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- INTERNATIONAL BUILDING CODE - 2015 WITH WISCONSIN INSERTS
- INTERNATIONAL EXISTING BUILDING CODE - 2015
- ASCE 7-10 MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES, ASCE/SEI 2010
- ACI 318-14 BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE AND COMMENTARY, 2011
- ACI 530/530.1-13 BUILDING CODE REQUIREMENTS AND SPECIFICATIONS FOR MASONRY STRUCTURES (AND RELATED COMMENTARIES), 2011
- AISC-ASD/LRFD (ASD USED) STEEL CONSTRUCTION MANUAL, 14TH EDITION
- AISC SEISMIC DESIGN MANUAL
- AWS D1.4/D1.4M STRUCTURAL WELDING CODE-STEEL, 2011 EDITION
- NDS-NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION ASD/LRFD (ASD USED), 2015 EDITION
- NDS-NATIONAL DESIGN SPECIFICATION SUPPLEMENT, DESIGN VALUES FOR WOOD CONSTRUCTION, 2015 EDITION
- AISI S200-07 - NORTH AMERICAN STANDARD FOR COLD-FORMED STEEL FRAMING-GENERAL PROVISIONS, 2012 EDITION
- AISI S211/S212/S213/S214-07 - NORTH AMERICAN STANDARD FOR COLD-FORMED STEEL FRAMING, 2012D EDITION (WALL STUD, HEADER, LATERAL, & TRUSS DESIGN)

## DESIGN STRESSES

CONCRETE AT 28 DAYS	$F_c = 4000$ PSI SLAB ON GRADE, PRECAST KEYWAYS AND TOPPING, SUPPORTED FLOORS, WALLS, PIERS, COLUMNS AND EXTERIOR EXPOSED CONCRETE.
	$F_c = 3000$ PSI FOOTINGS
	$F_c = 1000$ PSI SLURRY
	AIR ENTRAIN EXTERIOR EXPOSED CONCRETE PER CONCRETE SPECS.
REINFORCING STEEL & W.W.F.	$F_y = 60,000$ PSI PER ASTM A615 GRADE 60.
STRUCTURAL STEEL	$F_y = 50,000$ PSI PER ASTM A992 U.N.O. ASTM A36 GRADE 50 FOR CHANNELS, ANGLES, S-SHAPES, PLATE & BAR
HANDRAILS	$F_y = 42,000$ PSI PER ASTM A500 GRADE B.
TUBES	$F_y = 46,000$ PSI PER ASTM A500 GRADE B.
STRUCTURAL BOLTS	HIGH STRENGTH BOLTS, NUTS, & WASHERS, ASTM A 325 ZINC-PLATED HIGH STRENGTH BOLTS, NUTS, & WASHERS, ASTM A 325 STAINLESS STEEL BOLTS, NUTS, & WASHERS, ASTM F 593 SHEAR CONNECTORS, ASTM A 108 GRADES 1015 THRU 1020 THREADED RODS, ASTM A 36 GRADE 50 CLEVISES & TURNBUCKLES, ASTM A 108, GRADE 1035 EYE BOLTS & NUTS, ASTM A 108, GRADE 1030 ANCHOR BOLTS, ASTM F1554-07a, 55 KSI YIELD
CONCRETE MASONRY UNIT	$F_m = 2,500$ PSI (NET AREA COMPRESSIVE STRENGTH = 3750 PSI MIN.) USE NORMAL WEIGHT BLOCK. TYPE "M" MORTAR SHALL BE USED FOR FOUNDATION WALLS AND TYPE "S" OR "M" MORTAR SHALL BE USED ON WALLS ABOVE GRADE.
GROUT BETWEEN BASE PLATES & BRG. PLATES	NON-METALLIC, SHRINKAGE-RESISTANT ASTM C 1107.
COLD-FORMED METAL FRAMING	$F_y = 33,000$ PSI 18 GAUGE & LIGHTER $F_y = 50,000$ PSI 16 GAUGE & HEAVIER. ALL TRACK TO BE 16 GAUGE GALVANIZED COATING - G90
FIBER REINFORCEMENT	FIBRILLATED POLYPROPYLENE FIBERS ENGINEERED & DESIGNED FOR USE IN CONCRETE SLABS COMPLYING WITH ASTM C 1116, TYPE III, 1/2" TO 1 1/2" LONG.
SOIL BEARING PRESSURE	2,000 PSF (ASSUMED)

## DESIGN CRITERIA

DESIGN DEAD LOADS:	
ROOF	30 PSF
FLOORS	30 PSF
PLANTERS	100 PSF
DESIGN LIVE LOADS:	
ROOF	40 PSF
FLOORS	40 PSF
CORRIDORS, STAIRS	40 PSF
WIND LOAD DESIGN CRITERIA:	
BASIC WIND LOAD	20 PSF
SNOW LOAD DESIGN CRITERIA (MAIN ROOF):	
ROOF SNOW LOAD	30 PSF

PEDESTRIAN HANDRAILS OR GUARDS:  
200 LB. LOAD OR 50 PLF LOAD APPLIED IN ANY DIRECTION AT TOP OF HANDRAIL ASSEMBLY OR GUARD & TO TRANSFER THIS LOAD THROUGH SUPPORTS TO THE STRUCTURE.

## DEFLECTION CRITERIA

### ROOF MEMBERS:

	LIVE	SNOW OR WIND	DEAD + LIVE OR SNOW
SUPPORTING GYP. BOARD CEILINGS .....	L/360	L/360	L/360
SUPPORTING FLEXIBLE CEILINGS .....	L/240	L/240	L/240
NOT SUPPORTING CEILINGS .....	L/240	L/240	L/180
SUPPORTING RIGID MATERIALS (BRICK, ETC) ..	L/600 OR 0.3in.	L/600 OR 0.3in.	L/600 OR 0.3in.

### FLOOR MEMBERS:

SUPPORTING RIGID MATERIALS (BRICK, ETC) ..	L/600 OR 0.3in.	L/600 OR 0.3in.
SUPPORTING FLEXIBLE MATERIALS .....	L/360	L/240

### LINTEL/HEADER/BEAM MEMBERS:

SUPPORTING RIGID MATERIALS (BRICK, ETC) ...	L/600 OR 0.3in.	L/600 OR 0.3in.	L/600 OR 0.3in.
SUPPORTING FLEXIBLE MATERIALS(EIFS, SIDING) ...	L/360	L/360	L/240

### EXTERIOR WALLS:

WITH RIGID FINISHES (BRICK, MASONRY, ETC) .....	L/600 OR 0.3in.
WITH FLEXIBLE FINISHES (EIFS, SIDING, ETC) .....	L/360

## GENERAL NOTES

1. CONTRACTOR TO FIELD VERIFY ALL DIMENSIONS. IF DIMENSIONS OF ACTUAL FRAMING MEMBERS DIFFER FROM THOSE SHOWN ON THE PLAN, CONTRACTOR TO NOTIFY BRIOHN DESIGN GROUP OF DISCREPANCY.
2. ALL DETAILS TO BE COORDINATED WITH ARCHITECT BEFORE FABRICATION OF ANY COMPONENTS, THIS INCLUDES, BUT IS NOT LIMITED TO, STEEL/STEEL CONNECTION DETAILS, STEEL/WOOD CONNECTION DETAILS, & WOOD/STEEL/BRICK CONNECTION DETAILS.
3. CONTRACTOR TO FIELD VERIFY ALL EXISTING CONDITIONS PERTAINING TO THE WORK BEING PERFORMED. IT IS THE CONTRACTORS RESPONSIBILITY TO DETERMINE IF CONDITIONS WARRANT STRUCTURAL CONSIDERATIONS. IF ANY EXISTING CONDITIONS ARE DEEMED TO BE UN-SAFE, CONTRACTOR SHALL NOTIFY BRIOHN DESIGN GROUP.
4. ALL TEMPORARY SUPPORT CONDITIONS TO BE EVALUATED BY THE GENERAL CONTRACTOR AND IS NOT THE RESPONSIBILITY OF BROHN DESIGN GROUP.
5. CONTRACTOR TO FIELD VERIFY THE STRUCTURAL CONDITION OF ANY EXISTING MATERIALS AFTER EXISTING INTERIOR FINISHES ARE REMOVED. ANY CONCERNS SHOULD BE BROUGHT TO THE ATTENTION OF BRIOHN DESIGN GROUP.

## WOOD DESIGN CRITERIA

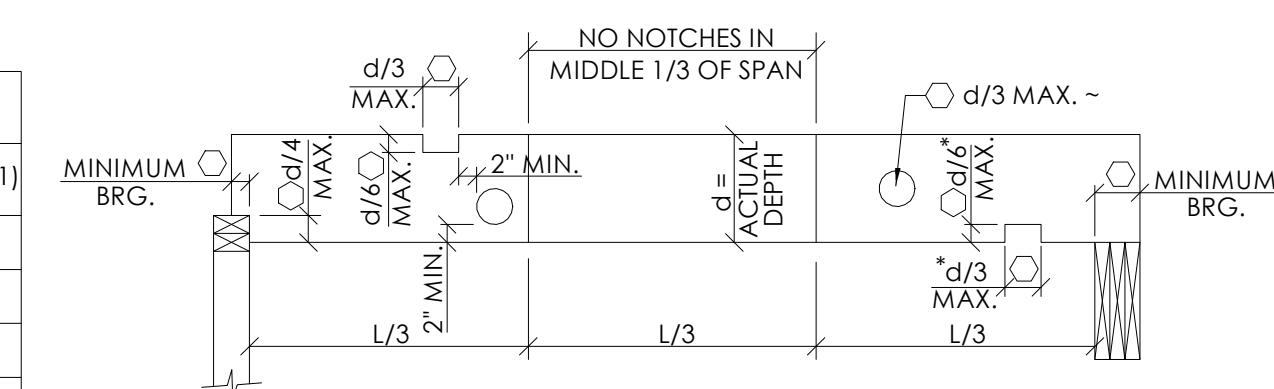
1. WOOD MOISTURE CONTENT 19% MAXIMUM.
2. IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE 2 x 6 SOLID BLOCKING AT ALL WOOD SHEATHING PANEL JOINTS. CONTRACTOR SHALL PROVIDE ADEQUATE BRACING AT ALL LOAD BEARING WALL STUDS BY BLOCKING OR OTHER MEANS TO PROVIDE LATERAL SUPPORT AT 1/4 POINTS ALONG THE VERTICAL LENGTH OF THE STUDS UNTIL SUCH A TIME WHEN WALL FINISHES AND/OR SHEATHING HAS BEEN PROPERLY APPLIED.
3. PROVIDE DOUBLE PLATE AT TOP OF WALL.
4. ROOF AND FLOOR TRUSSES SHALL BEAR DIRECTLY OVER STUDS.
5. STUDS ABOVE AND BELOW A FLOOR SHALL LINE UP.
6. MIN. EDGE DISTANCE FOR COOLER NAILS IS 3/8" FROM PANEL EDGE.
7. ALL TOP AND BOTTOM PLATE MATERIAL SHALL BE OF EQUIVALENT GRADE OR BETTER AS A WALL STUD. IN ADDITION, ALL BOTTOM PLATES FOR EXTERIOR WALLS SHALL BE PRESSURE TREATED. TOP AND BOTTOM PLATES SHALL BE NAILED TOGETHER USING (2) - ROWS OF 16d NAILS AT 8" o.c. STAGGERED
8. A HOLE NOT GREATER THAN 40% OF STUD WIDTH MAY BE BORED IN ANY STUD IN THIS SCHEDULE (60% OF THE WIDTH FOR (NON-LOAD BRG.) BRG.) WALLS). IN NO CASE SHALL THE EDGE OF THE BORED HOLE BE NEARER THAN 5/8" TO THE EDGE OF THE STUD. IN EXTERIOR WALLS AND BEARING PARTITIONS, ANY WOOD STUD MAY BE CUT OR NOTCHED TO A DEPTH NOT EXCEEDING 25% OF ITS WIDTH (CUTTING OR NOTCHING OF STUDS TO A DEPTH NOT GREATER THAN 40% OF THE WIDTH OF THE STUD IS PERMITTED IN NON-BEARING PARTITIONS SUPPORTING NO LOADS OTHER THAN THE WEIGHT OF THE PARTITION.)
9. NOTE: WHERE MORE THAN ONE STUD FORMS A COLUMN, THE MEMBERS SHALL BE SPIKED TOGETHER AS FOLLOWS:  
(2) 2 x 4s 10d COMMON NAILS @ 8" O.C. MAXIMUM  
(3) 2 x 4s 30d COMMON NAILS @ 8" O.C. MAXIMUM  
(2) 2 x 6s 2 ROWS OF 10d COMMON NAILS @ 8" O.C. MAXIMUM  
(3) 2 x 6s 2 ROWS OF 30d COMMON NAILS @ 8" O.C. MAXIMUM  
WHEN MORE THAN ONE ROW OF NAILS IS REQUIRED, PROVIDE 2" MINIMUM SPACING BETWEEN ROWS.
10. MAXIMUM SPLIT LENGTH = 1/2 OF HEADER DEPTH.
11. WHERE HEADER WIDTH IS LESS THAN WALL WIDTH, PROVIDE SPACERS IN CENTER OF HEADER TO MAKE OVERALL HEADER WIDTH EQUAL TO WALL WIDTH.
12. HEADERS WHICH HAVE NO SPACERS SHALL BE NAILED TOGETHER
13. FASTEN MULTIPLE MICRO-LAMS TOGETHER WITH A MINIMUM OF (2) ROWS OF 16d NAILS @ 12" o/c FOR DEPTHS LESS THAN OR EQUAL TO 12" AND WITH (3) ROWS OF 16d NAILS @ 12" o/c FOR DEPTHS GREATER THAN 12".
14. ALL LVLs TO HAVE Fb - 2600 PSI, E - 1.9E. IF ACTUAL VALUES OF LVLs DIFFER FROM THESE, ENGINEER TO BE NOTIFIED AND LVL SPECS MAY NEED TO BE REVISED.
15. ALL DIMENSIONAL LUMBER USED FOR JOISTS OR HEADERS TO BE DOUG. FIR NO. 2 OR BETTER. ALL STUD WALLS TO BE FRAMED WITH SPF STUD GRADE OR BETTER.
16. ALL GLU-LAM MEMBERS TO BE 24F - 1.8E STRESS CLASS. IF ACTUAL VALUES OF GLU-LAMS DIFFER FROM THESE, ENGINEER TO BE NOTIFIED AND SPECS MAY NEED TO BE REVISED.

