

STRUCTURAL NOTES

GENERAL NOTES:

1. INFORMATION ON THIS SHEET APPLIES TO ALL STRUCTURAL SHEETS.

2. INFORMATION ON THIS SHEET SUPPLEMENTS THE PROJECT SPECIFICATIONS, REFER TO THE PROJECT SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.

3. DRAWINGS HAVE NOT NECESSARILY BEEN ORGANIZED ACCORDING TO TRADES. A FULL SET OF DESIGN DRAWINGS MAY BE REQUIRED FOR AN INDIVIDUAL TRADE TO DETERMINE THE FULL SCOPE OF WORK. REFER TO OTHER DISCIPLINES' DRAWINGS FOR OTHER ELEMENTS OF STRUCTURAL CONSTRUCTION.

4. DRAWINGS HAVE BEEN SET UP TO PLOT AS INTENDED WHEN PLOTTED AS FULL SIZE. USE REDUCED SIZE DRAWINGS AT YOUR OWN RISK.

5. COORDINATE WORK OF TRADES. NOTIFY ENGINEER OF VARIANCES BEFORE WORK BEGINS.

6. COORDINATE SIZE AND LOCATION OF ROOF OR SLAB OPENINGS, OR BOTH, WITH ASSOCIATED TRADES.

7. OBTAIN ENGINEER'S REVIEW PRIOR TO MAKING ALTERATIONS TO A STRUCTURAL ITEM OR MEMBER NOT INDICATED ON THE DRAWINGS.

8. DO NOT SCALE DRAWINGS TO OBTAIN DIMENSIONS NOT INDICATED.

9. WHERE SHOP DRAWINGS ARE REQUIRED BY THE SPECIFICATIONS, DO NOT USE DESIGN DRAWINGS AS SHOP OR ERECTION DRAWINGS, OR BOTH.

10. FIELD VERIFY EXISTING CONDITIONS.
11. FOR LIMITS OF DEPRESSED SLABS AND FLOOR SLOPES, REFER TO ARCHITECTURAL.

12. REFER TO SHEET G201 AND G202 FOR REQUIRED FIRE RATINGS AND SPRAY FIREPROOFING REQUIREMENTS.

13. DESIGN AND CONSTRUCT CONNECTIONS OF ROOFTOP EQUIPMENT TO THE SUPPORTING STRUCTURE. WHERE ROOFTOP EQUIPMENT IS MOUNTED ON PRODUCTS SUCH AS CURBS, RAILS, OR SIMILAR SYSTEMS, DESIGN AND CONSTRUCT CONNECTIONS OF THE EQUIPMENT TO THE MOUNTING PRODUCTS AND OF THE MOUNTING PRODUCTS TO THE SUPPORTING STRUCTURE. DESIGN CONNECTIONS FOR APPLICABLE LOADS IN ACCORDANCE WITH THE BUILDING CODE AND ASCE 7, INCLUDING WIND AND SEISMIC LOADS. DESIGN SHALL BE PERFORMED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE IN WHICH THE PROJECT IS LOCATED IF SO REQUIRED BY THE AUTHORITY HAVING JURISDICTION. COORDINATE THE LOCATIONS OF SUPPORTING STRUCTURAL MEMBERS WITH THE EQUIPMENT SUPPLIER.

STRUCTURE STABILITY NOTES:

1. THIS STRUCTURE, OR PORTIONS THEREOF, HAS BEEN DESIGNED TO RELY ON THE ROOF AND MOMENT FRAMES FOR LATERAL STABILITY. PROVIDE TEMPORARY BRACING OF STRUCTURAL STEEL AND STUD WALLS TO MAINTAIN SAFETY AND ALIGNMENT UNTIL ROOFS AND MOMENT FRAMES HAVE BEEN COMPLETED AND INTERCONNECTING ATTACHMENTS HAVE BEEN MADE.

SOIL AND FOUNDATION NOTES:

1. FOUNDATION DESIGN IS BASED ON THE RECOMMENDATIONS MADE IN THE GEOTECHNICAL REPORT PREPARED BY G2 CONSULTING GROUP AND DATED MAY 7, 2025.
2. BRACE FOUNDATION WALLS THAT RETAIN EARTH AGAINST UNBALANCED BACKFILL PRESSURES UNTIL FLOORS AT TOP AND BOTTOM ARE IN PLACE.
3. CONSTRUCT FOOTINGS ON SATISFACTORY BEARING SOILS REGARDLESS OF ELEVATIONS INDICATED ON THE DRAWINGS.

STEEL NOTES:

1. POSTED BEAM REACTIONS HAVE BEEN DETERMINED FROM AN ALLOWABLE STRESS DESIGN (ASD) ANALYSIS. LOADS ARE UNFACTORED (SERVICE). LOADS UNDER 6K ARE NOT POSTED. PROVIDE MINIMUM 6K AXIAL LOAD ON EACH CONNECTION.
2. ABSENT WELD LENGTH IN WELD SYMBOLS MEANS WELD FULL LENGTH OF JOINT.
3. ABSENT FILLET WELD SIZE IN WELD SYMBOLS MEANS CHOOSE WELD SIZE BASED ON THICKNESS OF PIECES JOINED ACCORDING TO AISC SPECIFICATIONS.

CAST-IN-PLACE CONCRETE NOTES:

1. COORDINATE SIZE, LOCATION AND PLACEMENT OF EMBEDDED ITEMS SUCH AS PLATES, HARDWARE AND PIPE SLEEVES WITH RESPECTIVE TRADES.
2. SECURELY PLACE EMBEDDED ITEMS PRIOR TO PLACING CONCRETE.
3. DO NOT CORE OR CUT CONCRETE UNLESS REVIEWED BY ENGINEER.
4. WHERE DRILLING OR CUTTING INTO HARDENED CONCRETE IS REQUIRED, FIELD LOCATE REINFORCEMENT WITH A REINFORCING BAR DETECTOR TO AVOID DAMAGING THE REINFORCING BAR.
5. SUBMIT LOCATIONS OF CONSTRUCTION OR CONTROL JOINTS, OTHER THAN INDICATED ON THE DRAWINGS TO THE ENGINEER FOR REVIEW PRIOR TO PLACING CONCRETE.
6. PROVIDE CORNER BARS OF THE SAME SIZE AND SPACING AS HORIZONTAL WALL REINFORCING FOR WALLS UNLESS NOTED OTHERWISE.
7. PROVIDE CLEAR COVER TO REINFORCING BARS AS SCHEDULED, UNLESS NOTED OTHERWISE. REFER TO SCHEDULE THIS SHEET.
8. PROVIDE MINIMUM LAP SPICE LENGTH, IN INCHES, AS SCHEDULED, UNLESS NOTED OTHERWISE. REFER TO SCHEDULE THIS SHEET.
9. FOOTINGS AND PIERS ARE CENTERED BENEATH COLUMNS, UNLESS NOTED OTHERWISE.
10. PROVIDE 3/4" CHAMFERS ON ALL EXPOSED EDGES, UNLESS NOTED OTHERWISE.
11. PROVIDE DOWELS AND BENT BARS WITH STANDARD ACI/CRSI 90 OR 180 DEGREE BEND AS INDICATED, UNLESS NOTED OTHERWISE.
12. PROVIDE ADDITIONAL REINFORCING AROUND THE PERIMETER OF OPENINGS IN SLABS AND WALLS, REFER TO TYPICAL DETAILS.

