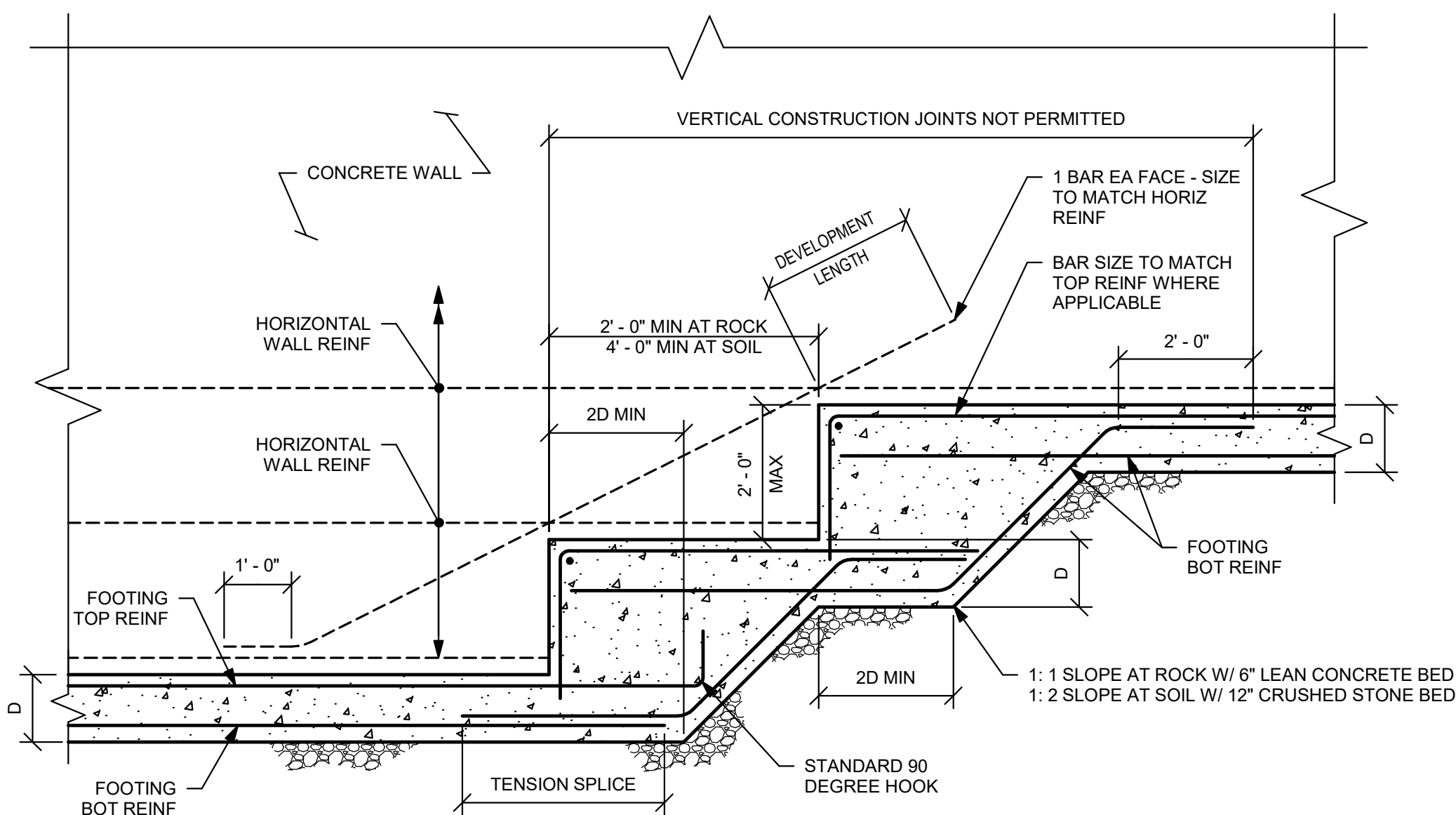
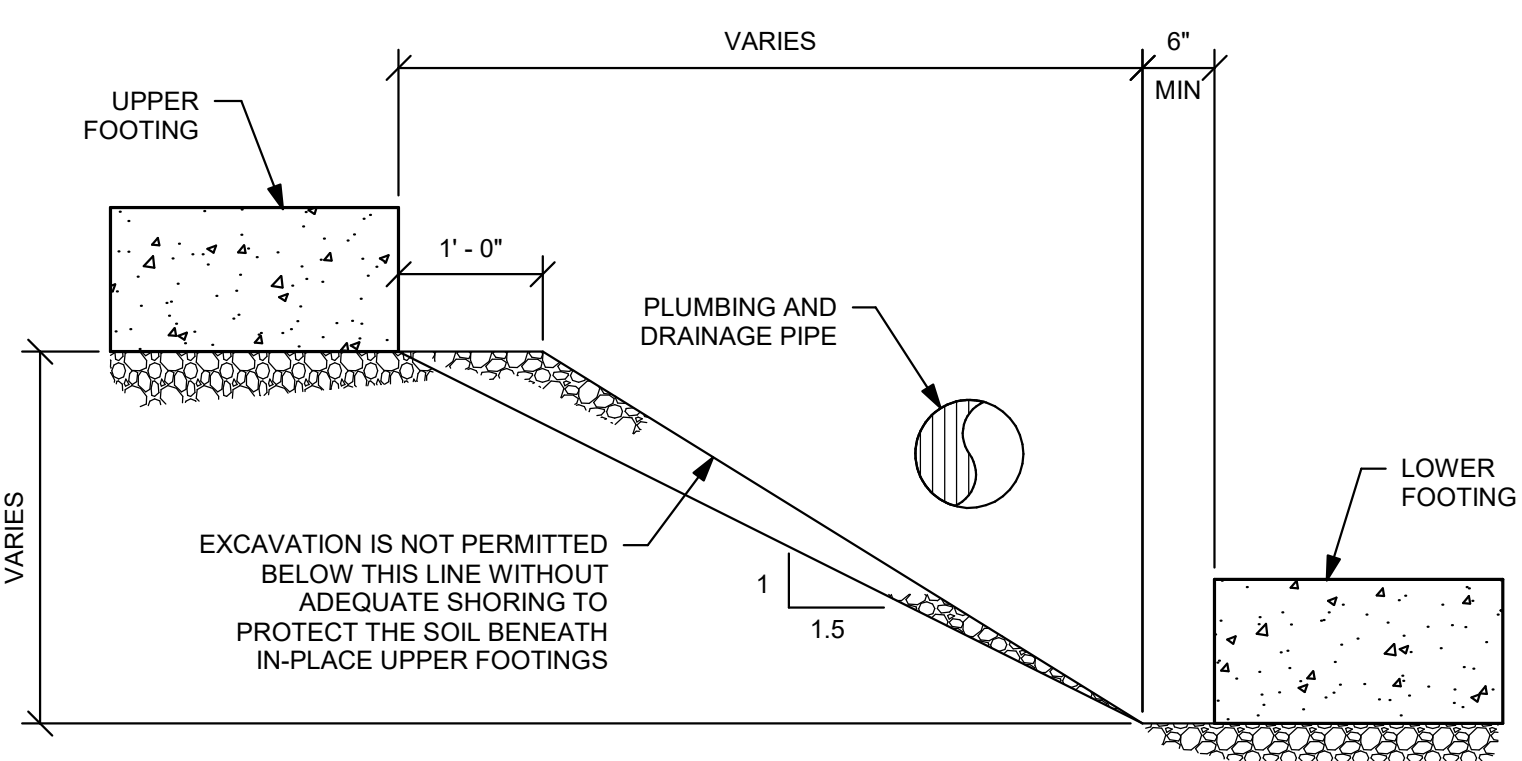
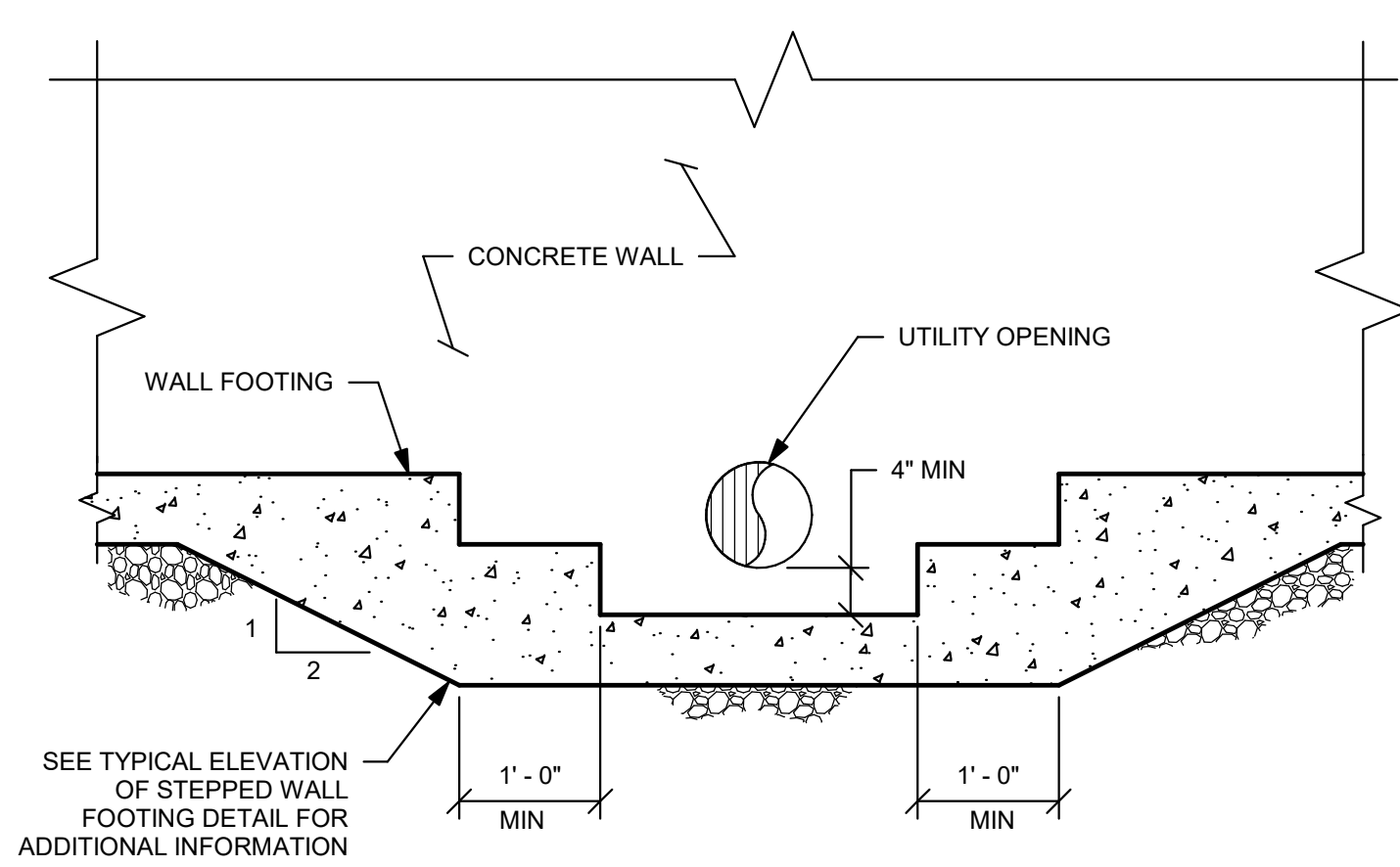




TYPICAL ELEVATION OF STEPPED WALL FOOTING DETAIL

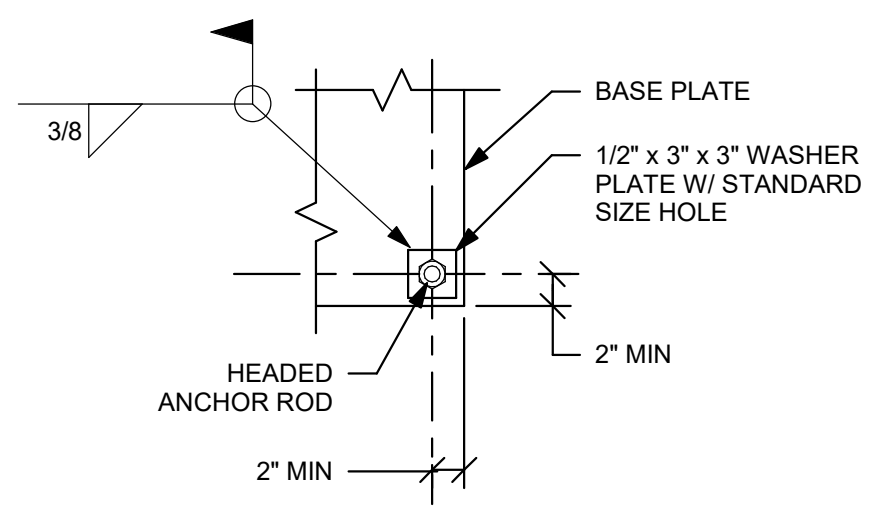


TYPICAL SLOPE BETWEEN FOOTINGS DETAIL

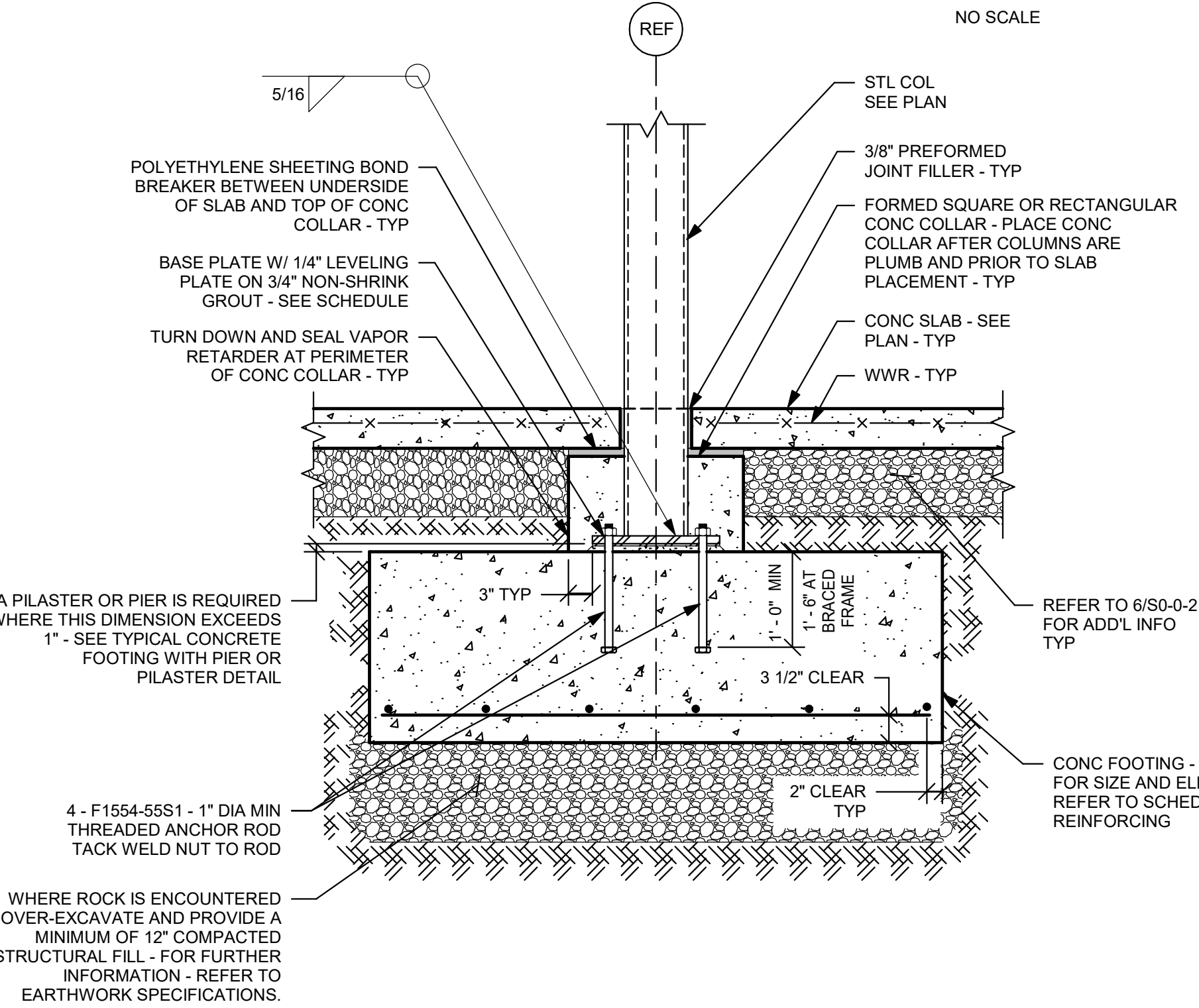


TYPICAL ELEVATION OF STEPPED WALL FOOTING AT UTILITY OPENING DETAIL

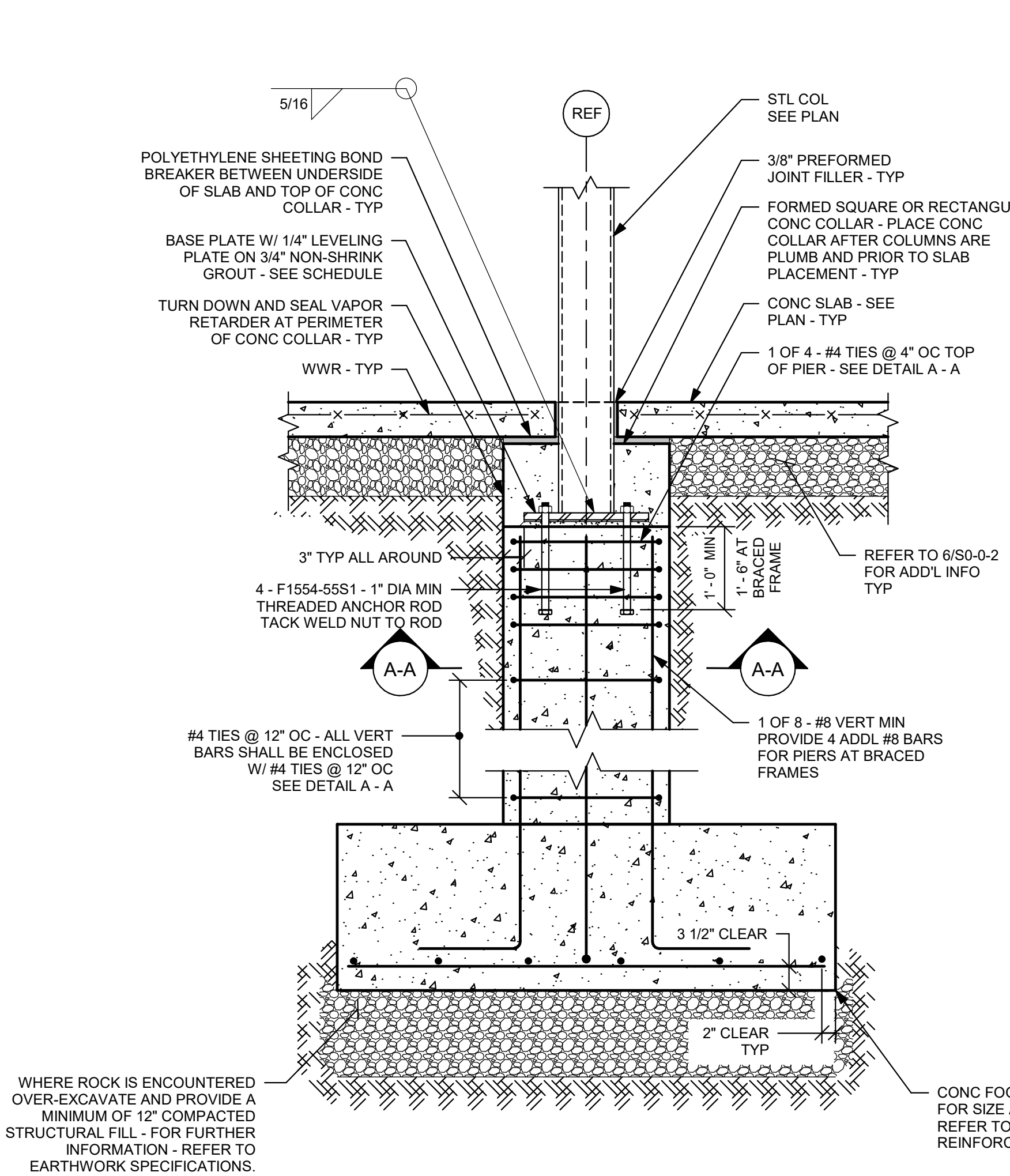
NOTE:
STEP FOOTING AS REQUIRED TO BE BELOW UTILITY OPENING.
COORDINATE WITH ALL CONTRACT DESIGN DISCIPLINES FOR UTILITY OPENING SIZES, PLAN LOCATIONS AND ELEVATIONS.



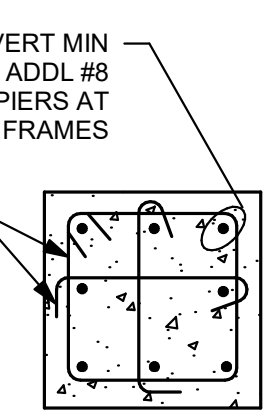
WASHER PLATE DETAIL



TYPICAL CONCRETE FOOTING WITHOUT PIER OR PILASTER DETAIL

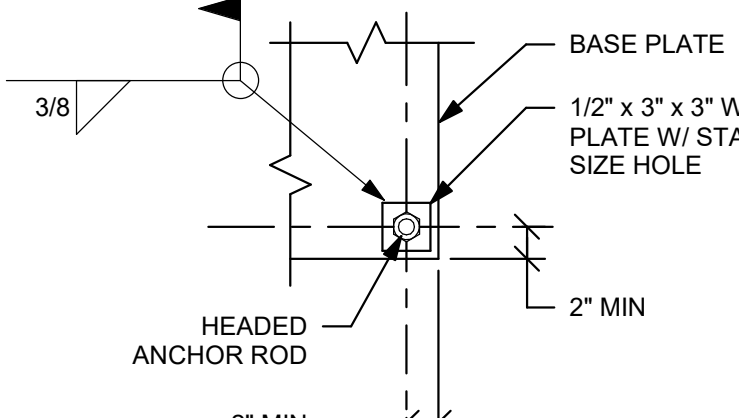


TYPICAL CONCRETE FOOTING WITH PIER OR PILASTER DETAIL

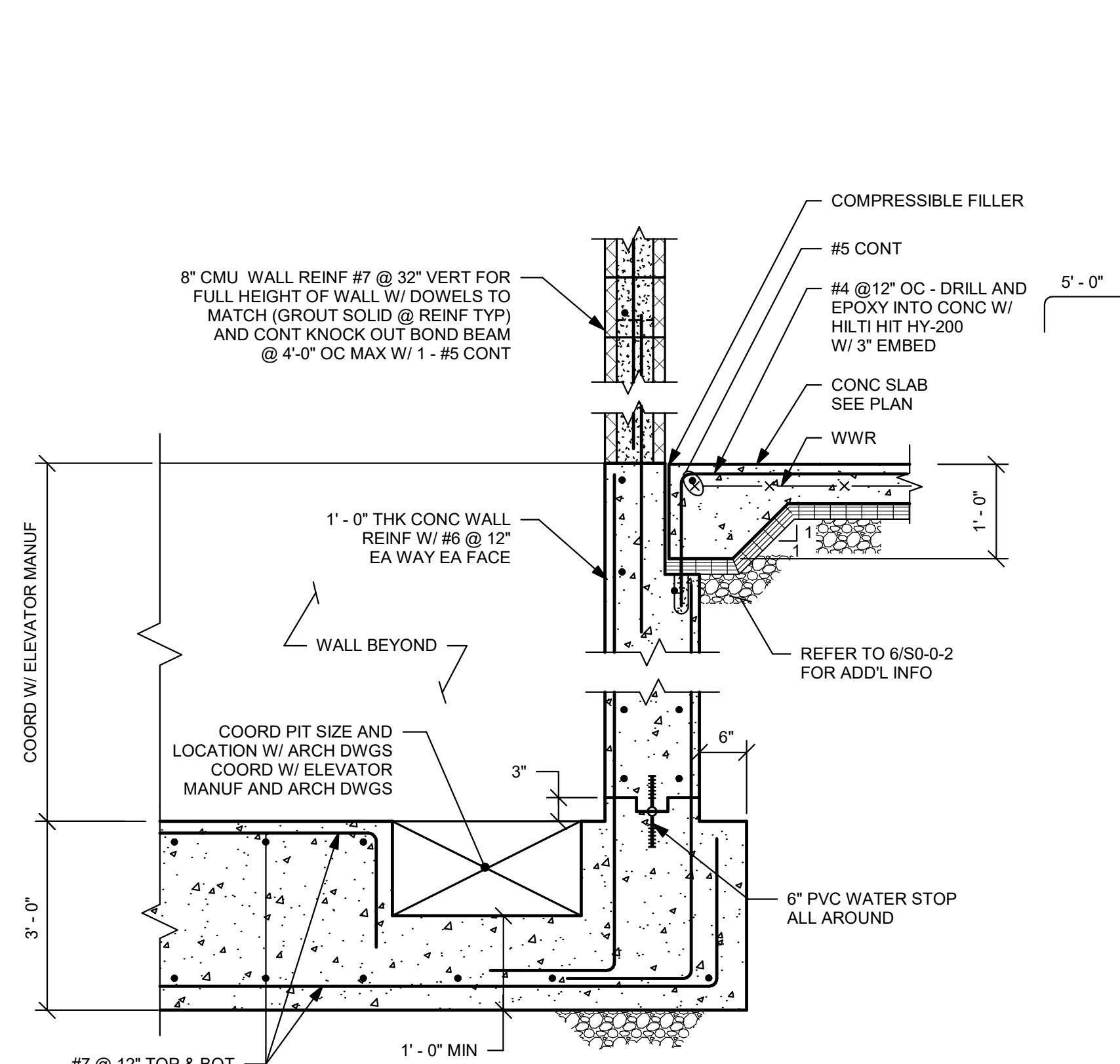


TYPICAL PIER DETAIL A-A

NOTE:
OFFSET PIER 3" FROM BASE PLATE ON ALL SIDES. NOTE: PIER DIMENSIONS AT BRACED FRAME LOCATIONS SHALL BE COORDINATED WITH BASE PLATE AND LEVELING PLATE SIZES.

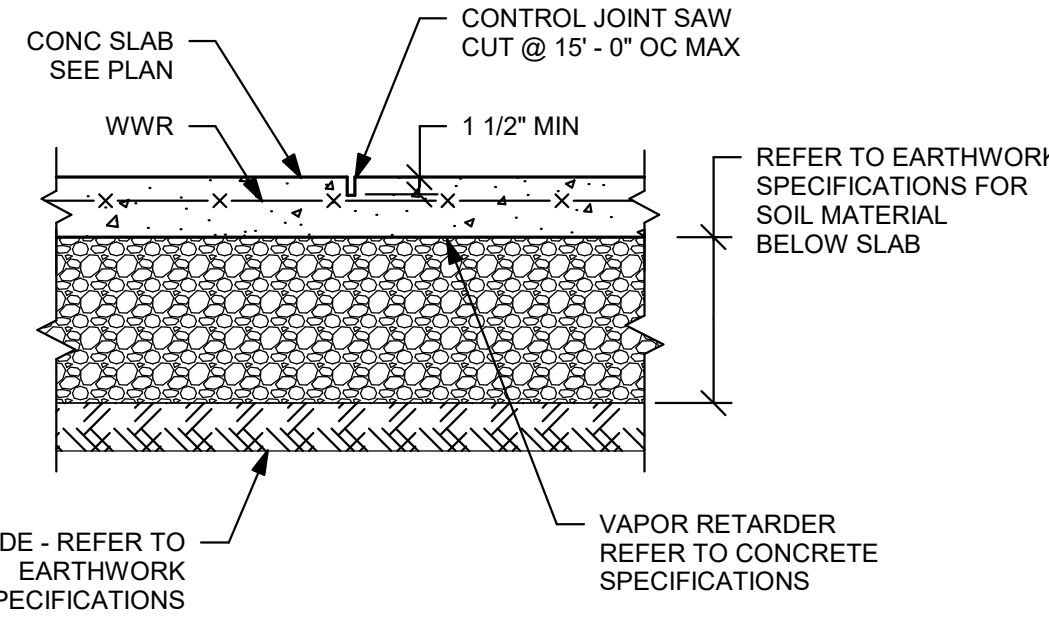


WASHER PLATE DETAIL



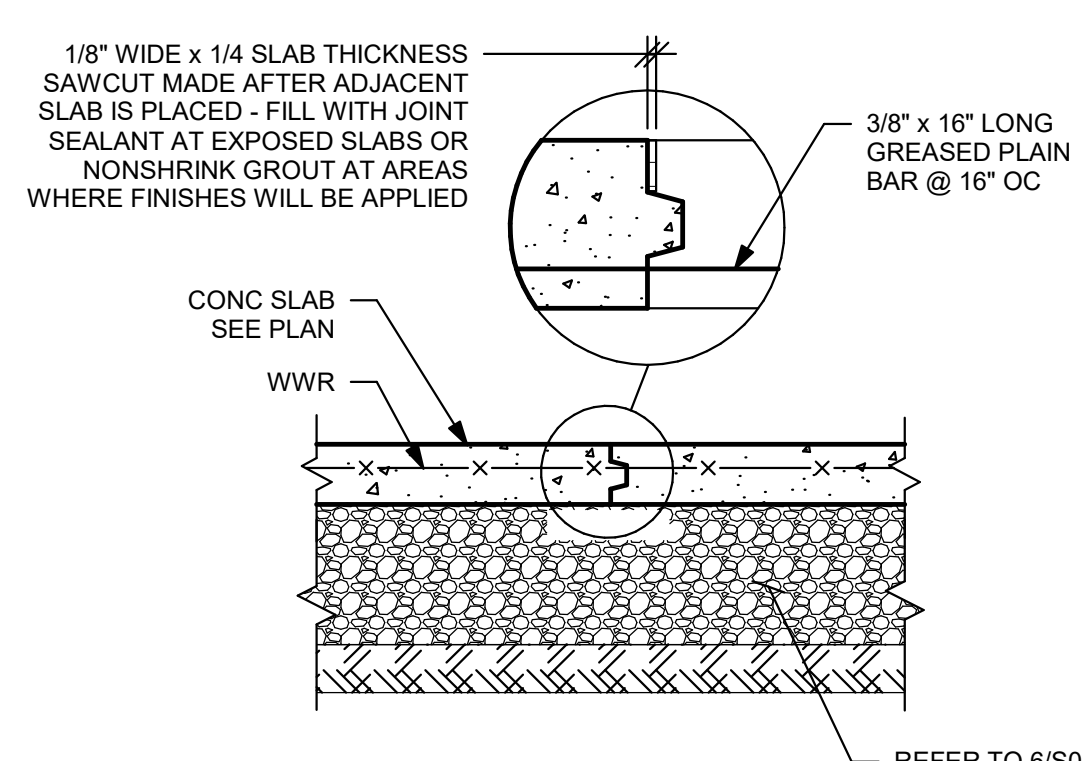
ELEVATOR PIT DETAIL

NOTES:
1) COORDINATE ELEVATOR PIT DIMENSIONS WITH ELEVATOR MANUFACTURER AND ARCHITECTURAL DRAWINGS.
2) SEE ARCH DWGS FOR SILL ANGLE AND COORD WITH ELEV MANUFACTURER.



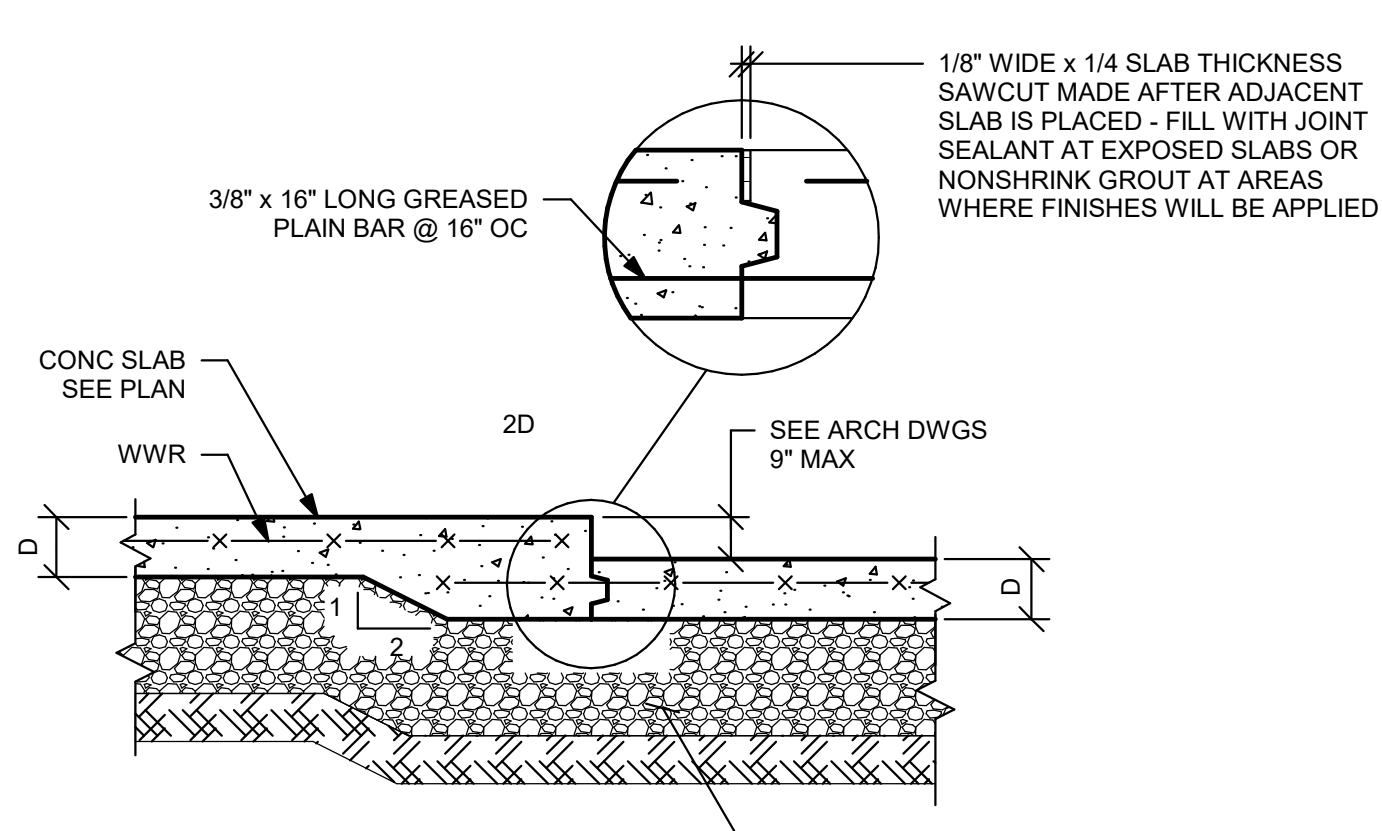
TYPICAL SLAB ON GRADE AND CONTROL JOINT DETAIL

NOTES:
1) SUBMIT A PLAN SHOWING PROPOSED LOCATIONS OF ALL THE CONTROL JOINTS AND CONSTRUCTION JOINTS FOR REVIEW BY THE ENGINEER PRIOR TO PLACEMENT OF CONCRETE FOR THE SLAB. CONTROL JOINTS SHALL TERMINATE AT SLAB EDGE OR CONSTRUCTION JOINT.
2) PROVIDE SUPPORT FOR WWR AT 3'-0" ON CENTER MAXIMUM, EACH WAY.



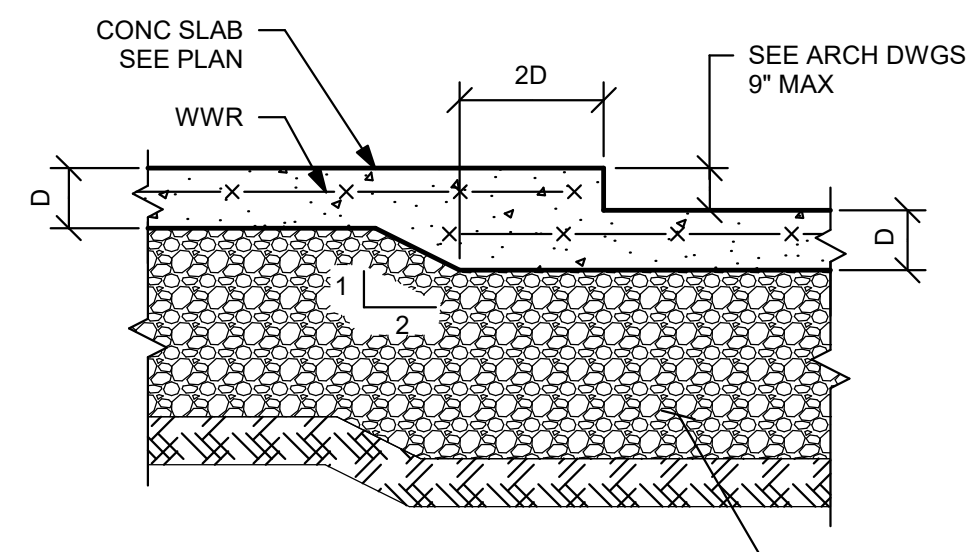
TYPICAL SLAB ON GRADE CONSTRUCTION JOINT DETAIL

NOTE:
SUBMIT A PLAN SHOWING PROPOSED LOCATIONS OF ALL THE CONTROL JOINTS AND CONSTRUCTION JOINTS FOR REVIEW BY THE ENGINEER PRIOR TO PLACEMENT OF CONCRETE FOR THE SLAB.

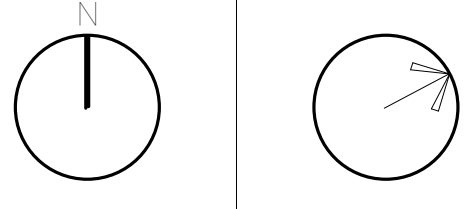
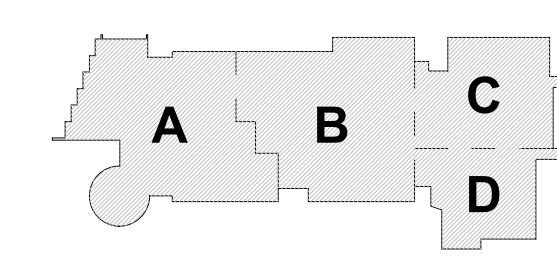


TYPICAL DEPRESSED SLAB ON GRADE CONSTRUCTION JOINT DETAIL

NOTE:
SUBMIT A PLAN SHOWING PROPOSED LOCATIONS OF ALL THE CONTROL JOINTS AND CONSTRUCTION JOINTS FOR REVIEW BY THE ENGINEER PRIOR TO PLACEMENT OF CONCRETE FOR THE SLAB.



TYPICAL DEPRESSED SLAB ON GRADE DETAIL





1

NO SCALE



2

NO SCALE



3

NO SCALE



NOTE "A"
COORDINATE WITH ARCHITECTURAL
AND MECHANICAL DRAWING FOR
TRENCH LOCATION AND EXTENTS.

(4)

NO SCALE



NOTE:
FOR SIZE OF PADS AND LOCATIONS
SEE MECHANICAL AND ELECTRICAL DRAWINGS

(5)

NO SCALE



6

NO SCALE



(7

NO SCALE



NOTES

- 1.) REFER TO ARCHITECTURAL AND PLUMBING DRAWINGS FOR LOCATION AND ADDITIONAL INFORMATION.
- 2.) REFER TO PLUMBING DRAWINGS FOR PIT DIMENSIONS.
- 3.) COORDINATE COVER GRATING WITH METAL FABRICATIONS AND ARCHITECTURAL DRAWINGS.

NOTES:-

- 1) FOR TOP OF WALL ELEVATIONS, GRADES AND FINISHES, FOOTING DRAINS, SEE ARCHITECTURAL, CIVIL AND SITE DRAWINGS.
- 2) ALL REINFORCEMENT TO BE ASTM GRADE 60.
- 3) ALL CONCRETE SHALL HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 5000 PSI UNLESS NOTED OTHERWISE.
- 4) REFER TO SPECIFICATION SECTION 03300 FOR CONCRETE REQUIREMENTS.
- 5) REFER TO THE FOLLOWING TYPICAL DETAILS FOR ADDITIONAL REQUIREMENTS:
 - A. TYPICAL ELEVATION OF STEPPED WALL FOOTING DETAIL
 - B. TYPICAL SLOPE BETWEEN FOOTINGS DETAIL
 - C. TYPICAL ELEVATION OF STEPPED WALL FOOTING AT UTILITY OPENING DETAIL
 - D. TYPICAL PLAN OF HORIZONTAL REINFORCING OF CONCRETE WALLS DETAIL
 - E. MINIMUM SLOPE AND EMBEDMENT LENGTH SCHEDULE
- 6) WEEP HOLES SHALL BE 4" DIAMETER, GRAY, SCHEDULE 40 PVC PIPE. ALSO WEEP HOLES WITH VERTICAL REGLETS.
- 7) REFER TO LANDSCAPE DRAWINGS FOR FENCE RAILING SLEEVES AND CONNECTION DETAILS APPROXIMATELY.
- 8) PLACE WALL WITH VERTICAL CONSTRUCTION JOINTS AT 30' ± 0" OC MAX PER TYPICAL DETAIL 10 ON DRAWING SO-3.



NOTE:
BACKFILL BOTH SIDES OF WALL SIMULTANEOUSLY TO
ELEVATION SHOWN - MAXIMUM OF 1' - 0" DIFFERENCE
IN ELEVATION OF BACKFILL.

(8)

NO SCALE



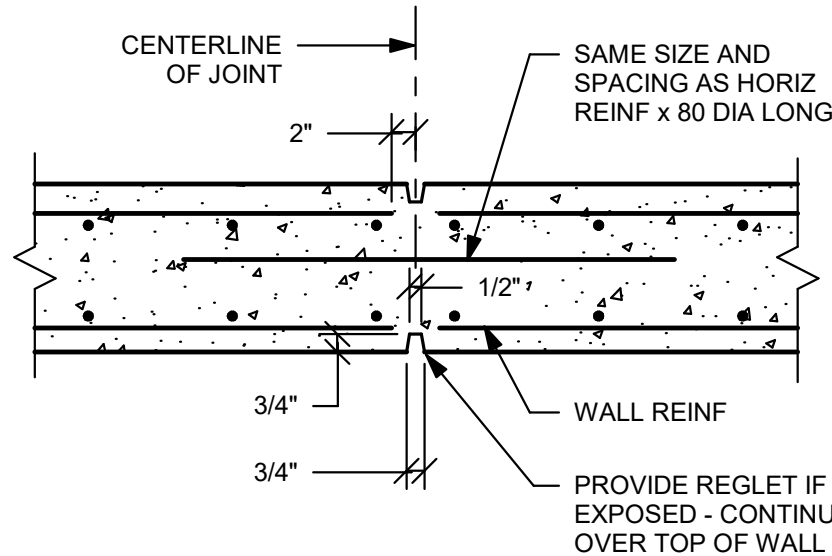
NO SCALE



NOTE:
SIMILAR AT EXTERIOR COLUMNS

(10)

NO SCALE

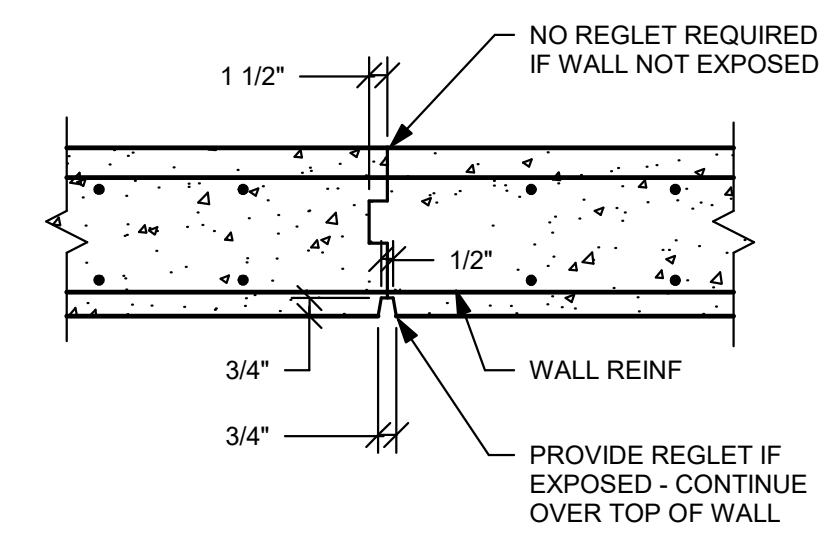


TYPICAL CONCRETE WALL CONTROL JOINT DETAIL

NOTES:
1) SPACE AT 30" - 0" CENTER TO CENTER MAX.
2) A CONSTRUCTION JOINT MAY BE SUBSTITUTED FOR A CONTROL JOINT, SEE CONSTRUCTION JOINT DETAIL.

1

NO SCALE

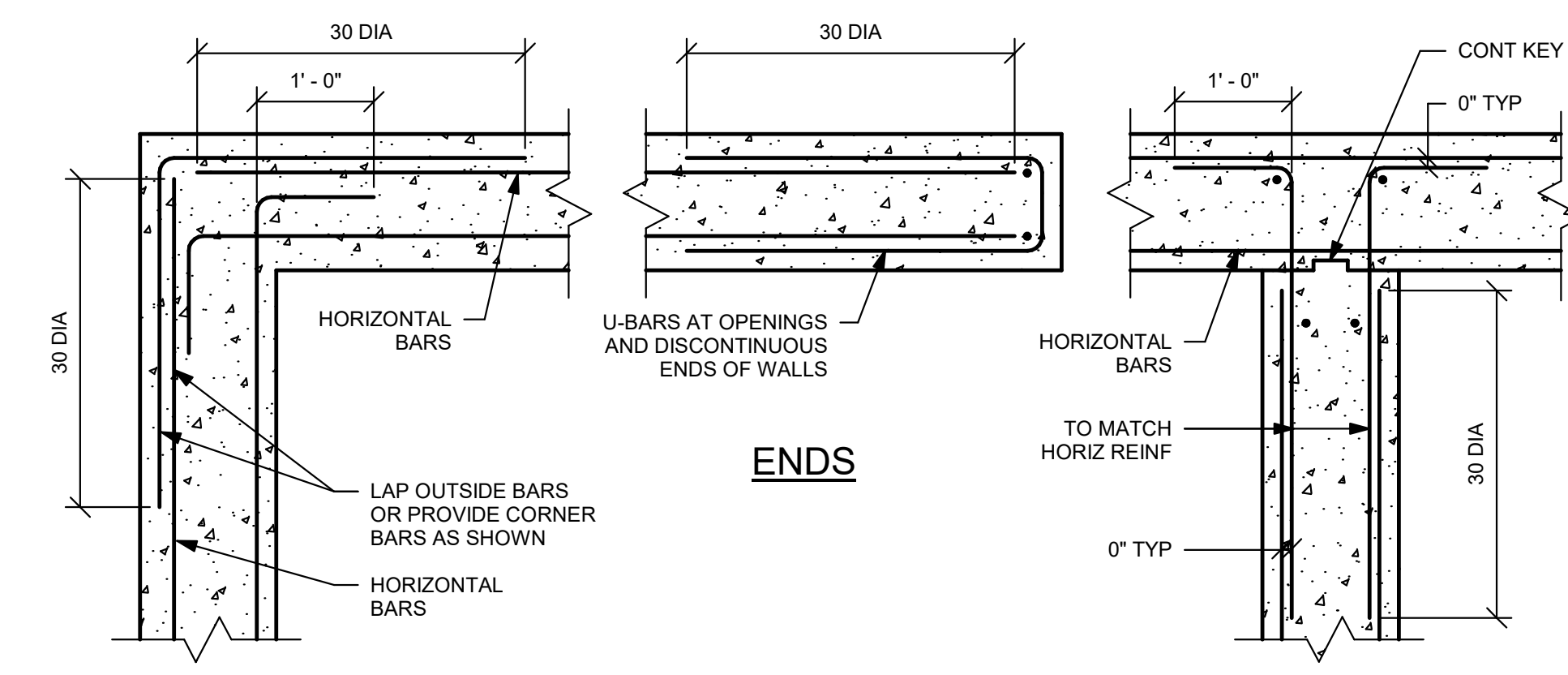


TYPICAL CONCRETE WALL CONSTRUCTION JOINT DETAIL

NOTE:
SPACE AT 60" - 0" CENTER TO CENTER MAX.

2

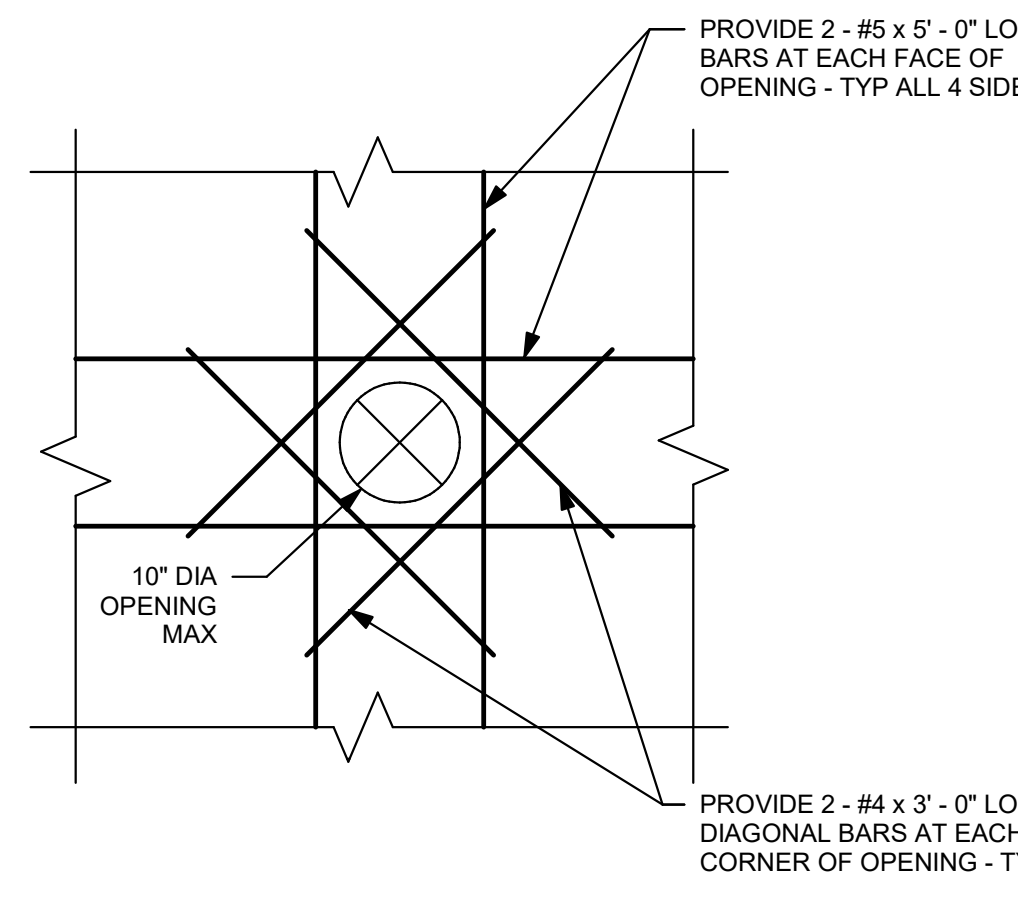
NO SCALE



TYPICAL PLAN OF HORIZONTAL REINFORCING OF CONCRETE WALLS DETAIL

3

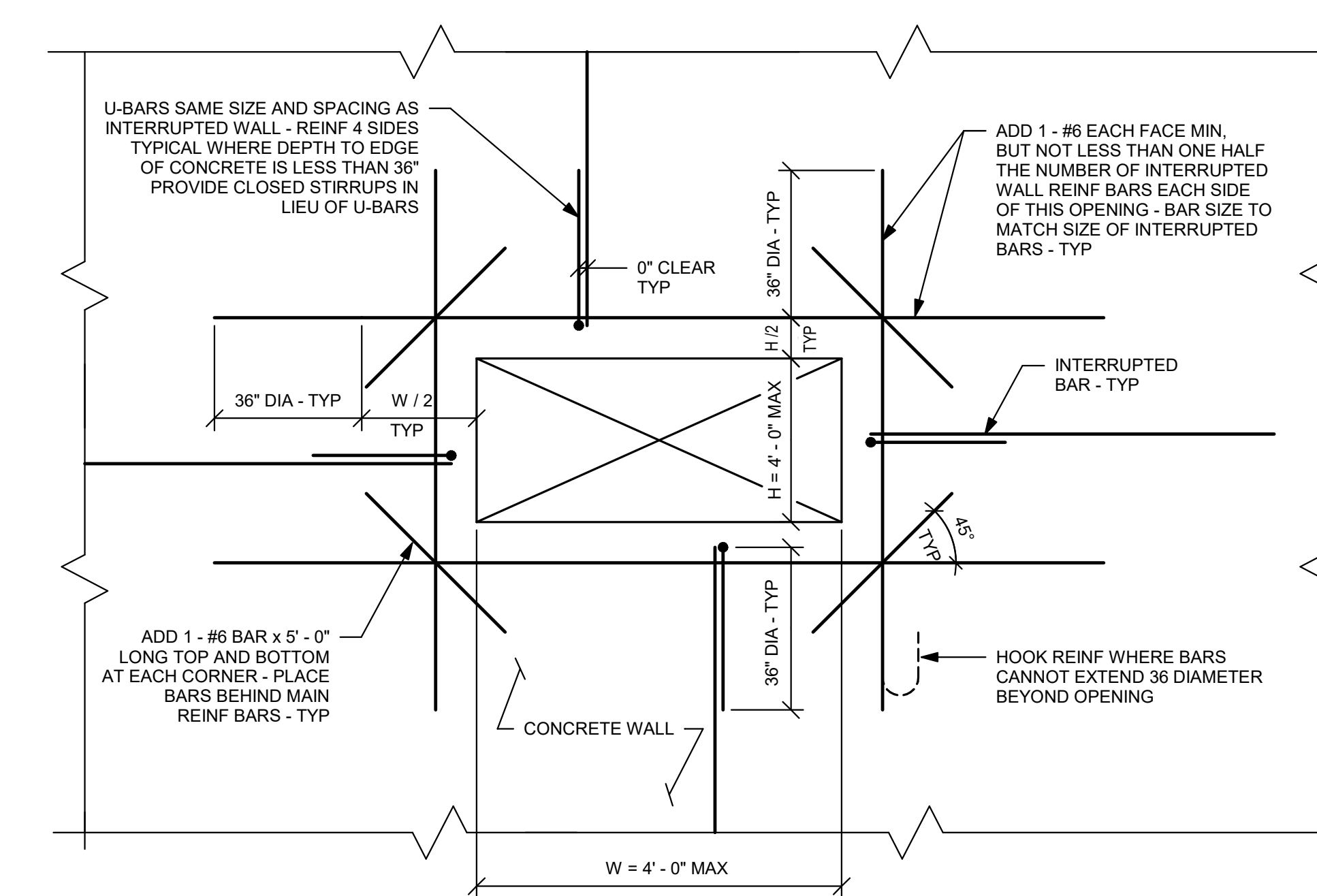
NO SCALE



NOTE:
THE SLEEVE SHALL NOT INTERRUPT OR CUT THROUGH THE VERTICAL REINFORCING STEEL AND SHALL NOT BE PLACED IN COLUMN PILES OR PLASTERS.

4

NO SCALE



TYPICAL REINFORCEMENT AT OPENINGS IN REINFORCED CONCRETE WALLS DETAIL

NOTES:
1) FOR QUANTITY, LOCATION, AND SIZES REFER TO ARCHITECTURAL AND MECHANICAL DRAWINGS.
2) TREAT EACH CONDUIT AS A SEPARATE OPENING.
3) PROVIDE A MINIMUM OF 12" CLEAR CONCRETE BETWEEN TOP OF PENETRATION AND TOP OF WALL.

5

NO SCALE

BAR SIZE	ℓd PER SPACING AND COVER CASE			
	CASE 1	CASE 2	CASE 1	CASE 2
TOP BARS	OTHER BARS	TOP BARS	OTHER BARS	
#3	19	15	28	22
#4	25	19	37	29
#5	31	24	47	36
#6	37	29	56	43
#7	44	34	67	51
#8	51	40	81	61
#9	58	47	96	71
#10	65	54	111	81
#11	72	61	127	91
#12	79	68	143	101
#13	86	75	160	111
#14	93	82	177	121
#15	100	89	194	131
#16	107	96	211	141
#17	114	103	228	151
#18	121	110	245	161

TENSION DEVELOPMENT LENGTHS, ℓd (INCHES)
FOR GRADE 60 UNCOATED BARS
fc = 4500 psi; NORMAL-WEIGHT CONCRETE
BASED ON ACI 12.2.2

BAR SIZE	LAP CLASS	LAP LENGTH PER SPACING AND COVER CASE			
		CASE 1	CASE 2	CASE 1	CASE 2
TOP BARS	OTHER BARS	TOP BARS	OTHER BARS		
#3	B	24	19	36	28
#4	B	32	25	48	37
#5	B	40	31	60	47
#6	B	48	37	72	56
#7	B	56	44	84	65
#8	B	64	52	96	76
#9	B	72	60	108	87
#10	B	80	68	120	98
#11	B	88	76	132	109
#12	B	96	84	144	120
#13	B	104	92	156	131
#14	B	112	100	168	142
#15	B	120	108	180	153
#16	B	128	116	192	164
#17	B	136	124	204	175
#18	B	144	132	216	186

TENSION LAP SPLICING LENGTHS, ℓs (INCHES)
FOR GRADE 60 UNCOATED BARS
fc = 4500 psi; NORMAL-WEIGHT CONCRETE
BASED ON ACI 12.2.2

BAR SIZE	ℓd PER SPACING AND COVER CASE			
	CASE 1	CASE 2	CASE 1	CASE 2
TOP BARS	OTHER BARS	TOP BARS	OTHER BARS	
#3	17	13	25	19
#4	22	17	33	26
#5	28	22	42	32
#6	33	26	50	38
#7	40	32	60	46
#8	46	38	72	55
#9	52	44	84	64
#10	58	50	96	73
#11	64	56	108	82
#12	70	62	120	91
#13	76	68	132	100
#14	82	74	144	110
#15	88	80	156	120
#16	94	86	168	130
#17	100	92	180	140
#18	106	98	192	150

TENSION DEVELOPMENT LENGTHS, ℓd (INCHES)
FOR GRADE 60 UNCOATED BARS
fc = 4500 psi; NORMAL-WEIGHT CONCRETE
BASED ON ACI 12.2.2

BAR SIZE	LAP CLASS	LAP LENGTH PER SPACING AND COVER CASE			
		CASE 1	CASE 2	CASE 1	CASE 2
TOP BARS	OTHER BARS	TOP BARS	OTHER BARS		
#3	B	22	17	33	25
#4	B	29	22	43	33
#5	B	36	28	54	42
#6	B	43	33	65	50
#7	B	50	40	76	60
#8	B	57	47	87	69
#9	B	64	54	98	78
#10	B	71	61	109	87
#11	B	78	68	120	96
#12	B	85	75	131	105
#13	B	92	82	142	114
#14	B	99	89	153	123
#15	B	106	96	164	132
#16	B	113	103	175	141
#17	B	120	110	186	150
#18	B	127	117	197	159

TENSION LAP SPLICING LENGTHS, ℓs (INCHES)
FOR GRADE 60 UNCOATED BARS
fc = 4500 psi; NORMAL-WEIGHT CONCRETE
BASED ON ACI 12.2.2

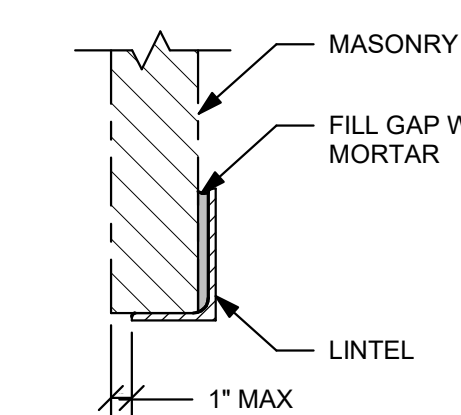
5,000 PSI NORMAL-WEIGHT CONCRETE

NOTES:
1) TOP BARS ARE DEFINED AS HORIZONTAL BARS WITH MORE THAN 12 INCHES OF CONCRETE CAST IN THE MEMBER BELOW THE REINFORCEMENT. WALL REINFORCEMENT IS CLASSIFIED AS OTHER BARS.
2) FOR LIGHTWEIGHT AGGREGATE CONCRETE MULTIPLY THE VALUES ABOVE BY 1.3.

ABBREVIATIONS:
db DENOTES NOMINAL BAR DIAMETER
> DENOTES GREATER THAN
≥ DENOTES EQUAL TO OR GREATER THAN
≠ DENOTES LESS THAN
≤ DENOTES EQUAL TO OR LESS THAN

MINIMUM SPLICE AND EMBEDMENT LENGTH SCHEDULE

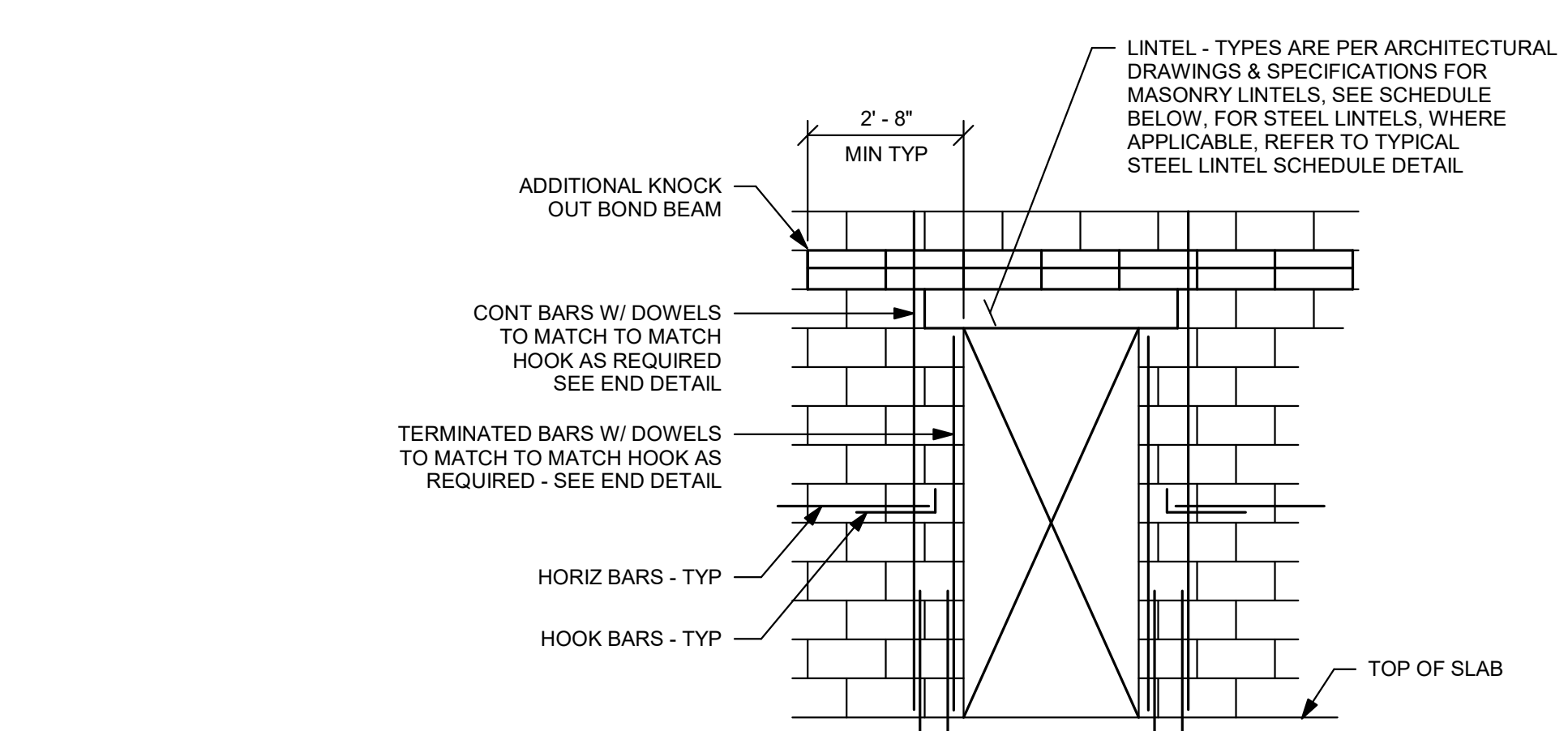
(UNLESS SHOWN OTHERWISE ON DRAWINGS)



TYPICAL SECTION SINGLE WYTHE MASONRY

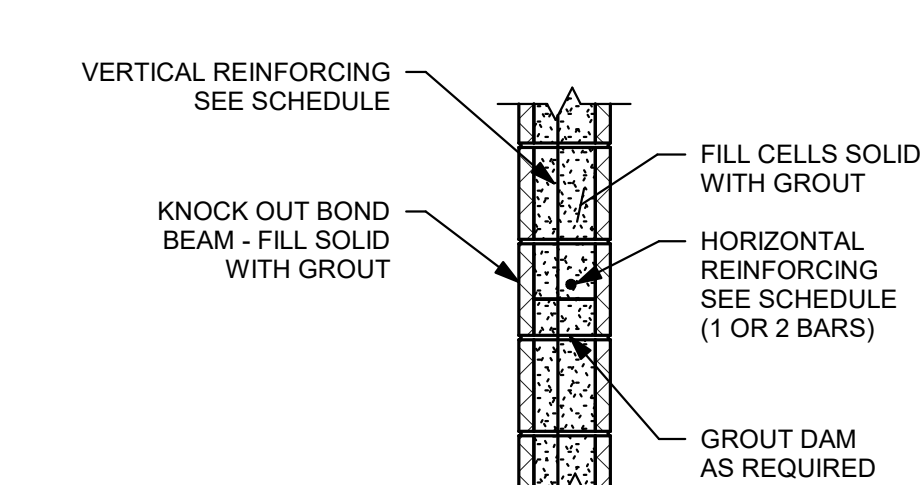
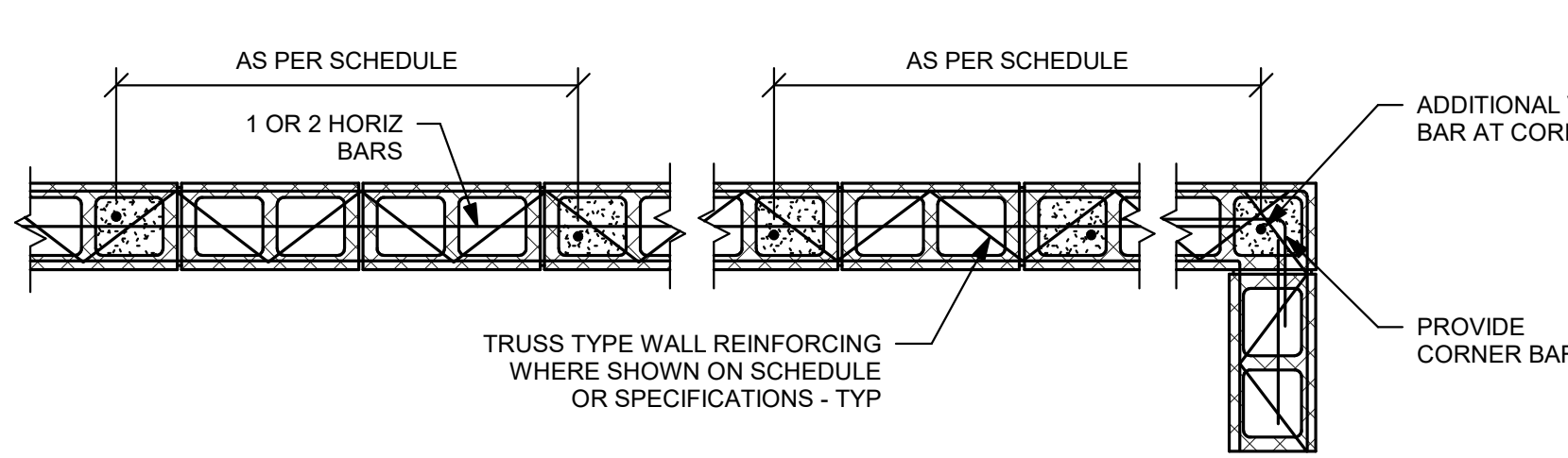
TYPICAL STEEL LINTEL SCHEDULE

LINTEL SCHEDULE	
MASONRY OPENING	LINTEL SIZE
UP TO 4' - 0"	L 4" x 3-1/2" x 5/16" (4" LEG VERTICAL)
4' - 7" TO 6' - 0"	L 5" x 3-1/2" x 5/16" (5" LEG VERTICAL)
6' - 1" TO 8' - 0"	L 6" x 3-1/2" x 3/8" (6" LEG VERTICAL)
8' - 1" TO 10' - 0"	L 7" x 4" x 3/8" (7" LEG VERTICAL)



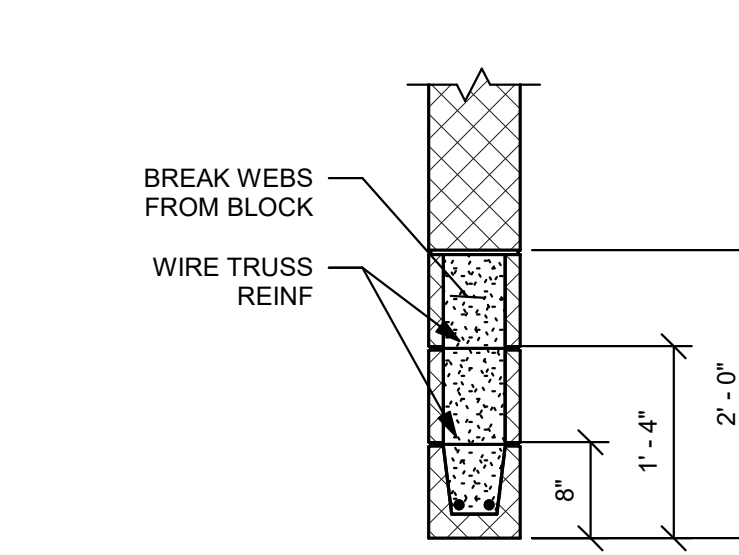
TYPICAL DETAIL

CORNER DETAIL



BOND BEAM DETAIL

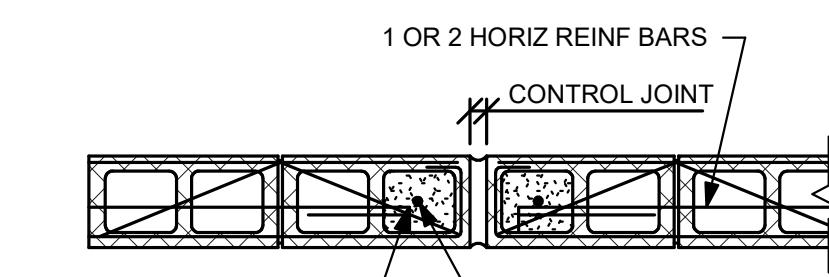
NOTES:
1) SEE SCHEDULE FOR SPACING.
2) PROVIDE REINFORCED BOND BEAM WITHIN 16" OF TOP OF WALL.
3) PROVIDE REINFORCED BOND BEAM AT TOP AND BOTTOM OF ALL OPENINGS.



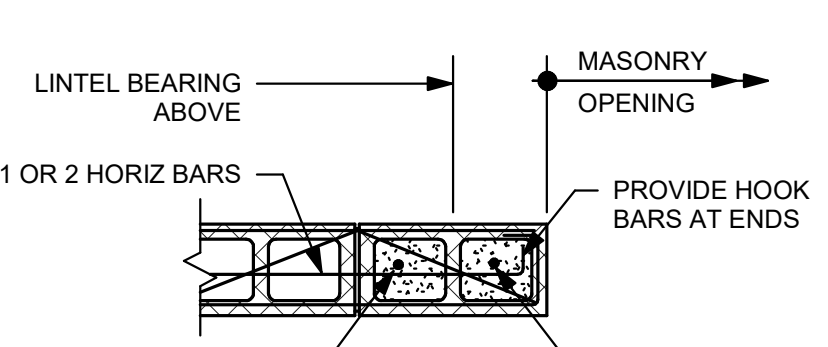
MASONRY LINTEL DETAIL AND SCHEDULE

NOTE:
NO CONSTRUCTION JOINTS OR CONTROL JOINTS ARE PERMITTED WITHIN 3' - 0" OF EDGE OF OPENING.

MASONRY LINTEL SCHEDULE		
OPENING DIMS	8" x 12" WIDE BEAM	REINFORCEMENT
0' - 0" - 4' - 0"	8" x 8" DEEP	2 - #5 CONT
4' - 0" - 8' - 0"	8" x 10" DEEP	2 - #5 CONT
8' - 0" - 12' - 0"	8" x 24" DEEP	2 - #6 CONT AND WIRE TRUSS TYPE - REINF AT JOINTS
0' - 0" - 4' - 0"	12" x 8" DEEP	2 - #5 CONT
4' - 0" - 8' - 0"	12" x 10" DEEP	2 - #6 CONT AND WIRE TRUSS TYPE - REINF AT JOINTS
8' - 0" - 12' - 0"	12" x 24" DEEP	2 - #6 TOP & BOT CONT AND WIRE TRUSS TYPE REINF AT JOINTS



VERTICAL CONTROL JOINT DETAIL



END DETAIL

NOTES:
1) PROVIDE 1 - CONTINUOUS BAR AT MASONRY OPENING 4' - 0" OR LESS IN WIDTH AT STRUTTED ENDS.
2) PROVIDE 2 - CONTINUOUS BARS AT MASONRY OPENING 4' - 0" TO 8' - 0" IN WIDTH.

TYPICAL REINFORCING AT CMU WALLS WITH OPENINGS ELEVATION

8

NO SCALE

DRA
Drumsey Rosane Anderson, Inc.
225 Oakland Road
Studio 205
South Windsor, CT 06074
Planning Architecture Interior
Tel: 877.661.1100
www.dra.com

NORTHEAST METRO TECH

100 Hemlock Rd.
Wakefield, MA 01880

EDG
Engineers Design Group Inc.
Structural Engineers
389 Main Street, Suite 401
Malden, MA 02148
(781)396-9007
EDG@EDGINC.COM

MSBA 60% CD
Submission

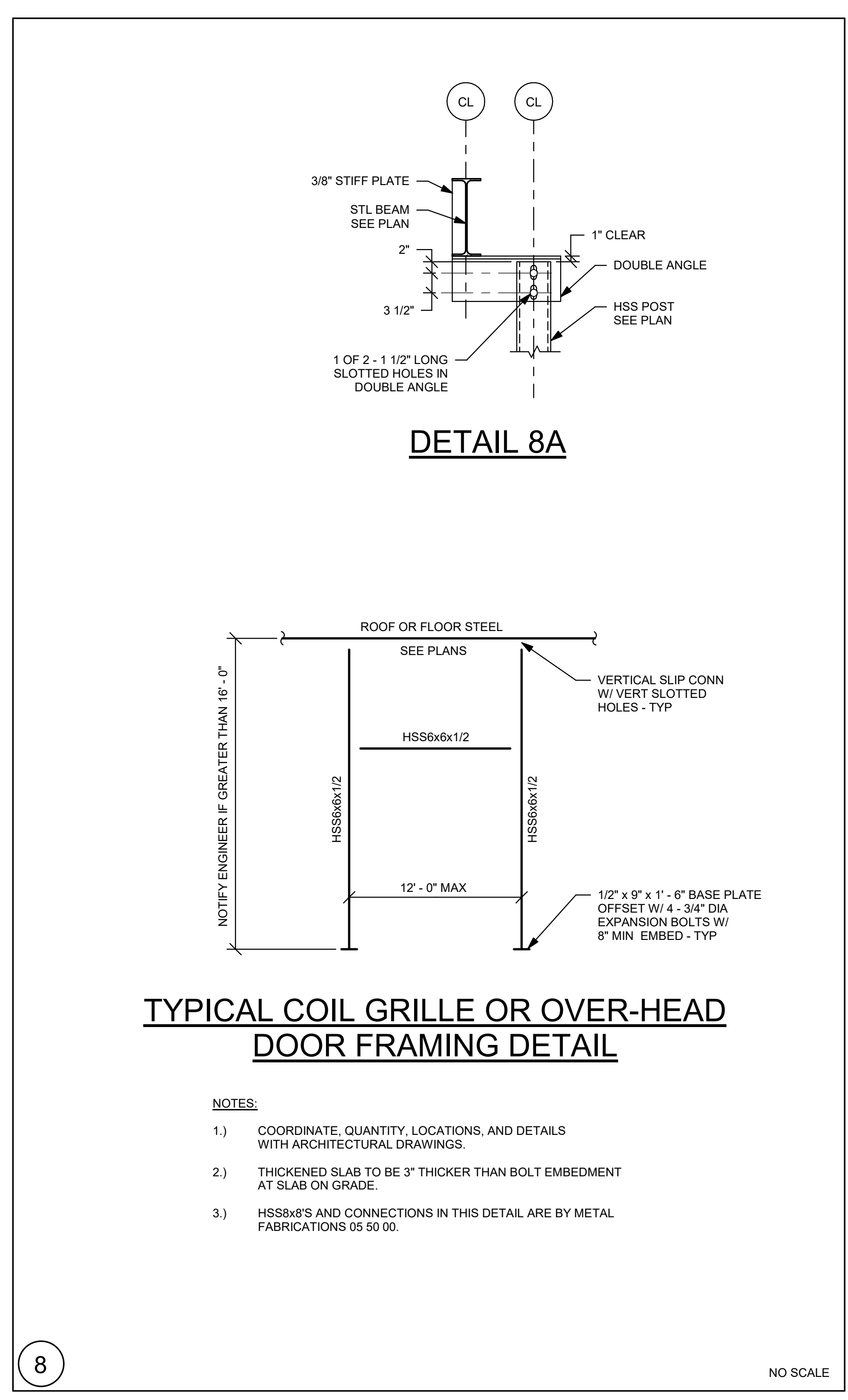
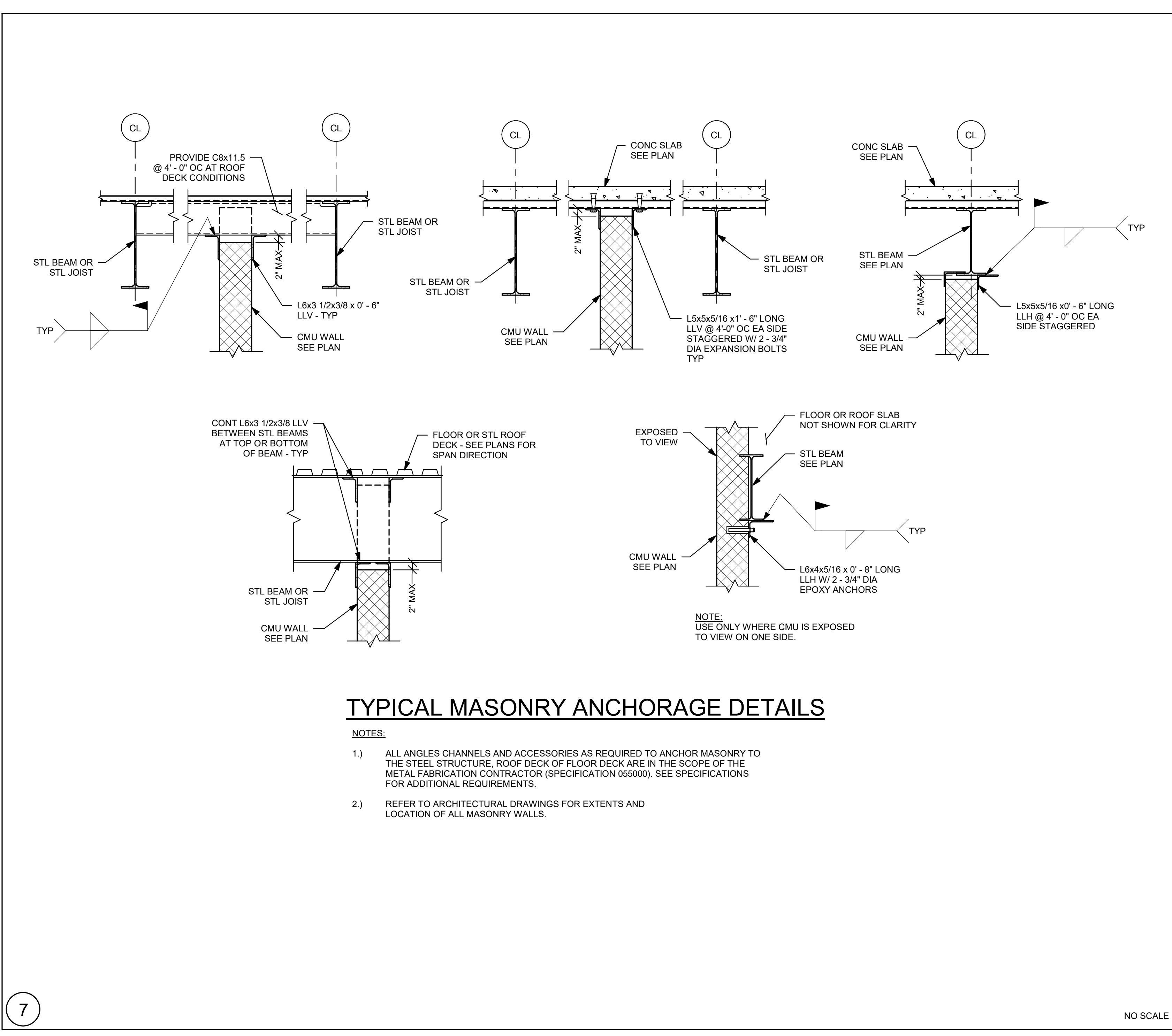
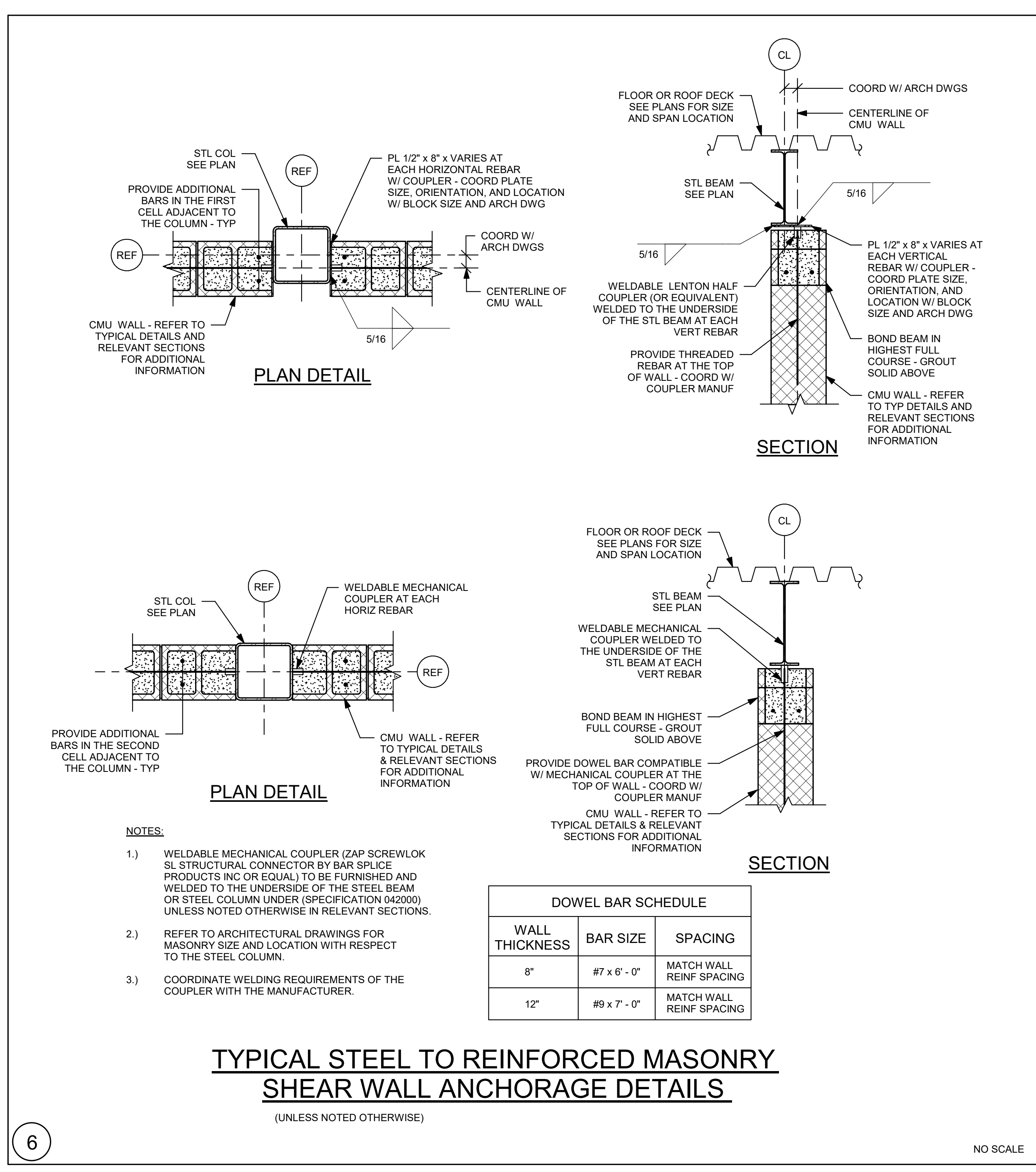
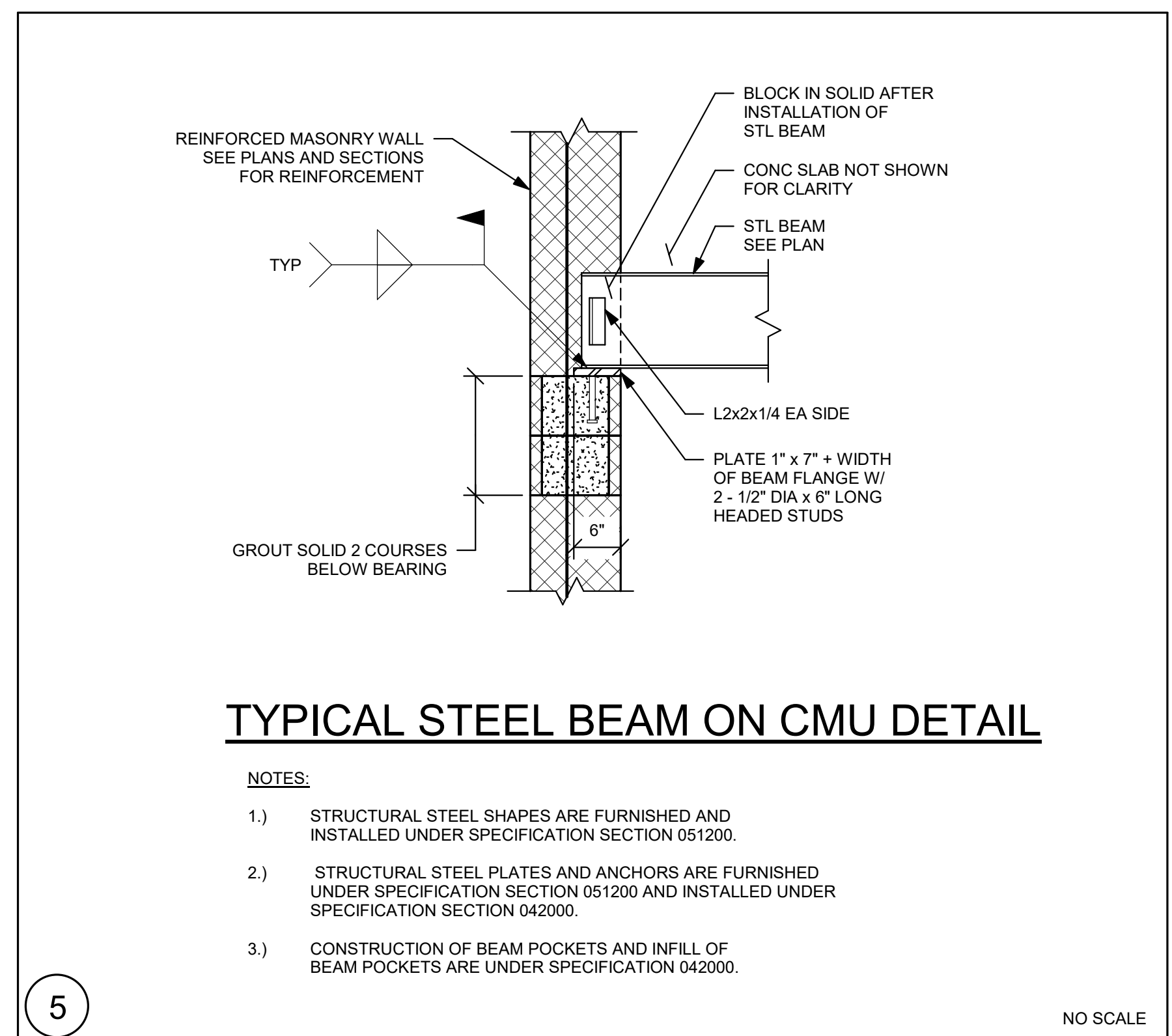
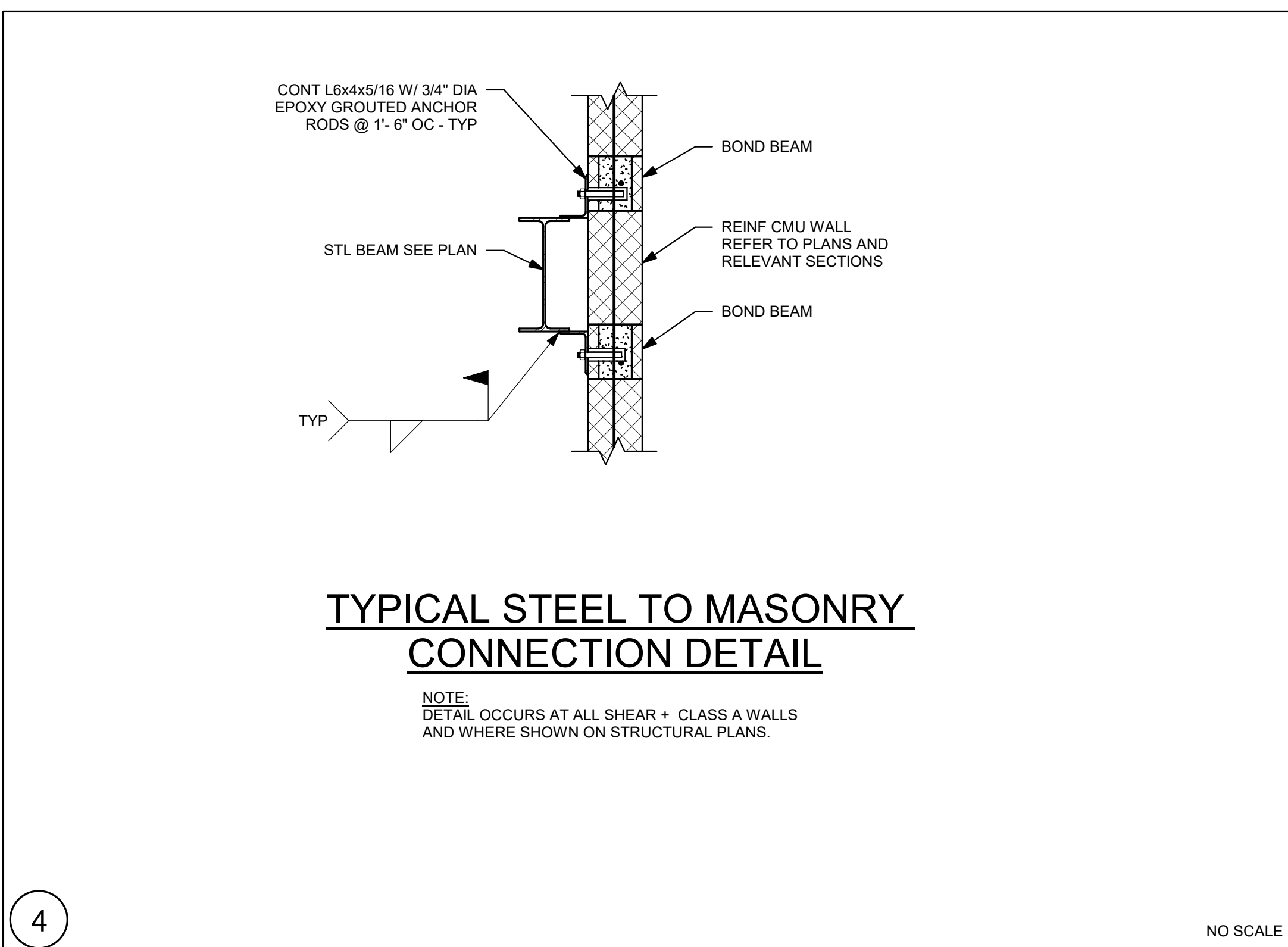
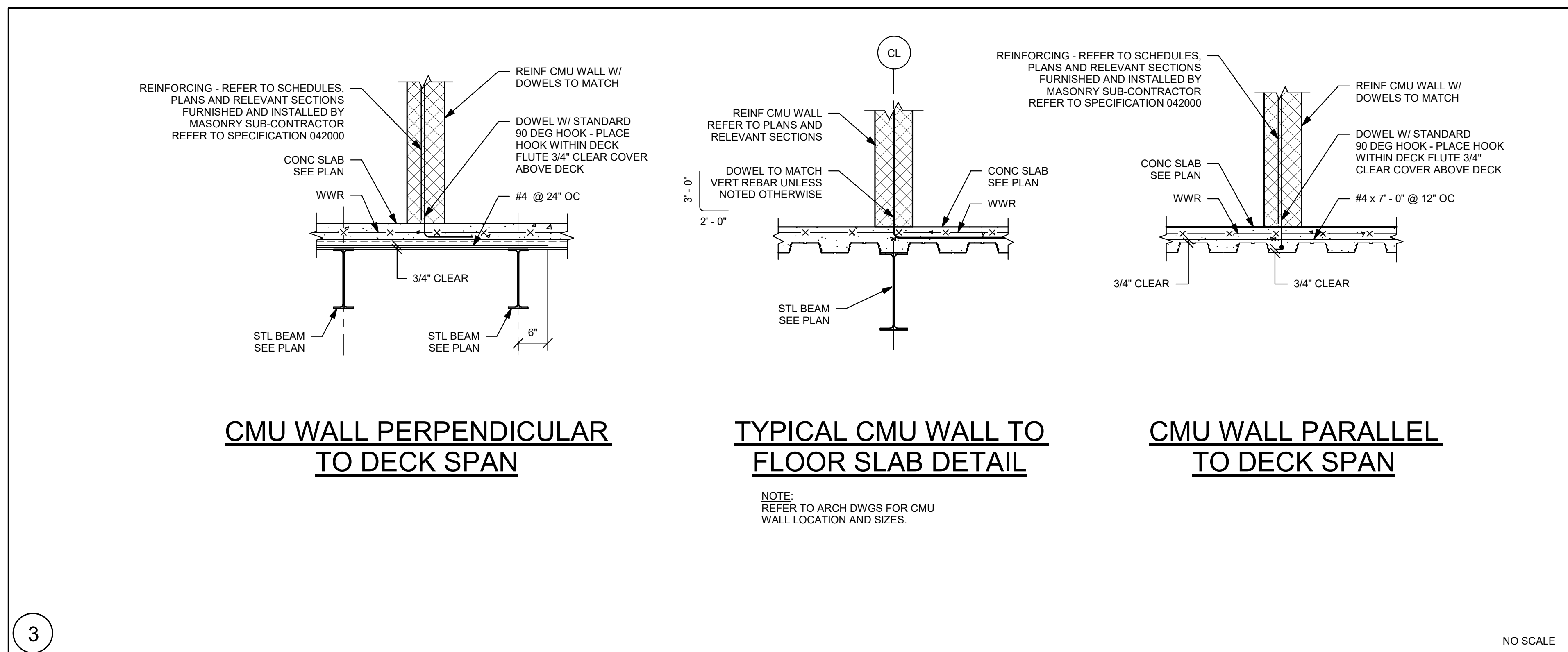
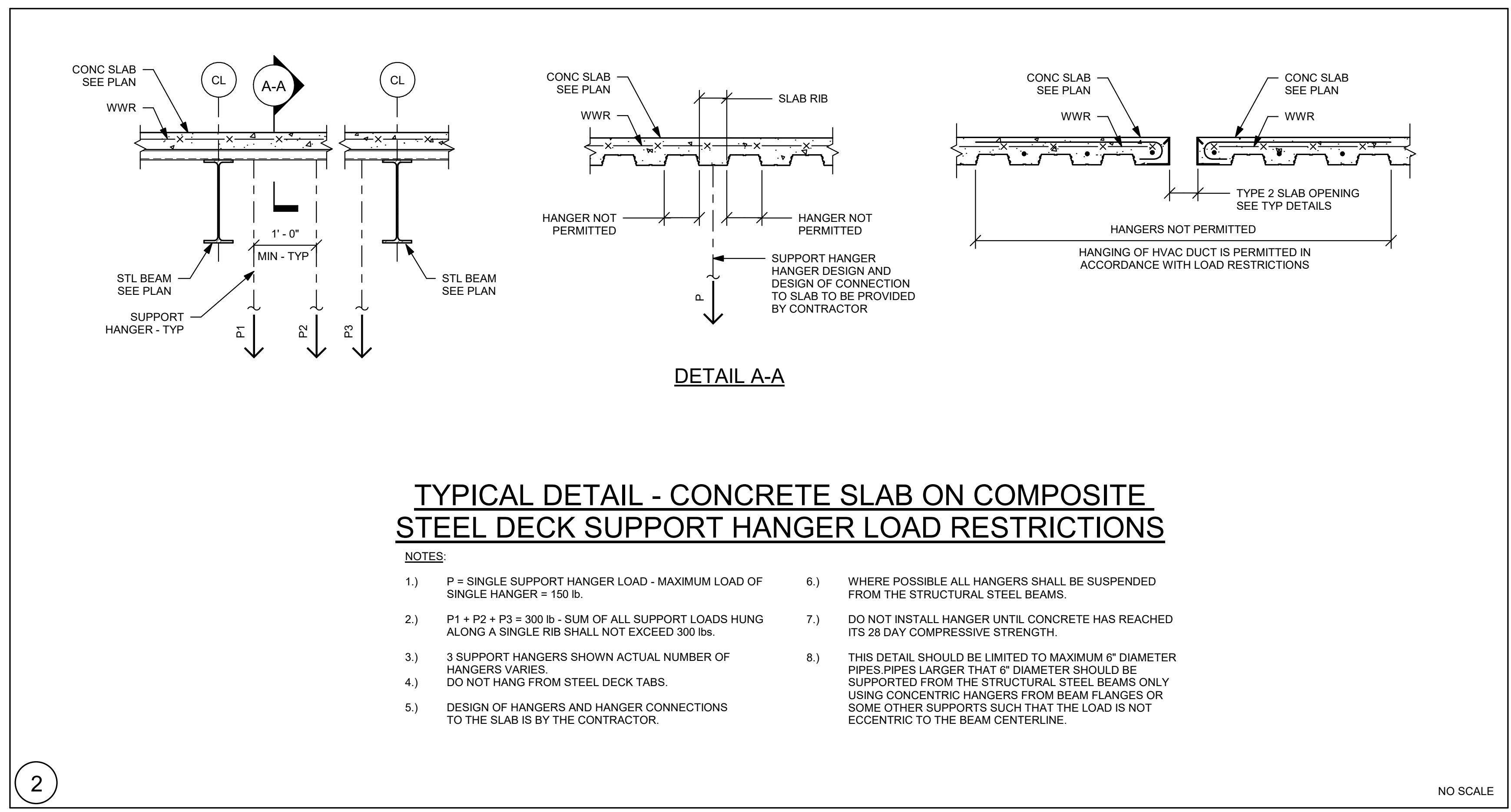
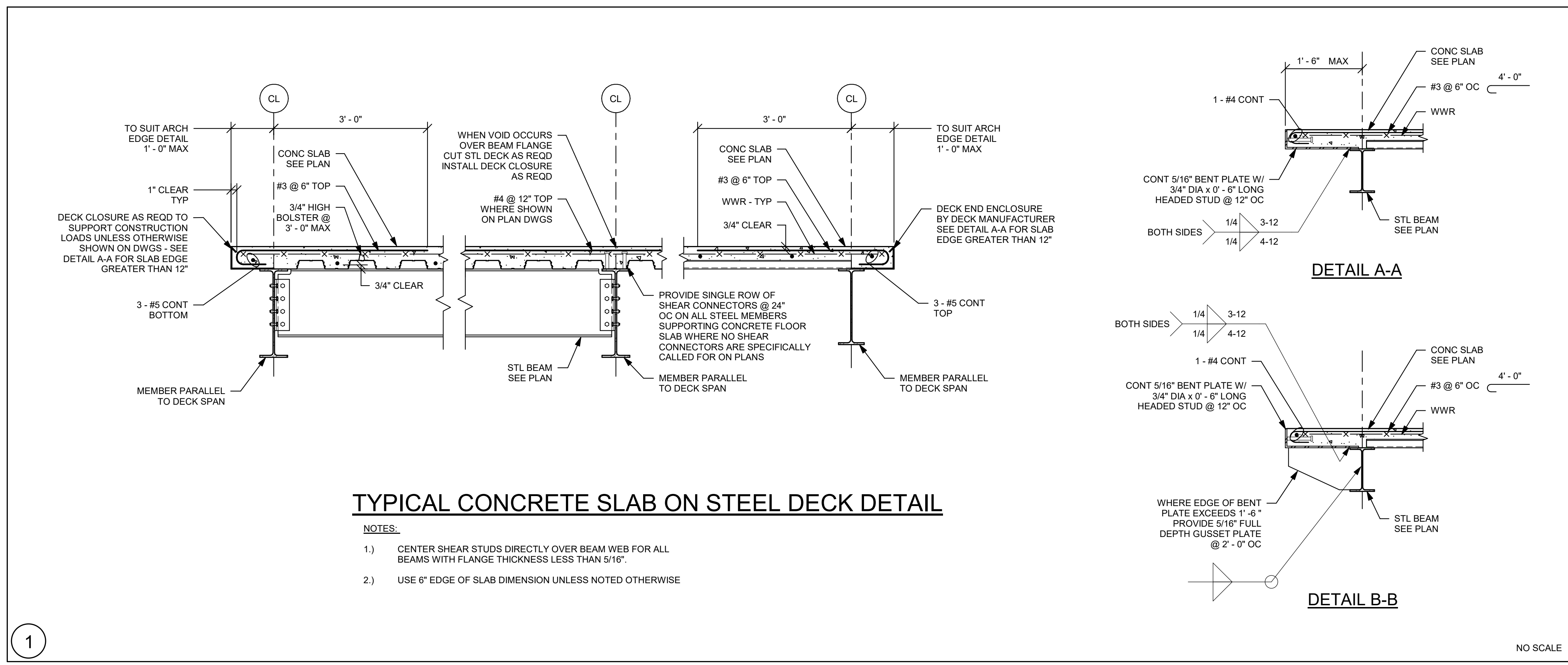
01/13/2023

A B C D

PROJECT NORTH
MAGNETIC NORTH

TYPICAL DETAILS

Scale: 3/4" = 1'-0"
Job No.: 20202
Drawn By: EDG
Date: 01/13/2023
S0-0-4



DRA

Drumme Rosane Anderson, Inc.

225 Oakland Road
Studio 205
South Windsor, CT 06074

260 Charles Street
Studio 300
Waltham, MA 02453

Planning Architects Interior
Tel: 877.621.1100
www.dra.com

NORTHEAST METRO TECH

100 Hemlock Rd,
Wakefield, MA 01880

Engineers Design Group Inc.

Structural Engineers
389 Main Street, Suite 401
Malden, MA 02148
(781)396-9007
EDG@EDGINC.COM

MSBA 60% CD Submission

01/13/2023

PROJECT NORTH

MAGNETIC NORTH

TYPICAL DETAILS

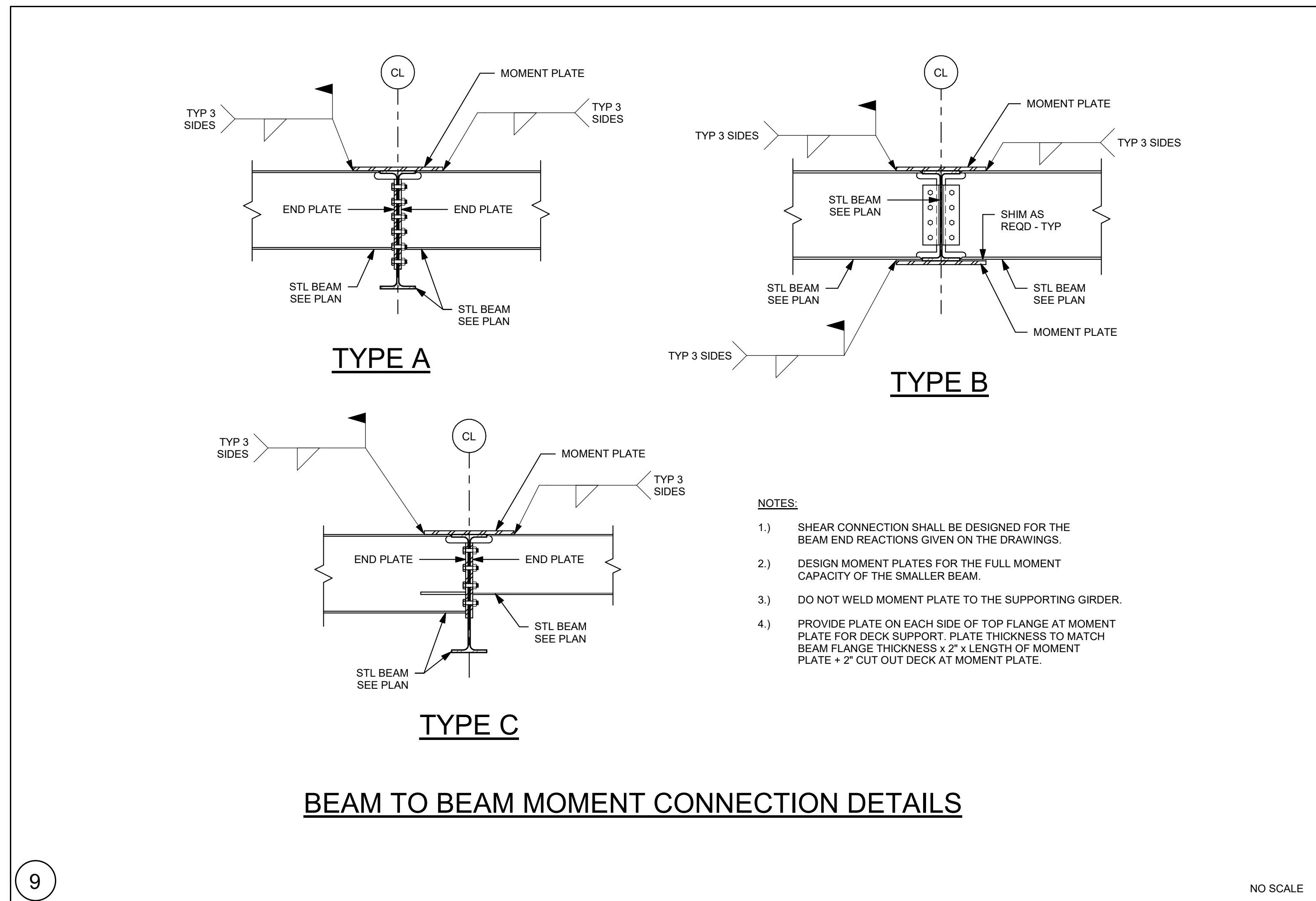
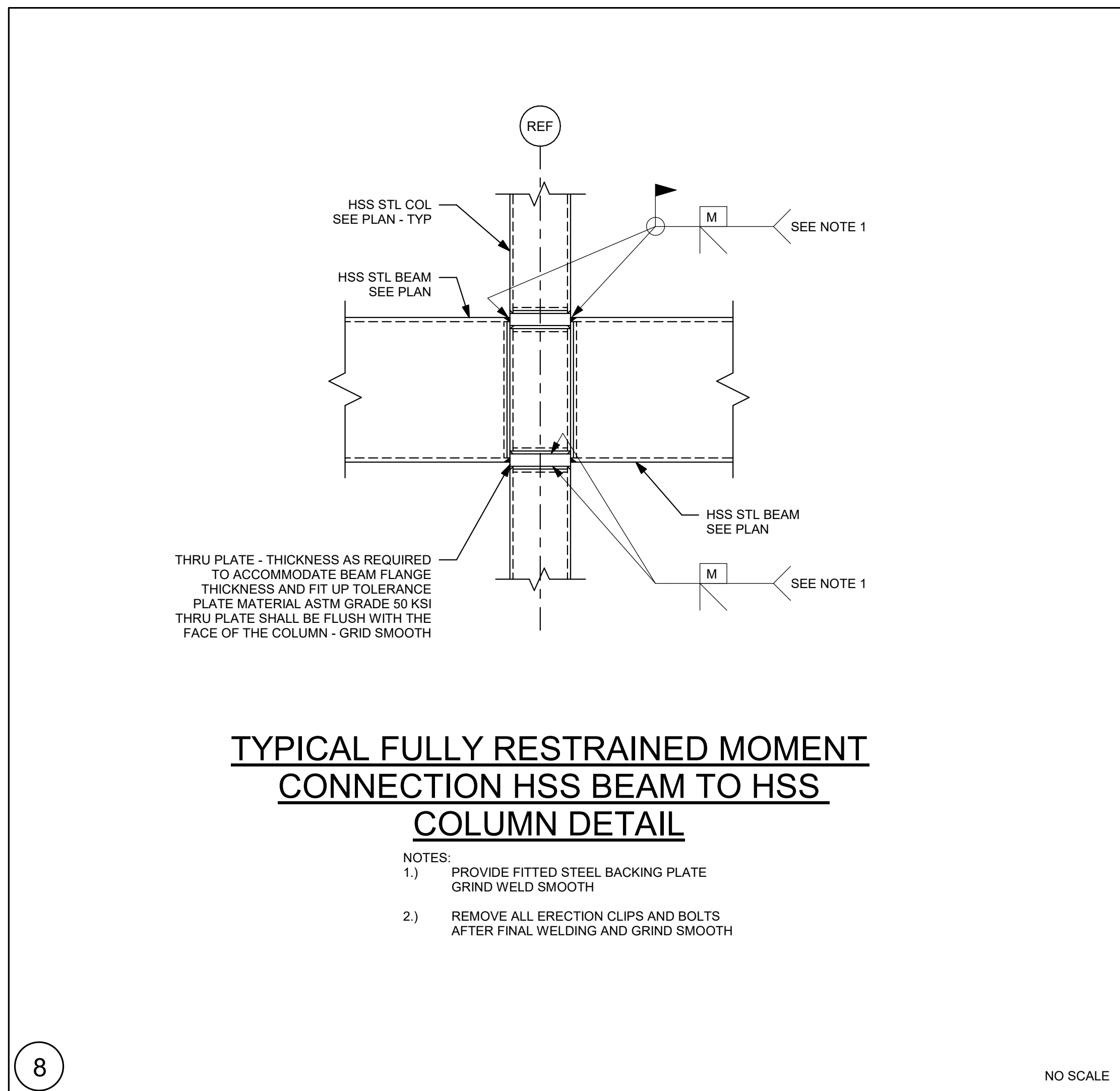
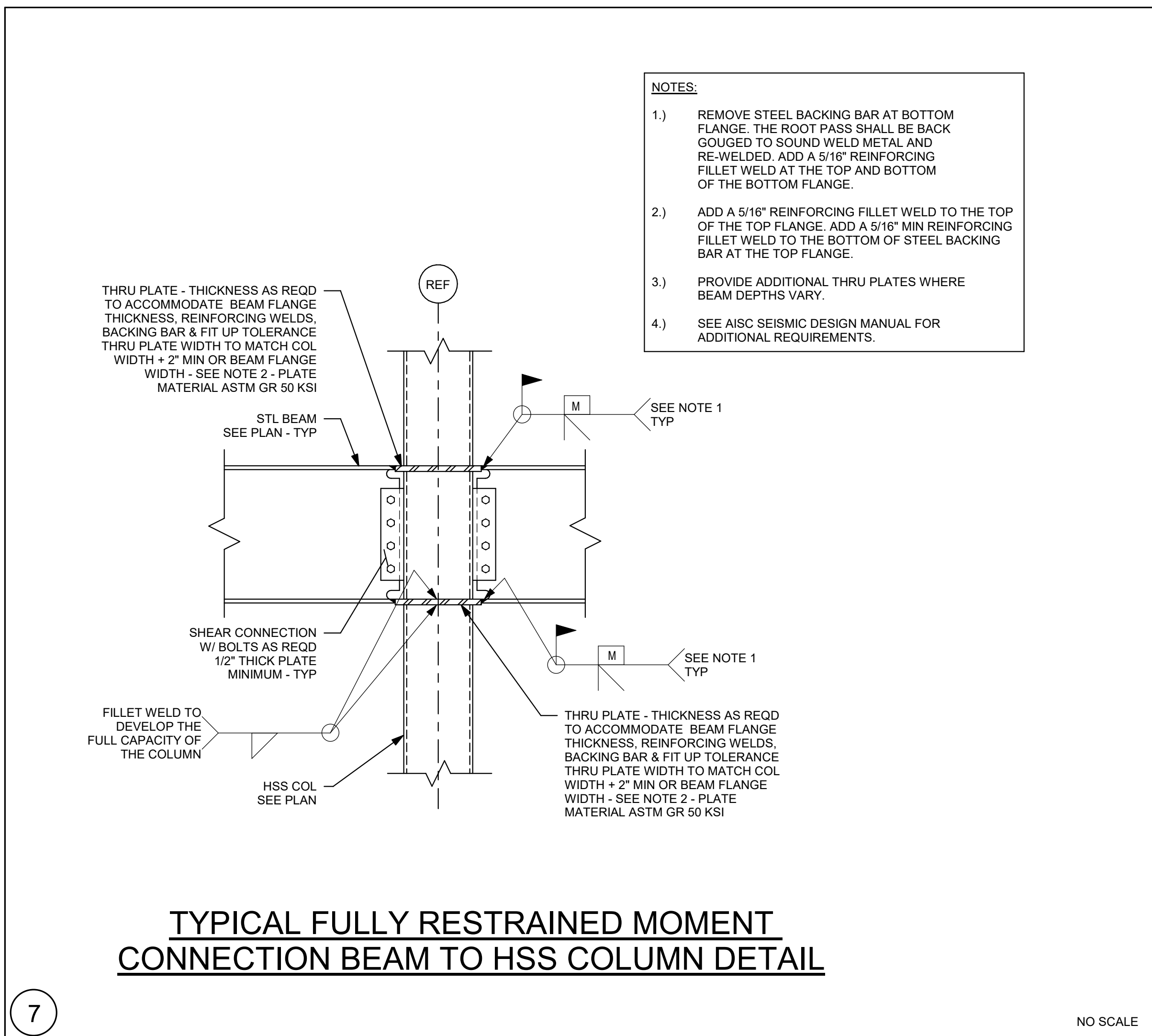
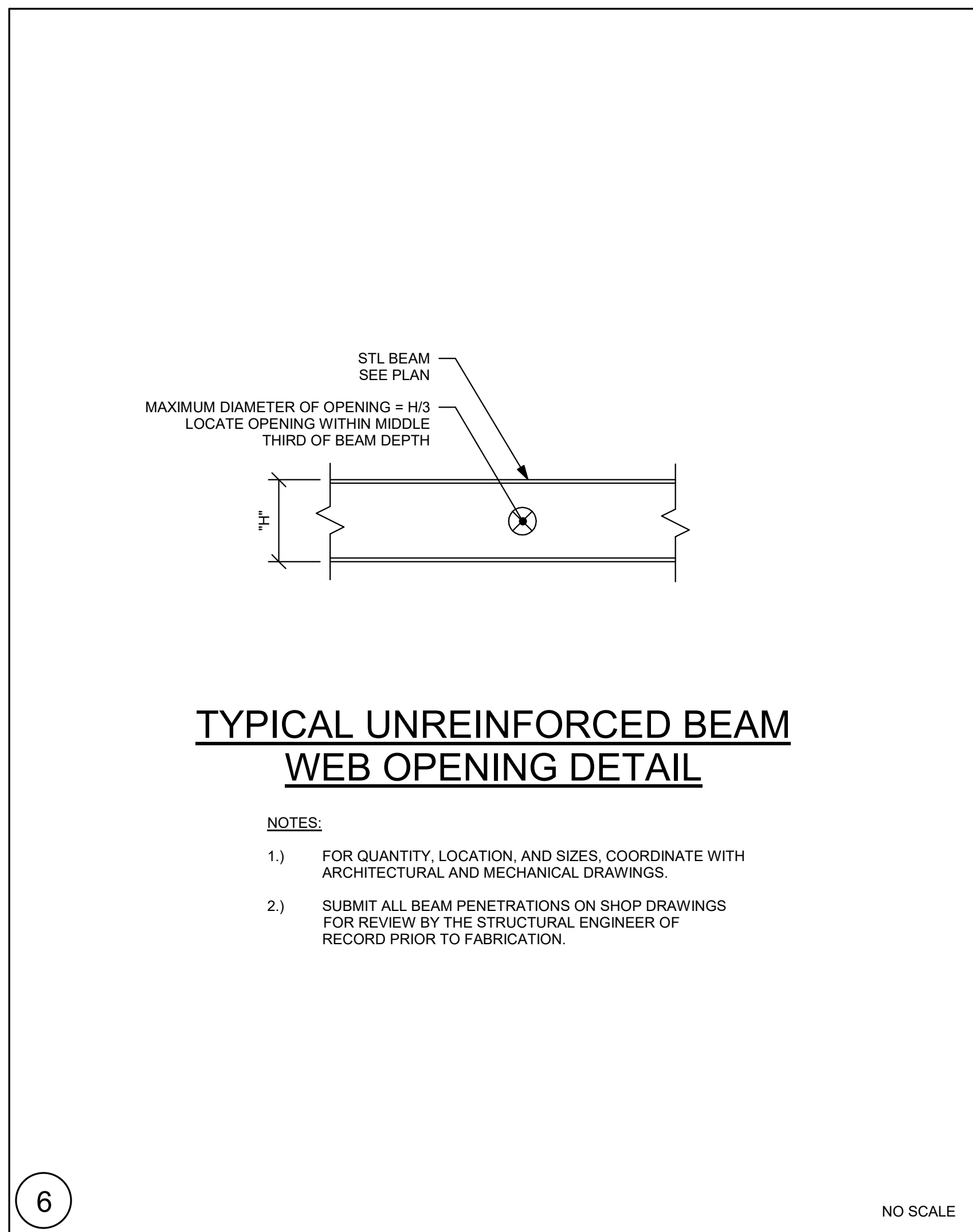
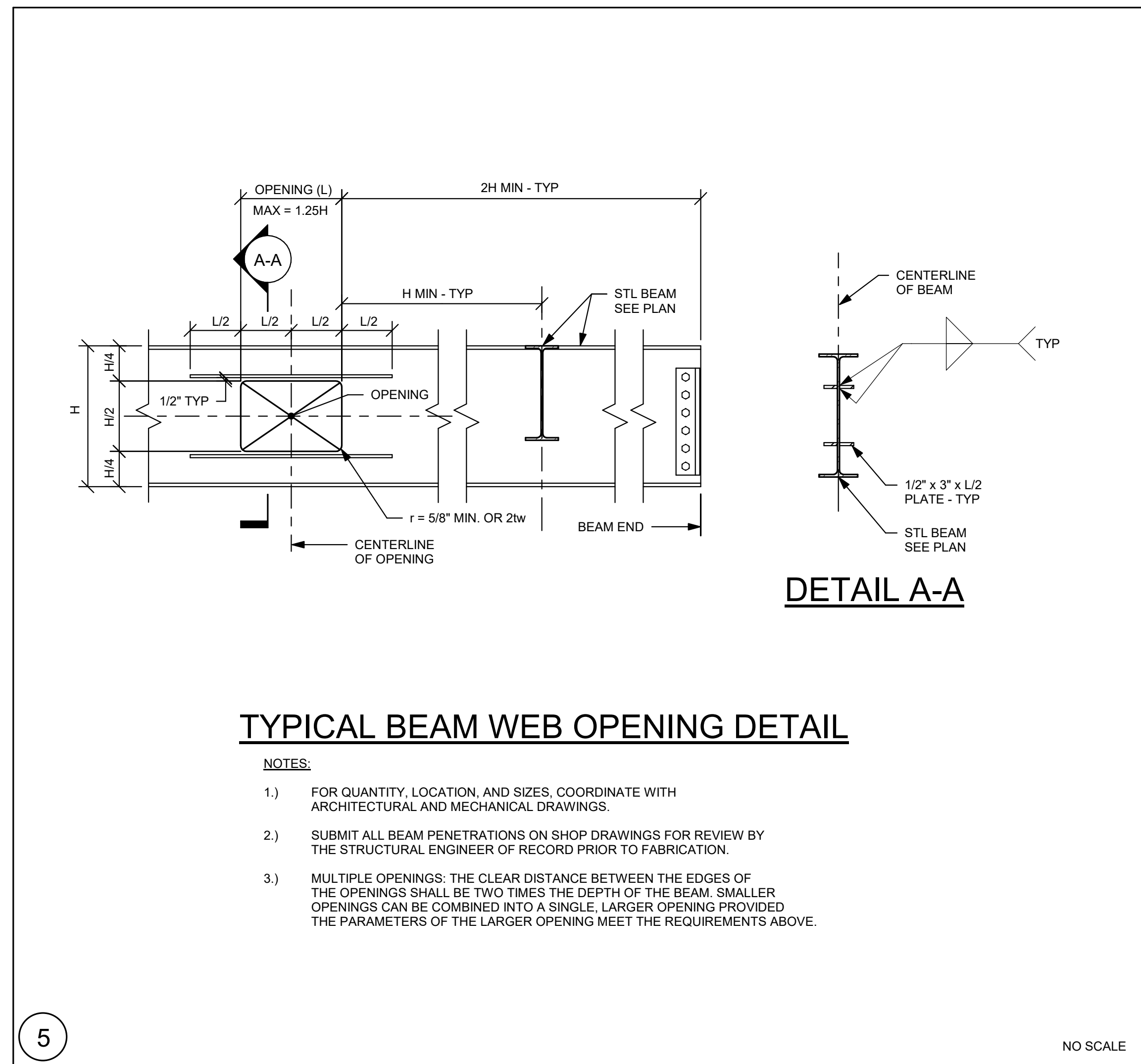
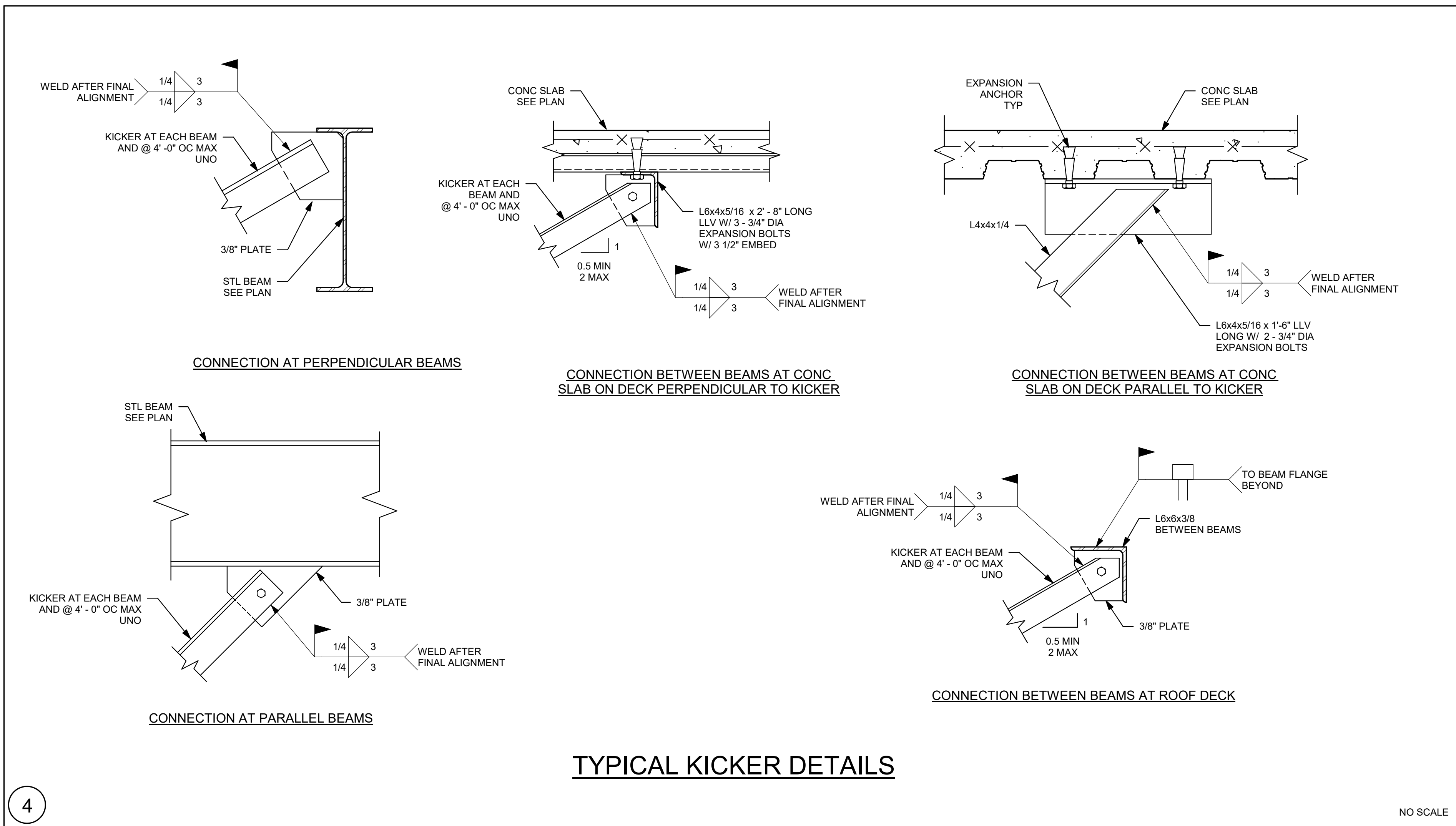
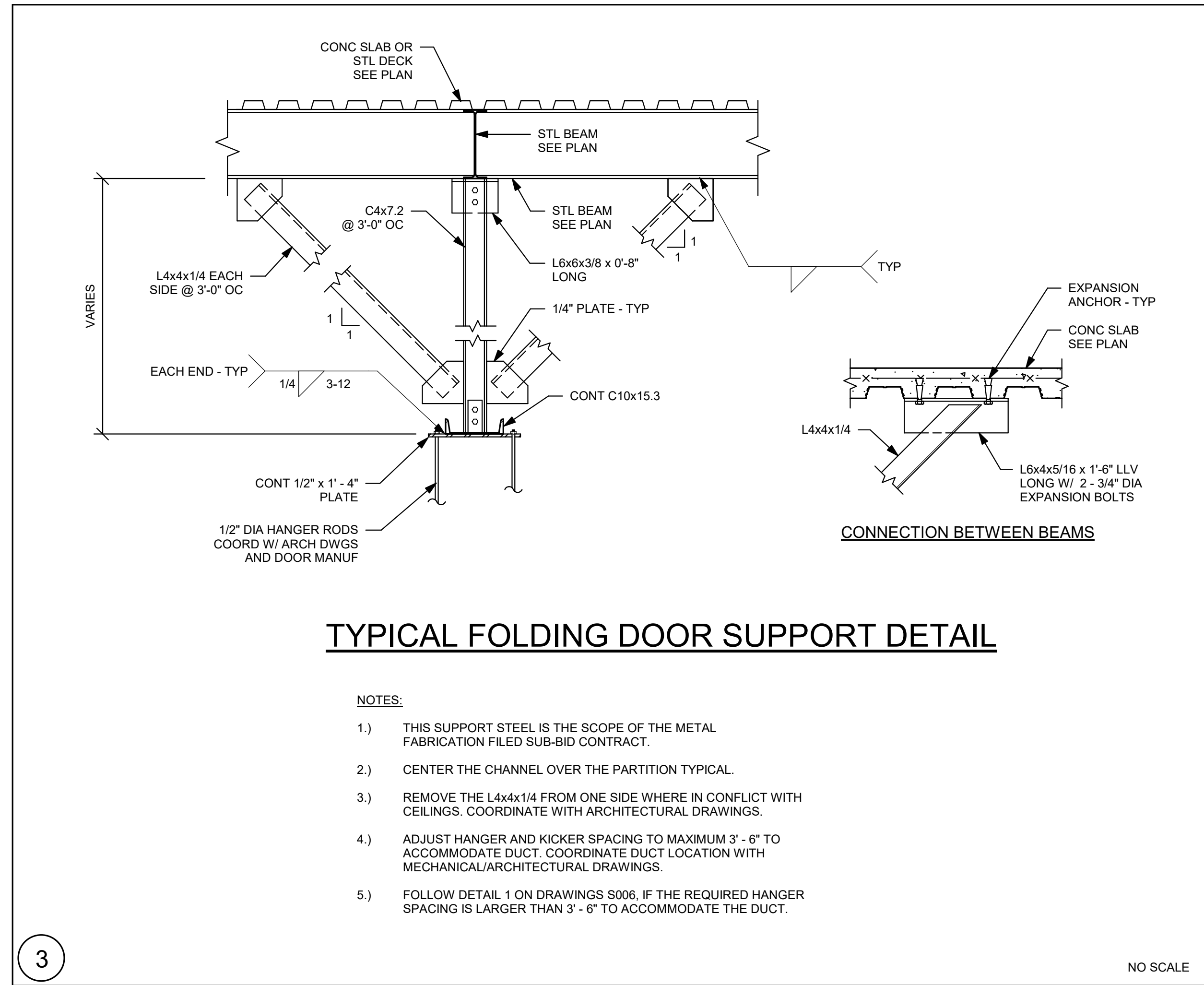
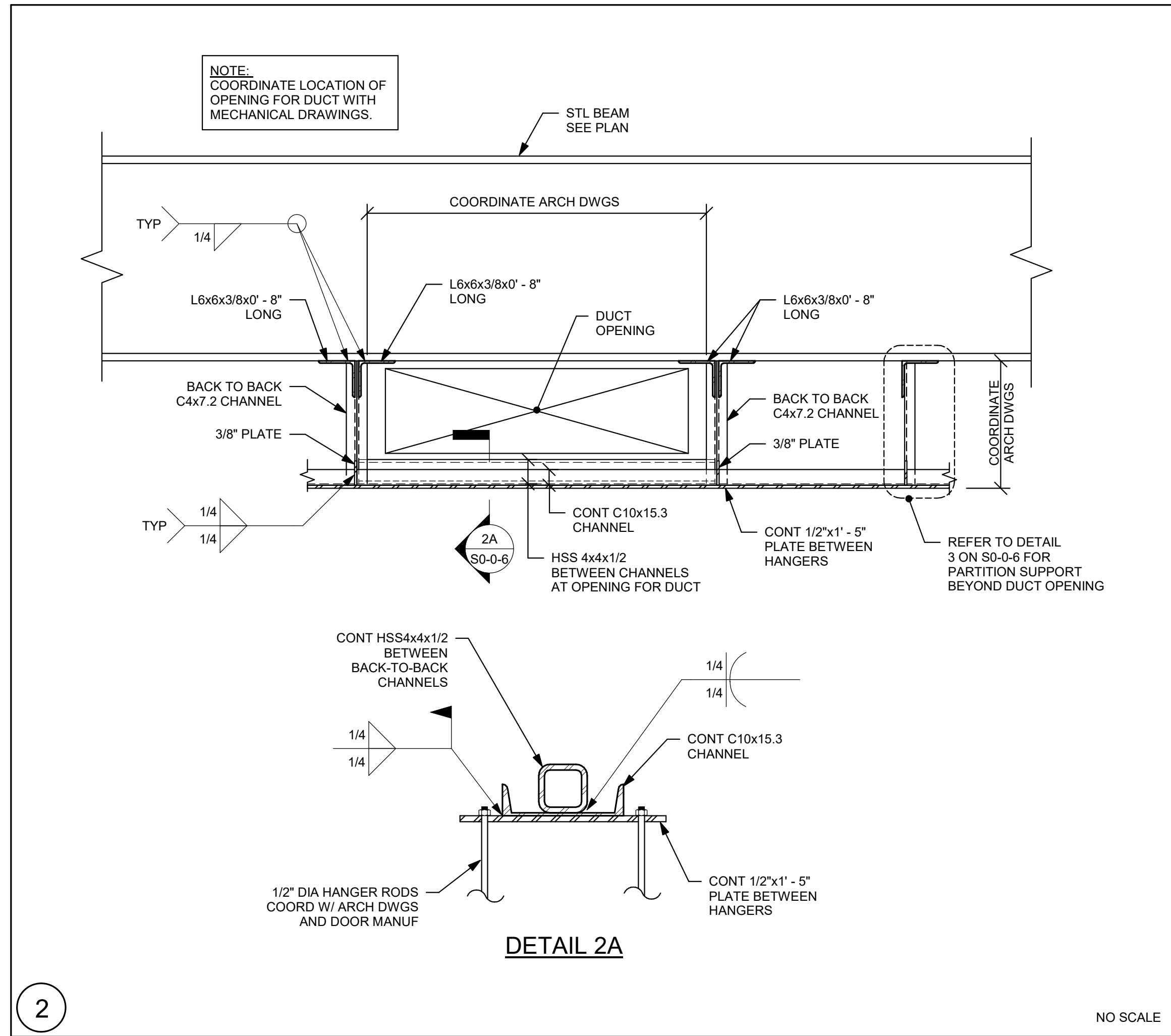
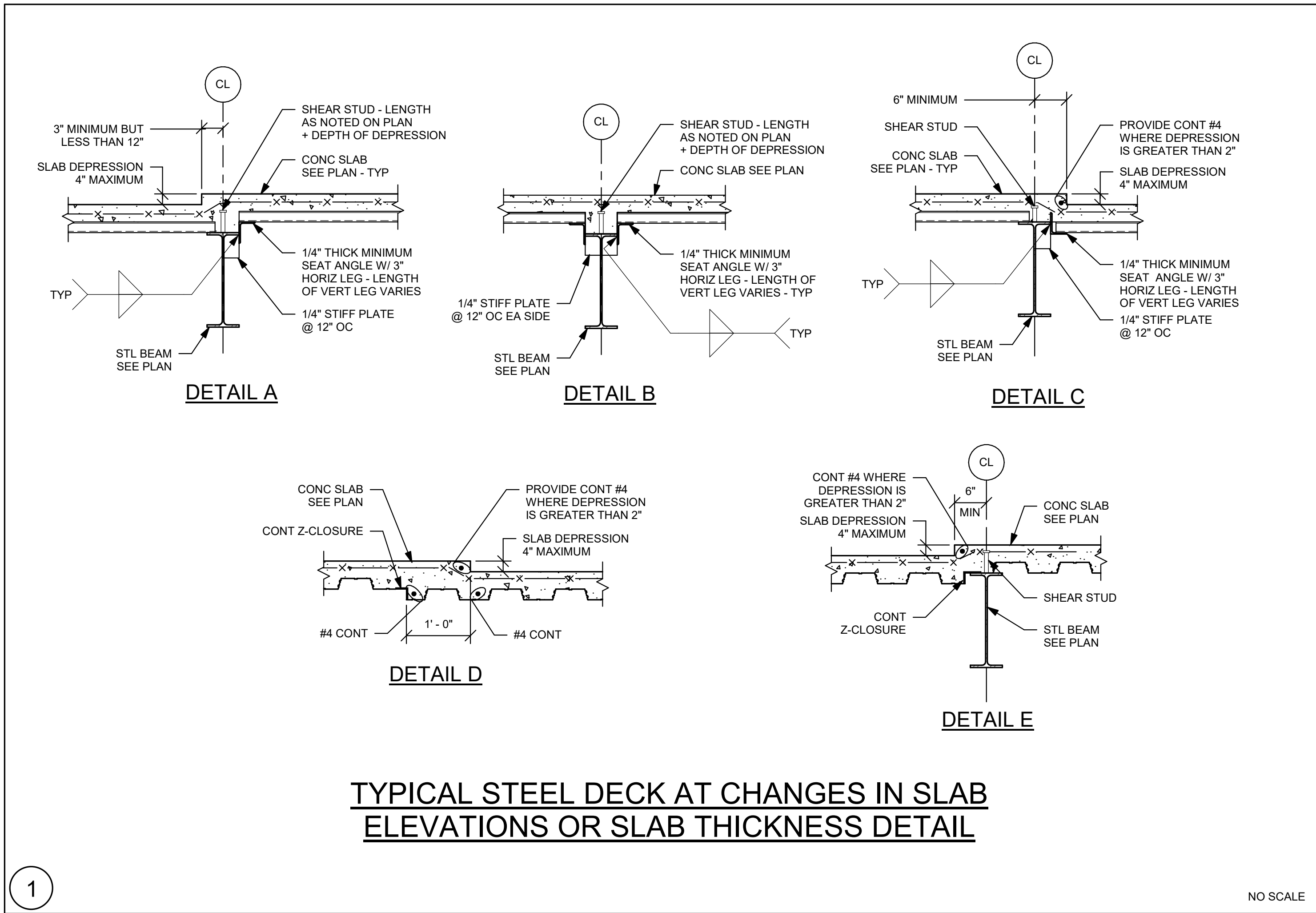
Scale: 3/4" = 1'-0"

Job No.: 20202

Drawn By: EDG

Date: 01/13/2023

S0-0-5



DRA

Drumme Rosane Anderson, Inc.

225 Oakland Road
Studio 205
South Windsor, CT 06074

260 Charles Street
Studio 300
Waltham, MA 02453

Planning Architecture Interior
Tel: 817.261.1100
www.draa.com

NORTHEAST METRO TECH

100 Hemlock Rd.
Wakefield, MA 01880

EDG

Engineers Design Group Inc.

Structural Engineers
389 Main Street, Suite 401
Malden, MA 02148
(781)396-9007
EDG@EDGINC.COM

MSBA 60% CD Submission

01/13/2023

KEY PLAN

PROJECT NORTH

MAGNETIC NORTH

TYPICAL DETAILS

Scale: As indicated
Job No.: 20202
Drawn By: EDG
Date: 01/13/2023

S0-0-6

© COPYRIGHT 2021 DRUMME ROSANE ANDERSON, INC.



①

NO SCALE



NOTE:
WHERE CONNECTION IS EXPOSED TO VIEW - GRIND WELDS SMOOTH
REMOVED ALL ERECTION ANGLES, PLATES, STUDS, AND BOLTS AFTER
FINAL WELDING IS COMPLETE. FILL ALL HOLES WITH WELD METAL AND
GRIND SURFACES AND WELDS SMOOTH.