JOIST SIZE	JOIST HOLES AND NOTCHES SCHEDULE				
	MAXIMUM NOTCH LENGTH	MAXIMUM NOTCH DEPTH	MAXIMUM END NOTCH DEPTH	MAXIMUM HOLE DIAMETER	MINIMUM BEARING LENGTH (1)
2 x 6	1-13/16"	7/8"	1-3/8"	1-13/16"	1-1/2" 3"
2 x 8	2-3/8"	1-3/16"	1-13/16"	2-3/8"	1-1/2" 3"
2 x 10	3-1/16"	1-1/2"	2-5/16"	3-1/16"	1-1/2" 3"
2 x 12	3-3/4"	1-7/8"	2-13/16"	3-3/4"	1-1/2" 3"

(1) - MINIMUM BEARING: 1-1/2" ON WOOD OR STEEL, AND 3" BEARING ON MASONRY.

TYPICAL NAILING SCHEDULE		(UNLESS NOTED OTHERWISE)
CONNECTION	NAILING	
JOIST TO SILL OR GIRDER, TOENAIL	3 - 8d	
BRIDGING TO JOIST, TOENAIL EACH END	2 - 8d	
SOLE PLATE TO JOIST OR BLOCKING, FACE NAIL	16d @ 16" o.c.	
TOP PLATE TO STUD, END NAIL	2 - 16d	
STUD TO SOLE PLATE	4 - 8d TOENAIL OR 2 - 16d, ENDNAIL	
DOUBLE STUDS, FACE NAIL	16d @ 24" o.c.	
DOUBLE TOP PLATES, FACE NAIL	16d @ 16" o.c.	
TOP PLATES, LAPS AND INTERSECTIONS, FACE NAIL	2 - 16d	
CONTINUOUS HEADER, TWO PIECES	16 @ 16" o.c. ALONG EACH EDGE	
CEILING JOISTS TO PLATE, TOENAIL	3 - 8d	
CONTINUOUS HEADER TO STUD, TOENAIL	4 - 8d	
CEILING JOISTS, LAPS OVER PARTITIONS, FACE NAIL	3 - 16d	
CEILING JOISTS, TO PARALLEL RAFTERS, FACE NAIL	3 - 16d	
RAFTER TO PLATE, TOENAIL	3 - 8d	
1" BRACE TO EACH STUD AND PLATE, FACE NAIL	2 - 8d	
1" x 8" SHEATHING OR LESS TO EACH BEARING, FACE NAIL	2 - 8d	
WIDER THAN 1" x 8" SHEATHING OR LESS TO EACH BRG., FACE NAIL	3 - 8d	
BUILT UP CORNER STUDS	16d @ 24" o.c.	
BUILT-UP GIRDER AND BEAMS	20d @ 32" o.c. AT TOP & BOTTOM, STAGGERED (2) - 20d AT ENDS & AT EACH SPLICE	
PLYWOOD AND PARTICAL BOARD: SUBFLOOR, ROOF AND SHEATHING (TO FRAMING): 1/2" AND LESS	6d <sup>2</sup>	
19/32" - 3/4"	8d <sup>3</sup> OR 6d <sup>4</sup>	
COMBINATION SUBFLOOR - UNDERLAYMENT (TO FRAMING) 3/4" AND LESS	6d <sup>4</sup>	
7/8" - 1"	8d <sup>4</sup>	

- NOTES
1. COMMON OR BOX NAILS MAY BE USED EXCEPT WHERE OTHERWISE STATED.
  2. COMMON OR DEFORMED SHANK
  3. COMMON
  4. DEFORMED SHANK
  5. NAILS SPACED AT 6 INCHES ON CENTER AT EDGES, 12 INCHES AT INTERMEDIATE SUPPORTS EXCEPT 6 INCHES AT ALL SUPPORTS WHERE SPANS ARE 48 INCHES OR MORE. FOR NAILING OF PLYWOOD AND PARTICLE BOARD DIAPHRAGMS AND SHEAR WALLS, REFER TO SECTION 2513 (C). NAILS FOR WALL SHEATHING MAY BE (FROM UBC TABLE NO. 25-Q).



\*NOTE: IF WIDTH OF MEMBER IS GREATER THAN OR EQUAL TO 3 1/2", THEN NO NOTCHES ARE ALLOWED ON TENSION SIDE EXCEPT AT BEARING ENDS

### PROJECT NAME:

LADDER CO. NO. 5  
1625 N. BRITTELL AVE  
MILWAUKEE, WI 53202

### OWNER:

LINCOLN & LUTZ FOWLER  
2383 N. MARSH AVE  
MILWAUKEE, WI 53211  
P. 414-967-0939

### ARCHITECT:

IRON JENNY  
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P. 414-967-0341

### GENERAL CONTRACTOR

DAHLMAN CONSTRUCTION  
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MILWAUKEE, WI 53212  
414-882-3102

### STRUCTURAL ENGINEER

IRON ENGINEERING  
800 N. PROSPECT RD  
SUITE 201  
BROOKFIELD, WI 53045  
P. 262-738-0600

### REV. NO:

1

### DATE:

1 - 21 - 2020

JOB 190601

SCALE AS NOTED

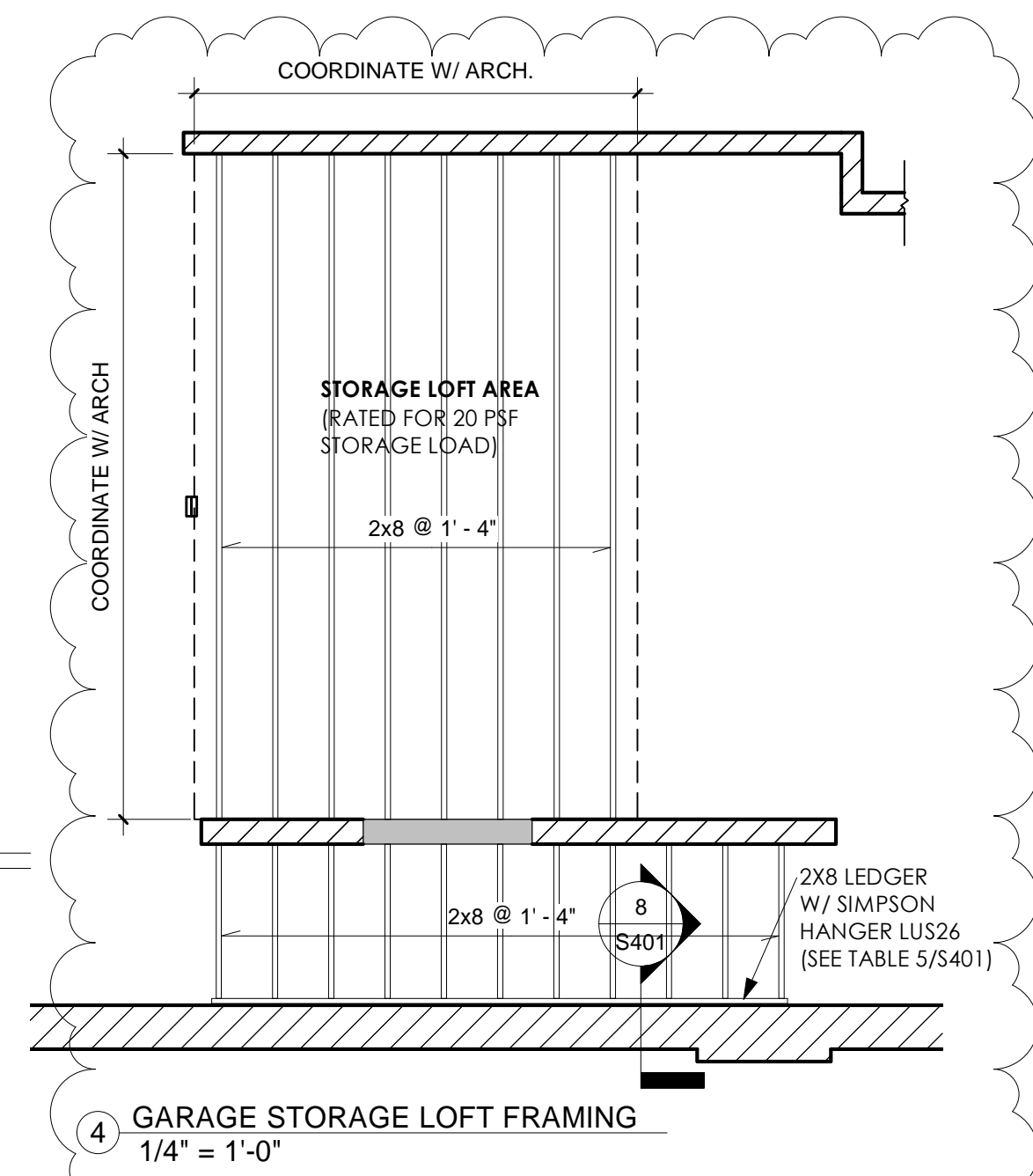
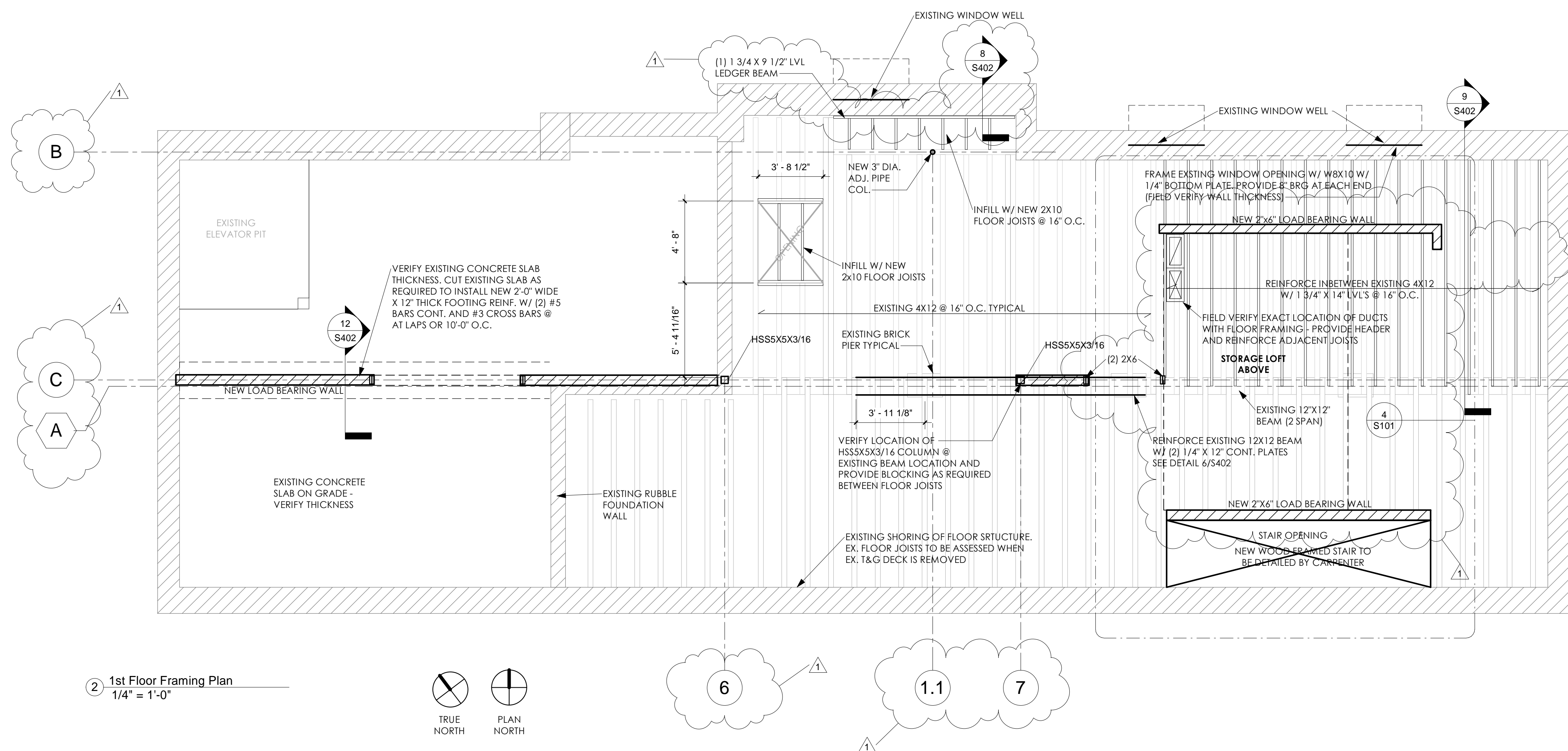
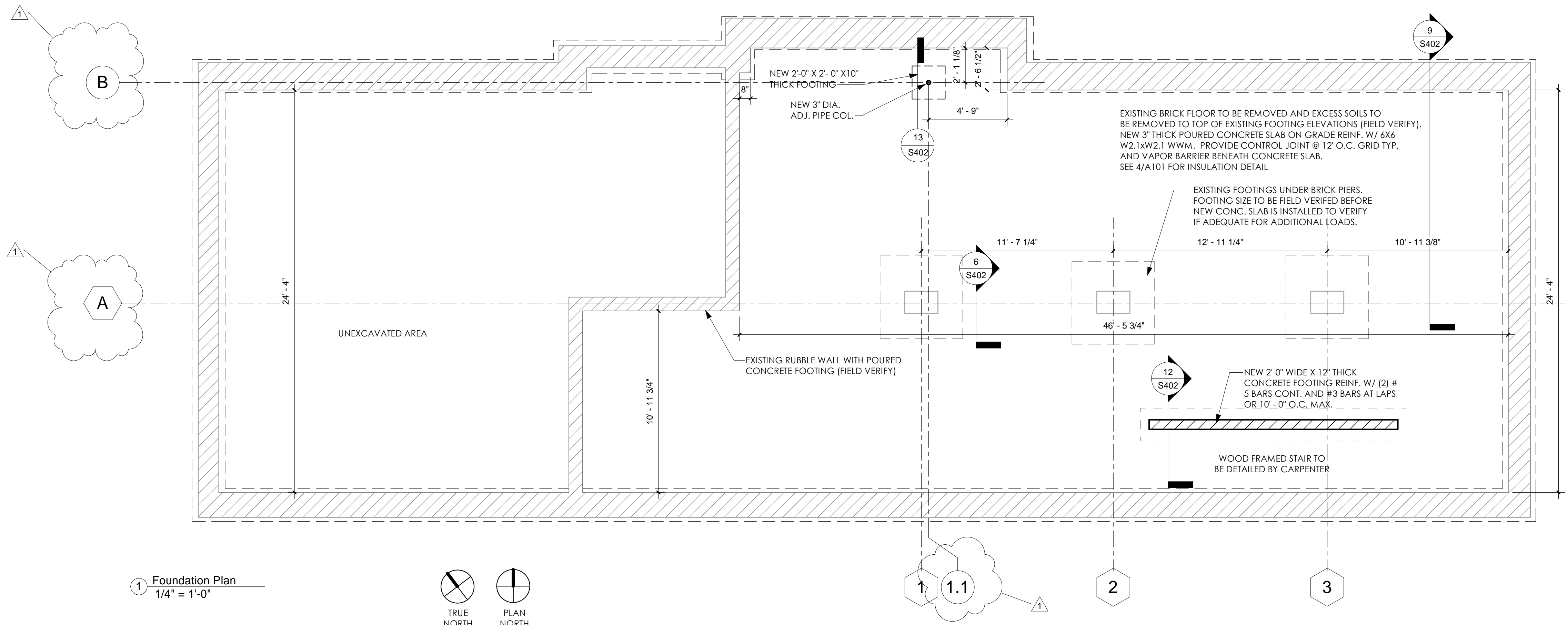
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DATE: 1-13-2020