DESIGN DATA

BUILDING CODE	2021 MICHIGAN BUILDING CODE
RISK CATEGORY	II
ALLOWABLE SOIL PRESSURE	3,000 PSF
HELICAL PIER ALLOWABLE AXIAL CAPACITY	10 KIPS
STEEL PILE ALLOWABLE AXIAL CAPACITY	20 KIPS
DESIGN STRESSES	
CONCRETE REINFORCING	Fy = 60,000 PSI
WELDED WIRE FABRIC	Fy = 65,000 PSI
STRUCTURAL STEEL	Fy = 50,000 PSI
CONCRETE	fc = 4,000 PSI
DESIGN LOADS	
ROOF DEAD LOADS	
METAL DECK, INSULATION & MEMBRANE	5 PSF
MECHANICAL, ELECTRICAL, PLUMBING	5 PSF UNO
MISCELLANEOUS	5 PSF
	TOTAL= 15 PSF
LIVE LOADS	
REDUCTION	20 PSF
GROUND FLOOR	PER CODE
OR NON-CONCURRENT CONCENTRATED LOAD	100 PSF
UNOCCUPIED ATTIC	2000 LBS
BOARDWALK AND PIERS	40 PSF
OR NON-CONCURRENT LIGHT VEHICLE WHEEL LOAD	90 PSF
	1000 LBS
SNOW LOADS	
GROUND (Pg)	20 PSF
FLAT ROOF (Pf)	14 PSF
EXPOSURE FACTOR (Ce)	1.0
IMPORTANCE FACTOR (Is)	1.0
THERMAL FACTOR (Ct)	1.0
WIND LOADS	
BASIC WIND SPEED (3-SECOND GUST)	108 MPH
EXPOSURE (ALL DIRECTIONS)	C
INTERNAL PRESSURE COEFFICIENT	±0.18
COMPONENTS AND CLADDING	REFER TO SCHEDULE
SEISMIC LOADS	
IMPORTANCE FACTOR (Ie)	1.0
MAPPED SPECTRAL RESPONSE (Ss)	10.7 % g
MAPPED SPECTRAL RESPONSE (S1)	4.8 % g
SITE CLASS	D
SPECTRAL RESPONSE COEFFICIENT (Sds)	11.4 % g
SPECTRAL RESPONSE COEFFICIENT (Sd1)	7.6 % g
SEISMIC DESIGN CATEGORY	B
FORCE-RESISTING SYSTEM	
	STEEL SYSTEMS NOT SPECIFICALLY DESIGNED FOR SEISMIC RESISTANCE
BASE SHEAR	9 KIPS (A) 12 KIPS (B)
SEISMIC RESPONSE COEFFICIENT (Cs)	3.8 %
RESPONSE MODIFICATION FACTOR (R)	3
ANALYSIS PROCEDURE	EQUIVALENT LATERAL FORCE

NOTES:

DEAD LOAD OF ROOFTOP MECHANICAL UNITS AND ARCHITECTURAL BULKHEADS ARE IN ADDITION TO THOSE LISTED ABOVE.

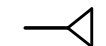
DRIFTING AND SLIDING SNOW LOADS ARE IN ADDITION TO THE LOADING ABOVE.

LEGENDS

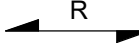
CONCRETE LEGEND:

- FX SPREAD FOOTING DESIGNATION, REFER TO SPREAD FOOTING SCHEDULE.
- PX PIER DESIGNATION, REFER TO PIER SCHEDULE.
- BPX BASEPLATE DESIGNATION, REFER TO BASEPLATE SCHEDULE. TAG IS PLACED AT LEVEL CORRESPONDING TO THE BOTTOM OF THE COLUMN.
- CJ CONSTRUCTION OR CONTROL JOINT, REFER TO TYPICAL DETAILS.
- SF STEP FOOTING, REFER TO TYPICAL DETAIL.

STEEL LEGEND:

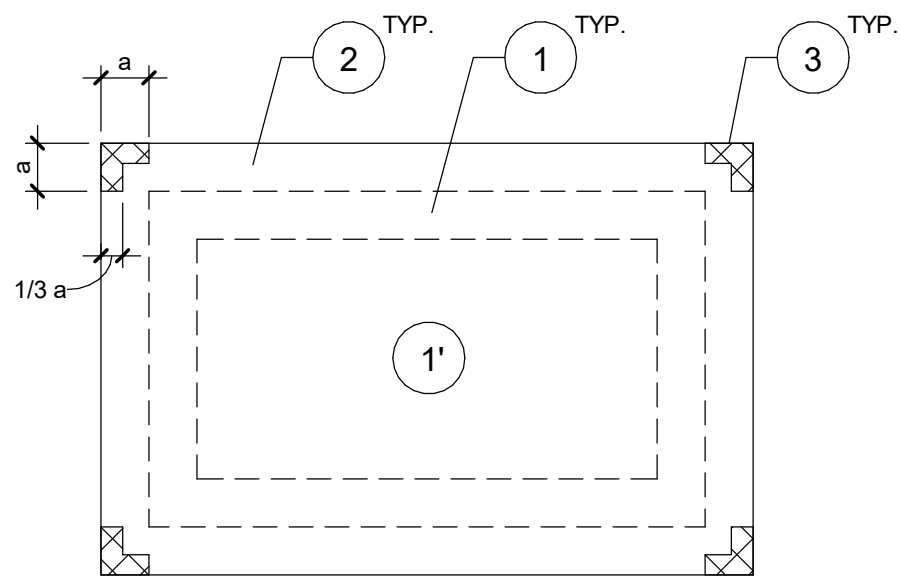
- WxxxXx BEAM SHAPE
- Wxxxxx COLUMN SHAPE. TAG IS PLACED ON LEVEL CORRESPONDING TO THE TOP OF THE COLUMN OR HANGER.
-  RIGID MOMENT CONNECTION, REFER TO FRAME ELEVATIONS.
-  CANTILEVERED RIGID MOMENT CONNECTION, REFER TO FRAME ELEVATIONS.
- LX LINTEL DESIGNATION, REFER TO LINTEL SCHEDULE.
- (xxx'-xx") TOP OF DECK OR SLAB SPOT ELEVATION. SUBTRACT TOTAL DECK OR SLAB THICKNESS TO OBTAIN TOP OF STEEL ELEVATION. UNIFORMLY SLOPE STEEL STRUCTURE BETWEEN VARYING SPOT ELEVATIONS AS INDICATED.
- <XXK> AXIAL LOAD ON BEAM.

METAL DECK LEGEND:

-  SPAN DIRECTION FOR 1 1/2"x19 GA. WIDE RIB METAL ROOF DECK. FASTEN DECK TO SUPPORTING MEMBERS WITH 5/8"Ø PUDDLE WELDS IN 36/4 PATTERN. INSTALL #10 TEK SCREW SIDELAP FASTENERS AT 32" (MAX.) BETWEEN SUPPORTS.

SCHEDULES

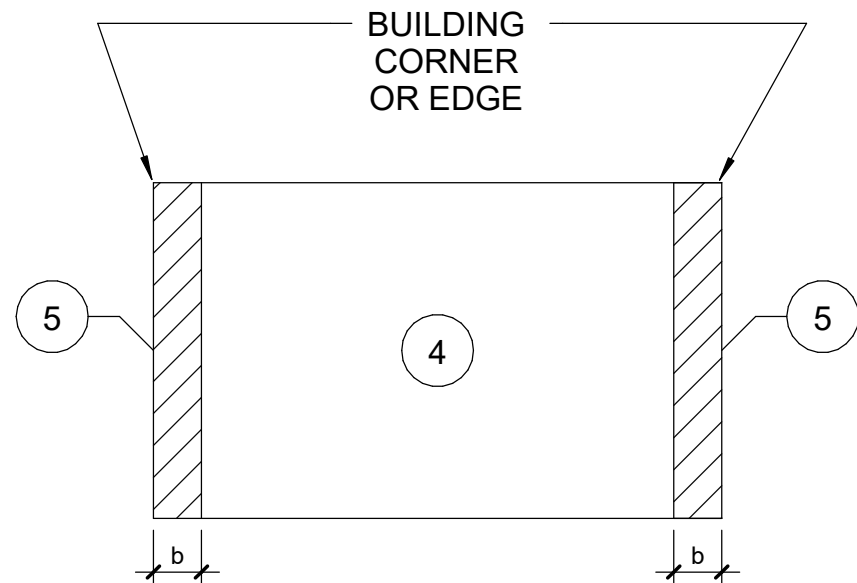
COMPONENT AND CLADDING ROOF PRESSURE (PSF)								
EFFECTIVE WIND AREA (SQ. FT.)	ZONE							
	POSITIVE PRESSURE				NEGATIVE PRESSURE			
	1'	1	2	3	1'	1	2	3
AREA < 10 SQ. FT.	16	16	16	16	25	44	58	79
AREA = 20 SQ. FT.	16	16	16	16	25	42	55	72
AREA = 50 SQ. FT.	16	16	16	16	25	37	48	61
AREA = 100 SQ. FT.	16	16	16	16	25	35	46	55
AREA > 200 SQ. FT.	16	16	16	16	18	28	37	37
NOTES:								
1. WIDTH OF CORNER ZONES (EACH DIRECTION) AND EDGE ZONES "a" IS 13'-0". REFER TO ASCE 7 FIGURES 30.3-1 THROUGH 7.								
2. POSITIVE PRESSURES ACT TOWARDS THE SURFACE. NEGATIVE PRESSURES ACT AWAY FROM THE SURFACE.								
3. LINEAR INTERPOLATE PRESSURES FOR EFFECTIVE WIND AREAS BETWEEN THOSE SCHEDULED OR USE PRESSURES FOR THE SMALLER EFFECTIVE WIND AREA.								



