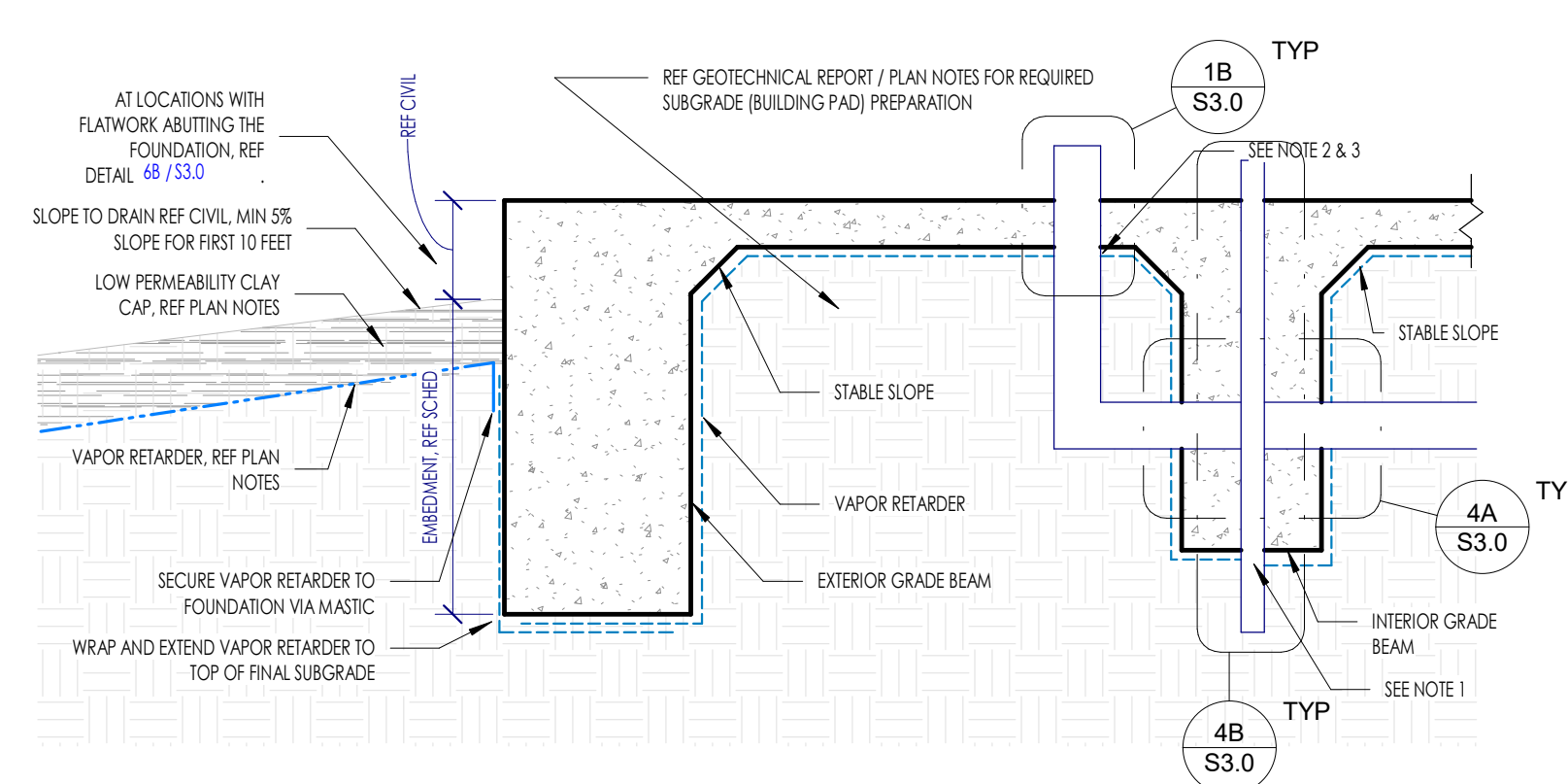
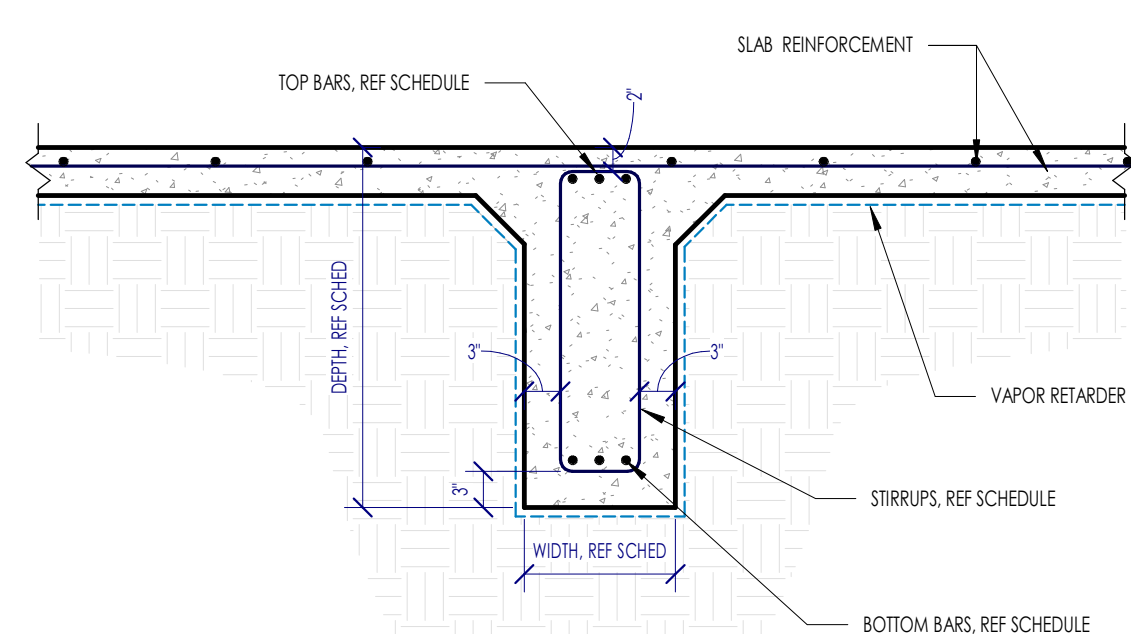


This project, like most OpeningDesign's projects, is open source. (Attribution-ShareAlike 4.0 International-CC BY-SA 4.0) - freely available to any party for future use, assuming the terms such as Attribution and ShareAlike are honored.

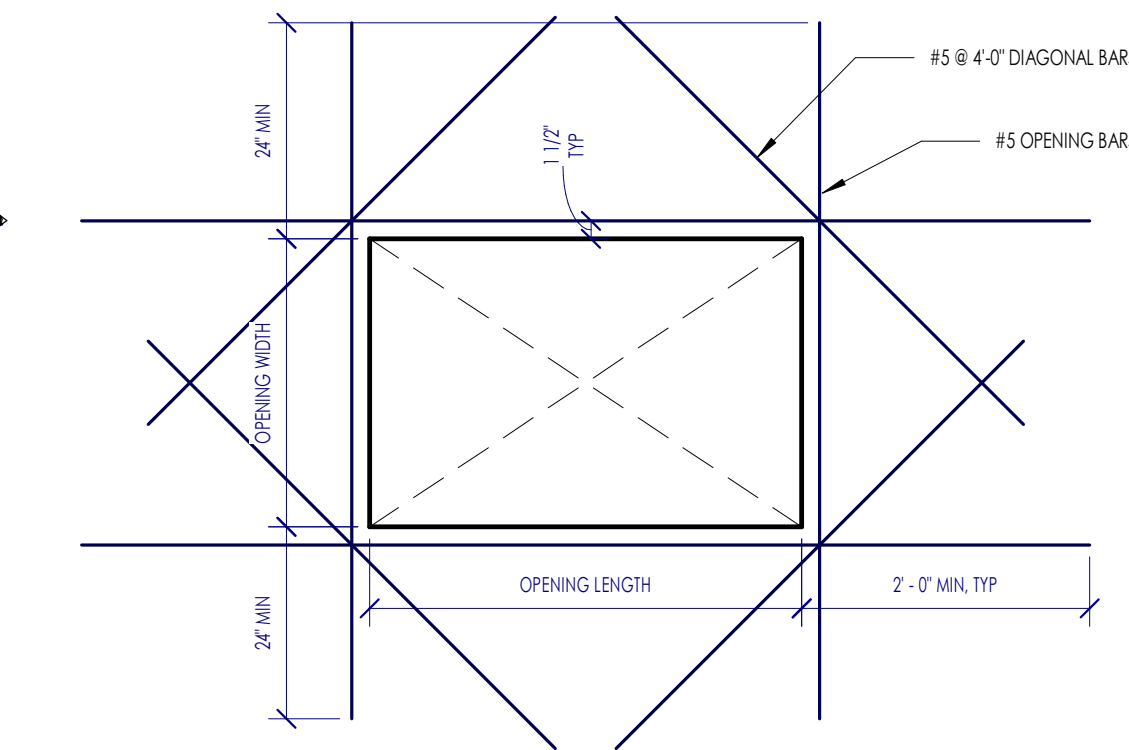


NOTES:
1. CUT AND/OR LAP THE VAPOR RETARDER AT THE BOTTOM OF EXTERIOR GRADE BEAMS. THE VAPOR RETARDER SHALL BE SECURED TO THE SIDES OF THE GRADE BEAM. IF LAPS ARE REQUIRED ON TOP OF THE SLAB, THEY MUST BE TAPED PER MFR RECOMMENDATIONS.
2. ALL PIPE, DUCTING, REAR, WIRE PENETRATIONS AND BLOCK OUTS SHOULD BE SEALED AFTER RECOMMENDED WRAP, TAPE AND/OR MASTIC.
3. IN THE EVENT THAT THE VAPOR RETARDER IS DAMAGED DURING OR AFTER INSTALLATION, REPAIRS MUST BE MADE. FOR HOLE, CUT, OR CRACKS OF VAPOR RETARDER TO A SIZE AND SHAPE THAT COVERS ANY DAMAGE BY A MINIMUM OVERLAP OF 6" IN ALL DIRECTIONS. CLEAN ALL ADHESION AREAS OF DUST, OIL, MOISTURE, AND FROST. TAPE DOWN ALL EDGES USING MFR RECOMMENDED TAPE.