2

NO SCALE



TYPICAL TOP POST CONNECTION DETAIL

3

NO SCALE



4

NO SCALE



5

NO SCALE



TYPICAL PLAN OF STEEL DECK SUPPORT DETAIL

6

NO SCALE



7

NO SCALE



8

NO SCALE



9

NO SCALE



10

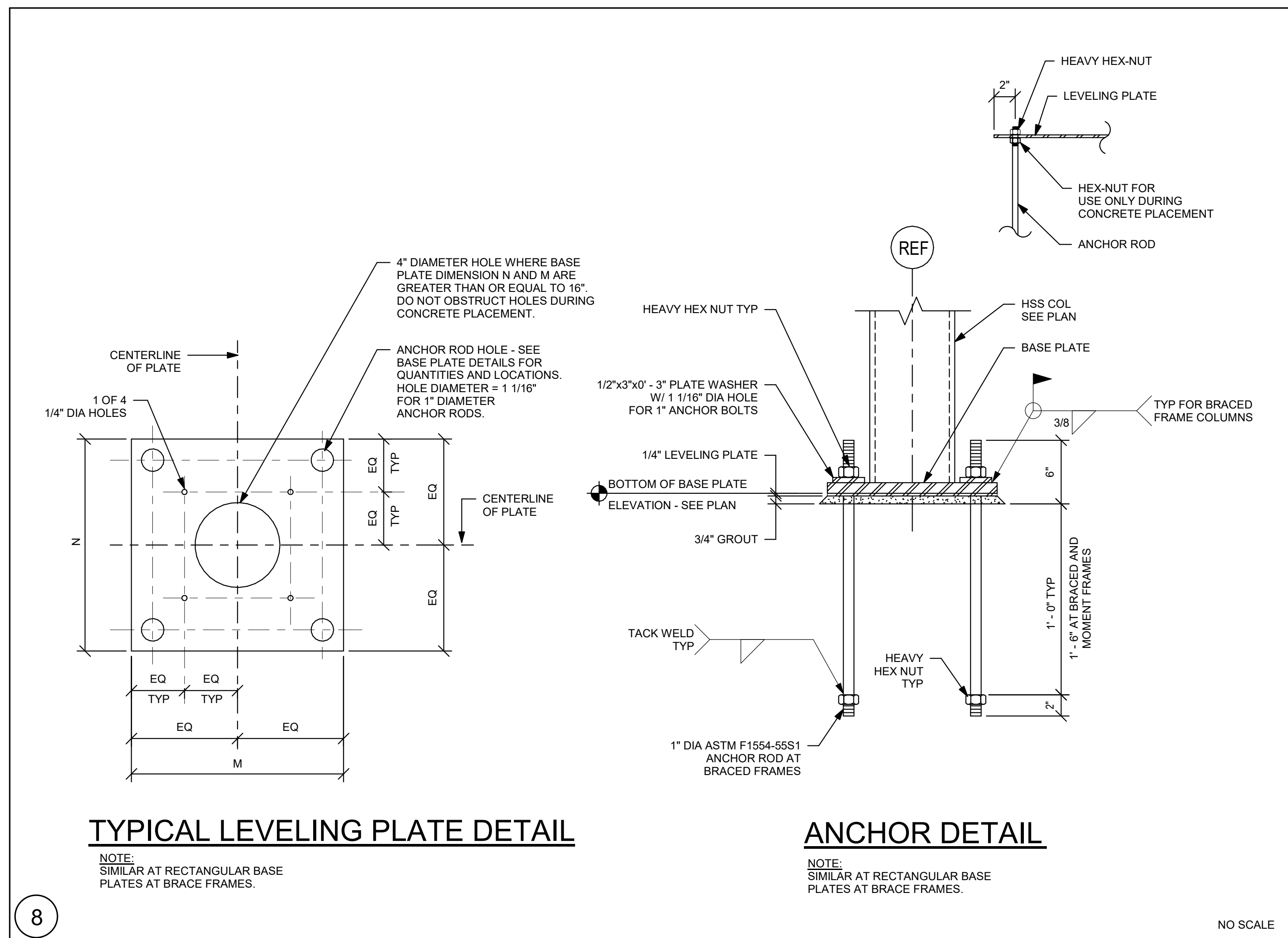
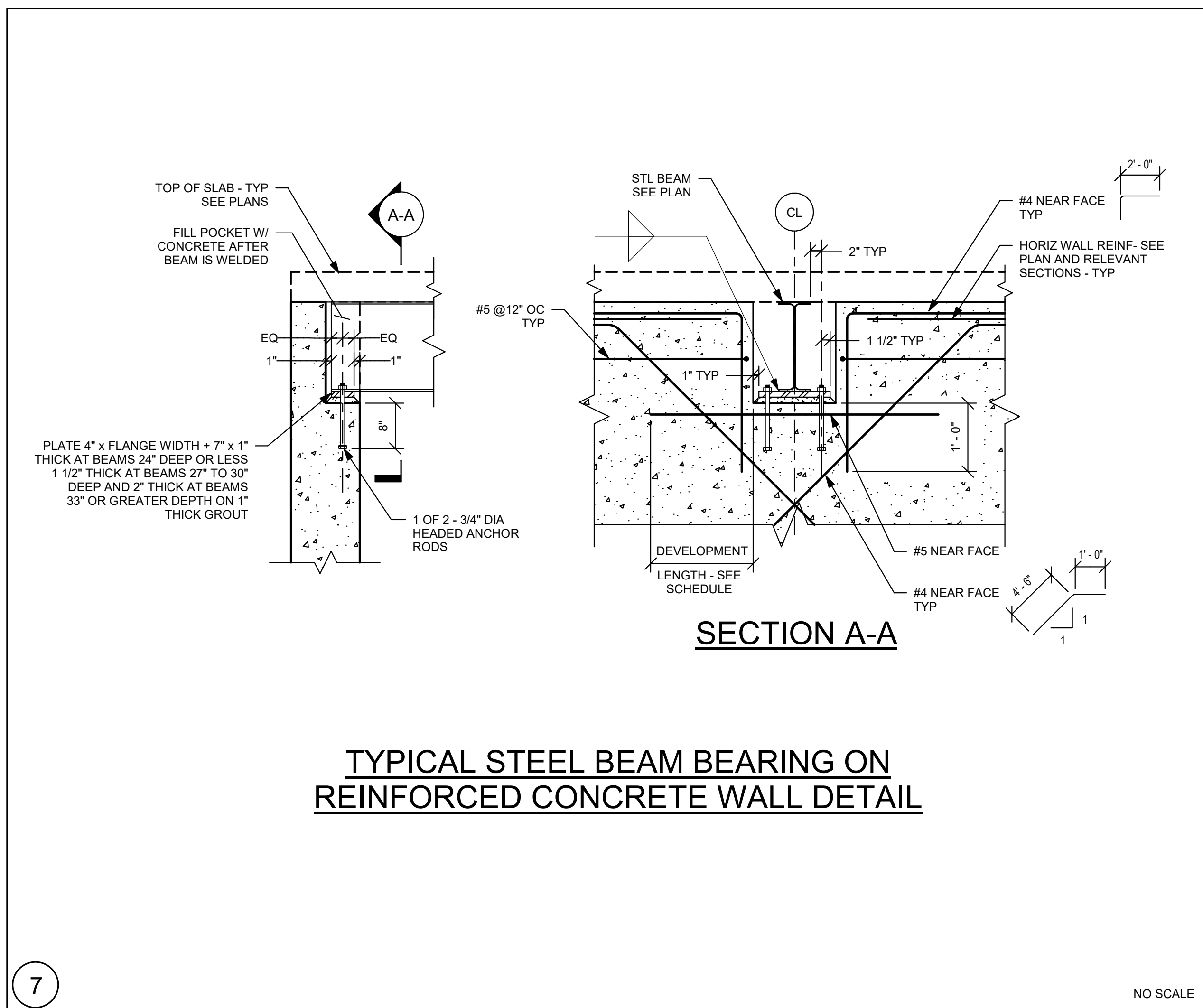
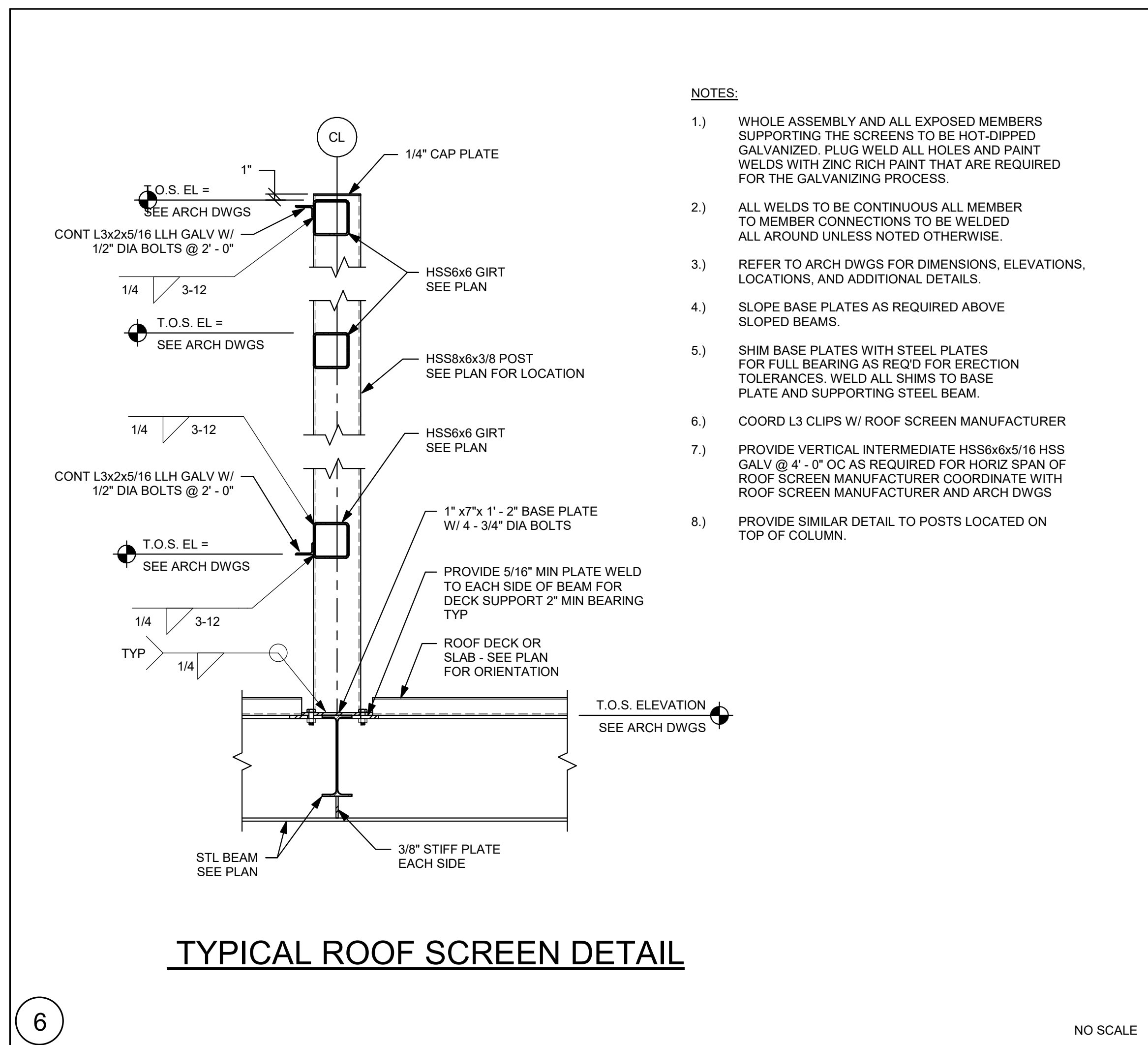
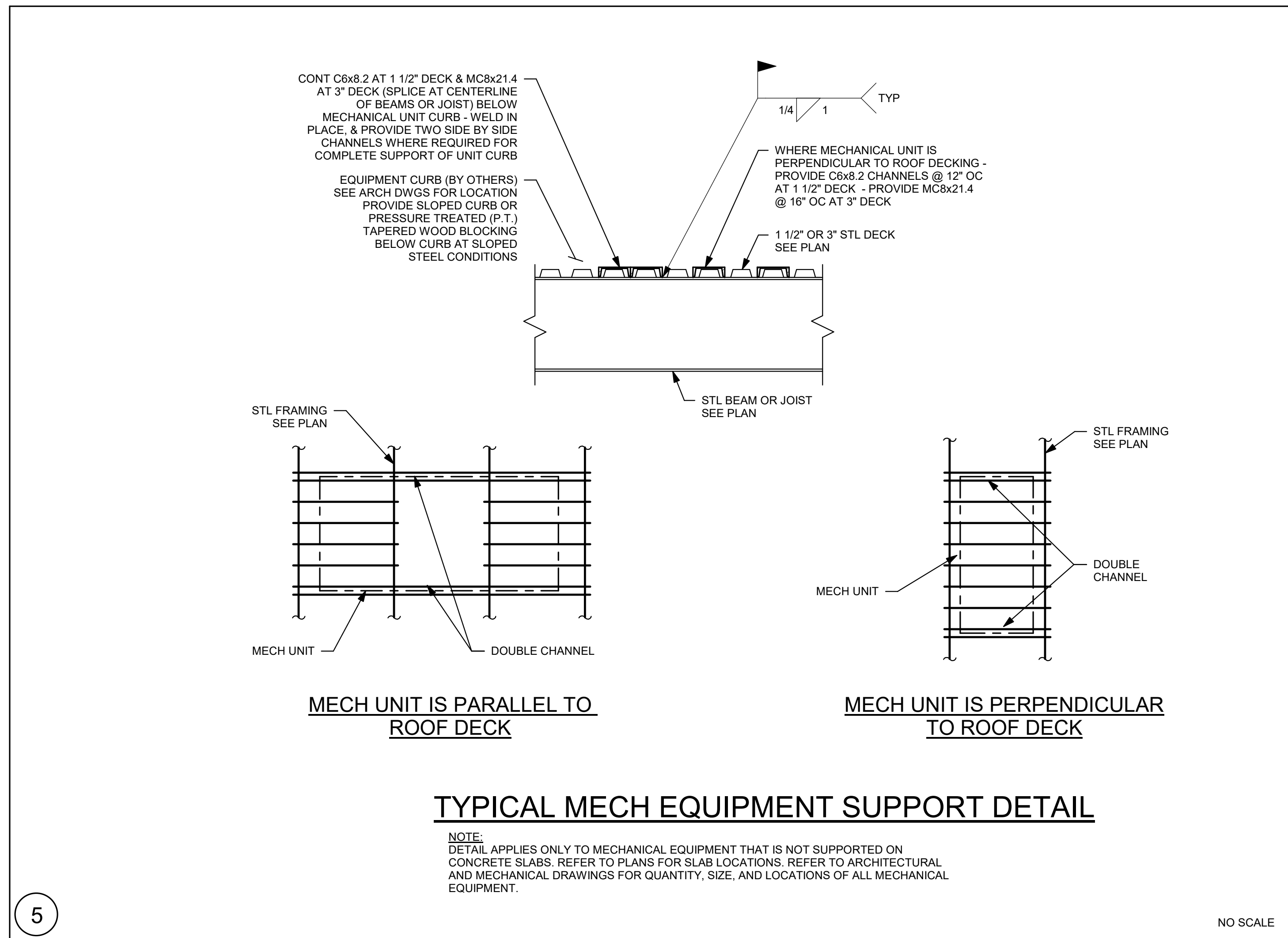
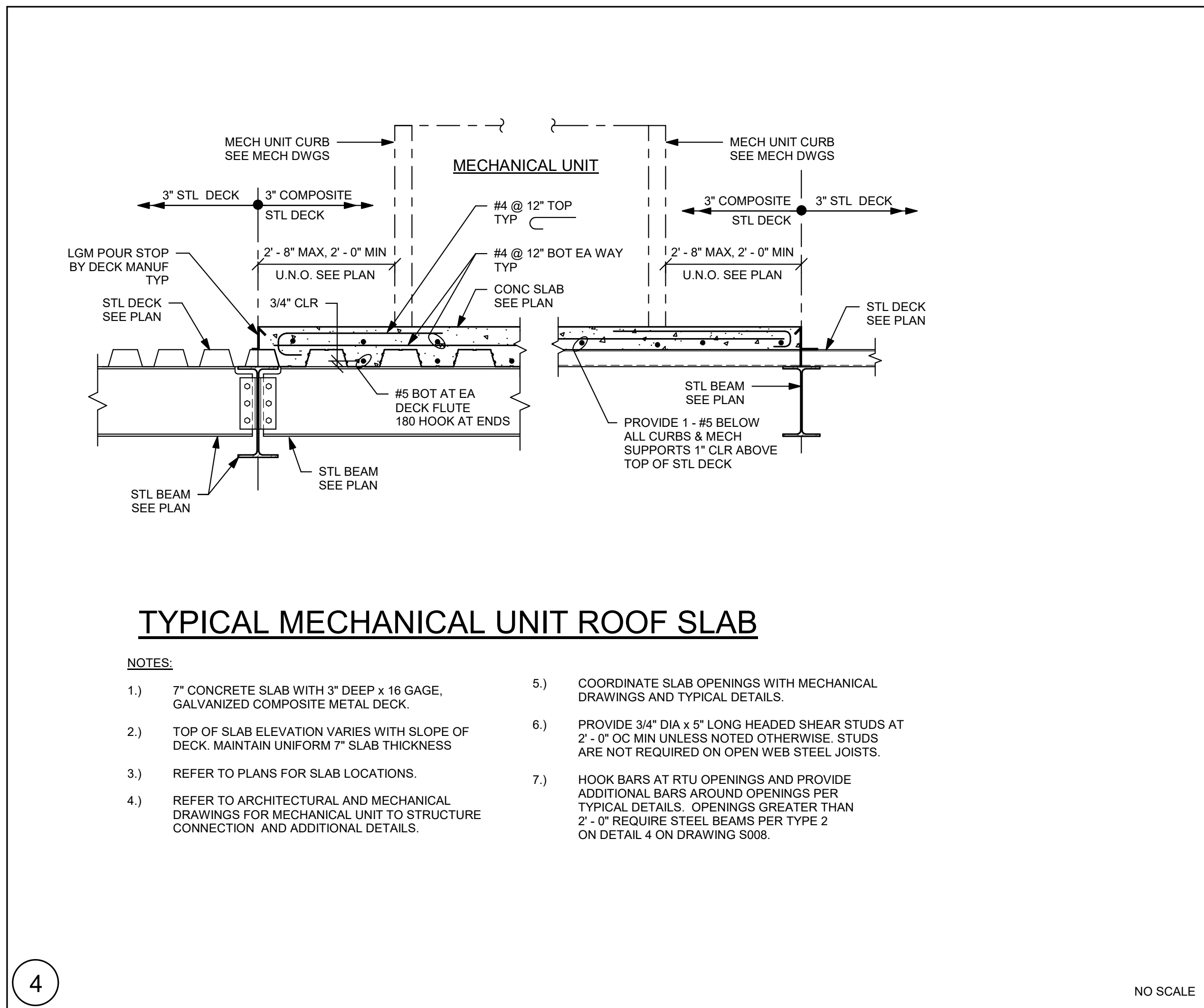
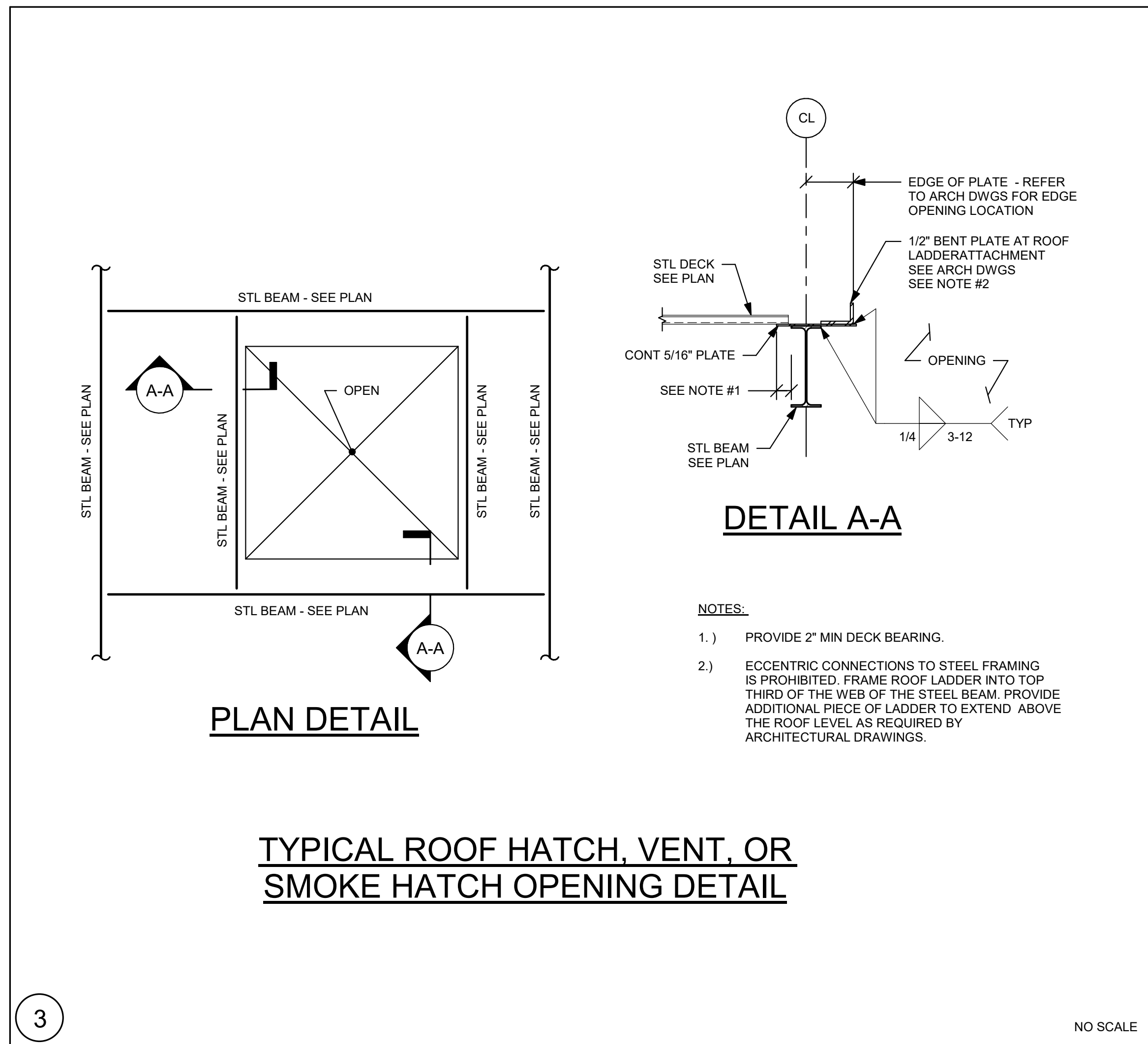
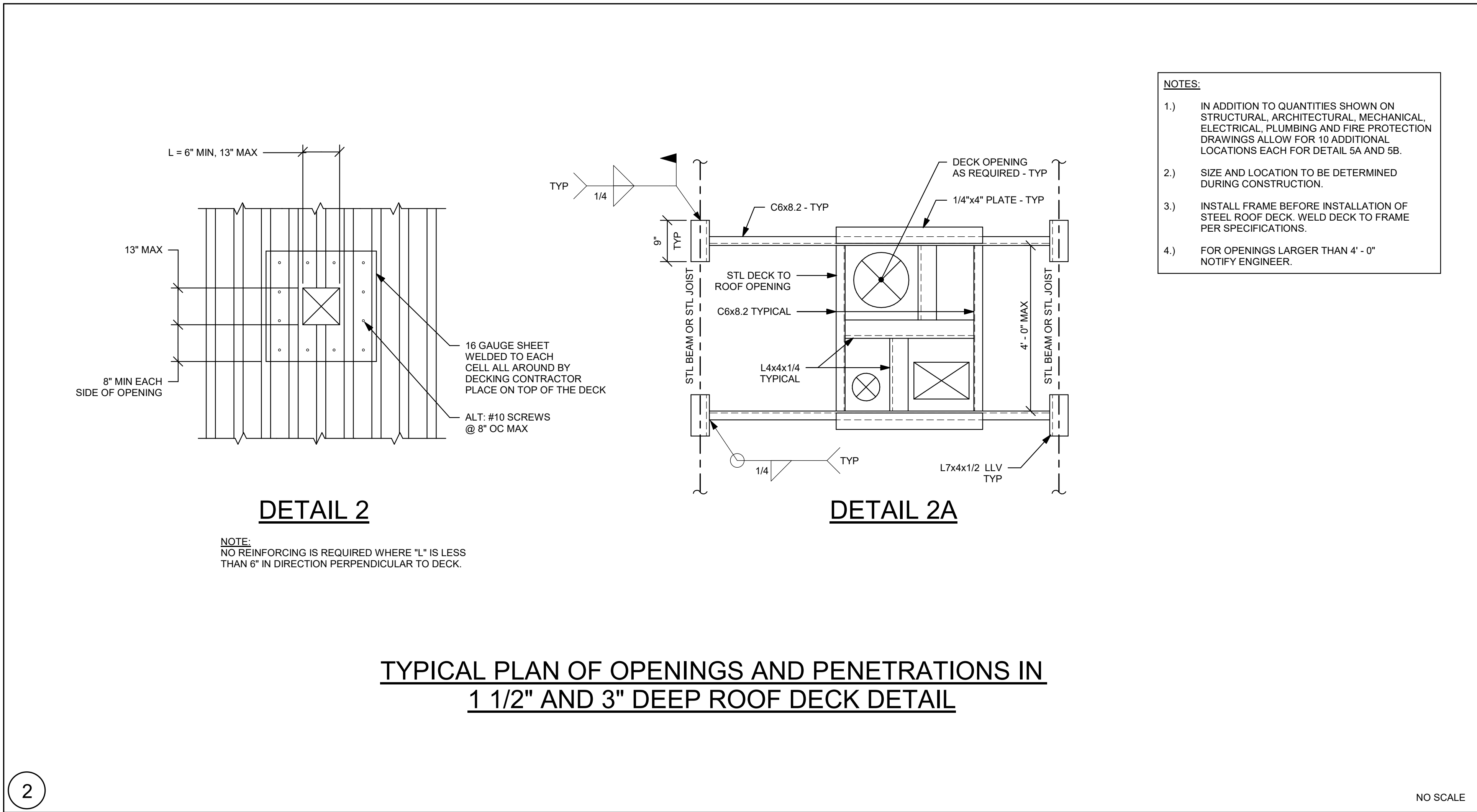
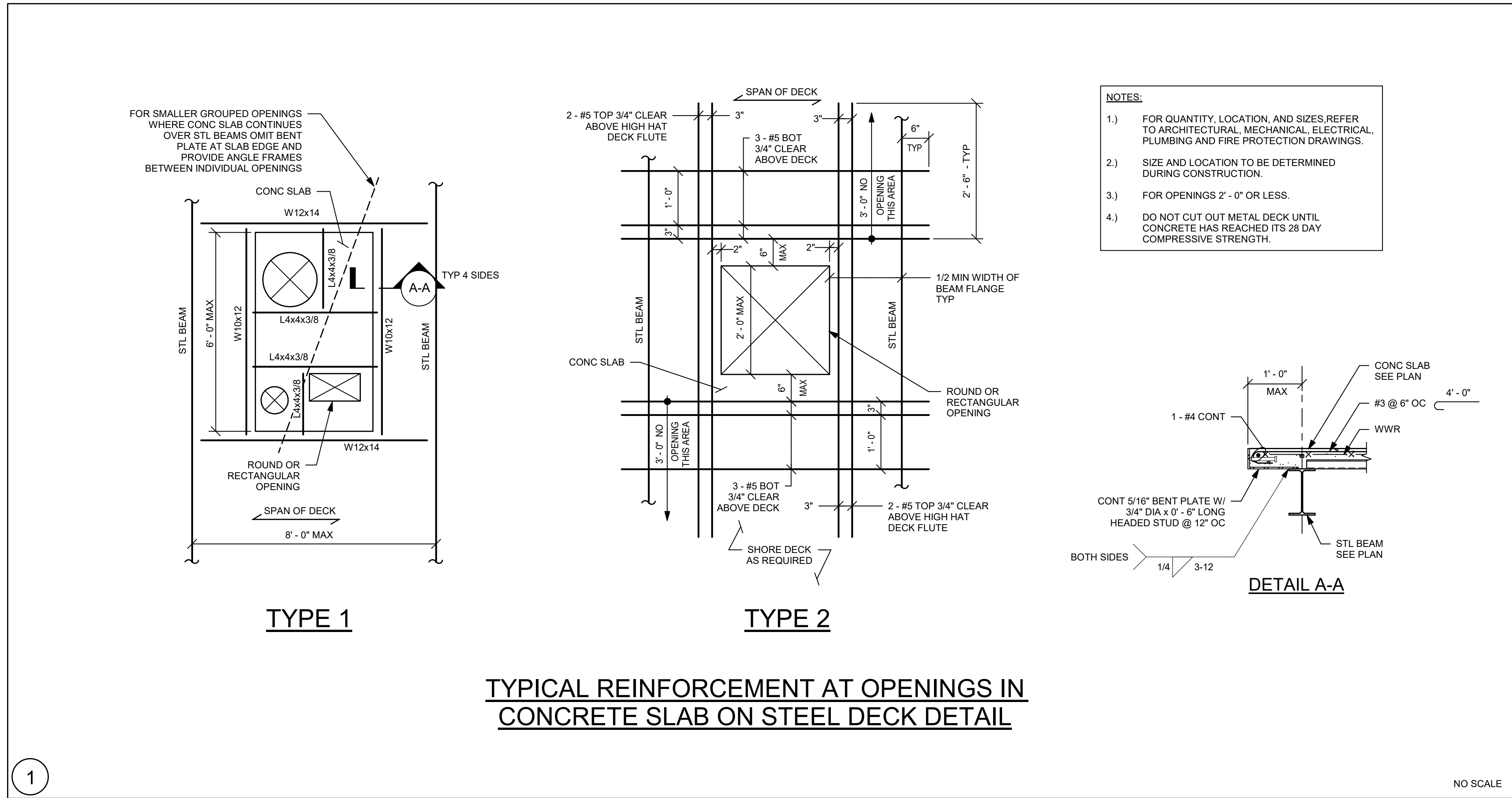


NO SCALE



11

NO SCALE



DRA

Drumme­y Rosane Anderson, Inc.

225 Oakland Road
Studio 205
South Windsor, CT
06074

260 Charles Street
Studio 300
Waltham, MA
02453

Planning Architecture Interior
Tel: 877.261.1100
www.dra.com

NORTHEAST
METRO TECH

100 Hemlock Rd,
Wakefield, MA 01880

EDG

Engineers Design Group Inc.
Structural Engineers
389 Main Street, Suite 401
Malden, MA 02148
(781)396-9007
EDG@EDGINC.COM

MSBA 60% CD
Submission

01/13/2023

A

B

C

D

KEY PLAN

PROJECT NORTH

MAGNETIC NORTH

TYPICAL
DETAILS

Scale: As indicated
Job No.: 20202
Drawn By: EDG
Date: 01/13/2023

S0-0-8

DRA

Drumme Rosane Anderson, Inc.
225 Oakland Road
Studio 205
South Windsor, CT 06074
Planning Architecture Interior
Tel: 877.221.1100
www.dra.com

NORTHEAST METRO TECH

100 Hemlock Rd,
Wakefield, MA 01880



Engineers Design Group Inc.
Structural Engineers
389 Main Street, Suite 401
Malden, MA 02148
(781)396-9007
EDG@EDGINC.COM

FOUNDATION NOTES

- REFER TO GRADING DRAWINGS FOR PLAN AND GRADE ELEVATIONS. THE STRUCTURAL DRAWINGS USES A DATUM OF 100'-0" AT THE FIRST FLOOR LEVEL, EQUAL TO 163.50' ON THE SITE GRADING PLANS.
- FOR GENERAL NOTES AND TYPICAL DETAILS SEE DRAWINGS S0-0-1, S0-0-2, S0-0-3, S0-0-4, S0-0-5, S0-0-6, S0-0-7 AND S0-0-8.
- F3 ETC... INDICATES A FOOTING TYPE. FOR SIZE OF FOOTING AND REINFORCEMENT SEE SCHEDULE ON THIS DRAWING.
- TOP OF FINISHED GRADE AT EXTERIOR CONDITIONS AND 2'-0" BELOW TOP OF CONCRETE SLAB AT INTERIOR CONDITIONS. ALL OTHER TOP OF FOOTING ELEVATIONS ARE 100'-0" ON PLANS. CONTRACTOR TO COORDINATE AND VERIFY ALL TOP OF FOOTING ELEVATIONS WITH UNDERGROUND PLUMBING SUB-CONTRACTORS FIELD LAYOUT.
- ALL FOOTING ELEVATIONS NOTED ON PLAN ARE SHOWN ONLY TO ASSIST IN COORDINATION. ALL FOOTING ELEVATIONS MUST BE COORDINATED WITH STRUCTURAL REQUIREMENTS, TYPICAL DETAILS, ARCHITECTURAL, MECHANICAL, ELECTRICAL, AND PLUMBING DRAWINGS.
- ALL FOOTINGS TO BE CENTERED UNDER COLUMNS UNLESS NOTED OTHERWISE.
- SF INDICATES A STEPPED FOOTING REFER TO DETAIL 1 ON DRAWING S0-0-2.
- C1 ETC... INDICATES A COLUMN TYPE. FOR SIZE OF COLUMNS AND BASE PLATES SEE SCHEDULE ON THIS DRAWING.
- BOTTOM OF BASE PLATE ELEVATION TO BE 1'-11" MINIMUM BELOW TOP OF CONCRETE SLAB AT INTERIOR CONDITIONS, AND 1'-11" BELOW TOP OF CONCRETE SLAB AT EXTERIOR CONDITIONS. UNLESS NOTED OTHERWISE AS 'X' REFER TO ARCHITECTURAL DRAWINGS FOR BRICK SHELF ELEVATIONS.
- FOR UNDER SLAB DRAINAGE AND WALL DRAINS, COORDINATE WITH ARCHITECTURAL, STRUCTURAL, CIVIL, AND PLUMBING DRAWINGS.
- INDICATES A DEPRESSED SLAB ON GRADE. REFER TO DETAILS 6 AND 7 ON DRAWING S0-0-2 COORDINATE ALL SLAB DEPRESSIONS WITH REQUIREMENTS ON ARCHITECTURAL DRAWINGS.
- FOR TYPICAL EXTERIOR DOOR DETAIL, REFER TO DETAIL 6 ON DRAWING S0-0-3 AND RELEVANT SECTIONS.
- BF-1 ETC... INDICATES A BRACED BAY. REFER TO BRACED FRAME ELEVATIONS AND DETAILS ON DRAWINGS S4-0-1, S4-0-2, S4-0-3 AND S4-0-4 FOR ADDITIONAL INFORMATION.
- INDICATES A CMU WALL. REFER TO TYPICAL DETAIL 3 ON DRAWING S0-0-4 FOR REINFORCEMENT AND DETAIL 4 ON DRAWING S0-0-4 FOR CONNECTIONS TO STEEL BEAMS AND CONCRETE SLABS AT THE TOP OF WALL FOR NON-STRUCTURAL WALLS. REFER TO RELEVANT SECTIONS FOR CONNECTIONS OF SHEAR WALLS TO THE STRUCTURE.
- FOR DIMENSIONS AND ELEVATIONS NOT GIVEN REFER TO ARCHITECTURAL DRAWINGS.
- INDICATES CONCRETE PIER REFER TO TYPICAL DETAIL 5 ON DRAWING S0-0-2.
- INDICATES UNDERGROUND UTILITY LINES PLUMBING THROUGH CONCRETE FOUNDATION WALL. TYPICAL, COORDINATE FOOTING ELEVATION WITH PIPE INVERTS AND TYPICAL STRUCTURAL DETAILS.
- INDICATES AN INSULATED STRUCTURAL PRECAST CONCRETE WALL. COORDINATE WITH ARCHITECTURAL DRAWINGS.
- CONCRETE PIER REINFORCING PER DETAIL 5 ON DRAWING S0-0-2 IS TO BE PROVIDED FOR ALL CONCRETE WALLS SUPPORTING COLUMNS. HORIZONTAL WALL REINFORCING MUST REMAIN CONTINUOUS.

COLUMN SCHEDULE *

MARK	SIZE	BASE PLATE SIZE
C1	HSS8x8x3/8	1' x 16' x 1'-4"
C2	HSS8x8x1/2	1' x 16' x 1'-4"
C3	HSS12x12x3/8	1' x 20' x 1'-8"
C4	HSS12x12x1/2	1' x 20' x 1'-8"
C5	HSS12x12x5/8	1' x 20' x 1'-8"
C6	HSS12.75x6.500	1' x 20' x 1'-8"
C7	HSS20x12x1/2	1 1/2' x 20' x 2'-4"
C8	HSS8x4x3/8	1' x 16' x 1'-0"
C9	HSS16x6.500	1 1/2' x 24' x 2'-0"
C10	HSS12x6x1/2	1 1/2' x 20' x 1'-2"
C11	HSS10x6.500	1' x 18' x 1'-6"
C12	HSS6x6x3/8	1' x 14' x 1'-2"

* BASE PLATE LENGTH AND WIDTH SPECIFIED IN SCHEDULE IS THE MINIMUM SIZE FOR A COLUMN THAT IS PART OF A BRACED FRAME. SEE FOUNDATION NOTE ABOVE AND REFER TO DETAILS ON DRAWING S4-0-2 FOR ADDITIONAL INFORMATION.

* PROVIDE 4 - 1" DIA F1554-55S1 ANCHOR RODS TYPICALLY. REFER TO DETAILS ON DRAWING S4-0-3 FOR ADDITIONAL ANCHOR RODS FOR COLUMN RECEIVING BRACINGS.

FOOTING SCHEDULE F SERIES

MARK	SIZE	REINFORCEMENT
F4	4'-0" x 4'-0" x 2'-0"	6 - #5 BOT EA WAY
F5	5'-0" x 5'-0" x 2'-0"	7 - #5 BOT EA WAY
F6	6'-0" x 6'-0" x 2'-0"	8 - #5 BOT EA WAY
F7	7'-0" x 7'-0" x 2'-0"	9 - #5 BOT EA WAY
F8	8'-0" x 8'-0" x 3'-0"	10 - #8 BOT EA WAY
F9	9'-0" x 9'-0" x 3'-0"	11 - #9 BOT EA WAY
F10	10'-0" x 10'-0" x 3'-0"	12 - #9 BOT EA WAY
F11	11'-0" x 11'-0" x 3'-0"	13 - #10 BOT EA WAY
F12	12'-0" x 12'-0" x 4'-0"	14 - #10 BOT EA WAY
FA	SEE PLAN x 2'-0"	#8 @ 12" OC TOP AND BOT EA WAY

T INDICATES TOP REINFORCING TO MATCH BOTTOM REINFORCING

FOOTING SCHEDULE G SERIES

MARK	SIZE	REINFORCEMENT
G4	4'-0" x 4'-0" x 2'-0"	5 - #5 BOT EA WAY
G5	5'-0" x 5'-0" x 2'-0"	6 - #5 BOT EA WAY
G6	6'-0" x 6'-0" x 2'-0"	7 - #5 BOT EA WAY
G7	7'-0" x 7'-0" x 2'-0"	8 - #5 BOT EA WAY
G8	8'-0" x 8'-0" x 2'-0"	9 - #5 BOT EA WAY
G9	9'-0" x 9'-0" x 2'-0"	10 - #7 BOT EA WAY
G10	10'-0" x 10'-0" x 2'-0"	11 - #7 BOT EA WAY
G11	11'-0" x 11'-0" x 2'-0"	12 - #8 BOT EA WAY
G12	12'-0" x 12'-0" x 3'-0"	13 - #8 BOT EA WAY
G13	13'-0" x 13'-0" x 3'-0"	14 - #9 BOT EA WAY
G14	14'-0" x 14'-0" x 3'-0"	15 - #9 BOT EA WAY
G15	15'-0" x 15'-0" x 3'-0"	16 - #9 BOT EA WAY
GA	SEE PLAN x 2'-0"	#8 @ 12" OC TOP AND BOT EA WAY

T INDICATES TOP REINFORCING TO MATCH BOTTOM REINFORCING

BRACE FRAME KEY

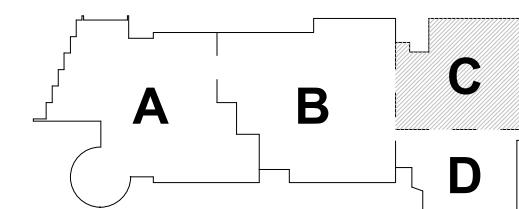
0" TYP	WF	BF-X	INDICATES A BRACE FRAME ABOVE AND BELOW LEVEL
0" TYP	BF-X	WF	INDICATES A BRACE FRAME ABOVE LEVEL
0" TYP	WF	BF-X	INDICATES A BRACE FRAME BELOW LEVEL

SPRAY FIREPROOFING NOTES
STEEL COLUMNS SHOWN ON THIS DRAWING TO RECEIVE 2-HOUR FIRE RATING BY CEMENTITIOUS FIREPROOFING UNLESS INDICATED AS A ROUND HSS COLUMN. EXPOSED TO VIEW PORTION OF ROUND HSS COLUMNS TO RECEIVE 2-HOUR FIRE RATING BY INTUMESCENT MASTIC FIREPROOFING. CONCEALED FROM VIEW PORTION OF ROUND HSS COLUMNS TO RECEIVE 2-HOUR FIRE RATING BY CEMENTITIOUS FIREPROOFING. COORDINATE WITH SPECIFICATIONS AND ARCHITECTURAL DRAWINGS FOR FIREPROOFING REQUIREMENTS.

© COPYRIGHT 2021 DRUMMEY ROSANE ANDERSON, INC.

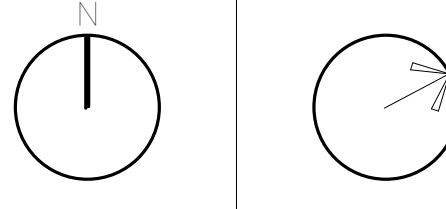
MSBA 60% CD
Submission

01/13/2023



KEY PLAN

PROJECT NORTH MAGNETIC NORTH



LOWER LEVEL FOUNDATION PLAN - AREA C

Scale: 1/8" = 1'-0"

Job No.: 20202

Drawn By: EDG

Date: 01/13/2023

S1-1-0C

100 Hemlock Rd,
Wakefield, MA 01880



9.		BOTTOM OF BASE PLATE ELEVATION TO BE 1" - 11" MINIMUM BELOW TOP OF CONCRETE SLAB AT INTERIOR CONDITIONS, AND 0" - 11" BELOW TOP OF CONCRETE SLAB AT EXTERIOR CONDITIONS. UNLESS NOTED OTHERWISE AS "XX", "XX" REFER TO ARCHITECTURAL DRAWINGS AND SPECIFICATIONS.
10.		FOR UNDER SLAB DRAINAGE AND DRAIN, DRAIN COORDINATE WITH ARCHITECTURAL, STRUCTURAL, CIVIL, AND PLUMBING DRAWINGS.
11.		INDICATES A DERESSED SLAB ON GRADE. REFER TO DETAILS 6 AND 7 ON DRAWINGS 50-0-2 COORDINATE ALL SLAB DEPRESSIONS WITH ARCHITECTURAL DRAWINGS.
12.		FOR TYPICAL EXTERIOR DOOR DETAIL REFER TO DETAIL 6 ON DRAWING 50-0-3 AND RELEVANT SECTIONS.
13.		8F4 - ETC. INDICATES A BRACED BAY. REFER TO BRACED FRAME ELEVATIONS AND DETAIL 10 ON DRAWINGS 54-0-1, 54-0-2, 54-0-3 AND 54-0-4 FOR ADDITIONAL INFORMATION.
14.	 	INDICATES A C&U WALL. REFER TO TYPICAL DETAIL 3 ON DRAWING 50-0-4 FOR REINFORCEMENT AND DETAIL 10 ON DRAWING 54-0-1 FOR REINFORCEMENT. FOR BEAMS AND CONCRETE SLABS AT THE TOP OF WALL FOR REINFORCEMENT. REFER TO TYPICAL REINFORCEMENT SECTIONS FOR CONNECTIONS OF SHEAR WALLS TO THE STRUCTURE.
15.		FOR DIMENSIONS AND ELEVATIONS NOT GIVEN REFER TO ARCHITECTURAL DRAWINGS.
16.		INDICATES CONCRETE PIER REFER TO TYPICAL DETAIL 5 ON DRAWING 50-0-2.
17.		INDICATES UNDERGROUND UTILITY LINES PLUMBING THROUGH CONCRETE FOUNDATION WALL TYPICAL. COORDINATE FOOTING ELEVATION WITH PIPE INVERTS AND TYPICAL STRUCTURAL DETAILS.
18.		INDICATES AN INSULATED STRUCTURAL PRECAST CONCRETE COORDINATE WITH ARCHITECTURAL DRAWINGS.
19.		CONCRETE PIER REINFORC PER DETAIL 5 ON DRAWING 50-0-2 IS TO BE PROVIDED FOR ALL CONCRETE WALLS SUPPORTING LOADS. ALL WALL REINFORCEMENT SHALL BE CONTINUOUS.

- * BASE PLATE LENGTH AND WIDTH SPECIFIED IN SCHEDULE IS THE MINIMUM SIZE FOR A COLUMN THAT IS PART OF A BRACED FRAME. SEE FOUNDATION NOTE ABOVE AND REFER TO DETAILS ON DRAWING S4-0-2 FOR ADDITIONAL INFORMATION.
- * PROVIDE 4 - 1" DIA F1554-55S1 ANCHOR RODS TYPICALLY. REFER TO DETAILS ON DRAWING S4-0-3 FOR ADDITIONAL ANCHOR RODS FOR COLUMN RECEIVING BRACING.

FOOTING SCHEDULE <u>G SERIES</u>		
MARK	SIZE	REINFORCEMENT
G4	4'-0" x 4'-0" x 2'-0"	5- #5 BOT EA WAY
G5	5'-0" x 5'-0" x 2'-0"	6- #5 BOT EA WAY
G6	6'-0" x 6'-0" x 2'-0"	7- #5 BOT EA WAY
G7	7'-0" x 7'-0" x 2'-0"	8- #6 BOT EA WAY
G8	8'-0" x 8'-0" x 2'-0"	9- #6 BOT EA WAY
G9	9'-0" x 9'-0" x 2'-0"	10- #7 BOT EA WAY
G10	10'-0" x 10'-0" x 2'-0"	11- #7 BOT EA WAY
G11	11'-0" x 11'-0" x 2'-0"	12- #8 BOT EA WAY
G12	12'-0" x 12'-0" x 3'-0"	13- #8 BOT EA WAY
G13	13'-0" x 13'-0" x 3'-0"	14- #9 BOT EA WAY
G14	14'-0" x 14'-0" x 3'-0"	15- #9 BOT EA WAY
G15	15'-0" x 15'-0" x 3'-0"	16- #9 BOT EA WAY
GA	SEE PLAN X 2'-0"	#8 @ 12"OC TOP AND BOT EA WAY

T INDICATES TOP REINFORCING TO MATCH BOTTOM REINFORCING

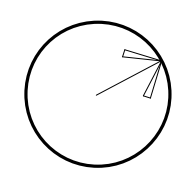
BRACE FRAME KEY		
0° TYP		INDICATES A BRACE FRAME ABOVE AND BELOW LEVEL
0° TYP		INDICATES A BRACE FRAME ABOVE LEVEL
0° TYP		INDICATES A BRACE FRAME BELOW LEVEL

SPRAY FIREPROOFING NOTES:
STEEL COLUMNS SHOWN ON THIS DRAWING TO RECEIVE 2-HOUR FIRE RATING BY CEMENTITIOUS FIREPROOFING UNLESS INDICATED AS A ROUND HSS COLUMN. EXPOSED TO VIEW PORTION OF ROUND HSS COLUMNS TO RECEIVE 2-HOUR FIRE RATING BY INTUMESCENT MASTIC FIREPROOFING. CONCEALED FROM VIEW PORTION OF ROUND HSS COLUMN TO RECEIVE 2-HOUR FIRE RATING BY CEMENTITIOUS FIREPROOFING. COORDINATE WITH SPECIFICATIONS AND ARCHITECTURAL DRAWINGS FOR FIREPROOFING REQUIREMENTS.

01/13/2023

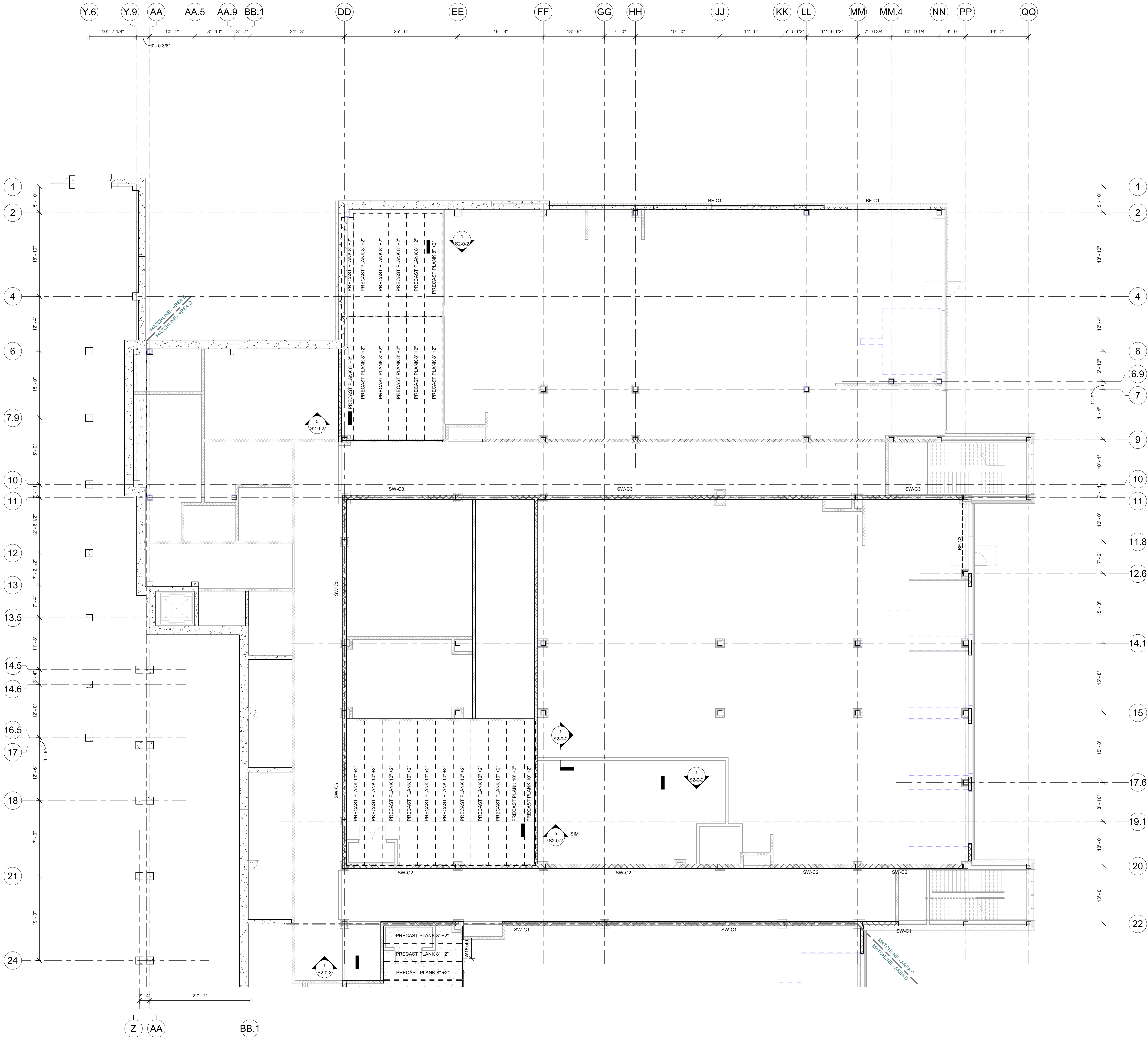


PROJECT NORTH	MAGNETIC NORTH
---------------	----------------



Drawn By: _____

S1-1-0D

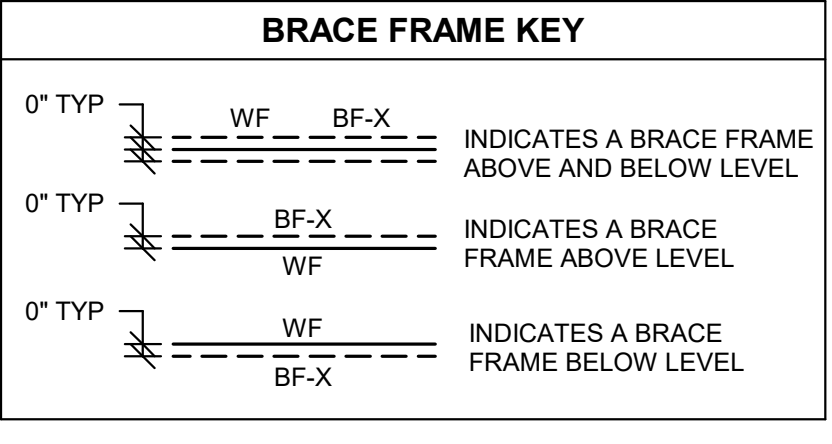


FRAMING ELEVATION NOTES:

- 1.) TYPICAL TOP-OF-CONCRETE ELEVATION = (89'-8") AT THE MEZZANINE FLOOR LEVEL, IN THE AREA BOUNDED BY GRIDS (DD) - (HH) AND (Q) - (R).
- 2.) COORDINATE ALL ELEVATIONS WITH ARCHITECTURAL DRAWINGS.

SPRAY FIREPROOFING NOTES:

STEEL COLUMNS SHOWN ON THIS DRAWING TO RECEIVE 2-HOUR FIRE RATING BY CEMENTITIOUS FIREPROOFING UNLESS INDICATED AS A ROUND HSS COLUMN. EXPOSED TO VIEW PORTION OF ROUND HSS COLUMNS TO RECEIVE 2-HOUR FIRE RATING BY INTUMESCENT MASTIC FIREPROOFING. CONCEALED FROM VIEW PORTION OF ROUND HSS COLUMN TO RECEIVE 2-HOUR FIRE RATING BY CEMENTITIOUS FIREPROOFING. COORDINATE WITH SPECIFICATIONS AND ARCHITECTURAL DRAWINGS FOR FIREPROOFING REQUIREMENTS.



- FRAMING NOTES:**
- 1.) FOR GENERAL NOTES AND TYPICAL DETAILS SEE DRAWINGS S0-0-1, S0-0-2, S0-0-3, S0-0-4, S0-0-5, S0-0-6, S0-0-7 AND S0-0-8.
 - 2.) REFER TO ARCHITECTURAL DRAWINGS FOR ELEVATIONS AND VERTICAL DIMENSIONS. PITCH ALL STEEL UNIFORMLY TO LOW POINTS AT THE COLUMNS AND BENT BEAMS AS SHOWN ON THE ARCHITECTURAL DRAWINGS.
 - 3.) BF-1 ETC., INDICATES A BRACED BAY. REFER TO BRACED FRAME ELEVATIONS AND DETAILS ON DRAWINGS S4-0-1, S4-0-2, S4-0-3 AND S4-0-4 FOR ADDITIONAL INFORMATION.
 - 4.) [XX] INDICATES THE NUMBER OF 3/4" DIAMETER x 4 1/4" LONG HEADED STUDS WELDED TO THE TOP FLANGE OF THE BEAM. SPACE STUDS EVENLY ALONG THE BEAM UNLESS NOTED OTHERWISE.
 - 5.) [MOMENT CONNECTION] INDICATES A MOMENT CONNECTION TO DEVELOP THE FULL CAPACITY OF THE MEMBER. REFER TO TYPICAL DETAILS 5 AND 9 ON DRAWING S0-0-5 AND DETAIL 3 ON DRAWING S0-0-7.
 - 6.) [5/16" FILLET] INDICATES A 5/16" FILLET WELD ALL AROUND (HSS BEAM TO HSS COLUMN) WHERE BEAM DIMENSIONS EXCEED COLUMN DIMENSIONS PROVIDE 1/2" THICK STEEL CAP PLATE TO ACHIEVE ALL AROUND WELD. REFER TO TYPICAL DETAIL 2 ON DRAWING S0-0-7.
 - 7.) <X> INDICATES UPWARD CAMBER AT THE MID-SPAN OF THE MEMBER.
 - 8.) [5-1/4"] INDICATES SPAN DIRECTION OF 2" DEEP, 20 GAGE GALVANIZED COMPOSITE STEEL DECK WITH 3 1/4" LIGHT WEIGHT CONCRETE TOPPING. TOTAL THICKNESS = 5 1/4". REINFORCE WITH 6#5 - W2 1xW2 1 WWR.
 - 9.) [1 1/2"] INDICATES SPAN DIRECTION OF 1 1/2" DEEP, 20 GAGE TYPE B, GALVANIZED STEEL ROOF DECK.
 - 10.) [3"] INDICATES SPAN DIRECTION OF 3" DEEP, 18/20 GAGE TYPE NCAS, GALVANIZED CELLULAR ACOUSTICAL STEEL ROOF DECK.
 - 11.) [6"] INDICATES SPAN DIRECTION OF 3" DEEP, 18 GAGE GALVANIZED COMPOSITE STEEL DECK WITH 3" LIGHT WEIGHT CONCRETE TOPPING. TOTAL THICKNESS = 6". SEE TYPICAL DETAIL 4 ON DRAWING S0-0-8.
 - 12.) FOR EXACT NUMBER, SIZE, AND LOCATION OF OPENING IN STEEL DECKING REFER TO MECHANICAL AND ARCHITECTURAL DRAWINGS. FOR FRAMING INFORMATION, REFER TO DETAIL 1 AND 8 ON DRAWING S0-0-6 AND DETAIL 1 ON DRAWING S0-0-8.
 - 13.) [6"] HATCHED AREA INDICATES LOCATION OF CONCRETE SLAB WITH 2" DEEP, 18 GAGE GALVANIZED COMPOSITE STEEL DECK WITH 4" NORMAL WEIGHT CONCRETE TOPPING. TOTAL THICKNESS = 6". REINFORCE WITH 6#5 - W2 1xW2 1 WWR. REFER TO TYPICAL DETAIL 5 ON DRAWING S0-0-7 FOR ADDITIONAL INFORMATION. USE 3/4" DIA x 5' LONG HEADED STUDS.
 - 14.) [6 1/2" NCA] HATCHED AREA INDICATES LOCATION OF CONCRETE SLAB WITH 3" DEEP, 18/20 GAGE TYPE NCA, GALVANIZED CELLULAR ACOUSTICAL STEEL DECK WITH 3 1/2" LIGHT WEIGHT CONCRETE TOPPING. TOTAL THICKNESS = 6 1/2". REINFORCE WITH 6#5 - W2 1xW2 1 WWR. REFER TO TYPICAL DETAIL 5 ON DRAWING S0-0-8 FOR ADDITIONAL INFORMATION. USE 3/4" DIA x 5' LONG HEADED STUDS.
 - 15.) [X] INDICATES A ROOF DRAIN. REFER TO TYPICAL STRUCTURAL DETAILS 1 AND 8 ON DRAWING S0-0-6 AND DETAIL 1 ON DRAWING S0-0-8. FOR DECKING SUPPORT, REFER TO DETAIL 4 ON DRAWING S0-0-5. REFER TO PLUMBING AND ARCHITECTURAL DRAWINGS FOR OPENING SIZES AND LOCATIONS.
 - 16.) CT INDICATES A COLUMN TERMINATES AT THIS LEVEL.
 - 17.) [WF] INDICATES A BEND IN THE STEEL BEAM. REFER TO TYPICAL DETAIL 8 ON DRAWING S0-0-8.
 - 18.) [OR] INDICATES A CMU WALL. REFER TO TYPICAL DETAIL 3 ON DRAWING S0-0-4 FOR REINFORCEMENT AND DETAIL 4 ON DRAWING S0-0-6 FOR CONNECTIONS TO STEEL BEAMS AND CONCRETE SLABS AT THE TOP OF WALL FOR NON-STRUCTURAL WALLS. REFER TO RELEVANT SECTIONS FOR CONNECTIONS OF SHEAR WALLS TO THE STRUCTURE.
 - 19.) [] INDICATES AN INSULATED STRUCTURAL, PRECAST CONCRETE WALL. COORDINATE WITH ARCHITECTURAL DRAWING.
 - 20.) [1 1/2" BCA] INDICATES SPAN DIRECTION OF 1 1/2" DEEP, 18/20 GAGE TYPE BCA, GALVANIZED CELLULAR ACOUSTICAL STEEL ROOF DECK.
 - 21.) [10' x 2"] PC PLANK INDICATES SPAN OF 10' DEEP PRESTRESSED, PRECAST CONCRETE HOLLOW CORE PLANK WITH A MINIMUM 2" OF NORMAL WEIGHT CONCRETE TOPPING. PLANK AND CONCRETE TOPPING SLAB TO BE DESIGNED TO SUPPORT A MINIMUM LIVE LOAD CAPACITY OF 150 PSF. PRECAST CONCRETE PLANK TO BE DESIGNED FOR MINIMUM OF 2-HOUR FIRE RATING.
 - 22.) FOR DIMENSIONS AND ELEVATIONS NOT GIVEN REFER TO ARCHITECTURAL DRAWINGS.
 - 23.) [WF] INDICATES A SPICE CONNECTION ALONG A CONTINUOUS STEEL BEAM. DESIGN SPICE CONNECTION FOR FULL CAPACITY OF STEEL BEAM.

DRA

Drumme Rosane Anderson, Inc.
225 Oakland Road
Studio 205
South Windsor, CT 06074

260 Charles Street
Studio 300
Wattham, MA 02453

Planning Architects Interior
Tel: 817.261.1100
www.dra.com

**NORTHEAST
METRO TECH**

100 Hemlock Rd.
Wakefield, MA 01880

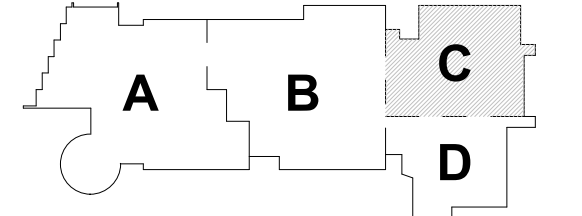
EDG

Engineers Design Group Inc.
Structural Engineers
389 Main Street, Suite 401
Malden, MA 02148
(781)396-9007
EDG@EDGINC.COM

© COPYRIGHT 2021 DRUMMEY ROSANE ANDERSON, INC.

MSBA 60% CD
Submission

01/13/2023



**MEZZANINE
FLOOR FRAMING
PLAN - AREA C**

Scale: 1/8" = 1'-0"
Job No.: 20202
Drawn By: EDG
Date: 01/13/2023

S1-1-0MC

DRA

Drumme Rosane Anderson, Inc.
225 Oakland Road
Studio 205
South Windsor, CT 06074
260 Charles Street
Studio 300
Waltham, MA 02453
Planning Architects Interior
Tel: 877.267.1100
www.dra.com

NORTHEAST
METRO TECH

100 Hemlock Rd.
Wakefield, MA 01880



Engineers Design Group Inc.
Structural Engineers
389 Main Street, Suite 401
Malden, MA 02148
(781)396-9007
EDG@EDGINC.COM

FRAMING NOTES:

- FOR GENERAL NOTES AND TYPICAL DETAILS SEE DRAWINGS S0-0-1, S0-0-2, S0-0-3, S0-0-4, S0-0-5, S0-0-6, S0-0-7 AND S0-0-8.
- REFER TO ARCHITECTURAL DRAWINGS FOR ELEVATIONS AND VERTICAL DIMENSIONS. FIT ALL STEEL UNIFORMLY TO LOW POINTS AT THE COLUMNS AND BENT BEAMS AS SHOWN ON THE ARCHITECTURAL DRAWINGS.
- BF-1 ETC... INDICATES A BRACED BAY. REFER TO BRACED FRAME ELEVATIONS AND DETAILS ON DRAWINGS S4-0-1, S4-0-2, S4-0-3 AND S4-0-4 FOR ADDITIONAL INFORMATION.
- [XX] INDICATES THE NUMBER OF 3/4" DIAMETER x 4 1/4" LONG HEADED STUDS WELDED TO THE TOP FLANGE OF THE BEAM. SPACE STUDS EVENLY ALONG THE BEAM UNLESS NOTED OTHERWISE.
- INDICATES A MOMENT CONNECTION TO DEVELOP THE FULL CAPACITY OF THE MEMBER. REFER TO TYPICAL DETAILS 8 AND 9 ON DRAWING S0-0-5 AND DETAIL 3 ON DRAWING S0-0-7.
- INDICATES A 5/16" FILLET WELD ALL AROUND. (HSS BEAM TO HSS COLUMN) WHERE BEAM DIMENSIONS EXCEED COLUMN DIMENSIONS PROVIDE 1/2" THICK STEEL CAP PLATE TO ACHIEVE ALL AROUND WELD. REFER TO TYPICAL DETAIL 2 ON DRAWING S0-0-7.
- < X' > INDICATES UPWARD CAMBER AT THE MID-SPAN OF THE MEMBER.
- 5'-14" INDICATES SPAN DIRECTION OF 2" DEEP, 20 GAGE GALVANIZED COMPOSITE STEEL DECK WITH 3 1/4" LIGHT WEIGHT CONCRETE TOPPING. TOTAL THICKNESS = 5 1/4". REINFORCE WITH 6x6 - W2, W2.1 WWR. REFER TO TYPICAL DETAIL 5 ON DRAWING S0-0-6.
- 1 1/2" INDICATES SPAN DIRECTION OF 1 1/2" DEEP, 20 GAGE TYPE B, GALVANIZED STEEL ROOF DECK.
- 3" NCAS INDICATES SPAN DIRECTION OF 3" DEEP, 18/20 GAGE TYPE NCAS, GALVANIZED CELLULAR ACOUSTIC STEEL ROOF DECK.
- 6" INDICATES SPAN DIRECTION OF 3" DEEP, 18 GAGE GALVANIZED COMPOSITE STEEL DECK WITH 3" LIGHT WEIGHT CONCRETE TOPPING. TOTAL THICKNESS = 6". SEE TYPICAL DETAIL 4 ON DRAWING S0-0-8.
- FOR EXACT NUMBER, SIZE, AND LOCATION OF OPENING IN STEEL DECKING REFER TO MECHANICAL AND ARCHITECTURAL DRAWINGS FOR FRAMING INFORMATION. REFER TO DETAIL 1 AND 8 ON DRAWING S0-0-6 AND DETAIL 1 ON DRAWING S0-0-8.
- HATCHED AREA INDICATES LOCATION OF CONCRETE SLAB WITH 2" DEEP, 18 GAGE GALVANIZED COMPOSITE STEEL DECK WITH 4" NORMAL WEIGHT CONCRETE TOPPING. TOTAL THICKNESS = 6". REINFORCE WITH 6x6 - W2, W2.1 WWR. REFER TO TYPICAL DETAIL 5 ON DRAWING S0-0-7 FOR ADDITIONAL INFORMATION. USE 3/4" DIA x 5' LONG HEADED STUDS.
- 6 1/2" NCA HATCHED AREA INDICATES LOCATION OF CONCRETE SLAB WITH 3" DEEP, 18/20 GAGE TYPE NCA, GALVANIZED CELLULAR ACOUSTIC STEEL DECK WITH 3 1/2" LIGHT WEIGHT CONCRETE TOPPING. TOTAL THICKNESS = 6 1/2". REINFORCE WITH 6x6 - W2, W2.1 WWR. REFER TO TYPICAL DETAIL 5 ON DRAWING S0-0-8 FOR ADDITIONAL INFORMATION. USE 3/4" DIA x 5' LONG HEADED STUDS.
- INDICATES A ROOF DRAIN. REFER TO TYPICAL STRUCTURAL DETAILS 1 AND 8 ON DRAWING S0-0-4 AND DETAIL 1 ON DRAWING S0-0-4 FOR DECKING SUPPORT. REFER TO DETAIL 4 ON DRAWING S0-0-5, REFER TO PLUMBING AND ARCHITECTURAL DRAWINGS FOR OPENING SIZES AND LOCATIONS.
- CT INDICATES A COLUMN TERMINATES AT THIS LEVEL.
- WF INDICATES A BEND IN THE STEEL BEAM. REFER TO TYPICAL DETAIL 8 ON DRAWING S0-0-8.
- INDICATES A CMU WALL. REFER TO TYPICAL DETAIL 3 ON DRAWING S0-0-4 FOR REINFORCEMENT AND DETAIL 4 ON DRAWING S0-0-6 FOR CONNECTIONS TO STEEL BEAMS AND CONCRETE SLABS AT THE TOP OR WALL FOR NON-STRUCTURAL WALLS. REFER TO RELEVANT SECTIONS FOR CONNECTIONS OF SHEAR WALLS TO THE STRUCTURE.
- INDICATES AN INSULATED STRUCTURAL PRECAST CONCRETE WALL. COORDINATE WITH ARCHITECTURAL DRAWING.
- 1 1/2" BCA INDICATES SPAN DIRECTION OF 1 1/2" DEEP, 18/20 GAGE TYPE BCA, GALVANIZED CELLULAR ACOUSTICAL STEEL ROOF DECK.
- 10' x 2" PC PLANK INDICATES SPAN OF 10' DEEP PRESTRESSED, PRECAST CONCRETE HOLLOW CORE PLANK WITH A MINIMUM 2" OF NORMAL WEIGHT CONCRETE TOPPING. PLANK AND CONCRETE TOPPING SLAB TO BE DESIGNED TO SUPPORT A MINIMUM LIVE LOAD CAPACITY OF 150 PSF. PRECAST CONCRETE PLANK TO BE DESIGNED FOR MINIMUM OF 2 HOUR FIRE RATING.
- FOR DIMENSIONS AND ELEVATIONS NOT GIVEN REFER TO ARCHITECTURAL DRAWINGS.
- WF INDICATES A SPLICE CONNECTION ALONG A CONTINUOUS STEEL BEAM. DESIGN SPLICE CONNECTION FOR FULL CAPACITY OF STEEL BEAM.

FRAMING ELEVATION NOTES:

- TYPICAL TOP-OF-CONCRETE ELEVATION = (89' - 8") AT THE MEZZANINE FLOOR LEVEL, IN THE AREA BOUNDED BY GRID (CC) - (EE) AND (TT) - (23).
- COORDINATE ALL ELEVATIONS WITH ARCHITECTURAL DRAWINGS.

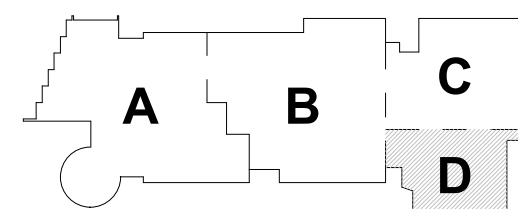
SPRAY FIREPROOFING NOTES:
STEEL COLUMN SHOWN ON THIS DRAWING TO RECEIVE 2-HOUR FIRE RATING BY CEMENTITIOUS FIREPROOFING UNLESS INDICATED AS A ROUND HSS COLUMN EXPOSED TO VIEW PORTION OF ROUND HSS COLUMNS TO RECEIVE 2-HOUR FIRE RATING BY INTUMESCENT MASTIC FIREPROOFING, CONCEALED FROM VIEW PORTION OF ROUND HSS COLUMN TO RECEIVE 2-HOUR FIRE RATING BY CEMENTITIOUS FIREPROOFING. COORDINATE WITH SPECIFICATIONS AND ARCHITECTURAL DRAWINGS FOR FIREPROOFING REQUIREMENTS.

BRACE FRAME KEY

- 0' TYP. WF BF-X INDICATES A BRACE FRAME ABOVE AND BELOW LEVEL.
- 0' TYP. BF-X WF INDICATES A BRACE FRAME ABOVE LEVEL.
- 0' TYP. WF BF-X INDICATES A BRACE FRAME BELOW LEVEL.

MSBA 60% CD
Submission

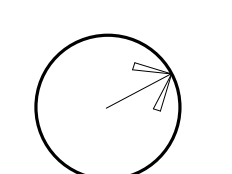
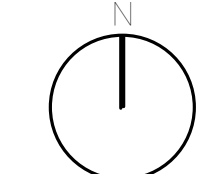
01/13/2023



KEY PLAN

PROJECT NORTH

MAGNETIC NORTH



MEZZANINE
FLOOR FRAMING
PLAN - AREA D

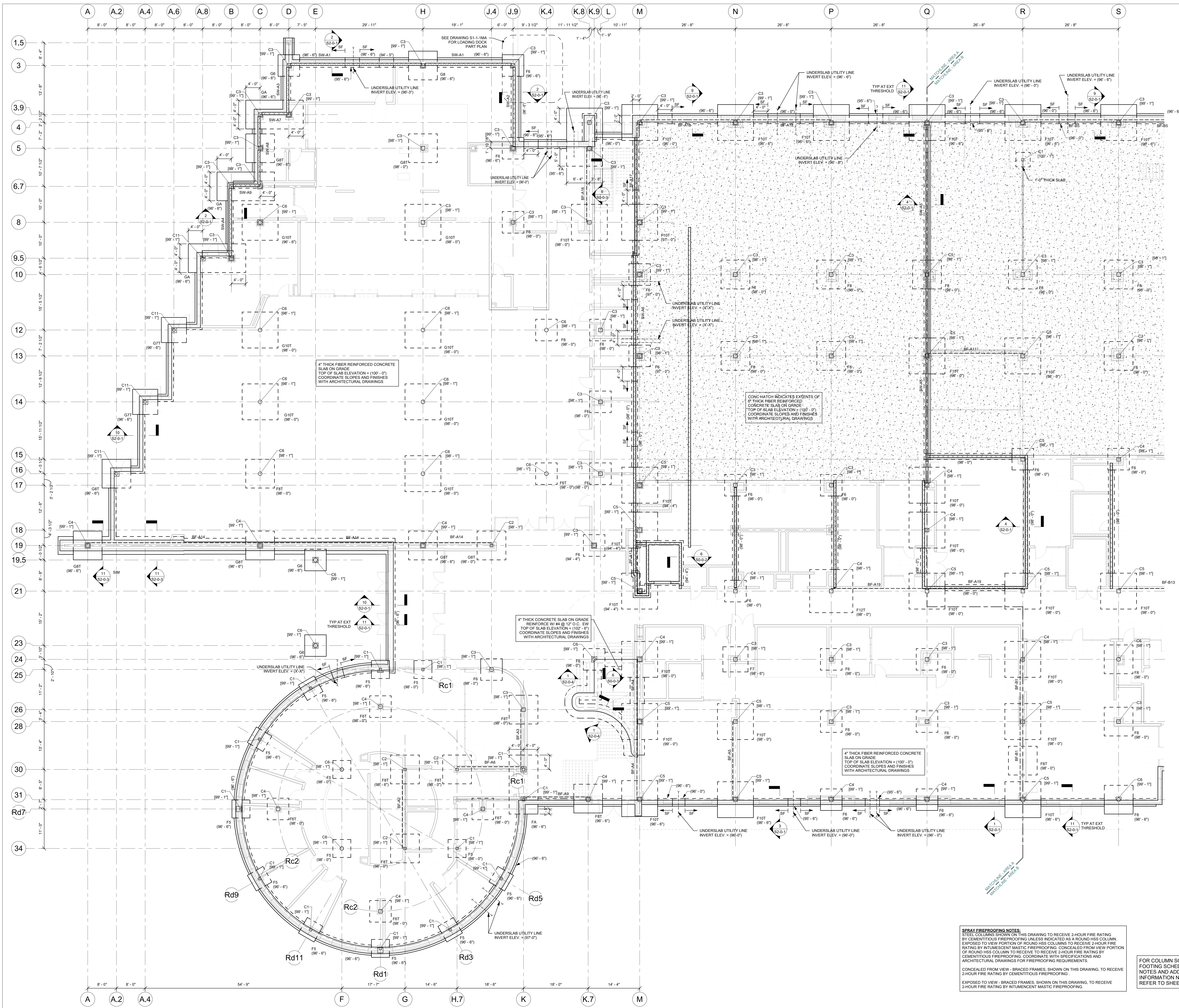
Scale: 1/8" = 1'-0"

Job No.: 20202

Drawn By: EDG

Date: 01/13/2023

S1-1-0MD



DRA

Drumme Rosane Anderson, Inc.
225 Oakland Road
Studio 205
South Windsor, CT 06074

260 Charles Street
Studio 300
Waltham, MA 02453

Planning Architecture Interior
Tel: 877.221.1100
www.dra.com

NORTHEAST
METRO TECH

100 Hemlock Rd.
Wakefield, MA 01880

EDG

Engineers Design Group Inc.
Structural Engineers
389 Main Street, Suite 401
Malden, MA 02148
(781)396-9007
EDG@EDGINC.COM

© COPYRIGHT 2021
DRUMMEY ROSANE ANDERSON, INC.

MSBA 60% CD
Submission

01/13/2023

A B C

D

KEY PLAN

PROJECT NORTH

MAGNETIC NORTH

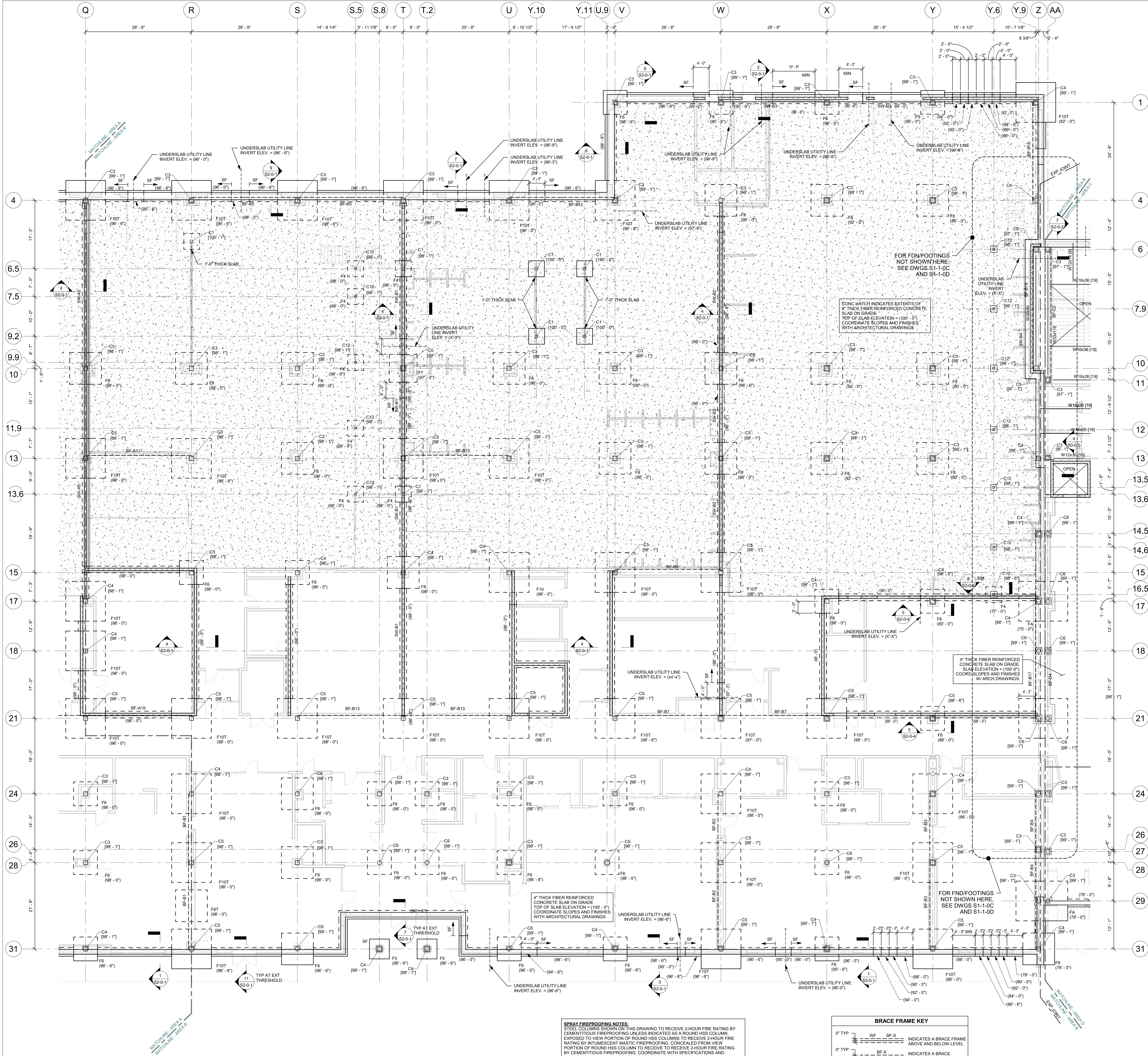
FIRST FLOOR
FOUNDATION
PLAN - AREA A

Scale: 1/8" = 1'-0"
Job No.: 20202
Drawn By: EDG
Date: 01/13/2023

S1-1-1A

SPRAY FIREPROOFING NOTES:
STEEL COLUMNS SHOWN ON THIS DRAWING TO RECEIVE 2-HOUR FIRE RATING BY CEMENTITIOUS FIREPROOFING UNLESS INDICATED AS A ROUND HSS COLUMN EXPOSED TO VIEW PORTION OF ROUND HSS COLUMNS TO RECEIVE 2-HOUR FIRE RATING BY INTUMESCENT MASTIC FIREPROOFING. CONCEALED FROM VIEW PORTION OF ROUND HSS COLUMNS TO RECEIVE 2-HOUR FIRE RATING BY CEMENTITIOUS FIREPROOFING. COORDINATE WITH SPECIFICATIONS AND ARCHITECTURAL DRAWINGS FOR FIREPROOFING REQUIREMENTS.
CONCEALED FROM VIEW - BRACED FRAMES, SHOWN ON THIS DRAWING, TO RECEIVE 2-HOUR FIRE RATING BY CEMENTITIOUS FIREPROOFING.
EXPOSED TO VIEW - BRACED FRAMES, SHOWN ON THIS DRAWING, TO RECEIVE 2-HOUR FIRE RATING BY INTUMESCENT MASTIC FIREPROOFING.

FOR COLUMN SCHEDULE, FOOTING SCHEDULE, PLAN NOTES AND ADDITIONAL INFORMATION NOT SHOWN, REFER TO SHEET S1-1-1B



- FOUNDATION NOTES:**
- 1.) REFER TO GRADING DRAWINGS FOR PLAN AND GRADE ELEVATIONS. THE STRUCTURAL DRAWINGS USE A DATUM OF 100'-0" AT THE FIRST FLOOR LEVEL, EQUAL TO (163.50) ON THE SITE GRADING PLANS.
 - 2.) FOR GENERAL NOTES AND TYPICAL DETAILS SEE DRAWINGS S0-0-1, S0-0-2, S0-0-3, S0-0-4, S0-0-5, S0-0-6, S0-0-7 AND S0-0-8.
 - 3.) F3 ETC., INDICATES A FOOTING TYPE. FOR SIZE OF FOOTING AND REINFORCEMENT SEE SCHEDULE ON THIS DRAWING.
 - 4.) TOP OF FOOTING ELEVATION TO BE 9'-6" MINIMUM BELOW LOWEST ADJACENT FINISHED GRADE AT EXTERIOR CONDITIONS AND 2'-0" BELOW TOP OF CONCRETE SLAB AT INTERIOR CONDITIONS. ALL OTHER TOP OF FOOTING ELEVATIONS ARE DENOTED AS THUS (X'-Y) COMPUTED FROM A DATUM ELEVATION OF 100'-0" ON PLANS. CONTRACTOR TO COORDINATE AND VERIFY ALL TOP OF FOOTING ELEVATIONS WITH UNDERGROUND PLUMBING SUB-CONTRACTORS FIELD LAYOUT.
 - 5.) ALL FOOTING ELEVATIONS NOTED ON PLAN ARE SHOWN ONLY TO ASSIST IN COORDINATION. ALL FOOTING ELEVATIONS MUST BE COORDINATED WITH STRUCTURAL REQUIREMENTS, TYPICAL DETAILS, ARCHITECTURAL, MECHANICAL, ELECTRICAL, AND PLUMBING DRAWINGS.
 - 6.) ALL FOOTINGS TO BE CENTERED UNDER COLUMNS UNLESS NOTED OTHERWISE.
 - 7.) SF INDICATES A STEPPED FOOTING REFER TO DETAIL ON DRAWING S0-0-2.
 - 8.) C1 ETC., INDICATES A COLUMN TYPE. FOR SIZE OF COLUMNS AND BASE PLATES SEE SCHEDULE ON THIS DRAWING.
 - 9.) BOTTOM OF BASE PLATE ELEVATION TO BE 1'-11" MINIMUM BELOW TOP OF CONCRETE SLAB AT EXTERIOR CONDITIONS, AND 0'-11" BELOW TOP OF CONCRETE SLAB AT INTERIOR CONDITIONS. UNLESS NOTED OTHERWISE AS (XX'-XX") REFER TO ARCHITECTURAL DRAWINGS FOR BRICK SHELF ELEVATIONS.
 - 10.) FOR UNDER SLAB DRAINAGE AND WALL DRAINS, COORDINATE WITH ARCHITECTURAL, STRUCTURAL, CIVIL, AND PLUMBING DRAWINGS.
 - 11.) INDICATES A DEPRESSED SLAB ON GRADE. REFER TO DETAILS 6 AND 7 ON DRAWING S0-0-2 COORDINATE ALL SLAB DEPRESSIONS WITH REQUIREMENTS ON ARCHITECTURAL DRAWINGS.
 - 12.) FOR TYPICAL EXTERIOR DOOR DETAIL REFER TO DETAIL 6 ON DRAWING S0-0-3 AND RELEVANT SECTIONS.
 - 13.) BF-1 ETC., INDICATES A COLUMN BAY. REFER TO BRACED FRAME ELEVATIONS AND DETAILS 5 ON DRAWINGS S4-0-1, S4-0-2, S4-0-3 AND S4-0-4 FOR ADDITIONAL INFORMATION.
 - 14.) INDICATES A CMU WALL. REFER TO TYPICAL DETAIL 3 ON DRAWING S0-0-4 FOR REINFORCEMENT AND DETAIL 4 ON DRAWING S0-0-4 FOR CONNECTIONS TO STEEL BEAMS AND CONCRETE SLABS AT THE TOP OF WALL. FOR NON-STRUCTURAL WALLS REFER TO RELEVANT SECTIONS FOR CONNECTIONS OF SHEAR WALLS TO THE STRUCTURE.
 - 15.) FOR DIMENSIONS AND ELEVATIONS NOT GIVEN REFER TO ARCHITECTURAL DRAWINGS.
 - 16.) INDICATES CONCRETE PIER REFER TO TYPICAL DETAIL 5 ON DRAWING S0-0-2.
 - 17.) INDICATES UNDERGROUND UTILITY LINES PLUMBING THROUGH CONCRETE FOUNDATION WALL TYPICAL. COORDINATE FOOTING ELEVATIONS WITH PLUMBING. COORDINATE WITH ARCHITECTURAL DETAILS.
 - 18.) INDICATES AN INSULATED STRUCTURAL PRECAST CONCRETE WALL. COORDINATE WITH ARCHITECTURAL DRAWINGS.
 - 19.) CONCRETE PIER REINFORCING PER DETAIL 5 ON DRAWING S0-0-2 IS TO BE PROVIDED FOR ALL CONCRETE WALLS SUPPORTING COLUMNS. HORIZONTAL WALL REINFORCING MUST REMAIN CONTINUOUS.

COLUMN SCHEDULE *		
MARK	SIZE	BASE PLATE SIZE
C1	HSS8x6x3/8	1' x 16' x 1'-4"
C2	HSS8x8x1/2	1' x 16' x 1'-4"
C3	HSS12x12x3/8	1' x 20' x 1'-8"
C4	HSS12x12x1/2	1' x 20' x 1'-8"
C5	HSS12x12x5/8	1' x 20' x 1'-8"
C6	HSS12.75x6.500	1' x 20' x 1'-8"
C7	HSS20x12x1/2	1 1/2' x 20' x 2'-4"
C8	HSS14x3/8	1' x 16' x 1'-0"
C9	HSS16x6.500	1 1/2' x 24' x 2'-0"
C10	HSS12x6x1/2	1 1/2' x 20' x 1'-2"
C11	HSS10x6.500	1' x 18' x 1'-6"
C12	HSS6x6x3/8	1' x 14' x 1'-2"

* BASE PLATE LENGTH AND WIDTH SPECIFIED IN SCHEDULE IS THE MINIMUM SIZE FOR A COLUMN THAT IS PART OF A BRACED FRAME. SEE FOUNDATION NOTE ABOVE AND REFER TO DETAILS ON DRAWING S4-0-2 FOR ADDITIONAL INFORMATION.

* PROVIDE 4 - 1" DIA F1554-5551 ANCHOR RODS TYPICALLY. REFER TO DETAILS ON DRAWING S4-0-3 FOR ADDITIONAL ANCHOR RODS FOR COLUMN RECEIVING BRACING.

FOOTING SCHEDULE F SERIES		
MARK	SIZE	REINFORCEMENT
F4	4'-0" x 4'-0" x 2'-0"	6 - #5 BOT EA WAY
F5	5'-0" x 5'-0" x 2'-0"	7 - #5 BOT EA WAY
F6	6'-0" x 6'-0" x 2'-6"	8 - #6 BOT EA WAY
F7	7'-0" x 7'-0" x 2'-6"	9 - #6 BOT EA WAY
F8	8'-0" x 8'-0" x 3'-0"	10 - #6 BOT EA WAY
F9	9'-0" x 9'-0" x 3'-0"	11 - #9 BOT EA WAY
F10	10'-0" x 10'-0" x 3'-0"	12 - #9 BOT EA WAY
F11	11'-0" x 11'-0" x 3'-6"	13 - #10 BOT EA WAY
F12	12'-0" x 12'-0" x 4'-0"	14 - #10 BOT EA WAY
FA	SEE PLAN x 2'-0"	#8 @ 12"OC TOP AND BOT EA WAY

T INDICATES TOP REINFORCING TO MATCH BOTTOM REINFORCING

FOOTING SCHEDULE Q SERIES		
MARK	SIZE	REINFORCEMENT
G4	4'-0" x 4'-0" x 2'-0"	5 - #5 BOT EA WAY
G5	5'-0" x 5'-0" x 2'-0"	6 - #5 BOT EA WAY
G6	6'-0" x 6'-0" x 2'-0"	7 - #6 BOT EA WAY
G7	7'-0" x 7'-0" x 2'-0"	8 - #6 BOT EA WAY
G8	8'-0" x 8'-0" x 2'-0"	9 - #6 BOT EA WAY
G9	9'-0" x 9'-0" x 2'-6"	10 - #7 BOT EA WAY
G10	10'-0" x 10'-0" x 2'-6"	11 - #7 BOT EA WAY
G11	11'-0" x 11'-0" x 2'-6"	12 - #8 BOT EA WAY
G12	12'-0" x 12'-0" x 3'-0"	13 - #8 BOT EA WAY
G13	13'-0" x 13'-0" x 3'-0"	14 - #9 BOT EA WAY
G14	14'-0" x 14'-0" x 3'-0"	15 - #9 BOT EA WAY
G15	15'-0" x 15'-0" x 3'-0"	16 - #9 BOT EA WAY
GA	SEE PLAN x 2'-0"	#8 @ 12"OC TOP AND BOT EA WAY

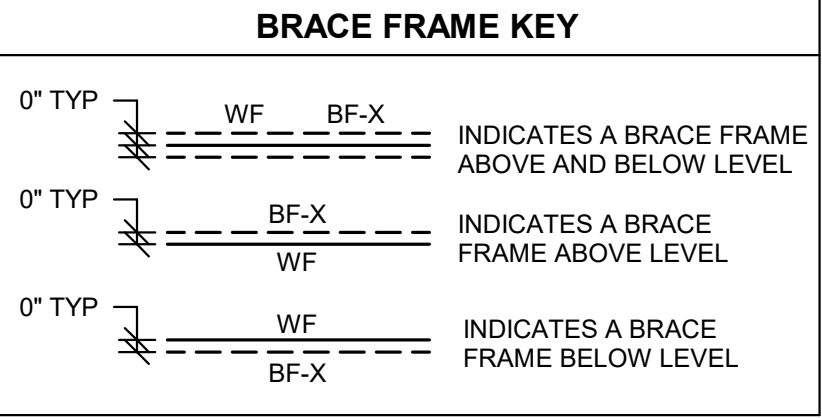
T INDICATES TOP REINFORCING TO MATCH BOTTOM REINFORCING

SPRAY FIREPROOFING NOTES:

STEEL COLUMNS SHOWN ON THIS DRAWING TO RECEIVE 2-HOUR FIRE RATING BY CEMENTITIOUS FIREPROOFING UNLESS INDICATED AS A ROUND HSS COLUMN. EXPOSED TO VIEW PORTION OF ROUND HSS COLUMNS TO RECEIVE 2-HOUR FIRE RATING BY INTUMESCENT MASTIC FIREPROOFING. CONCEALED FROM VIEW PORTION OF ROUND HSS COLUMN TO RECEIVE 2-HOUR FIRE RATING BY CEMENTITIOUS FIREPROOFING. COORDINATE WITH SPECIFICATIONS AND ARCHITECTURAL DRAWINGS FOR FIREPROOFING REQUIREMENTS.

CONCEALED FROM VIEW - BRACED FRAMES, SHOWN ON THIS DRAWING, TO RECEIVE 2-HOUR FIRE RATING BY INTUMESCENT MASTIC FIREPROOFING.

EXPOSED TO VIEW - BRACED FRAMES, SHOWN ON THIS DRAWING, TO RECEIVE 2-HOUR FIRE RATING BY CEMENTITIOUS FIREPROOFING.



DRA

Drummeys Rosane Anderson, Inc.
225 Oakland Road
Studio 205
South Windsor, CT 06074
Tel: 877.221.1100
www.dra.com

260 Charles Street
Studio 300
Waltham, MA 02453

Planning Architecture Interior

NORTHEAST
METRO TECH

100 Hemlock Rd.
Wakefield, MA 01880

EDG
Engineers Design Group Inc.
Structural Engineers
389 Main Street, Suite 401
Malden, MA 02148
(781)396-9007
EDG@EDGINC.COM

MSBA 60% CD
Submission

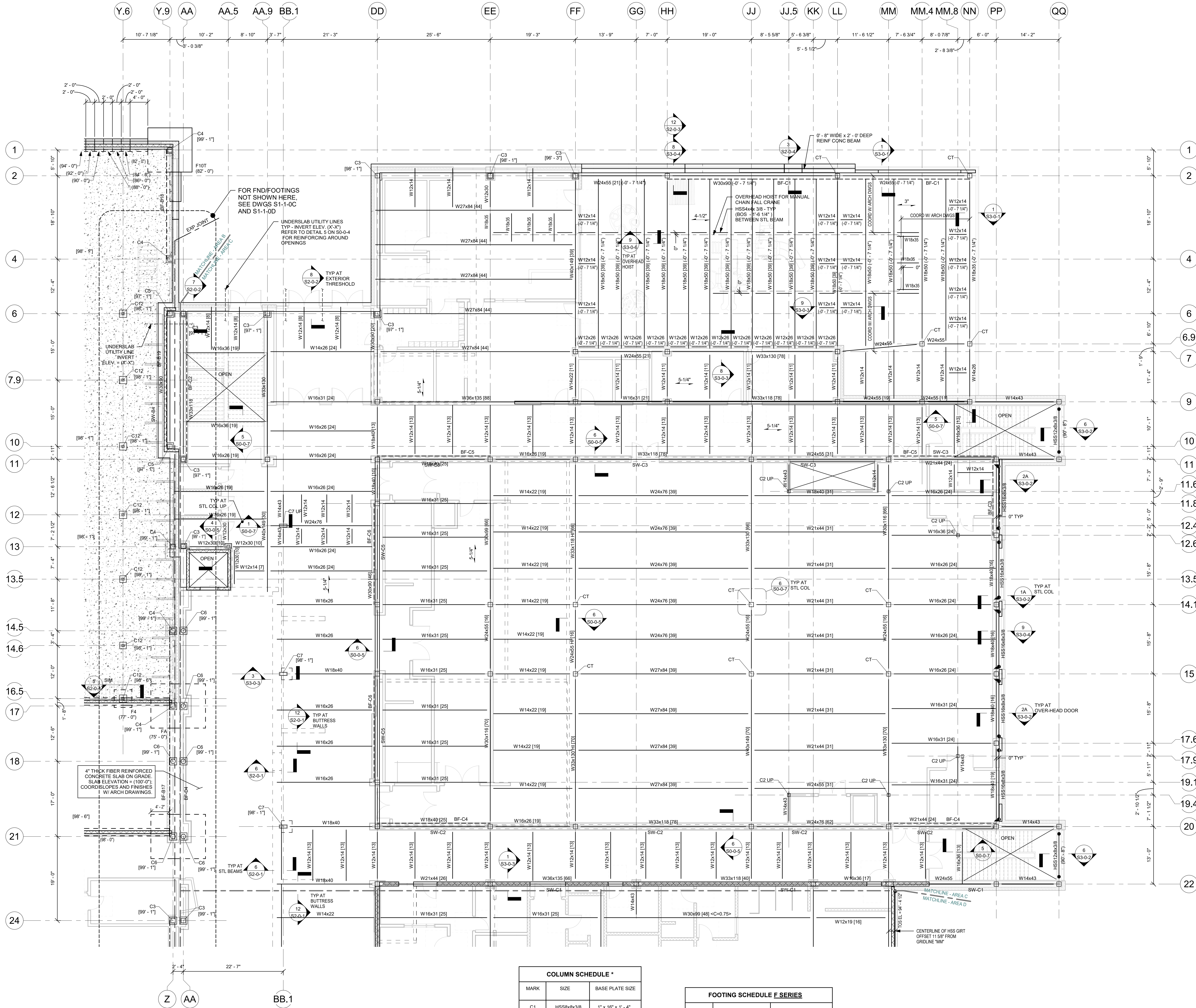
01/13/2023

KEY PLAN
PROJECT NORTH
MAGNETIC NORTH

FIRST FLOOR
FOUNDATION
PLAN - AREA B

Scale: 1/8" = 1'-0"
Job No.: 20202
Drawn By: EDG
Date: 01/13/2023

S1-1-1B



DRA

Drumsey Rosane Anderson, Inc.
225 Oakland Road
Studio 205
South Windsor, CT
06074

Planning Architects Interior
Tel: 877.221.1100
www.dra.com

NORTHEAST METRO TECH

100 Hemlock Rd,
Wakefield, MA 01880



Engineers Design Group Inc.
Structural Engineers
389 Main Street, Suite 401
Malden, MA 02148
(781)396-9007
EDG@EDGINC.COM

FRAMING NOTES:

- FOR GENERAL NOTES AND TYPICAL DETAILS SEE DRAWINGS S0-0.1, S0-0.2, S0-0.3, S0-0.4, S0-0.5, S0-0.6, S0-0.7 AND S0-0.8.
- REFER TO ARCHITECTURAL DRAWINGS FOR ELEVATIONS AND VERTICAL DIMENSIONS. PITCH ALL STEEL UNIFORMLY TO LOW POINTS AT THE COLUMNS AND BENT BEAMS AS SHOWN ON THE ARCHITECTURAL DRAWINGS.
- BF-1 ETC., INDICATES A BRACED BAY. REFER TO BRACED FRAME ELEVATIONS AND DETAILS ON DRAWINGS S4-0.1, S4-0.2, S4-0.3 AND S4-0.4 FOR ADDITIONAL INFORMATION.
- [XX] INDICATES THE NUMBER OF 3/4" DIAMETER x 4 x 1/4" LONG HEADED STUDS WELDED TO THE TOP FLANGE OF THE BEAM. SPACE STUDS EVENLY ALONG THE BEAM UNLESS NOTED OTHERWISE.
- INDICATES A MOMENT CONNECTION TO DEVELOP THE FULL CAPACITY OF THE MEMBER. REFER TO TYPICAL DETAILS 8 AND 9 ON DRAWING S0-0.5 AND DETAIL 3 ON DRAWING S0-0.7.
- INDICATES A 5/16" FILLET WELD ALL AROUND. (HSS BEAM TO HSS COLUMN) WHERE BEAM DIMENSIONS EXCEED COLUMN DIMENSIONS PROVIDE 1/2" THICK STEEL CAP PLATE TO ACHIEVE ALL AROUND WELD. REFER TO TYPICAL DETAIL 2 ON DRAWING S0-0.7.
- < X' > INDICATES UPWARD CAMBER AT THE MID-SPAN OF THE MEMBER.
- 5'-1/4" INDICATES SPAN DIRECTION OF 2" DEEP, 20 GAGE GALVANIZED COMPOSITE STEEL DECK WITH 3 1/4" LIGHT WEIGHT CONCRETE TOPPING. TOTAL THICKNESS = 5 1/4". REINFORCE WITH 6x6 - W2 1xW2.1 WWR.
- 1 1/2" INDICATES SPAN DIRECTION OF 1 1/2" DEEP, 20 GAGE TYPE 1, GALVANIZED STEEL ROOF DECK.
- 3" NCAS INDICATES SPAN DIRECTION OF 3" DEEP, 18/20 GAGE TYPE NCAS, GALVANIZED CELLULAR ACOUSTIC STEEL ROOF DECK.
- 6" INDICATES SPAN DIRECTION OF 3" DEEP, 16 GAGE GALVANIZED COMPOSITE STEEL DECK WITH 3" LIGHT WEIGHT CONCRETE TOPPING. TOTAL THICKNESS = 6". SEE TYPICAL DETAIL 4 ON DRAWING S0-0.4.
- FOR EXACT NUMBER, SIZE, AND LOCATION OF OPENING IN STEEL BEACING REFER TO MECHANICAL AND ARCHITECTURAL DRAWINGS. FOR FRAMING INFORMATION, REFER TO DETAIL 1 AND 8 ON DRAWING S0-0.6 AND DETAIL 1 ON DRAWING S0-0.5.
- HATCHED AREA INDICATES LOCATION OF CONCRETE SLAB WITH 2" DEEP, 18 GAGE GALVANIZED COMPOSITE STEEL DECK WITH 1 1/2" NORMAL WEIGHT CONCRETE TOPPING. TOTAL THICKNESS = 6". REINFORCE WITH 6x6 - W2 1xW2.1 WWR. REFER TO TYPICAL DETAIL 5 ON DRAWING S0-0.7 FOR ADDITIONAL INFORMATION. USE 3/4" DIA x 5' LONG HEADED STUDS.
- HATCHED AREA INDICATES LOCATION OF CONCRETE SLAB WITH 3" DEEP, 18/20 GAGE TYPE NCA, GALVANIZED CELLULAR ACOUSTIC STEEL DECK WITH 3 1/2" LIGHT WEIGHT CONCRETE TOPPING. TOTAL THICKNESS = 6 1/2". REINFORCE WITH 6x6 - W2 1xW2.1 WWR. REFER TO TYPICAL DETAIL 5 ON DRAWING S0-0.8 FOR ADDITIONAL INFORMATION. USE 3/4" DIA x 5' LONG HEADED STUDS.
- INDICATES A ROOF DRAIN. REFER TO TYPICAL STRUCTURAL DETAILS 1 AND 8 ON DRAWING S0-0.4 AND DETAIL 1 ON DRAWING S0-0.5 FOR DETAILING SUPPORT. REFER TO DETAIL 4 ON DRAWING S0-0.5 FOR CONNECTIONS TO STEEL BEAMS AND CONCRETE SLABS AT THE TOP OF WALL FOR NON-STRUCTURAL WALLS. REFER TO RELEVANT SECTIONS FOR CONNECTIONS OF SHEAR WALLS TO THE STRUCTURE.
- CT INDICATES A COLUMN TERMINATES AT THIS LEVEL.
- WF INDICATES A BEND IN THE STEEL BEAM. REFER TO TYPICAL DETAIL 8 ON DRAWING S0-0.5.
- INDICATES A CMU WALL. REFER TO TYPICAL DETAIL 3 ON DRAWING S0-0.4 FOR REINFORCEMENT AND DETAIL 4 ON DRAWING S0-0.4 FOR CONNECTIONS TO STEEL BEAMS AND CONCRETE SLABS AT THE TOP OF WALL FOR NON-STRUCTURAL WALLS. REFER TO RELEVANT SECTIONS FOR CONNECTIONS OF SHEAR WALLS TO THE STRUCTURE.
- INDICATES AN INSULATED STRUCTURAL PRECAST CONCRETE WALL. COORDINATE WITH ARCHITECTURAL DRAWING.
- 1 1/2" BCA INDICATES SPAN DIRECTION OF 1 1/2" DEEP, 18/20 GAGE TYPE BCA, GALVANIZED CELLULAR ACOUSTICAL STEEL ROOF DECK.
- 10' x 2" PC PLANK INDICATES SPAN OF 10' DEEP PRESTRESSED, PRECAST CONCRETE HOLLOW CORE PLANK WITH A MINIMUM 2" OF NORMAL WEIGHT CONCRETE TOPPING. PLANK AND CONCRETE TOPPING SLAB TO BE DESIGNED TO SUPPORT A MINIMUM LIVE LOAD CAPACITY OF 150 PSF. PRECAST CONCRETE PLANK TO BE DESIGNED FOR MINIMUM OF 2 HOUR FIRE RATING.
- FOR DIMENSIONS AND ELEVATIONS NOT GIVEN REFER TO ARCHITECTURAL DRAWINGS.
- INDICATES A SPLICE CONNECTION ALONG A CONTINUOUS STEEL BEAM. BEAM DESIGN SPLICE CONNECTION FOR FULL CAPACITY OF STEEL BEAM.

COLUMN SCHEDULE *		
MARK	SIZE	BASE PLATE SIZE
C1	HSS8x8x3/8	1' x 16' x 1' - 4"
C2	HSS8x8x1/2	1' x 16' x 1' - 4"
C3	HSS12x12x3/8	1' x 20' x 1' - 8"
C4	HSS12x12x1/2	1' x 20' x 1' - 8"
C5	HSS12x12x5/8	1' x 20' x 1' - 8"
C6	HSS12.75x500	1' x 20' x 1' - 8"
C7	HSS20x12x1/2	1 1/2' x 20' x 2' - 4"
C8	HSS8x4x3/8	1' x 16' x 1' - 0"
C9	HSS18x0.500	1 1/2' x 24' x 2' - 0"
C10	HSS12x6x1/2	1 1/2' x 20' x 1' - 2"
C11	HSS18x0.500	1' x 18' x 1' - 6"
C12	HSS6x6x3/8	1' x 14' x 1' - 2"

* BASE PLATE LENGTH AND WIDTH SPECIFIED IN SCHEDULE IS THE MINIMUM SIZE FOR A COLUMN THAT IS PART OF A BRACED FRAME. SEE FOUNDATION NOTE ABOVE AND REFER TO DETAILS ON DRAWING S4-0.2 FOR ADDITIONAL INFORMATION.

* PROVIDE 4 - 1" DIA F1554-5551 ANCHOR RODS TYPICALLY. REFER TO DETAILS ON DRAWING S4-0.3 FOR ADDITIONAL ANCHOR RODS FOR COLUMN RECEIVING BRACING.

FOOTING SCHEDULE F SERIES

MARK	SIZE	REINFORCEMENT
F4	4' - 0" x 4' - 0" x 2' - 0"	6 - #5 BOT EA WAY
F5	5' - 0" x 5' - 0" x 2' - 0"	7 - #5 BOT EA WAY
F6	6' - 0" x 6' - 0" x 2' - 6"	8 - #5 BOT EA WAY
F7	7' - 0" x 7' - 0" x 2' - 6"	9 - #5 BOT EA WAY
F8	8' - 0" x 8' - 0" x 3' - 0"	10 - #8 BOT EA WAY
F9	9' - 0" x 9' - 0" x 3' - 0"	11 - #9 BOT EA WAY
F10	10' - 0" x 10' - 0" x 3' - 6"	12 - #9 BOT EA WAY
F11	11' - 0" x 11' - 0" x 3' - 6"	13 - #10 BOT EA WAY
F12	12' - 0" x 12' - 0" x 4' - 0"	14 - #10 BOT EA WAY
FA	SEE PLAN x 2' - 0"	#8 @ 12"OC TOP AND BOT EA WAY

T INDICATES TOP REINFORCING TO MATCH BOTTOM REINFORCING

BRACE FRAME KEY

0" TYP	WF	BF-X	INDICATES A BRACE FRAME ABOVE AND BELOW LEVEL
0" TYP	BF-X	WF	INDICATES A BRACE FRAME ABOVE LEVEL
0" TYP	WF	BF-X	INDICATES A BRACE FRAME BELOW LEVEL

SPRAY FIREPROOFING NOTES:
STEEL COLUMNS SHOWN ON THIS DRAWING TO RECEIVE 2-HOUR FIRE RATING BY CEMENTITIOUS FIREPROOFING UNLESS INDICATED AS A ROUND HSS COLUMN. EXPOSED TO VIEW PORTION OF ROUND HSS COLUMNS TO RECEIVE 2-HOUR FIRE RATING BY INTUMESCENT MASTIC FIREPROOFING. CONCEALED FROM VIEW PORTION OF ROUND HSS COLUMNS TO RECEIVE 2-HOUR FIRE RATING BY CEMENTITIOUS FIREPROOFING. COORDINATE WITH SPECIFICATIONS AND ARCHITECTURAL DRAWINGS FOR FIREPROOFING REQUIREMENTS.
Concealed from View - BRACED FRAMES, SHOWN ON THIS DRAWING, TO RECEIVE 2-HOUR FIRE RATING BY INTUMESCENT MASTIC FIREPROOFING.
Exposed to View - BRACED FRAMES, SHOWN ON THIS DRAWING, TO RECEIVE 2-HOUR FIRE RATING BY INTUMESCENT MASTIC FIREPROOFING.

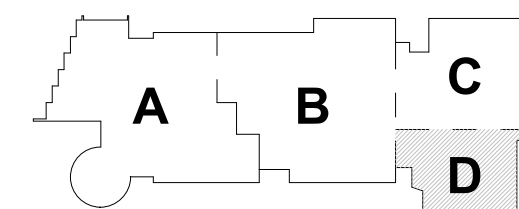
FRAMING ELEVATION NOTES:

- TYPICAL UNDERSIDE OF DECK ELEVATION = (89' - 6 3/4") AT THE FIRST FLOOR LEVEL. IN THE AREA COVERED BY GRIDS (BB) - (MM) AND (19) - (25), UNLESS NOTED OTHERWISE AS (< X' - X' >), (< X' - X' >), OR HILLO.
- FRAMING ELEVATIONS ARE BASED ON TOP-OF-FLOOR ELEVATION, (100' - 0"), SHOWN ON THE ARCHITECTURAL DRAWINGS.
- COORDINATE ALL ELEVATIONS WITH ARCHITECTURAL DRAWINGS.
- SLOPE STEEL UNIFORMLY TO COLUMN ELEVATIONS SHOWN ON PLANS.

© COPYRIGHT 2021 DRUMSEY ROSANE ANDERSON, INC.

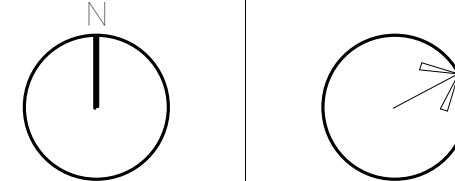
MSBA 60% CD
Submission

01/13/2023



KEY PLAN

PROJECT NORTH MAGNETIC NORTH



FIRST FLOOR FOUNDATION PLAN - AREA D

Scale: 1/8" = 1'-0"

Job No.: 20202

Drawn By: EDG

Date: 01/13/2023

S1-1-1D

DRA

Drumme Rosane Anderson, Inc.
225 Oakland Road
Studio 205
South Windsor, CT 06074
260 Charles Street
Studio 300
Waltham, MA 02453
Planning Architecture Interior
Tel: 817.251.1100
www.dra.com

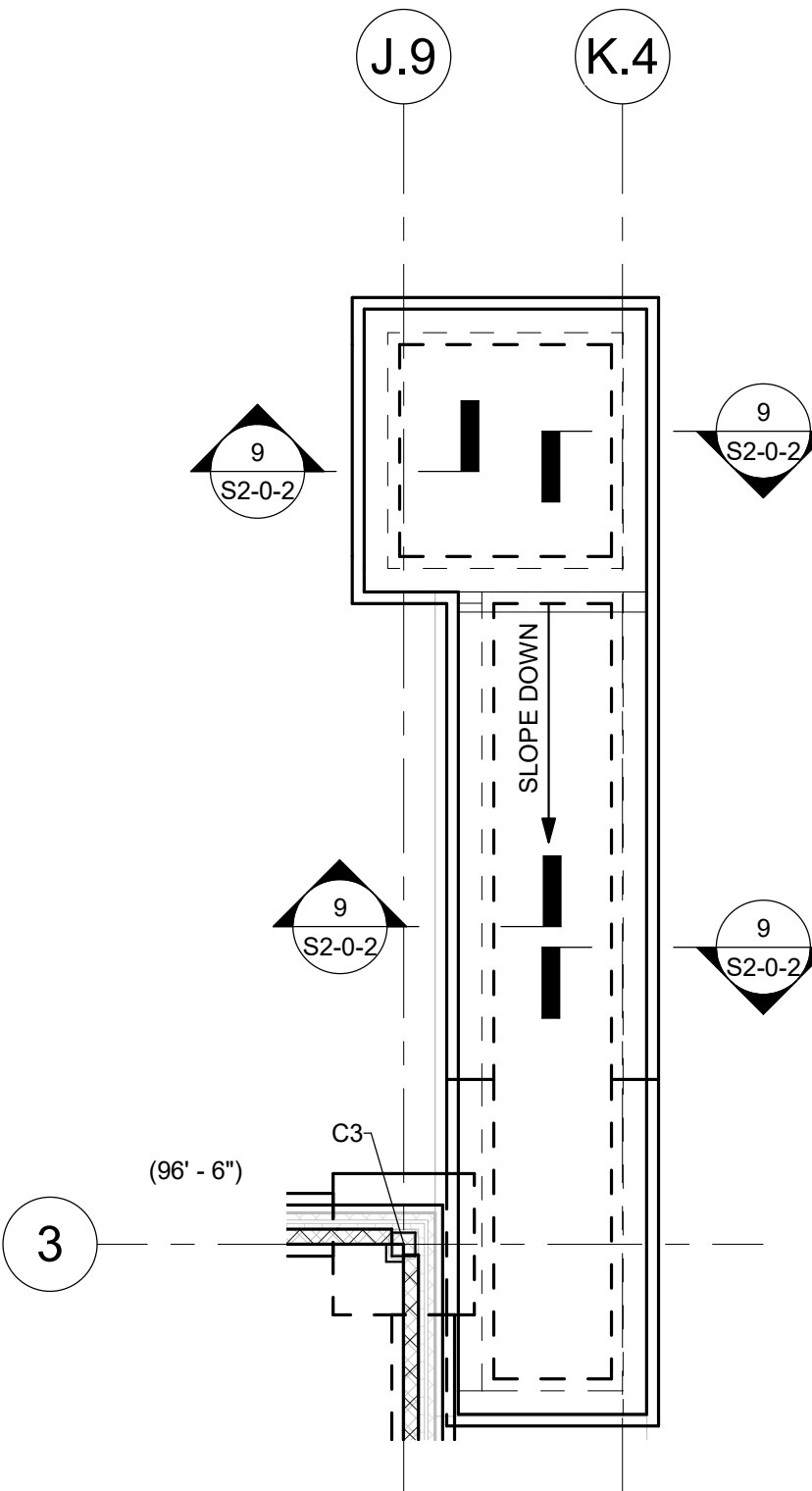
NORTHEAST METRO TECH

100 Hemlock Rd,
Wakefield, MA 01880

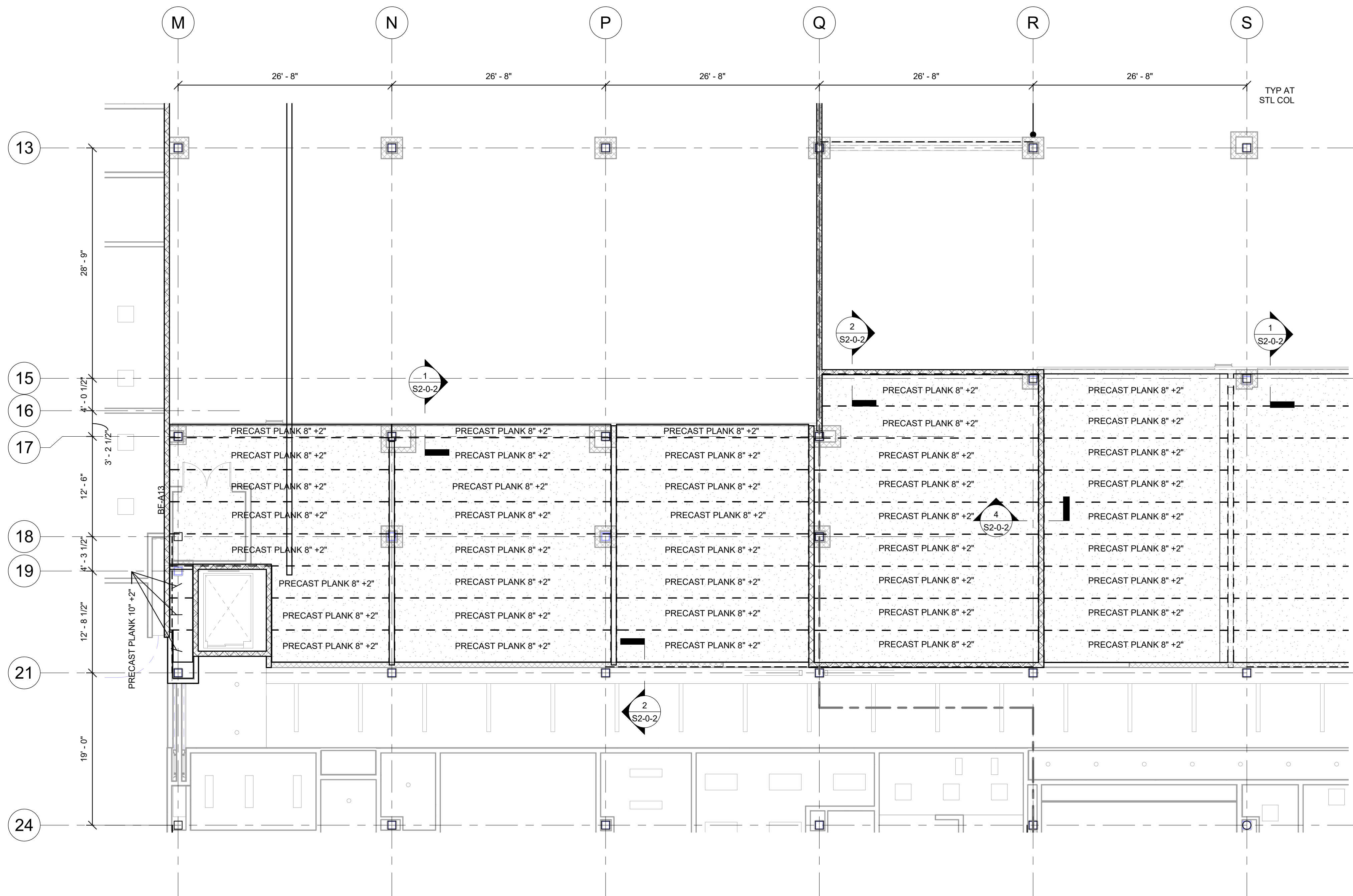
EDG
Engineers Design Group Inc.
Structural Engineers
389 Main Street, Suite 401
Malden, MA 02148
(781)396-9007
EDG@EDGINC.COM

FRAMING NOTES:

- FOR GENERAL NOTES AND TYPICAL DETAILS SEE DRAWINGS S0-0-1, S0-0-2, S0-0-3, S0-0-4, S0-0-5, S0-0-6, S0-0-7 AND S0-0-8.
- REFER TO ARCHITECTURAL DRAWINGS FOR ELEVATIONS AND VERTICAL DIMENSIONS. FITCH ALL STEEL UNIFORMLY TO LOW POINTS AT THE COLUMNS AND BENT BEAMS AS SHOWN ON THE ARCHITECTURAL DRAWINGS.
- 8" ETC. INDICATES A BRACED BAY. REFER TO BRACED FRAME ELEVATIONS AND DETAILS ON DRAWINGS S4-0-1, S4-0-2, S4-0-3 AND S4-0-4 FOR ADDITIONAL INFORMATION.
- [X] INDICATES THE NUMBER OF 3/4" DIAMETER x 4 1/4" LONG HEADED STUDS WELDED TO THE TOP FLANGE OF THE BEAM. SPACE STUDS EVENLY ALONG THE BEAM UNLESS NOTED OTHERWISE.
- INDICATES A MOMENT CONNECTION TO DEVELOP THE FULL CAPACITY OF THE MEMBER. REFER TO TYPICAL DETAILS 8 AND 9 ON DRAWING S0-0-5 AND DETAIL 3 ON DRAWING S0-0-7.
- INDICATES A 5/16" FILLET WELD ALL AROUND (HSS BEAM TO HSS COLUMN) WHERE BEAM DIMENSIONS EXCEED COLUMN DIMENSIONS PROVIDE 1/2" THICK STEEL CAP PLATE TO ACHIEVE ALL AROUND WELD. REFER TO TYPICAL DETAIL 2 ON DRAWING S0-0-7.
- < X' > INDICATES UPWARD CAMBER AT THE MID-SPAN OF THE MEMBER.
- 5-1/4" INDICATES SPAN DIRECTION OF 2" DEEP, 20 GAGE GALVANIZED COMPOSITE STEEL DECK WITH 5 1/4" LIGHT WEIGHT CONCRETE TOPPING. TOTAL THICKNESS = 5 1/4". REINFORCE WITH 6#6 - W2.1XW2.1 WWR.
- 1 1/2" INDICATES SPAN DIRECTION OF 1 1/2" DEEP, 20 GAGE TYPE B, GALVANIZED STEEL ROOF DECK.
- 3" NCAS INDICATES SPAN DIRECTION OF 3" DEEP, 18/20 GAGE TYPE NCAS, GALVANIZED CELLULAR ACOUSTIC STEEL ROOF DECK.
- 6" INDICATES SPAN DIRECTION OF 3" DEEP, 16 GAGE GALVANIZED COMPOSITE STEEL DECK WITH 3" LIGHT WEIGHT CONCRETE TOPPING. TOTAL THICKNESS = 6". SEE TYPICAL DETAIL 4 ON DRAWING S0-0-8.
- FOR EXACT NUMBER, SIZE, AND LOCATION OF OPENING IN STEEL DECKING REFER TO MECHANICAL AND ARCHITECTURAL DRAWINGS. FOR FRAMING INFORMATION, REFER TO DETAIL 1 AND 8 ON DRAWING S0-0-8 AND DETAIL 1 ON DRAWING S0-0-8.
- 6" HATCHED AREA INDICATES LOCATION OF CONCRETE SLAB WITH 2" DEEP, 18 GAGE GALVANIZED COMPOSITE STEEL DECK WITH 4" NORMAL WEIGHT CONCRETE TOPPING. TOTAL THICKNESS = 6". REINFORCE WITH 6#6 - W2.1XW2.1 WWR. REFER TO TYPICAL DETAIL 5 ON DRAWING S0-0-7 FOR ADDITIONAL INFORMATION. USE 3/4" DIA x 5' LONG HEADED STUDS.
- 8 1/2" NCA HATCHED AREA INDICATES LOCATION OF CONCRETE SLAB WITH 3" DEEP, 18/20 GAGE TYPE NCA, GALVANIZED CELLULAR ACOUSTIC STEEL DECK WITH 3 1/2" LIGHT WEIGHT CONCRETE TOPPING. TOTAL THICKNESS = 8 1/2". REINFORCE WITH 6#6 - W2.1XW2.1 WWR. REFER TO TYPICAL DETAIL 5 ON DRAWING S0-0-8 FOR ADDITIONAL INFORMATION. USE 3/4" DIA x 5' LONG HEADED STUDS.
- INDICATES A ROOF DRAIN. REFER TO TYPICAL STRUCTURAL DETAILS 1 AND 8 ON DRAWING S0-0-8 AND DETAIL 1 ON DRAWING S0-0-8. FOR DECKING SUPPORT, REFER TO DETAIL 4 ON DRAWING S0-0-5. REFER TO PLUMBING AND ARCHITECTURAL DRAWINGS FOR OPENING SIZES AND LOCATIONS.
- CT INDICATES A COLUMN TERMINATES AT THIS LEVEL.
- WF INDICATES A BEND IN THE STEEL BEAM. REFER TO TYPICAL DETAIL 8 ON DRAWING S0-0-8.
- INDICATES A CMU WALL. REFER TO TYPICAL DETAIL 3 ON DRAWING S0-0-4 FOR REINFORCEMENT AND DETAIL 4 ON DRAWING S0-0-4 FOR CONNECTIONS TO STEEL BEAMS AND CONCRETE SLABS AT THE TOP OF WALL FOR NON-STRUCTURAL WALLS. REFER TO RELEVANT SECTIONS FOR CONNECTIONS OF SHEAR WALLS TO THE STRUCTURE.
- INDICATES AN INSULATED STRUCTURAL PRECAST CONCRETE WALL. COORDINATE WITH ARCHITECTURAL DRAWING.
- 1 1/2" BCA INDICATES SPAN DIRECTION OF 1 1/2" DEEP, 18/20 GAGE TYPE BCA, GALVANIZED CELLULAR ACOUSTICAL STEEL ROOF DECK.
- 10' x 2" PC PLANK INDICATES SPAN OF 10' DEEP PRESTRESSED, PRECAST CONCRETE HOLLOW CORE PLANK WITH A MINIMUM 2" OF NORMAL WEIGHT CONCRETE TOPPING. PLANK AND CONCRETE TOPPING SLAB TO BE DESIGNED TO SUPPORT A MINIMUM LIVE LOAD CAPACITY OF 150 PSF. PRECAST CONCRETE PLANK TO BE DESIGNED FOR MINIMUM OF 2 HOUR FIRE RATING.
- FOR DIMENSIONS AND ELEVATIONS NOT GIVEN REFER TO ARCHITECTURAL DRAWINGS.
- WF INDICATES A SPLICE CONNECTION ALONG A CONTINUOUS STEEL BEAM. DESIGN SPLICE CONNECTION FOR FULL CAPACITY OF STEEL BEAM.



LOADING DOCK PART PLAN



FRAMING ELEVATION NOTES:

- TYPICAL TOP-OF-CONCRETE ELEVATION = (10' - 8") AT THE MEZZANINE FLOOR LEVEL. IN THE AREA BOUNDED BY GRIDS (M) - (S) AND (11) - (16).
- COORDINATE ALL ELEVATIONS WITH ARCHITECTURAL DRAWINGS.

SPRAY FIREPROOFING NOTES:

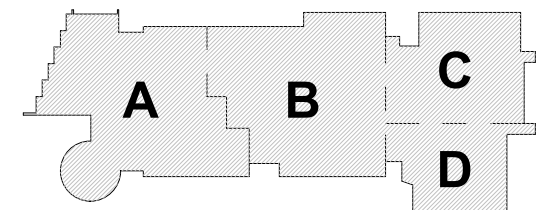
STEEL COLUMNS SHOWN ON THIS DRAWING TO RECEIVE 2-HOUR FIRE RATING BY CEMENTITIOUS FIREPROOFING UNLESS INDICATED AS A ROUND HSS COLUMN. EXPOSED TO VIEW PORTION OF ROUND HSS COLUMNS TO RECEIVE 2-HOUR FIRE RATING BY INTUMESCENT MASTIC FIREPROOFING. CONCEALED FROM VIEW PORTION OF ROUND HSS COLUMNS TO RECEIVE 2-HOUR FIRE RATING BY CEMENTITIOUS FIREPROOFING. COORDINATE WITH SPECIFICATIONS AND ARCHITECTURAL DRAWINGS FOR FIREPROOFING REQUIREMENTS.

CONCEALED FROM VIEW - BRACED FRAMES, SHOWN ON THIS DRAWING, TO RECEIVE 2-HOUR FIRE RATING BY CEMENTITIOUS FIREPROOFING.

EXPOSED TO VIEW - BRACED FRAMES, SHOWN ON THIS DRAWING, TO RECEIVE 2-HOUR FIRE RATING BY INTUMESCENT MASTIC FIREPROOFING.

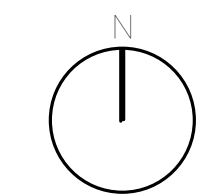
MSBA 60% CD
Submission

01/13/2023

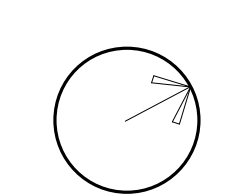


KEY PLAN

PROJECT NORTH



MAGNETIC NORTH



MEZZANINE FLOOR FRAMING - AREA A

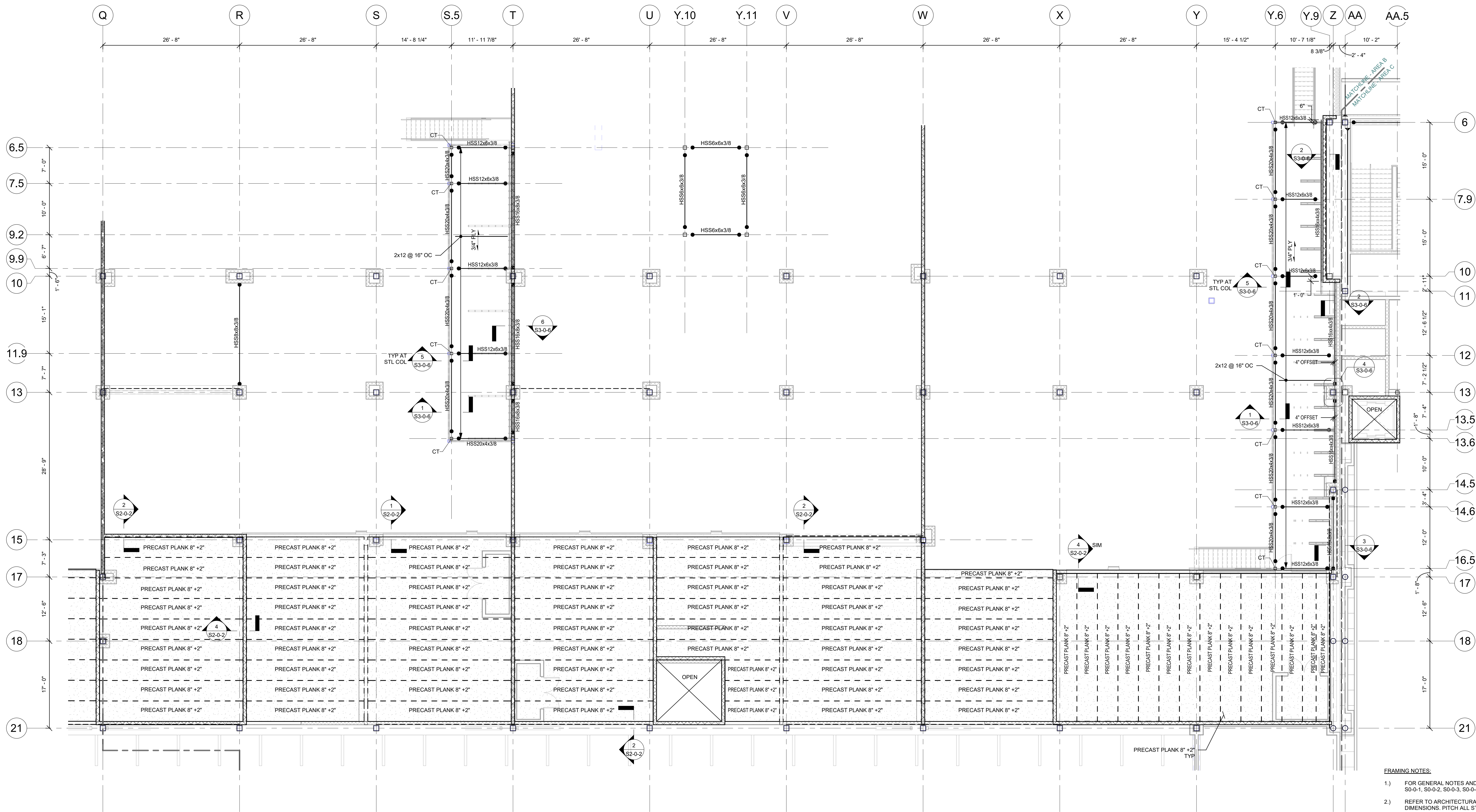
Scale: 1/8" = 1'-0"

Job No.: 20202

Drawn By: EDG

Date: 01/13/2023

S1-1-1MA



FRAMING ELEVATION NOTES:

- 1) TYPICAL TOP-OF-CONCRETE ELEVATION = (108' - 8") AT THE MEZZANINE FLOOR LEVEL, IN THE AREA BOUNDED BY GRIDS (Q) - (Z) AND (11) - (18).
- 2) TYPICAL TOP-OF-STEEL ELEVATION = (108' - 8") AT THE MEZZANINE FLOOR LEVEL, IN THE AREA BOUNDED BY GRIDS (EDG 8.9) - (17) AND (5.2) - (EDG 8.13).
- 3) TYPICAL TOP-OF-STEEL ELEVATION = (108' - 8") AT THE MEZZANINE FLOOR LEVEL, IN THE AREA BOUNDED BY GRIDS (EDG Y.6) - (Z) AND (5.2) - (12).
- 4) COORDINATE ALL ELEVATIONS WITH ARCHITECTURAL DRAWINGS.

SPRAY FIREPROOFING NOTES:

STEEL COLUMNS SHOWN ON THIS DRAWING TO RECEIVE 2-HOUR FIRE RATING BY CEMENTITIOUS FIREPROOFING UNLESS INDICATED AS A ROUND HSS COLUMN, EXPOSED TO VIEW PORTION OF ROUND HSS COLUMNS TO RECEIVE 2-HOUR FIRE RATING BY INTUMESCENT MASTIC FIREPROOFING. CONCEALED FROM VIEW PORTION OF ROUND HSS COLUMN TO RECEIVE 2-HOUR FIRE RATING BY CEMENTITIOUS FIREPROOFING. COORDINATE WITH SPECIFICATIONS AND ARCHITECTURAL DRAWINGS FOR FIREPROOFING REQUIREMENTS.

CONCEALED FROM VIEW - BRACED FRAMES, SHOWN ON THIS DRAWING, TO RECEIVE 2-HOUR FIRE RATING BY CEMENTITIOUS FIREPROOFING.

EXPOSED TO VIEW - BRACED FRAMES, SHOWN ON THIS DRAWING, TO RECEIVE 2-HOUR FIRE RATING BY INTUMESCENT MASTIC FIREPROOFING.

- FRAMING NOTES:**
- 1) FOR GENERAL NOTES AND TYPICAL DETAILS SEE DRAWINGS S0-0-1, S0-0-2, S0-0-3, S0-0-4, S0-0-5, S0-0-6, S0-0-7 AND S0-0-8.
 - 2) REFER TO ARCHITECTURAL DRAWINGS FOR ELEVATIONS AND VERTICAL DIMENSIONS. RITCH ALL STEEL UNIFORMLY TO LOW POINTS AT THE COLUMNS AND BENT BEAMS AS SHOWN ON THE ARCHITECTURAL DRAWINGS.
 - 3) BF-1 ETC. INDICATES A BRACED BAY. REFER TO BRACED FRAME ELEVATIONS AND DETAILS ON DRAWINGS S4-0-1, S4-0-2, S4-0-3 AND S4-0-4 FOR ADDITIONAL INFORMATION.
 - 4) [XX] INDICATES THE NUMBER OF 3/4" DIAMETER x 4 1/4" LONG HEADED STUDS WELDED TO THE TOP FLANGE OF THE BEAM. SPACE STUDS EVENLY ALONG THE BEAM UNLESS NOTED OTHERWISE.
 - 5) INDICATES A MOMENT CONNECTION TO DEVELOP THE FULL CAPACITY OF THE MEMBER. REFER TO TYPICAL DETAILS 8 AND 9 ON DRAWING S0-0-5 AND DETAIL 3 ON DRAWING S0-0-7.
 - 6) INDICATES A 6/16" FILLET WELD ALL AROUND. (HSS BEAM TO HSS COLUMN) WHERE BEAM DIMENSIONS EXCEED COLUMN DIMENSIONS PROVIDE 1/2" THICK STEEL CAP PLATE TO ACHIEVE ALL AROUND WELD. REFER TO TYPICAL DETAIL 2 ON DRAWING S0-0-7.
 - 7) < X > INDICATES UPWARD CAMBER AT THE MID-SPAN OF THE MEMBER.
 - 8) INDICATES SPAN DIRECTION OF 2" DEEP, 20 GAUGE GALVANIZED COMPOSITE STEEL DECK WITH 3 1/4" LIGHT WEIGHT CONCRETE TOPPING. TOTAL THICKNESS = 5 1/4". REINFORCE WITH 6#6 - W2 (W2-1) WWR. REFER TO TYPICAL DETAIL 5 ON DRAWING S0-0-7.
 - 9) INDICATES SPAN DIRECTION OF 1 1/2" DEEP, 20 GAUGE TYPE B, GALVANIZED STEEL ROOF DECK.
 - 10) INDICATES SPAN DIRECTION OF 3" DEEP, 18/20 GAUGE TYPE NCAS, GALVANIZED CELLULAR ACOUSTIC STEEL ROOF DECK.
 - 11) INDICATES SPAN DIRECTION OF 3" DEEP, 16 GAUGE GALVANIZED COMPOSITE STEEL DECK WITH 3" LIGHT WEIGHT CONCRETE TOPPING. TOTAL THICKNESS = 6". SEE TYPICAL DETAIL 4 ON DRAWING S0-0-8.
 - 12) FOR EXACT NUMBER, SIZE, AND LOCATION OF OPENING IN STEEL DECKING REFER TO MECHANICAL AND ARCHITECTURAL DRAWINGS. FOR FRAMING INFORMATION REFER TO DETAIL 1 AND 8 ON DRAWING S0-0-6 AND DETAIL 1 ON DRAWING S0-0-8.
 - 13) HATCHED AREA INDICATES LOCATION OF CONCRETE SLAB WITH 2" DEEP, 18 GAUGE GALVANIZED COMPOSITE STEEL DECK WITH 3 1/4" NORMAL WEIGHT CONCRETE TOPPING. TOTAL THICKNESS = 6". REINFORCE WITH 6#6 - W2 (W2-1) WWR. REFER TO TYPICAL DETAIL 5 ON DRAWING S0-0-7 FOR ADDITIONAL INFORMATION. USE 3/4" DIA x 6" LONG HEADED STUDS.
 - 14) HATCHED AREA INDICATES LOCATION OF CONCRETE SLAB WITH 3" DEEP, 18/20 GAUGE TYPE NCA, GALVANIZED CELLULAR ACOUSTIC STEEL DECK WITH 3 1/2" LIGHT WEIGHT CONCRETE TOPPING. TOTAL THICKNESS = 6 1/2". REINFORCE WITH 6#6 - W2 (W2-1) WWR. REFER TO TYPICAL DETAIL 5 ON DRAWING S0-0-8 FOR ADDITIONAL INFORMATION. USE 3/4" DIA x 5" LONG HEADED STUDS.
 - 15) INDICATES A ROOF DRAIN. REFER TO TYPICAL STRUCTURAL DETAILS 1 AND 8 ON DRAWING S0-0-6 AND DETAIL 1 ON DRAWING S0-0-8 FOR DECKING SUPPORT. REFER TO DETAIL 4 ON DRAWING S0-0-8 FOR CONNECTIONS TO STEEL BEAMS AND CONCRETE SLABS AT THE TOP OF WALL FOR NON-STRUCTURAL WALLS. REFER TO RELEVANT SECTIONS FOR OPENING SIZES AND LOCATIONS.
 - 16) CT INDICATES A COLUMN TERMINATES AT THIS LEVEL.
 - 17) INDICATES A BEND IN THE STEEL BEAM. REFER TO TYPICAL DETAIL 8 ON DRAWING S0-0-8.
 - 18) INDICATES A CMU WALL. REFER TO TYPICAL DETAIL 3 ON DRAWING S0-0-4 FOR REINFORCEMENT AND DETAIL 4 ON DRAWING S0-0-6 FOR CONNECTIONS TO STEEL BEAMS AND CONCRETE SLABS AT THE TOP OF WALL FOR NON-STRUCTURAL WALLS. REFER TO RELEVANT SECTIONS FOR CONNECTIONS OF SHEAR WALLS TO THE STRUCTURE.
 - 19) INDICATES AN INSULATED STRUCTURAL PRECAST CONCRETE WALL. COORDINATE WITH ARCHITECTURAL DRAWING.
 - 20) INDICATES SPAN DIRECTION OF 1 1/2" DEEP, 18/20 GAUGE TYPE BCA, GALVANIZED CELLULAR ACOUSTICAL STEEL ROOF DECK.
 - 21) HOLLOW CORE PLANK INDICATES SPAN OF 10" DEEP PRESTRESSED, PRECAST CONCRETE TOPPING. PLANK AND CONCRETE TOPPING SLAB TO BE DESIGNED TO SUPPORT A MINIMUM LIVE LOAD CAPACITY OF 120 PSF. PRECAST CONCRETE PLANK TO BE DESIGNED FOR MINIMUM OF 2-HOUR FIRE RATING.
 - 22) FOR DIMENSIONS AND ELEVATIONS NOT GIVEN REFER TO ARCHITECTURAL DRAWINGS.
 - 23) INDICATES A SPLICE CONNECTION ALONG A CONTINUOUS STEEL BEAM. DESIGN SPLICE CONNECTION FOR FULL CAPACITY OF STEEL BEAM.

**NORTHEAST
METRO TECH**

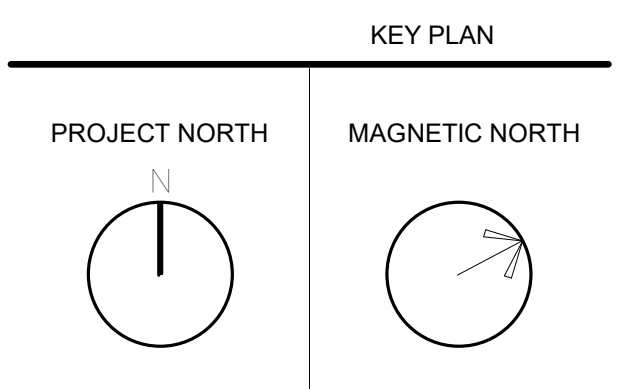
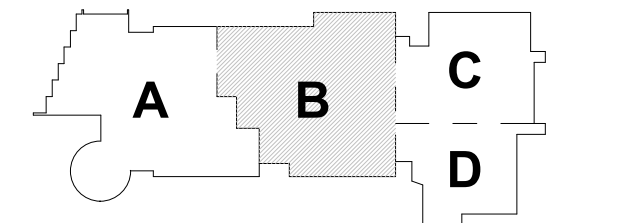
100 Hemlock Rd.
Wakefield, MA 01880

EDG

Engineers Design Group Inc.
Structural Engineers
389 Main Street, Suite 401
Malden, MA 02148
(781)396-9007
EDG@EDGINC.COM

MSBA 60% CD
Submission

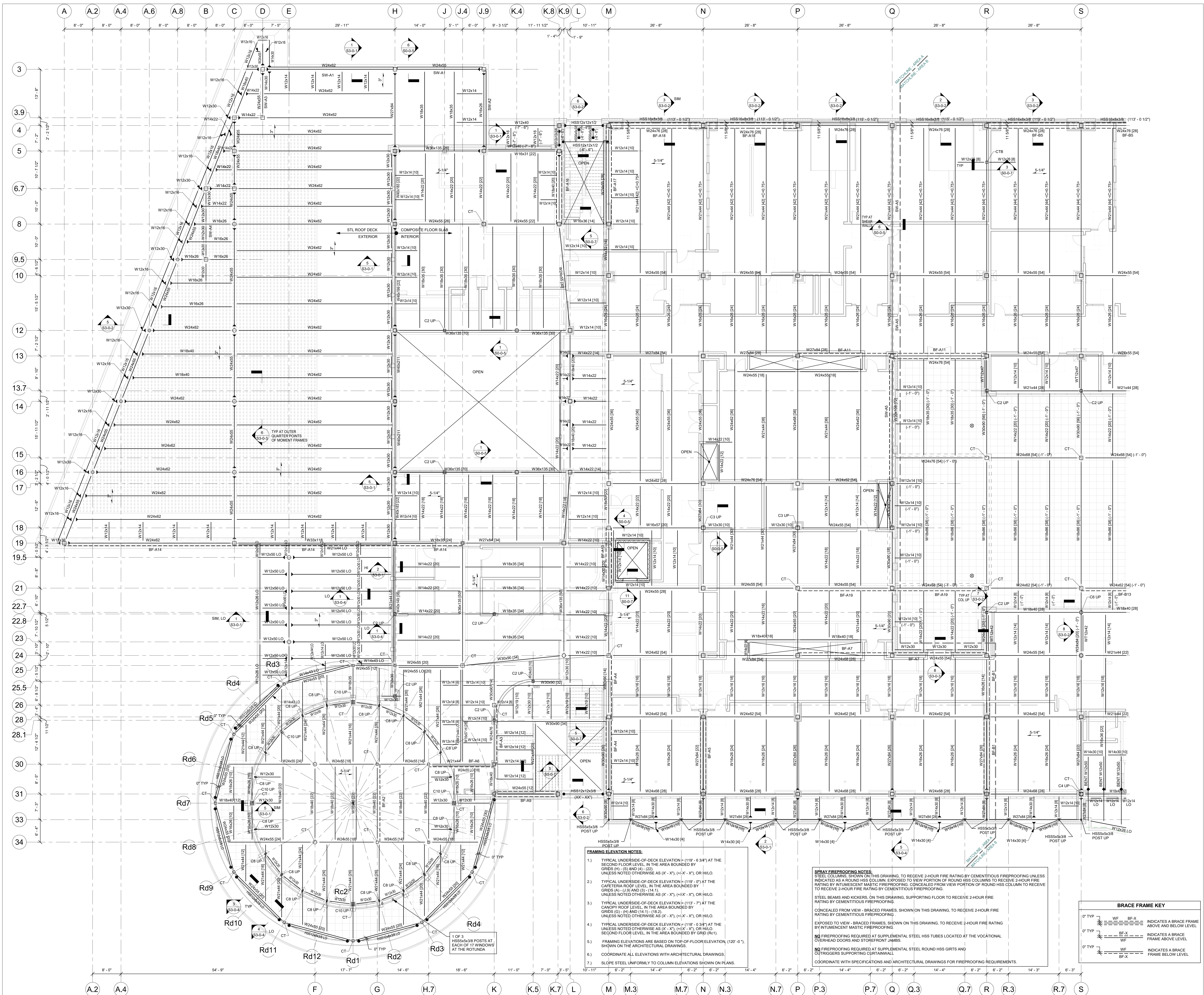
01/13/2023



**MEZZANINE
FLOOR
FRAMING- AREA
B**

Scale: 1/8" = 1'-0"
Job No.: 20202
Drawn By: EDG
Date: 01/13/2023

S1-1-1MB



FRAMING ELEVATION NOTES:

1. TYPICAL UNDERSIDE-OF-DECK ELEVATION = (119' - 6 3/4") AT THE SECOND FLOOR LEVEL, IN THE AREA BOUNDED BY GRIDS (H) - (S) AND (4) - (22). UNLESS NOTED OTHERWISE AS (X' - X'), (Y' - Y'), OR H.L.O.
2. TYPICAL UNDERSIDE-OF-DECK ELEVATION = (119' - 0") AT THE CAFETERIA ROOF LEVEL, IN THE AREA BOUNDED BY GRIDS (A) - (U) AND (3) - (14). UNLESS NOTED OTHERWISE AS (X' - X'), (Y' - Y'), OR H.L.O.
3. TYPICAL UNDERSIDE-OF-DECK ELEVATION = (113' - 7") AT THE CANOPY ROOF LEVEL, IN THE AREA BOUNDED BY GRIDS (S) - (N) AND (14) - (18.2). UNLESS NOTED OTHERWISE AS (X' - X'), (Y' - Y'), OR H.L.O.
4. TYPICAL UNDERSIDE-OF-DECK ELEVATION = (118' - 0 3/4") AT THE UNLESS NOTED OTHERWISE AS (X' - X'), (Y' - Y'), OR H.L.O.
5. FRAMING ELEVATIONS ARE BASED ON TOP-OF-FLOOR ELEVATION, (120' - 0"), SHOWN ON THE ARCHITECTURAL DRAWINGS.
6. COORDINATE ALL ELEVATIONS WITH ARCHITECTURAL DRAWINGS.
7. SLOPE STEEL UNIFORMLY TO COLUMN ELEVATIONS SHOWN ON PLANS.