SCHEMATIC ROOF PLAN (ZONES 1,2 AND 3)

CONCRETE REINFORCEMENT COVER REQUIREMENTS	
CONCRETE CAST AGAINST PERMANENTLY EXPOSED TO EARTH:	
ALL	3"
CONCRETE EXPOSED TO EARTH OR WEATHER:	
NO. 5 BAR AND SMALLER: NO. 8 BAR AND LARGER:	1 1/2" 2"
CONCRETE NOT EXPOSED TO WEATHER OR IN CONTACT WITH EARTH:	
SLABS, WALLS, JOISTS: NO. 11 BAR AND SMALLER: NO. 14 BAR AND LARGER:	3/4" 1 1/2"
BEAMS, COLUMNS: PRIMARY REINFORCEMENT, TIES, STIRRUPS, SPIRALS:	1 1/2"

CONCRETE REINFORCEMENT LAP SPICE SCHEDULE (INCHES)				
BAR SIZE	BEAMS & COLUMNS		WALLS & SLABS	
	TOP BARS	OTHERS	TOP BARS	OTHERS
3	16	16	16	16
5	24	20	24	20
6	30	24	30	24
NOTE: TOP BARS ARE HORIZONTAL BARS SO PLACED THAT MORE THAN 12" OF CONCRETE IS CAST BELOW THE BAR. HORIZONTAL BARS IN WALLS ARE TOP BARS. VERTICAL BARS ARE OTHER BARS.				



SCHEMATIC WALL ELEVATION (ZONES 4 AND 5)

COMPONENT AND CLADDING WALL PRESSURE (PSF)				
	ZONE			
	POSITIVE PRESSURE		NEGATIVE PRESSURE	
	4	5	4	5
AREA < 10 SQ. FT.	28	28	30	37
AREA = 20 SQ. FT.	27	27	29	35
AREA = 50 SQ. FT.	25	25	28	31
AREA = 100 SQ. FT.	23	23	27	29
AREA > 500 SQ. FT.	21	21	23	23
<u>NOTES:</u>				
1. WIDTH OF EDGE ZONES "B" IS 9'-0". REFER TO ASCE 7 FIGURES 30.3-1 THROUGH 7.				
2. POSITIVE PRESSURES ACT TOWARDS THE SURFACE. NEGATIVE PRESSURES ACT AWAY FROM THE SURFACE.				
3. LINEAR INTERPOLATE PRESSURES FOR EFFECTIVE WIND AREAS BETWEEN THOSE SCHEDULED OR USE PRESSURES FOR THE SMALLER EFFECTIVE WIND AREA.				

REVISIONS

10/12/2026	BIDS & PERMIT
09/21/2026	CD PEER REVIEW
09/09/2026	CD TEAM REVIEW
08/10/2026	CD 50% PROGRESS
08/22/2026	DD OWNER REVIEW
06/15/2026	DD PEER REVIEW
06/08/2026	DD 90 % PROGRESS
05/18/2026	DD 50 % PROGRESS
02/23/2026	SD OWNER REVIEW
02/13/2026	SD PEER REVIEW
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Drawn By RMEISSNER
Designer JCARTER
Reviewer CJOTTE
Manager CKRETOVIC

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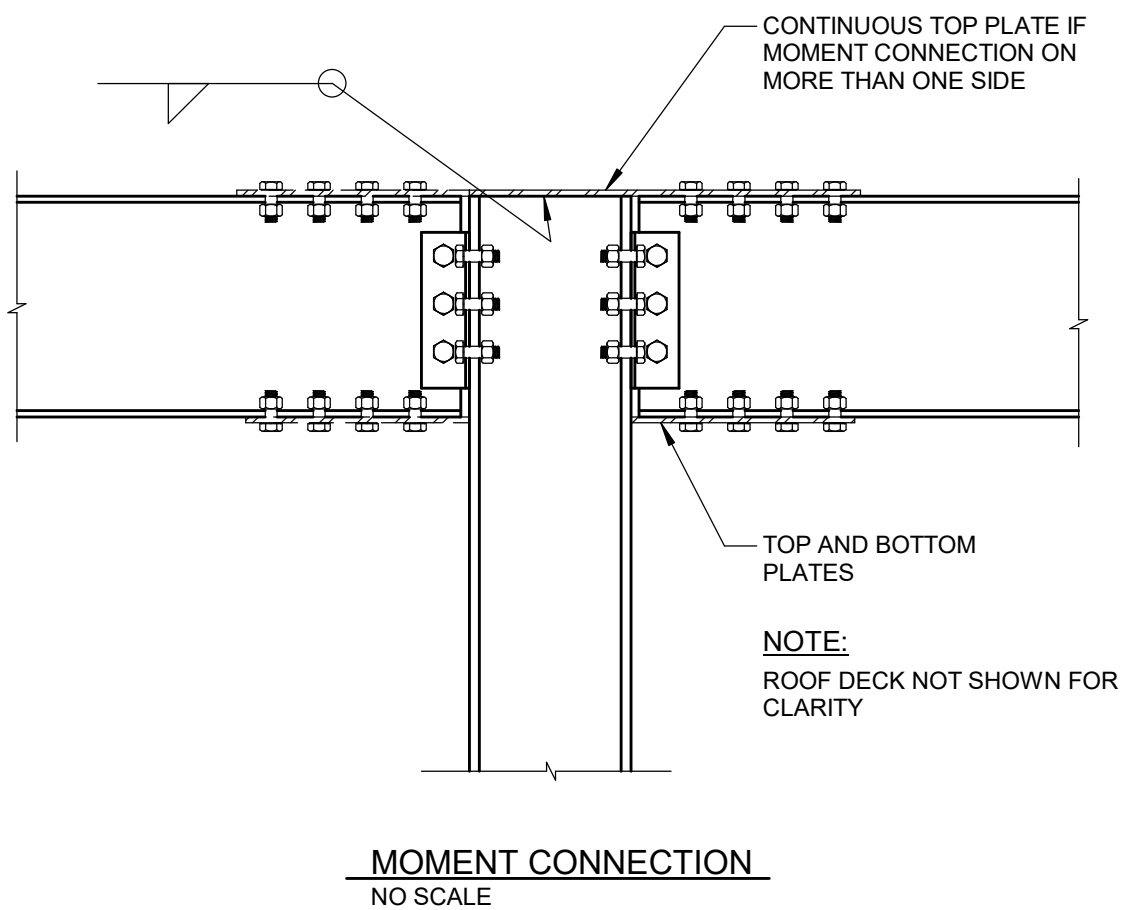
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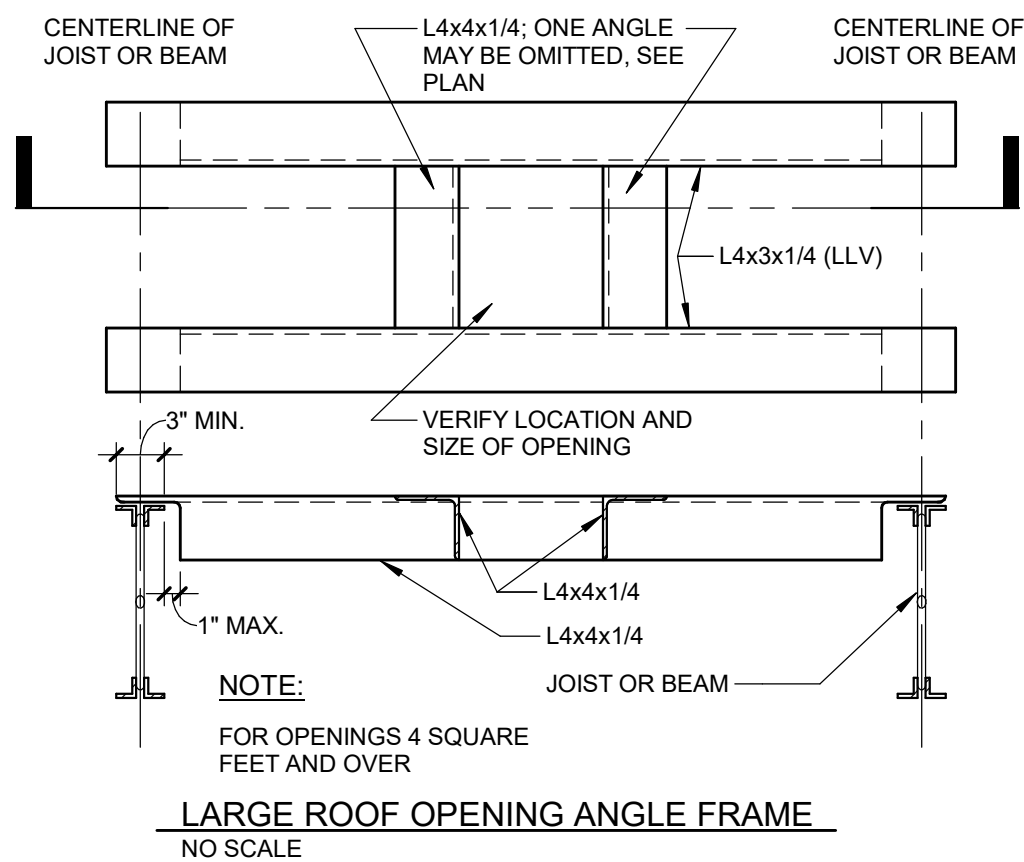
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S001