STRUCTURAL DESIGN  
CRITERIA

S001

FOR CONSTRUCTION  
DECEMBER 16, 2019



\*NOTE: EXISTING WOOD FLOORING TO BE REMOVED AND REPLACED WITH 0.6 - 22 GA. FORM DECK AND TOPPED WITH 3" CONCRETE REINFORCED W/ 4x4 W2.9 X W2.9 WWM

LEGEND

	NEW COLUMN LINE
	EXISTING COLUMN LINE

PROJECT NAME:  
LADDER CO. NO. 5  
283 N. MARSHALL AVE.  
MILWAUKEE, WI 53202

OWNER:  
LINCOLN & LUTZ FOWLER  
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ARCHITECT:  
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GENERAL CONTRACTOR:  
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STRUCTURAL ENGINEER:  
IRON JENNY ENGINEERING  
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MILWAUKEE, WI 53211  
P. 262-738-0600

REV. NO.	DATE
1	1 - 21 - 2020

JOB 190601

SCALE AS NOTED  
CHECKED BY: JS  
DATE: 1-13-2020

FOUNDATION AND FIRST FLOOR FRAMING PLAN

S101  
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**SIMPSON HANGER SPECIFICATIONS:**

**TABLE 1**

JOIST SIZE	MODEL NO.	G <sub>a</sub>	DIMENSIONS (in.)				FASTENERS	SPF/HF ALLOWABLE LOADS				
			W	H	B	TF		UPLIFT (160)	FLOOR (100)	SNOW (115)	ROOF (125)	
2X10	JB210A	18	1 9/16	9 3/16	2	1 7/16	6-16d	2-10dX1 1/2	270	1190	1190	1190

**TABLE 2**

JOIST SIZE	MODEL NO.	G <sub>a</sub>	DIMENSIONS (in.)				FASTENERS	SPF/HF ALLOWABLE LOADS				
			W	H	B	TF		UPLIFT (160)	FLOOR (100)	SNOW (115)	ROOF (125)	
2X14	JB214A	18	1 9/16	13 1/8	2	1 7/16	6-16d	2-10dX1 1/2	270	1190	1190	1190

**TABLE 3**

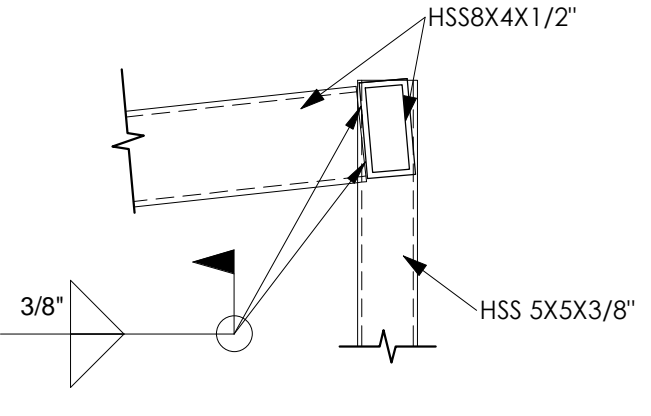
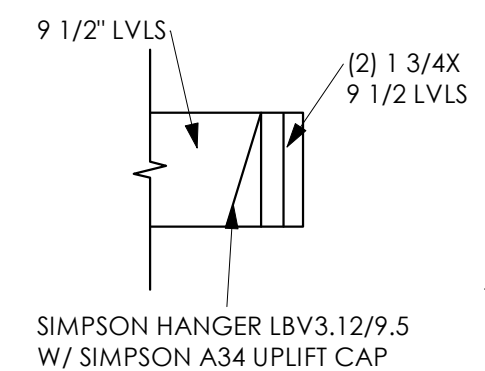
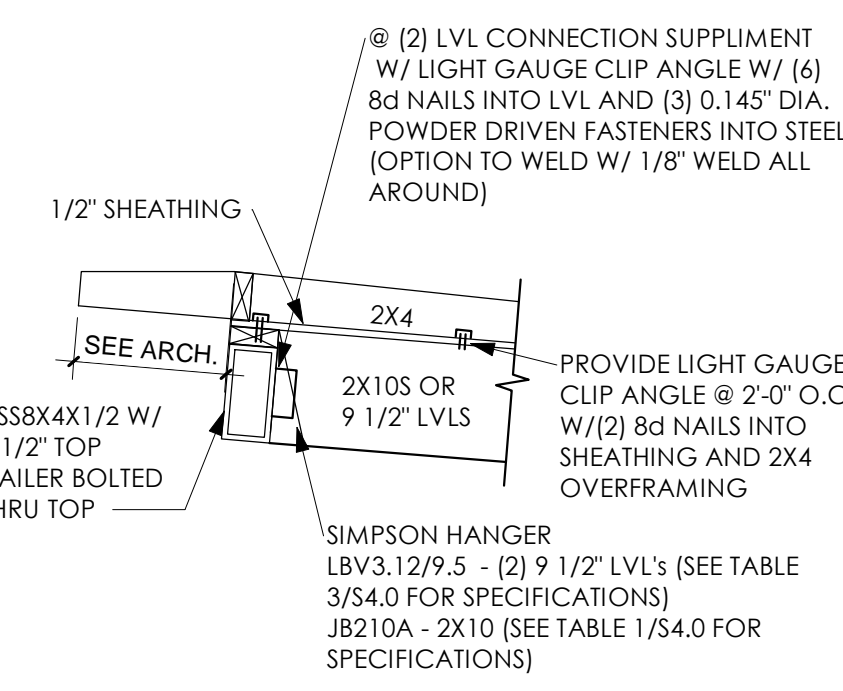
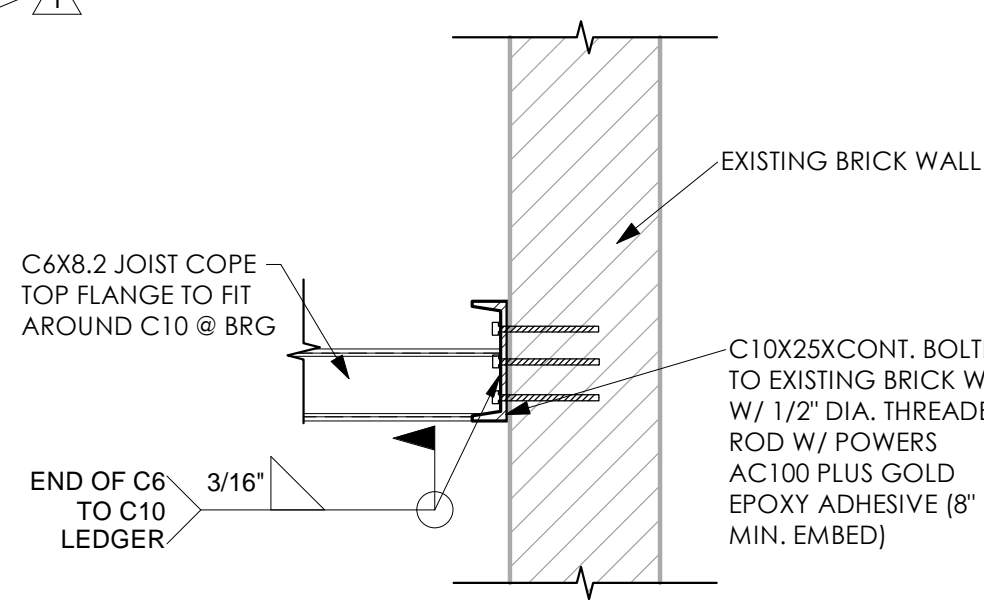
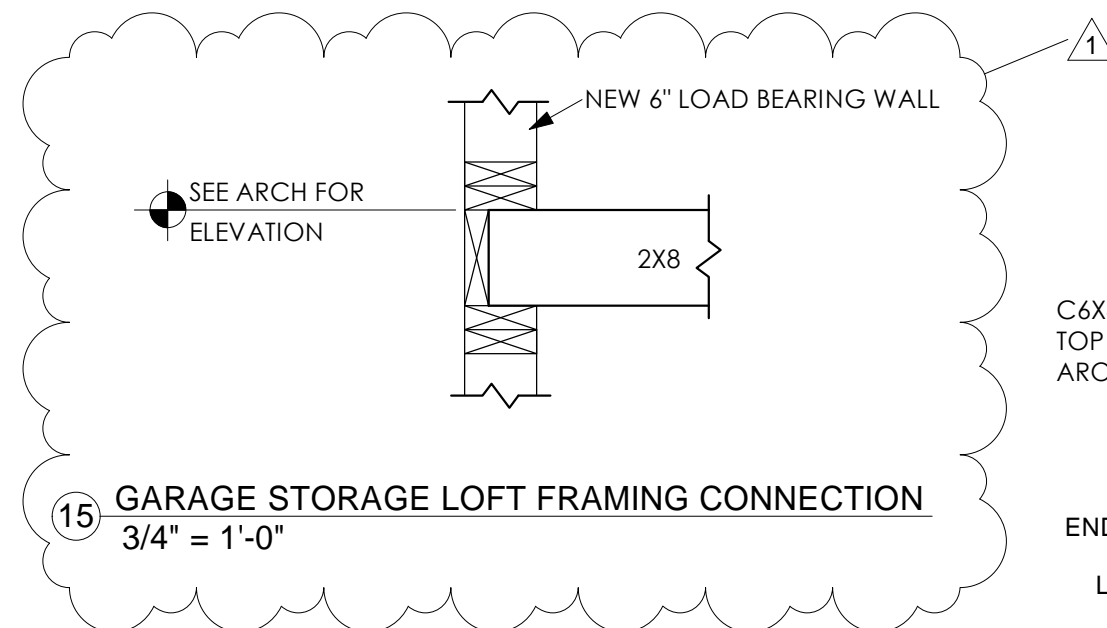
ACTUAL JOIST SIZE	MODEL NO.	WEB STIFF REQD	G <sub>a</sub>	DIMENSIONS				FASTENERS		UPLIFT (160)	LVL	PSL	LSL	DF/SP	SPF/HF	DF/SC/L JOIST	
				W	H	B	TF	SOLID HEADER TOP FACE	JOIST								
3X9 1/2	LBV3.12/9.5	---	14	3 1/8	9 1/2	2 1/2	2 1/2	6-16d	4-16d	2-10dX1 1/2	265	2910	2885	3190	2590	2060	1495

**TABLE 4**

JOIST SIZE	MODEL NO.	G <sub>a</sub>	DIMENSIONS (in.)				FASTENERS	SPF/HF ALLOWABLE LOADS				
			W	H	B	TF		UPLIFT (160)	FLOOR (100)	SNOW (115)	ROOF (125)	
2X6	LB26	14	1 9/16	5 3/8	1 1/2	1 1/2	4-16d	2-10dX1 1/2	325	860	860	860

**TABLE 5**

JOIST SIZE	MODEL NO.	G <sub>a</sub>	DIMENSIONS (in.)				FASTENERS	SPF/HF ALLOWABLE LOADS			
			W	H	B	TF		UPLIFT (160)	FLOOR (100)	SNOW (115)	ROOF (125)
2X8	LUS26	18	1 9/16	4 3/4	1 3/4	4-10d	4-10d	1165	865	990	1070