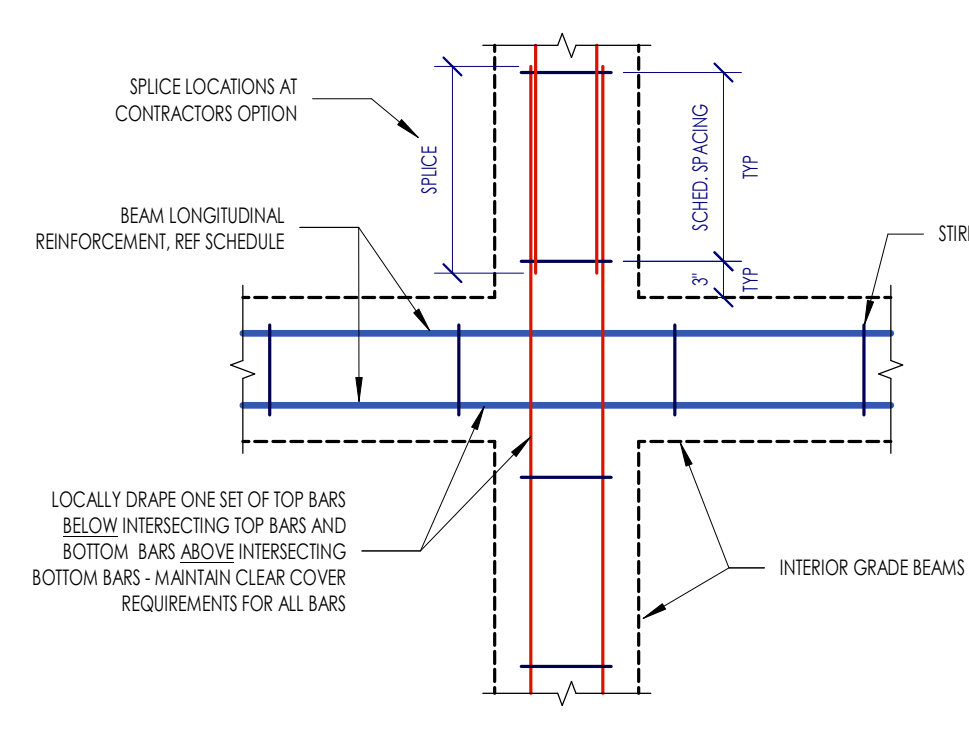
1B TYPICAL SUBGRADE AND VAPOR RETARDER PREPARATION
NOT TO SCALE



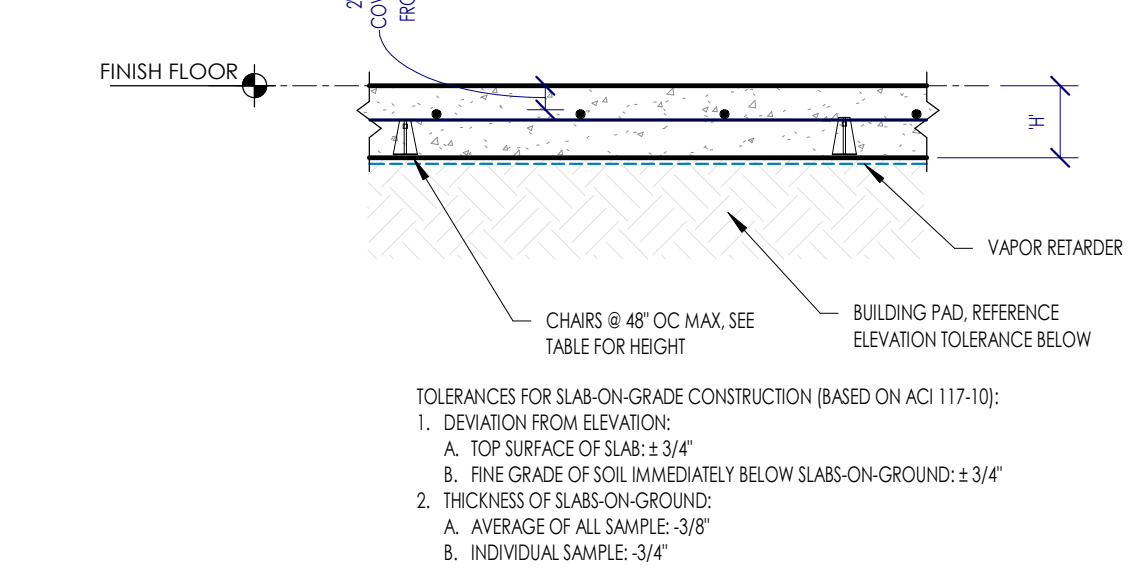
2D TYPICAL INTERIOR GRADE BEAM
NOT TO SCALE



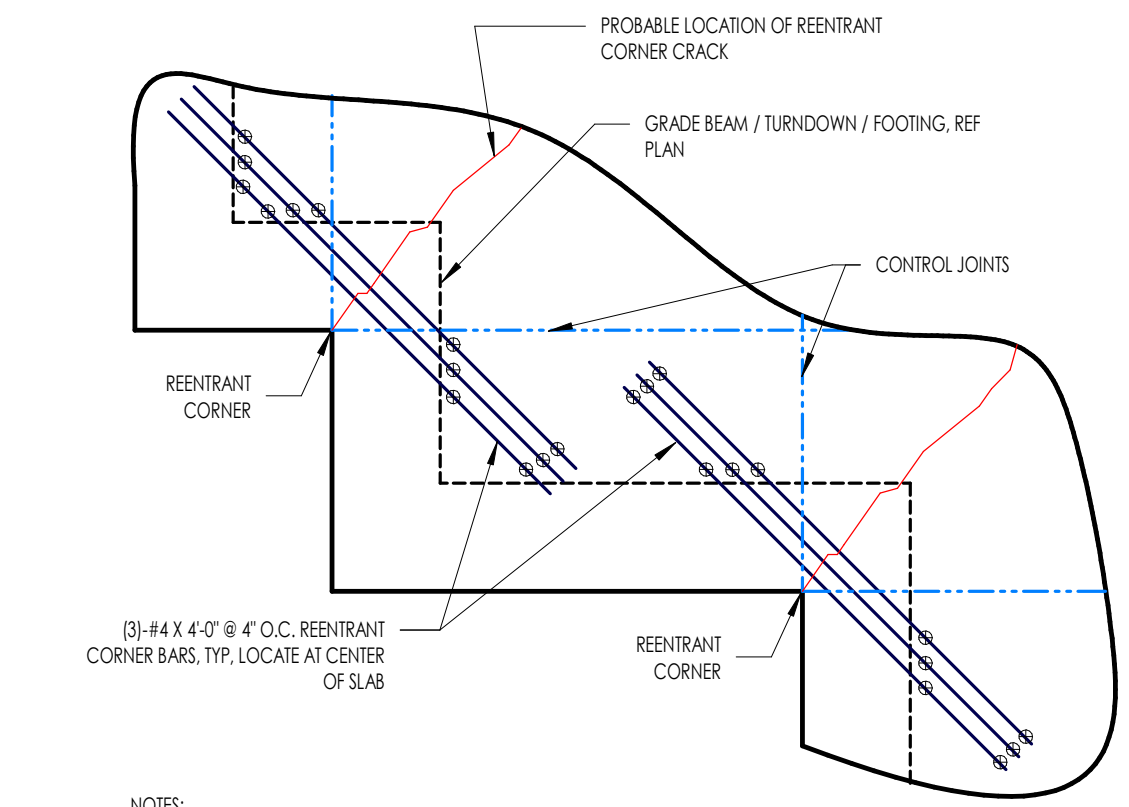
1D TYPICAL REINFORCEMENT AT SLAB BLOCKOUT
NOT TO SCALE



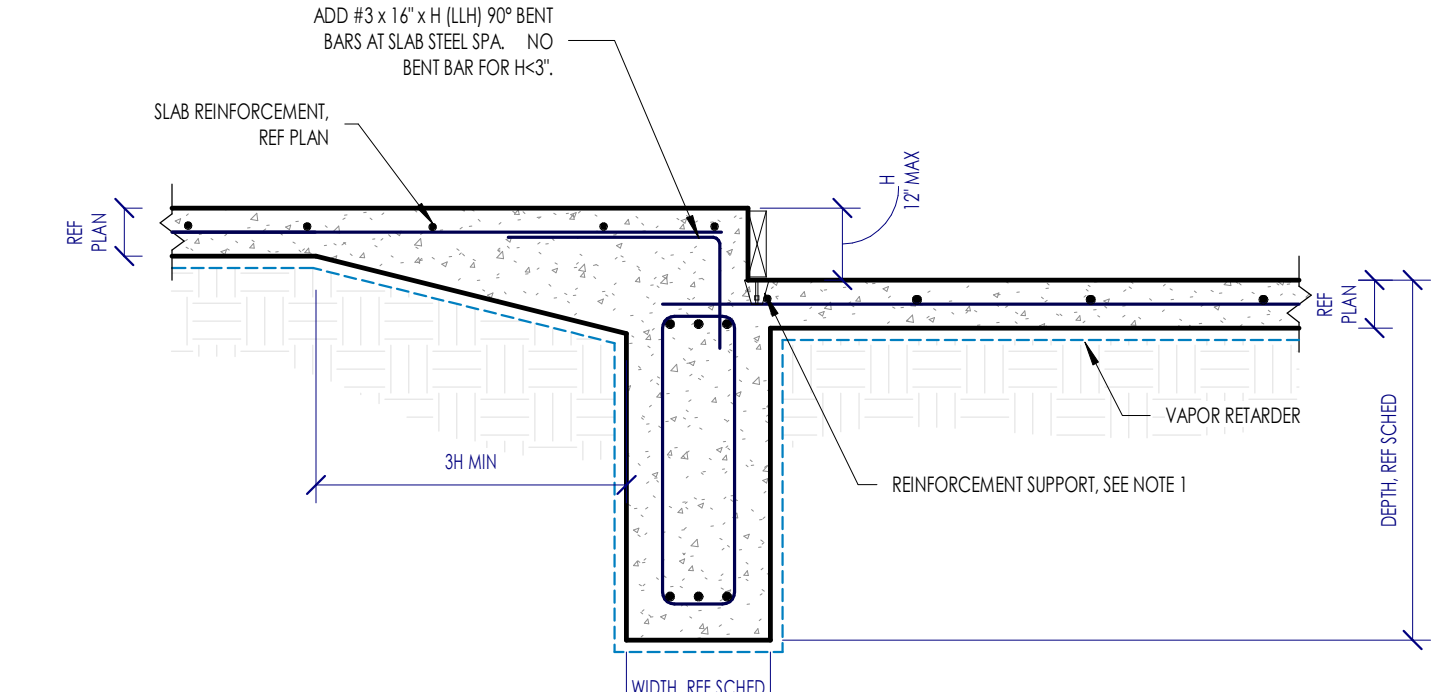
6C TYPICAL INTERIOR BEAM INTERSECTION
NOT TO SCALE



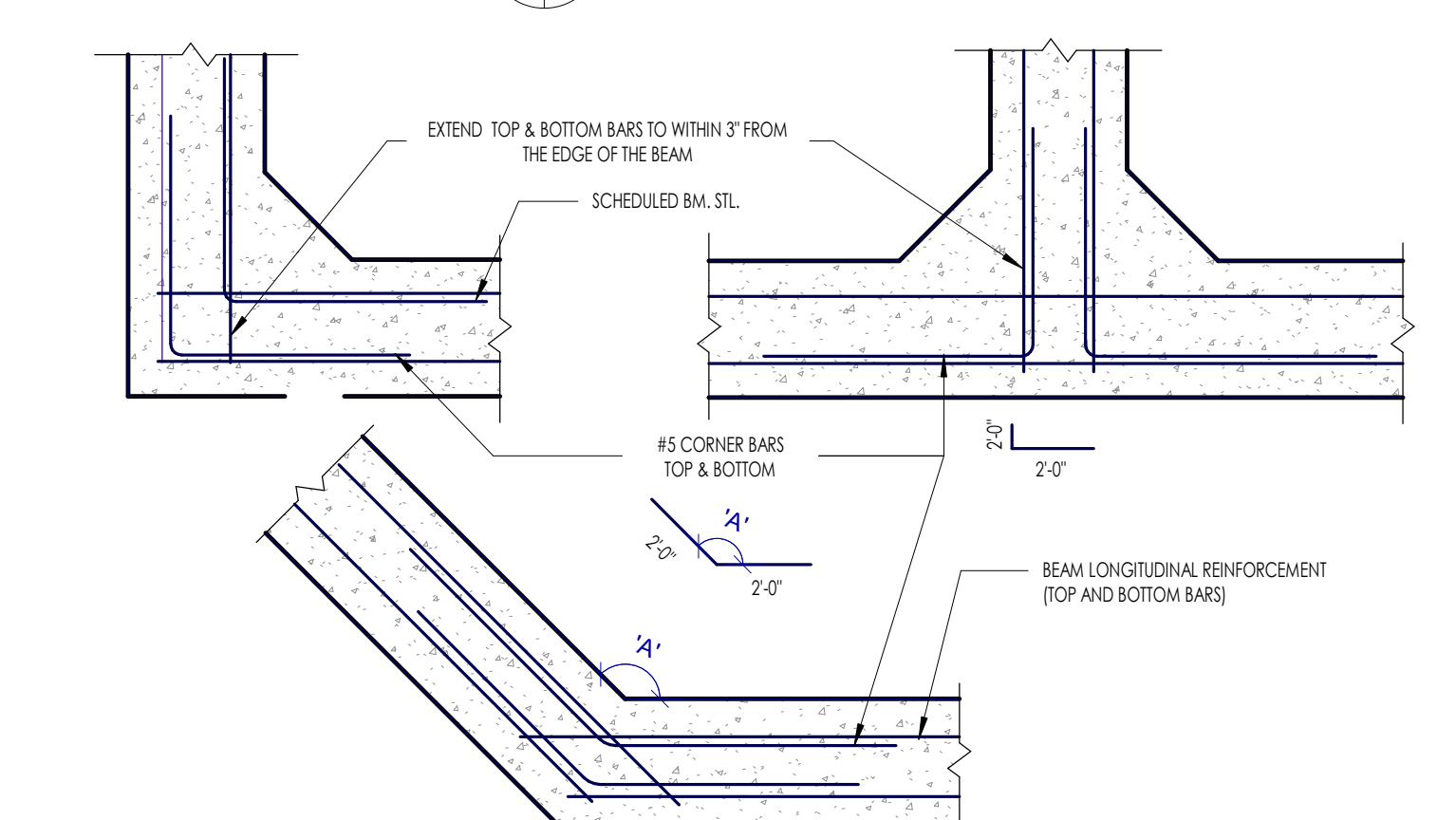
5C TYPICAL SLAB-ON-GRADE SECTION
NOT TO SCALE



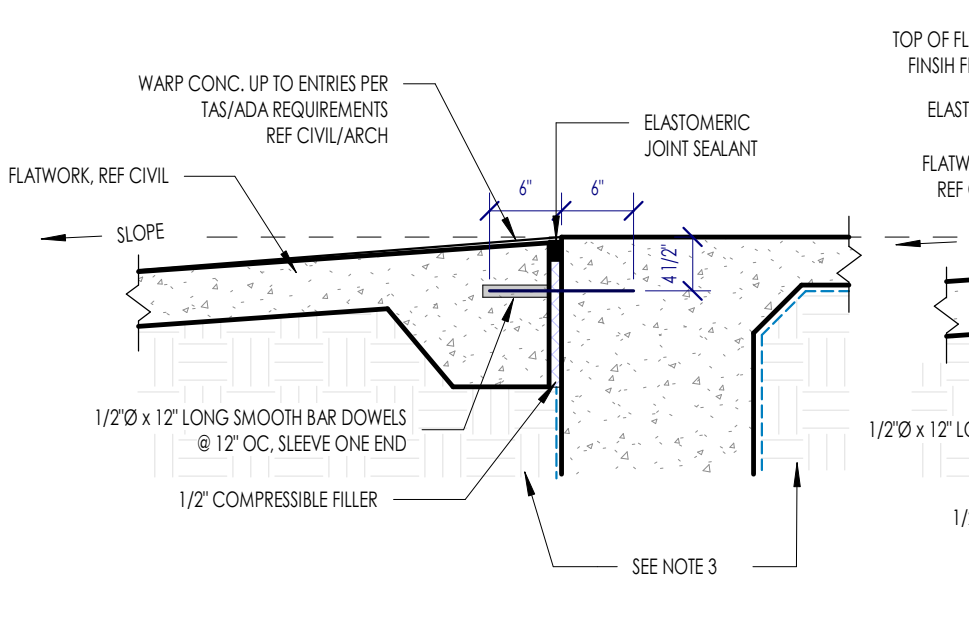
4C TYPICAL REENRANT CORNER BARS
NOT TO SCALE



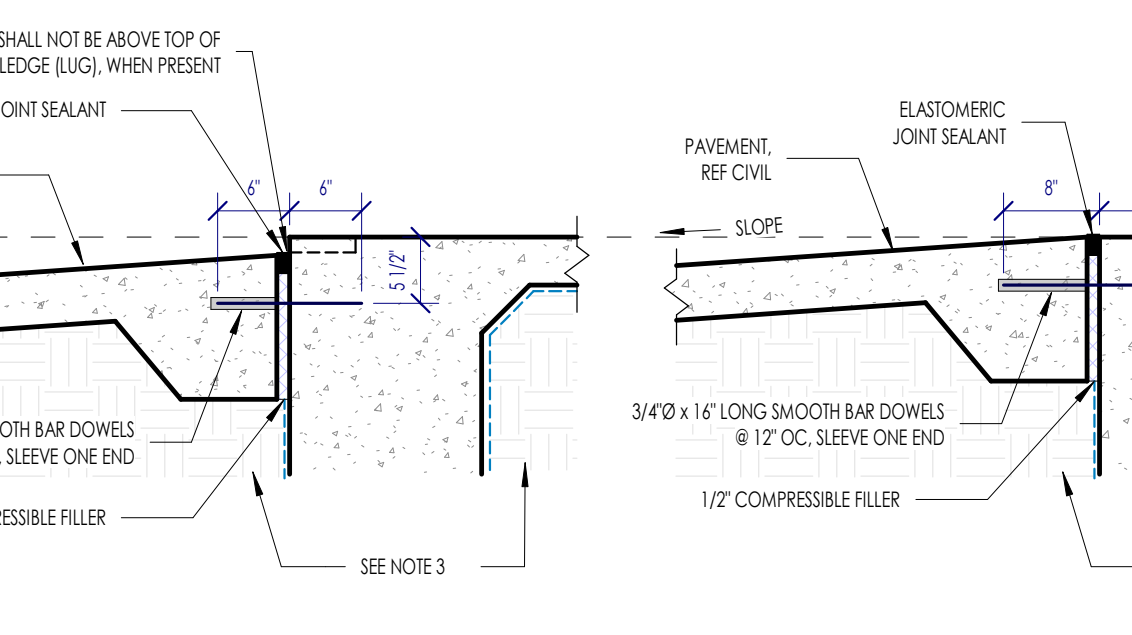
3C TYPICAL SLAB DROP AT GRADE BEAM
NOT TO SCALE



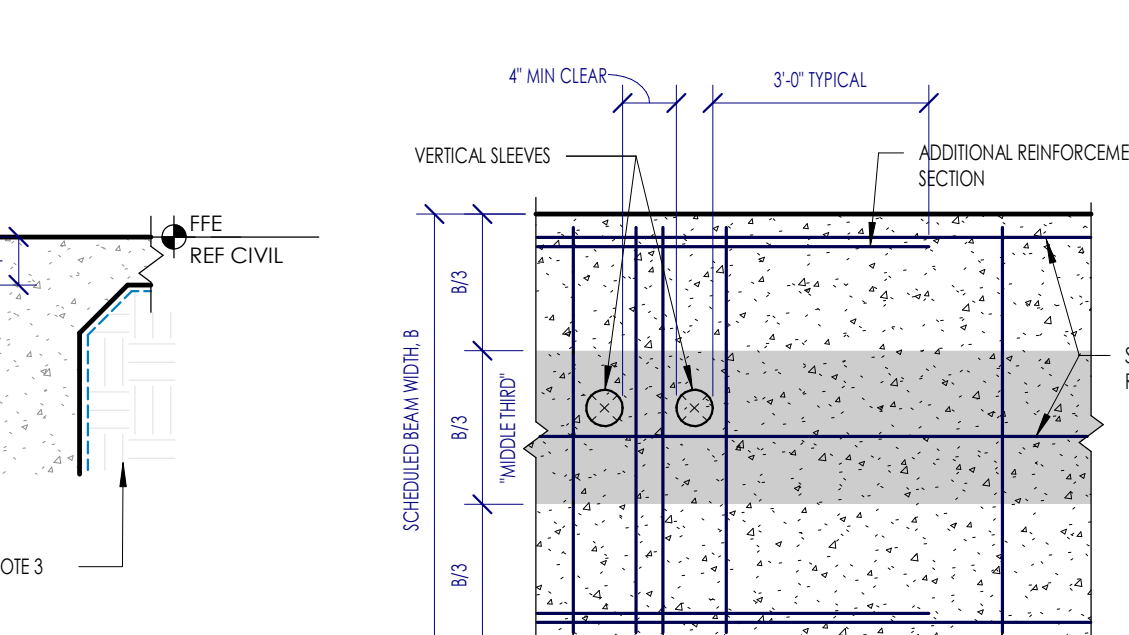
1C TYPICAL CORNER BARS
NOT TO SCALE



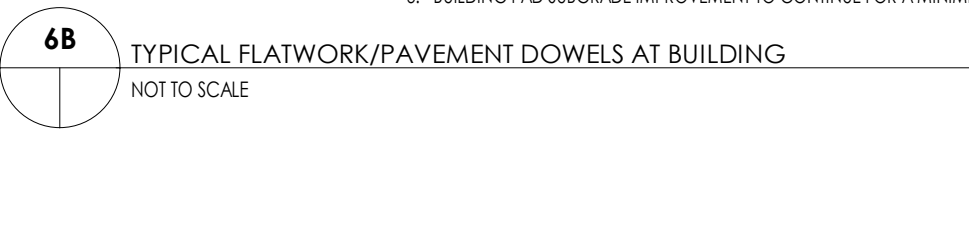
B FLATWORK AT ENTRY DOOR



B FLATWORK NOT AT ENTRY DOOR



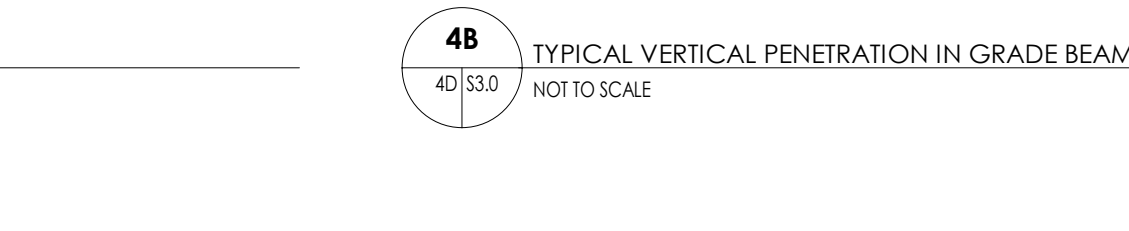
B AT PAVEMENT (DRIVE-IN)



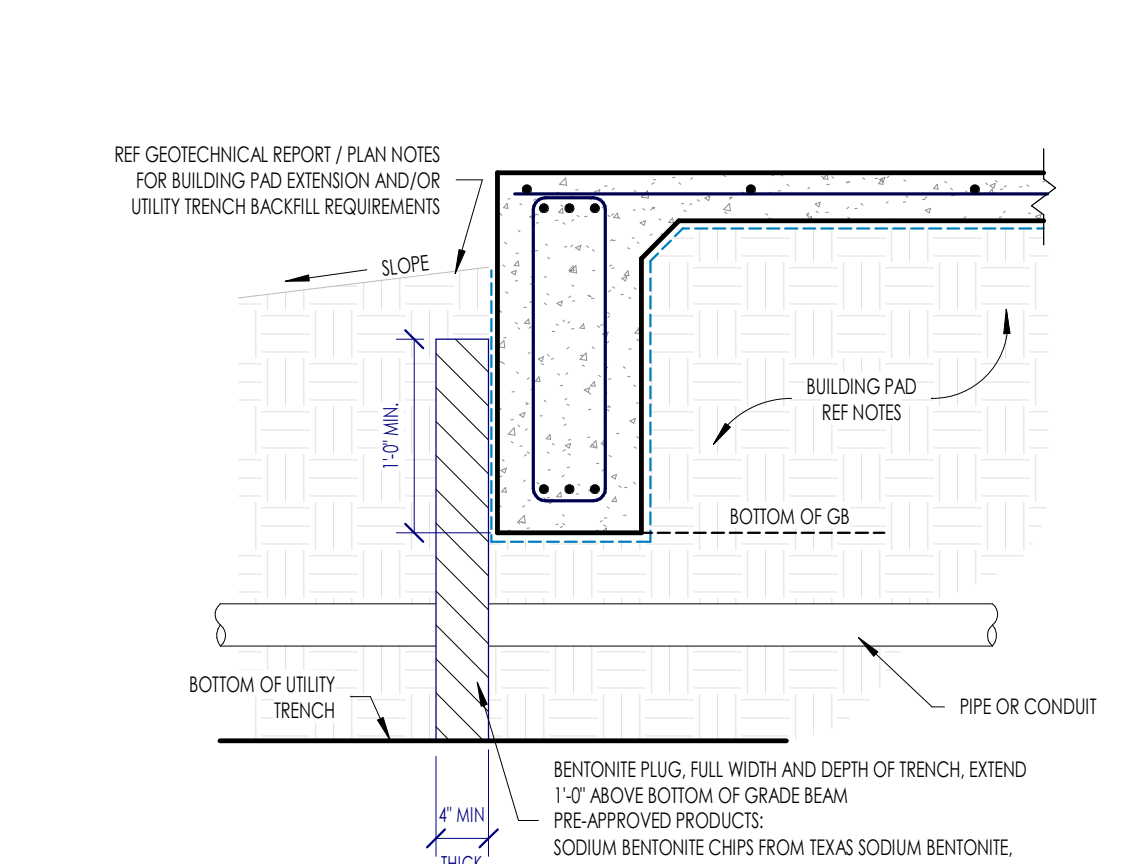
6B TYPICAL FLATWORK/PAVEMENT DOWELS AT BUILDING
NOT TO SCALE



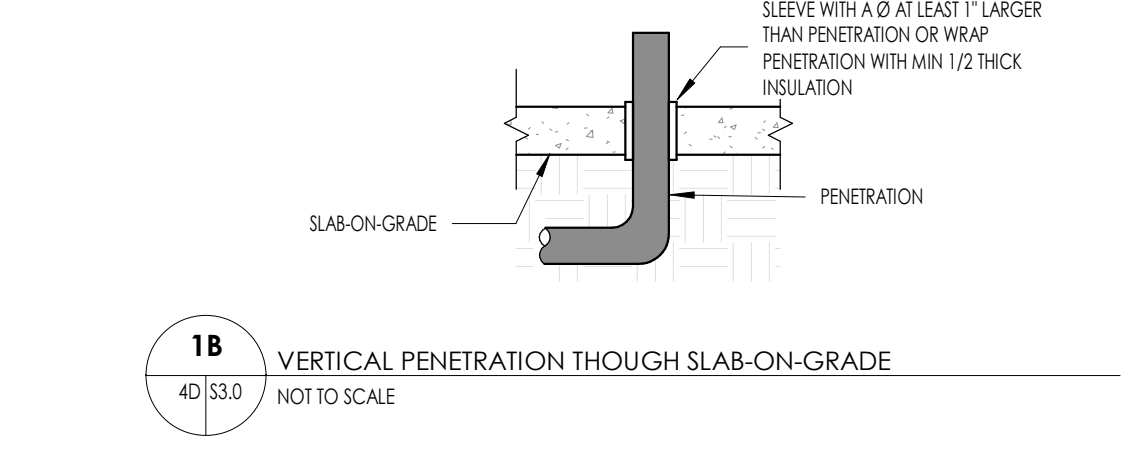
4B TYPICAL VERTICAL PENETRATION IN GRADE BEAM
NOT TO SCALE



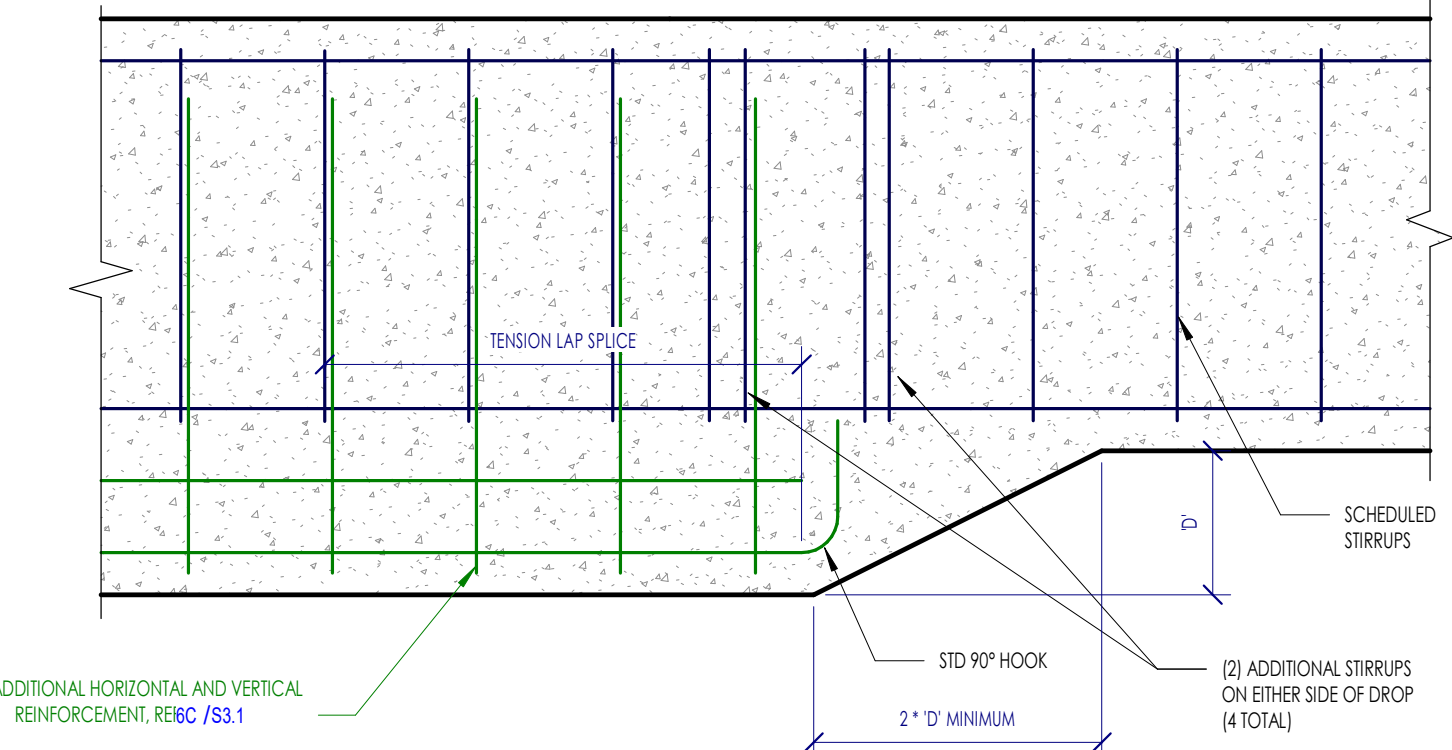
4A TYPICAL HORIZONTAL PENETRATION IN BEAM
NOT TO SCALE



2B TYPICAL UTILITY TRENCH UNDER BUILDING PAD BENTONITE PLUG AT EXTERIOR BEAM.
NOT TO SCALE



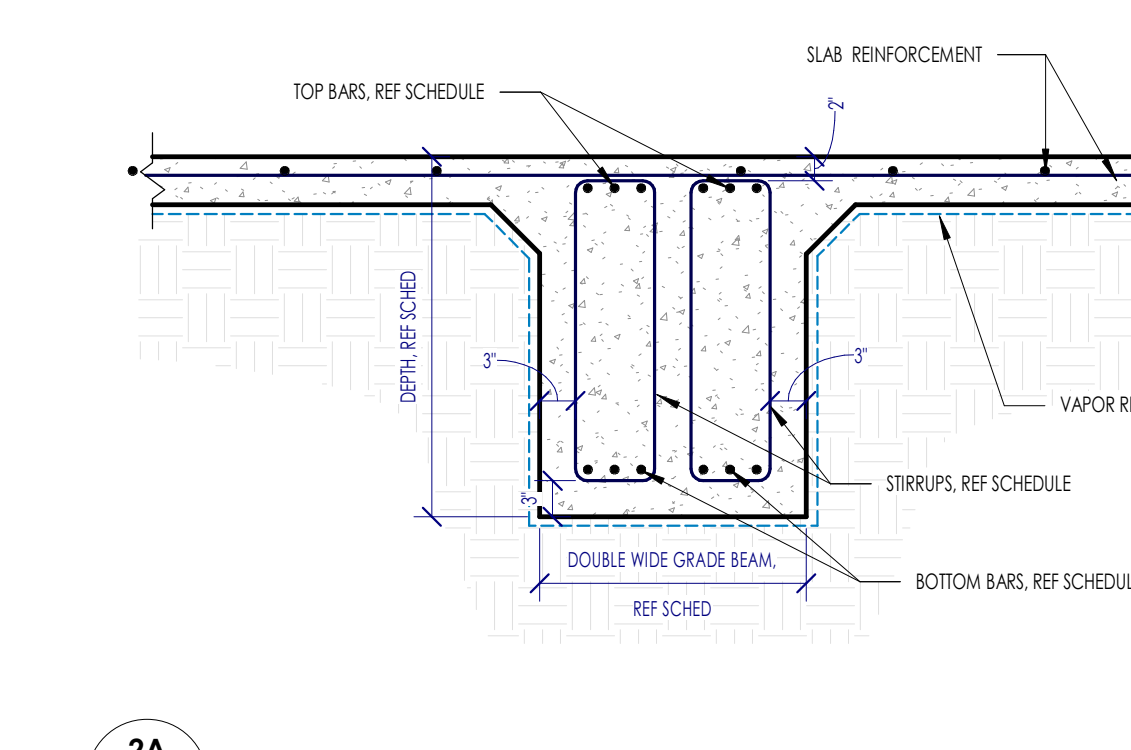
1B VERTICAL PENETRATION THROUGH SLAB-ON-GRADE
NOT TO SCALE



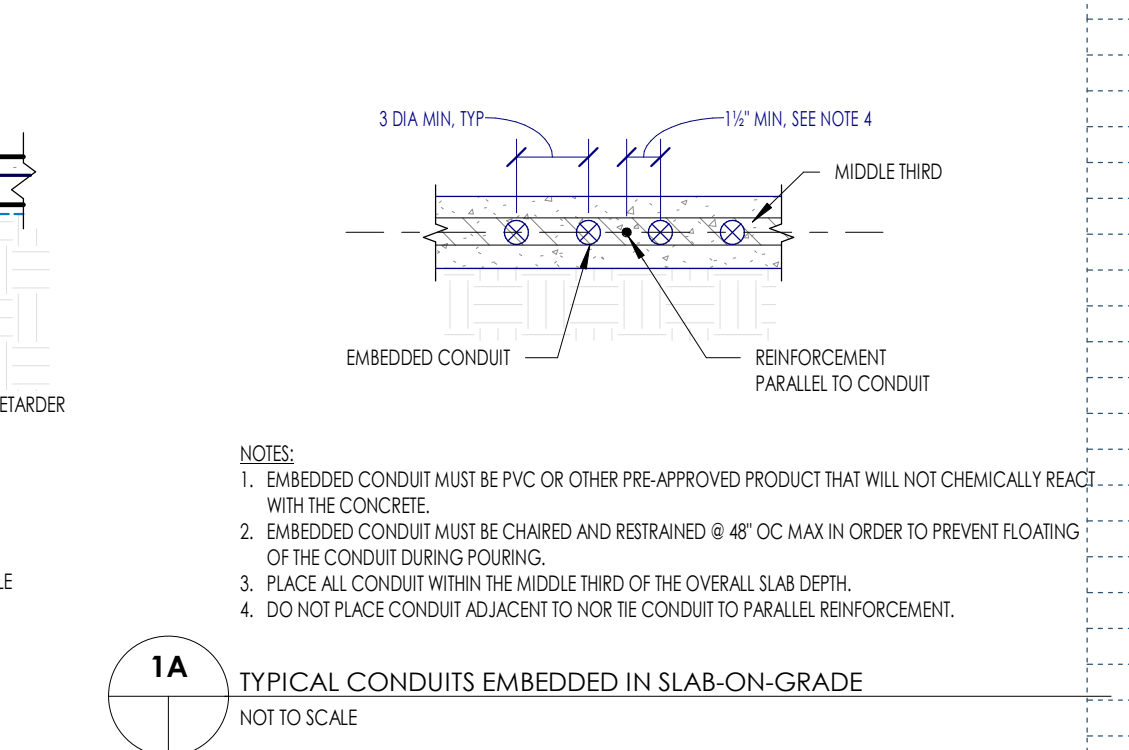
6A TYPICAL DROP TRANSITION IN GRADE BEAM - VERTICAL MOISTURE BARRIER
NOT TO SCALE