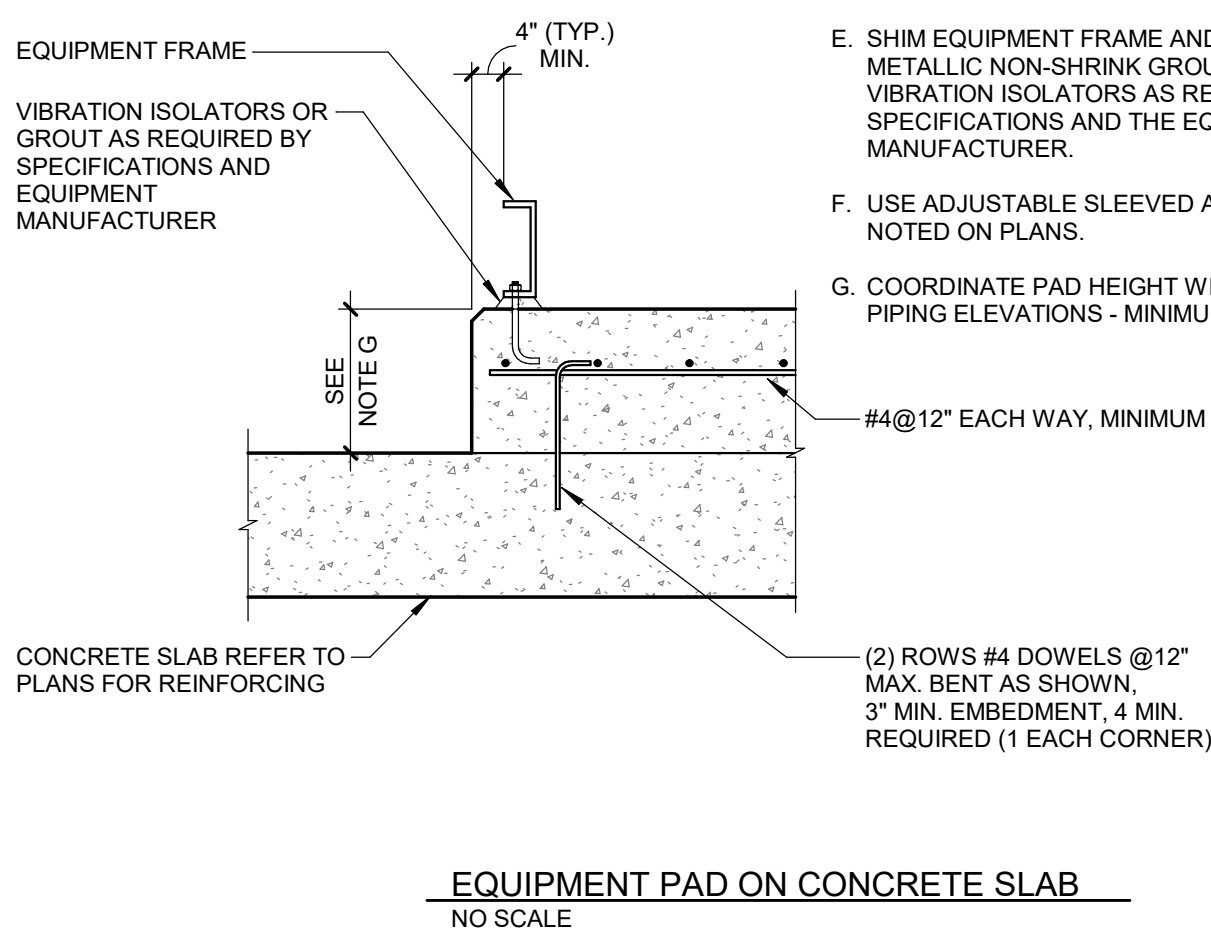
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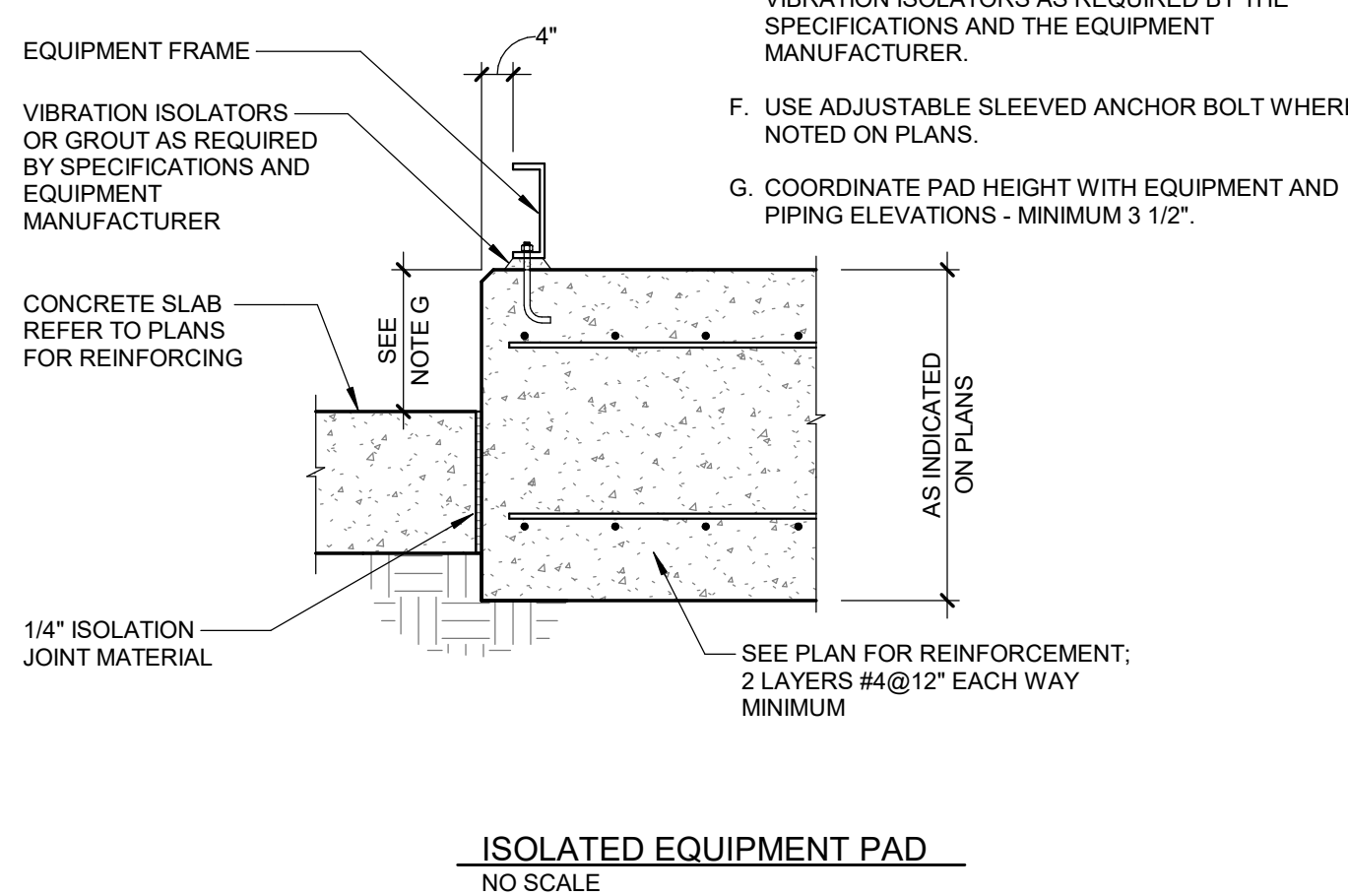
MOMENT CONNECTION
NO SCALE