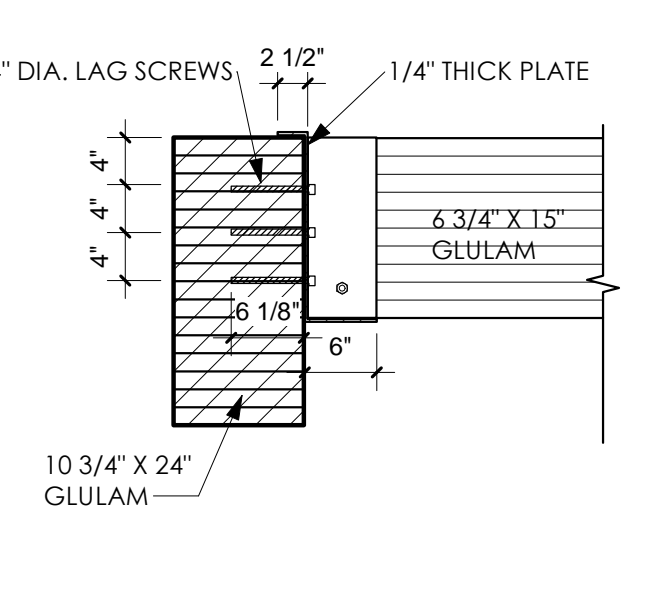
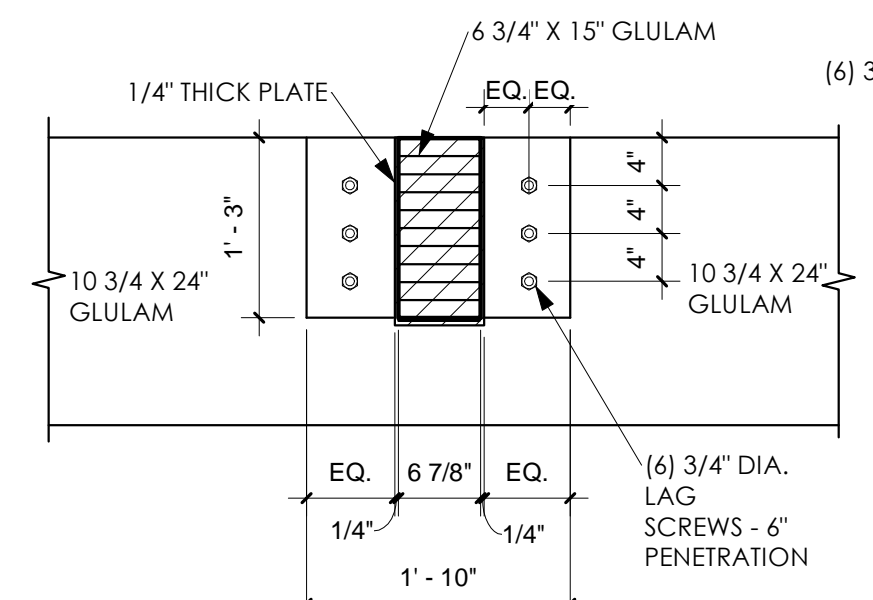
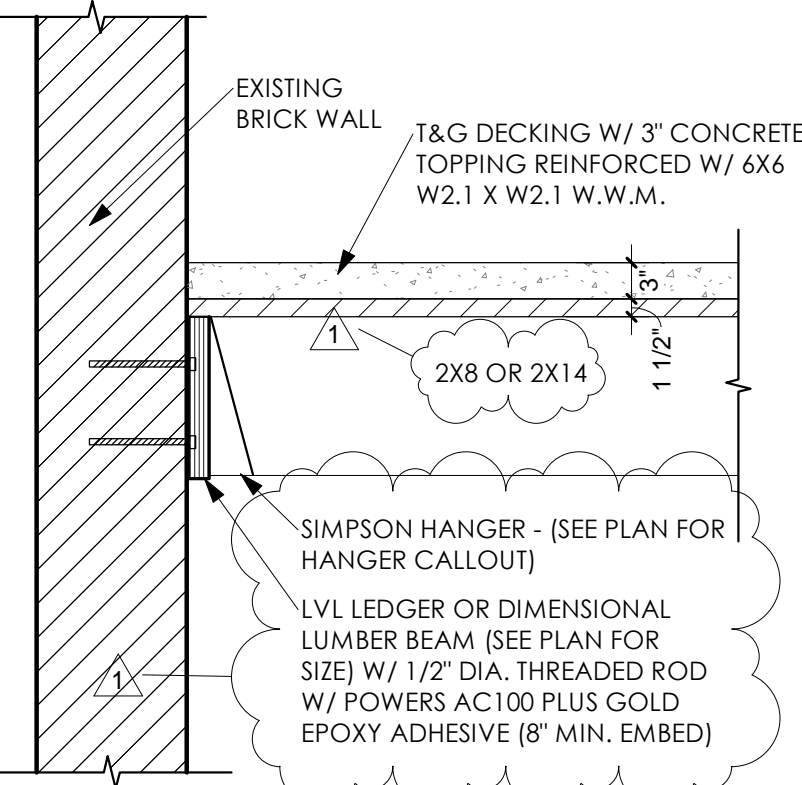
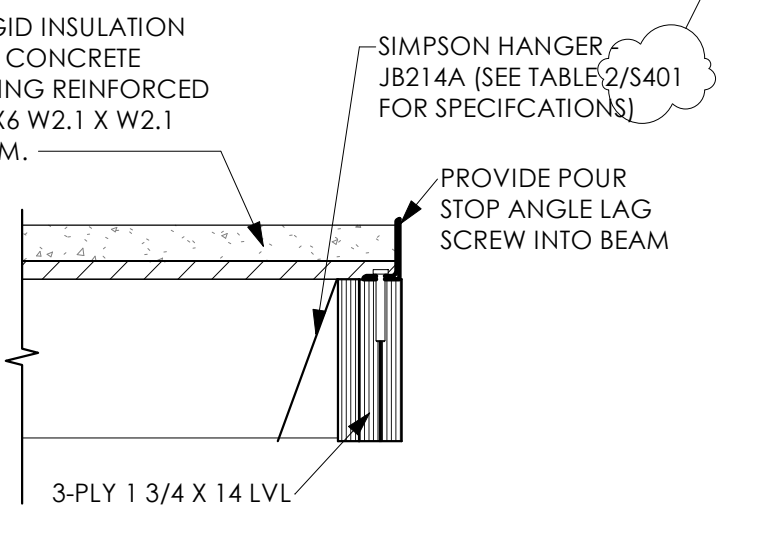
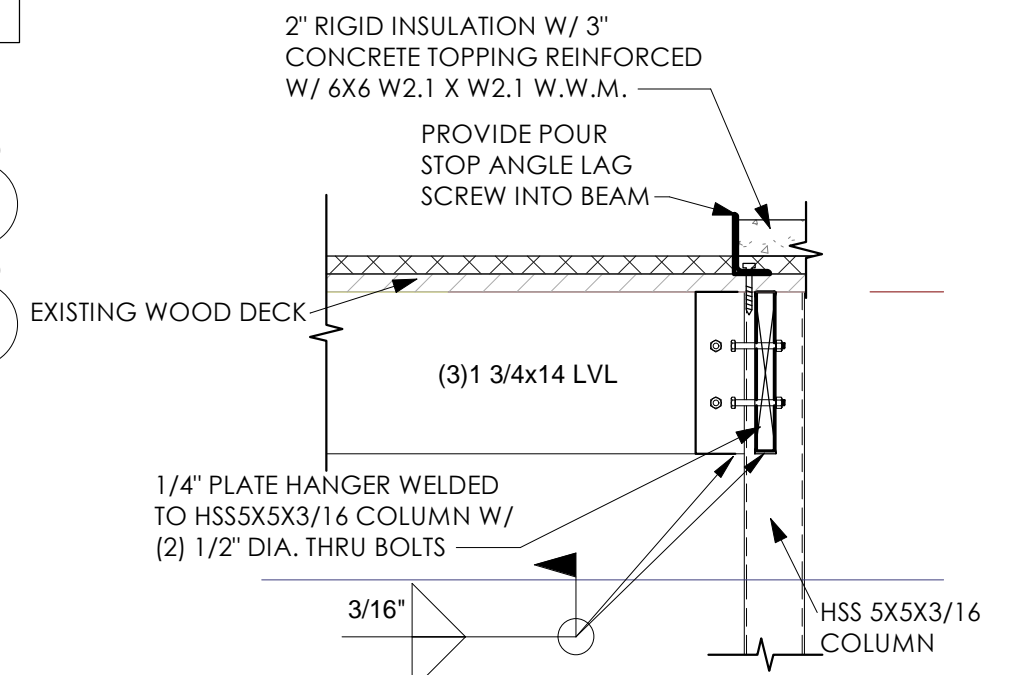
\*NOTE: ALL CHANNEL TO CHANNEL WELDS FOR LOFT AND STAIR FRAMING TO BE SAME AS WELD SHOWN ABOVE

14 CHANNEL FRAMING @ WALL 3/4" = 1'-0"

13 TYPICAL LVL OR 2X10 CONNECTION 3/4" = 1'-0"

12 LVL CONNECTIONS 3/4" = 1'-0"

11 BEAM TO COLUMN CONNECTION 3/4" = 1'-0"

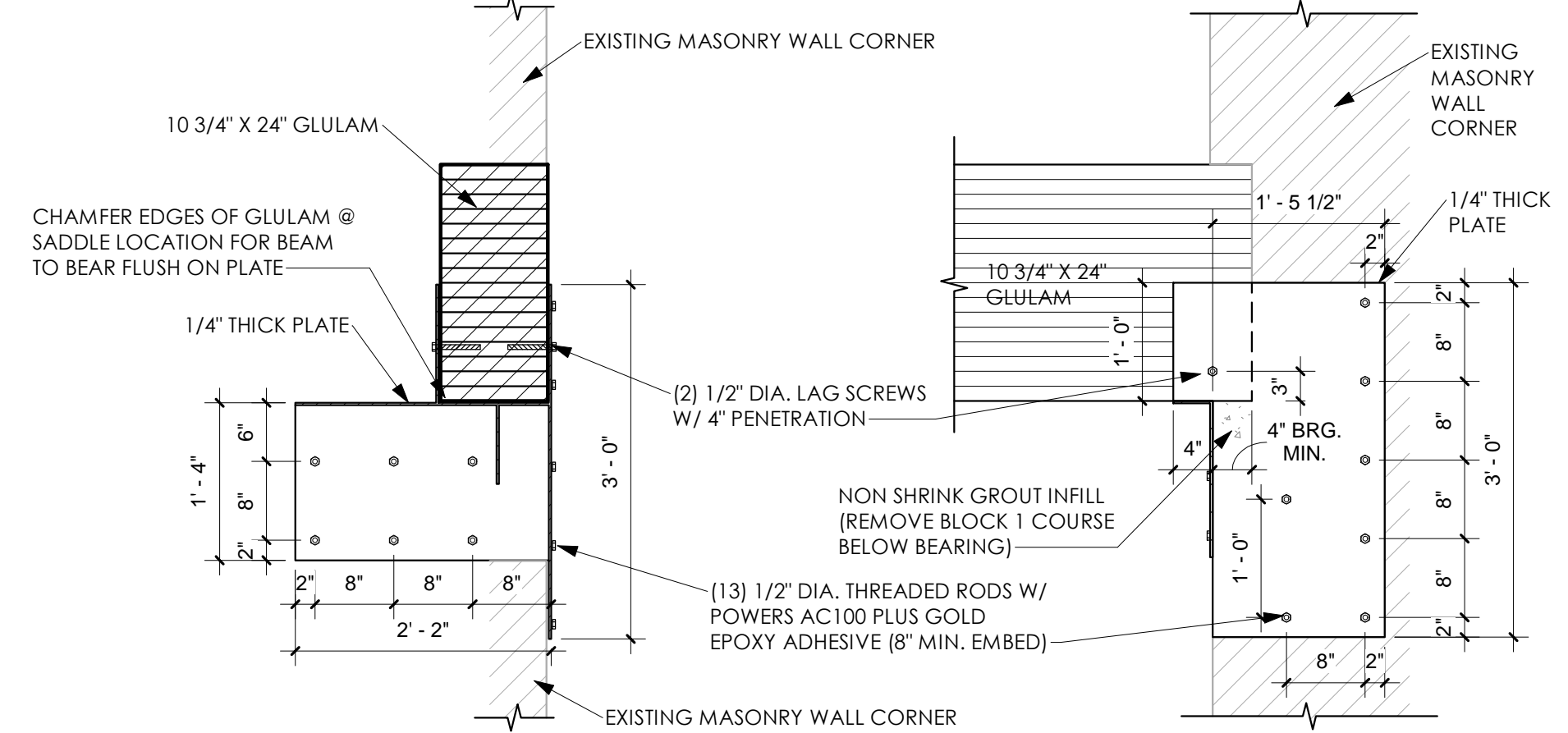
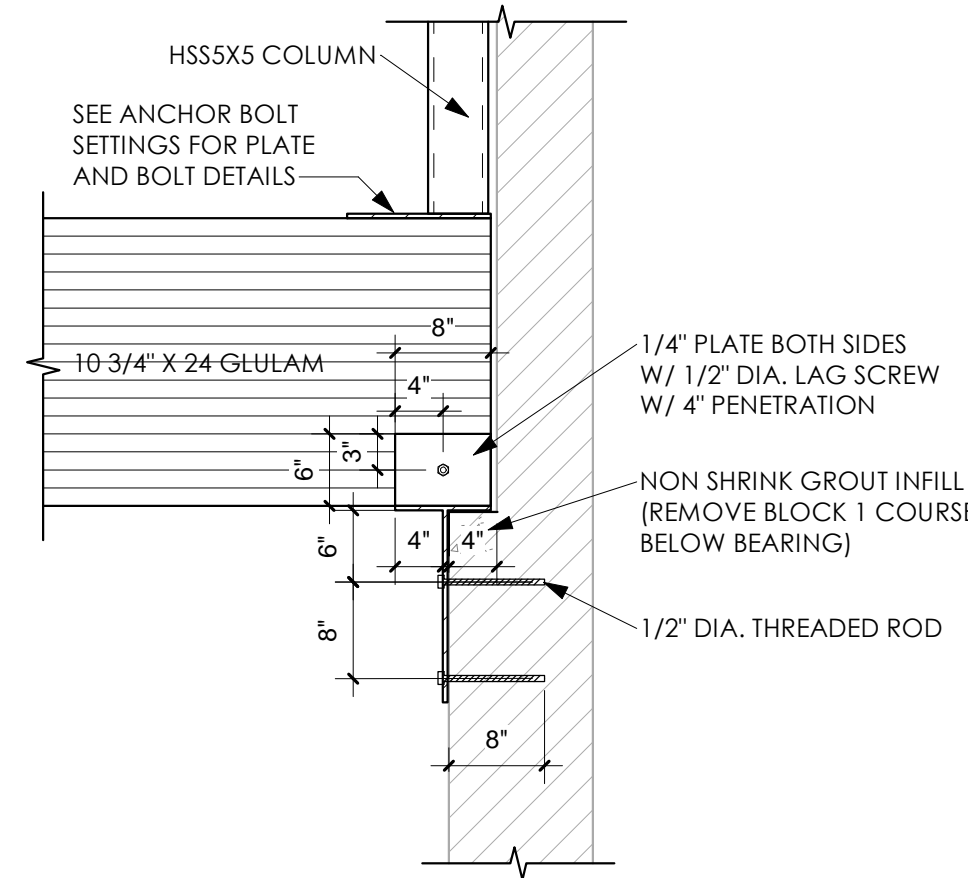
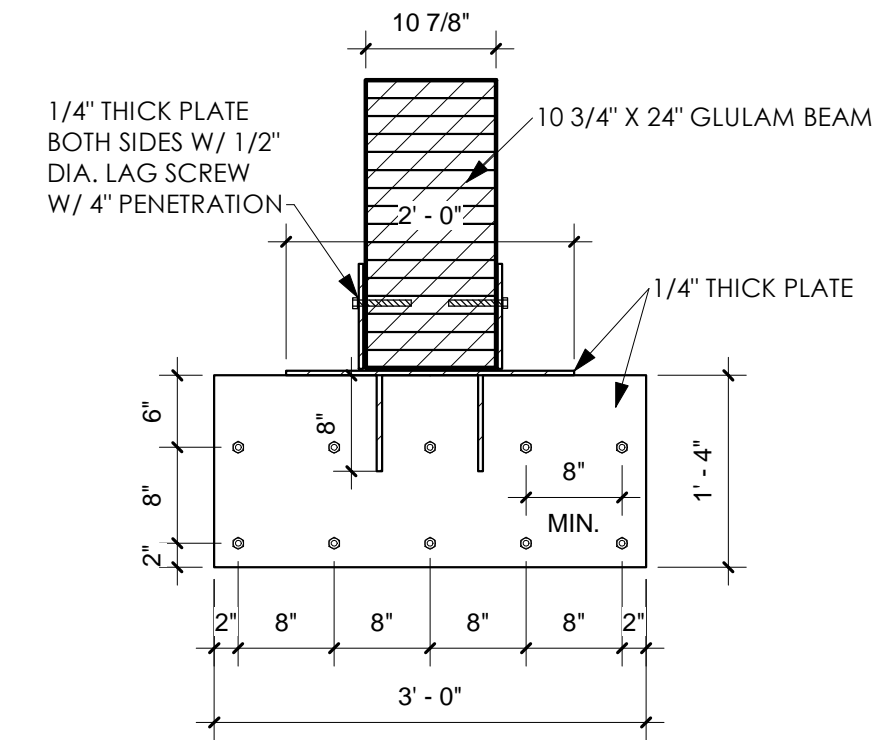
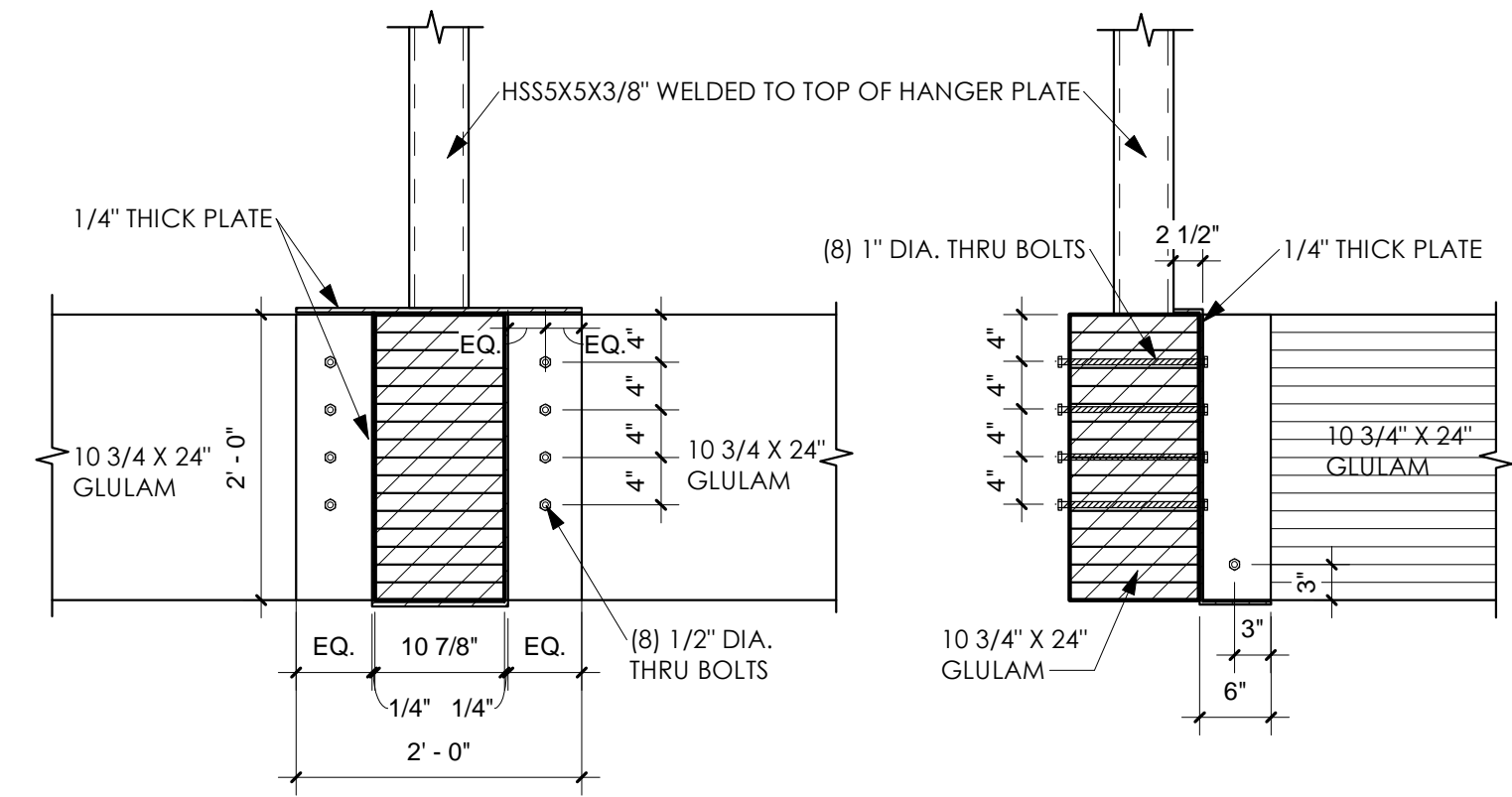