4A TYPICAL HORIZONTAL PENETRATION IN BEAM
NOT TO SCALE

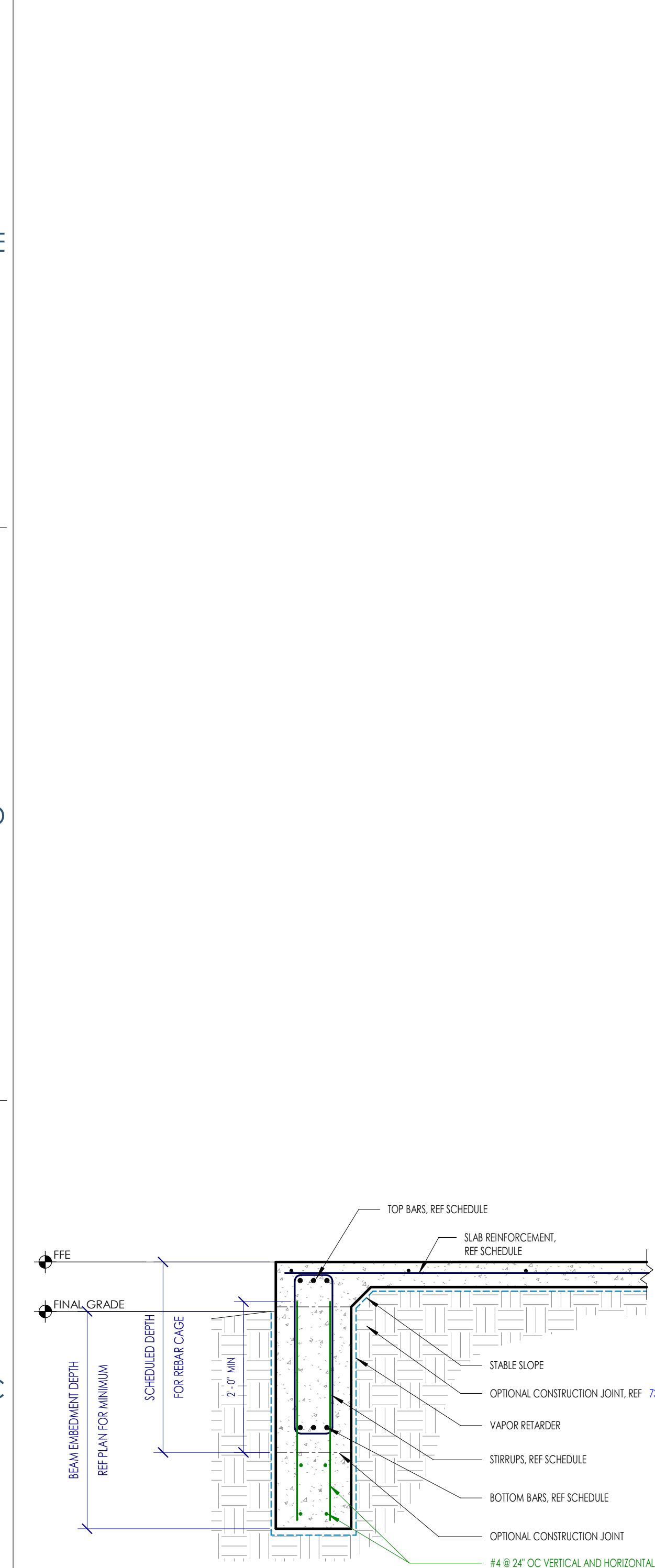


2A TYPICAL DOUBLE WIDE INTERIOR GRADE BEAM
NOT TO SCALE



1A TYPICAL CONDUITS EMBEDDED IN SLAB-ON-GRADE
NOT TO SCALE

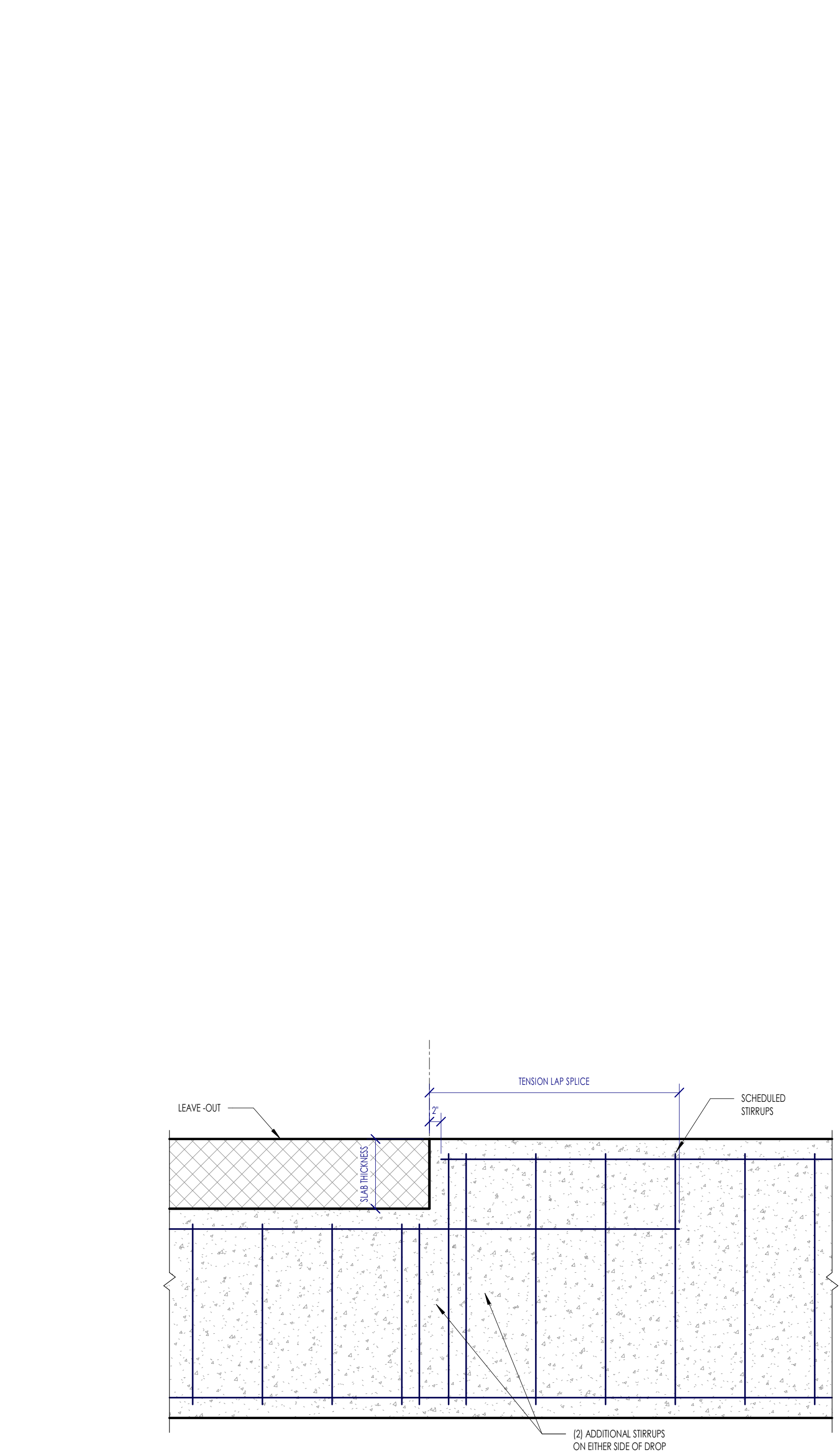
Date	Description
	REV. 1



4C TYPICAL EXTERIOR GRADE BEAM - VERTICAL MOISTURE BARRIER
NOT TO SCALE



5C TYPICAL GRADE BEAM AT STEEL STAIRS
NOT TO SCALE



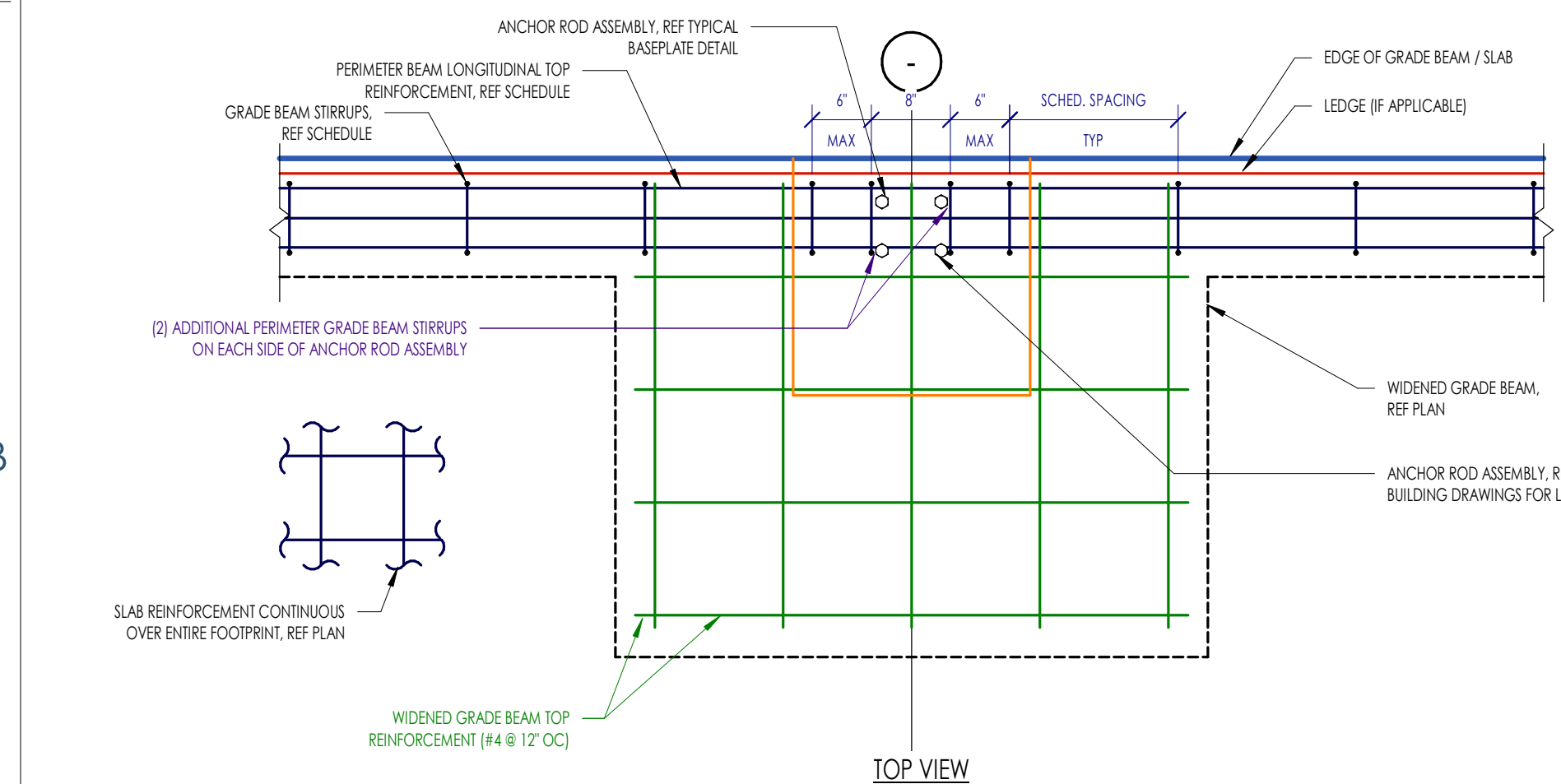
4C TYPICAL DROP TRANSITION IN GRADE BEAM TOP REINFORCEMENT AT SLAB LEAVE-OUT
NOT TO SCALE



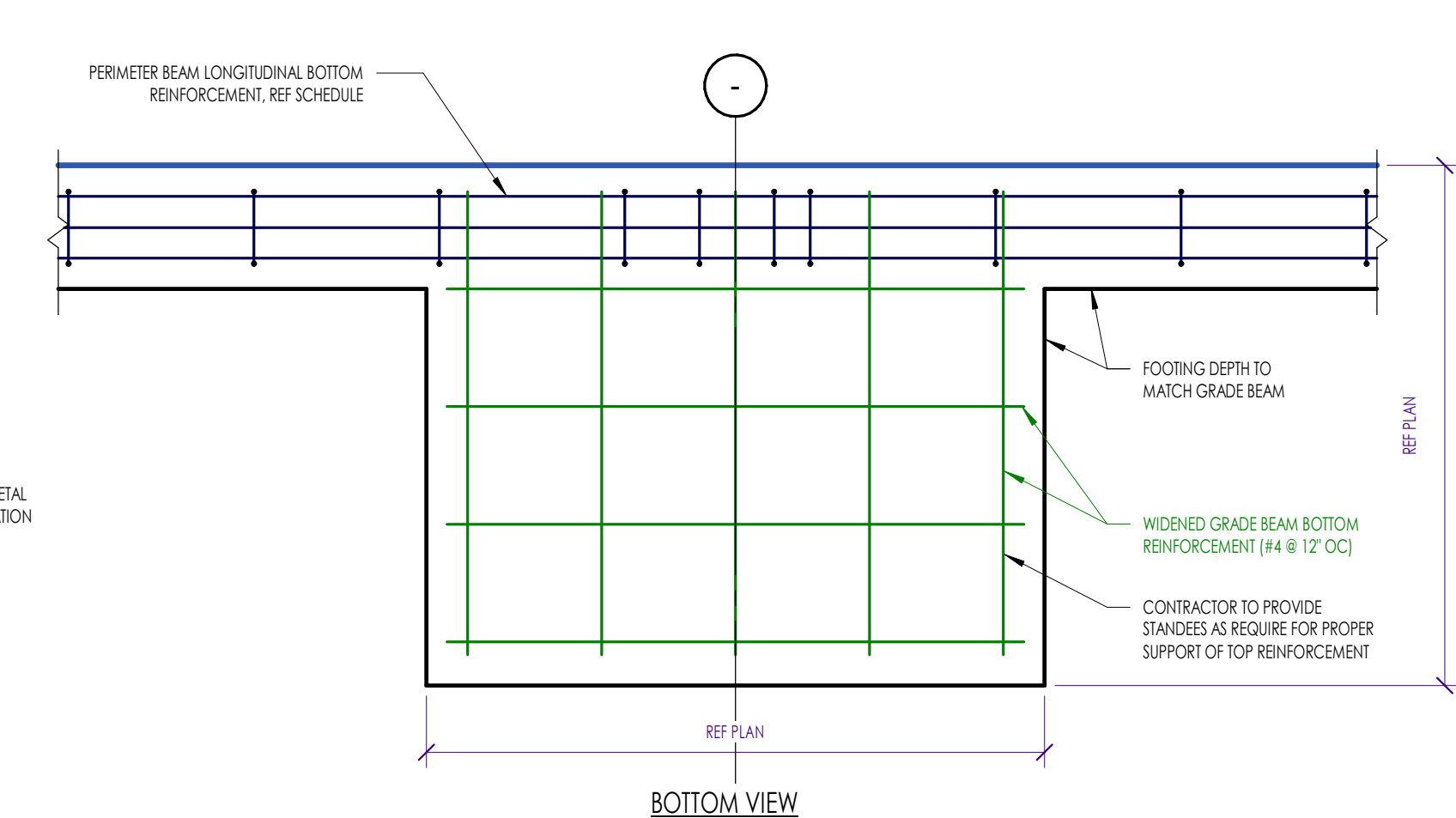
2C CSOG - TURN DOWN AT SLAB DROP
NOT TO SCALE



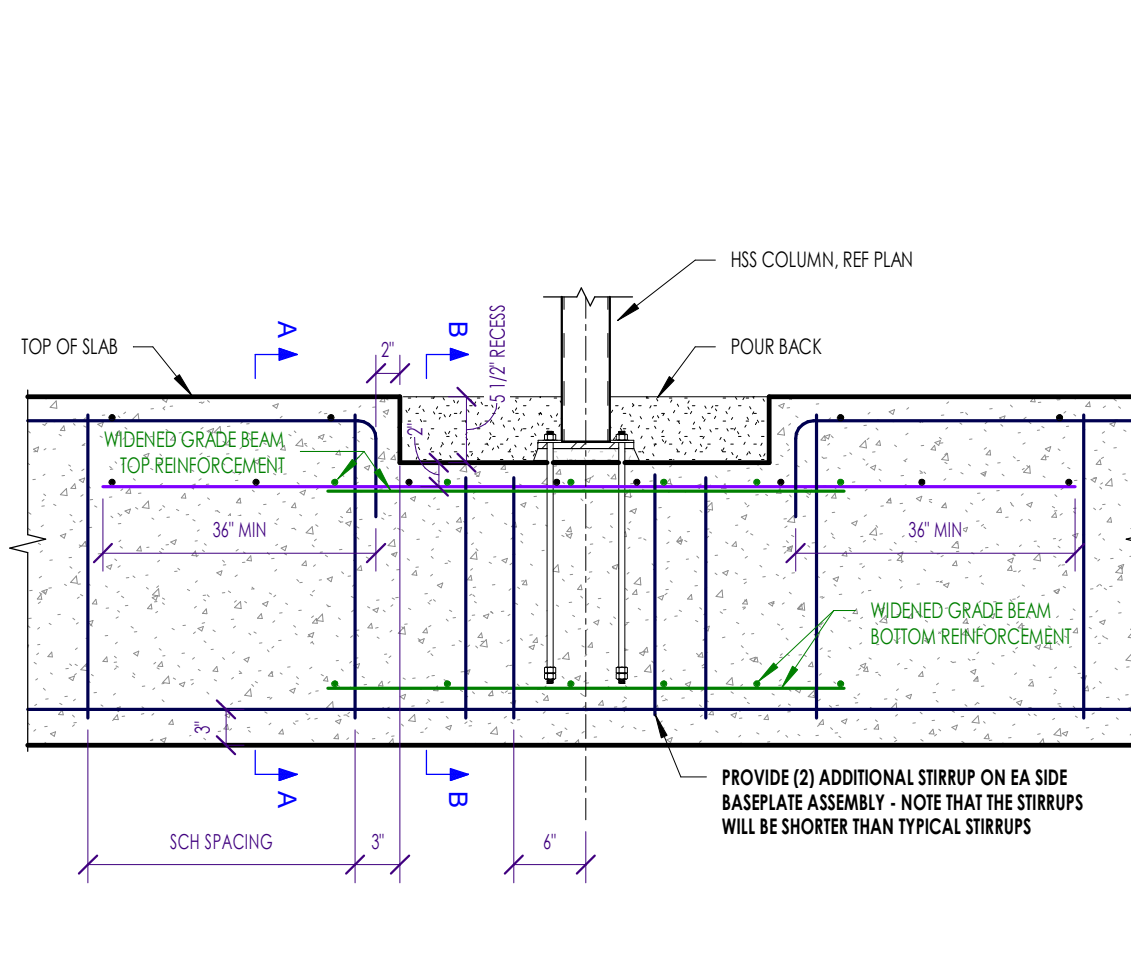
1C TYPICAL TURN DOWN BEAM
NOT TO SCALE



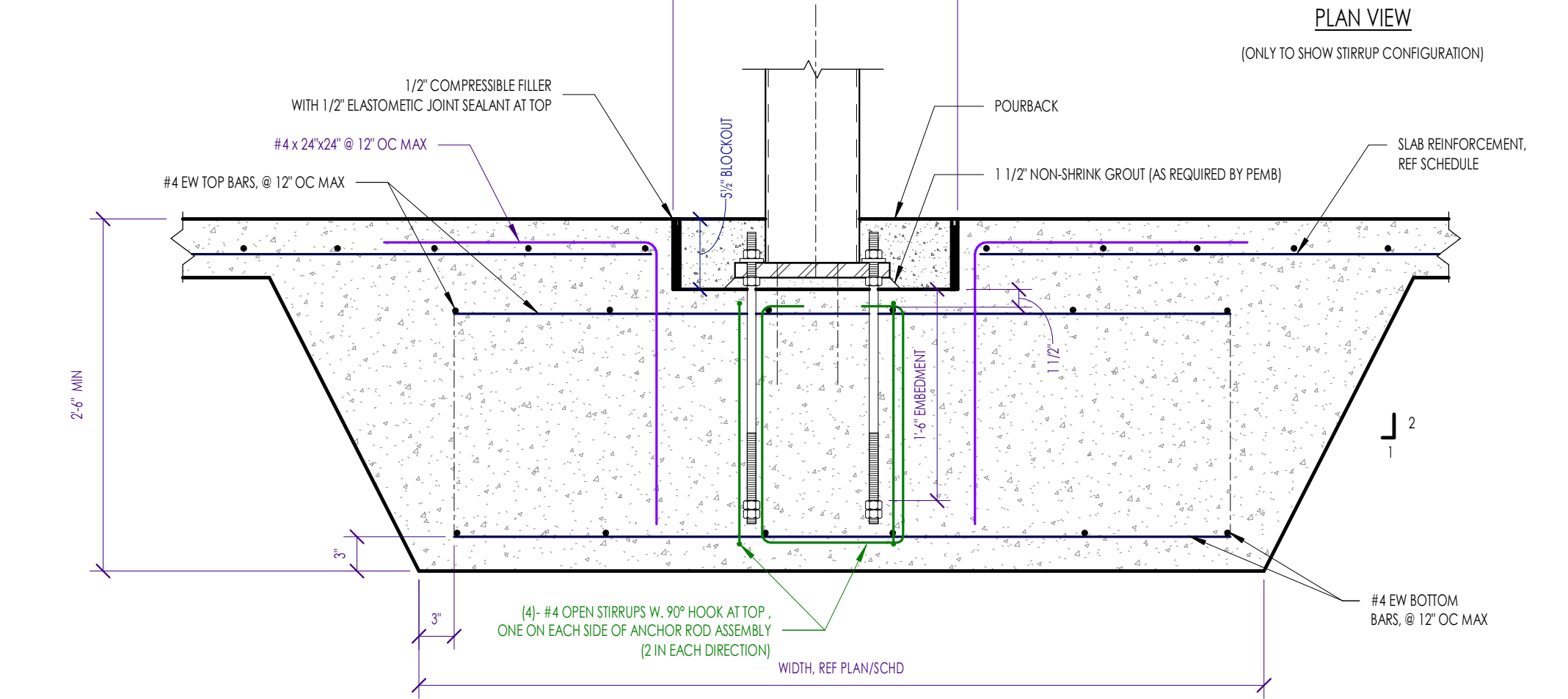
4B TYPICAL WIDENED FOOTING AT COLUMN - EMBEDDED BASE PLATE
NOT TO SCALE



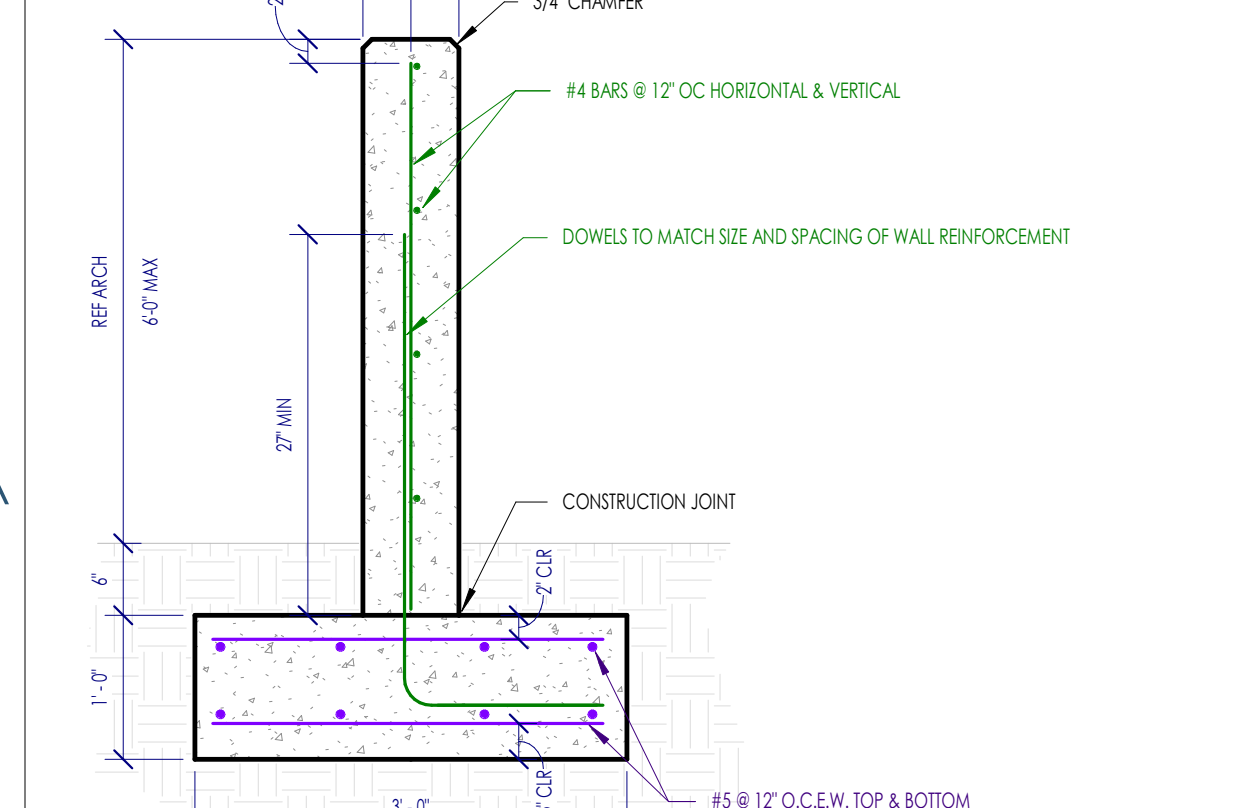
2B TYPICAL SPREAD FOOTING AT INTERIOR COLUMN
NOT TO SCALE



3A TYPICAL ANCHOR ROD
NOT TO SCALE



2B TYPICAL SPREAD FOOTING AT INTERIOR COLUMN
NOT TO SCALE

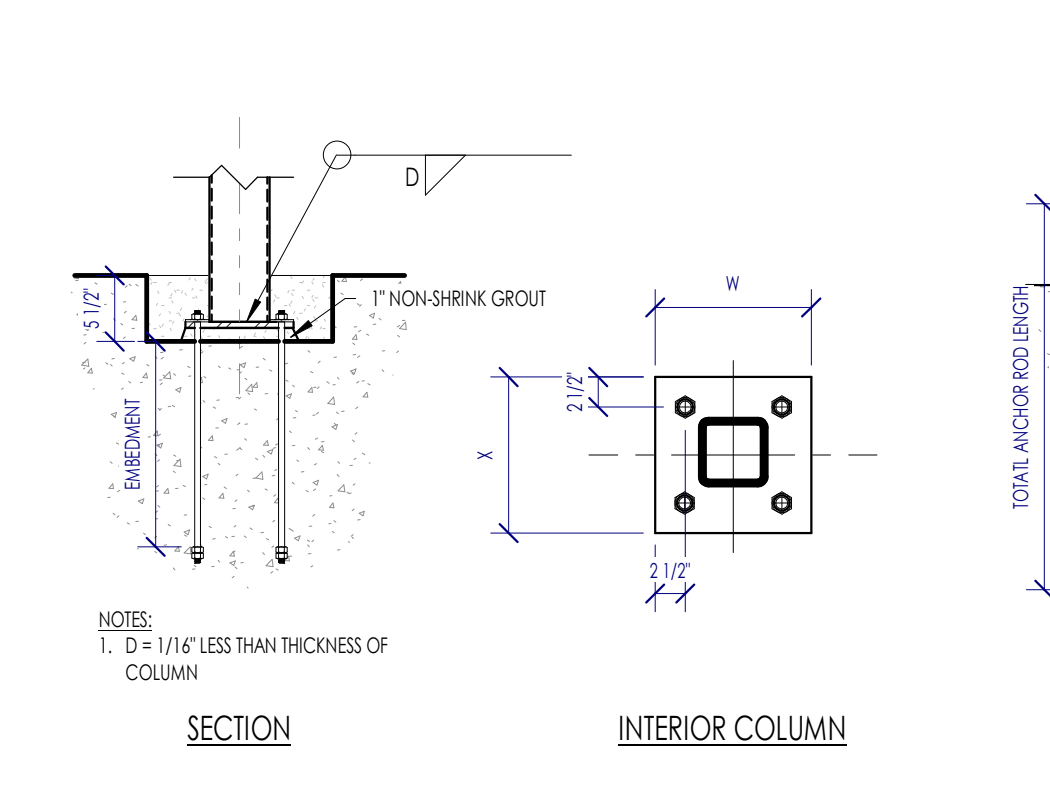


6A TYPICAL MOMENT SIGN FOUNDATION
NOT TO SCALE

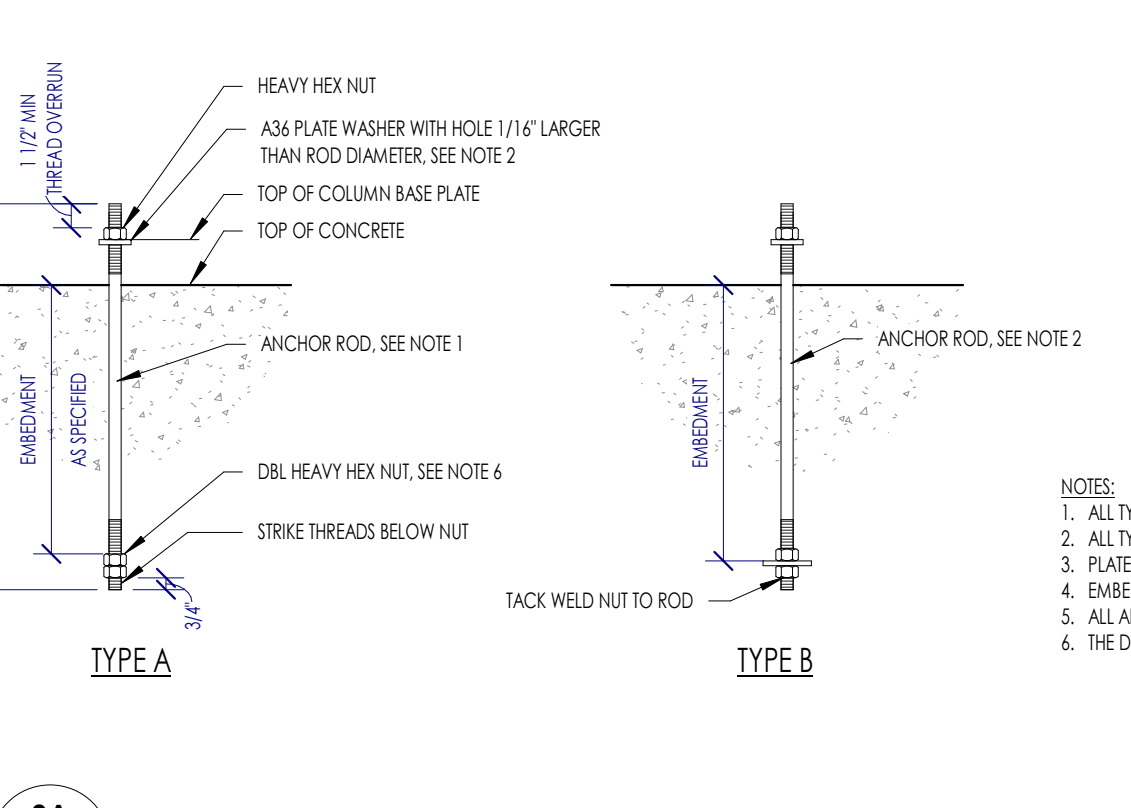
BASE PLATE & ANCHOR BOLT SCHEDULE

COLUMN	BASE PLATE DIMENSIONS			CONDITION	ANCHOR BOLTS		
	X	W	T		NO./TYPE	DIA.	EMBEDMENT
HSS/SLS	11"	13"	13"	INTERIOR	4/A	1"	1'-0"
HSS/SLS	14"	16"	16"	INTERIOR	4/A	1"	1'-0"