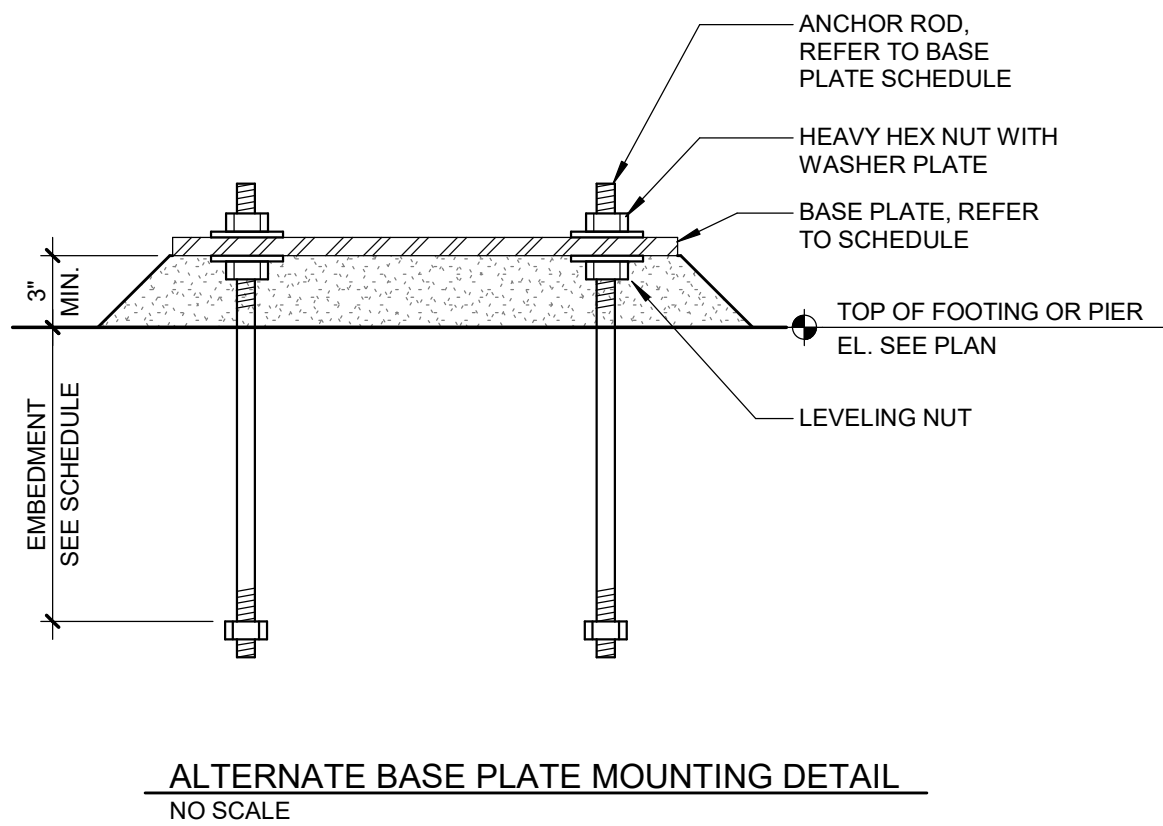
LARGE ROOF OPENING ANGLE FRAME
NO SCALE



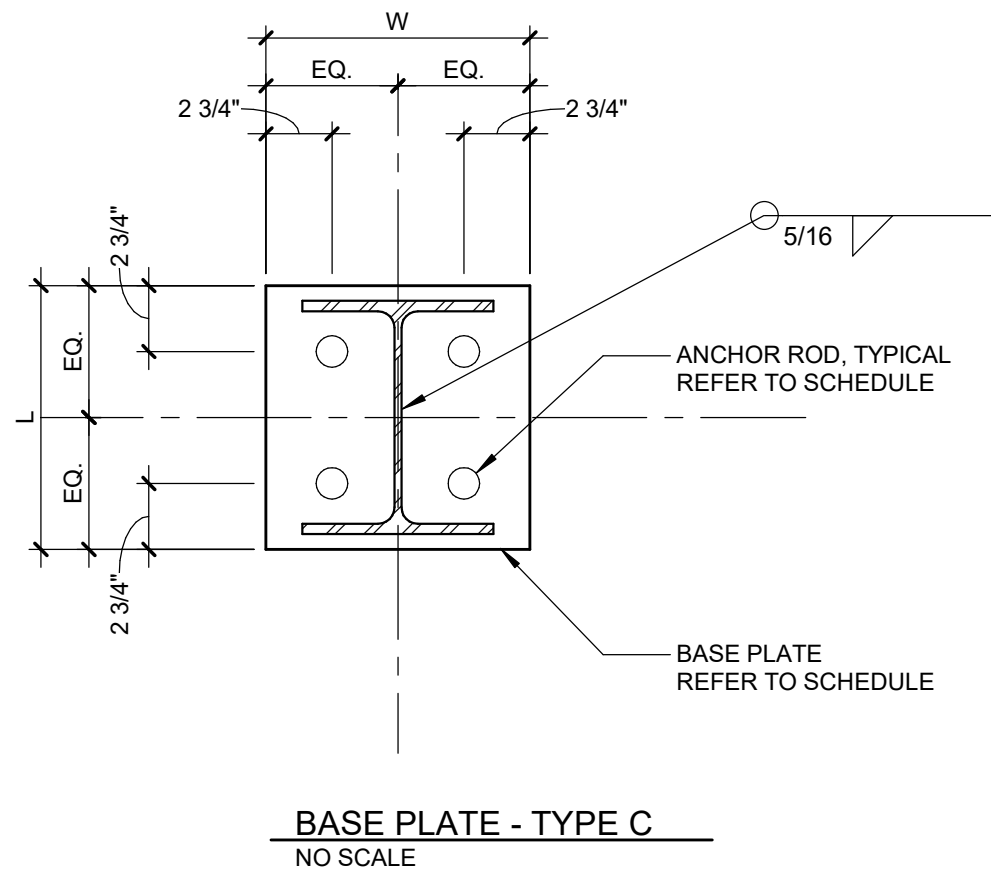
EQUIPMENT PAD ON CONCRETE SLAB
NO SCALE



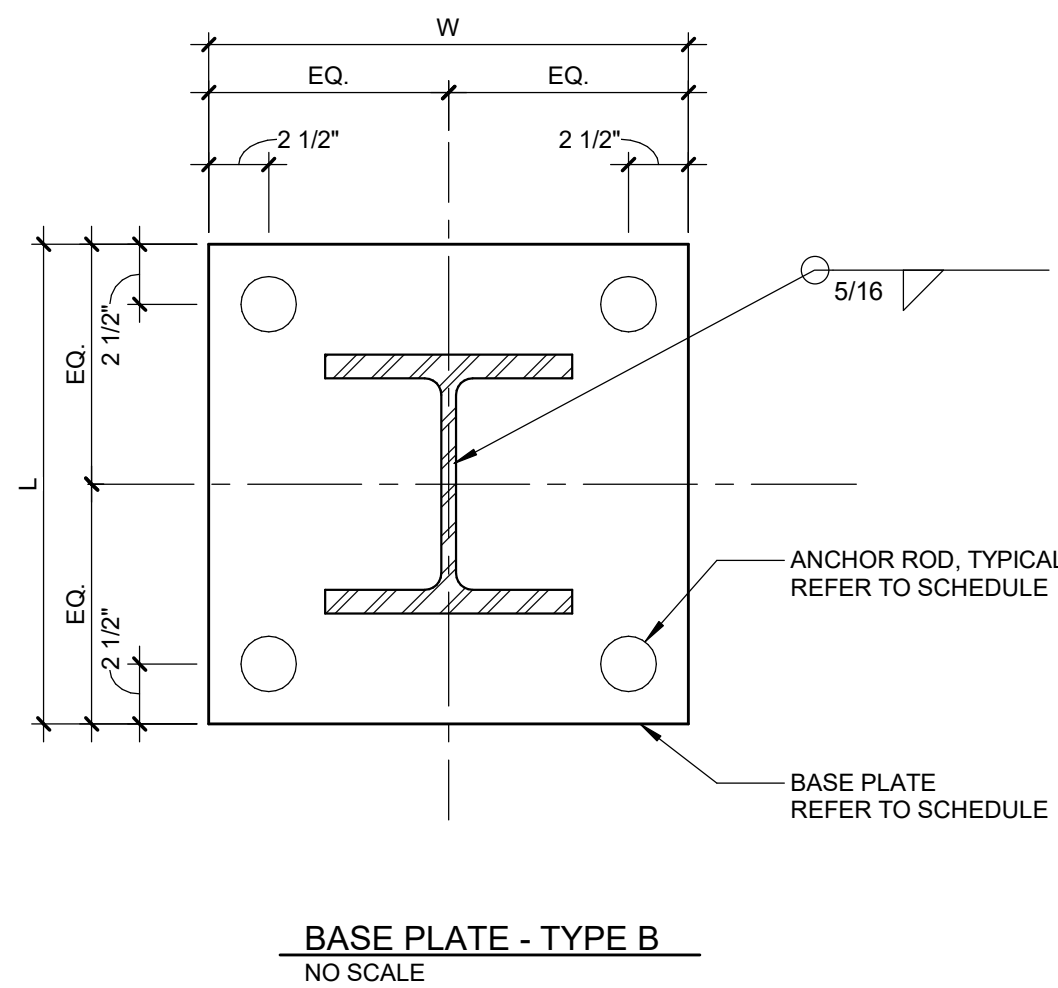
ISOLATED EQUIPMENT PAD
NO SCALE



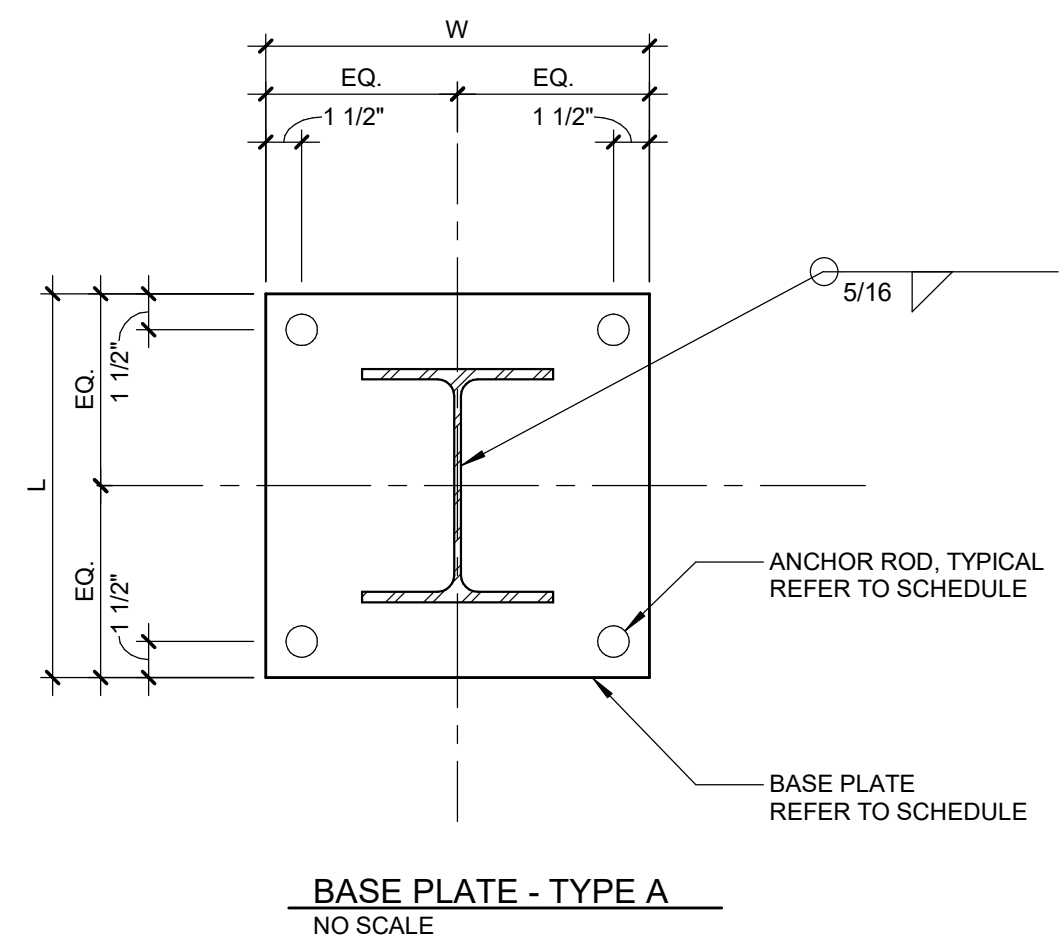
ALTERNATE BASE PLATE MOUNTING DETAIL
NO SCALE



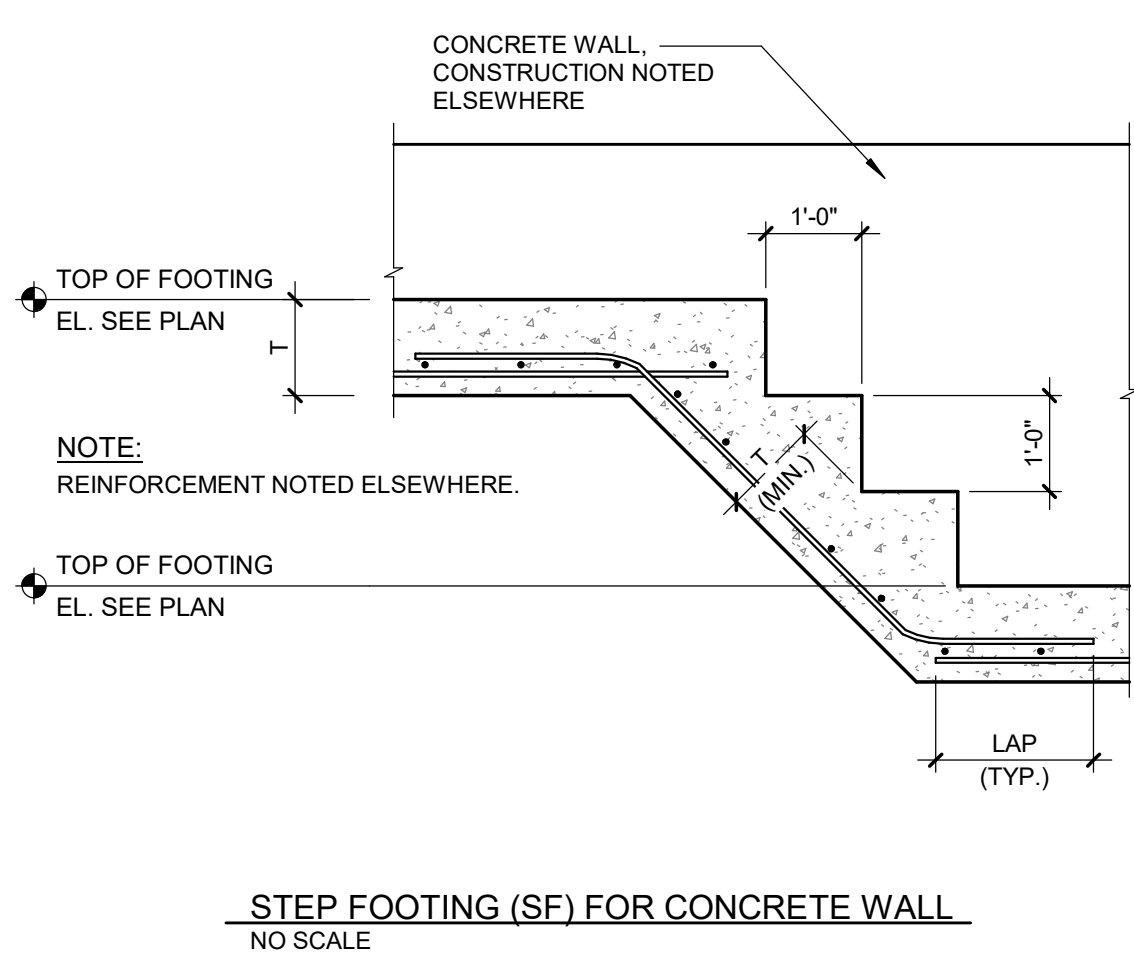
BASE PLATE - TYPE C
NO SCALE



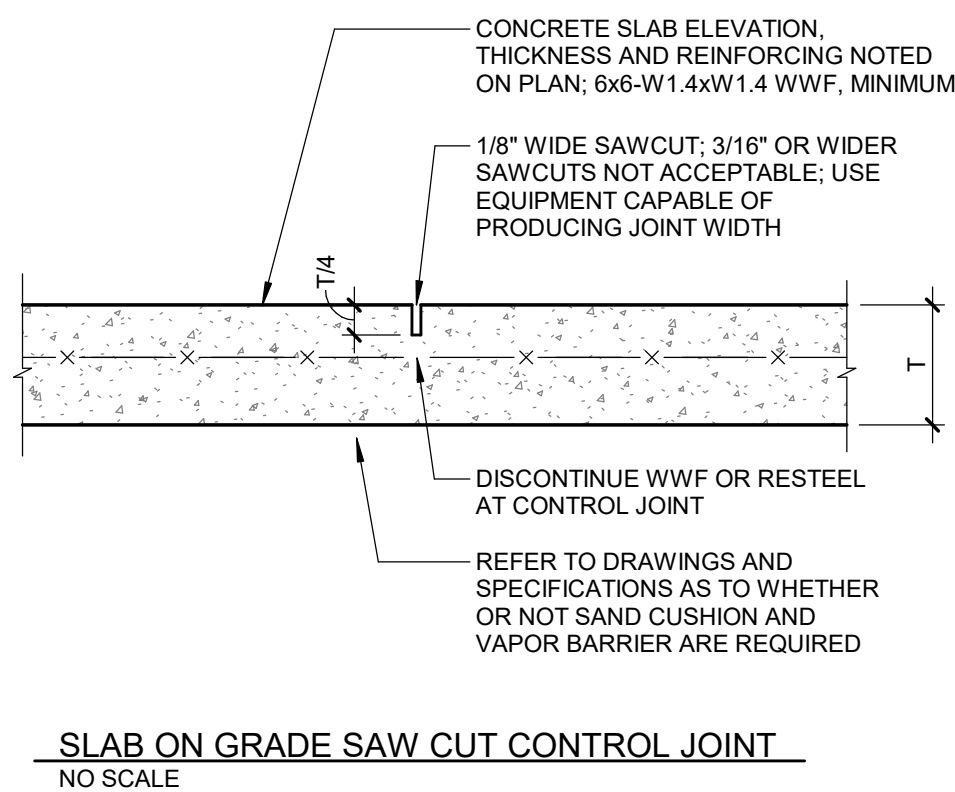
BASE PLATE - TYPE B