10 BEAM COLUMN CONNECTION 3/4" = 1'-0"

9 2X14 TO 3 PLY HANGER 3/4" = 1'-0"

8 TYPICAL 2X FRAMING TO WALL CONNECTION 3/4" = 1'-0"

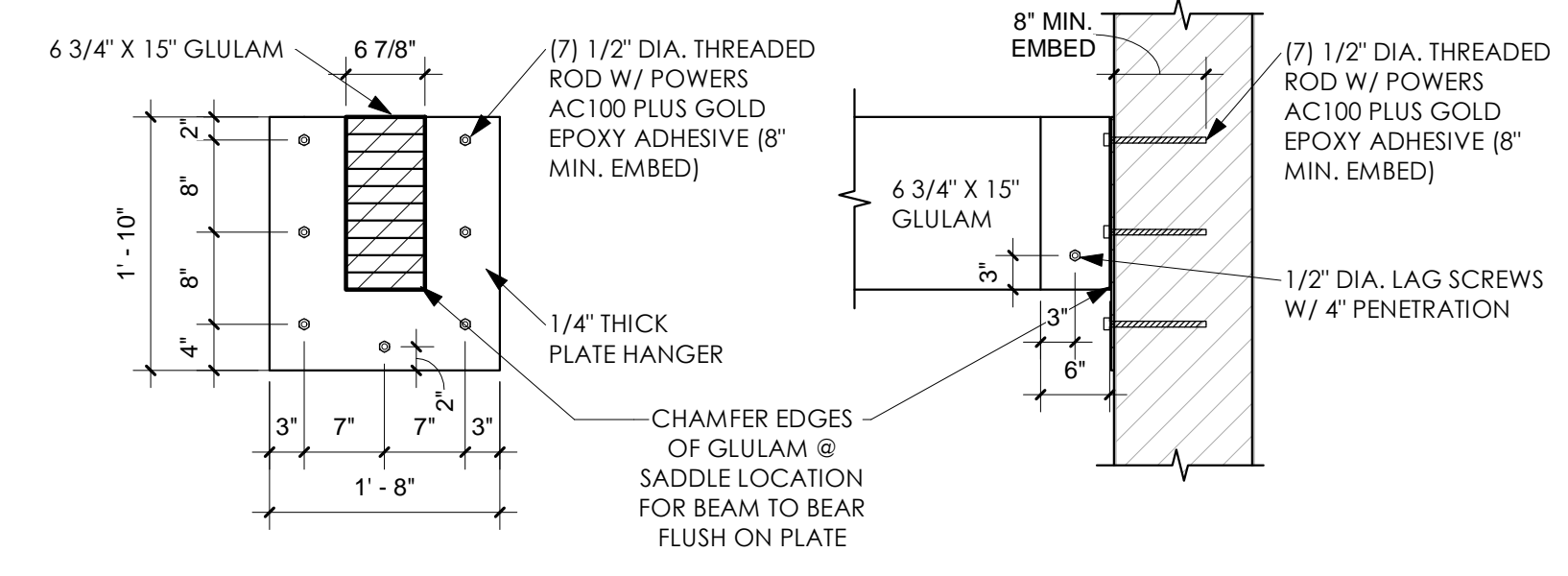
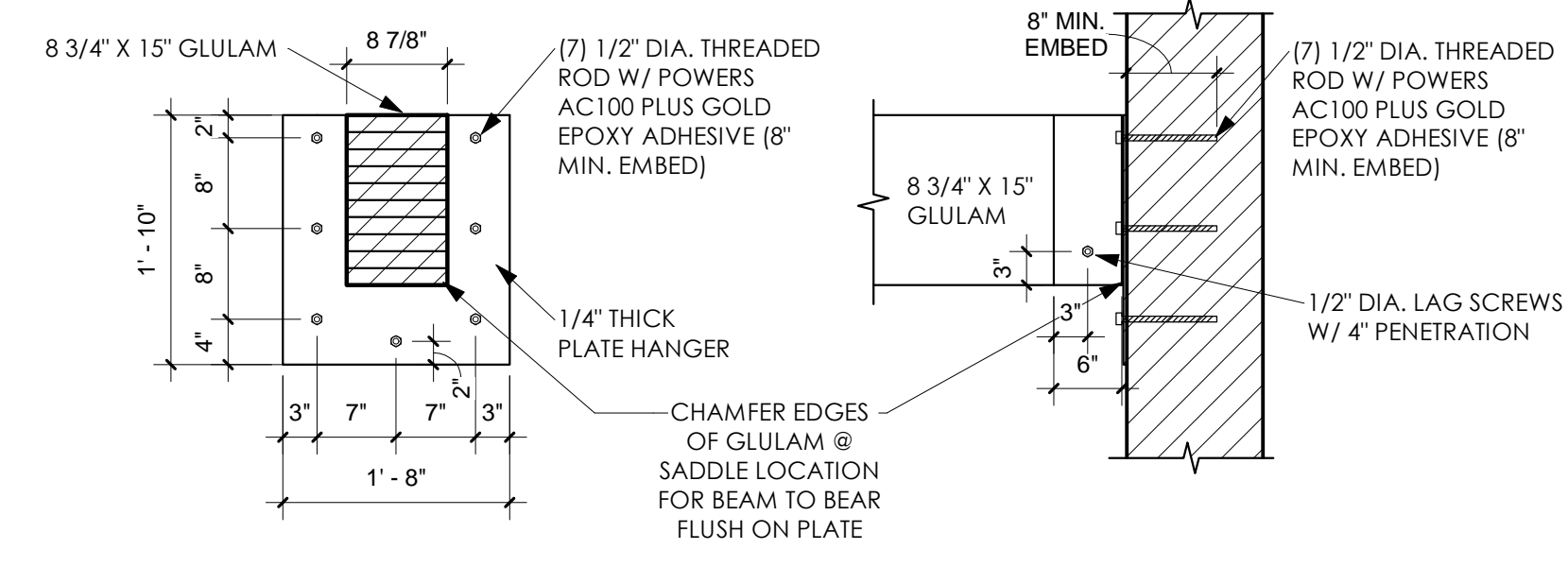
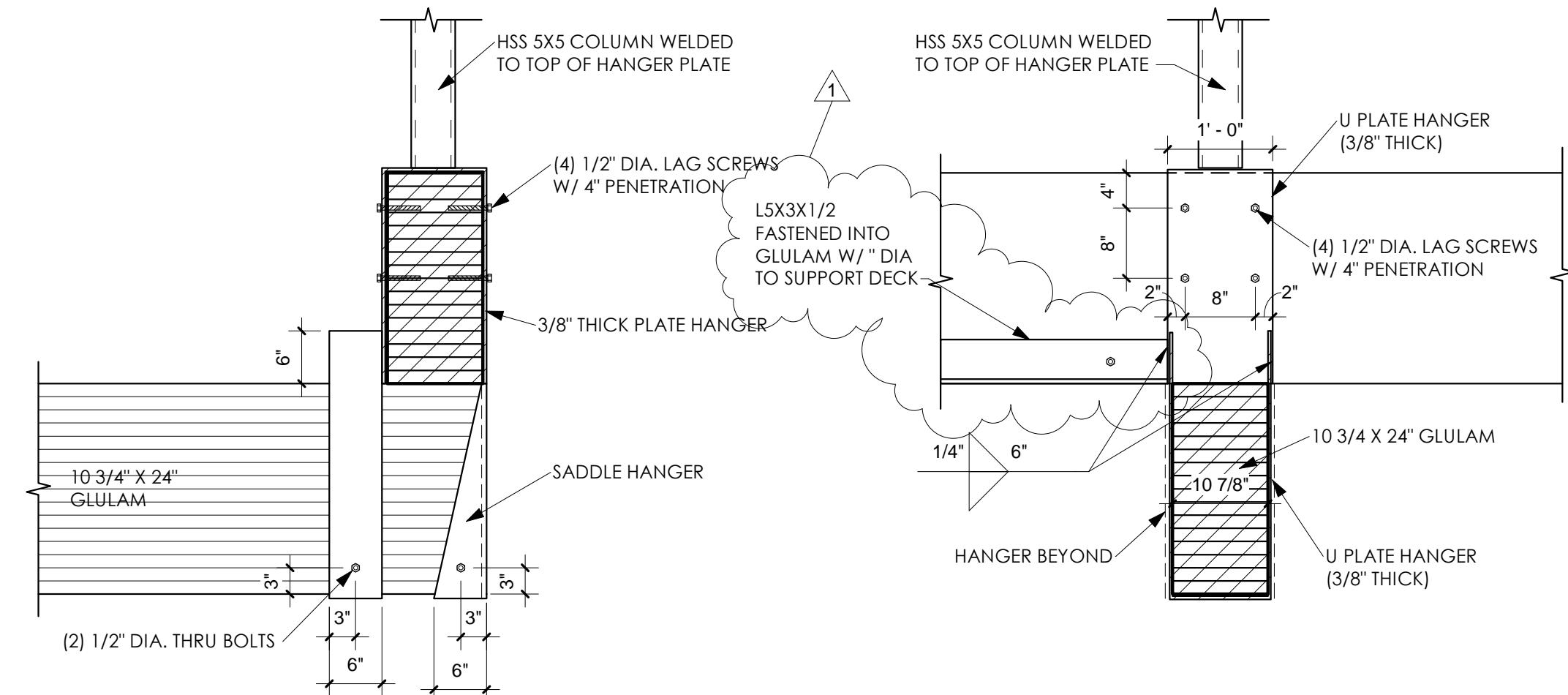
7 6 3/4" GLULAM TO 10 3/4" GLULAM TYPICAL CONNECTION 3/4" = 1'-0"