SPRAY FIREPROOFING NOTES:

STEEL COLUMNS, SHOWN ON THIS DRAWING, TO RECEIVE 2-HOUR FIRE RATING BY CEMENTITIOUS FIREPROOFING UNLESS INDICATED AS A ROUND HSS COLUMN, EXPOSED TO VIEW PORTION OF ROUND HSS COLUMNS TO RECEIVE 2-HOUR FIRE RATING BY INTUMESCENT MASTIC FIREPROOFING. CONCEALED FROM VIEW PORTION OF ROUND HSS COLUMN TO RECEIVE TO RECEIVE 2-HOUR FIRE RATING BY CEMENTITIOUS FIREPROOFING.

STEEL BEAMS AND KICKERS, ON THIS DRAWING, SUPPORTING FLOOR TO RECEIVE 2-HOUR FIRE RATING BY CEMENTITIOUS FIREPROOFING.

CONCEALED FROM VIEW - BRACED FRAMES, SHOWN ON THIS DRAWING, TO RECEIVE 2-HOUR FIRE RATING BY CEMENTITIOUS FIREPROOFING.

EXPOSED TO VIEW - BRACED FRAMES, SHOWN ON THIS DRAWING, TO RECEIVE 2-HOUR FIRE RATING BY INTUMESCENT MASTIC FIREPROOFING.

NO FIREPROOFING REQUIRED AT SUPPLEMENTAL STEEL HSS TUBES LOCATED AT THE VOCATIONAL OVERHEAD DOORS AND STOREFRONT JAMBS.

NO FIREPROOFING REQUIRED AT SUPPLEMENTAL STEEL ROUND HSS GIRTS AND OUTRIGGERS SUPPORTING CURTAINWALL.

COORDINATE WITH SPECIFICATIONS AND ARCHITECTURAL DRAWINGS FOR FIREPROOFING REQUIREMENTS.

BRACE FRAME KEY			
0" TYP	WF	BF-X	INDICATES A BRACE FRAME ABOVE AND BELOW LEVEL
0" TYP	BF-X	WF	INDICATES A BRACE FRAME ABOVE LEVEL
0" TYP	WF	BF-X	INDICATES A BRACE FRAME BELOW LEVEL

DRA

Drummeys Rosane Anderson, Inc.
225 Oakland Road
Studio 205
South Windsor, CT 06074

260 Charles Street
Studio 300
Waltham, MA 02453

Planning Architectural Interior
Tel: 877-271-1100
www.dra.com

NORTHEAST
METRO TECH

100 Hemlock Rd.
Wakefield, MA 01880

Engineers Design Group Inc.
389 Main Street, Suite 401
Malden, MA 02148
(781)396-9007
EDG@EDGINC.COM

MSBA 60% CD
Submission

01/13/2023

KEY PLAN

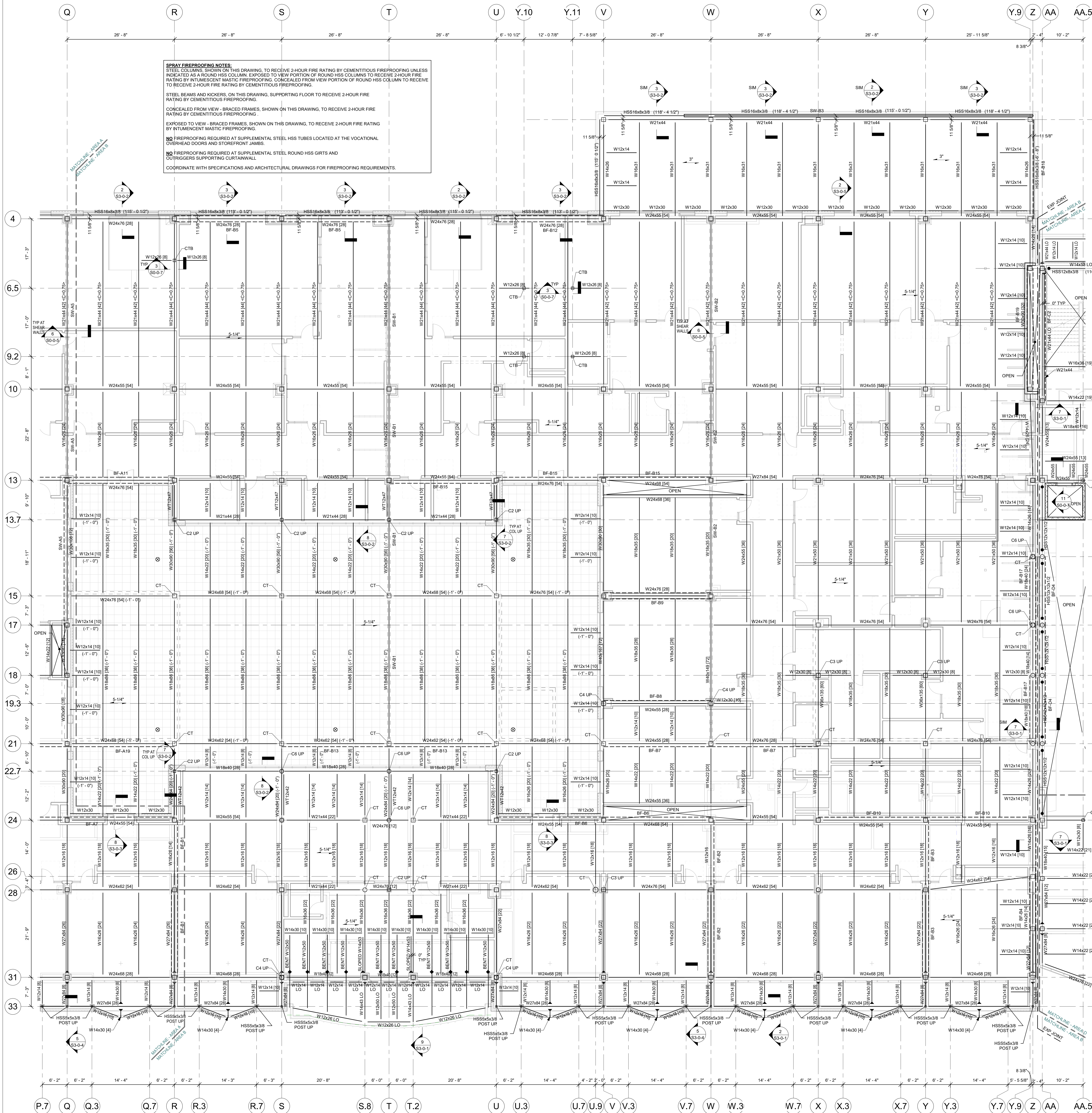
PROJECT NORTH

MAGNETIC NORTH

SECOND FLOOR
FRAMING PLAN -
AREA A

Scale: 1/8" = 1'-0"
Job No.: 20202
Drawn By: EDG
Date: 01/13/2023

S1-1-2A



FRAMING NOTES:

- FOR GENERAL NOTES AND TYPICAL DETAILS SEE DRAWINGS S0-0.1, S0-0.2, S0-0.3, S0-0.4, S0-0.5, S0-0.6, S0-0.7 AND S0-0.8.
- REFER TO ARCHITECTURAL DRAWINGS FOR ELEVATIONS AND VERTICAL DIMENSIONS. PITCH ALL STEEL UNIFORMLY TO LOW POINTS AT THE COLUMNS AND BENT BEAMS AS SHOWN ON THE ARCHITECTURAL DRAWINGS.
- BF-1 ETC., INDICATES A BRACED BAY. REFER TO BRACED FRAME ELEVATIONS AND DETAILS ON DRAWINGS S4-0.1, S4-0.2, S4-0.3 AND S4-0.4 FOR ADDITIONAL INFORMATION.
- [X] INDICATES THE NUMBER OF 3/4" DIAMETER 4 1/4" LONG HEADED STUDS WELDED TO THE TOP FLANGE OF THE BEAM. SPACE STUDS EVENLY ALONG THE BEAM UNLESS NOTED OTHERWISE.
- INDICATES A MOMENT CONNECTION TO DEVELOP THE FULL CAPACITY OF THE MEMBER. REFER TO TYPICAL DETAIL S3-0.1 AND S3-0.2 ON DRAWING S0-0.5 AND DETAIL 3 ON DRAWING S0-0.7.
- INDICATES A 5/16" FILLET WELD ALL AROUND (HSS BEAM TO HSS COLUMN) WHERE BEAM DIMENSIONS EXCEED COLUMN DIMENSIONS PROVIDE 1/2" THICK STEEL CAP PLATE TO ACHIEVE ALL AROUND WELD. REFER TO TYPICAL DETAIL 2 ON DRAWING S0-0.7.
- <X> INDICATES UPWARD CAMBER AT THE MID-SPAN OF THE MEMBER.
- 5-1/4" INDICATES SPAN DIRECTION OF 2" DEEP, 20 GAGE GALVANIZED COMPOSITE STEEL DECK WITH 3 1/4" LIGHT WEIGHT CONCRETE TOPPING. TOTAL THICKNESS = 5 1/4" REINFORCE WITH 6#6 - W2.1XW2.1 WWR.
- 1 1/2" INDICATES SPAN DIRECTION OF 1 1/2" DEEP, 20 GAGE TYPE B GALVANIZED STEEL ROOF DECK.
- 3" NCAS INDICATES SPAN DIRECTION OF 3" DEEP, 1820 GAGE TYPE NCAS, GALVANIZED CELLULAR ACUSTIC STEEL ROOF DECK.
- 6" INDICATES SPAN DIRECTION OF 3" DEEP, 16 GAGE GALVANIZED COMPOSITE STEEL DECK WITH 3" LIGHT WEIGHT CONCRETE TOPPING. TOTAL THICKNESS = 6" SEE TYPICAL DETAIL 4 ON DRAWING S0-0.8.
- FOR EXACT NUMBER, SIZE, AND LOCATION OF OPENING IN STEEL DECKING REFER TO MECHANICAL AND ARCHITECTURAL DRAWINGS. FOR FRAMING INFORMATION, REFER TO DETAIL 1 AND 8 ON DRAWING S0-0.6 AND DETAIL 1 ON DRAWING S0-0.7.
- 6" HATCHED AREA INDICATES LOCATION OF CONCRETE SLAB WITH 2" DEEP, 18 GAGE GALVANIZED COMPOSITE STEEL DECK WITH 4" NORMAL WEIGHT CONCRETE TOPPING. TOTAL THICKNESS = 6". REINFORCE WITH 6#6 - W2.1XW2.1 WWR. REFER TO TYPICAL DETAIL 5 ON DRAWING S0.07 FOR ADDITIONAL INFORMATION. USE 3/4" DIA X 5' LONG HEADED STUDS.
- 6 1/2" HATCHED AREA INDICATES LOCATION OF CONCRETE SLAB WITH 3" DEEP, 1820 GAGE TYPE NCAS, GALVANIZED CELLULAR ACUSTIC STEEL DECK WITH 3 1/2" LIGHT WEIGHT CONCRETE TOPPING. TOTAL THICKNESS = 6 1/2" REINFORCE WITH 6#6 - W2.1XW2.1 WWR. REFER TO TYPICAL DETAIL 5 ON DRAWING S0.08 FOR ADDITIONAL INFORMATION. USE 3/4" DIA X 5' LONG HEADED STUDS.
- INDICATES A ROOF DRAIN. REFER TO TYPICAL STRUCTURAL DETAILS 1 AND 8 ON DRAWING S0-0.4 AND DETAIL 1 ON DRAWING S0-0.8 FOR DECKING SUPPORT. REFER TO DETAIL 4 ON DRAWING S0-0.5. REFER TO PLUMBING AND ARCHITECTURAL DRAWINGS FOR OPENING SIZES AND LOCATIONS.
- CT INDICATES A COLUMN TERMINATES AT THIS LEVEL.
- WE INDICATES A BEND IN THE STEEL BEAM. REFER TO TYPICAL DETAIL 9 ON DRAWING S0-0.8.
- INDICATES A CMU WALL. REFER TO TYPICAL DETAIL 3 ON DRAWING S0-0.4 FOR REINFORCEMENT AND DETAIL 1 ON DRAWING S0-0.8 FOR CONNECTIONS TO STEEL BEAMS AND CONCRETE SLABS AT THE TOP OF WALL FOR NON-STRUCTURAL WALLS. REFER TO RELEVANT SECTIONS FOR CONNECTIONS OF SHEAR WALLS TO THE STRUCTURE.
- INDICATES AN INSULATED STRUCTURAL PRECAST CONCRETE WALL. COORDINATE WITH ARCHITECTURAL DRAWING.
- 1 1/2" BCA INDICATES SPAN DIRECTION OF 1 1/2" DEEP, 1820 GAGE TYPE BCA, GALVANIZED CELLULAR ACUSTIC STEEL ROOF DECK.
- 10' X 2" PC PLANK INDICATES SPAN OF 10' DEEP PRESTRESSED, PRECAST CONCRETE HOLLOW CORE PLANK WITH A MINIMUM 2" OF NORMAL WEIGHT CONCRETE TOPPING. PLANK AND CONCRETE TOPPING SLAB TO BE DESIGNED TO SUPPORT A MINIMUM LIVE LOAD CAPACITY OF 150 PSF. PRECAST CONCRETE PLANK TO BE DESIGNED FOR MINIMUM OF 2 HOUR FIRE RATINGS.
- FOR DIMENSIONS AND ELEVATIONS NOT GIVEN REFER TO ARCHITECTURAL DRAWINGS.
- WE INDICATES A SPLICE CONNECTION ALONG A CONTINUOUS STEEL BEAM. DESIGN SPLICE CONNECTION FOR FULL CAPACITY OF STEEL BEAM.

FRAMING ELEVATION NOTES:

- TYPICAL UNDERSIDE OF DECK ELEVATION = (11'9" - 6 3/4") AT THE SECOND FLOOR LEVEL. IN THE AREA BOUNDED BY GRIDS (H) - (S) AND (4) - (22). UNLESS NOTED OTHERWISE AS (X' - X'), ((X' - X') - X') OR HILO.
- TYPICAL UNDERSIDE OF DECK ELEVATION = (11'9" - 6 3/4") AT THE LOW ROOF LEVEL. IN THE AREA BOUNDED BY GRIDS (V) - (Z) AND (1) - (4). UNLESS NOTED OTHERWISE AS (X' - X'), ((X' - X') - X') OR HILO.
- TYPICAL UNDERSIDE OF DECK ELEVATION = (11'5" - 6") AT THE CANOPY ROOF LEVEL. IN THE AREA BOUNDED BY GRIDS (V) - (U) AND (21) - (22). UNLESS NOTED OTHERWISE AS (X' - X'), ((X' - X') - X') OR HILO.
- FRAMING ELEVATIONS ARE BASED ON TOP-OF-FLOOR ELEVATION, (120' - 0"), SHOWN ON THE ARCHITECTURAL DRAWINGS.
- COORDINATE ALL ELEVATIONS WITH ARCHITECTURAL DRAWINGS.
- SLOPE STEEL UNIFORMLY TO COLUMN ELEVATIONS SHOWN ON PLANS.

BRACE FRAME KEY

- | | | | |
|--------|------|------|---|
| 0" TYP | WF | BF-X | INDICATES A BRACE FRAME ABOVE AND BELOW LEVEL |
| 0" TYP | BF-X | WF | INDICATES A BRACE FRAME ABOVE LEVEL |
| 0" TYP | BF-X | BF-X | INDICATES A BRACE FRAME BELOW LEVEL |

DRA

Drumme Rosane Anderson, Inc.
225 Oakland Road
Studio 205
South Windsor, CT 06074

Planning Architects Interior
Tel: 877.221.1100
www.dra.com

NORTHEAST
METRO TECH

100 Hemlock Rd,
Wakefield, MA 01880

EDG
Engineers Design Group Inc.
Structural Engineers
389 Main Street, Suite 401
Malden, MA 02148
(781)396-9007
EDG@EDGINC.COM

© COPYRIGHT 2021 DRUMME ROSANE ANDERSON, INC.

MSBA 60% CD
Submission

01/13/2023

A B C D

KEY PLAN
PROJECT NORTH
MAGNETIC NORTH

SECOND FLOOR
FRAMING PLAN -
AREA B

Scale: 1/8" = 1'-0"
Job No.: 20202
Drawn By: EDG
Date: 01/13/2023
S1-1-2B

DRA

Drummeys Rosane Anderson, Inc.
225 Oakland Road
Studio 205
South Windsor, CT 06074

260 Charles Street
Studio 300
Waltham, MA 02453

Planning Architects Interior
Tel: 617.261.1100
www.dra.com

NORTHEAST METRO TECH

100 Hemlock Rd.
Wakefield, MA 01880



Engineers Design Group Inc.
Structural Engineers
389 Main Street, Suite 401
Malden, MA 02148
(781)396-9007
EDG@EDGINC.COM

FRAMING NOTES:

- FOR GENERAL NOTES AND TYPICAL DETAILS SEE DRAWINGS S0-0.1, S0-0.2, S0-0.3, S0-0.4, S0-0.5, S0-0.6, S0-0.7 AND S0-0.8.
- REFER TO ARCHITECTURAL DRAWINGS FOR ELEVATIONS AND VERTICAL DIMENSIONS. PITCH ALL STEEL UNIFORMLY TO LOW POINTS AT THE COLUMNS AND BENT BEAMS AS SHOWN ON THE ARCHITECTURAL DRAWINGS.
- BF-1 ETC. INDICATES A BRACED BAY. REFER TO BRACED FRAME ELEVATIONS AND DETAILS ON DRAWINGS S4-0.1, S4-0.2, S4-0.3 AND S4-0.4 FOR ADDITIONAL INFORMATION.
- [X] INDICATES THE NUMBER OF 3/4" DIAMETER x 4 1/4" LONG HEADED STUDS WELDED TO THE TOP FLANGE OF THE BEAM. SPACE STUDS EVENLY ALONG THE BEAM UNLESS NOTED OTHERWISE.
- INDICATES A MOMENT CONNECTION TO DEVELOP THE FULL CAPACITY OF THE MEMBER. REFER TO TYPICAL DETAILS 8 AND 9 ON DRAWING S0-0.5 AND DETAIL 3 ON DRAWING S0-0.7.
- INDICATES A 5/16" FILLET WELD ALL AROUND. (HSS BEAM TO HSS COLUMN) WHERE BEAM DIMENSIONS EXCEED COLUMN DIMENSIONS PROVIDE 1/2" THICK STEEL CAP PLATE TO ACHIEVE ALL AROUND WELD. REFER TO TYPICAL DETAIL 2 ON DRAWING S0-0.7.
- < X > INDICATES UPWARD CAMBER AT THE MID-SPAN OF THE MEMBER.
- 5'-14" INDICATES SPAN DIRECTION OF 2" DEEP, 20 GAGE GALVANIZED COMPOSITE STEEL DECK WITH 3 1/4" LIGHT WEIGHT CONCRETE TOPPING. TOTAL THICKNESS = 5 1/4". REINFORCE WITH 6#5 - W2, 1W2, 1 WWR.
- 1'-12" INDICATES SPAN DIRECTION OF 1 1/2" DEEP, 20 GAGE TYPE B, GALVANIZED STEEL ROOF DECK.
- 3" NCA INDICATES SPAN DIRECTION OF 3" DEEP, 1820 GAGE TYPE NCA, GALVANIZED CELLULAR ACOUSTIC STEEL ROOF DECK.
- 6" INDICATES SPAN DIRECTION OF 3" DEEP, 16 GAGE GALVANIZED COMPOSITE STEEL DECK WITH 1" LIGHT WEIGHT CONCRETE TOPPING. TOTAL THICKNESS = 6". SEE TYPICAL DETAIL 4 ON DRAWING S0-0.8.
- FOR EXACT NUMBER, SIZE, AND LOCATION OF OPENING IN STEEL DECKING REFER TO MECHANICAL AND ARCHITECTURAL DRAWINGS. FOR FRAMING INFORMATION, REFER TO DETAIL 1 AND 8 ON DRAWING S0-0.6 AND DETAIL 1 ON DRAWING S0-0.8.
- HATCHED AREA INDICATES LOCATION OF CONCRETE SLAB WITH 2" DEEP, 1820 GAGE TYPE NCA, GALVANIZED CELLULAR ACOUSTIC STEEL DECK WITH 3 1/2" LIGHT WEIGHT CONCRETE TOPPING. TOTAL THICKNESS = 6". REINFORCE WITH 6#5 - W2, 1W2, 1 WWR. REFER TO TYPICAL DETAIL 5 ON DRAWING S0-0.8 FOR ADDITIONAL INFORMATION. USE 3/4" DIA x 5' LONG HEADED STUDS.
- 6 1/2" INDICATES LOCATION OF CONCRETE SLAB WITH 3" DEEP, 1820 GAGE TYPE NCA, GALVANIZED CELLULAR ACOUSTIC STEEL DECK WITH 3 1/2" LIGHT WEIGHT CONCRETE TOPPING. TOTAL THICKNESS = 6 1/2". REINFORCE WITH 6#5 - W2, 1W2, 1 WWR. REFER TO TYPICAL DETAIL 5 ON DRAWING S0-0.8 FOR ADDITIONAL INFORMATION. USE 3/4" DIA x 5' LONG HEADED STUDS.
- INDICATES A ROOF DRAIN. REFER TO TYPICAL STRUCTURAL DETAILS 1 AND 8 ON DRAWING S0-0.6 AND DETAIL 1 ON DRAWING S0-0.8. FOR DECKING SUPPORT, REFER TO DETAIL 4 ON DRAWING S0-0.6. REFER TO PLUMBING AND ARCHITECTURAL DRAWINGS FOR OPENING SIZES AND LOCATIONS.
- CT INDICATES A COLUMN TERMINATES AT THIS LEVEL.
- WF INDICATES A BEND IN THE STEEL BEAM. REFER TO TYPICAL DETAIL 8 ON DRAWING S0-0.8.
- INDICATES A CMU WALL. REFER TO TYPICAL DETAIL 3 ON DRAWING S0-0.4 FOR REINFORCEMENT AND DETAIL 4 ON DRAWING S0-0.6 FOR CONNECTIONS TO STEEL BEAMS AND CONCRETE SLABS AT THE TOP OF WALL FOR NON-STRUCTURAL WALLS. REFER TO RELEVANT SECTIONS FOR CONNECTIONS OF SHEAR WALLS TO THE STRUCTURE.
- INDICATES AN INSULATED STRUCTURAL PRECAST CONCRETE WALL. COORDINATE WITH ARCHITECTURAL DRAWING.
- 1 1/2" BCA INDICATES SPAN DIRECTION OF 1 1/2" DEEP, 1820 GAGE TYPE BCA, GALVANIZED CELLULAR ACOUSTIC STEEL ROOF DECK.
- 10' x 2" PC PLANK INDICATES SPAN OF 10' DEEP PRESTRESSED, PRECAST CONCRETE HOLLOW CORE PLANK WITH A MINIMUM 2" OF NORMAL WEIGHT CONCRETE TOPPING. PLANK AND CONCRETE TOPPING SLAB TO BE DESIGNED TO SUPPORT A MINIMUM LIVE LOAD CAPACITY OF 150 PSF. PRECAST CONCRETE PLANK TO BE DESIGNED FOR MINIMUM OF 2 HOUR FIRE RATING.
- FOR DIMENSIONS AND ELEVATIONS NOT GIVEN REFER TO ARCHITECTURAL DRAWINGS.
- WF INDICATES A SPLICE CONNECTION ALONG A CONTINUOUS STEEL BEAM. DESIGN SPLICE CONNECTION FOR FULL CAPACITY OF STEEL BEAM.

FRAMING ELEVATION NOTES:

- TYPICAL UNDERSIDE-OF-DECK ELEVATION = (118' - 6 3/4") AT THE SECOND FLOOR LEVEL, IN THE AREA BOUNDED BY GRIDS (AA - (MM) AND (7.2) - (17), UNLESS NOTED OTHERWISE AS (X - X'), (+X - X'), OR HILO.
- TYPICAL UNDERSIDE-OF-DECK ELEVATION = (118' - 6 3/4") AT THE LOW ROOF LEVEL, IN THE AREA BOUNDED BY GRIDS (AA.9) - (NN) AND (7.2) - (7.2), UNLESS NOTED OTHERWISE AS (X - X'), (+X - X'), OR HILO.
- FRAMING ELEVATIONS ARE BASED ON TOP-OF-FLOOR ELEVATION, (120' - 0"), SHOWN ON THE ARCHITECTURAL DRAWINGS.
- COORDINATE ALL ELEVATIONS WITH ARCHITECTURAL DRAWINGS.
- SLOPE STEEL UNIFORMLY TO COLUMN ELEVATIONS SHOWN ON PLANS.

SPRAY FIREPROOFING NOTES:

STEEL COLUMNS, SHOWN ON THIS DRAWING, TO RECEIVE 2-HOUR FIRE RATING BY CEMENTITIOUS FIREPROOFING UNLESS INDICATED AS A ROUND HSS COLUMN. EXPOSED TO VIEW PORTION OF ROUND HSS COLUMNS TO RECEIVE 2-HOUR FIRE RATING BY INTUMESCENT MASTIC FIREPROOFING. CONCEALED FROM VIEW PORTION OF ROUND HSS COLUMN TO RECEIVE TO RECEIVE 2-HOUR FIRE RATING BY CEMENTITIOUS FIREPROOFING.

STEEL BEAMS AND KICKERS, ON THIS DRAWING, SUPPORTING FLOOR TO RECEIVE 2-HOUR FIRE RATING BY CEMENTITIOUS FIREPROOFING.

CONCEALED FROM VIEW - BRACED FRAMES, SHOWN ON THIS DRAWING, TO RECEIVE 2-HOUR FIRE RATING BY CEMENTITIOUS FIREPROOFING.

EXPOSED TO VIEW - BRACED FRAMES, SHOWN ON THIS DRAWING, TO RECEIVE 2-HOUR FIRE RATING BY INTUMESCENT MASTIC FIREPROOFING.

NO FIREPROOFING REQUIRED AT SUPPLEMENTAL STEEL HSS TUBES LOCATED AT THE VOCATIONAL OVERHEAD DOORS AND STOREFRONT JAMBS.

NO FIREPROOFING REQUIRED AT SUPPLEMENTAL STEEL ROUND HSS GIRTS AND OUTRIGGERS SUPPORTING CURTAINWALL.

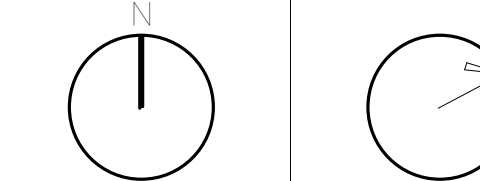
COORDINATE WITH SPECIFICATIONS AND ARCHITECTURAL DRAWINGS FOR FIREPROOFING REQUIREMENTS.

BRACE FRAME KEY

- 0" TYP. INDICATES A BRACE FRAME ABOVE AND BELOW LEVEL.
- 0" TYP. INDICATES A BRACE FRAME ABOVE LEVEL.
- 0" TYP. INDICATES A BRACE FRAME BELOW LEVEL.

KEY PLAN

PROJECT NORTH MAGNETIC NORTH



SECOND FLOOR FRAMING PLAN - AREA C

Scale: 1/8" = 1'-0"

Job No.: 20202

Drawn By: EDG

Date: 01/13/2023

S1-1-2C

DRA

Drumme Rosane Anderson, Inc.
225 Oakland Road
Studio 205
South Windsor, CT
06074
260 Charles Street
Studio 300
Waltham, MA
02453
Planning Architecture Interior
Tel: 877.221.1100
www.dra.com

NORTHEAST METRO TECH

100 Hemlock Rd.
Wakefield, MA 01880



Engineers Design Group Inc.
Structural Engineers
389 Main Street, Suite 401
Malden, MA 02148
(781)396-9007
EDG@EDGINC.COM

FRAMING NOTES:

- FOR GENERAL NOTES AND TYPICAL DETAILS SEE DRAWINGS S0-0-1, S0-0-2, S0-0-3, S0-0-4, S0-0-5, S0-0-6, S0-0-7 AND S0-0-8.
- REFER TO ARCHITECTURAL DRAWINGS FOR ELEVATIONS AND VERTICAL DIMENSIONS. PITCH ALL STEEL UNIFORMLY TO LOW POINTS AT THE COLUMNS AND BENT BEAMS AS SHOWN ON THE ARCHITECTURAL DRAWINGS.
- BF-1 ETC. INDICATES A BRACED BAY. REFER TO BRACED FRAME ELEVATIONS AND DETAILS ON DRAWINGS S4-0-1, S4-0-2, S4-0-3 AND S4-0-4 FOR ADDITIONAL INFORMATION.
- [XX] INDICATES THE NUMBER OF 3/4" DIAMETER x 4 1/4" LONG HEADED STUDS WELDED TO THE TOP FLANGE OF THE BEAM. SPACE STUDS EVENLY ALONG THE BEAM UNLESS NOTED OTHERWISE.
- INDICATES A MOMENT CONNECTION TO DEVELOP THE FULL CAPACITY OF THE MEMBER. REFER TO TYPICAL DETAILS 8 AND 9 ON DRAWING S0-0-2 AND DETAIL 3 ON DRAWING S0-0-7.
- INDICATES A 5/16" FILLET WELD ALL AROUND (HSS BEAM TO HSS COLUMN) WHERE BEAM DIMENSIONS EXCEED COLUMN DIMENSIONS PROVIDE 1/2" THICK STEEL CAP PLATE TO ACHIEVE ALL AROUND WELD. REFER TO TYPICAL DETAIL 2 ON DRAWING S0-0-7.
- < X > INDICATES UPWARD CAMBER AT THE MID-SPAN OF THE MEMBER.
- 5-1/4" INDICATES SPAN DIRECTION OF 3" DEEP, 20 GAGE GALVANIZED COMPOSITE STEEL DECK WITH 3 1/4" LIGHT WEIGHT CONCRETE TOPPING. TOTAL THICKNESS = 5 1/4". REINFORCE WITH 6x6 - W2.1xW2.1 WWR.
- 1-1/2" INDICATES SPAN DIRECTION OF 1 1/2" DEEP, 20 GAGE TYPE B, GALVANIZED STEEL ROOF DECK.
- 3" INDICATES SPAN DIRECTION OF 3" DEEP, 1820 GAGE TYPE BCA, GALVANIZED CELLULAR ACOUSTIC STEEL ROOF DECK.
- 6" INDICATES SPAN DIRECTION OF 3" DEEP, 16 GAGE GALVANIZED COMPOSITE STEEL DECK WITH 3" LIGHT WEIGHT CONCRETE TOPPING. TOTAL THICKNESS = 6". SEE TYPICAL DETAIL 4 ON DRAWING S0-0-8.
- FOR EXACT NUMBER, SIZE, AND LOCATION OF OPENING IN STEEL DECKING REFER TO MECHANICAL AND ARCHITECTURAL DRAWINGS FOR FRAMING INFORMATION. REFER TO DETAIL 1 AND 8 ON DRAWING S0-0-4 AND DETAIL 1 ON DRAWING S0-0-8.
- 6" HATCHED AREA INDICATES LOCATION OF CONCRETE SLAB WITH 2" DEEP, 18 GAGE GALVANIZED COMPOSITE STEEL DECK WITH 4" NORMAL WEIGHT CONCRETE TOPPING. TOTAL THICKNESS = 6". REINFORCE WITH 6x6 - W2.1xW2.1 WWR. REFER TO TYPICAL DETAIL 5 ON DRAWING S0-0-7 FOR ADDITIONAL INFORMATION. USE 3/4" DIA x 5' LONG HEADED STUDS.
- 6 1/2" HATCHED AREA INDICATES LOCATION OF CONCRETE SLAB WITH 3" DEEP, 1820 GAGE TYPE BCA, GALVANIZED CELLULAR ACOUSTIC STEEL DECK WITH 3 1/2" LIGHT WEIGHT CONCRETE TOPPING. TOTAL THICKNESS = 6 1/2". REINFORCE WITH 6x6 - W2.1xW2.1 WWR. REFER TO TYPICAL DETAIL 5 ON DRAWING S0-0-8 FOR ADDITIONAL INFORMATION. USE 3/4" DIA x 5' LONG HEADED STUDS.
- INDICATES A ROOF DRAIN. REFER TO TYPICAL STRUCTURAL DETAILS 1 AND 8 ON DRAWING S0-0-6 AND DETAIL 1 ON DRAWING S0-0-8. FOR DRAINING SUPPORT, REFER TO DETAIL 4 ON DRAWING S0-0-5. REFER TO PLUMBING AND ARCHITECTURAL DRAWINGS FOR OPENING SIZES AND LOCATIONS.
- CT INDICATES A COLUMN TERMINATES AT THIS LEVEL.
- WF INDICATES A BEND IN THE STEEL BEAM. REFER TO TYPICAL DETAIL 8 ON DRAWING S0-0-8.
- INDICATES A CMU WALL. REFER TO TYPICAL DETAIL 3 ON DRAWING S0-0-4 FOR REINFORCEMENT AND DETAIL 4 ON DRAWING S0-0-4 FOR CONNECTIONS TO STEEL BEAMS AND CONCRETE SLABS AT THE TOP OF WALL FOR NON-STRUCTURAL WALLS. REFER TO RELEVANT SECTIONS FOR CONNECTIONS OF SHEAR WALLS TO THE STRUCTURE.
- INDICATES AN INSULATED STRUCTURAL PRECAST CONCRETE WALL. COORDINATE WITH ARCHITECTURAL DRAWING.
- 1-1/2" INDICATES SPAN DIRECTION OF 1 1/2" DEEP, 1820 GAGE TYPE BCA, GALVANIZED CELLULAR ACOUSTIC STEEL ROOF DECK.
- 10" x 2" PC PLANK INDICATES SPAN OF 10" DEEP PRESTRESSED, PRECAST CONCRETE HOLLOW CORE PLANK WITH A MINIMUM 2" OF NORMAL WEIGHT CONCRETE TOPPING. PLANK AND CONCRETE TOPPING SLAB TO BE DESIGNED TO SUPPORT A MINIMUM LIVE LOAD CAPACITY OF 150 PSF. PRECAST CONCRETE PLANK TO BE DESIGNED FOR MINIMUM OF 2 HOUR FIRE RATING.
- FOR DIMENSIONS AND ELEVATIONS NOT GIVEN REFER TO ARCHITECTURAL DRAWINGS.
- WF INDICATES A SPICE CONNECTION ALONG A CONTINUOUS STEEL BEAM. DESIGN SPICE CONNECTION FOR FULL CAPACITY OF STEEL BEAM.

FRAMING ELEVATION NOTES:

- TYPICAL UNDERSIDE-OF-DECK ELEVATION = (11' - 6 3/4") AT THE SECOND FLOOR LEVEL, IN THE AREA BOUNDED BY GRIDS (AA) - (NN) AND (16) - (25), UNLESS NOTED OTHERWISE AS (X' - X'), (+X' - X'), OR HILO.
- TYPICAL UNDERSIDE-OF-DECK ELEVATION IS DEPRESSIONED BELOW (11' - 6 3/4") AT THE GYM FLOOR LEVEL, IN THE AREA BOUNDED BY GRIDS (DD) - (KK) AND (17) - (24). ELEVATION IS TO BE DETERMINED BASED ON THICKNESS OF GYM FLOORING SYSTEM, UNLESS NOTED OTHERWISE AS (X' - X'), (+X' - X'), OR HILO.
- FRAMING ELEVATIONS ARE BASED ON TOP-OF-FLOOR ELEVATION, (12'0" - 0"), SHOWN ON THE ARCHITECTURAL DRAWINGS.
- COORDINATE ALL ELEVATIONS WITH ARCHITECTURAL DRAWINGS.
- SLOPE STEEL UNIFORMLY TO COLUMN ELEVATIONS SHOWN ON PLANS.

SPRAY FIREPROOFING NOTES:

STEEL COLUMNS, SHOWN ON THIS DRAWING, TO RECEIVE 2-HOUR FIRE RATING BY CEMENTITIOUS FIREPROOFING UNLESS INDICATED AS A ROUND HSS COLUMN. EXPOSED TO VIEW PORTION OF ROUND HSS COLUMNS TO RECEIVE 2-HOUR FIRE RATING BY INTUMESCENT MASTIC FIREPROOFING. CONCEALED FROM VIEW PORTION OF ROUND HSS COLUMN TO RECEIVE TO RECEIVE 2-HOUR FIRE RATING BY CEMENTITIOUS FIREPROOFING.

STEEL BEAMS AND KICKERS, ON THIS DRAWING, SUPPORTING FLOOR TO RECEIVE 2-HOUR FIRE RATING BY CEMENTITIOUS FIREPROOFING.

CONCEALED FROM VIEW - BRACED FRAMES, SHOWN ON THIS DRAWING, TO RECEIVE 2-HOUR FIRE RATING BY INTUMESCENT MASTIC FIREPROOFING.

EXPOSED TO VIEW - BRACED FRAMES, SHOWN ON THIS DRAWING, TO RECEIVE 2-HOUR FIRE RATING BY INTUMESCENT MASTIC FIREPROOFING.

NO FIREPROOFING REQUIRED AT SUPPLEMENTAL STEEL HSS TUBES LOCATED AT THE VOCATIONAL OVERHEAD DOORS AND STOREFRONT JAMBS.

NO FIREPROOFING REQUIRED AT SUPPLEMENTAL STEEL ROUND HSS GIRTS AND OUTRIGGERS SUPPORTING CURTAINWALL.

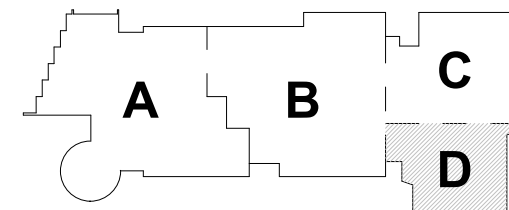
COORDINATE WITH SPECIFICATIONS AND ARCHITECTURAL DRAWINGS FOR FIREPROOFING REQUIREMENTS.

BRACE FRAME KEY

- 0" TYP
- WF BF-X
- INDICATES A BRACE FRAME ABOVE AND BELOW LEVEL
- 0" TYP
- BF-X WF
- INDICATES A BRACE FRAME ABOVE LEVEL
- 0" TYP
- WF BF-X
- INDICATES A BRACE FRAME BELOW LEVEL

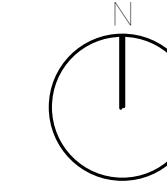
MSBA 60% CD
Submission

01/13/2023

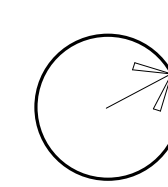


KEY PLAN

PROJECT NORTH



MAGNETIC NORTH



SECOND FLOOR FRAMING PLAN - AREA D

Scale: 1/8" = 1'-0"

Job No.: 20202

Drawn By: EDG

Date: 01/13/2023

S1-1-2D

SPRAY FIREPROTECTING NOTES:

EXPLODED TO VIEW - BRACED DRAWING, TO RECEIVE 2-HOUR FIRE RATING BY CEMENTITIOUS FIBER REINFORCING UNLESS INDICATED AS A ROUND HSS COLUMN. EXPLODED TO VIEW PORTION OF ROUND HSS COLUMNS TO BE SPRAYED WITH FIRE-RESISTANT MATERIAL TO RECEIVE 2-HOUR FIRE RATING BY CEMENTITIOUS FIBER REINFORCING. SEE SECTION OF ROUND HSS COLUMN TO RECEIVE TO RECEIVE 2-HOUR FIRE RATING BY CEMENTITIOUS FIBER REINFORCING.

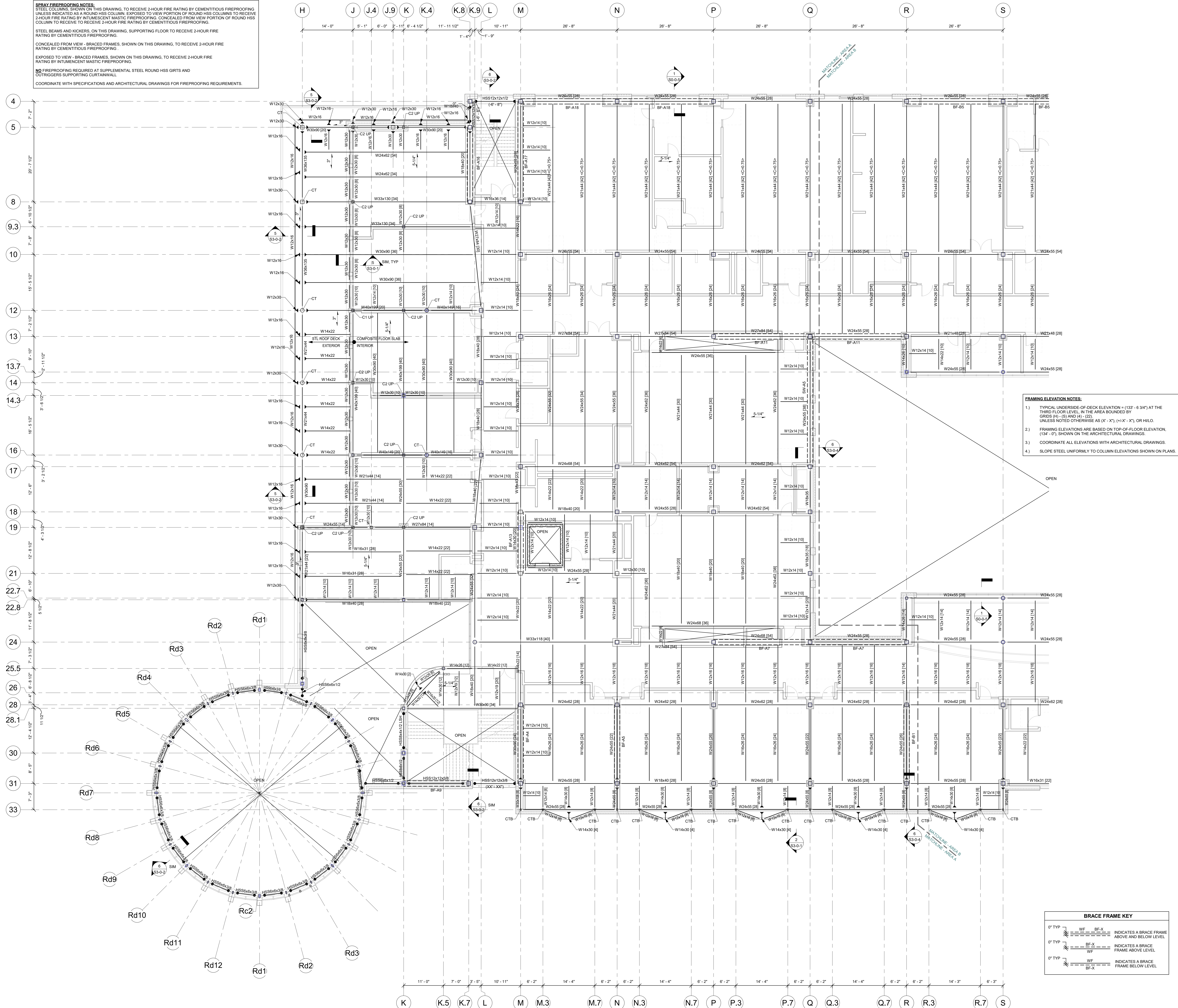
STEEL BEAMS AND KICKERS, ON THIS DRAWING, SUPPORTING FLOOR TO RECEIVE 2-HOUR FIRE RATING BY CEMENTITIOUS FIBER REINFORCING.

CONCEALED FROM VIEW - BRACED FRAMES, SHOWN ON THIS DRAWING, TO RECEIVE 2-HOUR FIRE RATING BY CEMENTITIOUS FIBER REINFORCING.

EXPLODED TO VIEW - BRACED FRAMES, SHOWN ON THIS DRAWING, TO RECEIVE 2-HOUR FIRE RATING BY ATTACHMENT - MASTIC FIRE PROOFING.

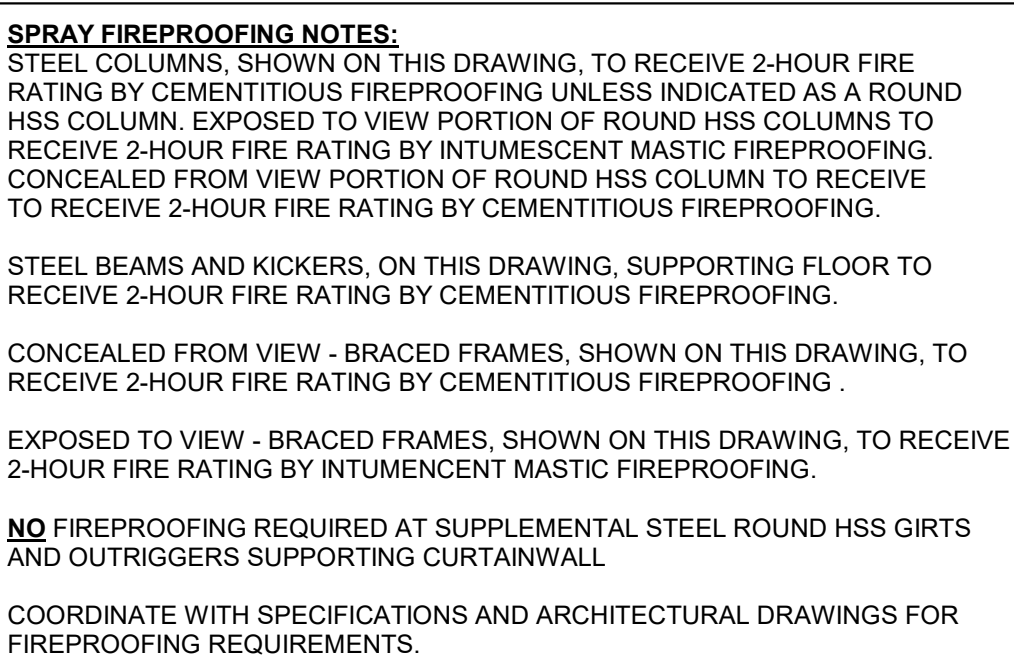
TO FIREPROOFING REQUIRED AT SUPPLEMENTAL STEEL ROUND HSS GIRTS AND OUTRIGGERS SUPPORTING CURTAINWALL.

COORDINATE WITH SPECIFICATIONS AND ARCHITECTURAL DRAWINGS FOR FIREPROOFING REQUIREMENTS.



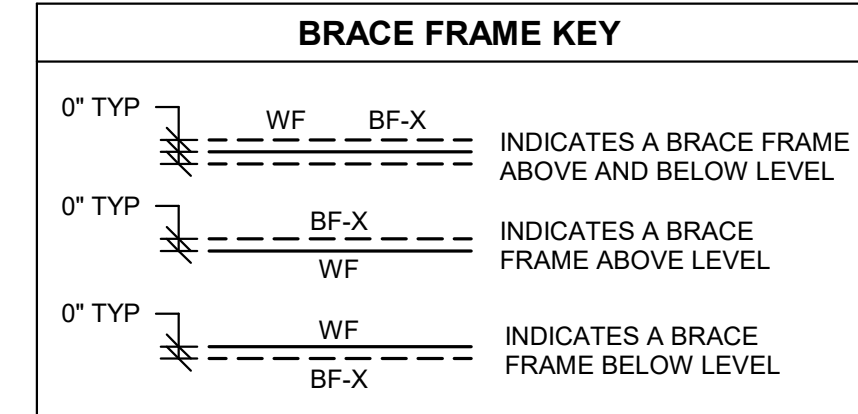
1-1-3A

Drawn By: EDG

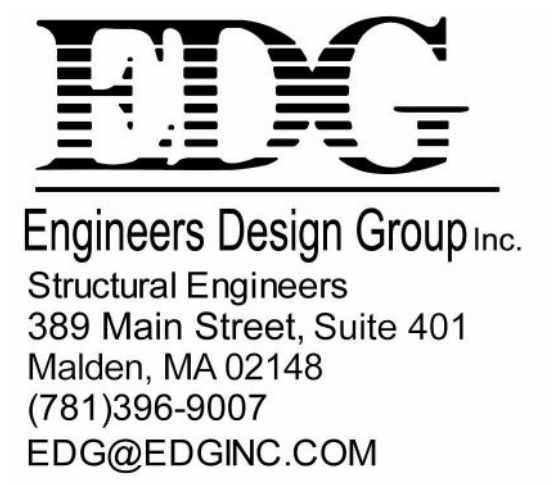


FRAMING ELEVATION NOTES:

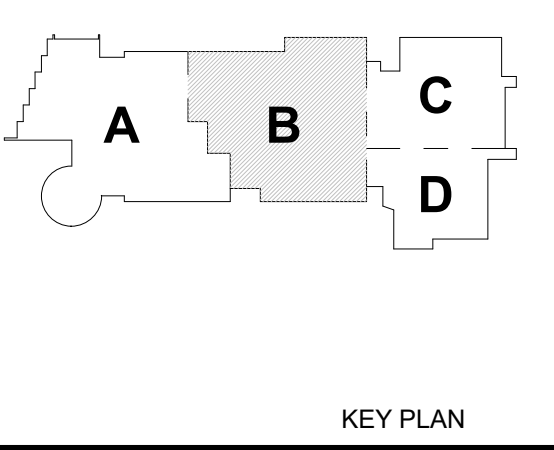
- 1.) TYPICAL UNDERSIDE-OF-DECK ELEVATION = $(133' - 6 \frac{3}{4}")$ AT THE THIRD FLOOR LEVEL, IN THE AREA BOUNDED BY GRIDS (C) - (Z) AND (4) - (22).
- 2.) FRAMING ELEVATIONS ARE BASED ON TOP-OF-FLOOR ELEVATION, $(134' - 0")$, SHOWN ON THE ARCHITECTURAL DRAWINGS.
- 3.) COORDINATE ALL ELEVATIONS WITH ARCHITECTURAL DRAWINGS.
- 4.) SLOPE STEEL UNIFORMLY TO COLUMN ELEVATIONS SHOWN ON PLANS.



100 Hemlock Rd,
Wakefield, MA 01880

MSBA 60% CD
Submission

01/13/2023



**THIRD FLOOR
FRAMING PLAN -
AREA B**

Scale: 1/8" = 1'-0"
 Date: 01/13/2023
 Drawn By: EDG
S1-1-3B

FRAMING NOTES:

- FOR GENERAL NOTES AND TYPICAL DETAILS SEE DRAWINGS S0-0-1, S0-0-2, S0-0-3, S0-0-4, S0-0-5, S0-0-6, S0-0-7 AND S0-0-8.
- REFER TO ARCHITECTURAL DRAWINGS FOR ELEVATIONS AND VERTICAL DIMENSIONS. PITCH ALL STEEL UNIFORMLY TO LOW POINTS AT THE COLUMNS AND BENT BEAMS AS SHOWN ON THE ARCHITECTURAL DRAWINGS.
- BF-1 ETC. INDICATES A BRACED BAY. REFER TO BRACED FRAME ELEVATIONS AND DETAILS ON DRAWINGS S4-0-1, S4-0-2, S4-0-3 AND S4-0-4 FOR ADDITIONAL INFORMATION.
- [X] INDICATES THE NUMBER OF 3/4" DIAMETER x 4 1/4" LONG HEADED STUDS WELDED TO THE TOP FLANGE OF THE BEAM. SPACE STUDS EVENLY ALONG THE BEAM UNLESS NOTED OTHERWISE.
- INDICATES A MOMENT CONNECTION TO DEVELOP THE FULL CAPACITY OF THE MEMBER. REFER TO TYPICAL DETAILS 8 AND 9 ON DRAWING S0-0-5 AND DETAIL 3 ON DRAWING S0-0-7.
- INDICATES A 5/16" FILLET WELD ALL AROUND (HSS BEAM TO HSS COLUMN) WHERE BEAM DIMENSIONS EXCEED COLUMN DIMENSIONS PROVIDE 1/2" THICK STEEL CAP PLATE TO ACHIEVE ALL AROUND WELD. REFER TO TYPICAL DETAIL 2 ON DRAWING S0-0-7.
- < X > INDICATES UPWARD CAMBER AT THE MID-SPAN OF THE MEMBER.
- 5-1/4" INDICATES SPAN DIRECTION OF 2" DEEP, 20 GAGE GALVANIZED COMPOSITE STEEL DECK WITH 3 1/4" LIGHT WEIGHT CONCRETE TOPPING. TOTAL THICKNESS = 5 1/4". REINFORCE WITH 6#6 - W2 1XW2.1 WWR.
- 1 1/2" INDICATES SPAN DIRECTION OF 1 1/2" DEEP, 20 GAGE TYPE B, GALVANIZED STEEL ROOF DECK.
- 3" INDICATES SPAN DIRECTION OF 3" DEEP, 18/20 GAGE TYPE NCA, GALVANIZED CELLULAR ACUSTIC STEEL ROOF DECK.
- 6" INDICATES SPAN DIRECTION OF 3" DEEP, 18 GAGE GALVANIZED COMPOSITE STEEL DECK WITH 3" LIGHT WEIGHT CONCRETE TOPPING. TOTAL THICKNESS = 6". SEE TYPICAL DETAIL 4 ON DRAWING S0-0-8.
- FOR EXACT NUMBER, SIZE, AND LOCATION OF OPENING IN STEEL DECKING REFER TO MECHANICAL AND ARCHITECTURAL DRAWINGS. FOR FRAMING INFORMATION, REFER TO DETAIL 1 AND 8 ON DRAWING S0-0-6 AND DETAIL 1 ON DRAWING S0-0-8.
- HATCHED AREA INDICATES LOCATION OF CONCRETE SLAB WITH 2" DEEP, 18 GAGE GALVANIZED COMPOSITE STEEL DECK WITH 4" NORMAL WEIGHT CONCRETE TOPPING. TOTAL THICKNESS = 6". REINFORCE WITH 6#6 - W2 1XW2.1 WWR. REFER TO TYPICAL DETAIL 5 ON DRAWING S0-0-7 FOR ADDITIONAL INFORMATION. USE 3/4" DIA x 5' LONG HEADED STUDS.
- HATCHED AREA INDICATES LOCATION OF CONCRETE SLAB WITH 3" DEEP, 18/20 GAGE TYPE NCA, GALVANIZED CELLULAR ACUSTIC STEEL DECK WITH 3 1/2" LIGHT WEIGHT CONCRETE TOPPING. TOTAL THICKNESS = 6 1/2". REINFORCE WITH 6#6 - W2 1XW2.1 WWR. REFER TO TYPICAL DETAIL 5 ON DRAWING S0-0-8 FOR ADDITIONAL INFORMATION. USE 3/4" DIA x 5' LONG HEADED STUDS.
- INDICATES A ROOF DRAIN. REFER TO TYPICAL STRUCTURAL DETAILS 1 AND 8 ON DRAWING S0-0-4 AND DETAIL 1 ON DRAWING S0-0-8. FOR DECKING SUPPORT, REFER TO DETAIL 4 ON DRAWING S0-0-5. REFER TO PLUMBING AND ARCHITECTURAL DRAWINGS FOR OPENING SIZES AND LOCATIONS.
- CT INDICATES A COLUMN TERMINATES AT THIS LEVEL.
- WF INDICATES A BEND IN THE STEEL BEAM. REFER TO TYPICAL DETAIL 8 ON DRAWING S0-0-8.
- INDICATES A CMU WALL. REFER TO TYPICAL DETAIL 3 ON DRAWING S0-0-4 FOR REINFORCEMENT AND DETAIL 4 ON DRAWING S0-0-6 FOR CONNECTIONS TO STEEL BEAMS AND CONCRETE SLABS AT THE TOP OF WALL FOR NON-STRUCTURAL WALLS. REFER TO RELEVANT SECTIONS FOR CONNECTIONS OF SHEAR WALLS TO THE STRUCTURE.
- INDICATES AN INSULATED STRUCTURAL PRECAST CONCRETE WALL. COORDINATE WITH ARCHITECTURAL DRAWING.
- 1 1/2" INDICATES SPAN DIRECTION OF 1 1/2" DEEP, 18/20 GAGE TYPE NCA, GALVANIZED CELLULAR ACUSTIC STEEL ROOF DECK.
- 10' x 2" PC PLANK INDICATES SPAN OF 10' DEEP PRESTRESSED, PRECAST CONCRETE HOLLOW CORE PLANK WITH A MINIMUM 2" OF NORMAL WEIGHT CONCRETE TOPPING. PLANK AND CONCRETE TOPPING SLAB TO BE DESIGNED TO SUPPORT A MINIMUM LIVE LOAD CAPACITY OF 150 PSF. PRECAST CONCRETE PLANK TO BE DESIGNED FOR MINIMUM OF 2 HOUR FIRE RATING.
- FOR DIMENSIONS AND ELEVATIONS NOT GIVEN REFER TO ARCHITECTURAL DRAWINGS.
- INDICATES A SPICE CONNECTION ALONG A CONTINUOUS STEEL BEAM. DESIGN SPICE CONNECTION FOR FULL CAPACITY OF STEEL BEAM.

FRAMING ELEVATION NOTES:

- TYPICAL UNDERSIDE-OF-DECK ELEVATION = (137' - 6 3/4") AT THE THIRD FLOOR LEVEL, IN THE AREA BOUNDED BY GRIDS (AA) - (AA.9) AND (5.2) - (9), UNLESS NOTED OTHERWISE AS (X' - X'), (Y-X' - X'), OR HILO.
- TYPICAL UNDERSIDE-OF-DECK ELEVATION = (139' - 0 3/4") AT THE THIRD FLOOR LEVEL, IN THE AREA BOUNDED BY GRIDS (DD) - (NN) AND (16) - (17), UNLESS NOTED OTHERWISE AS (X' - X'), (Y-X' - X'), OR HILO.
- TYPICAL UNDERSIDE-OF-DECK ELEVATION = (136' - 4") AT THE MULTI-PURPOSE ROOF LEVEL, IN THE AREA BOUNDED BY GRIDS (DD) - (MM) AND (7.2) - (16.2), UNLESS NOTED OTHERWISE AS (X' - X'), (Y-X' - X'), OR HILO.
- FRAMING ELEVATIONS ARE BASED ON TOP-OF-FLOOR ELEVATION, (134' - 0"), SHOWN ON THE ARCHITECTURAL DRAWINGS.
- COORDINATE ALL ELEVATIONS WITH ARCHITECTURAL DRAWINGS.
- SLOPE STEEL UNIFORMLY TO COLUMN ELEVATIONS SHOWN ON PLANS.

SPRAY FIREPROOFING NOTES:

STEEL COLUMNS, SHOWN ON THIS DRAWING, TO RECEIVE 2-HOUR FIRE RATING BY CEMENTITIOUS FIREPROOFING UNLESS INDICATED AS A ROUND HSS COLUMN, EXPOSED TO VIEW PORTION OF ROUND HSS COLUMNS TO RECEIVE 2-HOUR FIRE RATING BY INTUMESCENT MASTIC FIREPROOFING. CONCEALED FROM VIEW PORTION OF ROUND HSS COLUMN TO RECEIVE 2-HOUR FIRE RATING BY CEMENTITIOUS FIREPROOFING.

STEEL BEAMS AND KICKERS, ON THIS DRAWING, SUPPORTING FLOOR TO RECEIVE 2-HOUR FIRE RATING BY CEMENTITIOUS FIREPROOFING.

CONCEALED FROM VIEW - BRACED FRAMES, SHOWN ON THIS DRAWING, TO RECEIVE 2-HOUR FIRE RATING BY CEMENTITIOUS FIREPROOFING.

EXPOSED TO VIEW - BRACED FRAMES, SHOWN ON THIS DRAWING, TO RECEIVE 2-HOUR FIRE RATING BY INTUMESCENT MASTIC FIREPROOFING.

NO FIREPROOFING REQUIRED AT SUPPLEMENTAL STEEL ROUND HSS GRTS AND OUTRIGGERS SUPPORTING CURTAINWALL.

COORDINATE WITH SPECIFICATIONS AND ARCHITECTURAL DRAWINGS FOR FIREPROOFING REQUIREMENTS.

BRACE FRAME KEY

- 0" TYP
WF BF-X
INDICATES A BRACE FRAME ABOVE AND BELOW LEVEL.
- 0" TYP
BF-X
INDICATES A BRACE FRAME ABOVE LEVEL.
- 0" TYP
WF BF-X
INDICATES A BRACE FRAME BELOW LEVEL.

DRA

Drumme Rosane Anderson, Inc.
225 Oakland Road
Studio 205
South Windsor, CT
06074
Planning Architecture Interior
Tel: 817.221.1100
www.dra.com

NORTHEAST
METRO TECH

100 Hemlock Rd.
Wakefield, MA 01880

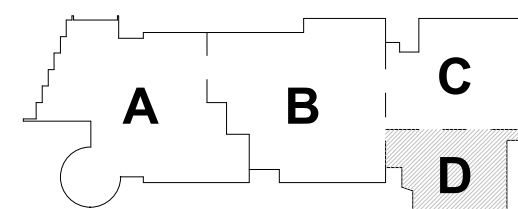


Engineers Design Group Inc.
Structural Engineers
389 Main Street, Suite 401
Malden, MA 02148
(781)396-9007
EDG@EDGINC.COM

© COPYRIGHT 2021 DRUMMEY ROSANE ANDERSON, INC.

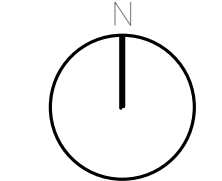
MSBA 60% CD
Submission

01/13/2023

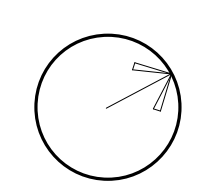


KEY PLAN

PROJECT NORTH



MAGNETIC NORTH



THIRD FLOOR
FRAMING PLAN -
AREA D

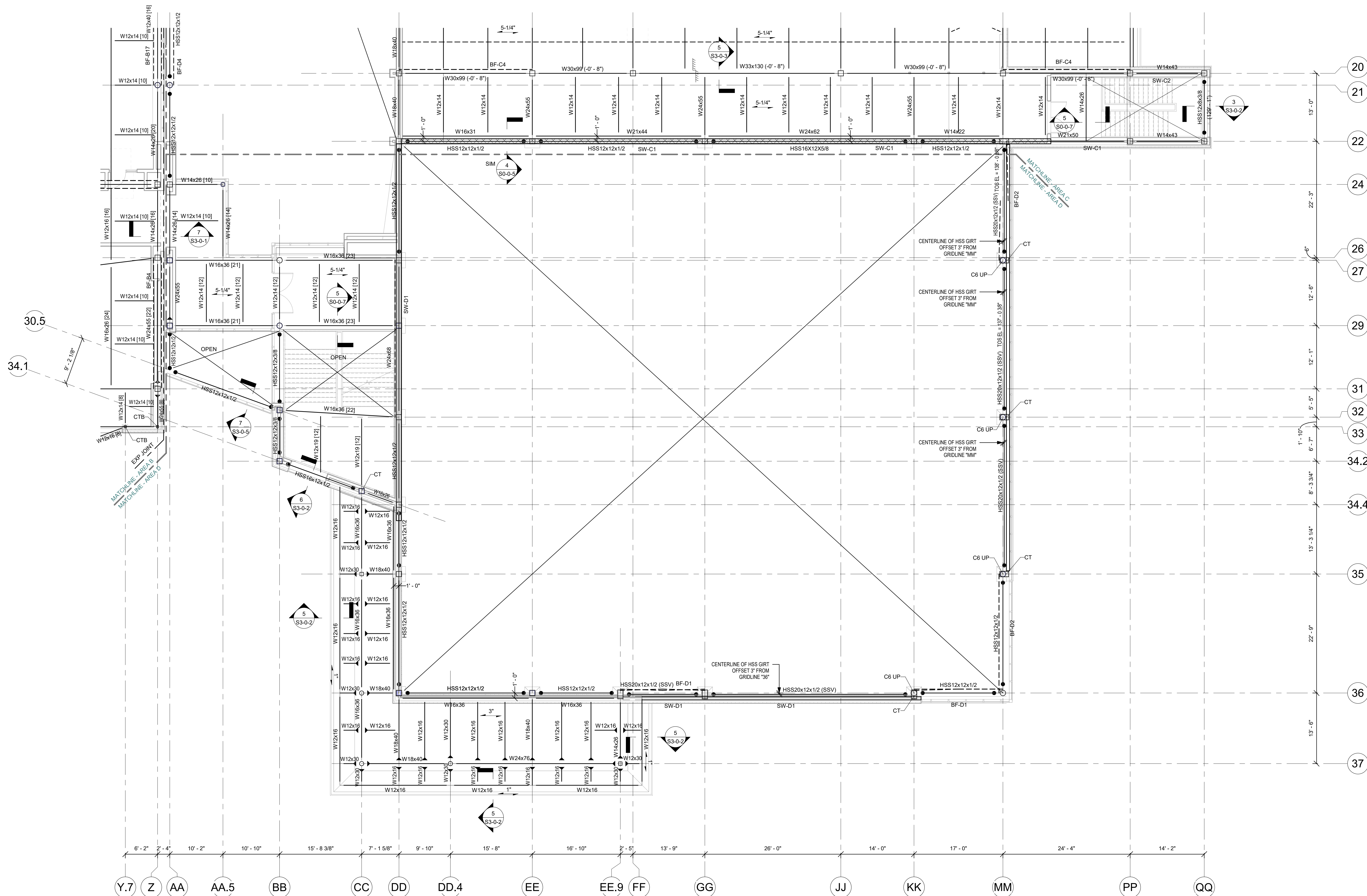
Scale: 1/8" = 1'-0"

Job No.: 20202

Drawn By: EDG

Date: 01/13/2023

S1-1-3D



DRA

Drummeys Rosane Anderson, Inc.
225 Oakland Road
Studio 205
South Windsor, CT 06074
Planning Architecture Interior
Tel: 877.211.1100
www.dra.com

NORTHEAST
METRO TECH

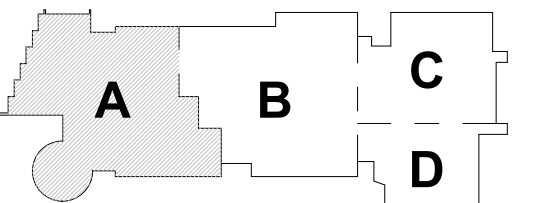
100 Hemlock Rd.
Wakefield, MA 01880

EDG
Engineers Design Group Inc.
Structural Engineers
389 Main Street, Suite 401
Malden, MA 02148
(781)396-9007
EDG@EDGINC.COM

© COPYRIGHT 2021 DRUMMEYS ROSANE ANDERSON, INC.

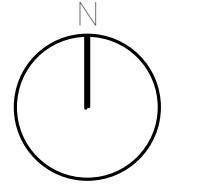
MSBA 60% CD
Submission

01/13/2023

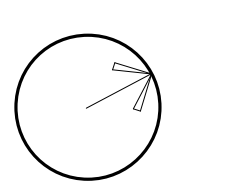


KEY PLAN

PROJECT NORTH



MAGNETIC NORTH



FOURTH FLOOR
FRAMING PLAN -
AREA A

Scale: 1/8" = 1'-0"

Job No.: 20202

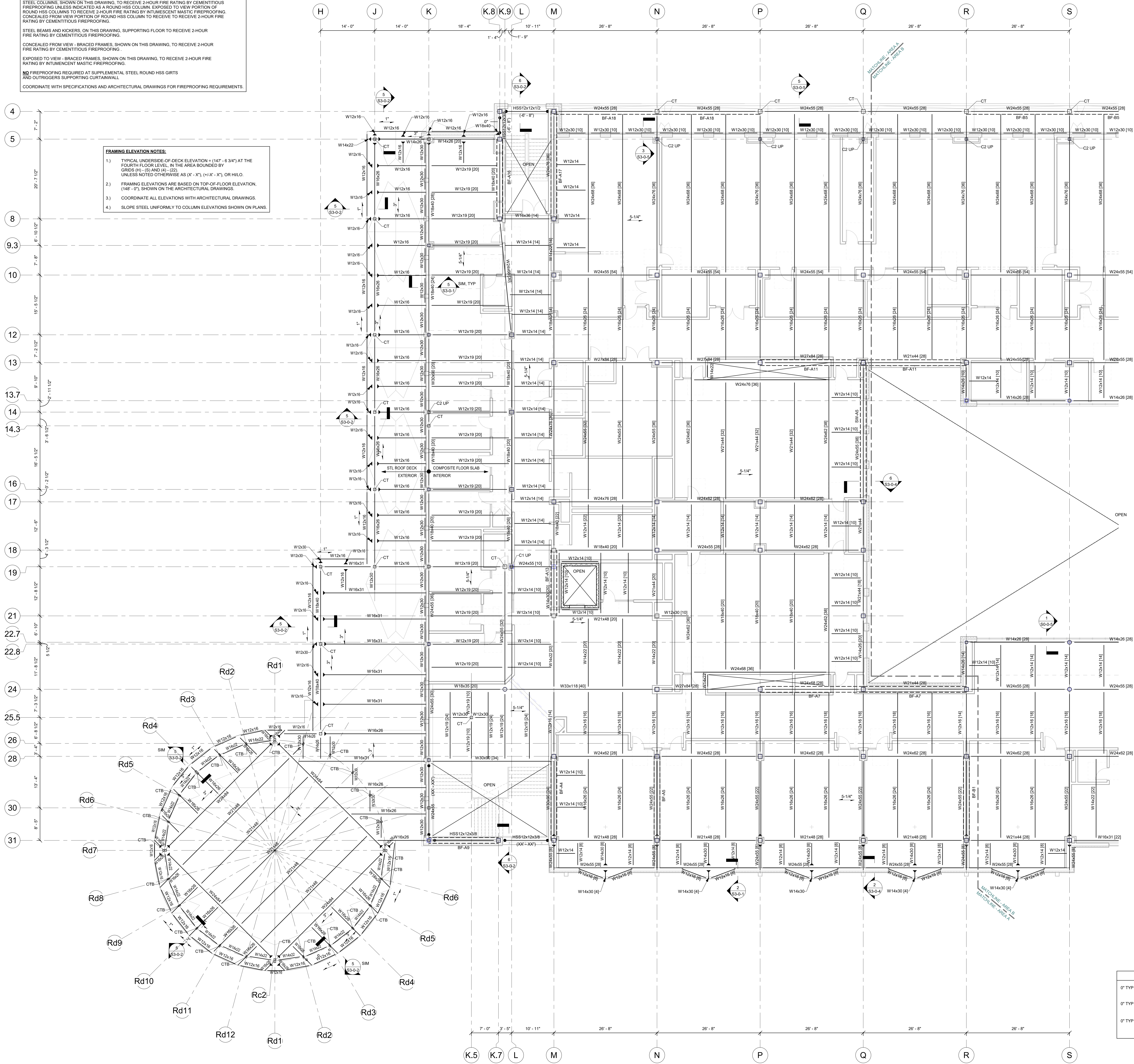
Drawn By: EDG

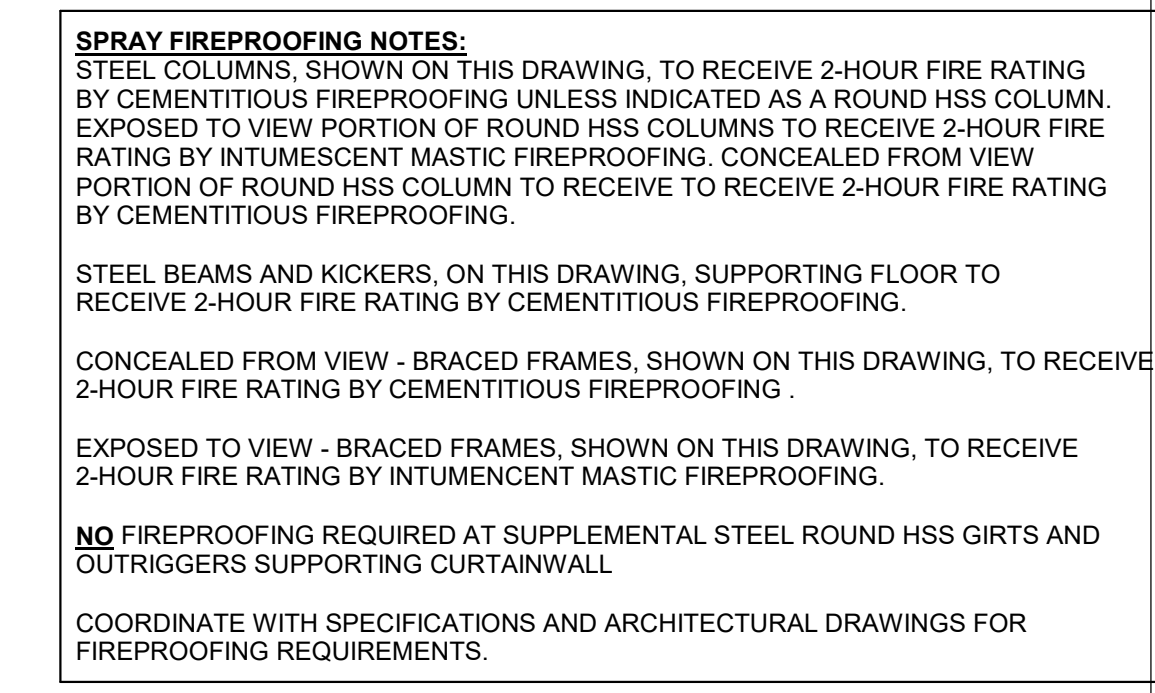
Date: 01/13/2023

S1-1-4A

SPRAY FIREPROOFING NOTES:
STEEL COLUMN, SHOWN ON THIS DRAWING, TO RECEIVE 2-HOUR FIRE RATING BY CEMENTITIOUS FIREPROOFING UNLESS INDICATED AS A ROUND HSS COLUMN, EXPOSED TO VIEW PORTION OF ROUND HSS COLUMN TO RECEIVE 2-HOUR FIRE RATING BY INTUMESCENT MASTIC FIREPROOFING CONCEALED FROM VIEW PORTION OF ROUND HSS COLUMN TO RECEIVE 2-HOUR FIRE RATING BY CEMENTITIOUS FIREPROOFING.
STEEL BEAMS AND KICKERS, ON THIS DRAWING, SUPPORTING FLOOR TO RECEIVE 2-HOUR FIRE RATING BY CEMENTITIOUS FIREPROOFING.
CONCEALED FROM VIEW - BRACED FRAMES, SHOWN ON THIS DRAWING, TO RECEIVE 2-HOUR FIRE RATING BY CEMENTITIOUS FIREPROOFING.
EXPOSED TO VIEW - BRACED FRAMES, SHOWN ON THIS DRAWING, TO RECEIVE 2-HOUR FIRE RATING BY INTUMESCENT MASTIC FIREPROOFING.
NO FIREPROOFING REQUIRED AT SUPPLEMENTAL STEEL ROUND HSS GIRTS AND OUTRIGGERS SUPPORTING CURTAINWALL.
COORDINATE WITH SPECIFICATIONS AND ARCHITECTURAL DRAWINGS FOR FIREPROOFING REQUIREMENTS.

FRAMING ELEVATION NOTES:
1.) TYPICAL UNDERSIDE-OF-DECK ELEVATION = (147' - 6 3/4") AT THE FOURTH FLOOR LEVEL IN THE AREA BOUNDED BY GRID (H) - (S) AND (4) - (22), UNLESS NOTED OTHERWISE AS (X' - Y'), (X' - Y'), OR H/LO.
2.) FRAMING ELEVATIONS ARE BASED ON TOP-OF-FLOOR ELEVATION, (148' - 0"), SHOWN ON THE ARCHITECTURAL DRAWINGS.
3.) COORDINATE ALL ELEVATIONS WITH ARCHITECTURAL DRAWINGS.
4.) SLOPE STEEL UNIFORMLY TO COLUMN ELEVATIONS SHOWN ON PLANS.





EDG
Engineers Design Group Inc.
Structural Engineers
389 Main Street, Suite 401
Malden, MA 02148
(781)396-9007
EDG@EDGINC.COM

Scale: 1/8" = 1'-0"
Job No.: 20202
Drawn By: EDG
Date: 01/13/2023

FRAMING ELEVATION NOTES:	
1.)	TYPICAL UNDERSIDE-OF-DECK ELEVATION = $(147' - 6 \frac{3}{4}")$ AT THE FOURTH FLOOR LEVEL. IN THE AREA BOUNDED BY GRIDS (0) - (2) AND (4) - (22).
2.)	FRAMING ELEVATIONS ARE BASED ON TOP-OF-FLOOR ELEVATION, $(148' - 0")$, SHOWN ON THE ARCHITECTURAL DRAWINGS.
3.)	COORDINATE ALL ELEVATIONS WITH ARCHITECTURAL DRAWINGS.
4.)	SLOPE STEEL UNIFORMLY TO COLUMN ELEVATIONS SHOWN ON PLANS.

BRACE FRAME KEY		
0" TYP		WF BF-X INDICATES A BRACE FRAME ABOVE AND BELOW LEVEL
0" TYP		BF-X INDICATES A BRACE FRAME ABOVE LEVEL
0" TYP		WF BF-X INDICATES A BRACE FRAME BELOW LEVEL

DRA

Drumme Rosane Anderson, Inc.
225 Oakland Road
Studio 205
South Windsor, CT 06074

260 Charles Street
Studio 300
Waltham, MA 02453

Planning Architects Interior
Tel: 817.261.1100
www.dra.com

NORTHEAST METRO TECH

100 Hemlock Rd.
Wakefield, MA 01880



Engineers Design Group Inc.
Structural Engineers
389 Main Street, Suite 401
Malden, MA 02148
(781)396-9007
EDG@EDGINC.COM

SPRAY FIREPROOFING NOTES:
STEEL COLUMN, SHOWN ON THIS DRAWING, TO RECEIVE 2-HOUR FIRE RATING BY CEMENTITIOUS FIREPROOFING UNLESS INDICATED AS A ROUND HSS COLUMN. EXPOSED TO VIEW PORTION OF ROUND HSS COLUMNS TO RECEIVE 2-HOUR FIRE RATING BY INTUMESCENT MASTIC FIREPROOFING. CONCEALED FROM VIEW PORTION OF ROUND HSS COLUMN TO RECEIVE 2-HOUR FIRE RATING BY CEMENTITIOUS FIREPROOFING.
STEEL BEAMS AND KICKERS, ON THIS DRAWING, SUPPORTING FLOOR TO RECEIVE 2-HOUR FIRE RATING BY CEMENTITIOUS FIREPROOFING (Unless located higher than 20' to the bottom of the structural members) CONCEALED FROM VIEW - BRACED FRAMES, SHOWN ON THIS DRAWING, TO RECEIVE 2-HOUR FIRE RATING BY CEMENTITIOUS FIREPROOFING.
EXPOSED TO VIEW - BRACED FRAMES, SHOWN ON THIS DRAWING, TO RECEIVE 2-HOUR FIRE RATING BY INTUMESCENT MASTIC FIREPROOFING.
NO FIREPROOFING REQUIRED AT SUPPLEMENTAL STEEL ROUND HSS GIRTS AND OUTRIGERS SUPPORTING CURTAINWALL.
COORDINATE WITH SPECIFICATIONS AND ARCHITECTURAL DRAWINGS FOR FIREPROOFING REQUIREMENTS.

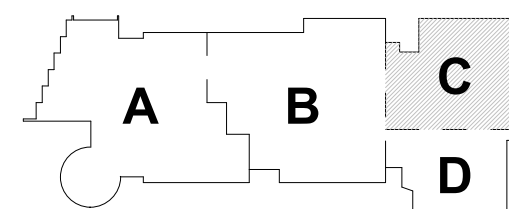
FRAMING NOTES:

- FOR GENERAL NOTES AND TYPICAL DETAILS SEE DRAWINGS S0-0-1, S0-0-2, S0-0-3, S0-0-4, S0-0-5, S0-0-6, S0-0-7 AND S0-0-8.
- REFER TO ARCHITECTURAL DRAWINGS FOR ELEVATIONS AND VERTICAL DIMENSIONS. PITCH ALL STEEL UNIFORMLY TO LOW POINTS AT THE COLUMNS AND BENT BEAMS AS SHOWN ON THE ARCHITECTURAL DRAWINGS.
- BF-1 ETC., INDICATES A BRACED BAY. REFER TO BRACED FRAME ELEVATIONS AND DETAILS ON DRAWINGS S4-0-1, S4-0-2, S4-0-3 AND S4-0-4 FOR ADDITIONAL INFORMATION.
- [XX] INDICATES THE NUMBER OF 3/4" DIA. x 4 1/4" LONG HEADED STUDS WELDED TO THE TOP FLANGE OF THE BEAM. SPACE STUDS EVENLY ALONG THE BEAM UNLESS NOTED OTHERWISE.
- INDICATES A MOMENT CONNECTION TO DEVELOP THE FULL CAPACITY OF THE MEMBER. REFER TO TYPICAL DETAILS 8 AND 9 ON DRAWING S0-0-5 AND DETAIL 5 ON DRAWING S0-0-7.
- INDICATES A 9/16" FILLET WELD ALL AROUND (HSS BEAM TO HSS COLUMN) WHERE BEAM DIMENSIONS EXCEED COLUMN DIMENSIONS PROVIDE 1/2" THICK STEEL CAP PLATE TO ACHIEVE ALL AROUND WELD. REFER TO TYPICAL DETAIL 2 ON DRAWING S0-0-7.
- < X > INDICATES UPWARD CAMBER AT THE MID-SPAN OF THE MEMBER.
- 5-1/4" INDICATES SPAN DIRECTION OF 2" DEEP, 20 GAGE GALVANIZED COMPOSITE STEEL DECK WITH 3 1/4" LIGHT WEIGHT CONCRETE TOPPING. TOTAL THICKNESS = 5 1/4". REINFORCE WITH 6# - W2.1WV2.1 WWR. REFER TO TYPICAL DETAIL 5 ON DRAWING S0-0-8 FOR ADDITIONAL INFORMATION. USE 3/4" DIA x 5' LONG HEADED STUDS.
- 1-1/2" INDICATES SPAN DIRECTION OF 1 1/2" DEEP, 20 GAGE TYPE B, GALVANIZED STEEL ROOF DECK.
- 3" INDICATES SPAN DIRECTION OF 3" DEEP, 18/20 GAGE TYPE NCAS, GALVANIZED CELLULAR ACOUSTIC STEEL ROOF DECK.
- 6" INDICATES SPAN DIRECTION OF 3" DEEP, 18 GAGE GALVANIZED COMPOSITE STEEL DECK WITH 3" LIGHT WEIGHT CONCRETE TOPPING. TOTAL THICKNESS = 6". SEE TYPICAL DETAIL 4 ON DRAWING S0-0-8.
- FOR EXACT NUMBER, SIZE, AND LOCATION OF OPENING IN STEEL DECKING REFER TO MECHANICAL AND ARCHITECTURAL DRAWINGS. FOR FRAMING INFORMATION, REFER TO DETAIL 1, AND 8 ON DRAWING S0-0-4 AND DETAIL 1 ON DRAWING S0-0-8.
- 6" HATCHED AREA INDICATES LOCATION OF CONCRETE SLAB WITH 2" DEEP, 18 GAGE GALVANIZED COMPOSITE STEEL DECK WITH 4" NORMAL WEIGHT CONCRETE TOPPING. TOTAL THICKNESS = 6". REINFORCE WITH 6# - W2.1WV2.1 WWR. REFER TO TYPICAL DETAIL 5 ON DRAWING S0-0-8 FOR ADDITIONAL INFORMATION. USE 3/4" DIA x 5' LONG HEADED STUDS.
- 6-1/2" HATCHED AREA INDICATES LOCATION OF CONCRETE SLAB WITH 3" DEEP, 18/20 GAGE TYPE NCA, GALVANIZED CELLULAR ACOUSTIC STEEL DECK WITH 3 1/2" LIGHT WEIGHT CONCRETE TOPPING. TOTAL THICKNESS = 6-1/2". REINFORCE WITH 6# - W2.1WV2.1 WWR. REFER TO TYPICAL DETAIL 5 ON DRAWING S0-0-8 FOR ADDITIONAL INFORMATION. USE 3/4" DIA x 5' LONG HEADED STUDS.
- INDICATES A ROOF DRAIN. REFER TO TYPICAL, STRUCTURAL DETAILS 1 AND 8 ON DRAWING S0-0-4 AND DETAIL 1 ON DRAWING S0-0-8. FOR DECKING SUPPORT, REFER TO DETAIL 4 ON DRAWING S0-0-5. REFER TO PLUMBING AND ARCHITECTURAL DRAWINGS FOR OPENING SIZES AND LOCATIONS.
- CT INDICATES A COLUMN TERMINATES AT THIS LEVEL.
- WF INDICATES A BEND IN THE STEEL BEAM. REFER TO TYPICAL DETAIL 6 ON DRAWING S0-0-8.
- INDICATES A CMU WALL. REFER TO TYPICAL DETAIL 3 ON DRAWING S0-0-4 FOR REINFORCEMENT AND DETAIL 4 ON DRAWING S0-0-4 FOR CONNECTIONS TO STEEL BEAMS AND CONCRETE SLABS AT THE TOP OF WALL FOR NON-STRUCTURAL WALLS. REFER TO RELEVANT SECTIONS FOR CONNECTIONS OF SHEAR WALLS TO THE STRUCTURE.
- INDICATES AN INSULATED STRUCTURAL PRECAST CONCRETE WALL. COORDINATE WITH ARCHITECTURAL DRAWING.
- 1-1/2" INDICATES SPAN DIRECTION OF 1 1/2" DEEP, 18/20 GAGE TYPE BCA, GALVANIZED CELLULAR ACOUSTICAL STEEL ROOF DECK.
- 10' x 2" PC PLANK INDICATES SPAN OF 10' DEEP PRESTRESSED, PRECAST CONCRETE HOLLOW CORE PLANK WITH A MINIMUM 2" OF NORMAL WEIGHT CONCRETE TOPPING. PLANK AND CONCRETE TOPPING SLAB TO BE DESIGNED TO SUPPORT A MINIMUM LIVE LOAD CAPACITY OF 150 PSF. PRECAST CONCRETE PLANK TO BE DESIGNED FOR MINIMUM OF 2 HOUR FIRE RATING.
- FOR DIMENSIONS AND ELEVATIONS NOT GIVEN REFER TO ARCHITECTURAL DRAWINGS.
- WF INDICATES A SPLICE CONNECTION ALONG A CONTINUOUS STEEL BEAM. DESIGN SPLICE CONNECTION FOR FULL CAPACITY OF STEEL BEAM.

© COPYRIGHT 2021 DRUMMEY ROSANE ANDERSON, INC.

MSBA 60% CD
Submission

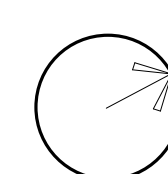
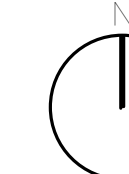
01/13/2023



KEY PLAN

PROJECT NORTH

MAGNETIC NORTH



FOURTH FLOOR FRAMING PLAN - AREA C

Scale: 1/8" = 1'-0"

Job No.: 20202

Drawn By: EDG

Date: 01/13/2023

S1-1-4C

FRAMING ELEVATION NOTES:

- TYPICAL UNDERSIDE-OF-DECK ELEVATION = (147'-6 3/4") AT THE FOURTH FLOOR LEVEL. IN THE AREA BOUNDED BY GRIDS (AA) - (AA.9) AND (7) - (9) UNLESS NOTED OTHERWISE AS (X' - X'), (+X' - X'), OR HILO.
- TYPICAL UNDERSIDE-OF-DECK ELEVATION = (152'-4") AT THE CLEAR-STORY ROOF LEVEL. IN THE AREA BOUNDED BY GRIDS (AA) - (NN) AND (7) - (17) UNLESS NOTED OTHERWISE AS (X' - X'), (+X' - X'), OR HILO.
- FRAMING ELEVATIONS ARE BASED ON TOP-OF-FLOOR ELEVATION, (148'-0"), SHOWN ON THE ARCHITECTURAL DRAWINGS.
- COORDINATE ALL ELEVATIONS WITH ARCHITECTURAL DRAWINGS.
- SLOPE STEEL UNIFORMLY TO COLUMN ELEVATIONS SHOWN ON PLANS.

BRACE FRAME KEY

- 0" TYP. WF - BF-X INDICATES A BRACE FRAME ABOVE AND BELOW LEVEL
- 0" TYP. BF-X - WF INDICATES A BRACE FRAME ABOVE LEVEL
- 0" TYP. WF - BF-X INDICATES A BRACE FRAME BELOW LEVEL

DRA

Drumme Rosane Anderson, Inc.
225 Oakland Road
Studio 205
South Windsor, CT 06074

260 Charles Street
Studio 300
Waltham, MA 02453

Planning Architecture Interior
Tel: 877.221.1100
www.dra.com

NORTHEAST
METRO TECH

100 Hemlock Rd.
Wakefield, MA 01880

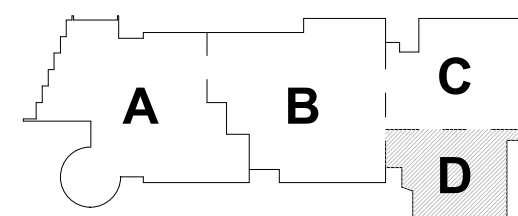


Engineers Design Group Inc.
Structural Engineers
389 Main Street, Suite 401
Malden, MA 02148
(781)396-9007
EDG@EDGINC.COM

© COPYRIGHT 2021 DRUMMEY ROSANE ANDERSON, INC.

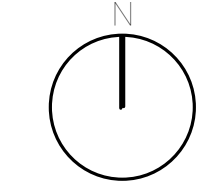
MSBA 60% CD
Submission

01/13/2023

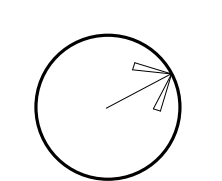


KEY PLAN

PROJECT NORTH



MAGNETIC NORTH



FOURTH FLOOR
FRAMING PLAN -
AREA D

Scale: 1/8" = 1'-0"

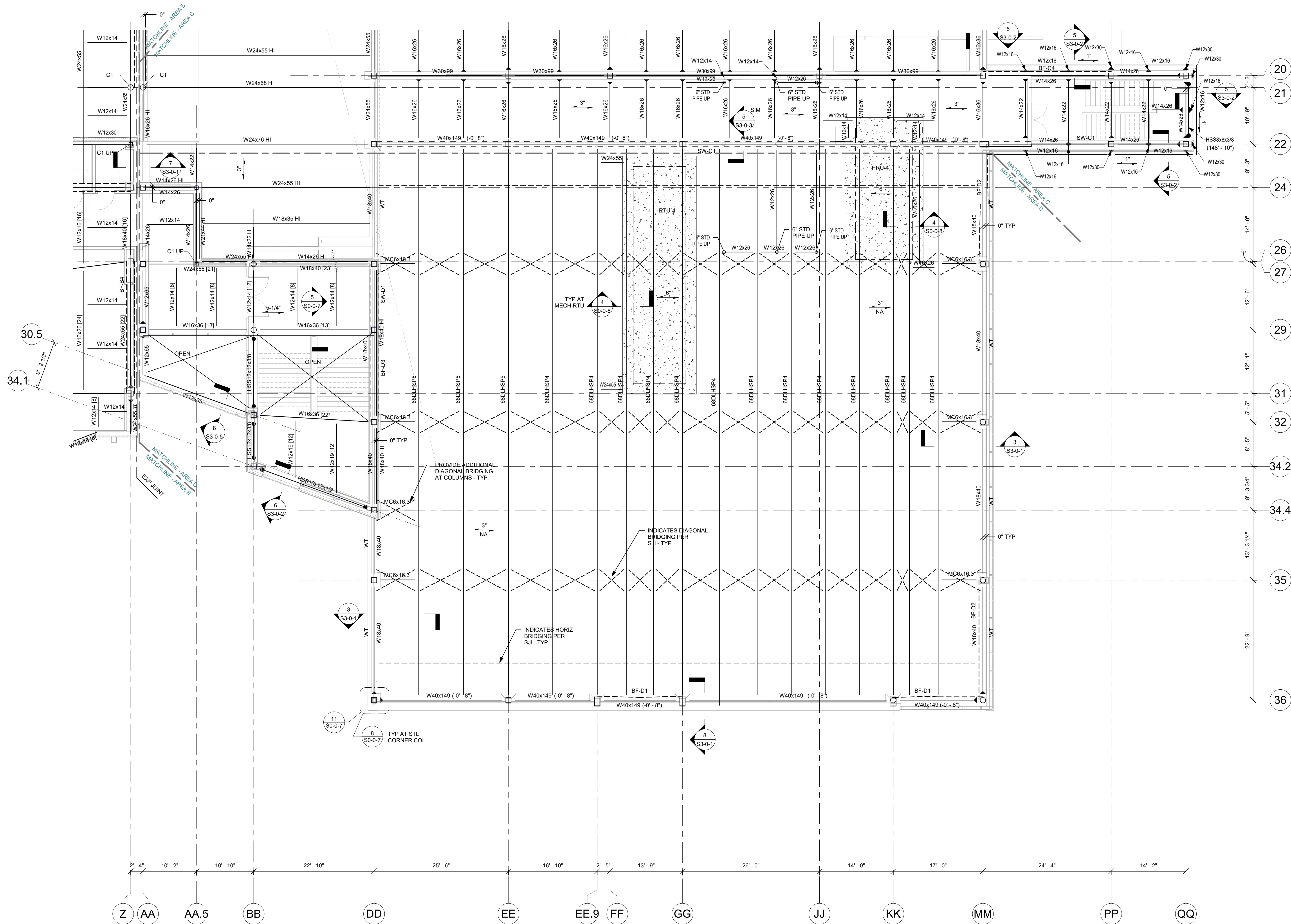
Job No.: 20202

Drawn By: EDG

Date: 01/13/2023

S1-1-4D

SPRAY FIREPROOFING NOTES:
STEEL COLUMNS SHOWN ON THIS DRAWING, TO RECEIVE 2-HOUR FIRE RATING BY CEMENTITIOUS FIREPROOFING UNLESS INDICATED AS A ROUND HSS COLUMN. EXPOSED TO VIEW PORTION OF ROUND HSS COLUMNS TO RECEIVE 2-HOUR FIRE RATING BY INTUMESCENT MASTIC FIREPROOFING. CONCEALED FROM VIEW PORTION OF ROUND HSS COLUMN TO RECEIVE TO RECEIVE 2-HOUR FIRE RATING BY CEMENTITIOUS FIREPROOFING.
STEEL BEAMS AND KICKERS, ON THIS DRAWING, SUPPORTING FLOOR TO RECEIVE 2-HOUR FIRE RATING BY CEMENTITIOUS FIREPROOFING (Unless located higher than 20' to the bottom of the structural members).
CONCEALED FROM VIEW - BRACED FRAMES, SHOWN ON THIS DRAWING, TO RECEIVE 2-HOUR FIRE RATING BY INTUMESCENT MASTIC FIREPROOFING.
EXPOSED TO VIEW - BRACED FRAMES, SHOWN ON THIS DRAWING, TO RECEIVE 2-HOUR FIRE RATING BY INTUMESCENT MASTIC FIREPROOFING.
NO FIREPROOFING REQUIRED AT SUPPLEMENTAL STEEL ROUND HSS GRT AND OUTRIGGERS SUPPORTING CURTAINWALL.
COORDINATE WITH SPECIFICATIONS AND ARCHITECTURAL DRAWINGS FOR FIREPROOFING REQUIREMENTS.



DRA

Drumsey Rosane Anderson, Inc.
225 Oakland Road
Studio 205
South Windsor, CT
06074

260 Charles Street
Studio 300
Waltham, MA
02453

Planning Architecture Interior
Tel: 877.271.1100
www.dra.com

NORTHEAST METRO TECH

100 Hemlock Rd.
Wakefield, MA 01880



Engineers Design Group Inc.
Structural Engineers
389 Main Street, Suite 401
Malden, MA 02148
(781)396-9007
EDG@EDGINC.COM

SPRAY FIREPROOFING NOTES:

STEEL COLUMNS SHOWN ON THIS DRAWING, TO RECEIVE 2-HOUR FIRE RATING BY CEMENTITIOUS FIREPROOFING UNLESS INDICATED AS A ROUND HSS COLUMN. EXPOSED TO VIEW PORTION OF ROUND HSS COLUMNS TO RECEIVE 2-HOUR FIRE RATING BY INTUMESCENT MASTIC FIREPROOFING. CONCEALED FROM VIEW PORTION OF ROUND HSS COLUMN TO RECEIVE 2-HOUR FIRE RATING BY CEMENTITIOUS FIREPROOFING.

STEEL BEAMS AND KICKERS, ON THIS DRAWING, SUPPORTING ROOF TO RECEIVE 1-HOUR FIRE RATING BY CEMENTITIOUS FIREPROOFING. METAL ROOF DECK TO RECEIVE 1-HOUR FIRE RATING BY CEMENTITIOUS FIREPROOFING. CONCEALED FROM VIEW - BRACED FRAMES, SHOWN ON THIS DRAWING, TO RECEIVE 2-HOUR FIRE RATING BY CEMENTITIOUS FIREPROOFING.

EXPOSED TO VIEW - BRACED FRAMES, SHOWN ON THIS DRAWING, TO RECEIVE 2-HOUR FIRE RATING BY INTUMESCENT MASTIC FIREPROOFING.

NO FIREPROOFING REQUIRED AT SUPPLEMENTAL STEEL ROUND HSS CRTS AND OUTRIGGERS SUPPORTING CURTAINWALL.

COORDINATE WITH SPECIFICATIONS AND ARCHITECTURAL DRAWINGS FOR FIREPROOFING REQUIREMENTS.

FRAMING NOTES:

- FOR GENERAL NOTES AND TYPICAL DETAILS SEE DRAWINGS S0-1, S0-2, S0-3, S0-4, S0-5, S0-6, S0-7, S0-8, S0-9, S0-10, S0-11, S0-12, S0-13, S0-14, S0-15, S0-16, S0-17, S0-18, S0-19, S0-20, S0-21, S0-22, S0-23, S0-24, S0-25, S0-26, S0-27, S0-28, S0-29, S0-30, S0-31, S0-32, S0-33, S0-34, S0-35, S0-36, S0-37, S0-38, S0-39, S0-40, S0-41, S0-42, S0-43, S0-44, S0-45, S0-46, S0-47, S0-48, S0-49, S0-50, S0-51, S0-52, S0-53, S0-54, S0-55, S0-56, S0-57, S0-58, S0-59, S0-60, S0-61, S0-62, S0-63, S0-64, S0-65, S0-66, S0-67, S0-68, S0-69, S0-70, S0-71, S0-72, S0-73, S0-74, S0-75, S0-76, S0-77, S0-78, S0-79, S0-80, S0-81, S0-82, S0-83, S0-84, S0-85, S0-86, S0-87, S0-88, S0-89, S0-90, S0-91, S0-92, S0-93, S0-94, S0-95, S0-96, S0-97, S0-98, S0-99, S0-100.
- REFER TO ARCHITECTURAL DRAWINGS FOR ELEVATIONS AND VERTICAL DIMENSIONS. PITCH ALL STEEL UNIFORMLY TO LOW POINTS AT THE COLUMNS AND BENT BEAMS AS SHOWN ON THE ARCHITECTURAL DRAWINGS.
- BF-1 ETC. INDICATES A BRACED BAY. REFER TO BRACED FRAME ELEVATIONS AND DETAILS ON DRAWINGS S4-0-1, S4-0-2, S4-0-3 AND S4-0-4 FOR ADDITIONAL INFORMATION.
- [XX] INDICATES THE NUMBER OF 3/4" DIA X 4' LONG HEADED STUDS WELDED TO THE TOP FLANGE OF THE BEAM. SPACE STUDS EVENLY ALONG THE BEAM UNLESS NOTED OTHERWISE.
- INDICATES A MOMENT CONNECTION TO DEVELOP THE FULL CAPACITY OF THE MEMBER. REFER TO TYPICAL DETAILS 8 AND 9 ON DRAWING S0-0-5 AND DETAIL 3 ON DRAWING S0-0-7.
- INDICATES A 5/16" FILLET WELD ALL AROUND (HSS BEAM TO HSS COLUMN) WHERE BEAM DIMENSIONS EXCEED COLUMN DIMENSIONS PROVIDE 1/2" THICK STEEL CAP PLATE TO ACHIEVE ALL AROUND WELD. REFER TO TYPICAL DETAIL 2 ON DRAWING S0-0-7.
- + X' - INDICATES UPWARD CAMBER AT THE MID-SPAN OF THE MEMBER.
- 5'-14" INDICATES SPAN DIRECTION OF 2' DEEP, 20 GAGE GALVANIZED COMPOSITE STEEL DECK WITH 3 1/4" LIGHT WEIGHT CONCRETE TOPPING. TOTAL THICKNESS = 5 1/4". REINFORCE WITH 6#8 - W2 1W2 1 WWR.
- 1 1/2" INDICATES SPAN DIRECTION OF 1 1/2" DEEP, 20 GAGE TYPE B, GALVANIZED STEEL ROOF DECK.
- 3" NCAS INDICATES SPAN DIRECTION OF 3" DEEP, 1820 GAGE TYPE NCAS, GALVANIZED CELLULAR ACOUSTIC STEEL ROOF DECK.
- 6" INDICATES SPAN DIRECTION OF 3" DEEP, 16 GAGE GALVANIZED COMPOSITE STEEL DECK WITH 2" LIGHT WEIGHT CONCRETE TOPPING. TOTAL THICKNESS = 6". SEE TYPICAL DETAIL 4 ON DRAWING S0-0-8.

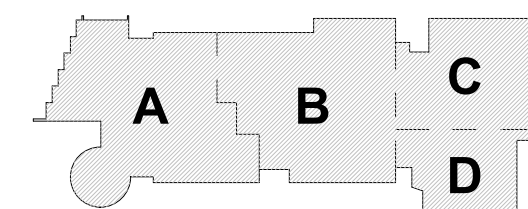
- FOR EXACT NUMBER, SIZE, AND LOCATION OF OPENING IN STEEL DECKING REFER TO MECHANICAL AND ARCHITECTURAL DRAWINGS. FOR FRAMING INFORMATION, REFER TO DETAIL 1 AND 8 ON DRAWING S0-0-5 AND DETAIL 1 ON DRAWING S0-0-8.
- 6" HATCHED AREA INDICATES LOCATION OF CONCRETE SLAB WITH 2" DEEP, 18 GAGE GALVANIZED COMPOSITE STEEL DECK WITH 4" NORMAL WEIGHT CONCRETE TOPPING. TOTAL THICKNESS = 6". REINFORCE WITH 6#8 - W2 1W2 1 WWR. REFER TO TYPICAL DETAIL 5 ON DRAWING S0-0-7 FOR ADDITIONAL INFORMATION. USE 3/4" DIA X 5' LONG HEADED STUDS.
- 6 1/2" HATCHED AREA INDICATES LOCATION OF CONCRETE SLAB WITH 3" DEEP, 1820 GAGE TYPE NCA, GALVANIZED CELLULAR ACOUSTIC STEEL DECK WITH 3 1/2" LIGHT WEIGHT CONCRETE TOPPING. TOTAL THICKNESS = 6 1/2". REINFORCE WITH 6#8 - W2 1W2 1 WWR. REFER TO TYPICAL DETAIL 5 ON DRAWING S0-0-7 FOR ADDITIONAL INFORMATION. USE 3/4" DIA X 5' LONG HEADED STUDS.
- INDICATES A ROOF DRAIN. REFER TO TYPICAL STRUCTURAL DETAILS 1 AND 8 ON DRAWING S0-0-6 AND DETAIL 1 ON DRAWING S0-0-8. FOR DECKING SUPPORT, REFER TO DETAIL 4 ON DRAWING S0-0-8. REFER TO PLUMBING AND ARCHITECTURAL DRAWINGS FOR OPENING SIZES AND LOCATIONS.
- CT INDICATES A COLUMN TERMINATES AT THIS LEVEL.
- WF INDICATES A BEND IN THE STEEL BEAM. REFER TO TYPICAL DETAIL 8 ON DRAWING S0-0-8.
- INDICATES A CMU WALL. REFER TO TYPICAL DETAIL 3 ON DRAWING S0-0-4 FOR REINFORCEMENT AND DETAIL 4 ON DRAWING S0-0-4 FOR CONNECTIONS TO STEEL BEAMS AND CONCRETE SLABS AT THE TOP OF WALL. FOR NON-STRUCTURAL WALLS, REFER TO RELEVANT SECTIONS FOR CONNECTIONS OF SHEAR WALLS TO THE STRUCTURE.
- INDICATES AN INSULATED STRUCTURAL PRECAST CONCRETE WALL. COORDINATE WITH ARCHITECTURAL DRAWING.
- 1 1/2" BCA INDICATES SPAN DIRECTION OF 1 1/2" DEEP, 1820 GAGE TYPE BCA, GALVANIZED CELLULAR ACOUSTIC STEEL ROOF DECK.
- 10' + 2" PC PLANK INDICATES SPAN OF 10' DEEP PRESTRESSED, PRECAST CONCRETE HOLLOW CORE PLANK WITH A MINIMUM 2" OF NORMAL WEIGHT CONCRETE TOPPING. PLANK AND CONCRETE TOPPING SLAB TO BE DESIGNED TO SUPPORT A MINIMUM LIVE LOAD CAPACITY OF 150 PSF. PRECAST CONCRETE PLANK TO BE DESIGNED FOR MINIMUM OF 2-HOUR FIRE RATING.
- FOR DIMENSIONS AND ELEVATIONS NOT GIVEN REFER TO ARCHITECTURAL DRAWINGS.
- WF INDICATES A SPLICE CONNECTION ALONG A CONTINUOUS STEEL BEAM. DESIGN SPLICE CONNECTION FOR FULL CAPACITY OF STEEL BEAM.

FRAMING ELEVATION NOTES:

- TYPICAL UNDERSIDE-OF-DECK ELEVATION = (162' - 0") AT THE ROOF LEVEL. IN THE AREA BOUNDED BY GRIDS (K), (S) AND (4) - (22). UNLESS NOTED OTHERWISE AS (X' - X'), (+X' - X'), OR HI/LO.
- COORDINATE ALL ELEVATIONS WITH ARCHITECTURAL DRAWINGS.
- SLOPE STEEL UNIFORMLY TO COLUMN ELEVATIONS SHOWN ON PLANS.

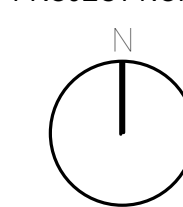
MSBA 60% CD
Submission

01/13/2023

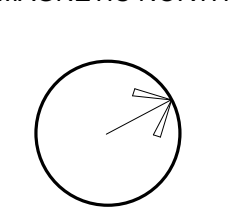


KEY PLAN

PROJECT NORTH



MAGNETIC NORTH



ROOF FRAMING PLAN - AREA A

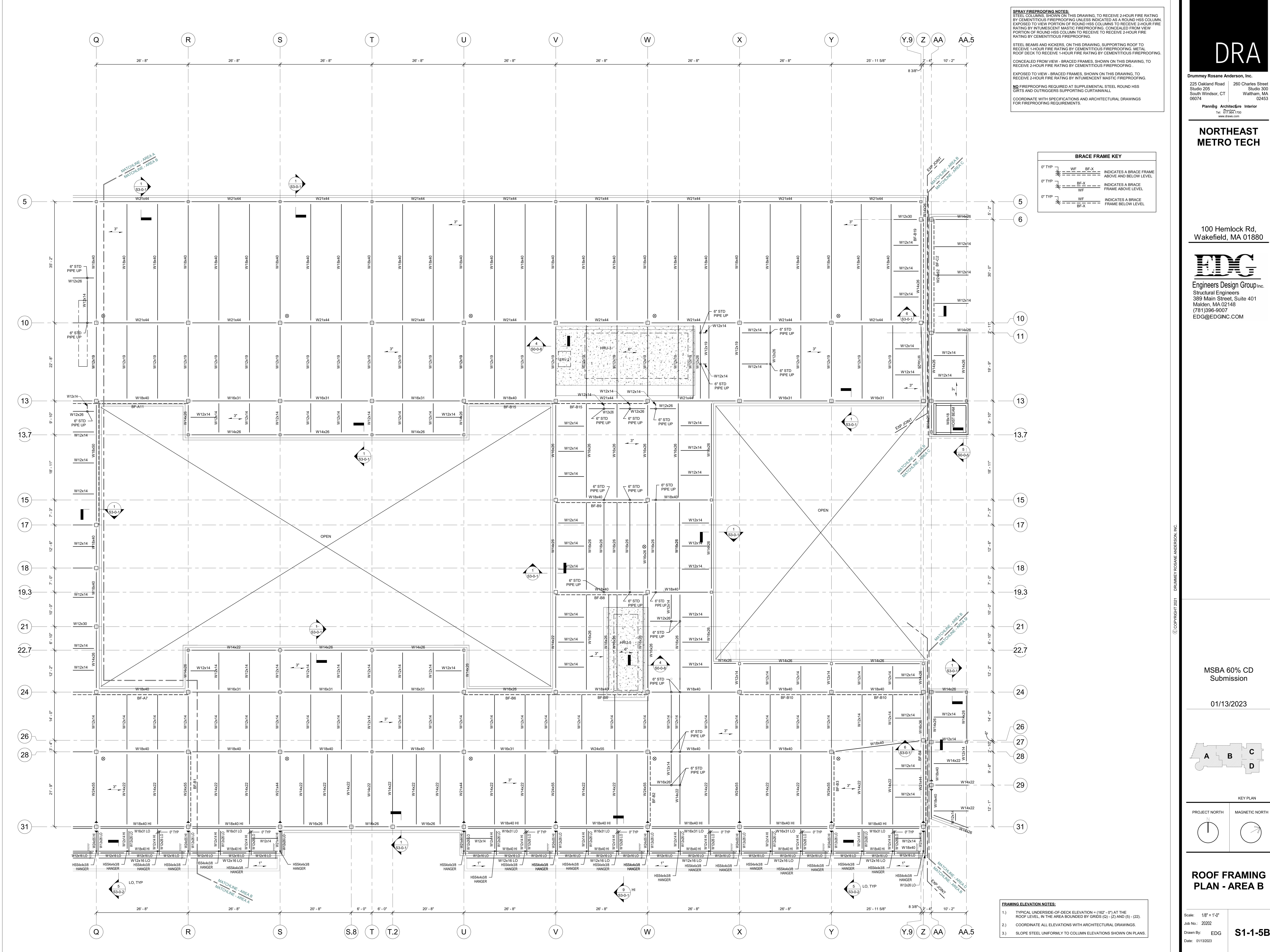
Scale: 1/8" = 1'-0"

Job No.: 20202

Drawn By: EDG

Date: 01/13/2023

S1-1-5A



SPRAY FIREPROOFING NOTES:
STEEL COLUMNS, SHOWN ON THIS DRAWING, TO RECEIVE 2-HOUR FIRE RATING BY CEMENTITIOUS FIREPROOFING UNLESS INDICATED AS A ROUND HSS COLUMN. EXPOSED TO VIEW PORTION OF ROUND HSS COLUMNS TO RECEIVE 2-HOUR FIRE RATING BY INTUMESCENT MASTIC FIREPROOFING. CONCEALED FROM VIEW PORTION OF ROUND HSS COLUMN TO RECEIVE 2-HOUR FIRE RATING BY CEMENTITIOUS FIREPROOFING.
STEEL BEAMS AND KICKERS, ON THIS DRAWING, SUPPORTING ROOF TO RECEIVE 1-HOUR FIRE RATING BY CEMENTITIOUS FIREPROOFING. METAL ROOF DECK TO RECEIVE 1-HOUR FIRE RATING BY CEMENTITIOUS FIREPROOFING.
CONCEALED FROM VIEW - BRACED FRAMES, SHOWN ON THIS DRAWING, TO RECEIVE 2-HOUR FIRE RATING BY INTUMESCENT MASTIC FIREPROOFING.
EXPOSED TO VIEW - BRACED FRAMES, SHOWN ON THIS DRAWING, TO RECEIVE 2-HOUR FIRE RATING BY INTUMESCENT MASTIC FIREPROOFING.
NO FIREPROOFING REQUIRED AT SUPPLEMENTAL STEEL ROUND HSS GIRTS AND OUTRIGERS SUPPORTING CURTAINWALL.
COORDINATE WITH SPECIFICATIONS AND ARCHITECTURAL DRAWINGS FOR FIREPROOFING REQUIREMENTS.

BRACE FRAME KEY		
0° TYP	WF	BF-X
0° TYP	BF-X	WF
0° TYP	WF	BF-X

- FRAMING ELEVATION NOTES:**
- 1.) TYPICAL UNDERSIDE-OF-DECK ELEVATION = (162'-0") AT THE ROOF LEVEL IN THE AREA BOUNDED BY GRIDS (0) - (2) AND (5) - (22).
 - 2.) COORDINATE ALL ELEVATIONS WITH ARCHITECTURAL DRAWINGS.
 - 3.) SLOPE STEEL UNIFORMLY TO COLUMN ELEVATIONS SHOWN ON PLANS.

DRA
Drumsey Rosane Anderson, Inc.
225 Oakland Road
Studio 205
South Windsor, CT 06074
260 Charles Street
Studio 300
Waltham, MA 02453
Tel: 877.221.1100
www.dra.com

**NORTHEAST
METRO TECH**

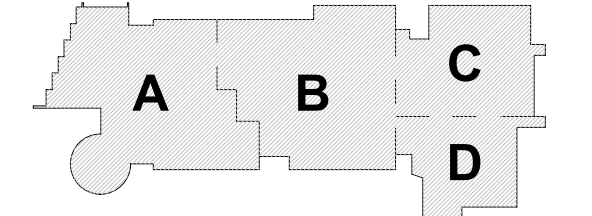
100 Hemlock Rd.
Wakefield, MA 01880

EDG
Engineers Design Group Inc.
Structural Engineers
389 Main Street, Suite 401
Malden, MA 02148
(781)396-9007
EDG@EDGINC.COM

© COPYRIGHT 2021 DRUMSEY ROSANE ANDERSON, INC.

MSBA 60% CD
Submission

01/13/2023



KEY PLAN

PROJECT NORTH

MAGNETIC NORTH

**ROOF FRAMING
PLAN - AREA B**

Scale: 1/8" = 1'-0"
Job No.: 20202
Drawn By: EDG
Date: 01/13/2023

S1-1-5B

Drummeys Rosane Anderson, Inc.

225 Oakland Road	260 Charles Street
Studio 205	Studio 300
South Windsor, CT	Waltham, MA
06074	02453

**Planning Architecture Interior
Design**

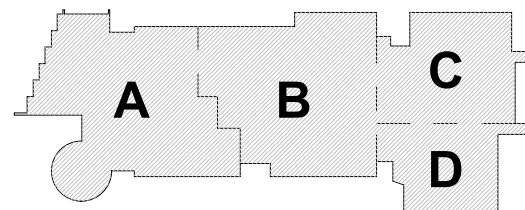
Tel: 617.964.1700
www.draws.com

100 Hemlock Rd,
Wakefield, MA 01880

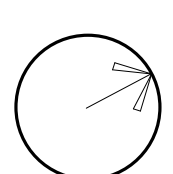


MARKING	NOTES
1)	FOR GENERAL NOTES AND TYPICAL DETAILS SEE DRAWINGS S0-0-1, S0-0-2, S0-0-3, S0-0-4, S0-0-5, S0-0-6, S0-0-7 AND S0-0-8.
2)	FOR ARCHITECTURAL DRAWINGS FOR ELEVATIONS AND VERTICAL DIMENSIONS OF EACH ALL STEEL DETAIL, SHOW THE SPACING OF THE COLUMNS AND BENT BEAMS AS NOTED ON THE ARCHITECTURAL DRAWINGS.
3)	B-FI -E- INDICATES A BRACED BAY. REFER TO BRACED FRAME ANALYSIS DETAIL 5 ON DRAWING S0-0-1, S0-0-2, S0-0-3 AND S0-0-4 FOR ADDITIONAL INFORMATION.
4)	[X] INDICATES THE NUMBER OF 3/4" DIAMETER X 1/4" LONG HEADED STUDS USED TO THE TOP FLANGE OF THE MEMBER SPACE STUDS WELD ALONG THE BEAM UNLESS NOTED OTHERWISE.
5)	[M] INDICATES A MOMENT CONNECTION TO DEVELOP THE FULL CAPACITY OF THE MEMBER. REFER TO TYPICAL DETAILS 8 AND 9 ON DRAWING S0-0-1 AND DETAIL 3 ON DRAWING S0-0-6.
6)	[HSS] INDICATES A 5/16" FILLET WELD ALL AROUND. [HSS BEAM TO HSS COLUMN] WHEREAS BEAM DIMENSIONS EXCEED COLUMN DIMENSIONS PROVIDE 1/2" THICK STEEL CAP PLATE ALL AROUND ALL AROUND WELD REFER TO TYPICAL DETAIL 10 ON DRAWING S0-0-6.
7)	< x > INDICATES UPWARD CAMBER AT THE MID-SPAN OF THE MEMBER.
8)	S-114" INDICATES STEEL SECTION OF 2" DEEP, 20 GAGE GALVANIZED COMPOSITE STEEL DECK WITH 3" LIGHT WEIGHT CONCRETE TOPPING. TOTAL THICKNESS = 5+114". REINFORCE WITH 8#6 -2Wx12-1 DWR.
9)	S-112" INDICATES STEEL SECTION OF 1 1/2" DEEP, 20 GAGE TYPE B, GALVANIZED STEEL ROOF DECK.
10)	NCA-S INDICATES STEEL SECTION OF 3" DEEP, 1820 GAGE TYPE NCS, GALVANIZED CELLULAR ACUSTIC STEEL ROOF DECK.
11)	S-16" INDICATES STEEL SECTION OF 3" DEEP, 16 GAGE GALVANIZED COMPOSITE STEEL DECK WITH 3" LIGHT WEIGHT CONCRETE TOPPING. TOTAL THICKNESS = 6" SEE TYPICAL DETAIL 4 ON DRAWING S0-0-8.
12)	FOR EXACT NUMBER, SIZE, AND LOCATION OF OPENING IN STEEL DECKING REFER TO MECHANICAL AND ELECTRICAL DRAWINGS FOR FRAMING INFORMATION. REFER TO DETAIL 1 AND 8 ON DRAWING S0-0-6 AND DETAIL 1 ON DRAWING S0-0-8.
13)	HATCHED AREA INDICATES LOCATION OF CONCRETE SLAB WITH 2" DEEP, 16 GAGE GALVANIZED COMPOSITE STEEL DECK WITH 4" NORMAL WEIGHT CONCRETE TOPPING. TOTAL THICKNESS = 6"+2" REINFORCE WITH 8#6 -2Wx12-1 DWR. REFER TO TYPICAL DETAIL 5 ON DRAWING S0-0-7 FOR ADDITIONAL INFORMATION.
14)	HATCHED AREA INDICATES LOCATION OF CONCRETE SLAB WITH 3" DEEP, 1820 GAGE TYPE NCA, GALVANIZED CELLULAR ACUSTIC STEEL DECK WITH 3" LIGHT WEIGHT CONCRETE TOPPING. TOTAL THICKNESS = 6"+2" REINFORCE WITH 8#6 -2Wx12-1 DWR. REFER TO TYPICAL DETAIL 5 ON DRAWING S0-0-8 FOR ADDITIONAL INFORMATION. USE 3/4" DIA X 5" LONG HEADED STUDS.
15)	INDICATES A ROOF DRAIN. REFER TO TYPICAL STRUCTURAL DETAILS 1 AND 2 ON DRAWING S0-0-6 FOR ADDITIONAL INFORMATION. FOR DRIVING SURF REFER TO DETAIL 4 ON DRAWING S0-0-5. REFER TO PUMPING AND ARCHITECTURAL DRAWINGS FOR OPENING SIZES AND LOCATIONS.
16)	CT INDICATES A COLUMN TERMINATES AT THIS LEVEL.
17)	WF INDICATES A BEAM IN THE STEEL BEAM. REFER TO TYPICAL DETAIL 1 ON DRAWING S0-0-6.
18)	OR INDICATES A CHU WALL. REFER TO TYPICAL DETAIL 3 ON DRAWING S0-0-4 FOR REINFORCEMENT AND DETAIL 3 ON DRAWING S0-0-4 FOR CONNECTIONS TO STEEL BEAMS. CONCRETE SLABS AT THE INTERSECTION OF WALLS FOR NON-STRUCTURAL WALLS. REFER TO RELEVANT SECTIONS FOR CONNECTIONS OF STEEL WALLS TO THE STRUCTURE.
19)	INDICATES AN INSULATED STRUCTURAL PRECAST CONCRETE WALL COORDINATE WITH ARCHITECTURAL DRAWINGS.
20)	S-112" INDICATES STEEL SECTION OF 1 1/2" DEEP, 1820 GAGE TYPE NCS, GALVANIZED CELLULAR ACUSTIC STEEL ROOF DECK.
21)	10' + 2" PC PLANK INDICATES SPAN OF 17' DEEP PRESTRESSED, PRECAST CONCRETE HOLLOW CORE PLANK WITH A MINIMUM 2" OF NORMAL WEIGHT CONCRETE TOPPING. PLANK AND CONCRETE TOPPING SLAB TO BE DESIGNED TO SUPPORT MINIMUM LIVE LOAD CAPACITY OF 20 PSF PER SQUARE FOOT. CONCRETE PLANK TO BE DESIGNED FOR MINIMUM OF 2 HOUR FIRE RATING.
22)	FOR DIMENSIONS AND DETAILS NOT GIVEN REFER TO ARCHITECTURAL DRAWING.
23)	WF INDICATES A SPICE CONNECTION ALONG A CONTINUOUS STEEL BEAM. DESIGN SPICE CONNECTION FOR FULL CAPACITY OF STEEL BEAM.

BRACE FRAME KEY		
0" TYP		INDICATES A BRACE FRAME ABOVE AND BELOW LEVEL
0" TYP		INDICATES A BRACE FRAME ABOVE LEVEL
0" TYP		INDICATES A BRACE FRAME BELOW LEVEL



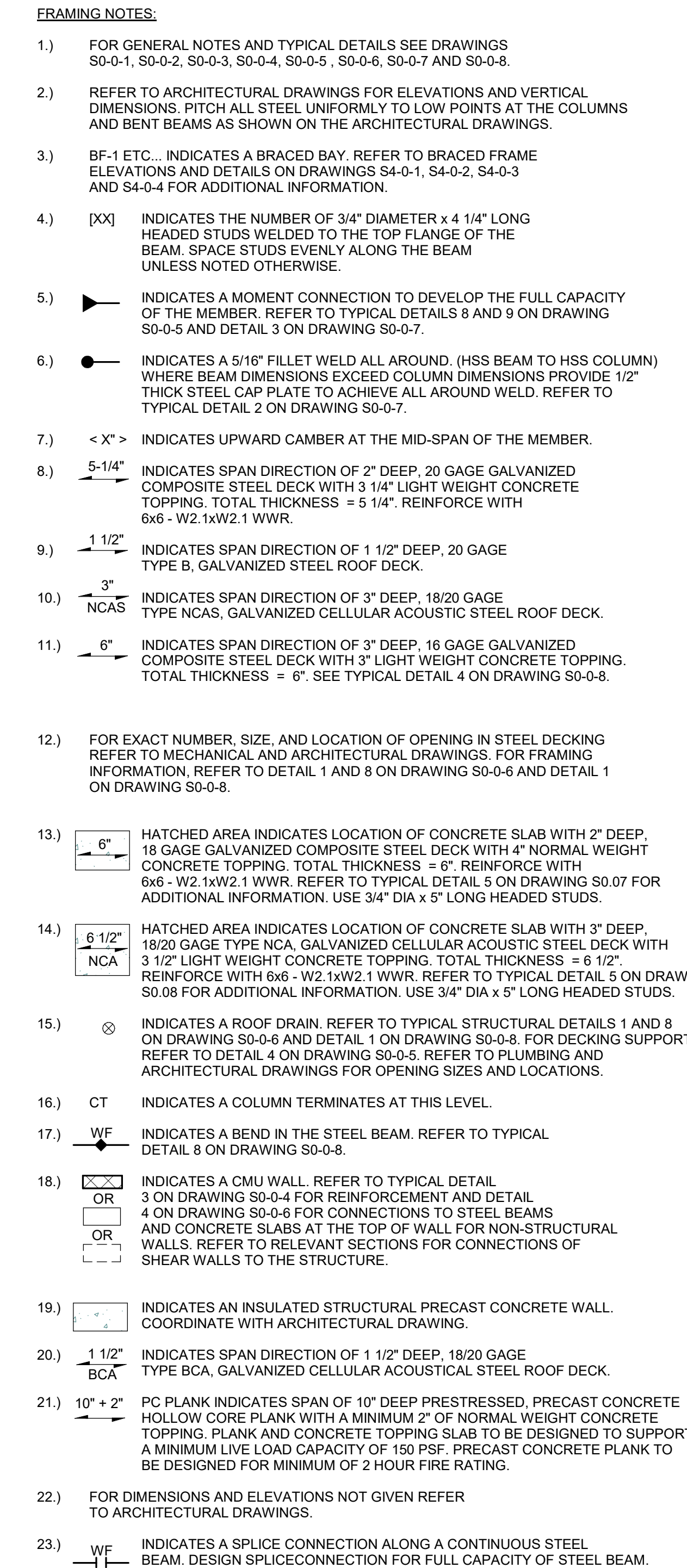
MAGNETIC NORTH



Page 58

S1-1-5C

100 Hemlock Rd,
Wakefield, MA 01880



- 1.) TYPICAL UNDERSIDE-OF-DECK ELEVATION = (162' - 0") AT THE ROOF LEVEL, IN THE AREA BOUNDED BY GRIDS (AA) - (DD) AND (18) - (26).
- 2.) COORDINATE ALL ELEVATIONS WITH ARCHITECTURAL DRAWINGS.
- 3.) SLOPE STEEL UNIFORMLY TO COLUMN ELEVATIONS SHOWN ON PLANS.

