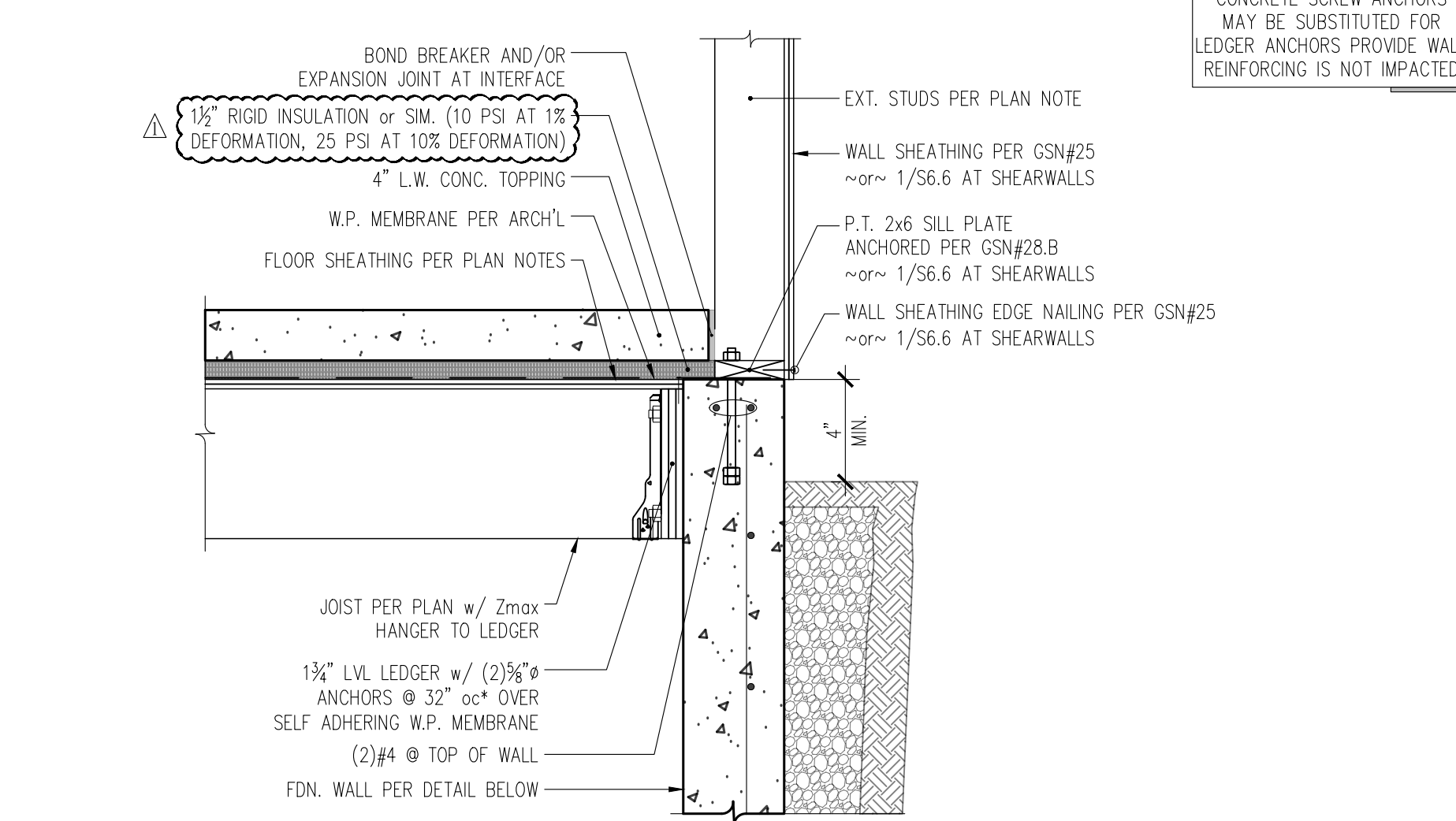
5 SECTION THROUGH HIGH FOUNDATION WALL AND HUNG PERPENDICULAR GARAGE JOISTS  
S3.2 1" = 1'-0"



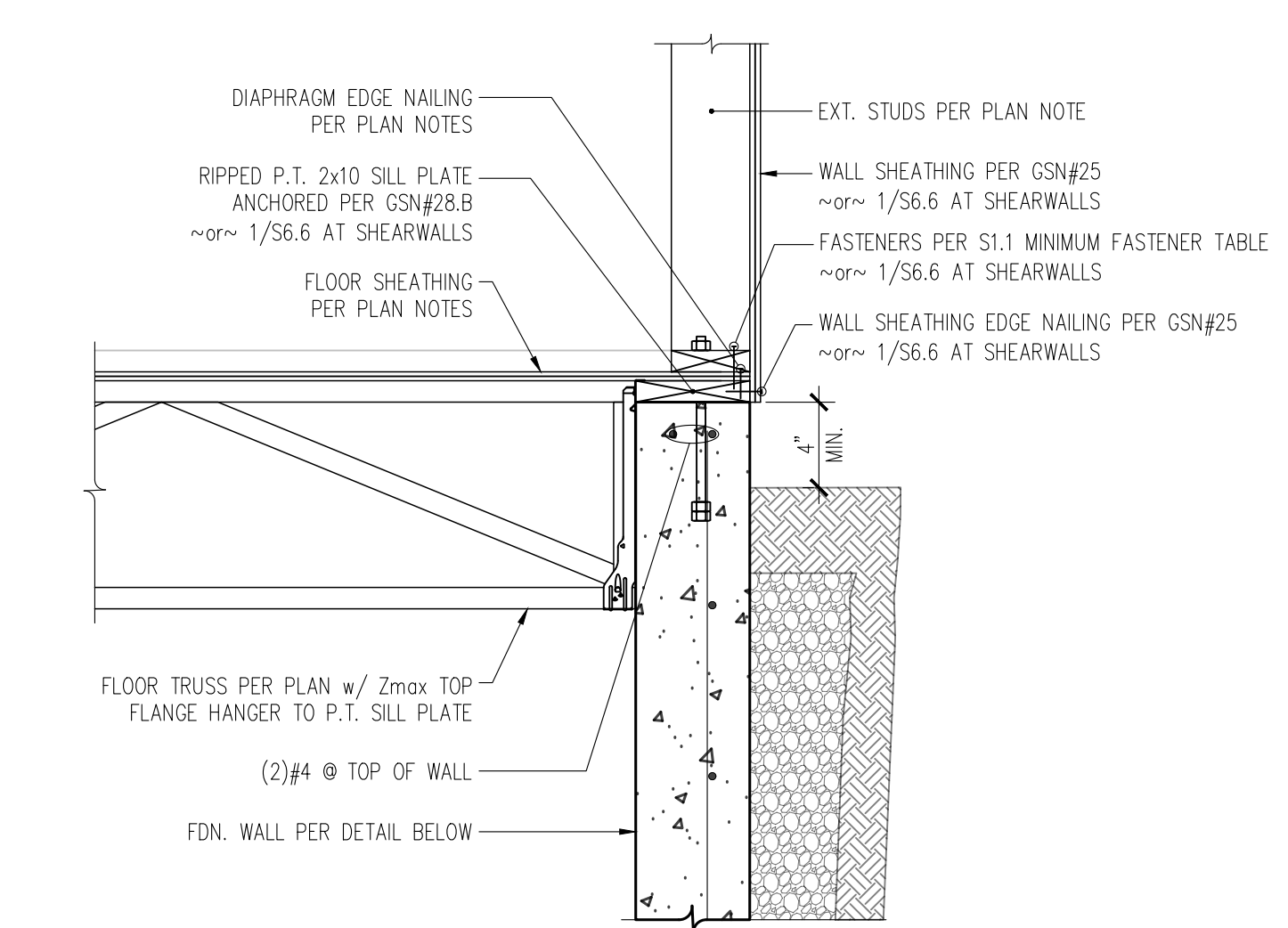
2 SECTION THROUGH HIGH FOUNDATION WALL AND HUNG PERPENDICULAR FLOOR TRUSS  
S3.2 1" = 1'-0"



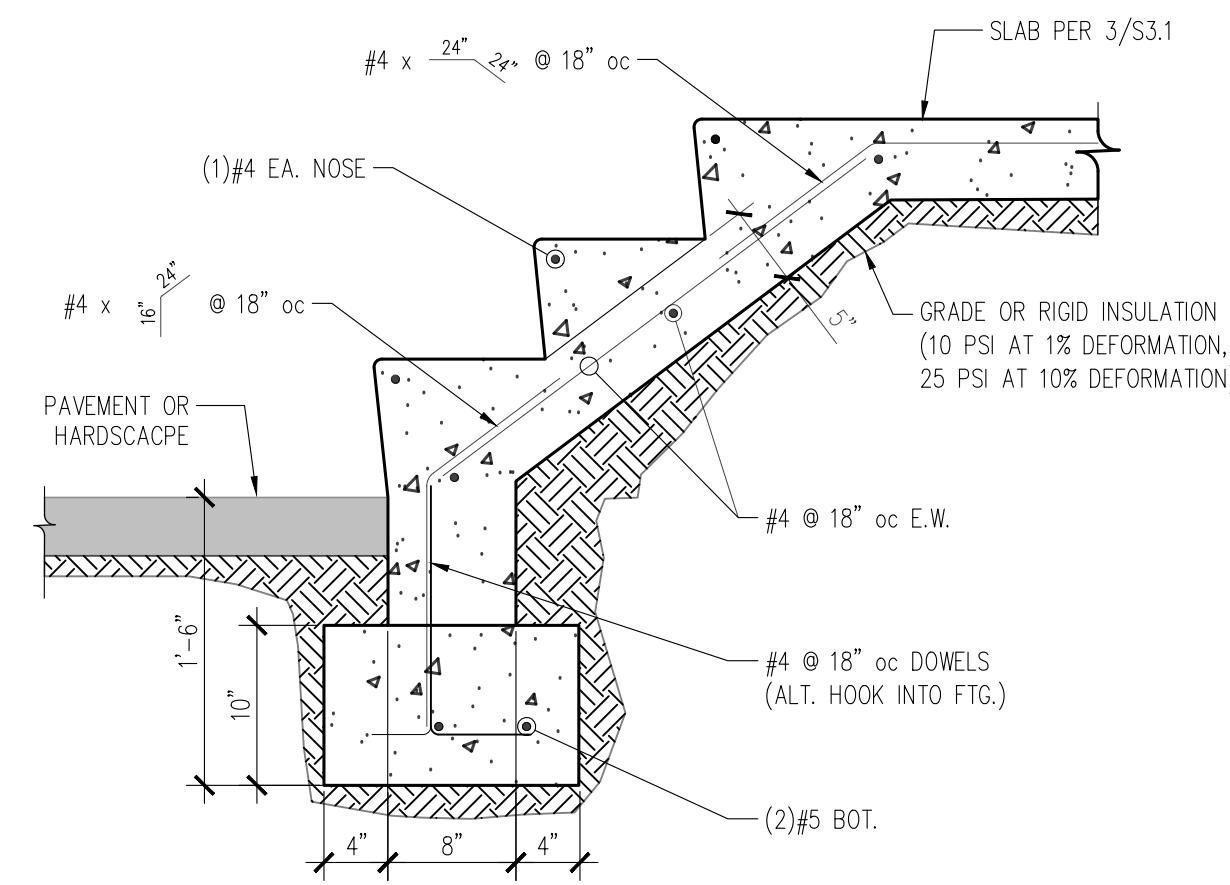
7 SECTION THROUGH HIGH FOUNDATION WALL  
S3.2 1" = 1'-0"



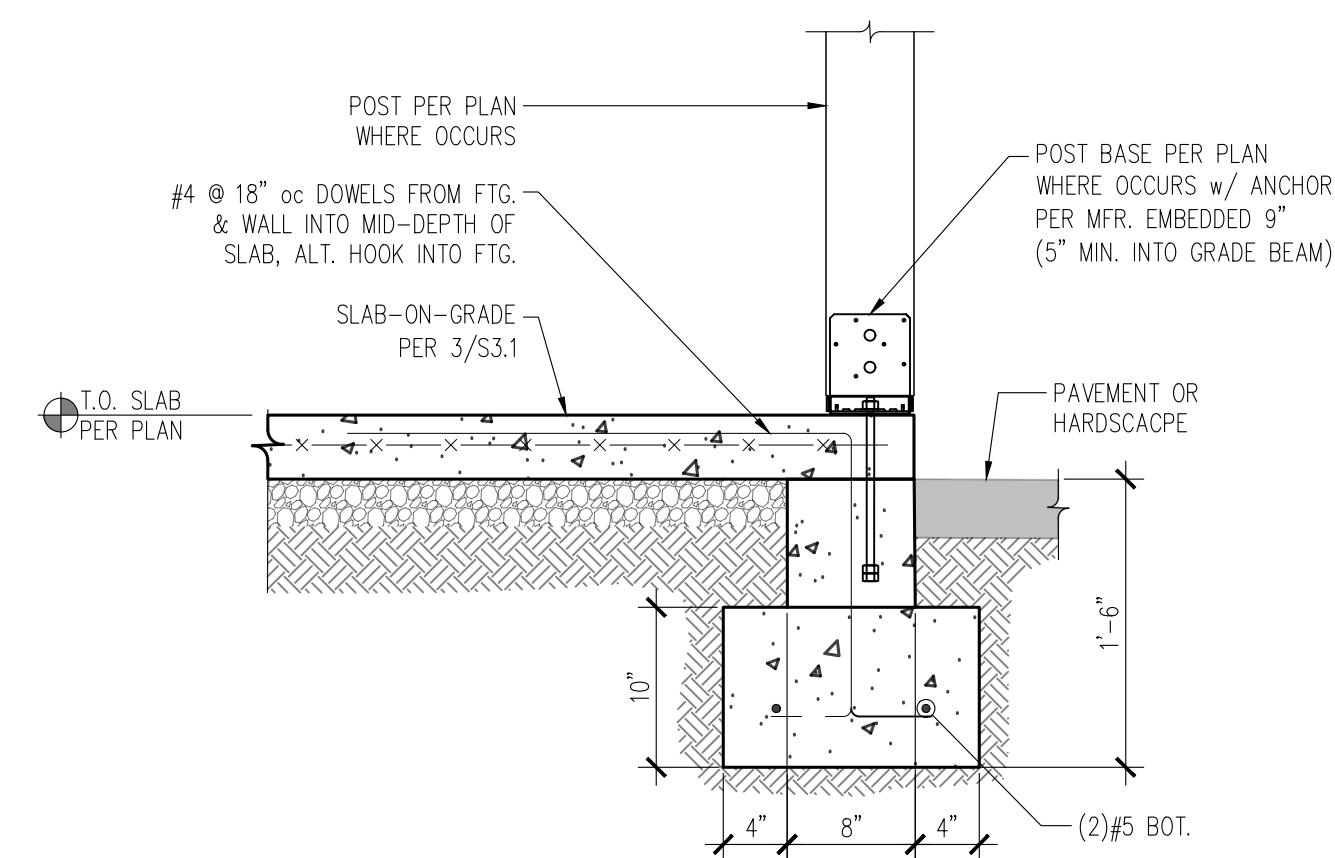
4 SECTION THROUGH HIGH FOUNDATION WALL AND HUNG PERPENDICULAR GARAGE JOISTS  
S3.2 1" = 1'-0"



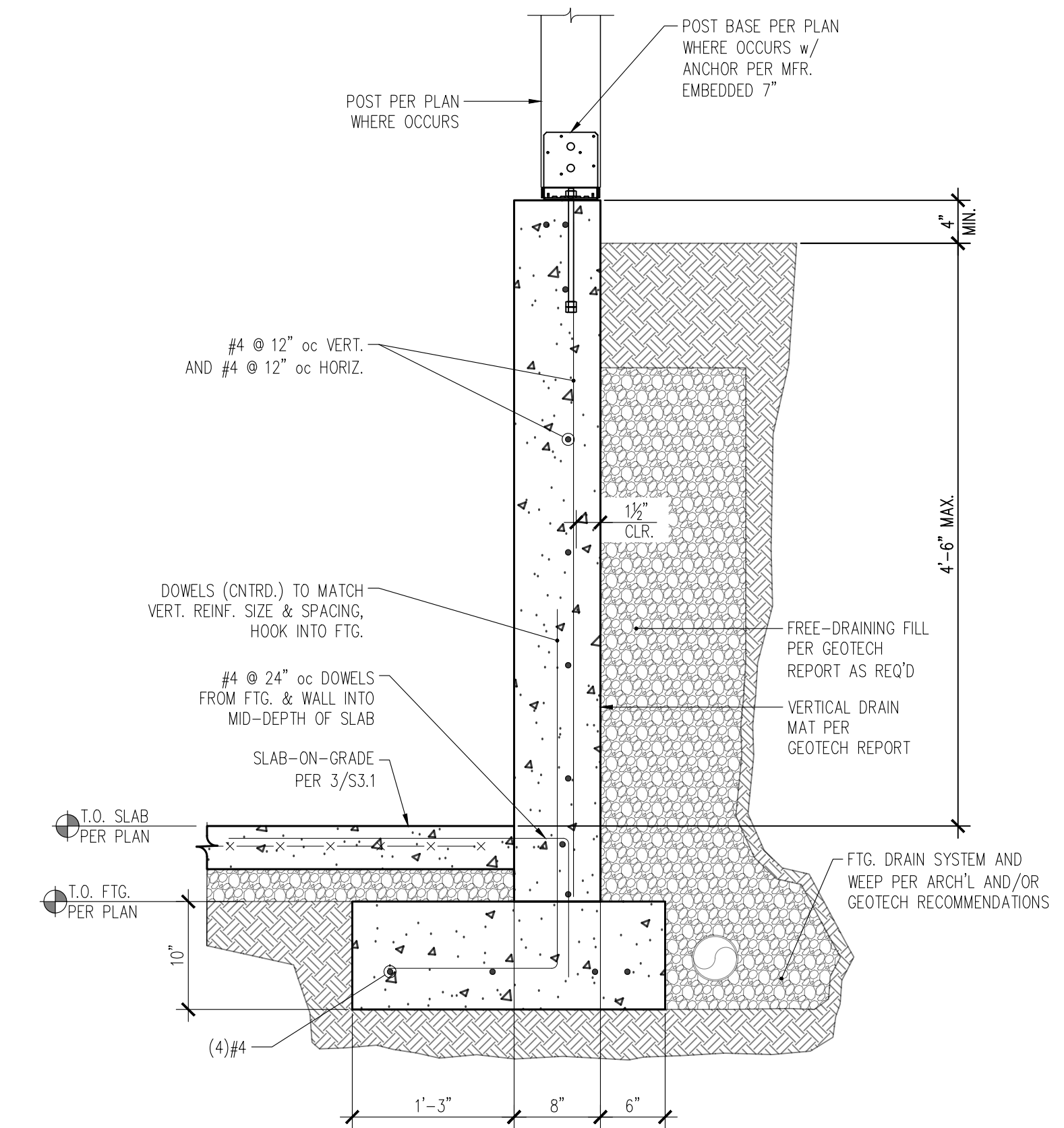
1 SECTION THROUGH HIGH FOUNDATION WALL AND HUNG PERPENDICULAR FLOOR TRUSS  
S3.2 1" = 1'-0"



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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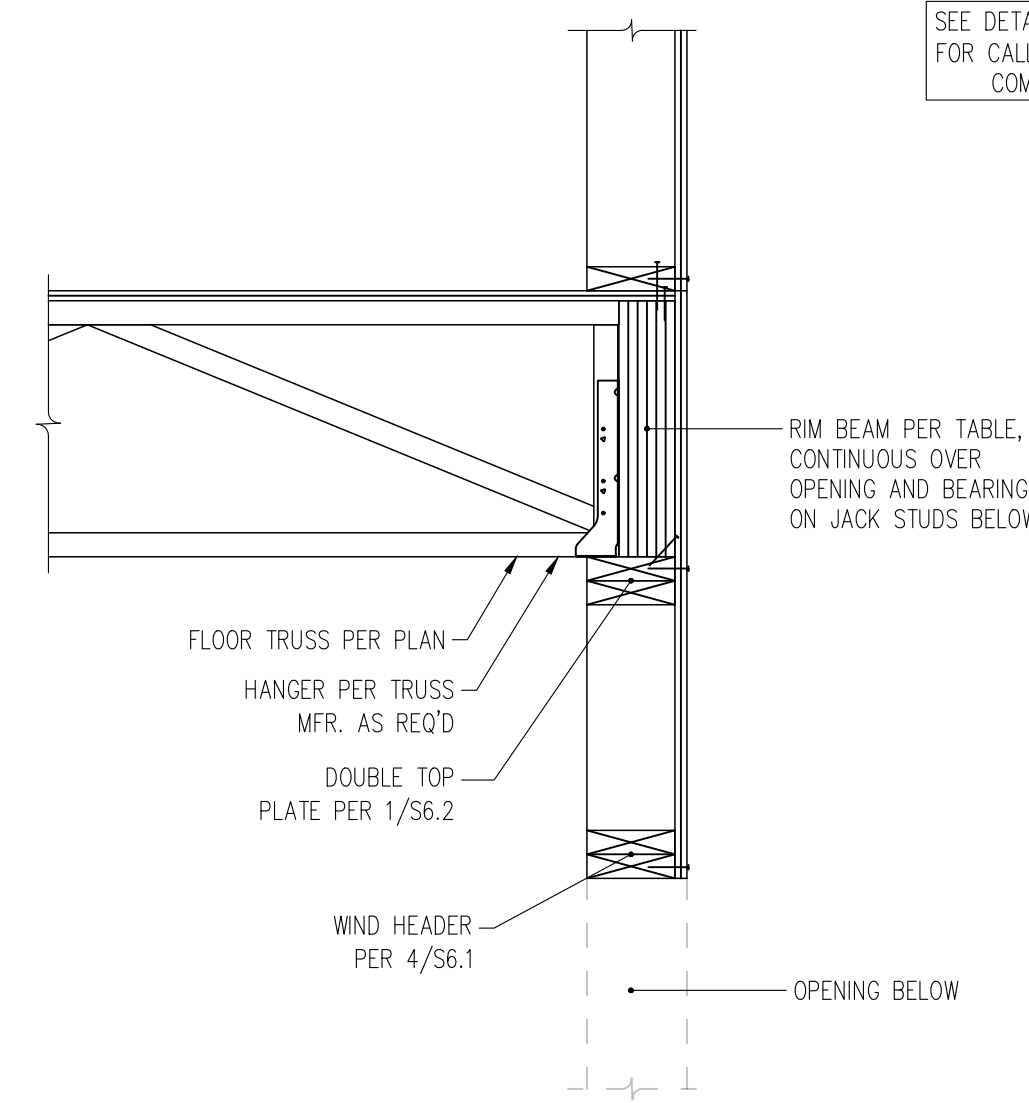
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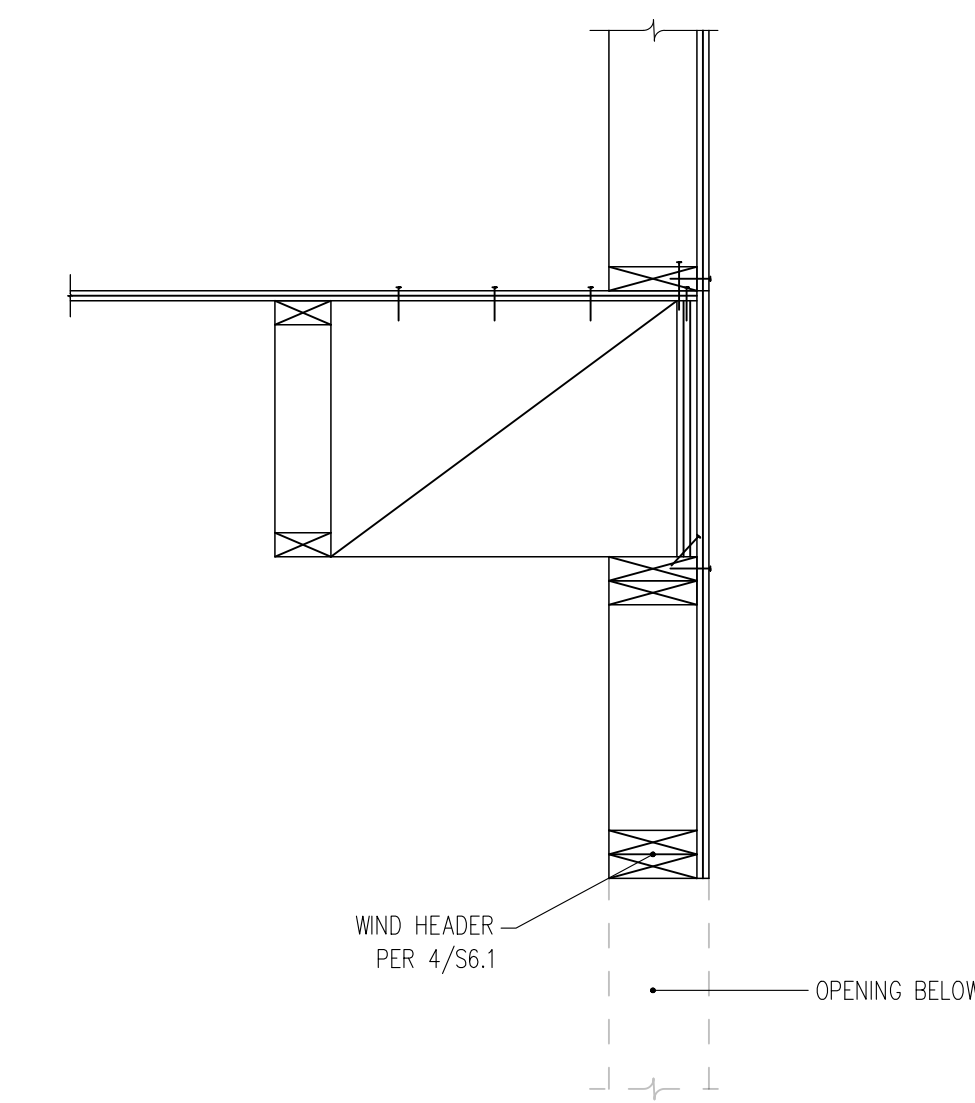
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S6.1

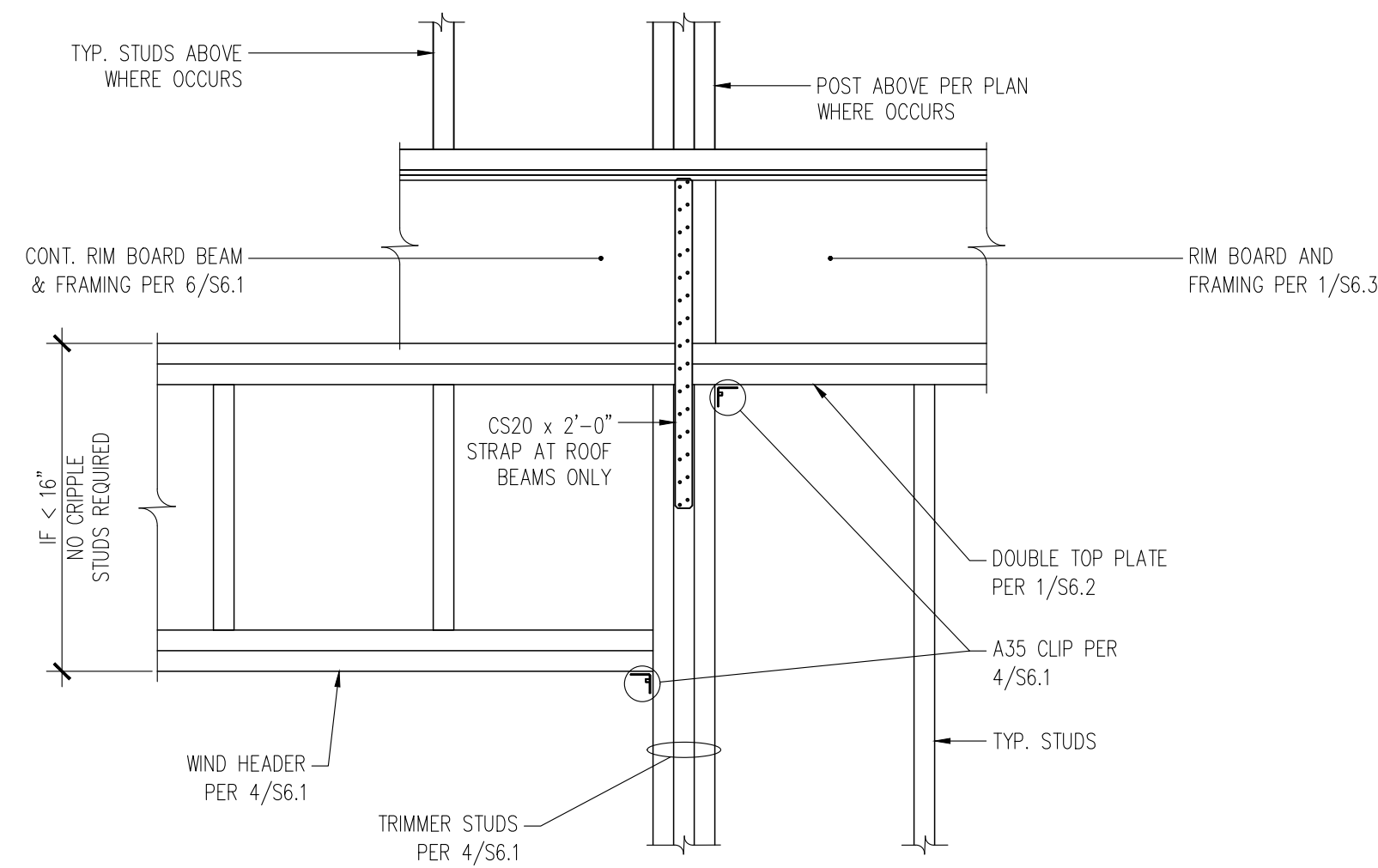
UPPER FLOOR		
OPENING WIDTH, L	RIM/HEADER SIZE	MINIMUM No. OF STUD
L ≤ 3'-6"	1 3/4"x16" LVL	(1)2x6
L ≤ 6'-6"	1 3/4"x16" LVL	(2)2x6
MAIN FLOOR		
L ≤ 3'-6"	1 3/4"x16" LVL	(1)2x6
L ≤ 6'-6"	1 3/4"x16" LVL	(2)2x6