5A TYPICAL BASEPLATE DETAIL
NOT TO SCALE



3A TYPICAL ANCHOR ROD
NOT TO SCALE



3A TYPICAL ANCHOR ROD
NOT TO SCALE

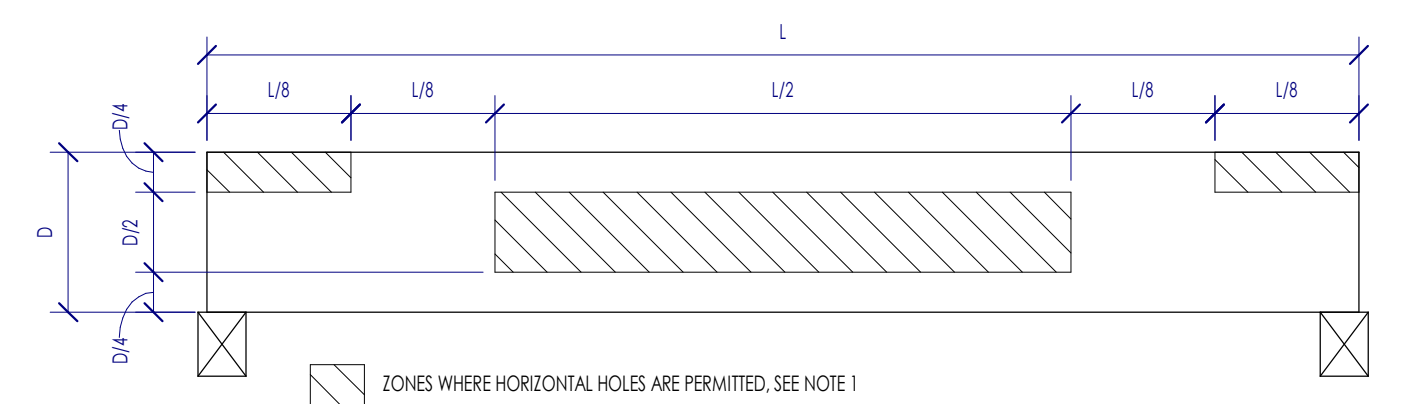
ANCHOR ROD DIAMETER	HOLE DIAMETER	SQUARE PLATE WASHER SIZE	PLATE WASHER THICKNESS	TYPE B ANCHOR PLATE
5/8"	1.31/4"	1 1/2"	1/4"	PL17X10-4
3/4"	1.51/4"	2"	1/4"	PL17X10-4
7/8"	1.91/4"	2 1/2"	5/16"	PL17X10-4
1"	1.131/4"	3"	3/8"	PL19X10-5
1 1/2"	2.51/4"	3 1/2"	1/2"	PL19X10-5

NOTES:
1. ALL TYPE A ANCHOR RODS SHALL BE F1554 GRADE 36.
2. ALL TYPE B ANCHOR RODS SHALL BE F1554 GRADE 55.11.
3. PLATE WASHERS MUST BE WELDED TO THE BASE PLATE WITH MINIMUM 3/16" FLEET WELD ALL AROUND.
4. EMBEDMENT DEPTH ARE PRELIMINARY. FINAL EMBEDMENT TO BE PROVIDED AFTER REVIEW OF METAL BUILDING REACTIONS.
5. ALL ANCHOR ROD HOLES SHALL ADHERE TO AISC DESIGN GUIDE 01 - TABLE 2.3.
6. THE DOUBLE NUT MAY BE OMITTED IF THE NUT IS TACK WELDED TO THE ROD.

3A TYPICAL ANCHOR ROD
NOT TO SCALE

This project, like most OpeningDesign's projects, is open source. (Attribution-ShareAlike 4.0 International-CC BY-SA 4.0)-freely available to any party for future use, assuming the terms such as Attribution and ShareAlike are honored.

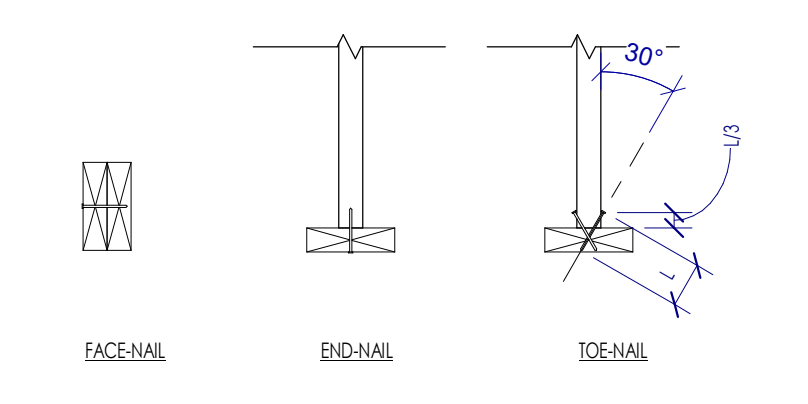
TYPICAL FASTENING SCHEDULE			
CONNECTION ID	CONNECTION TYPE	FASTENING	FASTENING ORIENTATION
1	JOIST TO BIL OR GIRDER	(2) - 0.131" X 3"	TORNAIL
2	SOLE PLATE TO JOIST OR BLOCKING	0.148" X 3" x 3" NAILS @ 12" OC NAILS	FACE NAIL
3	TOP PLATE TO STUD	(3) - 0.131" X 3"	END NAIL
4	STUD TO SOLE PLATE - OPTION 1	(2) - 1st COMMON (2) - 0.131" X 3" NAILS	END NAIL
5	STUD TO SOLE PLATE - OPTION 2	(4) 0.131" X 3" NAILS	TORNAIL
6	DOUBLE/MULTIPLE STUDS	REFERENCE DETAIL: (4)/(54)1	FACE NAIL
7	DOUBLE TOP PLATES	0.131" X 3" NAILS @ 12" OC	FACE NAIL
8	DOUBLE TOP PLATE SPICE	REFERENCE DETAIL: (3A)/(54)1	FACE NAIL
9	BLOCKING BETWEEN JOISTS/RAFTERS TO TOP PLATE	(3) - 0.131" X 3" NAILS	TORNAIL
10	BIM JOIST TO TOP PLATE	0.131" X 3" NAILS @ 6" OC	TORNAIL
11	CEILING JOIST TO TOP PLATE	(3) - 0.131" X 3" NAILS	TORNAIL
12	CEILING JOIST L4F OVER PARTITION	(4) - 0.131" X 3" NAILS	FACE NAIL
13	CEILING JOIST TO PARALLEL RAFTERS	(4) - 0.131" X 3" NAILS	FACE NAIL
14	RAFTER TO TOP PLATE	(3) - 0.131" X 3" NAILS	TORNAIL
15	BUILT-UP CORNER STUDS	0.131" X 3" NAILS @ 16" OC	FACE NAIL
16	BUILT-UP BEAMS	REFERENCE DETAIL: (2A)/(54)D	FACE NAIL
17	COLLAR TIE TO RAFTER	(4) - 0.131" X 3" NAILS	FACE NAIL
18	JACK RAFTER TO HP	(4) - 0.131" X 3" NAILS	TORNAIL
19	RAFTER TO RIDGE BOARD/BEAM	(3) - 0.131" X 3" NAILS	TORNAIL
20	BLOCKING AT STUDS	(3) - 0.131" X 3" NAILS EACH SIDE	TORNAIL



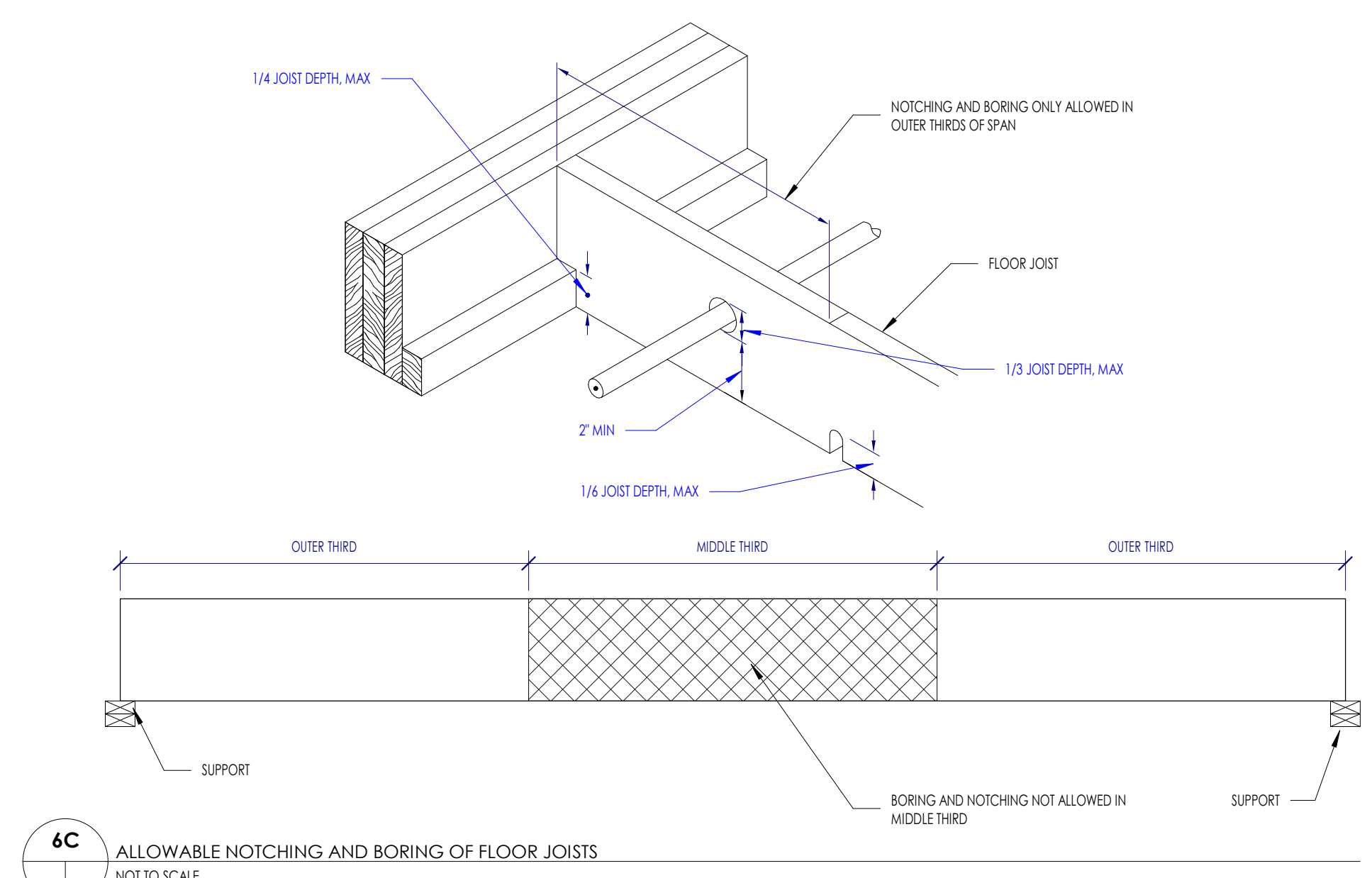
NOTES:
 1. HOLE SIZE: THE HOLE DIAMETER SHALL NOT EXCEED 1/4" OR D/10, WHICHEVER IS SMALLER.
 2. SPACING: FOR LARGER HOLE DIAMETERS OR FOR HOLES OUTSIDE OF THE PERMITTED ZONES, WRITTEN PERMISSION MUST BE OBTAINED FROM THE EOR.
 3. LIMITATIONS: THE ABOVE CRITERIA ONLY APPLY TO SIMPLY SUPPORTED, UNIFORMLY LOADED (UNLESS OTHERWISE SPECIFIED) GLUE LAMINATED BEAMS. FOR BEAMS THAT ARE EITHER CONTINUOUS ACROSS MULTIPLE SPANS OR THAT ARE SUPPORTING NON-UNIFORM LOADS, WRITTEN PERMISSION MUST BE OBTAINED FROM THE EOR.

4E ALLOWABLE HORIZONTAL HOLE LOCATIONS IN GLUE LAMINATED TIMBER BEAMS
NOT TO SCALE

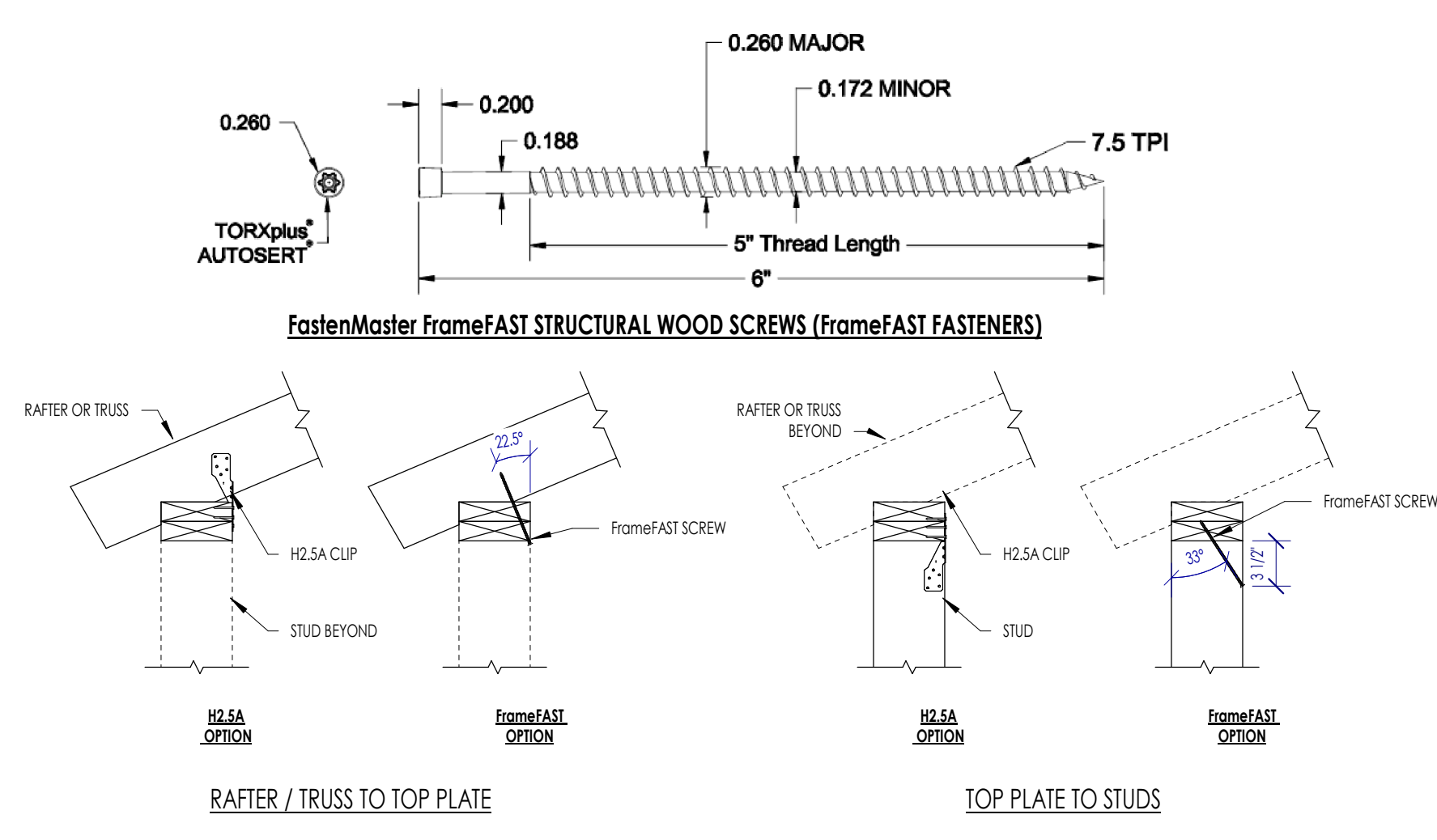
6D TYPICAL WOOD FASTENING SCHEDULE
NOT TO SCALE



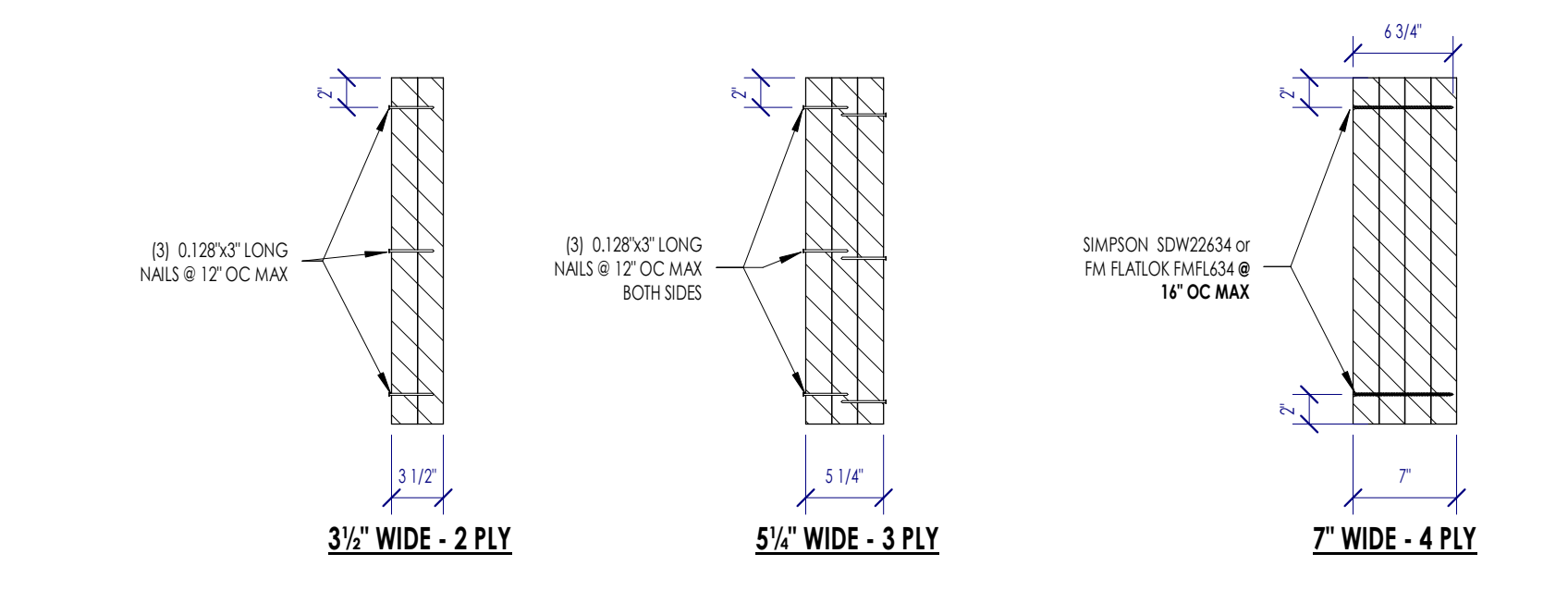
4D TYPICAL NAILING CONFIGURATIONS
NOT TO SCALE



6C ALLOWABLE NOTCHING AND BORING OF FLOOR JOISTS
NOT TO SCALE



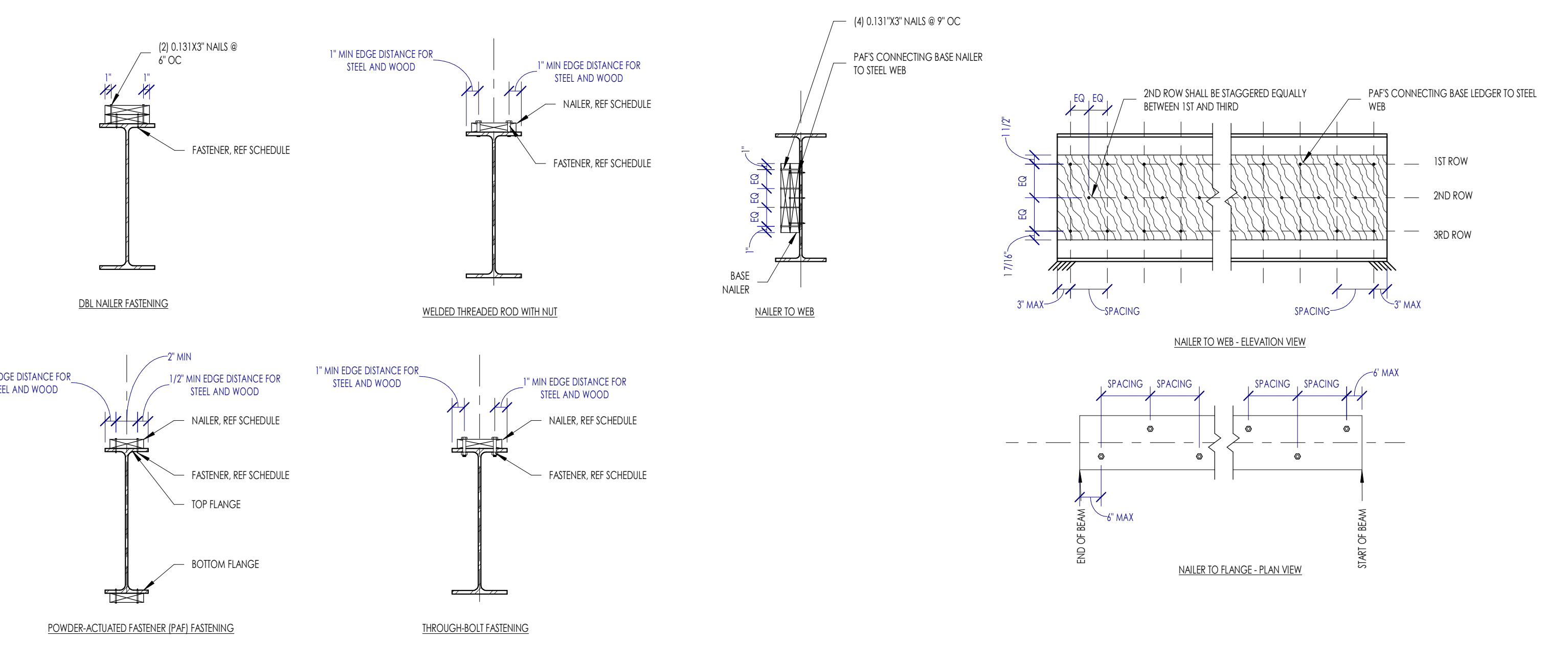
4C ALLOWABLE SUBSTITUTION OF H2-5A CLIPS WITH FrameFAST SCREWS - UPLIFT LOAD PATH
NOT TO SCALE