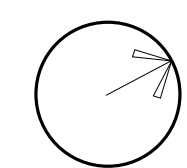
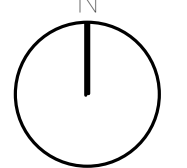
MSBA 60% CD
Submission

01/13/2023



PROJECT NORTH

MAGNETIC NORTH



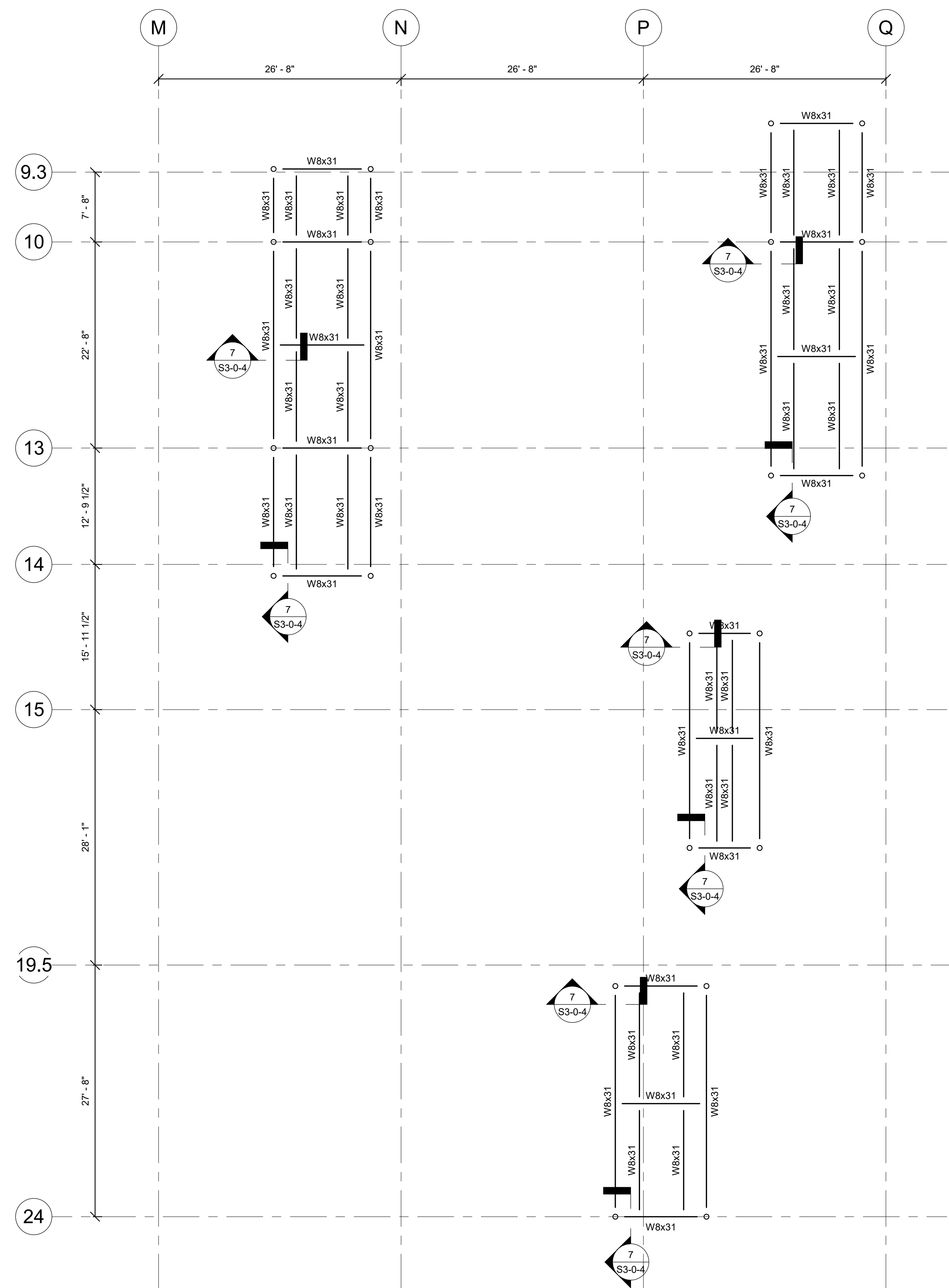
Scale: $1/8" = 1'-0"$

00000

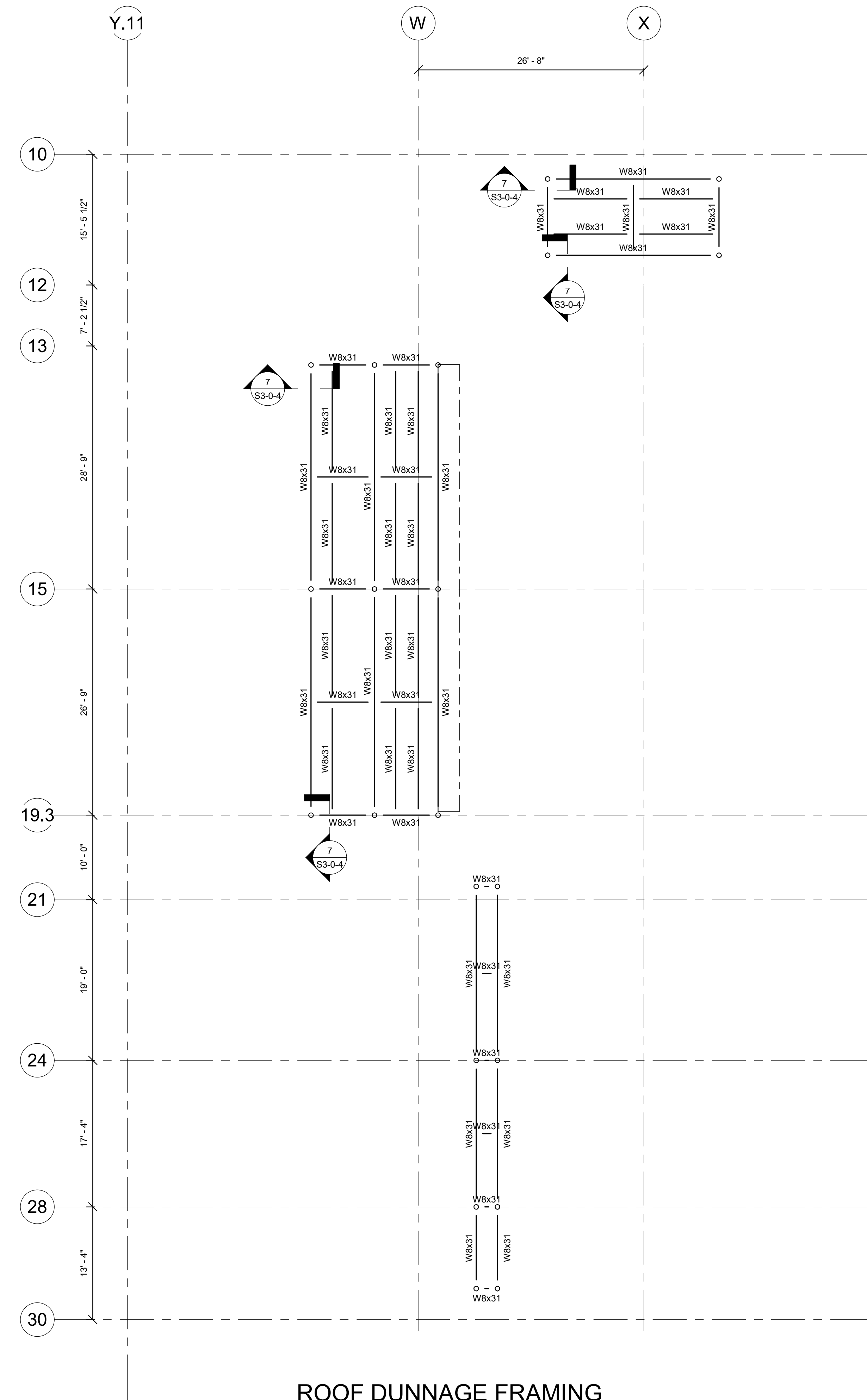
Drawn By: EDG

Date: 04/12/2022

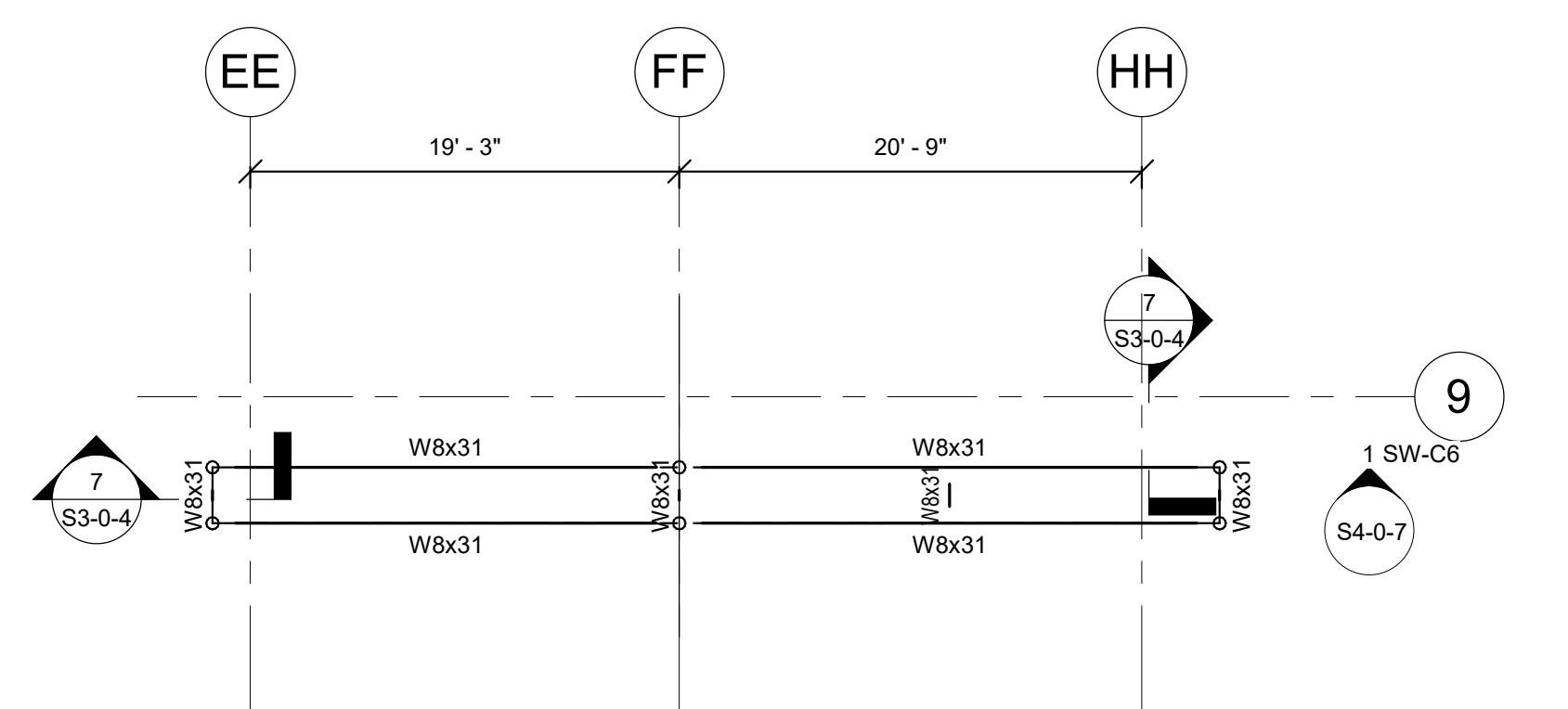
S1-1-5D



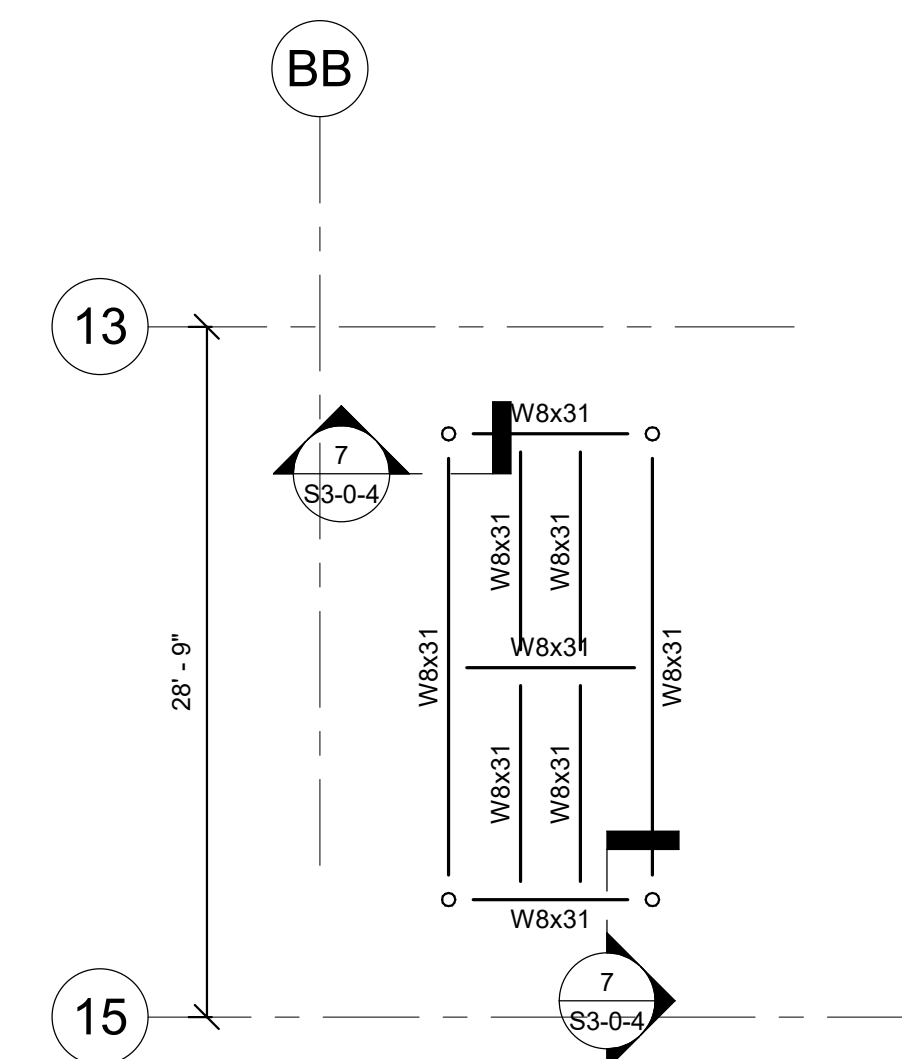
ROOF DUNNAGE FRAMING
PART PLAN - AREA A



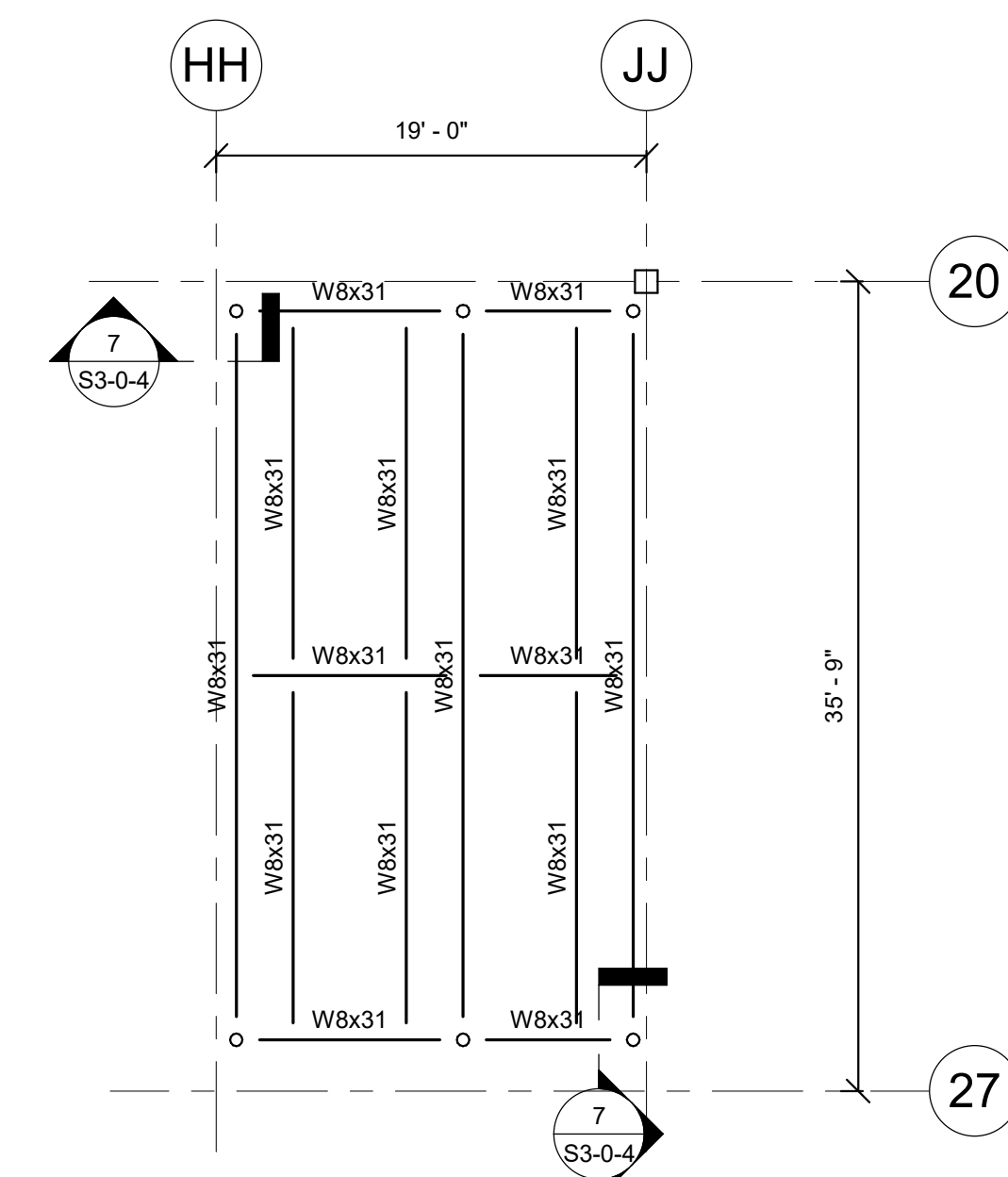
ROOF DUNNAGE FRAMING
PART PLAN - AREA B



ROOF DUNNAGE FRAMING
PART PLAN - AREA C



ROOF DUNNAGE FRAMING
PART PLAN - AREA C



ROOF DUNNAGE FRAMING
PART PLAN - AREA D

DRA

Drumme Rosane Anderson, Inc.
225 Oakland Road
Studio 205
South Windsor, CT 06074
Planning Architecture Interior
Tel: 817.221.1100
www.draa.com

260 Charles Street
Studio 300
Waltham, MA 02453

NORTHEAST
METRO TECH

100 Hemlock Rd.
Wakefield, MA 01880

EDG

Engineers Design Group Inc.
Structural Engineers
389 Main Street, Suite 401
Malden, MA 02148
(781)396-9007
EDG@EDGINC.COM

MSBA 60% CD
Submission

01/13/2023

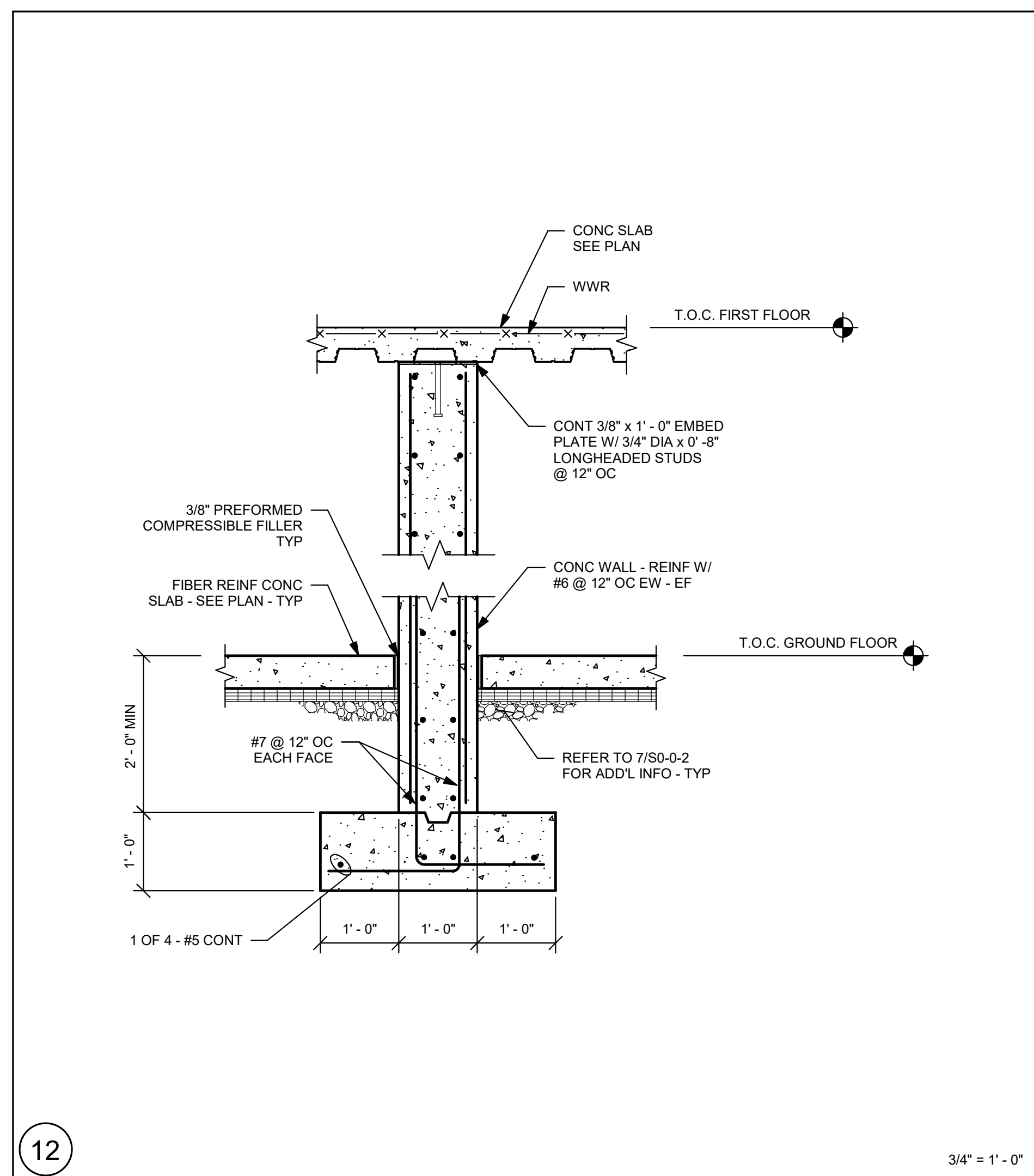
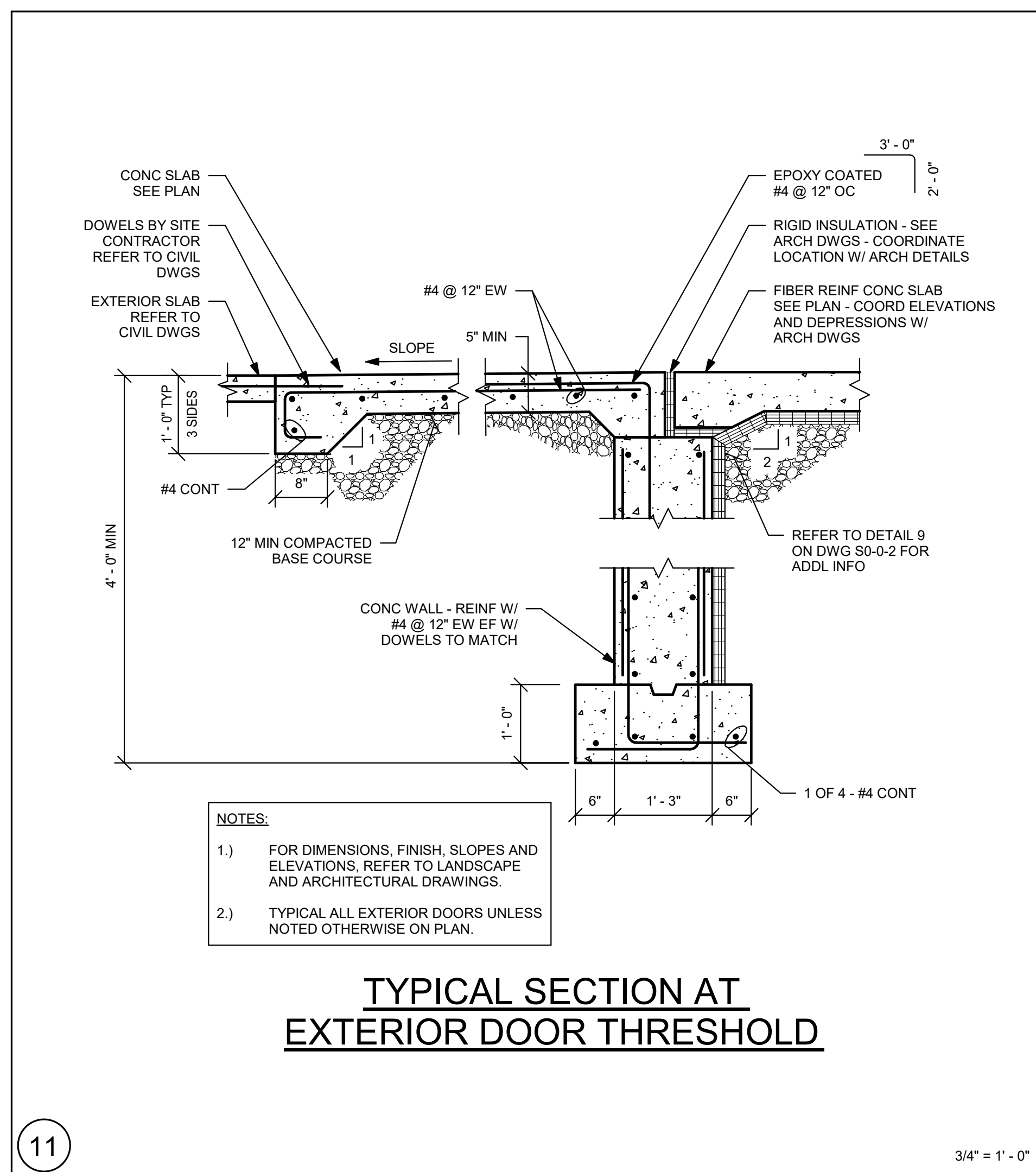
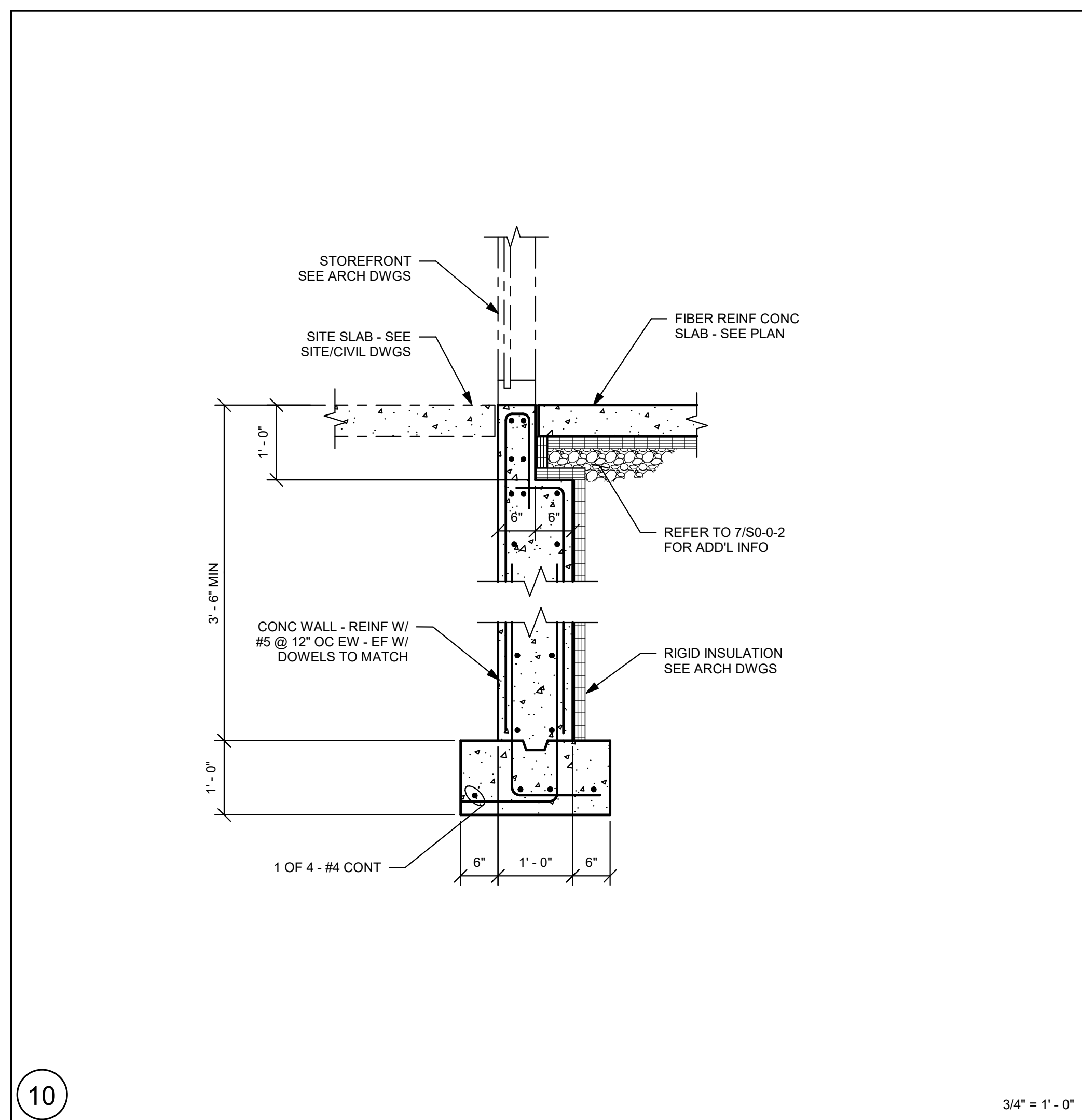
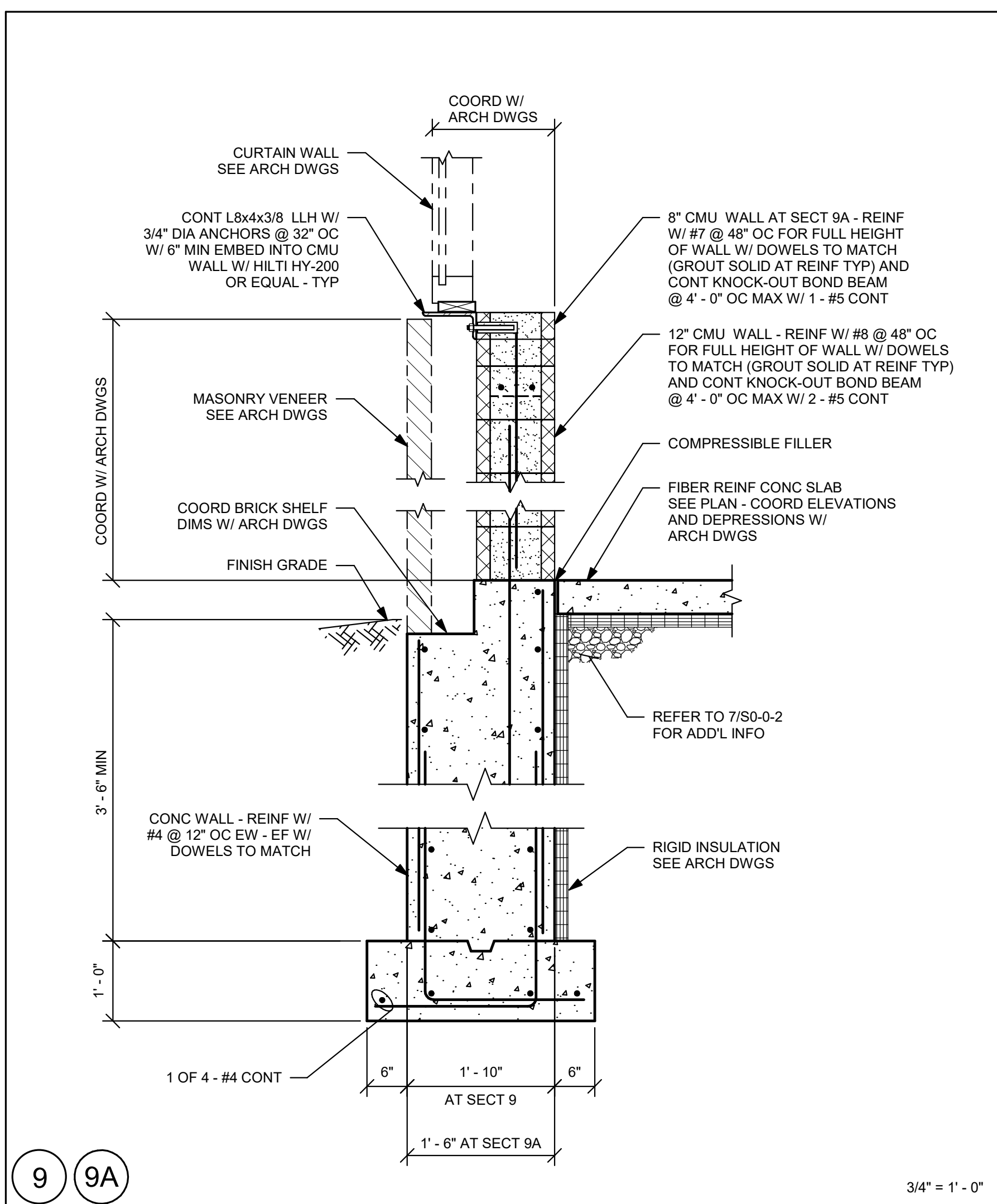
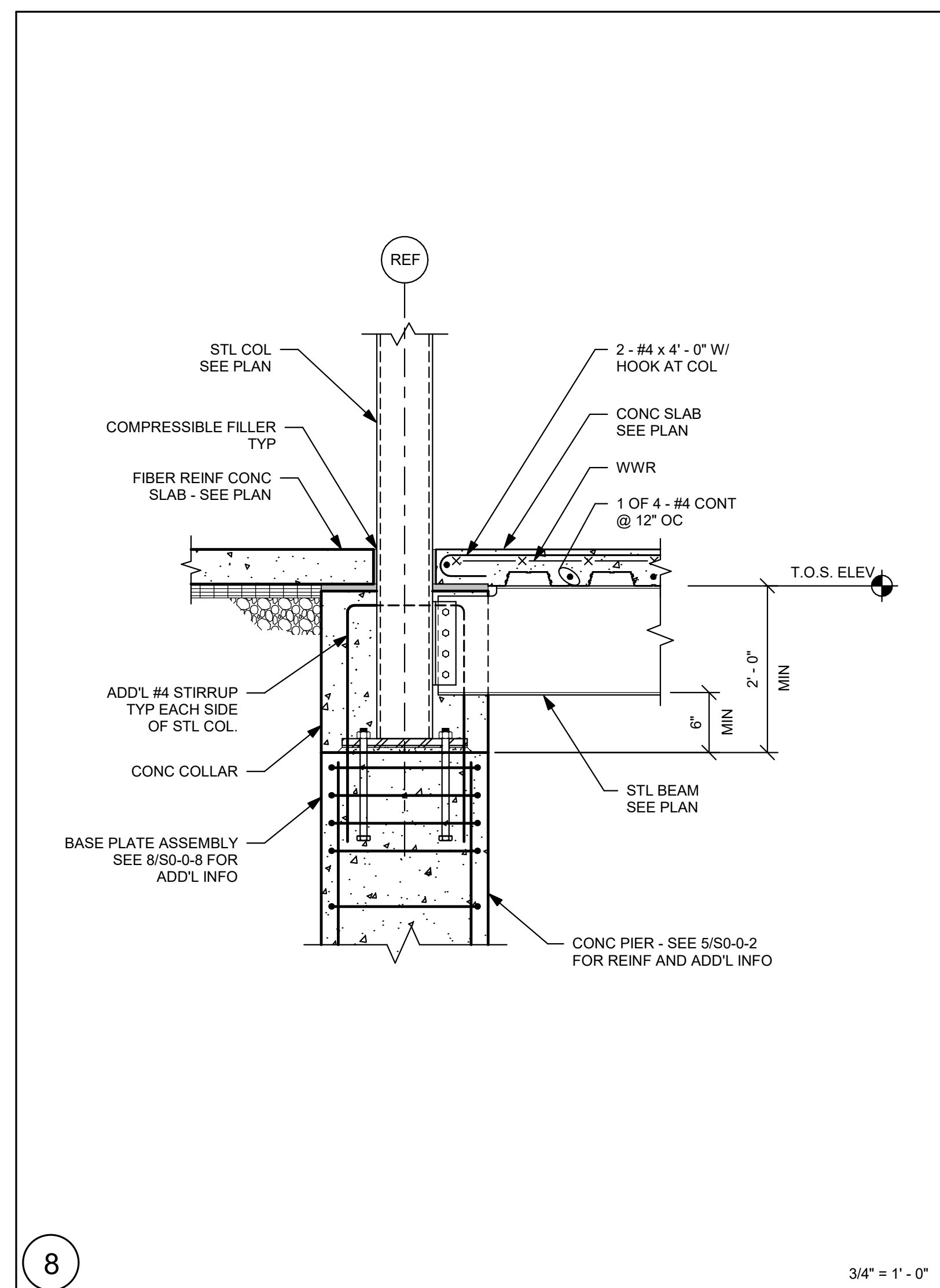
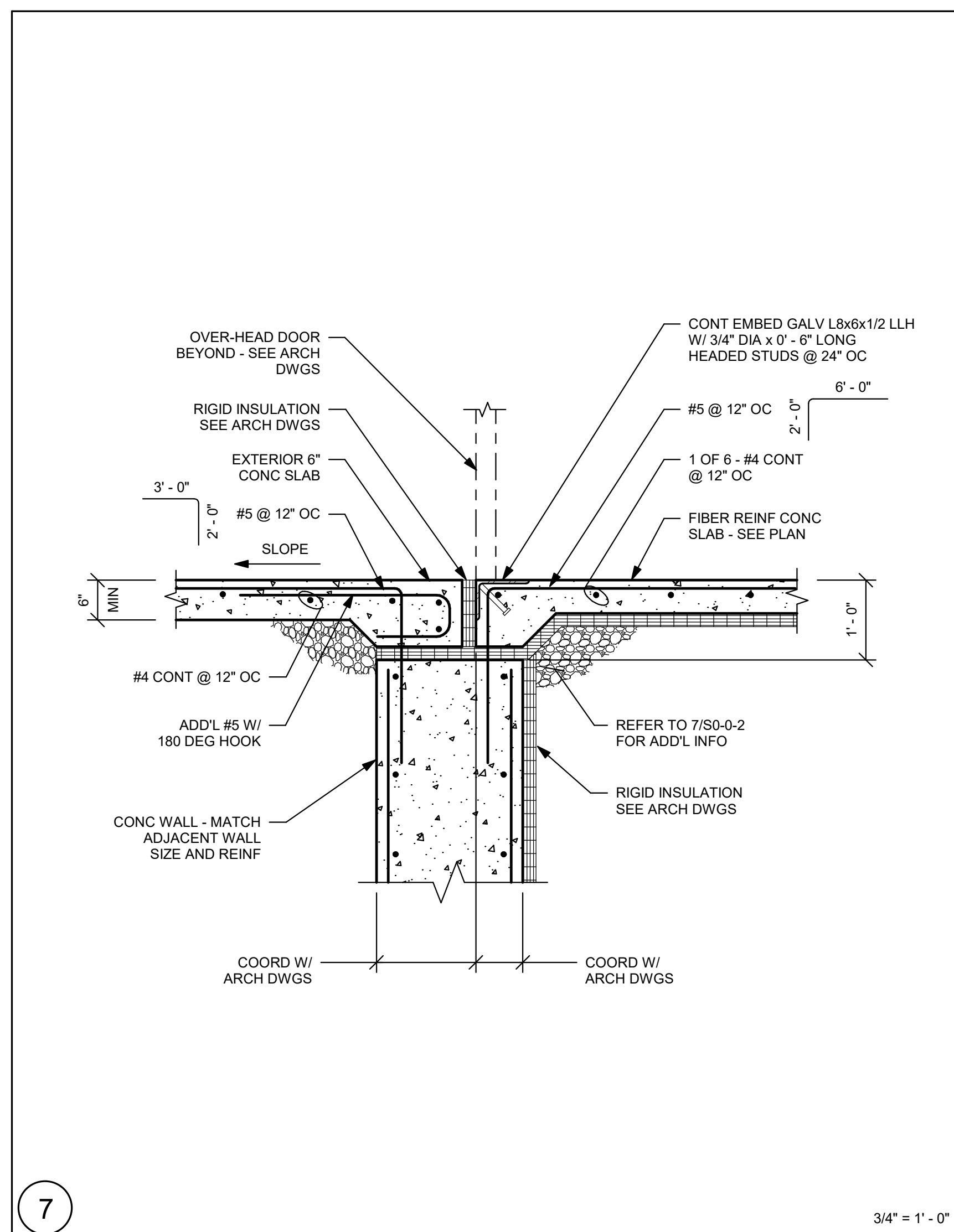
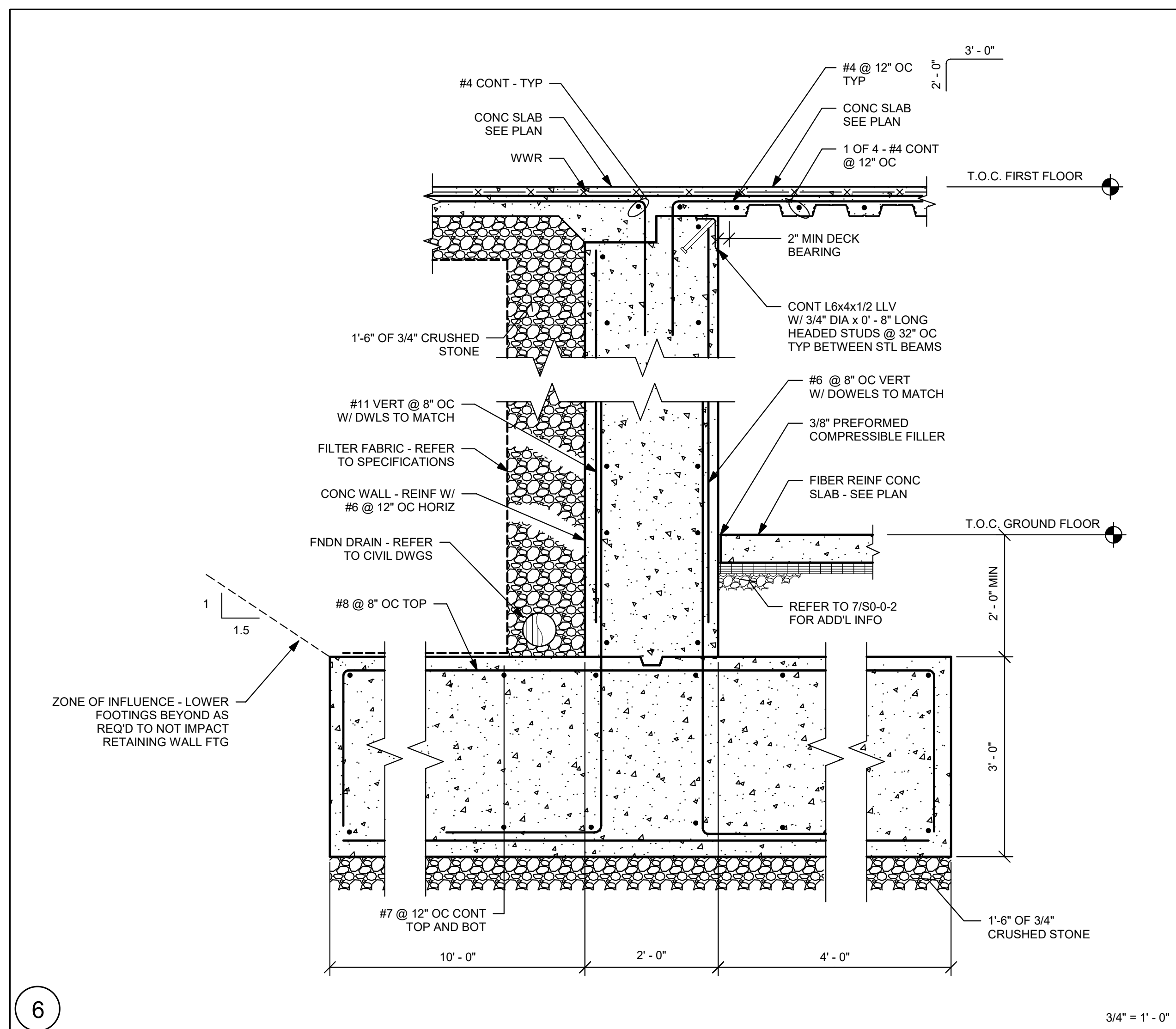
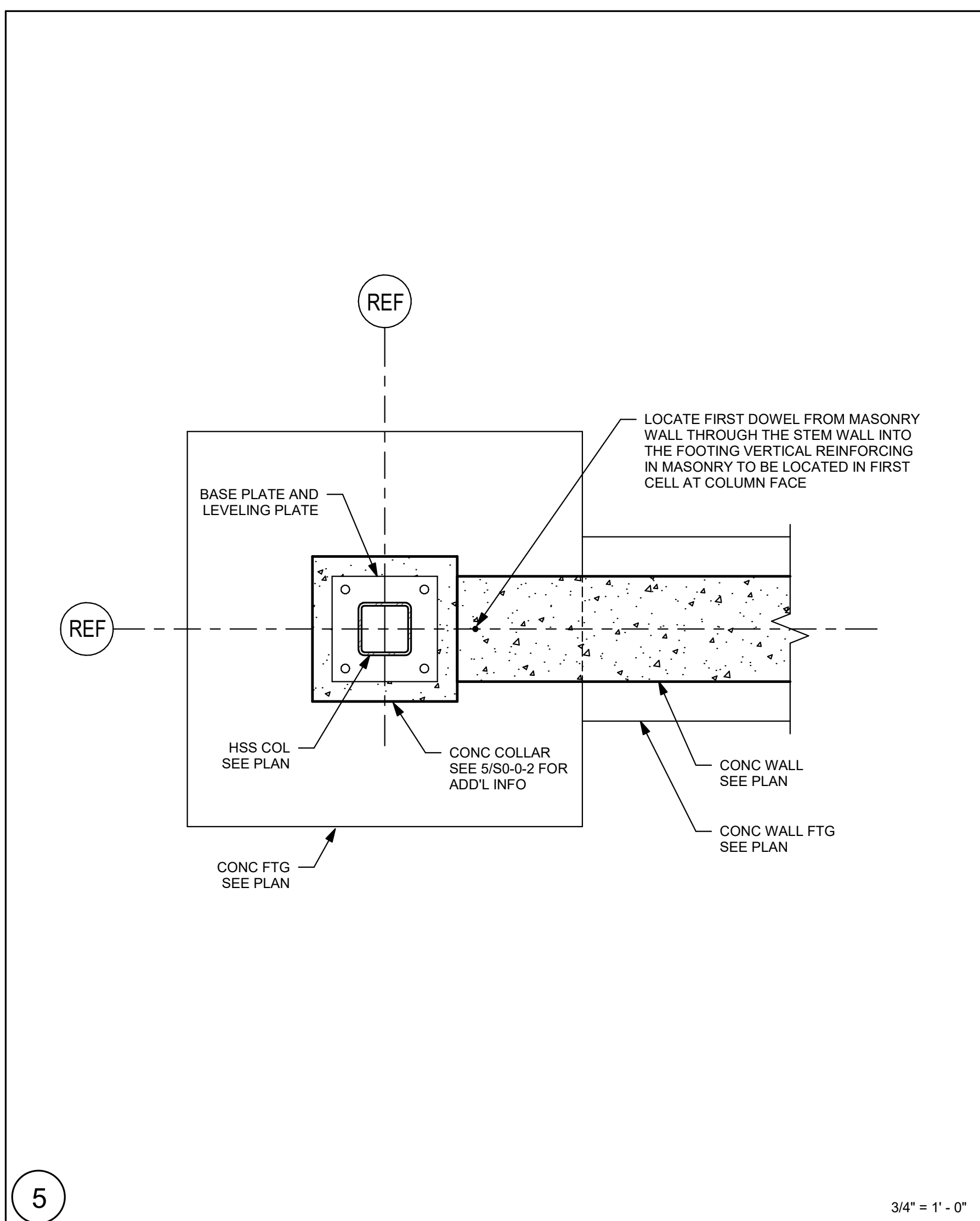
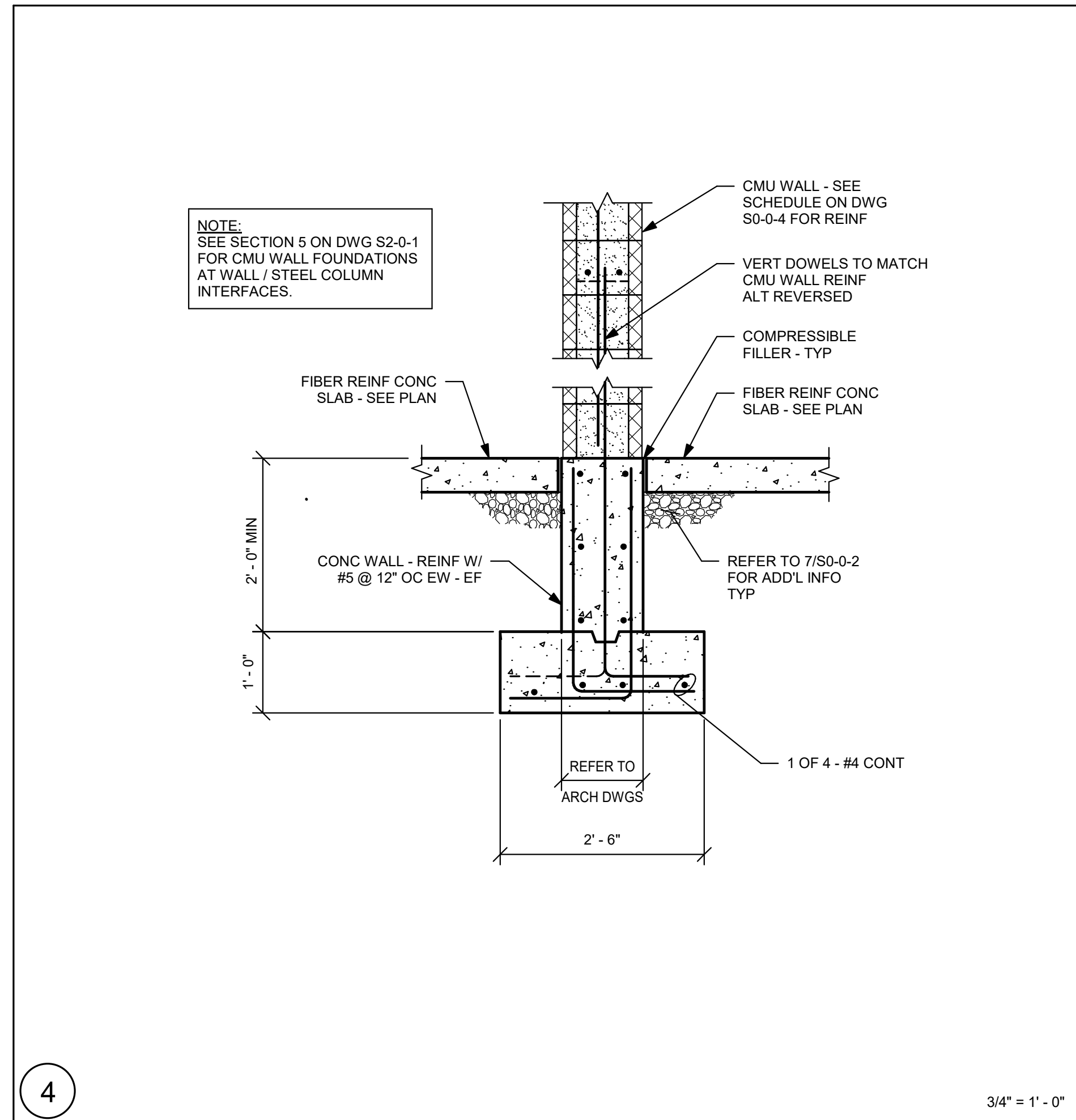
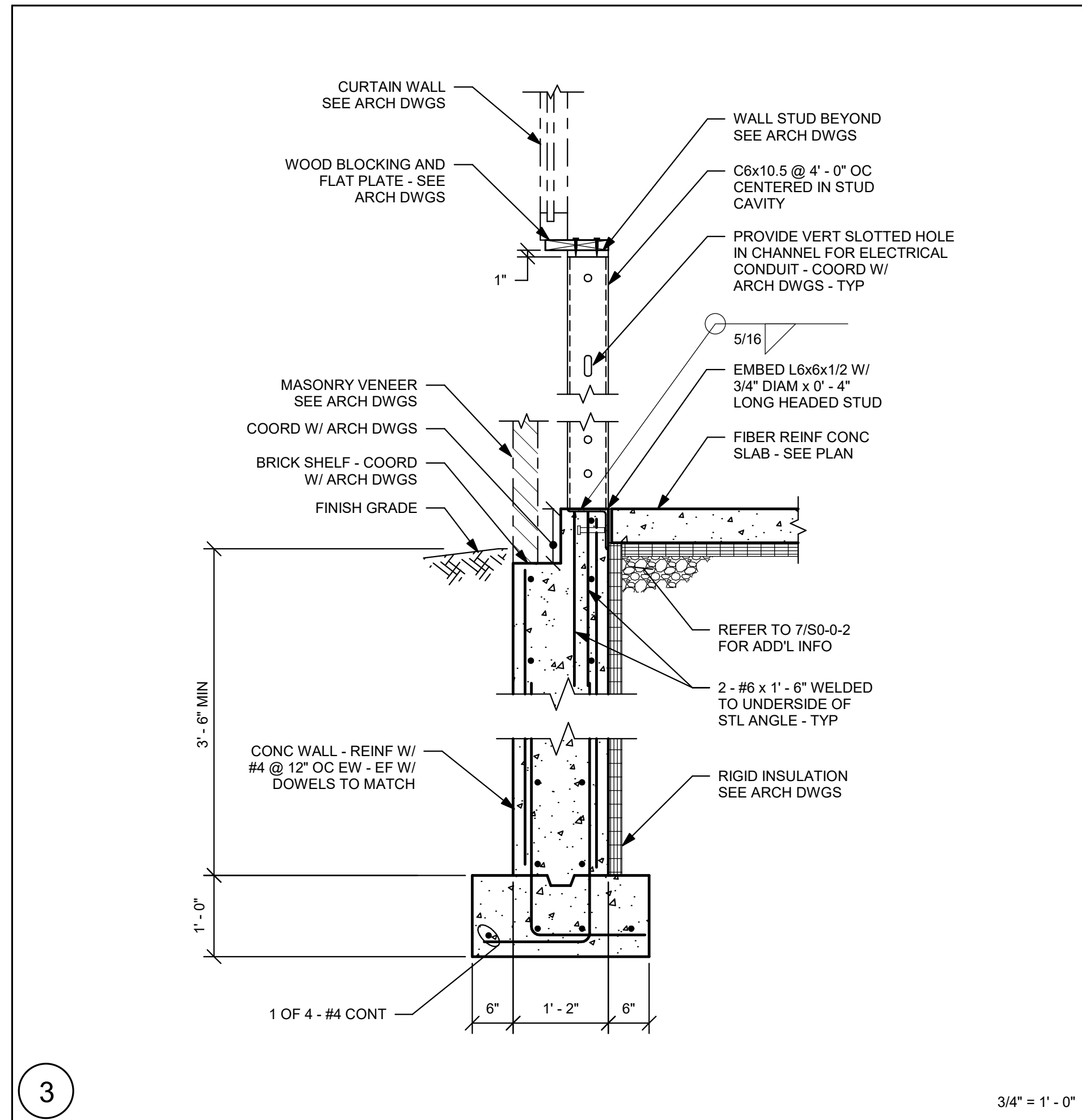
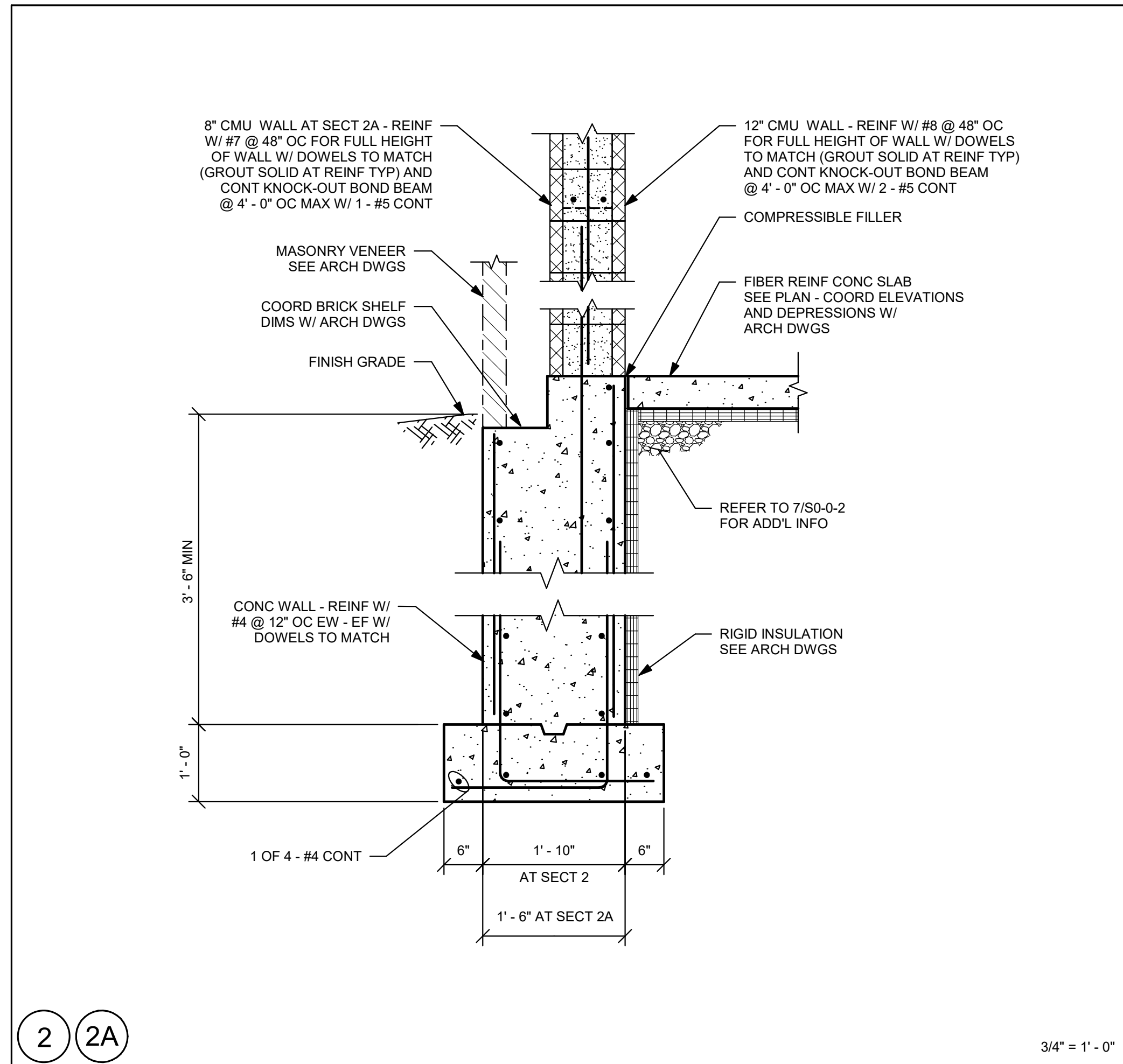
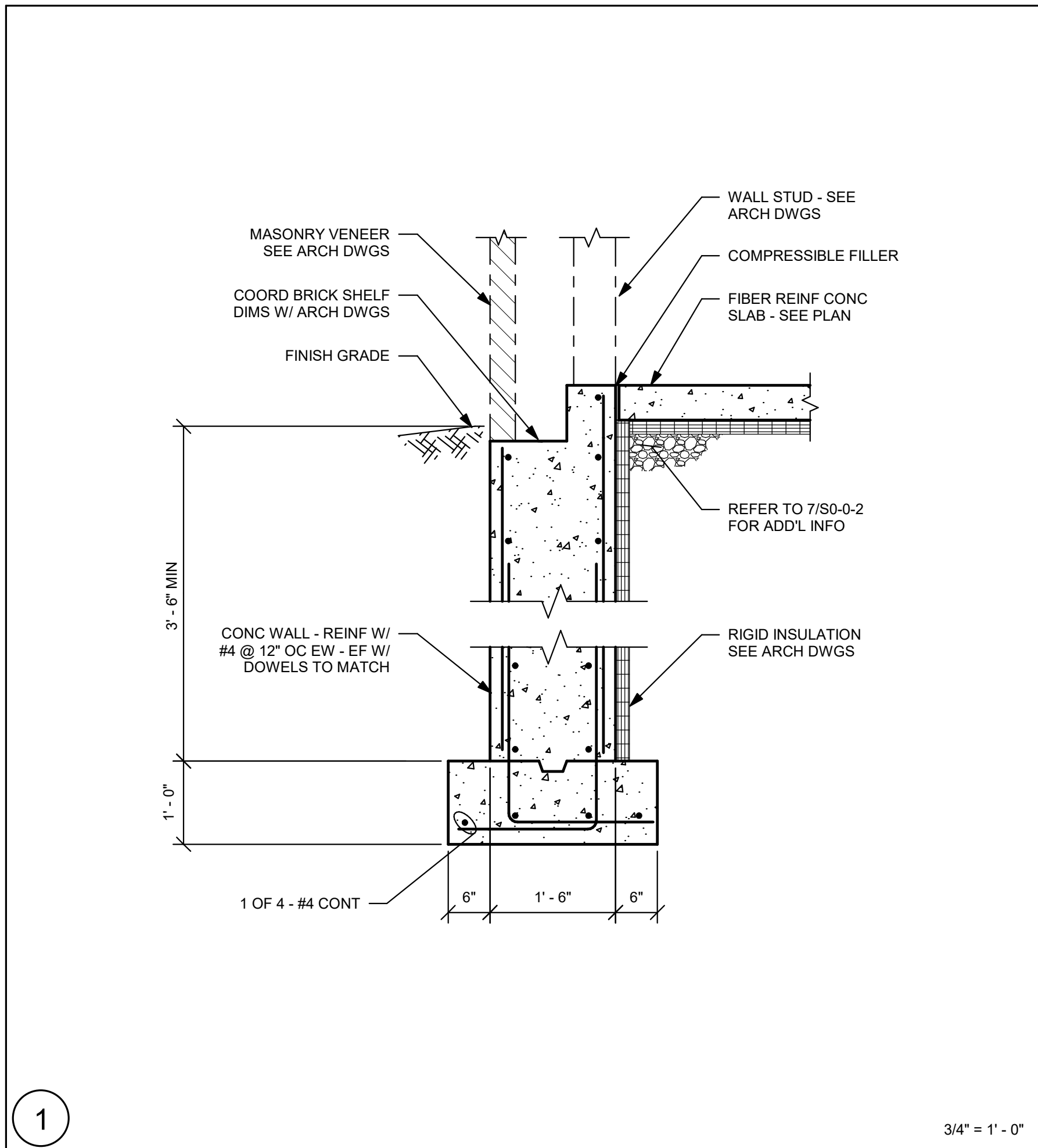
KEY PLAN

PROJECT NORTH
MAGNETIC NORTH

ROOF DUNNAGE
FRAMING PARTS

Scale: 1/8" = 1'-0"
Job No.: 20202
Drawn By: EDG
Date: 01/13/2023

S1-1-6



DRA

Drumme Rosane Anderson, Inc.

225 Oakland Road
Studio 205
South Windsor, CT 06074

260 Charles Street
Studio 300
Waltham, MA 02453

Planning Architecture Interior

Tel: 877.261.1100
www.dra.com

NORTHEAST METRO TECH

100 Hemlock Rd.
Wakefield, MA 01880

EDG

Engineers Design Group Inc.

389 Main Street, Suite 401
Malden, MA 02148
(781)396-9007
EDG@EDGINC.COM

© COPYRIGHT 2021 DRUMMEY ROSANE ANDERSON, INC.

MSBA 60% CD Submission

01/13/2023

KEY PLAN

PROJECT NORTH

MAGNETIC NORTH

SECTIONS

Scale: 3/4" = 1'-0"

Job No.: 20202

Drawn By: EDG

Date: 01/13/2023

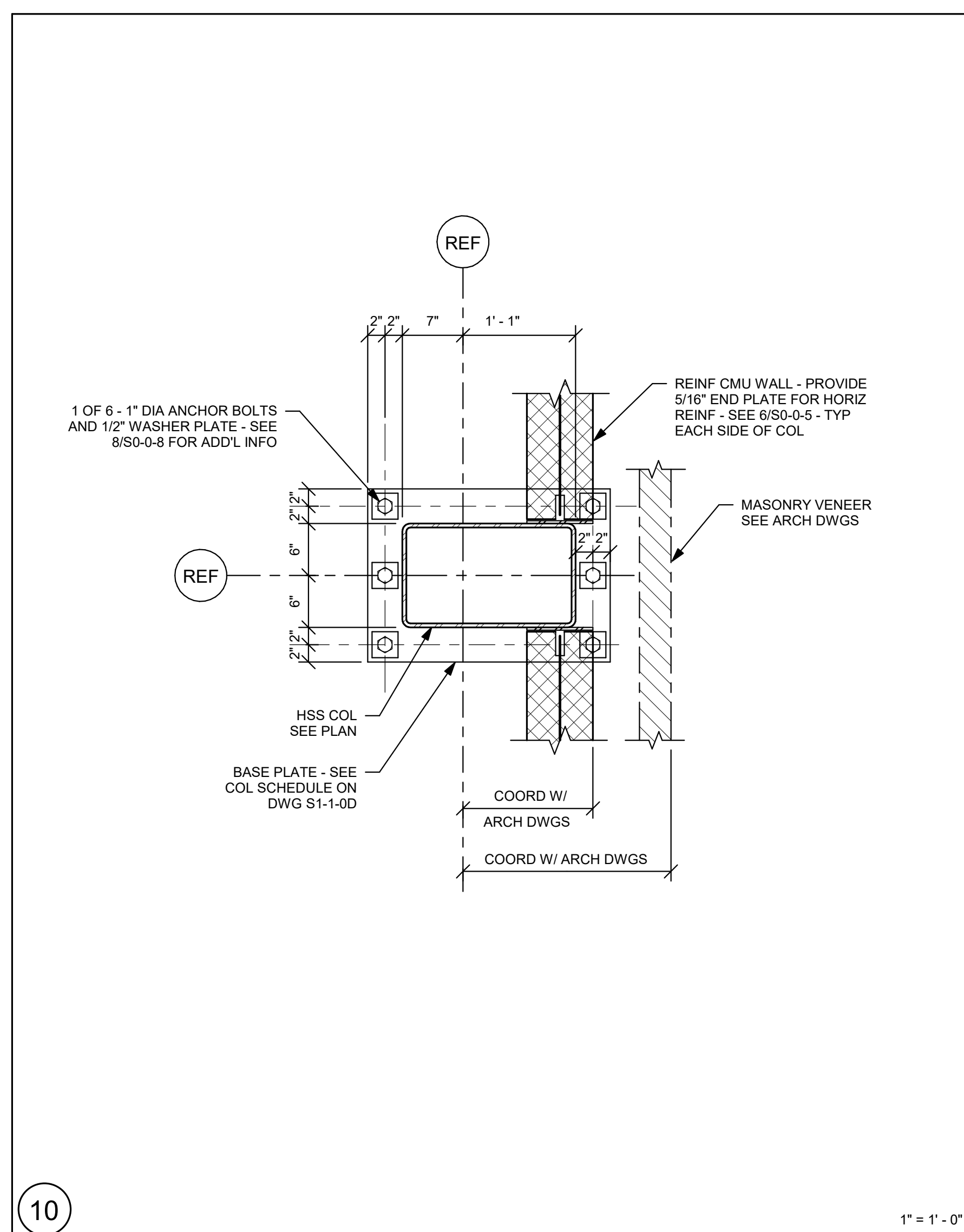
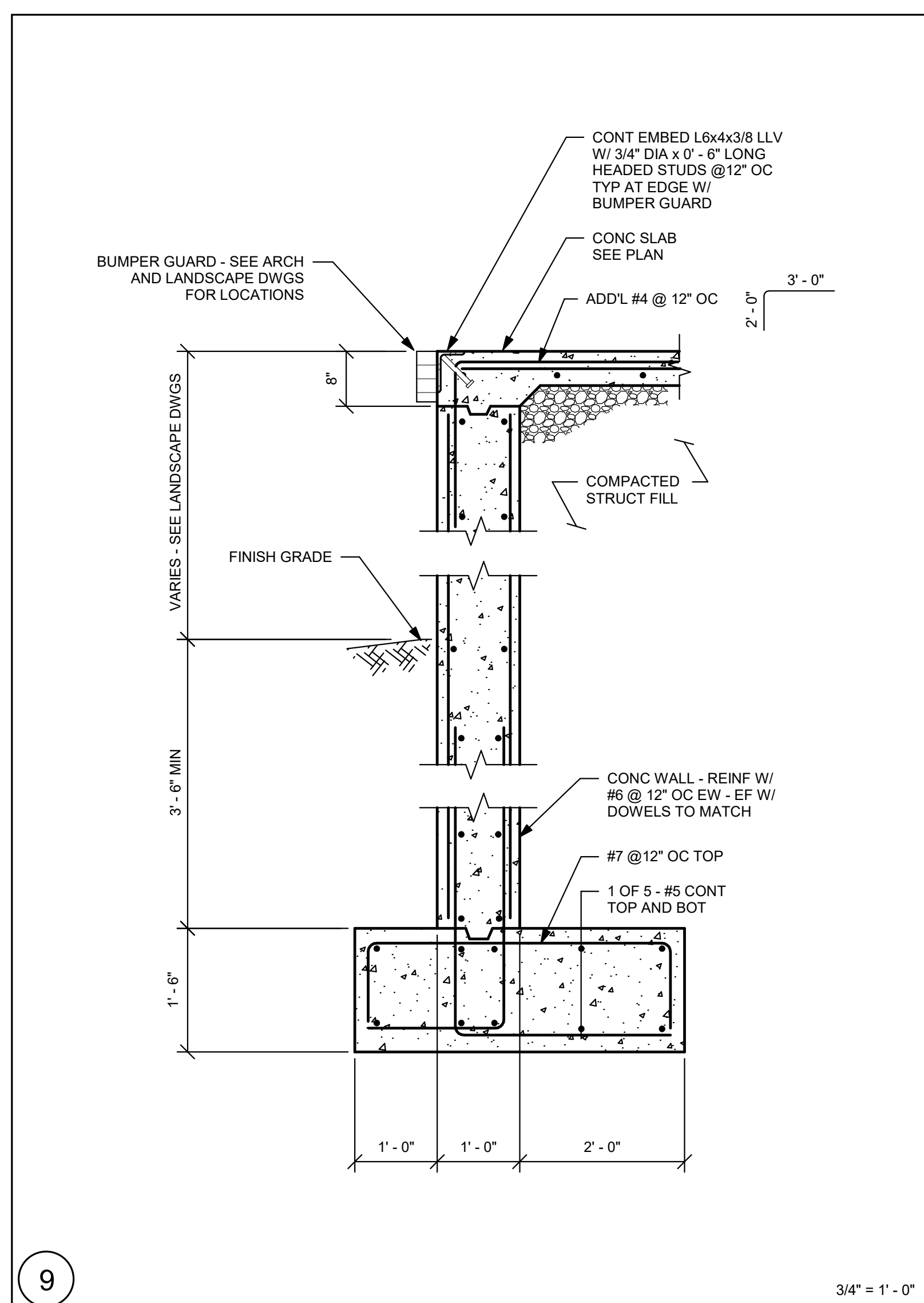
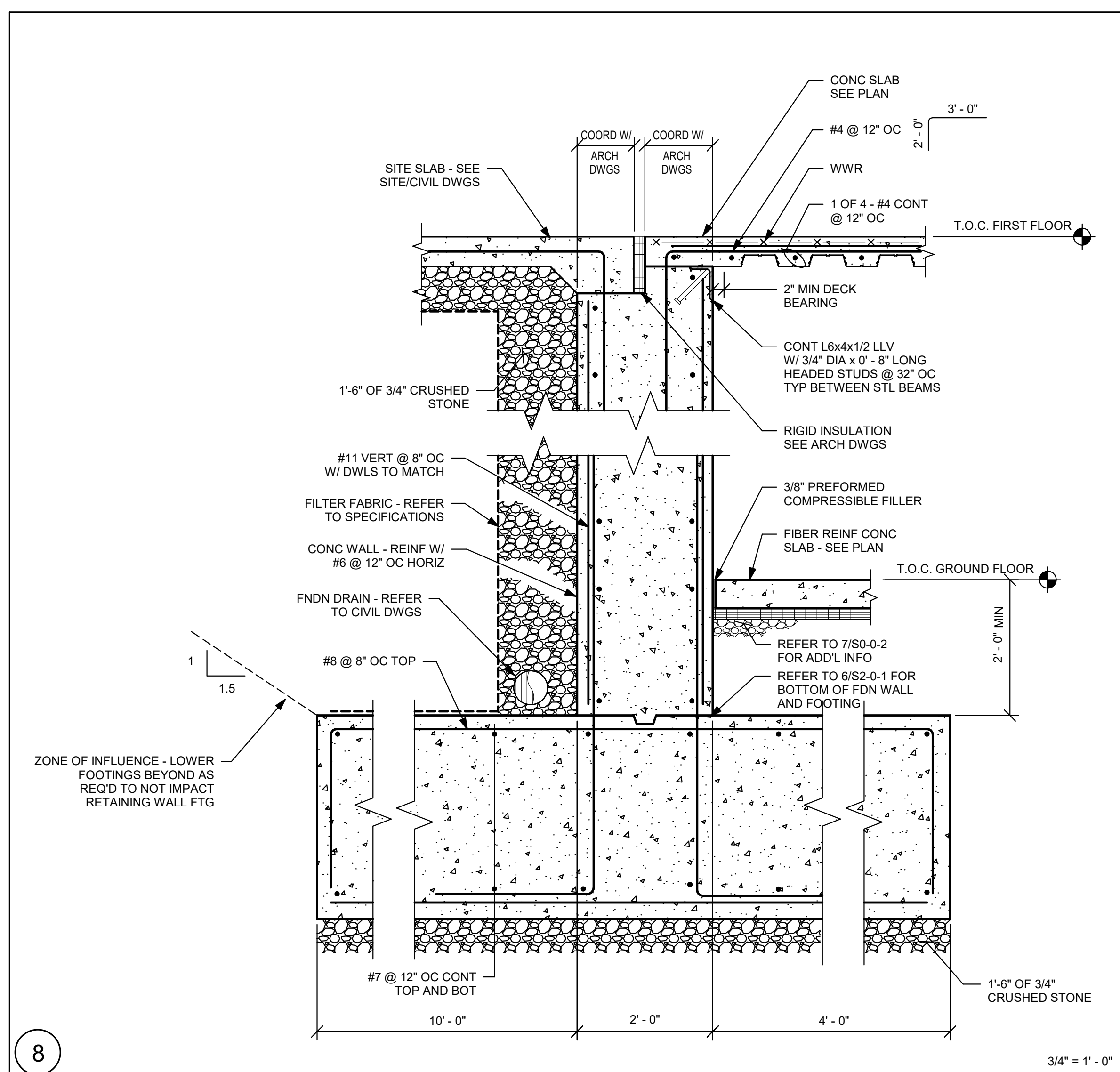
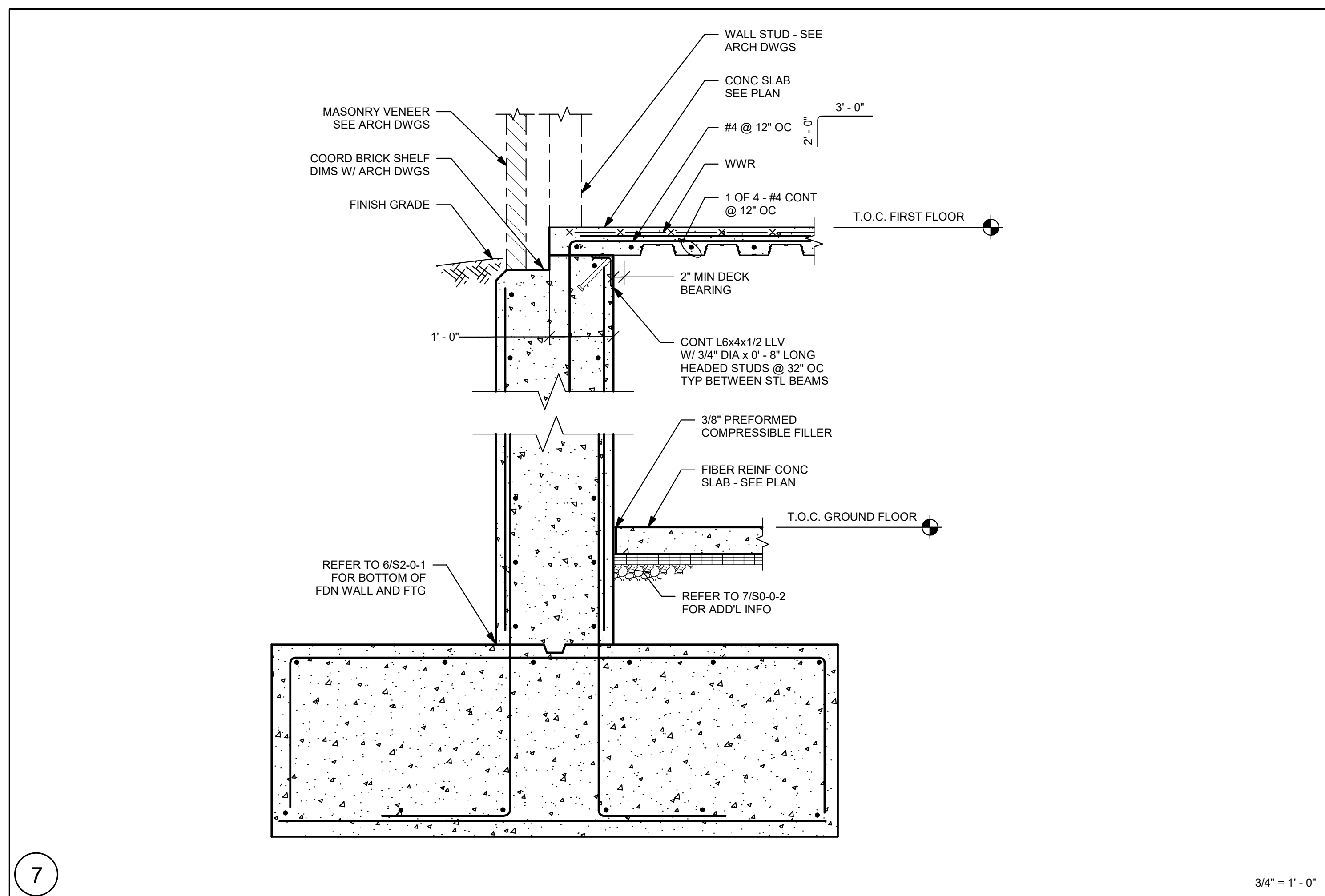
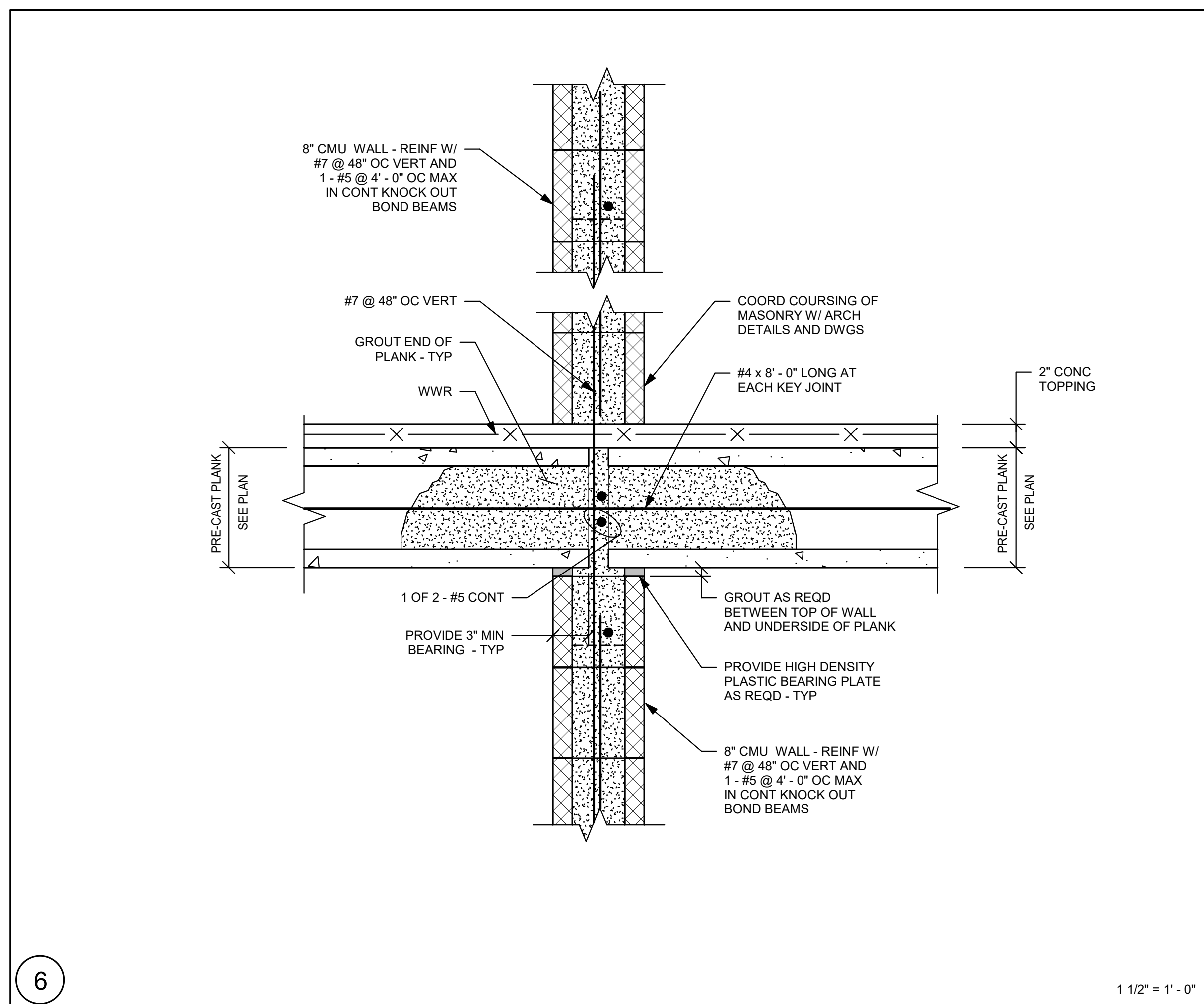
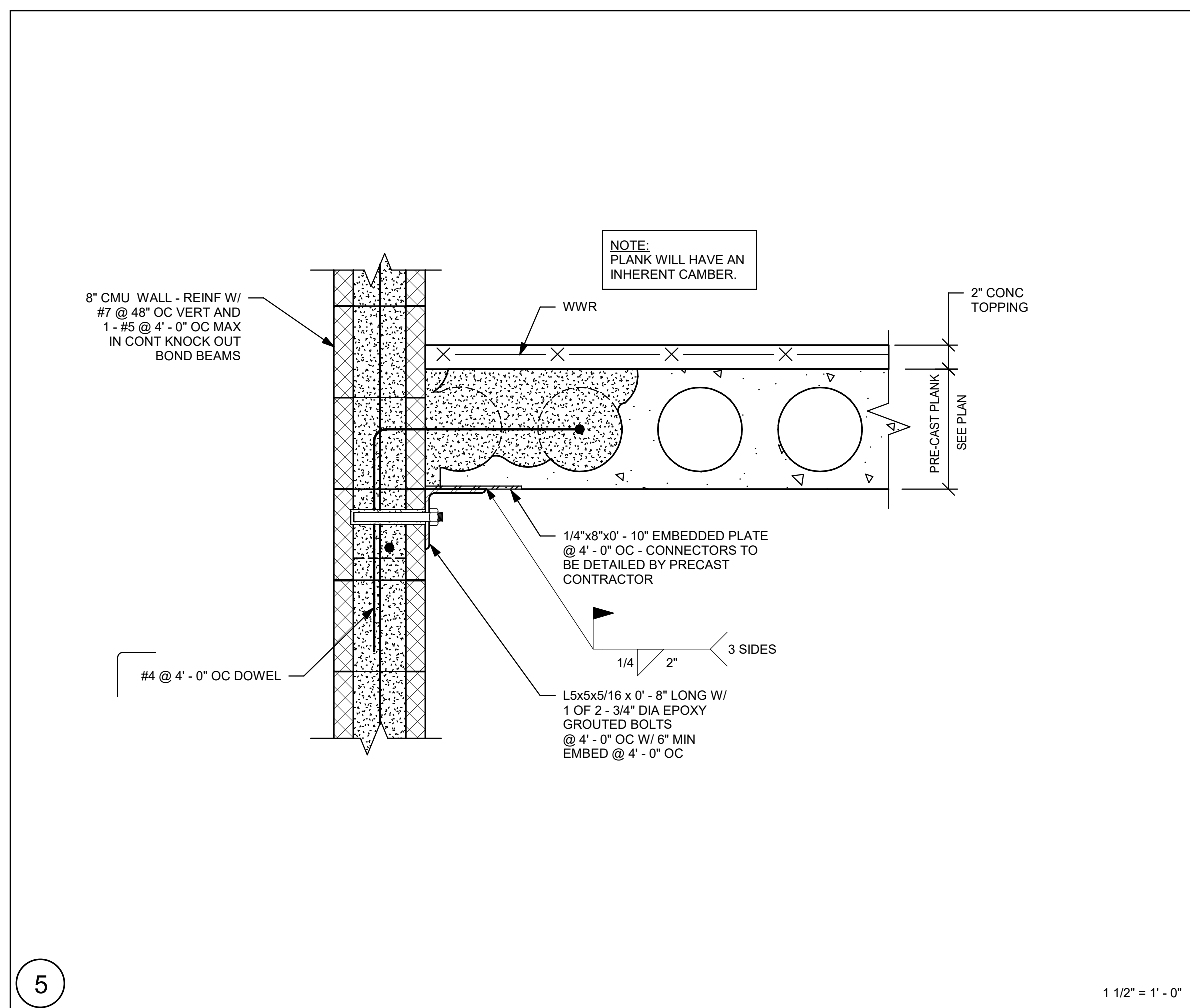
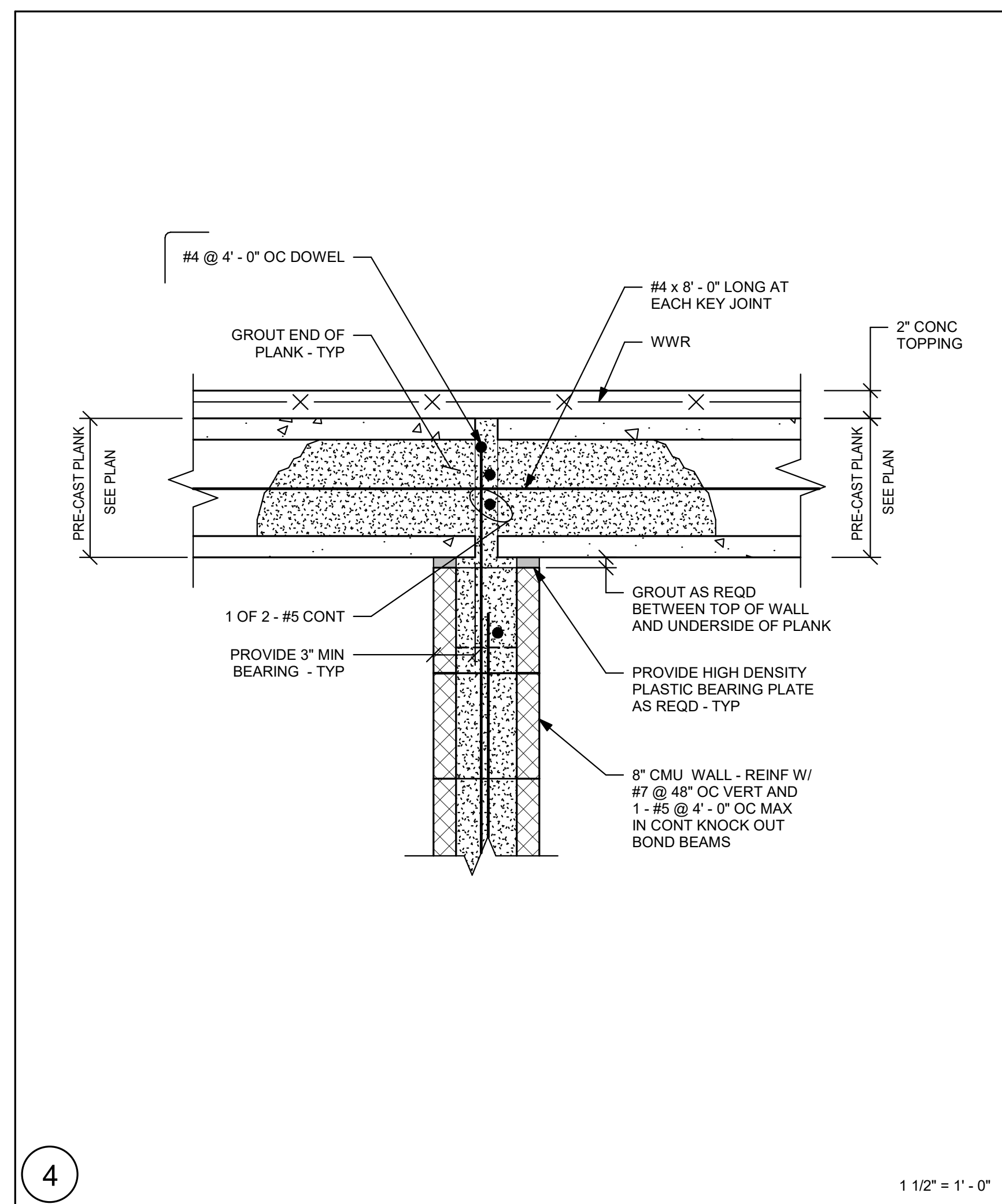
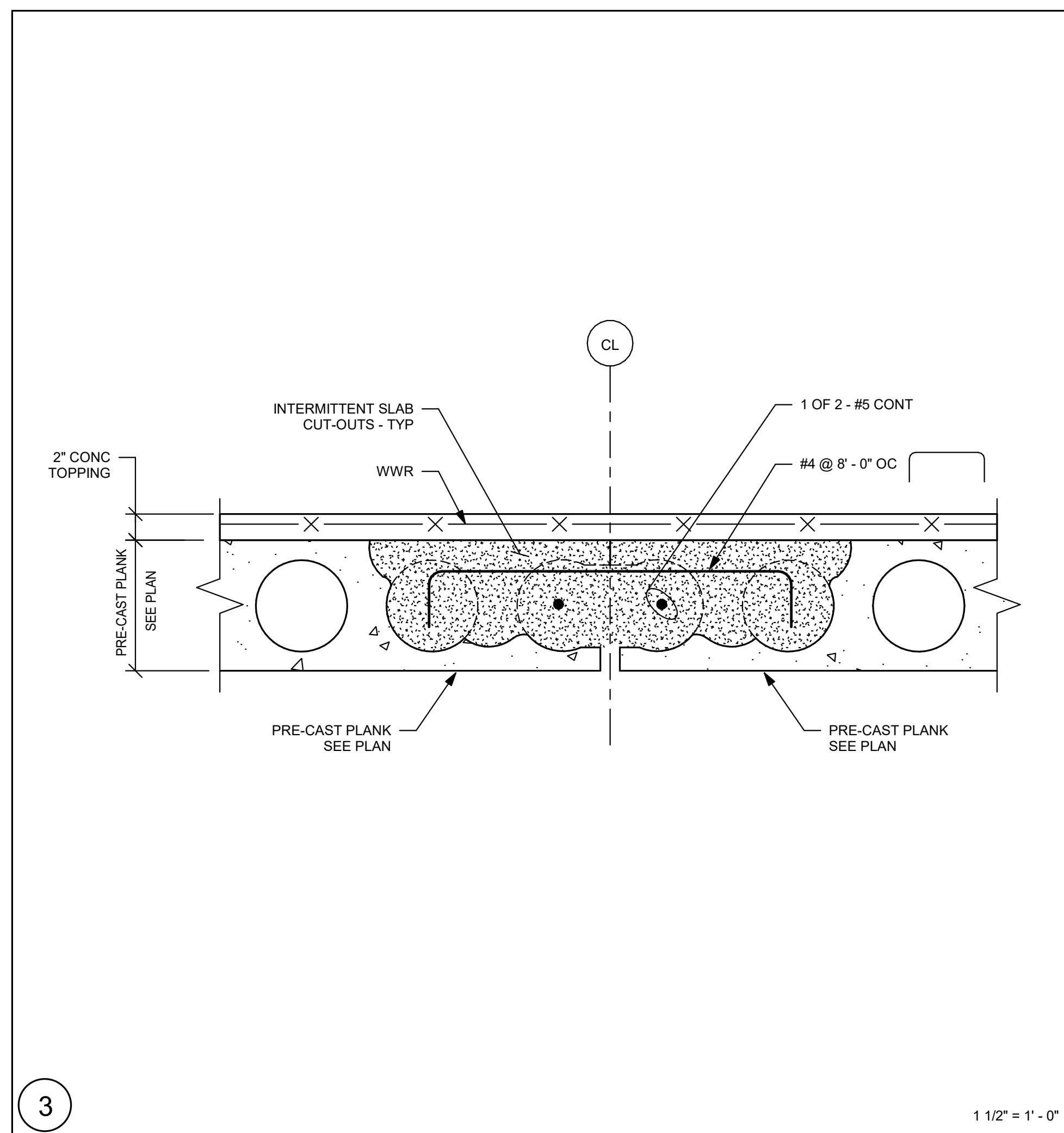
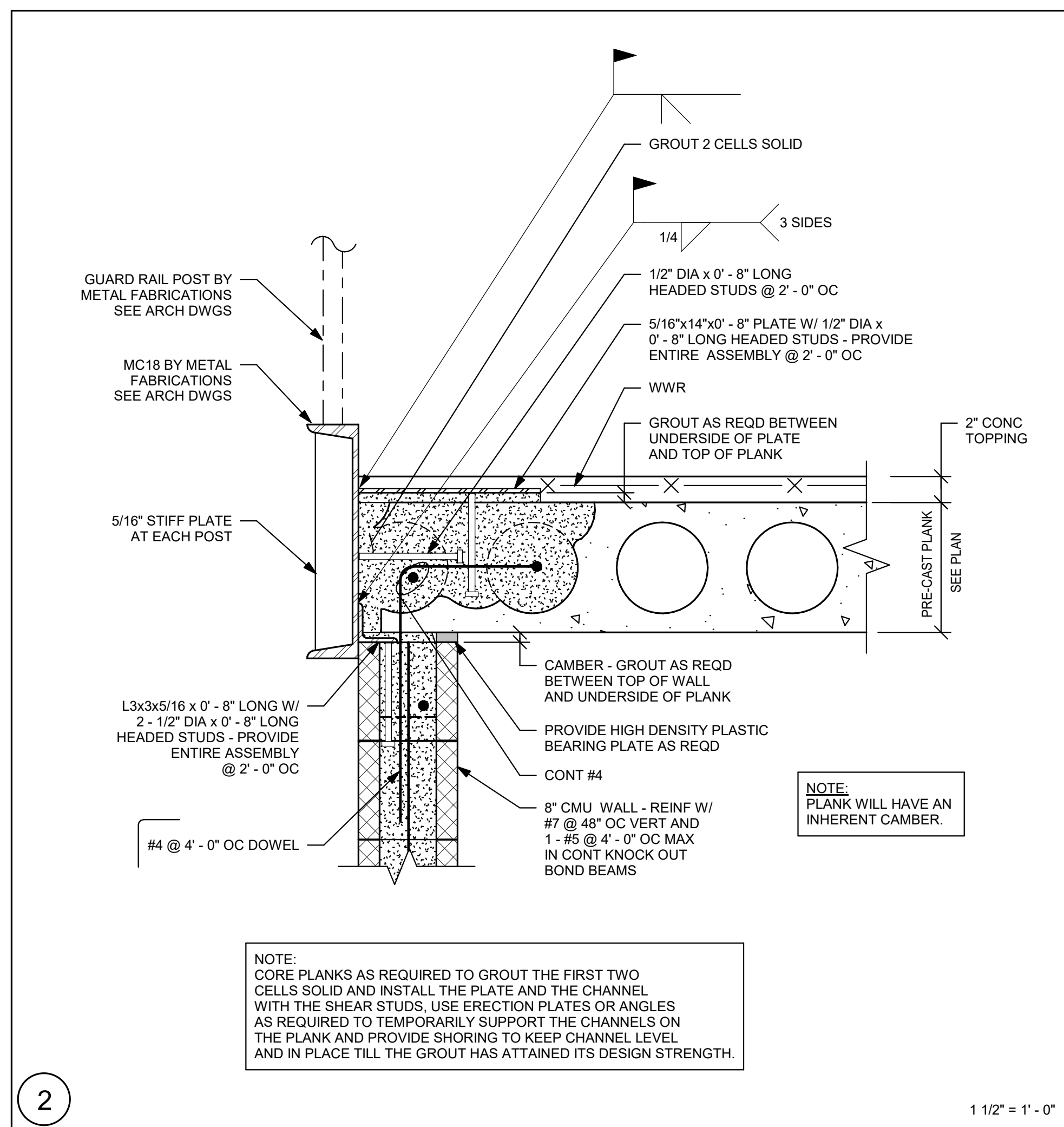
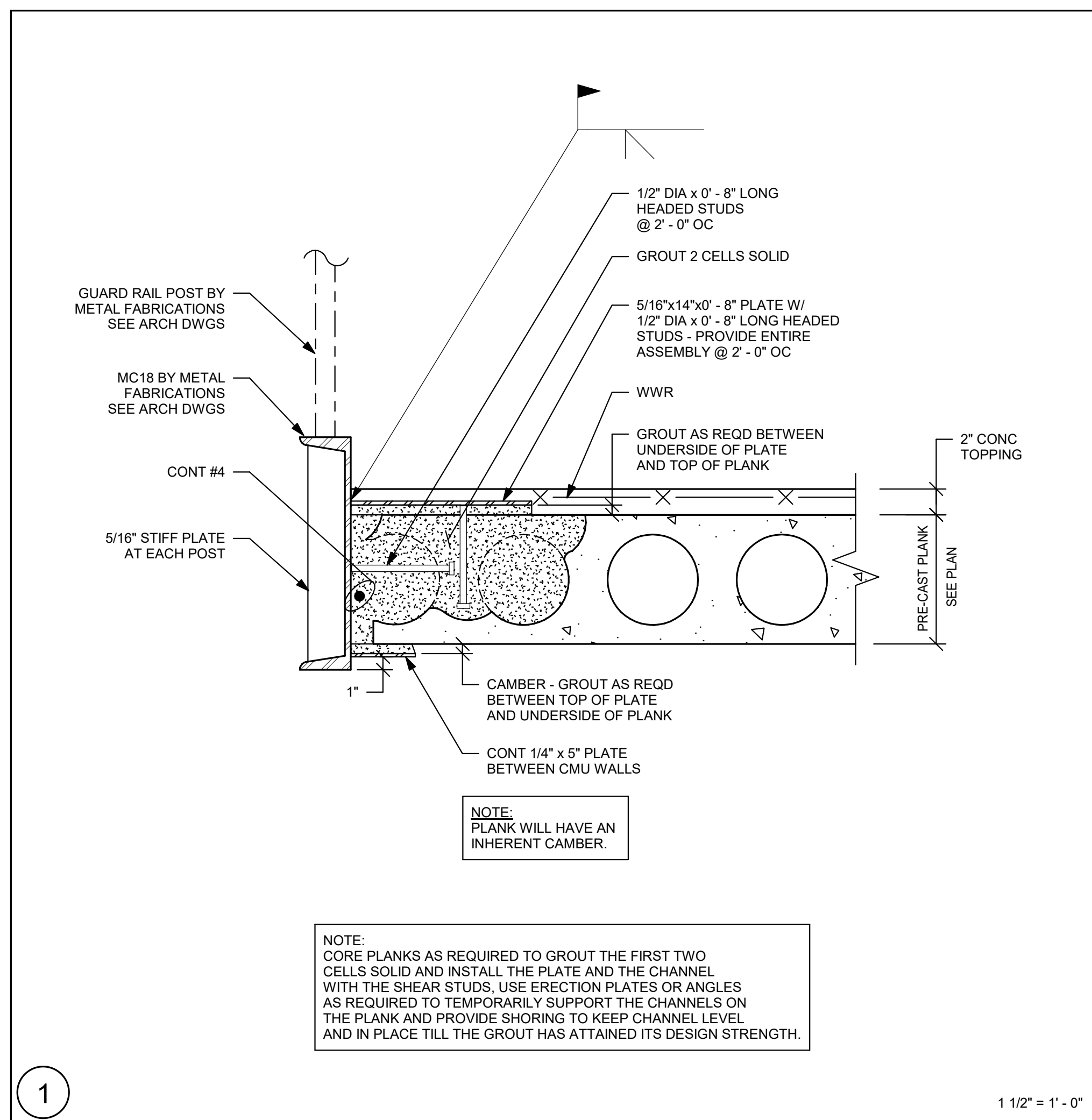
S2-0-1

**NORTHEAST
METRO TECH**

100 Hemlock Rd,
Wakefield, MA 01880



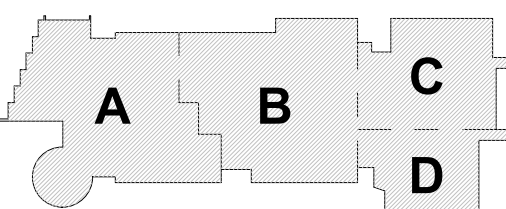
Engineers Design Group Inc.
Structural Engineers
39 Main Street, Suite 401
Malden, MA 02148
(81)396-9007
EDG@EDGINC.COM



© COPYRIGHT 2021 DRUMMEY ROSANE ANDERSON, INC.

MSBA 60% CD
Submission

01/13/2023



KEY PLAN

PROJECT NORTH

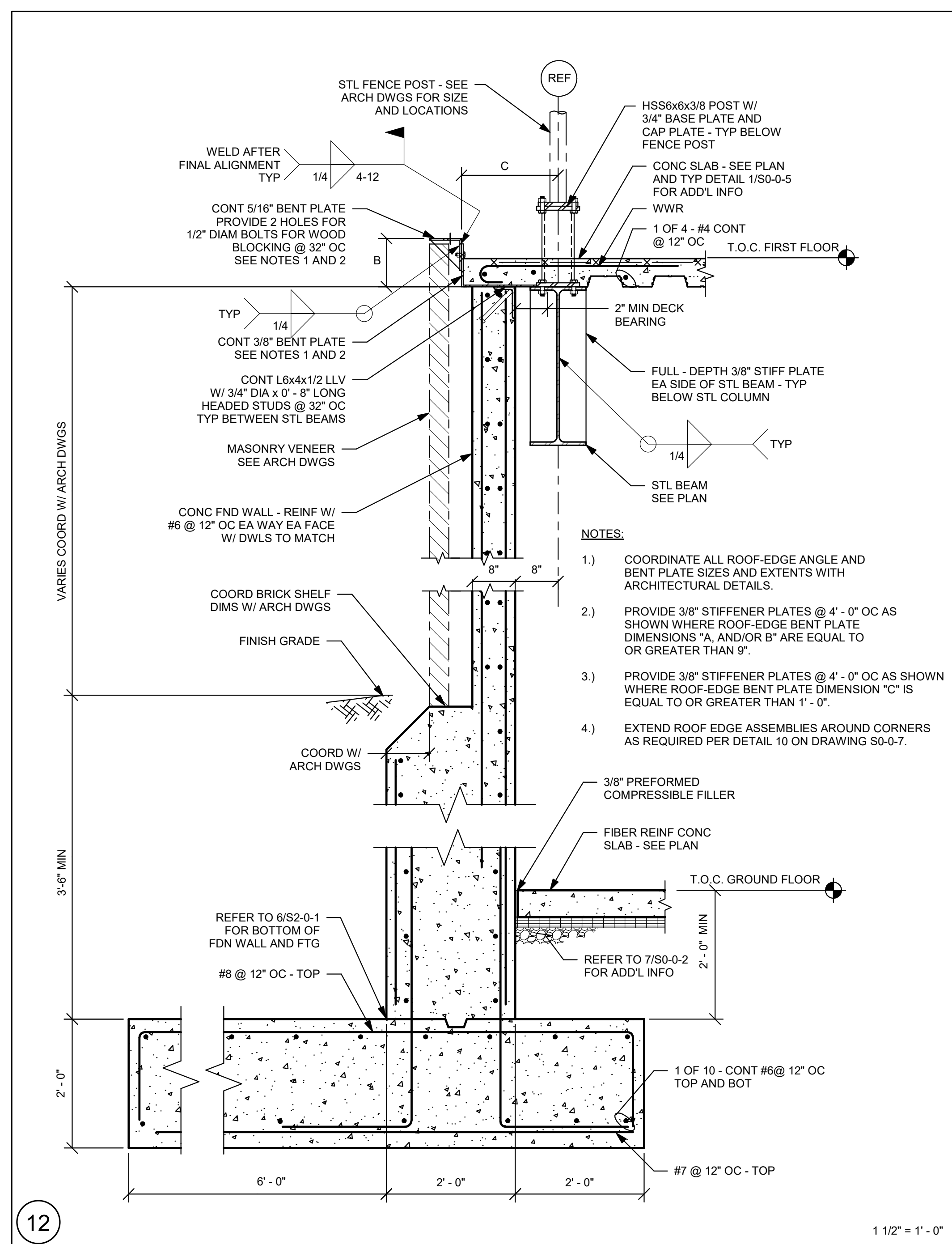
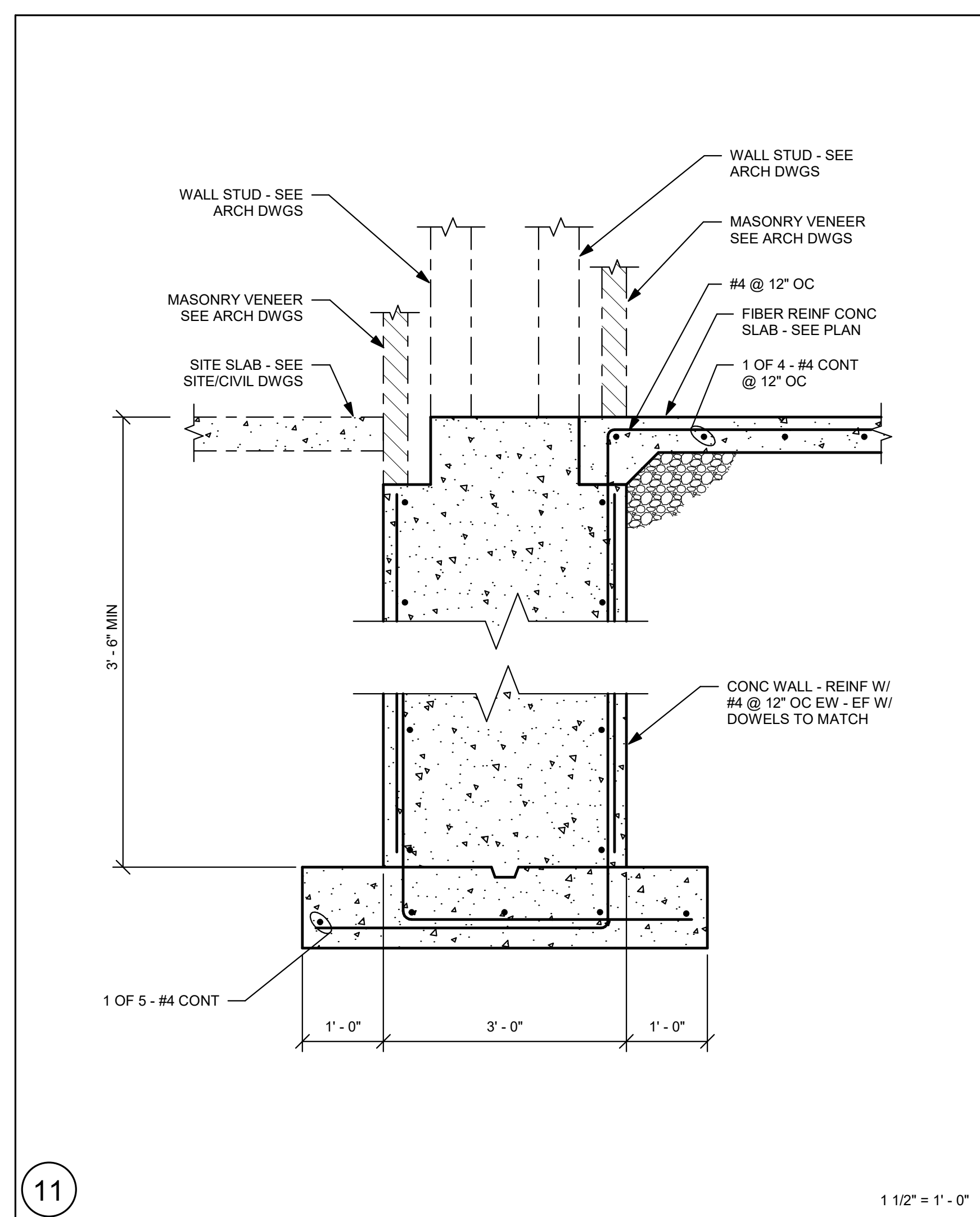
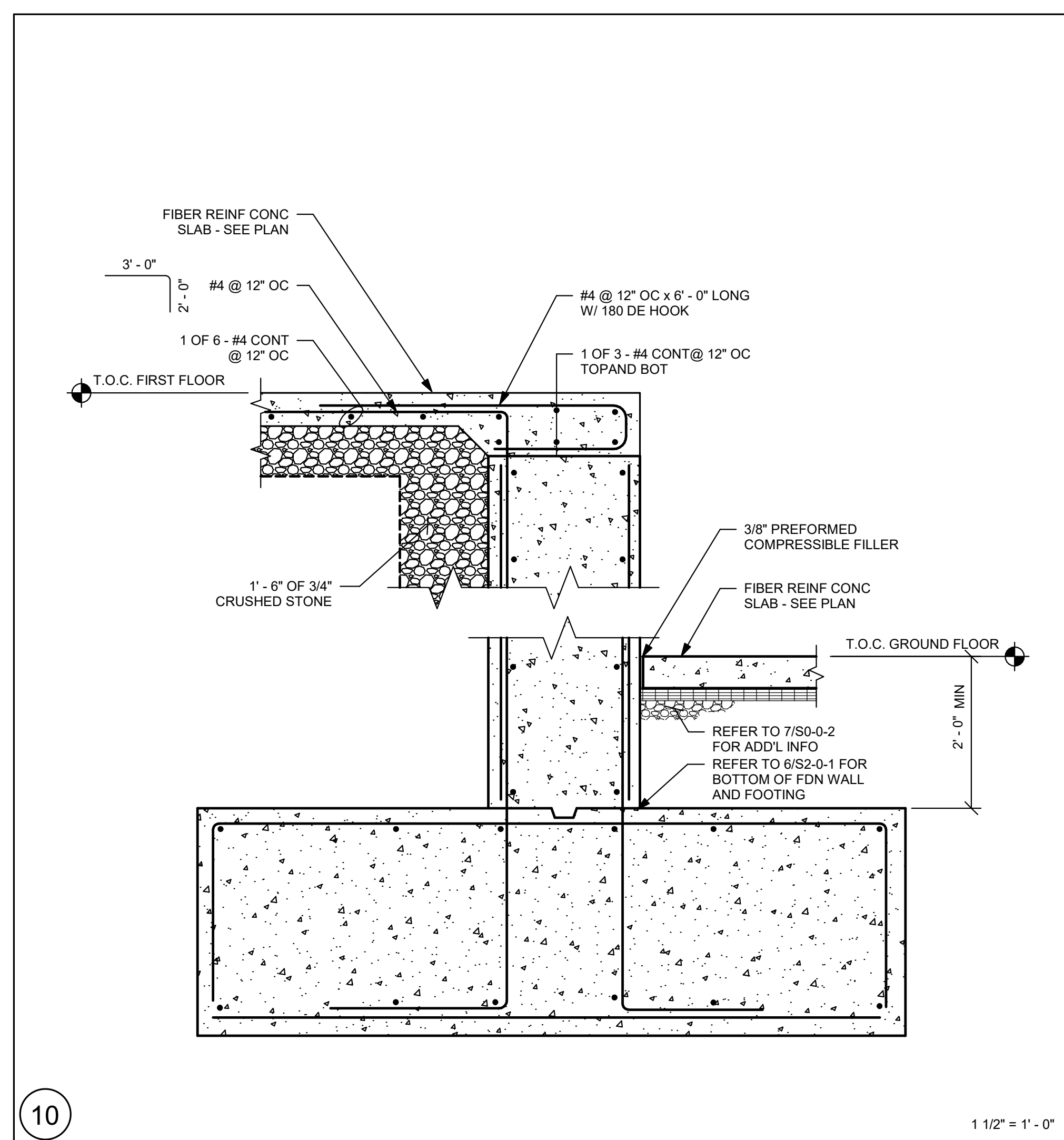
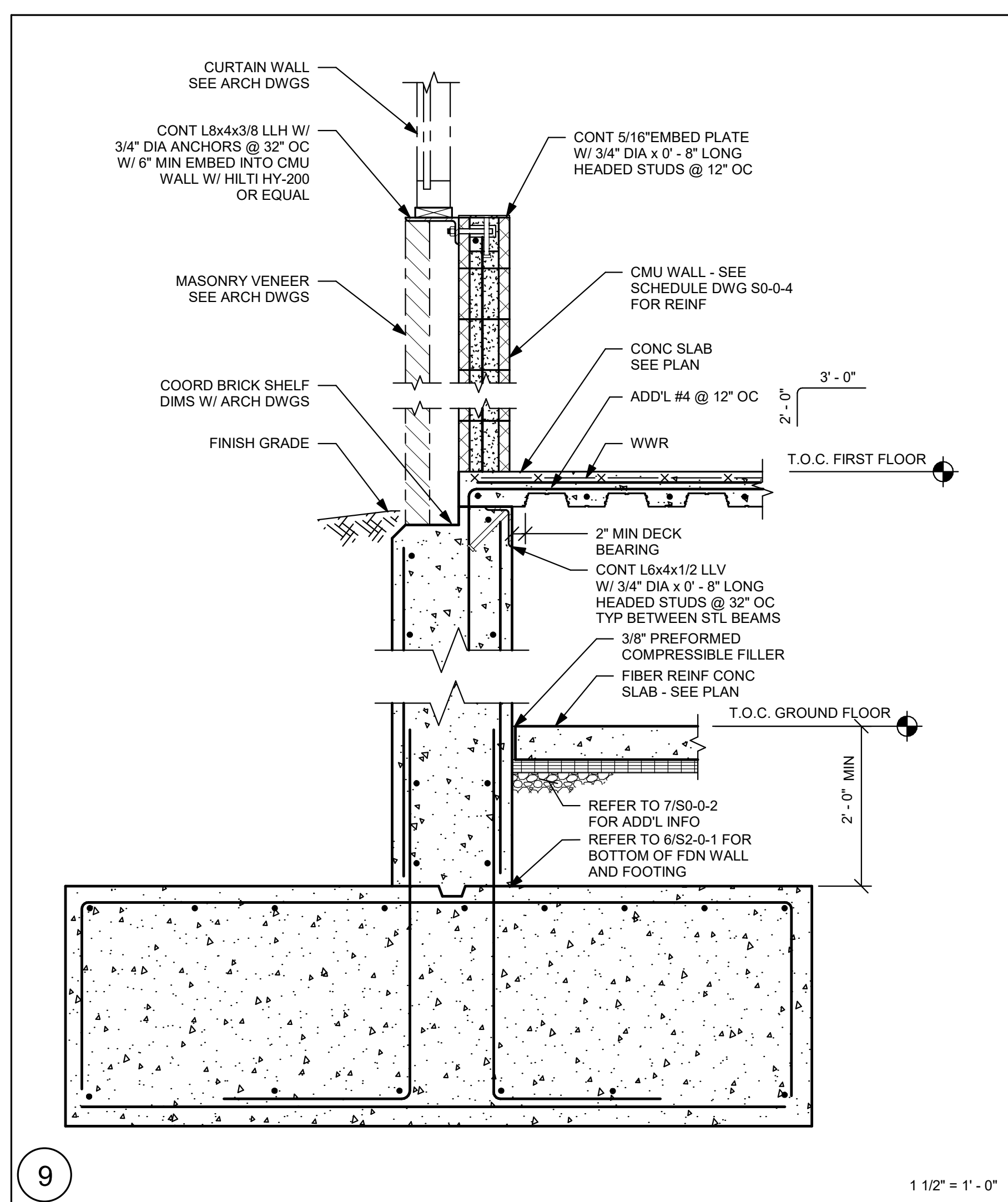
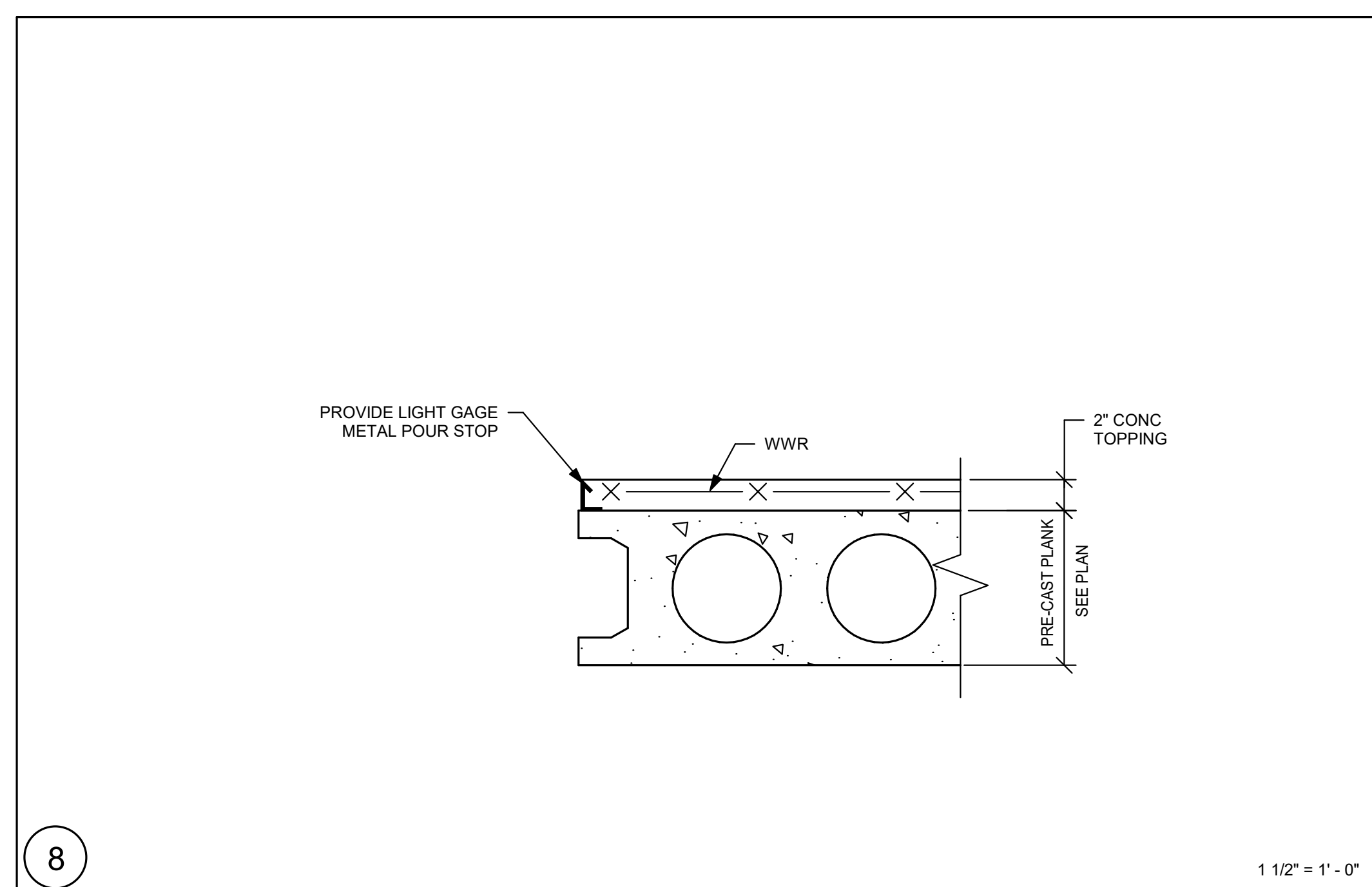
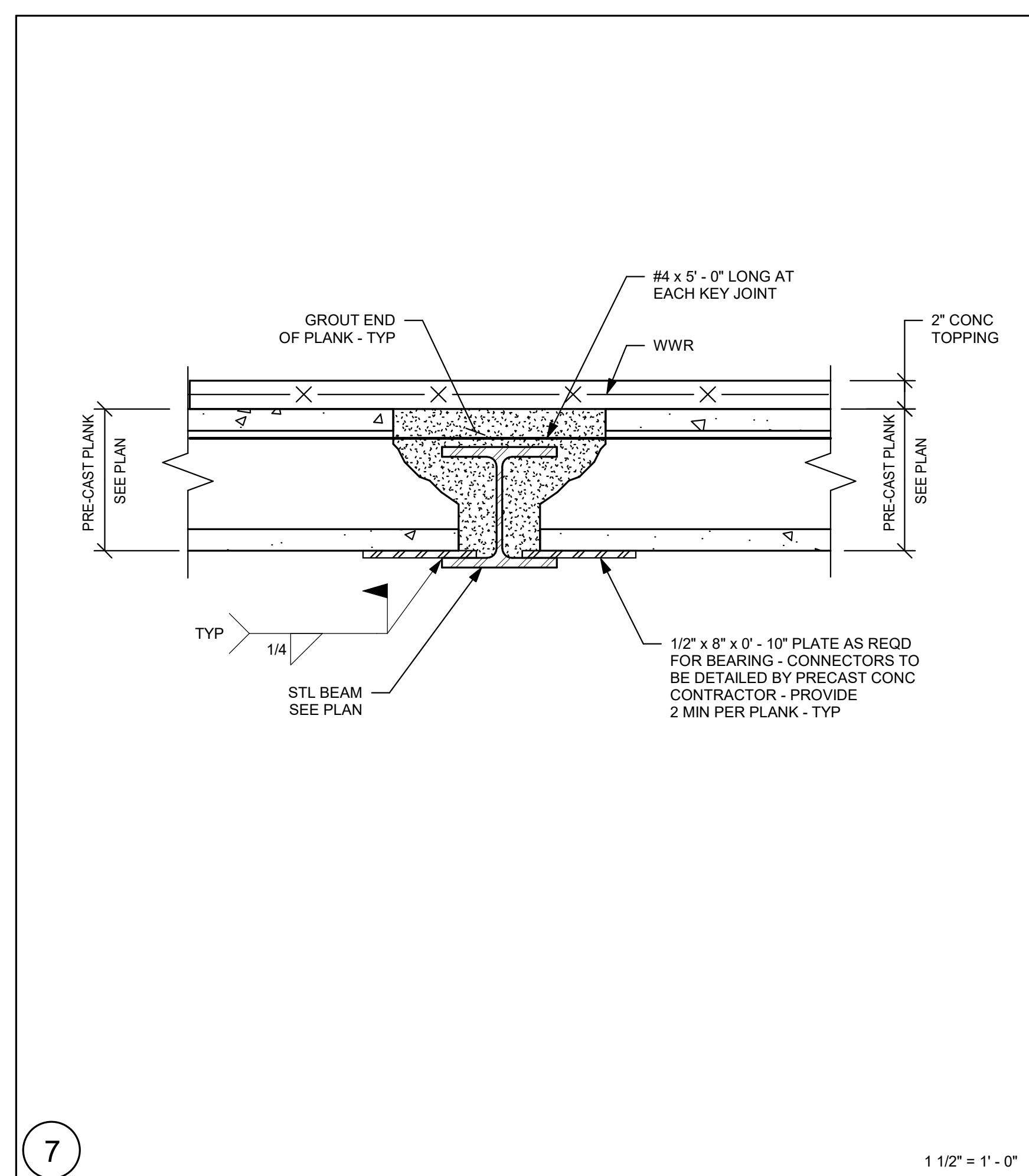
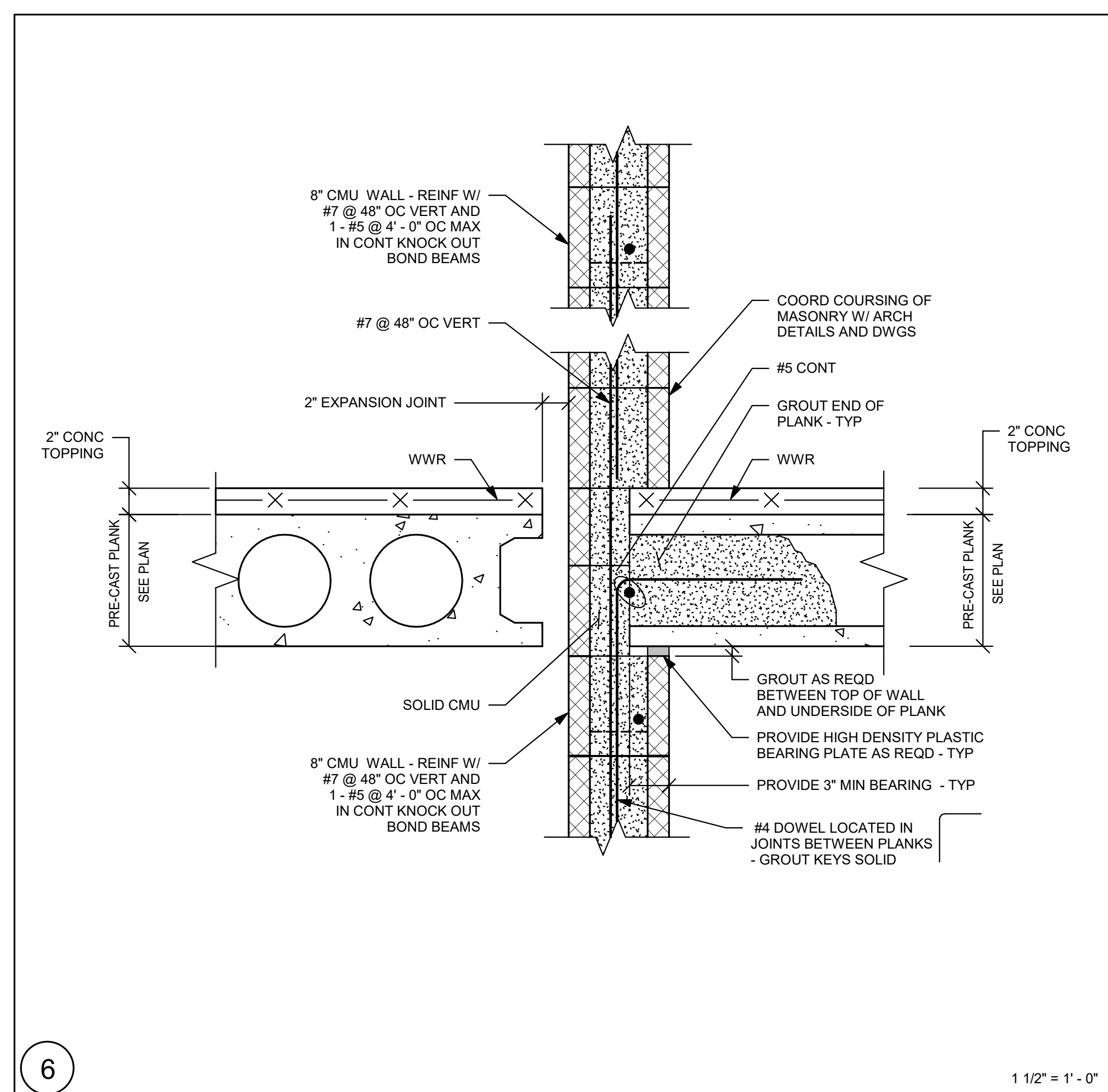
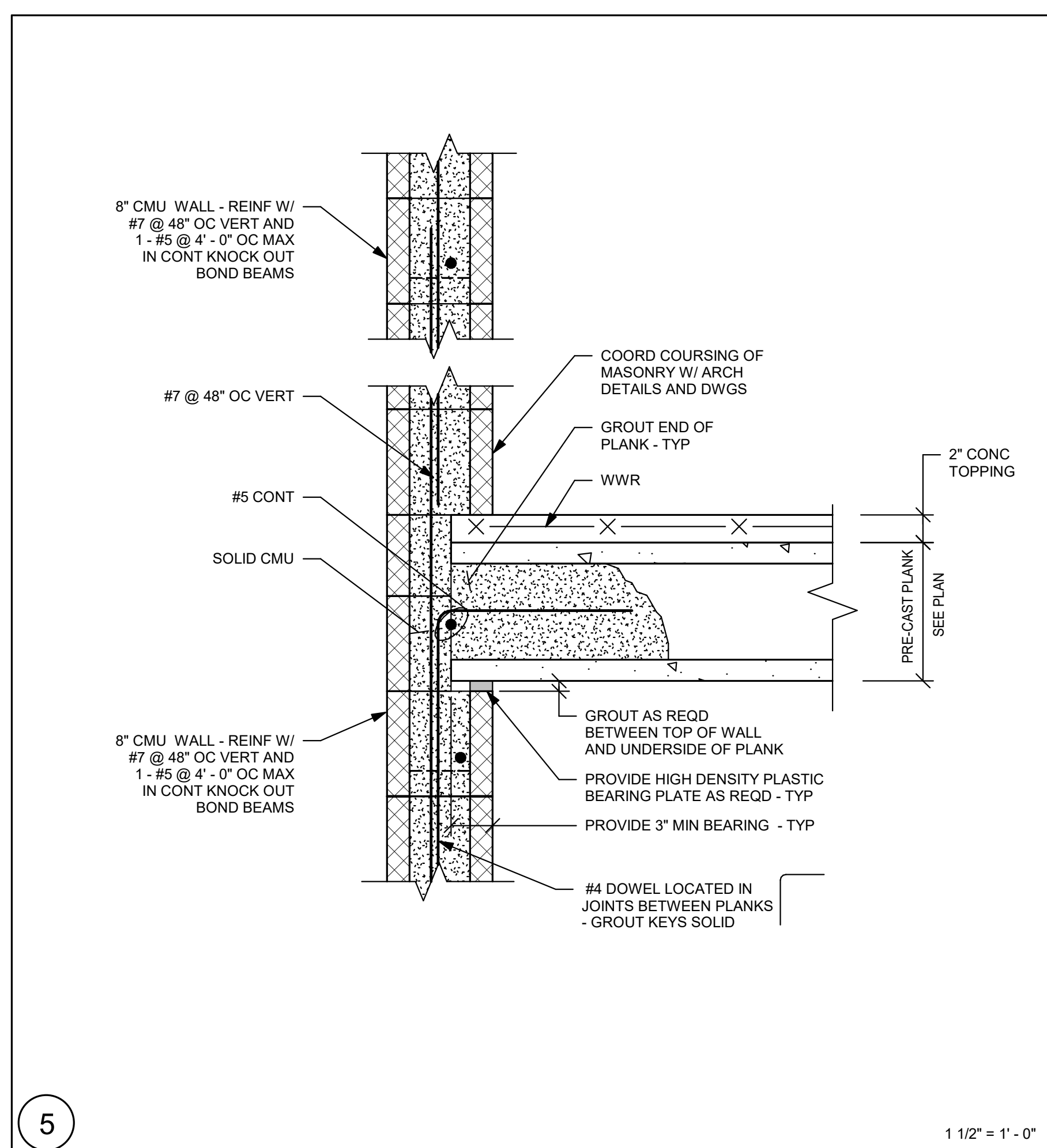
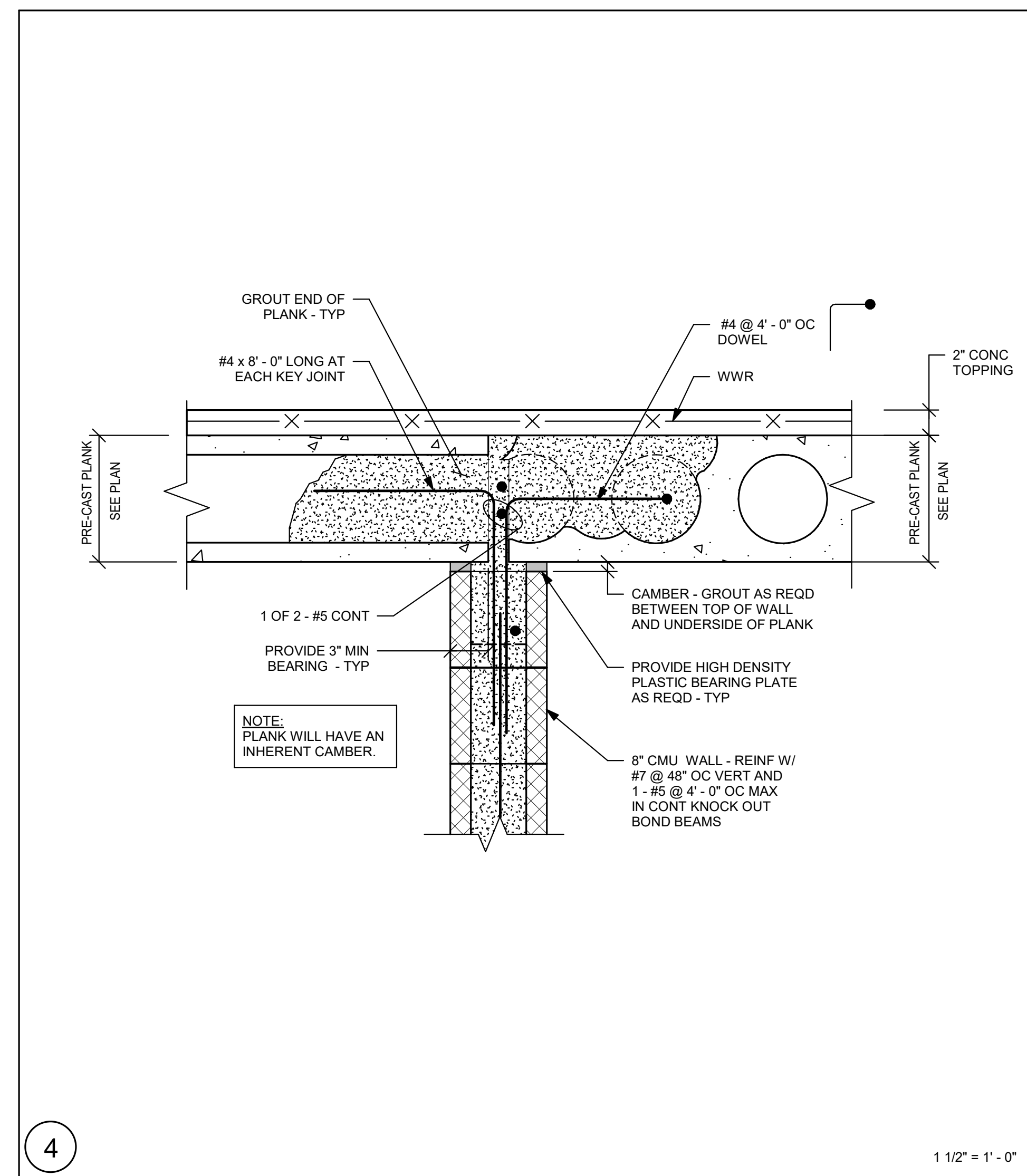
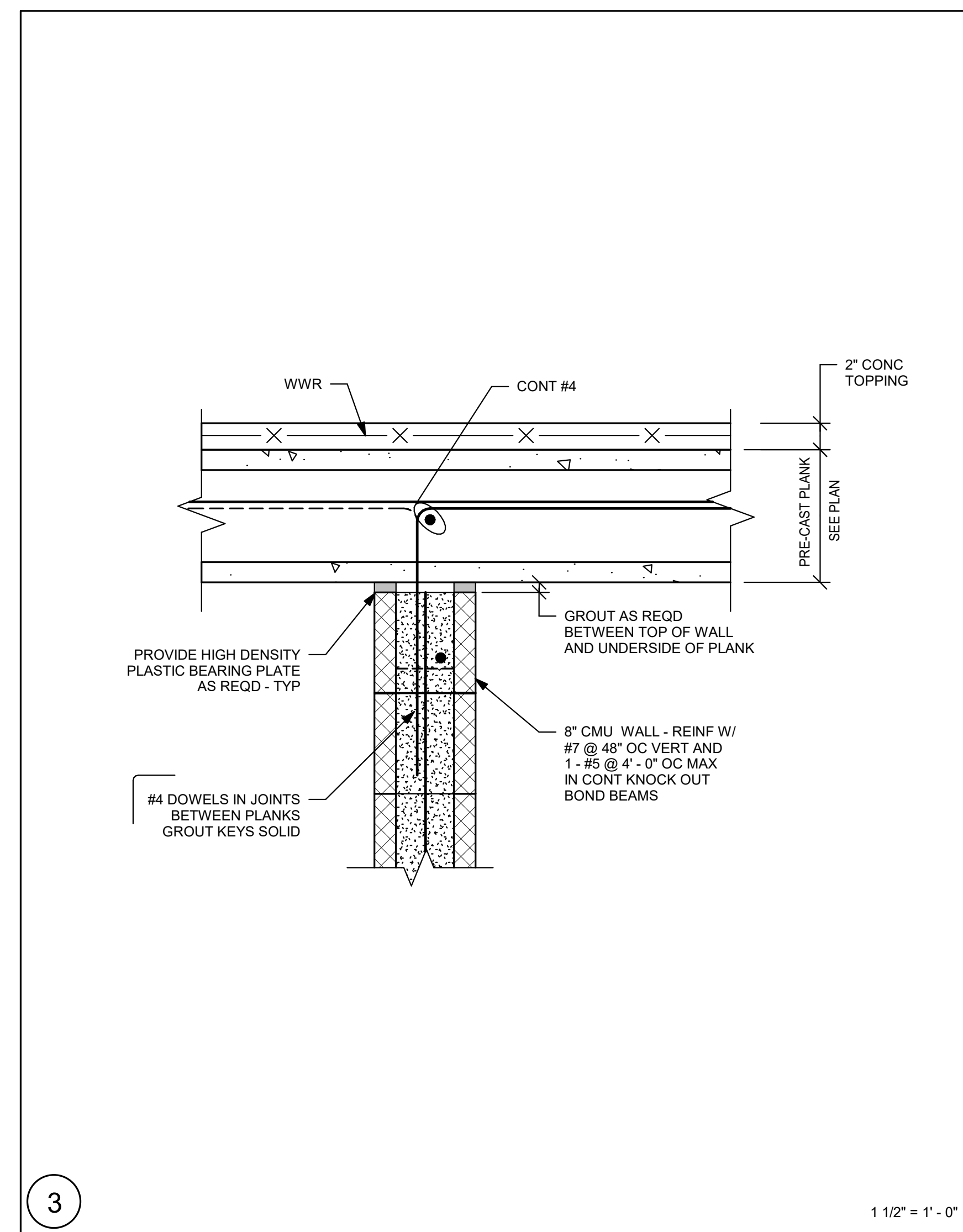
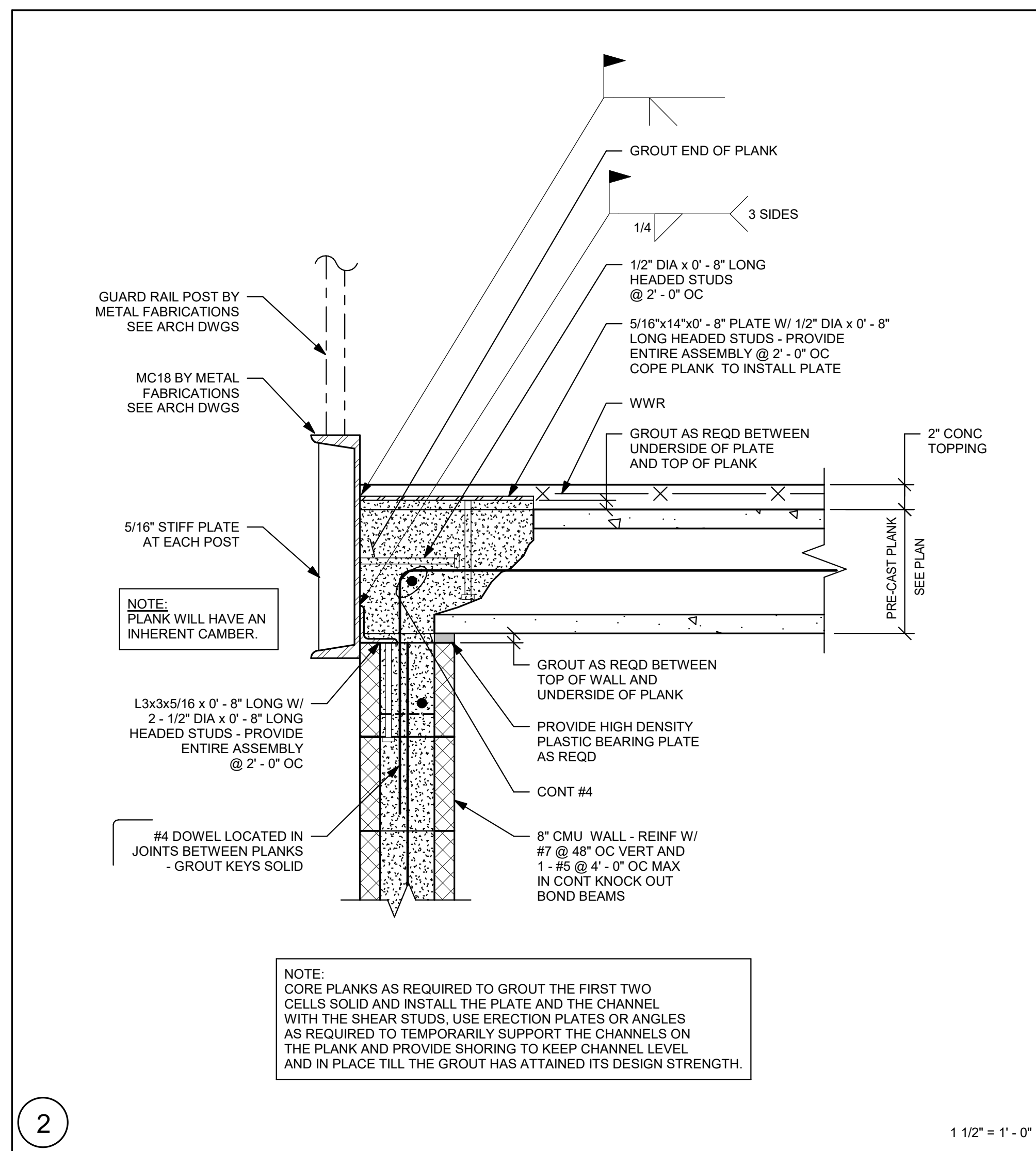
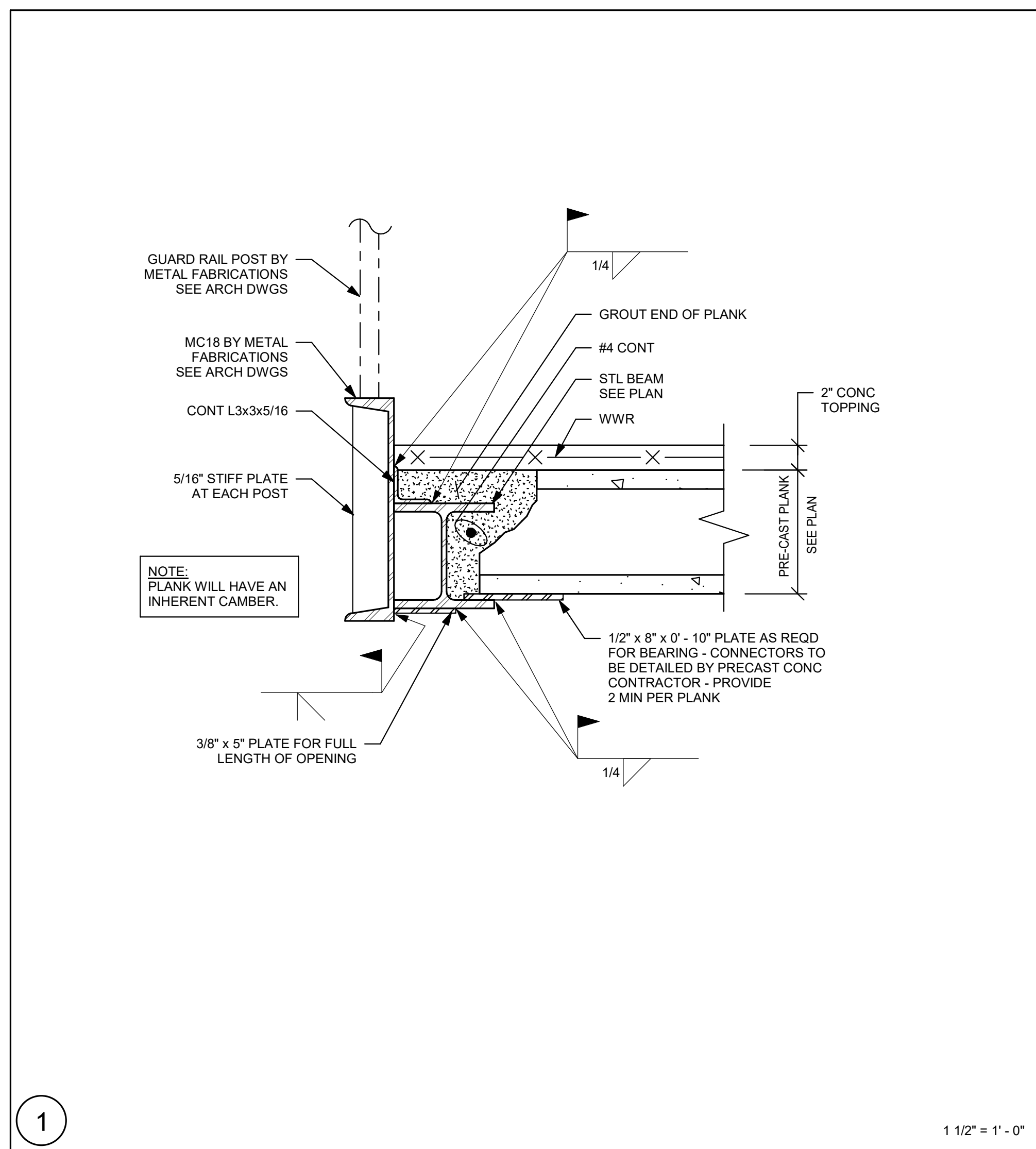
MAGNETIC NORTH

SECTIONS

Scale: As indicated
Job No.: 20202

Drawn By: **EDG**

S2-0-2



DRA

DrummeY Rosane Anderson, Inc.