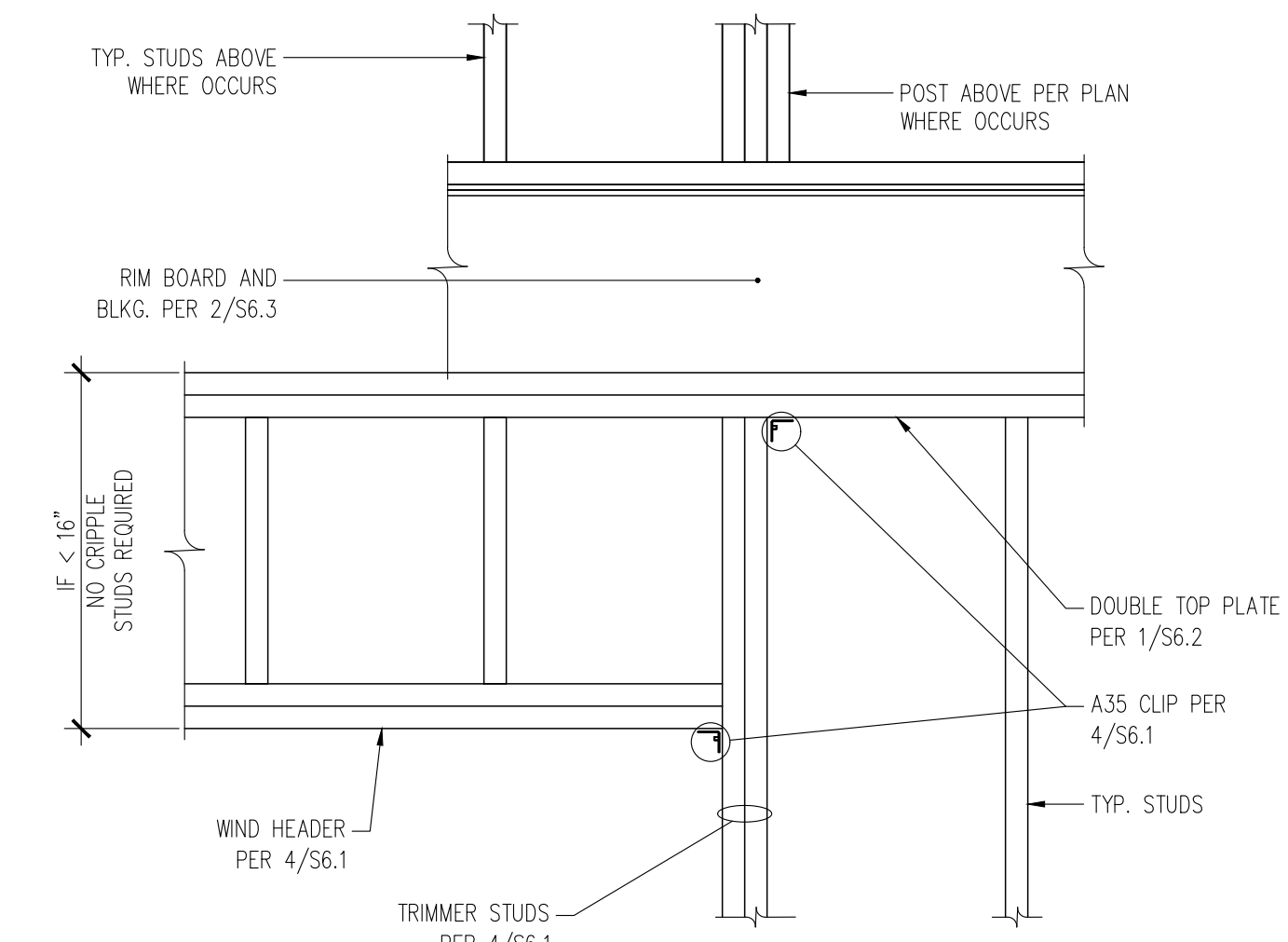
6 TYPICAL RIMBOARD HEADER & WIND HEADER IN LOAD BEARING EXTERIOR WALL  
S6.1 NTS



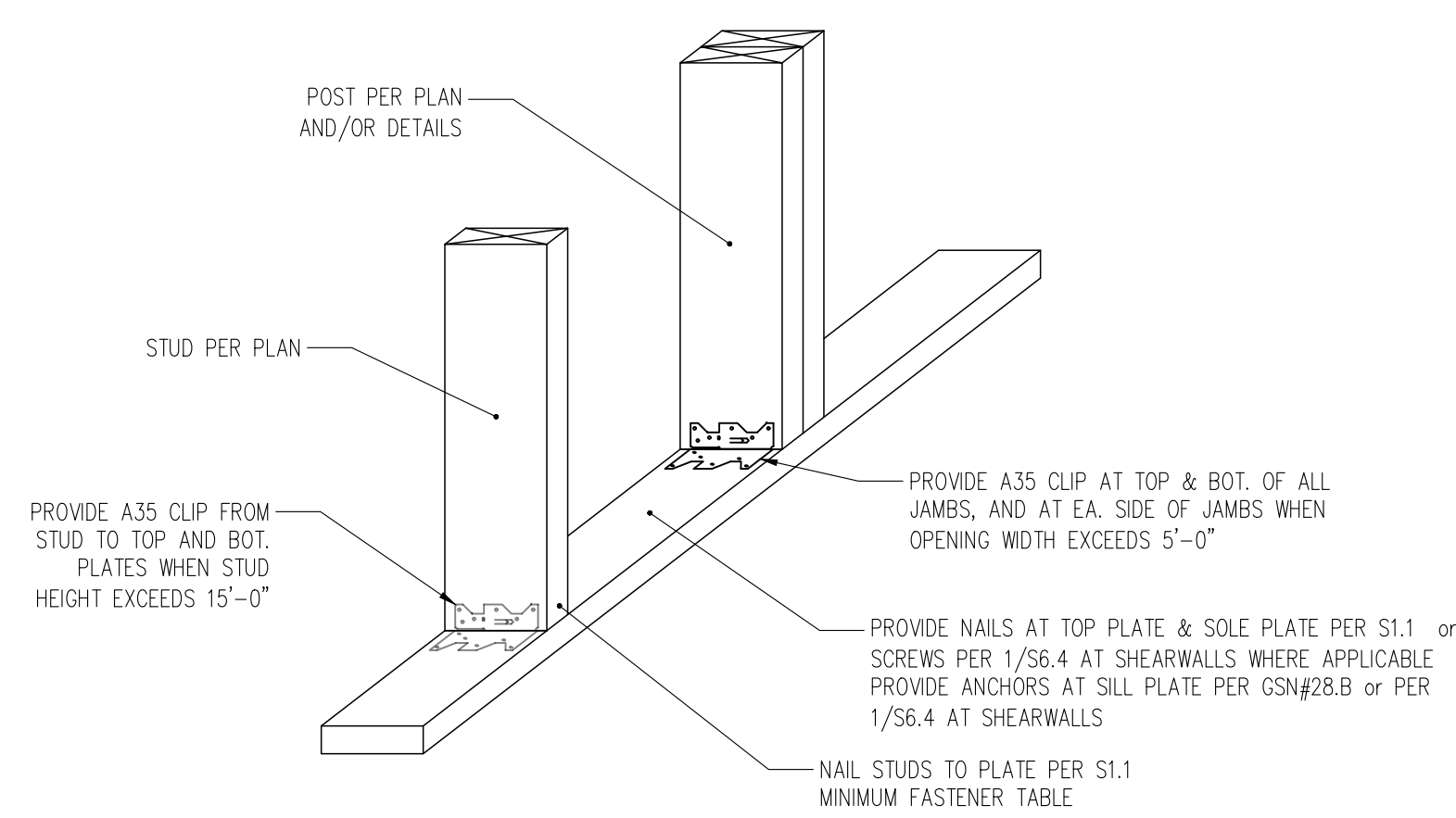
3 TYPICAL WIND HEADER IN NON-LOAD BEARING EXTERIOR WALL  
S6.1 NTS



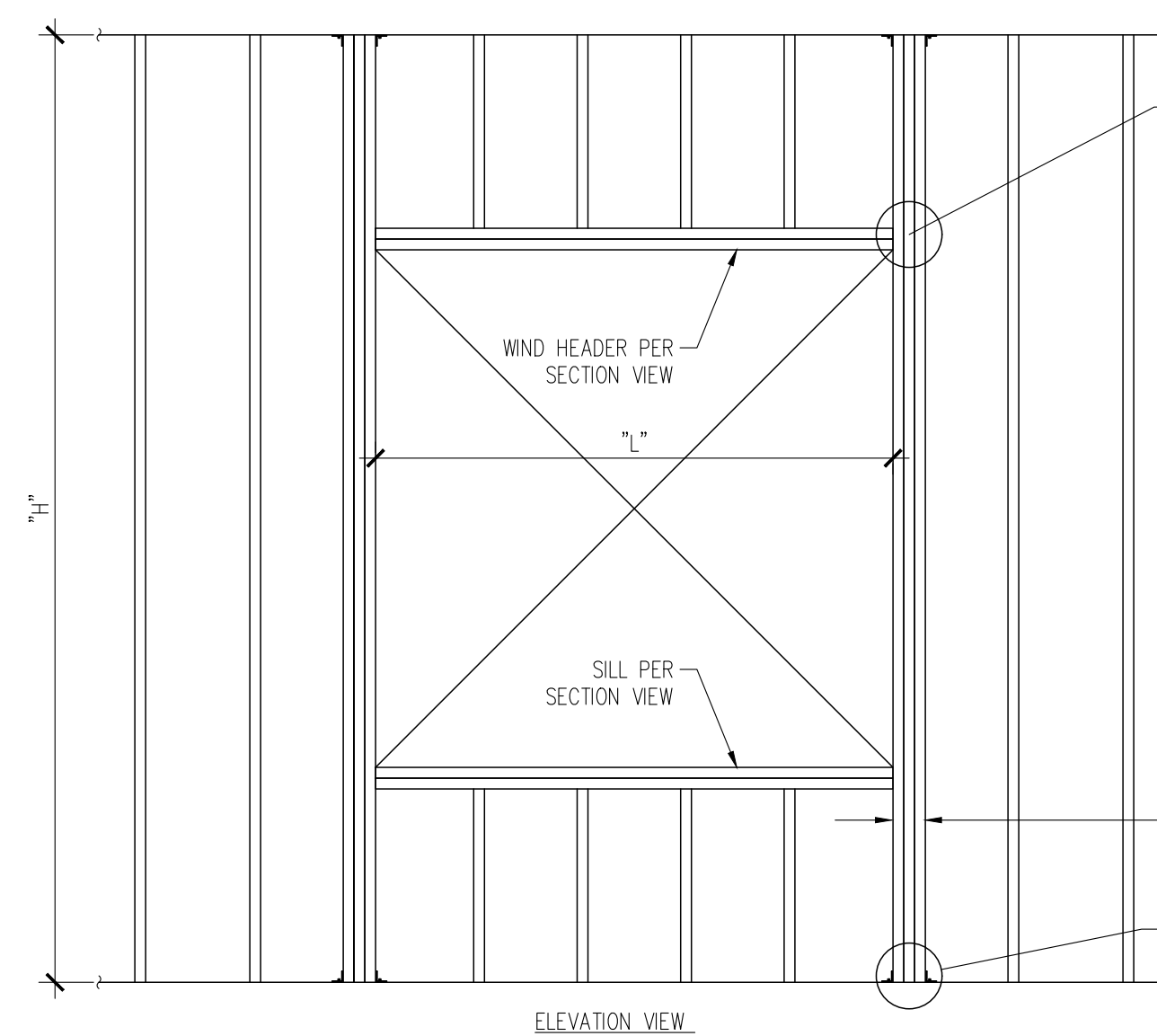
5 TYPICAL FLUSH BEAM/HEADER IN EXTERIOR WALL  
S6.1 NTS



2 TYPICAL WIND HEADER DETAIL  
S6.1 NTS



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

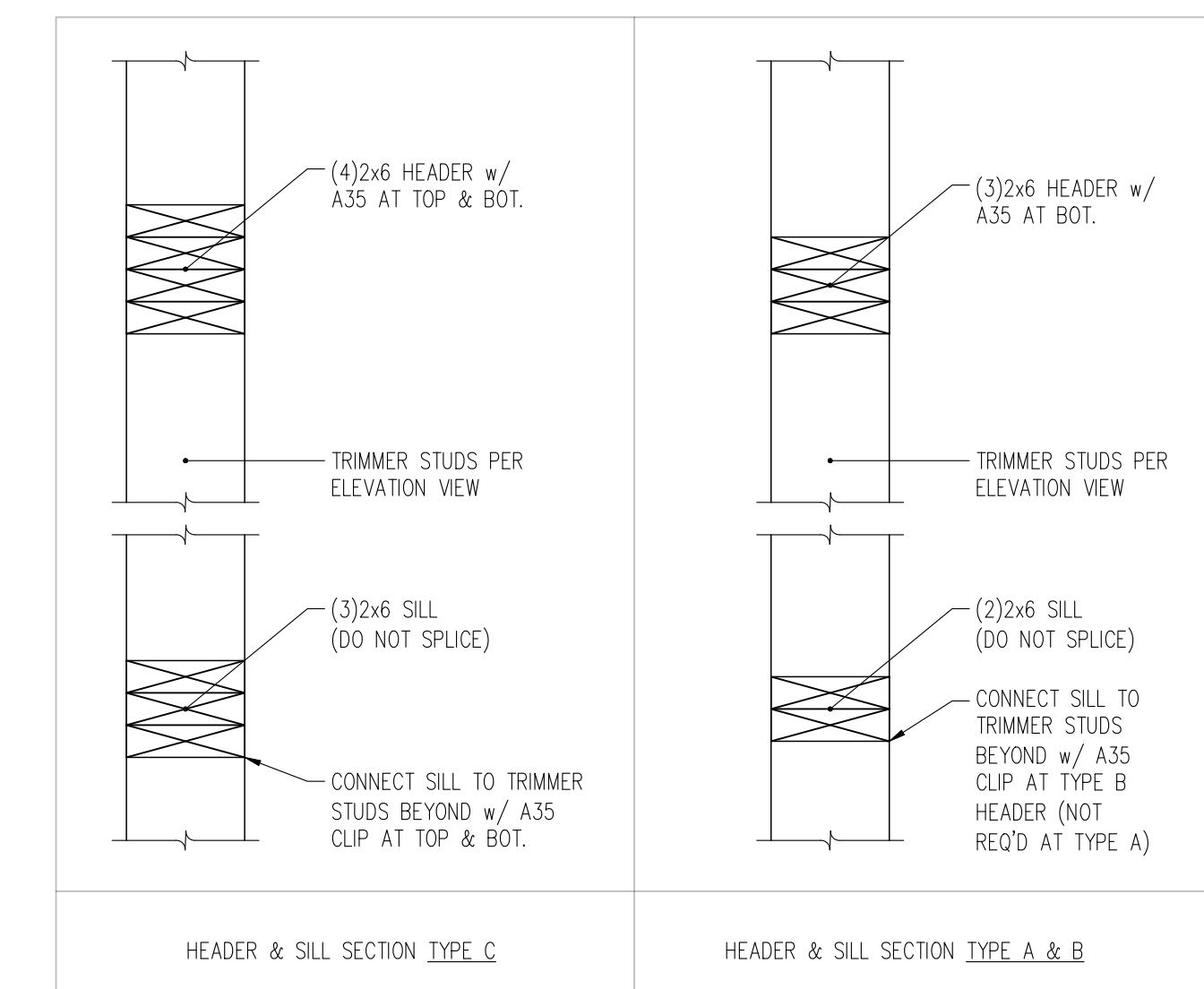


4 TYPICAL WIND HEADER  
S6.1 NTS

TYPICAL EXTERIOR WALL OPENING FRAMING SCHEDULE ②

CLEAR HEIGHT "H"	OPENING WIDTH "L"	HDR./SILL TYPE PER SECTION AT RIGHT	No. OF FULL HEIGHT TRIMMER STUDS ③
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



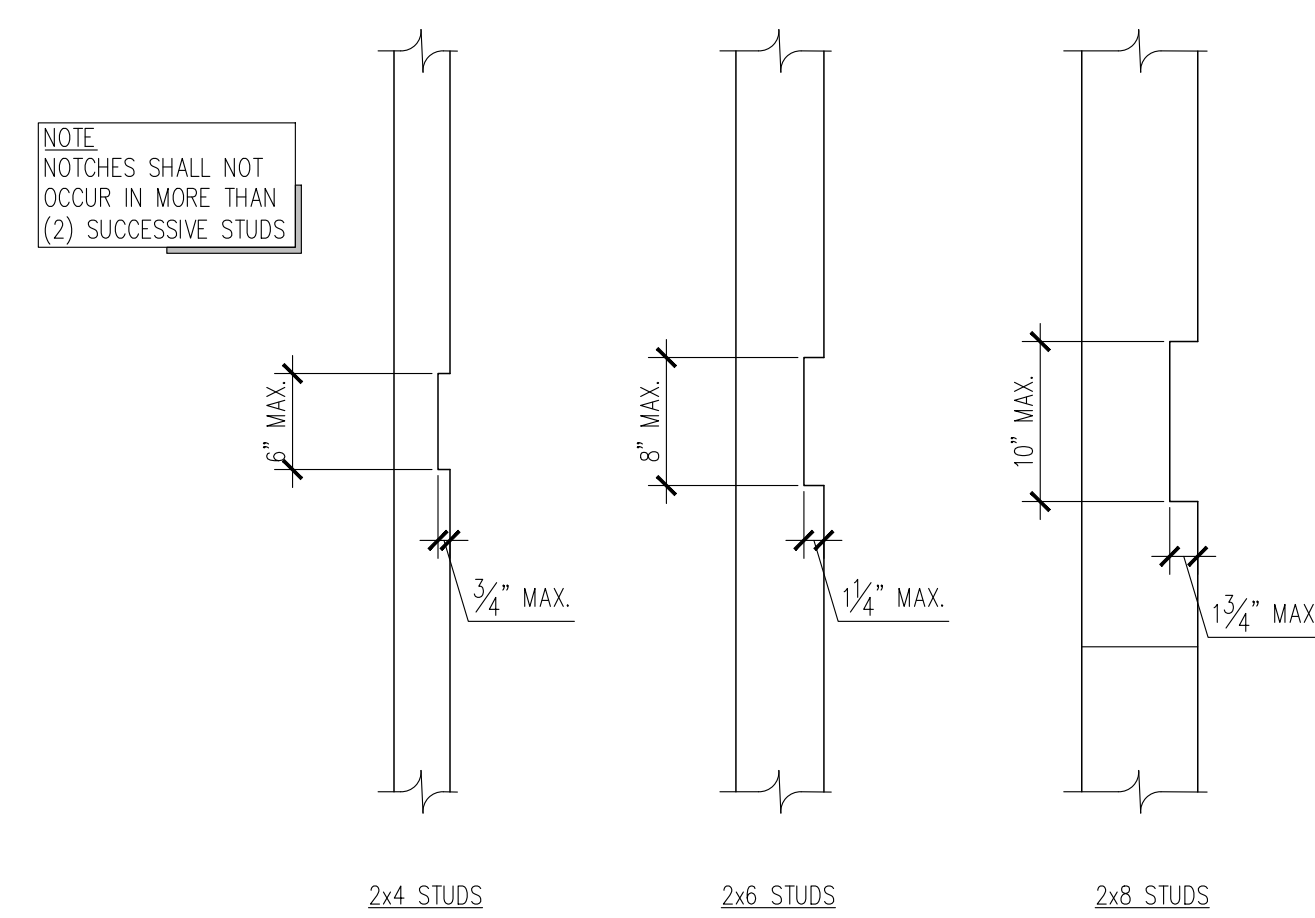
HEADER & SILL SECTION TYPE C

HEADER & SILL SECTION TYPE A & B

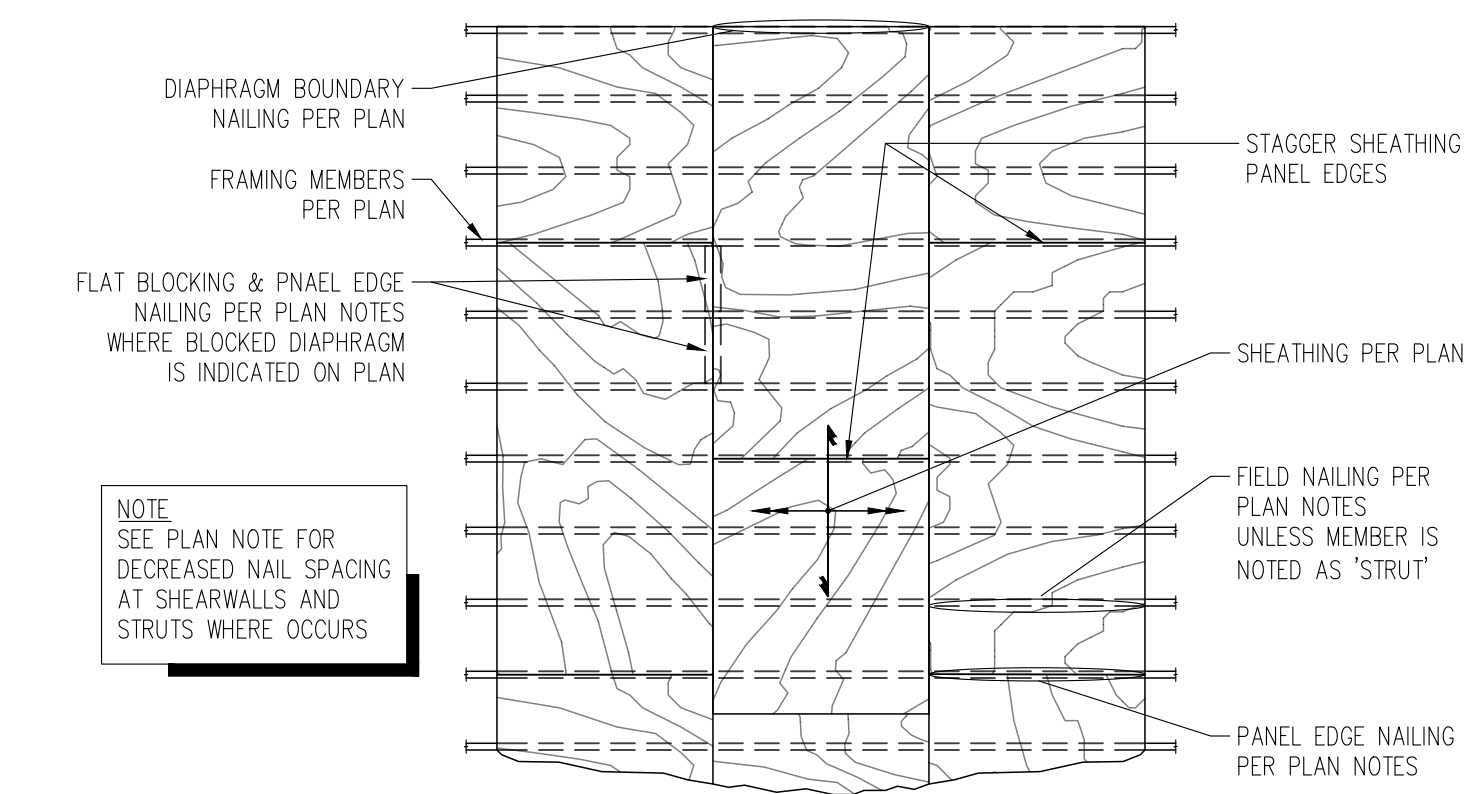
PIECE WIDTH	NUMBER OF PLYS	TYPE <sup>(1)</sup>	FASTENER			LOCATION
			MIN. LENGTH	# ROWS	O.C. SPACING	
1 3/4"	2	10d NAILS	3"	3 <sup>(2)</sup>	12"	ONE SIDE
		12d - 16d NAILS	3 3/4"	2 <sup>(2)</sup>	24"	
	3	10d NAILS	3"	3 <sup>(2)</sup>	12"	BOTH SIDES
		12d - 16d NAILS	3 3/4"	2 <sup>(2)</sup>	24"	
	4	10d NAILS	3"	3 <sup>(2)</sup>	12"	ONE SIDE (PER PLY)
		12d - 16d NAILS	3 3/4"	2 <sup>(2)</sup>	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

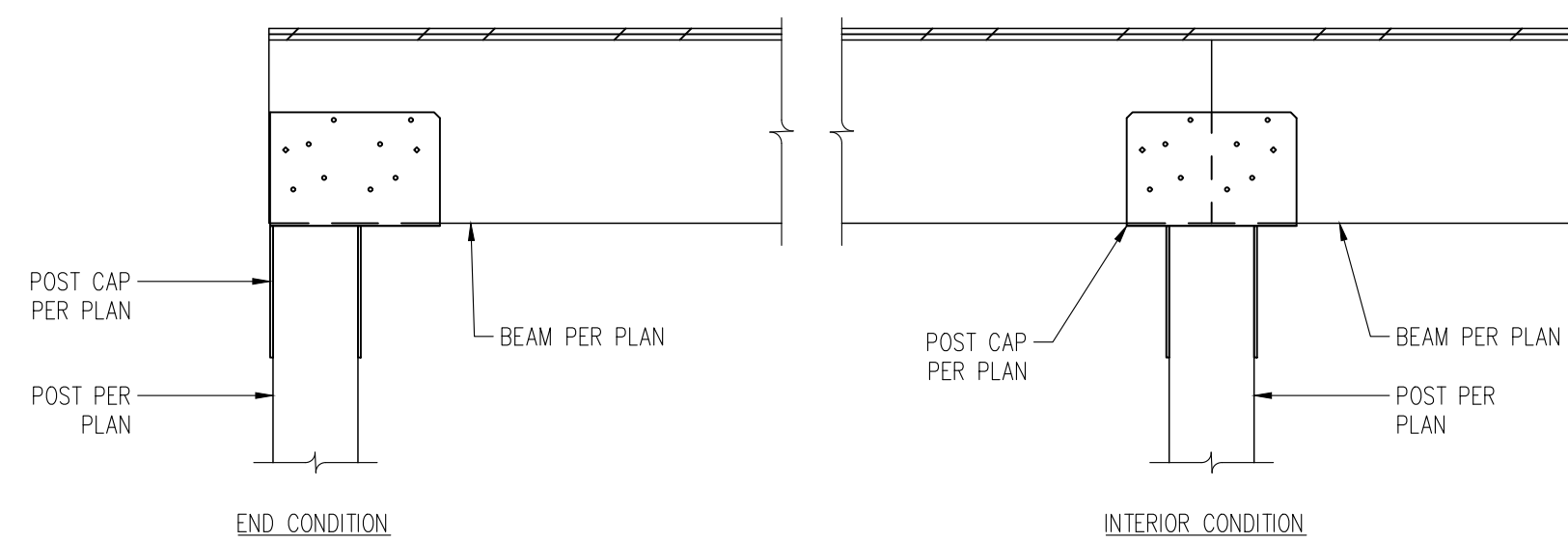
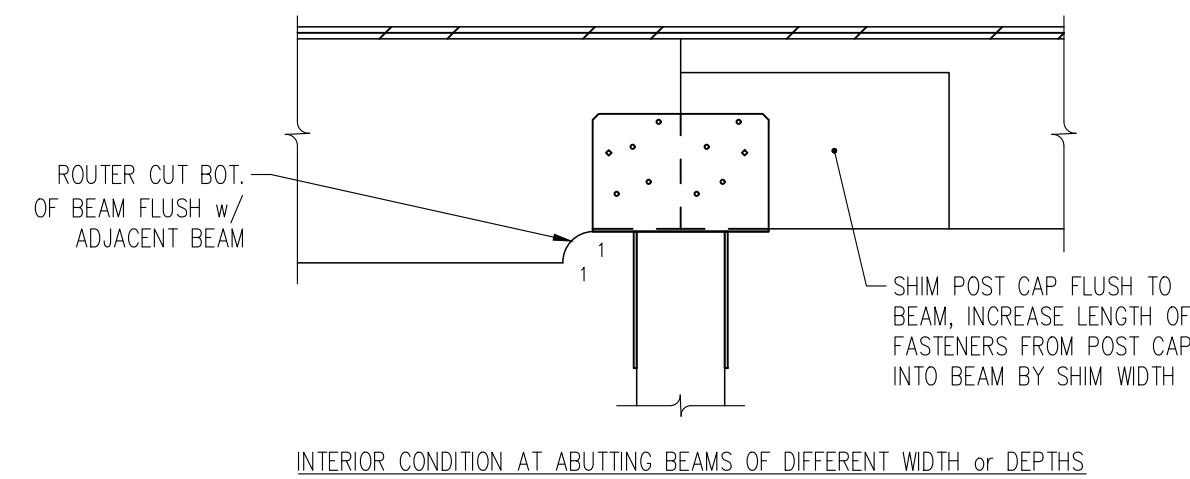
9 MULTIPLE LVL MEMBER FASTENING FOR TOP-LOADED BEAM PER WEYERHAUSER  
S6.2 NTS