6 10 3/4" GLULAM TO 10 3/4" GLULAM TYPICAL CONNECTION 3/4" = 1'-0"

5 10 3/4" GLULAM CONNECTION TO MASONRY 3/4" = 1'-0"

4 10 3/4" GLULAM CONNECTION TO MASONRY @ CORNER 3/4" = 1'-0"



3 GLULAM TO GLULAM CORNER HANGING CONNECTION 3/4" = 1'-0"

2 8 3/4" GLULAM CONNECTION TO MASONRY 3/4" = 1'-0"

6 6 3/4" GLULAM CONNECTION TO MASONRY 3/4" = 1'-0"

FOR CONSTRUCTION  
DECEMBER 16, 2019

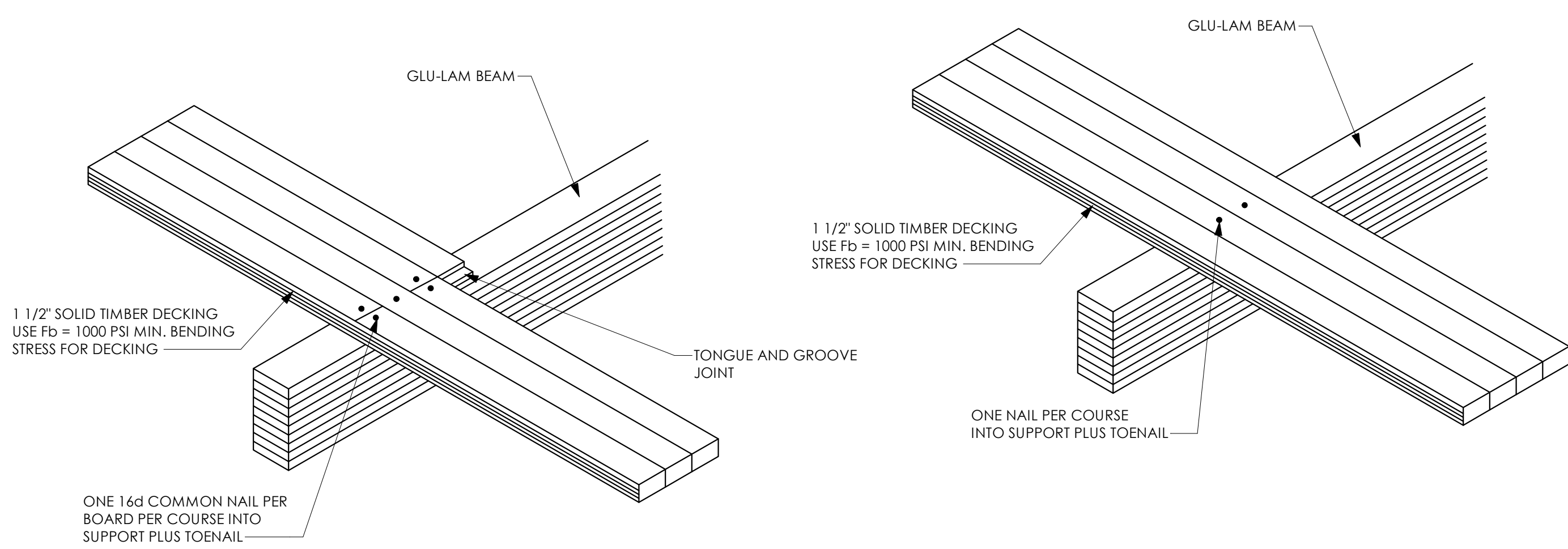
PROJECT NAME:  
OWNER:  
ARCHITECT:  
GENERAL CONTRACTOR:  
STRUCTURAL ENGINEER:

REV. NO.	DATE
1	1-21-2020

JOB 190601  
SCALE: AS NOTED  
CHECKED BY: JS  
DATE: 1-13-2020  
DETAILS

S401  
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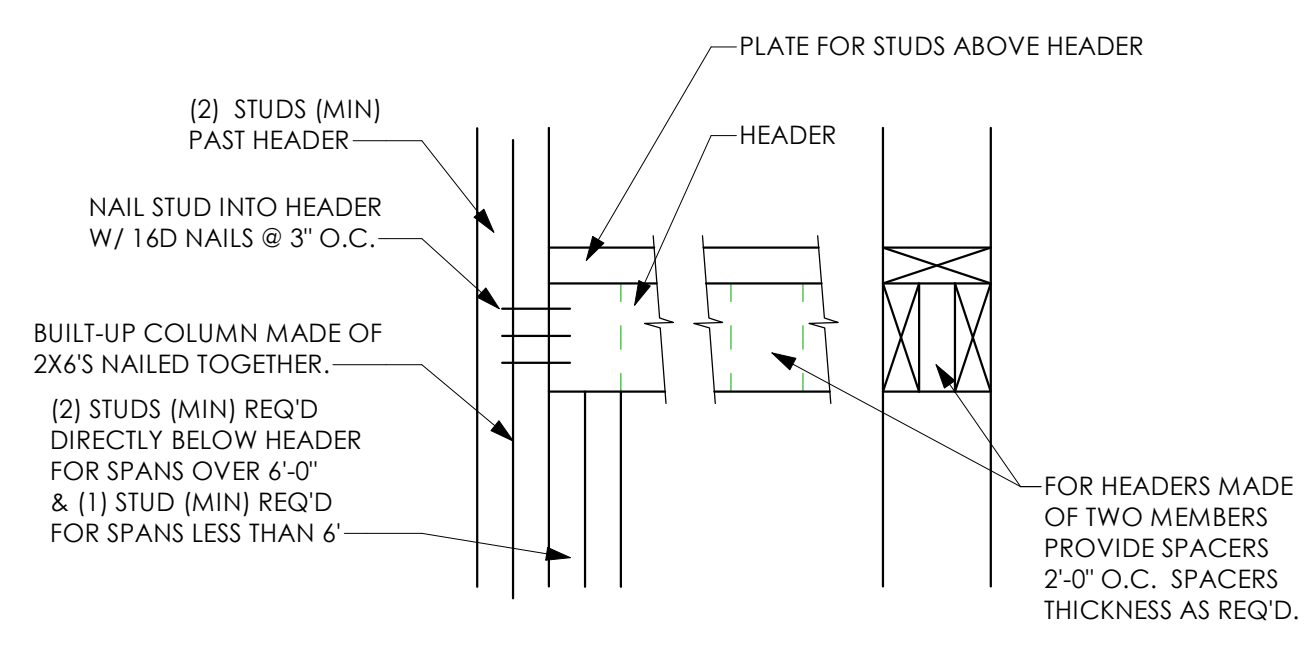


NOTE-TWO SPAN CONTINUOUS PER AITC 112-81  
-APPLICATION SHOULD BE MADE BY NAILING EACH COURSE TO SUPPORTING MEMBER WITH ONE 16d FACE NAIL PLUS ONE 16d TOENAIL.

NOTE-TWO SPAN CONTINUOUS LAYUP WHERE POSSIBLE AND SIMPLE LAYUP EVERYWHERE ELSE. ALL JOINTS TO BE CENTERED OVER SUPPORT (CONTROLLED RANDOM LAYUP NOT ALLOWED).

- APPLICATION SHOULD BE MADE BY NAILING EACH COURSE TO SUPPORTING MEMBER WITH ONE 16d FACE NAIL PLUS ONE 16d TOENAIL.

15 TONGUE & GROOVE DECK ATTACHMENT  
3/4" = 1'-0"



11 HEADER SUPPORT AT COLUMNS  
3/4" = 1'-0"

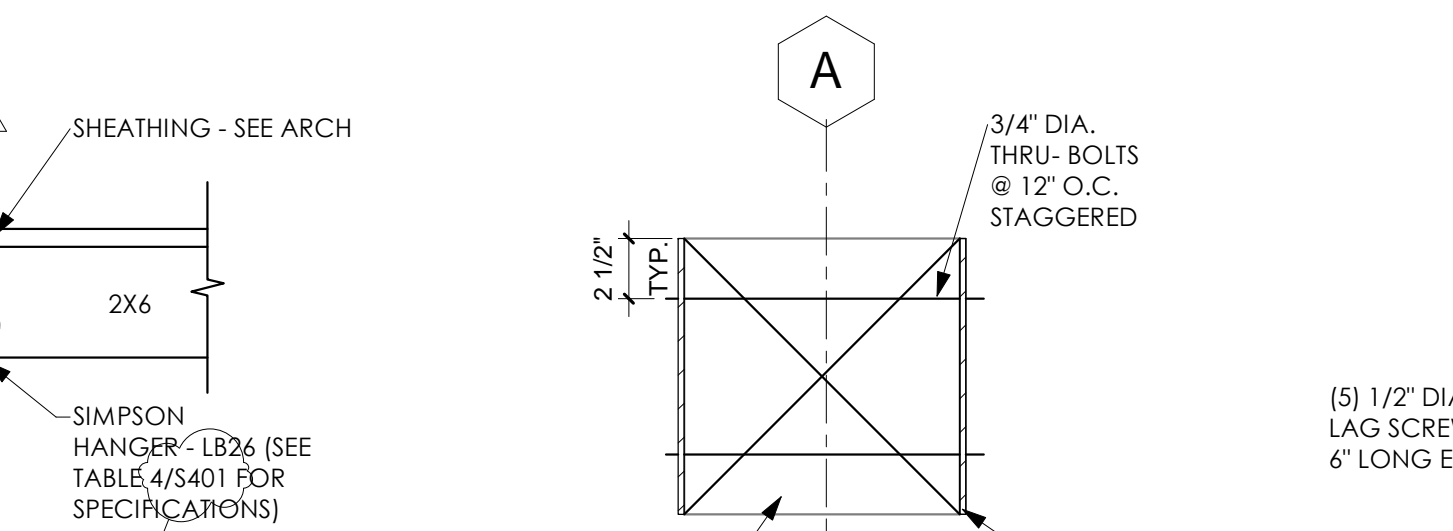
AS A MINIMUM, PROVIDE STUDS AT EACH JAMB EQUAL IN NUMBER TO 1/2 THE NUMBER OF STUDS INTERRUPTED FOR THE OPENING, ROUNDED TO NEXT WHOLE NUMBER, PLUS 1.

WHERE MORE THAN ONE STUD FORMS A COLUMN, THE MEMBERS SHALL BE SPIKED TOGETHER AS FOLLOWS:

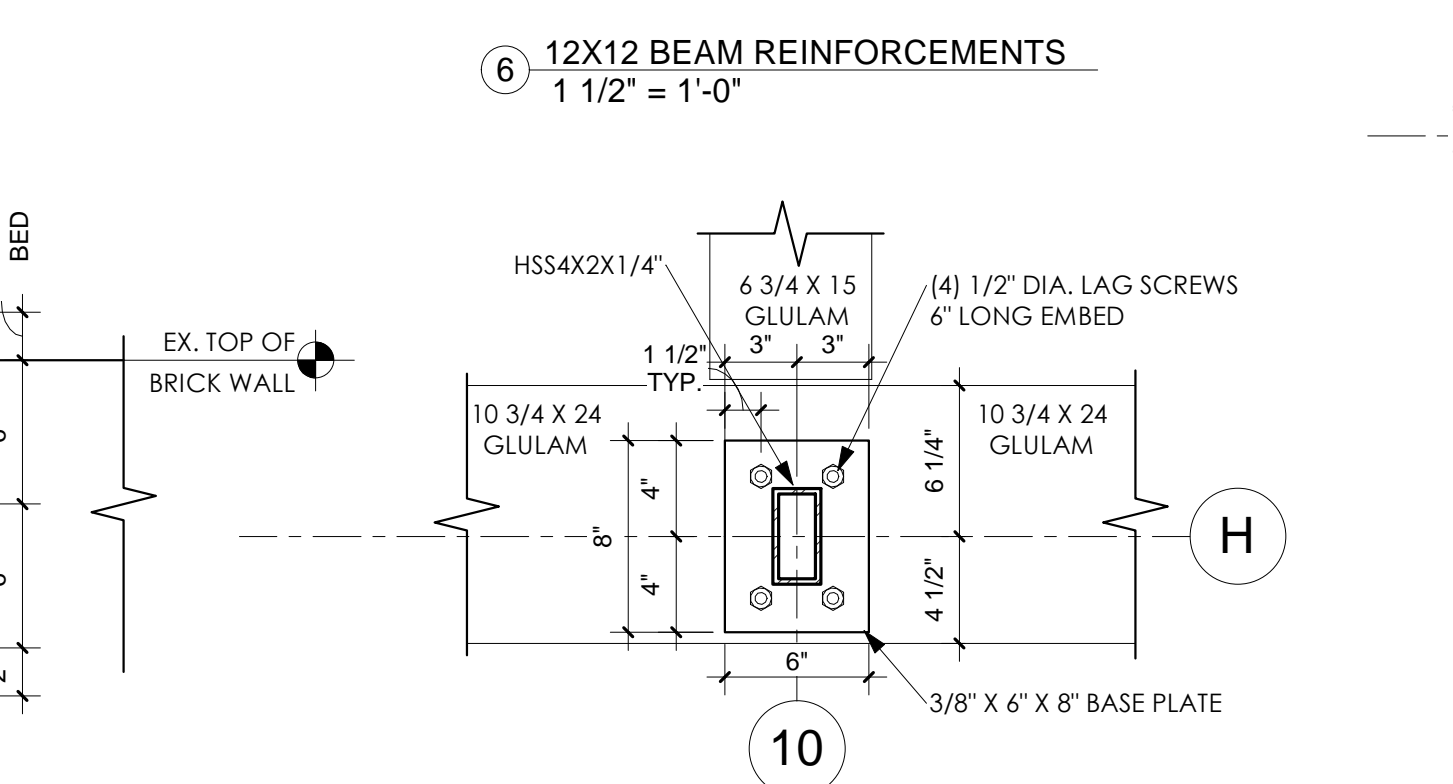
- (2) 2 x 4S 10G COMMON NAILS @ 6" O.C. MAXIMUM
- (3) 2 x 4S 30G COMMON NAILS @ 8" O.C. MAXIMUM
- (2) 2 x 6S 2 ROWS OF 10G COMMON NAILS @ 8" O.C. MAXIMUM
- (3) 2 x 6S 2 ROWS OF 30G COMMON NAILS @ 8" O.C. MAXIMUM

WHEN MORE THAN ONE ROW OF NAILS IS REQUIRED, PROVIDE 2 1/2" MINIMUM SPACING BETWEEN ROWS.