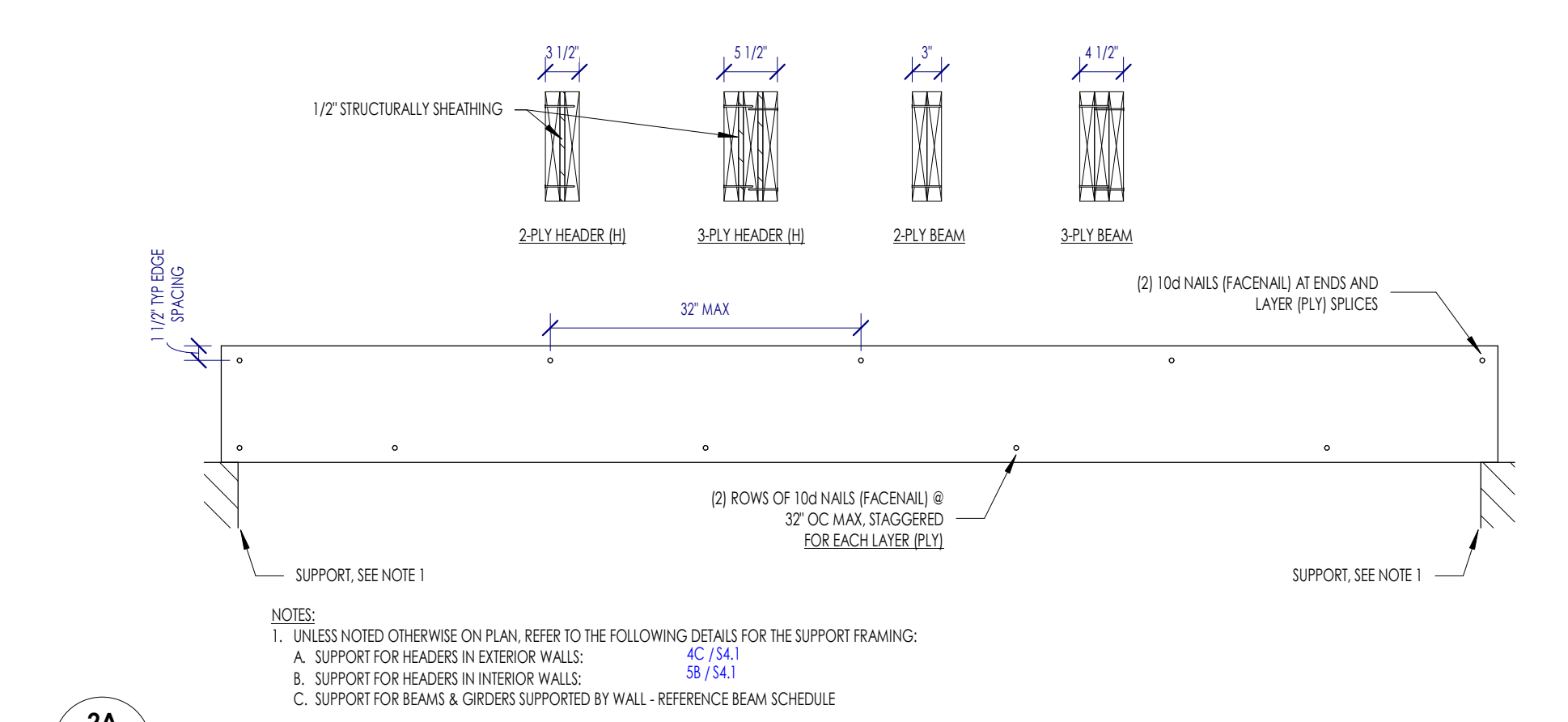
2C TYPICAL LVL MULTIPLE PLY FASTENING REQUIREMENTS
NOT TO SCALE

FASTENER SCHEDULE - TO BEAM TOP FLANGE			FASTENER SCHEDULE - TO BEAM WEB / BOTTOM FLANGE		
L (ft)	PAF FASTENER	BOLT / ROD*	L _e (ft)	PAF FASTENER	BOLT / ROD*
≤ 0.35	X-4.47 @ 12" OC	1/2" D @ 24" OC	≤ 0.35	(1) - X-4.47 @ 12" OC	(2) - 1/2" D @ 24" OC
0.35 < L ≤ 0.44	D5.47 @ 12" OC	1/2" D @ 24" OC	0.35 < L _e ≤ 0.44	(2) - D5.47 @ 12" OC	(2) - 1/2" D @ 24" OC
L > 0.44	N/A	1/2" D @ 12" OC	L _e > 0.44	N/A	(2) - 1/2" D @ 12" OC

NALER SCHEDULE - TO BEAM FLANGE		NALER SCHEDULE - TO BEAM WEB	
b (ft)	NALER SIZE	d (ft)	NALER SIZE
≤ 5.5	2x4	≤ 5	2x4
5.5 < b ≤ 7.25	2x6	5 < d ≤ 6.75	2x6
7.25 < b	2x8	6.75 < d ≤ 8.75	2x8
		8.75 < d ≤ 10.75	2x10
		10.75 < d ≤ 15	(2) - 2x8
		15 < d ≤ 19	(2) - 2x10
		19 < d ≤ 23	(2) - 2x12
		d > 23	(3) - 2x8



6A WOOD NAILER TO TOP OF STRUCTURAL STEEL
NOT TO SCALE



2A TYPICAL NAILING BUILT UP BEAMS, GIRDERS & HEADERS
NOT TO SCALE



Owner: Renovation Wranglers
102 E 26th St
Bryan, TX 77803
Katencason@rw.com | 979.450.9969



ARCHITECTURE
Architect of Record: LKB Architecture
2929 Allen Pkwy Suite 200
Houston, TX 77019
isa@lkbarchitecture.com | 713.425.3076



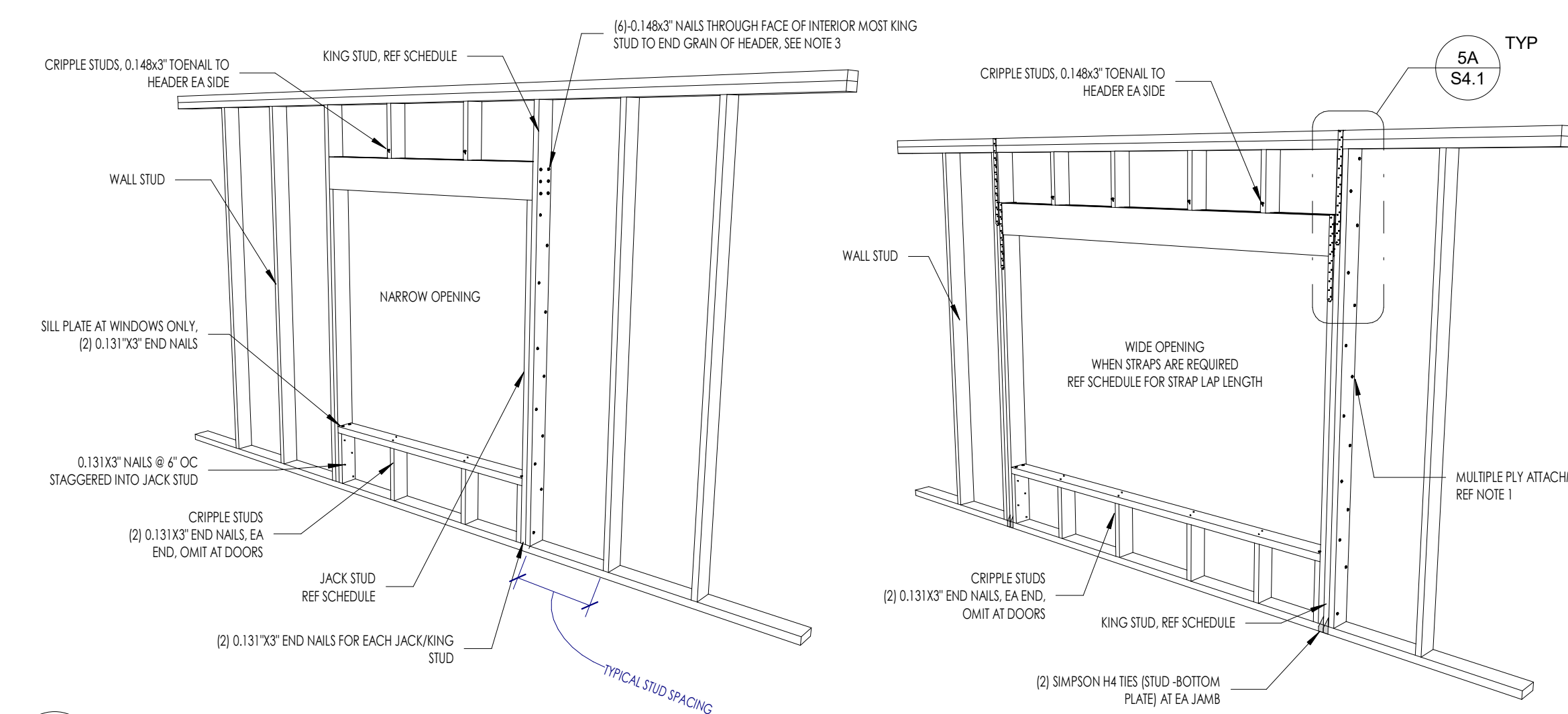
Structural: Dudley
6102 Imperial Loop Drive
College Station, TX 77845
(979) 777-0720



MEP: AMC Engineers
508 E Jackson St # 552
Burnet, TX 78611
info@amcengineers.com

This project, like most OpeningDesign's projects, is open source (Attribution-ShareAlike 4.0 International--CC BY-SA 4.0)--freely available to any party for future use, assuming the terms such as Attribution and ShareAlike are honored.

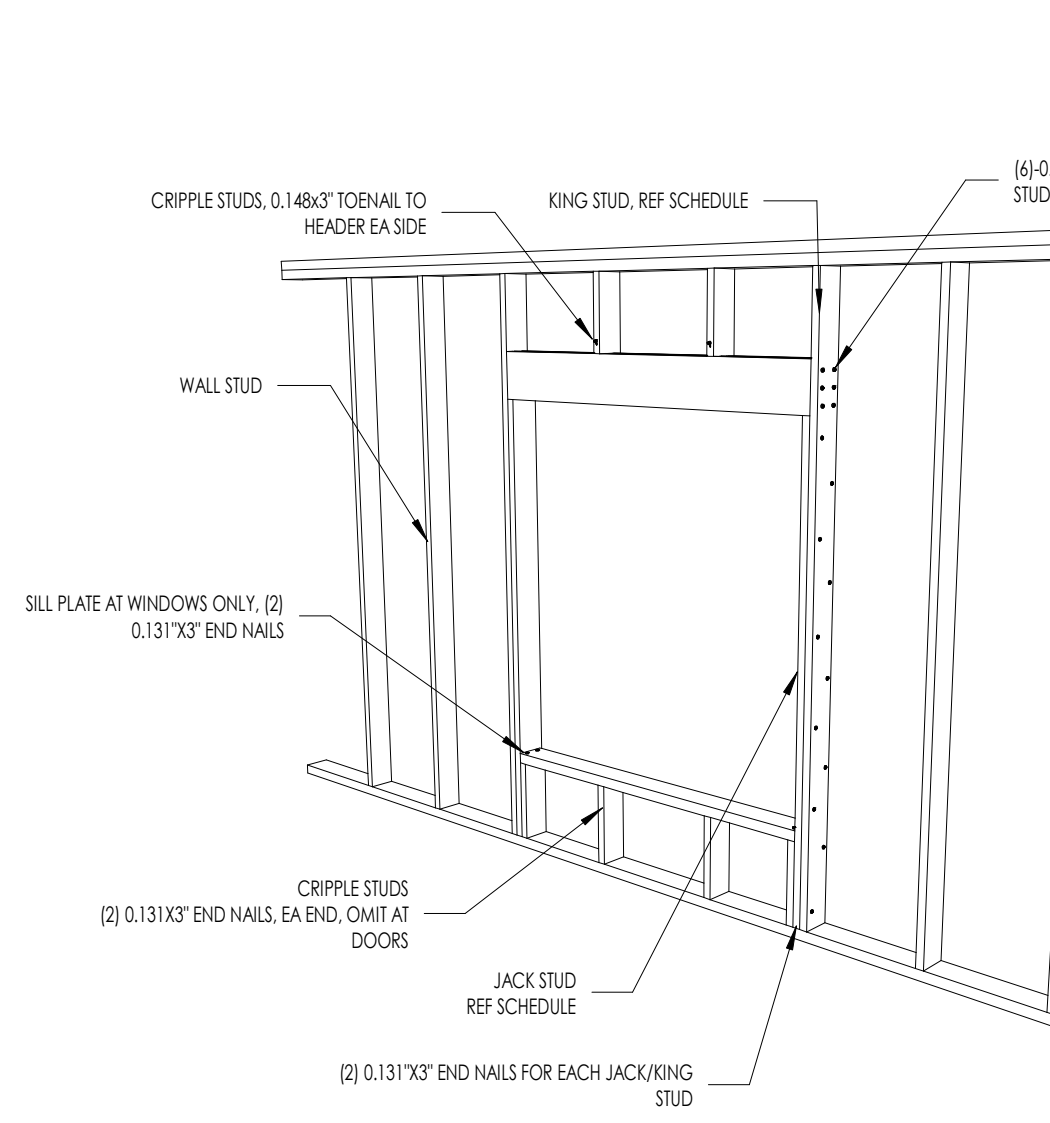
Date	Description



OPENING WIDTH (FT)	REQUIRED NO. OF KING STUDS						NO. JACK STUDS	STRAP LAP LENGTH (IN)
	PLATE HEIGHT (FT)							
	8	9	10	11	12			
5.3	1	1	1	2	2	1	N/R	
4	1	1	2	2	2	1	N/R	
5	2	2	2	3	3	1	N/R	
6	2	2	3	3	3	1	N/R	
7	2	2	3	3	4	1	N/R	
8	3	3	3	4	4	2	8	
9	3	3	4	4	4	2	8	
10	3	3	4	4	4	2	8	

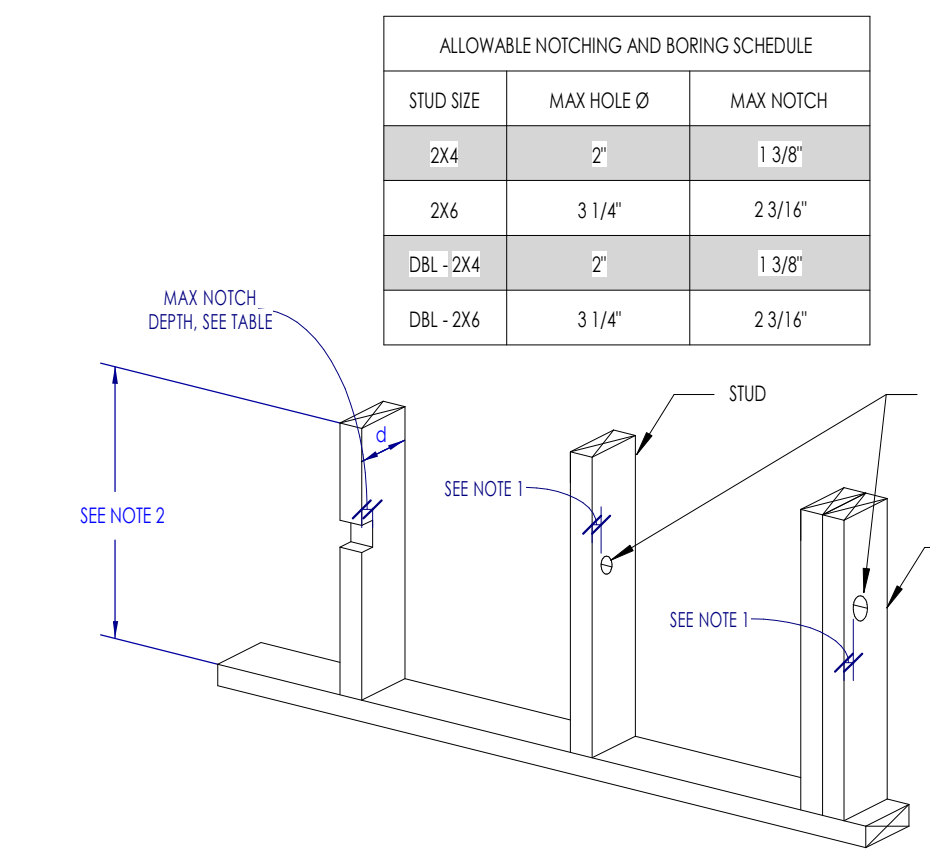
OPENING WIDTH (FT)	REQUIRED NO. OF KING STUDS						NO. JACK STUDS	STRAP LAP LENGTH (IN)
	PLATE HEIGHT (FT)							
	8	9	10	11	12			
5.3	1	1	1	1	1	1	N/R	
4	1	1	1	1	1	1	N/R	
5	1	1	1	1	2	1	N/R	
6	1	1	1	2	2	1	N/R	
7	1	1	2	2	2	1	N/R	
8	1	1	2	2	2	2	8	
9	1	2	2	2	2	2	8	
10	1	2	2	2	3	2	8	

NOTES:
1. MULTIPLE PILES MUST BE ATTACHED PER THE MECHANICALLY LAMINATED BUILT-UP COLUMN, NAILED DETAIL.
2. TABLE IS BASED OFF A HORIZONTAL WIND PRESSURE OF 20 PSF AND GRAVITY LOADING OF 200 PLF.
3. WALLS MUST BE CENTERED ON THE NOMINAL PILES OF THE HEADERS.
4. N/R = NOT REQUIRED. IF N/R, THEN REFERENCE NARROW OPENING DIAGRAM FOR CONNECTION REQUIREMENTS, OTHERWISE REFERENCE THE WIDE OPENING DIAGRAM.

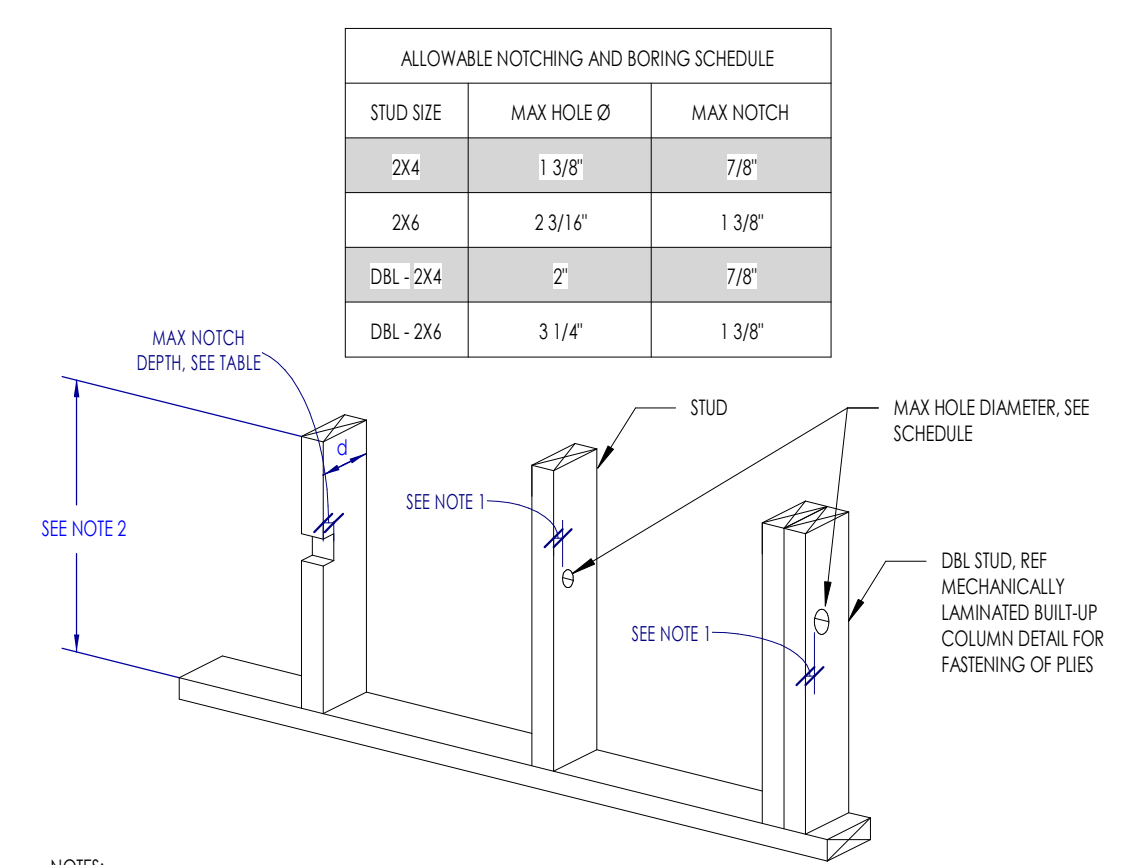


OPENING WIDTH (FT)	REQUIRED NO. OF KING STUDS						NO. JACK STUDS	HEADER SIZE	
	PLATE HEIGHT (FT)							2x4 STUD WALL	2x6 STUD WALL
	8	9	10	11	12				
5.3	1	1	1	1	1	1	22H	32H	
4	1	1	1	1	1	1	22H	32H	
5	1	1	1	2	2	1	22H	32H	
6	1	1	2	2	2	1	22H	32H	
7	1	1	2	2	3	1	22H	32H	
8	2	2	2	3	3	2	221H	321H	
9	2	2	3	3	3	2	221H	321H	
10	2	2	3	3	3	2	221H	321H	