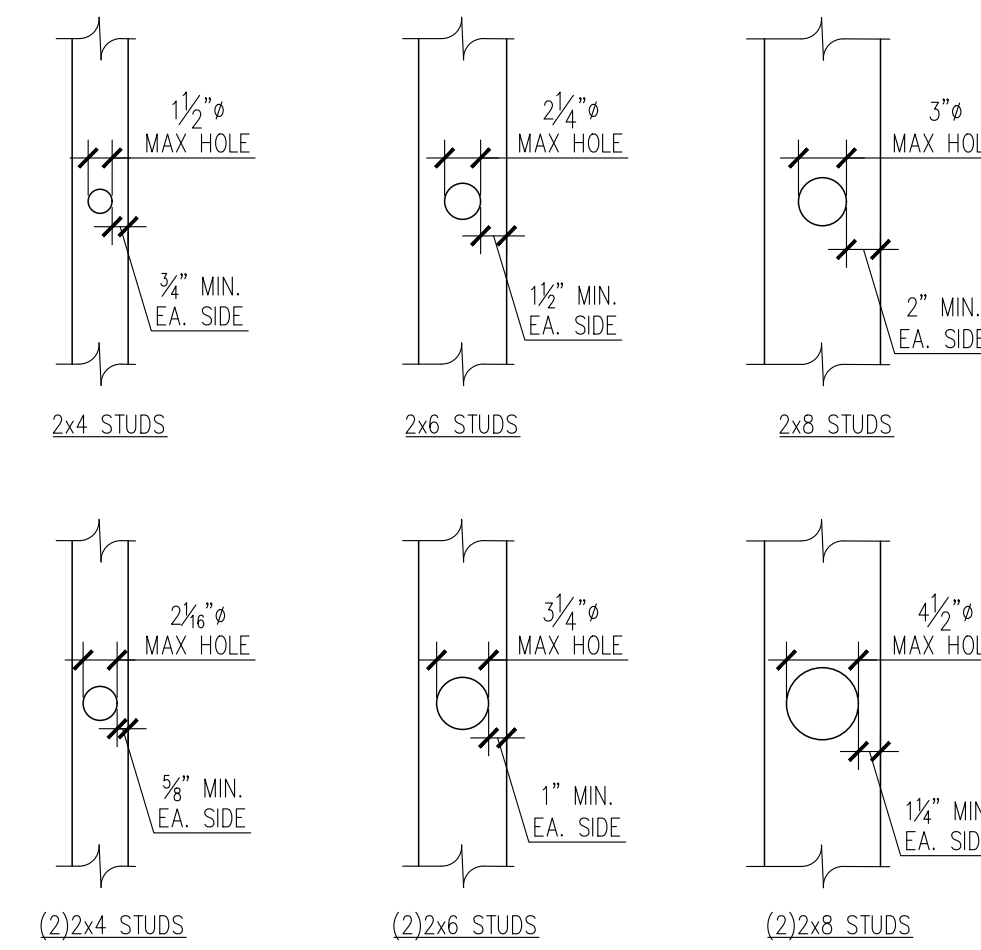
6 ALLOWABLE HOLES IN STUDWALL STUDS  
S6.2 NTS



3 TYPICAL DIAPHRAGM NAILING  
S6.2 NTS



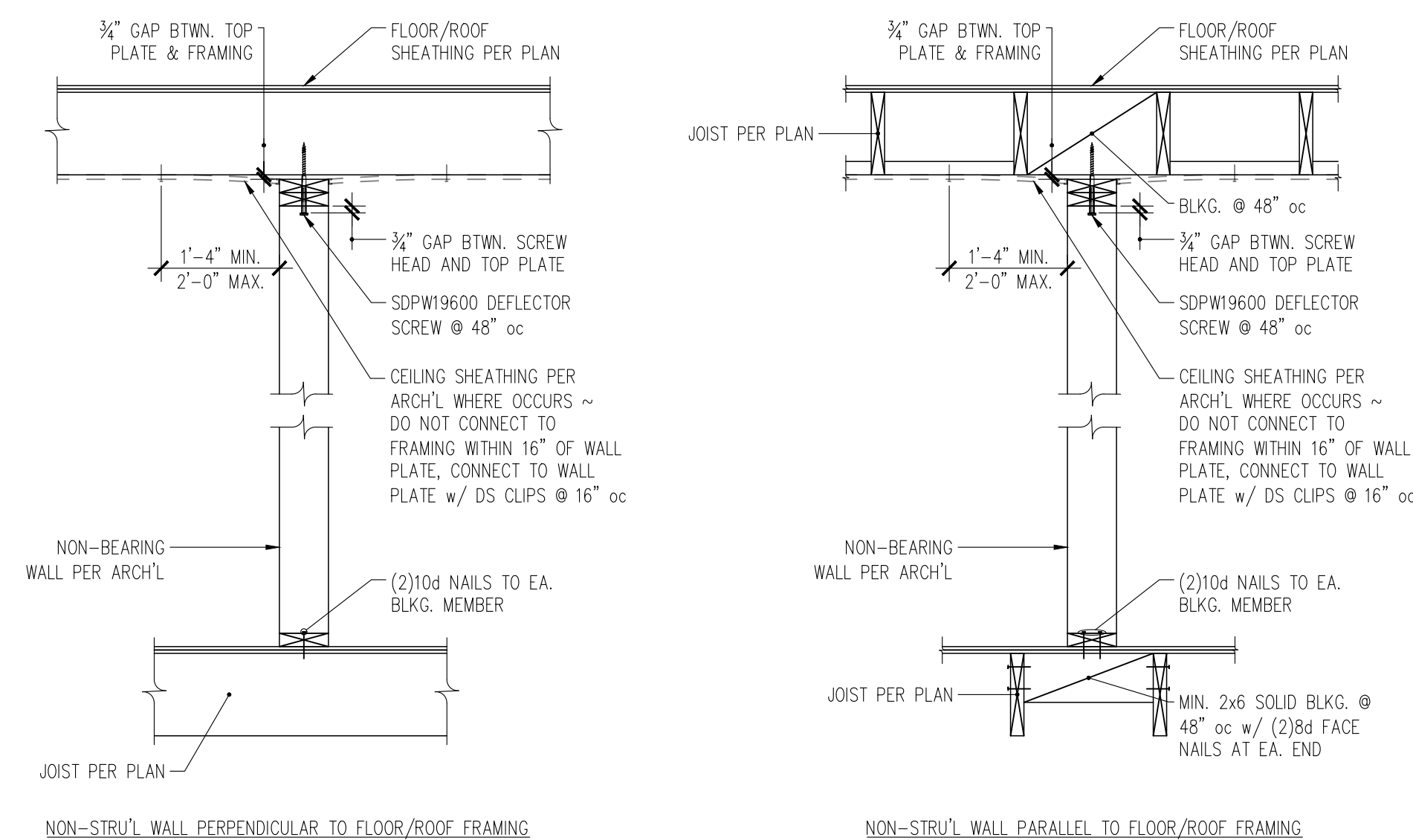
8 TYPICAL POST CAP INSTALLATION  
S6.2 NTS



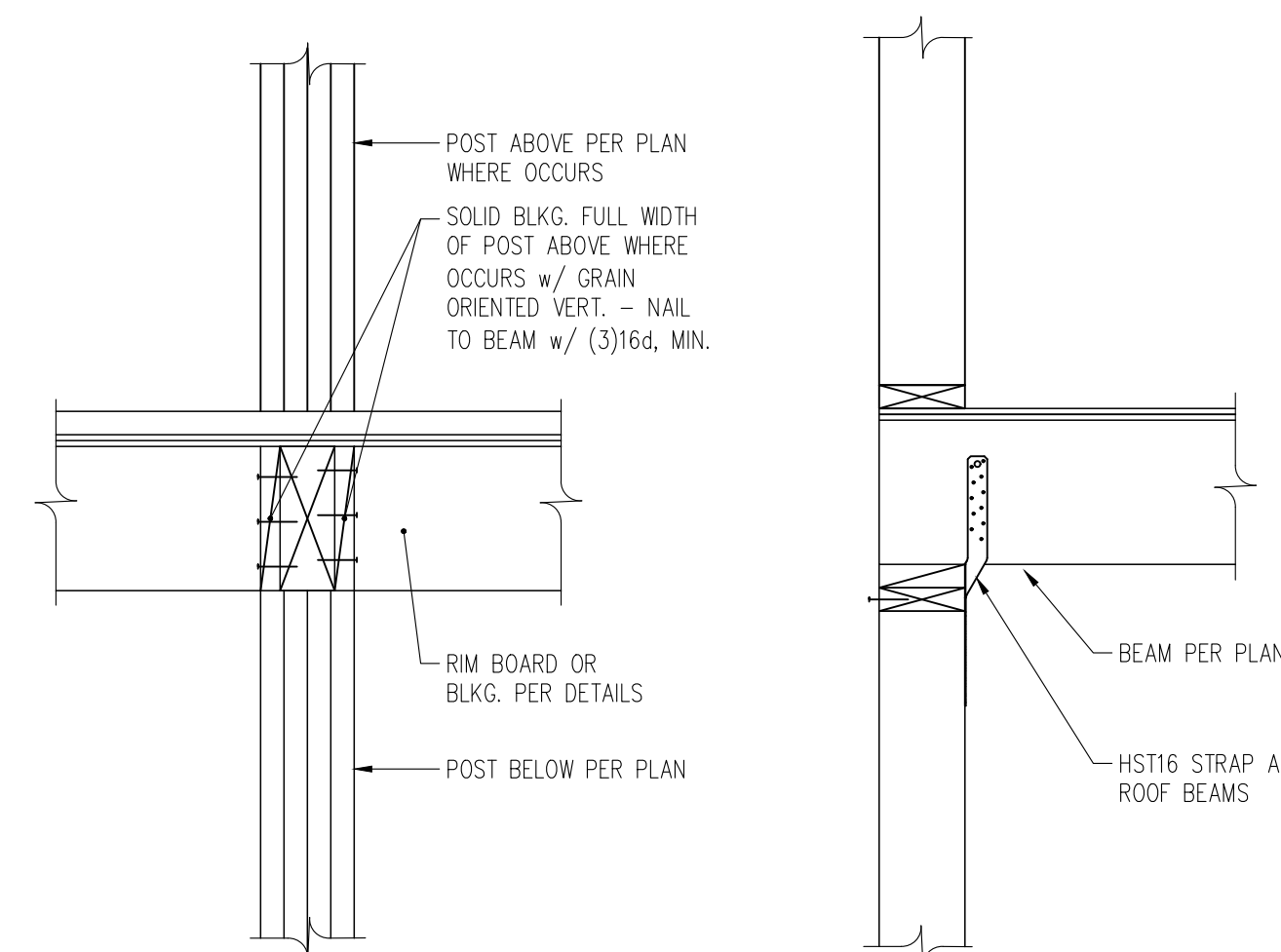
5 ALLOWABLE HOLES IN STUDWALL STUDS  
S6.2 NTS

	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)

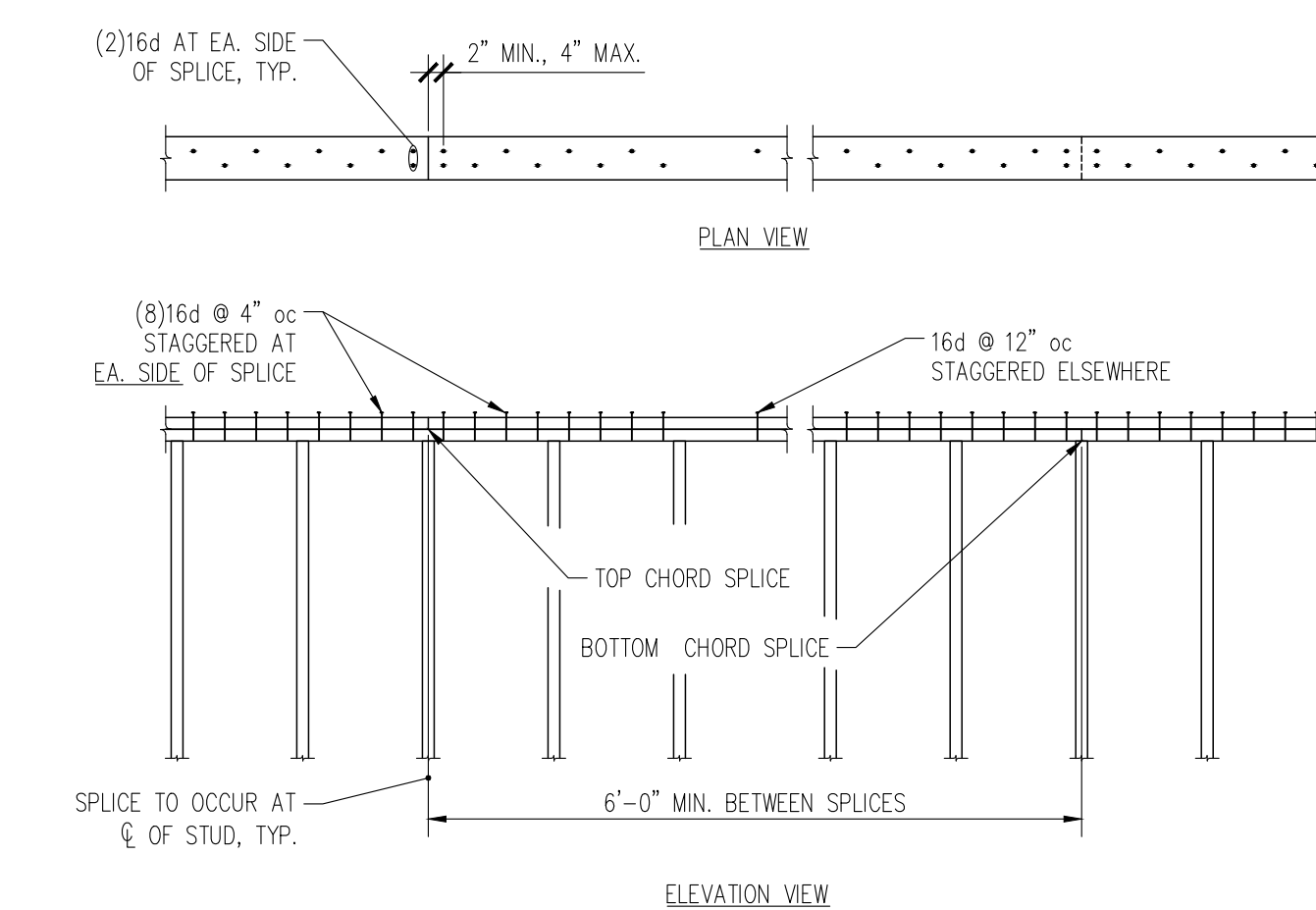
2 ALLOWABLE HOLES THROUGH TOP PLATES  
S6.2 NTS



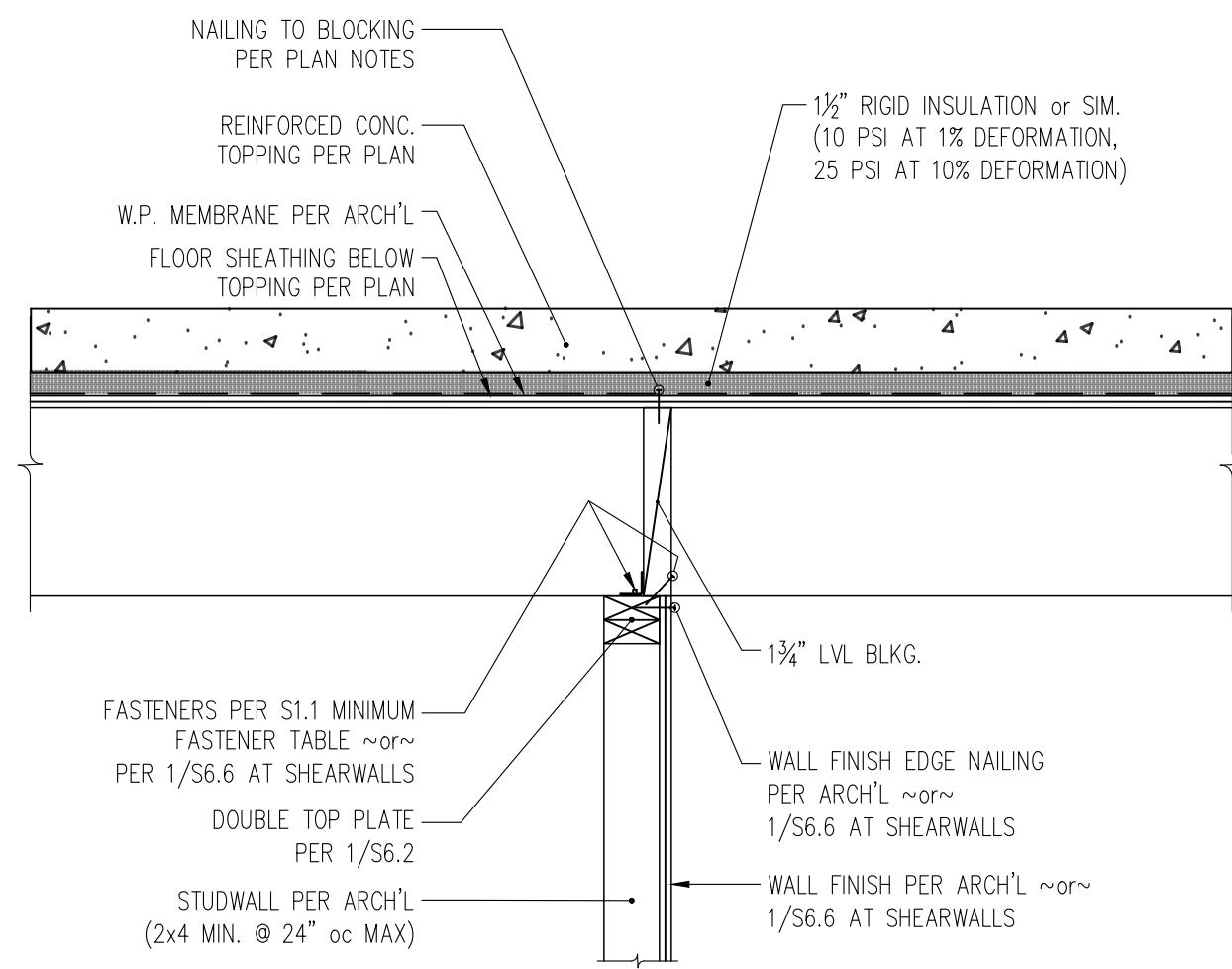
7 CONNECTION OF NON-STRUC'L PARTITION WALL TO STRUCTURE  
S6.2 NTS



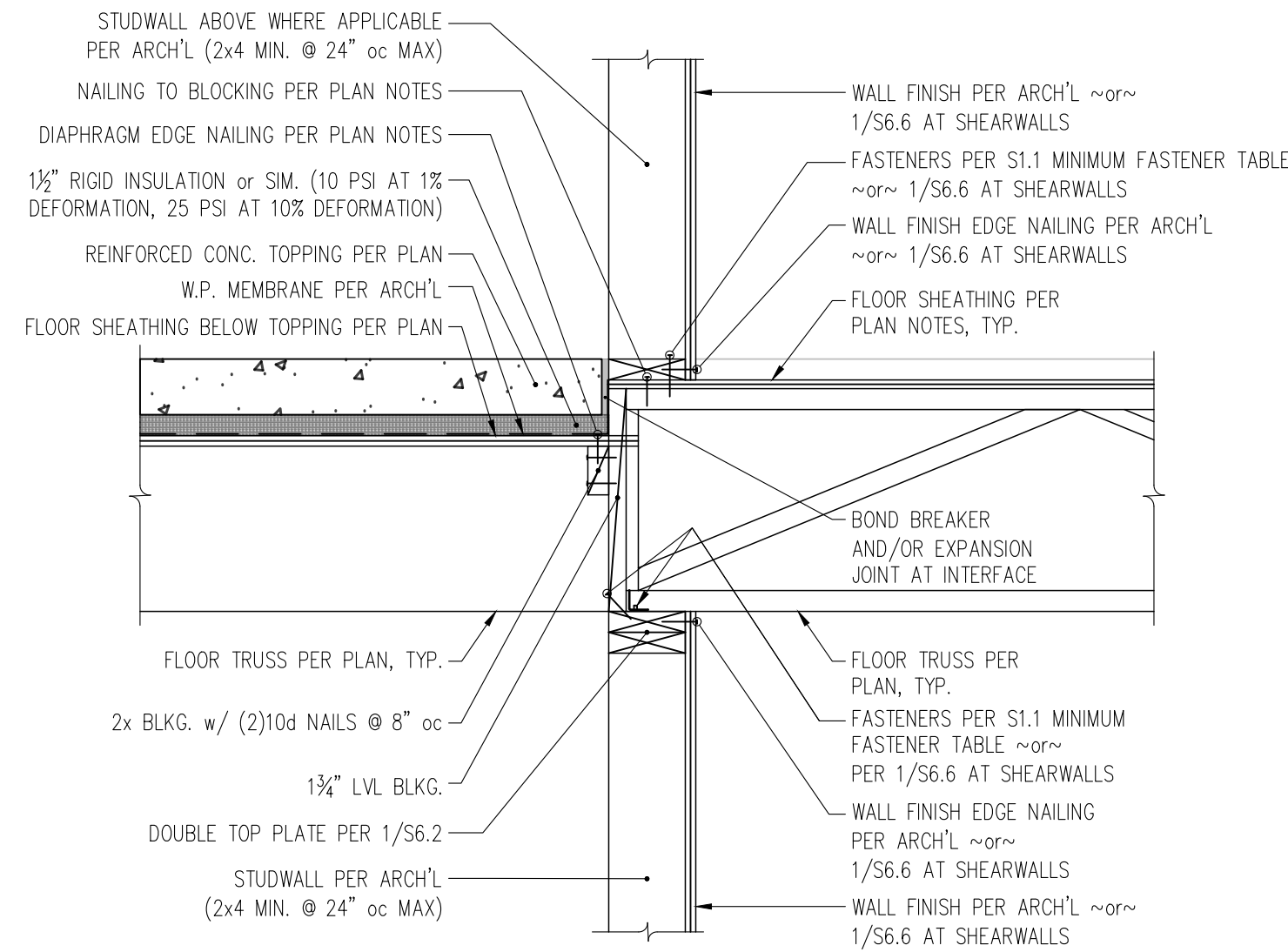
4 TYPICAL BEAM PERPENDICULAR TO WALL  
S6.2 NTS



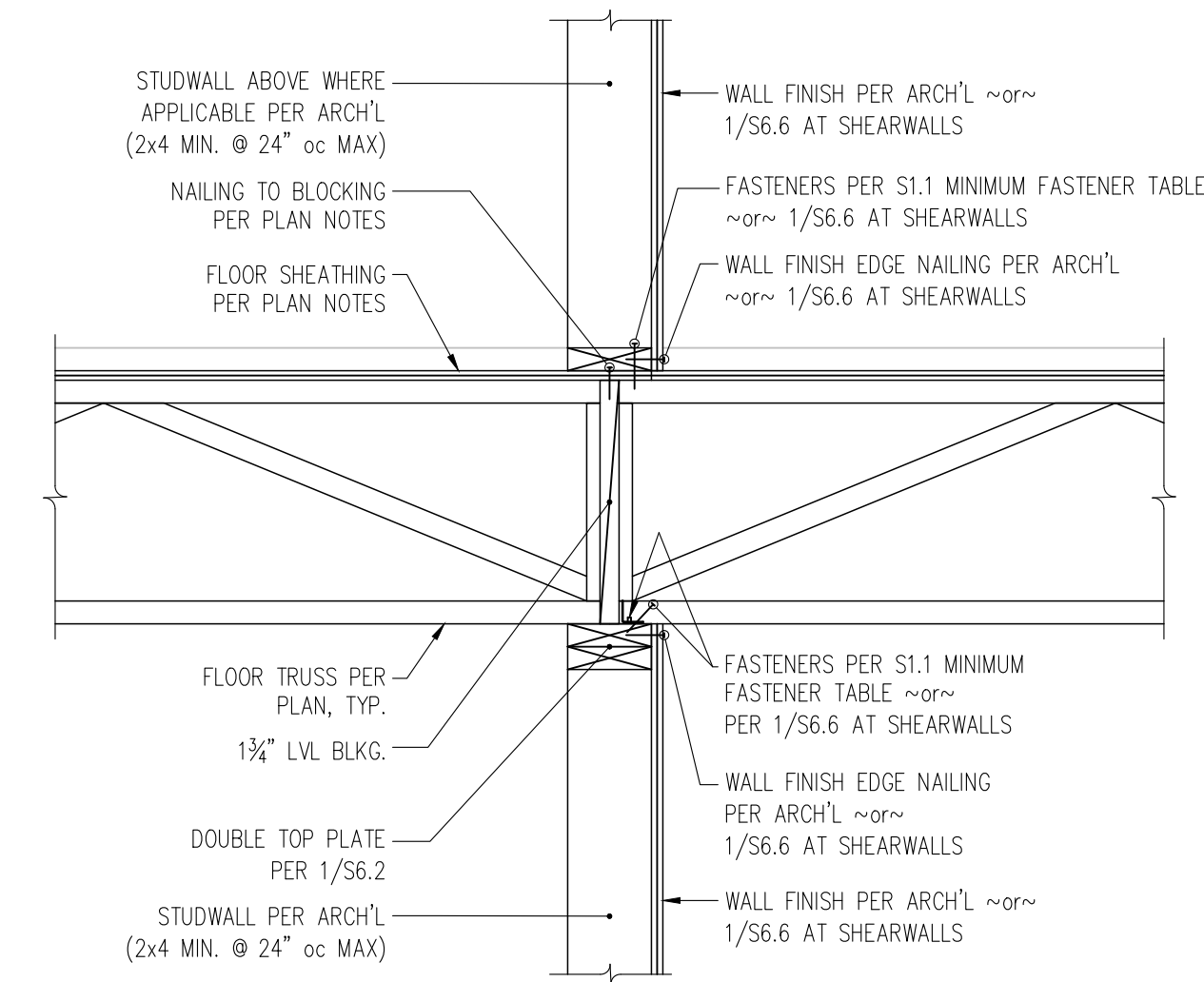
1 TOP PLATE SPLICE  
S6.2 NTS



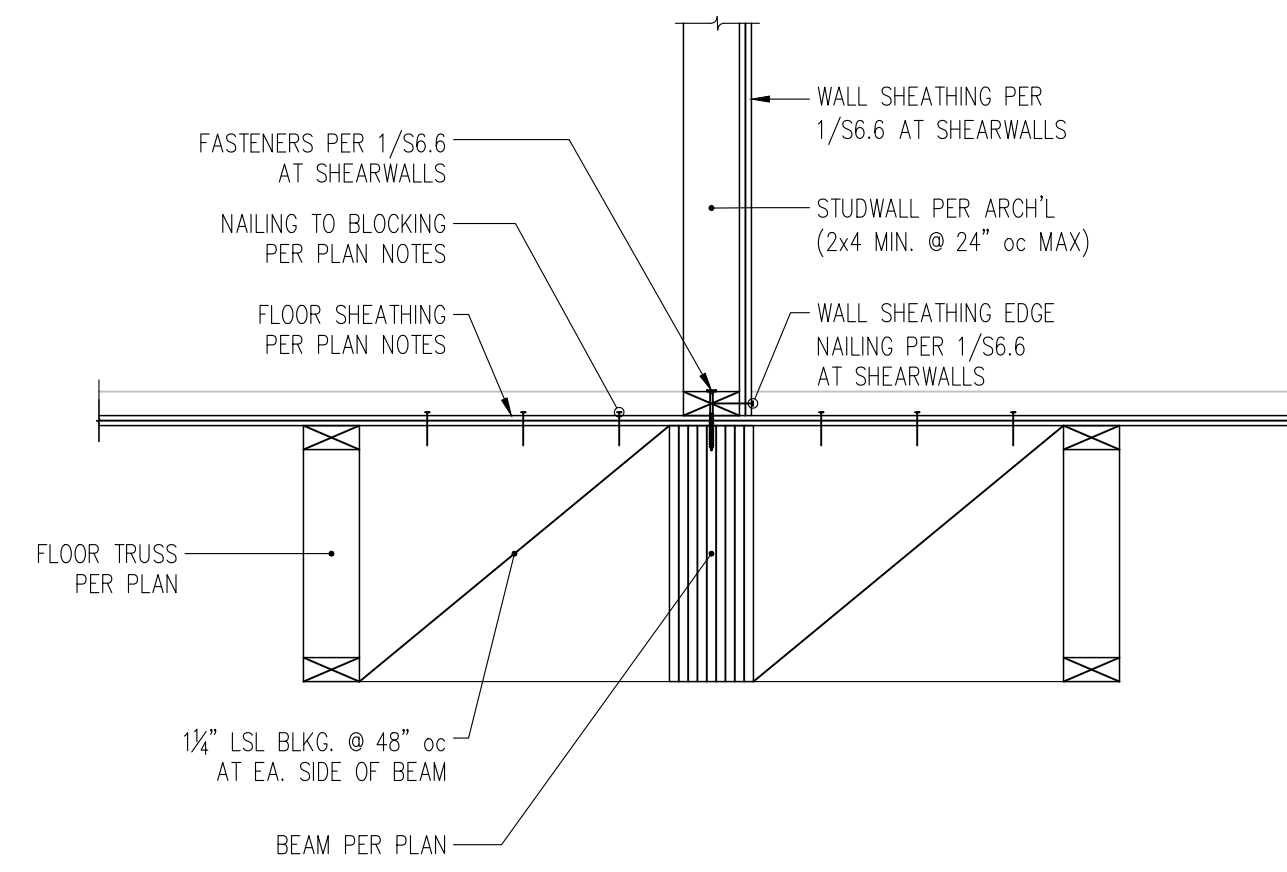
9 SECTION THROUGH INTERIOR STRUC'L WALL w/ PERPENDICULAR GARAGE JOISTS AT EA. SIDE  
S6.3 1" = 1'-0"



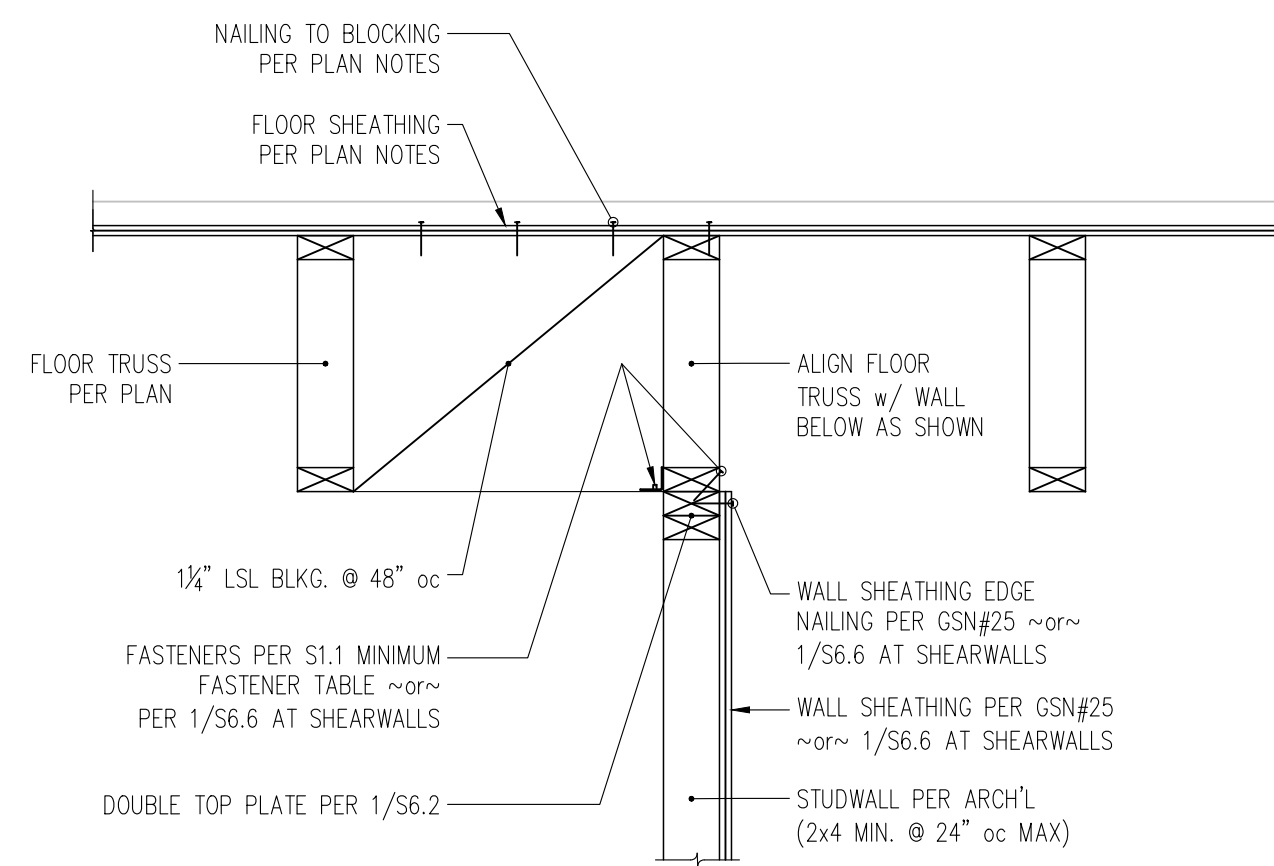
6 SECTION THROUGH INTERIOR STRUC'L WALL w/ PERPENDICULAR TRUSS AND JOIST AT OPP. SIDE  
S6.3 1" = 1'-0"