10 TYPICAL WALL FRAMING ELEVATION  
3/4" = 1'-0"



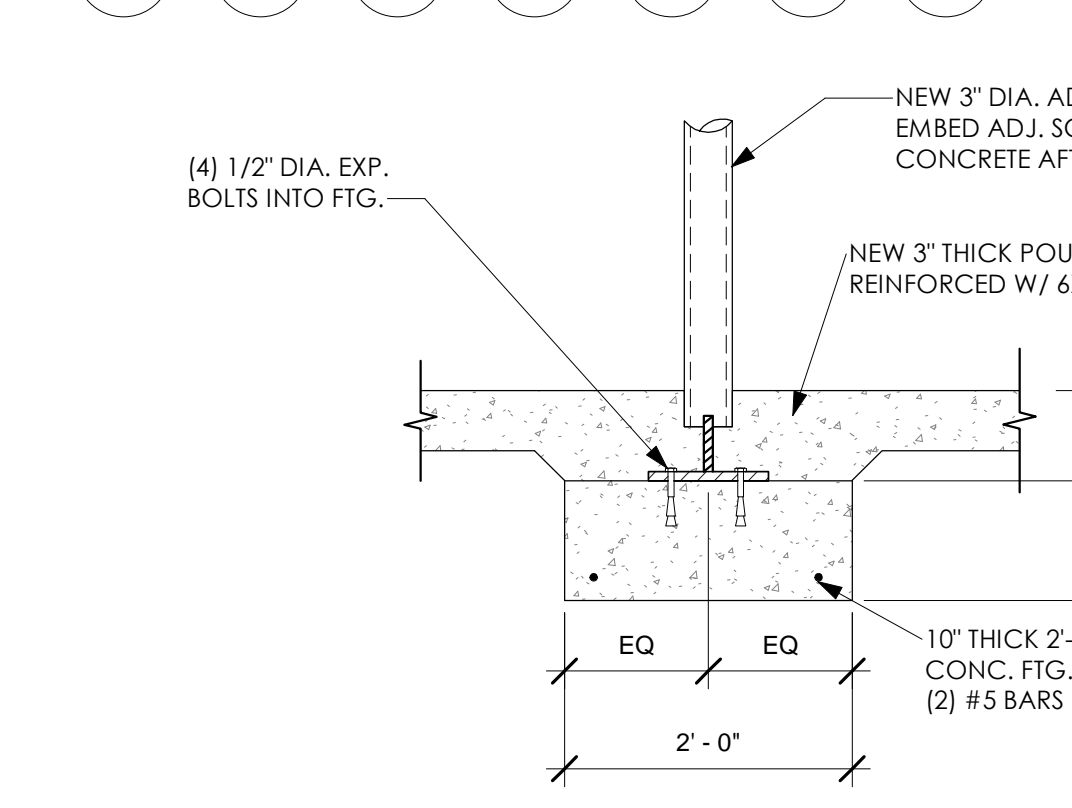
7 ELEVATOR FRAMING CONNECTION  
3/4" = 1'-0"



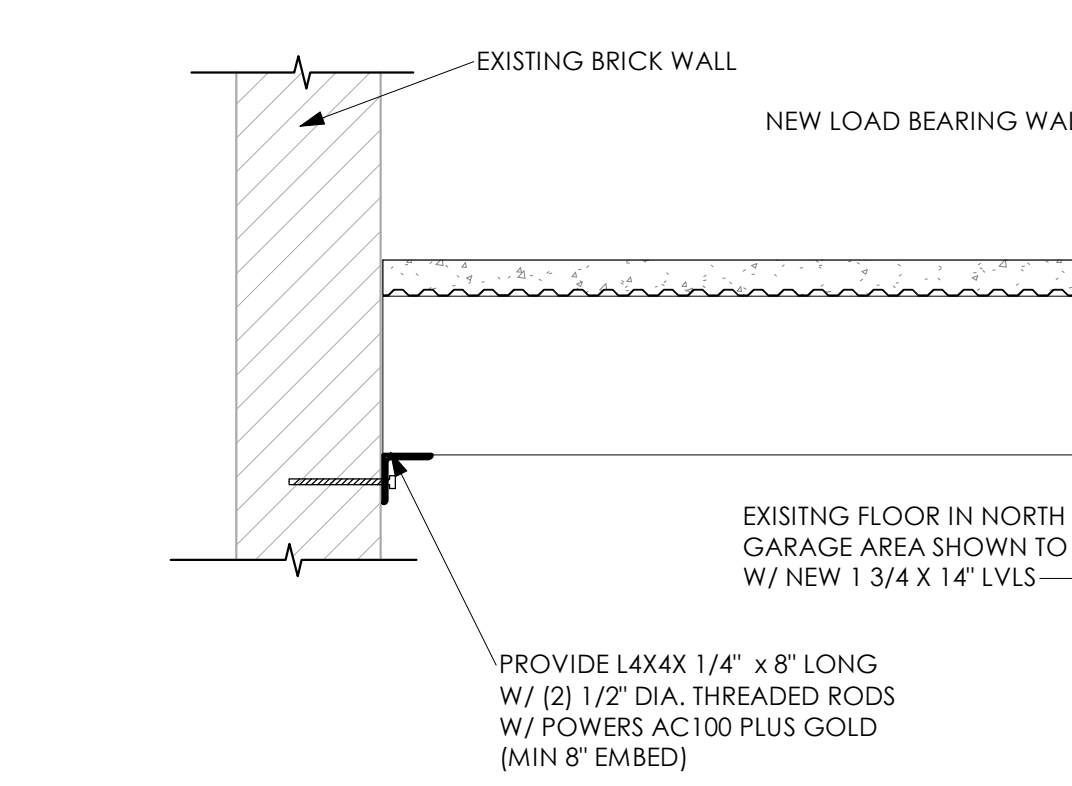
6 12X12 BEAM REINFORCEMENTS  
1 1/2" = 1'-0"



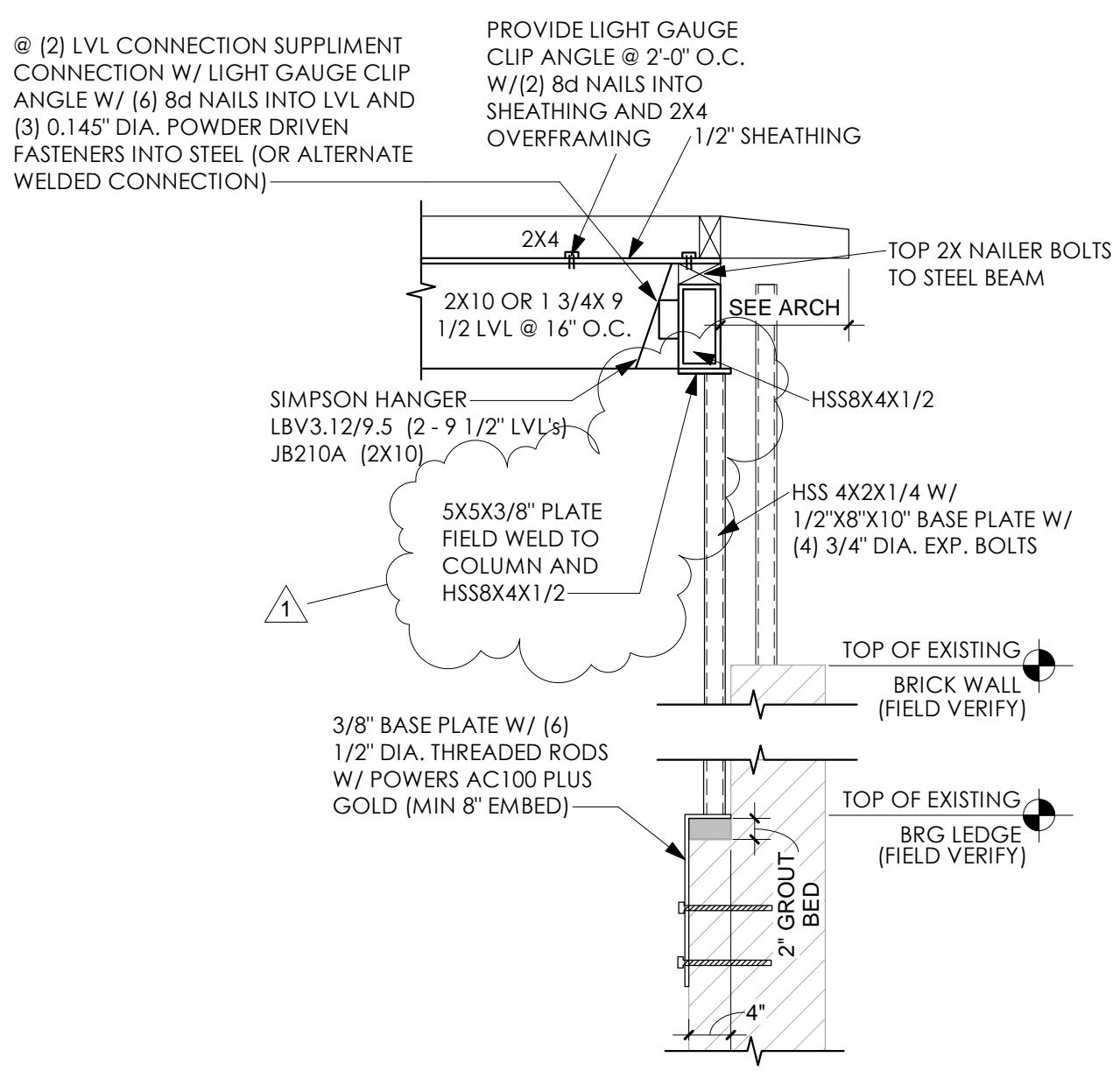
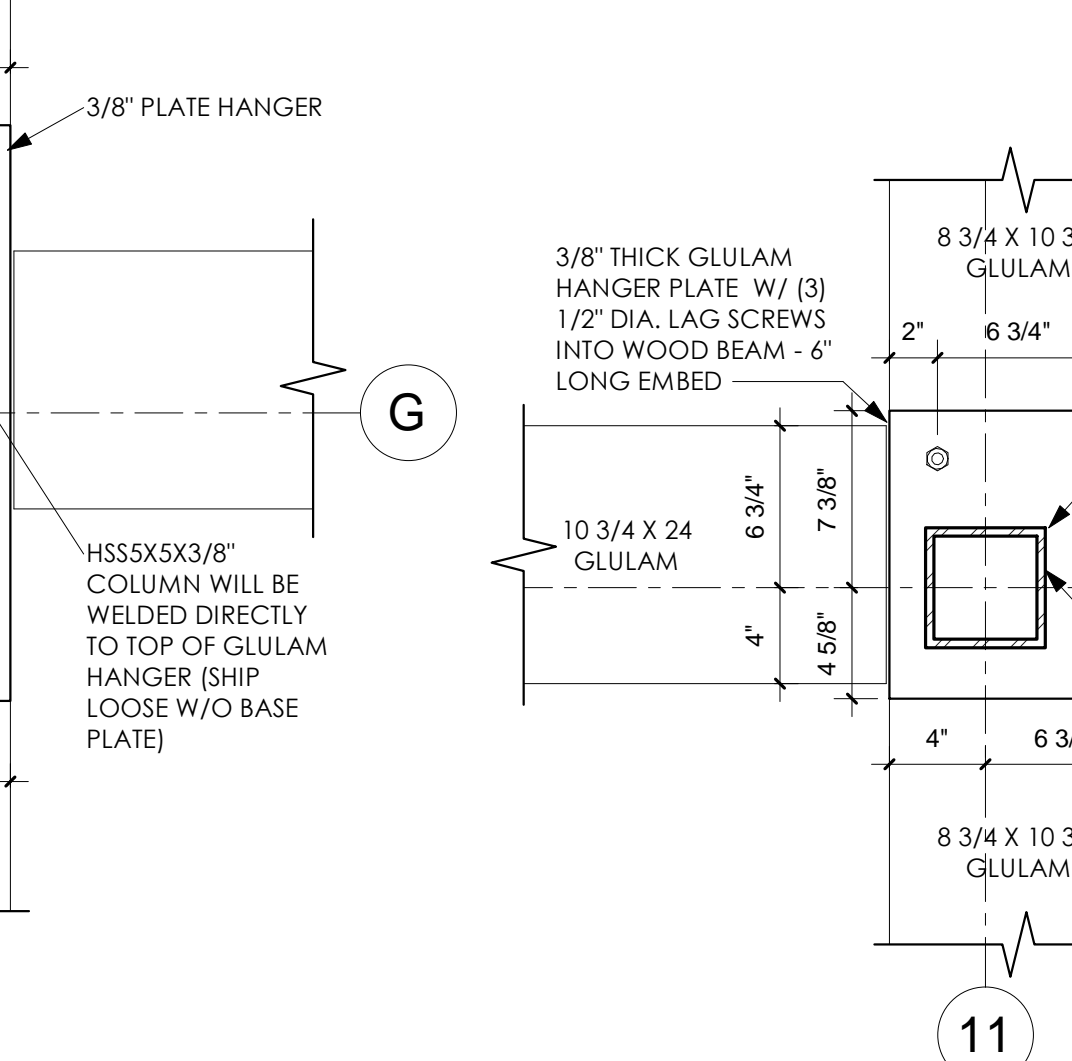
16 DECK BEARING @ HIGH GLULAM  
3/4" = 1'-0"