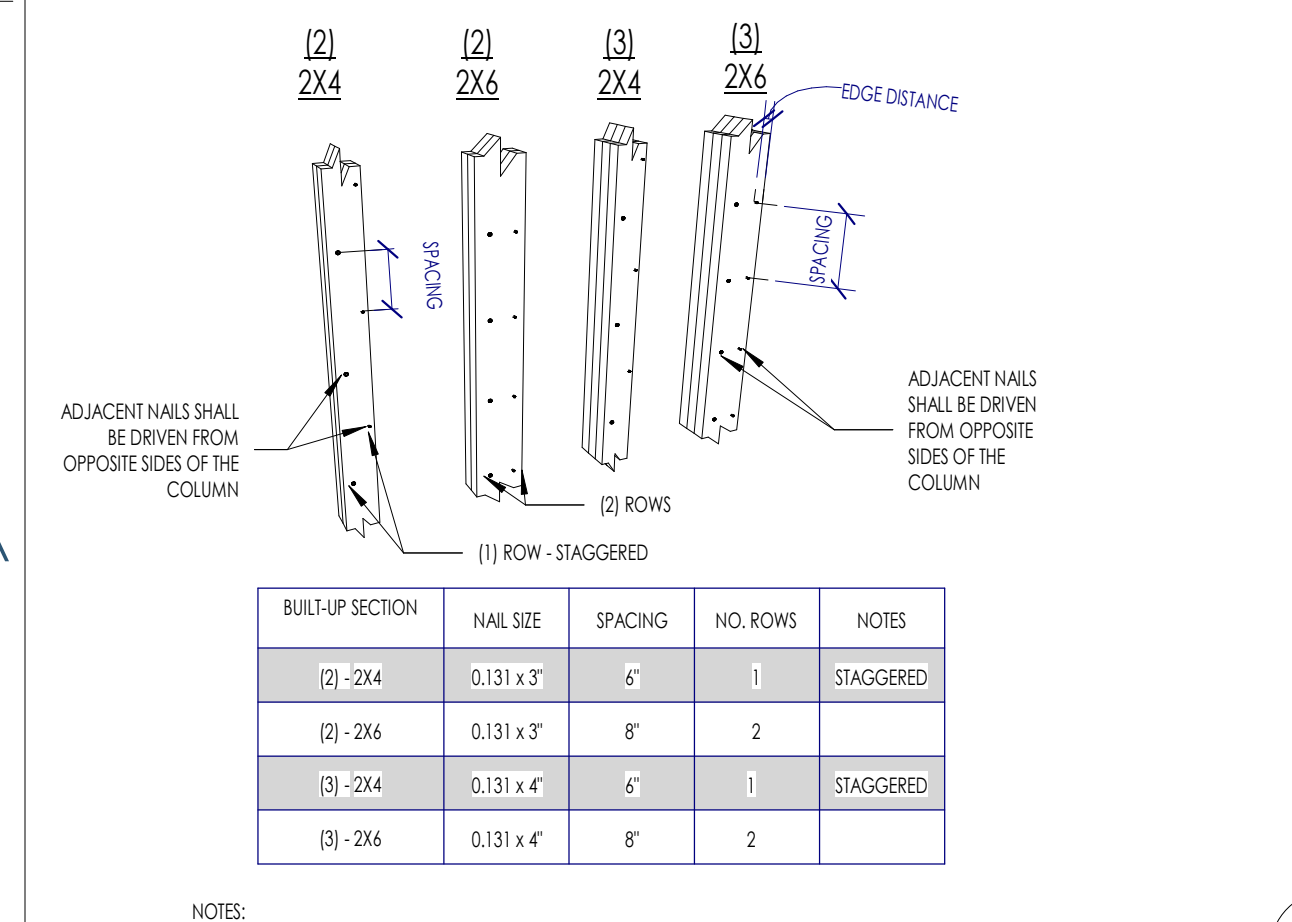
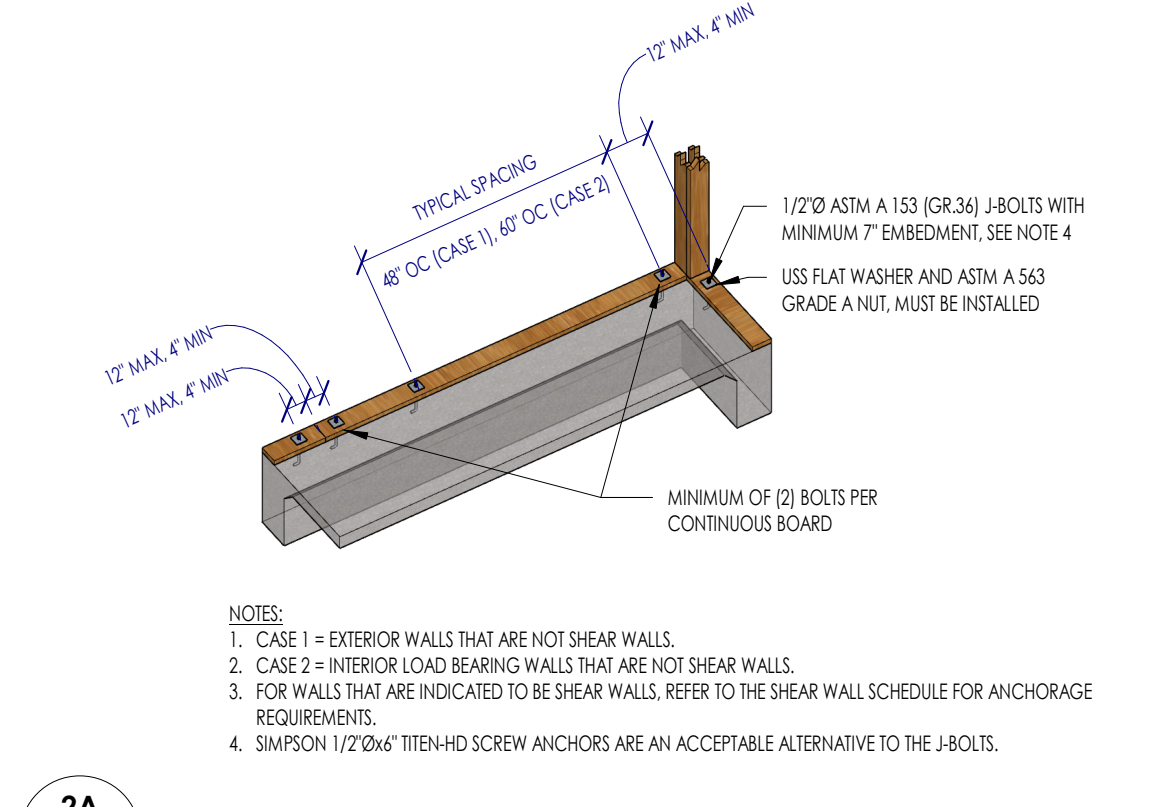
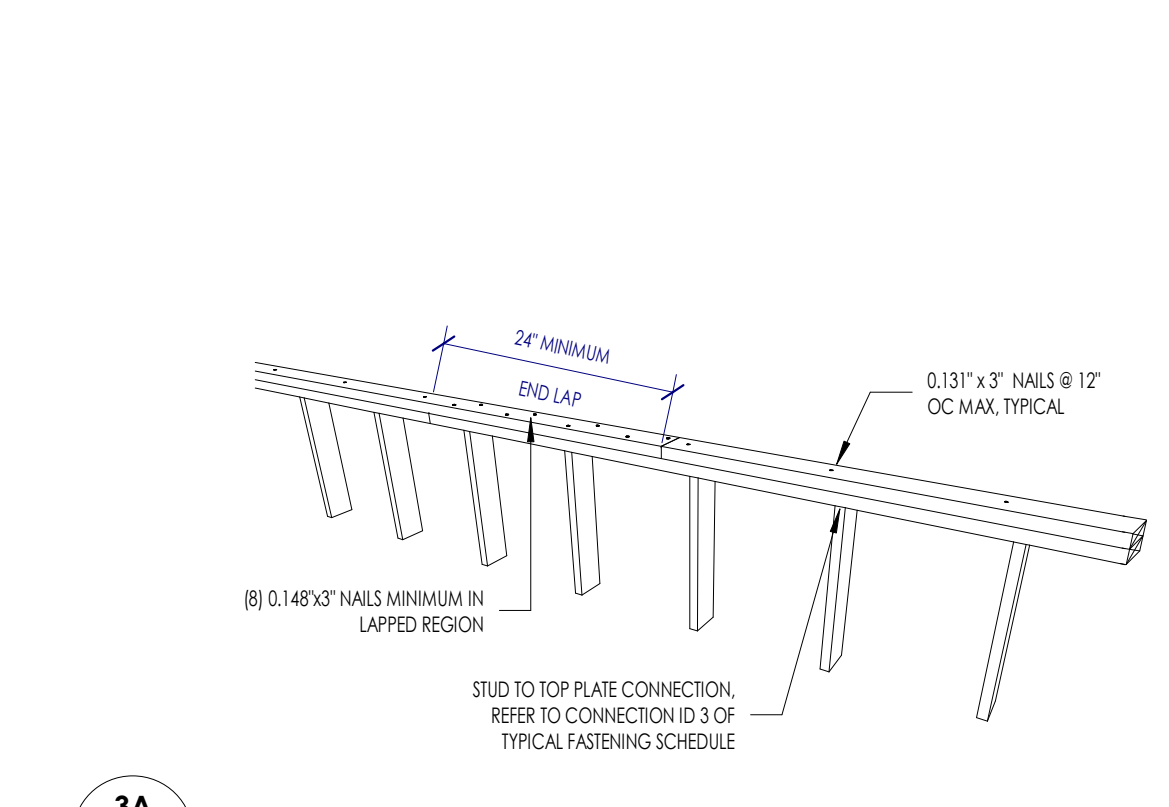
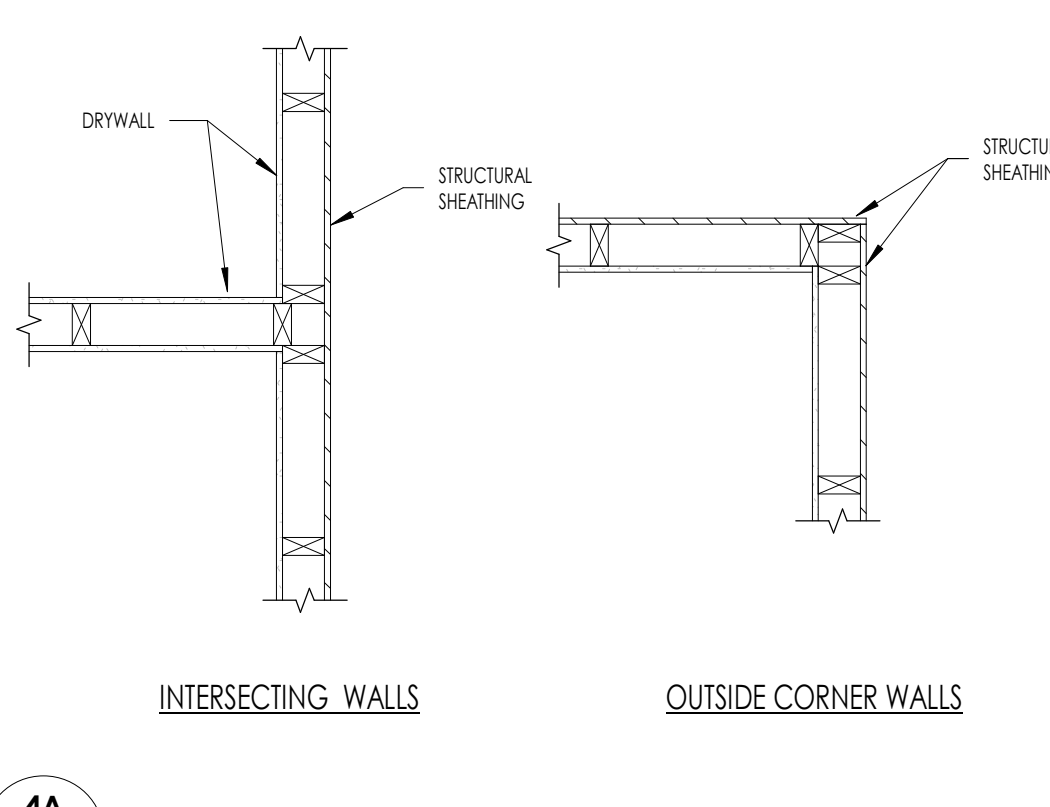
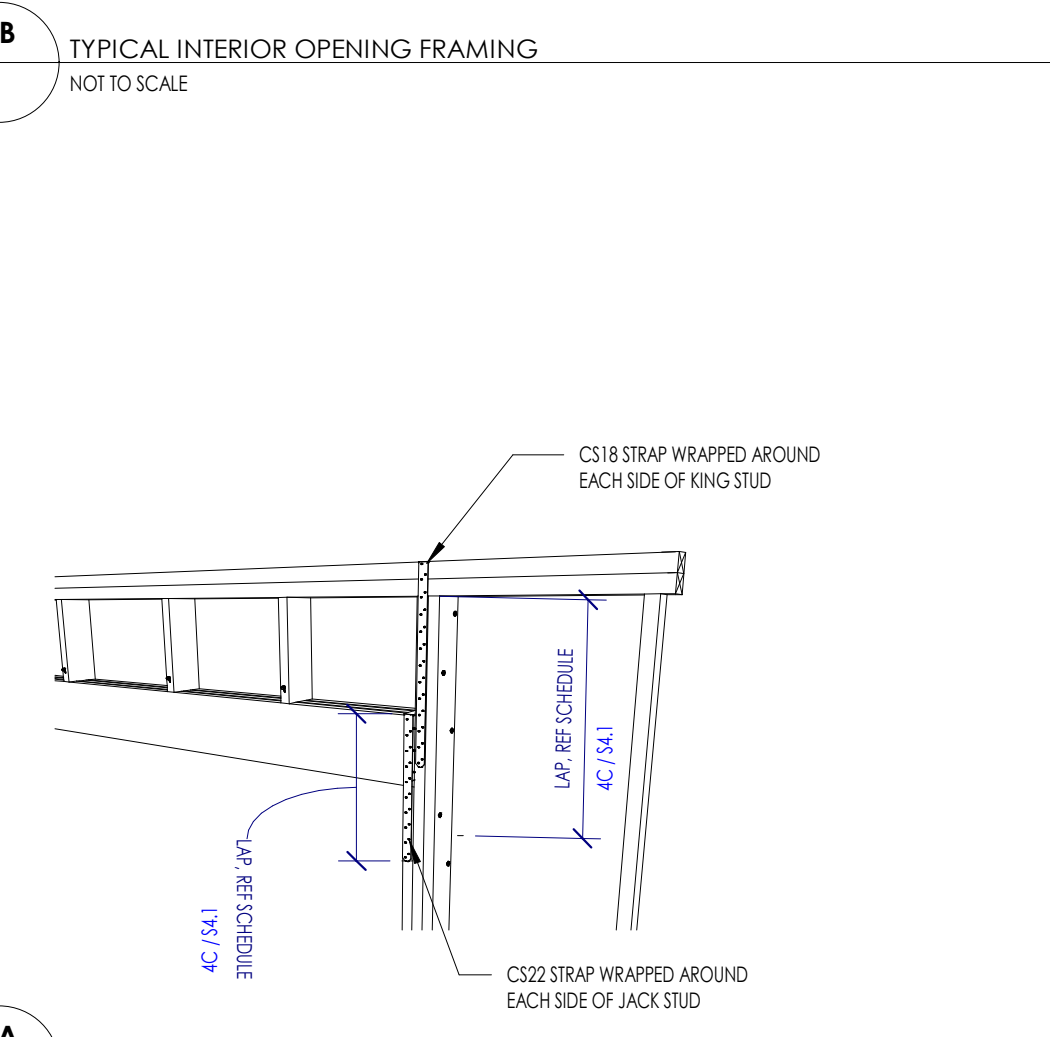
NOTES:
1. LOAD BEARING WALLS AND ASSOCIATED HEADERS ARE INDICATED ON PLAN.



NOTES:
1. MIN 5/8" CLEAR EDGE DISTANCE.
2. NOTCHES IN EITHER SIDE OF A STUD SHALL NOT BE LOCATED WITHIN THE MIDDLE THIRD OF THE STUD LENGTH.
3. NOTCHES AND BORINGS SHALL NOT OCCUR IN THE SAME CROSS SECTION.



NOTES:
1. MIN 5/8" CLEAR EDGE DISTANCE.
2. NOTCHES IN EITHER SIDE OF A STUD SHALL NOT BE LOCATED WITHIN THE MIDDLE THIRD OF THE STUD LENGTH.
3. NOTCHES AND BORINGS SHALL NOT OCCUR IN THE SAME CROSS SECTION.



NOTES:
1. END DISTANCE: THE FIRST FASTENERS SHALL BE LOCATED 2" FROM THE END OF THE COLUMN ON EACH END.
2. EDGE DISTANCE: 3/4" EDGE DISTANCES ± 1/8"

6A MECHANICALLY LAMINATED BUILT-UP COLUMN (STUD PACK) - NAILED
NOT TO SCALE

5A TYPICAL STRAP AT WIDE EXTERIOR OPENINGS
4C [S4.1] NOT TO SCALE

4A TYPICAL CORNER AND INTERSECTION WALL STUDS [NOT AT SHEAR WALL]
NOT TO SCALE

3A TYPICAL LOAD BEARING / SHEAR WALL DOUBLE TOP PLATE SPLICE
NOT TO SCALE

2A TYPICAL BOTTOM PLATE ANCHORAGE
NOT TO SCALE

Date	Description

This project, like most OpeningDesign's projects, is open source. (Attribution-ShareAlike 4.0 International-CC BY-SA 4.0) - freely available to any party for future use, assuming the terms such as Attribution and ShareAlike are honored.