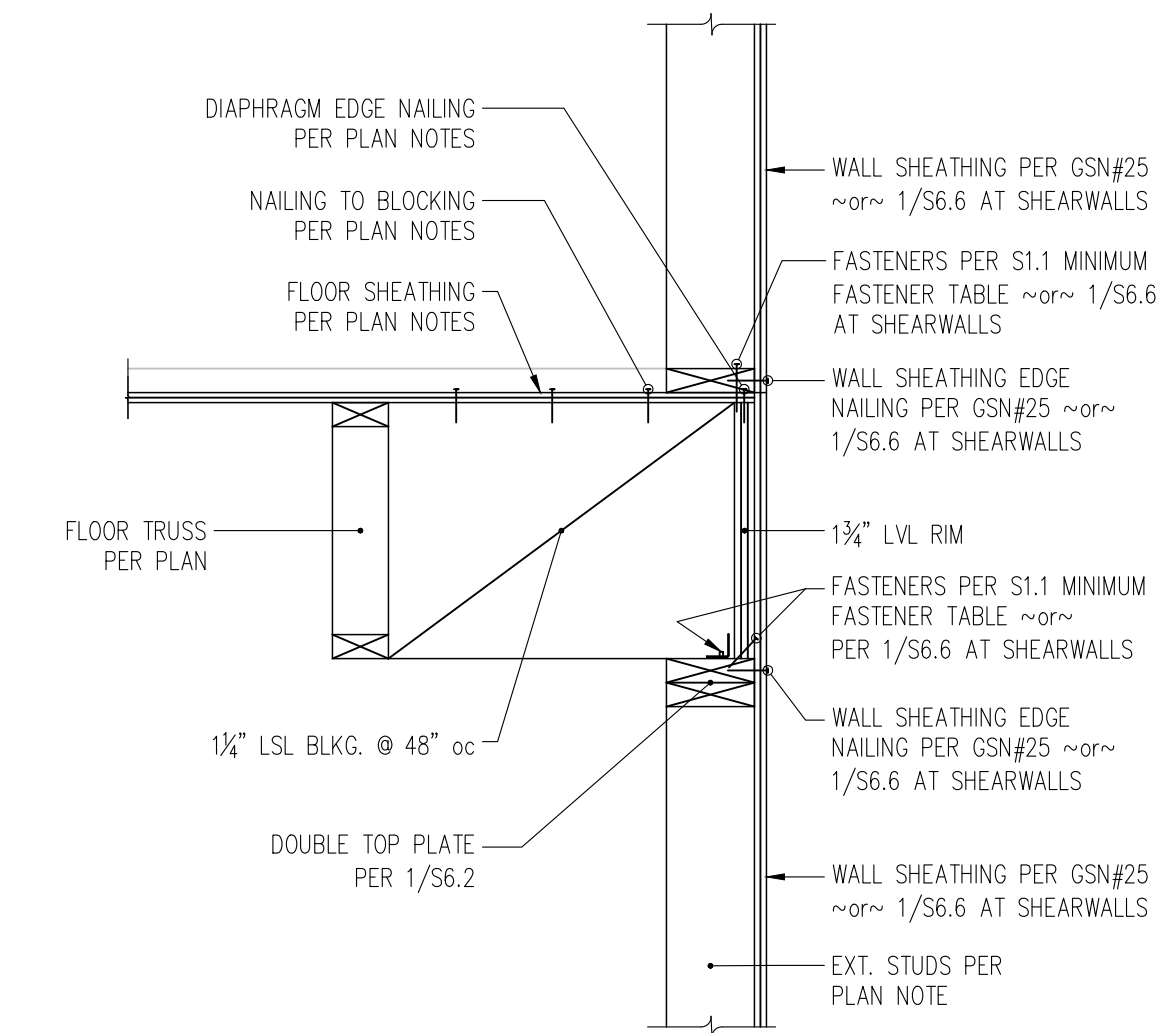
3 SECTION THROUGH INTERIOR STRUC'L WALL w/ PERPENDICULAR TRUSSES AT EA. SIDE  
S6.3 1" = 1'-0"



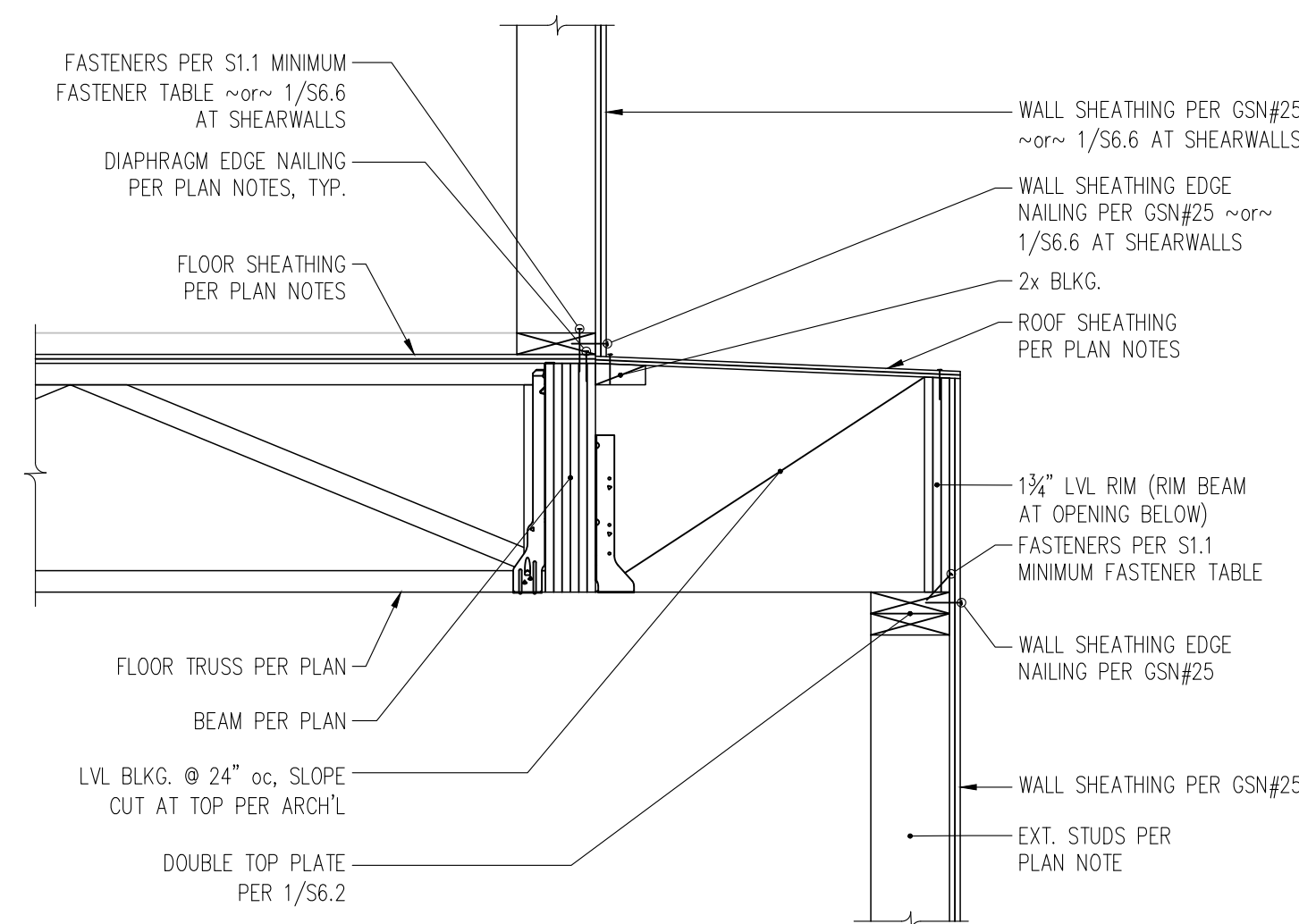
8 SECTION THROUGH FLUSH FRAMED BEAM w/ JOIST AT EACH SIDE  
S6.3 1" = 1'-0"



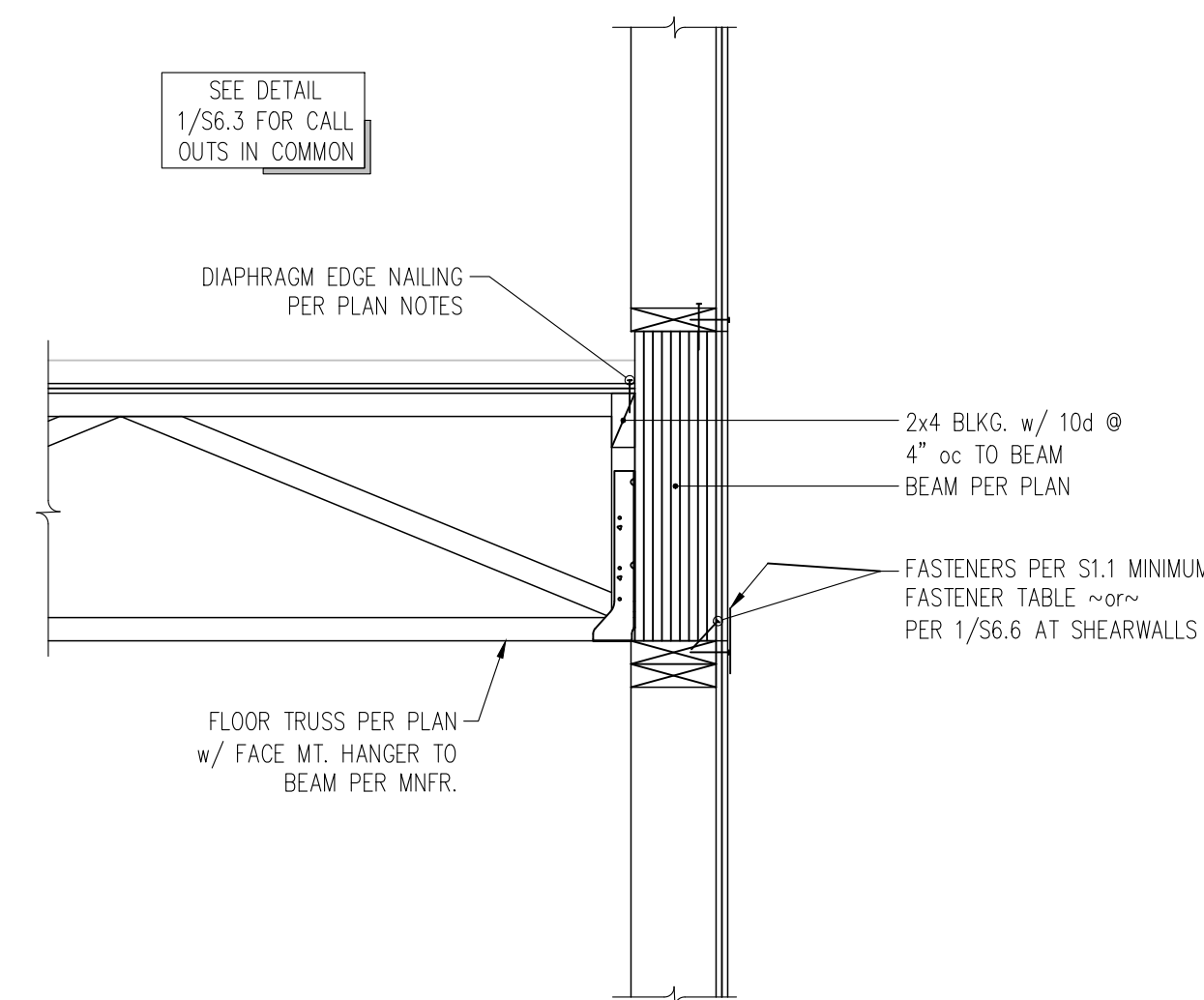
5 SECTION THROUGH INTERIOR STRUC'L WALL w/ PARALLEL TRUSSES AT EA. SIDE  
S6.3 1" = 1'-0"



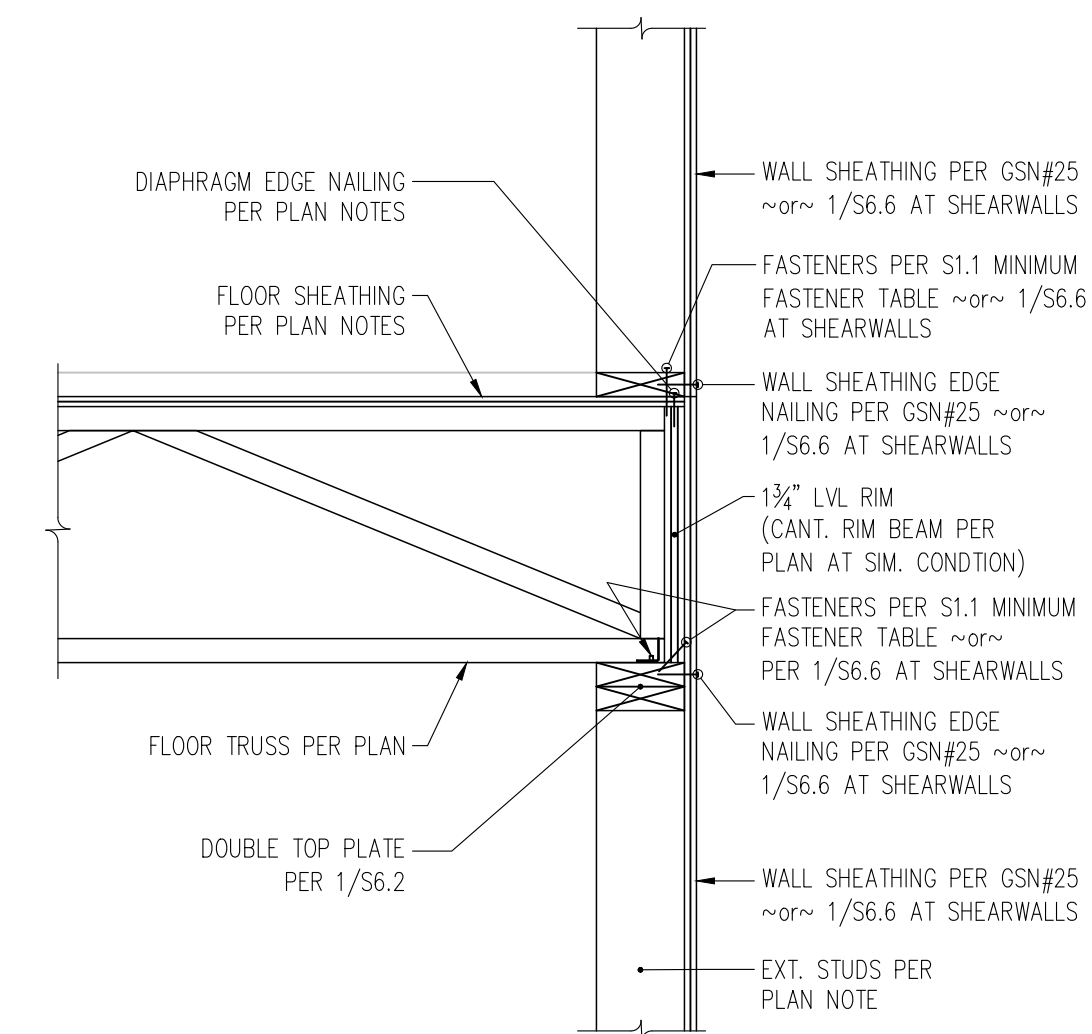
2 SECTION THROUGH EXTERIOR WALL AT PARALLEL FLOOR JOISTS  
S6.3 1" = 1'-0"



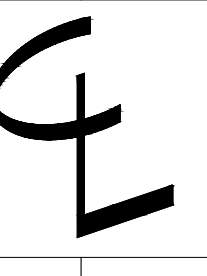
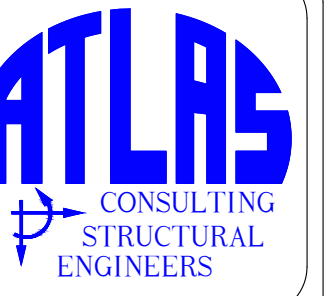
7 SECTION THROUGH UPSET BEAM IN EXTERIOR WALL AT PERPENDICULAR FLOOR TRUSS  
S6.3 1" = 1'-0"



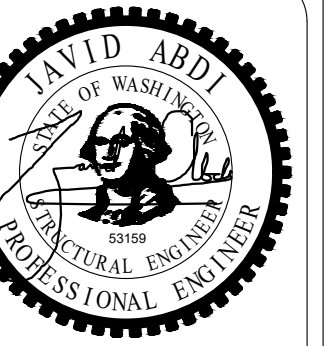
4 SECTION THROUGH INTERIOR STRUC'L WALL w/ PERPENDICULAR TRUSSES AT EA. SIDE  
S6.3 1" = 1'-0"



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



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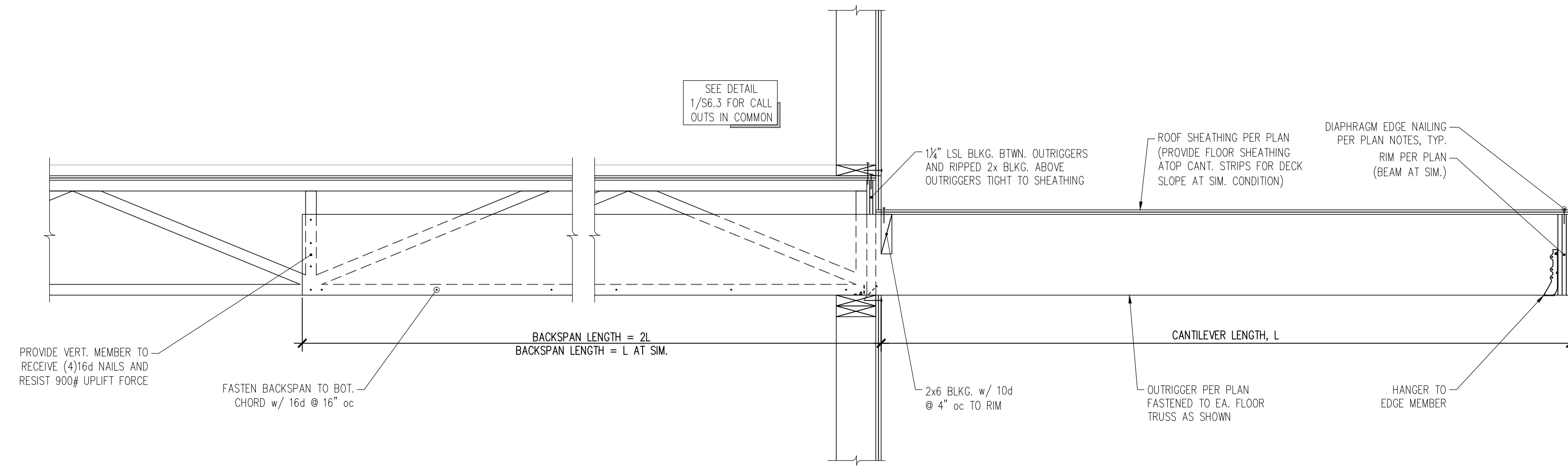
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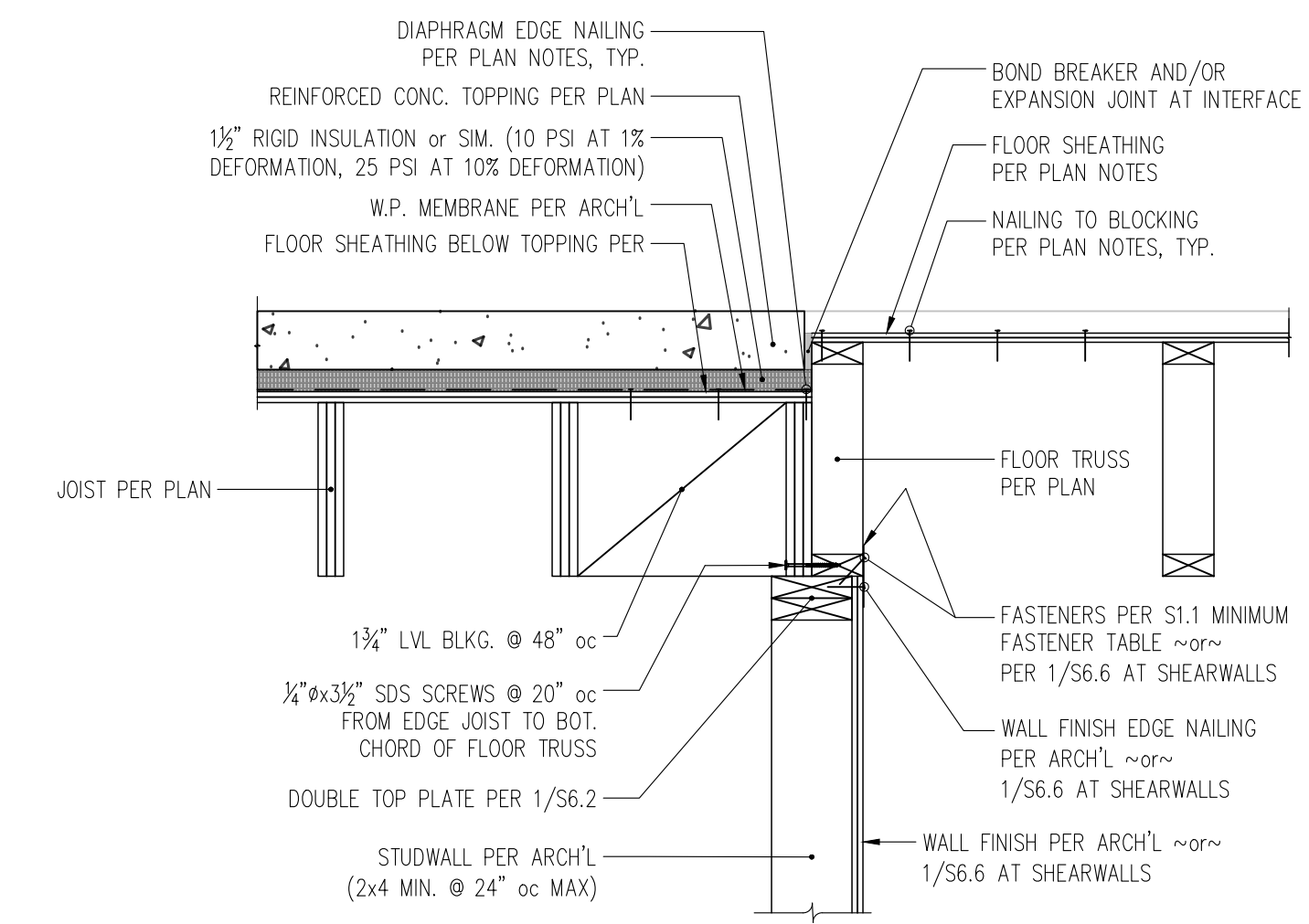
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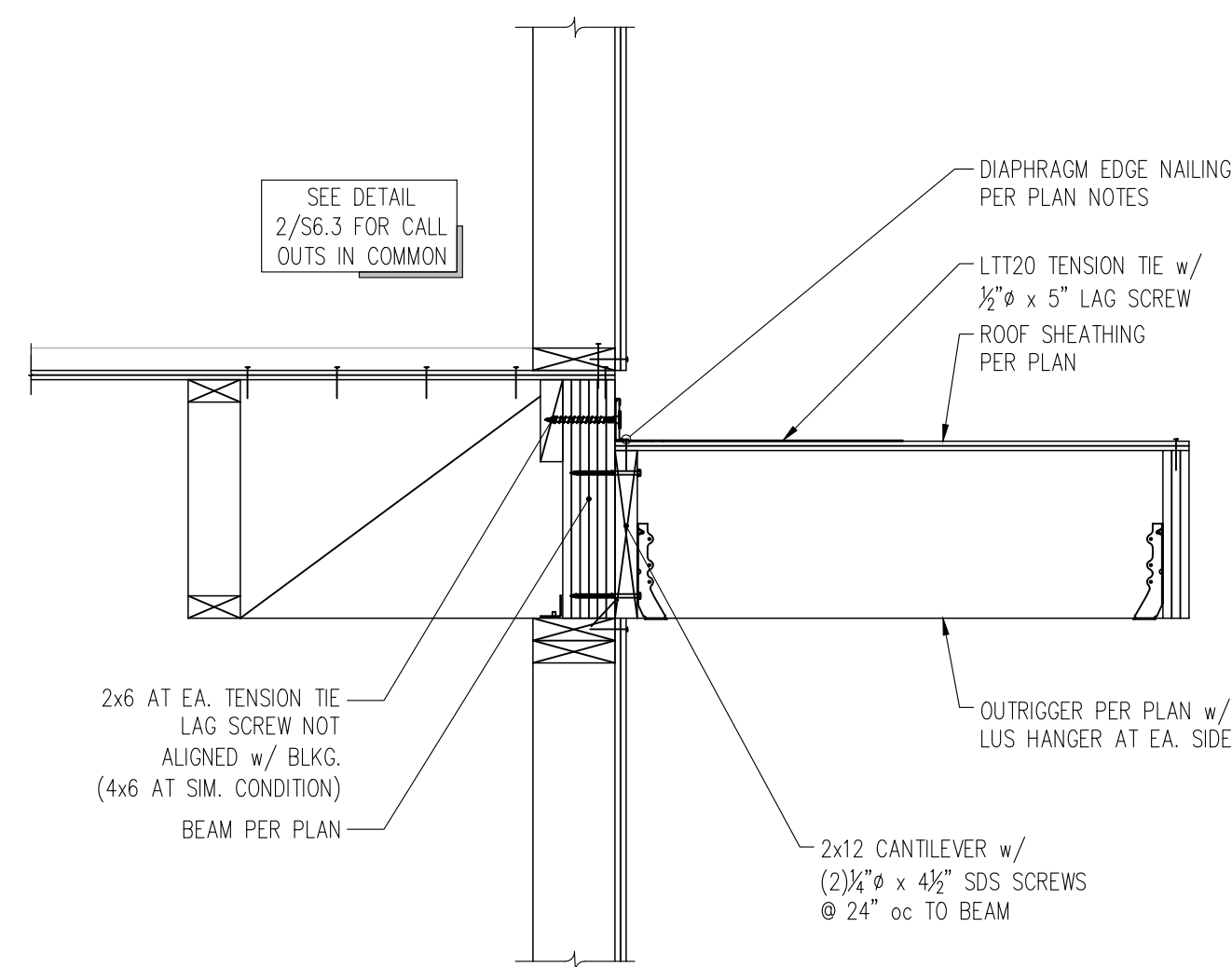
**S6.4**



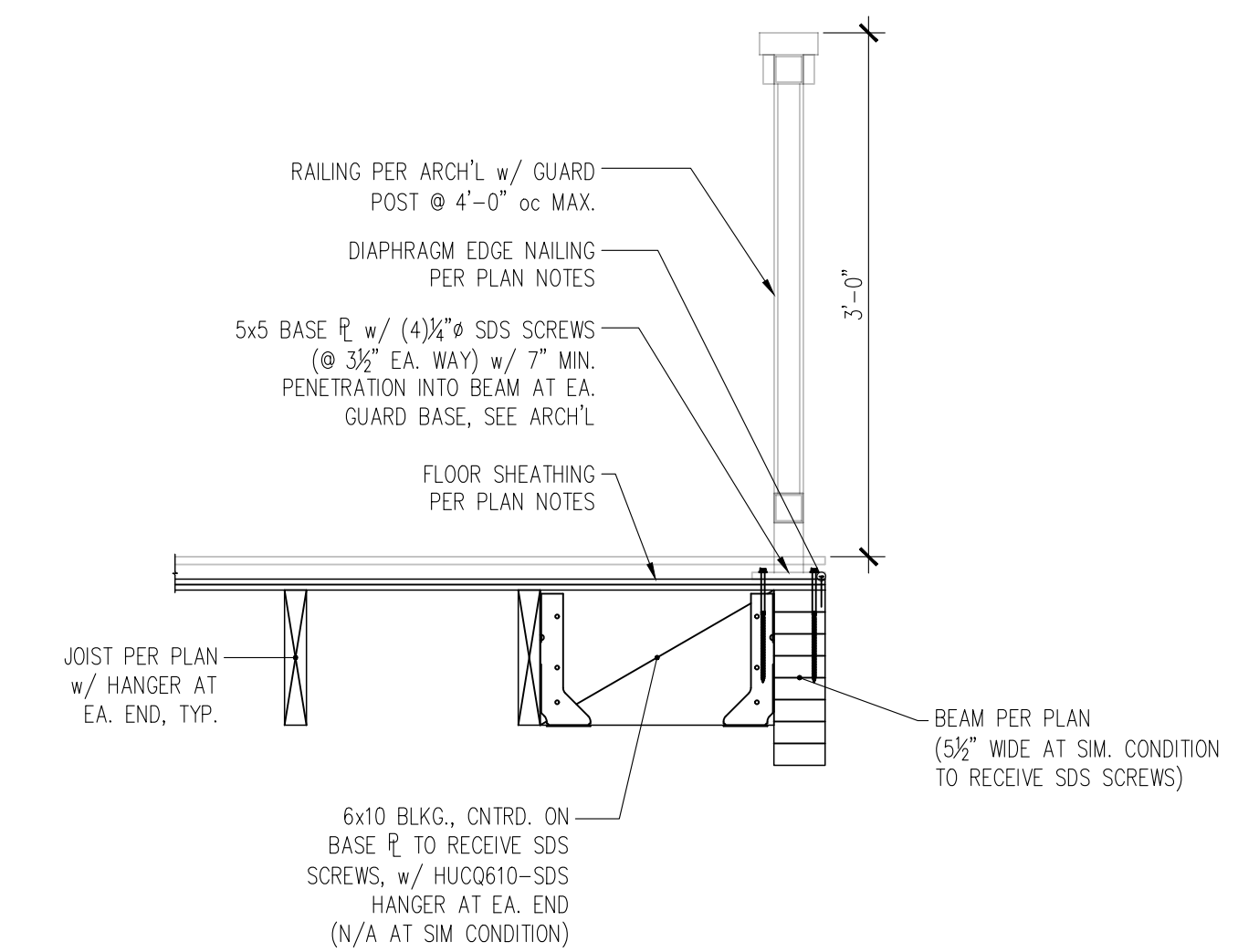
9 SECTION AT CANTILEVERED FRAMING AND PERPENDICULAR INTERIOR FRAMING  
S6.4 1" = 1'-0"



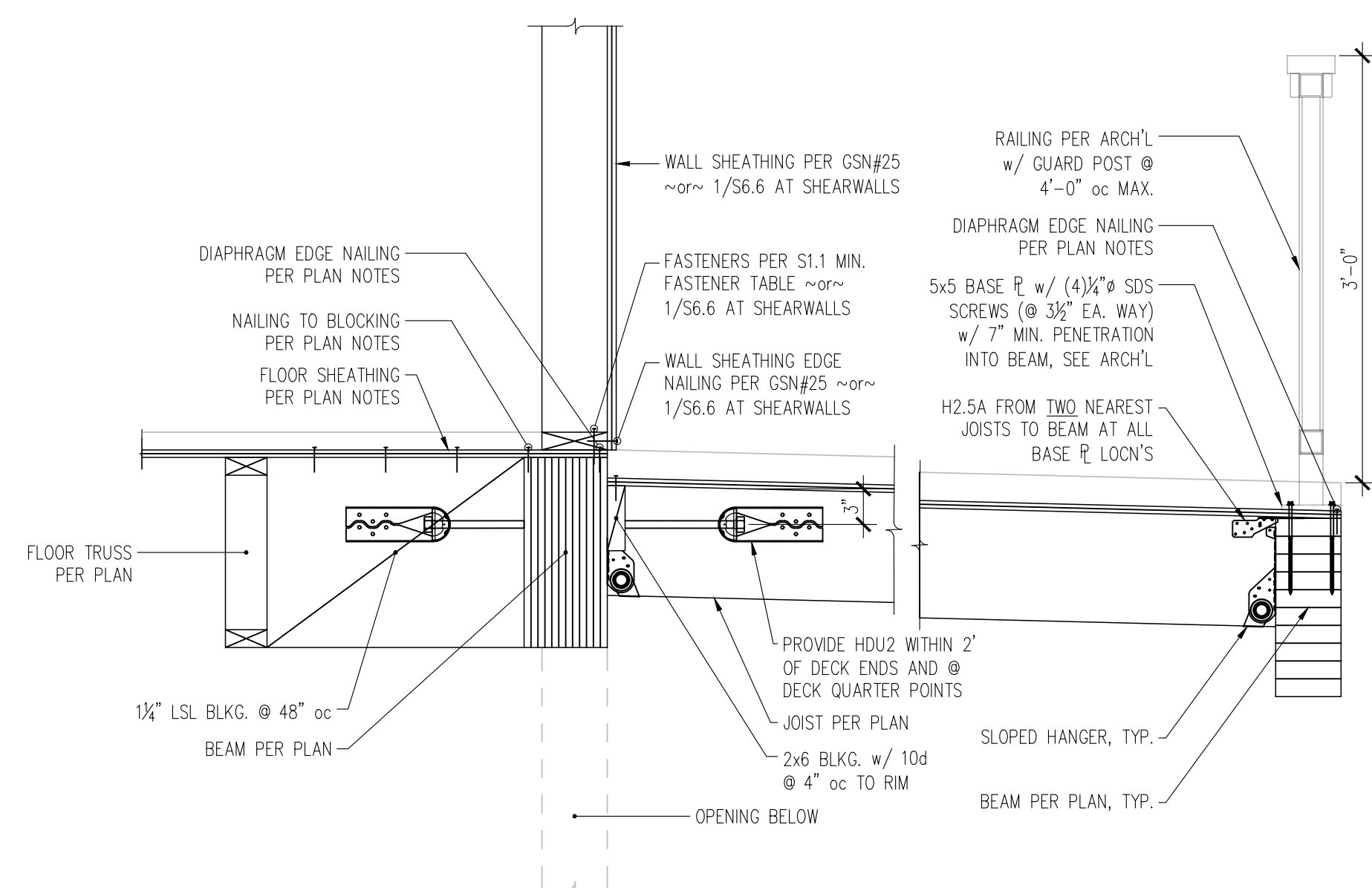
3 SECTION THROUGH INTERIOR STRUCTURAL WALL WITH PARALLEL TRUSS AND JOIST AT OPPOSITE SIDE  
S6.4 1" = 1'-0"