225 Oakland Road
Studio 205
South Windsor, CT 06074

260 Charles Street
Studio 300
Waltham, MA 02453

Planning Architecture Interior
Tel: 817.221.1100
www.draa.com

NORTHEAST METRO TECH

100 Hemlock Rd,
Wakefield, MA 01880

Engineers Design Group Inc.
Structural Engineers
389 Main Street, Suite 401
Malden, MA 02148
(781)396-9007
EDG@EDGINC.COM

MSBA 60% CD Submission

01/13/2023

KEY PLAN

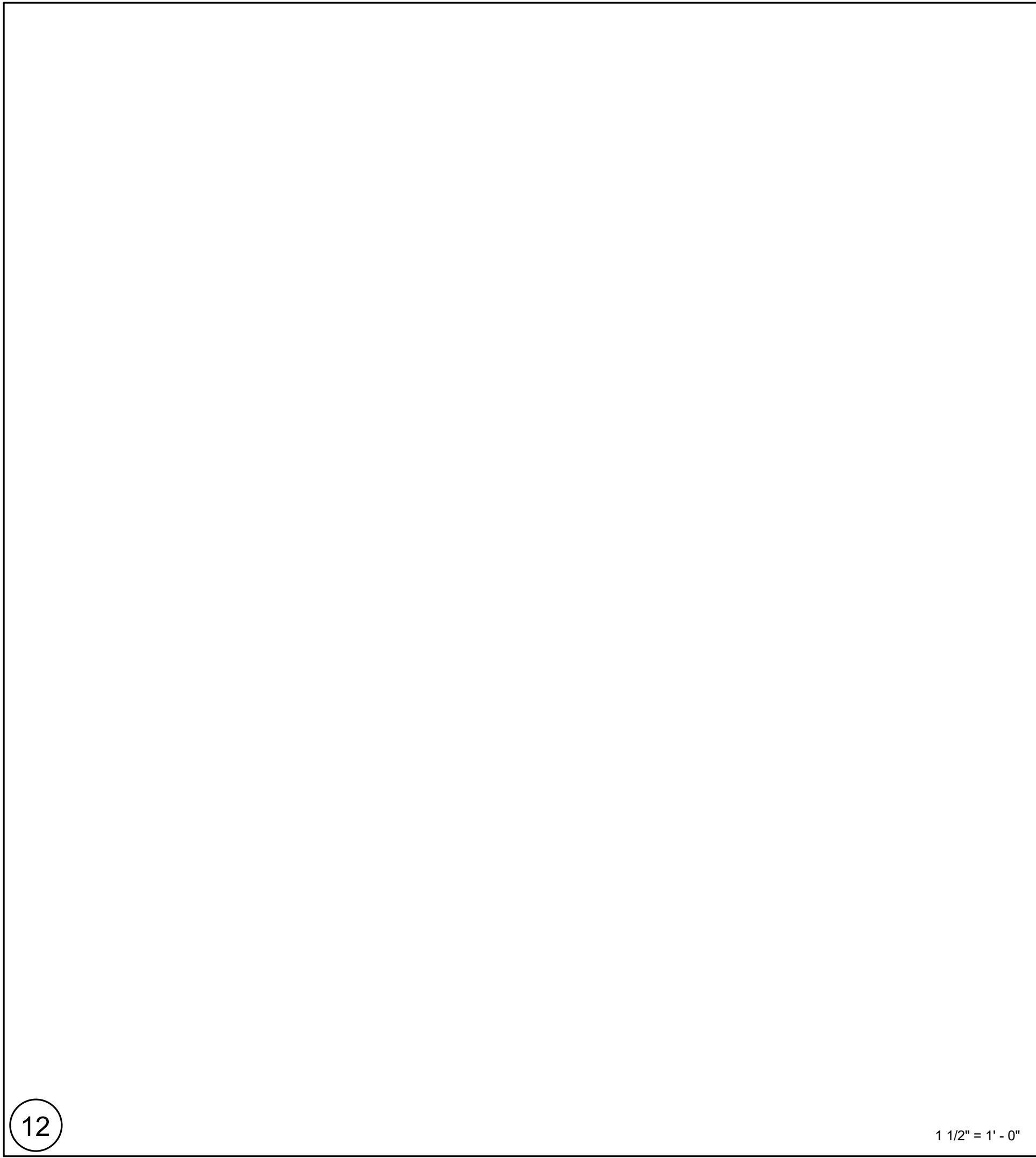
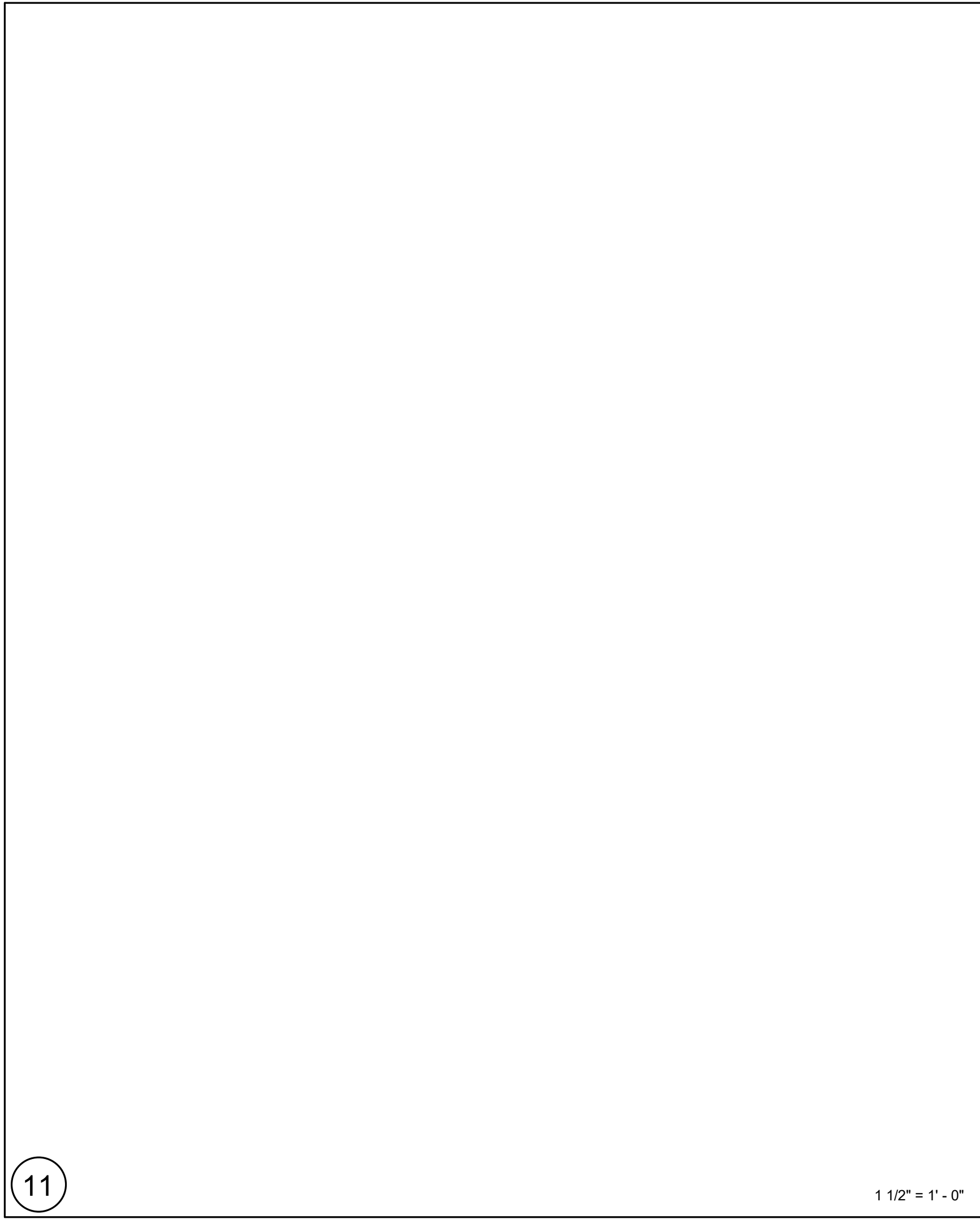
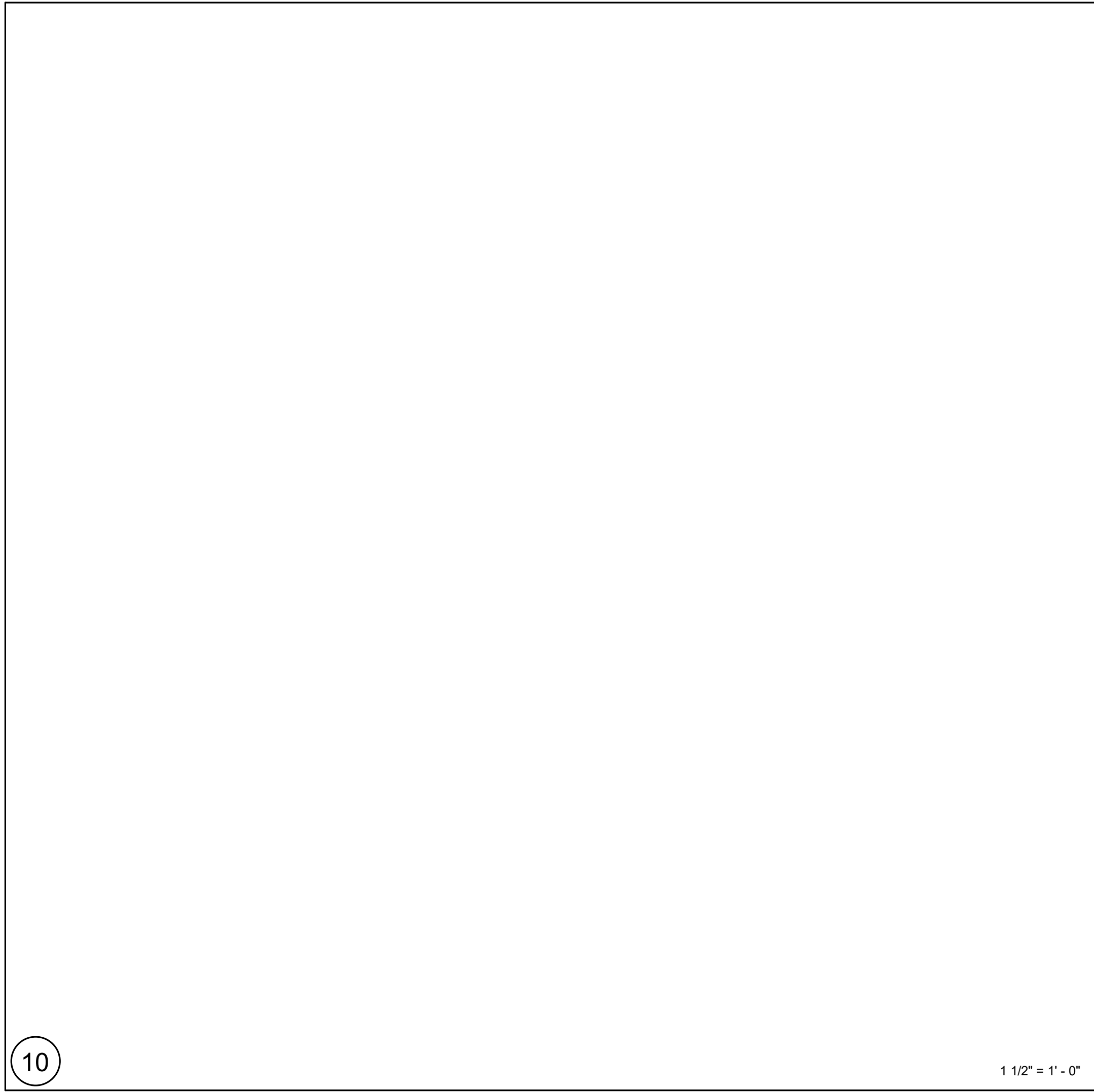
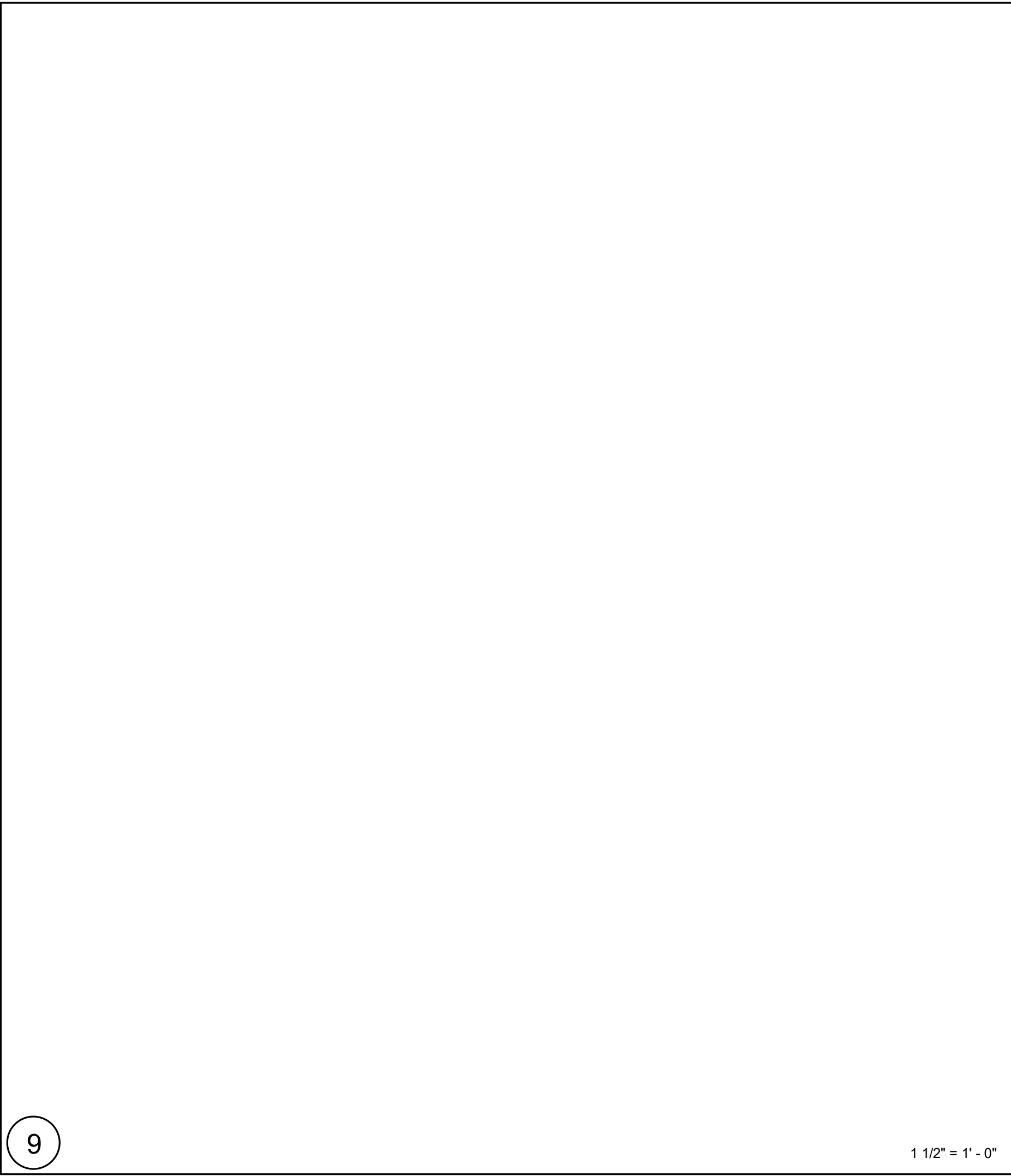
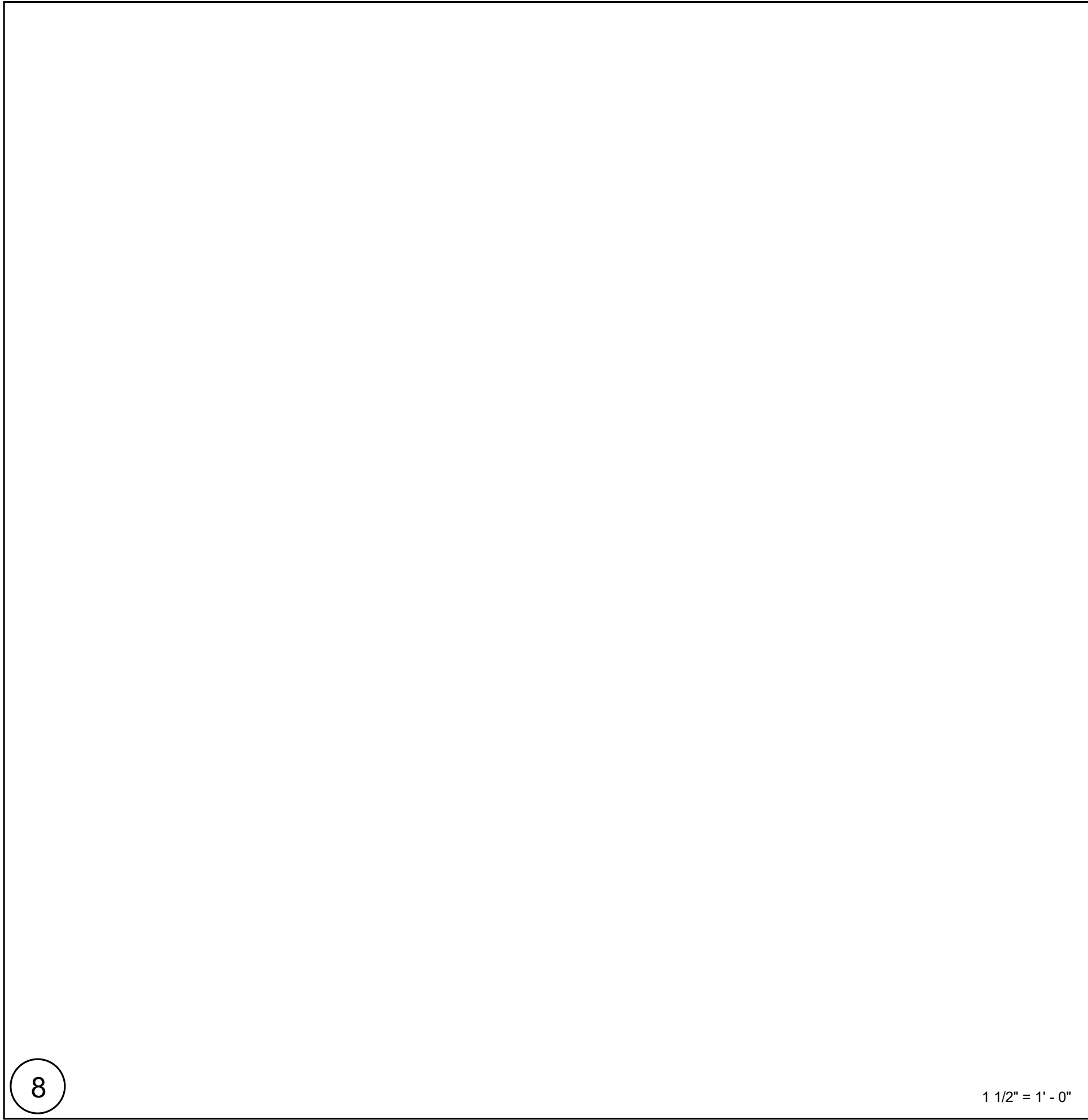
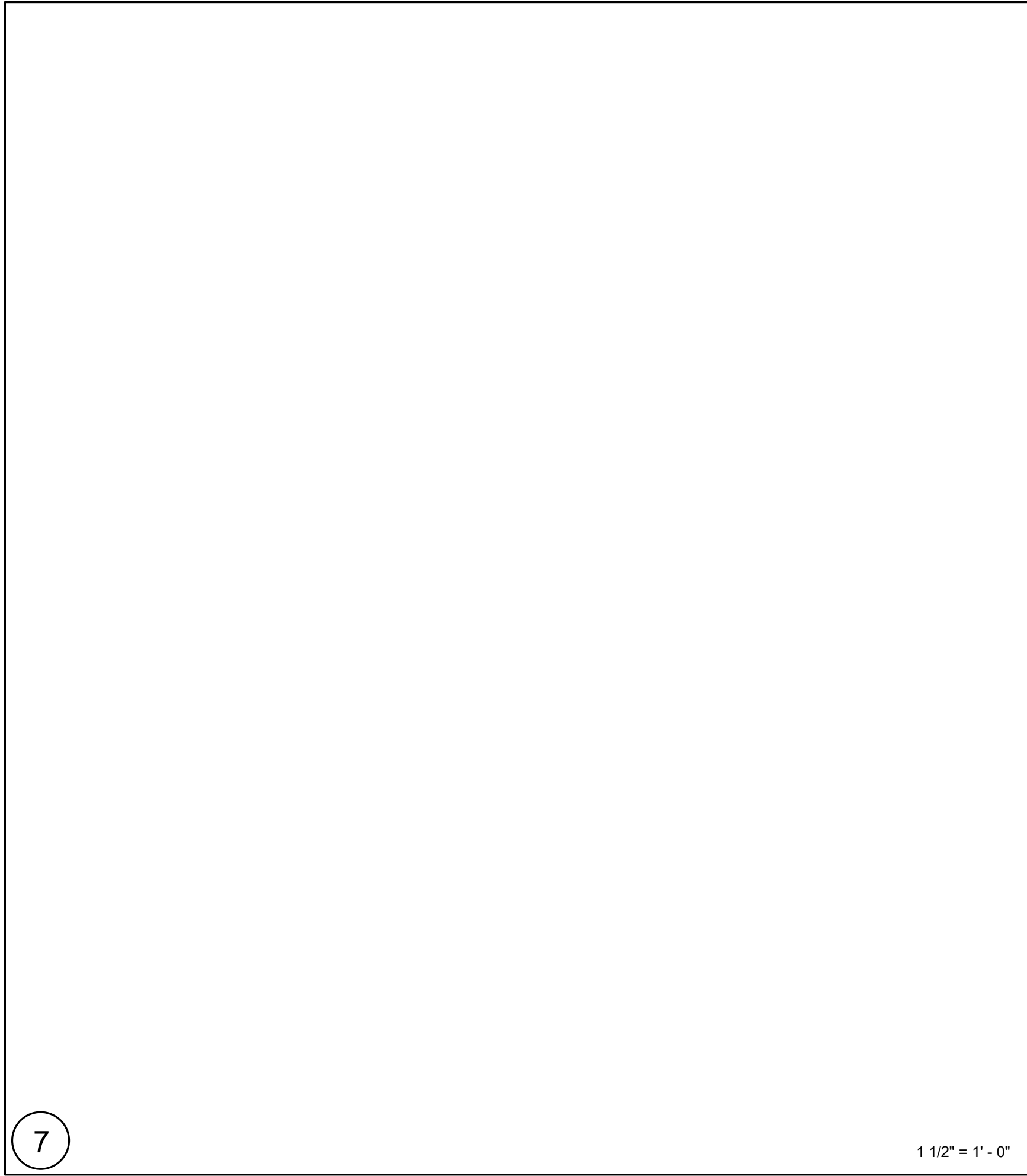
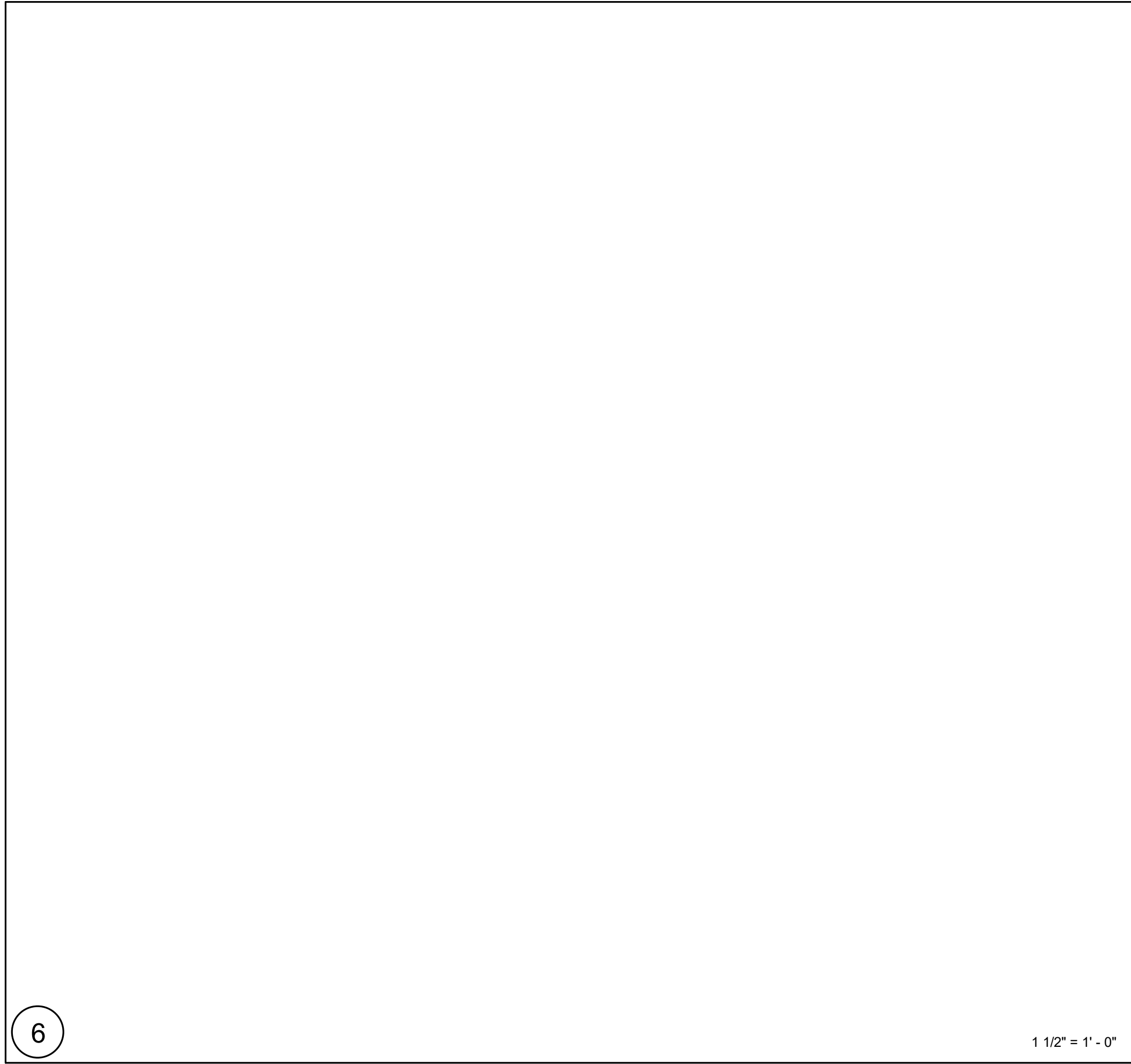
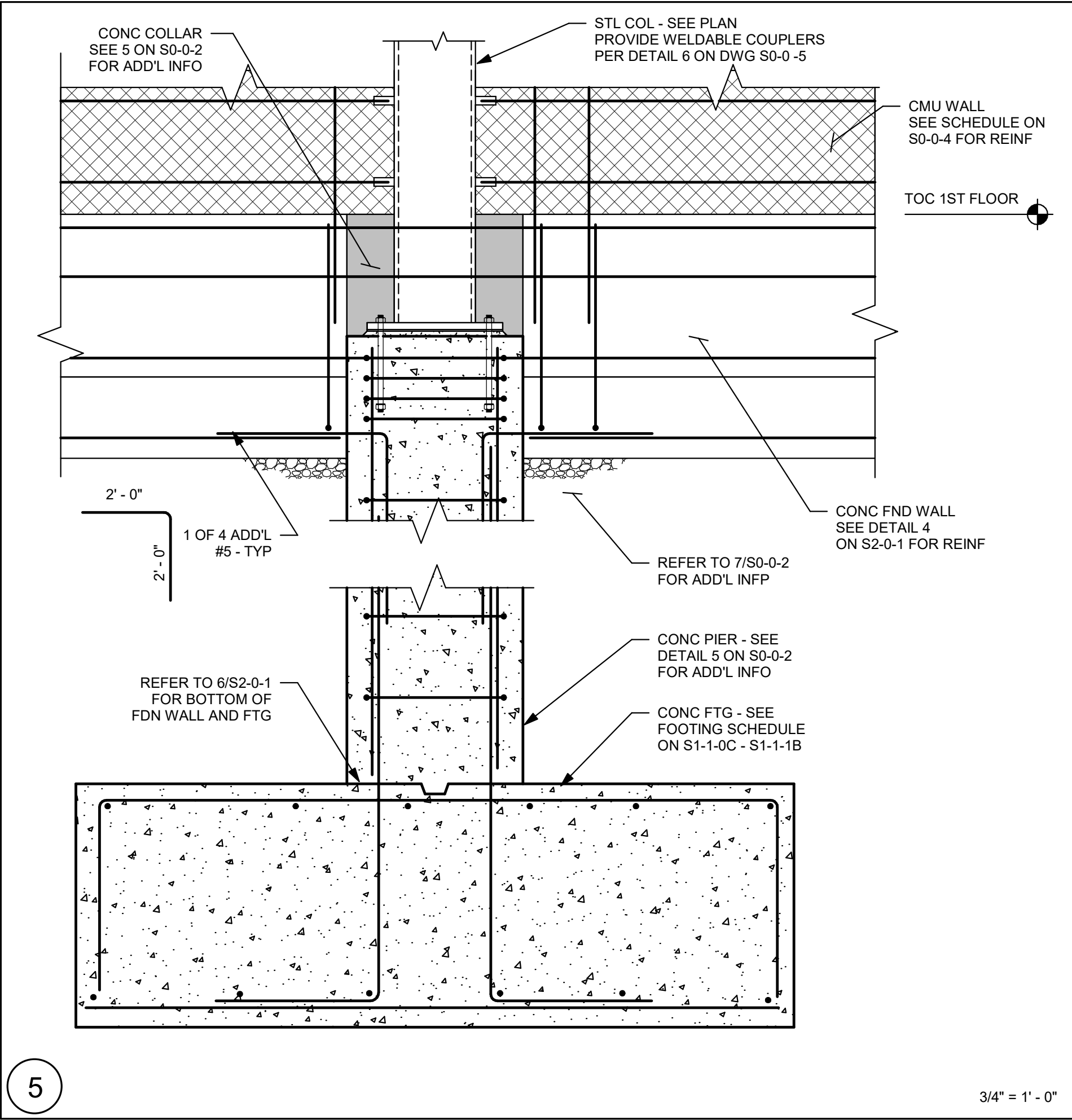
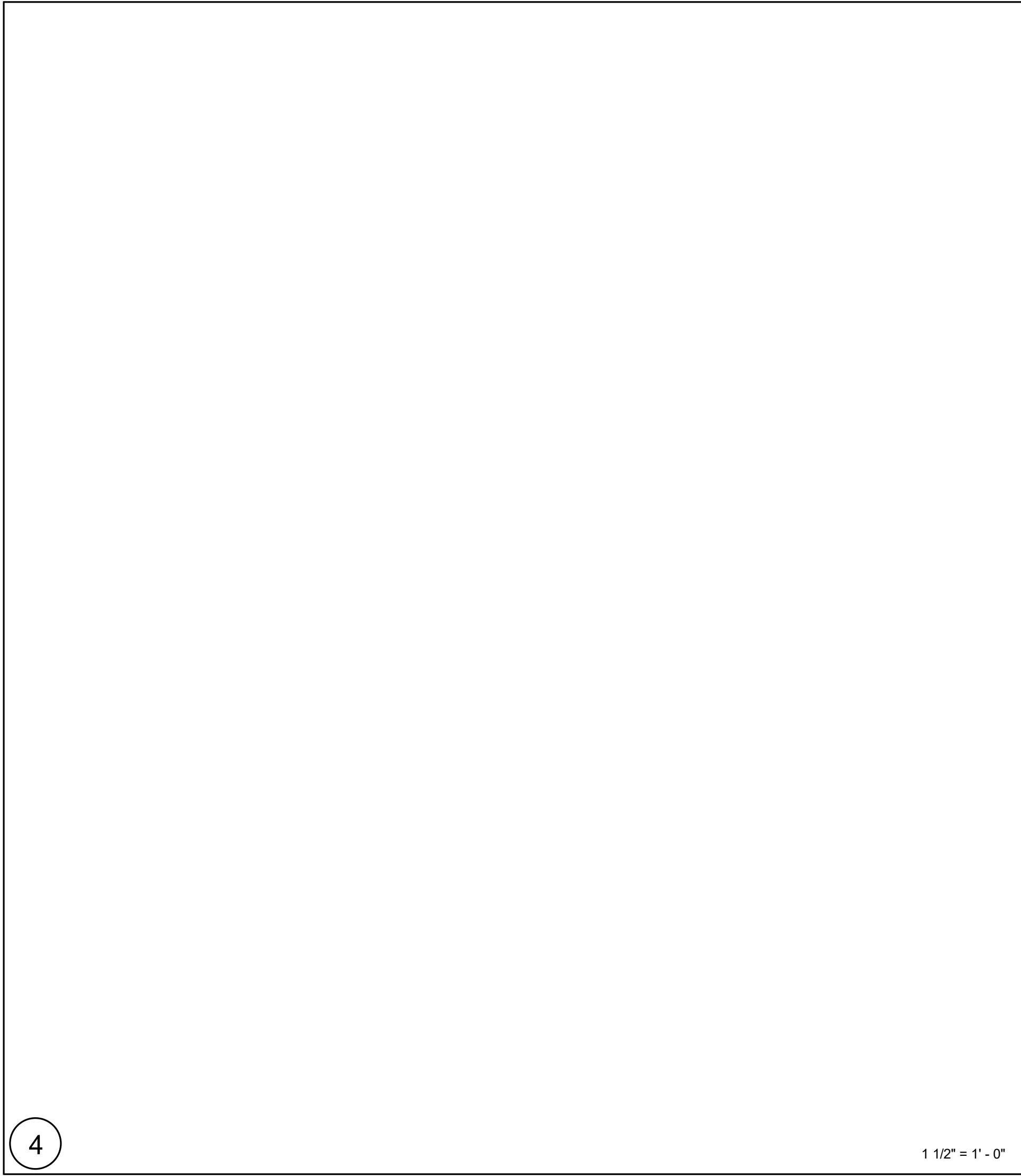
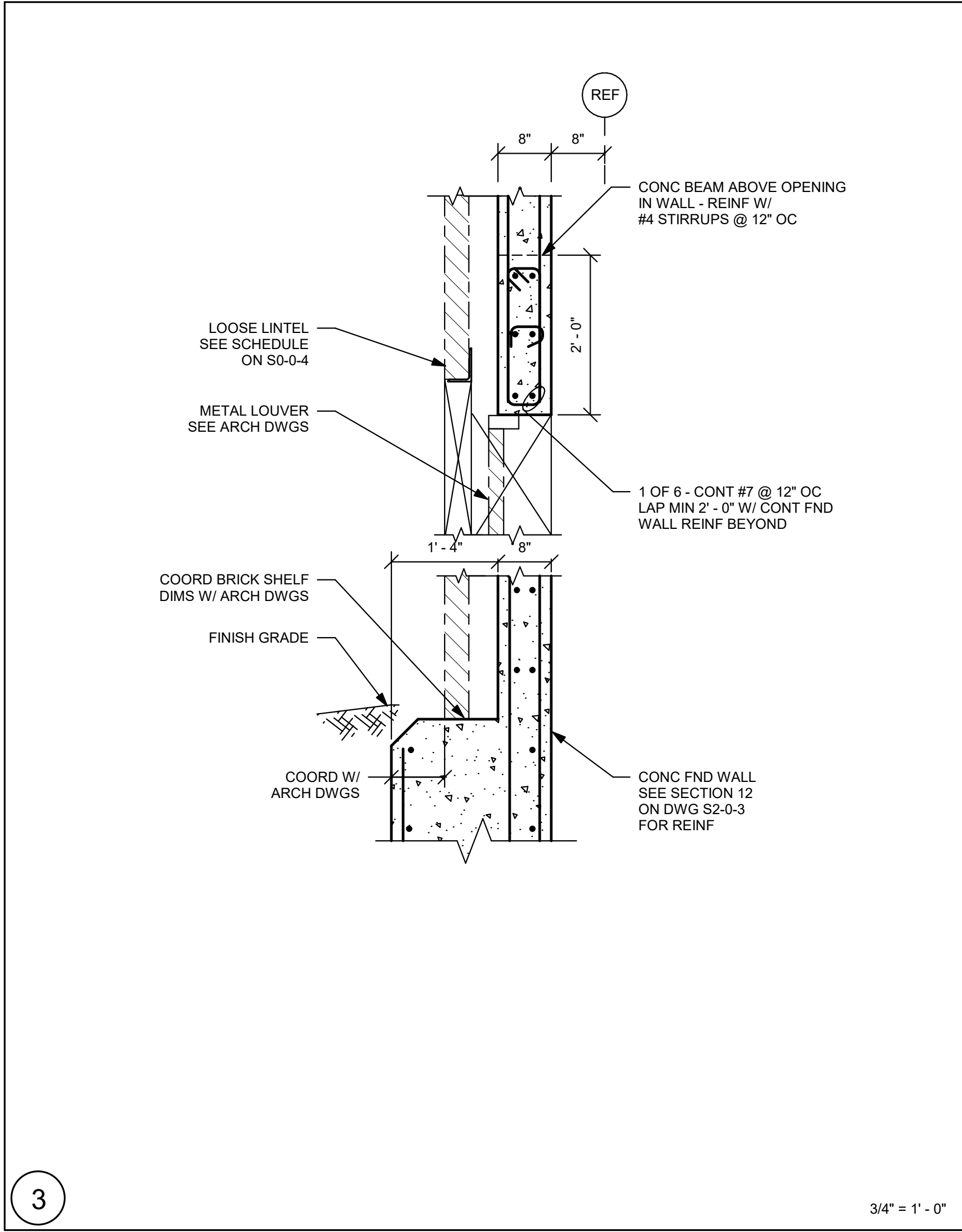
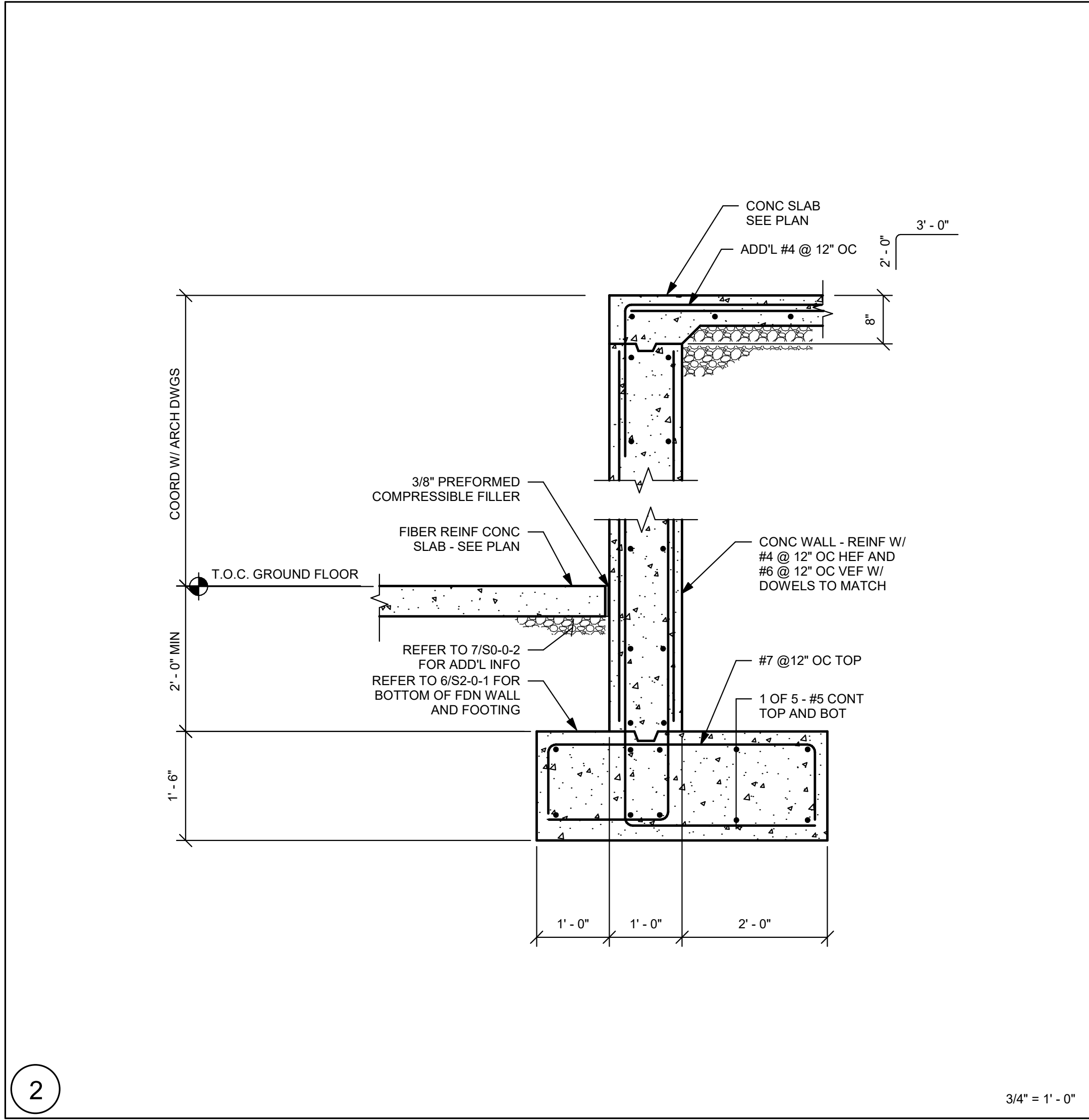
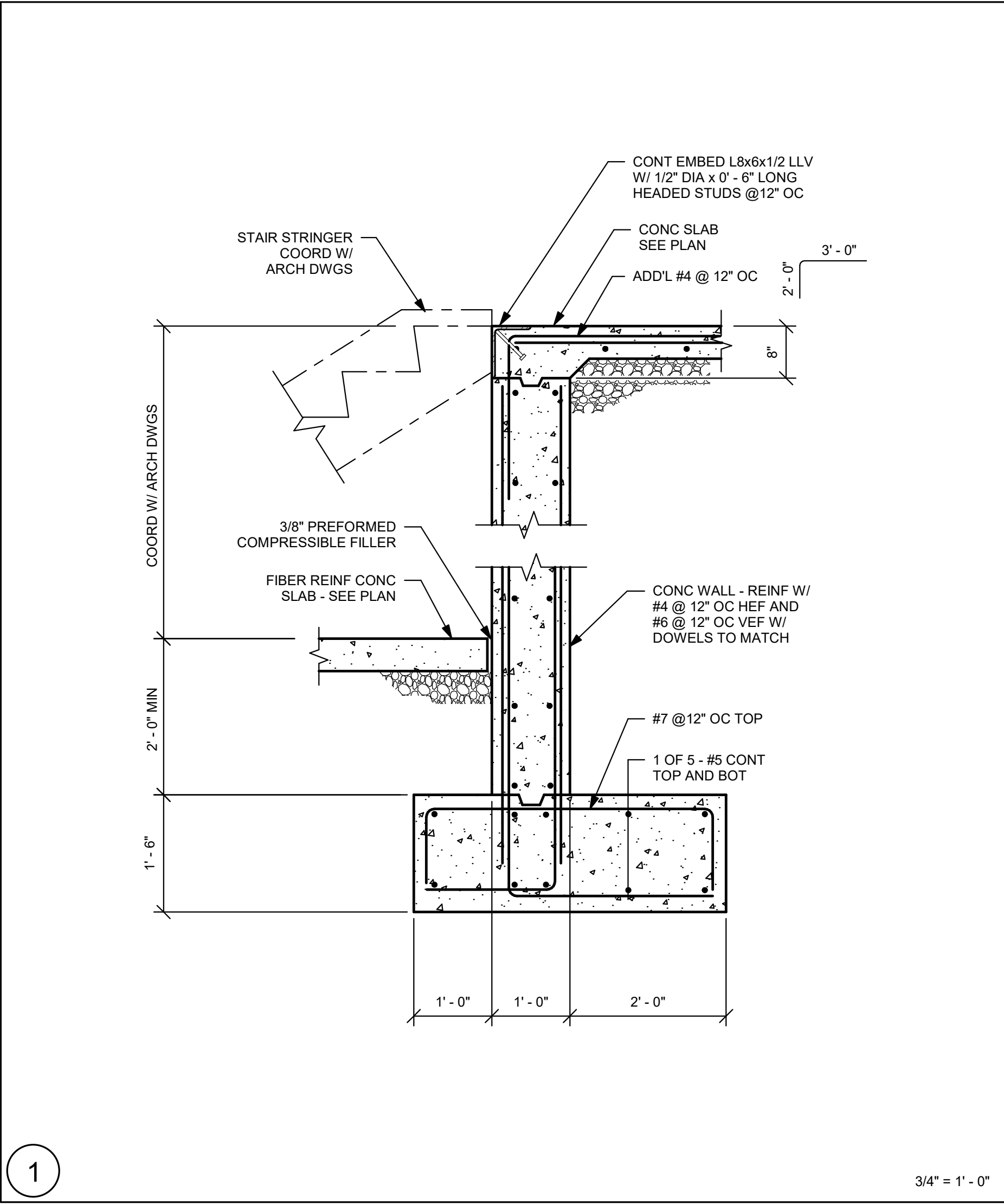
PROJECT NORTH

MAGNETIC NORTH

SECTIONS

Scale: As indicated
Job No.: 20202
Drawn By: EDG
Date: 01/13/2023

S2-0-3



DRA

Drummey Rosane Anderson, Inc.

225 Oakland Road
Studio 205
South Windsor, CT 06074

260 Charles Street
Studio 300
Waltham, MA 02453

Planning Architecture Interior

Tel: 817.261.1100
www.draa.com

NORTHEAST
METRO TECH

100 Hemlock Rd,
Wakefield, MA 01880

EDG

Engineers Design Group Inc.
Structural Engineers
389 Main Street, Suite 401
Malden, MA 02148
(781)396-9007
EDG@EDGINC.COM

MSBA 60% CD
Submission

01/13/2023

A B C D

KEY PLAN

PROJECT NORTH

MAGNETIC NORTH

SECTIONS

Scale: 3/4" = 1'-0"
Job No.: 20202
Drawn By: EDG
Date: 01/13/2023

S2-0-4

NORTHEAST METRO TECH

100 Hemlock Rd.
Wakefield, MA 01880

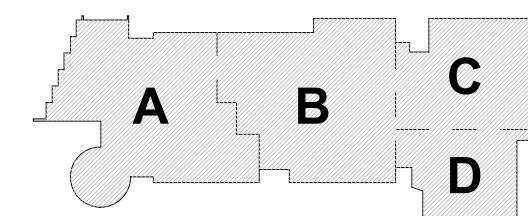


Engineers Design Group Inc.
Structural Engineers
389 Main Street, Suite 401
Malden, MA 02148
(781)396-9007
EDG@EDGINC.COM

© COPYRIGHT 2021 DRUMMEY ROSANE ANDERSON, INC.

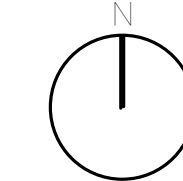
MSBA 60% CD
Submission

01/13/2023

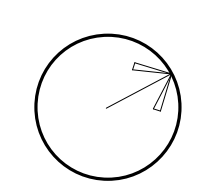


KEY PLAN

PROJECT NORTH



MAGNETIC NORTH



SECTIONS

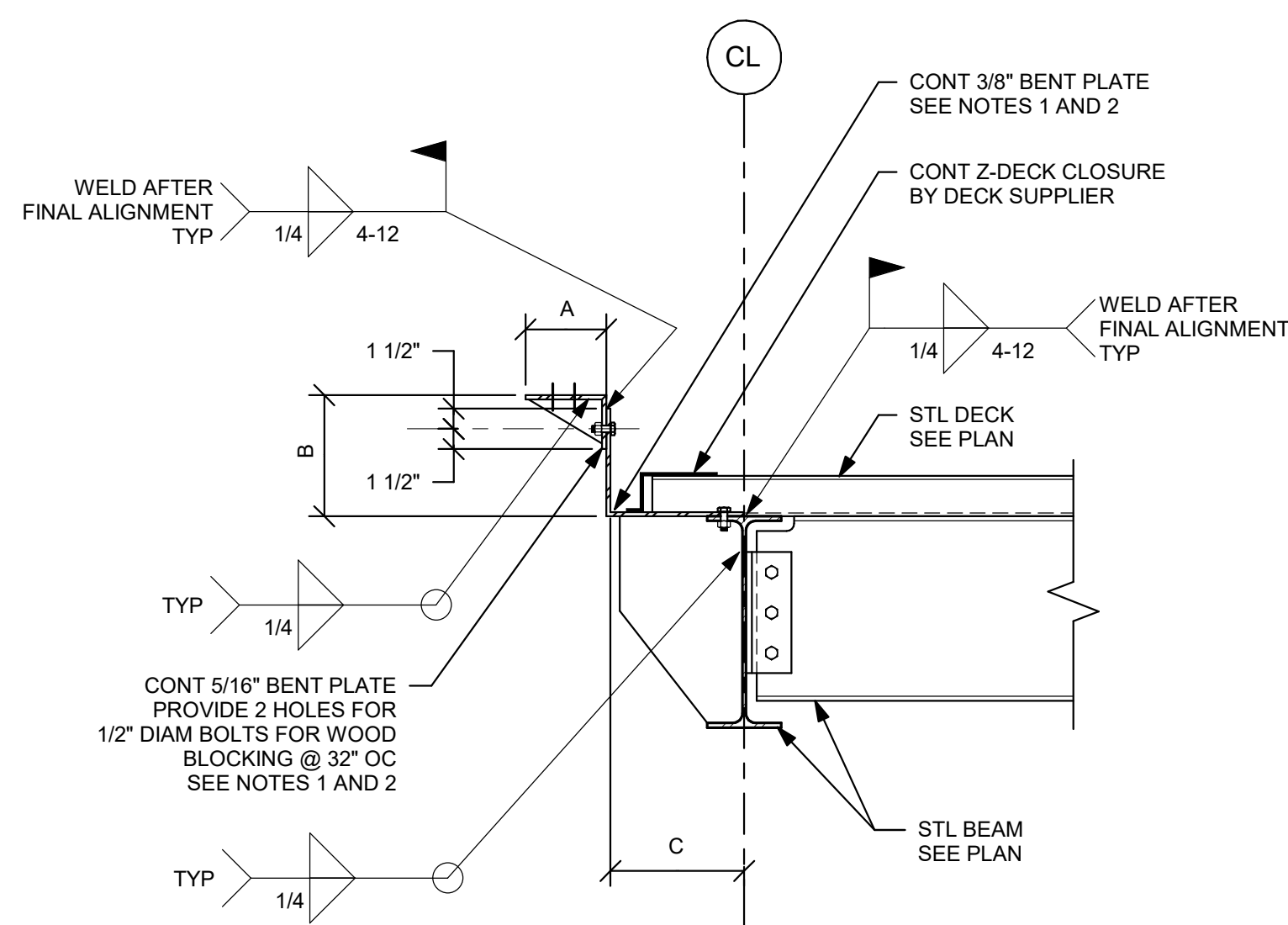
Scale: As indicated

Job No.: 20202

Drawn By: EDG

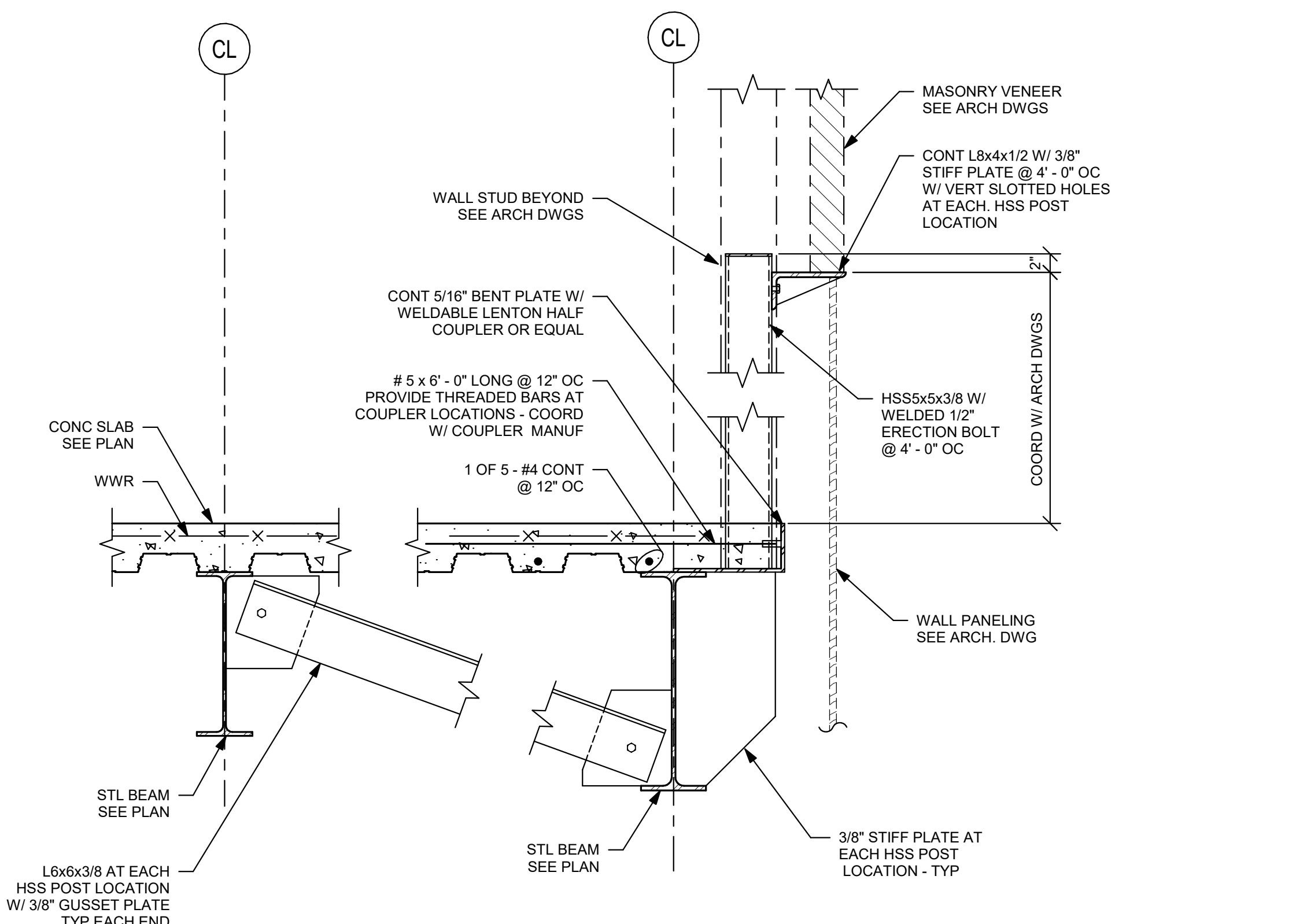
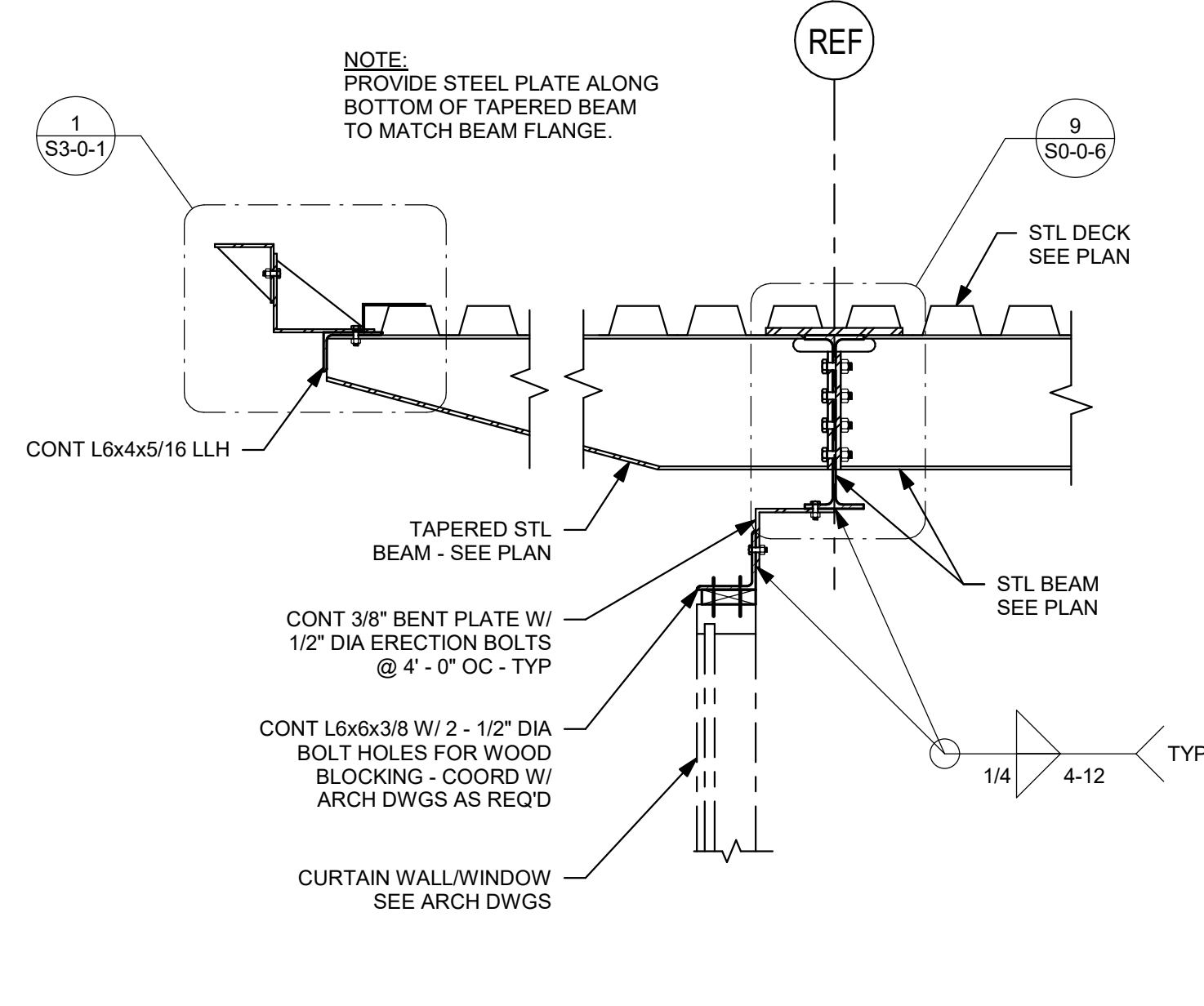
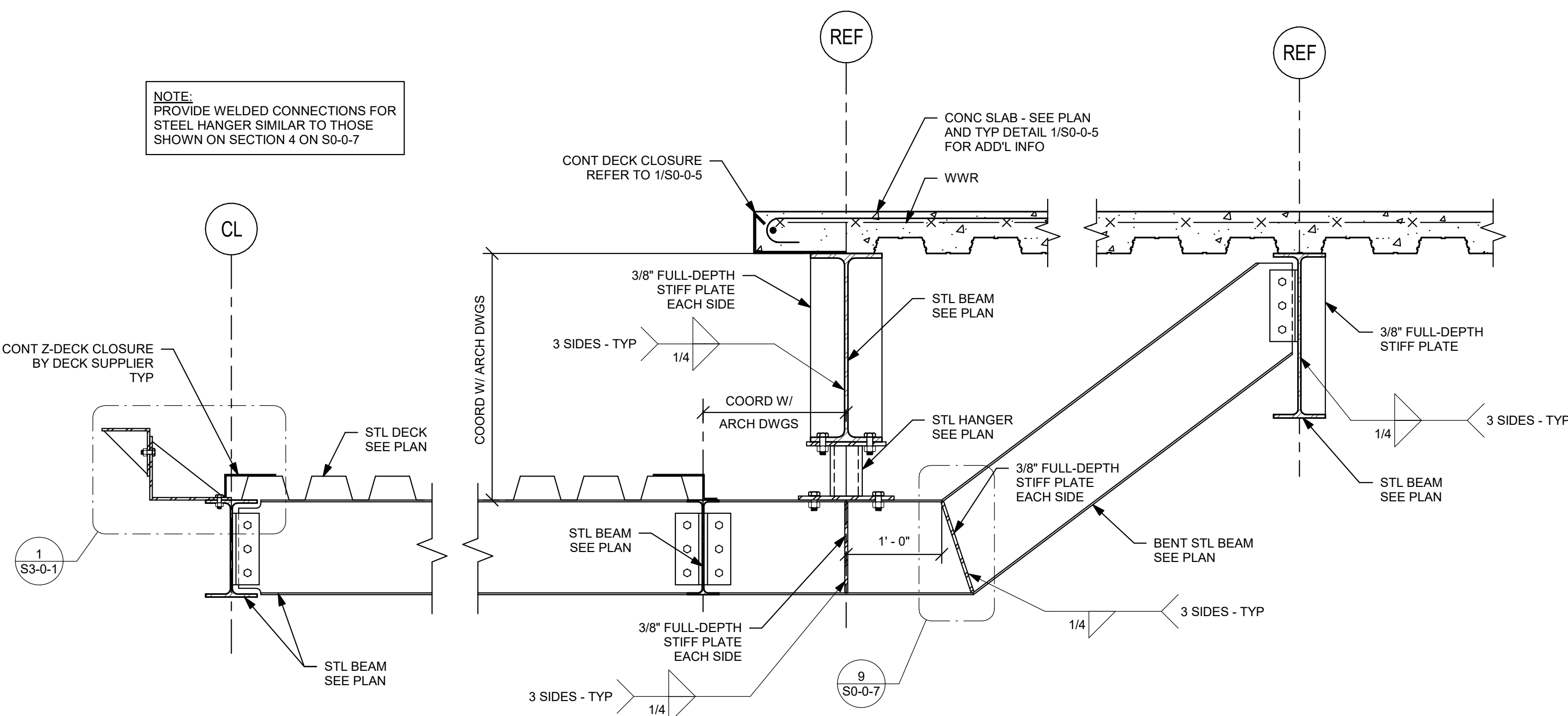
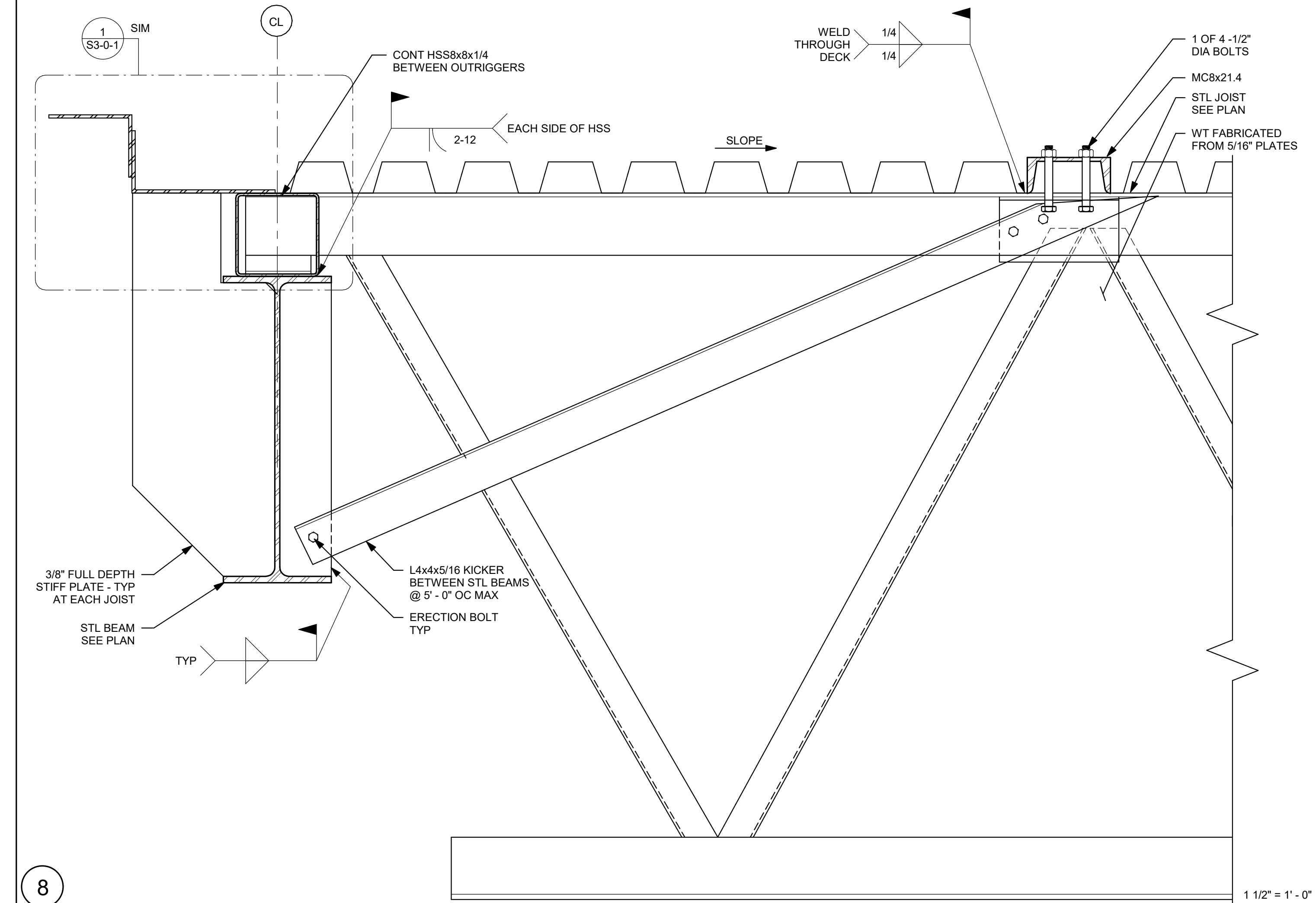
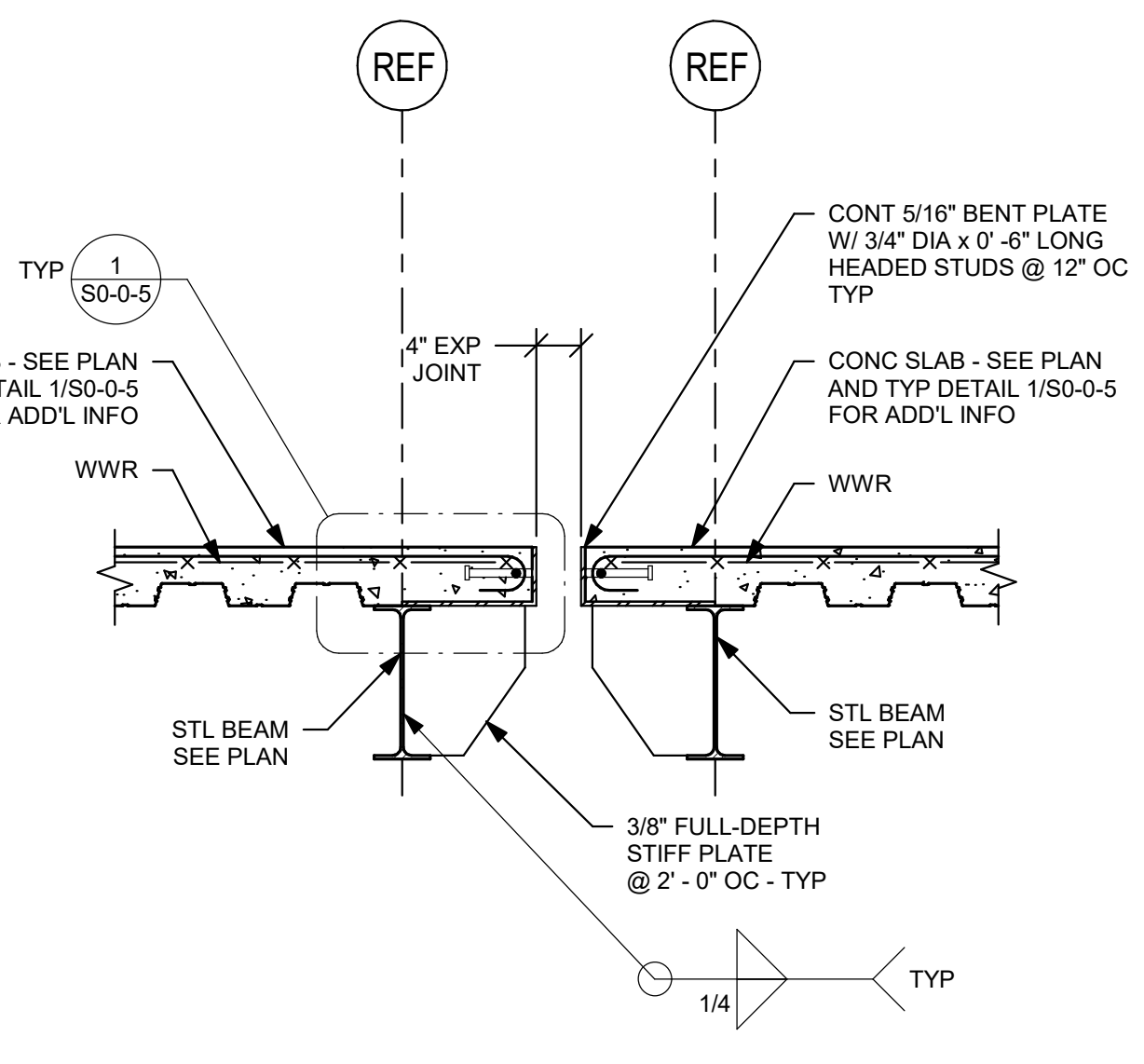
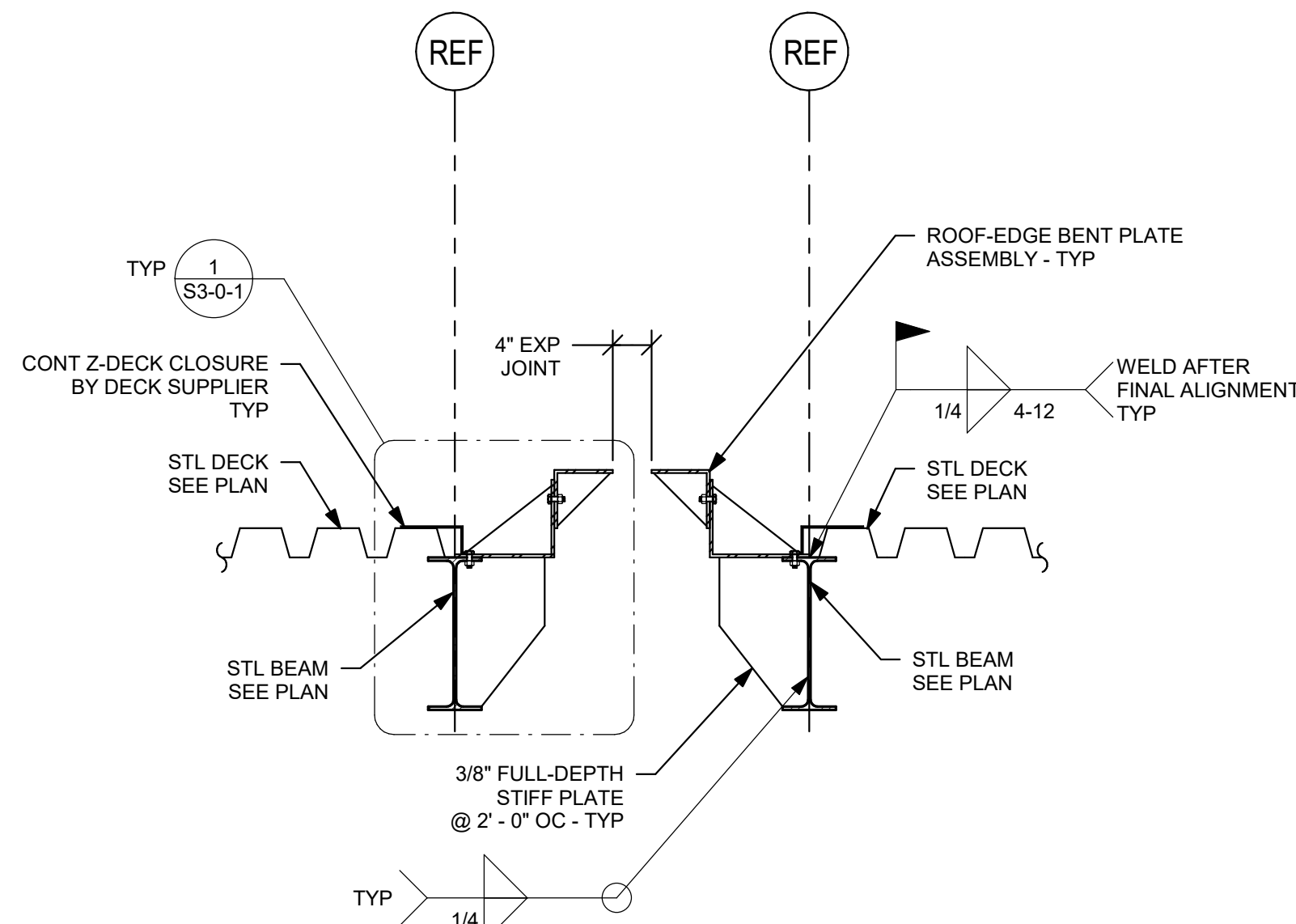
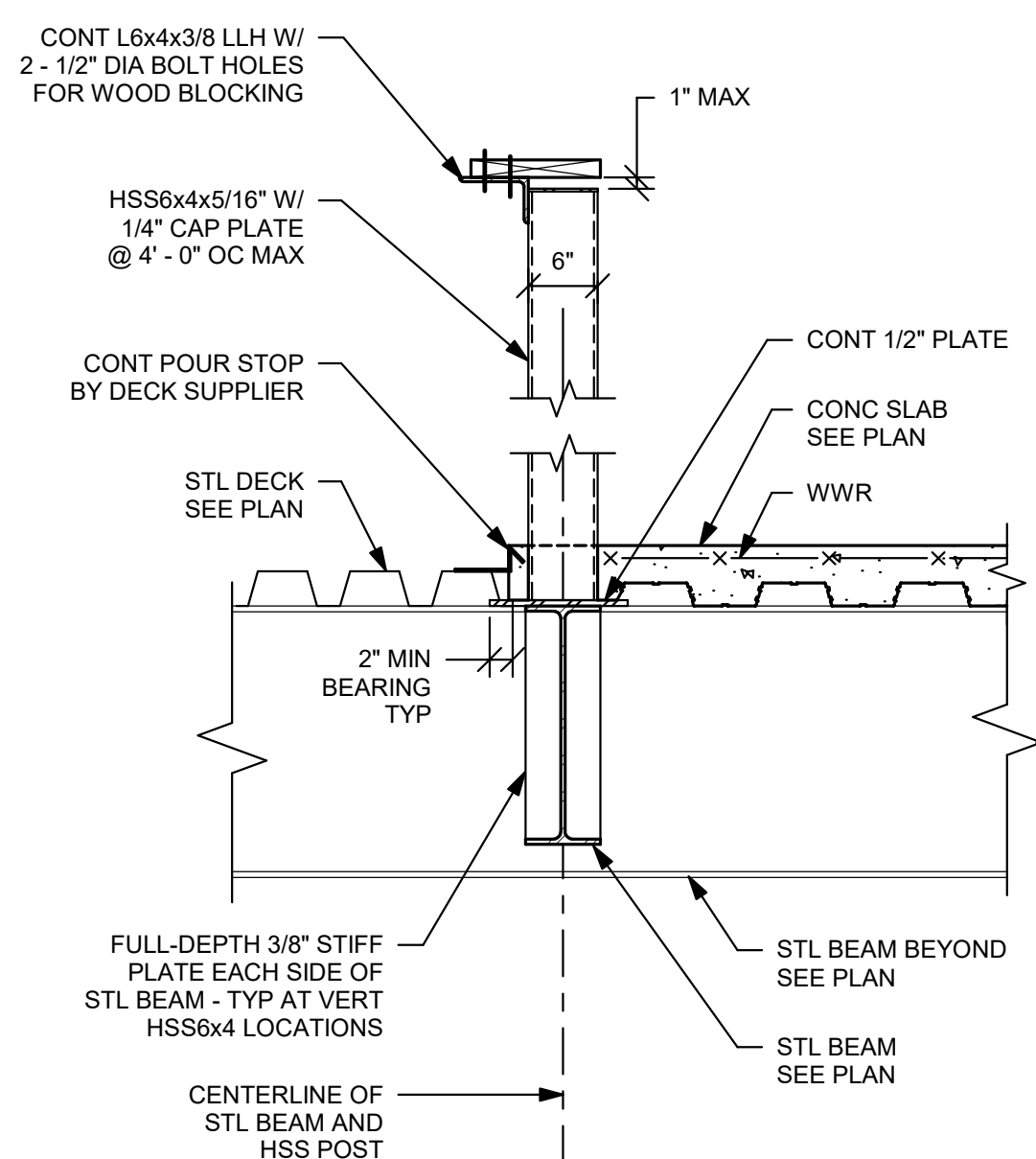
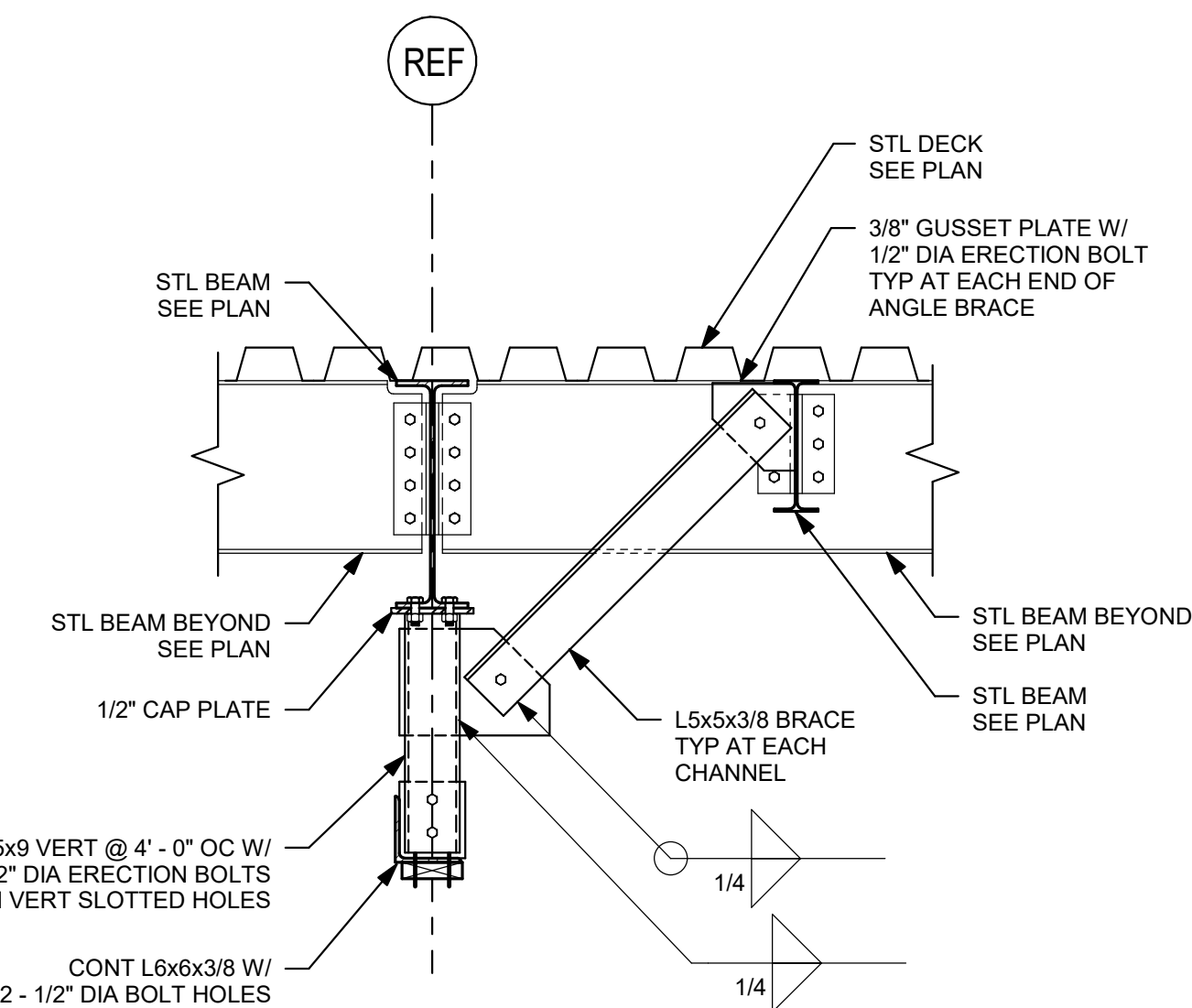
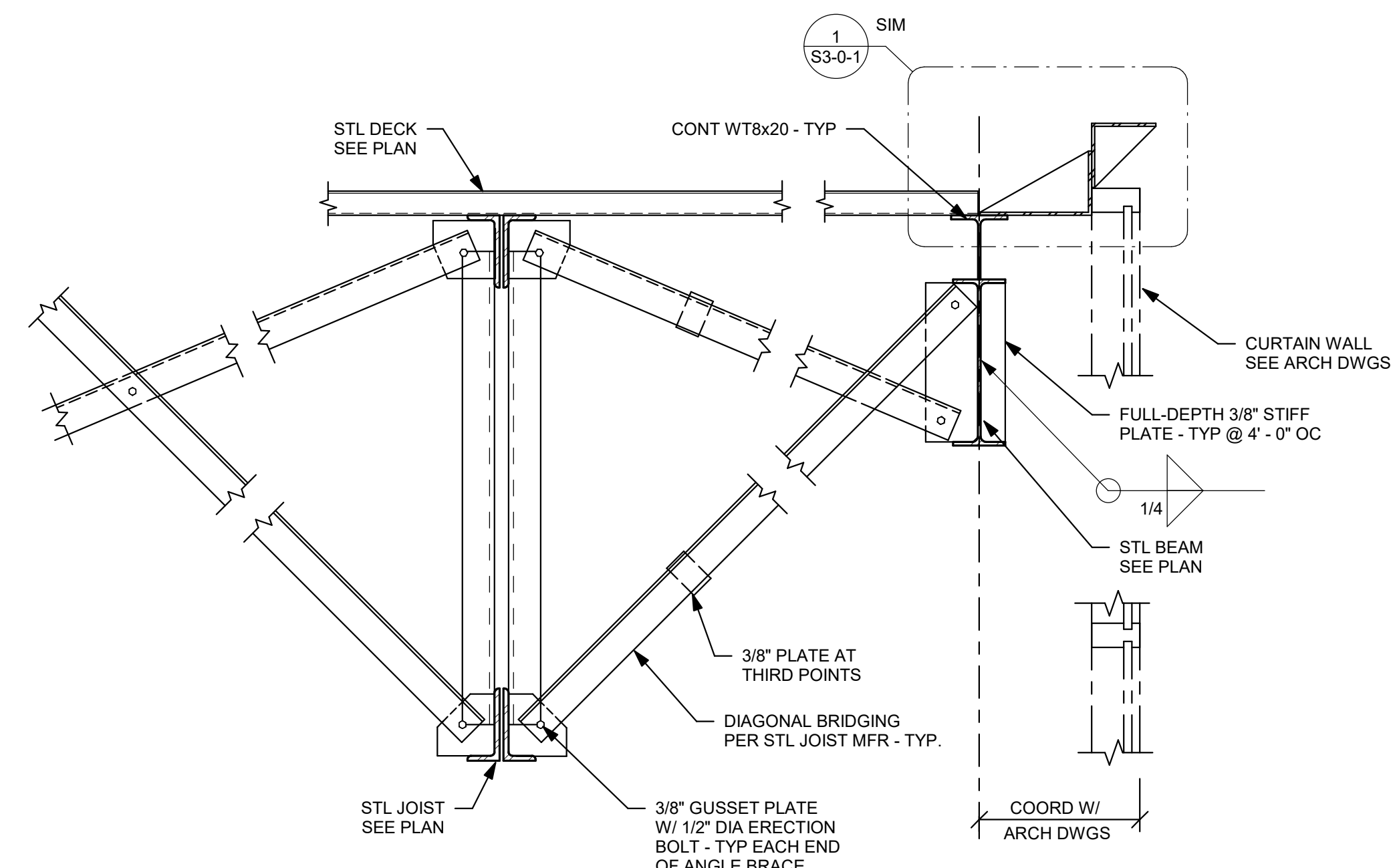
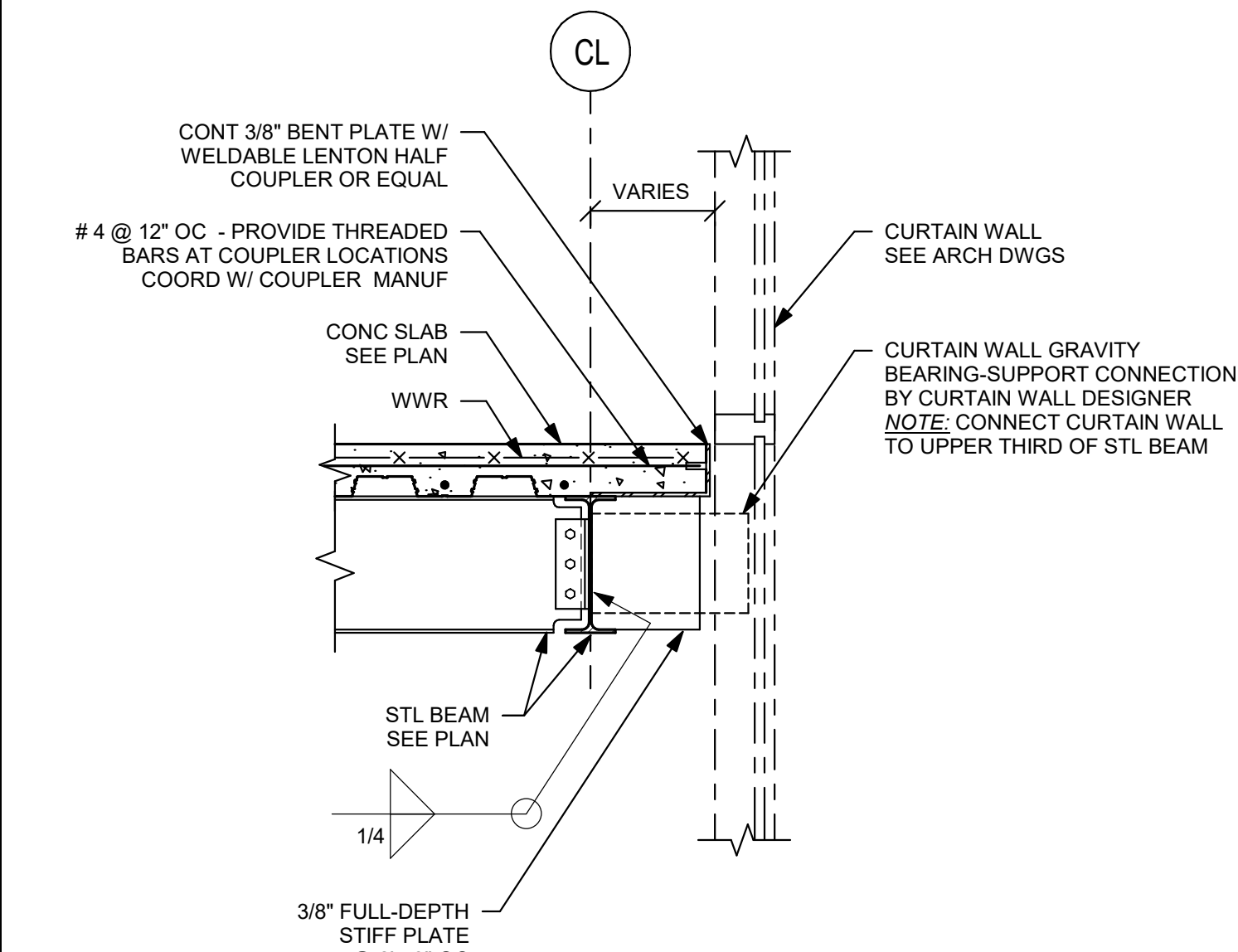
Date: 01/13/2023

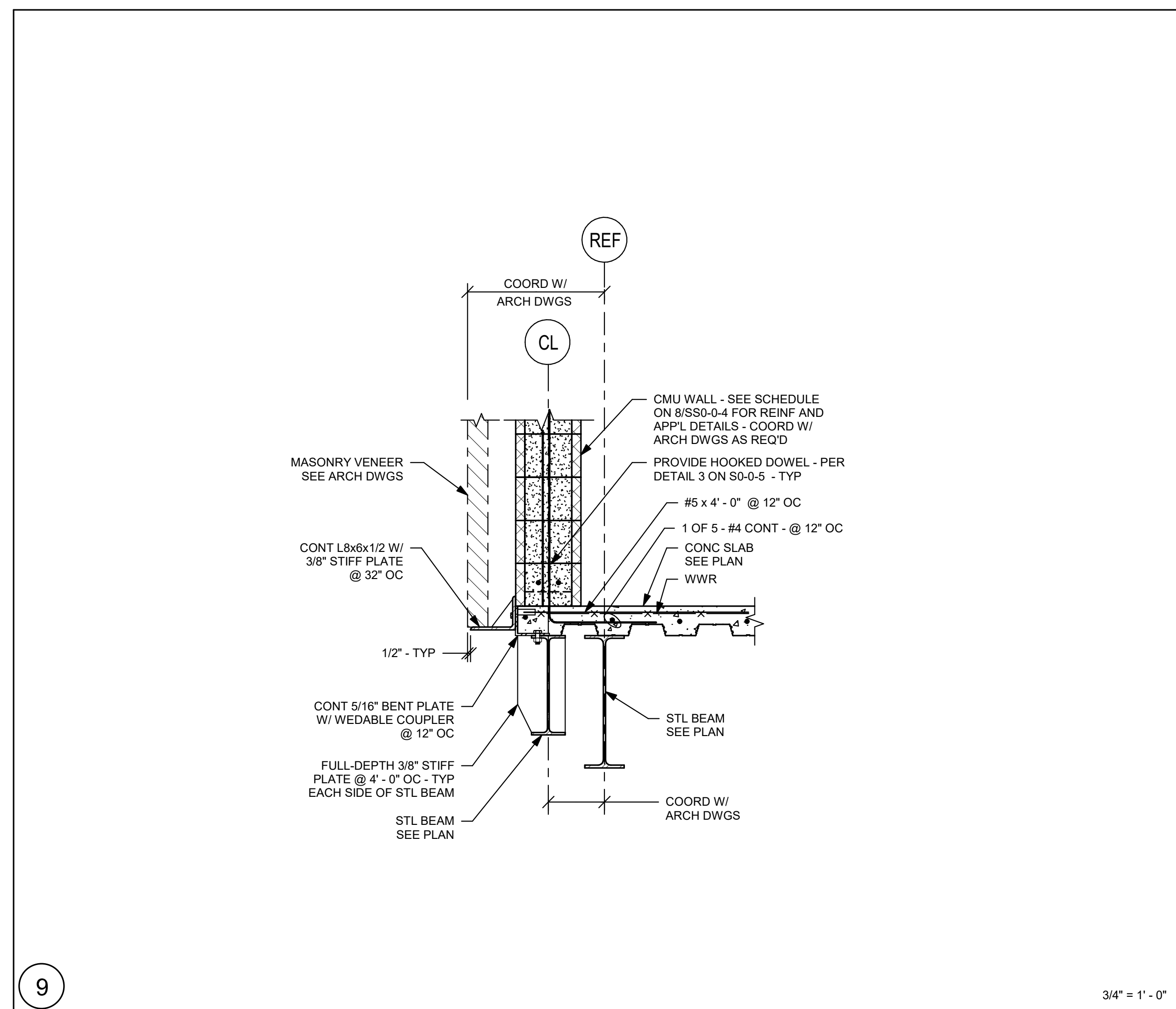
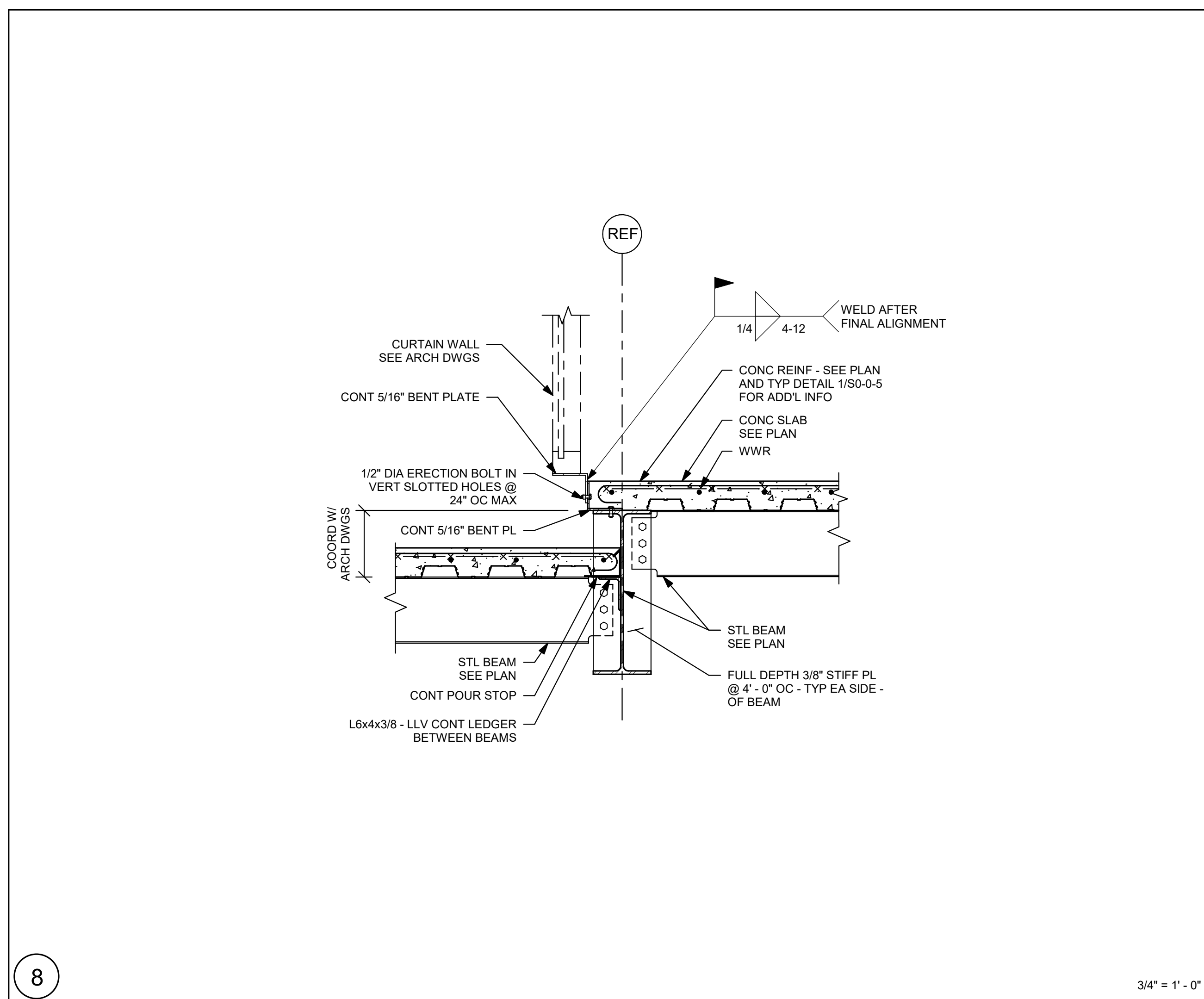
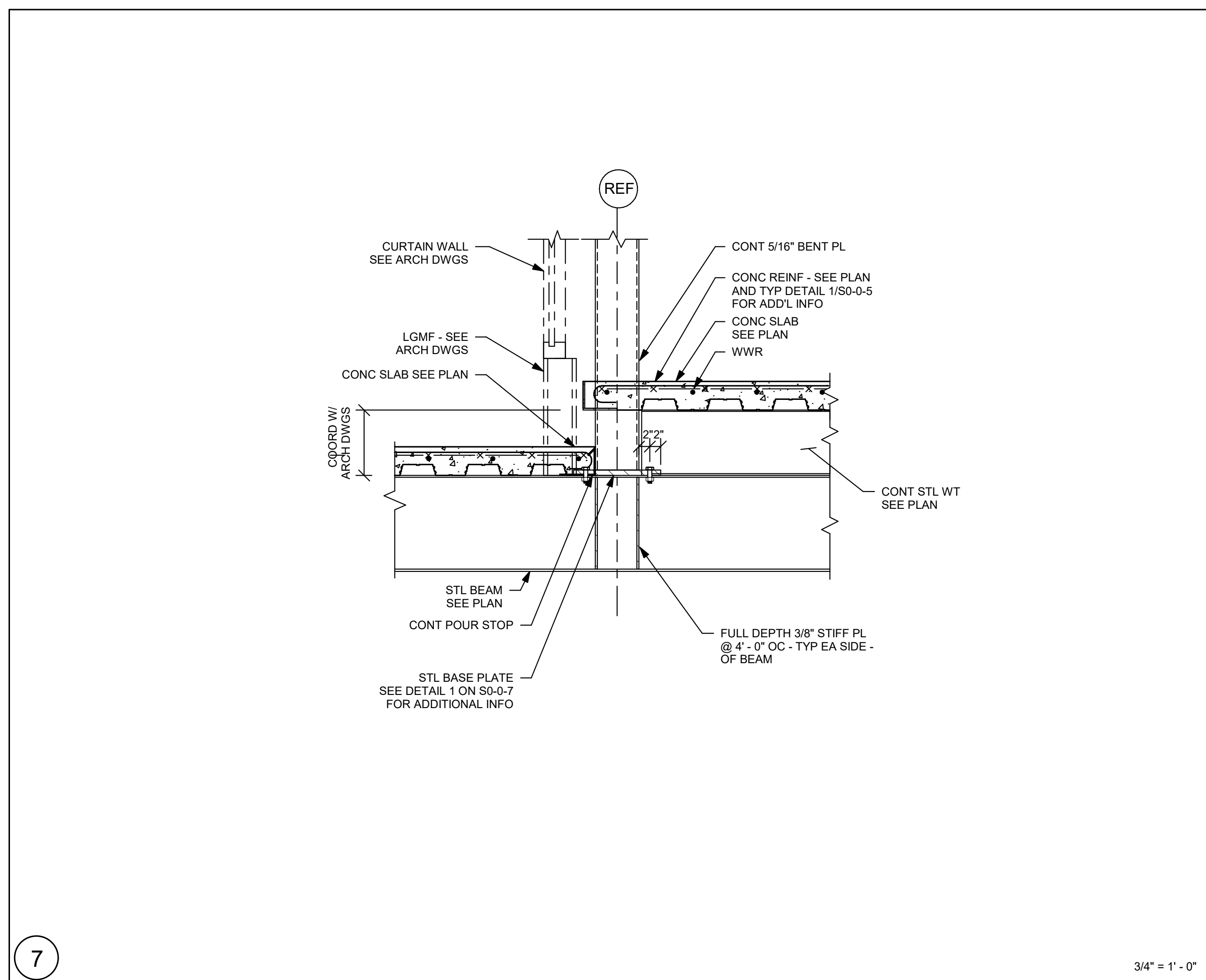
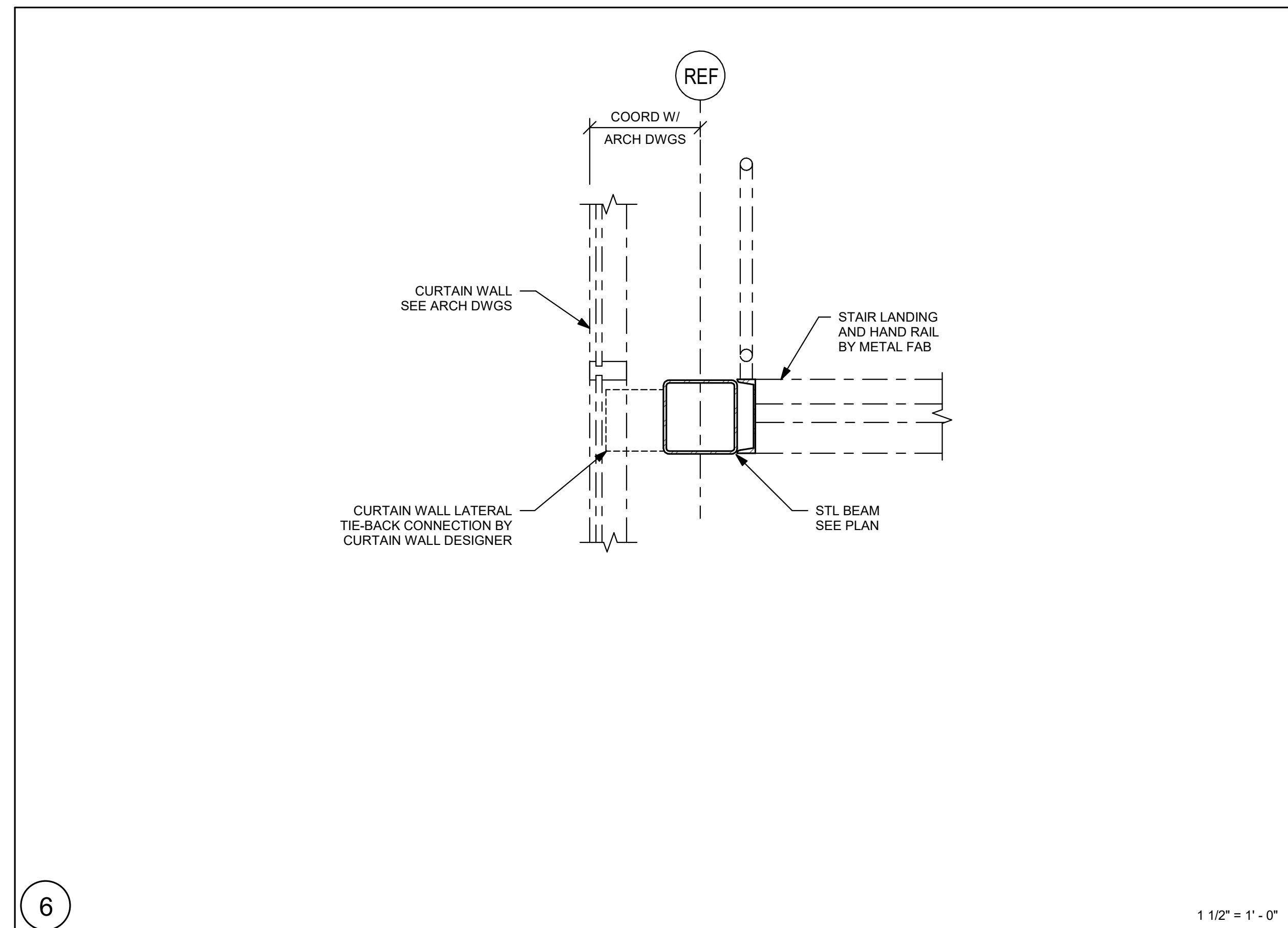
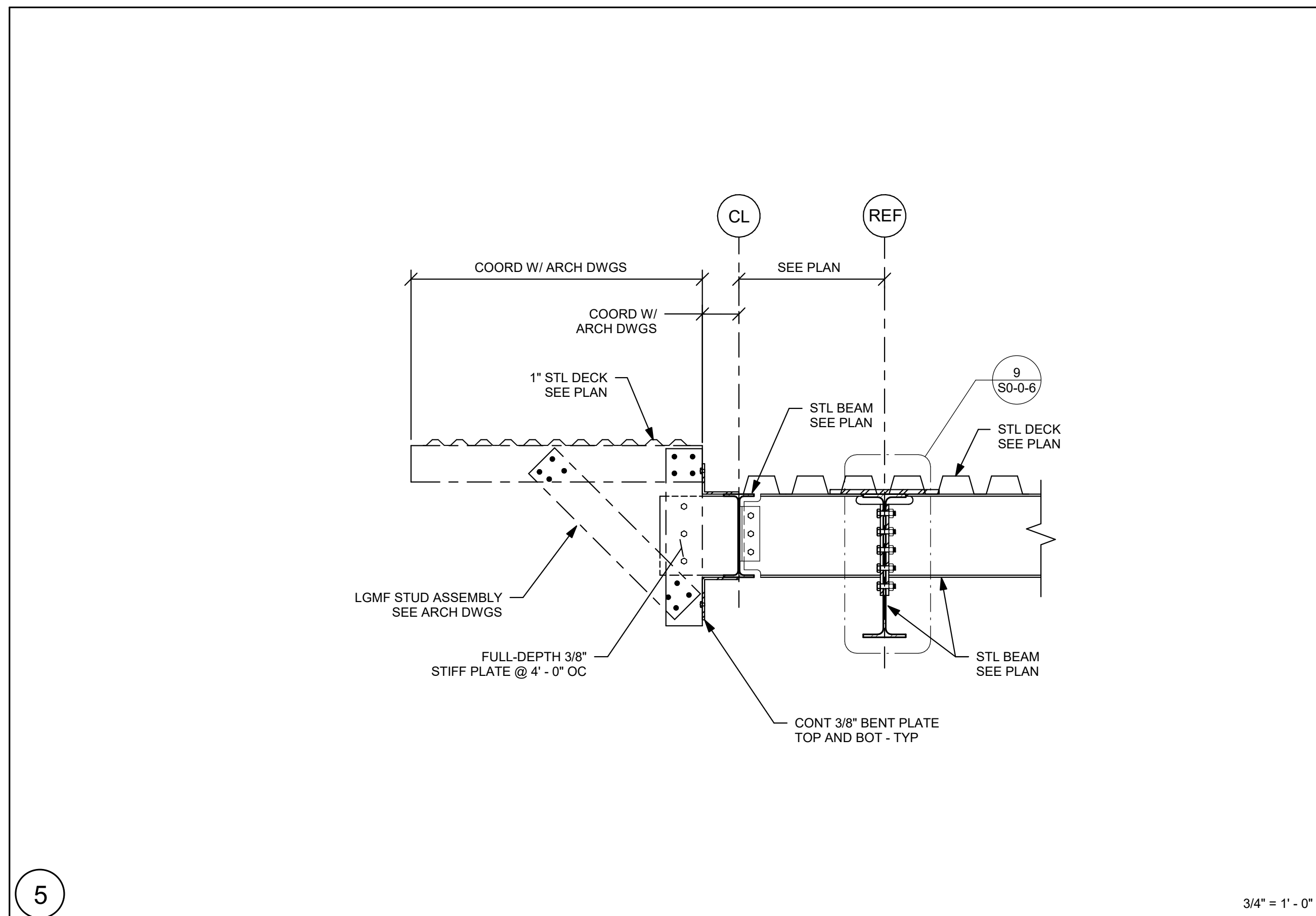
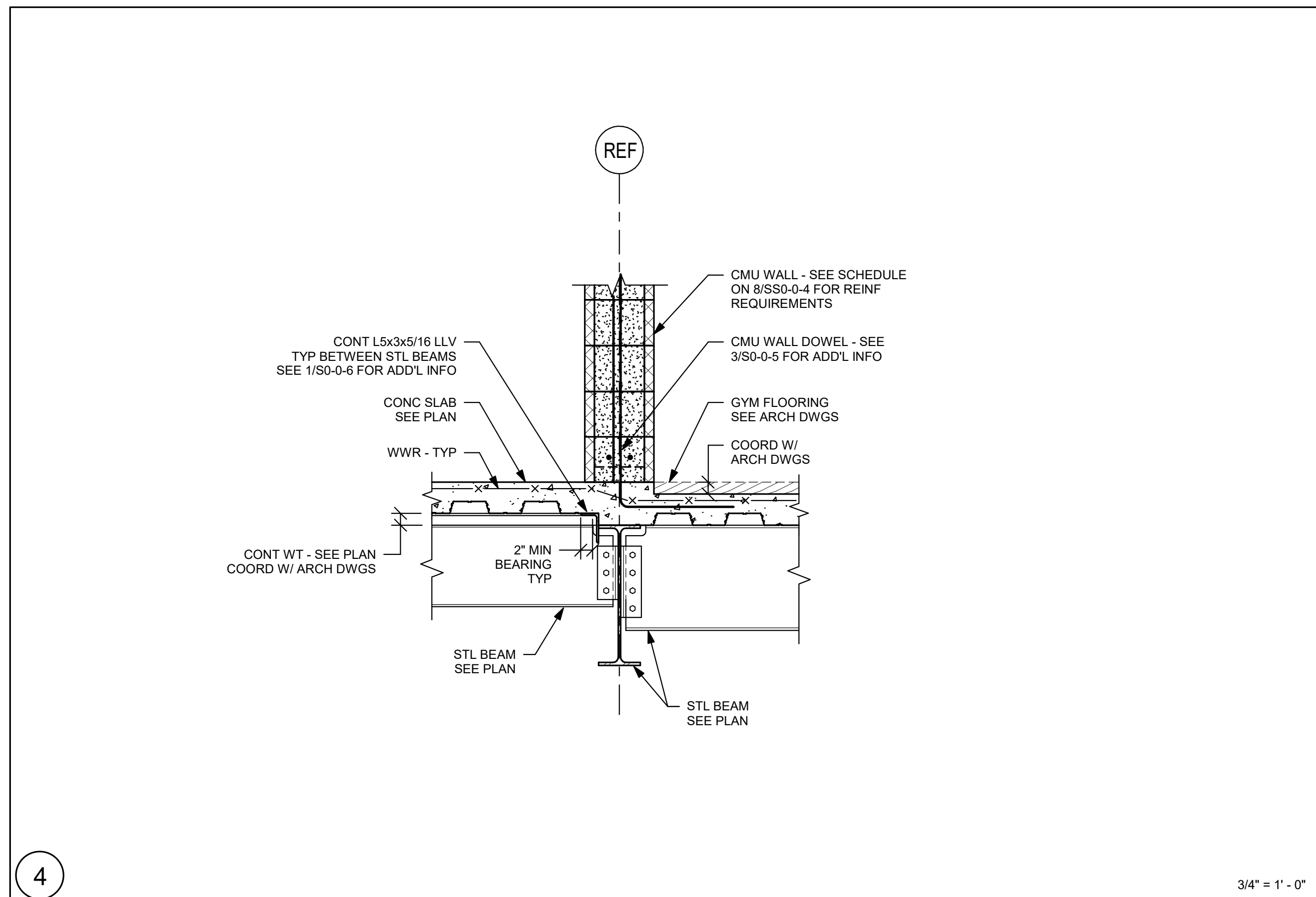
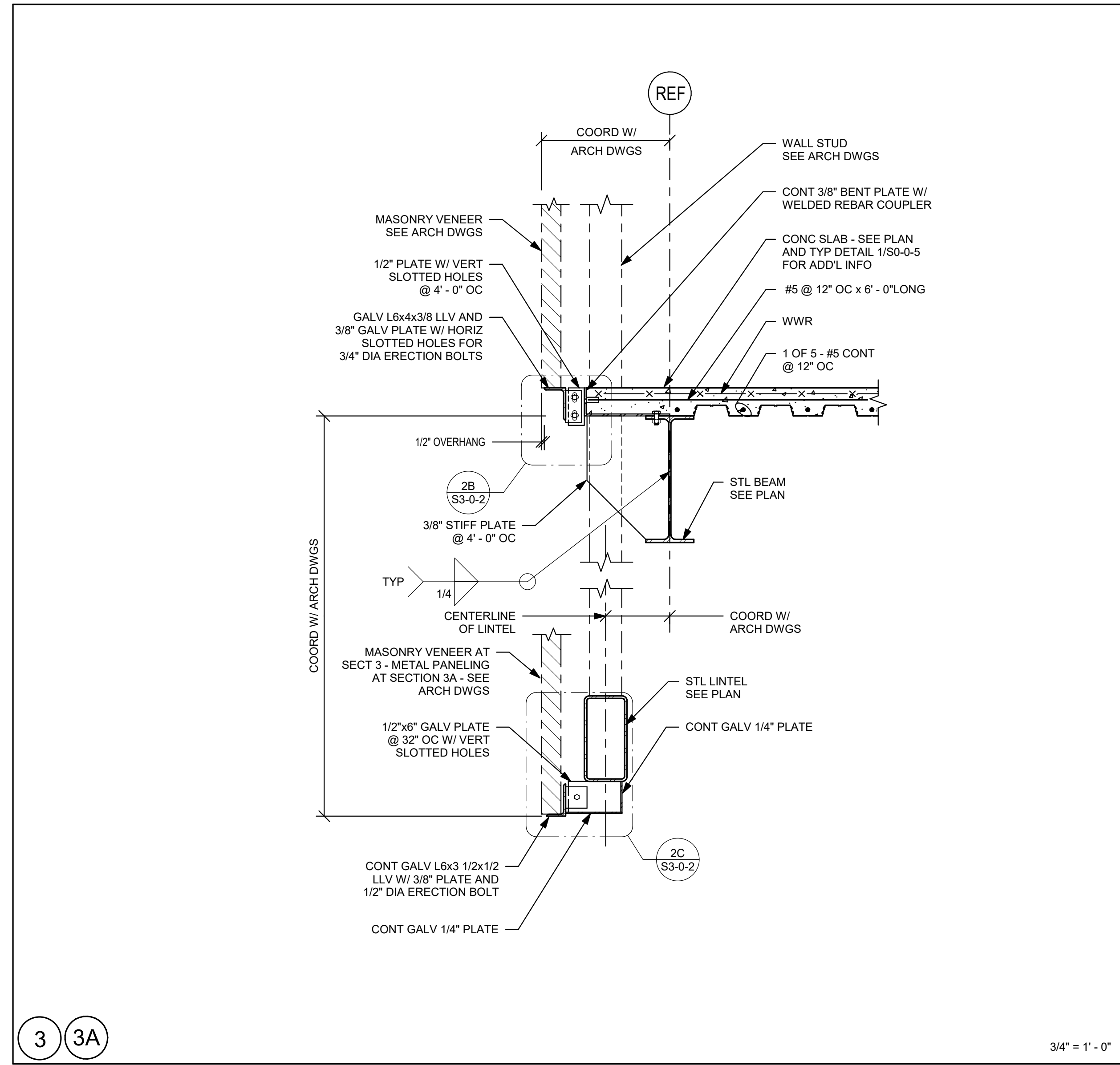
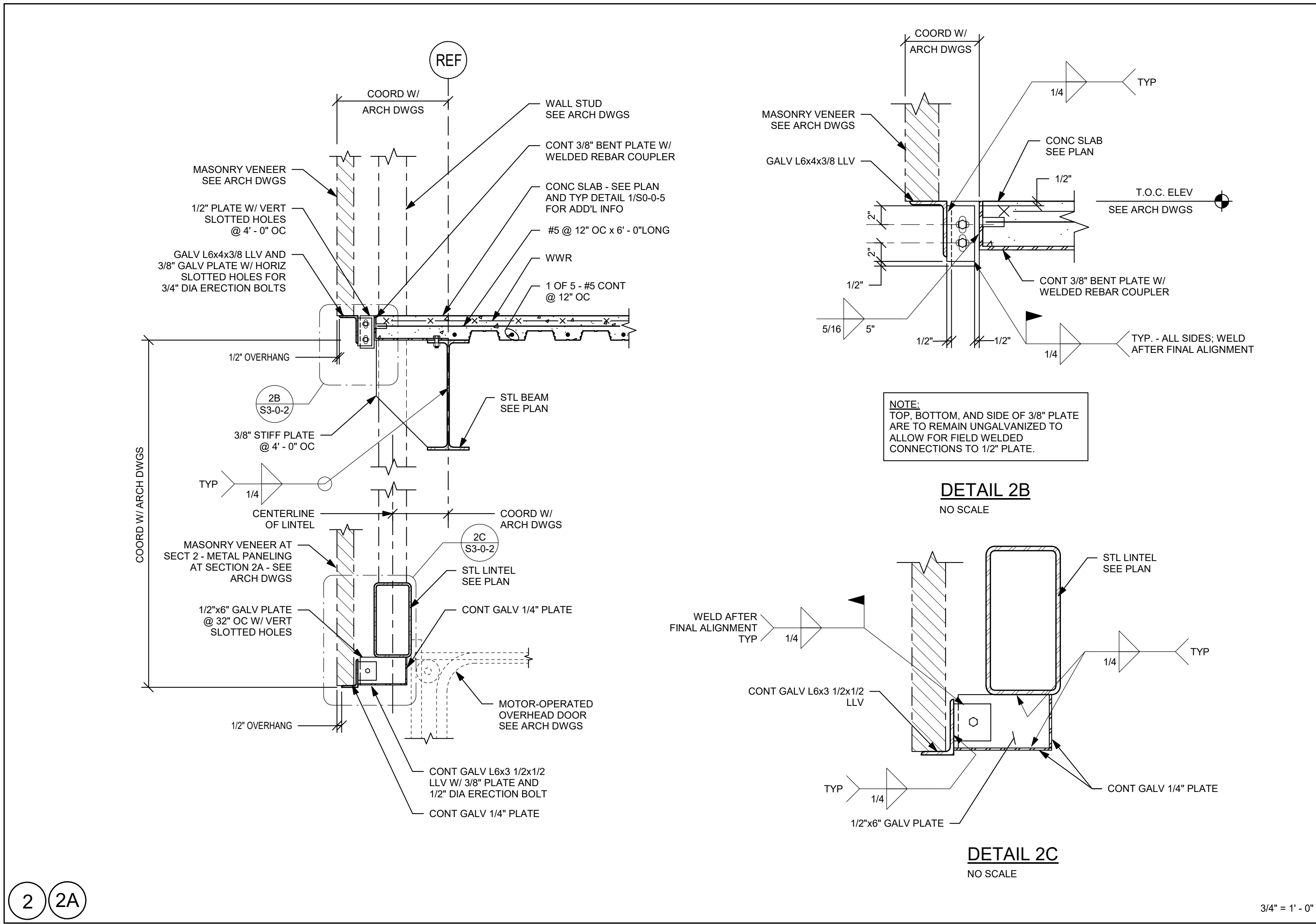
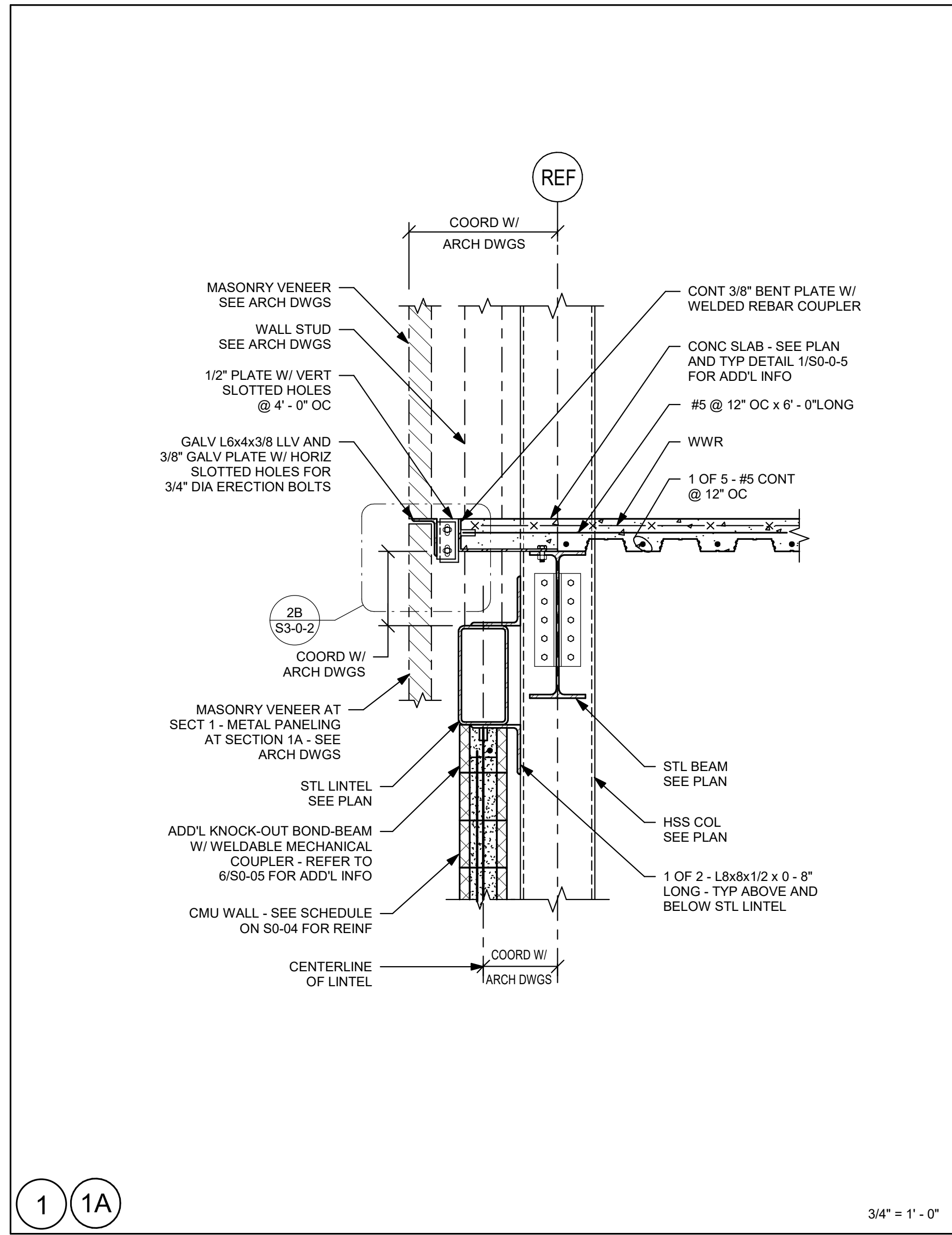
S3-0-1



NOTES:

- COORDINATE ALL ROOF-EDGE ANGLE AND BENT PLATE SIZES AND EXTENTS WITH ARCHITECTURAL DETAILS.
- PROVIDE 3/8" STIFFENER PLATES @ 4'-0" OC AS SHOWN WHERE ROOF-EDGE BENT PLATE DIMENSIONS 'A' AND/OR 'B' ARE EQUAL TO OR GREATER THAN 9".
- PROVIDE 3/8" STIFFENER PLATES @ 4'-0" OC AS SHOWN WHERE ROOF-EDGE BENT PLATE DIMENSION 'C' IS EQUAL TO OR GREATER THAN 1'-0".
- EXTEND ROOF EDGE ASSEMBLIES AROUND CORNERS AS REQUIRED PER DETAIL 10 ON DRAWING S0-0-7.





DRA

Drumme Rosane Anderson, Inc.

225 Oakland Road Studio 205 South Windsor, CT 06074

260 Charles Street Studio 300 Wallham, MA 02453

Planning Architecture Interior

Tel: 817.261.1100 www.dra.com

NORTHEAST METRO TECH

100 Hemlock Rd. Wakefield, MA 01880

EDG

Engineers Design Group Inc.

Structural Engineers

389 Main Street, Suite 401 Malden, MA 02148

(781)396-9007

EDG@EDGINC.COM

© COPYRIGHT 2021 DRUMMEY ROSANE ANDERSON, INC.

MSBA 60% CD Submission

01/13/2023

KEY PLAN

PROJECT NORTH

MAGNETIC NORTH

SECTIONS

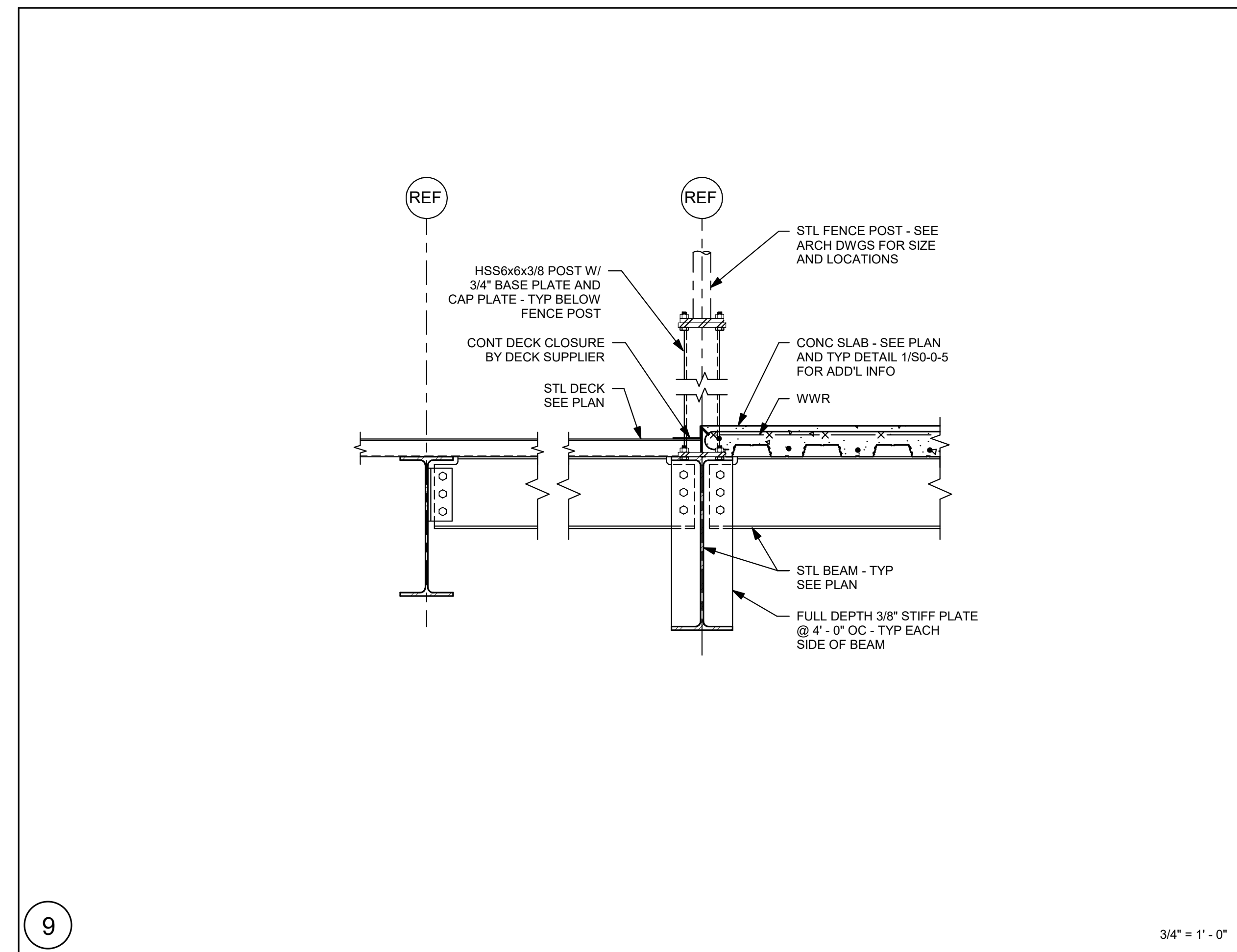
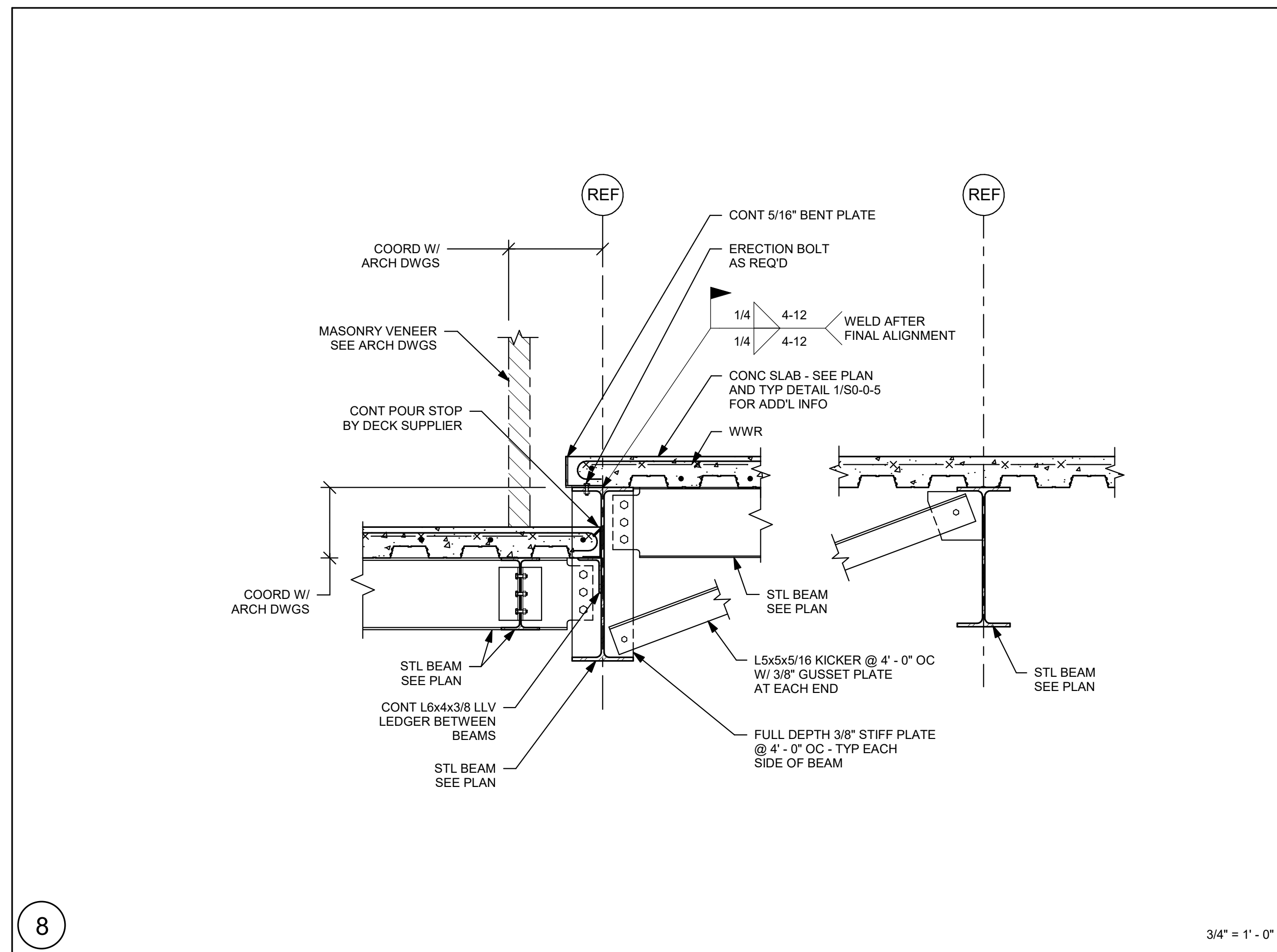
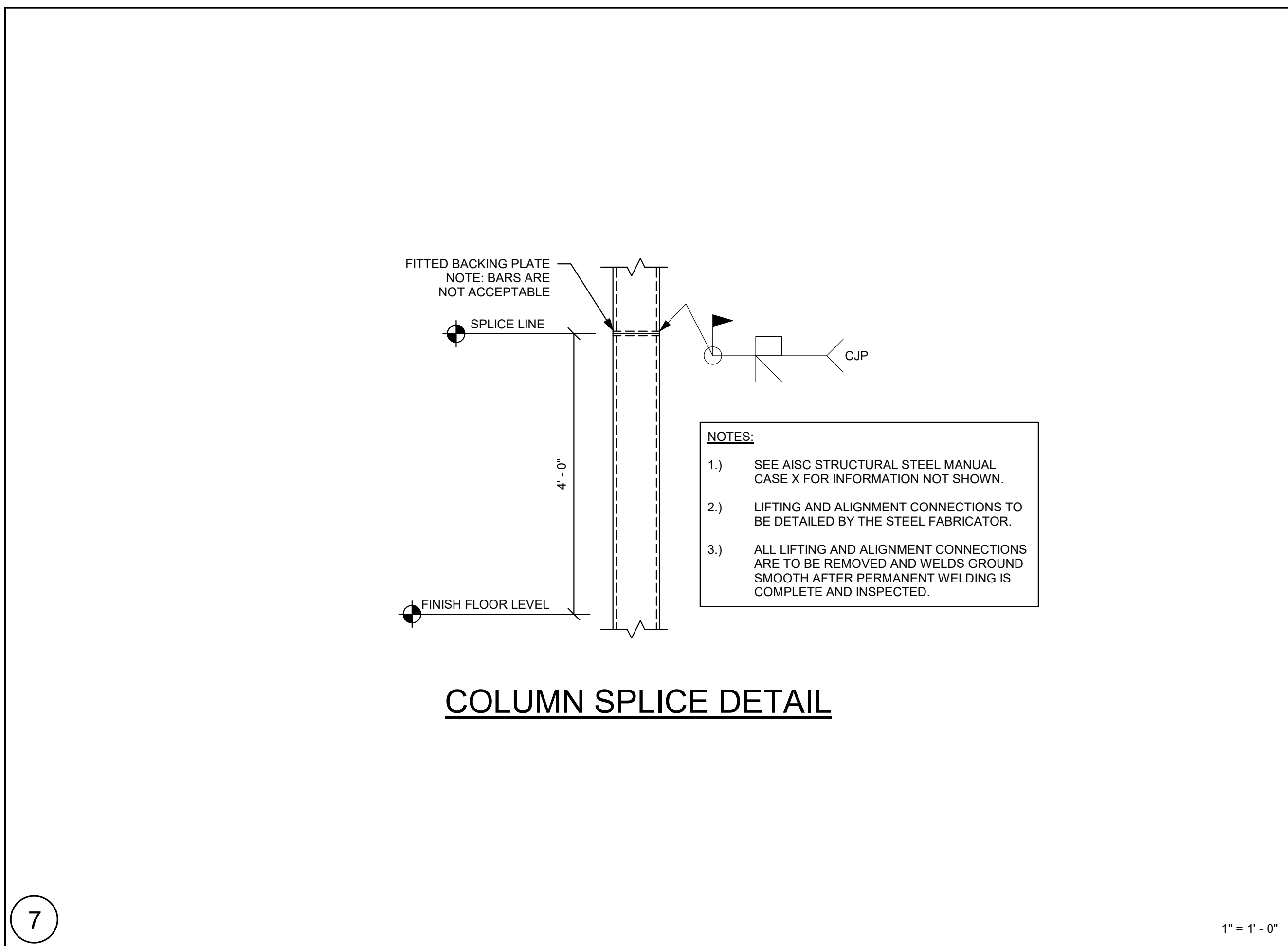
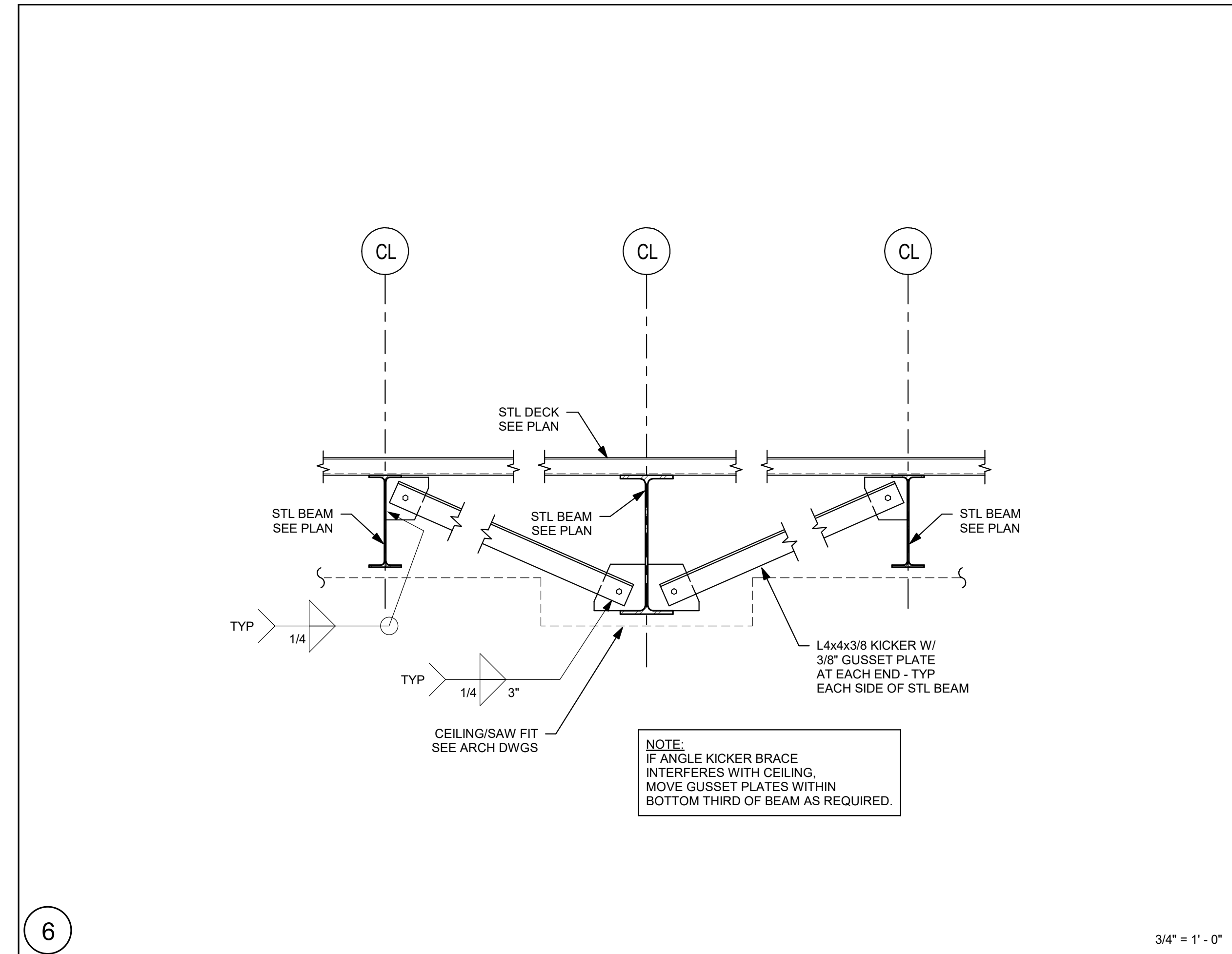
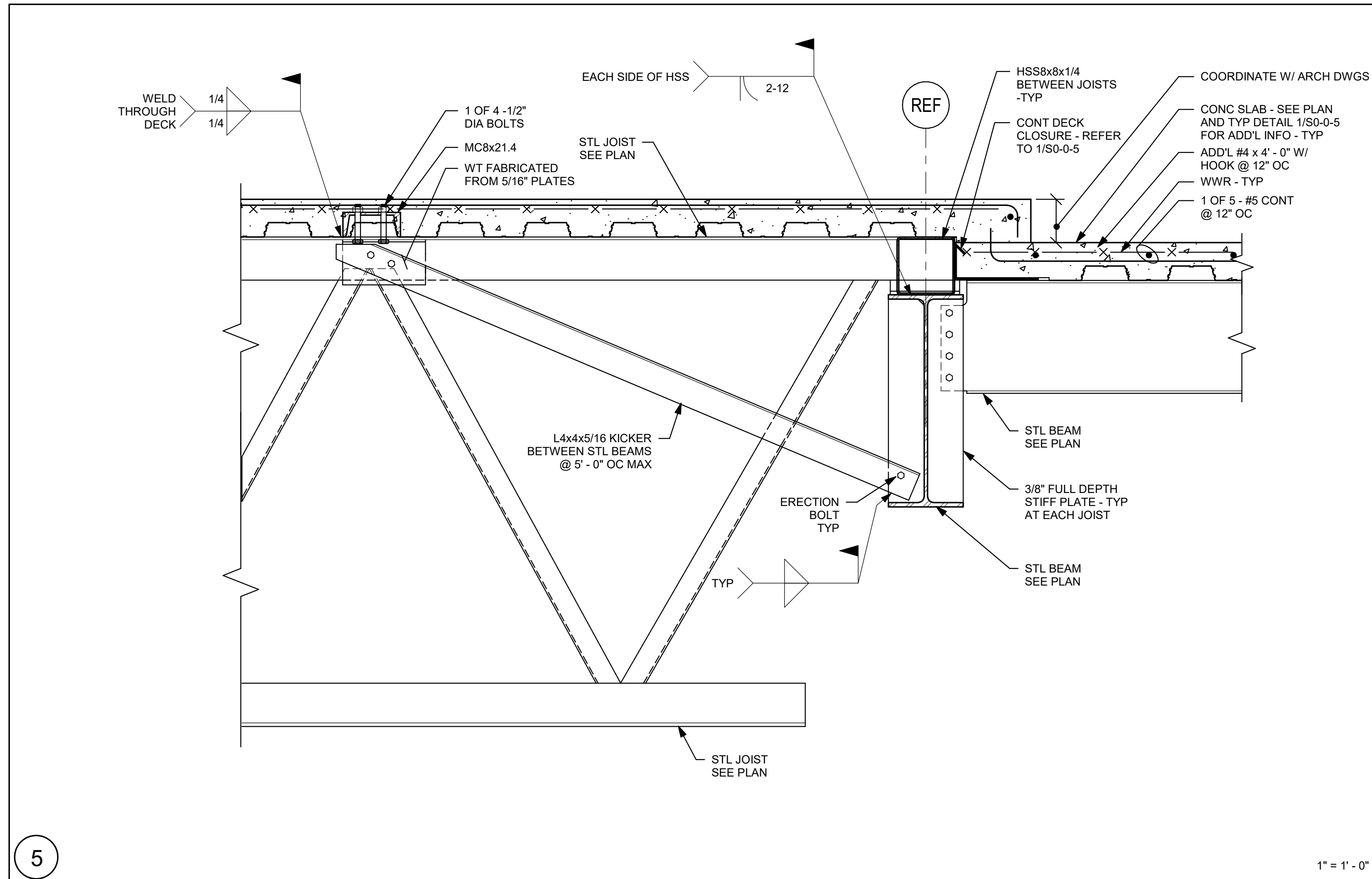
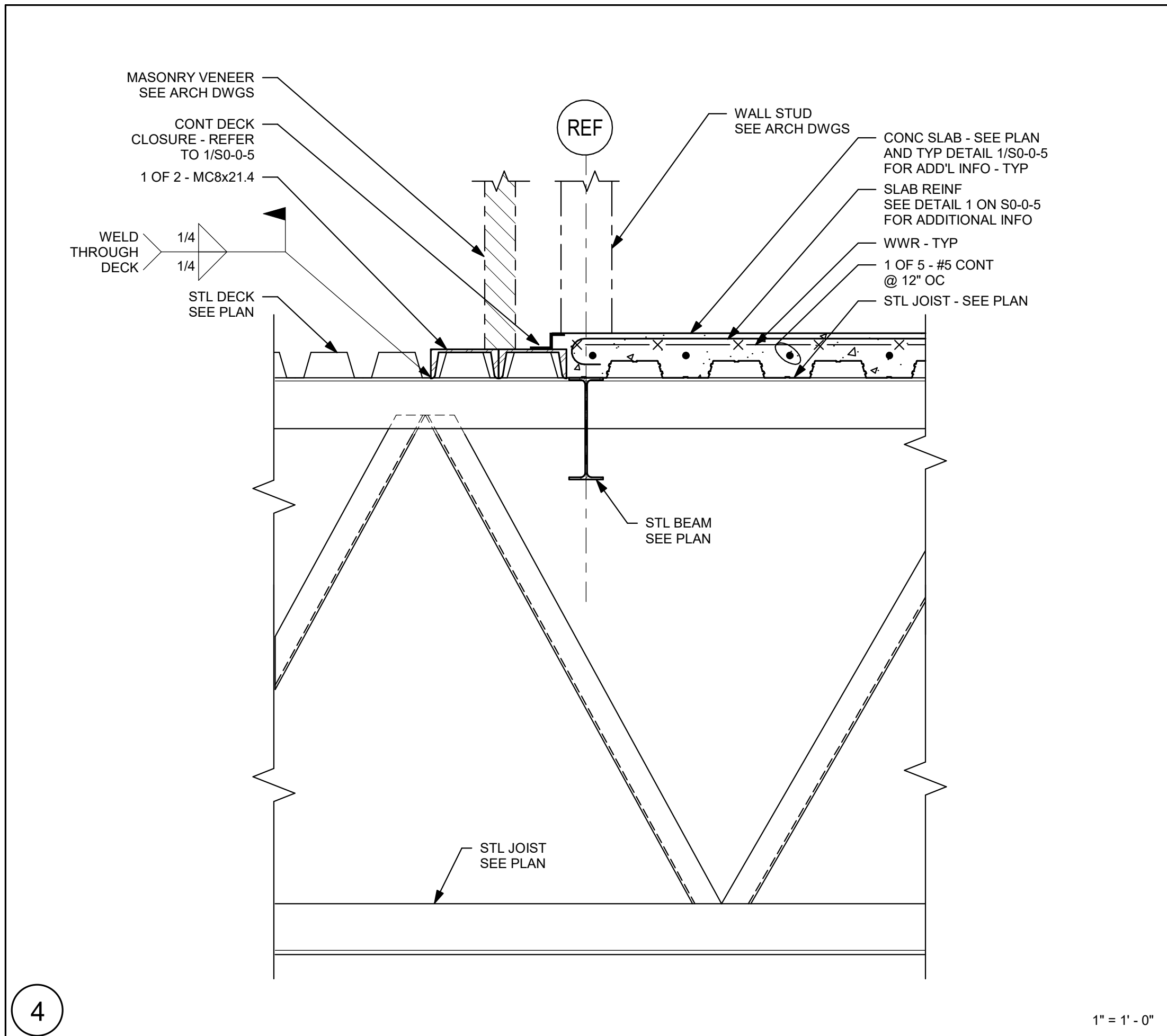
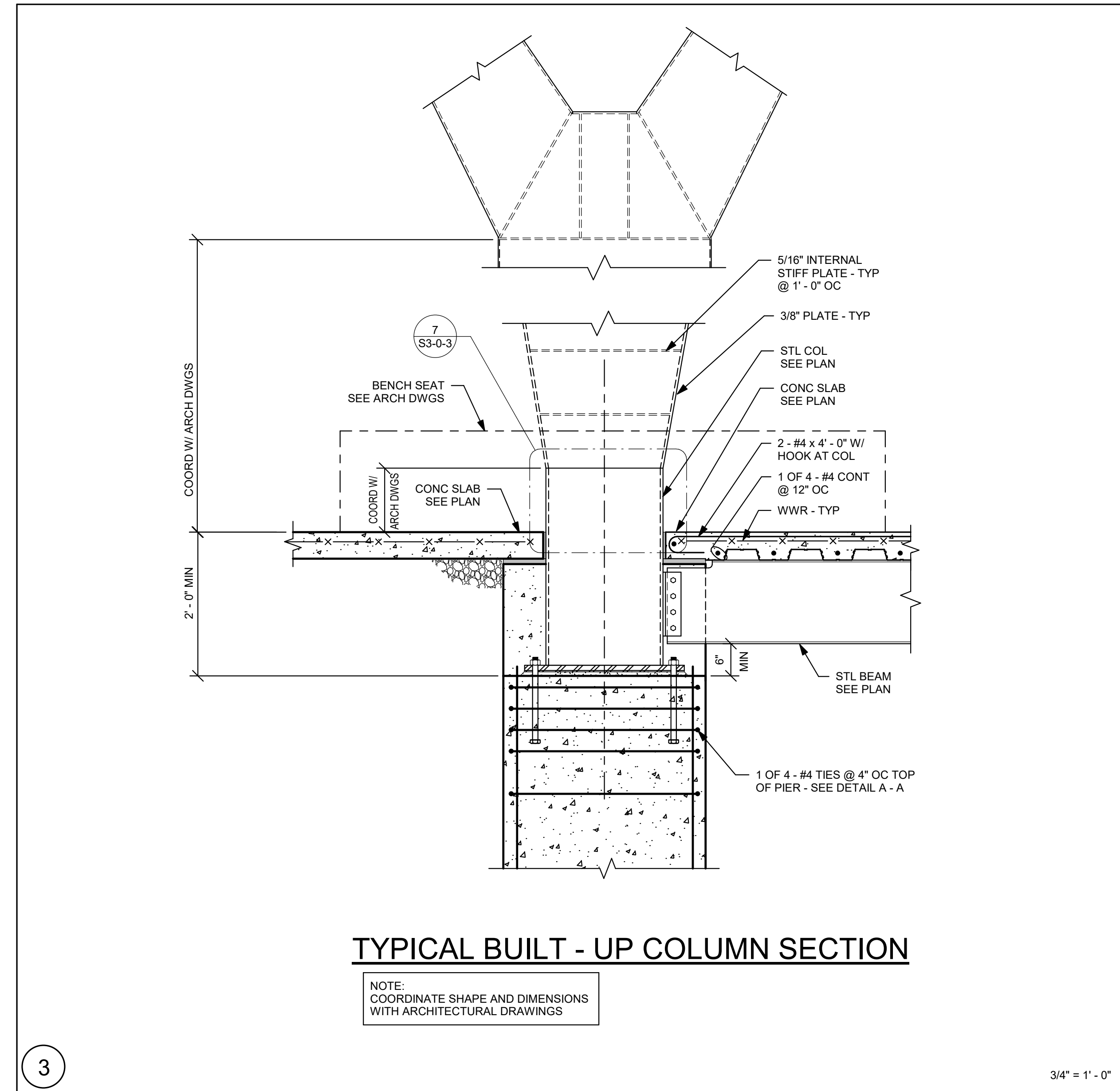
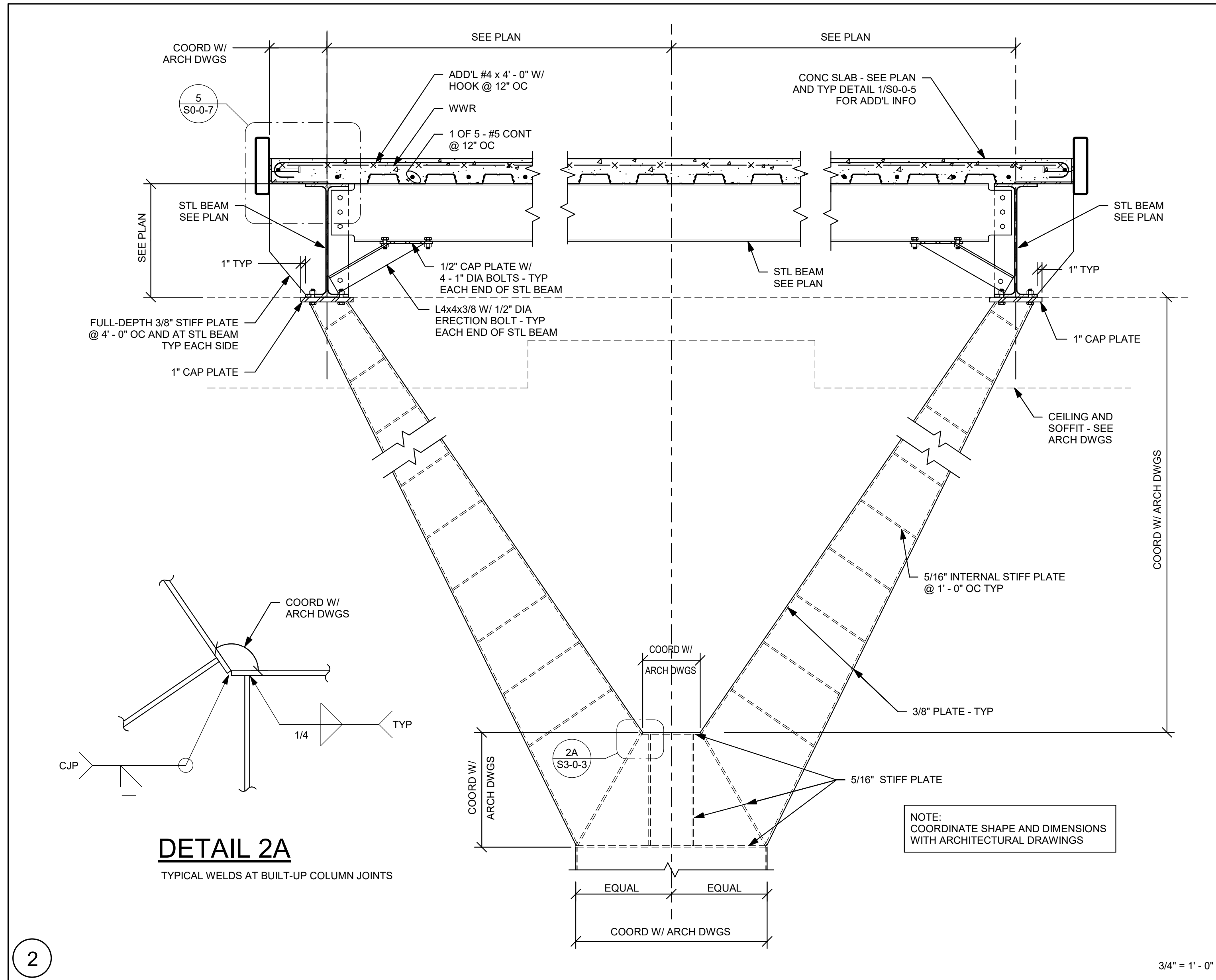
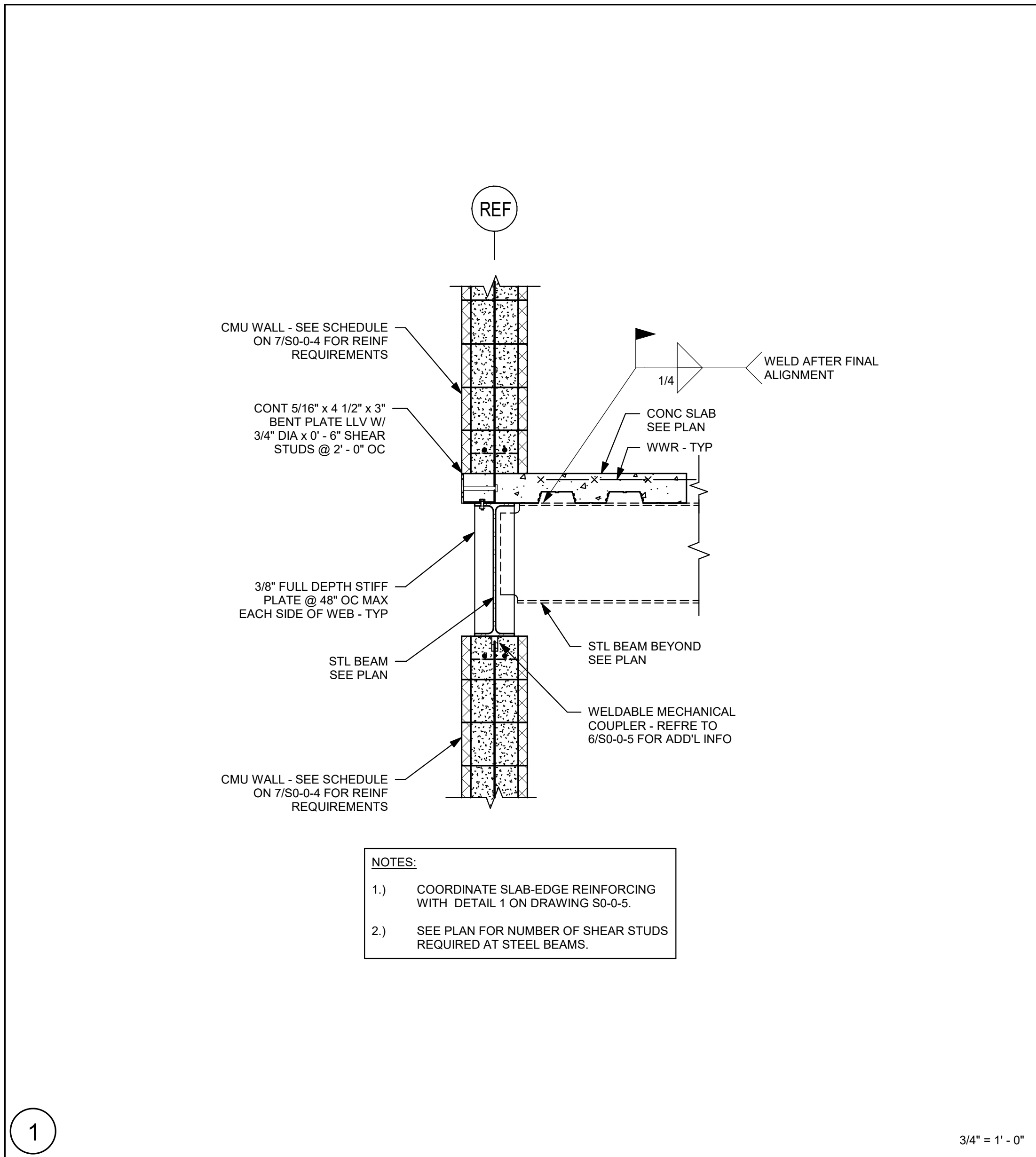
Scale: As indicated

Job No.: 20202

Drawn By: EDG

Date: 01/13/2023

S3-0-2



NORTHEAST METRO TECH

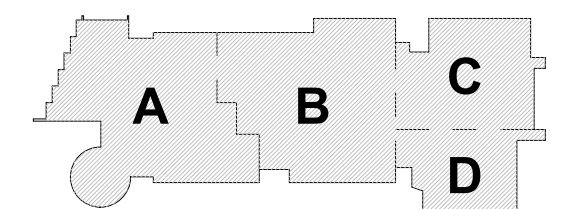
100 Hemlock Rd.
Wakefield, MA 01880

EDG
Engineers Design Group Inc.
Structural Engineers
389 Main Street, Suite 401
Malden, MA 02148
(781)396-9007
EDG@EDGINC.COM

© COPYRIGHT 2021 DRUMME ROSANE ANDERSON, INC.