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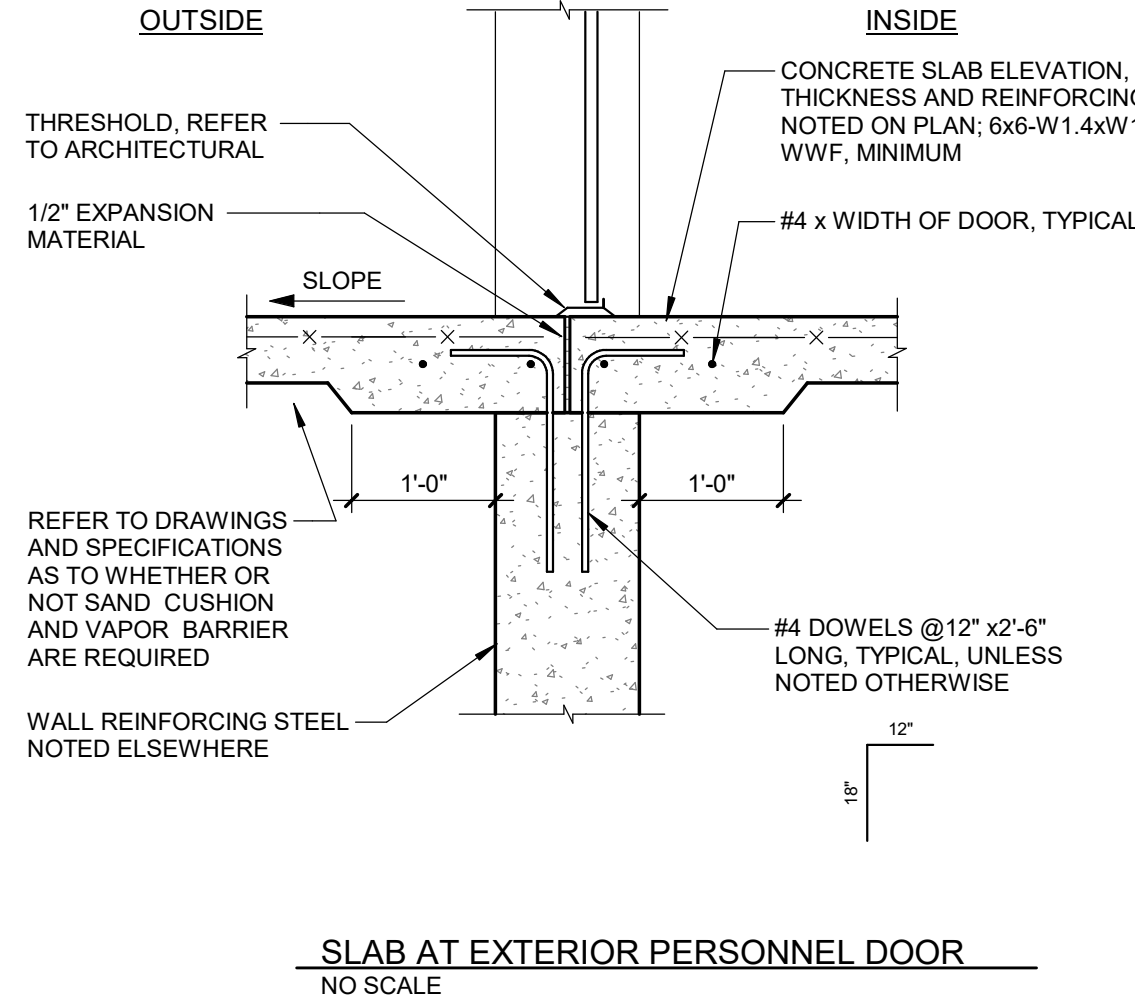
BASE PLATE - TYPE A
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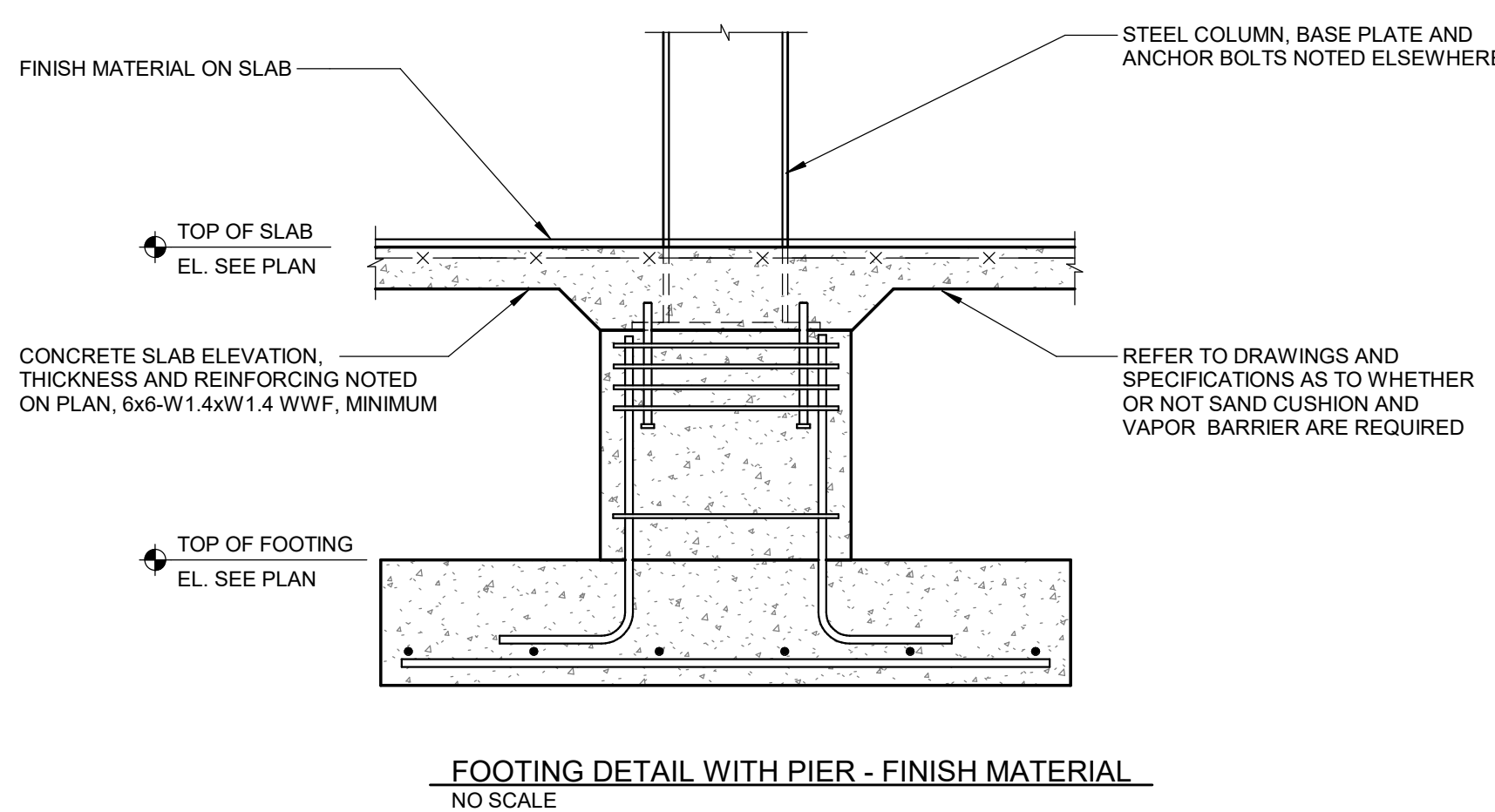
STEP FOOTING (SF) FOR CONCRETE WALL
NO SCALE



SLAB ON GRADE SAW CUT CONTROL JOINT
NO SCALE



SLAB AT EXTERIOR PERSONNEL DOOR
NO SCALE



FOOTING DETAIL WITH PIER - FINISH MATERIAL
NO SCALE

LOOSE LINTEL SCHEDULE		
MARK	SIZE	CLEAR OPENING WIDTH
L1	L6X4x5/16 LLV (GALV.)	<= 5'-0"