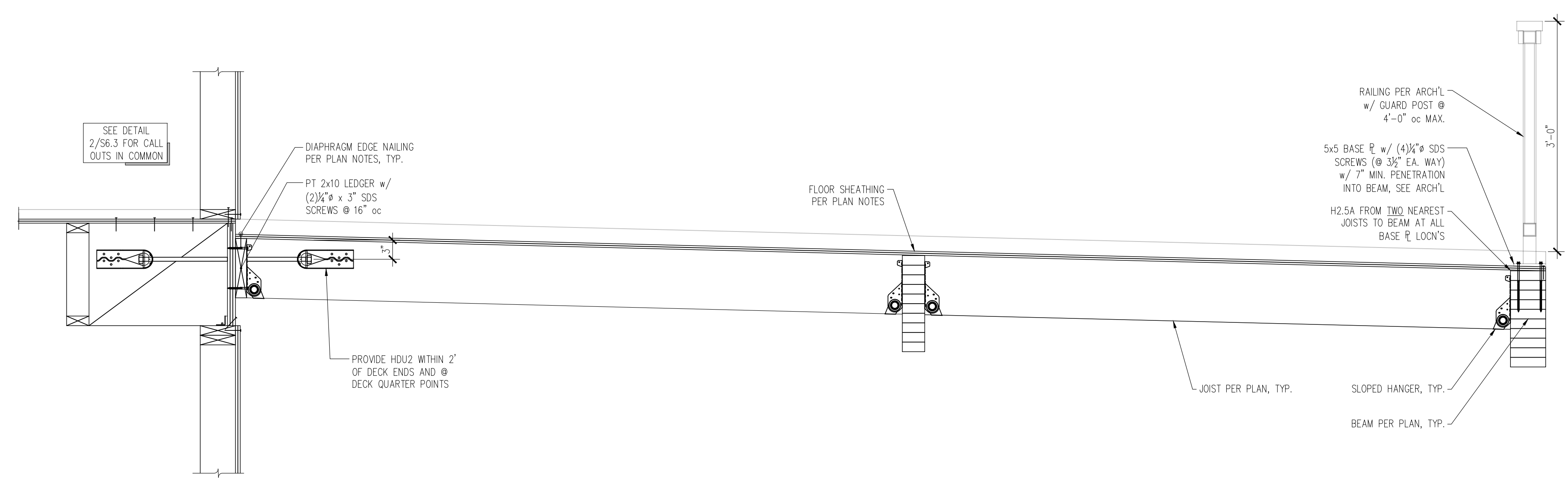
5 SECTION AT CANTILEVERED LOW ROOF AND UPPER FLOOR PARALLEL FRAMING  
S6.4 1" = 1'-0"



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

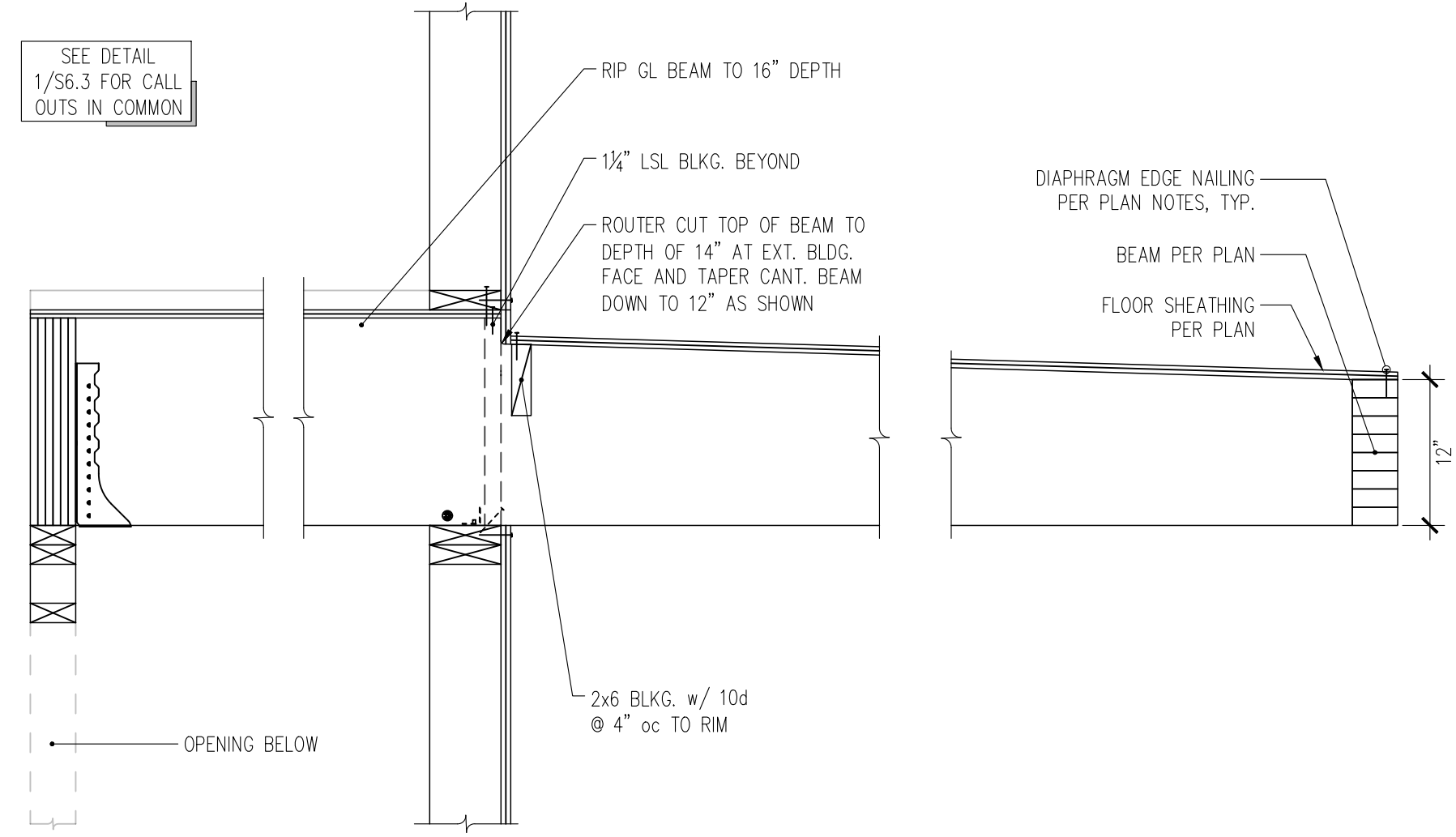


7 SECTION AT UPPER FLOOR DECK PERPENDICULAR JOISTS  
S6.4 1" = 1'-0"

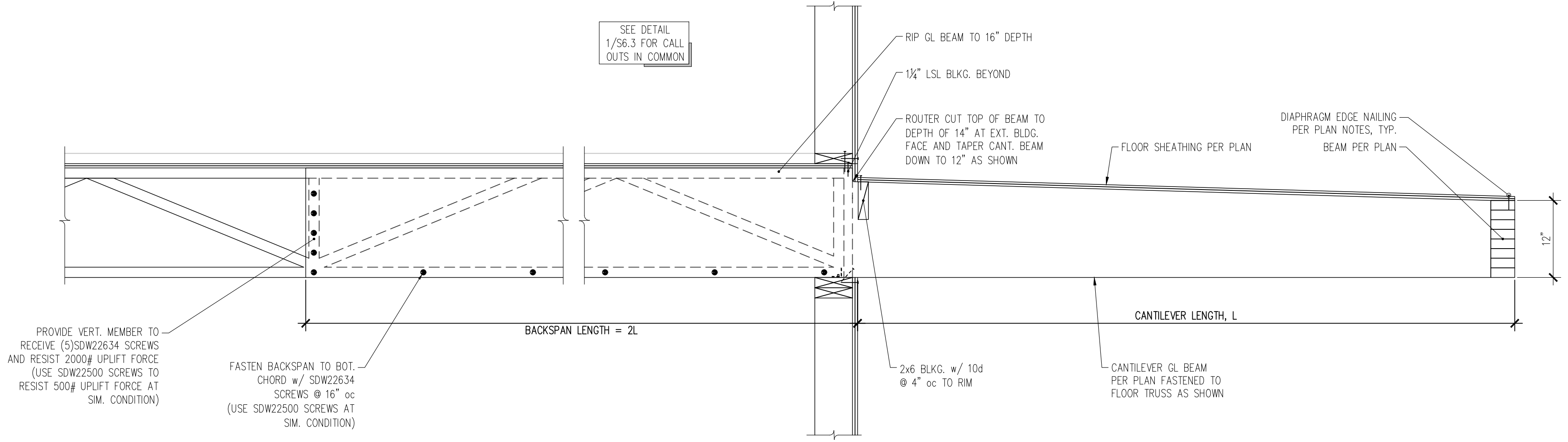


4 SECTION AT MAIN FLOOR DECK PERPENDICULAR JOISTS  
S6.4 1" = 1'-0"

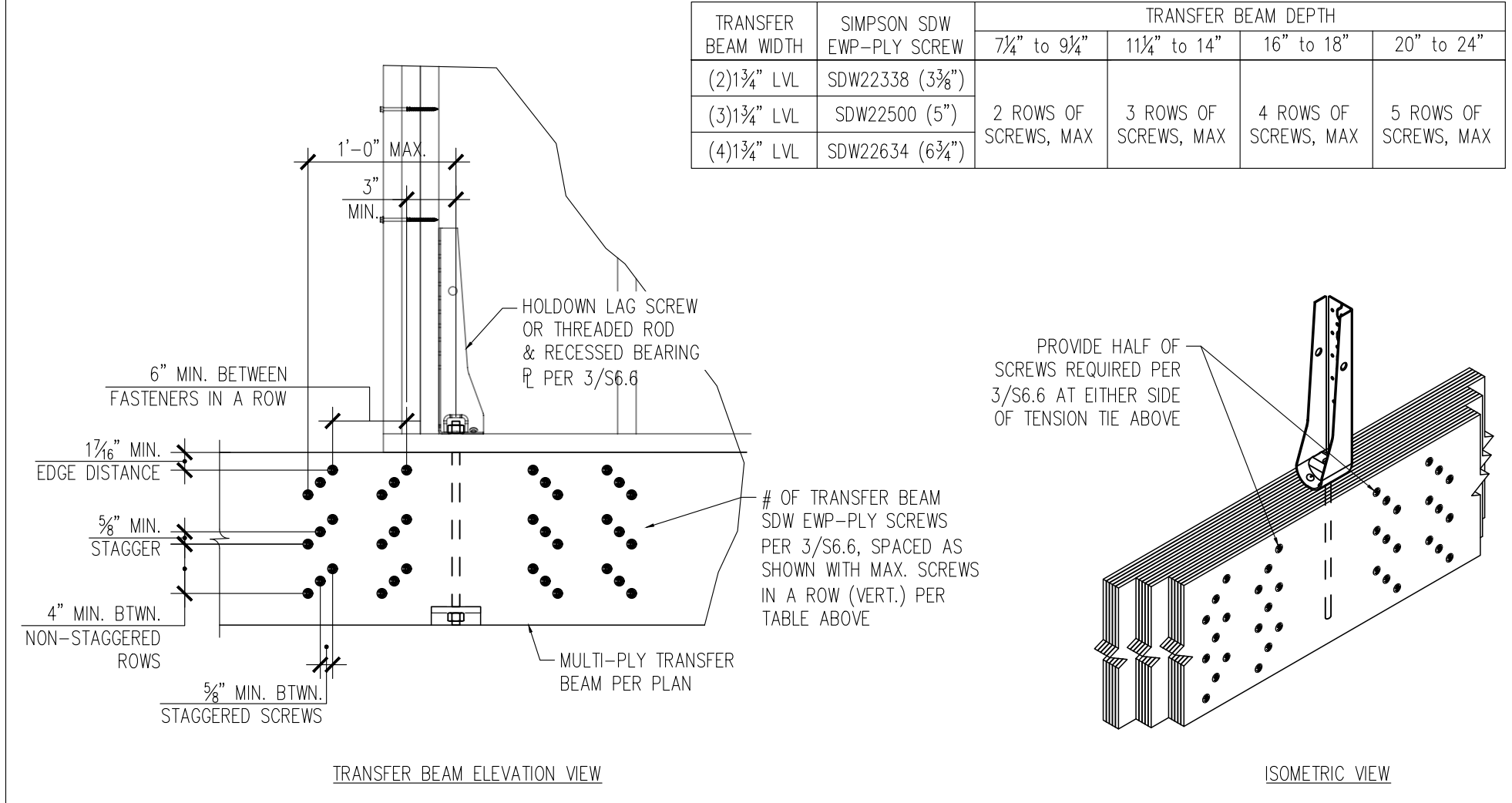




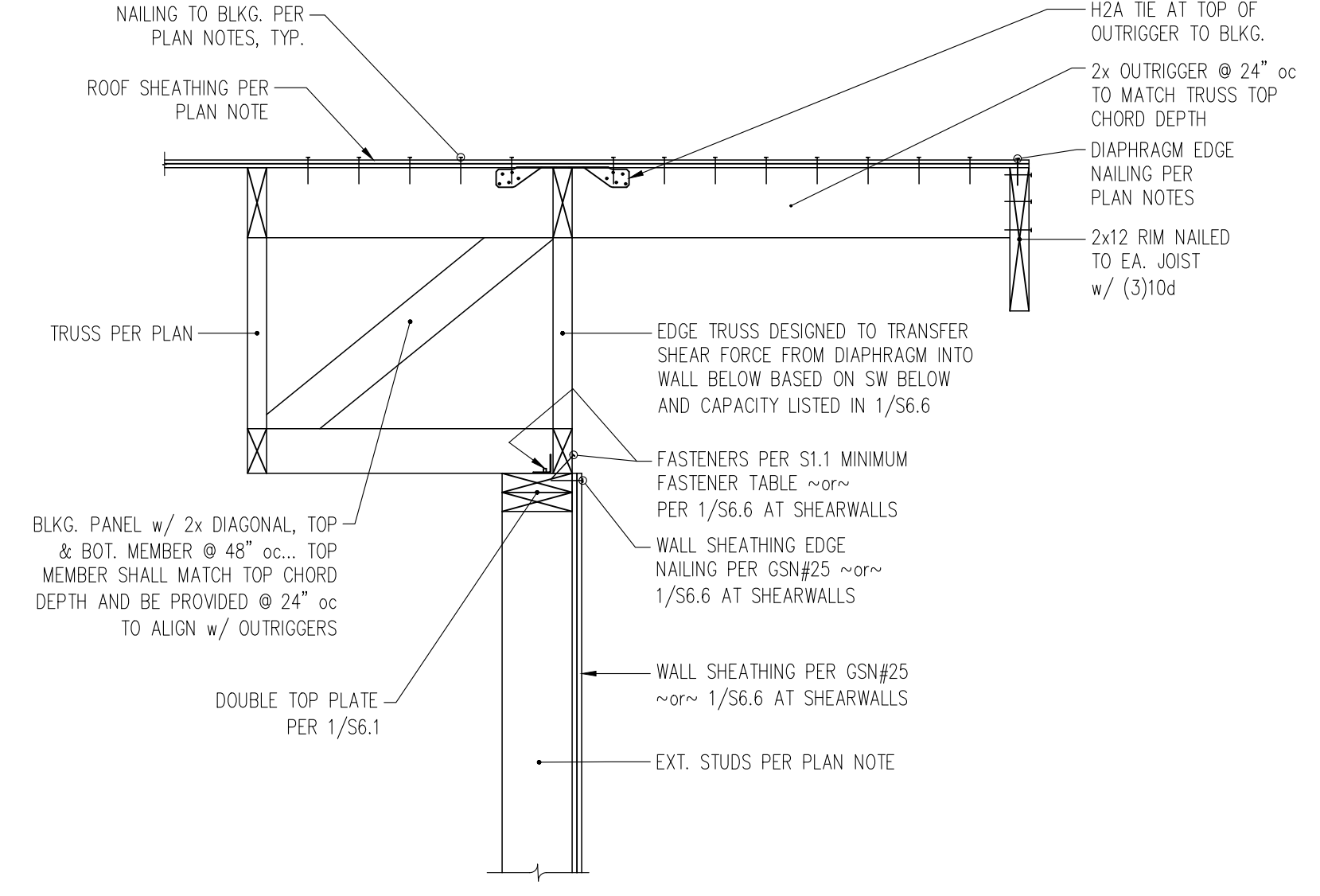
9 SECTION AT CANTILEVERED FRAMING AND PERPENDICULAR INTERIOR FRAMING  
S6.5 1" = 1'-0"



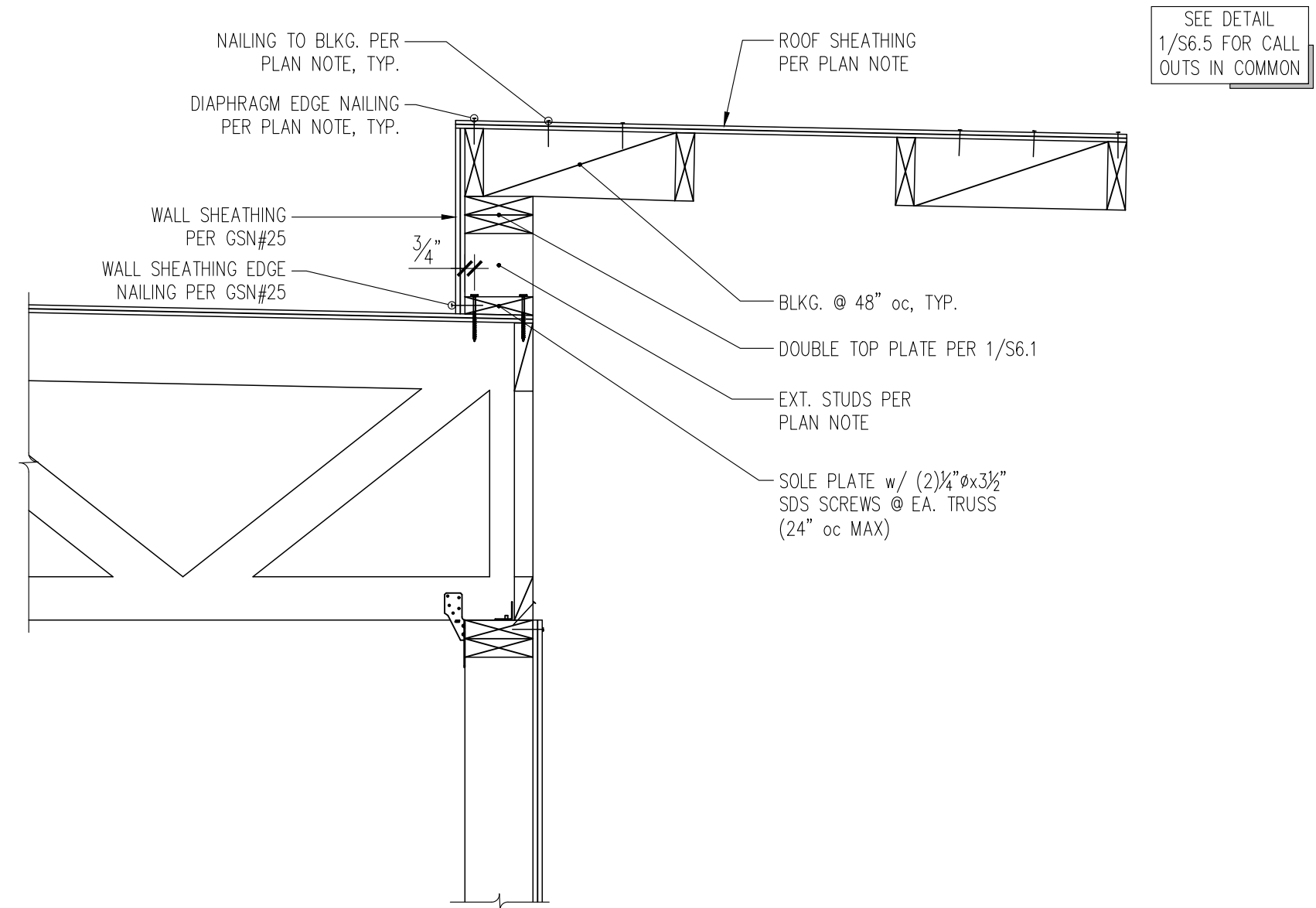
6 SECTION AT CANTILEVERED FRAMING AND PERPENDICULAR INTERIOR FRAMING  
S6.5 1" = 1'-0"



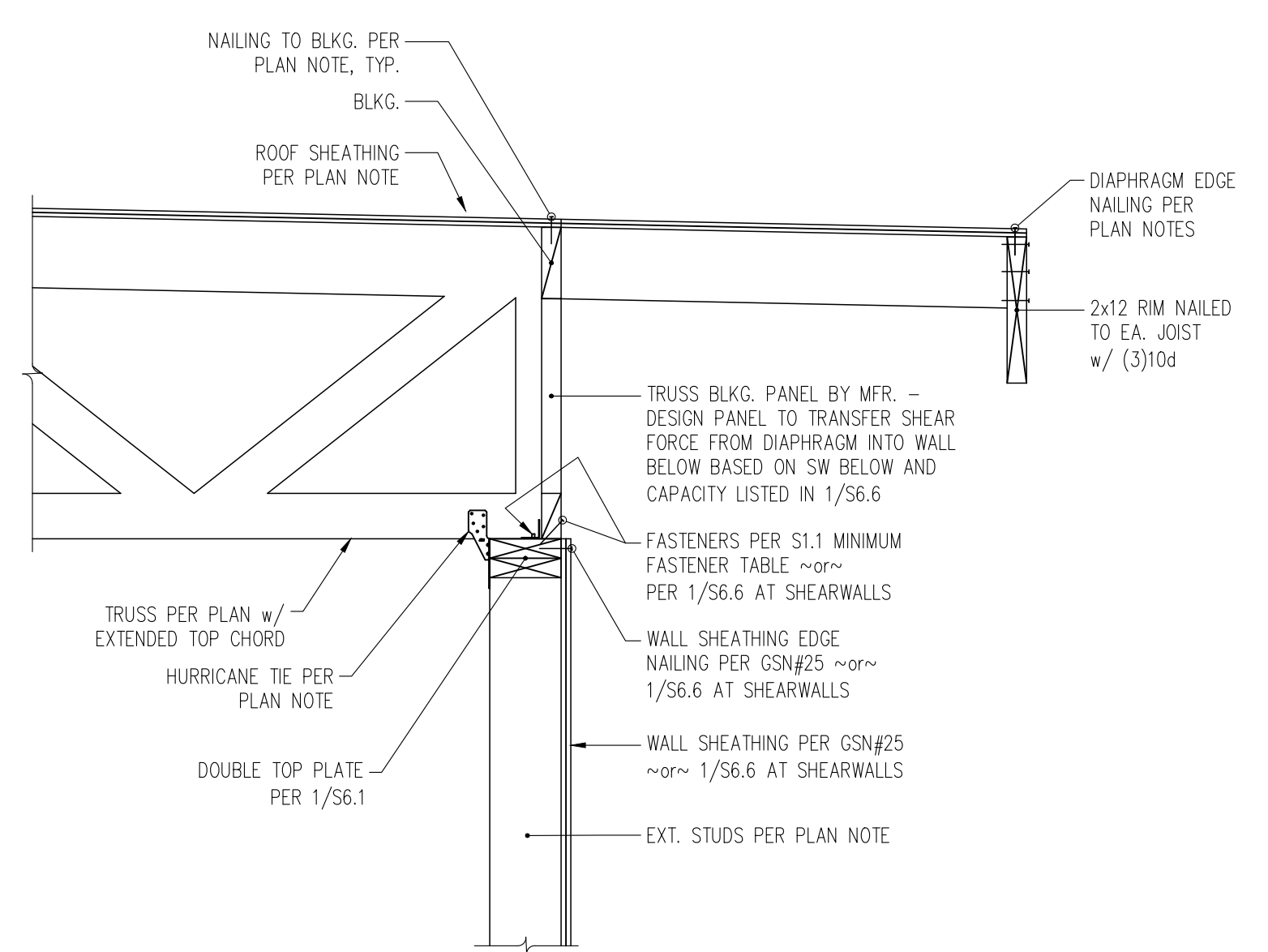
5 MULTI-PLY TRANSFER BEAM CONNECTION DETAILS  
S6.5 1" = 1'-0"



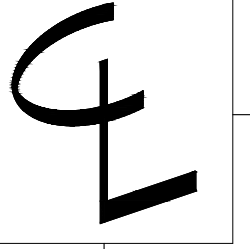
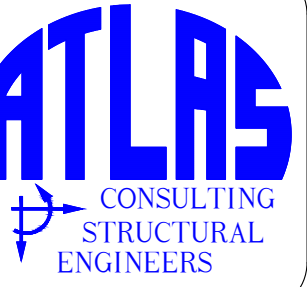
2 SECTION THROUGH EXTERIOR WALL AT PARALLEL ROOF TRUSSES  
S6.5 1" = 1'-0"



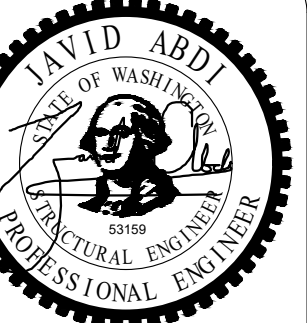
4 SECTION THROUGH RAISED ROOF AT PERPENDICULAR ROOF TRUSSES  
S6.5 1" = 1'-0"



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



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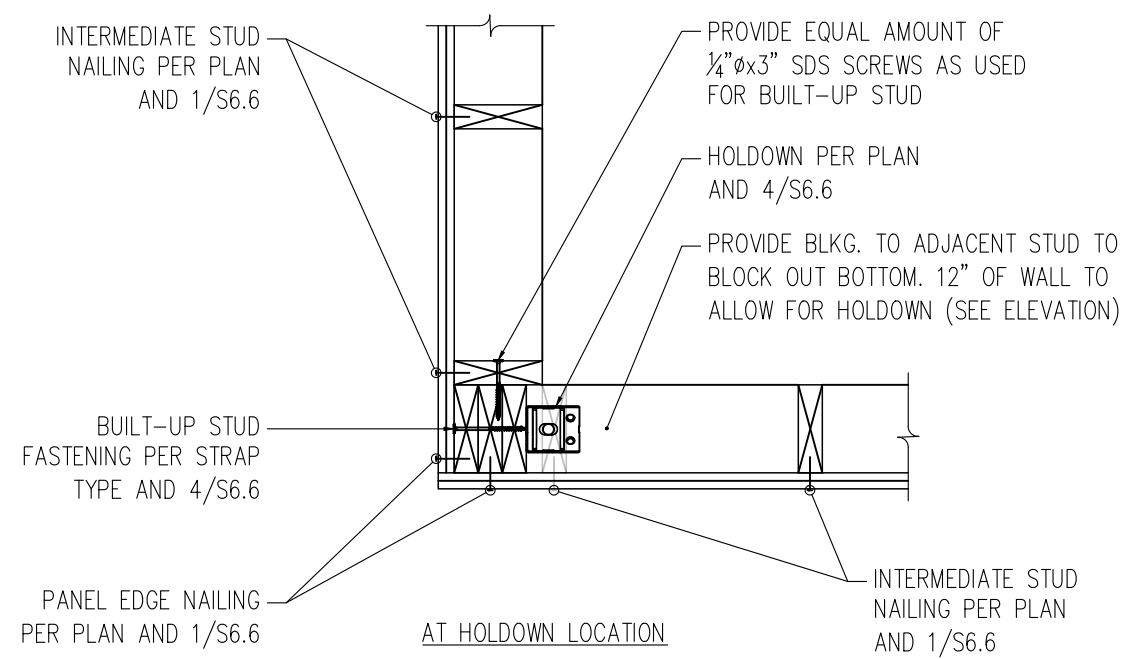
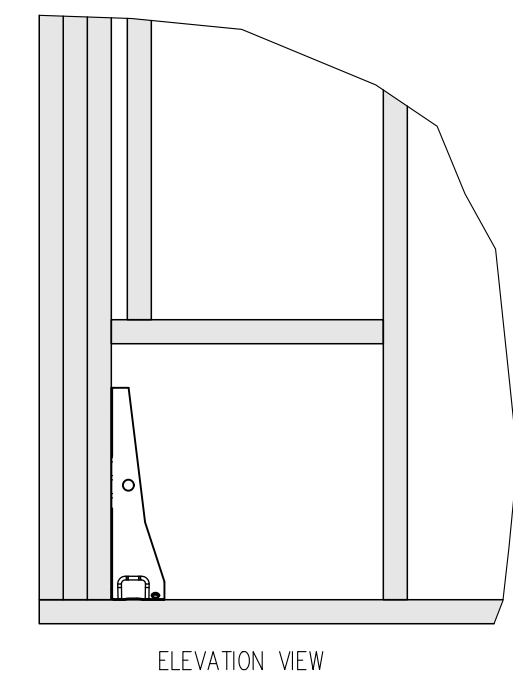
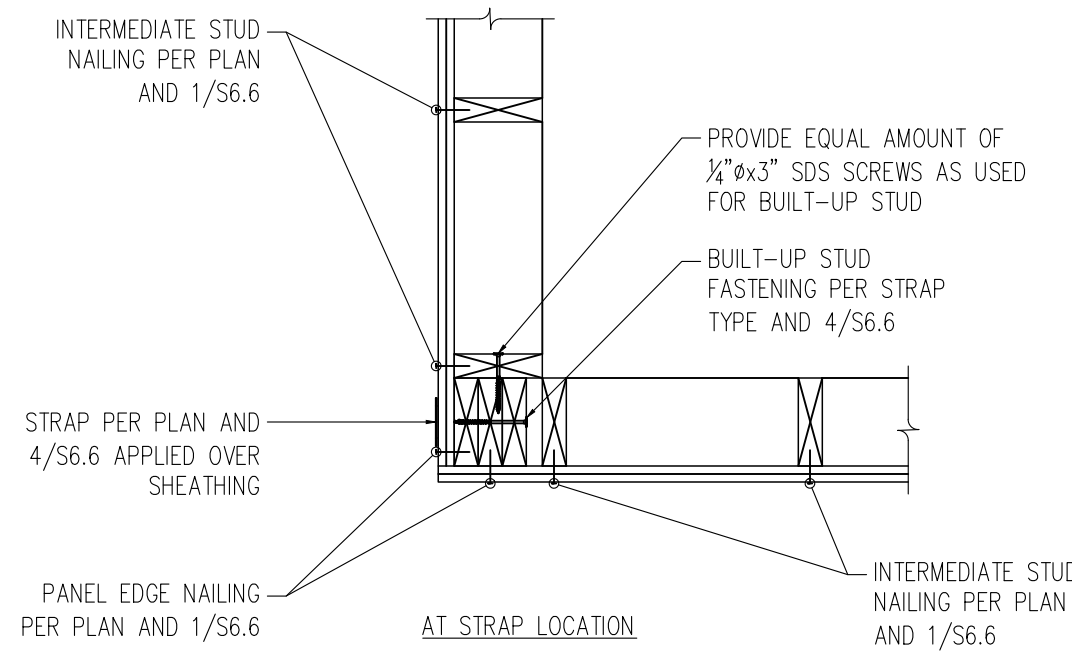