MSBA 60% CD
Submission

01/13/2023

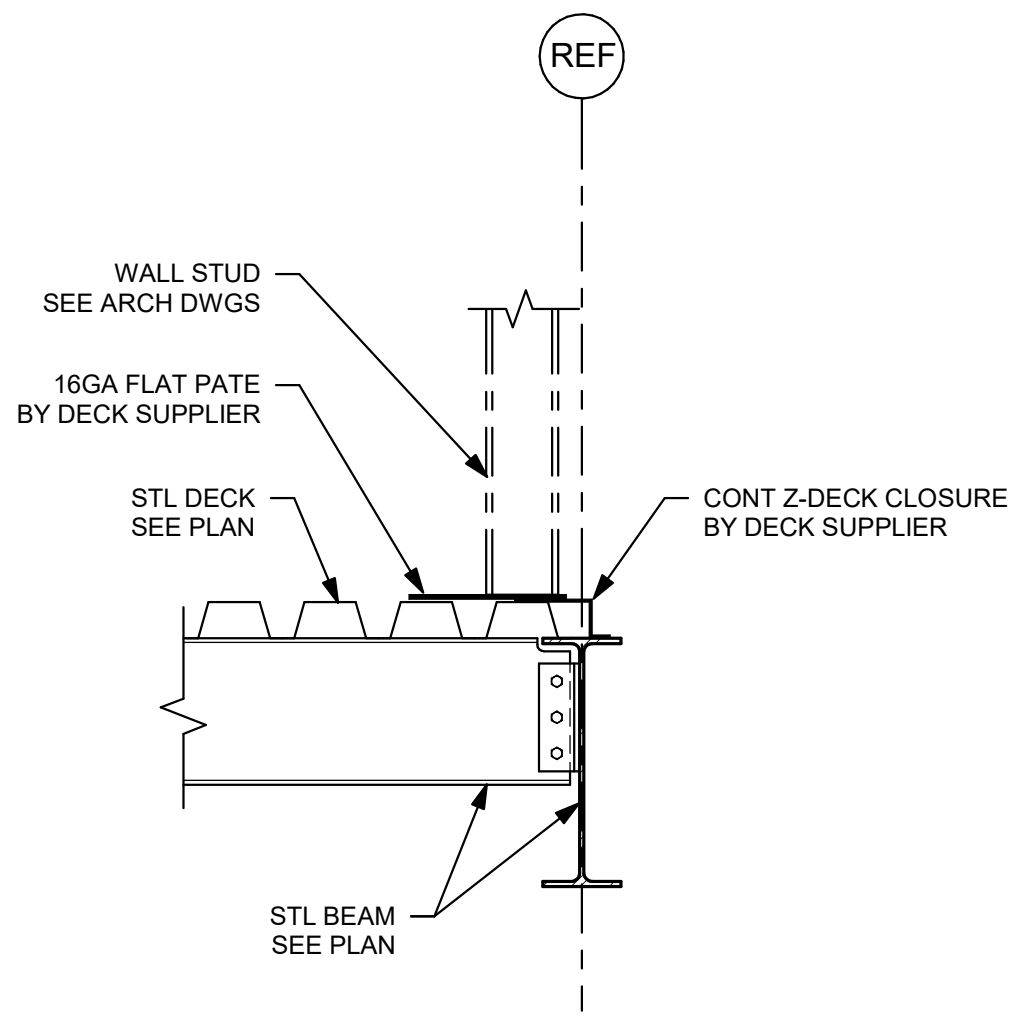


PROJECT NORTH
MAGNETIC NORTH

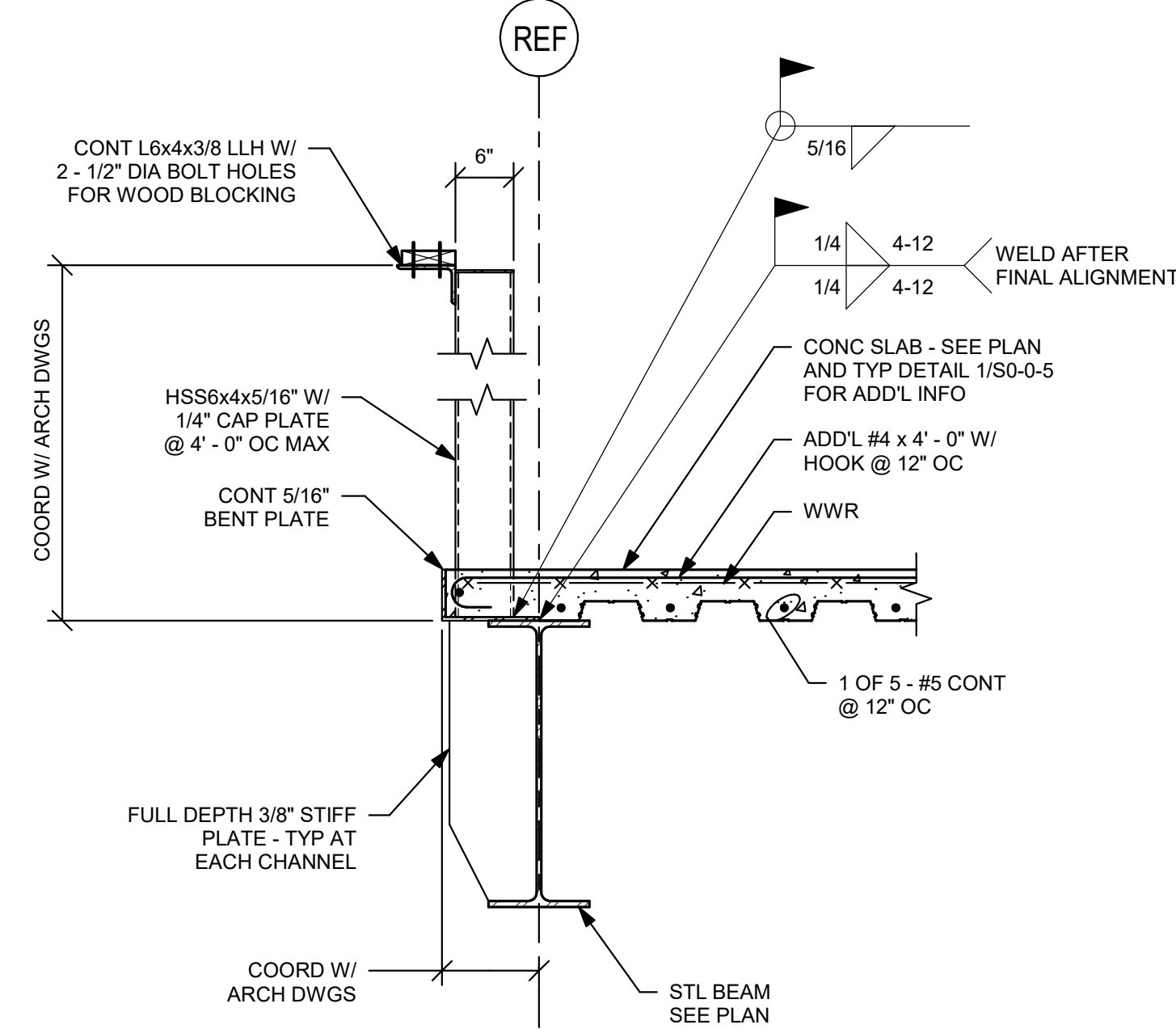
SECTIONS

Scale: As indicated
Job No.: 20202
Drawn By: EDG
Date: 01/13/2023

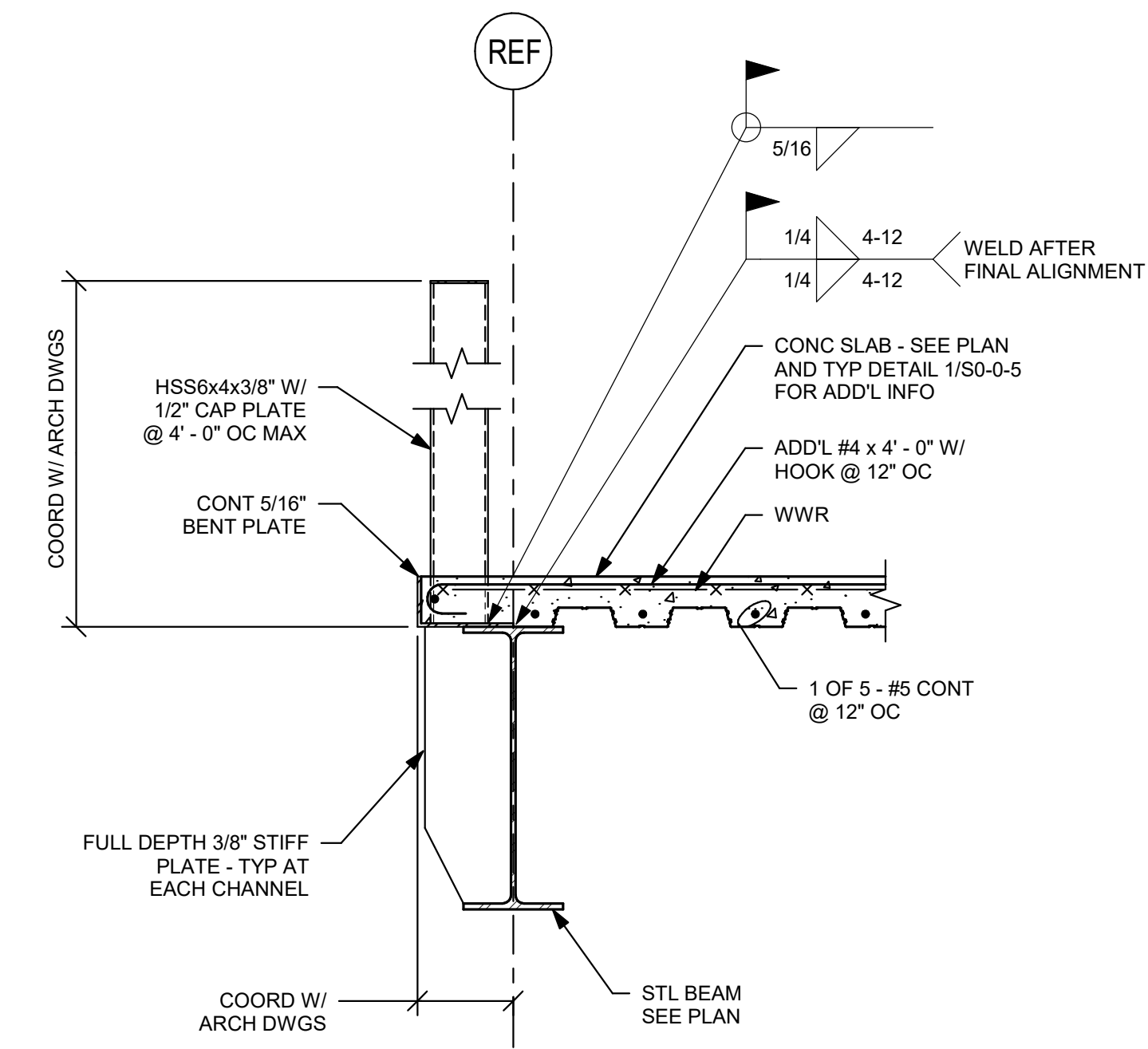
S3-0-3



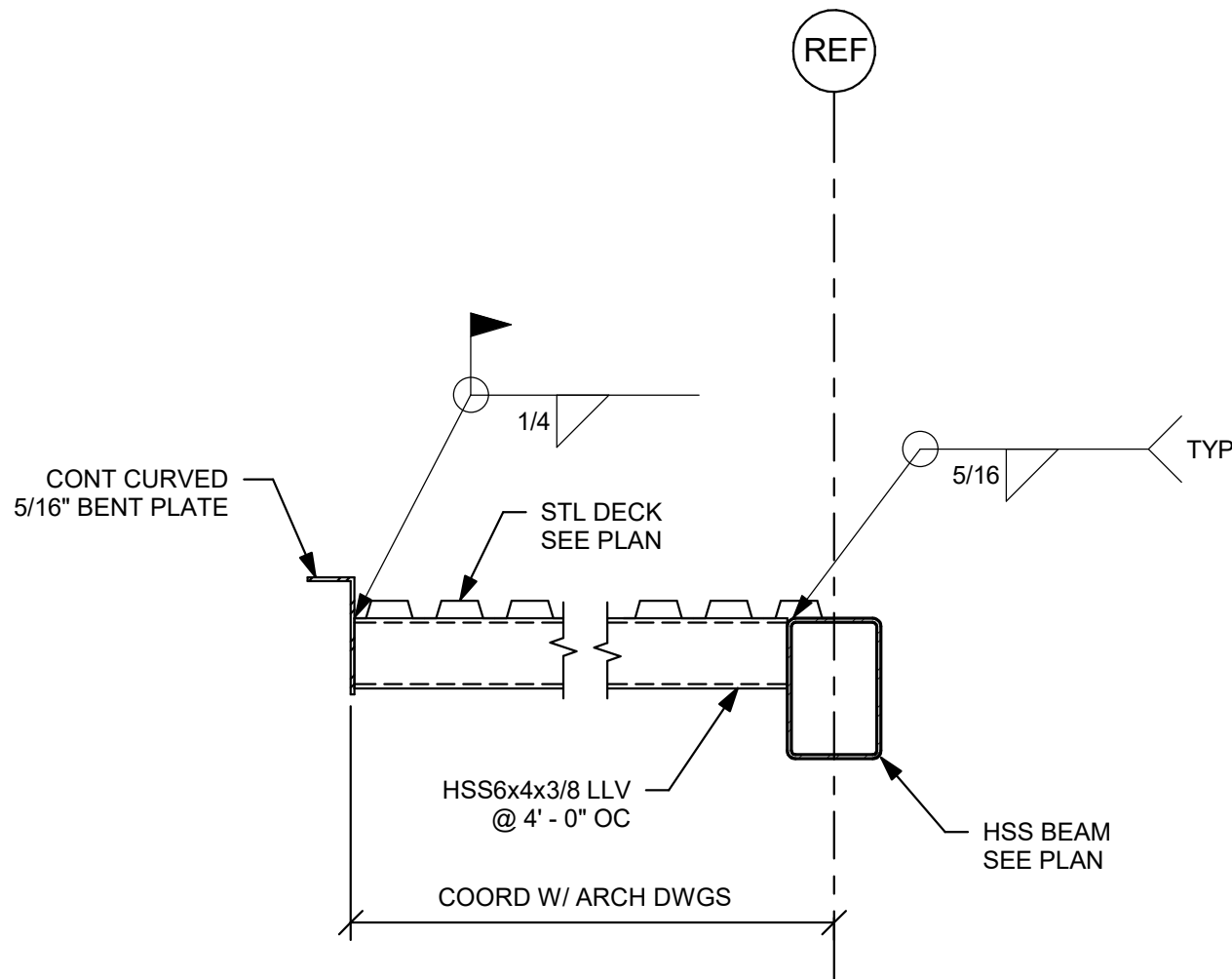
3/4" = 1'-0"



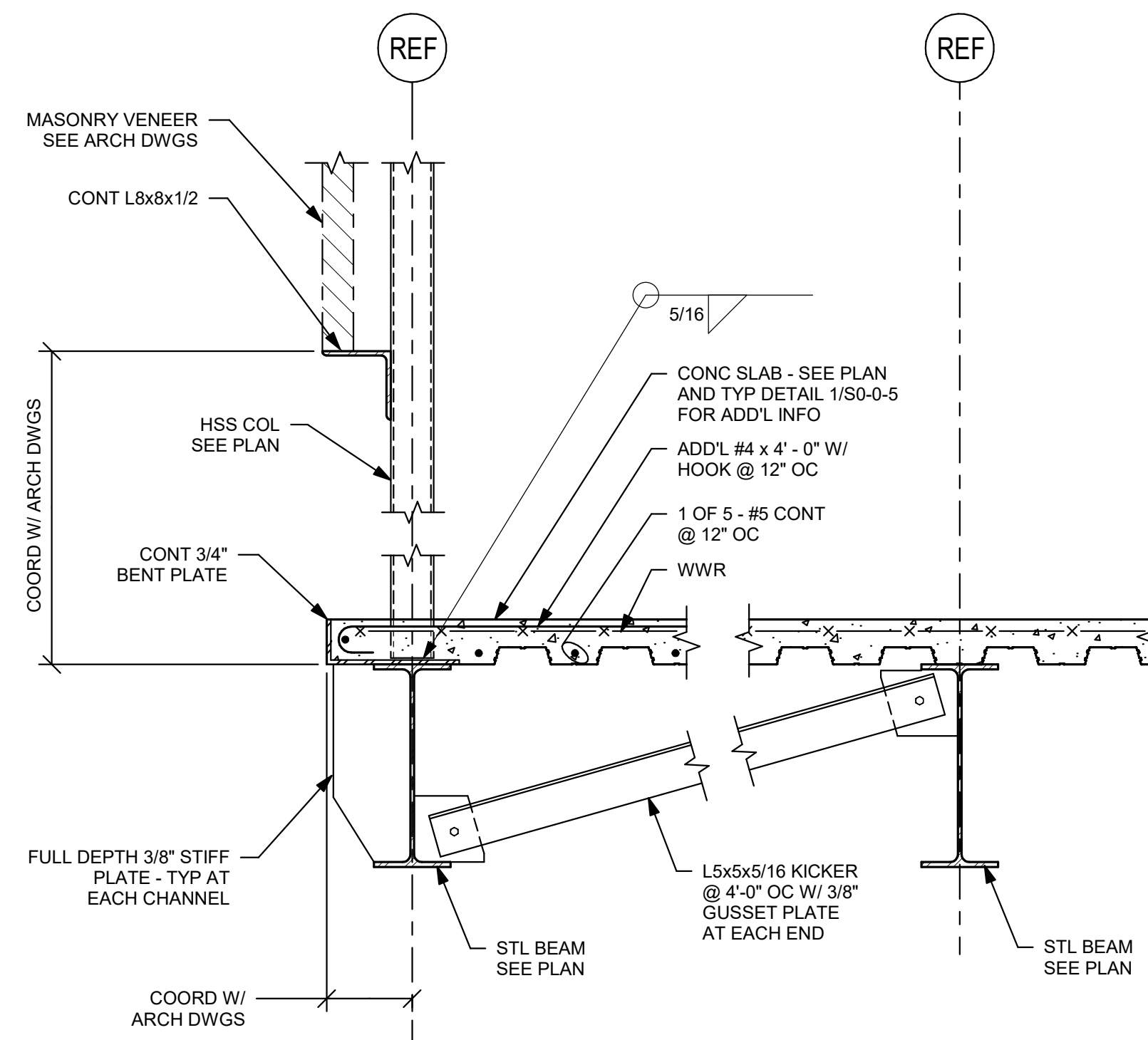
3/4" = 1'-0"



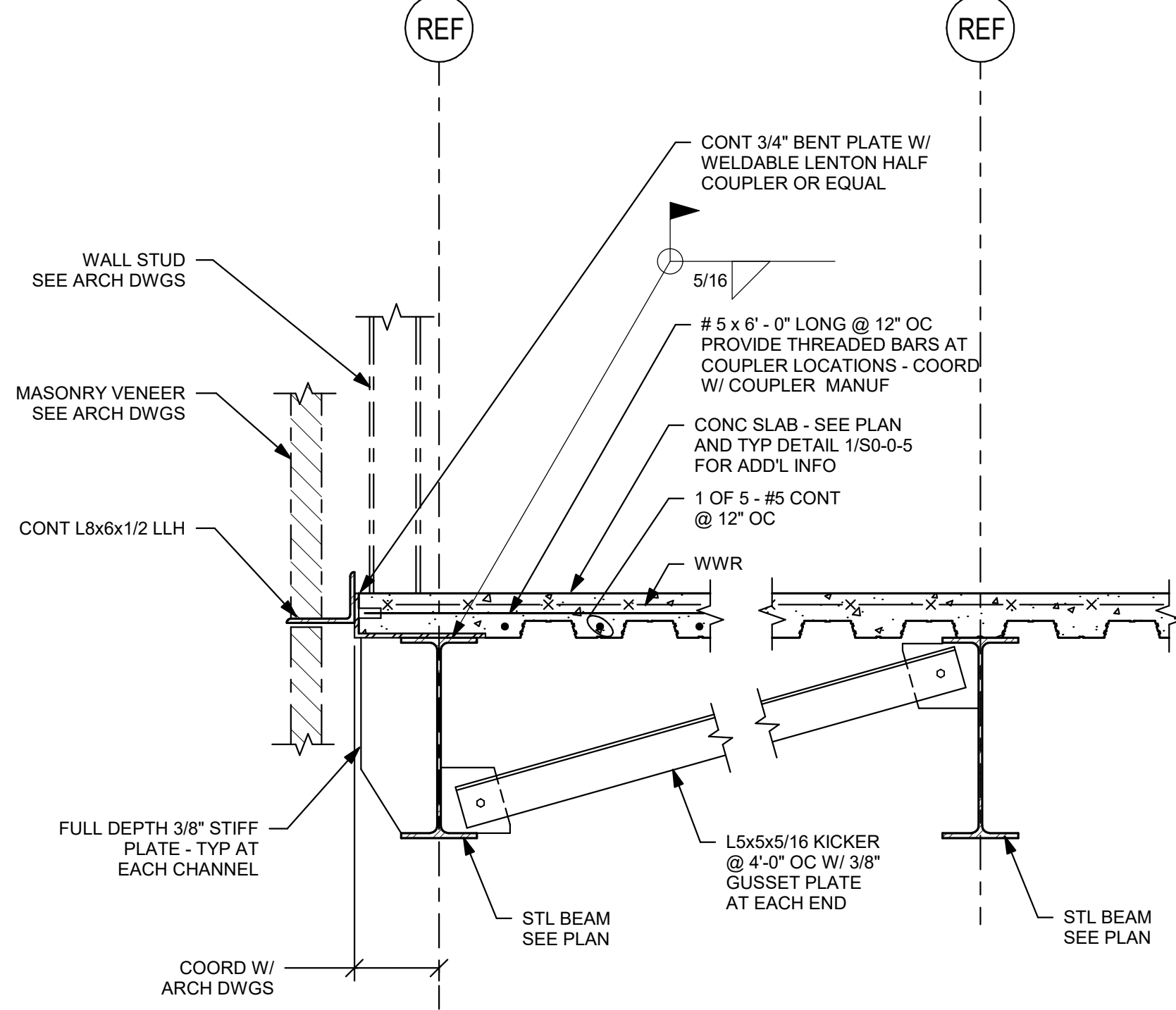
3/4" = 1'-0"



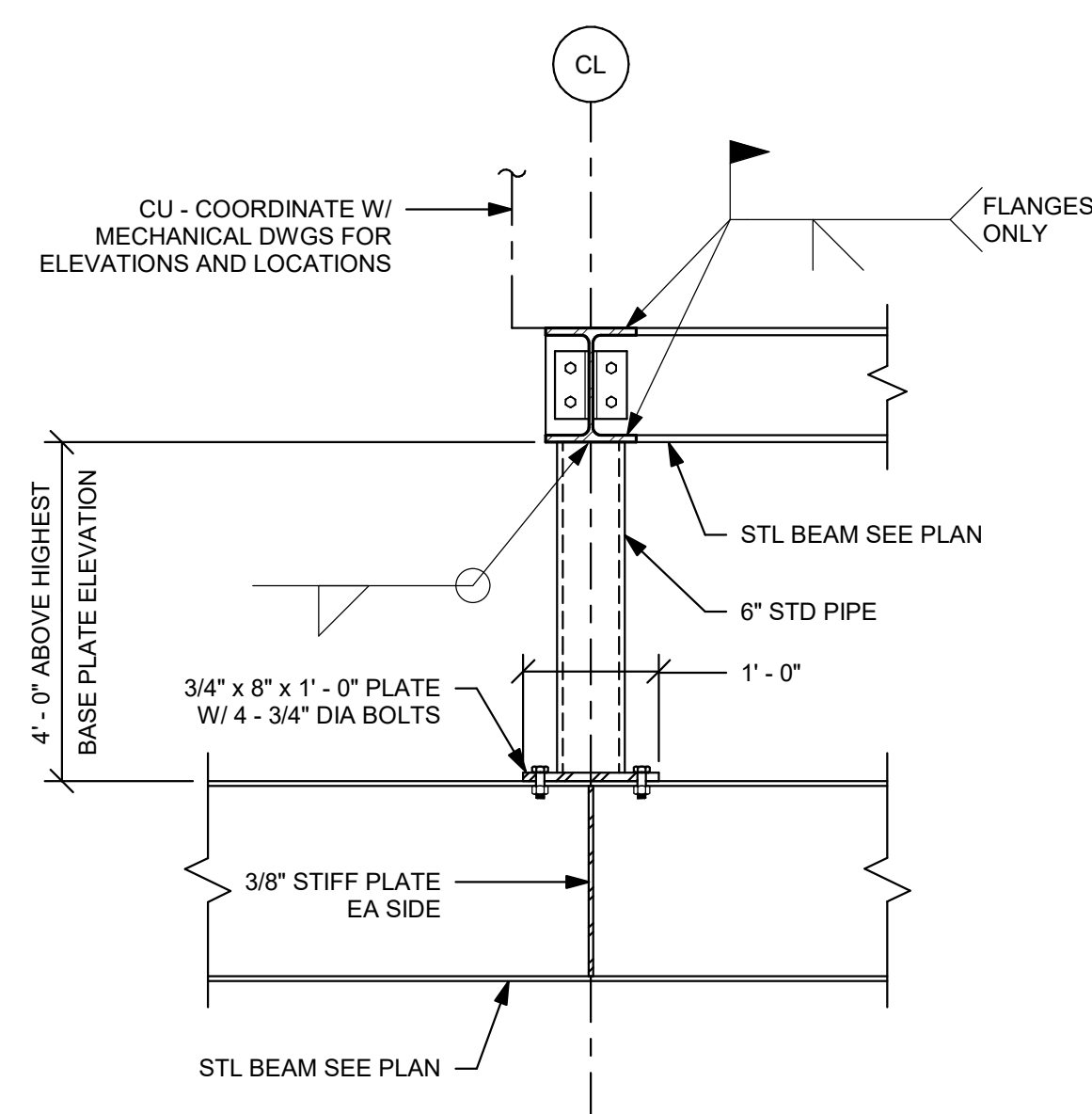
1" = 1'-0"



1" = 1'-0"



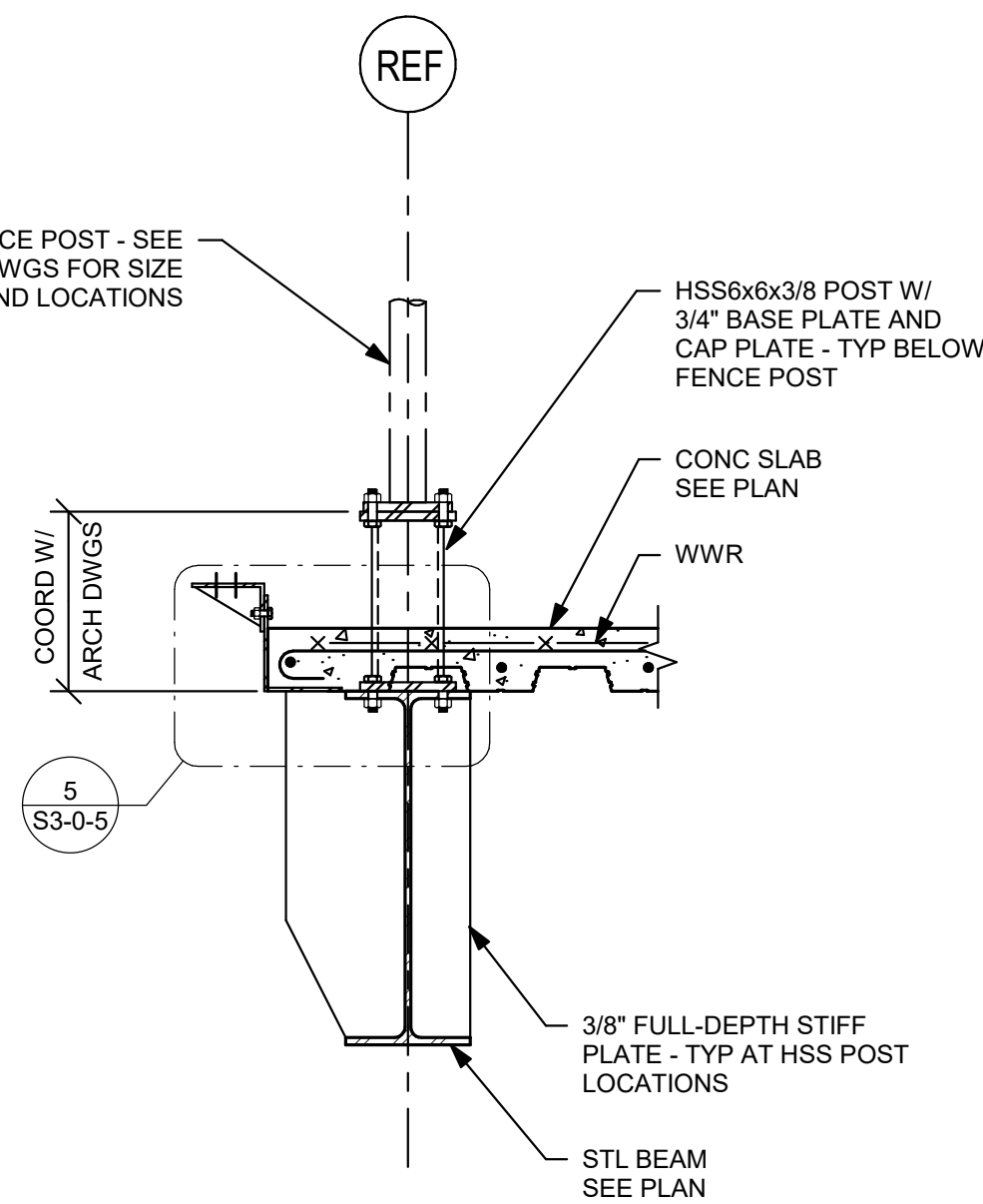
1 1/2" = 1'-0"



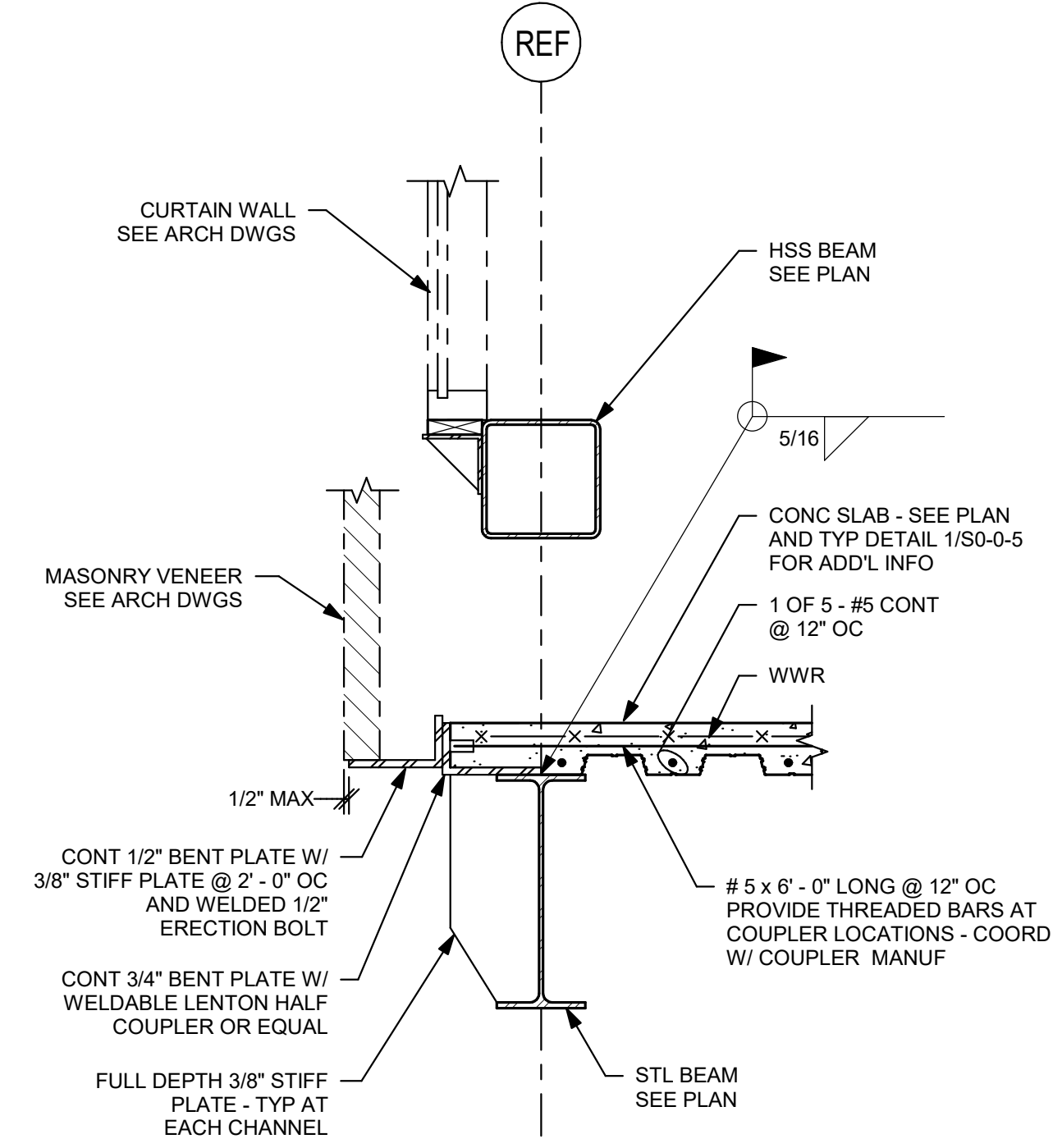
TYPICAL SUPPORT OF ROOF TOP MECHANICAL UNIT DETAIL

- NOTES:
1.) ALL EXPOSED STEEL TO BE HOT-DIP GALVANIZED.
2.) TOUCH UP ALL FIELD WELDS WITH ZINC RICH PAINT

1" = 1'-0"



3/4" = 1'-0"



3/4" = 1'-0"

DRA

Drumsey Rosane Anderson, Inc.
225 Oakland Road
Studio 205
South Windsor, CT 06074
Planning Architecture Interior
Tel: 817.261.1100
www.dra.com

NORTHEAST METRO TECH

100 Hemlock Rd.
Wakefield, MA 01880

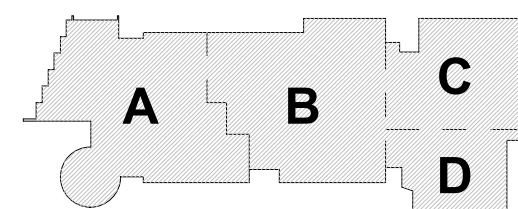
EDG

Engineers Design Group Inc.
Structural Engineers
389 Main Street, Suite 401
Malden, MA 02148
(781)396-9007
EDG@EDGINC.COM

© COPYRIGHT 2021 DRUMSEY ROSANE ANDERSON, INC.

MSBA 60% CD
Submission

01/13/2023



KEY PLAN

PROJECT NORTH

MAGNETIC NORTH

SECTIONS

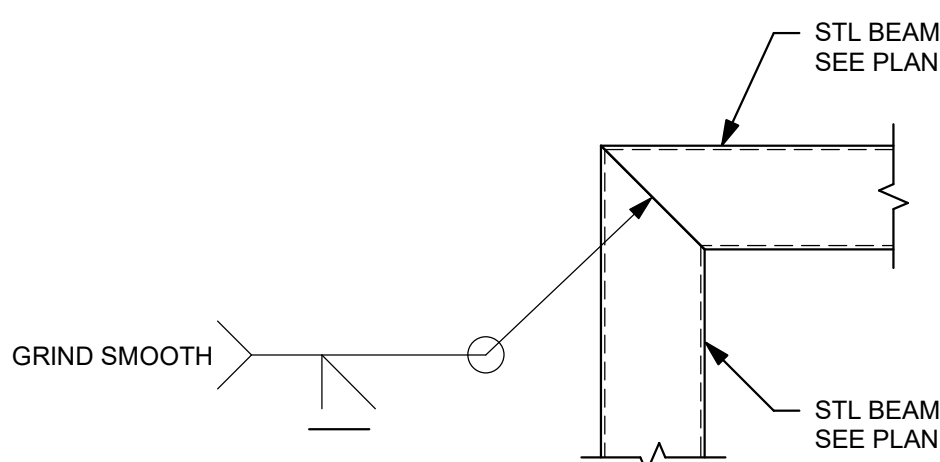
Scale: 3/4" = 1'-0"

Job No.: 20202

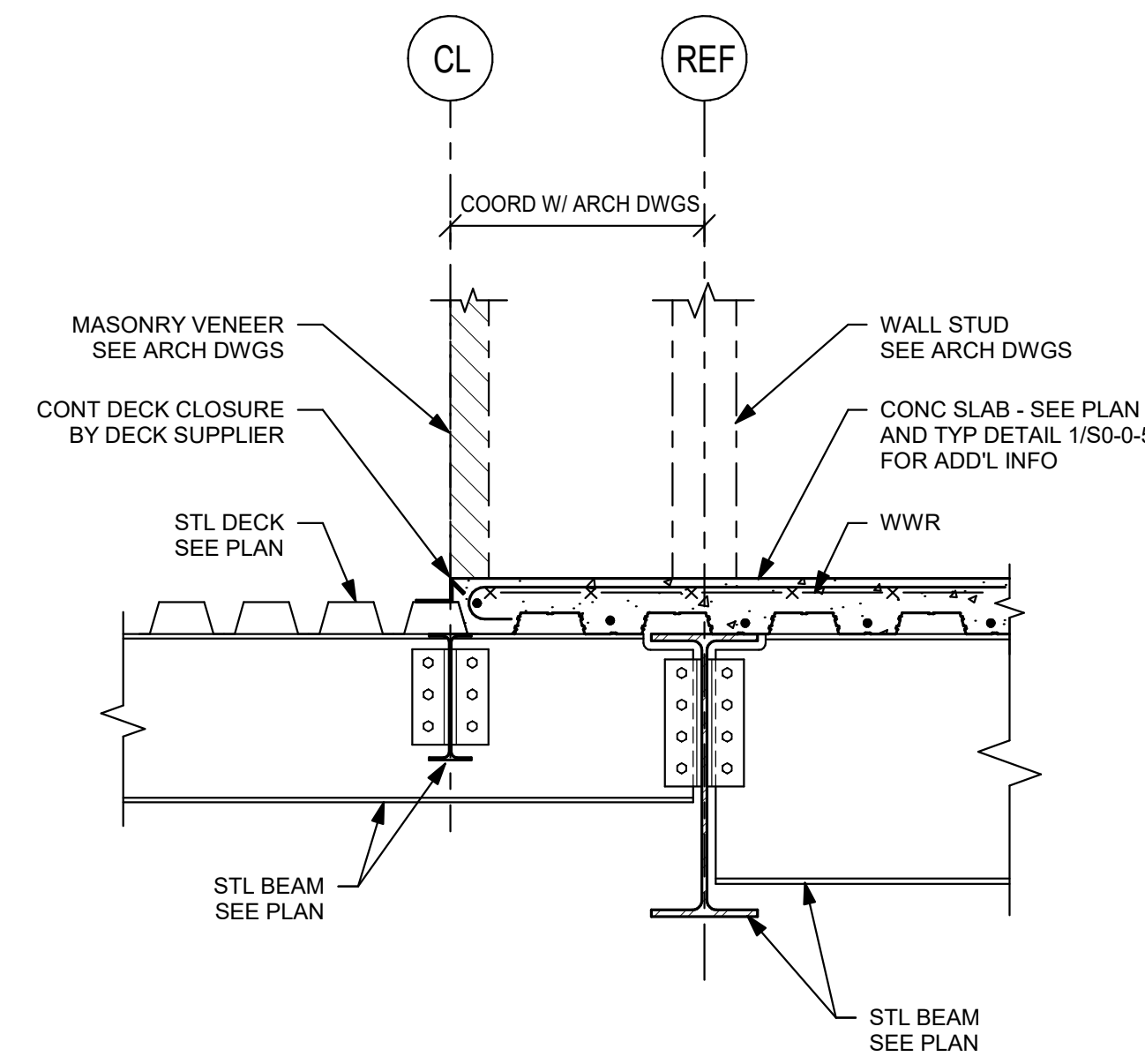
Drawn By: EDG

Date: 01/13/2023

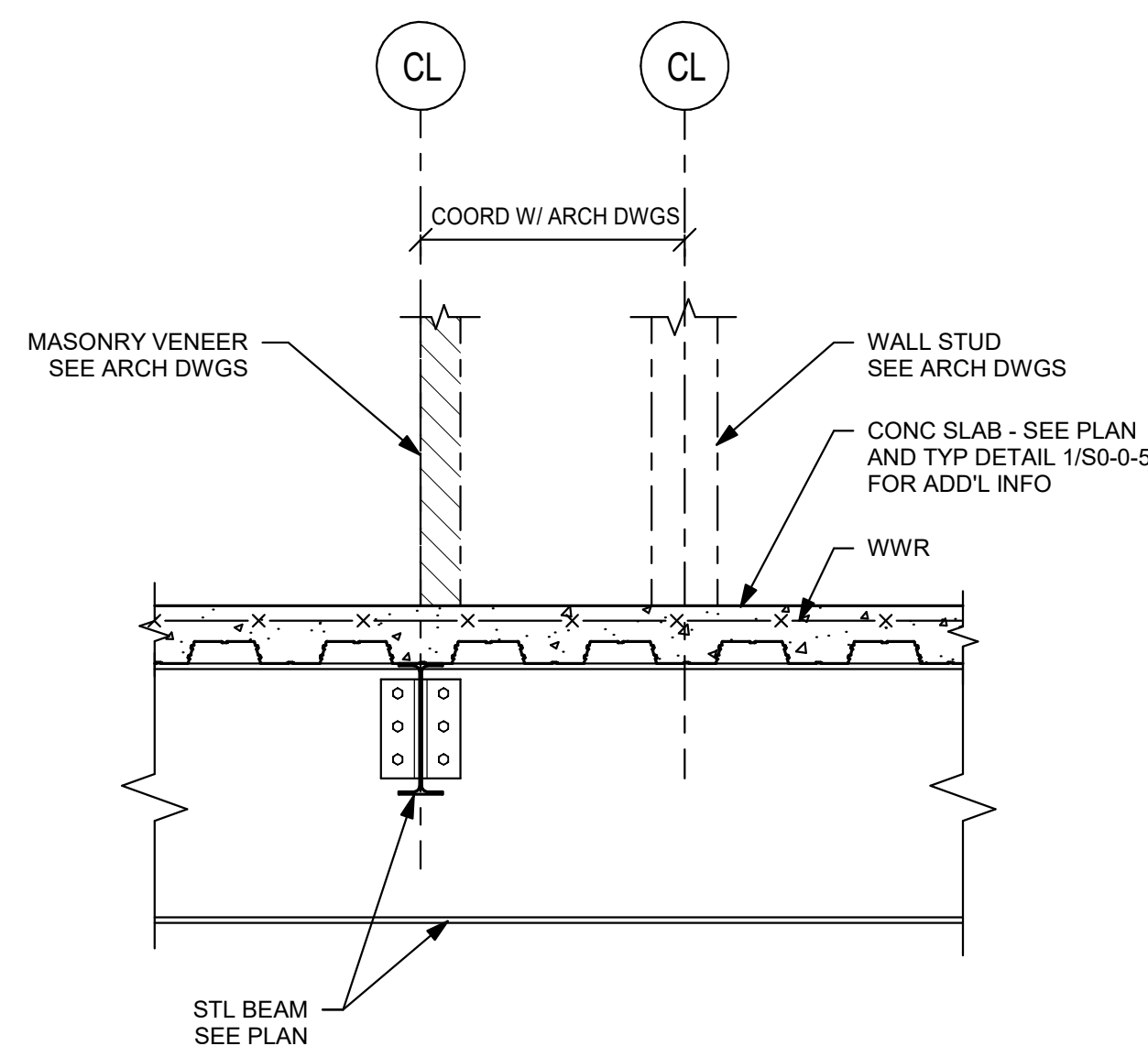
S3-0-4



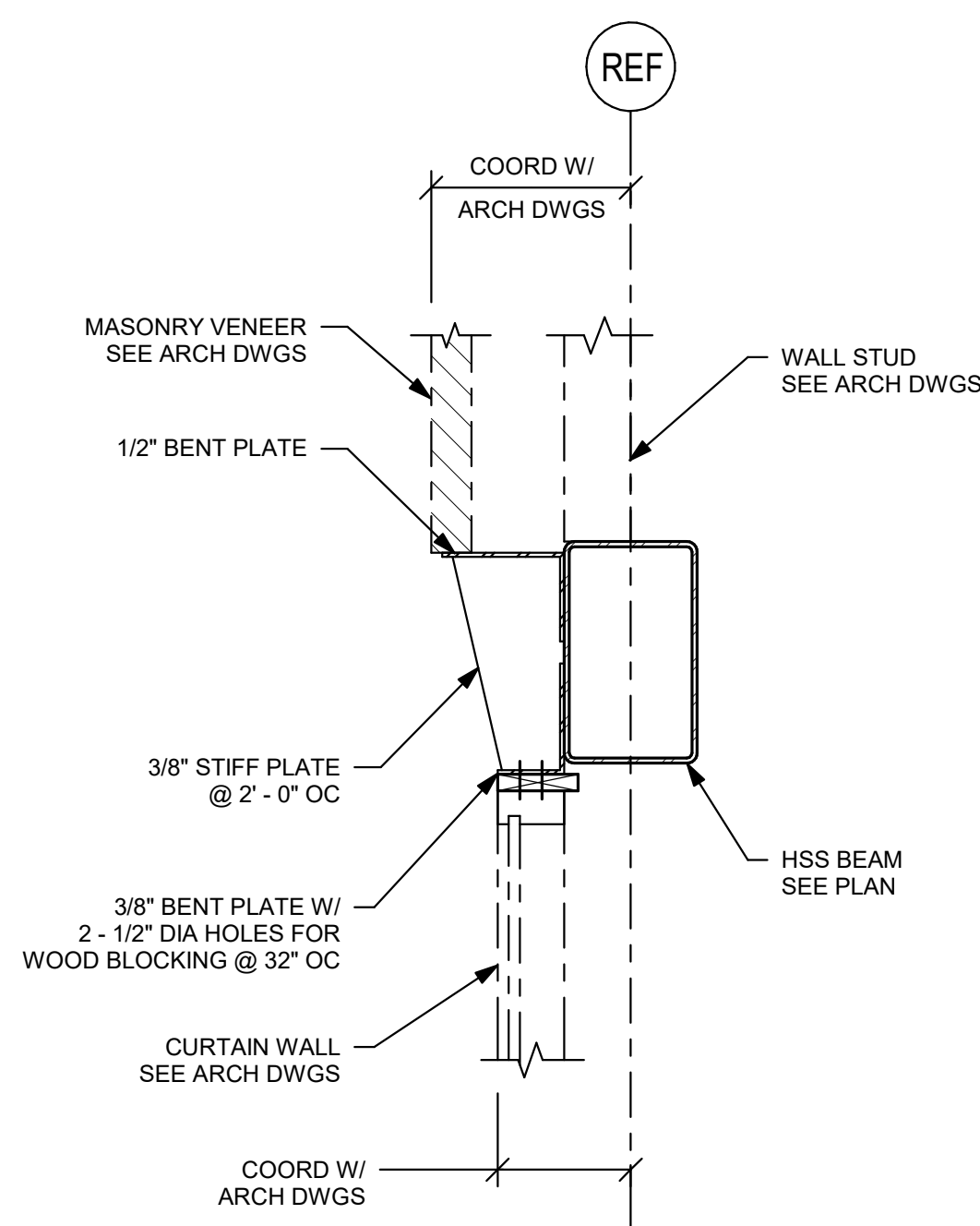
3/4" = 1' - 0"



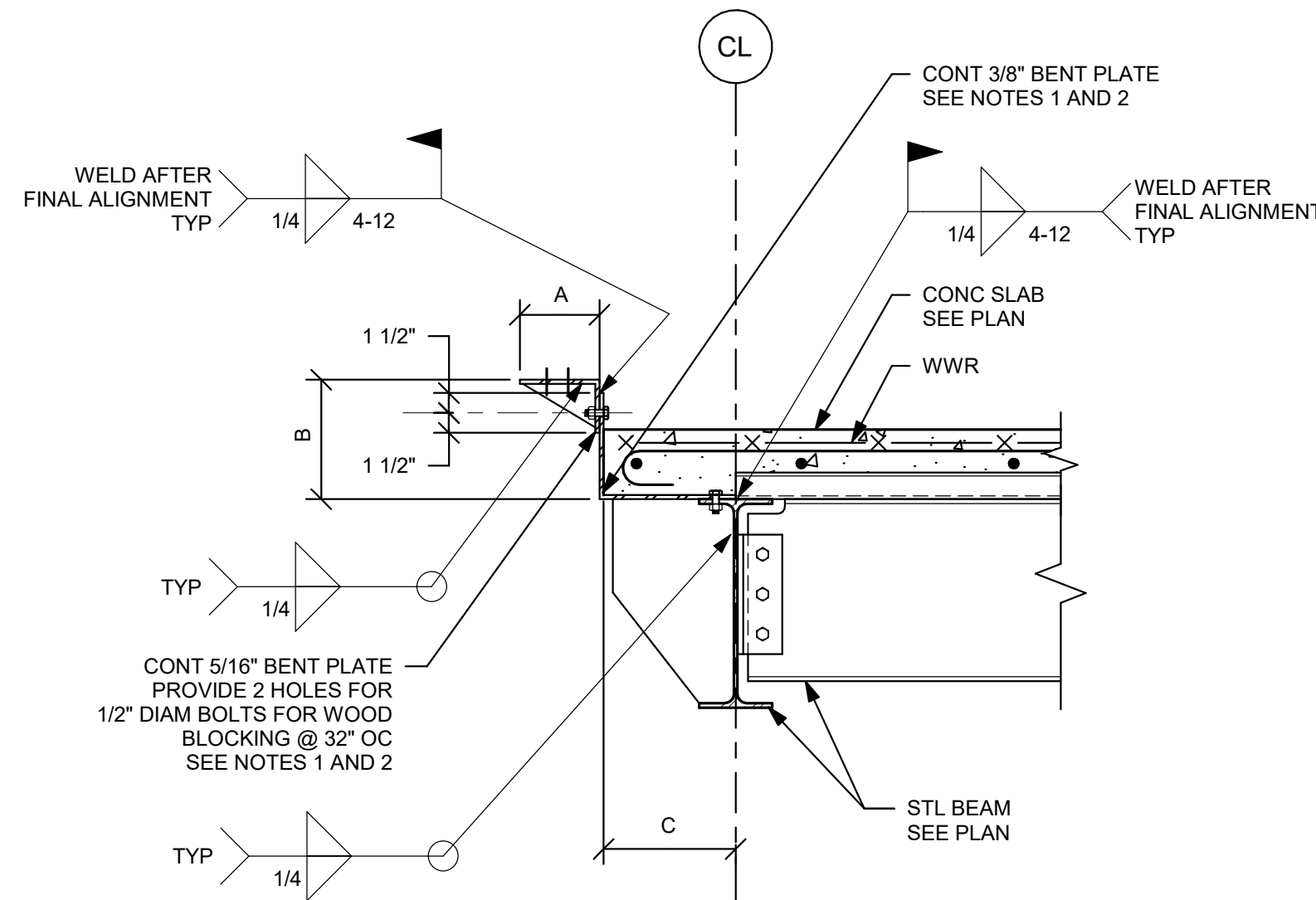
3/4" = 1' - 0"



3/4" = 1' - 0"

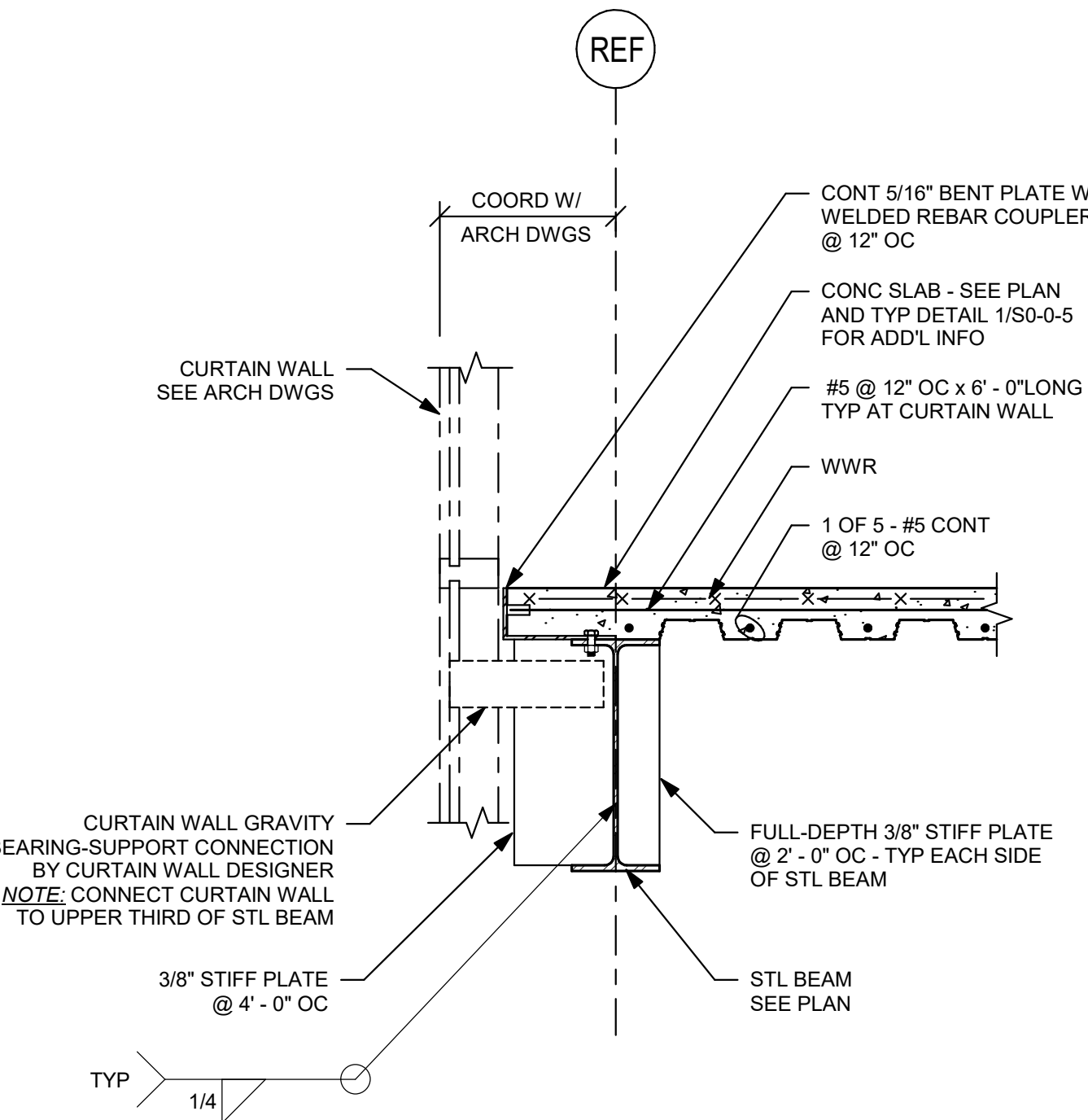


1" = 1' - 0"

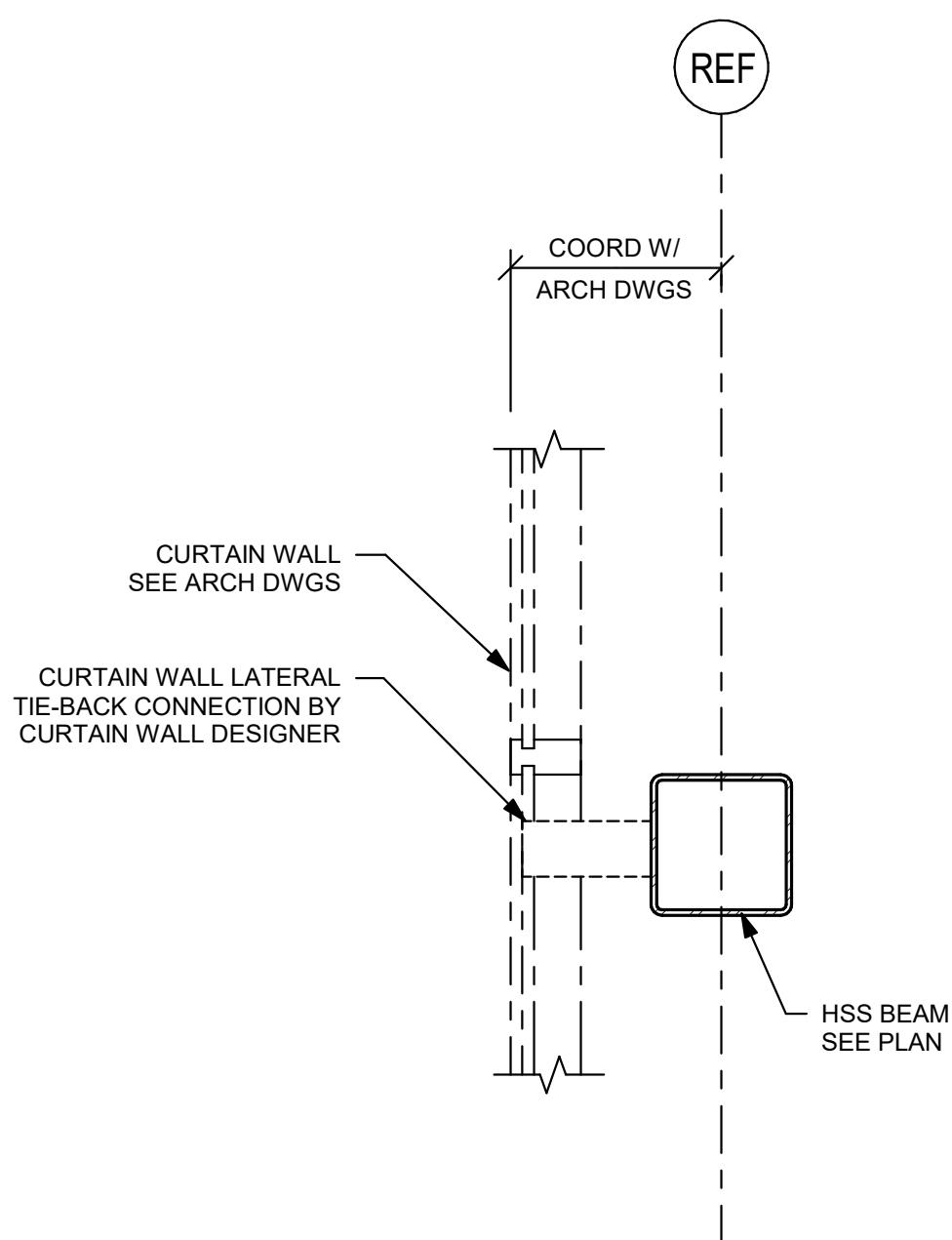


- NOTES:
- COORDINATE ALL ROOF-EDGE ANGLE AND BENT PLATE SIZES AND EXTENTS WITH ARCHITECTURAL DETAILS.
 - PROVIDE 3/8" STIFFENER PLATES @ 4' - 0" OC AS SHOWN WHERE ROOF-EDGE BENT PLATE DIMENSIONS "A" AND/OR "B" ARE EQUAL TO OR GREATER THAN 9'.
 - PROVIDE 3/8" STIFFENER PLATES @ 4' - 0" OC AS SHOWN WHERE ROOF-EDGE BENT PLATE DIMENSION "C" IS EQUAL TO OR GREATER THAN 11' - 0".
 - EXTEND ROOF EDGE ASSEMBLIES AROUND CORNERS AS REQUIRED PER DETAIL 10 ON DRAWING S0-0-7.

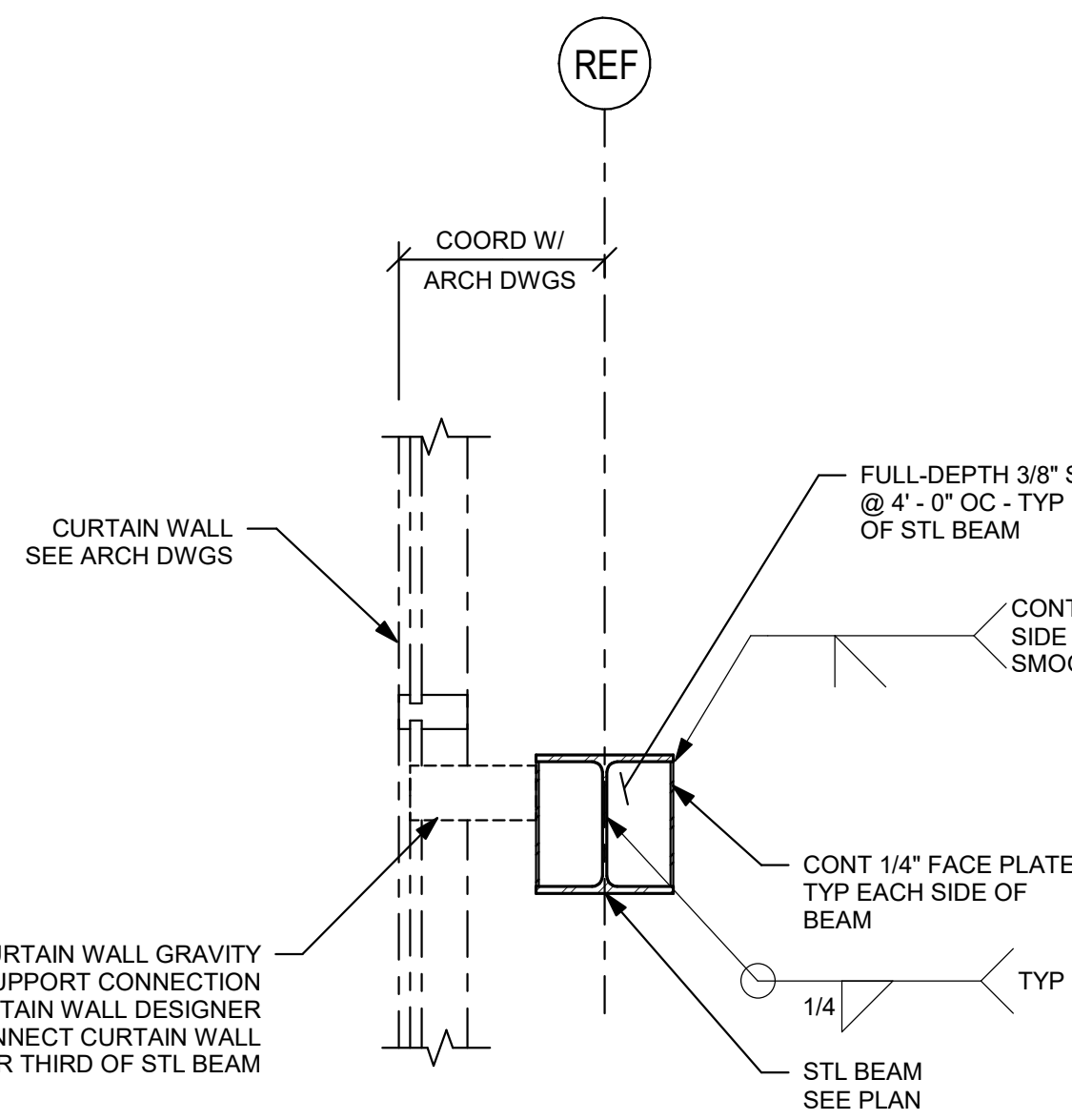
1" = 1' - 0"



1 1/2" = 1' - 0"

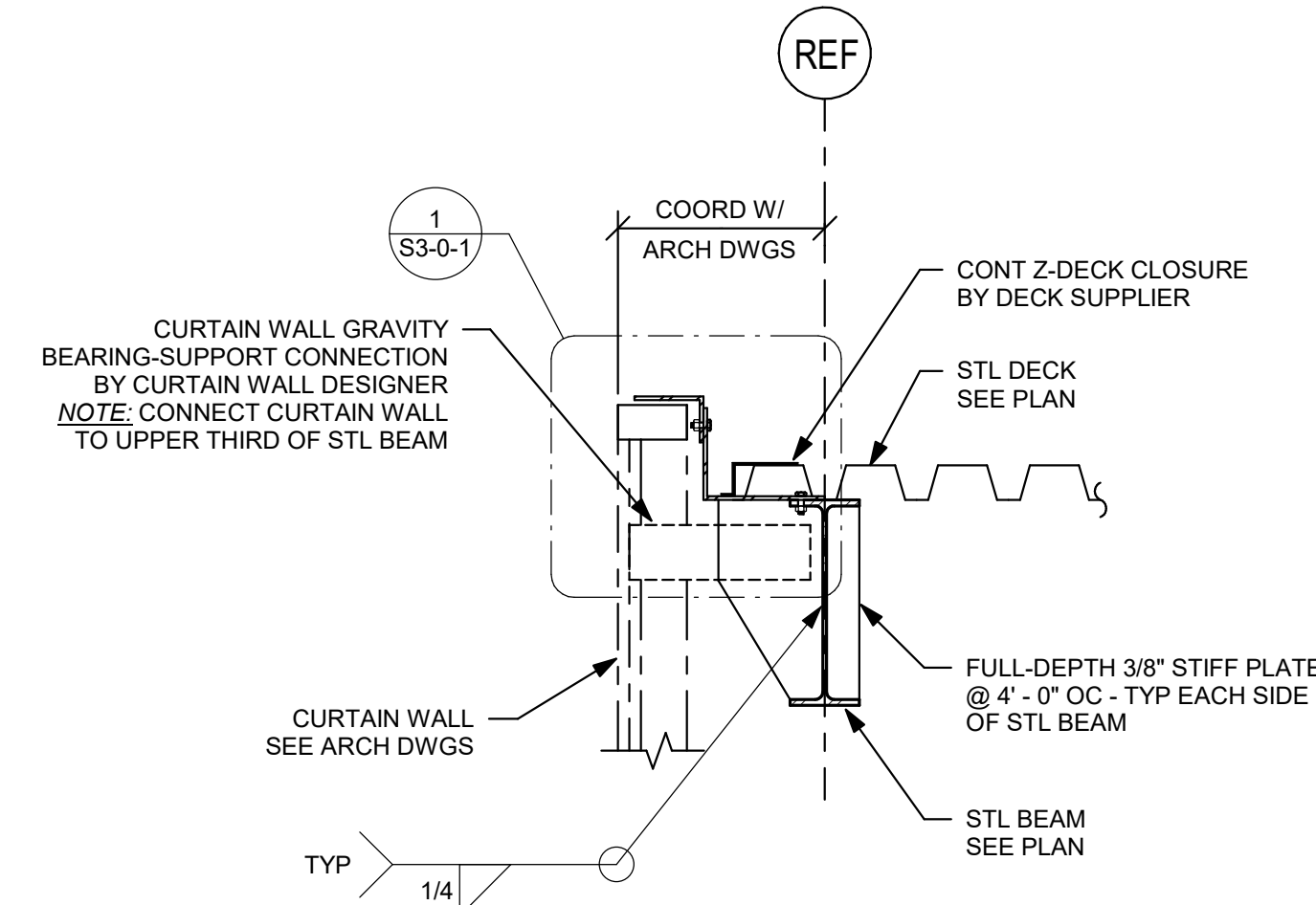


1" = 1' - 0"



NOTE:
CUT AND GRIND SMOOTH EDGES OF STL BEAM TO REPLICATE CORNERS OF HSS MEMBERS.

3/4" = 1' - 0"



3/4" = 1' - 0"

DRA

Drumme Rosane Anderson, Inc.
225 Oakland Road
Studio 205
South Windsor, CT 06074
260 Charles Street
Studio 300
Waltham, MA 02453
Planning Architecture Interior
Tel: 817.261.1100
www.dra.com

NORTHEAST
METRO TECH

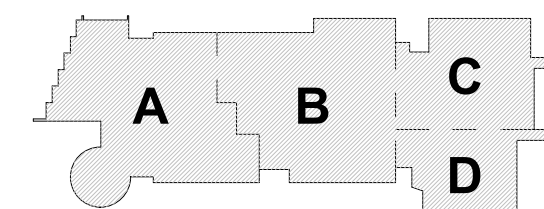
100 Hemlock Rd.
Wakefield, MA 01880

EDG
Engineers Design Group Inc.
Structural Engineers
389 Main Street, Suite 401
Malden, MA 02148
(781)396-9007
EDG@EDGINC.COM

© COPYRIGHT 2021 DRUMMEY ROSANE ANDERSON, INC.

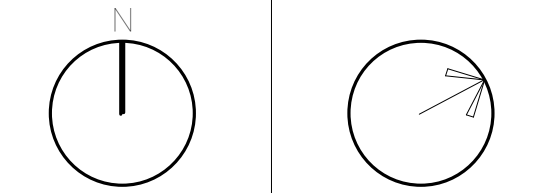
MSBA 60% CD
Submission

01/13/2023



KEY PLAN

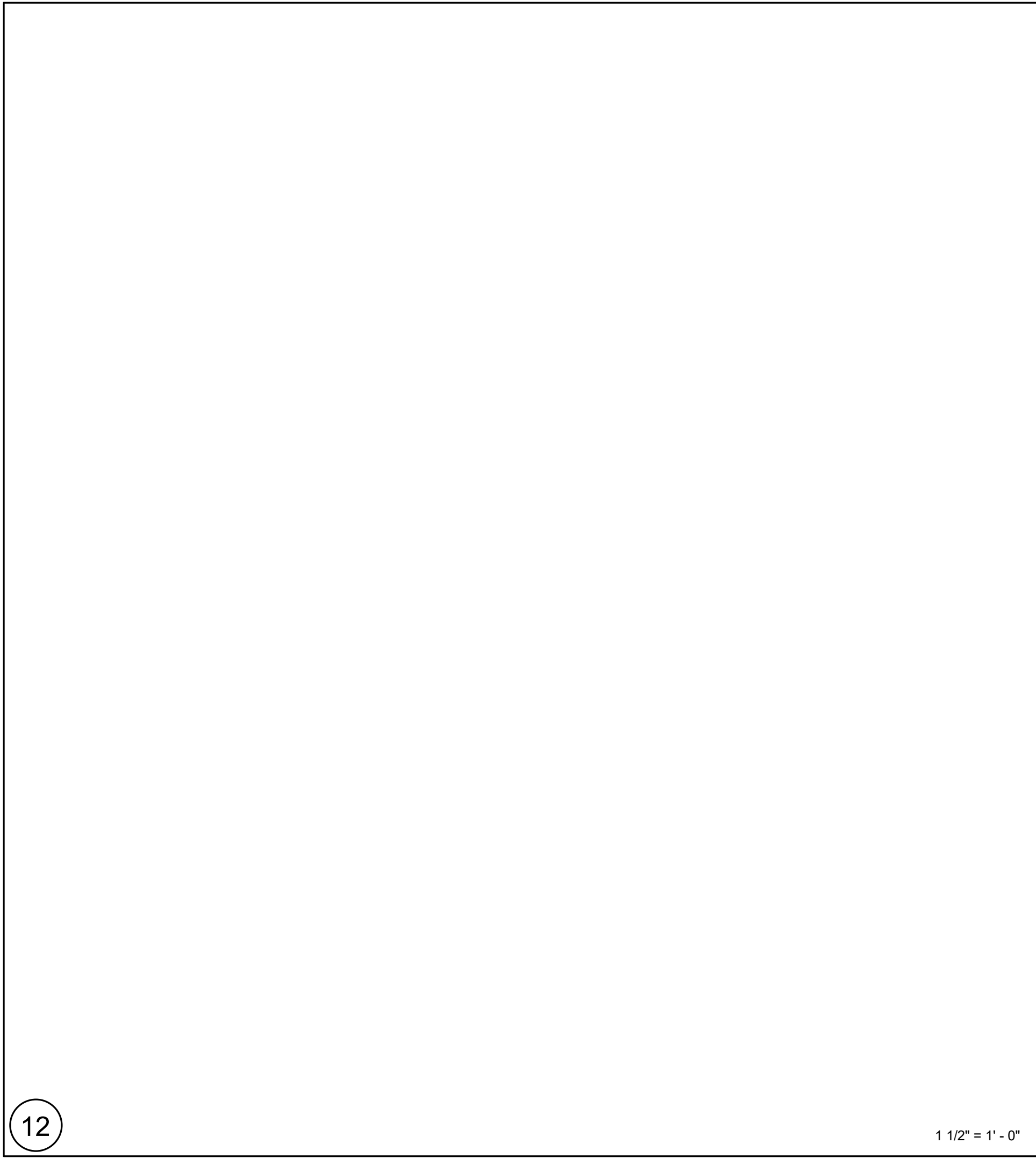
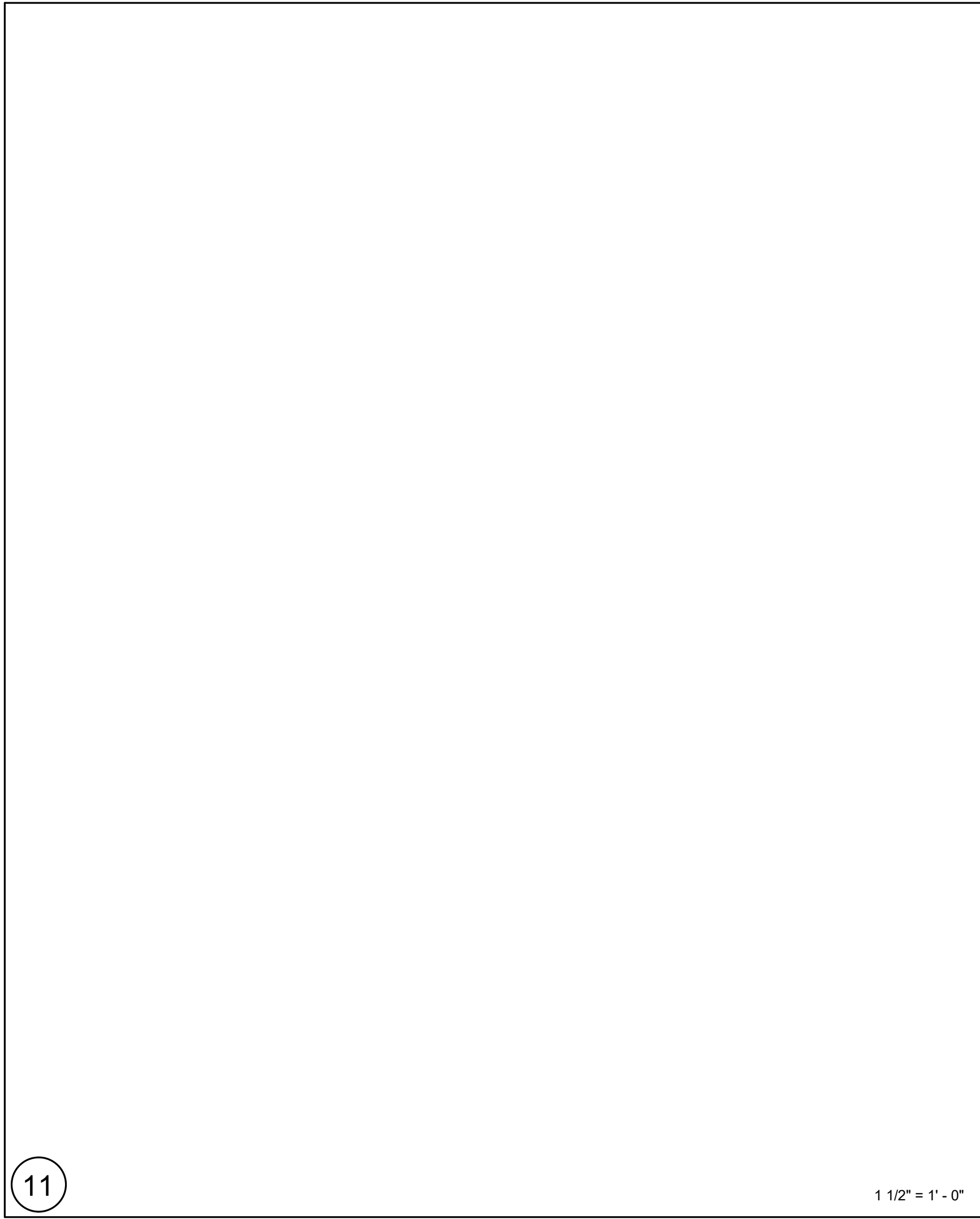
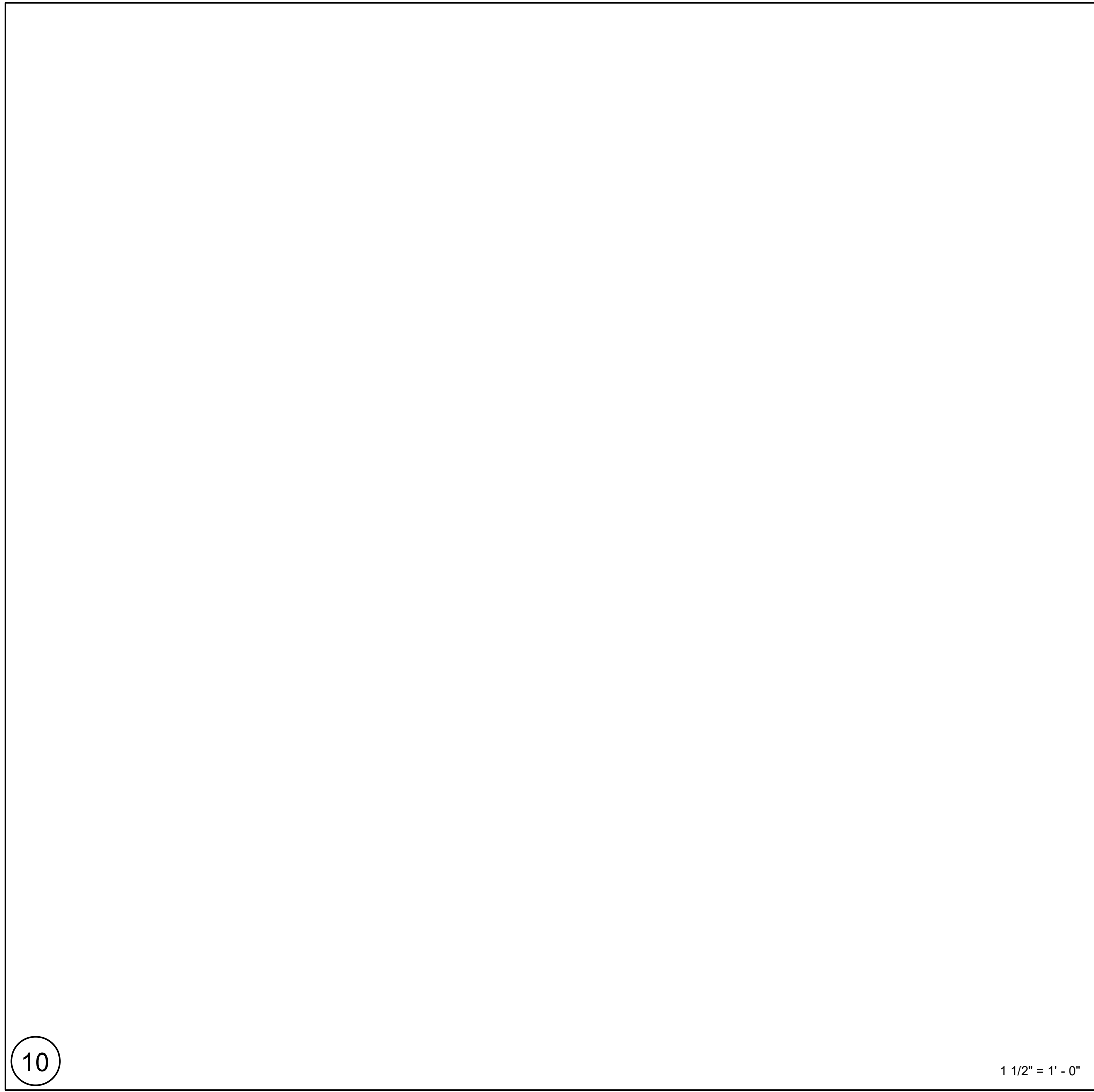
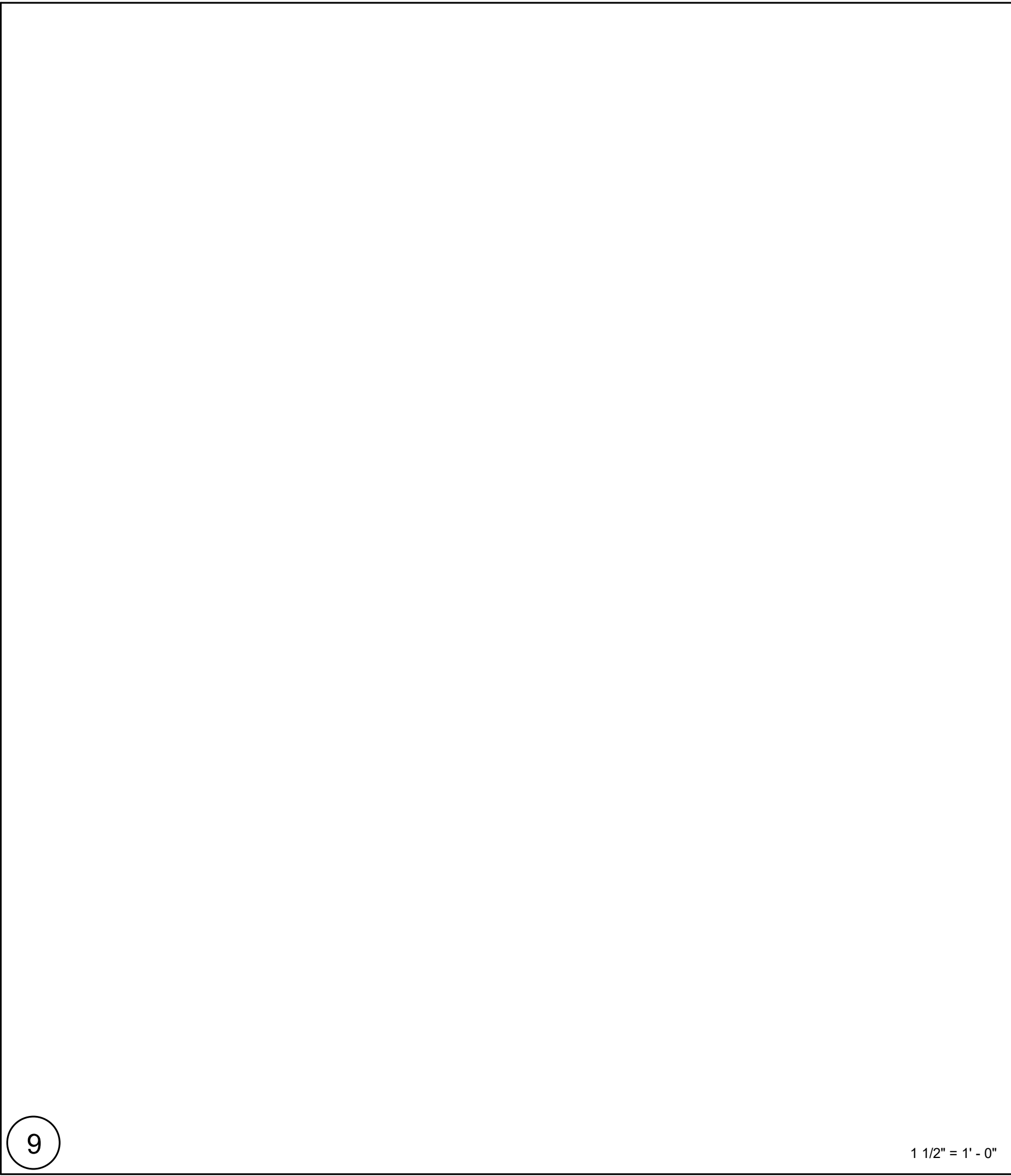
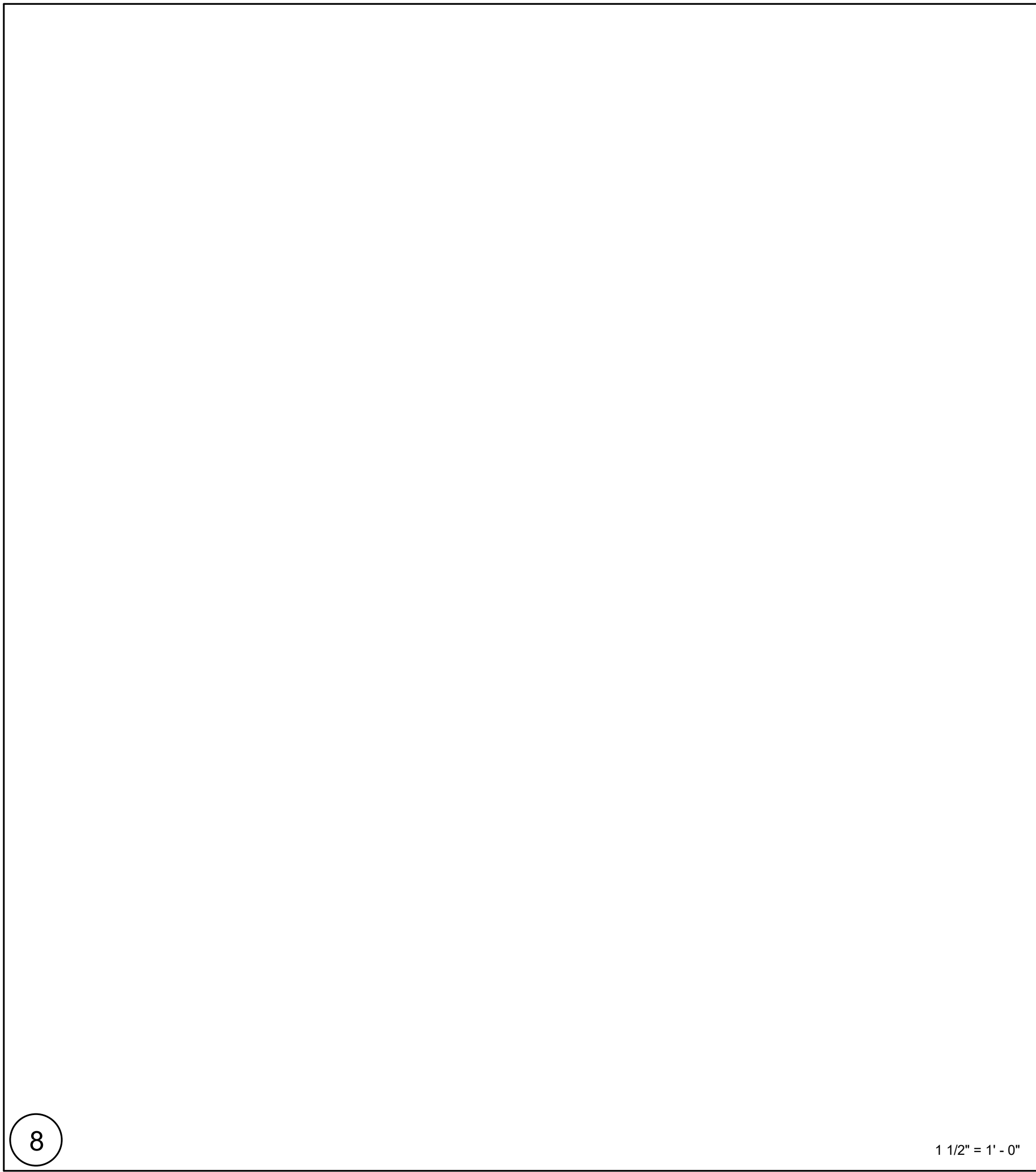
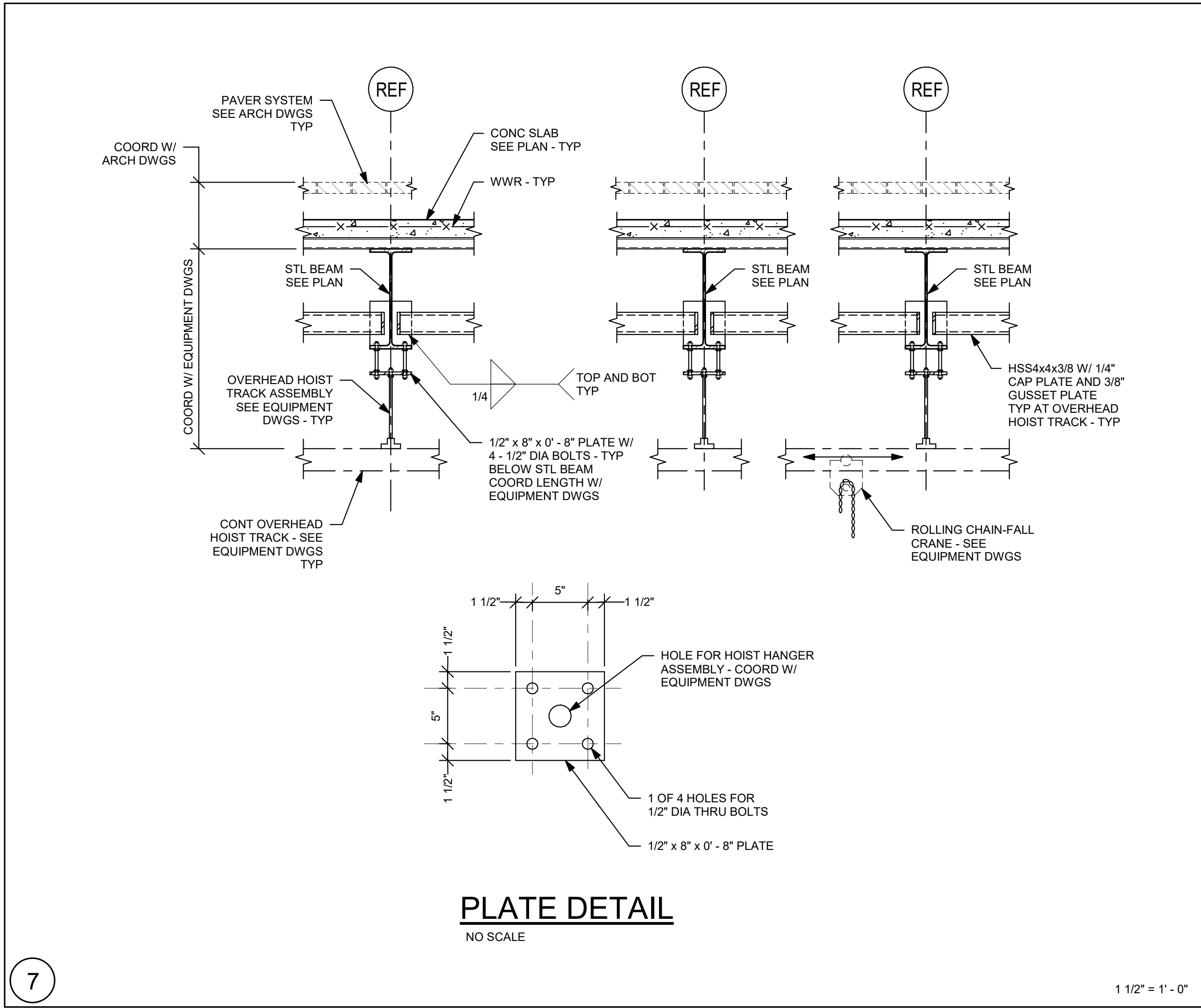
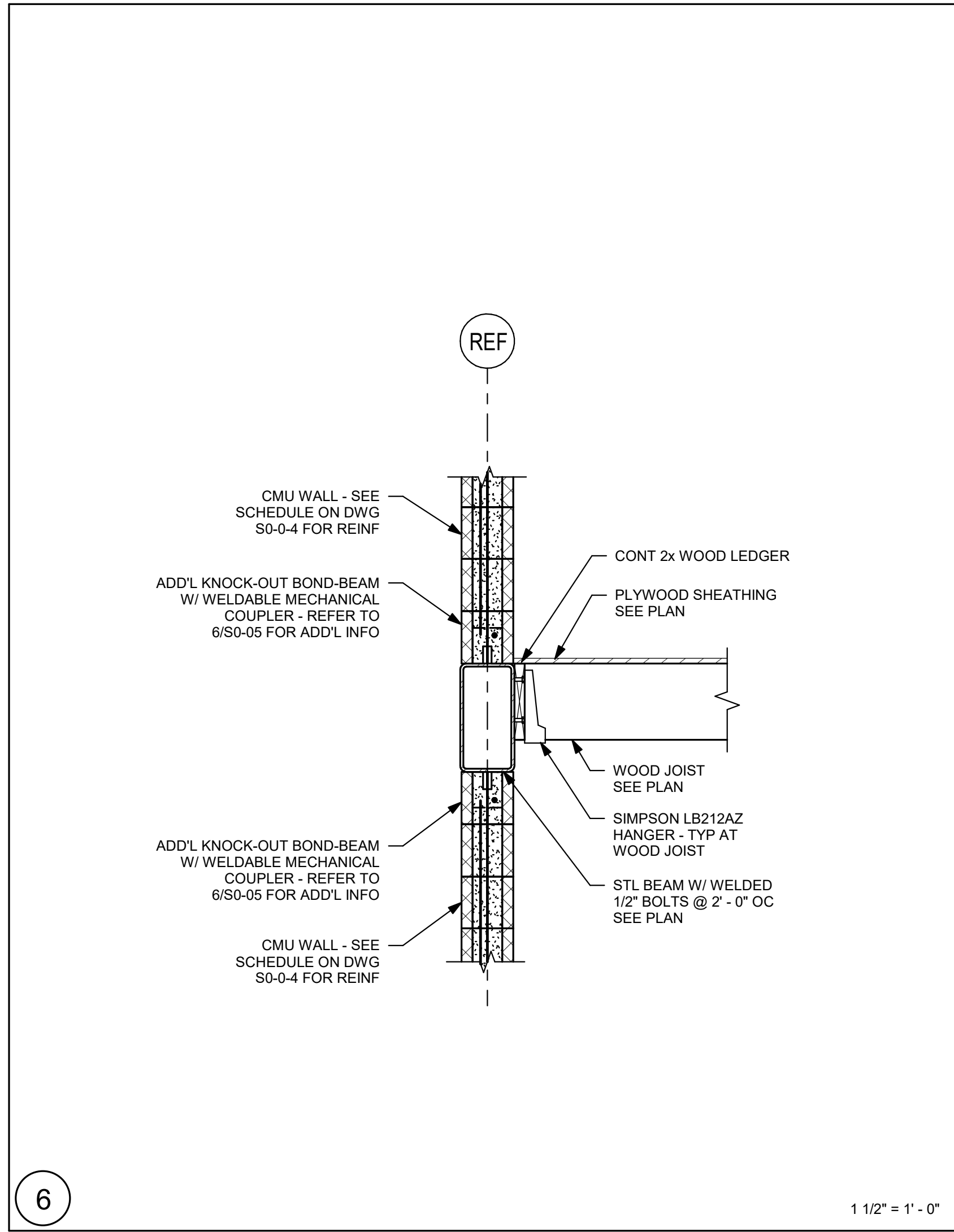
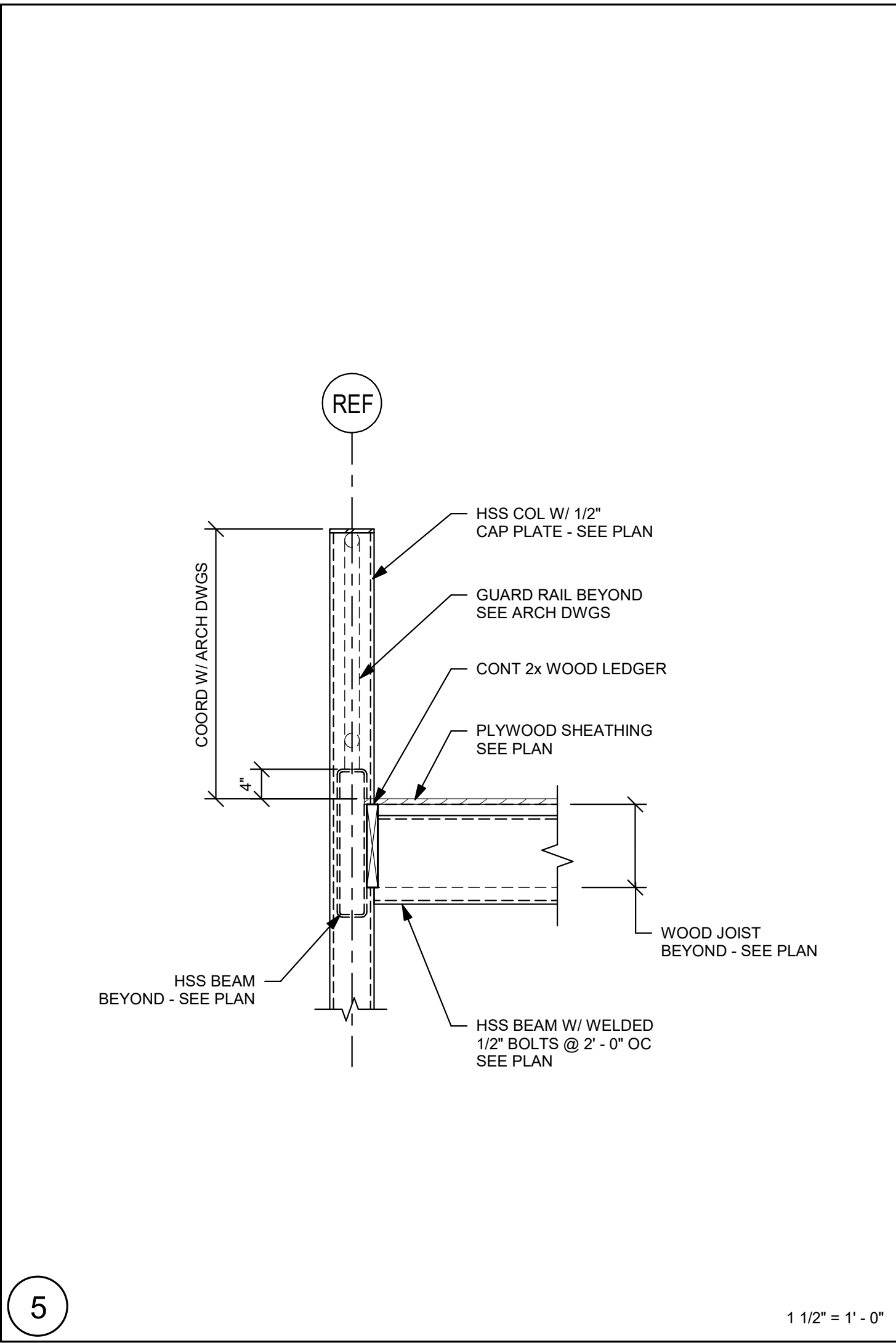
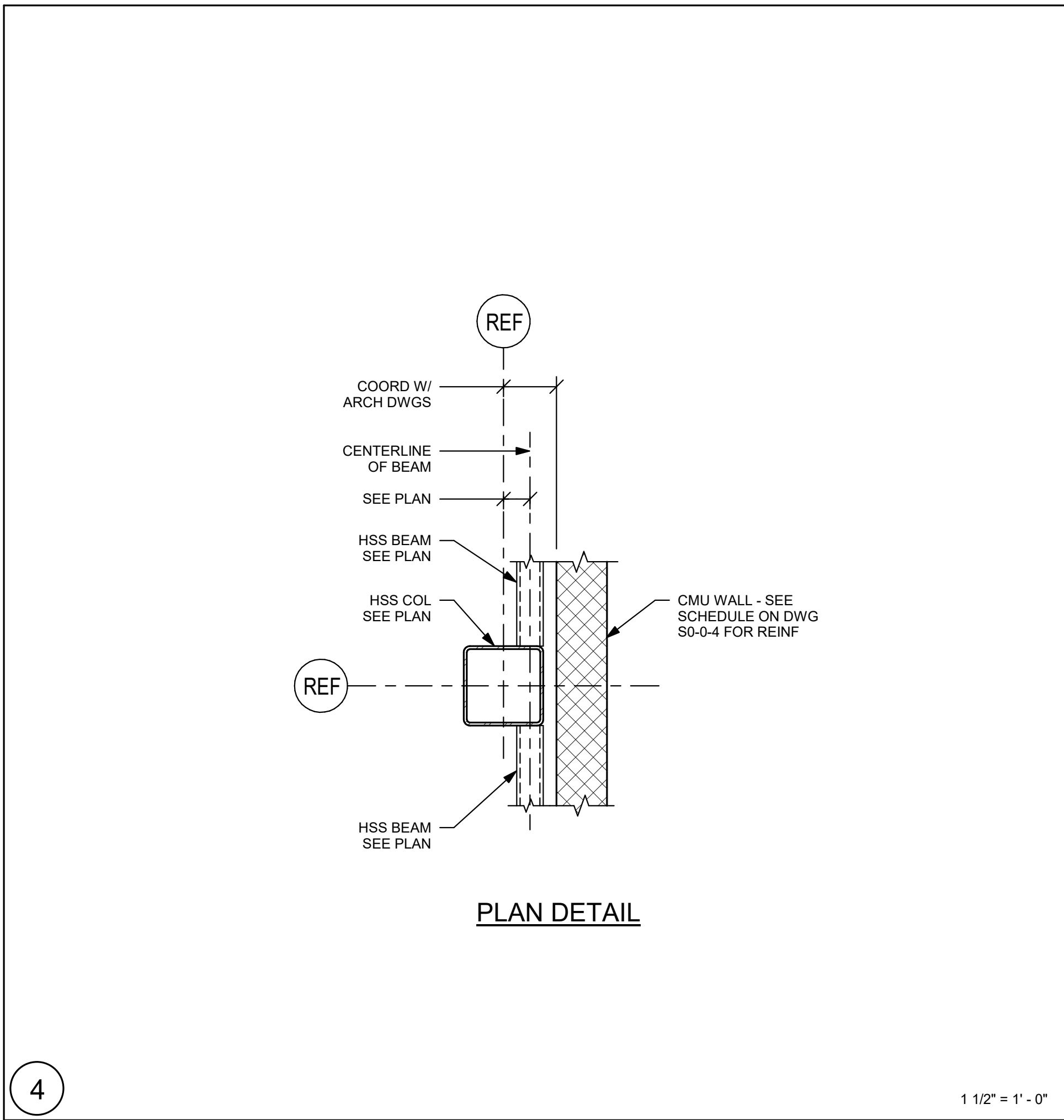
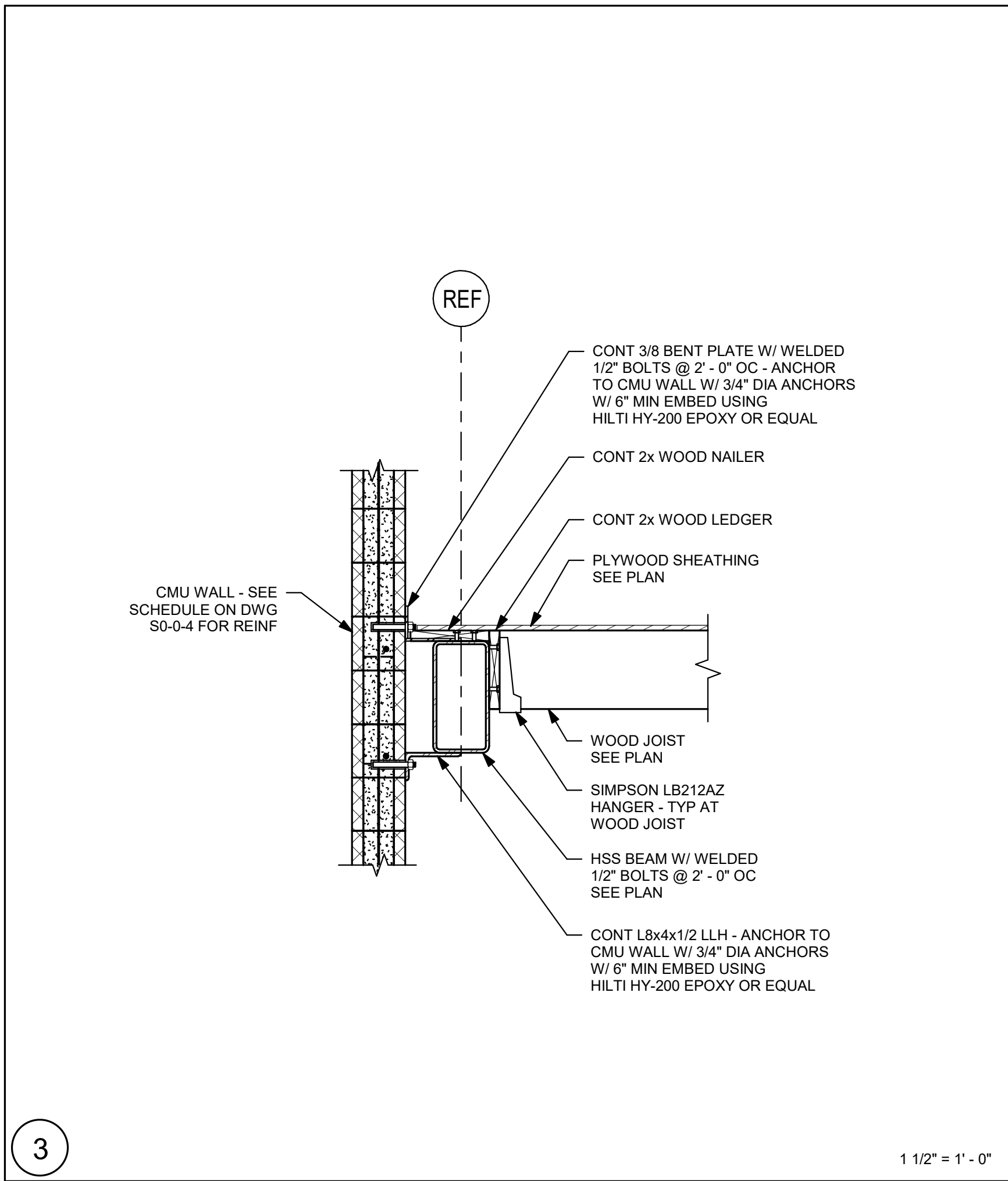
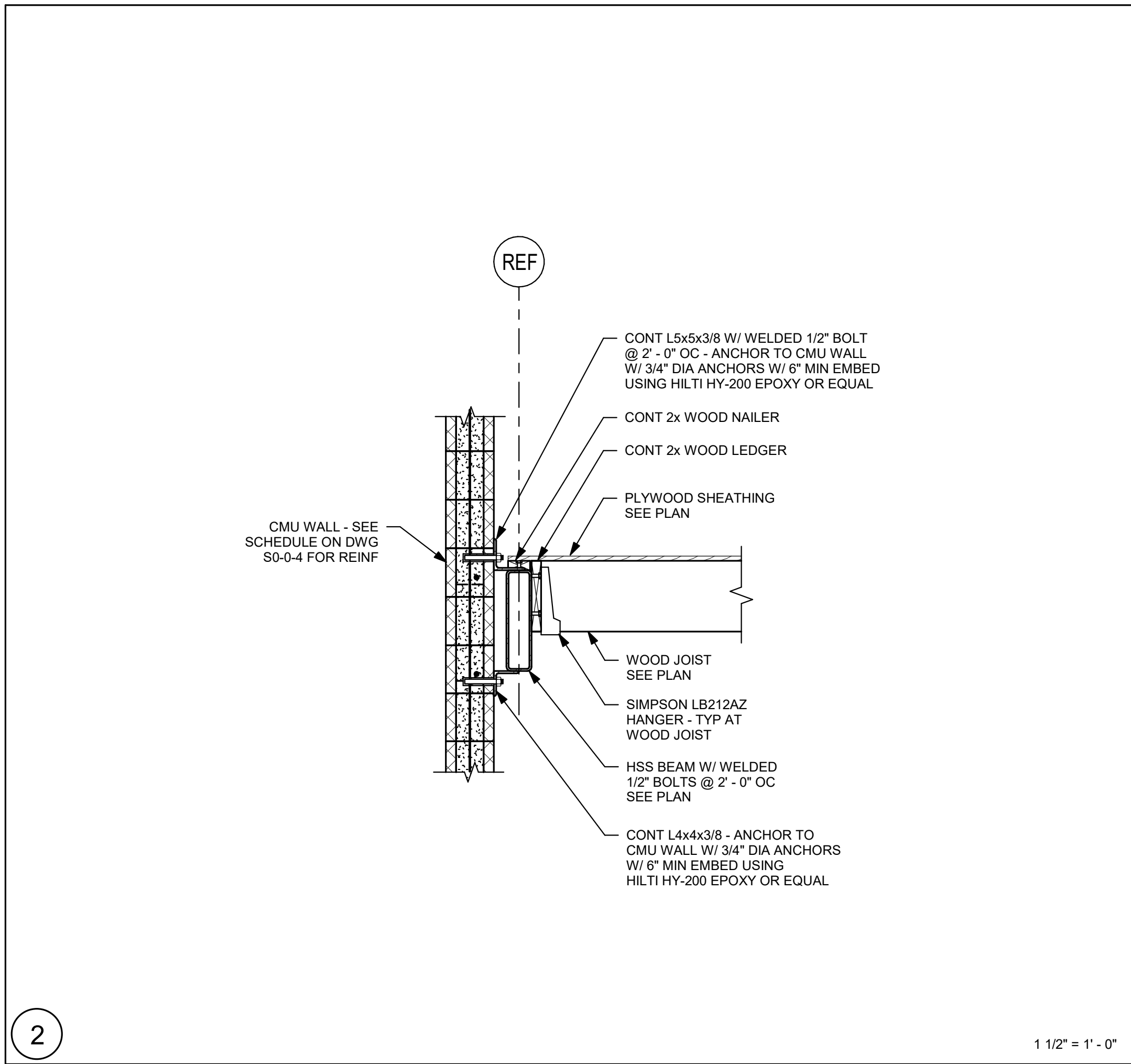
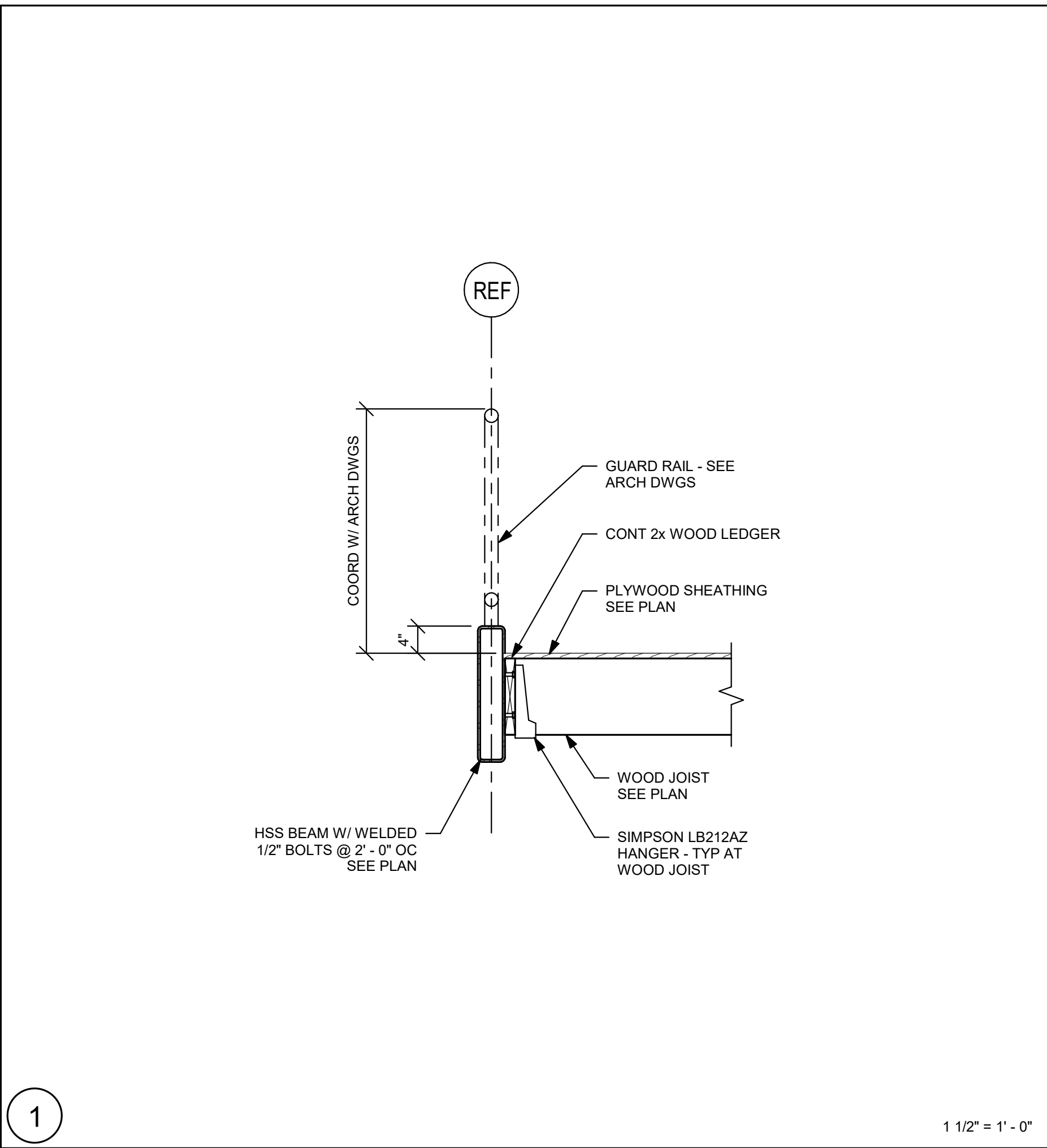
PROJECT NORTH
MAGNETIC NORTH

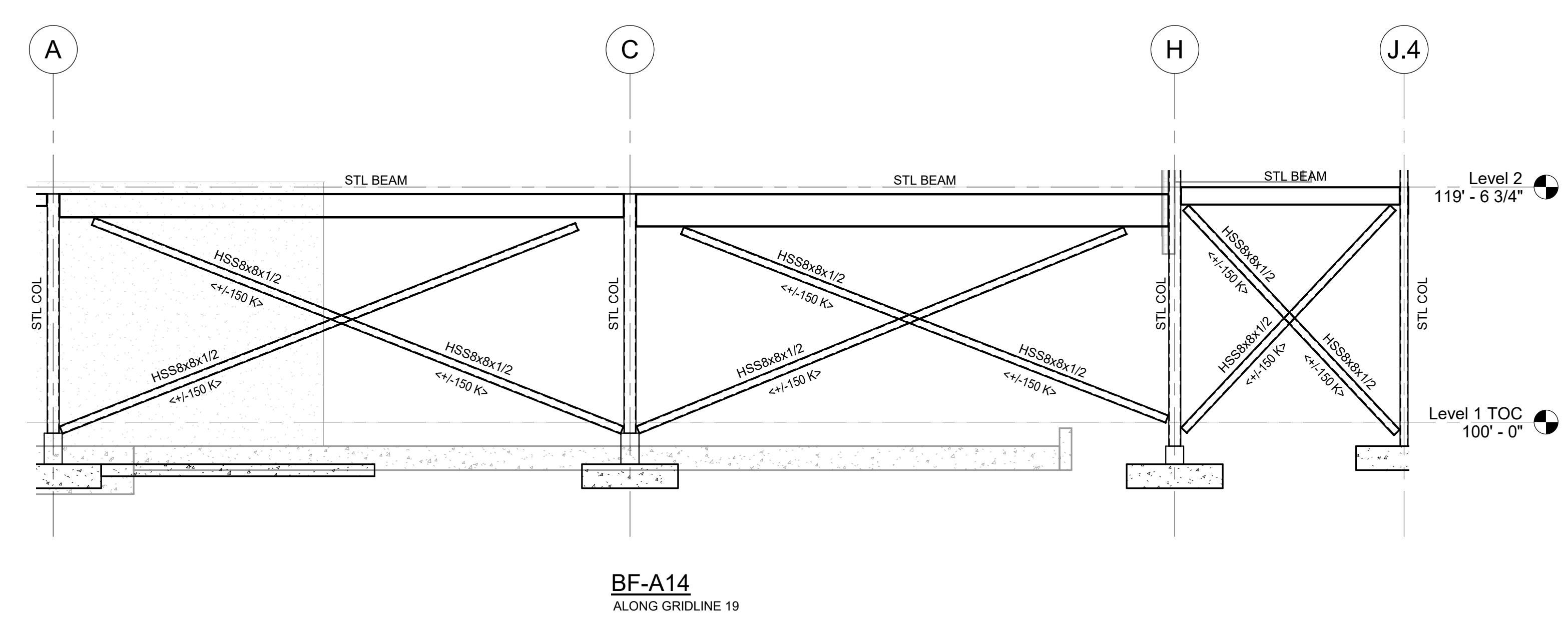
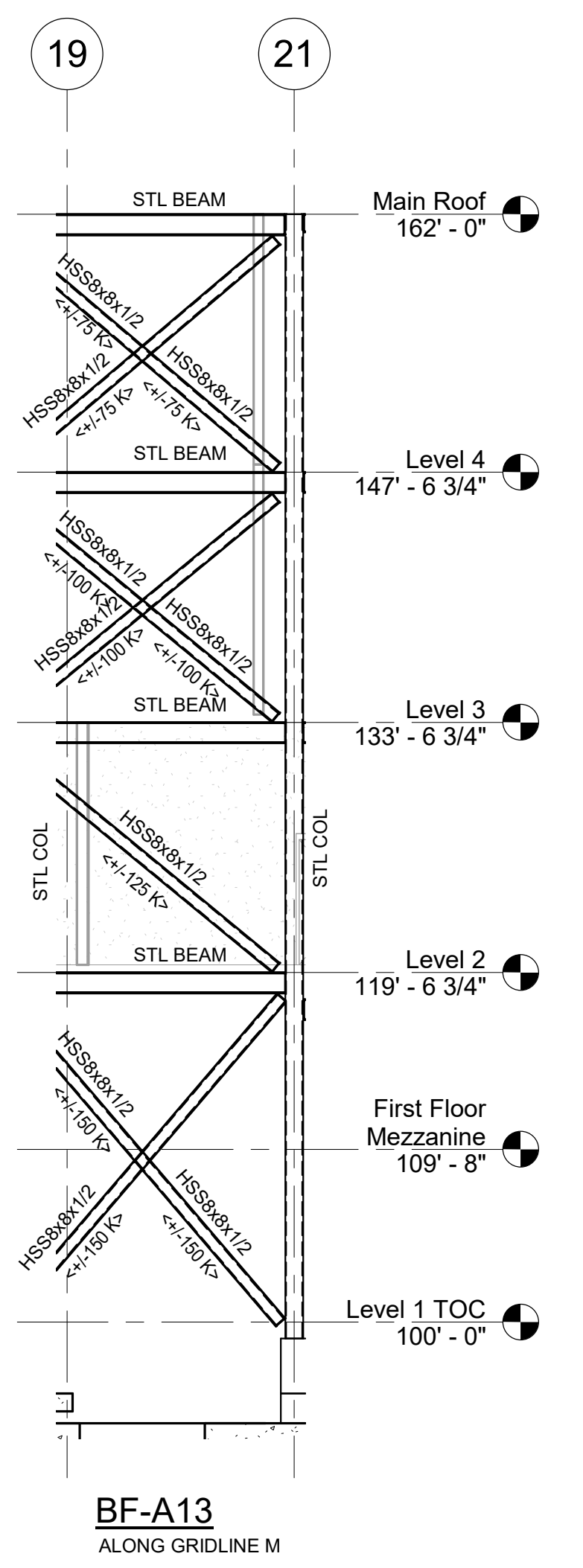
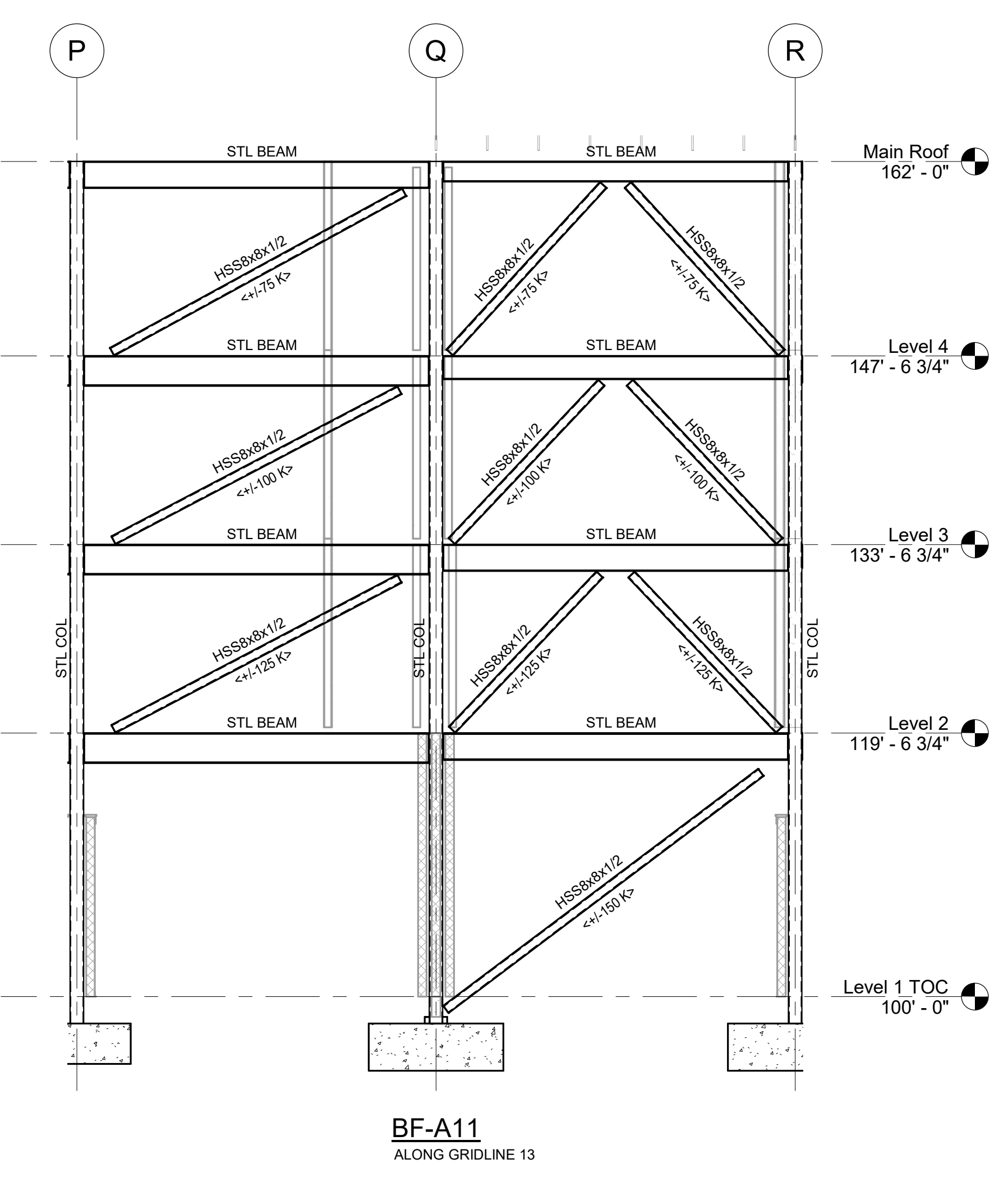
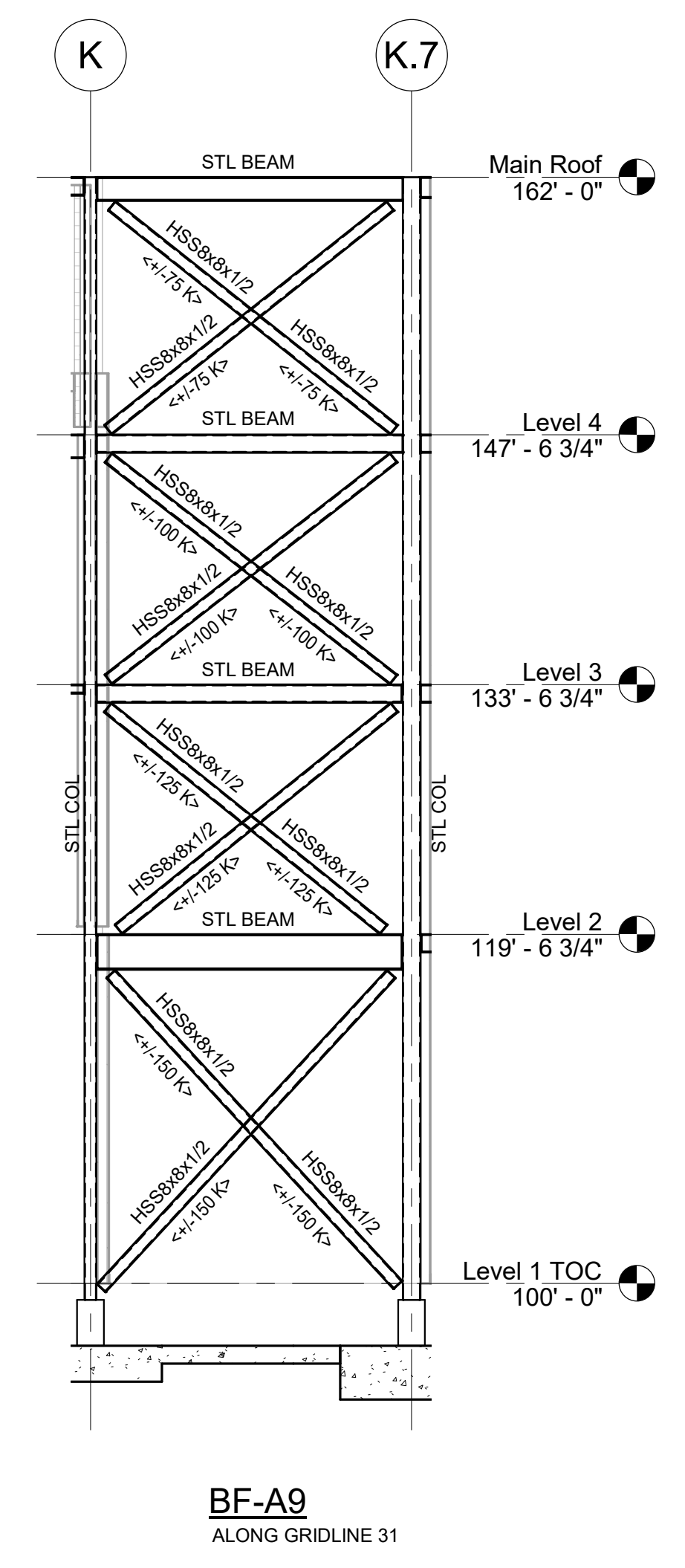
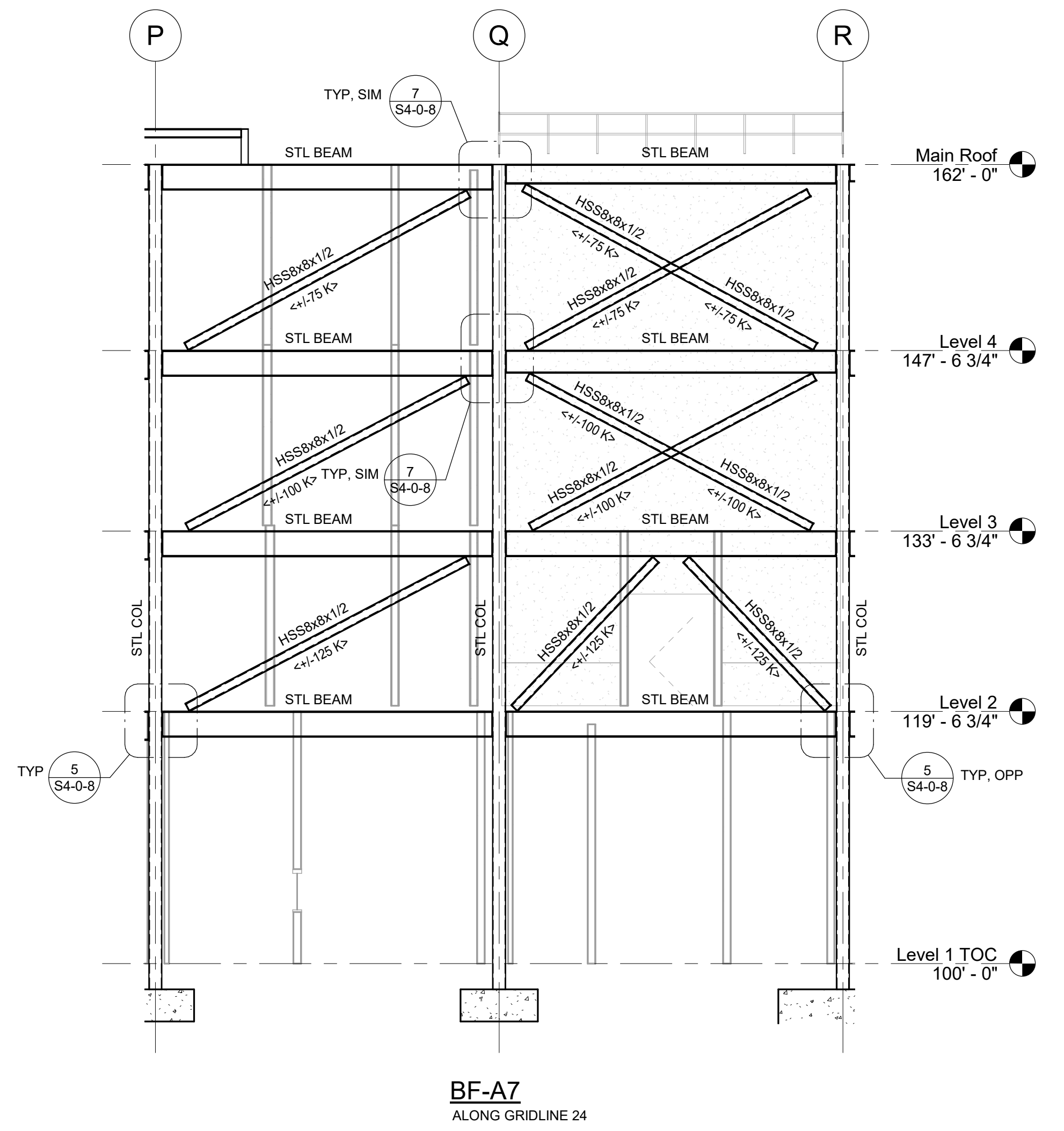
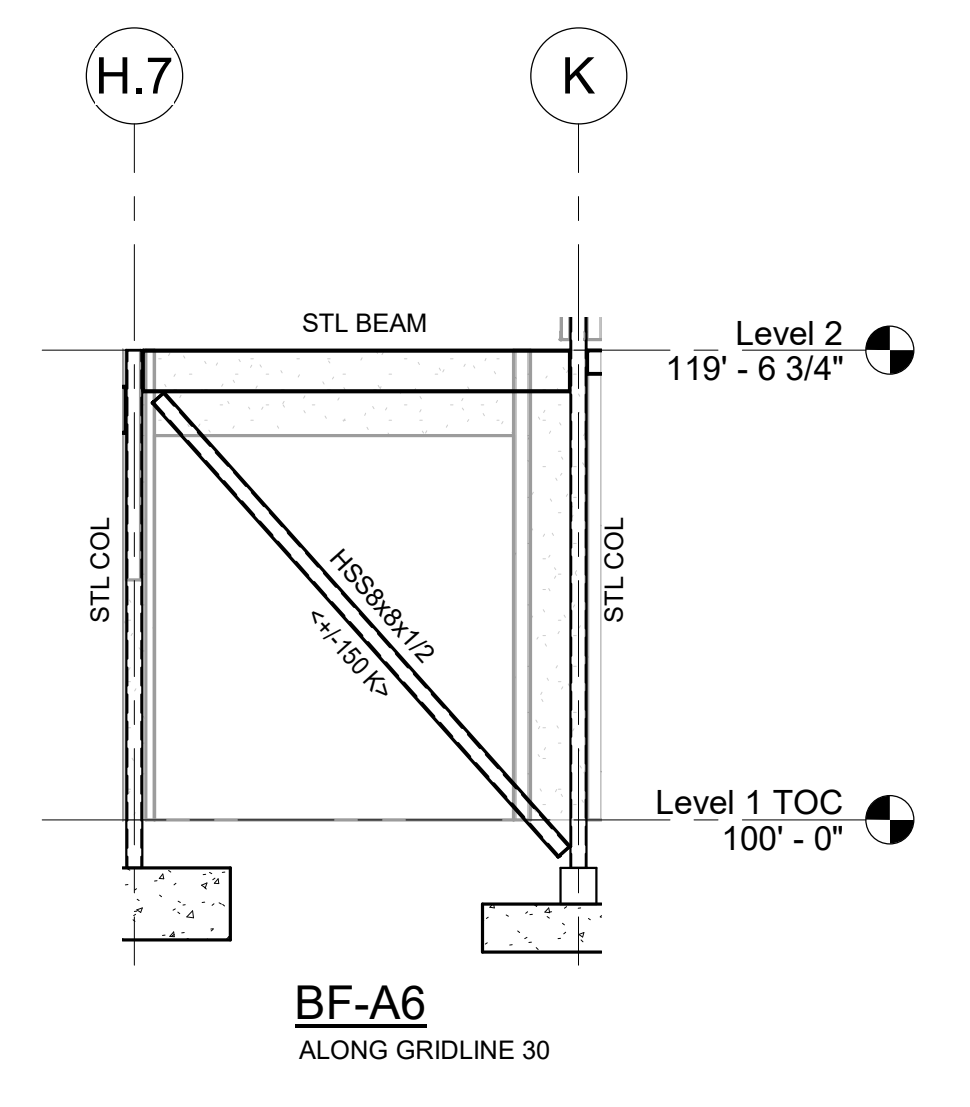
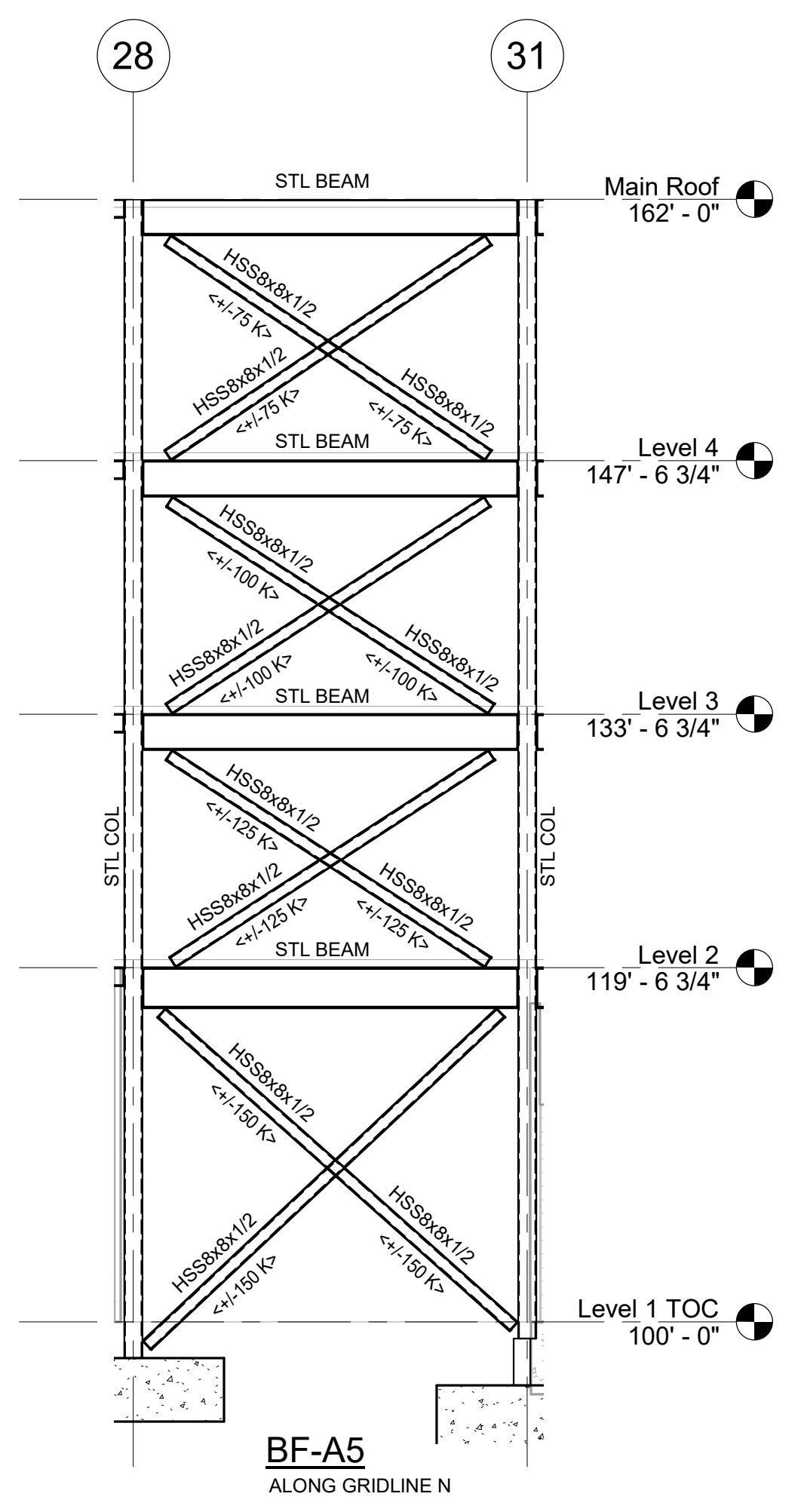
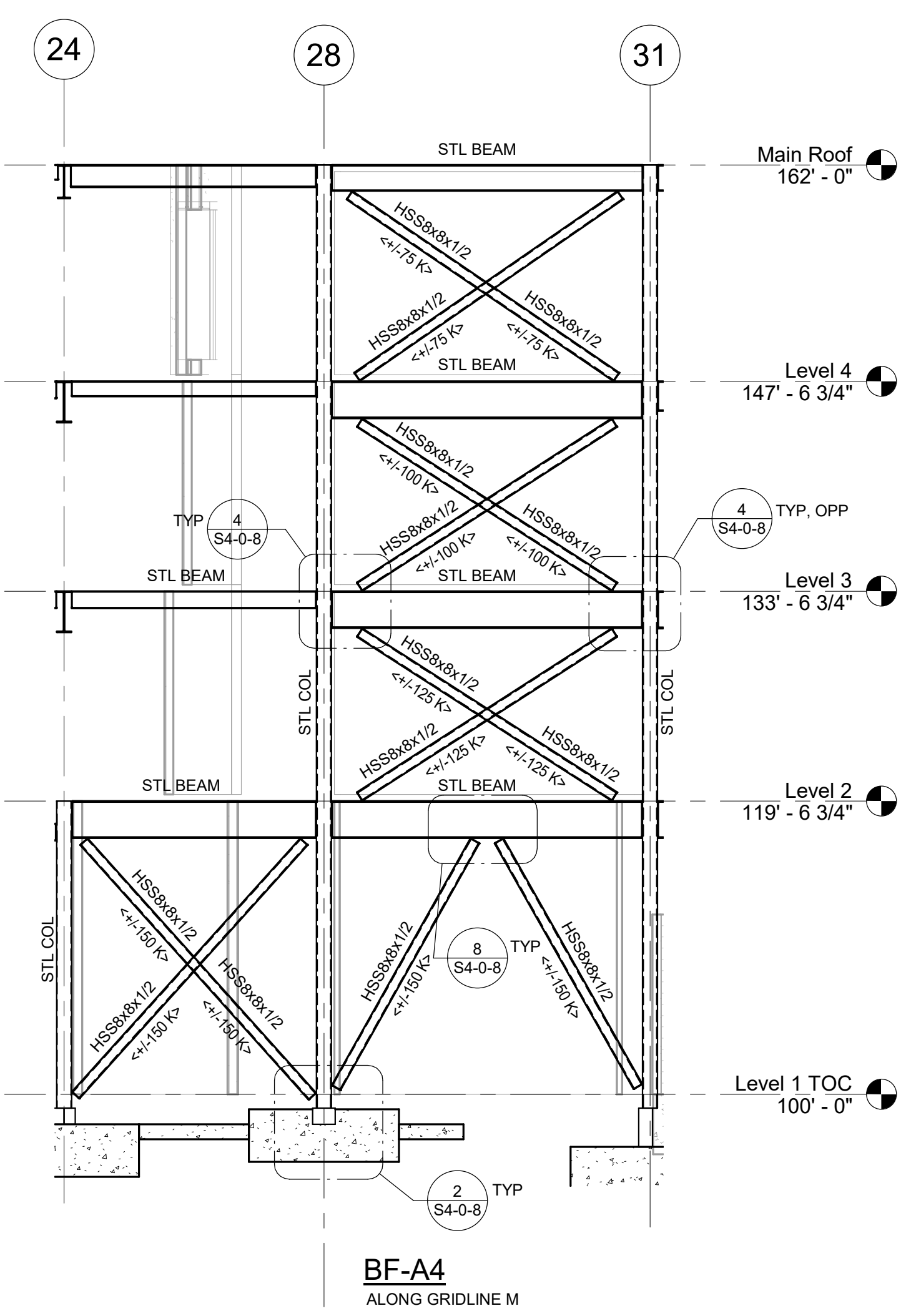
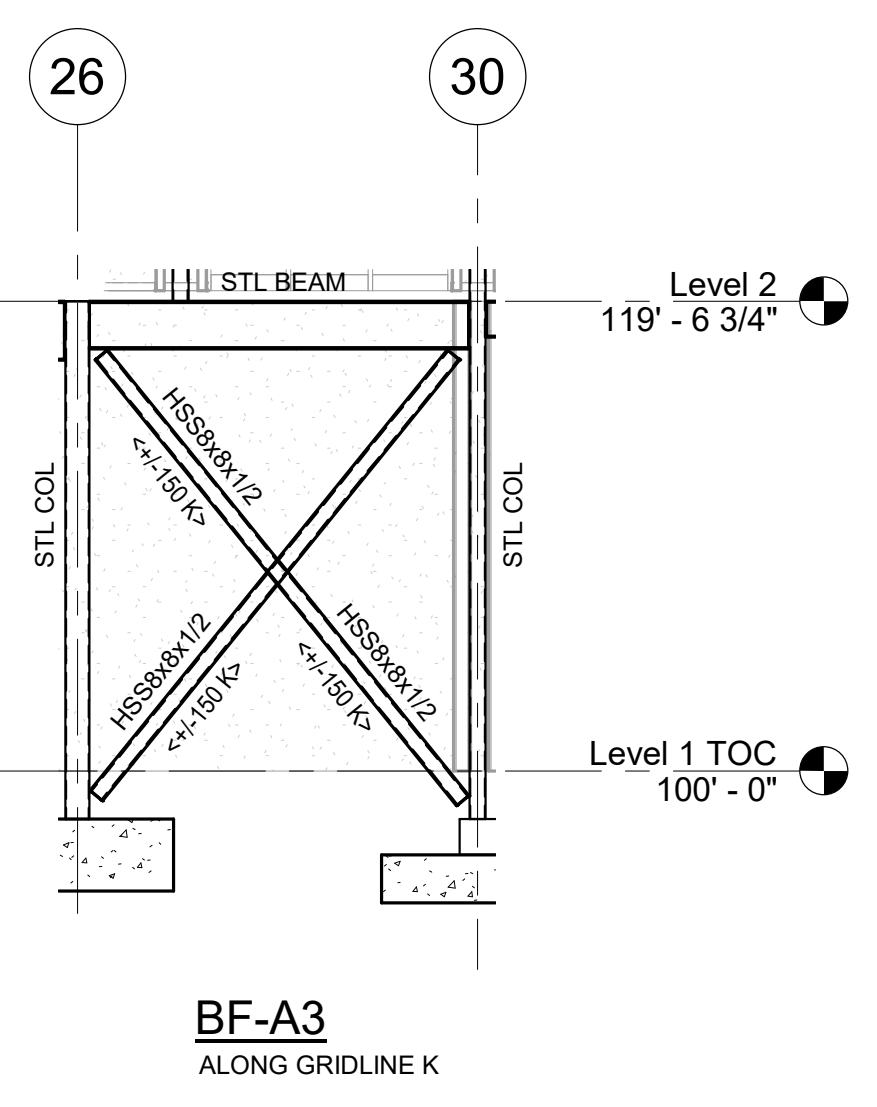
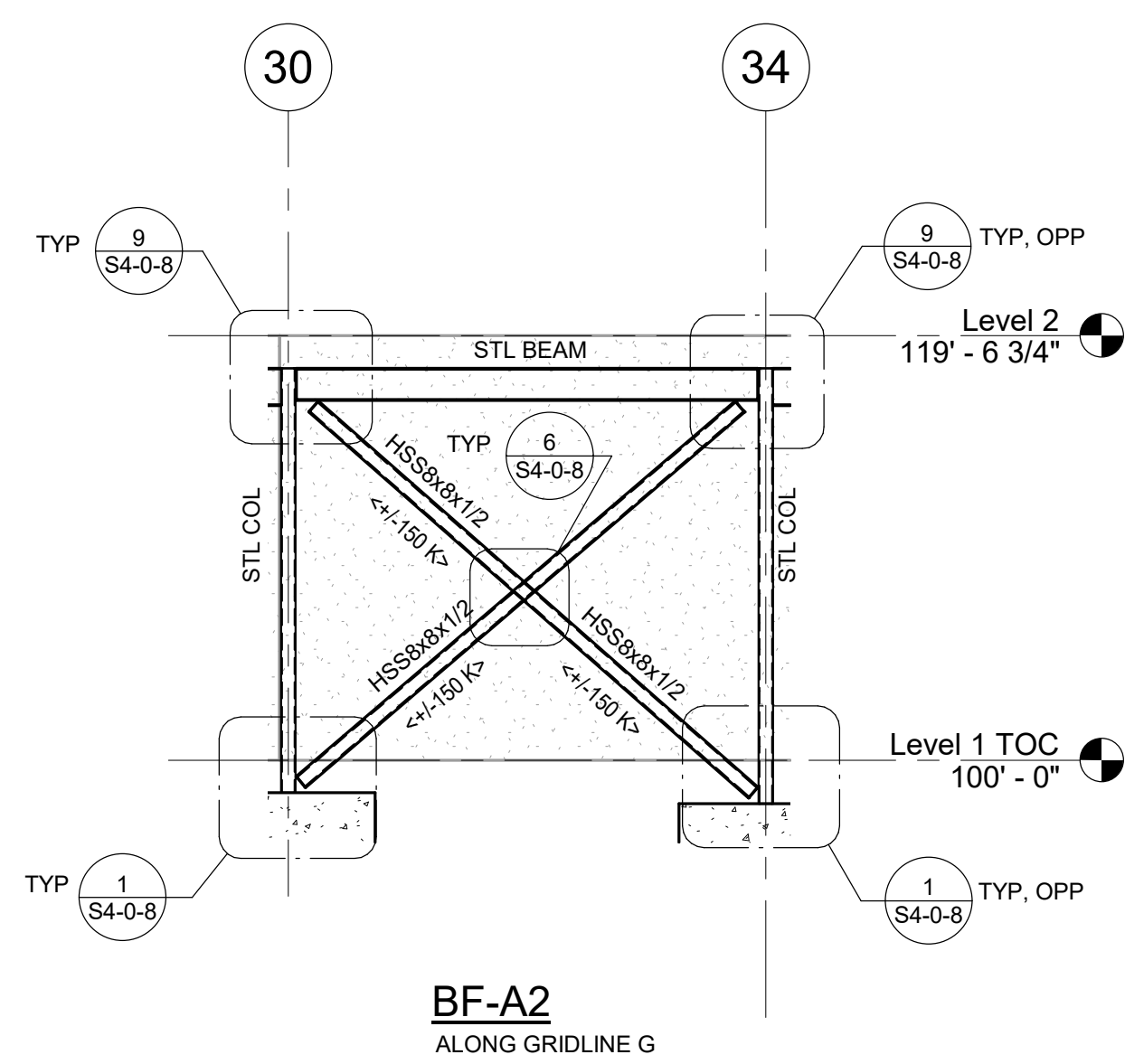


SECTIONS

Scale: As indicated
Job No.: 20202
Drawn By: EDG
Date: 01/13/2023

S3-0-5





- NOTES:**
- 1.) FABRICATOR IS RESPONSIBLE FOR BRACE CONNECTION DESIGN.
 - 2.) ELEVATIONS ARE SCHEMATIC ONLY AND INTENDED TO SHOW CONFIGURATION OF BRACED FRAMES AND BRACE FORCES.
 - 3.) DESIGN DIAGONAL MEMBER CONNECTIONS FOR TWICE THE AXIAL DESIGN FORCE SHOWN BELOW EACH MEMBER <30k> (TENSION OR COMPRESSION). AXIAL DESIGN FORCE IS BASED ON LRFD. USE GENERAL UNIFORM FORCE METHOD FOR CONNECTION DESIGN.
 - 4.) DO NOT WELD TOP END OF DIAGONAL BRACE MEMBERS IN PLACE UNTIL FLOOR SLABS AND ROOFING ARE IN PLACE. WELDS MUST BE FULLY INSPECTED AND APPROVED PRIOR TO PLACING ANY CONCRETE OR INSTALLING OTHER MATERIALS THAT WOULD COVER THE CONNECTIONS.
 - 5.) BOLTED CONNECTIONS IN BRACED FRAMES SHALL BE DESIGNED AS SLIP CRITICAL CONNECTIONS.
 - 6.) SEE PLANS FOR COLUMN AND BEAM SIZES.