6 5 4 3 2 1

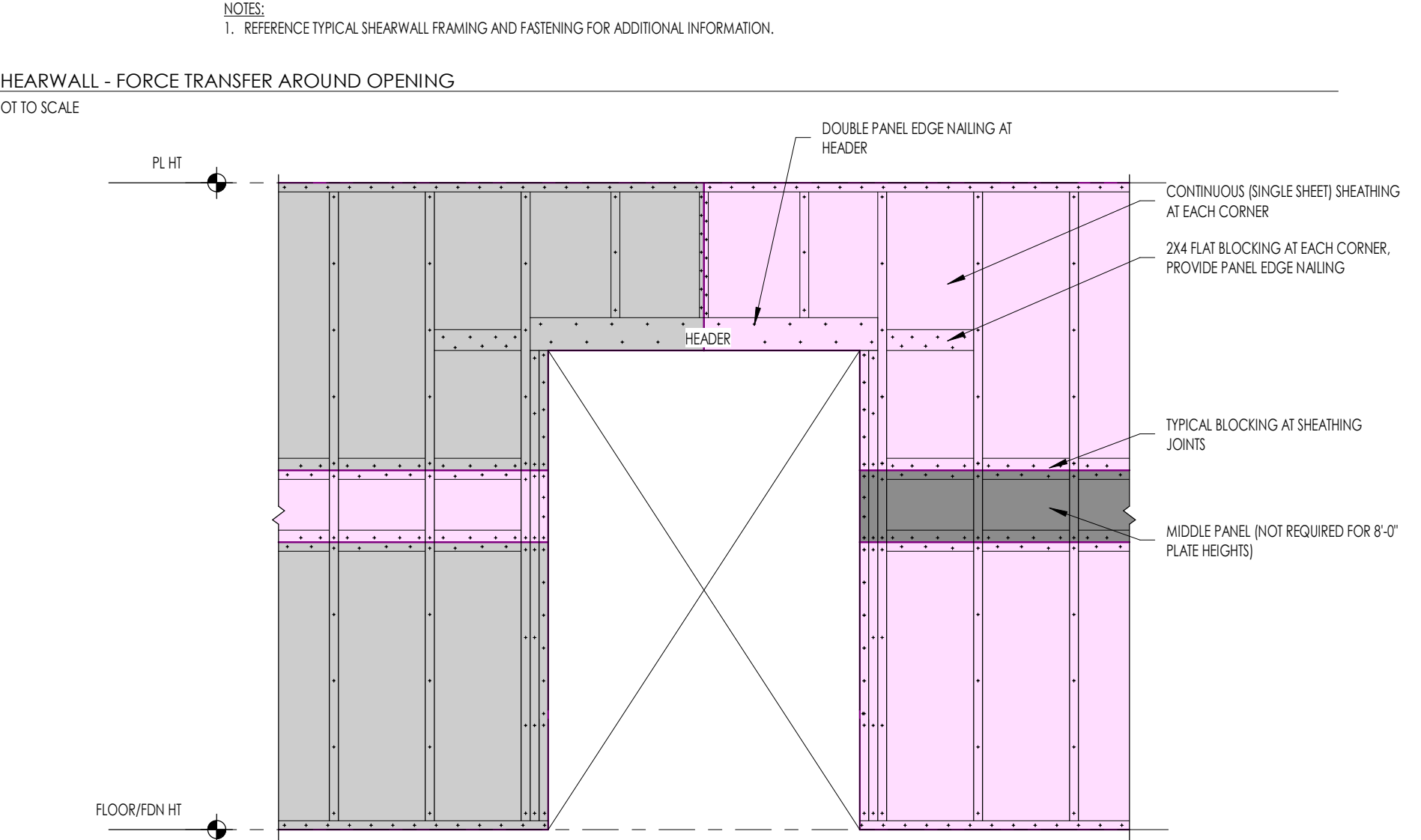
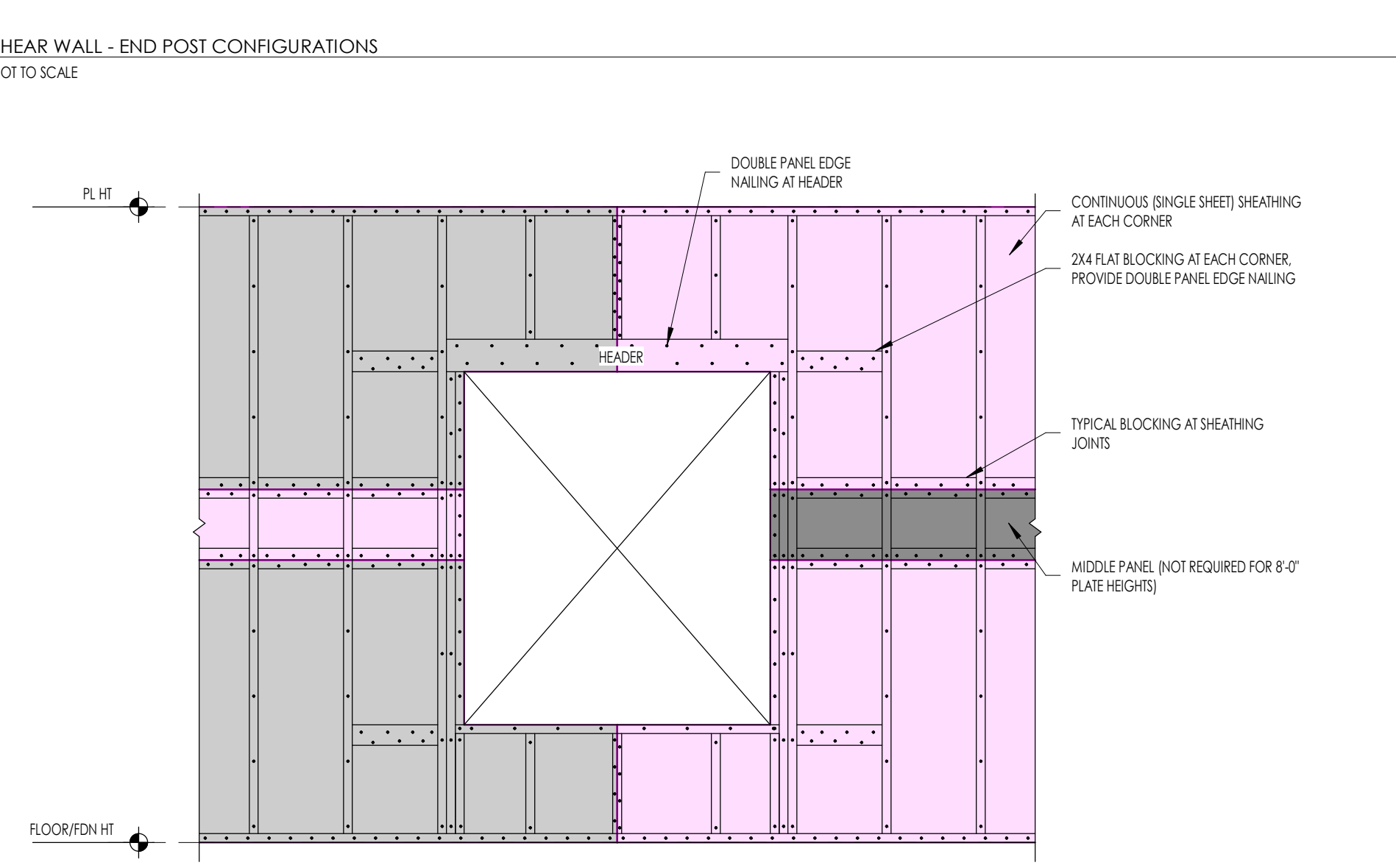
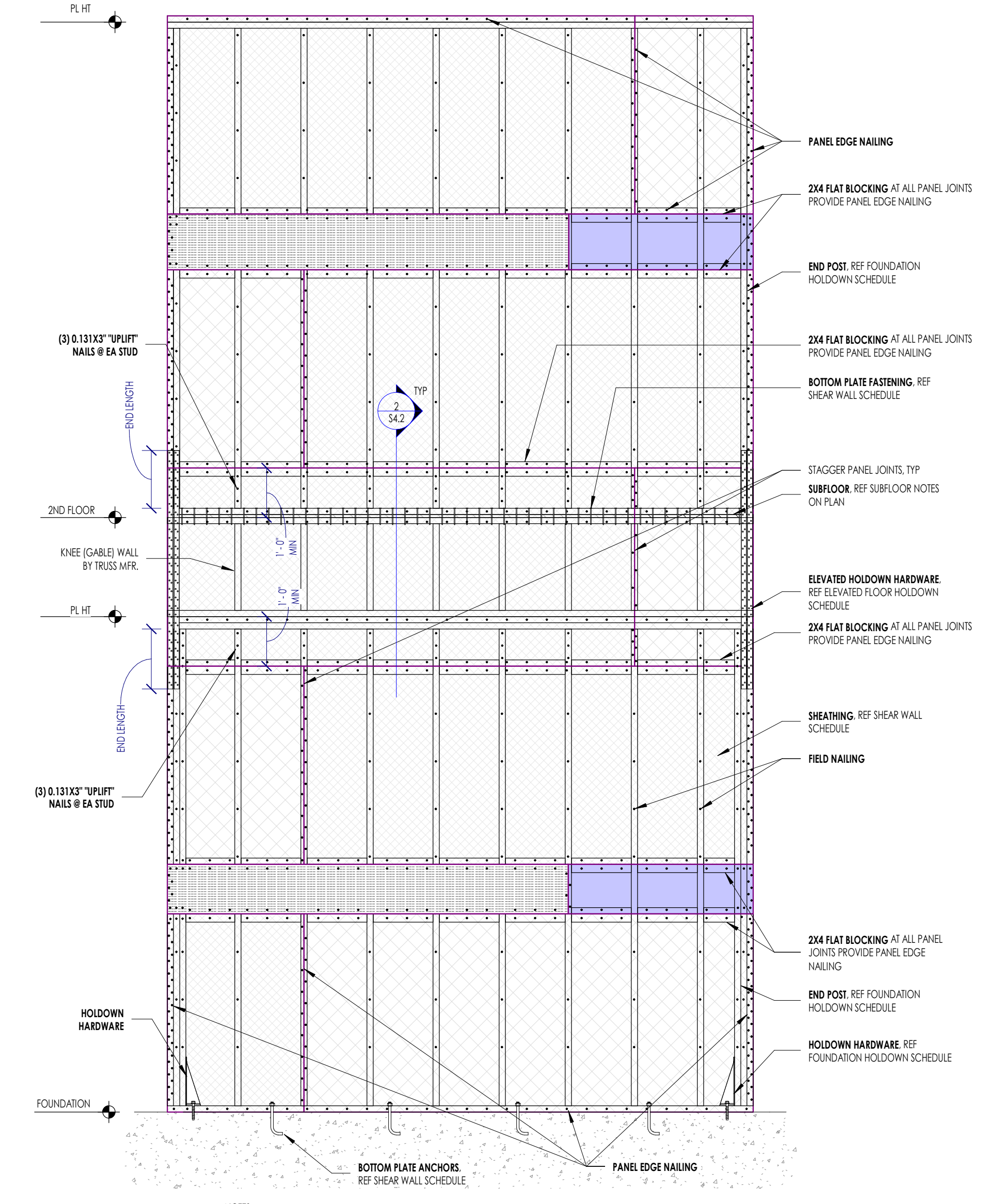
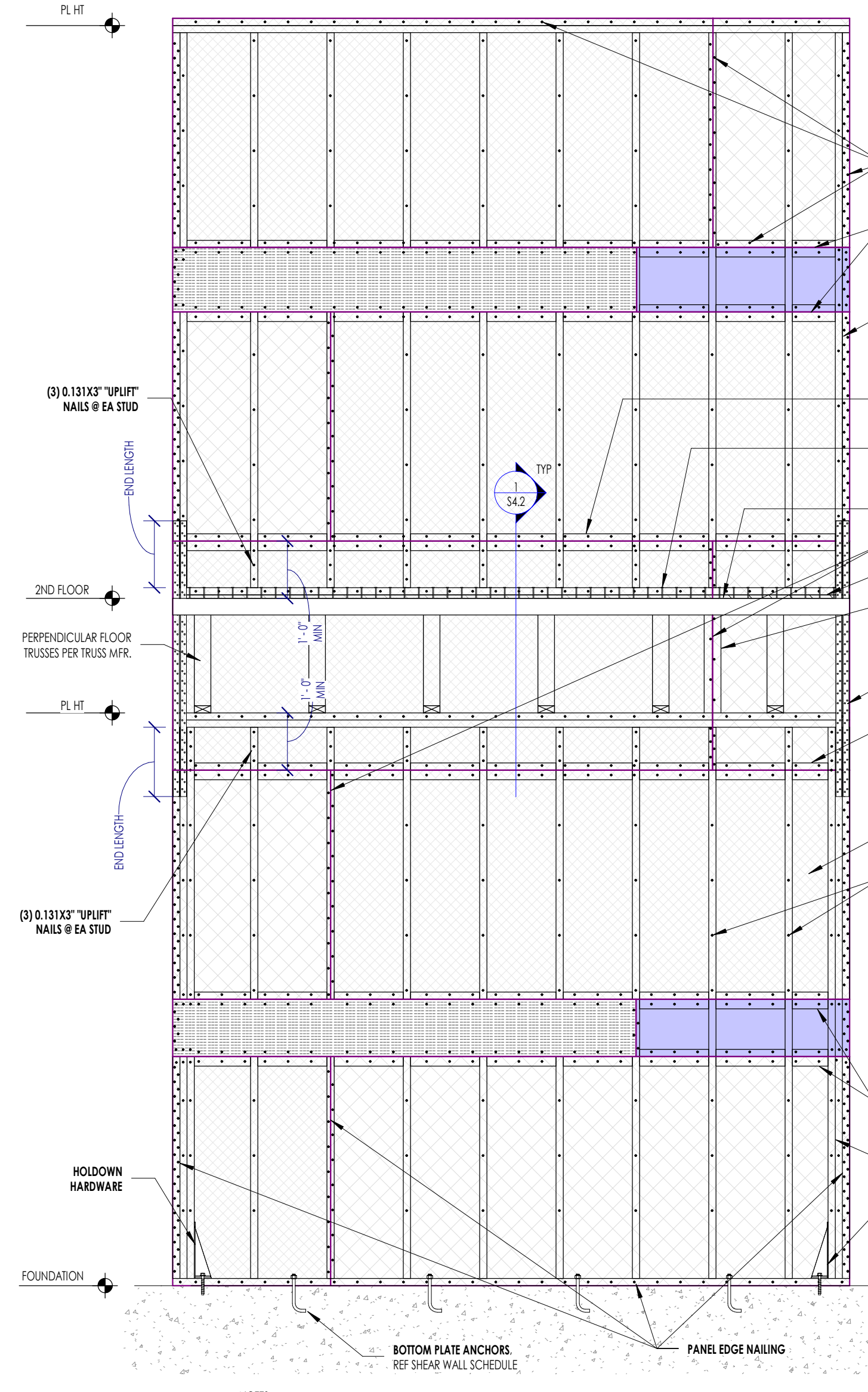
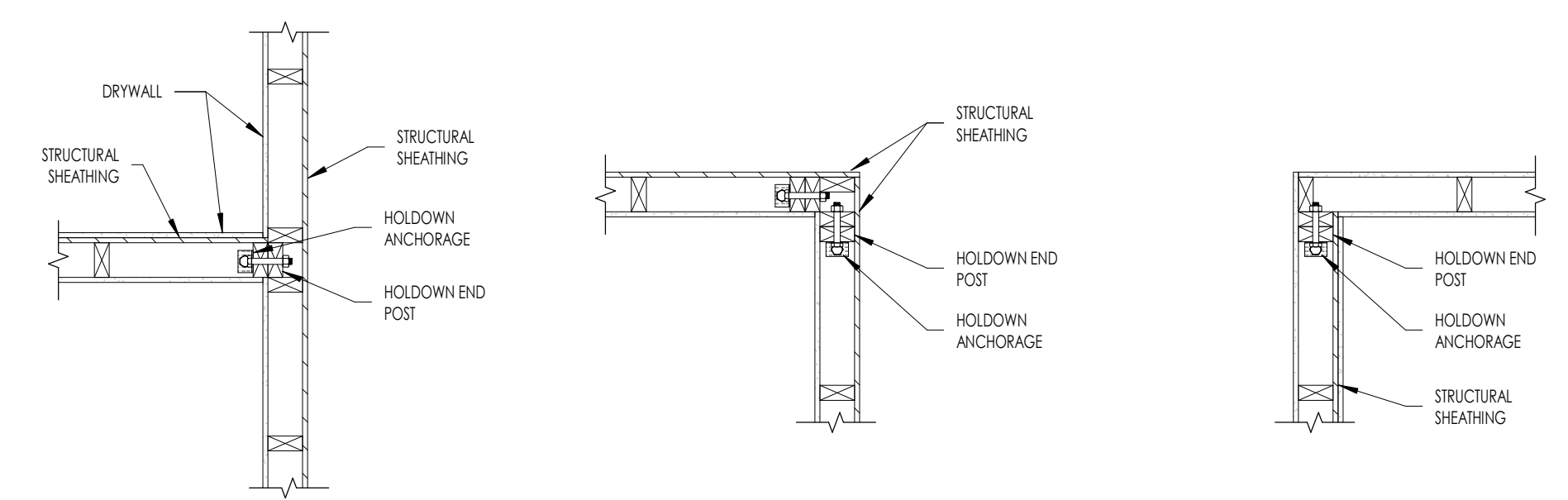
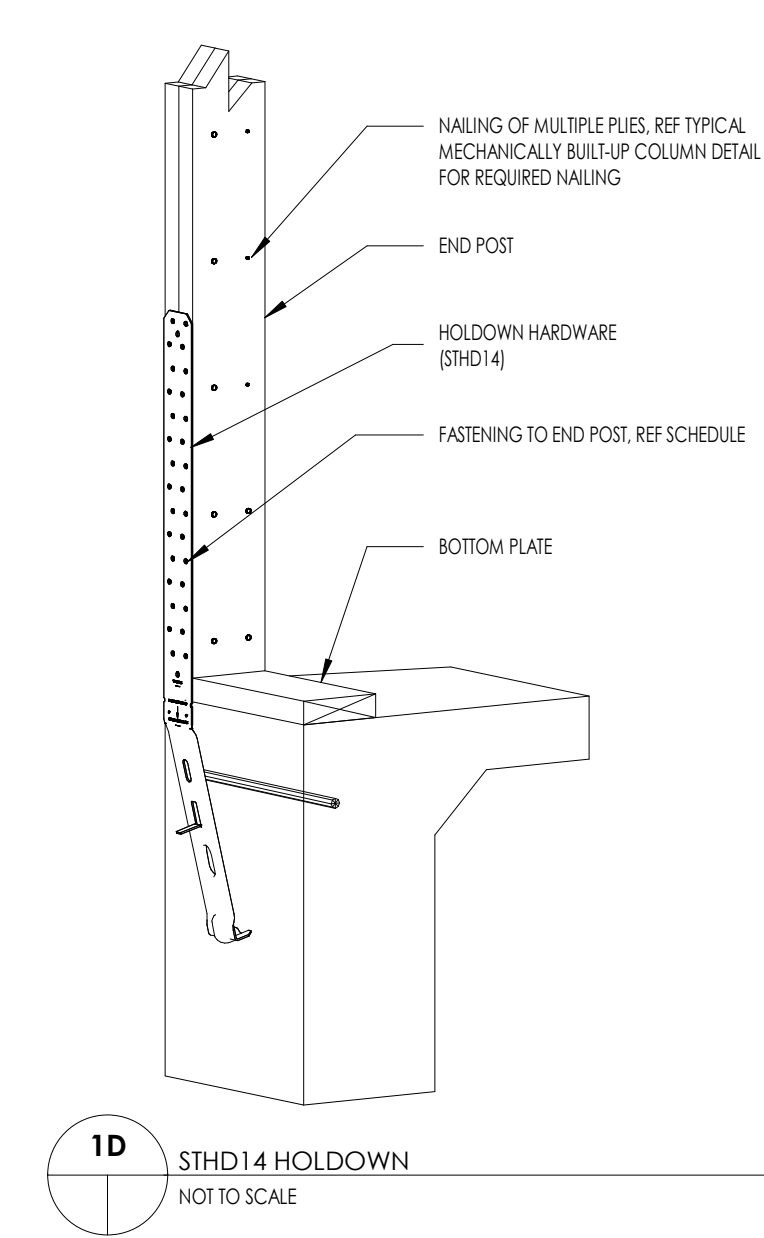
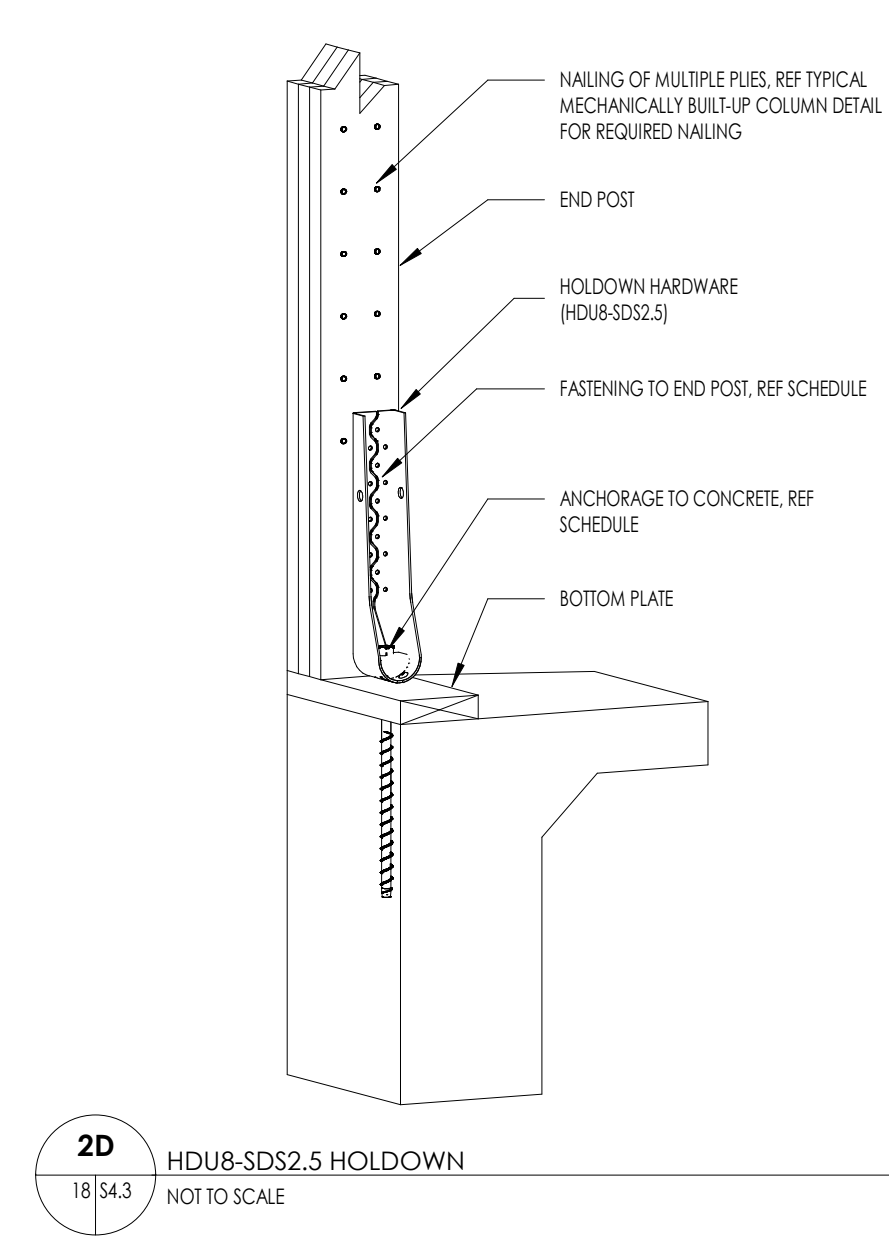
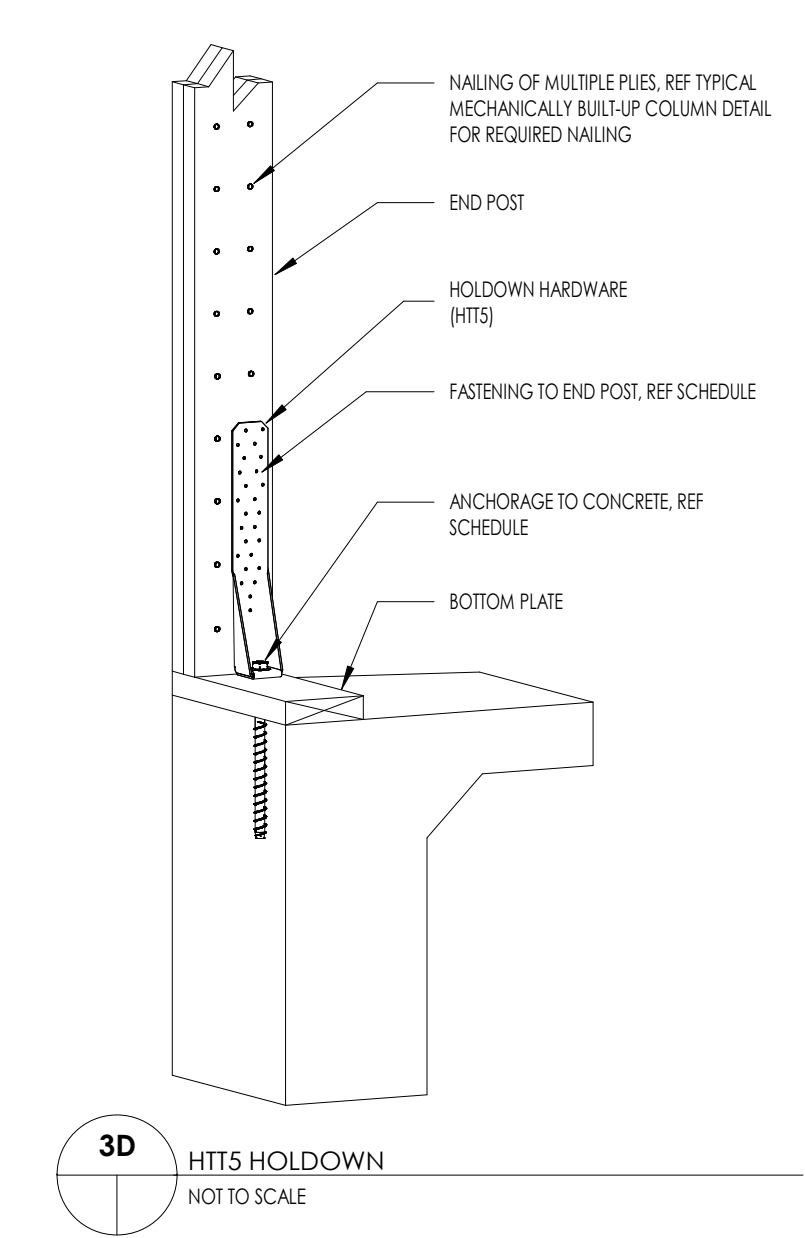
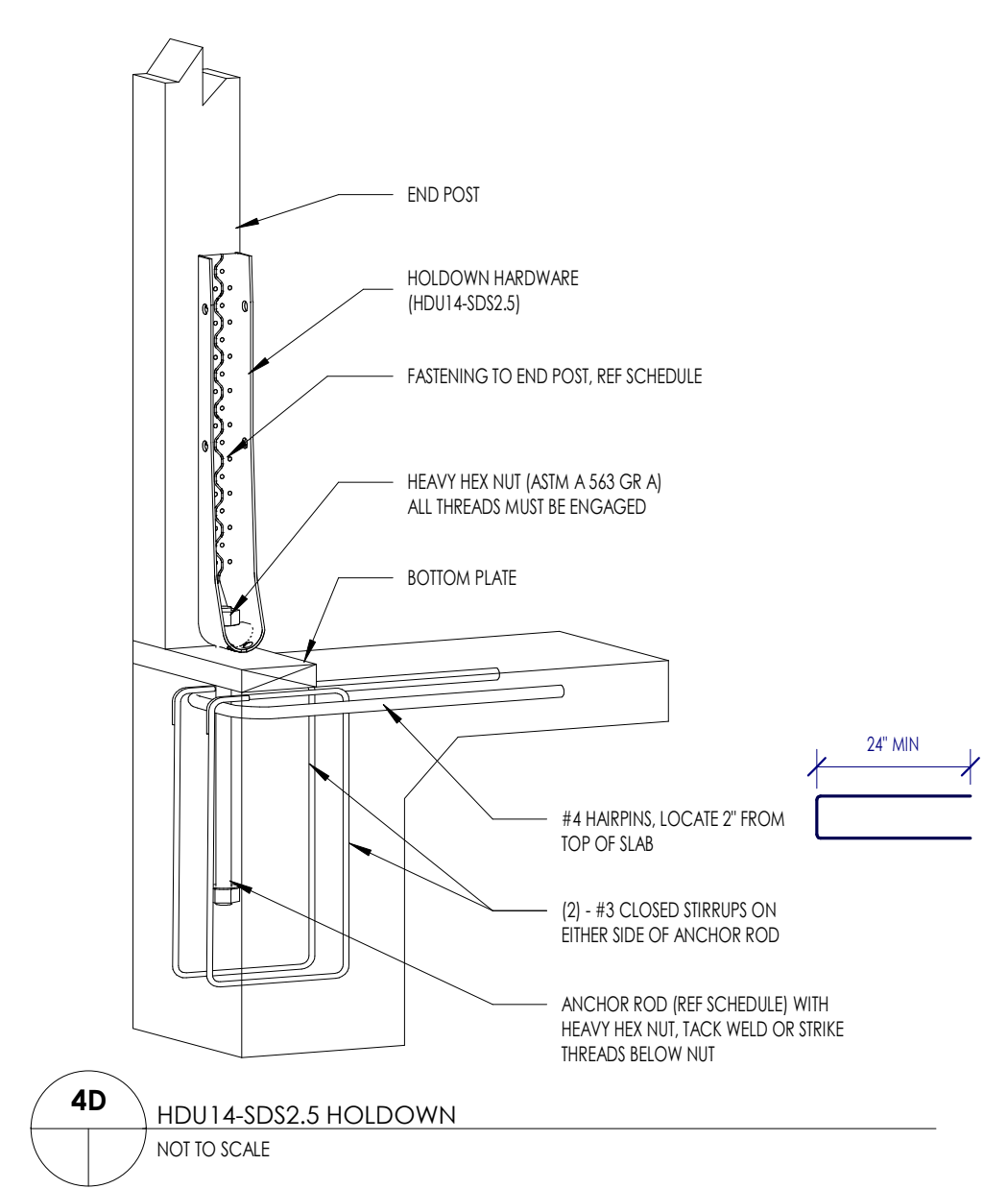
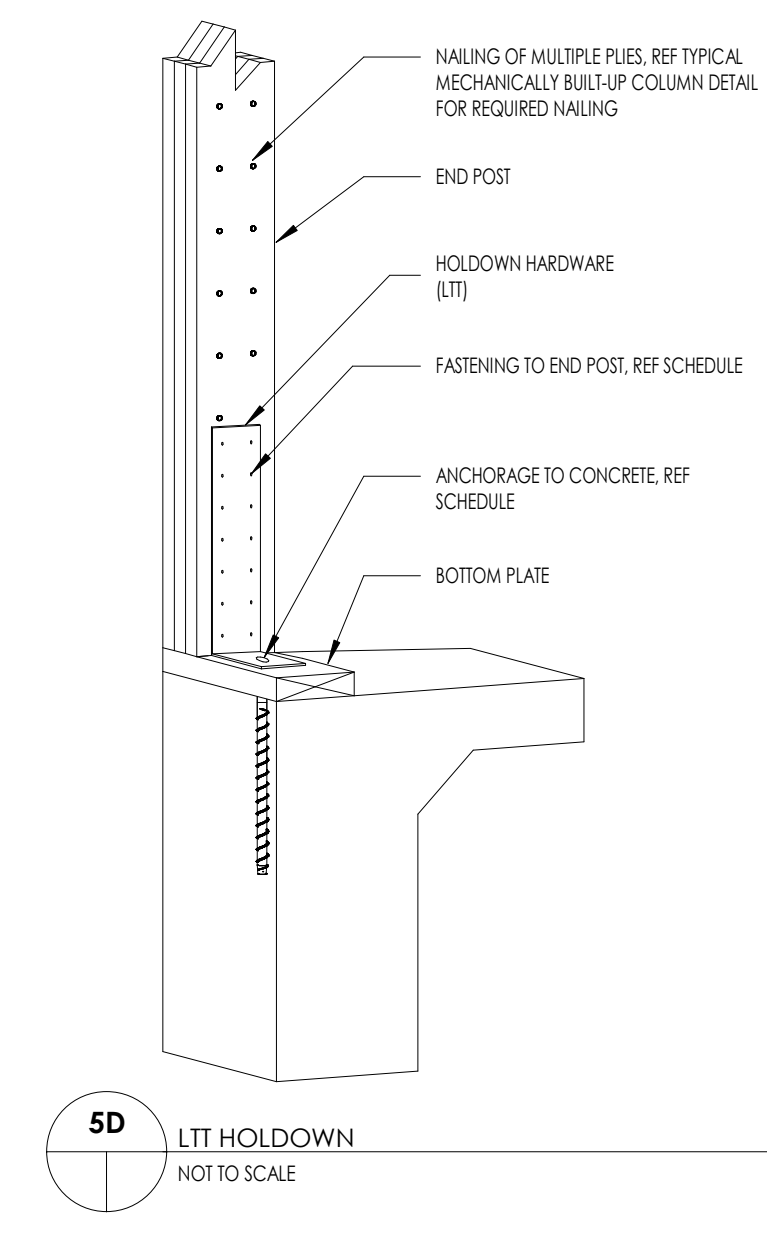
E

D

C

B

A



4A TYPICAL MULTIPLE STORY SHEARWALL FRAMING AND FASTENING, TRUSSES PERPENDICULAR NOT TO SCALE

2A TYPICAL MULTIPLE STORY SHEARWALL FRAMING AND FASTENING, TRUSSES PARALLEL NOT TO SCALE

Table with 2 columns: Date, Description

RENOVATION Wranglers
 Owner: Renovation Wranglers
 102 E 26th St
 Bryan, TX 77803
 Kateneason@wranglers.com | 979.450.9969

LKB ARCHITECTURE
 Architect of Record: LKB Architecture
 2929 Allen Pkwy Suite 200
 Houston, TX 77019
 isa@lkbarchitecture.com | 713.425.3076