Mithala Residence  
3632 90th Ave SE  
Mercer Island, WA - 98040

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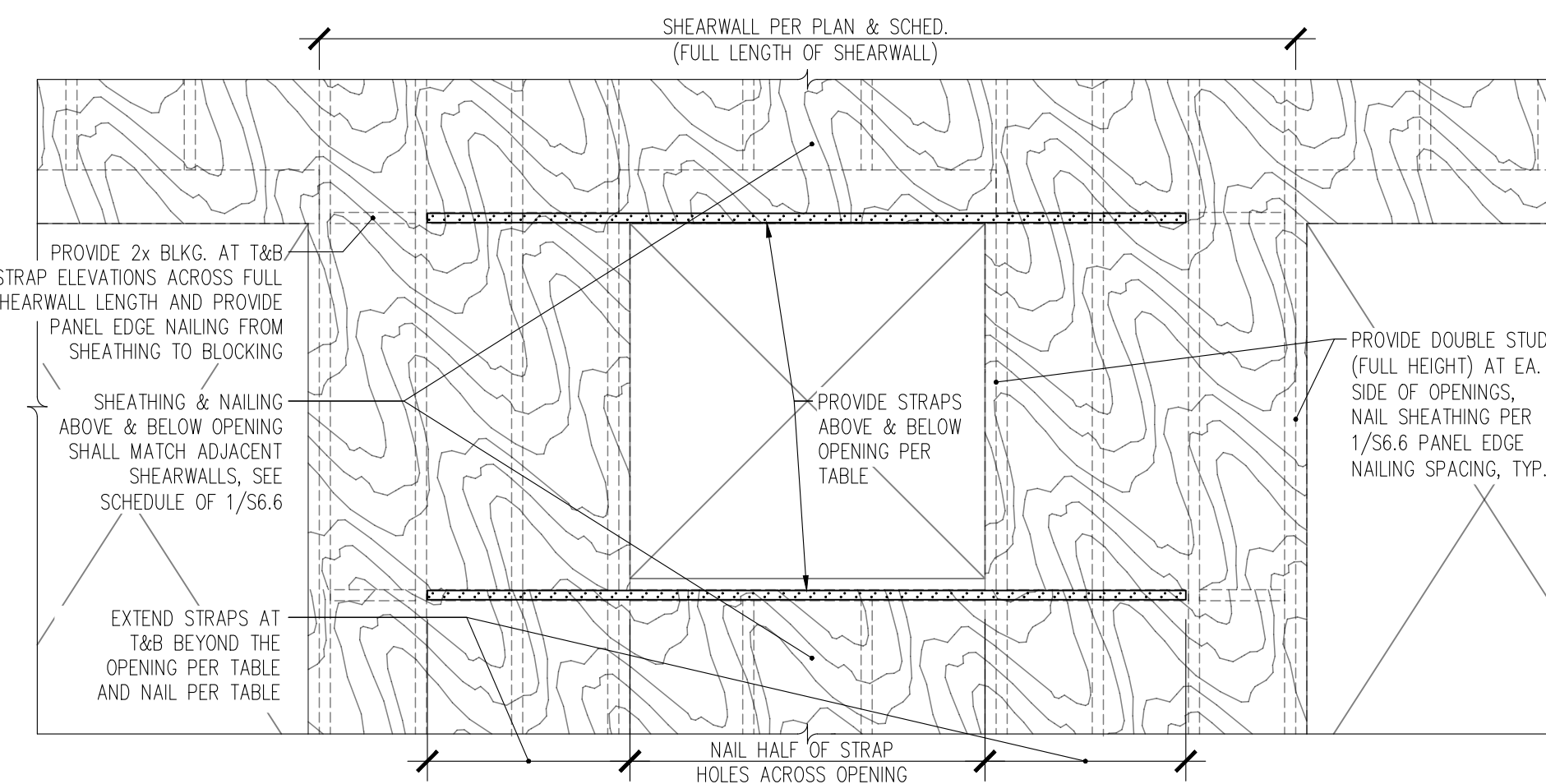
DRAWN BY  
JDA  
DATE  
10.18.22  
06.09.23

S6.5



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"



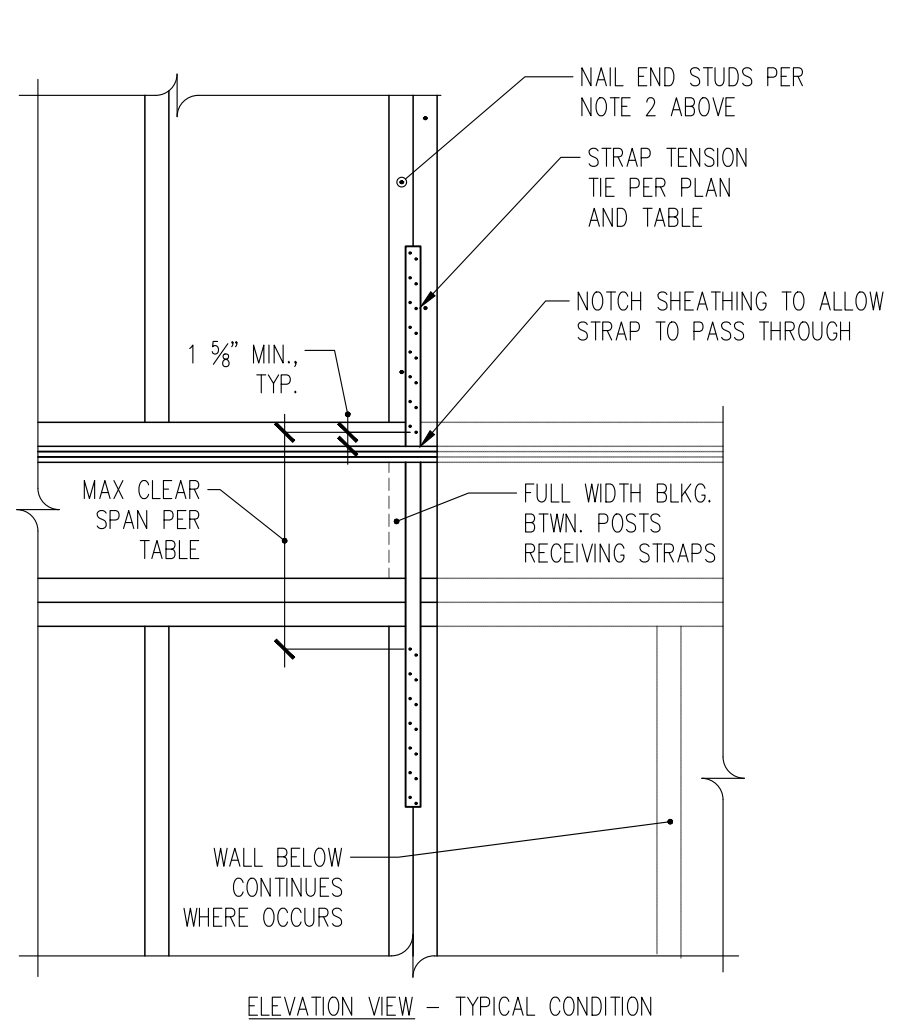
7 STRAPPED SHEARWALL DETAIL  
S6.6 N.T.S.

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)1/2" x 4 1/2" SDS
MSTC66	(3)2x	18" - (64)0.148" x 3/4"	5,850#	(12)1/2" x 6" SDS
(2)MSTC52	(4)2x	18" - (44)0.148" x 3/4"	7,750#	(14)1/2" x 6" SDS
(2)MSTC66	6x8	18" - (64)0.148" x 3/4"	9,800#	(12)1/2" x 6" 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.

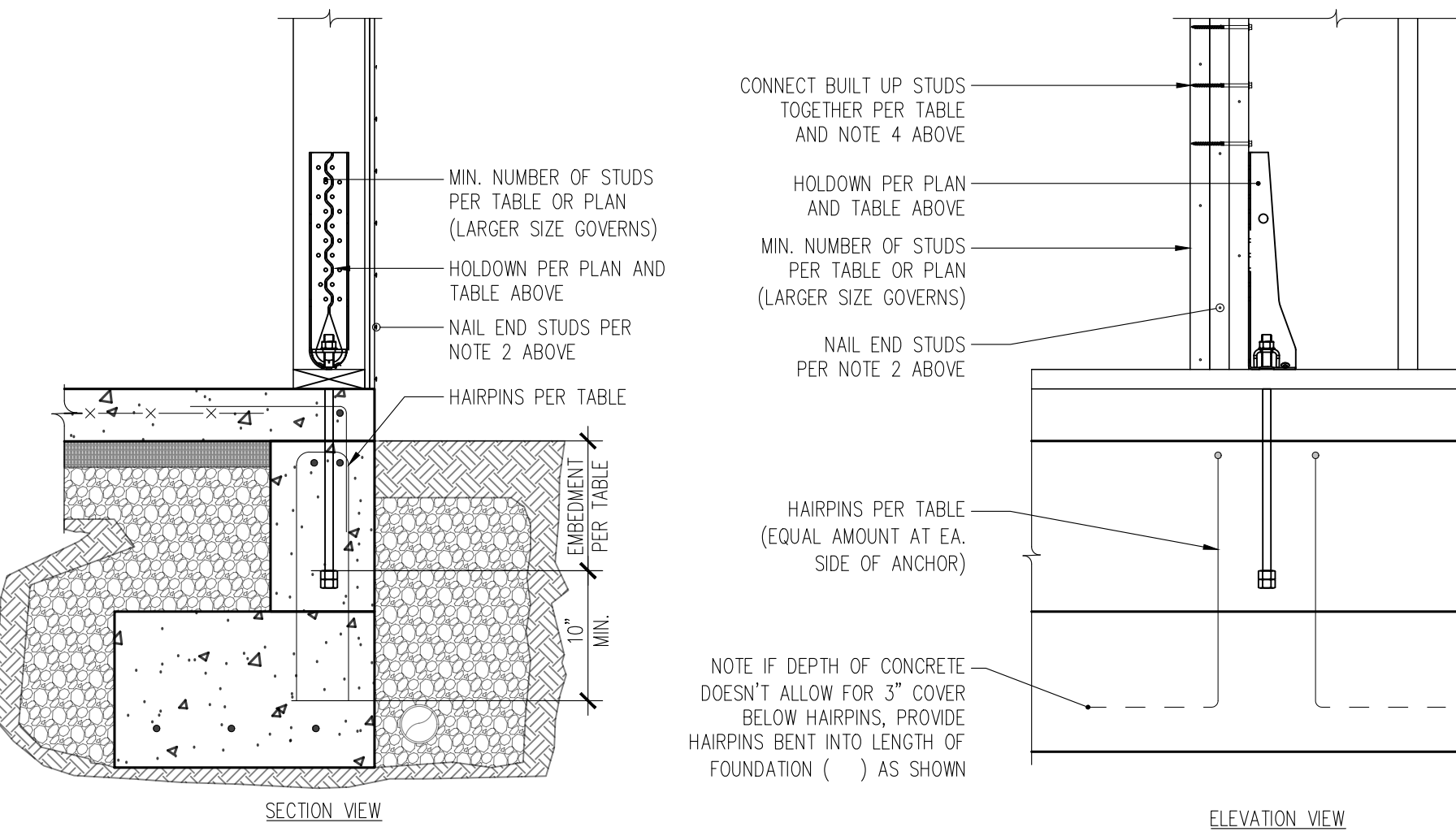
^ DENOTES TENSION TIE THAT OCCURS ATOP OF A FRAMING MEMBER BELOW. FOR:  
 HDU2^ - 3/8" LAG SCREW WITH 7" MINIMUM PENETRATION INTO BEAM - 6 TOTAL SDW EWP-PLY SCREWS, SEE 5/56.5  
 HDU4^ - 3/8" LAG SCREW WITH 10" MINIMUM PENETRATION INTO BEAM - 6 TOTAL SDW EWP-PLY SCREWS, SEE 5/56.5  
 HDU8^ - 7/8" LAG SCREW WITH 14" MINIMUM PENETRATION INTO BEAM - 14 TOTAL SDW EWP-PLY SCREWS, SEE 5/56.5  
 HDU11^ - 1" ROD w/ BEARING R 1/2"x5"x0"-5" AND RECESSED NUT & WASHER - 16 TOTAL SDW EWP-PLY SCREWS, SEE 5/56.5  
 HDU14^ - 1" ROD w/ BEARING R 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.



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
HOU2	(2)2x	3/8" ø x 10" - (2)#4 HAIRPIN	(6)1/2" ø x 2 1/2" SDS SCREWS	3,075#	10d @ 4" oc
HOU4	(3)2x	3/8" ø x 10" - (2)#4 HAIRPIN	(10)1/2" ø x 2 1/2" SDS SCREWS	4,565#	(9)1/2" ø x 4 1/2" SDS
HOU5	(3)2x	3/8" ø x 10" - (2)#4 HAIRPIN	(14)1/2" ø x 2 1/2" SDS SCREWS	5,645#	(10)1/2" ø x 4 1/2" SDS
HOU8	(4)2x	3/8" ø x 10" - (4)#4 HAIRPIN	(20)1/2" ø x 2 1/2" SDS SCREWS	7,870#	(15)1/2" ø x 6" SDS
HOU11	6x6	1" ø x 10" - (4)#4 HAIRPIN	(30)1/2" ø x 2 1/2" SDS SCREWS	11,175#	N/A
HOU14	6x6	1" ø x 10" - (6)#4 HAIRPIN	(36)1/2" ø x 2 1/2" SDS SCREWS	14,445#	N/A

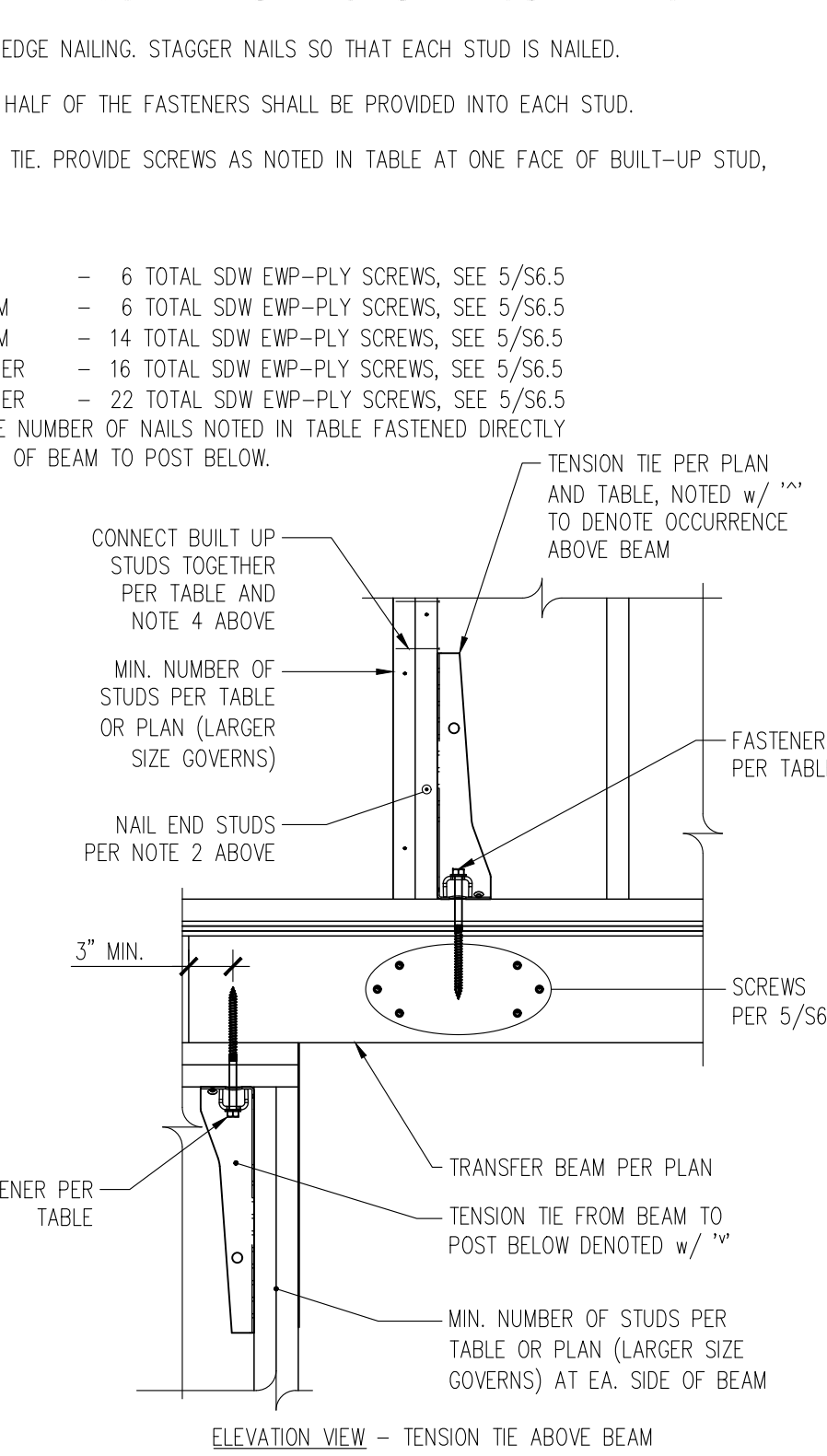
- TENSION TIE TYPES REFER TO SIMPSON STRONG-TIE CATALOG CALLOUTS.
- NAIL PLYWOOD SHEATHING TO STUDS RECEIVING HOLD-DOWN WITH SCHEDULED PANEL EDGE NAILING. STAGGER NAILS SO THAT EACH STUD IS NAILED.
- ANCHORS SHALL BE HEAVY HEX HEAD WITH DOUBLE NUT CAST INTO CONCRETE. ASTM F 1554 Gr. 36 FOR 3/8" ANCHOR, 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.



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

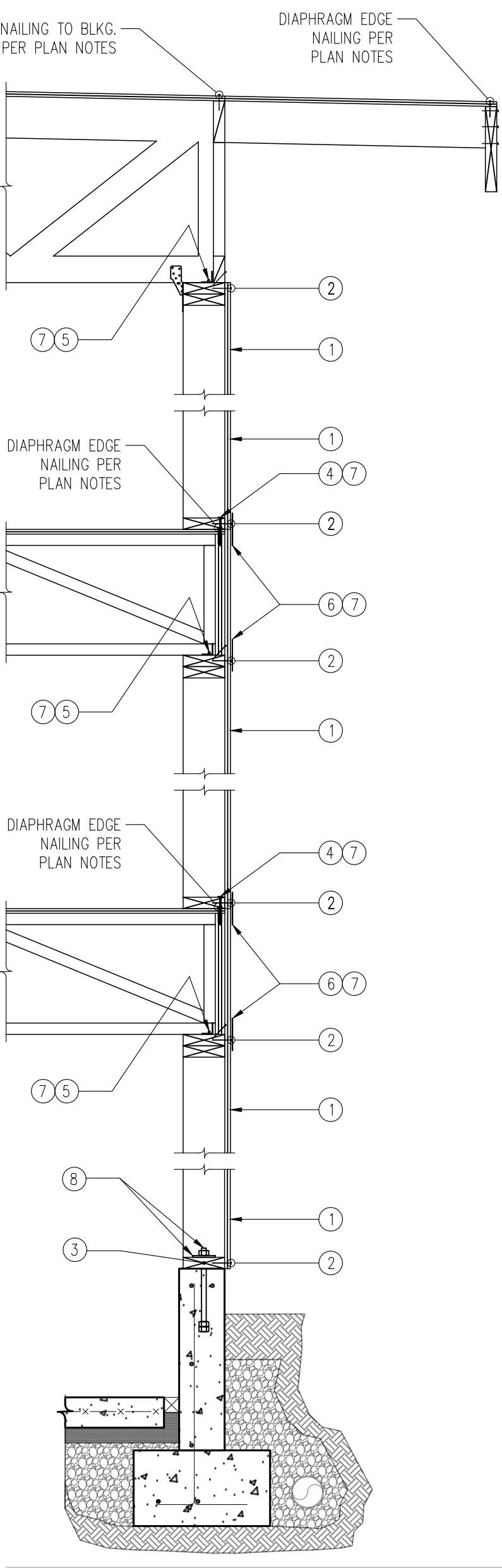
TENSION TIE ABOVE BEAM

TIE MARK	Min. # of studs	FASTENERS	ASD CAPACITY	BUILT-UP STUD FACE NAILS or SCREWS
HOU2^	(2)2x	(6)1/2" ø x 2 1/2" SDS	2,750#	10d @ 4" oc
HOU4^	(3)2x	(10)1/2" ø x 2 1/2" SDS	3,750#	(10)1/2" ø x 4 1/2" SDS
HOU8^	(4)2x	(20)1/2" ø x 2 1/2" SDS	7,750#	(15)1/2" ø x 6" SDS
HOU11^	6x6	(30)1/2" ø x 2 1/2" SDS	9,800#	N/A
HOU14^	6x6	(36)1/2" ø 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)1/2" ø x 4 1/2" SDS
(2)MSTC52^	(4)2x	(44)0.148" x 3/4"	7,750#	(14)1/2" ø x 6" SDS



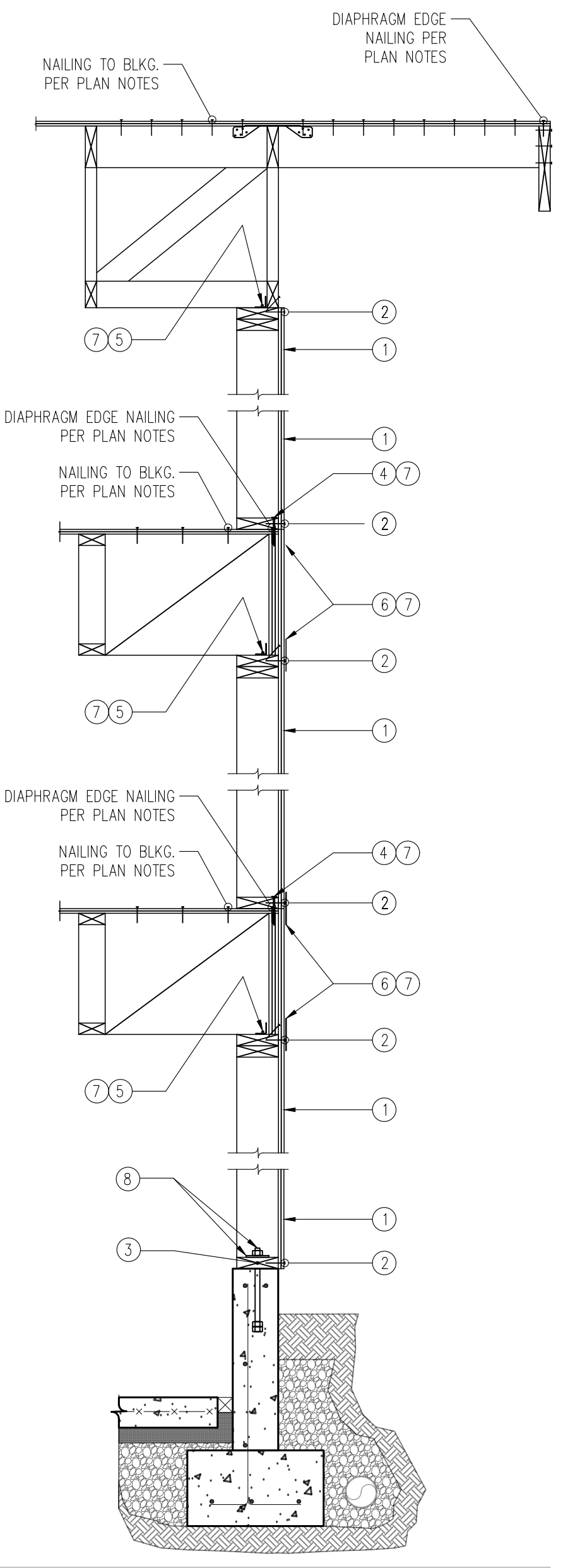
SHEARWALL PANEL TYPE	① SHEATHING THICKNESS	② 0.148" x 2 1/2" PANEL NAILING	③ STUD/BLKG. AT ABUTTING PANEL EDGES & SILL PLATE THICKNESS	⑦ CONN. OF BLKG. OR FRAMING TO TOP PLATE, AND SOLE PLATE TO SILL PLATE			⑧ ANCHOR BOLTS TO CONC.	⑨ ASD CAPACITY, PLF
				④ 1/2" ø x 3 1/2" SDS SCREWS	⑤ A35 CLIPS	⑥ LTP4 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 3/8" 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 BRACKS AND PENETRATIONS EXCEEDING THE "NO REINFORCING" HOLE SIZE PER 2/56.1.

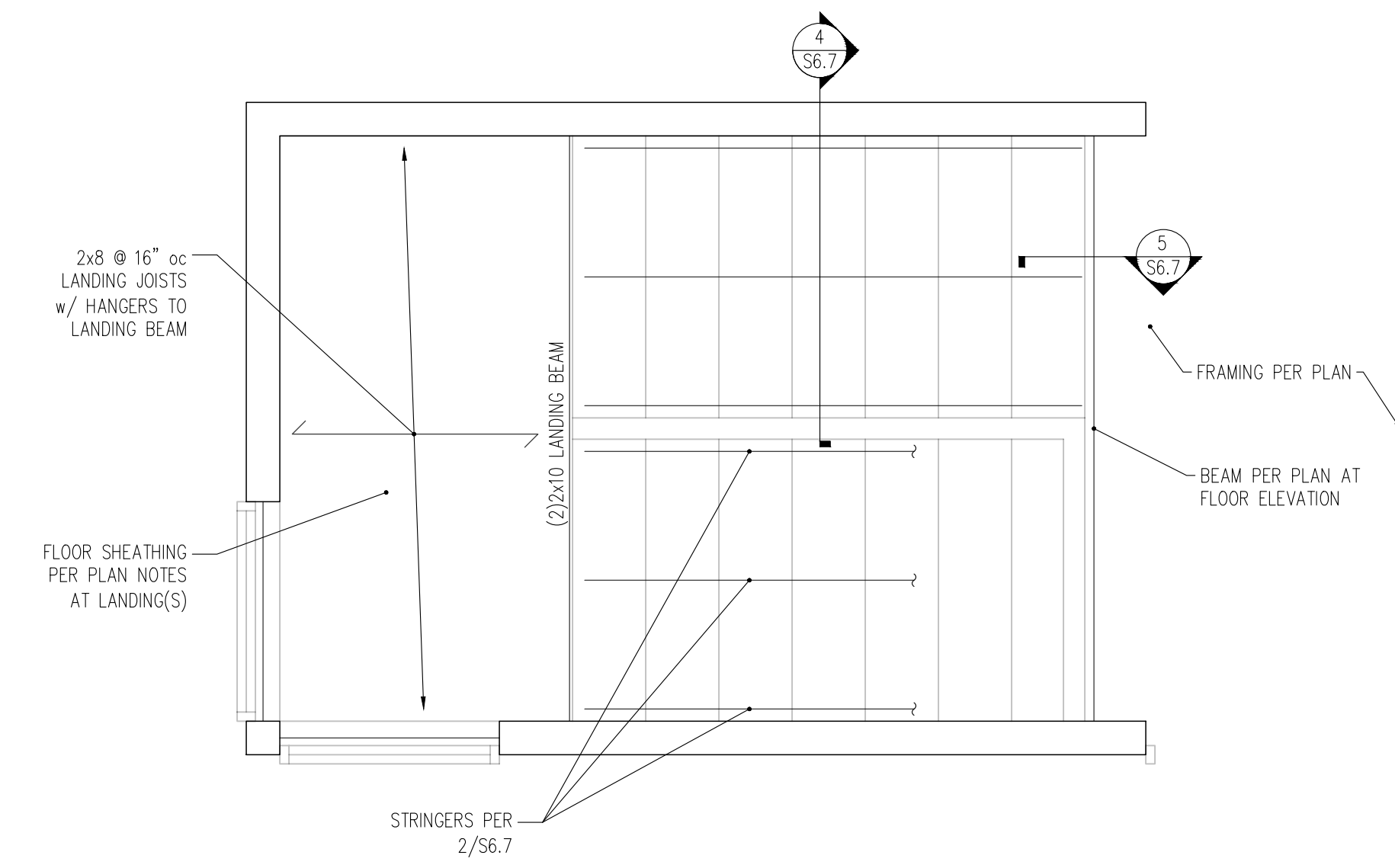


SHEARWALL SECTION AT PERPENDICULAR FRAMING

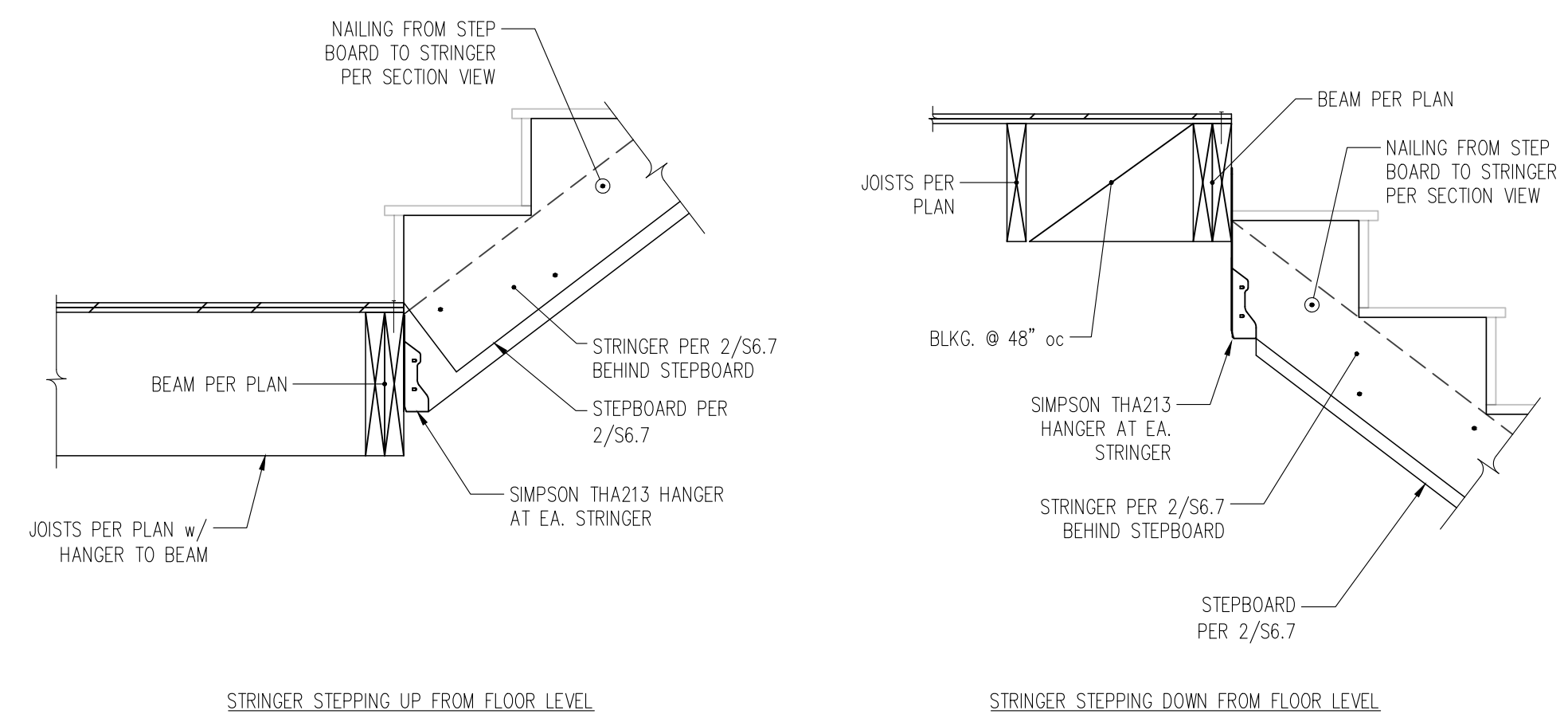
1 SHEARWALL SECTION AND SCHEDULE  
S6.6 1" = 1'-0"