DRA

Drumme Rosane Anderson, Inc.
225 Oakland Road
Studio 205
South Windsor, CT 06074

260 Charles Street
Studio 300
Waltham, MA 02453

Planning Architecture Interior
Tel: 817.261.1100
www.drainc.com

NORTHEAST METRO TECH

100 Hemlock Rd.
Wakefield, MA 01880

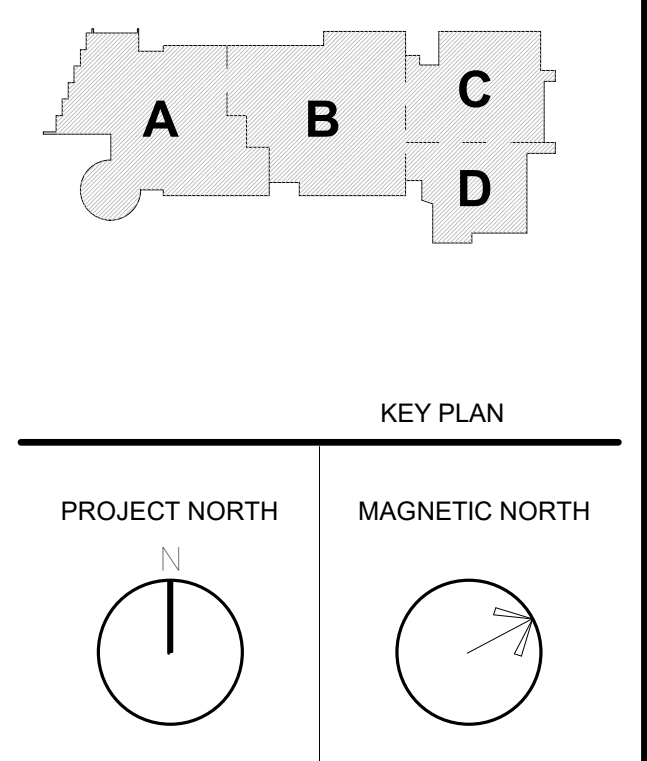
EDG

Engineers Design Group Inc.
Structural Engineers
389 Main Street, Suite 401
Malden, MA 02148
(781)396-9007
EDG@EDGINC.COM

© COPYRIGHT 2021 DRUMMEY ROSANE ANDERSON, INC.

MSBA 60% CD
Submission

01/13/2023



BRACE FRAME ELEVATIONS - AREA A

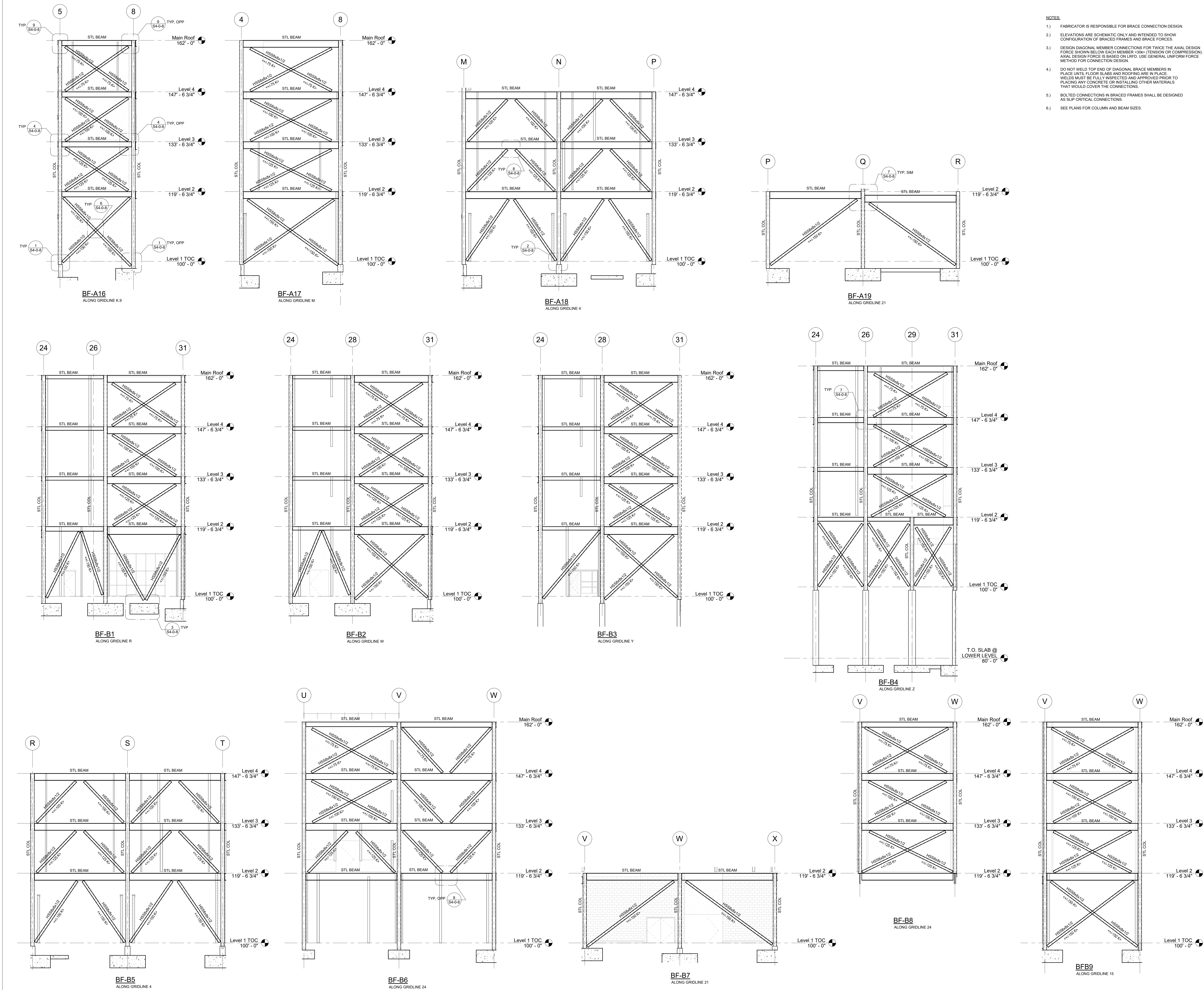
Scale: 1/8" = 1'-0"

Job No.: 20202

Drawn By: EDG

Date: 01/13/2023

S4-0-1



DRA

Drumme Rosane Anderson, Inc.
225 Oakland Road
Studio 205
South Windsor, CT 06074

260 Charles Street
Studio 300
Waltham, MA 02453

Planning Architecture Interior
Tel: 817.261.1100
www.dra.com

NORTHEAST
METRO TECH

100 Hemlock Rd.
Wakefield, MA 01880

EDG

Engineers Design Group Inc.
Structural Engineers
389 Main Street, Suite 401
Malden, MA 02148
(781)396-9007
EDG@EDGINC.COM

MSBA 60% CD
Submission

01/13/2023

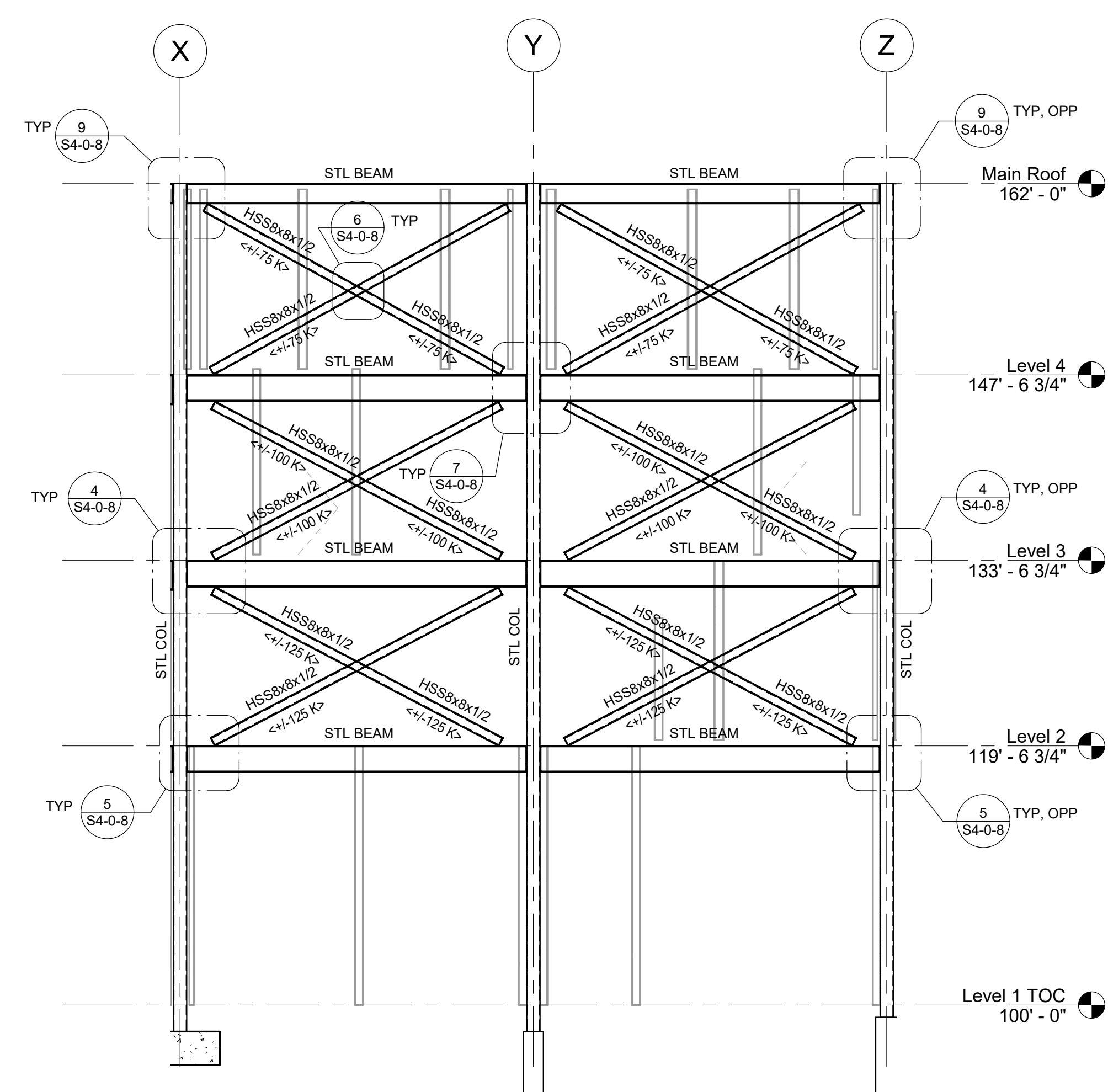
KEY PLAN

PROJECT NORTH
MAGNETIC NORTH

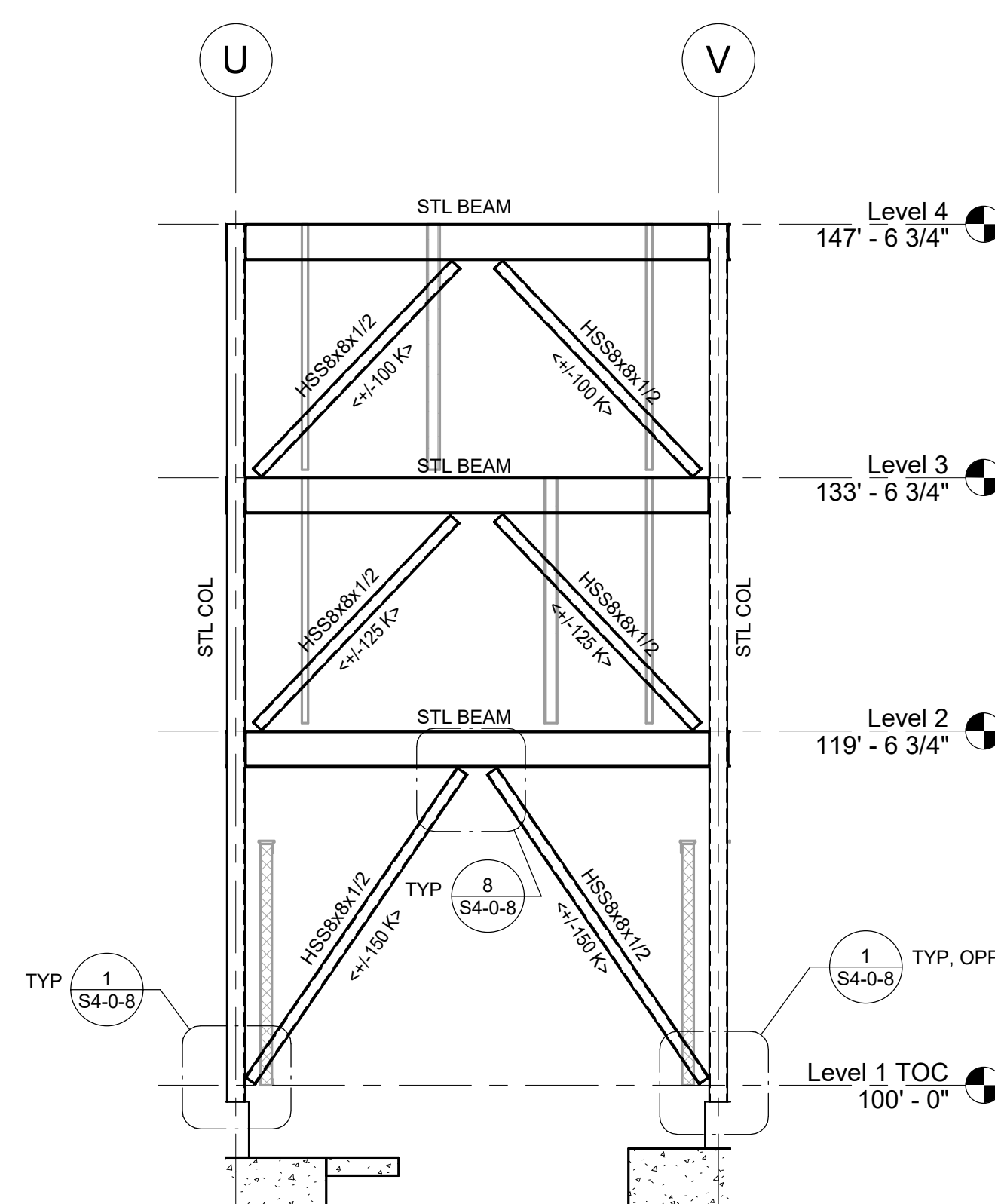
BRACE FRAME
ELEVATION -
AREAS A + B

Scale: 1/8" = 1'-0"
Job No.: 20202
Drawn By: EDG
Date: 01/13/2023

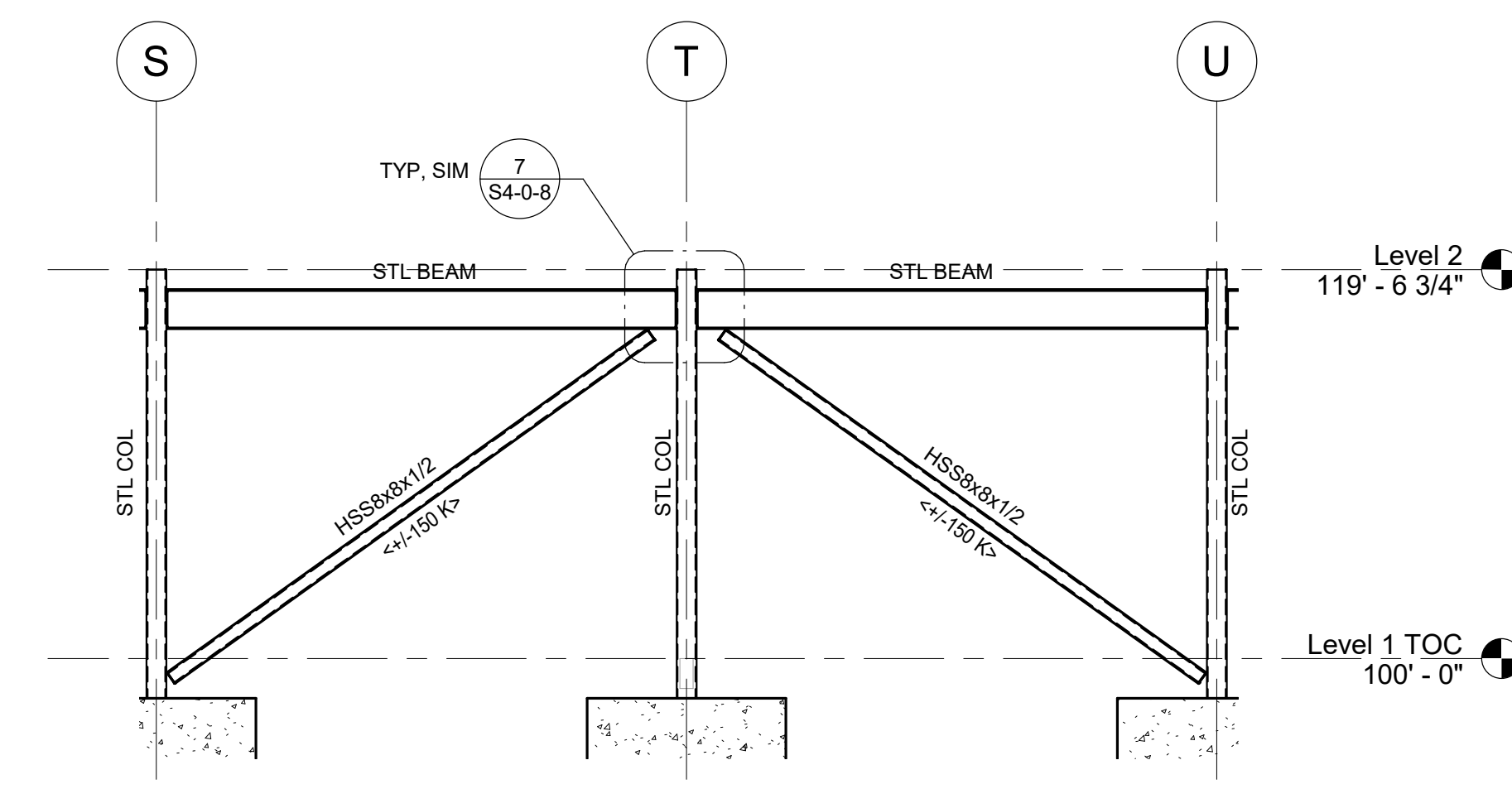
S4-0-2



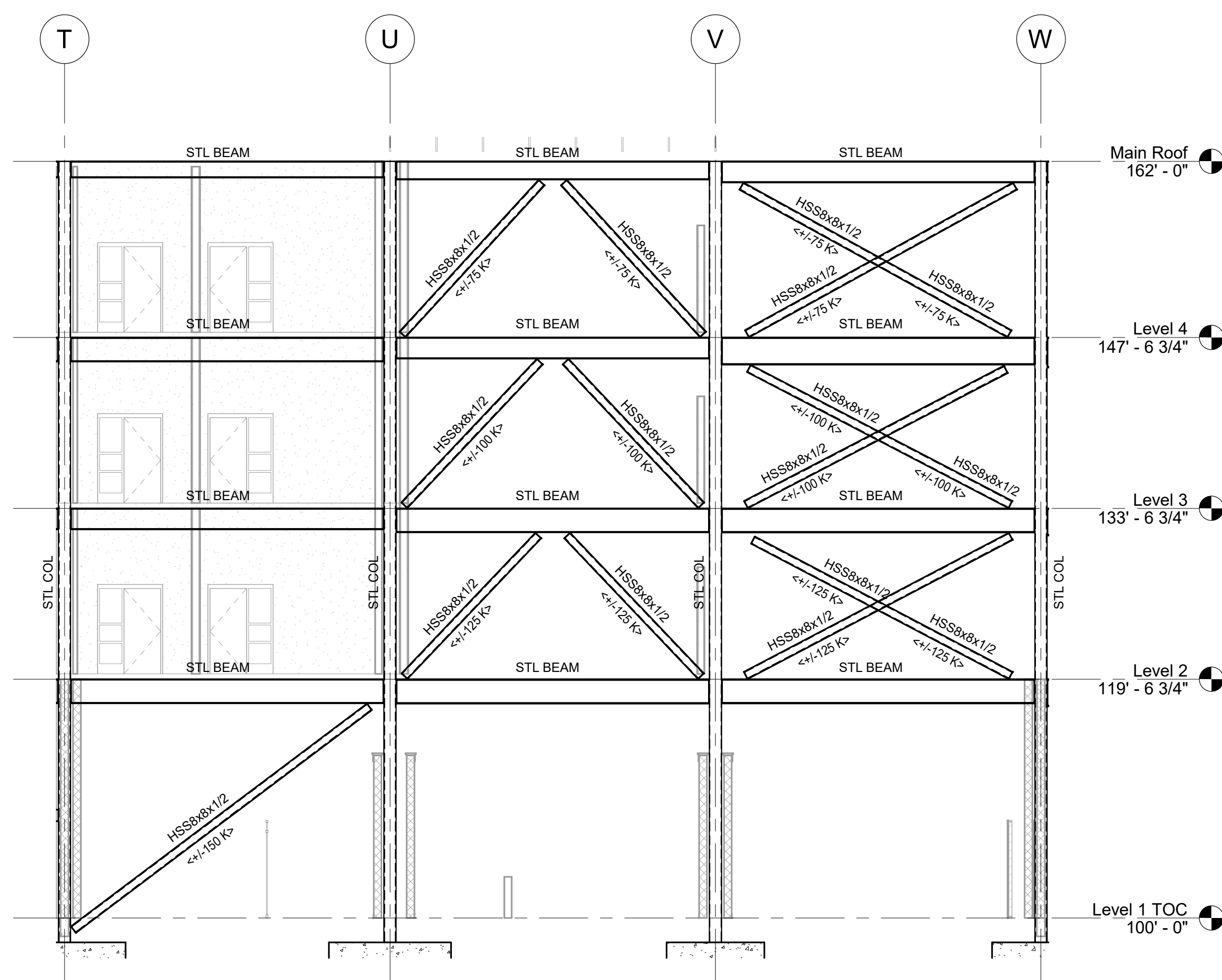
BF-B10
ALONG GRIDLINE 24



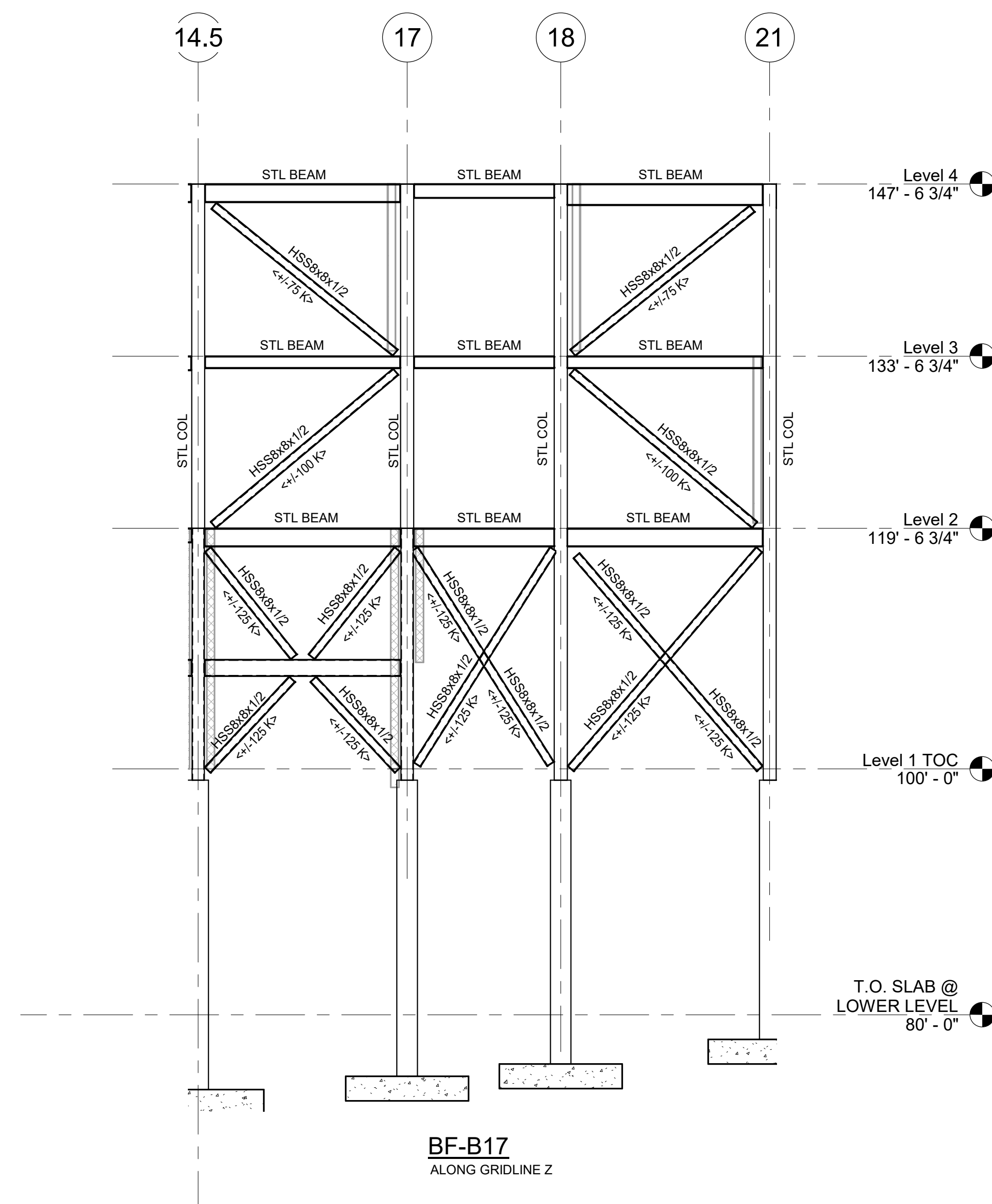
BF-B12
ALONG GRIDLINE 4



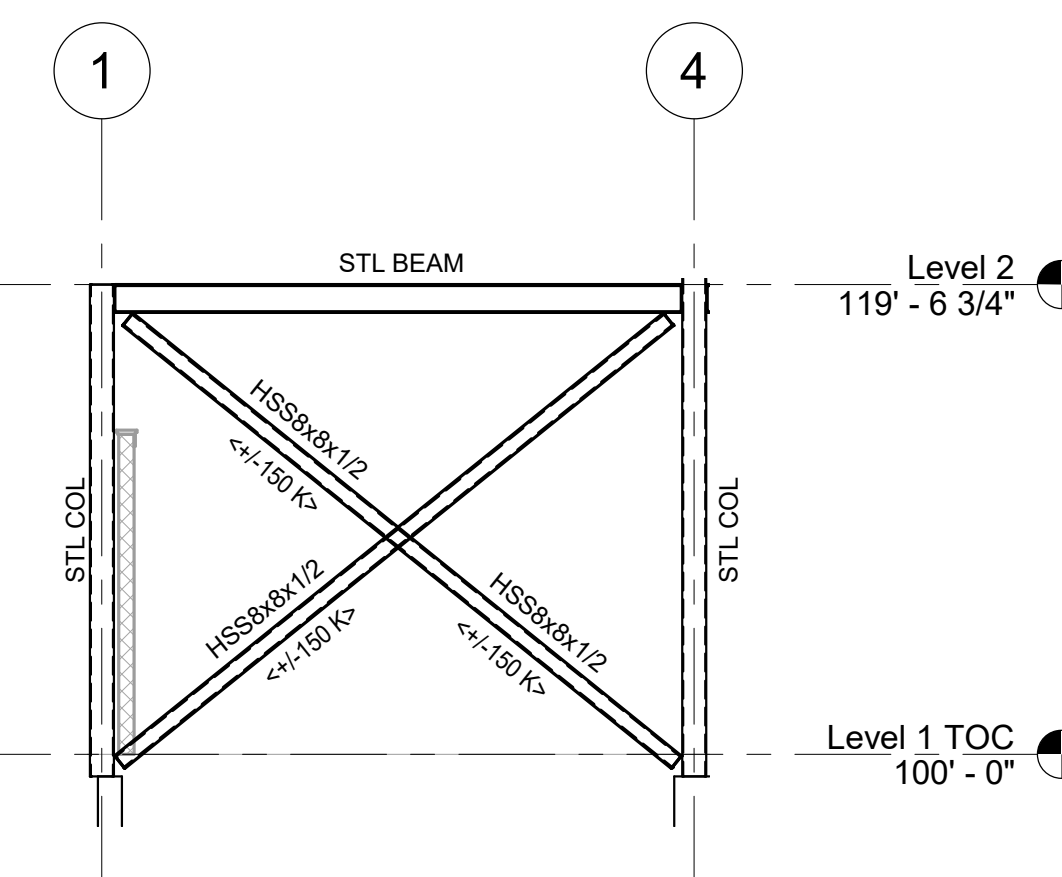
BF-B13
ALONG GRIDLINE 21



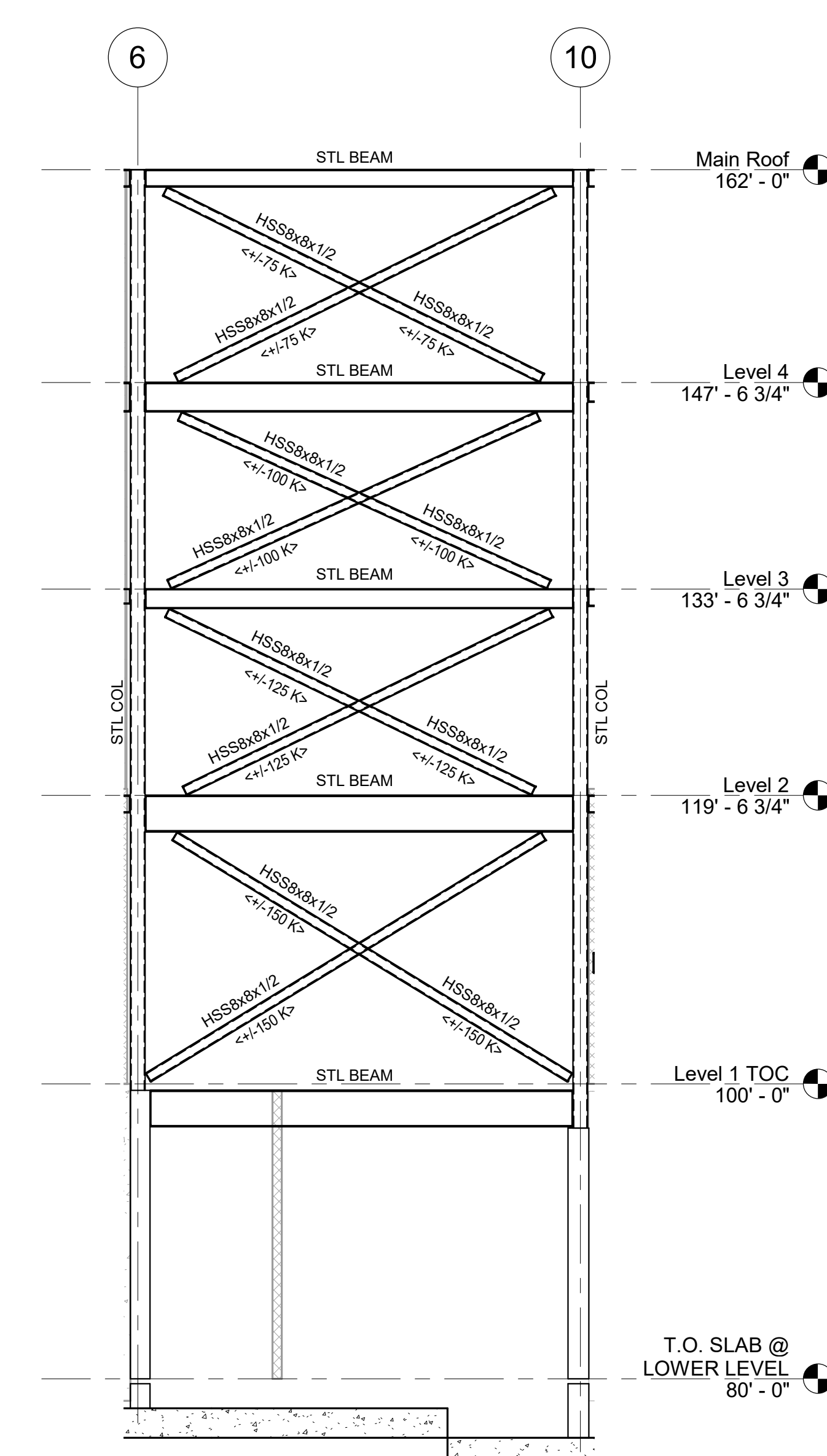
BF-B15
ALONG GRIDLINE 13



BF-B17
ALONG GRIDLINE 2



BF-B18
ALONG GRIDLINE Y 9



BF-B19
ALONG GRIDLINE Y 9

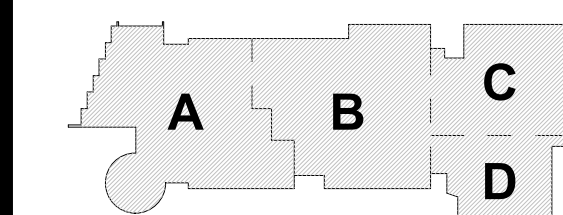
NOTES:

- 1.) FABRICATOR IS RESPONSIBLE FOR BRACE CONNECTION DESIGN.
- 2.) ELEVATIONS ARE SCHEMATIC ONLY AND INTENDED TO SHOW CONFIGURATION OF BRACED FRAMES AND BRACE FORCES.
- 3.) DESIGN DIAGONAL MEMBER CONNECTIONS FOR TWICE THE AXIAL DESIGN FORCE SHOWN BELOW EACH MEMBER <30K> (TENSION OR COMPRESSION). AXIAL DESIGN FORCE IS BASED ON L.R.T.D. USE GENERAL UNIFORM FORCE METHOD FOR CONNECTION DESIGN.
- 4.) DO NOT WELD TOP END OF DIAGONAL BRACE MEMBERS IN PLACE UNTIL FLOOR SLABS AND ROOFING ARE IN PLACE. WELDS MUST BE FULLY INSPECTED AND APPROVED PRIOR TO PLACING ANY CONCRETE OR INSTALLING OTHER MATERIALS THAT WOULD COVER THE CONNECTIONS.
- 5.) BOLTED CONNECTIONS IN BRACED FRAMES SHALL BE DESIGNED AS SLIP CRITICAL CONNECTIONS.
- 6.) SEE PLANS FOR COLUMN AND BEAM SIZES.

© COPYRIGHT 2021 DRUMMEY ROSANE ANDERSON, INC.

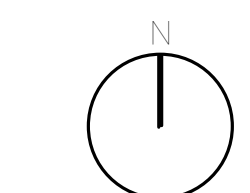
MSBA 60% CD
Submission

01/13/2023

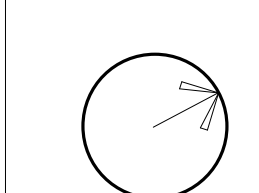


KEY PLAN

PROJECT NORTH



MAGNETIC NORTH



**BRACE FRAME
ELEVATION -
AREA B**

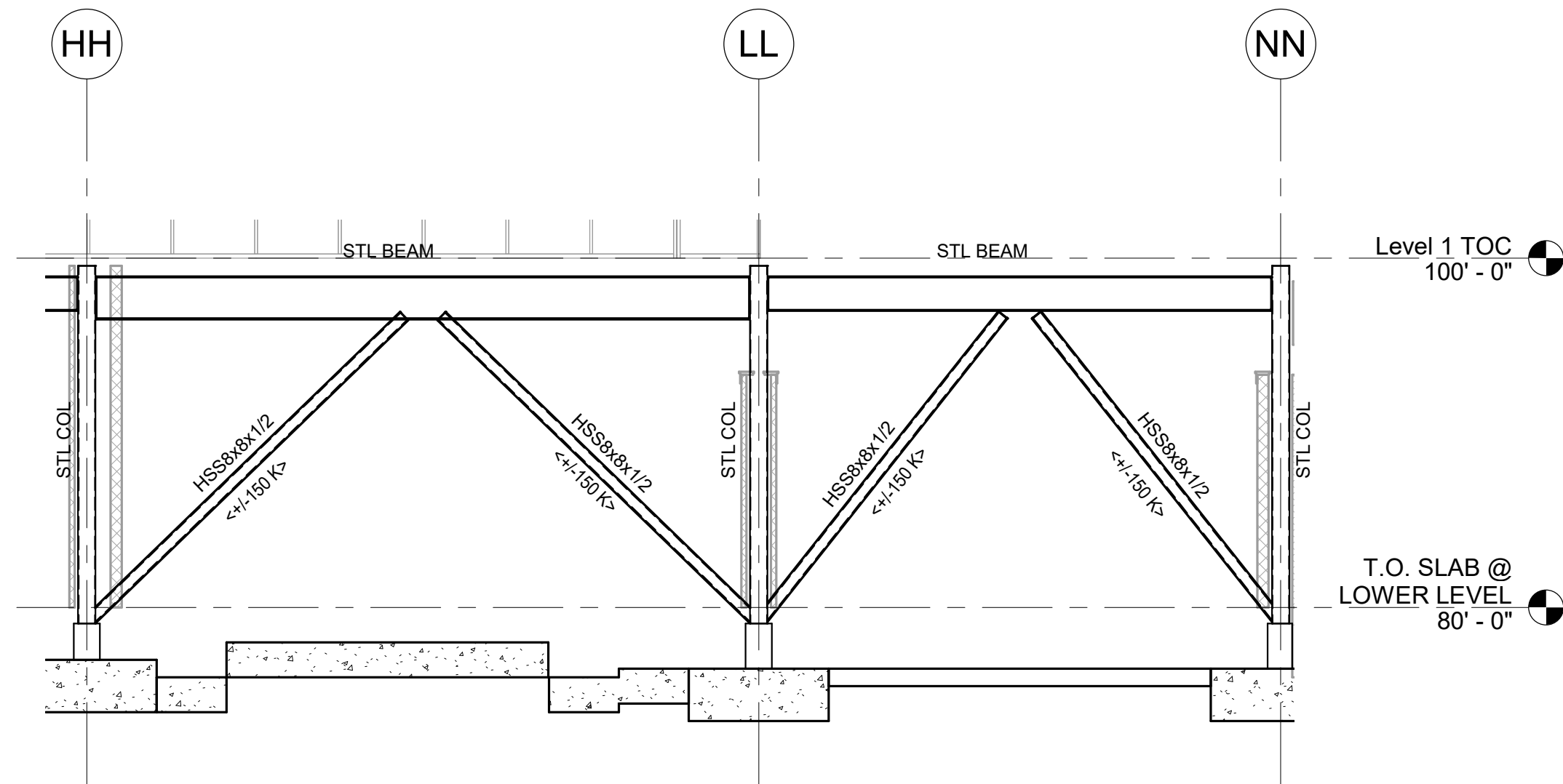
Scale: 1/8" = 1'-0"

Job No.: 20202

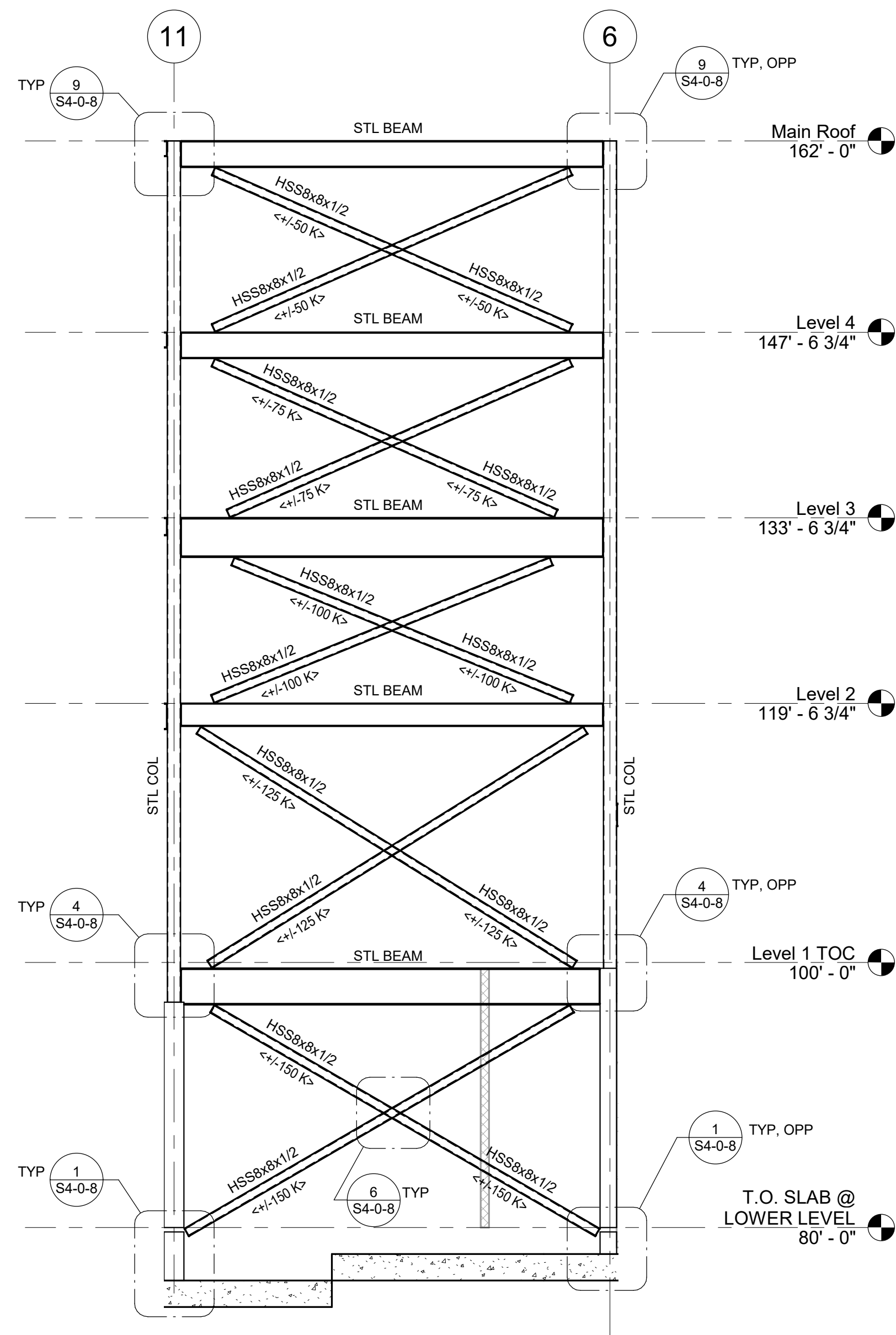
Drawn By: EDG

Date: 01/13/2023

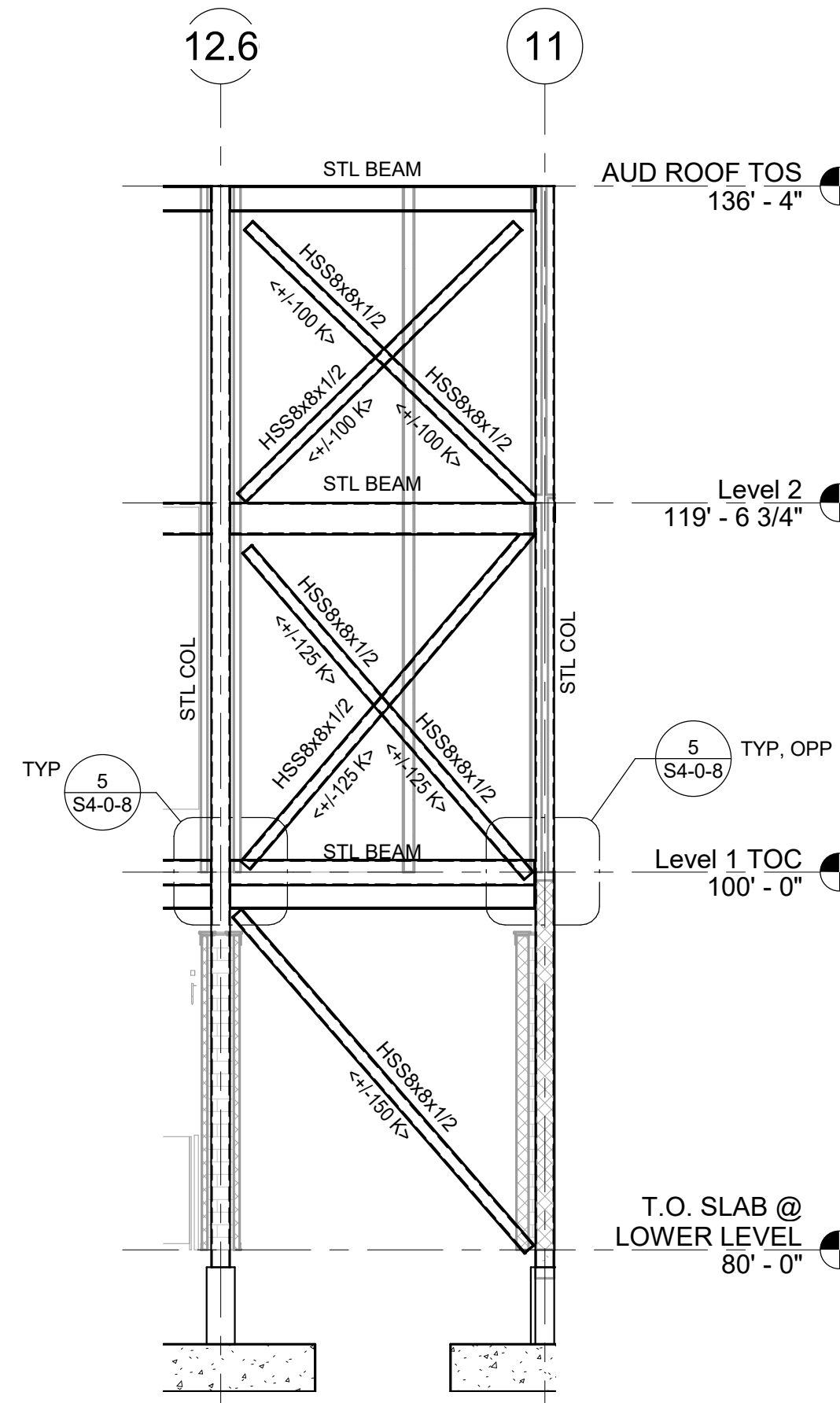
S4-0-3



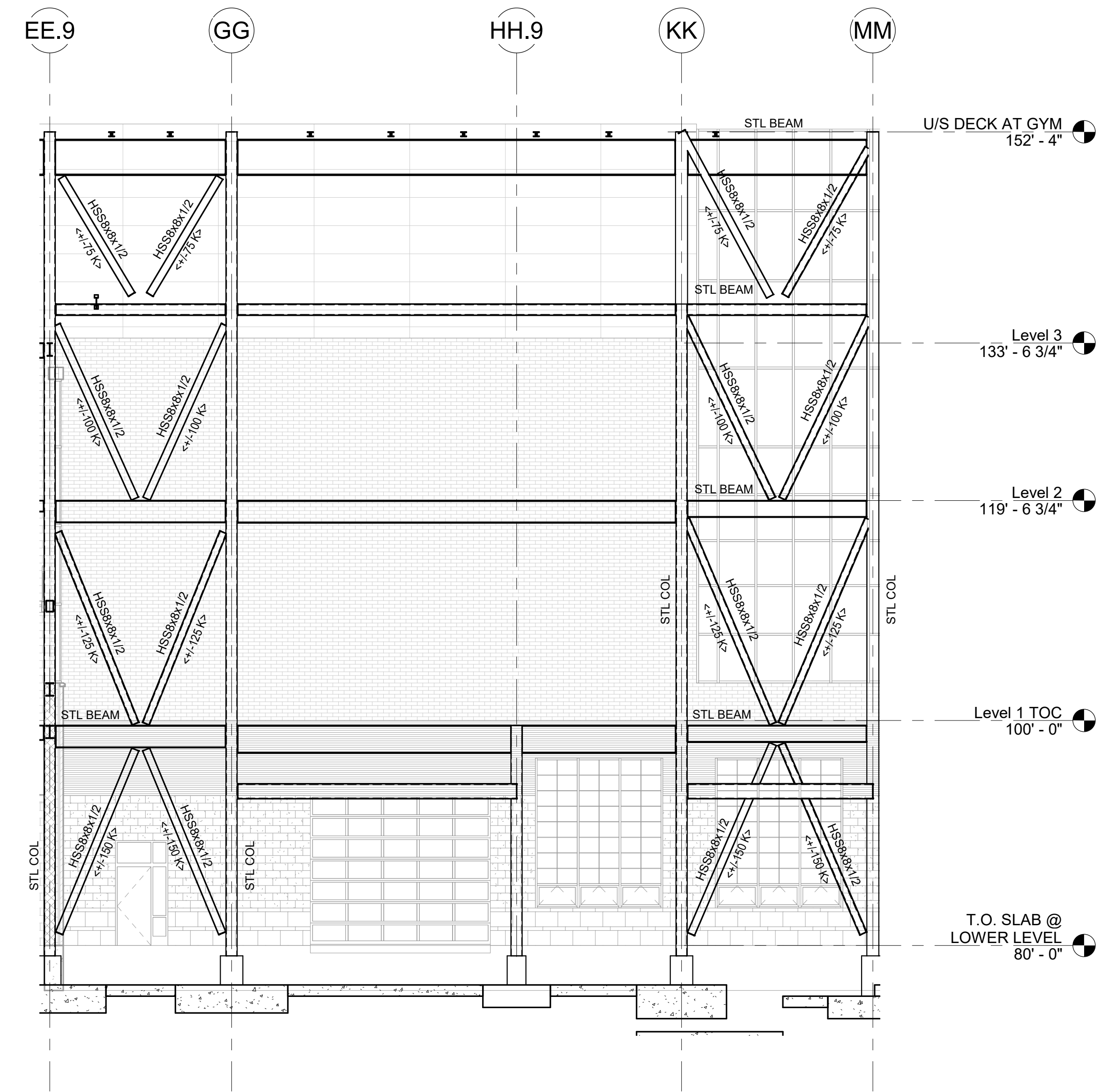
BF-C1
ALONG GRIDLINE 2



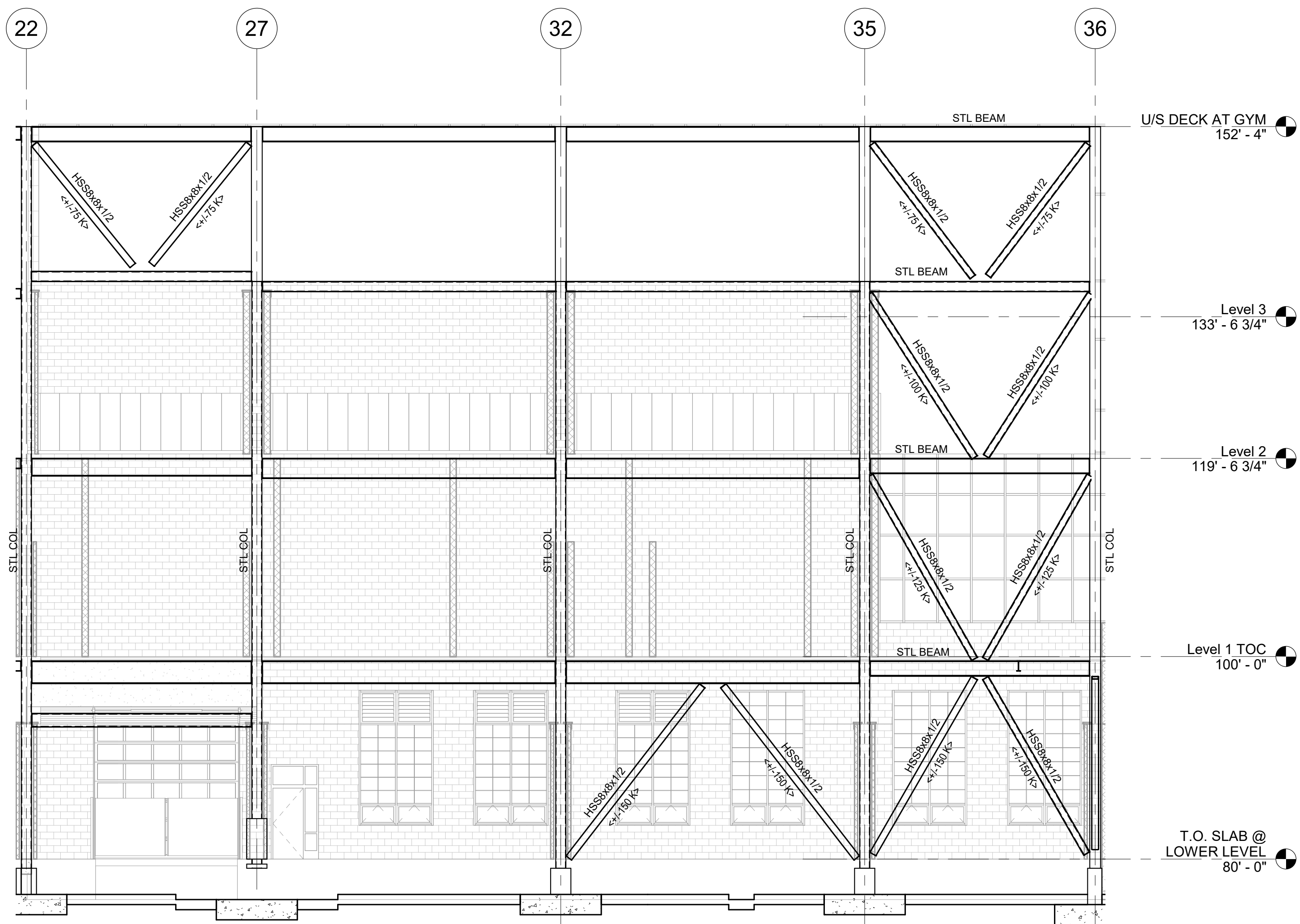
BF-C2
ALONG GRIDLINE AA



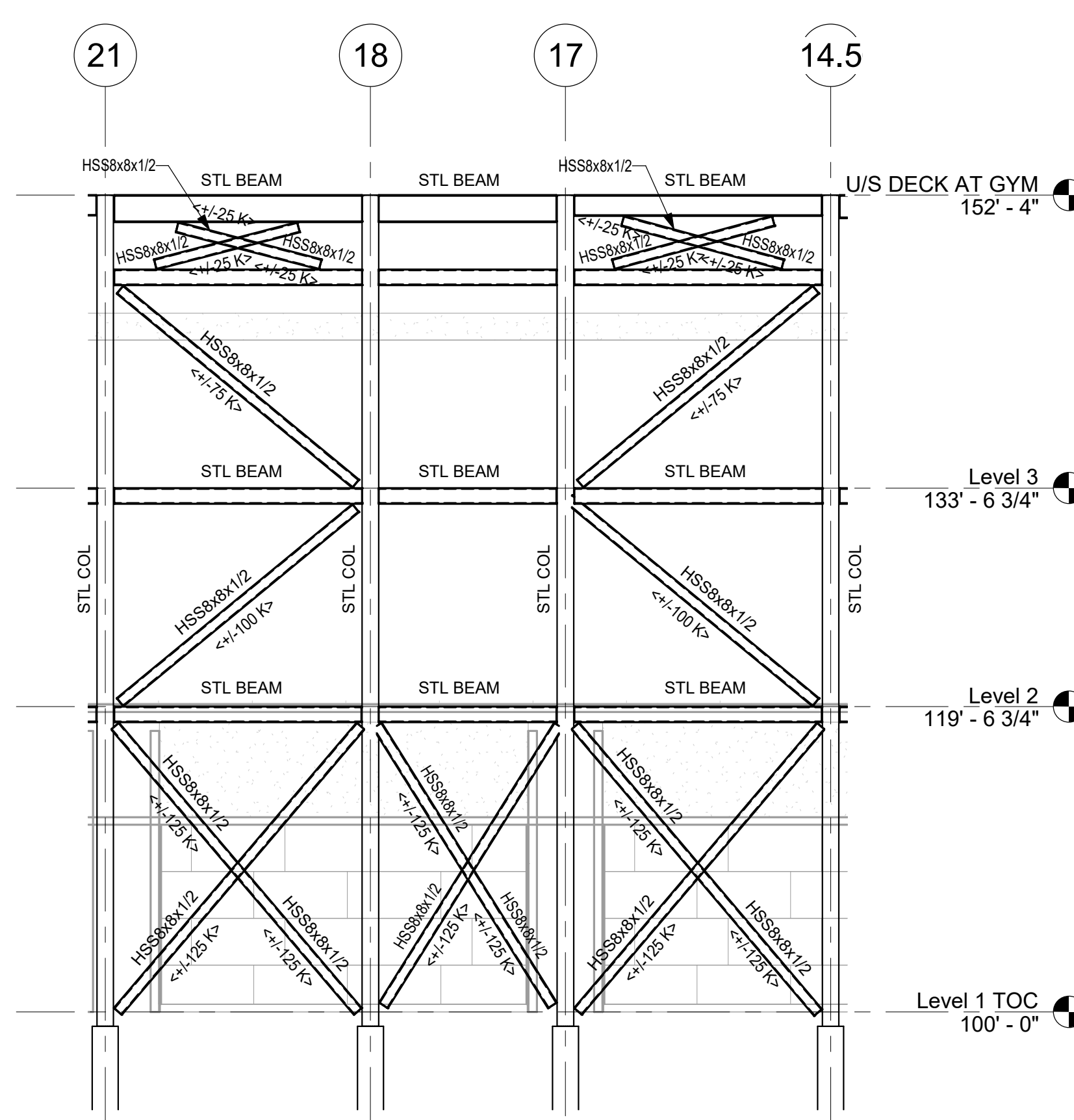
BF-C3
ALONG GRIDLINE PP



BF-D1 AND SW-D3
ALONG GRIDLINE 36



BF-D2 AND SW-D2
ALONG GRIDLINE MM



BF-D4
ALONG GRIDLINE AA

DRA

Drumme Rosane Anderson, Inc.
225 Oakland Road
Studio 205
South Windsor, CT 06074
Planning Architecture Interior
Tel: 817.261.1100
www.dra.com

**NORTHEAST
METRO TECH**

100 Hemlock Rd.
Wakefield, MA 01880

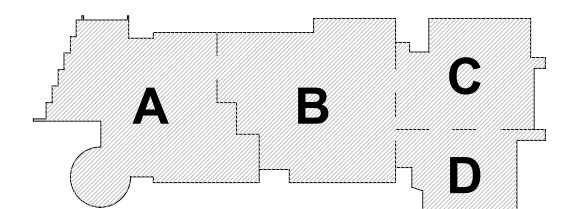
EDG

Engineers Design Group Inc.
Structural Engineers
389 Main Street, Suite 401
Malden, MA 02148
(781)396-9007
EDG@EDGINC.COM

© COPYRIGHT 2021 DRUMMEY ROSANE ANDERSON, INC.

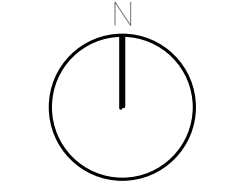
MSBA 60% CD
Submission

01/13/2023

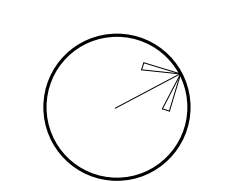


KEY PLAN

PROJECT NORTH



MAGNETIC NORTH



**BRACED FRAME
ELEVATION C +
D**

Scale: 1/8" = 1'-0"

Job No.: 20202

Drawn By: EDG

Date: 01/13/2023

S4-0-4

NOTES:

- 1.) FABRICATOR IS RESPONSIBLE FOR BRACE CONNECTION DESIGN.
- 2.) ELEVATIONS ARE SCHEMATIC ONLY AND INTENDED TO SHOW CONFIGURATION OF BRACED FRAMES AND BRACE FORCES.
- 3.) DESIGN DIAGONAL MEMBER CONNECTIONS FOR TWICE THE AXIAL DESIGN FORCE SHOWN BELOW EACH MEMBER. (TENSION OR COMPRESSION). AXIAL DESIGN FORCE IS BASED ON LRFD. USE GENERAL UNIFORM FORCE METHOD FOR CONNECTION DESIGN.
- 4.) DO NOT WELD TOP END OF DIAGONAL BRACE MEMBERS IN PLACE UNTIL FLOOR SLABS AND ROOFING ARE IN PLACE. WELDS MUST BE FULLY INSPECTED AND APPROVED PRIOR TO PLACING ANY CONCRETE OR INSTALLING OTHER MATERIALS THAT WOULD COVER THE CONNECTIONS.
- 5.) BOLTED CONNECTIONS IN BRACED FRAMES SHALL BE DESIGNED AS SLIP CRITICAL CONNECTIONS.
- 6.) SEE PLANS FOR COLUMN AND BEAM SIZES.

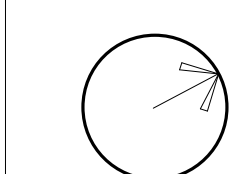
100 Hemlock Rd,
Wakefield, MA 01880



01/13/2023



MAGNETIC NORTH



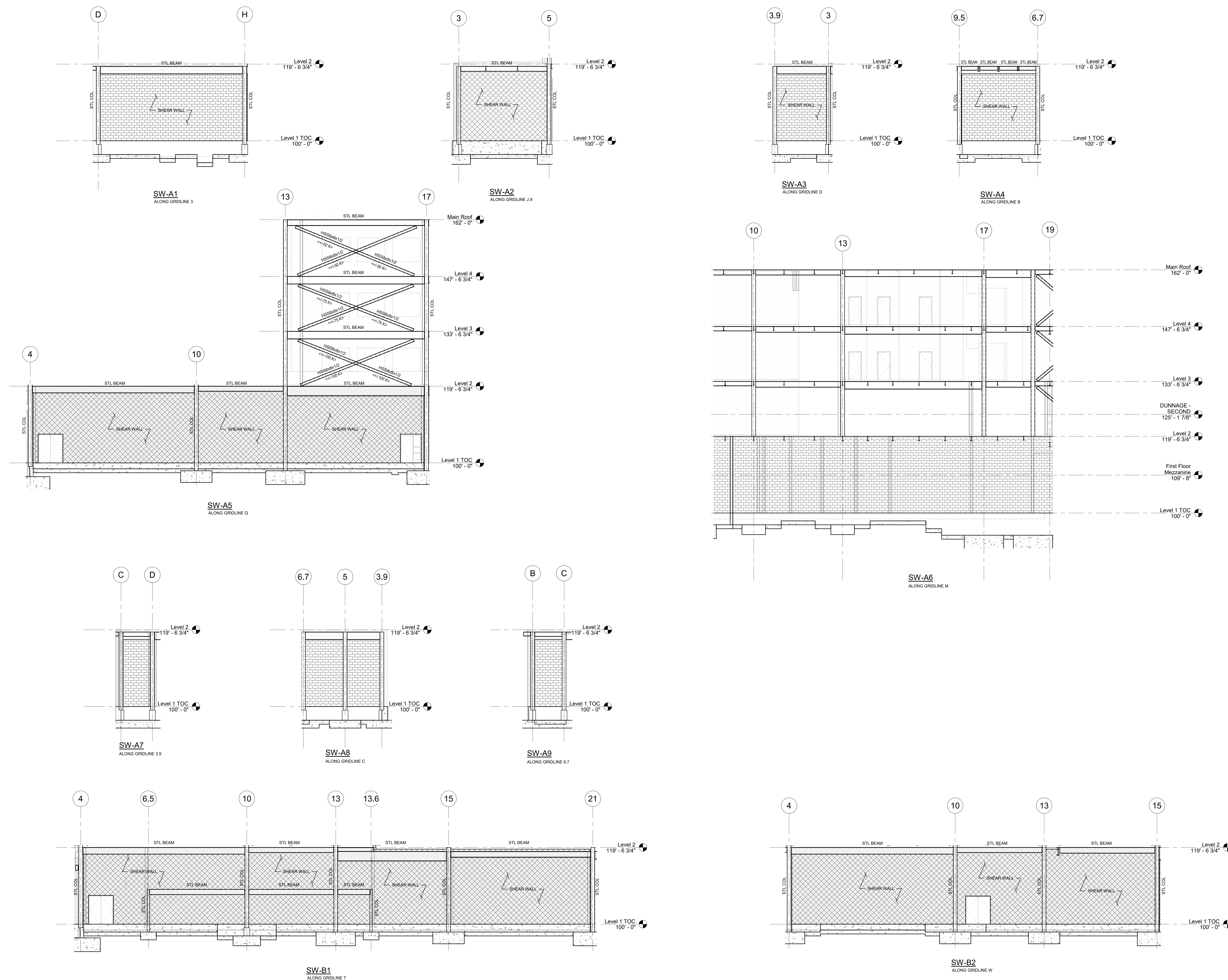
Scale: $1/8" = 1'-0"$

Job No: 20202

Drawn By: EDC

Date: 01/13/2023

S4-0-5



DRA

Drumme Rosane Anderson, Inc.
225 Oakland Road
Studio 205
South Windsor, CT 06074
Tel: 817.221.1100
www.dra.com

260 Charles Street
Studio 300
Waltham, MA 02453
Tel: 817.221.1100
www.dra.com

NORTHEAST
METRO TECH

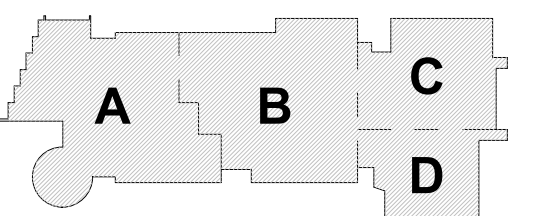
100 Hemlock Rd.
Wakefield, MA 01880

EDG
Engineers Design Group Inc.
Structural Engineers
389 Main Street, Suite 401
Malden, MA 02148
(781)396-9007
EDG@EDGINC.COM

© COPYRIGHT 2021 DRUMME ROSANE ANDERSON, INC.

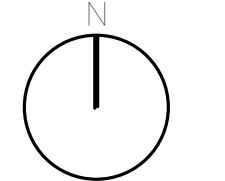
MSBA 60% CD
Submission

01/13/2023

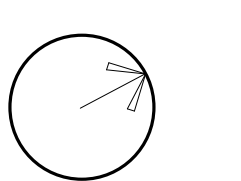


KEY PLAN

PROJECT NORTH



MAGNETIC NORTH



SHEAR WALLS

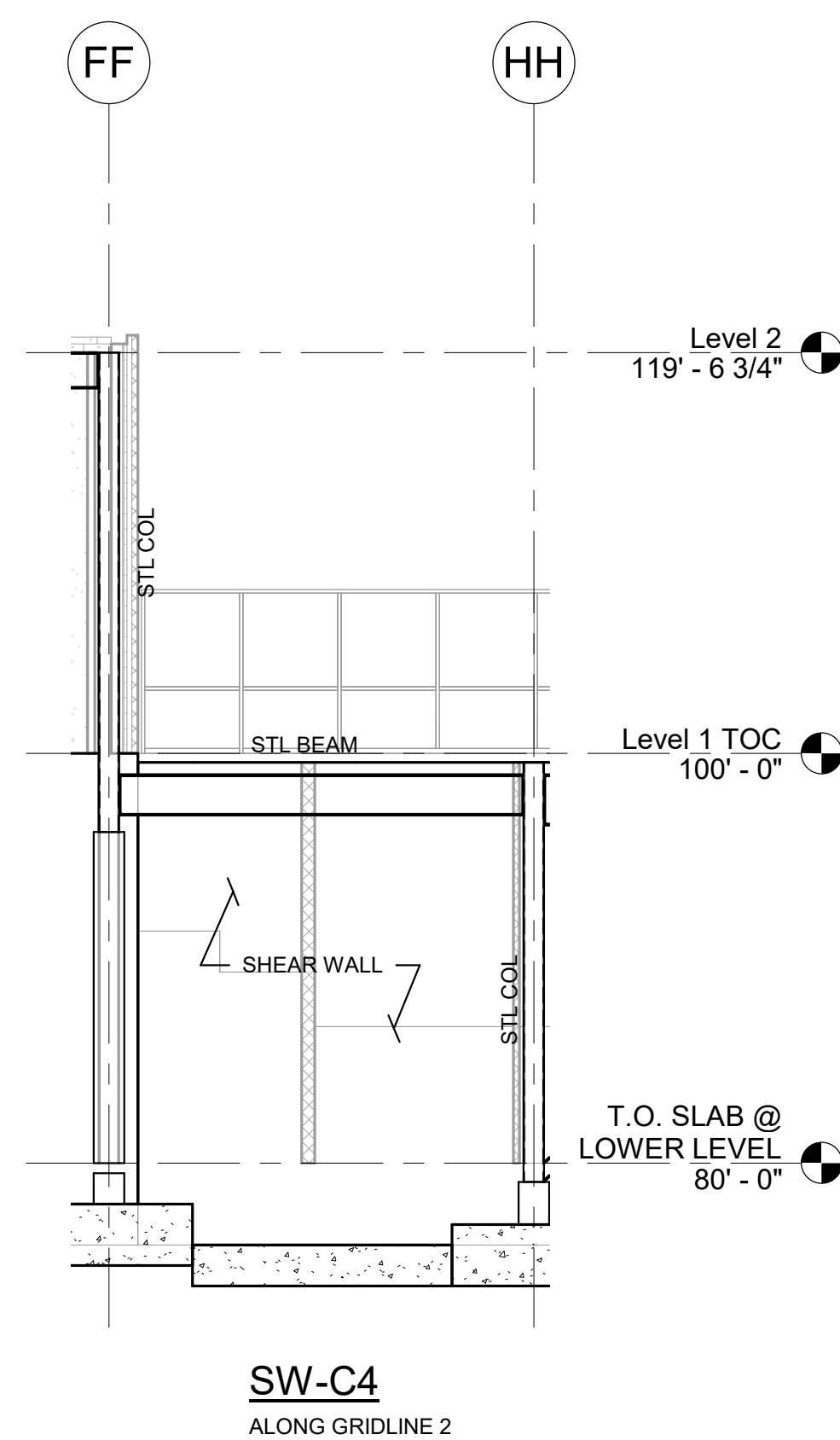
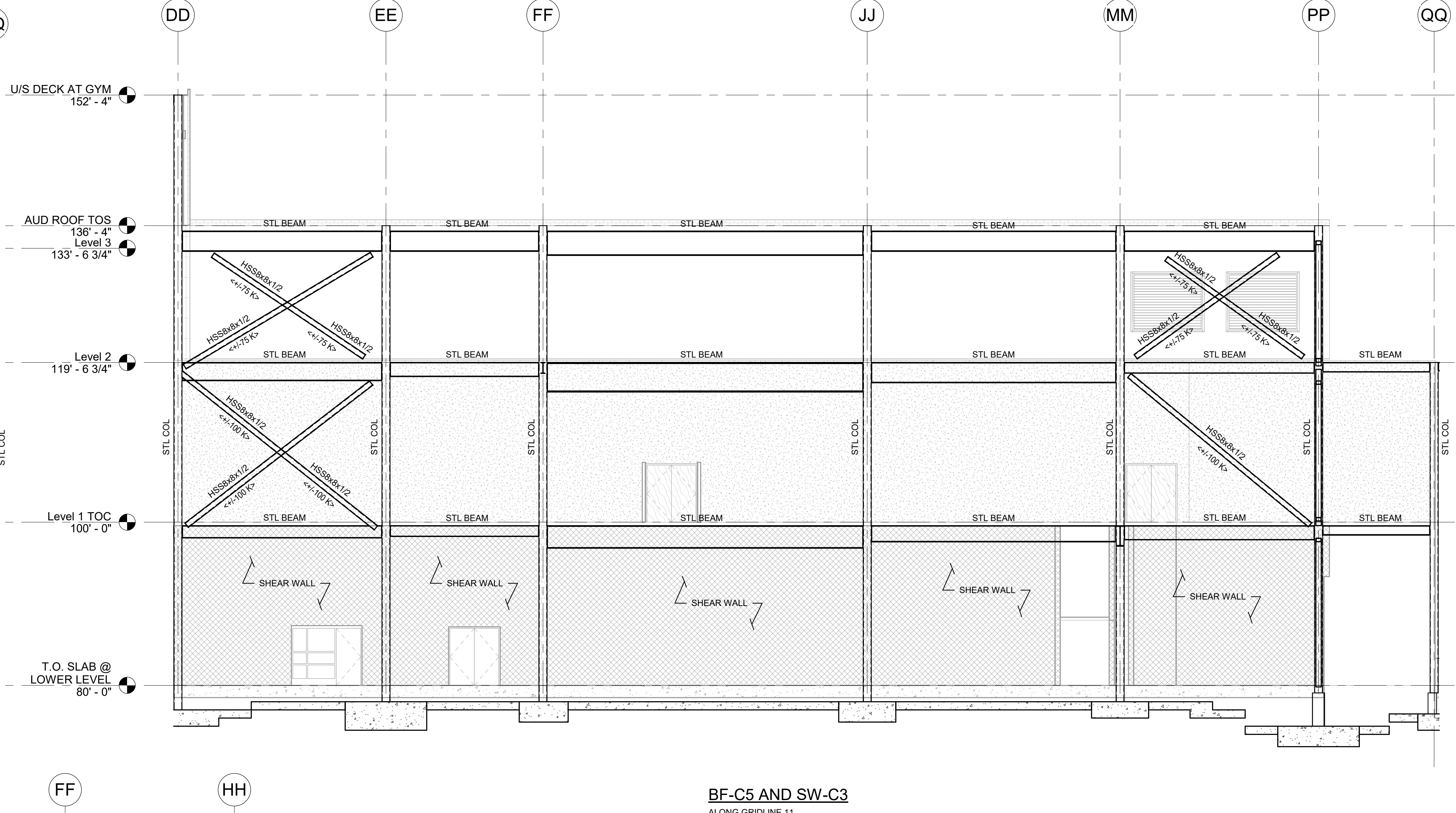
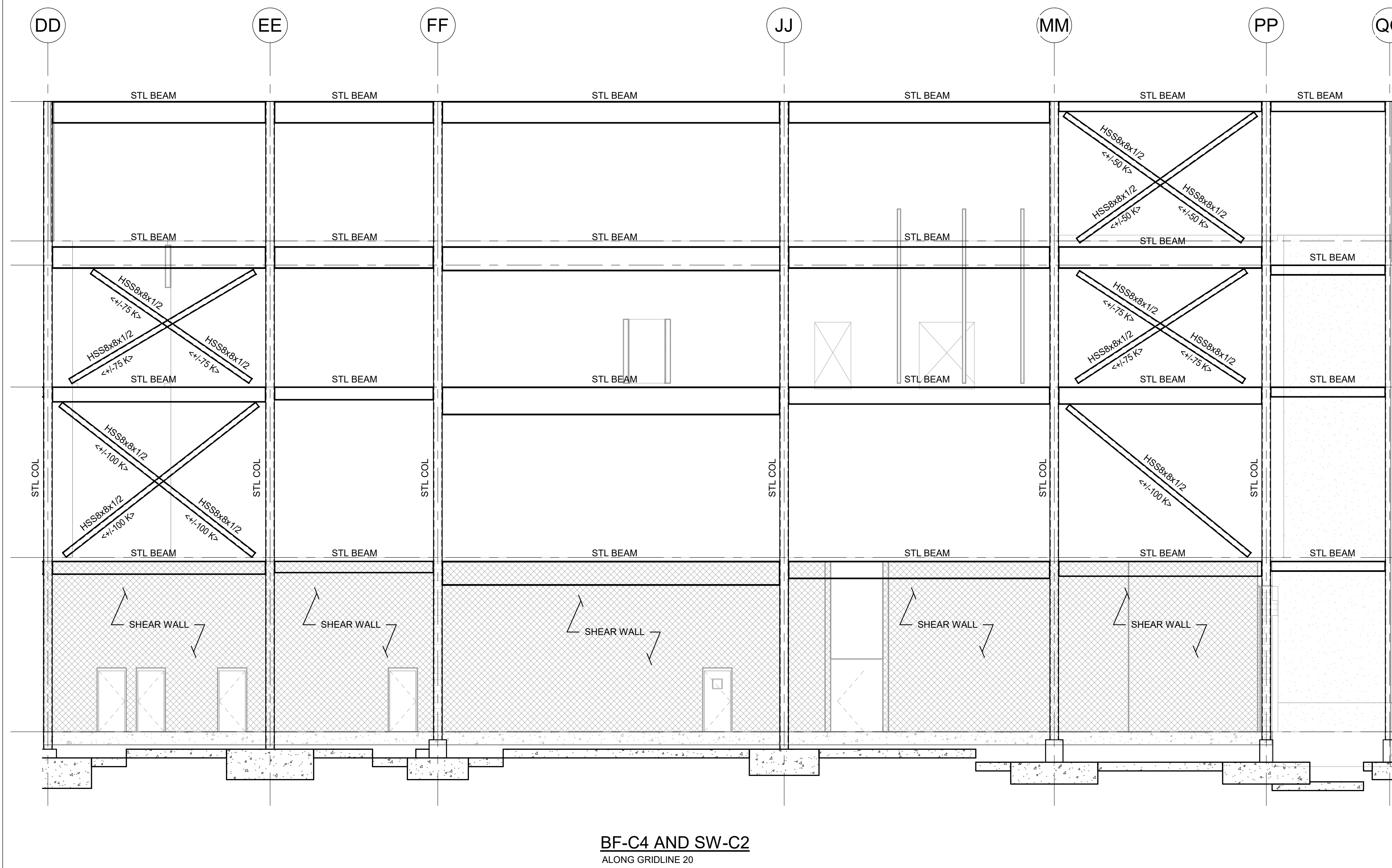
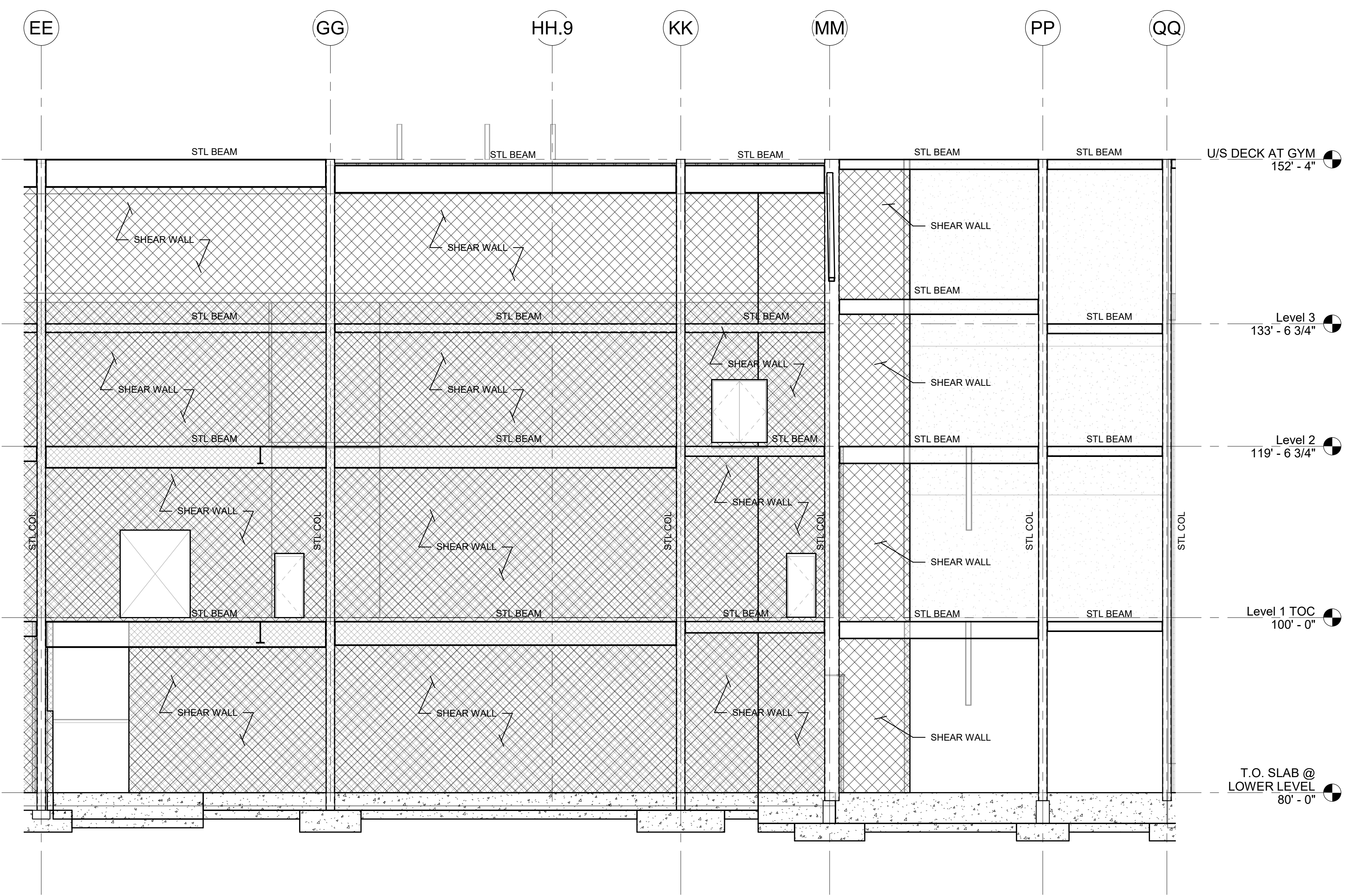
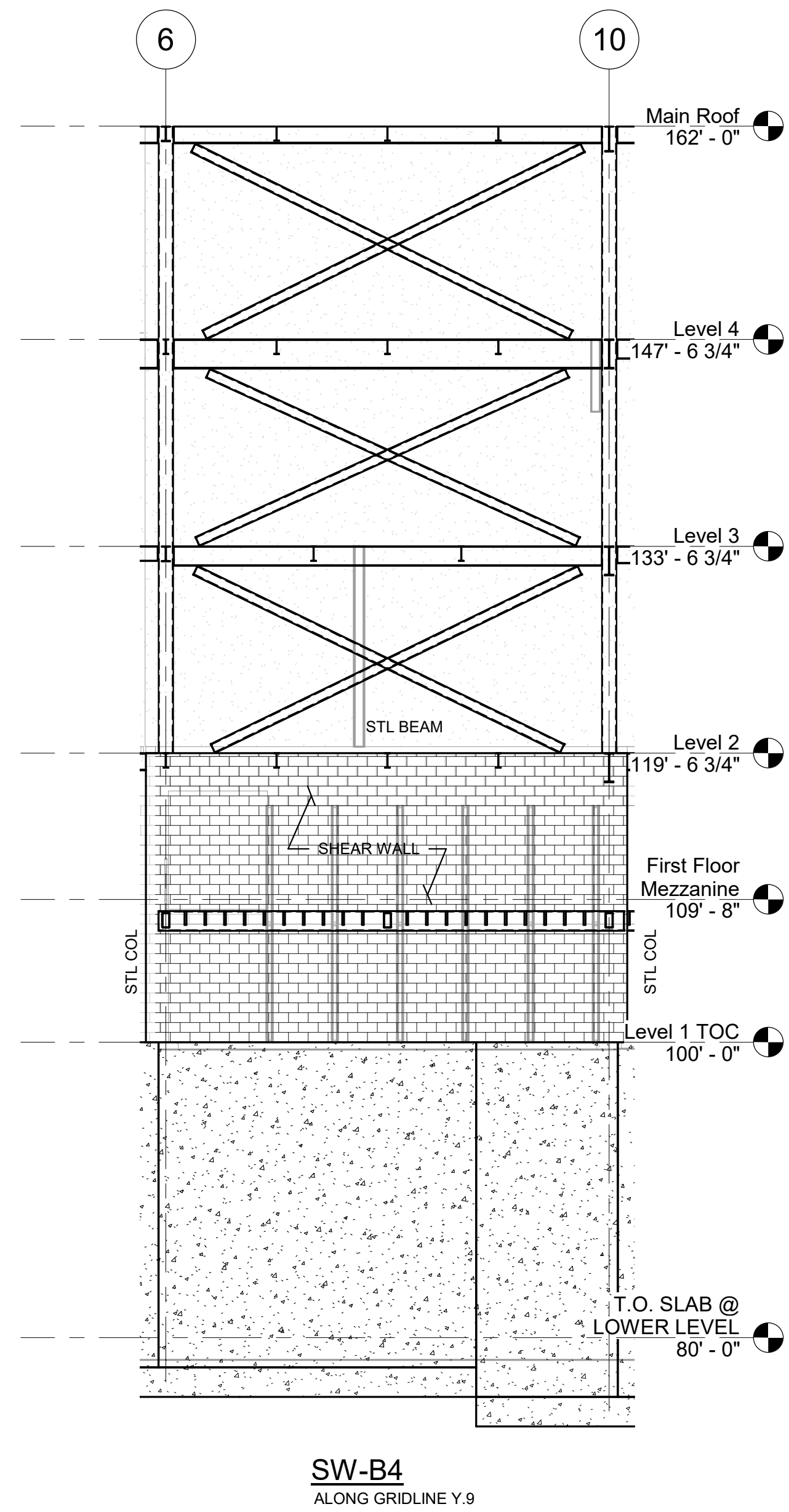
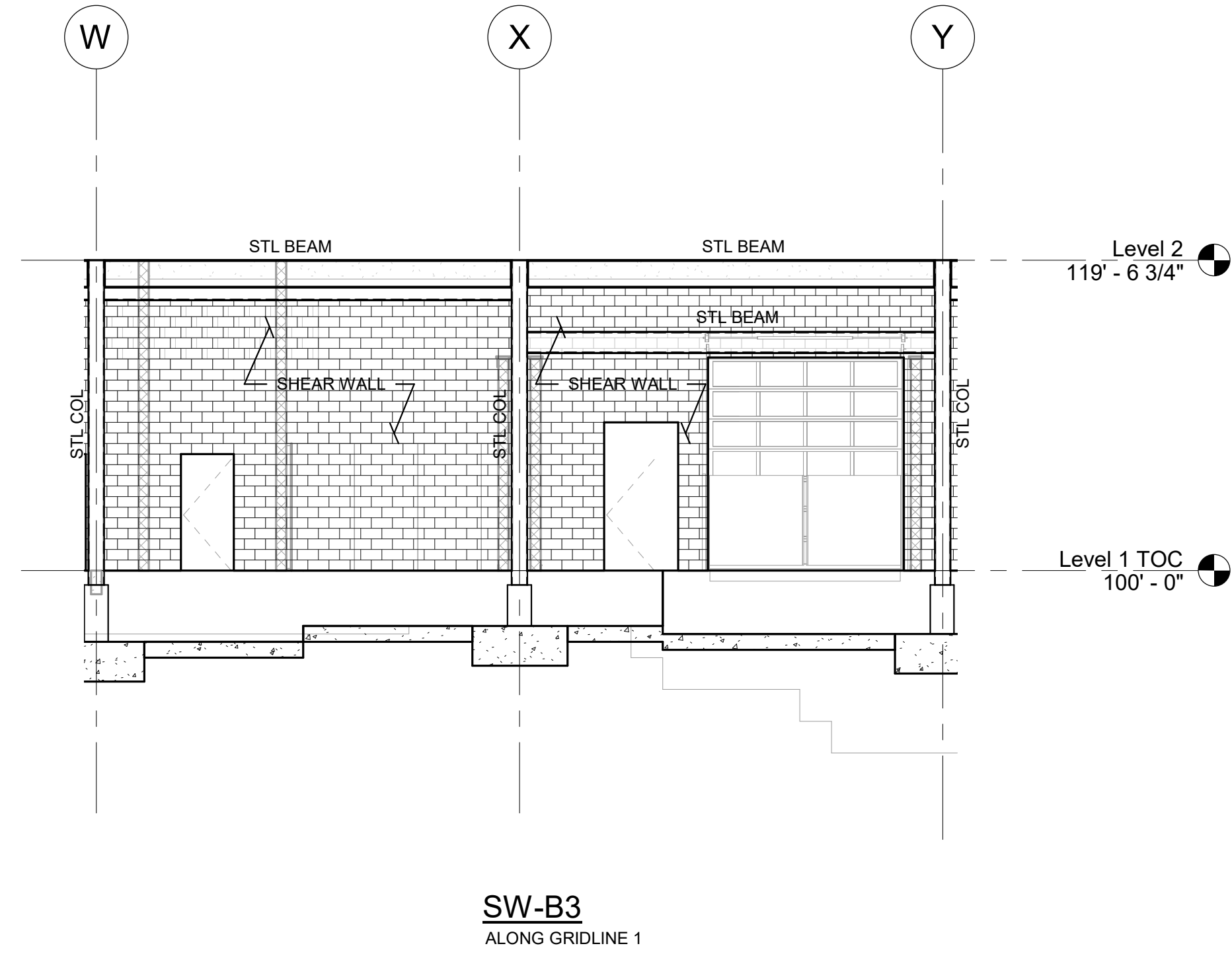
Scale: 1/8" = 1'-0"

Job No.: 20202

Drawn By: EDG

Date: 01/13/2023

S4-0-6



100 Hemlock Rd,
Wakefield, MA 01880

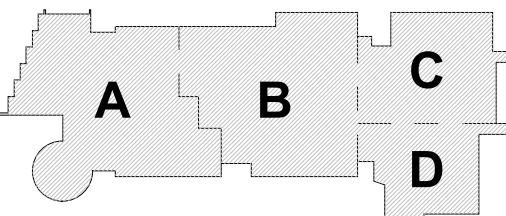


SW-C6
ALONG GRIDLINE 9

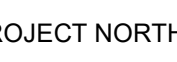
BF-D3 AND SW-D1
ALONG GRIDLINE DD

MSBA 60% CD
Submission

01/13/2023



KEY PLAN



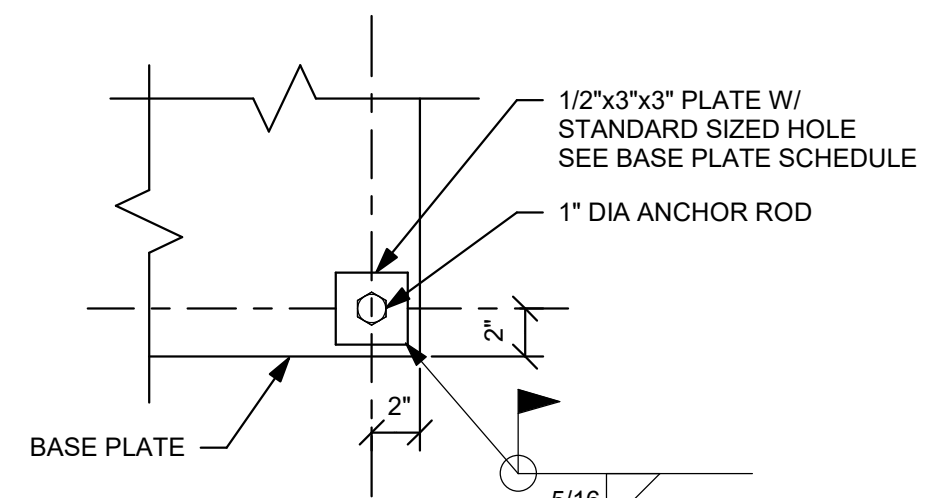
SHEAR WALLS

Scale: $1/8" = 1'-0"$

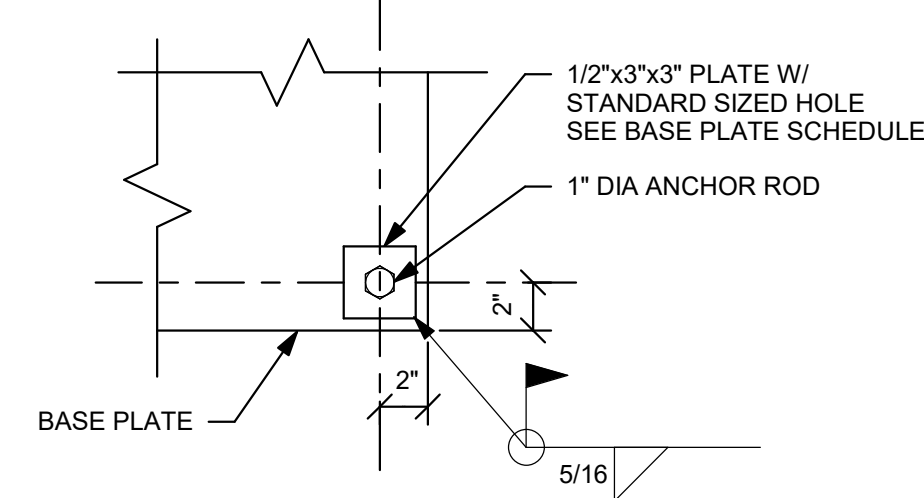
Job No. 30302

Drawn By: EDC

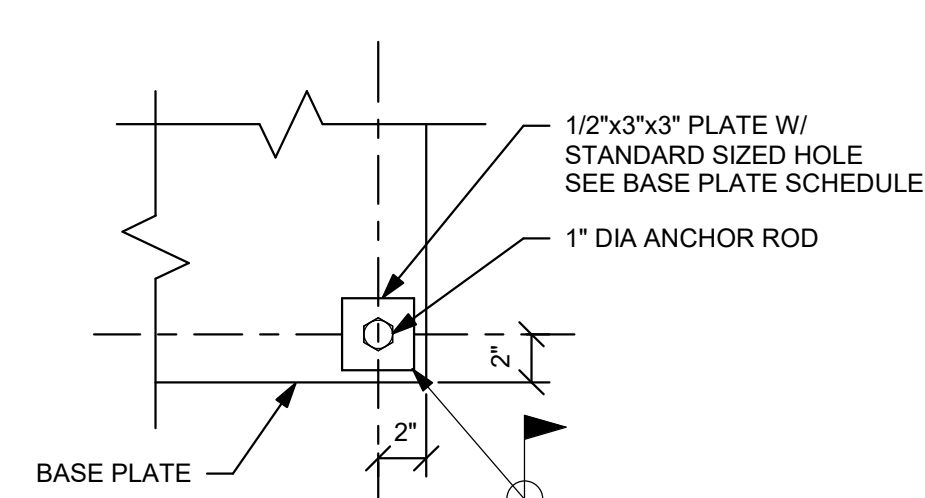
S4-0-7



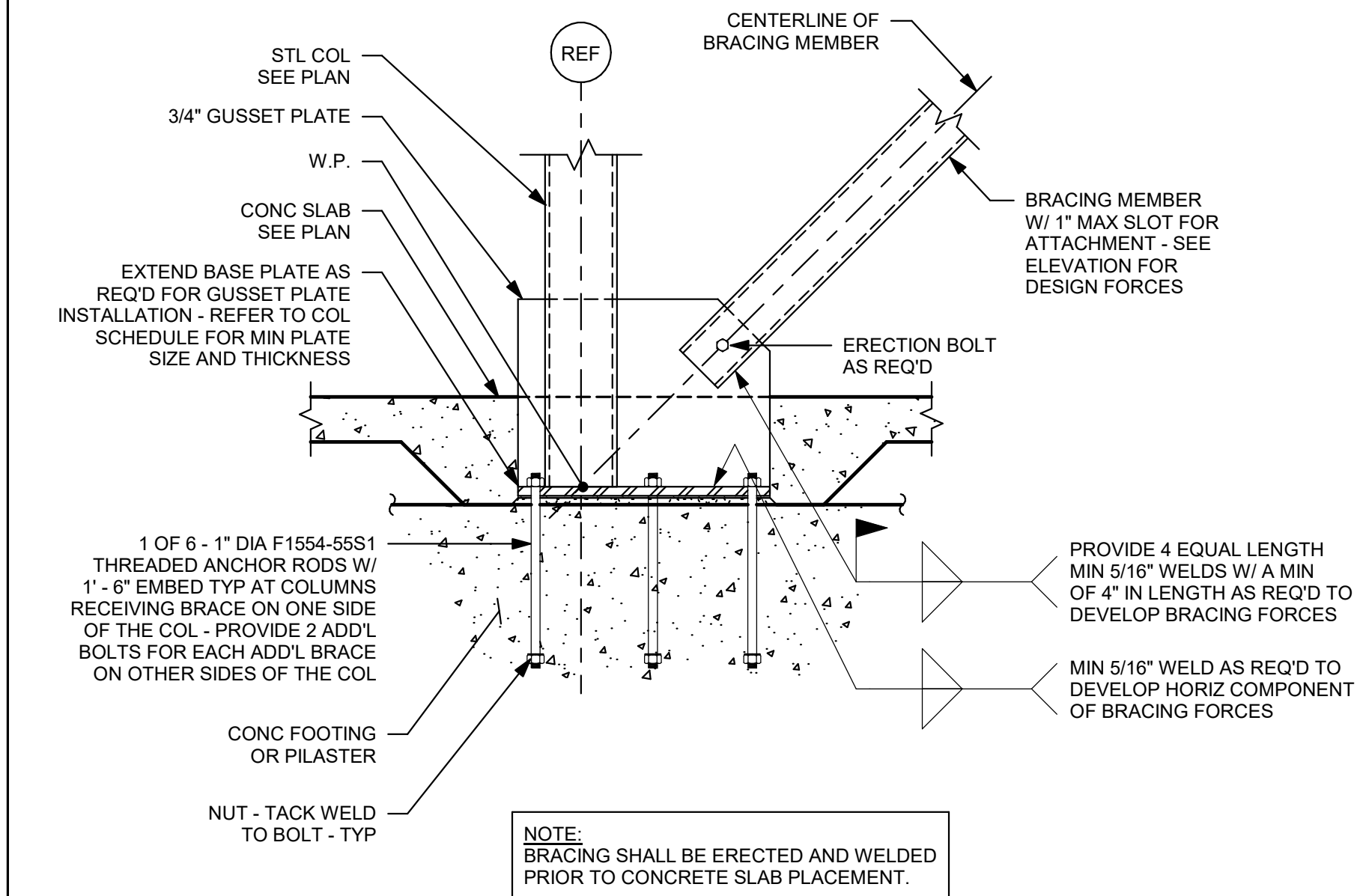
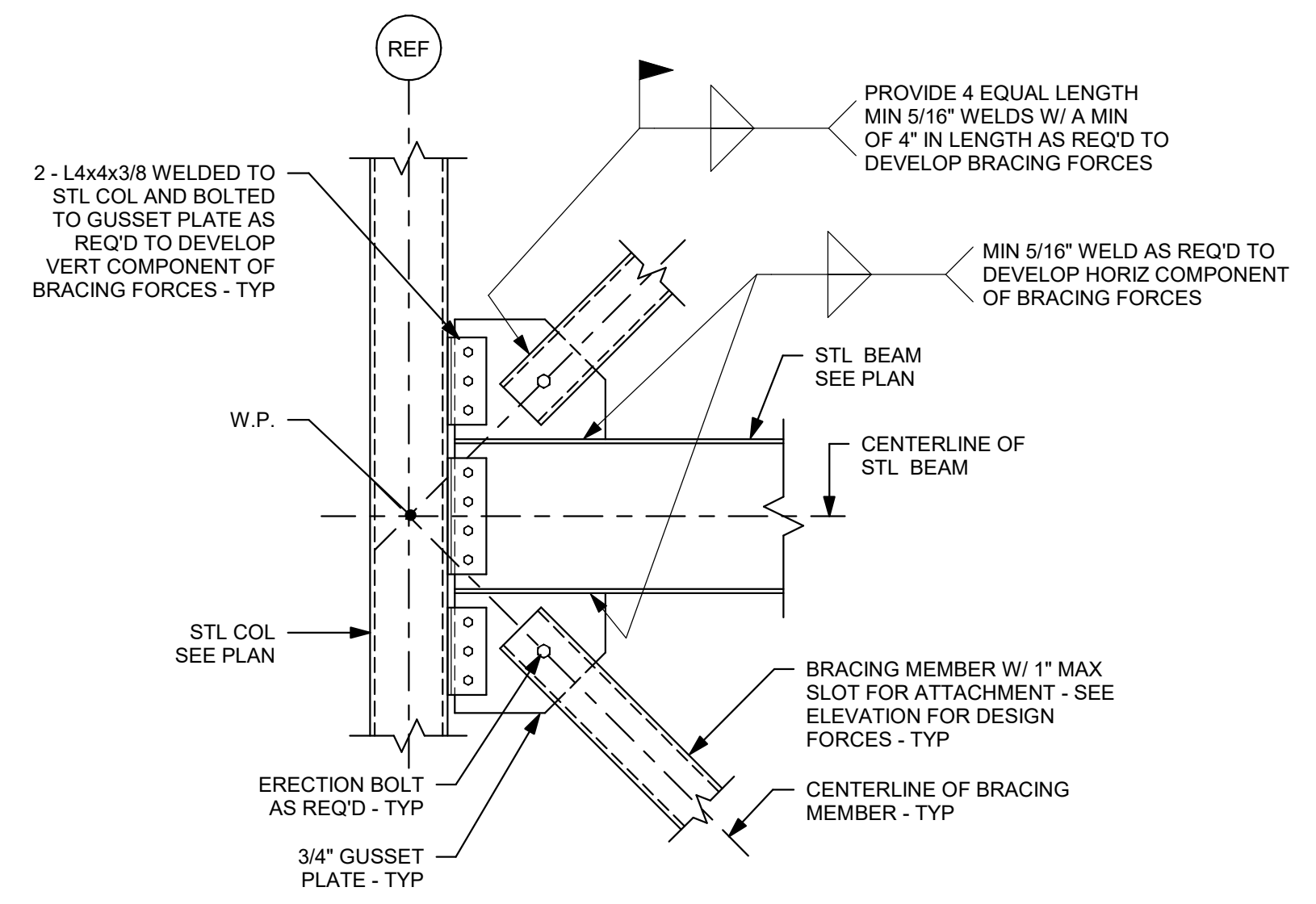
BASE PLATE DETAIL



BASE PLATE DETAIL

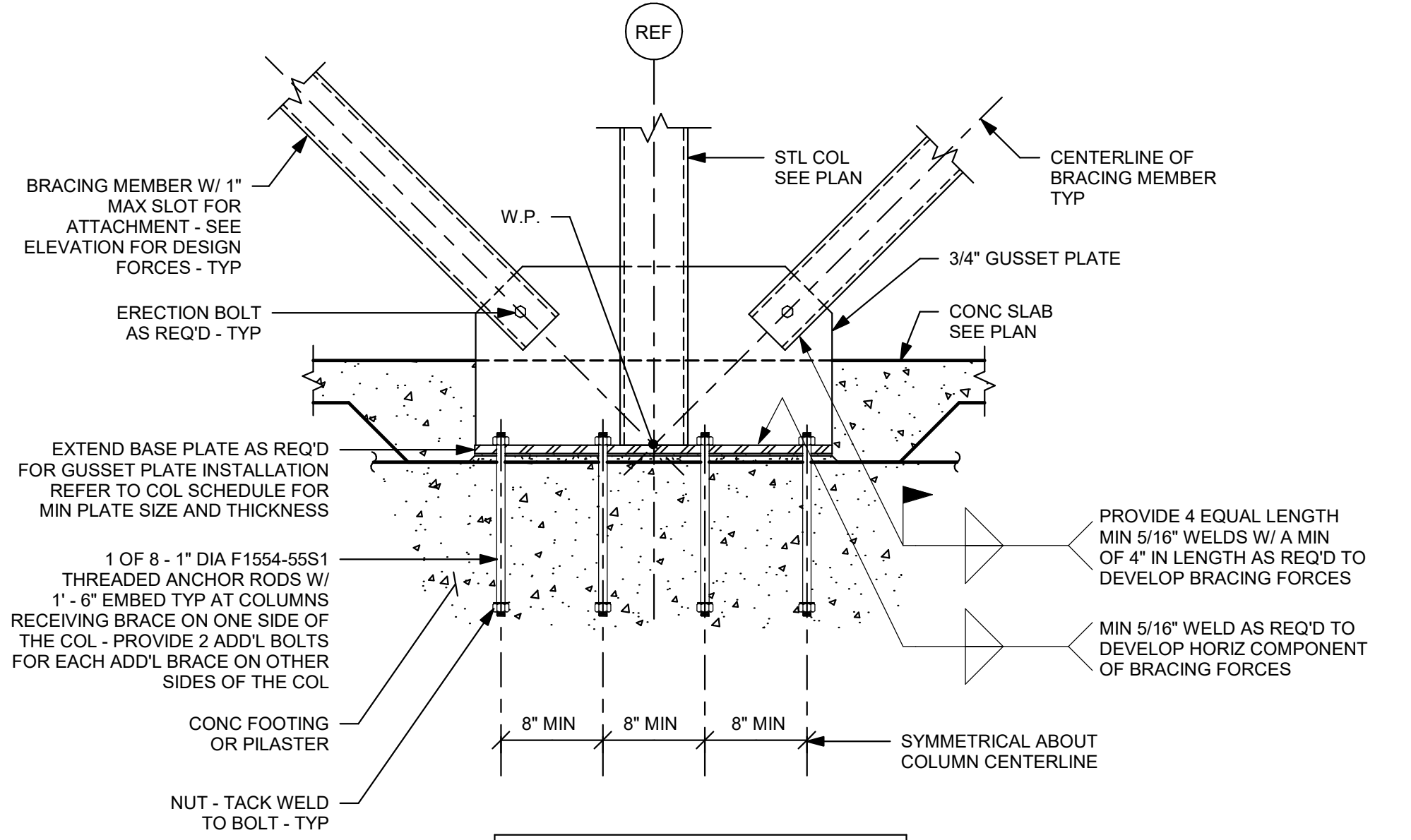


BASE PLATE DETAIL



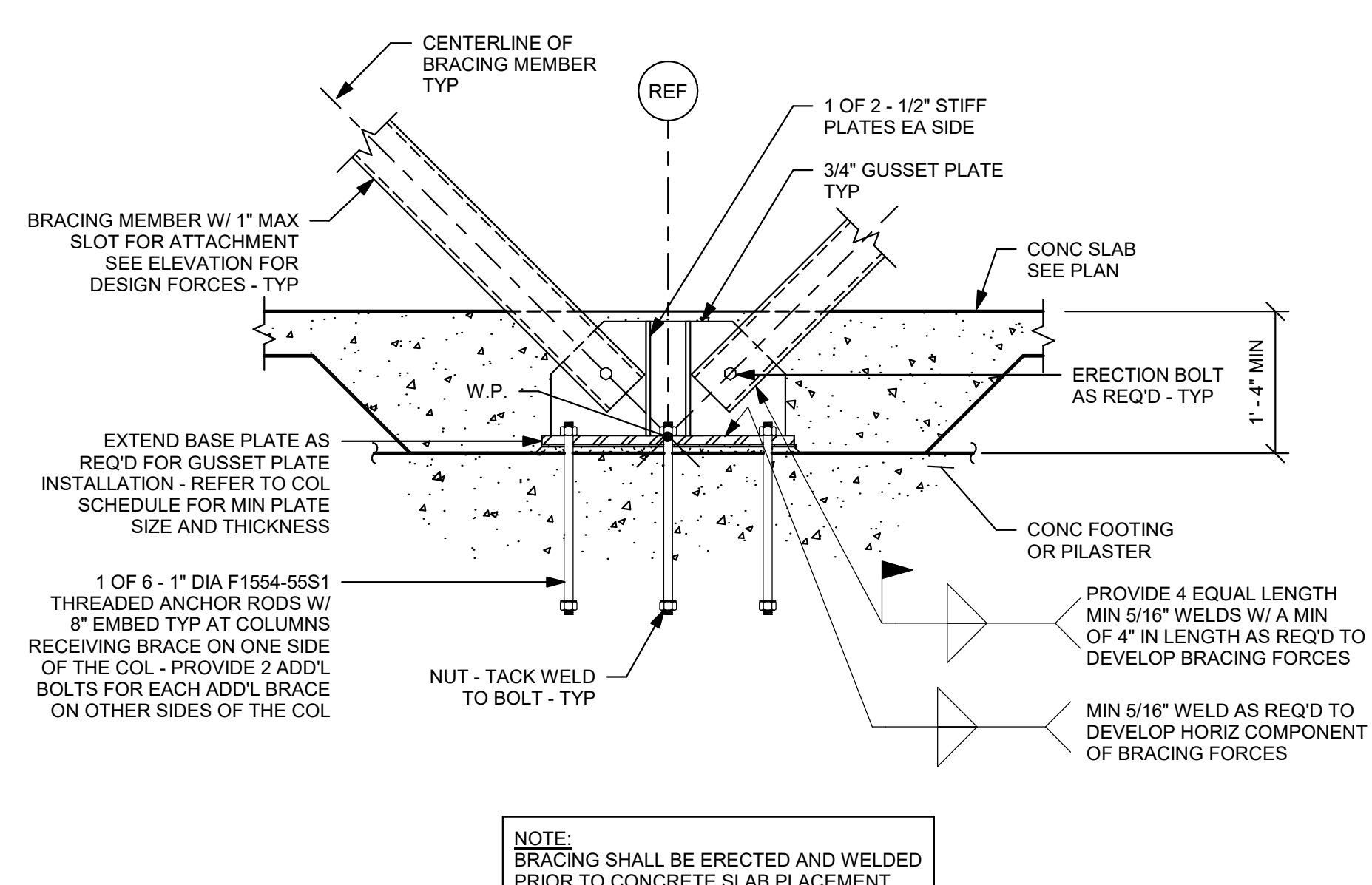
1

3/4" = 1' - 0"



2

3/4" = 1' - 0"

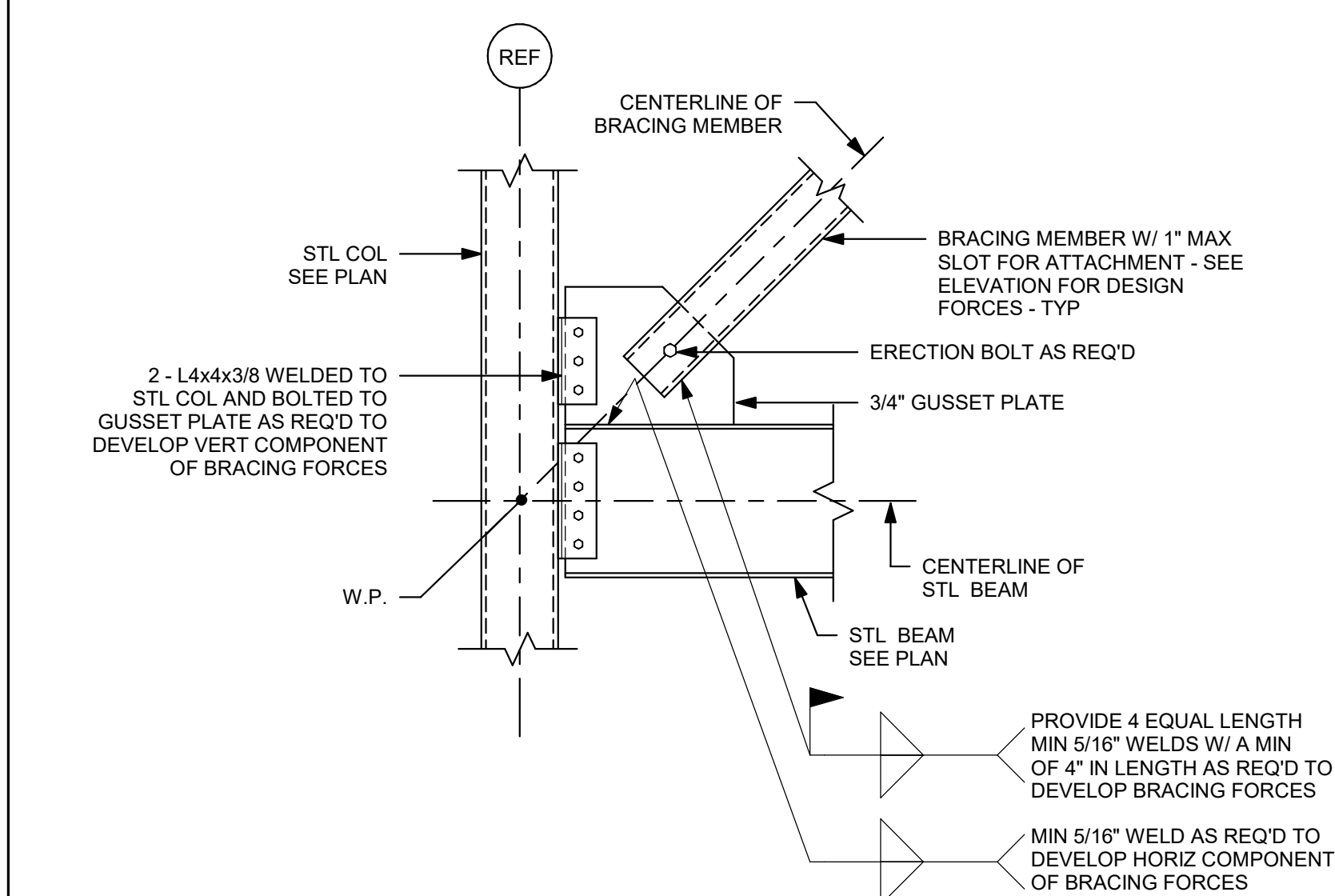


3

3/4" = 1' - 0"

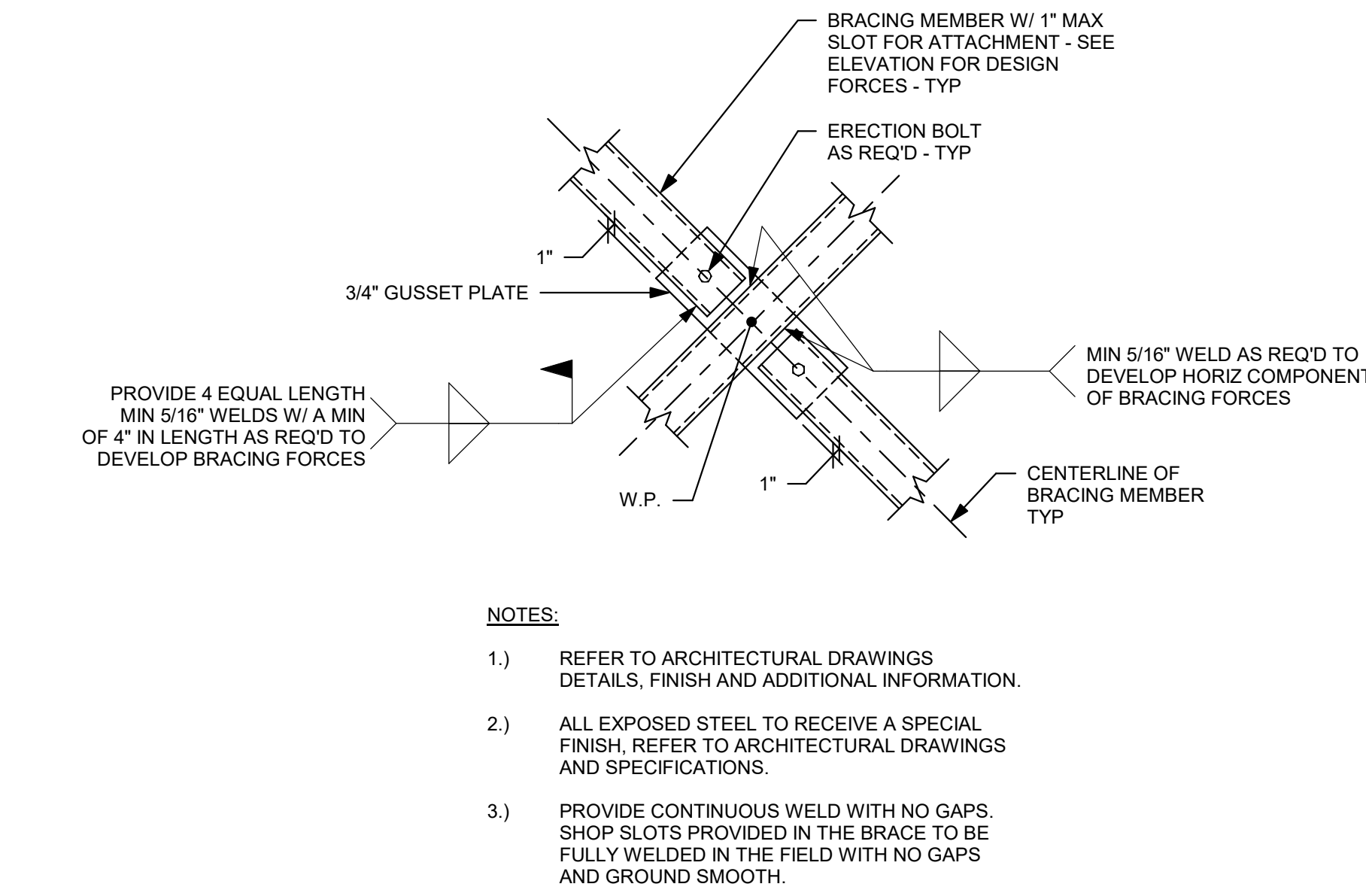
4

3/4" = 1' - 0"



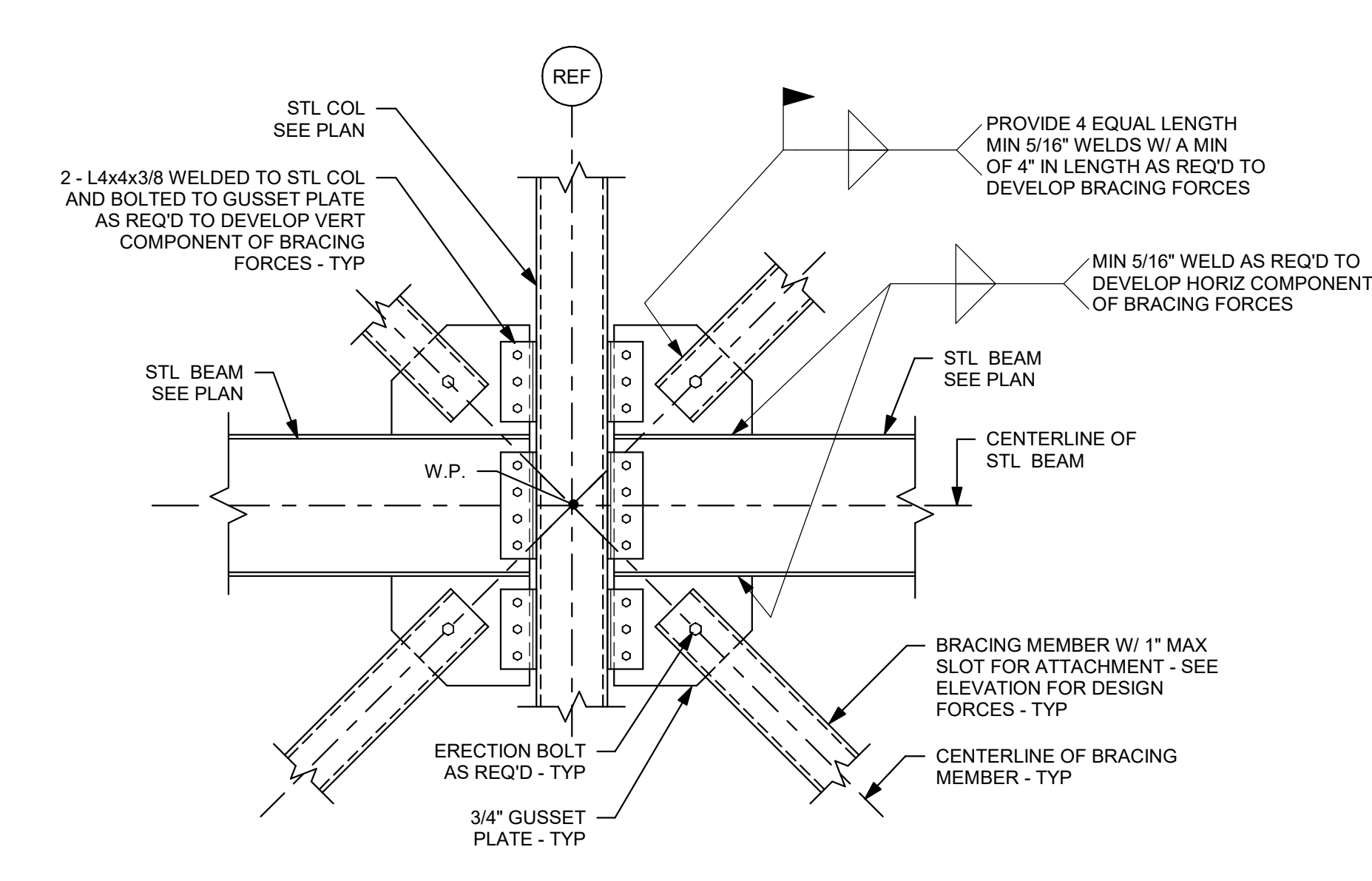
5

3/4" = 1' - 0"



6

3/4" = 1' - 0"

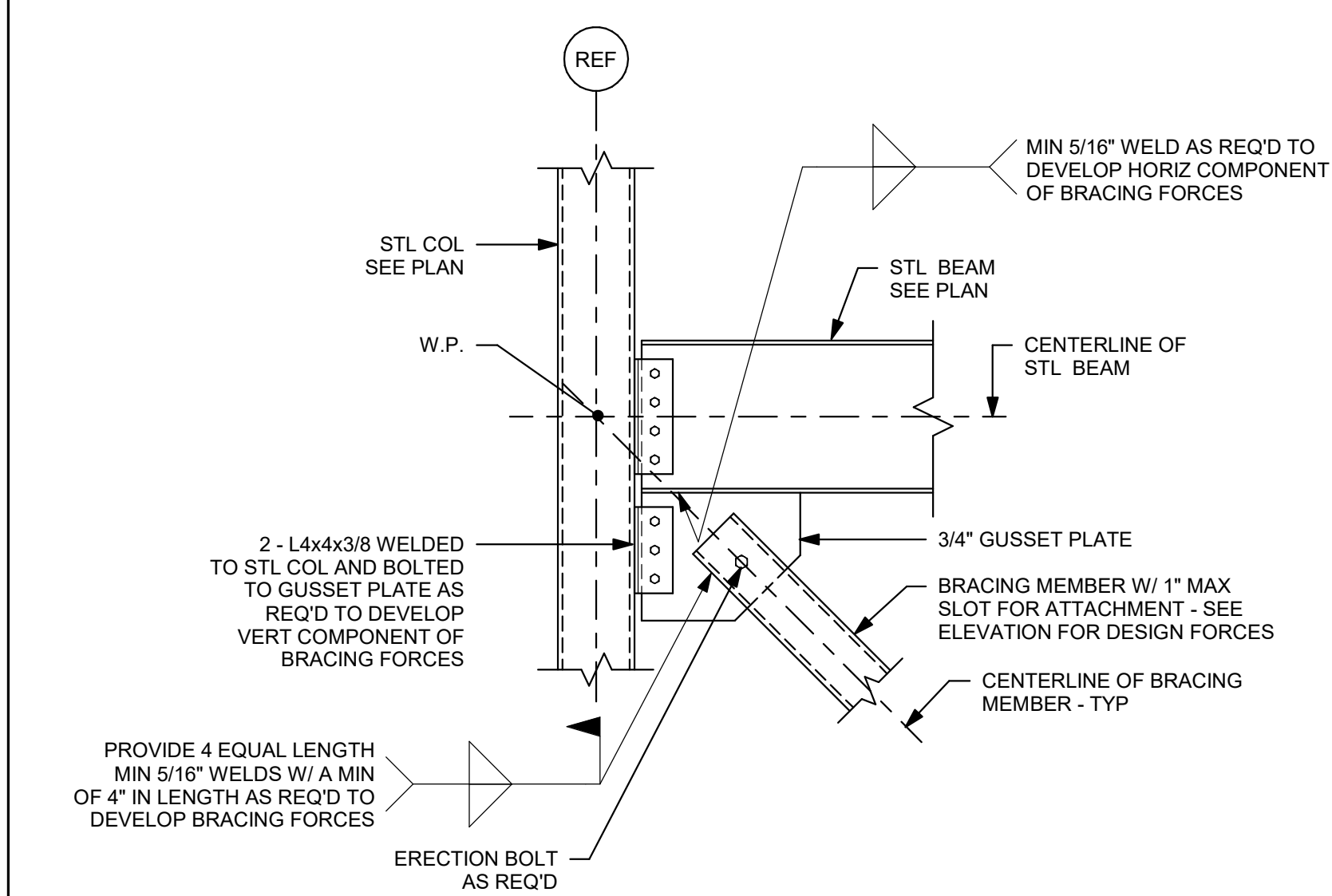


7

3/4" = 1' - 0"

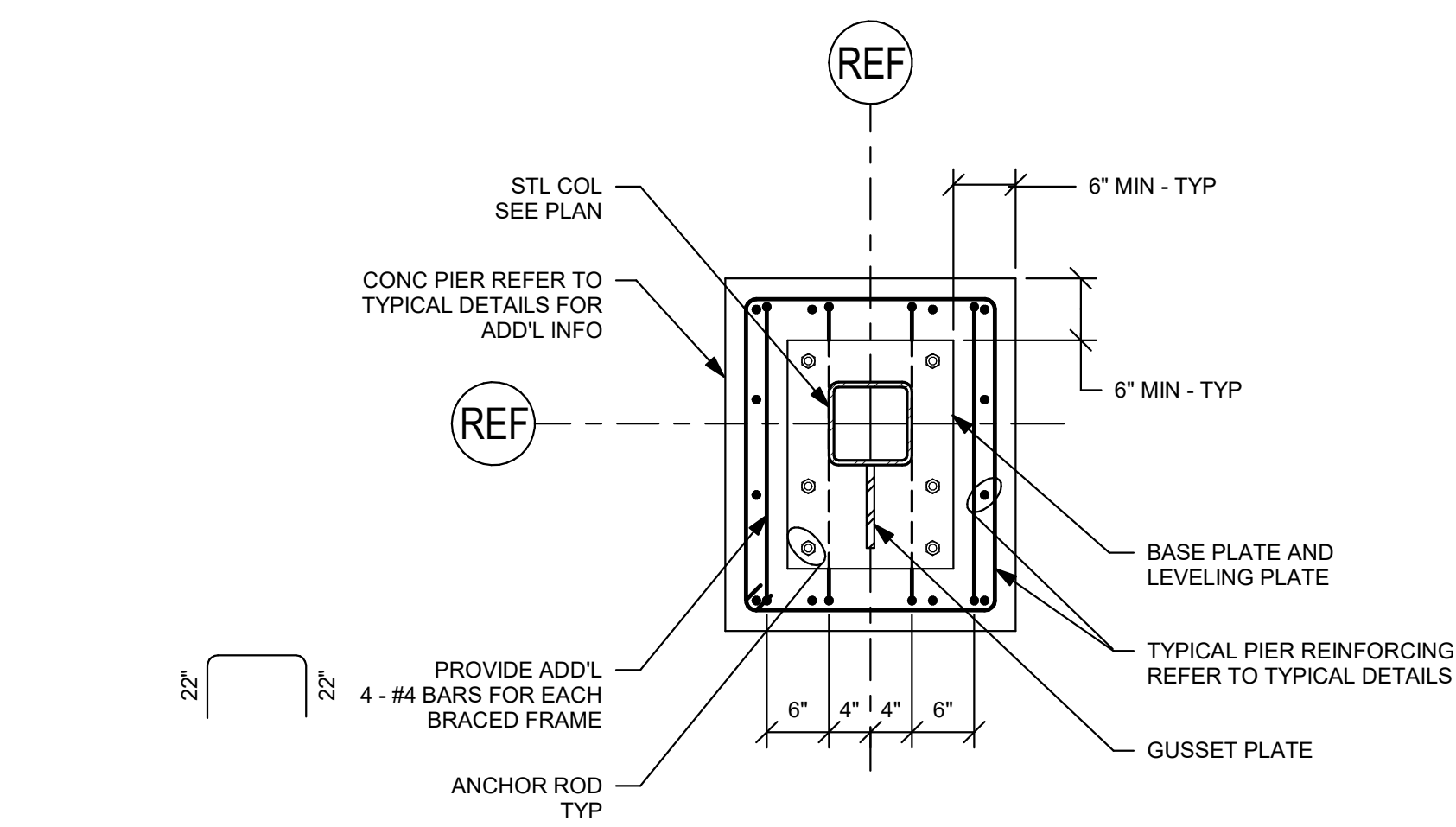
8

3/4" = 1' - 0"



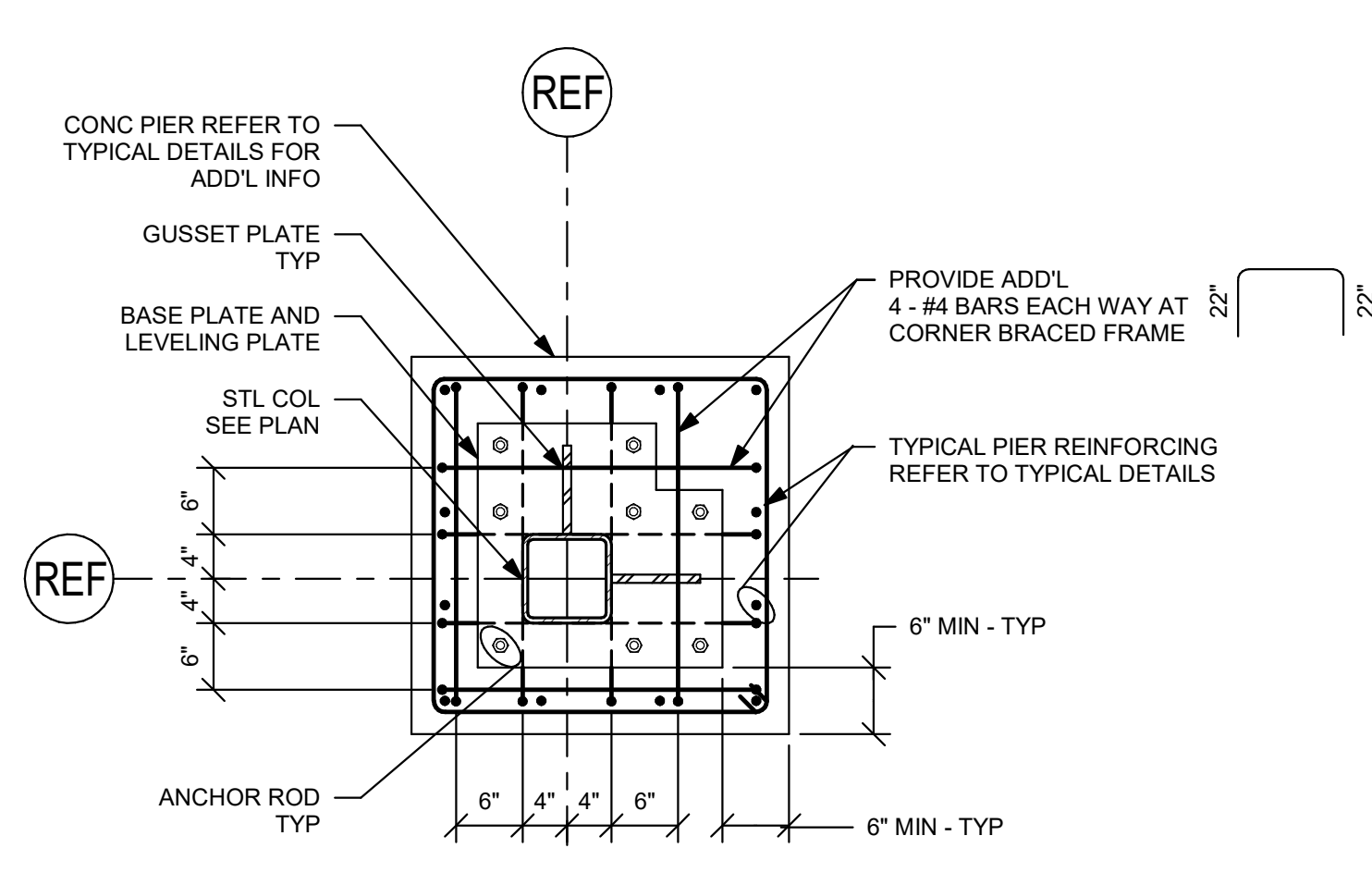
9

3/4" = 1' - 0"



10

3/4" = 1' - 0"

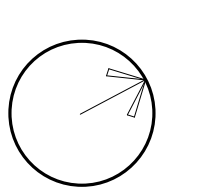
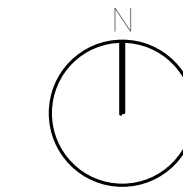
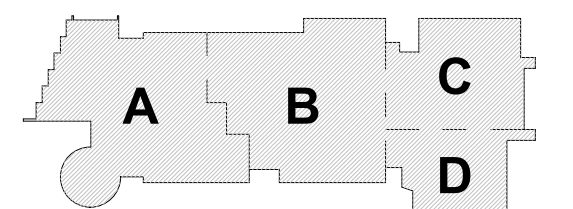


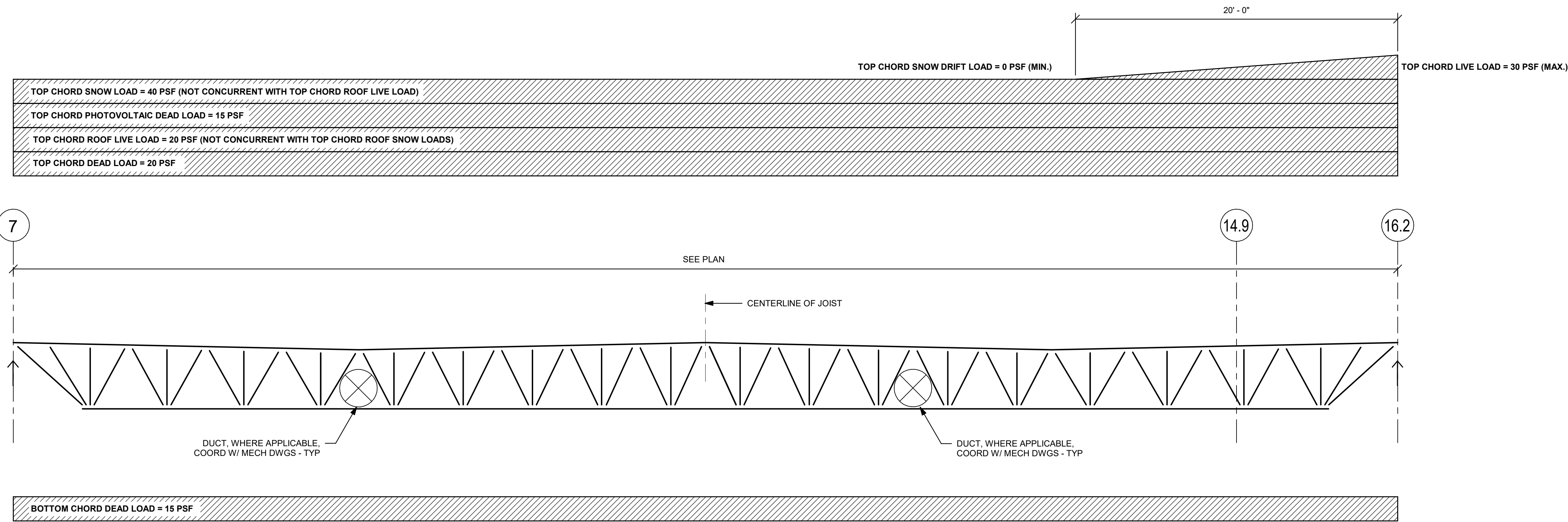
11

3/4" = 1' - 0"

12

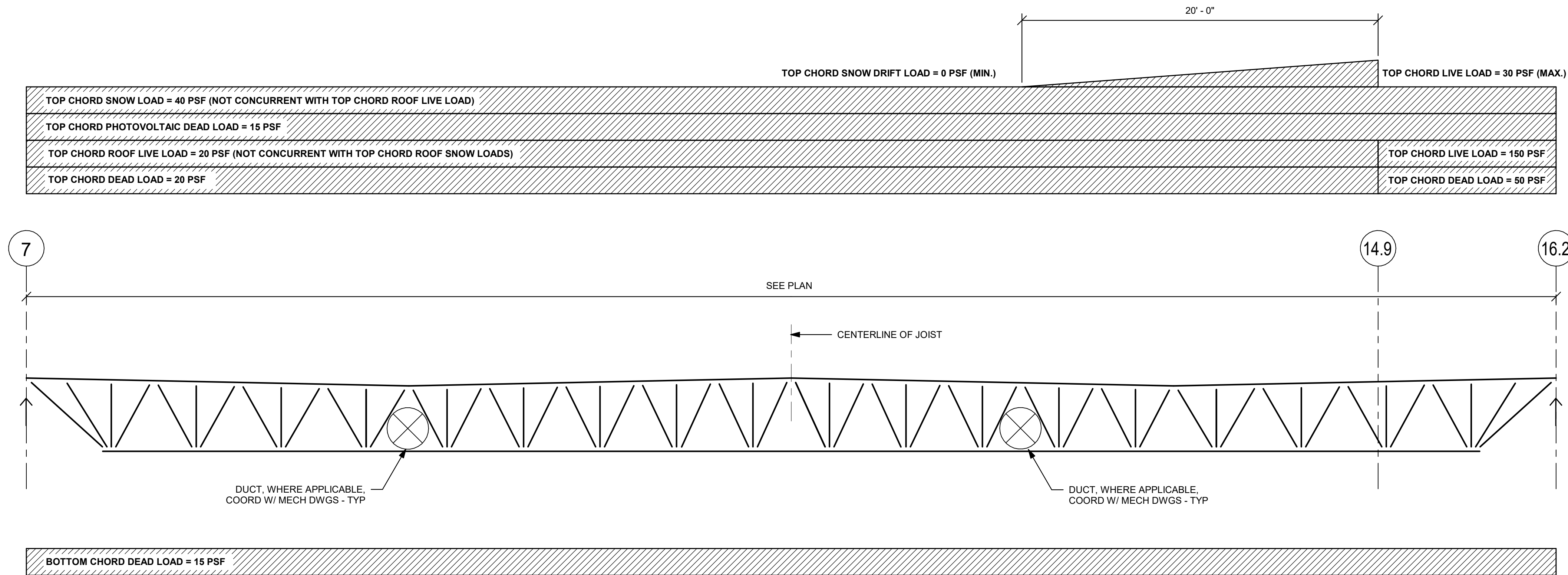
3/4" = 1' - 0"



NORTHEAST
METRO TECH100 Hemlock Rd.
Wakefield, MA 01880Engineers Design Group Inc.
Structural Engineers
389 Main Street, Suite 401
Malden, MA 02148
(781)396-9007
EDG@EDGINC.COM

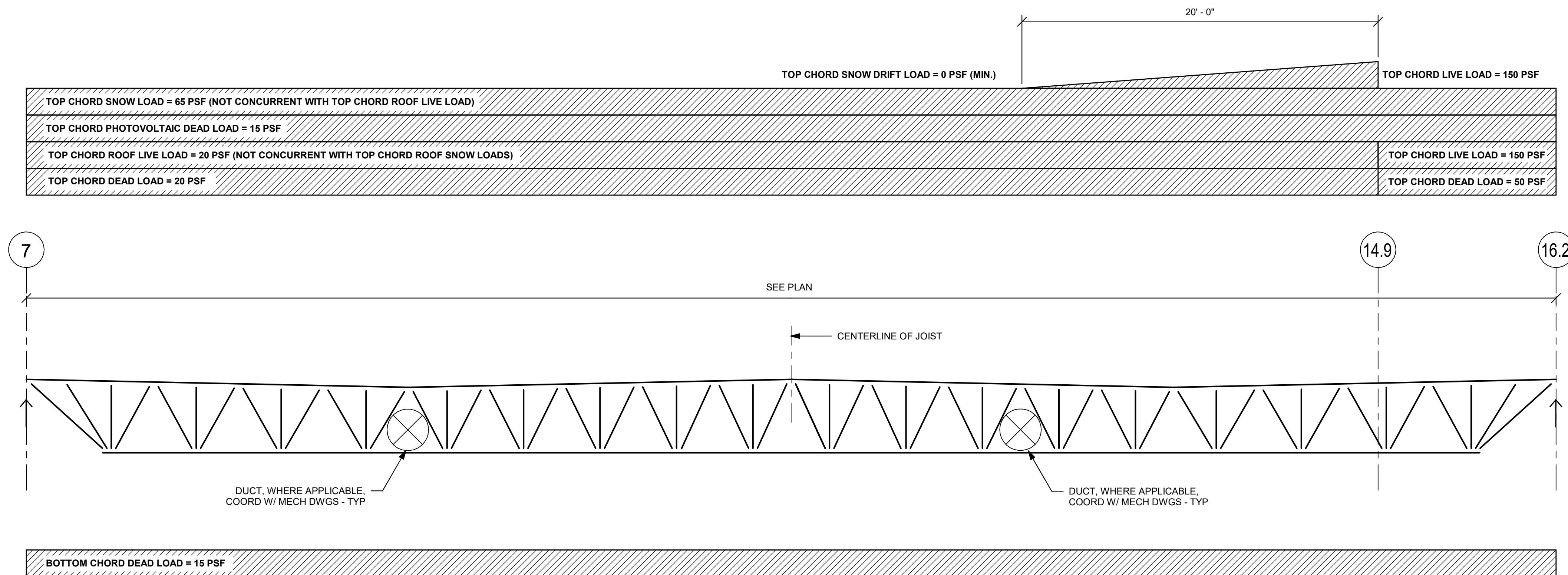
JOIST PROFILE AND LOAD DIAGRAM FOR 60DLHSP1

NOTE: SELF WEIGHT OF JOIST NOT INCLUDED IN LOADS



JOIST PROFILE AND LOAD DIAGRAM FOR 60DLHSP2

NOTE: SELF WEIGHT OF JOIST NOT INCLUDED IN LOADS



JOIST PROFILE AND LOAD DIAGRAM FOR 60DLHSP3

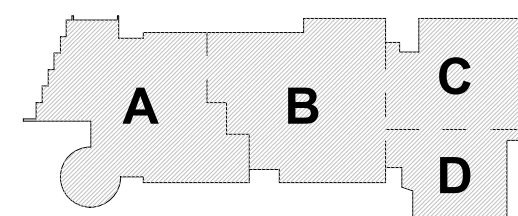
NOTE: SELF WEIGHT OF JOIST NOT INCLUDED IN LOADS

JOIST NOTES:

- JOIST SEAT DEPTH VARIES (8" MIN) AT CENTERLINE OF BEARING. COORDINATE WITH TOP OF STEEL BEAM.
- IN ADDITION TO THE LOADS SHOWN IN THE DIAGRAMS, DESIGN JOISTS AT THE GYMNASIUM FOR CONCENTRATED LOADS FROM MOTORIZED GYMNASIUM CURTAIN BATTING CAGE AND BASKETBALL BACKSTOP SUPPORT POINTS. REFER TO THE ARCHITECTURAL AND CEILING DRAWINGS. REFER TO MANUFACTURERS INFORMATION FOR LOAD MAGNITUDES AND LOCATIONS.
- REFER TO SPECIFICATIONS FOR UPLIFT LOAD ON THE JOISTS. DO NOT USE DESIGN DEAD LOAD TO OFFSET UPLIFT LOADS. ONLY SELF WEIGHT OF THE JOIST AND METAL ROOF DECK CAN BE USED TO OFFSET ANY UPLIFT LOADS.
- DESIGN FOR MAXIMUM LIVE LOADS DEFLECTION OF $L/360$.
- DESIGN ALL JOISTS FOR ADDITIONAL UPWARD LOAD OF 200 POUNDS AT FIRST PANEL POINT AT EACH END OF JOIST.
- IN ADDITION TO THE SLOPE, PROVIDE CAMBER PER SJI.
- DESIGN LOADS ARE ALLOWABLE STRESS DESIGN.
- JOIST SHALL BE TOP CHORD, SINGLE PITCHED UNDER-SLUNG JOIST. JOISTS ARE SYMMETRICAL ABOUT THE MIDSPAN.
- JOIST WEB CONFIGURATION IS BY JOIST SUPPLIER. WEB CONFIGURATION SHALL BE COMPATIBLE WITH MECHANICAL DUCT LAYOUT AND CATWALK SUPPORTS.
- JOIST MANUFACTURER SHALL DESIGN AND ACCOUNT FOR JOIST CAMBER AND JOIST DEFLECTION TO LIMIT DIFFERENTIAL DEFLECTION OF ADJACENT JOISTS TO ALLOW FOR PROPER INSTALLATION OF MULTIPLE SPAN ROOF DECK WITHOUT FIELD CUTTING OF DECK. REDUCE CAMBER BY HALF AT JOISTS ADJACENT TOP STRUCTURAL STEEL FRAMING.
- ALIGN PANEL POINTS OF ALL JOISTS AS SHOWN IN JOIST PROFILES.