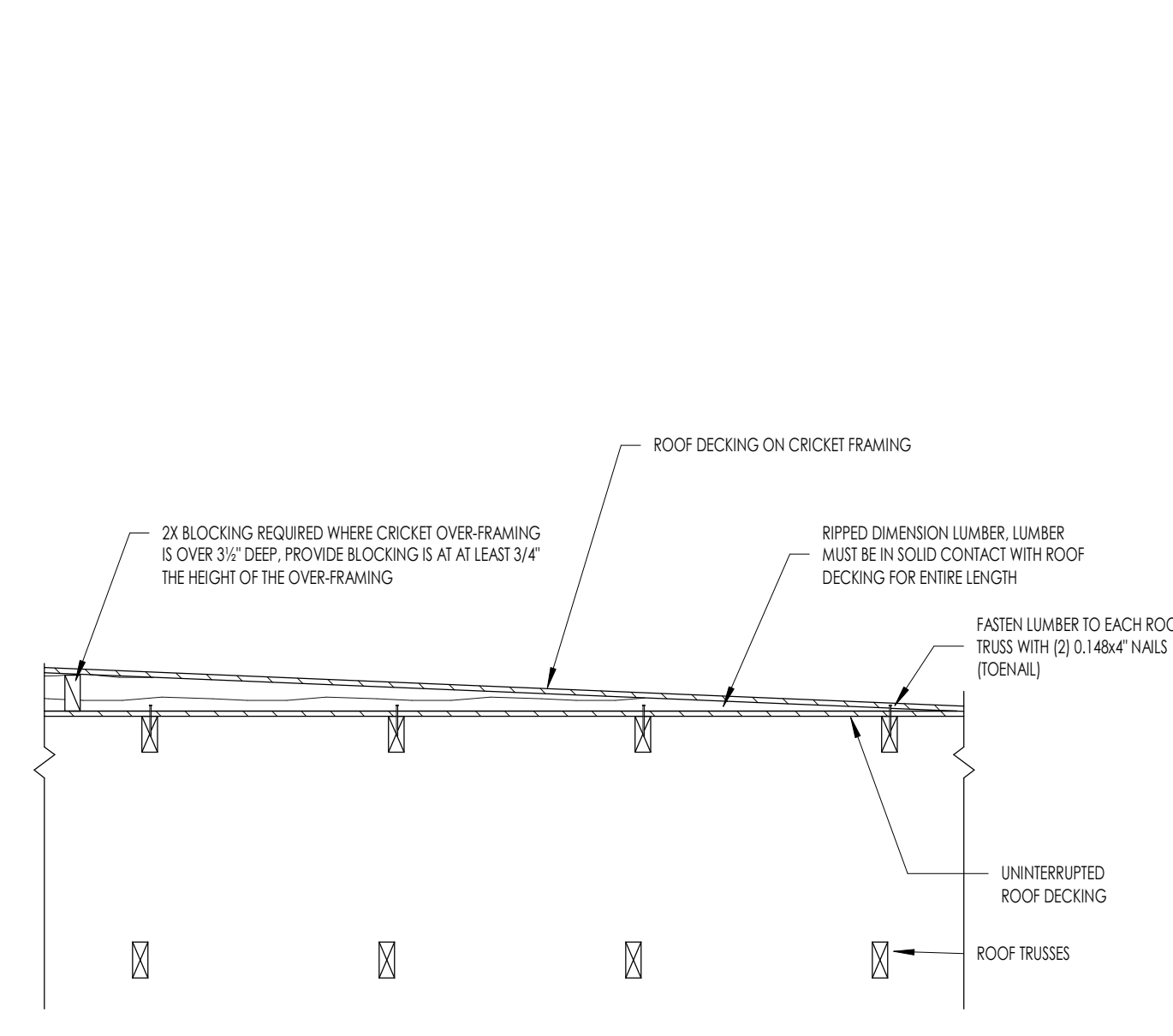
DUDLEY
 Structural: Dudley
 6102 Imperial Loop Drive
 College Station, TX 77845
 (979) 777-0720

AMC ENGINEERS
 MEP: AMC Engineers
 508 E Jackson St # 552
 Burnet, TX 78611
 info@amcengineers.com

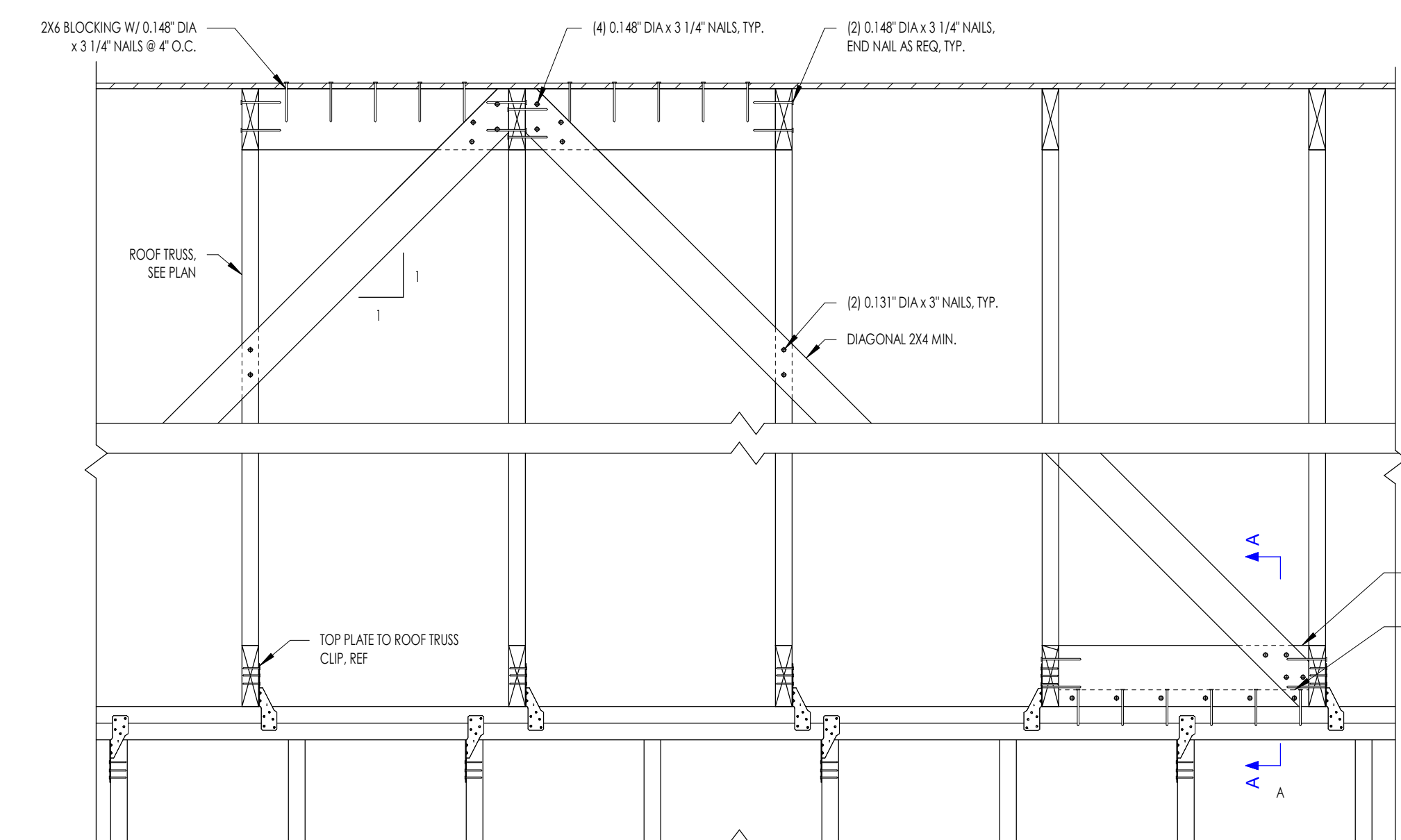
This project, like most OpeningDesign's projects, is open source (Attribution-ShareAlike 4.0 International—CC BY-SA 4.0)—freely available to any party for future use, assuming the terms such as Attribution and ShareAlike are honored.

openingdesign
 Architect: OpeningDesign
 17 S Fairchild | FL 7
 Madison, WI 53703
 ryan@openingdesign.com | 773.425.6456

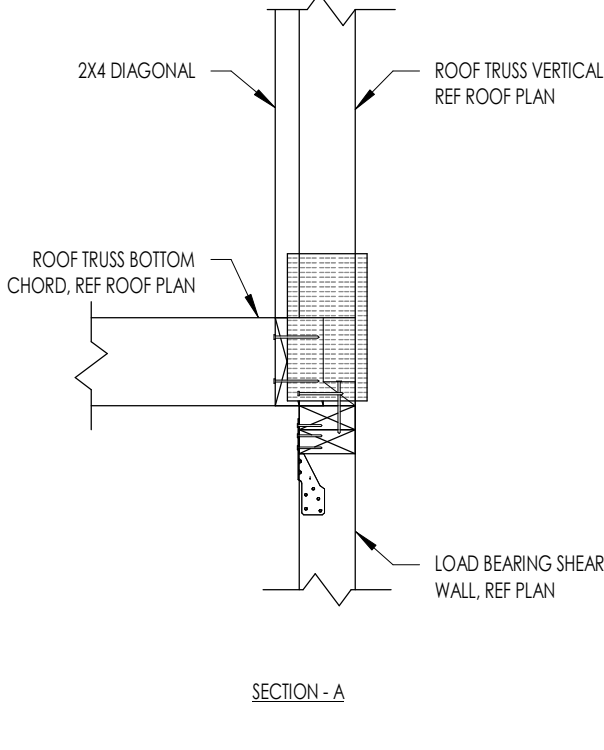
Date	Description



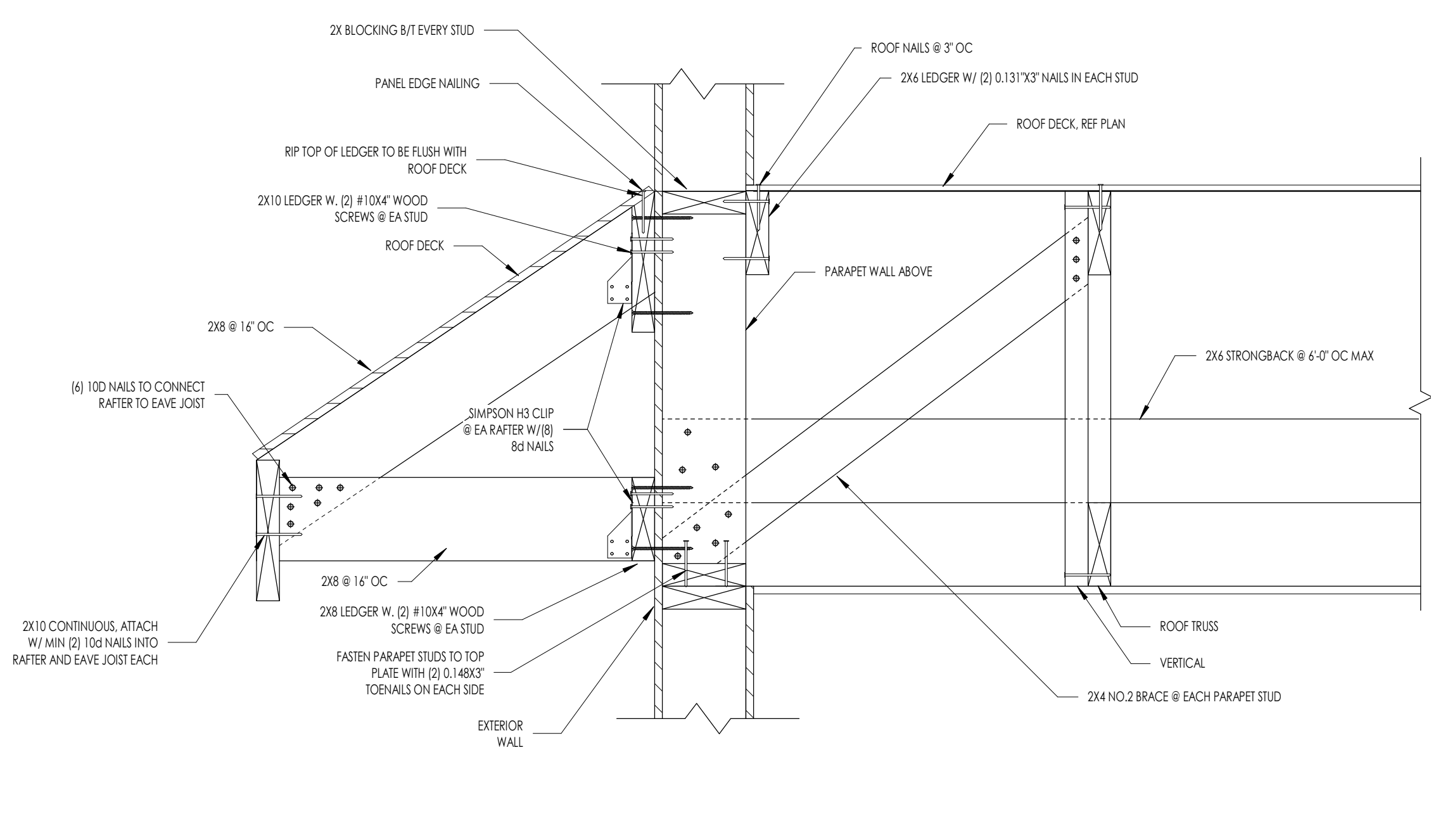
6A TYPICAL CRICKET FRAMING AT ROOF
NOT TO SCALE



5A D617.60 ROOF - BRACING AT INTERIOR SHEAR WALL
NOT TO SCALE

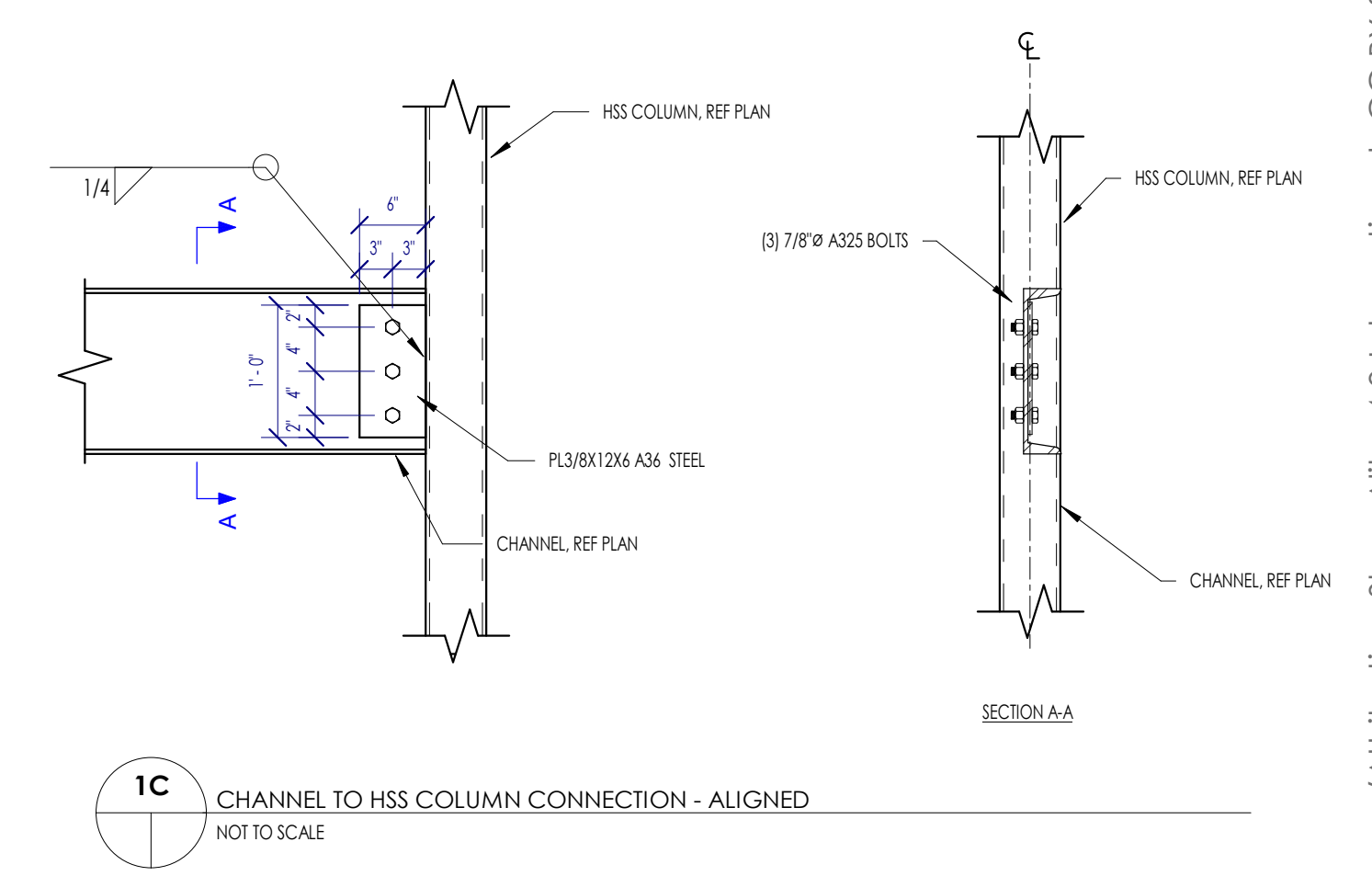


SECTION A

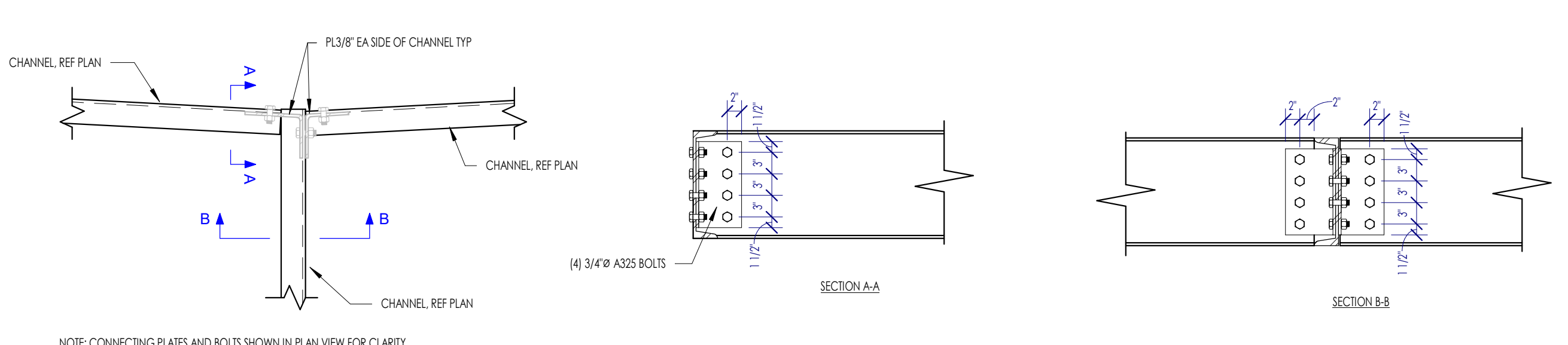


2A ROOF - RAFTER ATTACHMENT INTO WALL
NOT TO SCALE

This project, like most OpeningDesign's projects, is open source (Attribution-ShareAlike 4.0 International-CC BY-SA 4.0) - freely available to any party for future use, assuming the terms such as Attribution and ShareAlike are honored.

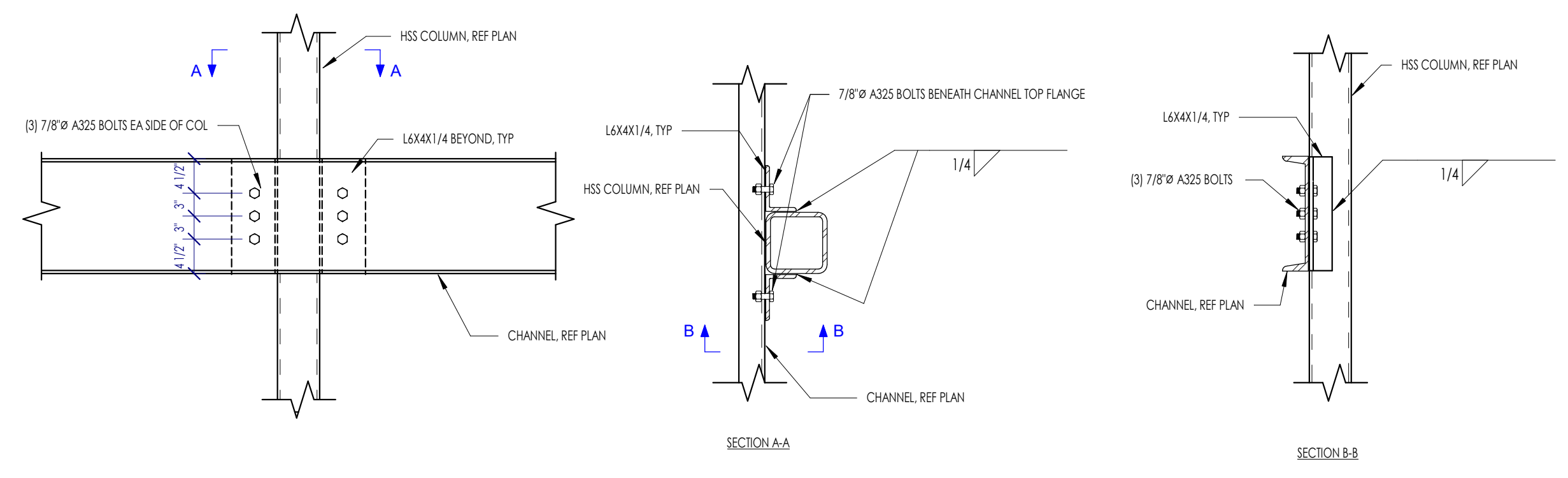


1C CHANNEL TO HSS COLUMN CONNECTION - ALIGNED
NOT TO SCALE

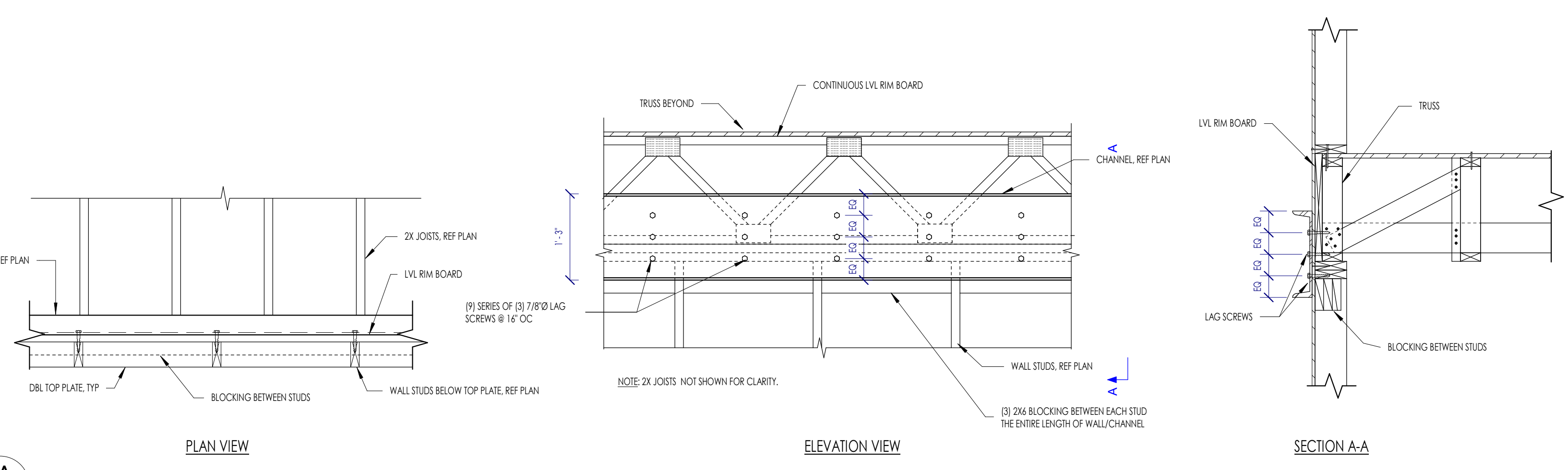


NOTE: CONNECTING PLATES AND BOLTS SHOWN IN PLAN VIEW FOR CLARITY.

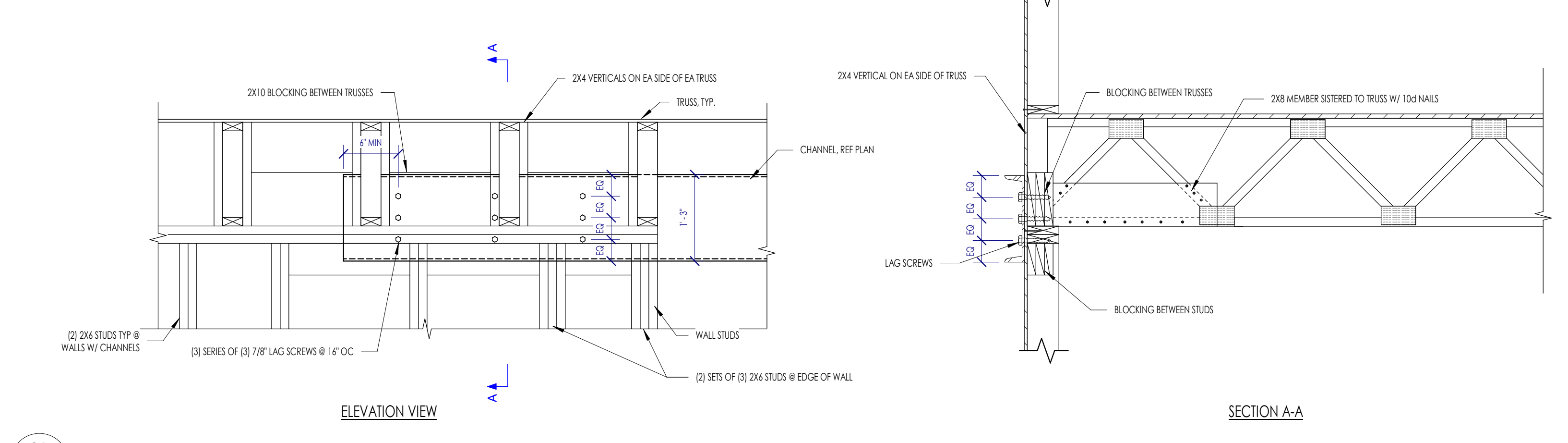
6B TYPICAL CHANNEL CONNECTION AT BALCONY
NOT TO SCALE



3B CHANNEL TO HSS COLUMN CONNECTION - ECCENTRIC
NOT TO SCALE



6A TYPICAL CHANNEL TO WALL STUD CONNECTION
NOT TO SCALE



3A TYPICAL CHANNEL TO WALL STUD CONNECTION Copy 2
NOT TO SCALE