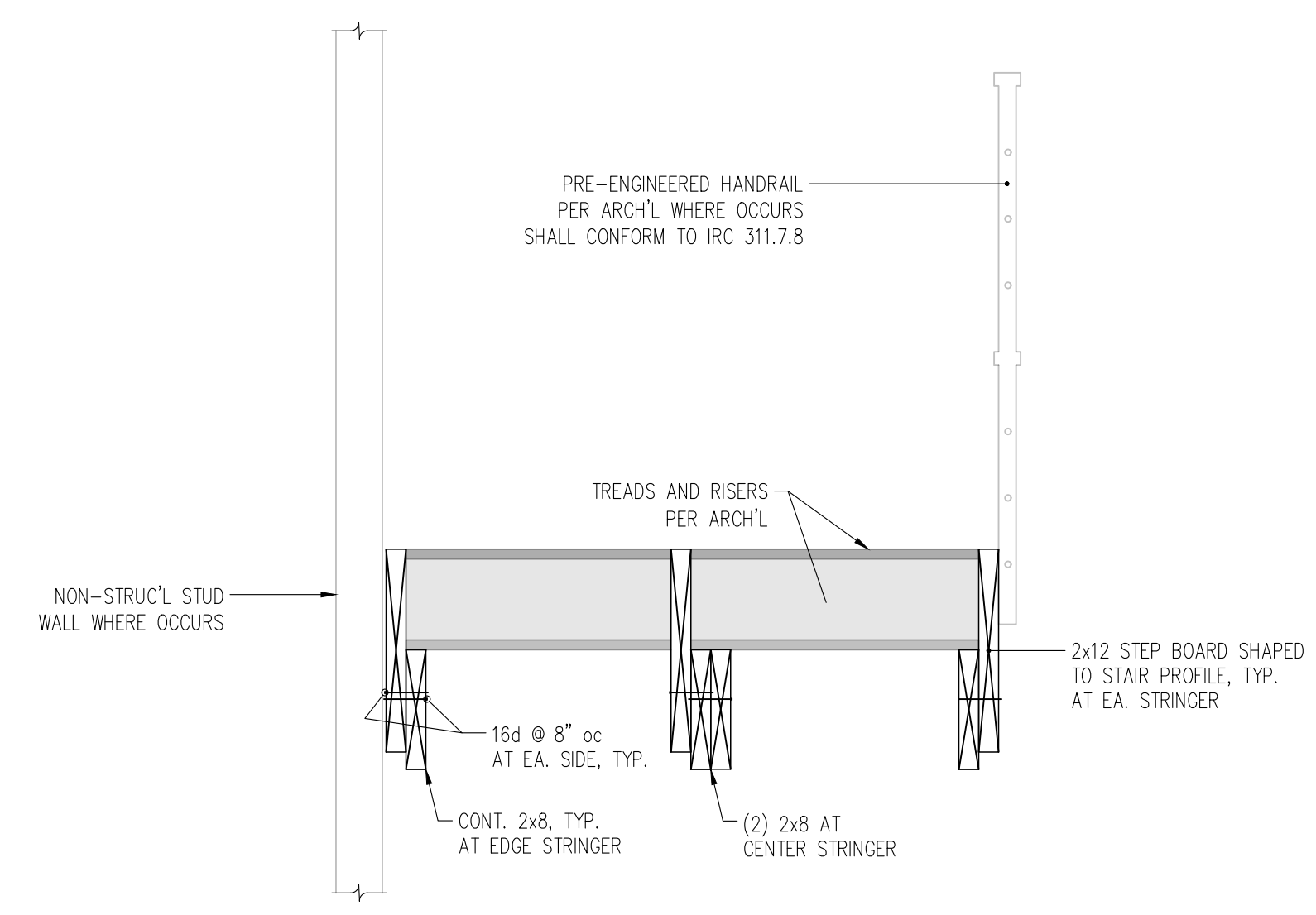
SHEARWALL SECTION AT PARALLEL FRAMING



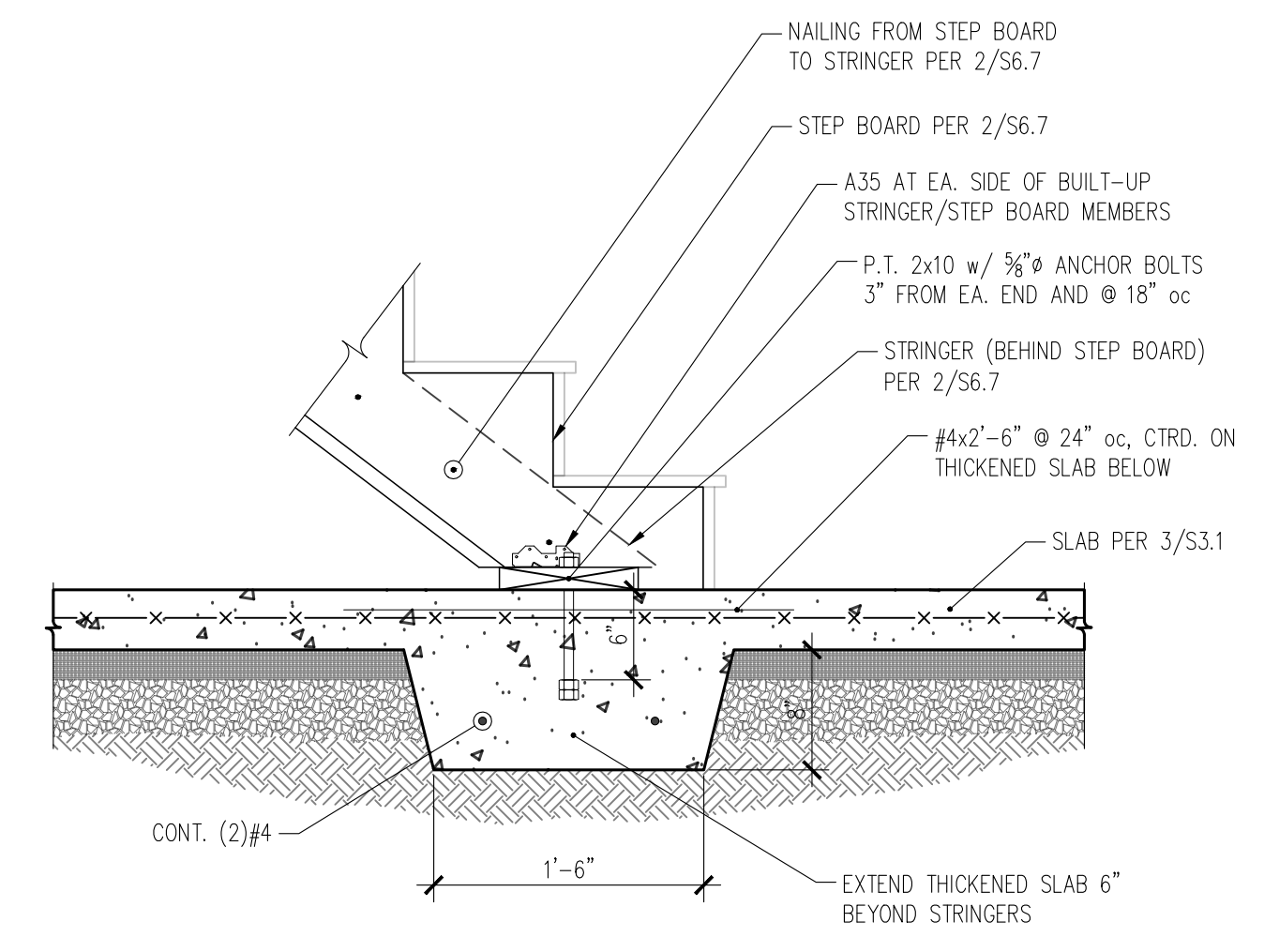
3 TYPICAL STAIR FRAMING/LANDING PLAN VIEW  
1" = 1'-0"



5 SECTION THROUGH ROOF BREAK AT INTERIOR WALL  
1" = 1'-0"



2 SECTION THROUGH STAIR FRAMING  
1" = 1'-0"



1 SECTION THROUGH THICKENED SLAB-ON-GRADE AT STAIR STRINGERS  
1" = 1'-0"

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Typical Stair Framing Details

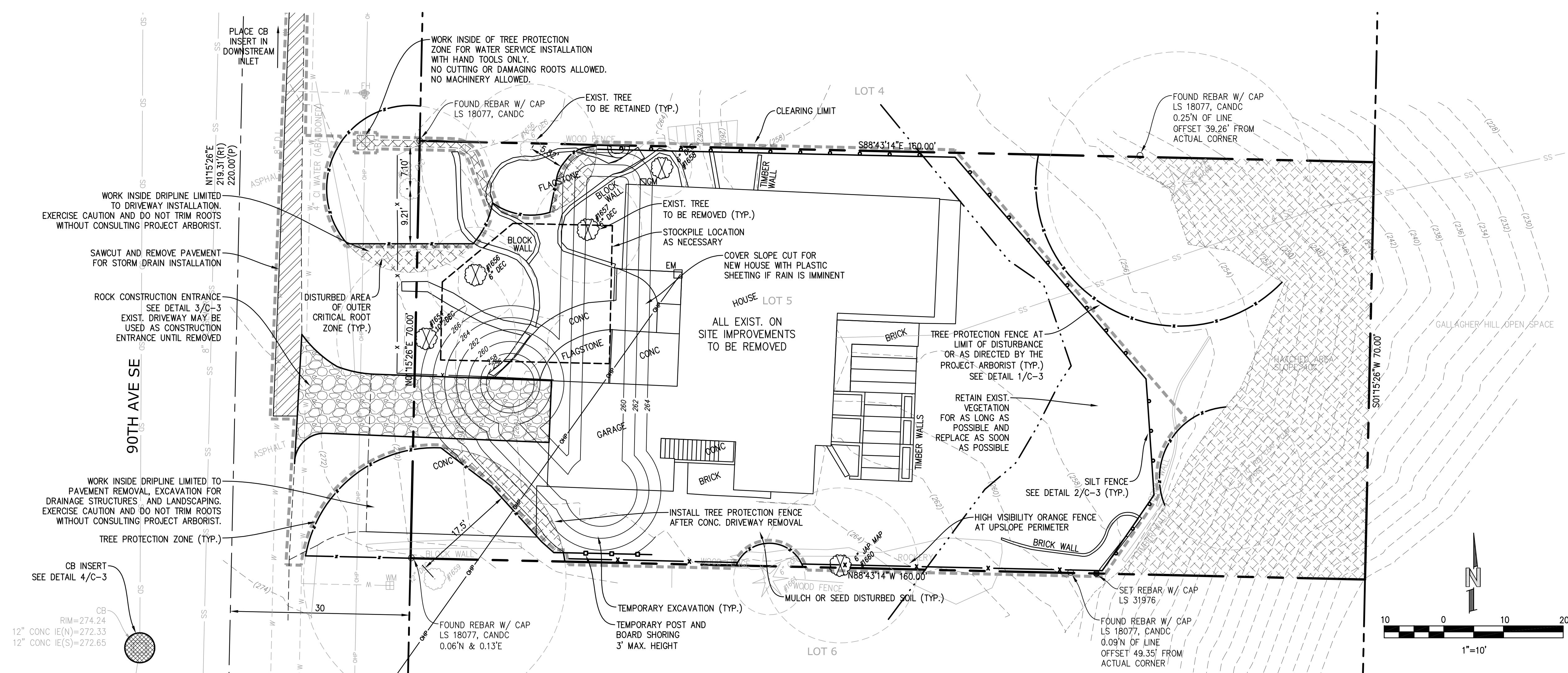
DRAWN BY

JDA

DATE

10.18.22

S6.7



**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**

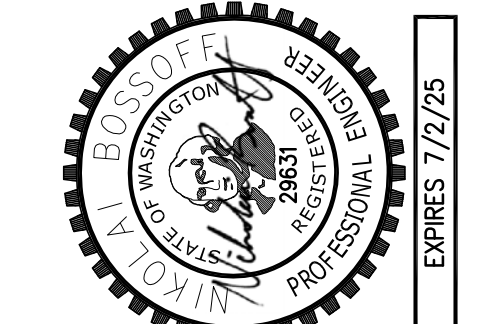
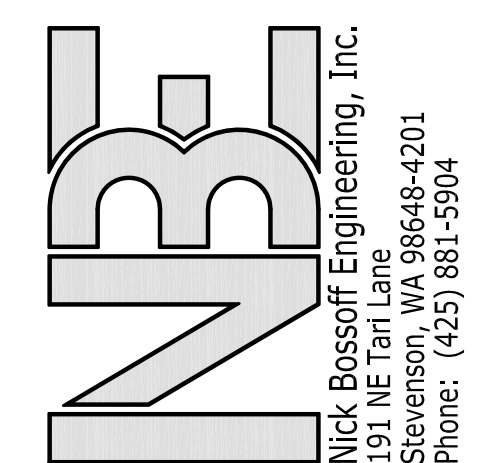
ELEVATIONS SHOWN ON THIS DRAWING ARE BASE ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88) AND WERE ESTABLISHED USING RTK GPS.

**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 DOES INSPECTOR. THE DOES 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 COMMERCIALY 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.



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

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 3632 90TH AVE SE

MERCER ISLAND

T.E.S.C.  
 PLAN

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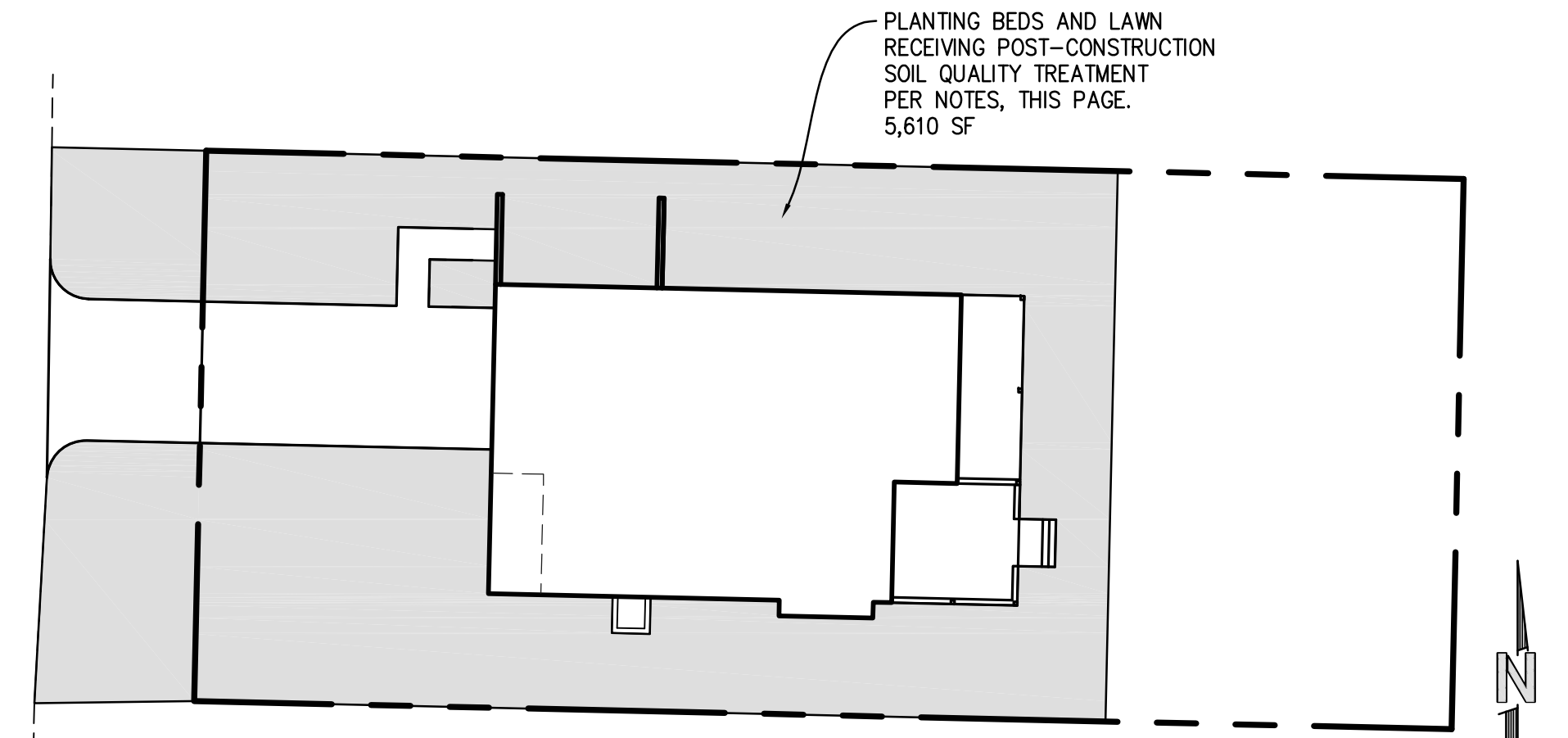
POST-CONSTRUCTION SOIL QUALITY AND DEPTH NOTES

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.

- 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.
  - 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 NEEDED 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.
- 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:

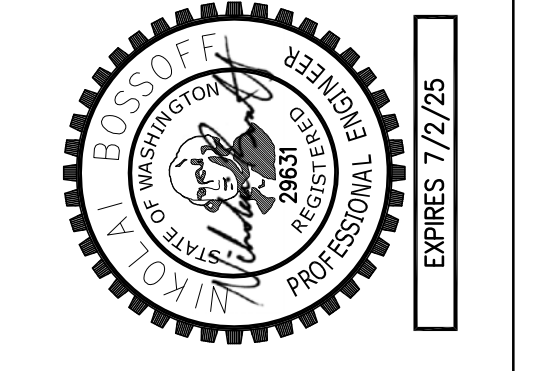
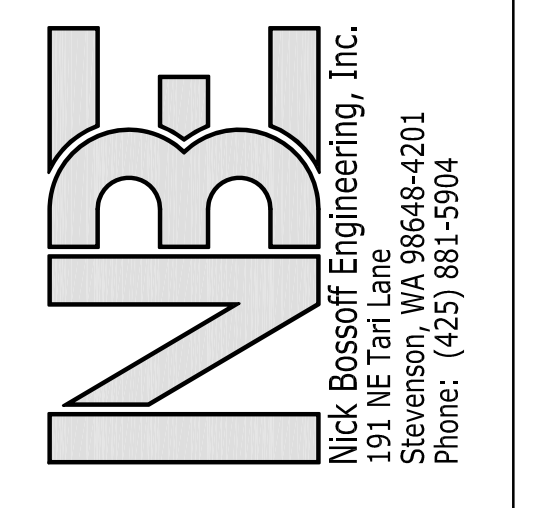
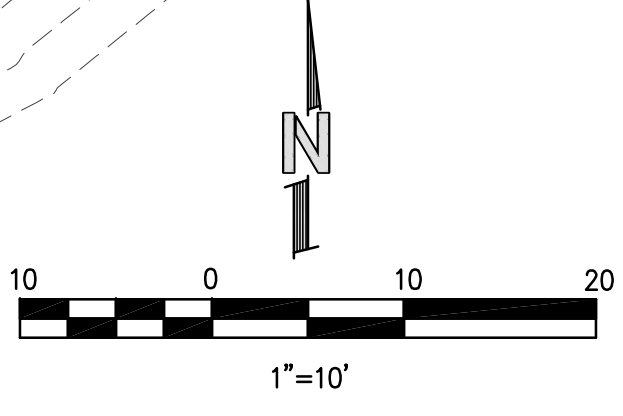
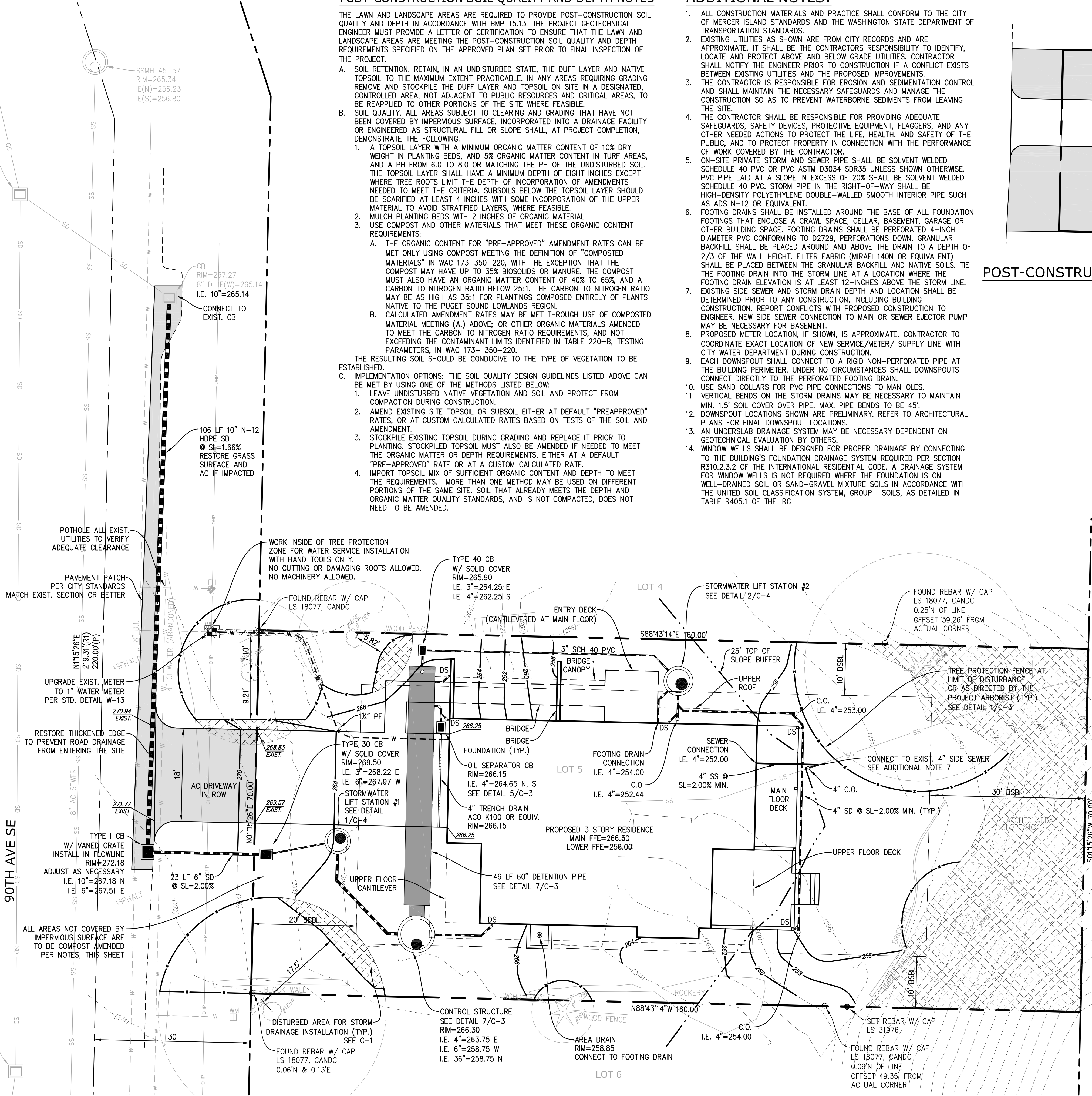
- ALL CONSTRUCTION MATERIALS AND PRACTICE SHALL CONFORM TO THE CITY OF MERCER ISLAND STANDARDS AND THE WASHINGTON STATE DEPARTMENT OF TRANSPORTATION STANDARDS.
- EXISTING UTILITIES AS SHOWN ARE FROM CITY RECORDS AND ARE APPROXIMATE. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO IDENTIFY, LOCATE AND PROTECT 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 (MIRAFI 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 1 SOILS, AS DETAILED IN TABLE R405.1 OF THE IRC



POST-CONSTRUCTION SOIL QUALITY

SCALE: 1"=20'

1



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JOB NUMBER: GUDI-2201pin.dwg  
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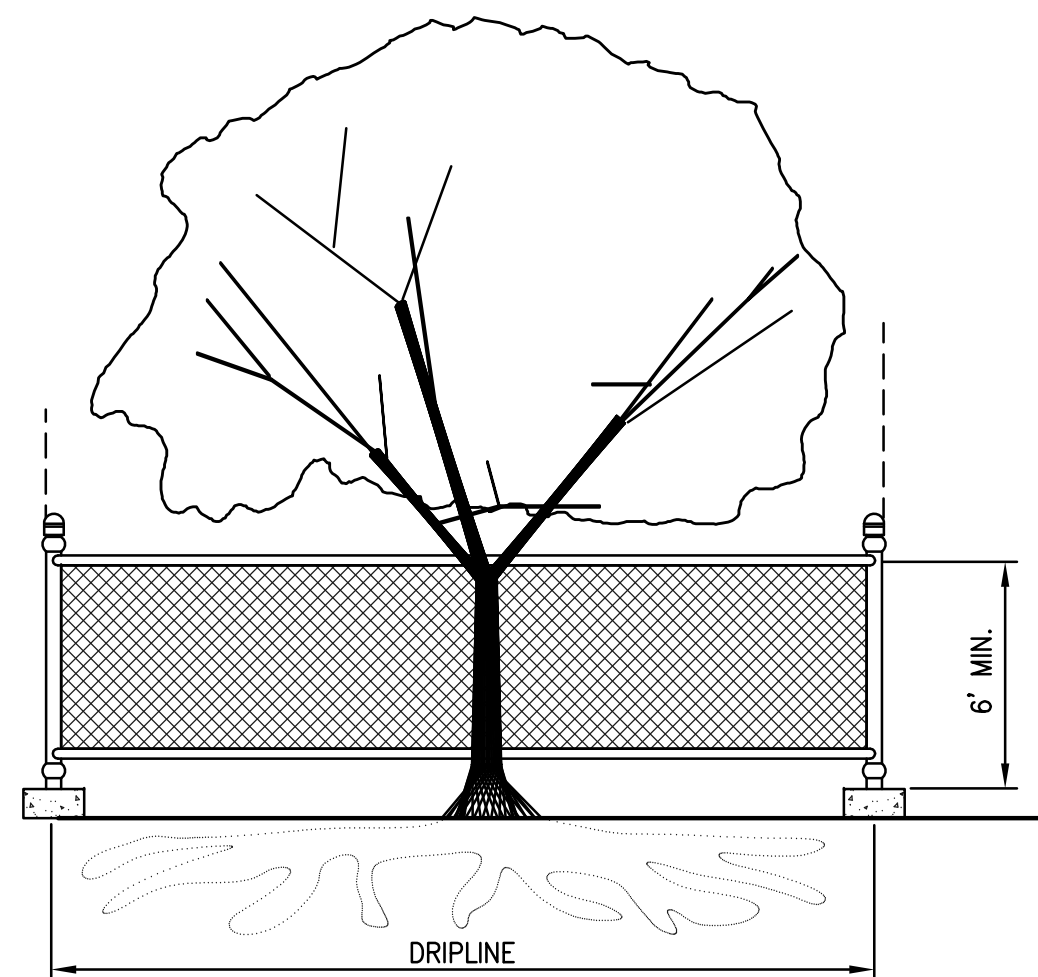
WASHINGTON