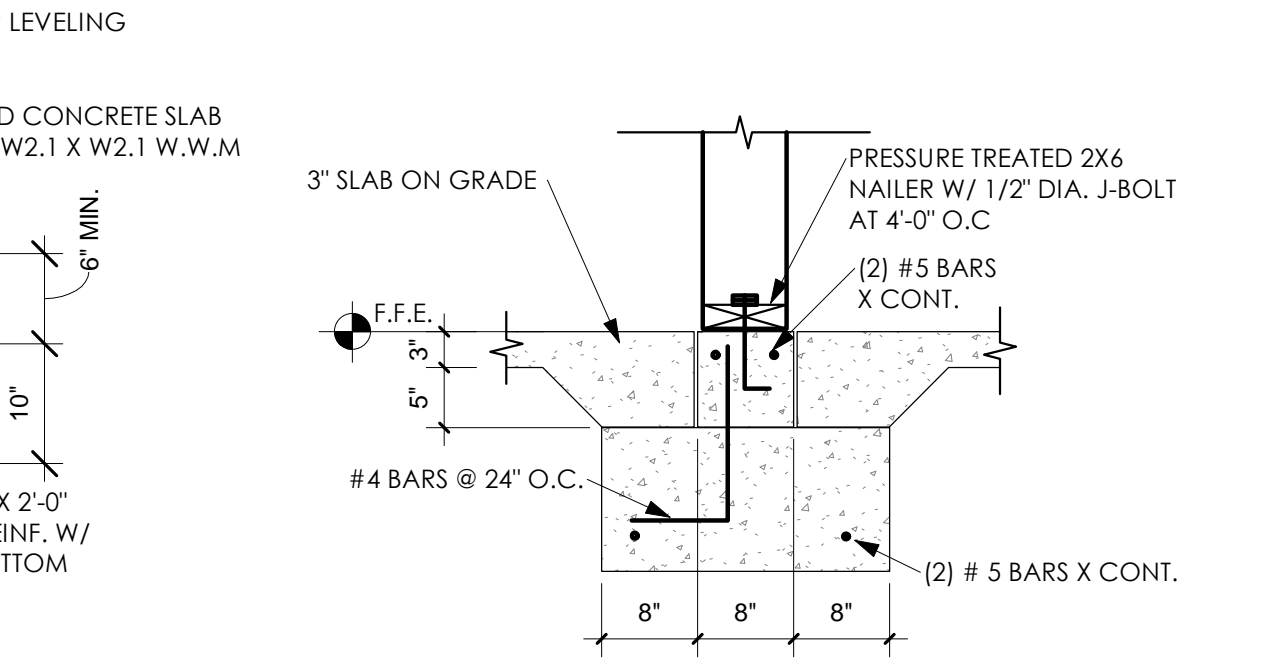
13 NEW ADJUSTABLE PIPE COLUMN  
3/4" = 1'-0"



9 FLOOR REINFORCEMENT @ NORTH SIDE OF GARAGE  
3/4" = 1'-0"

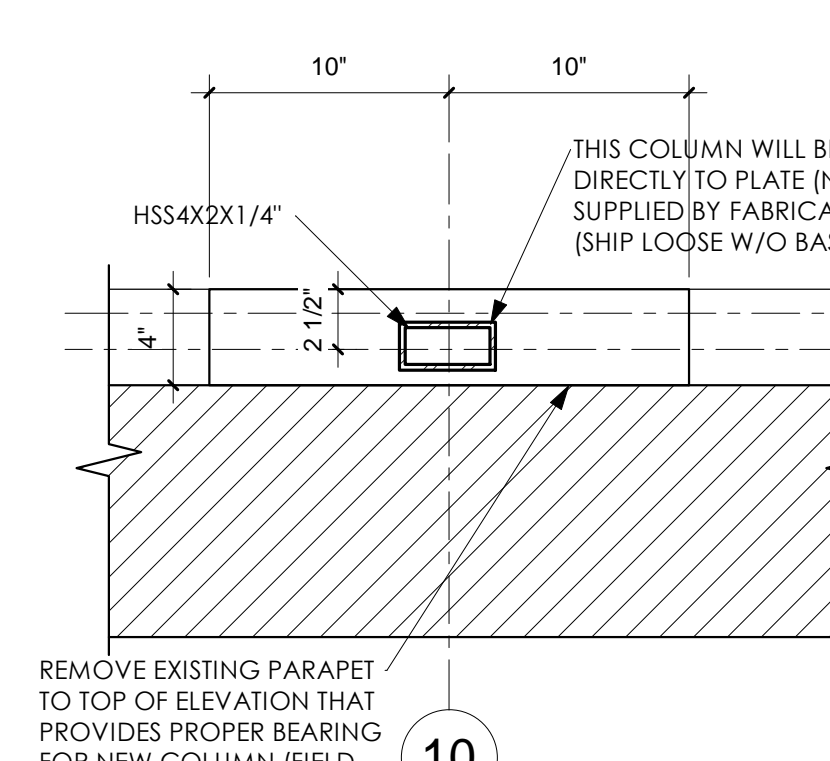


14 COLUMN CONNECTION TO EXISTING WALL  
3/4" = 1'-0"

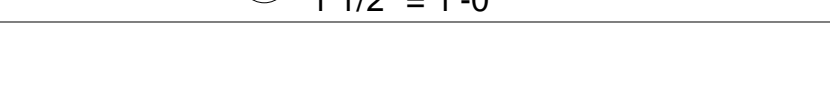


12 WOOD BEARING WALL ON FOOTING  
3/4" = 1'-0"

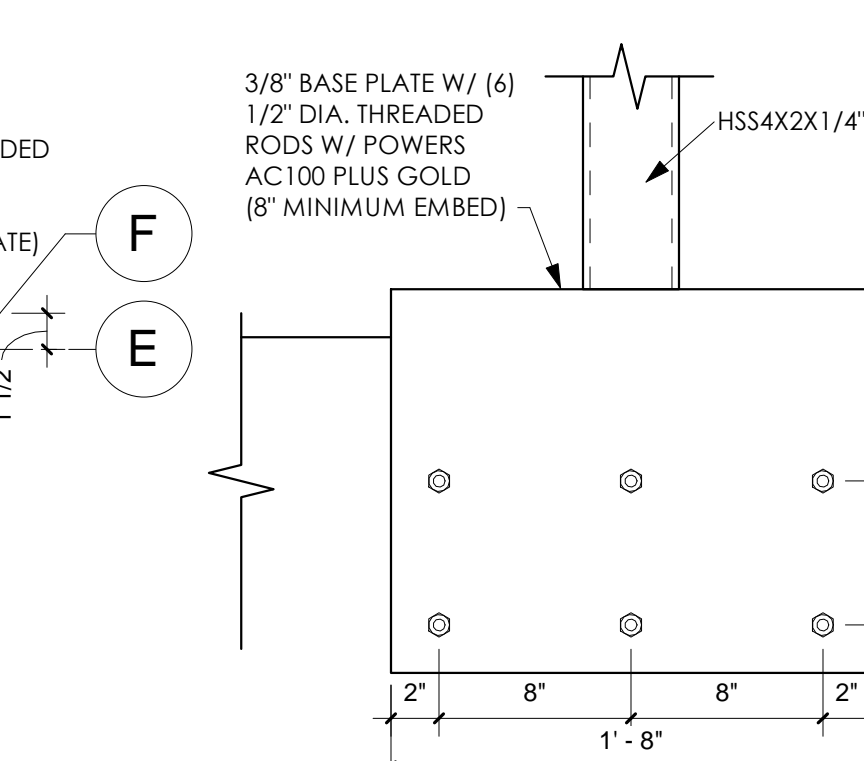
8 EXISTING STAIRWELL INFILL  
3/4" = 1'-0"



5 ANCHOR BOLT SETTING 5  
1 1/2" = 1'-0"



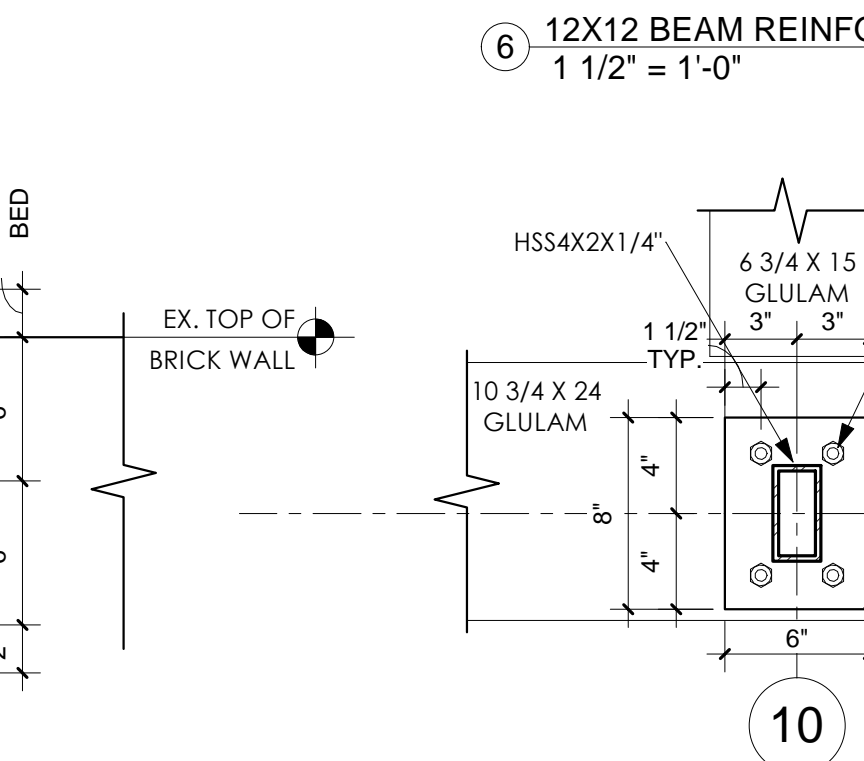
10 ANCHOR BOLT SETTING 10  
1 1/2" = 1'-0"



4 ANCHOR BOLT SETTING 4  
1 1/2" = 1'-0"



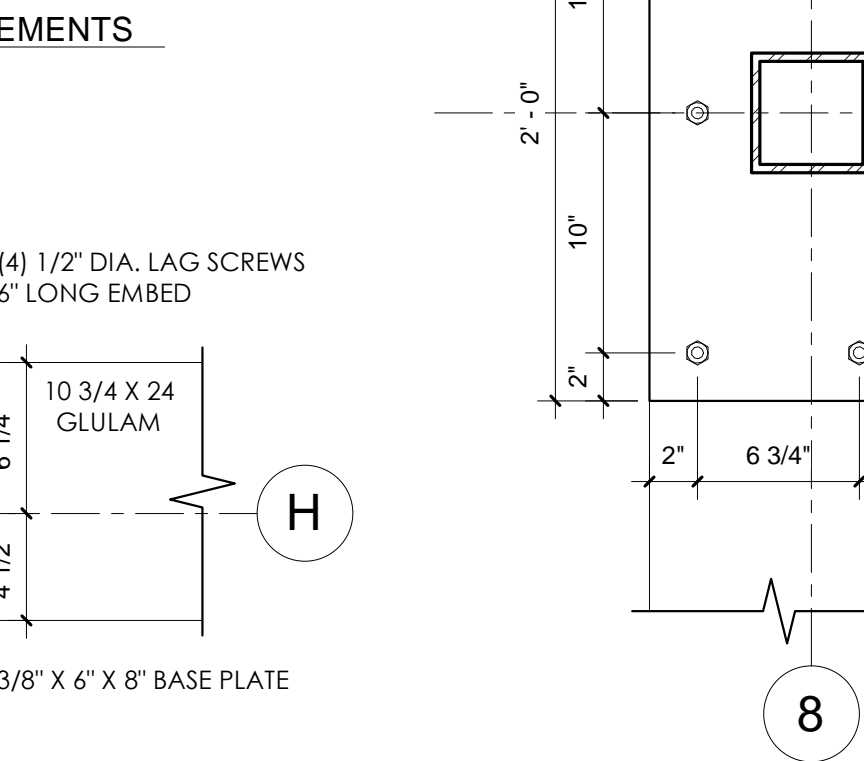
6 ANCHOR BOLT SETTING 6  
1 1/2" = 1'-0"



3 ANCHOR BOLT SETTING 3  
1 1/2" = 1'-0"



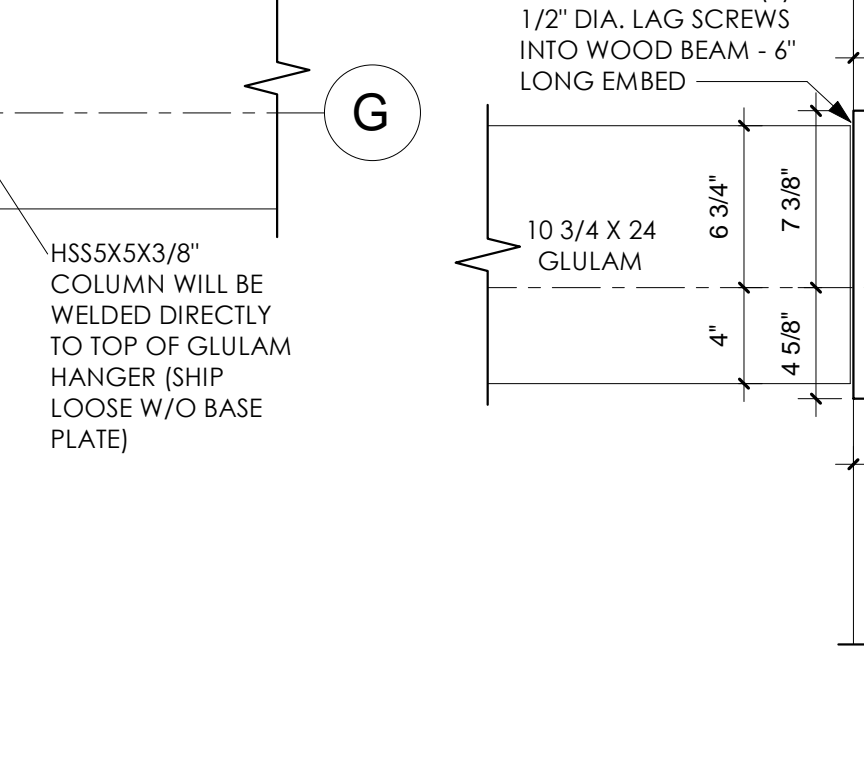
11 ANCHOR BOLT SETTING 11  
1 1/2" = 1'-0"



2 ANCHOR BOLT SETTING 2  
1 1/2" = 1'-0"



1 ANCHOR BOLT SETTING 1  
1 1/2" = 1'-0"



PROJECT NAME:  
LADDER CO. NO. 5  
2825 N. STOWELL AVE  
MILWAUKEE, WI 53212

OWNER:  
IRON JENNY  
2825 N. STOWELL AVE  
MILWAUKEE, WI 53212  
P. 414-967-0939

ARCHITECT:  
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2825 N. STOWELL AVE  
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GENERAL CONTRACTOR:  
DAHLMAN CONSTRUCTION  
4200 N. CHELSEA AVE  
MILWAUKEE, WI 53212  
414-962-3122

STRUCTURAL ENGINEER:  
BETHAN ENGINEERING  
2825 N. STOWELL AVE  
SUITE 200  
MILWAUKEE, WI 53212  
P. 262-738-0600

REV. NO.	DATE
1	1-21-2020

JOB 190601

SCALE AS NOTED  
CHECKED BY JS  
DATE 1-13-2020

DETAILS

S402  
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