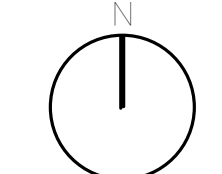
MSBA 60% CD
Submission

01/13/2023

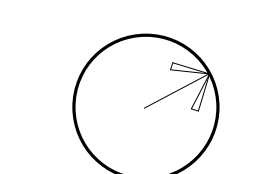


KEY PLAN

PROJECT NORTH



MAGNETIC NORTH

JOIST LOADING
DIAGRAMS

Scale: As indicated

Job No.: 20202

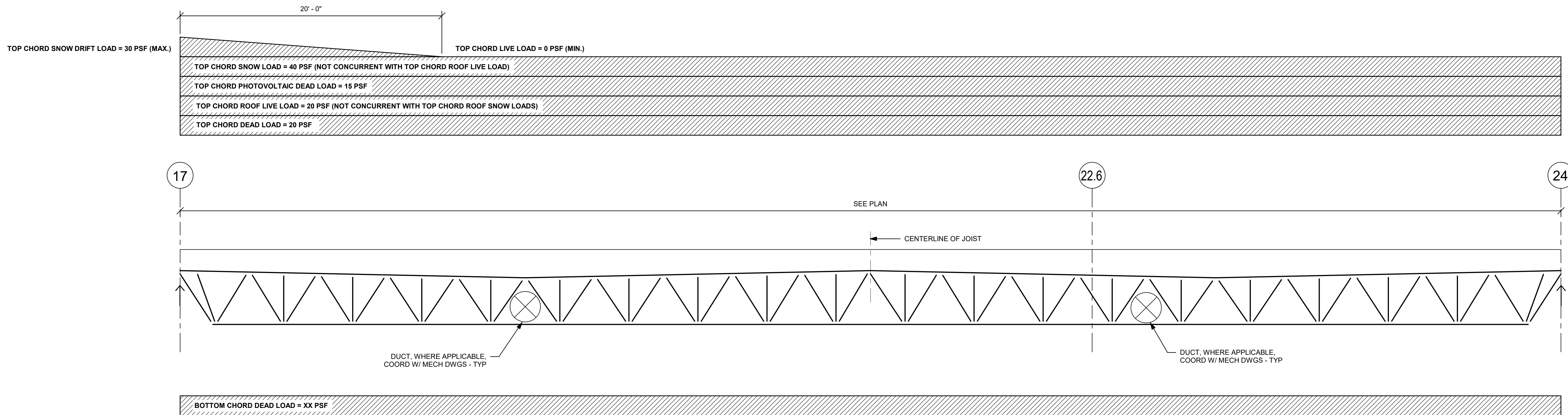
Drawn By: EDG

Date: 01/13/2023

S5-0-1

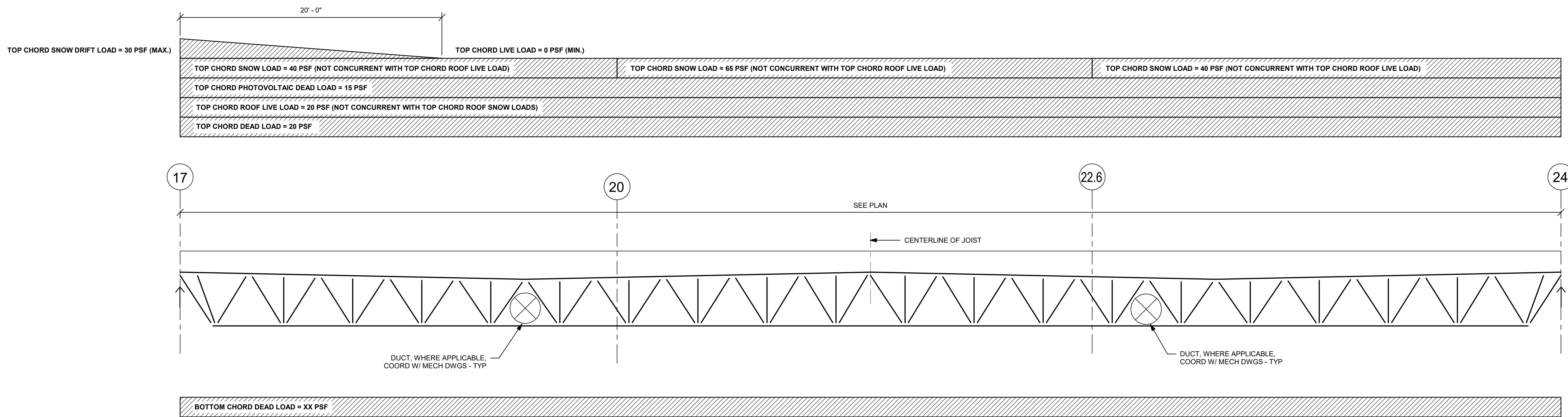
JOIST NOTES:

- 1.) JOIST SEAT DEPTH VARIES (5" MIN) AT CENTERLINE OF BEARING. COORDINATE WITH TOP OF STEEL BEAM.
- 2.) IN ADDITION TO THE LOADS SHOWN IN THE DIAGRAMS, DESIGN JOISTS AT THE GYMNASIUM FOR CONCENTRATED LOADS FROM MOTORIZED GYMNASIUM CURTAIN BATTING CAGE AND BASKETBALL BACKSTOP SUPPORT POINTS. REFER TO THE ARCHITECTURAL AND CEILING DRAWINGS. REFER TO MANUFACTURERS INFORMATION FOR LOAD MAGNITUDES AND LOCATIONS.
- 3.) REFER TO SPECIFICATIONS FOR UPLIFT LOAD ON THE JOISTS. DO NOT USE DESIGN DEAD LOAD TO OFFSET UPLIFT LOADS. ONLY SELF WEIGHT OF THE JOIST AND METAL ROOF DECK CAN BE USED TO OFFSET ANY UPLIFT LOADS.
- 4.) DESIGN FOR MAXIMUM LIVE LOADS DEFLECTION OF $L/360$.
- 5.) DESIGN ALL JOISTS FOR ADDITIONAL UPWARD LOAD OF 200 POUNDS AT FIRST PANEL POINT AT EACH END OF JOIST.
- 6.) IN ADDITION TO THE SLOPE, PROVIDE CAMBER PER SJI.
- 7.) DESIGN LOADS ARE ALLOWABLE STRESS DESIGN.
- 8.) JOIST SHALL BE TOP CHORD, SINGLE PITCHED UNDER-SLING JOIST. JOISTS ARE SYMMETRICAL ABOUT THE MIDSPAN.
- 9.) JOIST WEB CONFIGURATION IS BY JOIST SUPPLIER. WEB CONFIGURATION SHALL BE COMPATIBLE WITH MECHANICAL DUCT LAYOUT AND CATWALK SUPPORTS.
- 10.) JOIST MANUFACTURER SHALL DESIGN AND ACCOUNT FOR JOIST CAMBER AND JOIST DEFLECTION TO LIMIT DIFFERENTIAL DEFLECTION OF ADJACENT JOISTS TO ALLOW FOR PROPER INSTALLATION OF MULTIPLE SPAN ROOF DECK WITHOUT FIELD CUTTING OF DECK. REDUCE CAMBER BY HALF AT JOISTS ADJACENT TOP STRUCTURAL STEEL FRAMING.
- 11.) ALIGN PANEL POINTS OF ALL JOISTS AS SHOWN IN JOIST PROFILES.



JOIST PROFILE AND LOAD DIAGRAM FOR 60DLHSP4

NOTE: SELF WEIGHT OF JOIST IS NOT INCLUDED IN LOADS



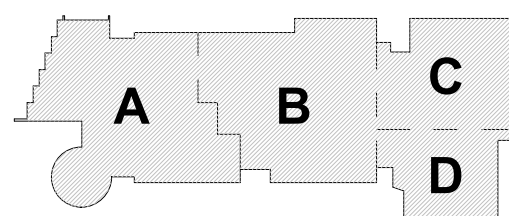
JOIST PROFILE AND LOAD DIAGRAM FOR 60DLHSP5

NOTE: SELF WEIGHT OF JOIST IS NOT INCLUDED IN LOADS

© COPYRIGHT 2021 DRUMMEY ROSANE ANDERSON, INC.

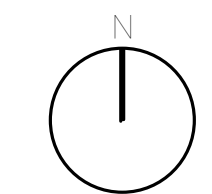
MSBA 60% CD
Submission

01/13/2023

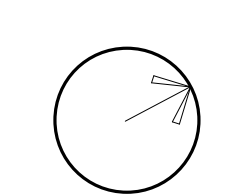


KEY PLAN

PROJECT NORTH



MAGNETIC NORTH

JOIST LOADING
DIAGRAMS

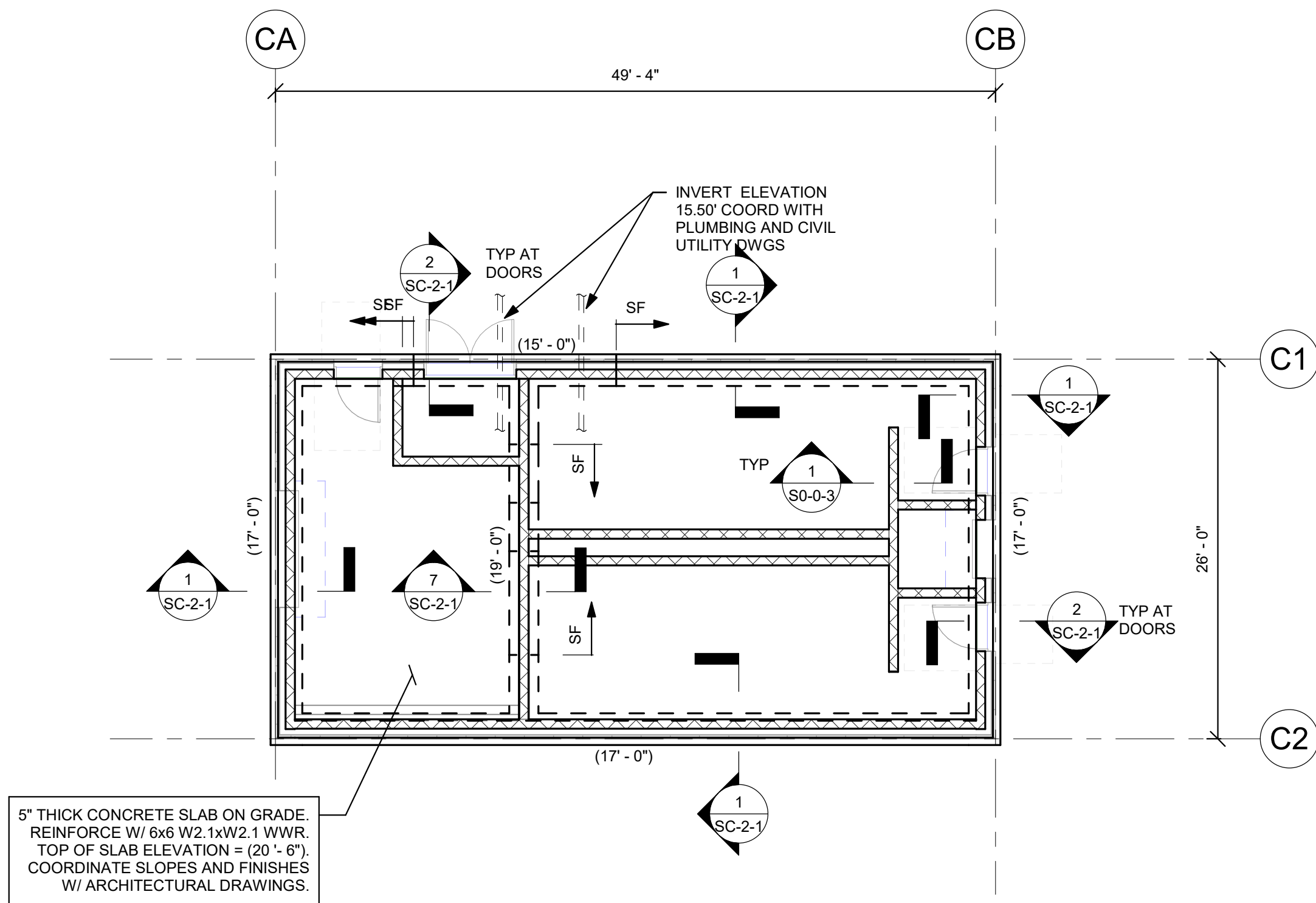
Scale: As indicated

Job No.: 20202

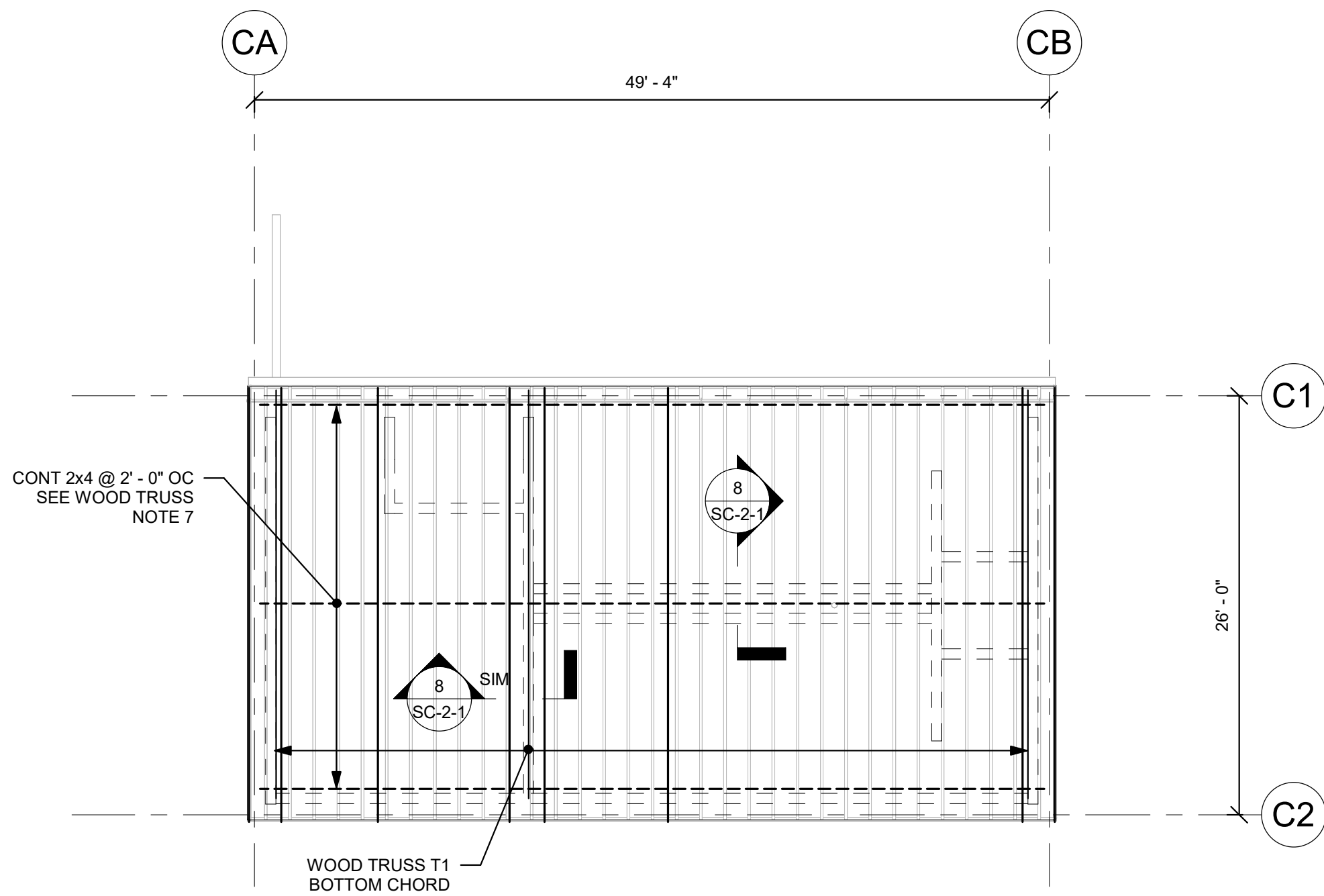
Drawn By: EDG

Date: 01/13/2023

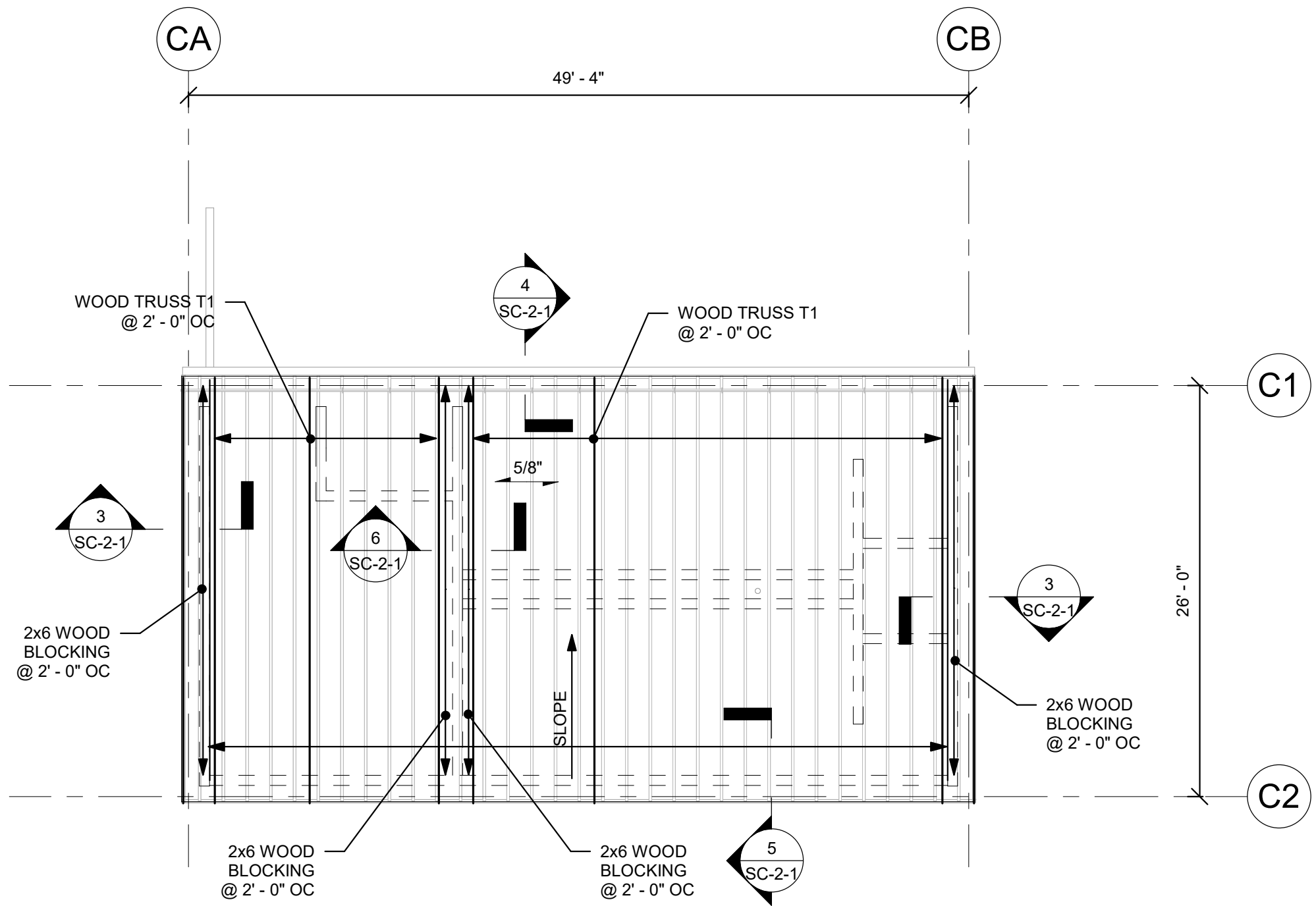
S5-0-2



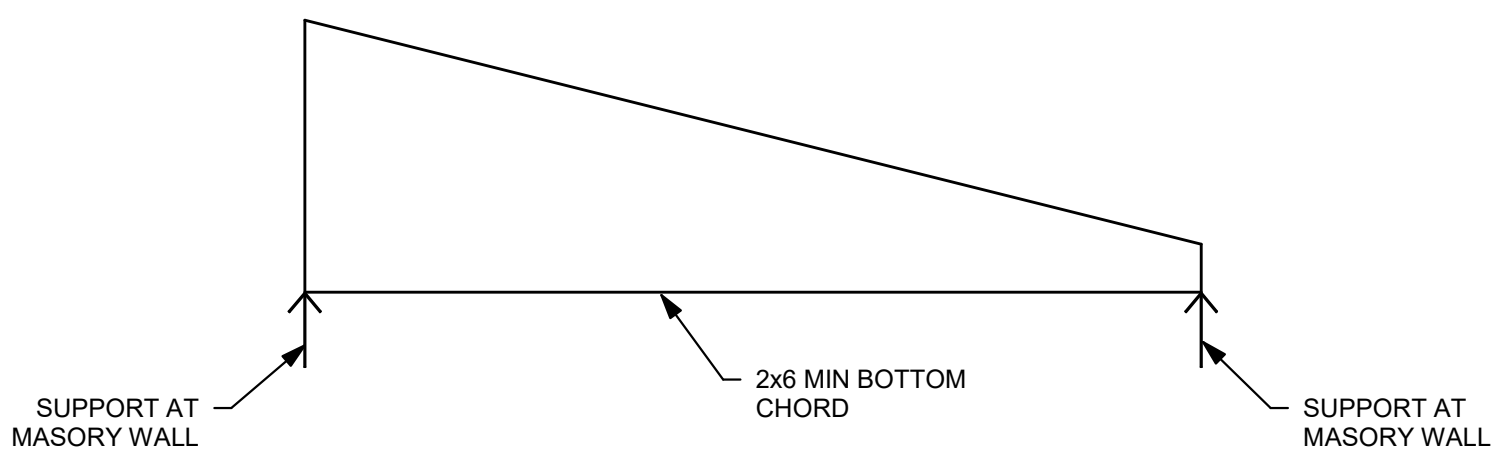
CONCESSION BUILDING GROUND FLOOR PLAN



CONCESSION BUILDING CEILING PLAN



CONCESSION BUILDING ROOF PLAN



WOOD TRUSS TYPE T1

WOOD TRUSS NOTES:

- 1.) TRUSS CONFIGURATIONS ARE DIAGRAMMATIC AND NOT TO SCALE. SEE ARCHITECTURAL DRAWINGS FOR EXACT LENGTHS AND CONDITIONS.
- 2.) REVIEW MECHANICAL ELECTRICAL AND PLUMBING DRAWINGS FOR ADDITIONAL EQUIPMENT LOADS.
- 3.) EXCEPT AS SHOWN OTHERWISE, DESIGN TRUSSES FOR THE FOLLOWING MINIMUM UNIFORM DESIGN LOADS:
TRUSS TYPE T1
TOP CHORD DEAD LOAD 15PSF
BOTTOM CHORD DEAD LOAD 5PSF
SNOW LOAD 30PSF
(SEE GENERAL NOTES ON S0-0-1 FOR WIND AND SEISMIC DESIGN CRITERIA)
- 4.) DESIGN AND PROVIDE ALL TEMPORARY ERECTION RESTRAINTS / BRACING.
- 5.) DESIGN AND PROVIDE ALL PERMANENT RESTRAINT / BRACING FOR WEB MEMBERS AS REQUIRED FOR A PERMANENT INSTALLATION.
- 6.) OSB STRUCTURAL USE SHEATHING PROVIDES PERMANENT BRACING FOR THE TOP CHORD WHERE SHOWN.
- 7.) PROVIDE CONTINUOUS 2x4 @ 2'-0" ON CENTER (MAX.) FOR LATERAL BRACING OF TRUSS BOTTOM CHORD
- 8.) IN ADDITION TO WOOD BLOCKING SHOWN ON PLANS, PROVIDE 2x BLOCKING BETWEEN TOP CHORD OF TRUSSES AT EACH PANEL POINT. 2x BLOCKING SIZE TO MATCH TOP CHORD OF TRUSS.
- 9.) WHERE TRUSSES ARE TO BE SUPPLIED IN MORE THAN ONE PIECE, OR HINGED, DESIGN AND PROVIDE ALL NECESSARY BRACING CONNECTIONS AND ACCESSORIES.
- 10.) REFER TO GENERAL NOTES ON DRAWING S0-0-1 FOR ADDITIONAL REQUIREMENTS.
- 11.) DESIGN AND PROVIDE UPLIFT CONNECTORS. CONNECTORS SHOWN ARE MINIMUM REQUIREMENTS.

OSB STUCTURAL PANEL NAILING SCHEDULE
(EXCEPT AS NOTED OTHERWISE)

AT PANEL EDGE BOUNDARIES	10d COMMON NAILS AT 6" OC
AT OTHER PANEL EDGES	10d COMMON NAILS AT 6" OC
AT INTERMEDIATE PANEL SUPPORTS	10d COMMON NAILS AT 10" OC

FRAMING NOTES:

- 1.) FOR GENERAL NOTES AND TYPICAL DETAILS SEE DRAWINGS S0-0-1, S0-0-2, S0-0-3, S0-0-4, S0-0-5, S0-0-6, S0-0-7 AND S0-0-8.
- 2.) 5/8" INDICATES SPAN DIRECTION OF 5/8" ROOF SHEATHING. PROVIDE APA RATED STRUCTURAL SHEATHING EXPOSURE 1 PLYWOOD OR OSB.
- 3.) T1 ETC. INDICATES A PRE-FABRICATED WOOD TRUSS. SEE THIS DRAWING FOR TRUSS CONFIGURATION AND LOADING INFORMATION. MAXIMUM TRUSS SPACING EQUALS 2'-0" ON CENTER.
- 4.) FOR DIMENSIONS AND ELEVATIONS NOT GIVEN REFER TO ARCHITECTURAL DRAWINGS.

FOUNDATION NOTES:

- 1.) REFER TO GRADING DRAWINGS FOR PLAN AND GRADE ELEVATIONS. THE STRUCTURAL DRAWINGS USES A DATUM OF 100'-0" AT THE MAIN FLOOR, WHICH CORRESPONDS TO 163.50' MEAN SEA LEVEL, AS SHOWN ON THE SITE AND CIVIL DRAWINGS.
- 2.) FOR GENERAL NOTES AND TYPICAL DETAILS SEE DRAWINGS S0-0-1, S0-0-2, S0-0-3, S0-0-4, S0-0-5, S0-0-6, S0-0-7 AND S0-0-8.
- 3.) F3 ETC. INDICATES A FOOTING TYPE. FOR SIZE OF FOOTING AND REINFORCEMENT SEE SCHEDULE ON THIS DRAWING.
- 4.) TOP OF FOOTING ELEVATION TO BE 3'-6" MINIMUM BELOW LOWEST ADJACENT FINISHED GRADE AT EXTERIOR CONDITIONS AND 2'-0" BELOW TOP OF CONCRETE SLAB AT INTERIOR CONDITIONS. ALL OTHER TOP OF FOOTING ELEVATIONS ARE DENOTED AS THUS (XX'-XX") ON PLANS. CONTRACTOR TO COORDINATE AND VERIFY ALL TOP OF FOOTING ELEVATIONS WITH UNDERGROUND PLUMBING SUB-CONTRACTOR'S FIELD LAYOUT.
- 5.) ALL FOOTING ELEVATIONS NOTED ON PLAN ARE SHOWN ONLY TO ASSIST IN COORDINATION. ALL FOOTING ELEVATIONS MUST BE COORDINATED WITH STRUCTURAL REQUIREMENTS, TYPICAL DETAILS, ARCHITECTURAL, MECHANICAL, ELECTRICAL, AND PLUMBING DRAWINGS.
- 6.) SF INDICATES A STEPPED FOOTING REFER TO DETAIL 1 ON DRAWING S0-0-2.
- 7.) FOR UNDER SLAB DRAINAGE AND WALL DRAINS, COORDINATE WITH ARCHITECTURAL, STRUCTURAL, CIVIL, AND PLUMBING DRAWINGS.
- 8.) INDICATES A DEPRESSED SLAB ON GRADE. REFER TO DETAILS 6 AND 7 ON DRAWING S0-0-2 COORDINATE ALL SLAB DEPRESSIONS WITH REQUIREMENTS ON ARCHITECTURAL DRAWINGS.
- 9.) FOR TYPICAL EXTERIOR DOOR DETAIL REFER TO DETAIL 6 ON DRAWING S0-0-3 AND RELEVANT SECTIONS.
- 10.) INDICATES A CMU WALL. REFER TO TYPICAL DETAIL 3 ON DRAWING S0-0-4 FOR REINFORCEMENT AND DETAIL 4 ON DRAWING S0-0-4 FOR CONNECTIONS TO STEEL BEAMS AND CONCRETE SLABS AT THE TOP OF WALL FOR NON-STRUCTURAL WALLS. REFER TO RELEVANT SECTIONS FOR CONNECTIONS OF SHEAR WALLS TO THE STRUCTURE.
- 11.) FOR DIMENSIONS AND ELEVATIONS NOT GIVEN REFER TO ARCHITECTURAL DRAWINGS.
- 12.) INDICATES UNDERGROUND UTILITY LINES PLUMBING THROUGH CONCRETE FOUNDATION WALL TYPICAL. COORDINATE FOOTING ELEVATION WITH PIPE INVERTS AND TYPICAL STRUCTURAL DETAILS.

DRA

Drumme Rosane Anderson, Inc.
225 Oakland Road
Studio 205
South Windsor, CT
06074
260 Charles Street
Studio 300
Waltham, MA
02453
Planning Architecture Interior
Tel: 877.261.1100
www.dra.com

NORTHEAST
METRO TECH

100 Hemlock Rd.
Wakefield, MA 01880

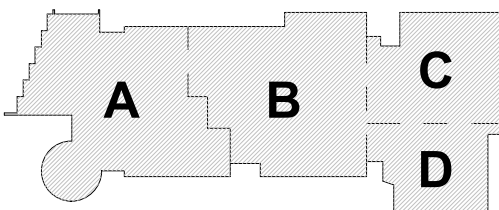
EDG

Engineers Design Group Inc.
Structural Engineers
389 Main Street, Suite 401
Malden, MA 02148
(781)396-9007
EDG@EDGINC.COM

© COPYRIGHT 2021 DRUMMEY ROSANE ANDERSON, INC.

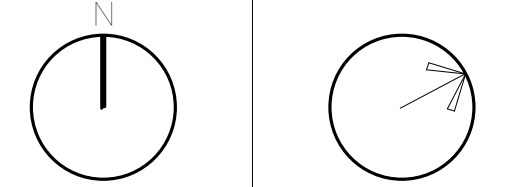
MSBA 60% CD
Submission

01/13/2023



KEY PLAN

PROJECT NORTH MAGNETIC NORTH



CONCESSION
BUILDING PLANS

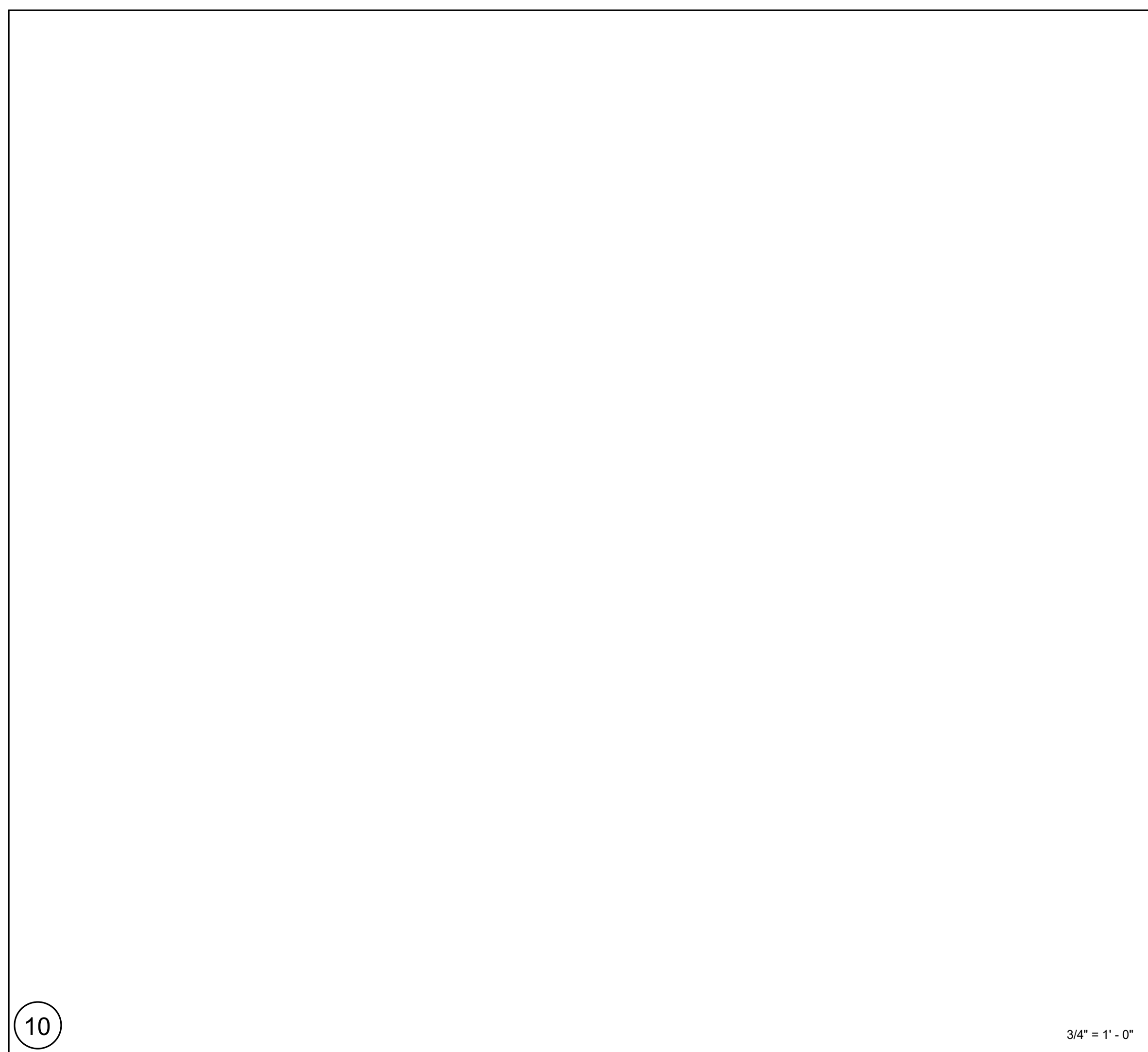
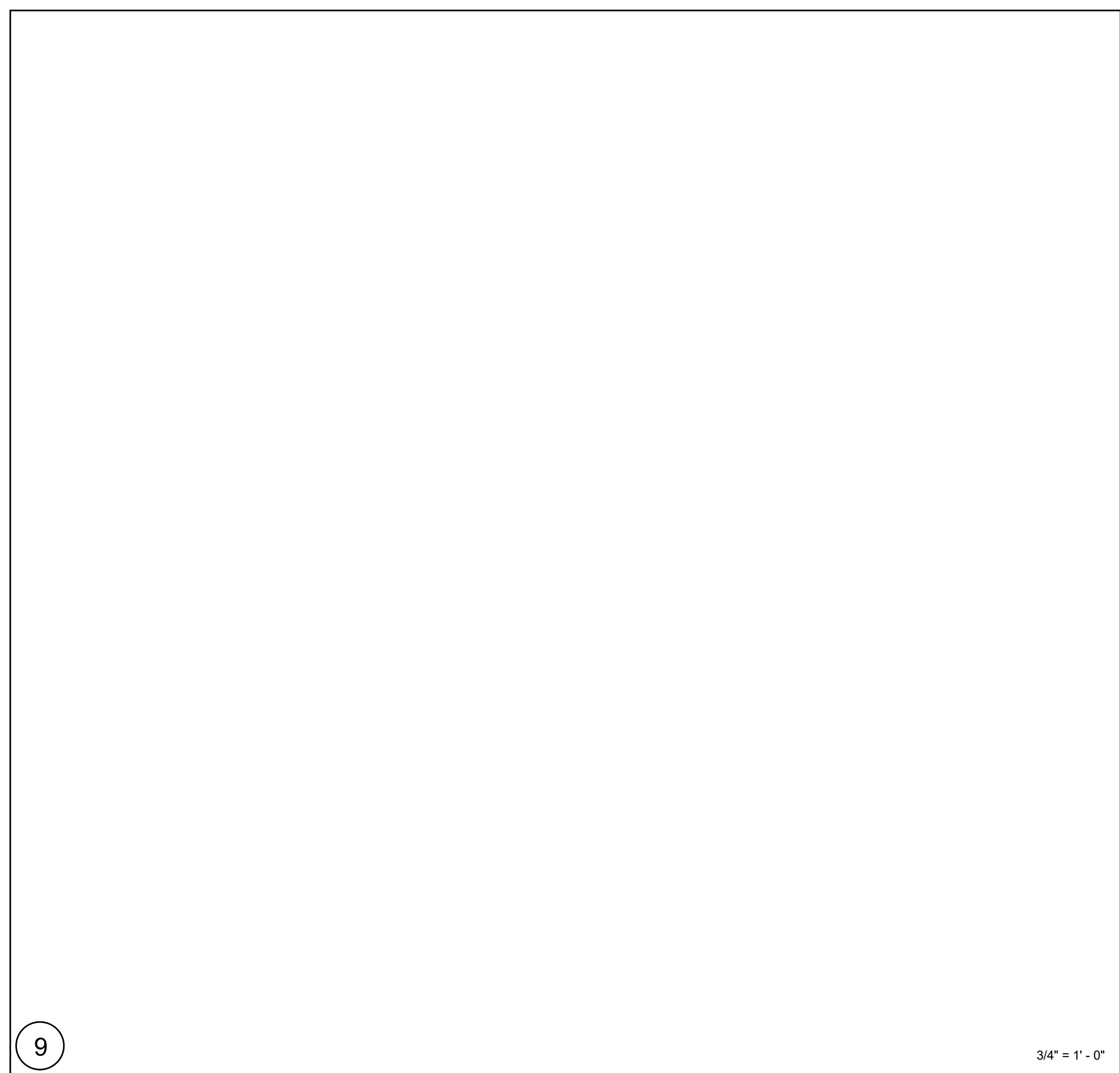
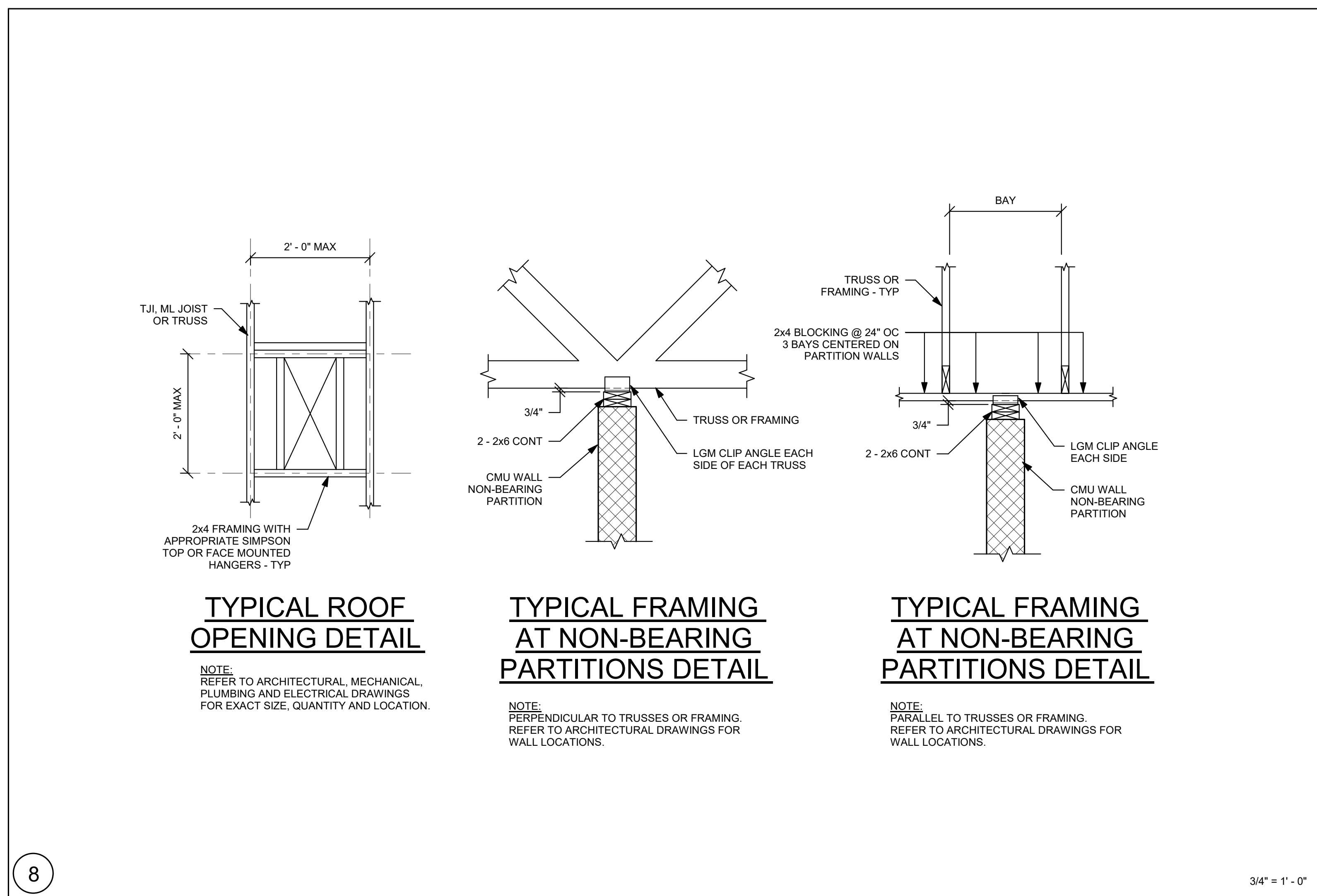
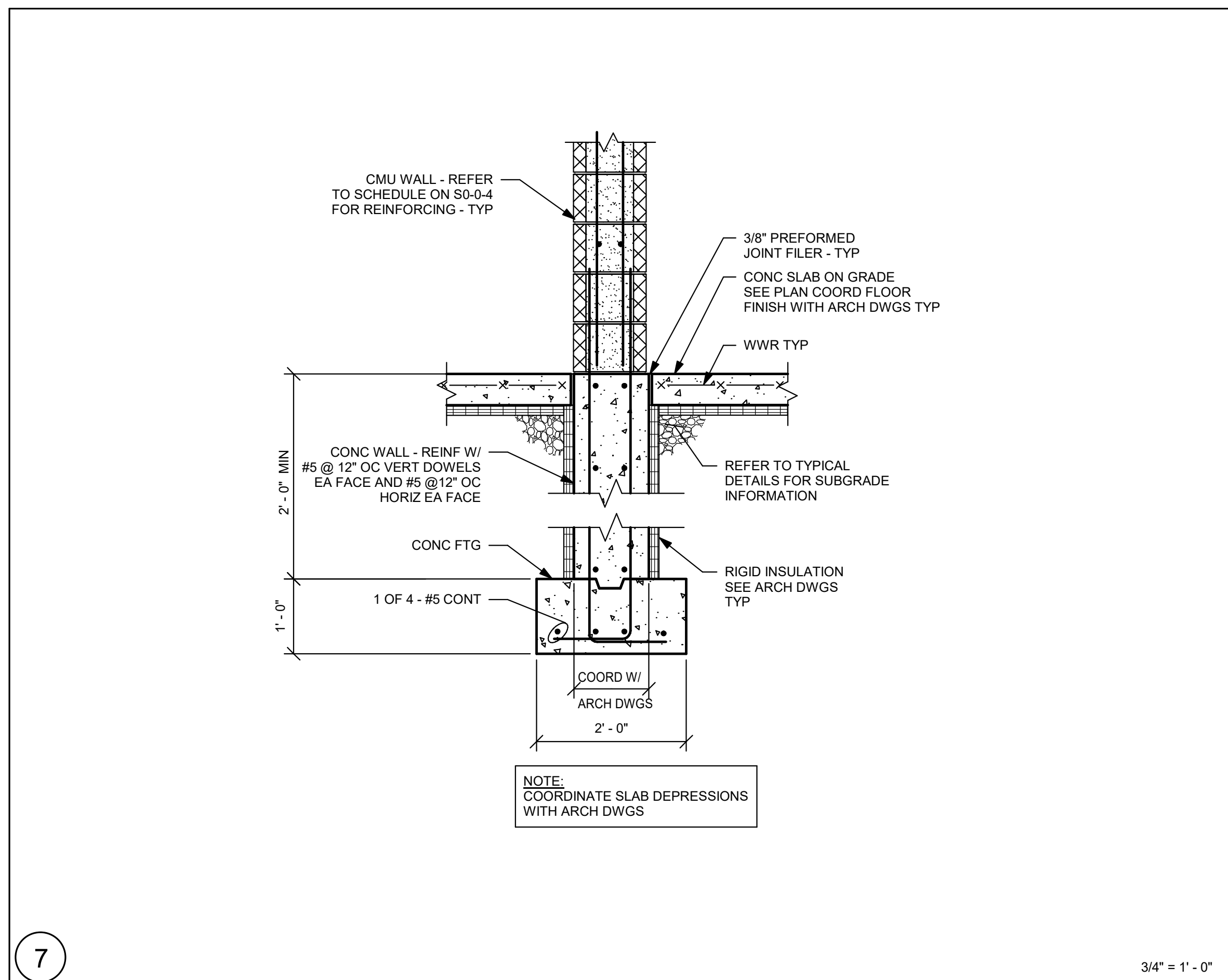
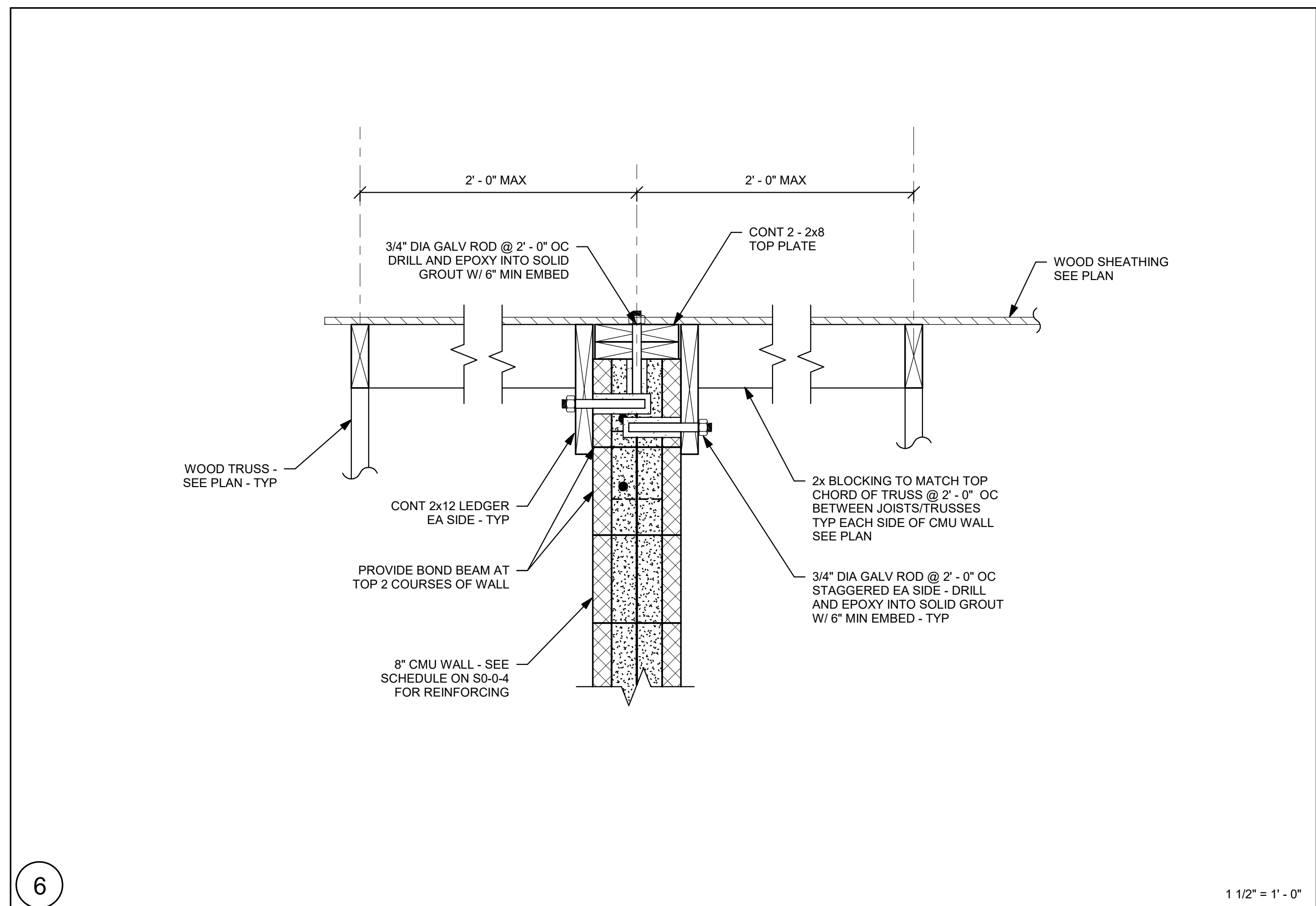
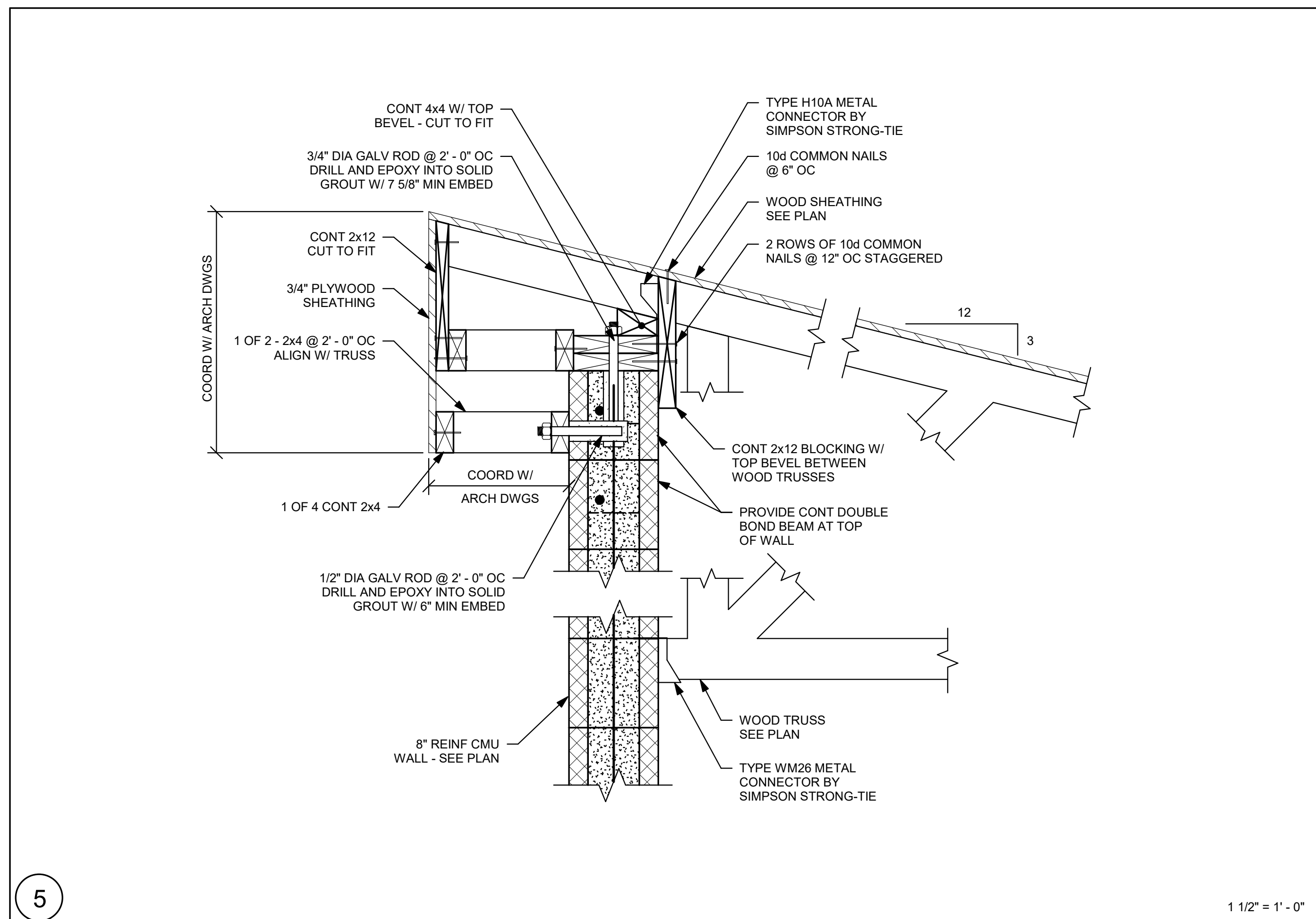
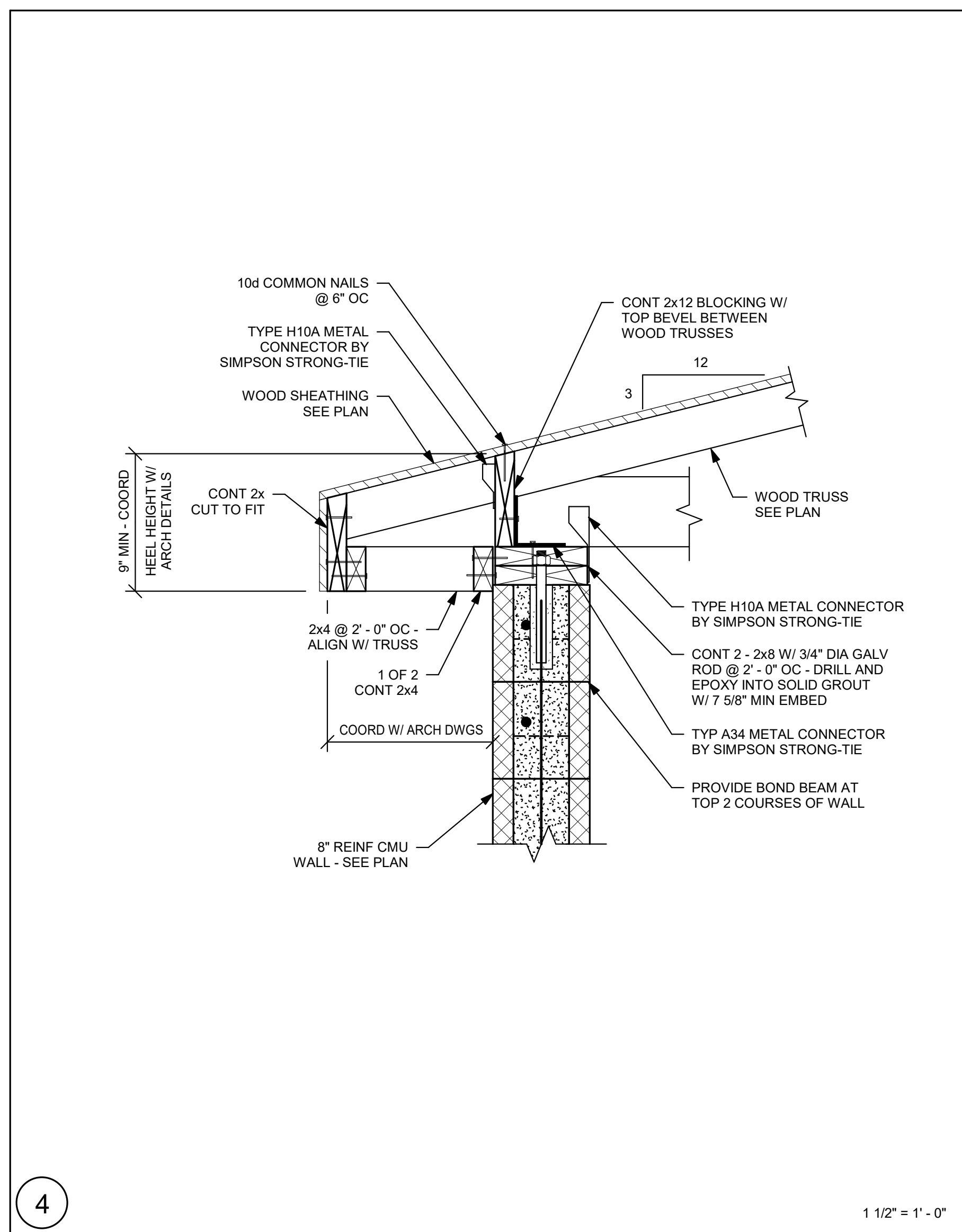
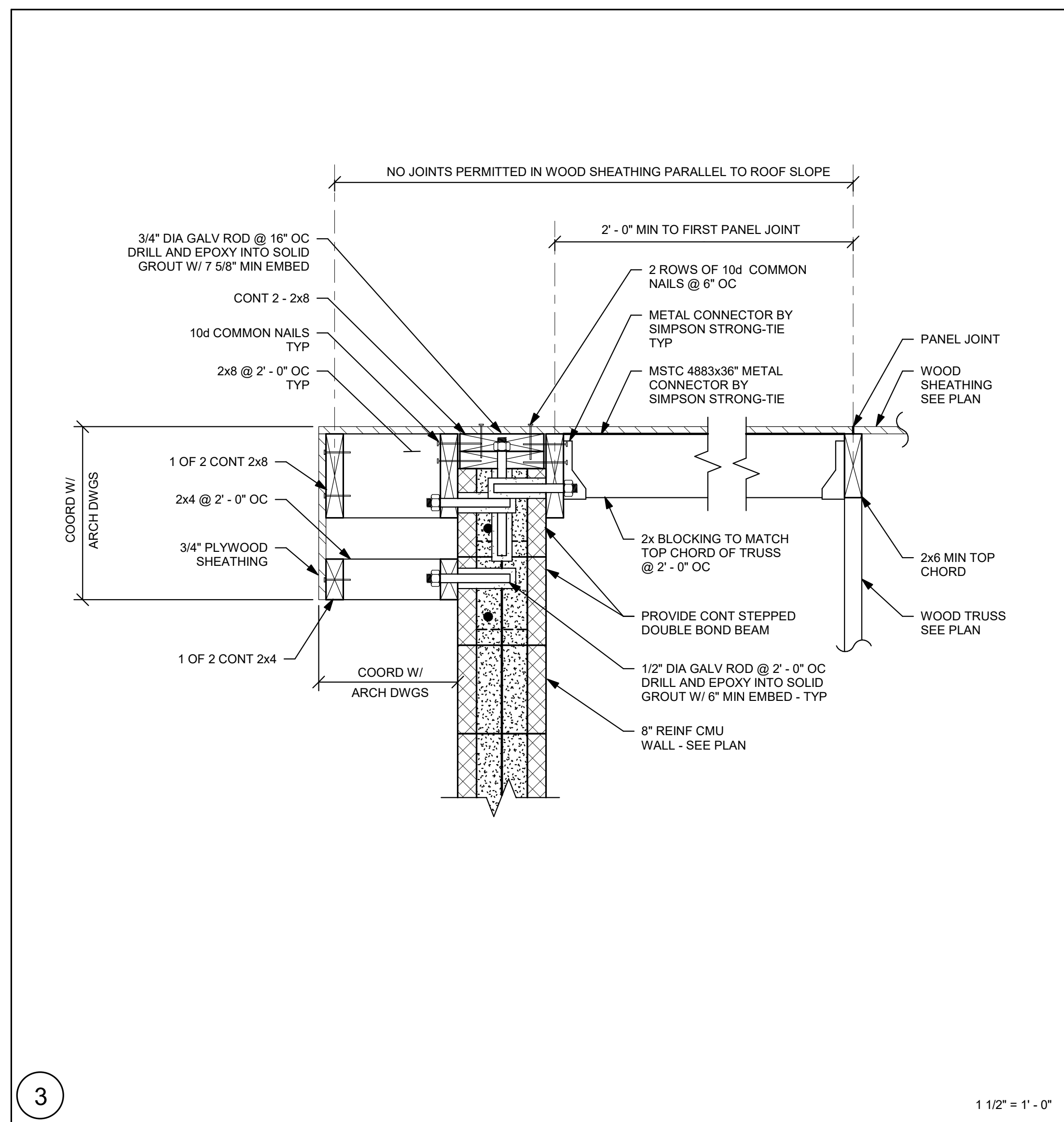
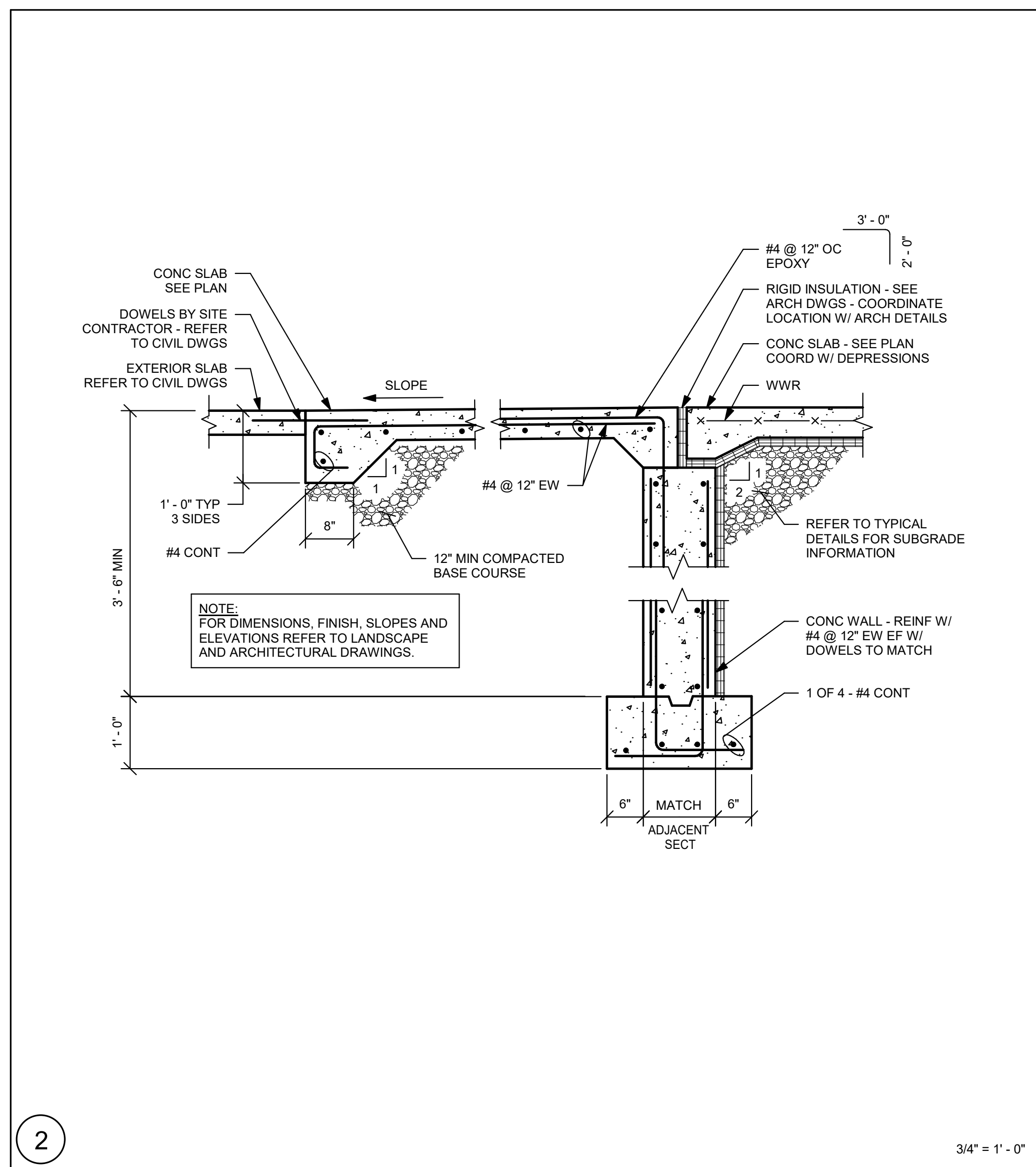
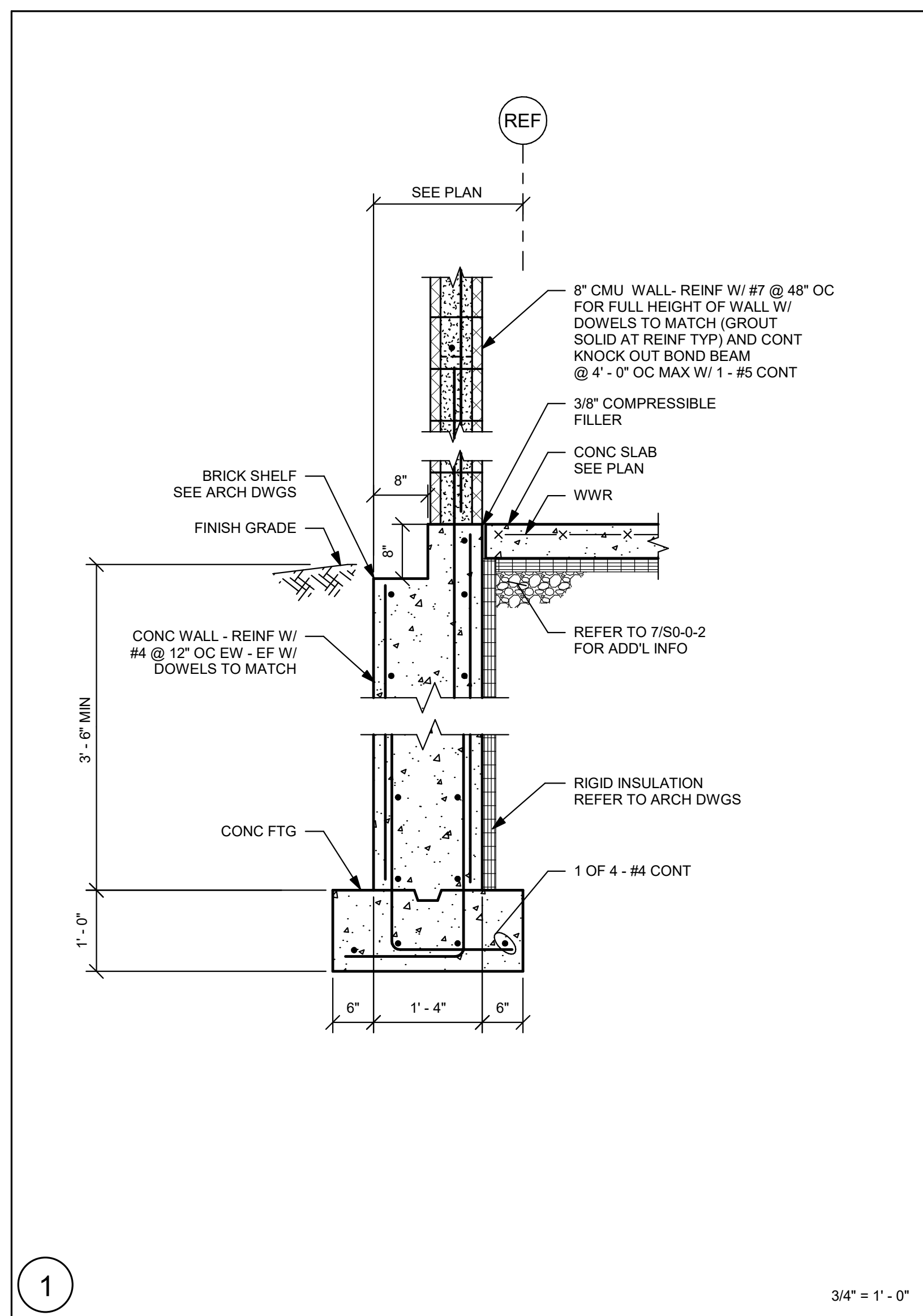
Scale: As indicated

Job No.: 20202

Drawn By: EDG

Date: 01/13/2023

SC-1-1



**NORTHEAST
METRO TECH**

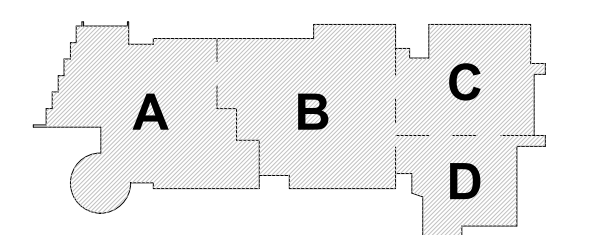
100 Hemlock Rd.
Wakefield, MA 01880

EDG
Engineers Design Group Inc.
Structural Engineers
389 Main Street, Suite 401
Malden, MA 02148
(781)396-9007
EDG@EDGINC.COM

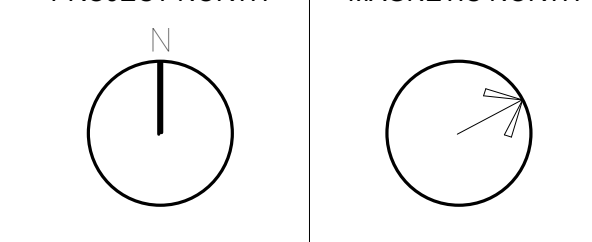
© COPYRIGHT 2021 DRUMREY ROSANE ANDERSON, INC.

MSBA 60% CD
Submission

01/13/2023



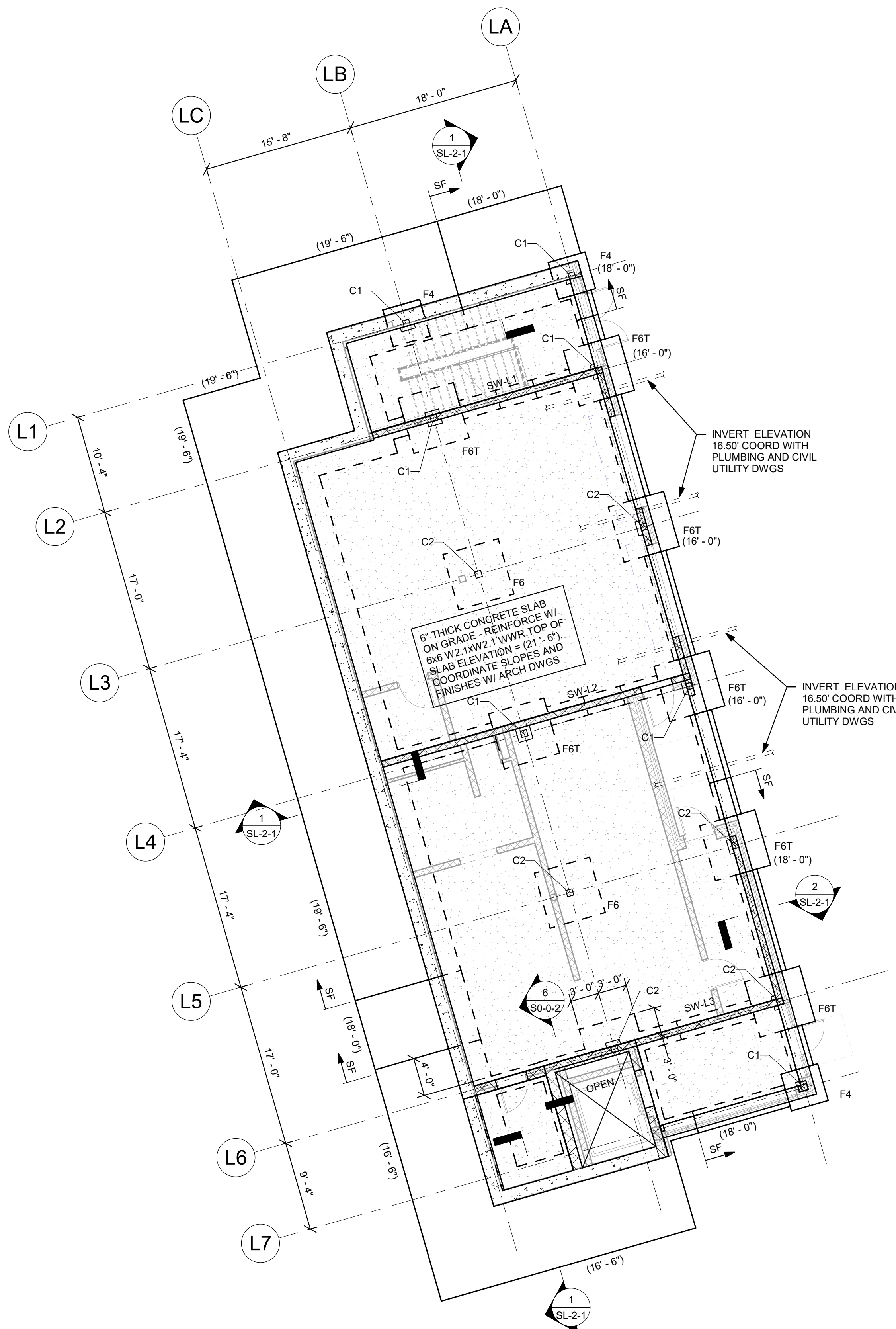
PROJECT NORTH
MAGNETIC NORTH



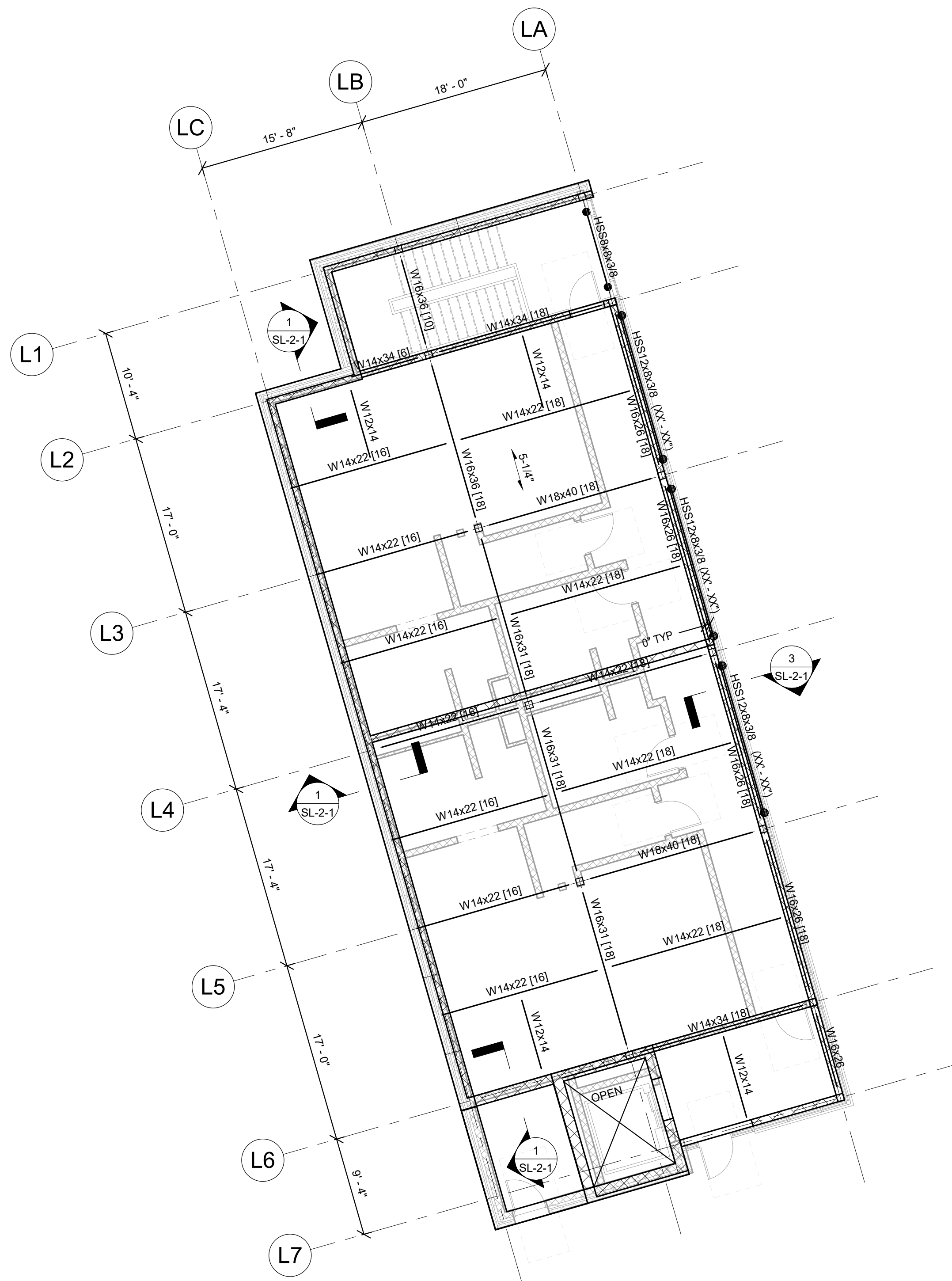
**CONCESSION
BUILDING
SECTIONS**

Scale: As indicated
Job No.: 20202
Drawn By: EDG
Date: 01/13/2023

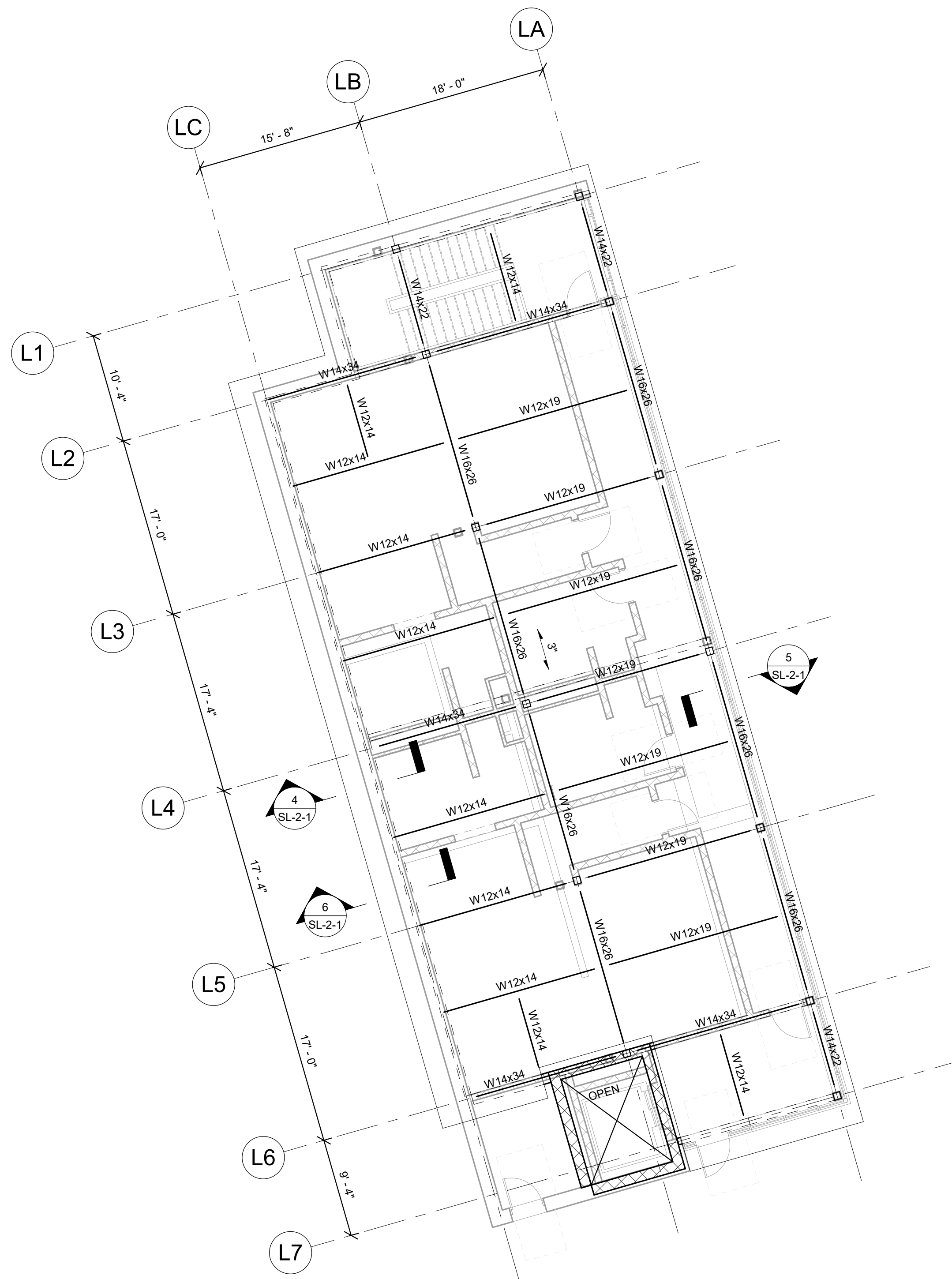
SC-2-1



LOCKER BUILDING GROUND FLOOR PLAN



LOCKER BUILDING FIRST FLOOR PLAN



LOCKER BUILDING ROOF PLAN

FOUNDATION NOTES:

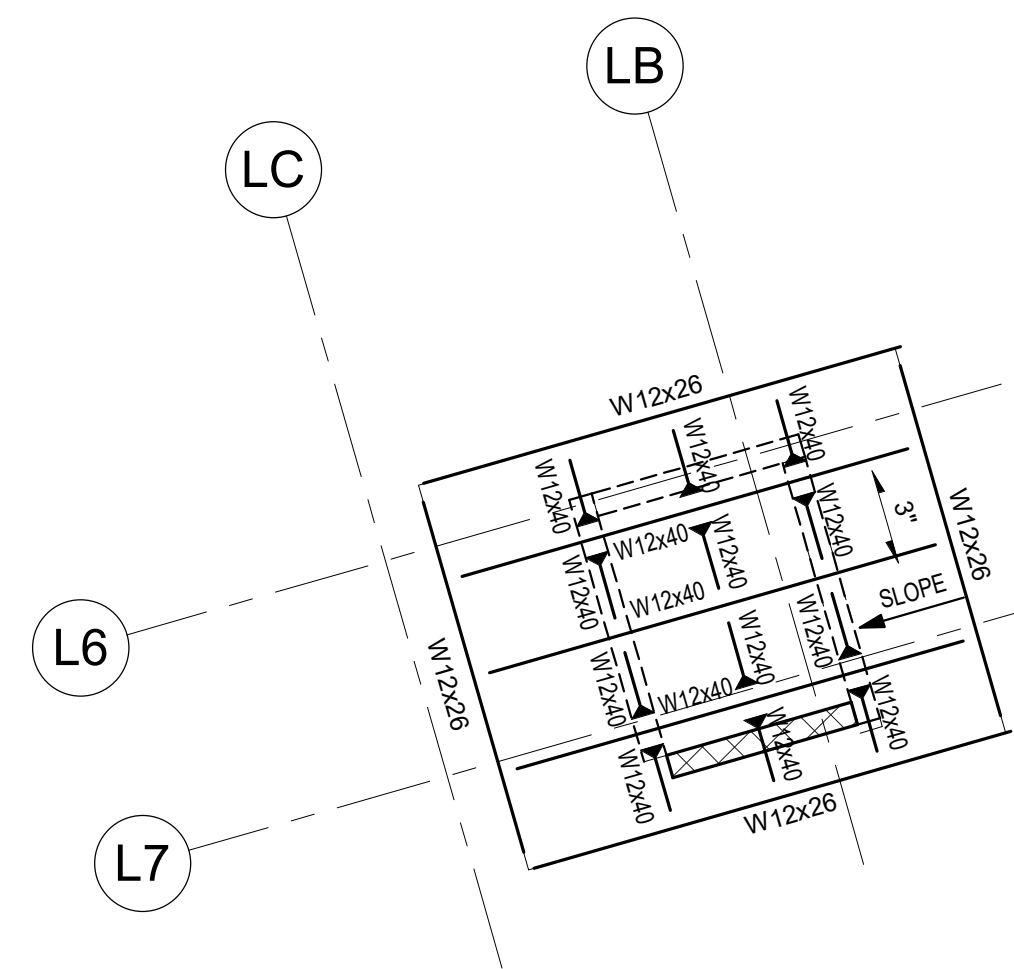
- REFER TO GRADING DRAWINGS FOR PLAN AND GRADE ELEVATIONS. THE STRUCTURAL DRAWINGS USES A DATUM OF 100'-0" AT THE MAIN FLOOR, WHICH CORRESPONDS TO 163.50' MEAN SEA LEVEL, AS SHOWN ON THE SITE AND CIVIL DRAWINGS.
- FOR GENERAL NOTES AND TYPICAL DETAILS SEE DRAWINGS S0-0-1, S0-0-2, S0-0-3, S0-0-4, S0-0-5, S0-0-6, S0-0-7 AND S0-0-8.
- F3 ETC... INDICATES A FOOTING TYPE, FOR SIZE OF FOOTING AND REINFORCEMENT SEE SCHEDULE ON THIS DRAWING.
- TOP OF FOOTING ELEVATION TO BE 3'-6" MINIMUM BELOW LOWEST ADJACENT FINISHED GRADE AT EXTERIOR CONDITIONS AND 2'-0" BELOW TOP OF CONCRETE SLAB AT INTERIOR CONDITIONS. ALL OTHER TOP OF FOOTING ELEVATIONS ARE DENOTED AS THUS (XX'-XX") ON PLANS. CONTRACTOR TO COORDINATE AND VERIFY ALL TOP OF FOOTING ELEVATIONS WITH UNDERGROUND PLUMBING SUB-CONTRACTOR'S FIELD LAYOUT.
- ALL FOOTING ELEVATIONS NOTED ON PLAN ARE SHOWN ONLY TO ASSIST IN COORDINATION. ALL FOOTING ELEVATIONS MUST BE COORDINATED WITH STRUCTURAL REQUIREMENTS, TYPICAL DETAILS, ARCHITECTURAL, MECHANICAL, ELECTRICAL, AND PLUMBING DRAWINGS.
- ALL FOOTINGS TO BE CENTERED UNDER COLUMNS UNLESS NOTED OTHERWISE.
- SE INDICATES A STEPPED FOOTING REFER TO DETAIL 1 ON DRAWING S0-0-2.
- BOTTOM OF BASE PLATE ELEVATION TO BE 1'-5" MINIMUM BELOW TOP OF CONCRETE SLAB AT INTERIOR CONDITIONS, AND 0'-11" BELOW TOP OF CONCRETE SLAB AT EXTERIOR CONDITIONS. UNLESS NOTED OTHERWISE AS (XX'-XX") REFER TO ARCHITECTURAL DRAWINGS FOR BRICK SHELF ELEVATIONS.
- FOR UNDER SLAB DRAINAGE AND WALL DRAINS, COORDINATE WITH ARCHITECTURAL, STRUCTURAL, CIVIL, AND PLUMBING DRAWINGS.
- INDICATES A DEPRESSED SLAB ON GRADE. REFER TO DETAILS 6 AND 7 ON DRAWING S0-0-2 COORDINATE ALL SLAB DEPRESSIONS WITH REQUIREMENTS ON ARCHITECTURAL DRAWINGS.
- FOR TYPICAL EXTERIOR DOOR DETAIL, REFER TO DETAIL 6 ON DRAWING S0-0-3 AND RELEVANT SECTIONS.
- INDICATES A CMU WALL. REFER TO TYPICAL DETAIL 3 ON DRAWING S0-0-4 FOR REINFORCEMENT AND DETAIL 4 ON DRAWING S0-0-6 FOR CONNECTIONS TO STEEL BEAMS AND CONCRETE SLABS AT THE TOP OF WALL FOR NON-STRUCTURAL WALLS. REFER TO RELEVANT SECTIONS FOR CONNECTIONS OF SHEAR WALLS TO THE STRUCTURE.
- FOR DIMENSIONS AND ELEVATIONS NOT GIVEN REFER TO ARCHITECTURAL DRAWINGS.
- INDICATES CONCRETE PIER REFER TO TYPICAL DETAIL 5 ON DRAWING S0-0-2.
- INDICATES UNDERGROUND UTILITY LINES PLUMBING THROUGH CONCRETE FOUNDATION WALL TYPICAL. COORDINATE FOOTING ELEVATION WITH PIPE INVERTS AND TYPICAL STRUCTURAL DETAILS.
- CONCRETE PIER REINFORCING PER DETAIL 5 ON DRAWING S0-0-2 IS TO BE PROVIDED FOR ALL CONCRETE WALLS SUPPORTING COLUMNS. HORIZONTAL WALL REINFORCING MUST REMAIN CONTINUOUS.

FRAMING NOTES:

- FOR GENERAL NOTES AND TYPICAL DETAILS SEE DRAWINGS S0-0-1, S0-0-2, S0-0-3, S0-0-4, S0-0-5, S0-0-6, S0-0-7 AND S0-0-8.
- REFER TO ARCHITECTURAL DRAWINGS FOR ELEVATIONS AND VERTICAL DIMENSIONS. FITCH ALL STEEL UNIFORMITY TO LOW POINTS AT THE COLUMNS AND BENT BEAMS AS SHOWN ON THE ARCHITECTURAL DRAWINGS.
- [XX] INDICATES THE NUMBER OF 3/4" DIAMETER x 3 1/2" LONG HEADED STUDS WELDED TO THE TOP FLANGE OF THE BEAM. SPACE STUDS EVENLY ALONG THE BEAM UNLESS NOTED OTHERWISE.
- INDICATES A MOMENT CONNECTION TO DEVELOP THE FULL CAPACITY OF THE MEMBER. REFER TO TYPICAL DETAILS 7, 8 AND 9 ON DRAWING S0-0-6.
- INDICATES A 5/16" FILLET WELD ALL AROUND, (HSS BEAM TO HSS COLUMN) WHERE BEAM DIMENSIONS EXCEED COLUMN DIMENSIONS PROVIDE 1/2" THICK STEEL CAP PLATE TO ACHIEVE ALL AROUND WELD. REFER TO TYPICAL DETAIL 2 ON DRAWING S0-0-7.
- < X > INDICATES UPWARD CAMBER AT THE MID-SPAN OF THE MEMBER.
- 1 1/2" INDICATES SPAN DIRECTION OF 2" DEEP, 20 GAGE GALVANIZED COMPOSITE STEEL DECK WITH 2 1/2" NORMAL WEIGHT CONCRETE TOPPING. TOTAL THICKNESS = 4 1/2". REINFORCE WITH 6x6 - W21x120.1 WWR.
- 1 1/2" INDICATES SPAN DIRECTION OF 1 1/2" DEEP, 20 GAGE TYPE B, GALVANIZED STEEL ROOF DECK.
- 3" INDICATES SPAN DIRECTION OF 3" DEEP, 20 GAGE TYPE N, GALVANIZED STEEL ROOF DECK.
- FOR EXACT NUMBER, SIZE, AND LOCATION OF OPENING IN STEEL DECKING REFER TO MECHANICAL AND ARCHITECTURAL DRAWINGS. FOR FRAMING INFORMATION, REFER TO DETAIL 1 AND 2 ON DRAWING S0-0-8.
- INDICATES A ROOF DRAIN. REFER TO TYPICAL STRUCTURAL DETAILS 1 AND 8 ON DRAWING S0-0-6 AND DETAIL 11 ON DRAWING S0-0-8 FOR DECKING SUPPORT. REFER TO DETAIL 4 ON DRAWING S0-0-5. REFER TO PLUMBING AND ARCHITECTURAL DRAWINGS FOR OPENING SIZES AND LOCATIONS.
- CT INDICATES A COLUMN TERMINATES AT THIS LEVEL.
- WB INDICATES A BEND IN THE STEEL BEAM. REFER TO TYPICAL DETAIL 9 ON DRAWING S0-0-8.
- INDICATES A CMU WALL. REFER TO TYPICAL DETAIL 3 ON DRAWING S0-0-4 FOR REINFORCEMENT AND DETAIL 4 ON DRAWING S0-0-6 FOR CONNECTIONS TO STEEL BEAMS AND CONCRETE SLABS AT THE TOP OF WALL FOR NON-STRUCTURAL WALLS. REFER TO RELEVANT SECTIONS FOR CONNECTIONS OF SHEAR WALLS TO THE STRUCTURE.
- FOR DIMENSIONS AND ELEVATIONS NOT GIVEN REFER TO ARCHITECTURAL DRAWINGS.

FOOTING SCHEDULE		
DESIGN SOIL BEARING CAPACITY = 2 TSF		
MARK	SIZE	REINFORCEMENT
F4	4'-0" x 4'-0" x 1'-0"	6 - #5 BOT EA WAY
F6T	6'-0" x 6'-0" x 2'-0"	7 - #6 BOT EA WAY

T INDICATES TOP REINFORCING TO MATCH BOTTOM REINFORCING



LOCKER BUILDING ELEVATOR ROOF PART PLAN

DRA

Drumme Rosane Anderson, Inc.
225 Oakland Road
Studio 205
South Windsor, CT 06074
260 Charles Street
Studio 300
Waltham, MA 02453
Planning Architecture Interior
Tel: 877.261.1100
www.dra.com

NORTHEAST METRO TECH

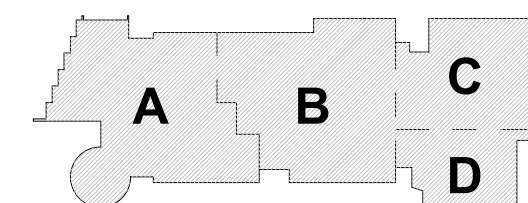
100 Hemlock Rd.
Wakefield, MA 01880

EDG
Engineers Design Group Inc.
Structural Engineers
389 Main Street, Suite 401
Malden, MA 02148
(781)396-9007
EDG@EDGINC.COM

© COPYRIGHT 2021 DRUMMEY ROSANE ANDERSON, INC.

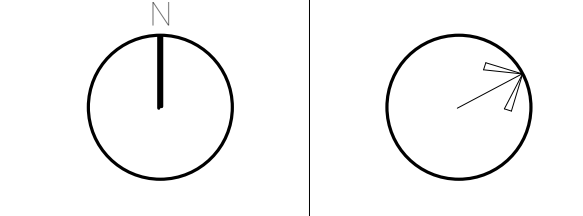
MSBA 60% CD
Submission

01/13/2023



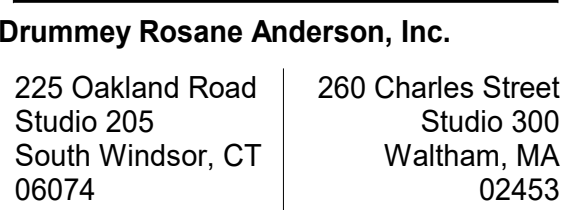
KEY PLAN

PROJECT NORTH MAGNETIC NORTH



LOCKER BUILDING PLANS

Scale: 1/8" = 1'-0"
Job No.: 20202
Drawn By: EDG
Date: 01/13/2023
SL-1-1



**Planning Architecture Interior
Design**
Tel: 617.964.1700
www.draaws.com

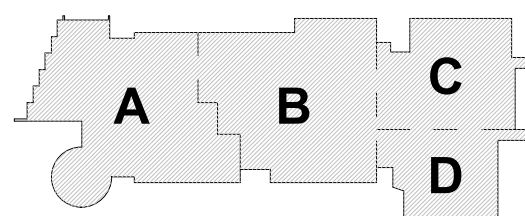
100 Hemlock Rd,
Wakefield, MA 01880



© COPYRIGHT 2021 DRUMMEY ROSANE ANDERSON, INC.

MSBA 60% CD
Submission

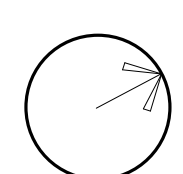
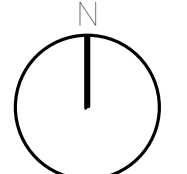
01/13/2023



KEY PLAN

PROJECT NORTH

MAGNETIC NORTH



LOCKER ROOM BUILDING SECTIONS

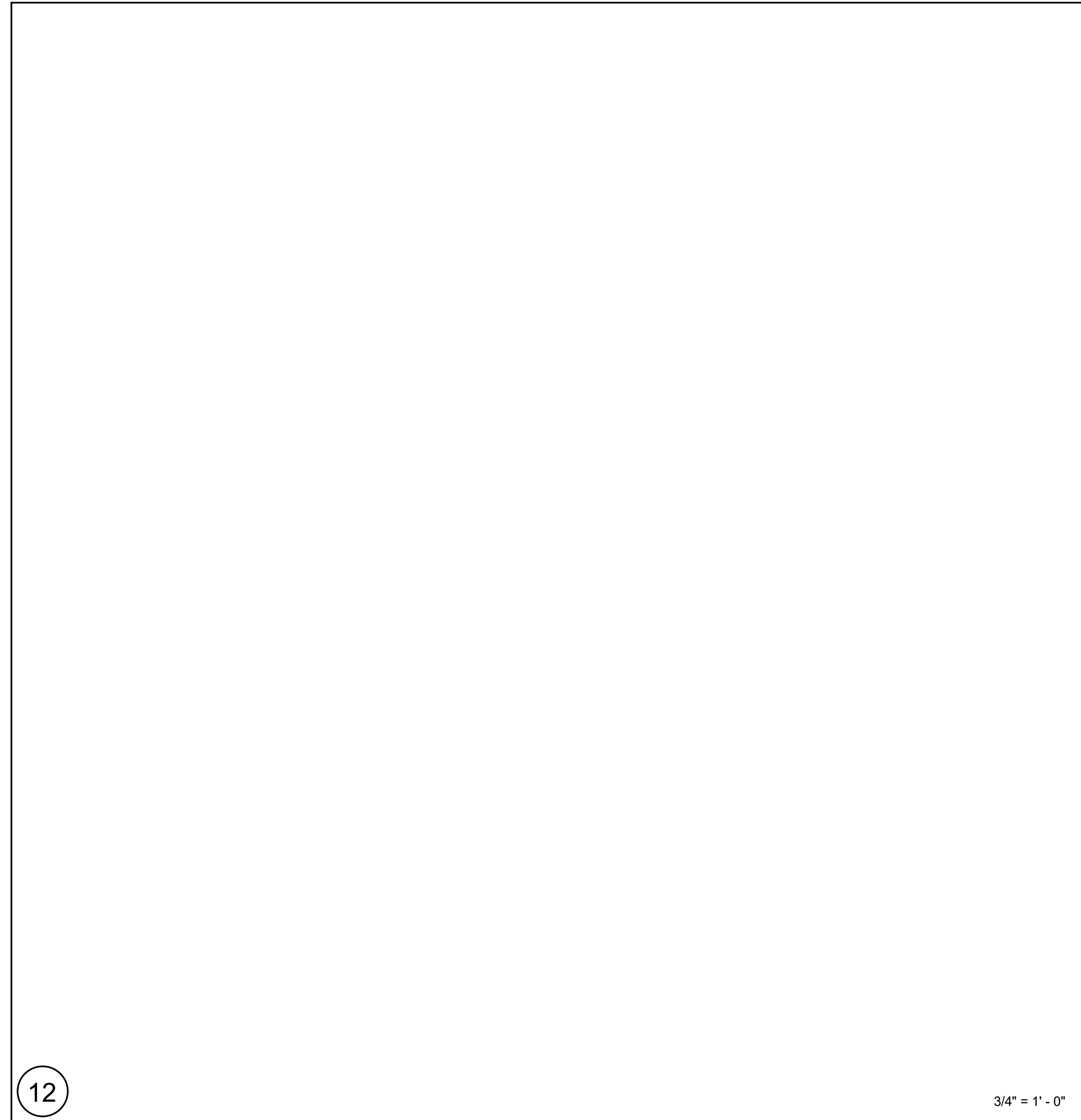
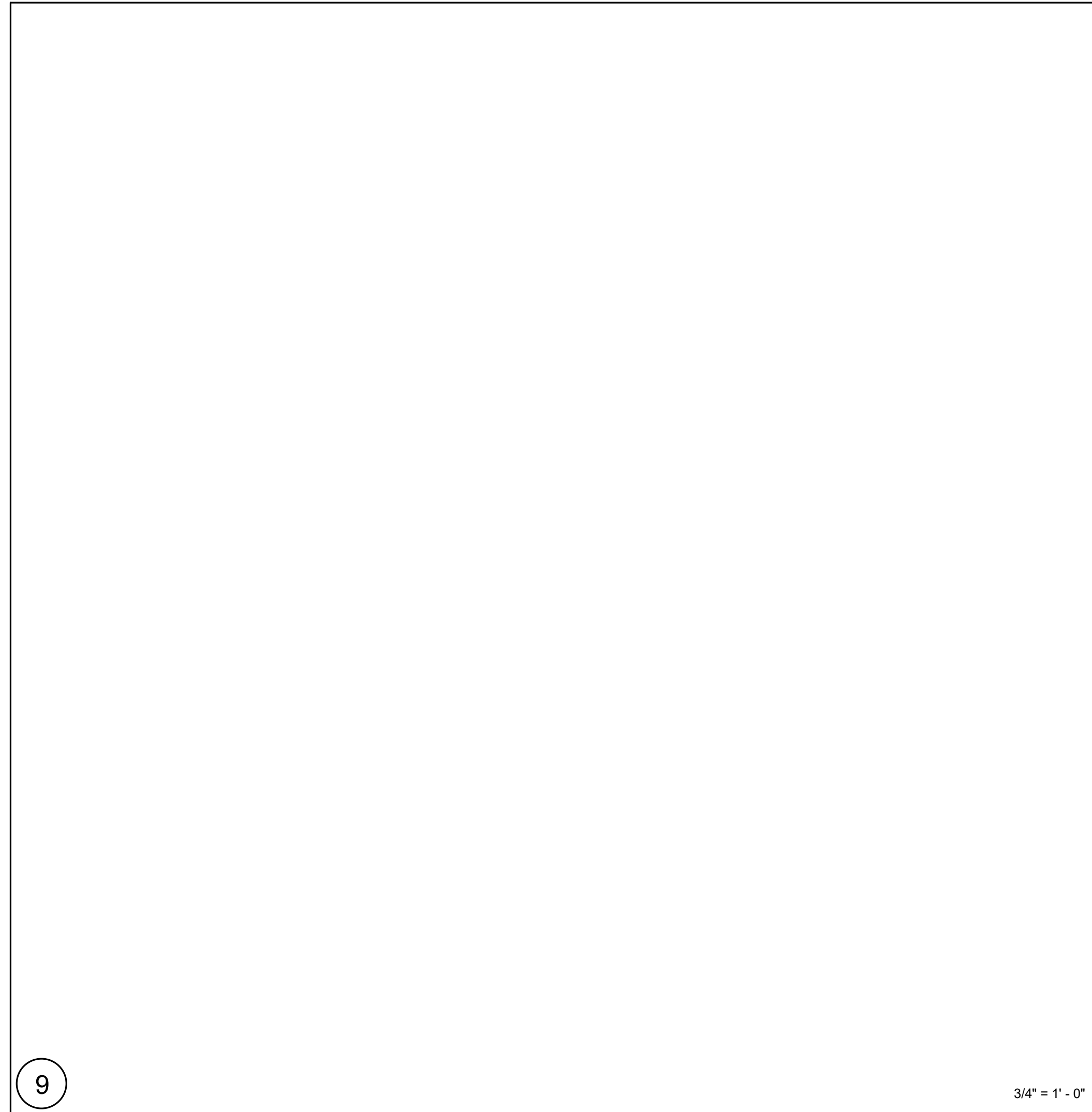
Scale: As indicated

Code:	FW 1110000
1111	00000

Job No.: 20202

Drawn By: EDC

SL-2-1



DRA

Drumme y Rosane Anderson, Inc.
225 Oakland Road
Studio 205
South Windsor, CT
06074
260 Charles Street
Studio 300
Waltham, MA
02453
Planning Architecture Interior
Tel: 817.261.1100
www.draa.com

NORTHEAST
METRO TECH

100 Hemlock Rd.
Wakefield, MA 01880

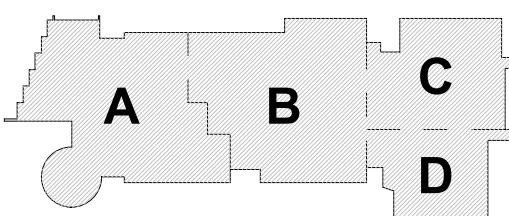


Engineers Design Group Inc.
Structural Engineers
389 Main Street, Suite 401
Malden, MA 02148
(781)396-9007
EDG@EDGINC.COM

© COPYRIGHT 2021 DRUMMEY ROSANE ANDERSON, INC.

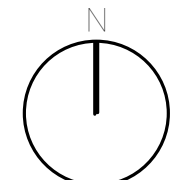
MSBA 60% CD
Submission

01/13/2023

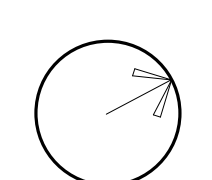


KEY PLAN

PROJECT NORTH



MAGNETIC NORTH



LOCKER ROOM
BUILDING
SHEAR WALLS

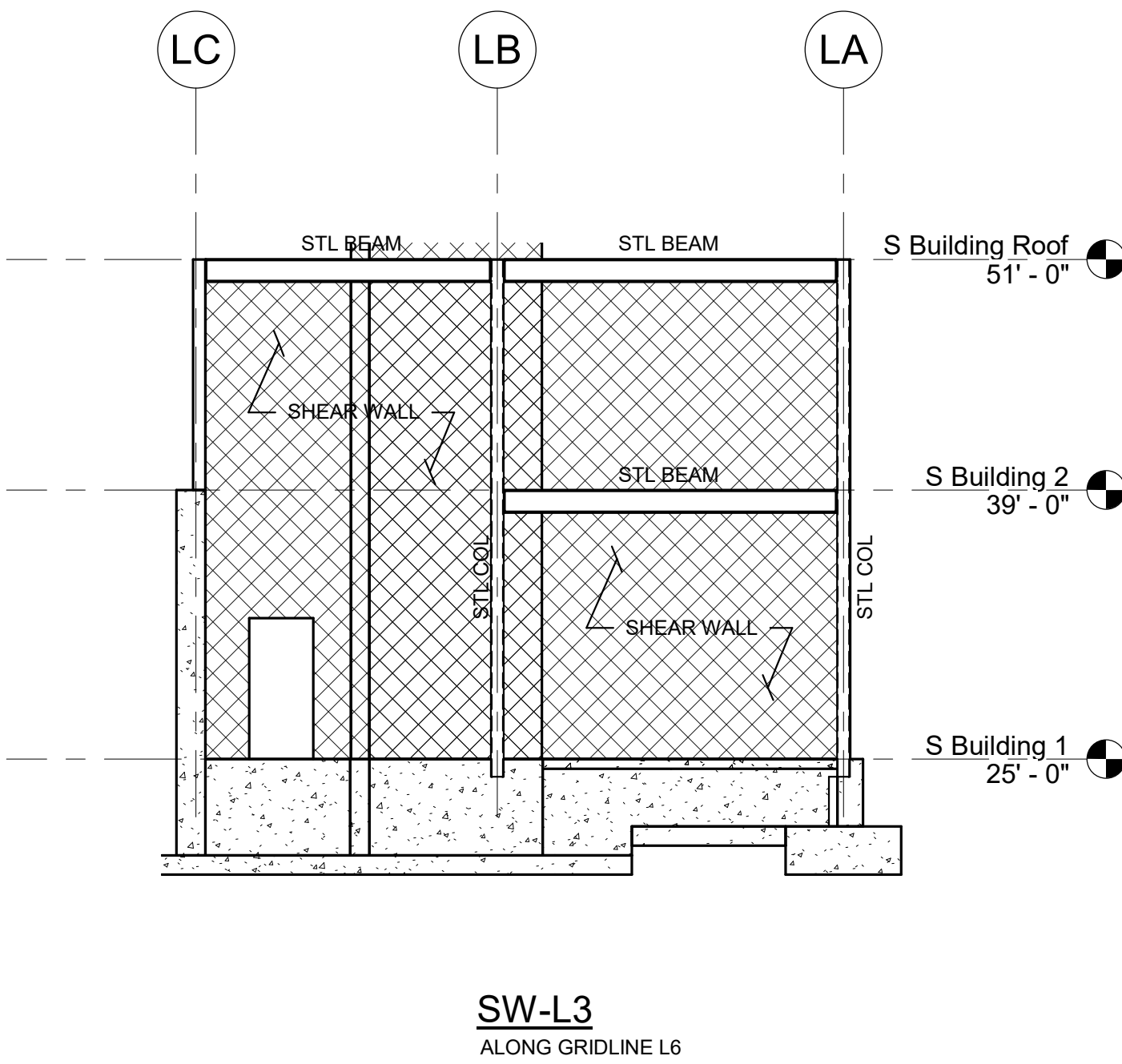
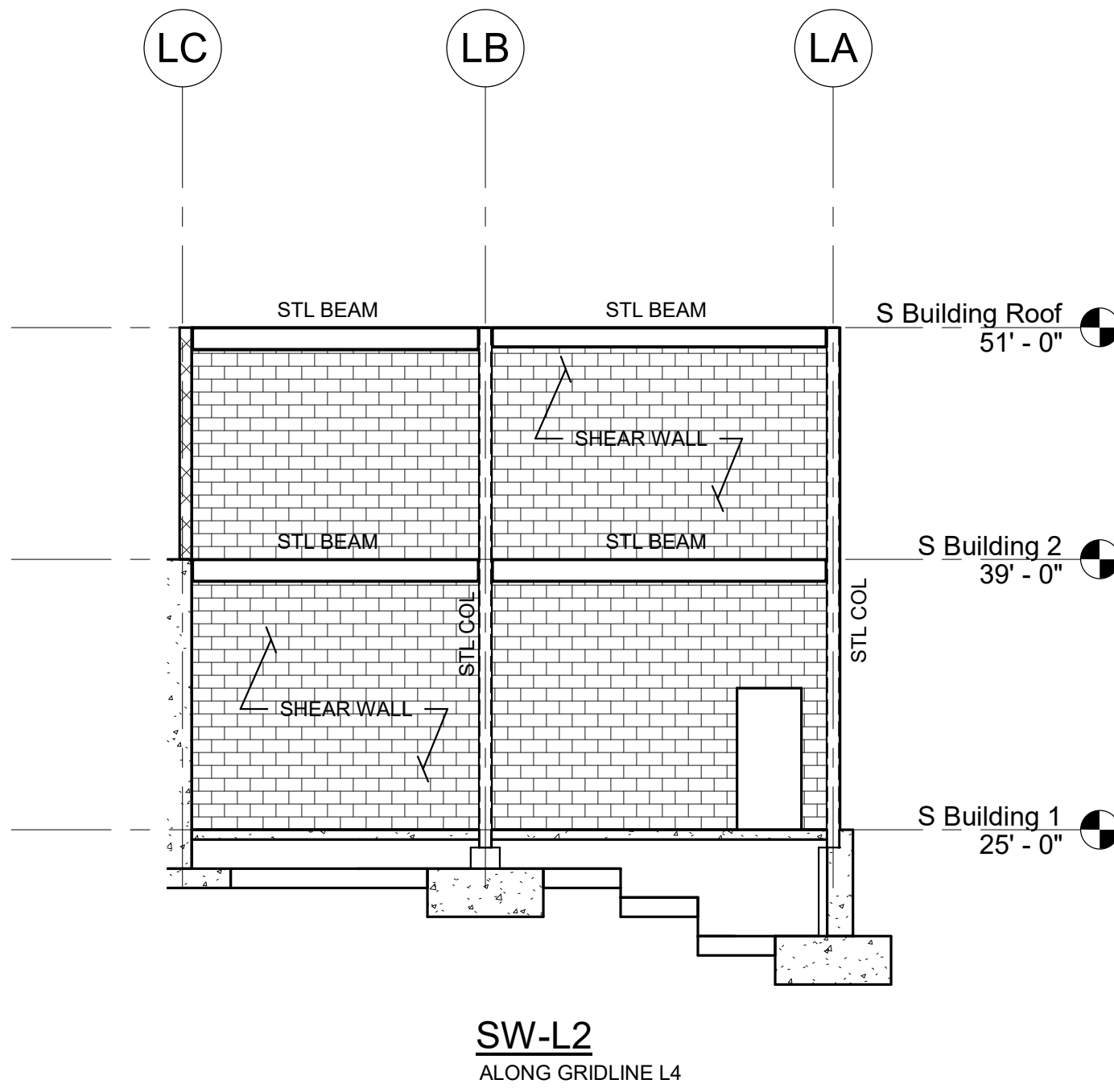
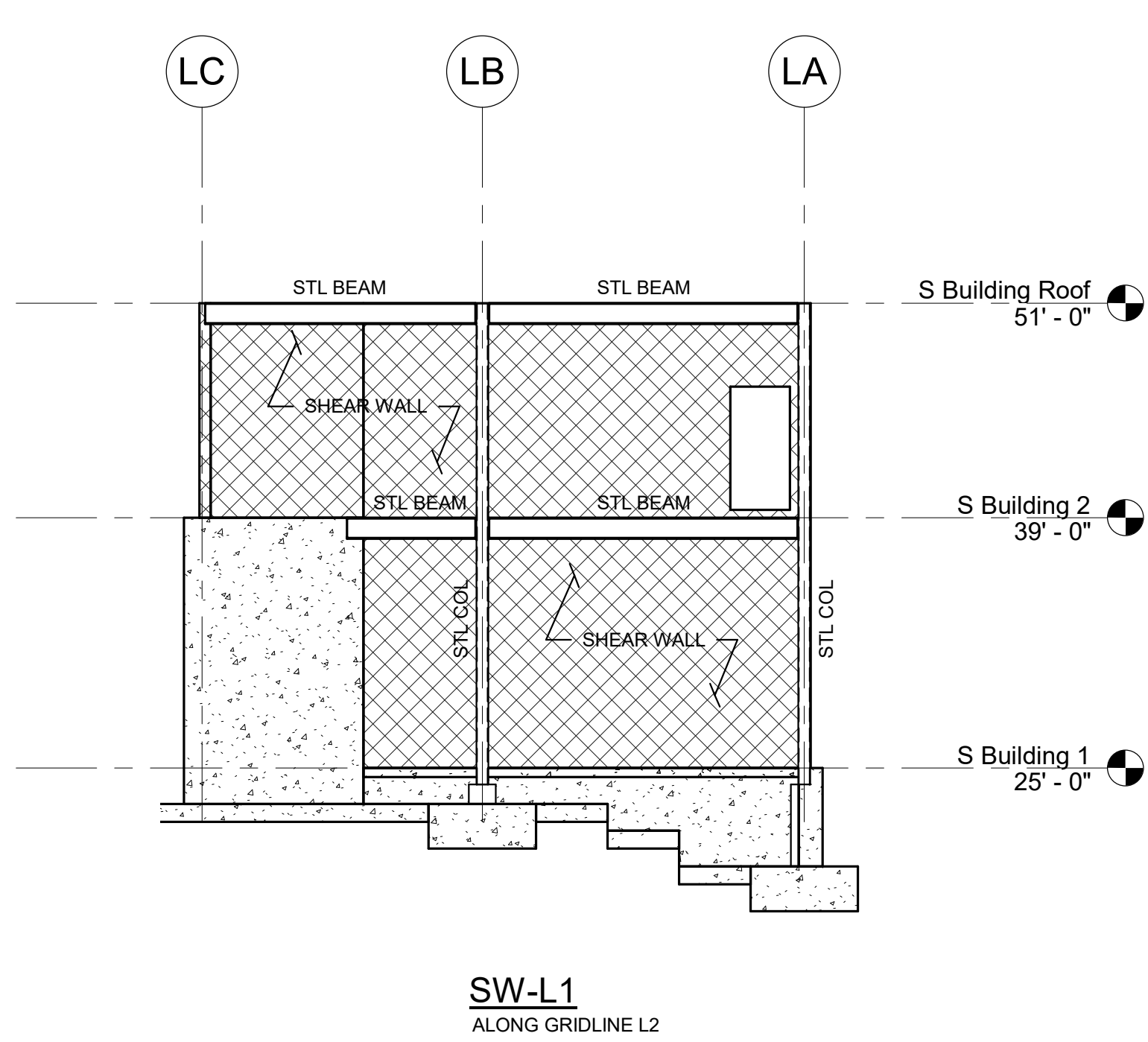
Scale: 1/8" = 1'-0"

Job No.: 20202

Drawn By: EDG

Date: 01/13/2023

SL-3-1



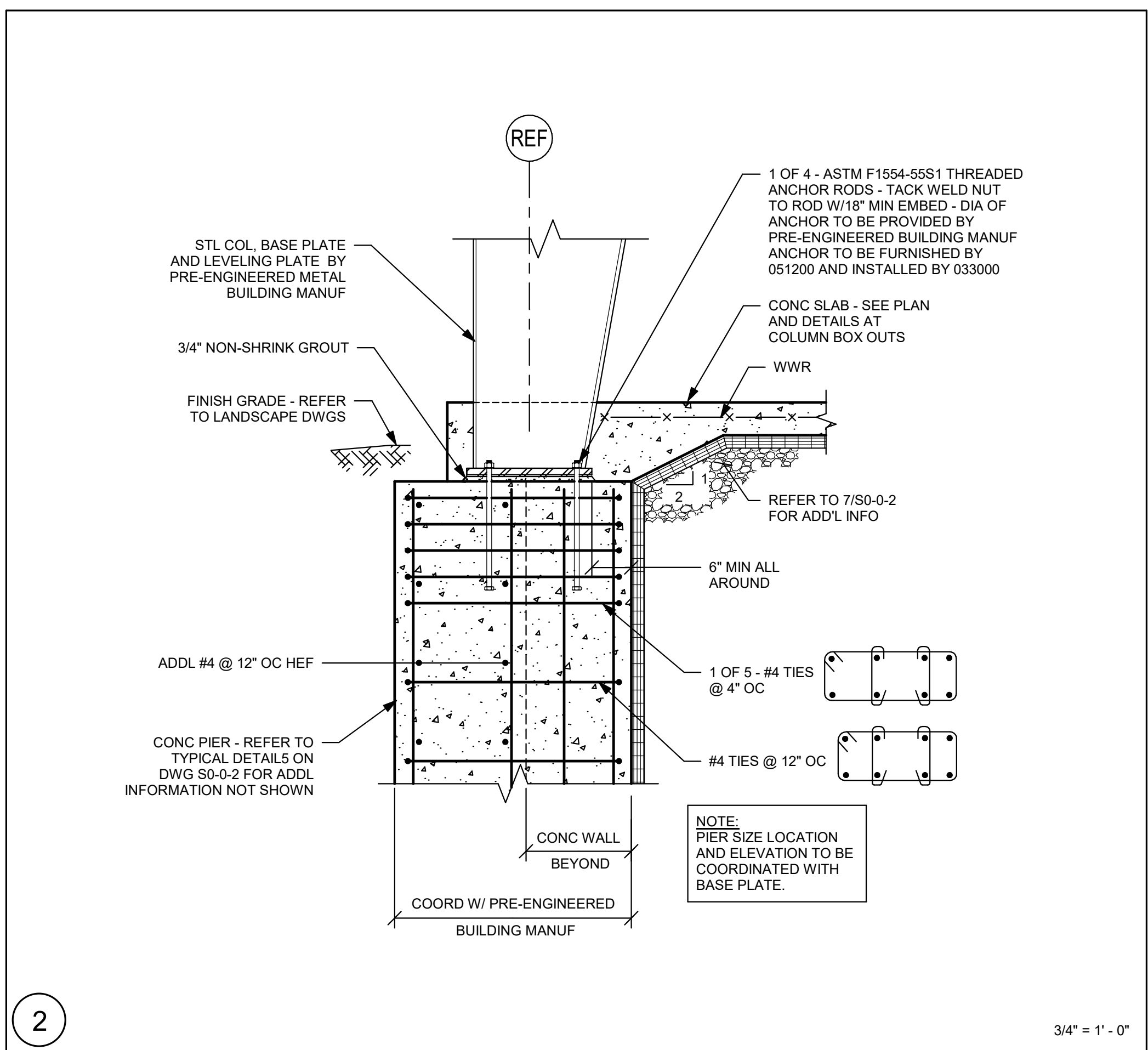
100 Hemlock Rd,
Wakefield, MA 01880



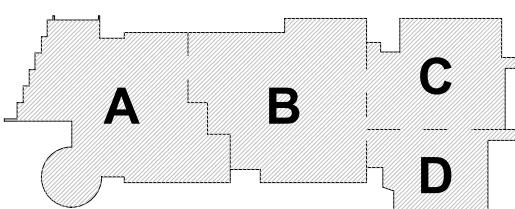
- FOUNDATION NOTES:**
- 1) REFER TO GRADING DRAWINGS FOR PLAN AND GRADE ELEVATIONS
THE STRUCTURAL DRAWINGS USES A DATUM OF 100.0' AT THE MAIN
LEVEL, WHICH CORRESPONDS TO 163.92' MEAN SEA LEVEL, AS SHOWN
ON THE SITE AND CIVIL DRAWINGS.
 - 2) FOR GENERAL NOTES AND SYMBOLS, SEE DRAWINGS
S0-01, S0-02, S0-03, S0-04, S0-05, S0-06, S0-07 AND S0-08.
 - 3) F3 ETC. INDICATES A FOOTING TYPE, TYPE OF FOOTING
AND REINFORCEMENT SEE S0-01 THROUGH S0-08.
 - 4) TOP OF FOOTING ELEVATION TO BE 3'-6" MINIMUM BELOW LOWEST
ADJUSTED FINISHED GRADE AT EXTERIOR CONDITIONS AND 2'-0"
BELOW TOP OF CONCRETE SLAB AT INTERIOR CONDITIONS. ALL
FOOTINGS TO BE FINISHED TO TOP OF FOOTING. ALL FOOTINGS PLUS
XXX-XX ON PLANS CONTRACTOR TO COORDINATE AND VERIFY
TOP OF FOOTING ELEVATION WITH TOP OF EXISTING GROUND
PLUMBING SUB-CONTRACTOR'S FIELD LAYOUT.
 - 5) ALL FOOTING ELEVATIONS SHOWN ON PLAN ARE SHOWN ONLY TO
COORDINATION. ALL FOOTING ELEVATIONS MUST BE
COORDINATED WITH STRUCTURAL REQUIREMENTS, TYPICAL DETAILS,
ARCHITECTURAL, MECHANICAL, ELECTRICAL, AND PLUMBING DRAWINGS.
 - 6) ALL FOOTINGS TO BE CENTERED UNDER COLUMNS
UNLESS NOTED OTHERWISE.
 - 7)  INDICATES A STEPPED FOOTING REFER TO
DETAILS ON DRAWING S0-02.
 - 8) BOTTOM OF BASE SLATE ELEVATION TO BE 1'-5" MINIMUM BELOW
TOP OF CONCRETE SLAB AT INTERIOR CONDITIONS, AND 0'-11"
TOP OF CONCRETE SLAB AT EXTERIOR CONDITIONS.
UNLESS NOTED OTHERWISE AS "XXX-XX" REFER TO
ARCHITECTURAL DRAWINGS FOR BROW-SHILL ELEVATIONS.
 - 9) FOR UNDER SLAB DRAINAGE AND WALL DRAINS, COORDINATE
WITH ARCHITECTURAL, MECHANICAL, ELECTRICAL, AND PLUMBING DRAWINGS.
 - 10)  INDICATES A DEPRESSION SLAB ON GRADE. REFER TO DETAILS
6 AND 7 ON DRAWING S0-02 COORDINATE ALL WALLS
AND CONNECTIONS WITH ALL REQUIREMENTS ON
ARCHITECTURAL DRAWINGS.
 - 11) FOR TYPICAL EXTERIOR DOOR DETAIL. REFER TO
DETAIL 6 ON DRAWING S0-03 AND RELEVANT SECTIONS.
 - 12)  INDICATES A CMU WALL. REFER TO TYPICAL DETAIL,
ON DRAWING S0-03 FOR CONNECTIONS TO WALLS.
 ON A DRAWING S0-06 FOR CONNECTIONS TO STEEL BEAMS
AND CONCRETE SLABS AT THE TOP OF WALL FOR NON-STRUCTURAL
WALLS. REFER TO TYPICAL DETAIL FOR CONNECTIONS OF
SHEAR WALLS TO THE STRUCTURE.
 - 13) FOR DIMENSIONS AND ELEVATIONS NOT GIVEN REFER TO
ARCHITECTURAL DRAWINGS.
 - 14)  INDICATES CONCRETE PIER REFER TO TYPICAL
DETAIL ON DRAWING S0-02.
 - 15)  INDICATES UNDERGROUND UTILITY LINES PLUMBING THROUGH
CONCRETE FOUNDATION WALL TYPICAL. COORDINATE
FOOTING ELEVATION WITH PIPE INVERTS AND TYPICAL
STRUCTURAL DETAILS.

FOOTING SCHEDULE		
DESIGN SOIL BEARING CAPACITY = 2 TSF		
MARK	SIZE	REINFORCEMENT
F4	4' - 0" x 4' - 0" x 1' - 6"	6 - #5 BOT EA WAY
F6T	6' - 0" x 6' - 0" x 2' - 0"	7 - #6 BOT EA WAY

T INDICATES TOP REINFORCING TO MATCH BOTTOM REINFORCING

MSBA 60% CD
Submission

01/13/2023



KEY PLAN

PROJECT NO.

MAGNETIC NORTH

MAINTENANCE BUILDING PLANS

Scale: As indicated

00000

Job No.: 20202

SM-1-1