**MITHILA**  
3632 90TH AVE SE

MERCER ISLAND

TITLE: DRAINAGE PLAN

SHEET: C-2



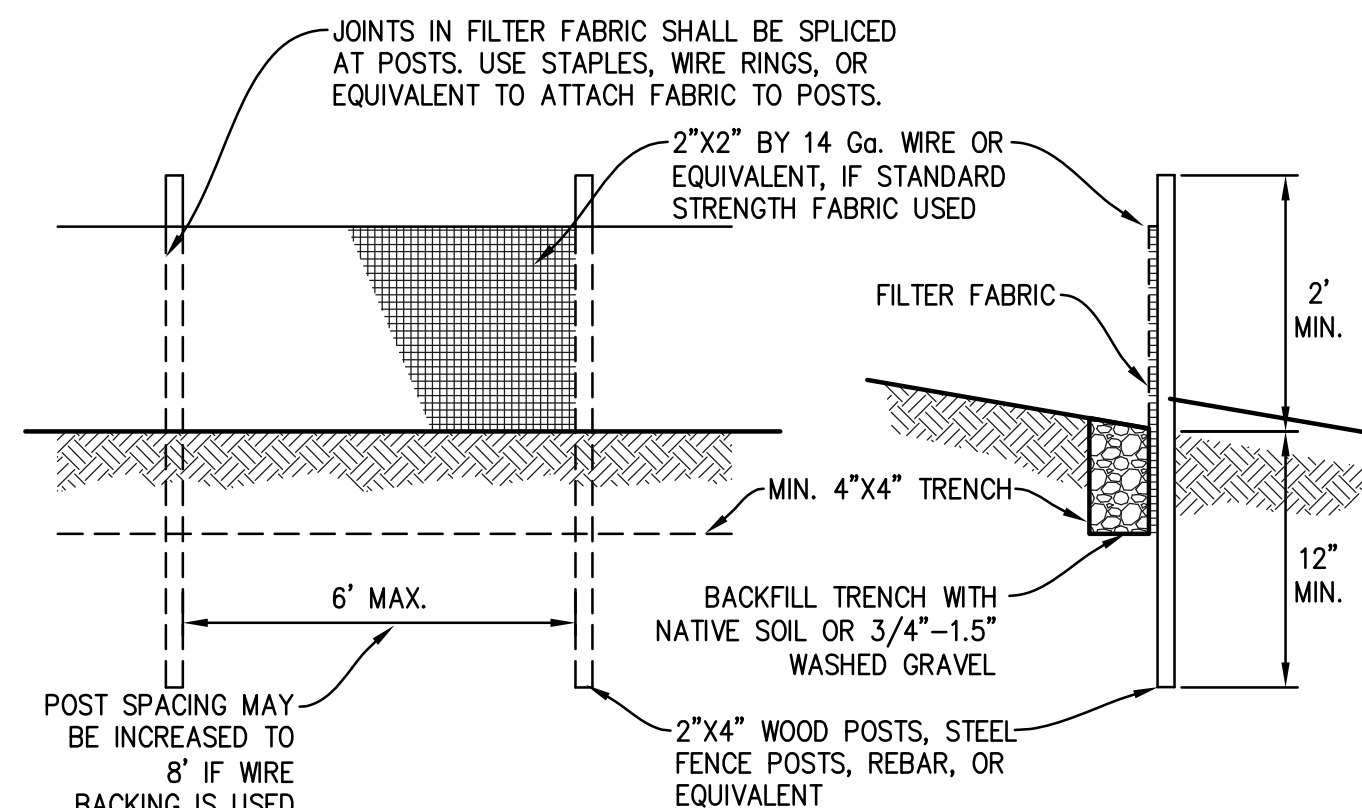
**TREE PROTECTION DURING CONSTRUCTION**

- 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



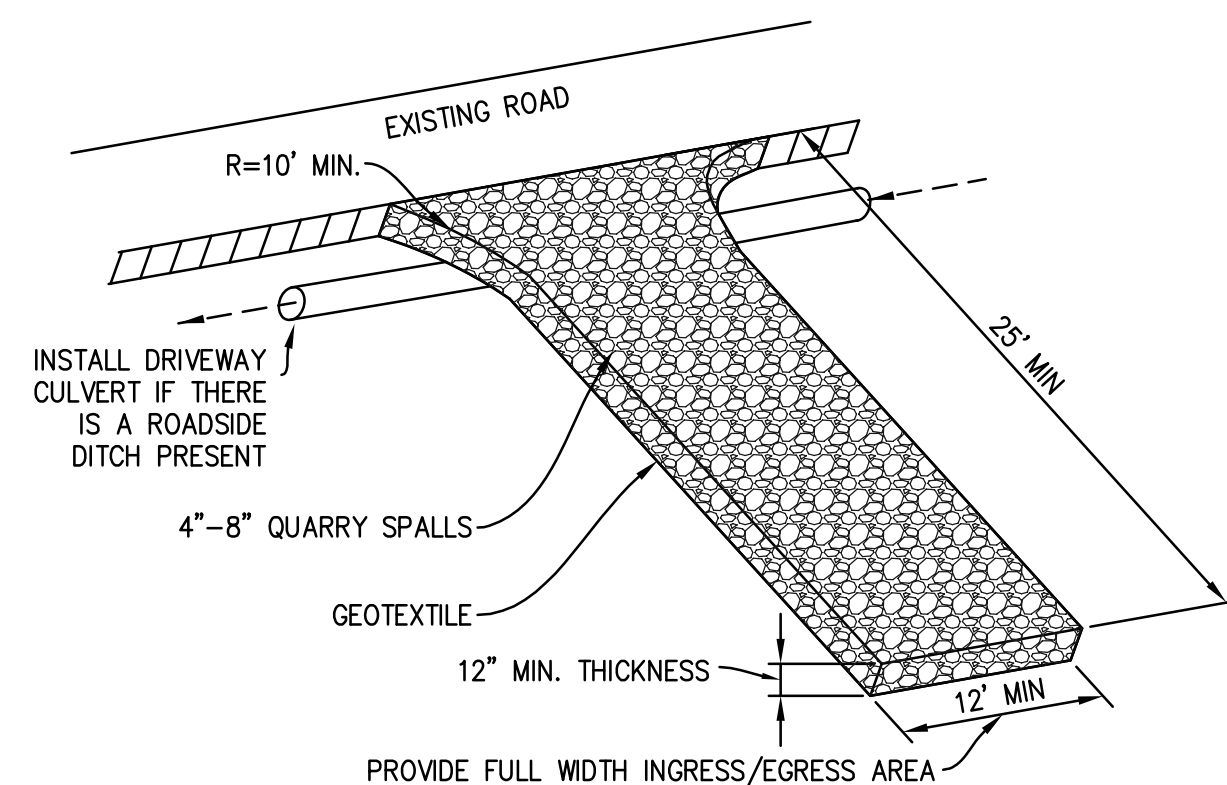
**MAINTENANCE STANDARDS**

- 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



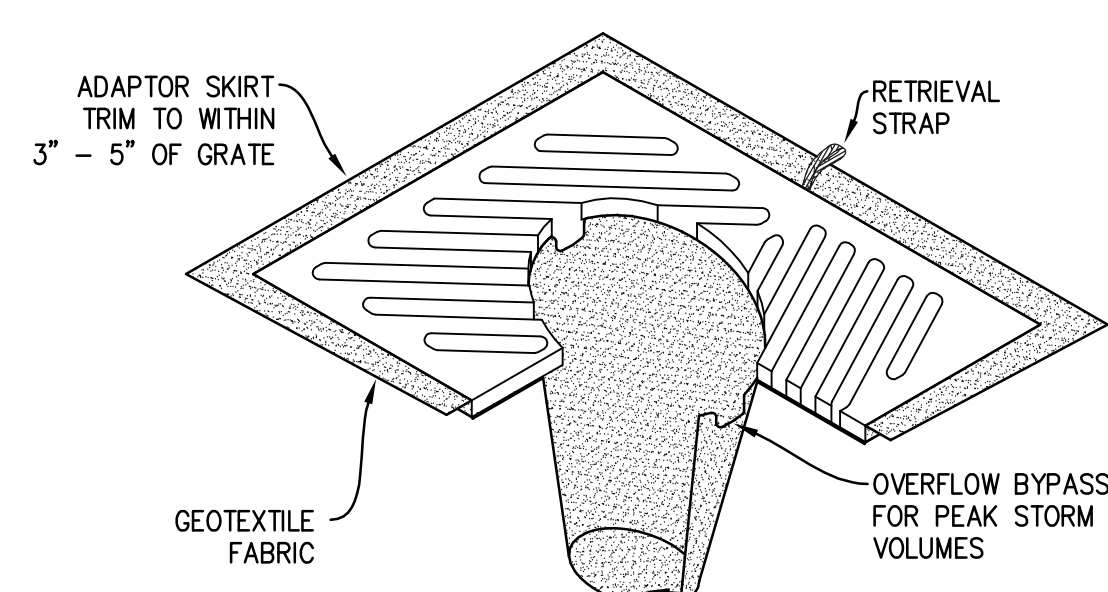
**MAINTENANCE STANDARDS**

- 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



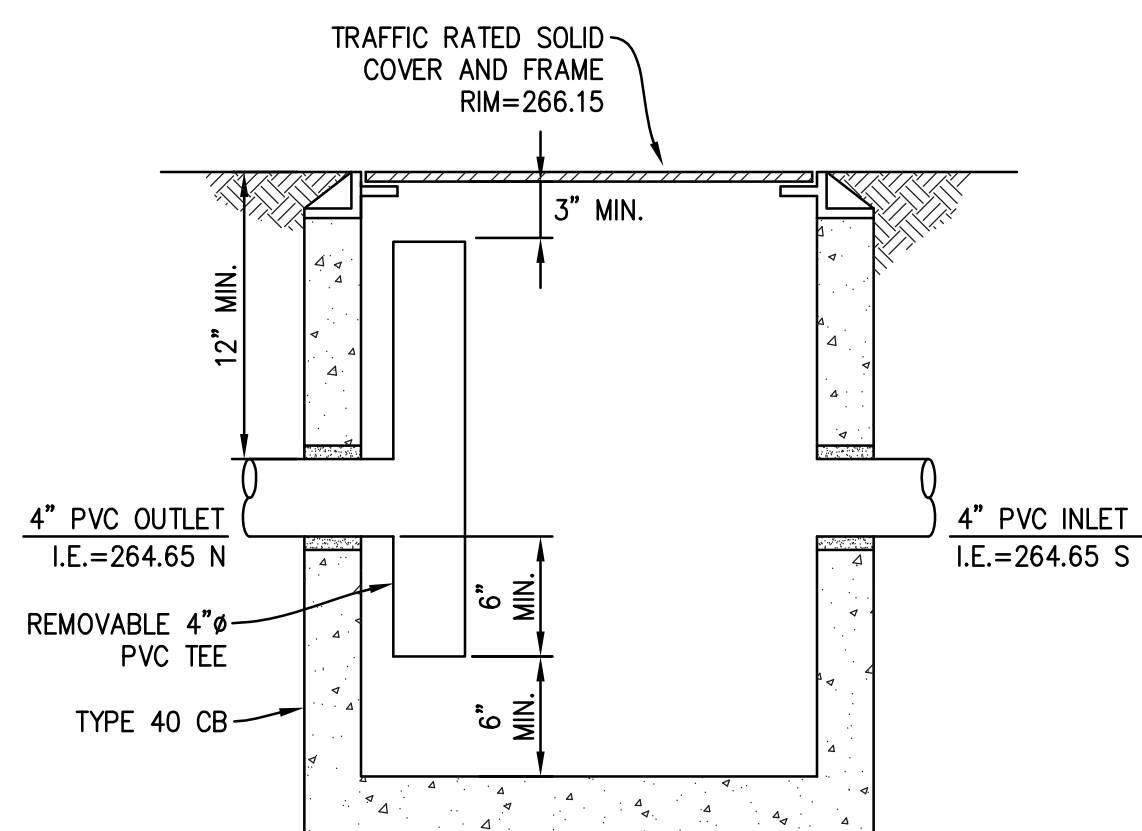
**NOTES**

- 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		
CUDI-2201		
JOB NUMBER		
GUDI-2201.pln.dwg		
FILE NAME:		

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

**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 50:
  - 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.
- PROVIDE AT LEAST ONE 3 X 0.080 GAUGE SUPPORT BRACKET ANCHORED TO CONCRETE WALL WITH 5/8 IN. STAINLESS STEEL EXPANSION BOLTS OR EMBEDDED SUPPORTS 2 IN. INTO CATCH BASIN WALL (MAXIMUM 3'-0" VERTICAL SPACING).
- THE SHEAR GATE SHALL BE MADE OF ALUMINUM ALLOY IN ACCORDANCE WITH ASTM B 209 AND ASTM B 275, DESIGNATION Z5304, OR CAST IRON IN ACCORDANCE WITH ASTM A 48, CLASS 3002. THE LIFT HANDLE SHALL BE MADE OF A SIMILAR METAL TO THE GATE (TO PREVENT GALVANIC CORROSION). IT MAY BE OF SOLID ROD OR HOLLOW TUBING, WITH ADJUSTABLE HOOK AS REQUIRED. A NEOPRENE RUBBER GASKET IS REQUIRED BETWEEN THE RISER MOUNTING FLANGE AND THE GATE FLANGE. INSTALL THE GATE SO THAT THE LEVEL-LINE MARK IS LEVEL WHEN THE GATE IS CLOSED. THE MATING SURFACES OF THE LID AND THE BODY SHALL BE MACHINED FOR PROPER FIT. ALL SHEAR GATE BOLTS SHALL BE STAINLESS STEEL.
- THE UPPER CATCH BASIN IS REQUIRED IF THE LENGTH OF THE DETENTION PIPE IS GREATER THAN 50 FT.

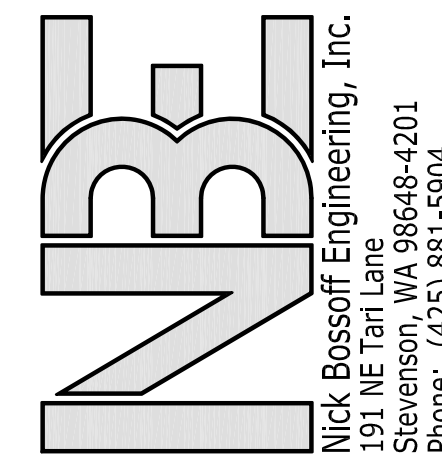
**ON-SITE DETENTION SYSTEM NOTES:**

- 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



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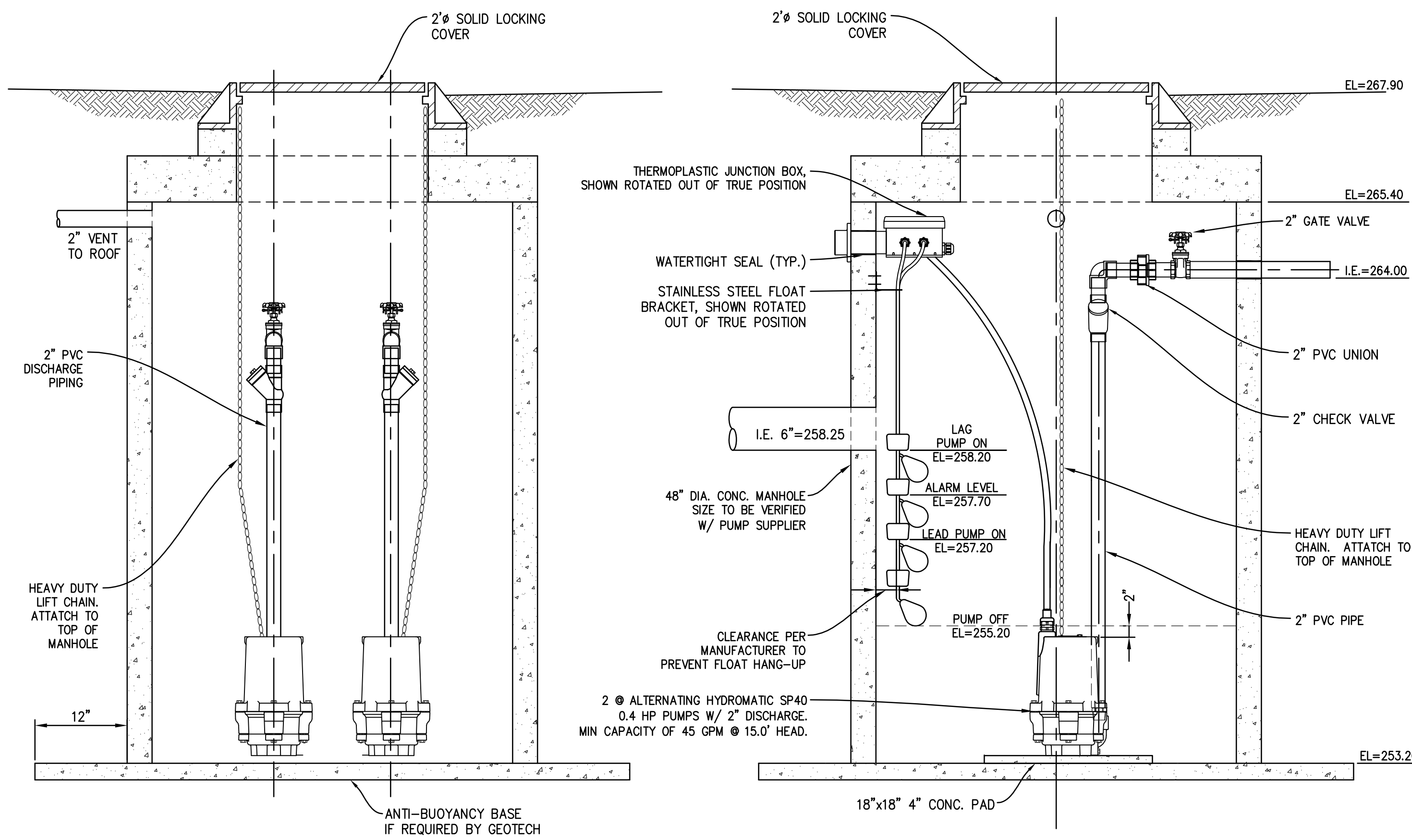
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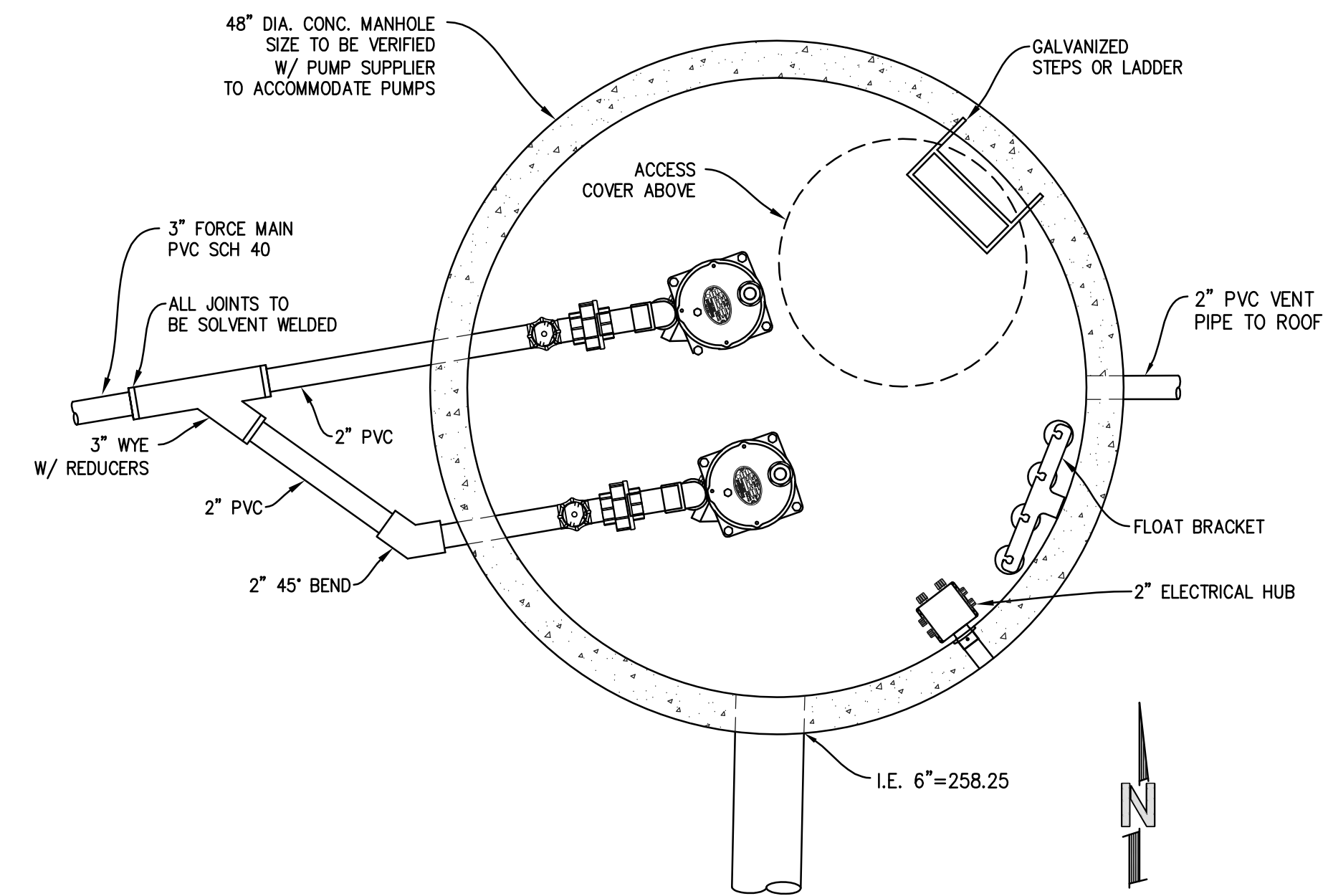
MERCER ISLAND

TITLE:  
DETAILS

SHEET:  
C-3



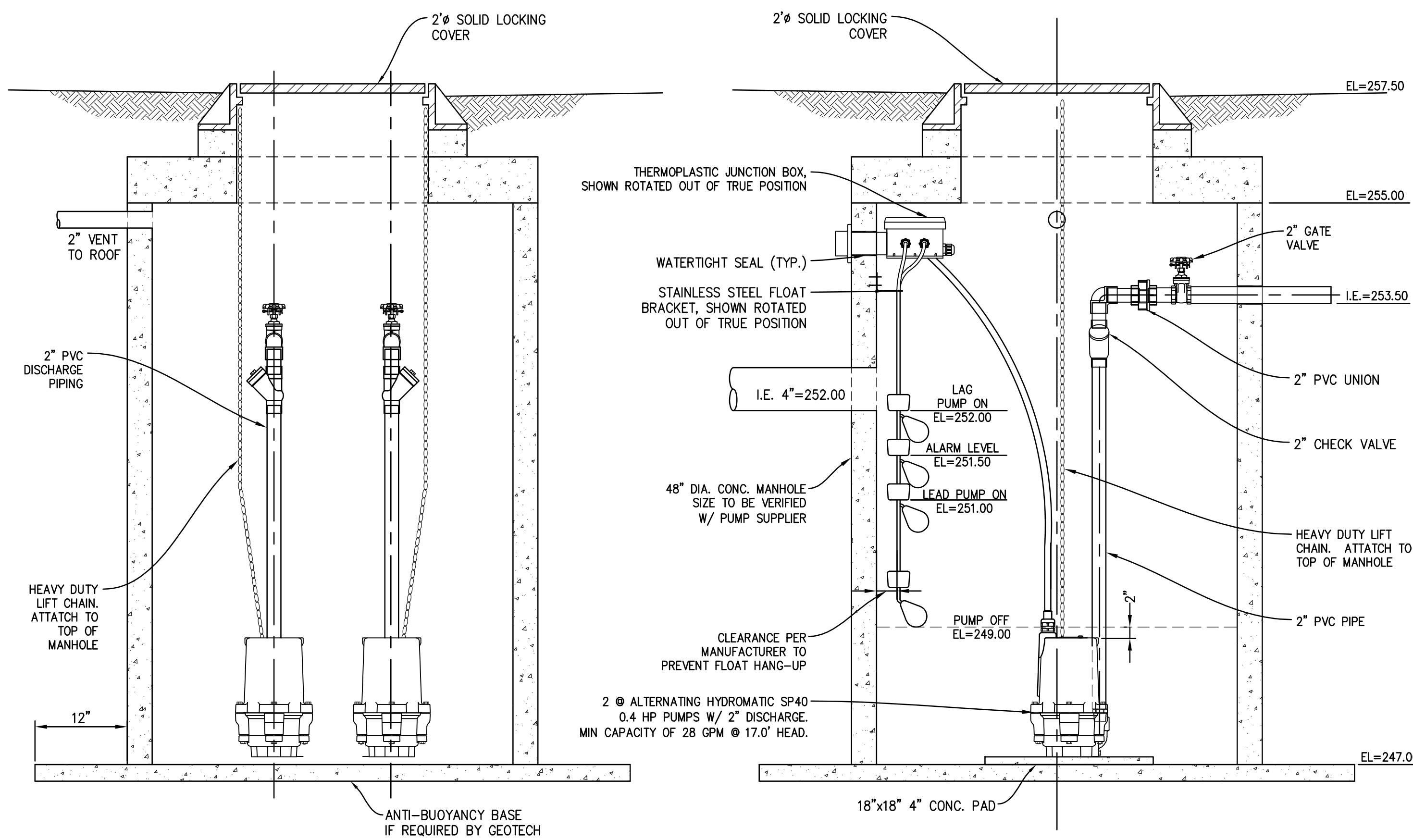
STORMWATER LIFT STATION #1



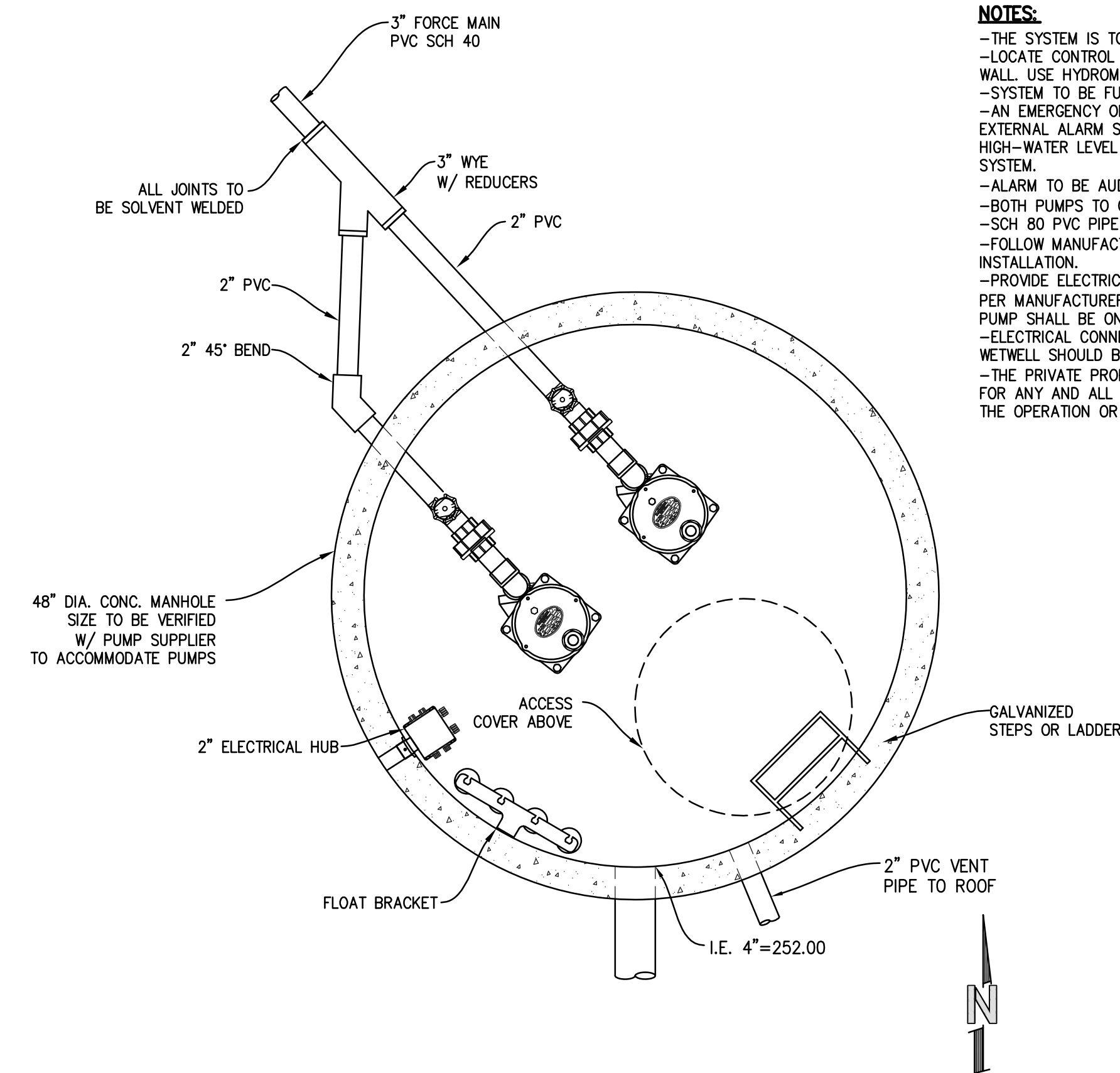
**NOTES:**  
 -THE SYSTEM IS TO BE AN ALTERNATING DUPLEX SYSTEM.  
 -LOCATE CONTROL PANEL AND ALARM ON EXTERIOR BUILDING WALL. USE HYDRAMATIC PANEL OR APPROVED EQUIVALENT.  
 -SYSTEM TO BE FULLY AUTOMATIC WITH MANUAL OVERRIDE.  
 -AN EMERGENCY ON-SITE, BACK-UP POWER SUPPLY AND AN EXTERNAL ALARM SYSTEM 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.

**HORIZONTAL DATUM & 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.

**PROJECT INFORMATION**

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

PROPERTY OWNER: ELIZABETH TUBBS  
3632 90TH AVE SE  
MERCER ISLAND, WA 98040

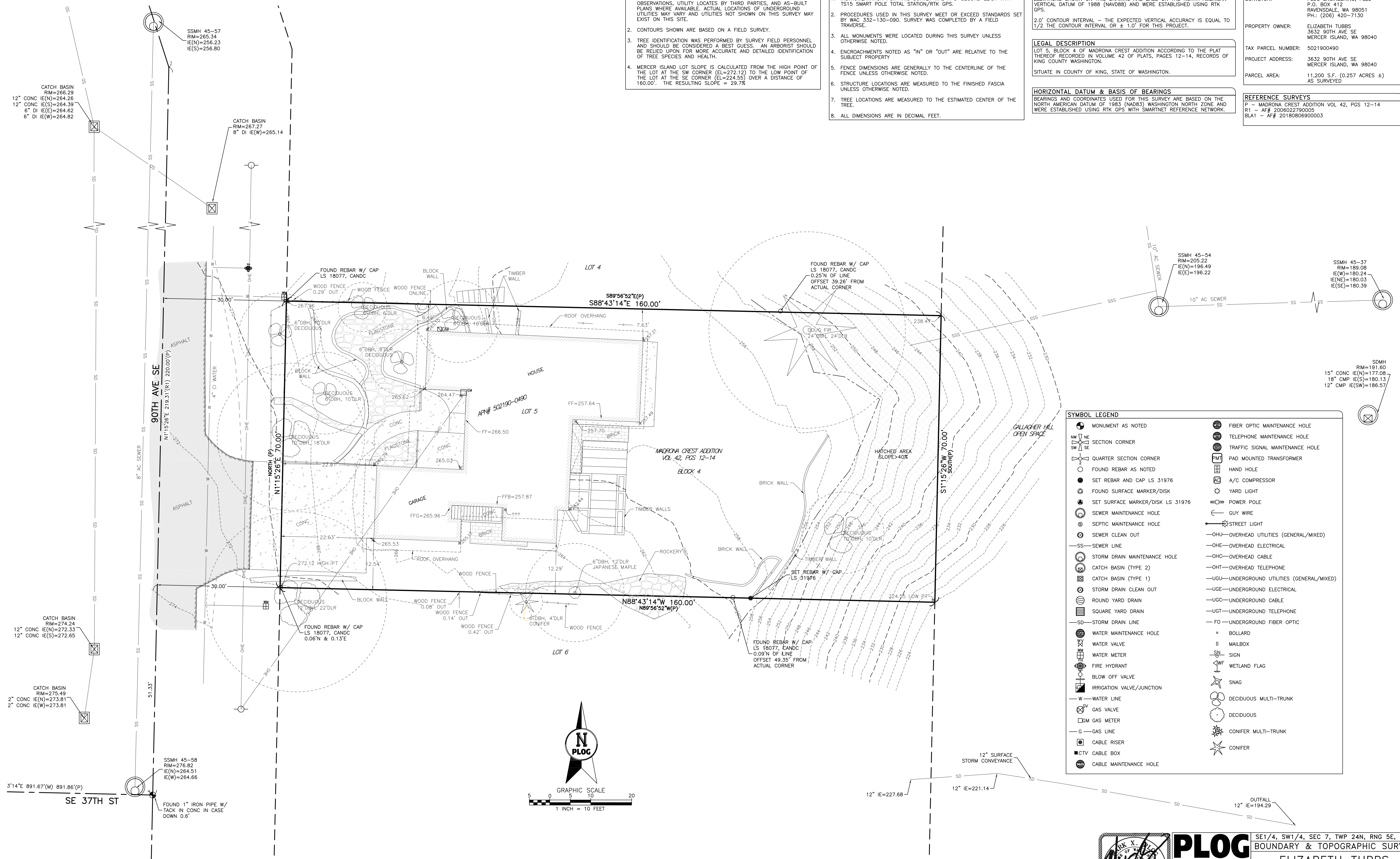
TAX PARCEL NUMBER: 5021900490

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

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

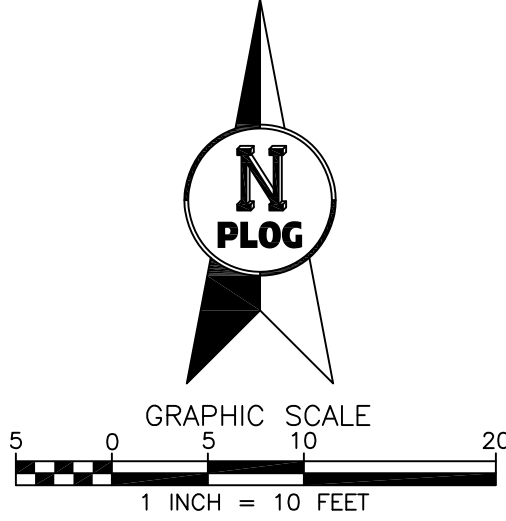
**REFERENCE SURVEYS**

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	



**PLOG ENGINEERING**  
Surveyors & Civil Engineers

31976  
REGISTERED  
PROFESSIONAL LAND SURVEYOR  
2021

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

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