L2	L6X4x3/8 LLV (GALV.)	<= 6'-4"
NOTE: 1. PROVIDE 8" BEARING AT WALL, EACH END. 2. PROVIDE STAINLESS STEEL STONE ANCHORS IN ACCORDANCE WITH LIMESTONE FABRICATOR'S RECOMMENDATIONS.		

- NOTES:
- ANCHOR BOLTS AS SPECIFIED OR SUPPLIED BY EQUIPMENT MANUFACTURER.
 - ALL ANCHOR BOLTS TO BE CAST INTO BASE PAD.
 - COORDINATE ANCHOR BOLT LENGTH WITH PAD THICKNESS.
 - SET EQUIPMENT FRAME ON ANCHOR BOLTS CAST INTO EQUIPMENT PAD.
 - SHIM EQUIPMENT FRAME AND GROUT WITH NON-METALLIC NON-SHRINK GROUT, OR PROVIDE VIBRATION ISOLATORS AS REQUIRED BY THE SPECIFICATIONS AND THE EQUIPMENT MANUFACTURER.
 - USE ADJUSTABLE SLEEVED ANCHOR BOLT WHERE NOTED ON PLANS.
 - COORDINATE PAD HEIGHT WITH EQUIPMENT AND PIPING ELEVATIONS - MINIMUM 3 1/2'.

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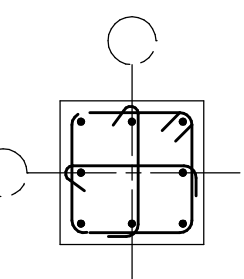
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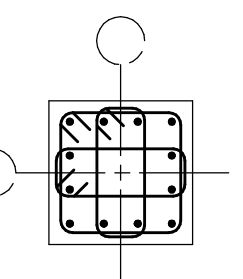
S002

CONCRETE PIER SCHEDULE					
MARK	SIZE	VERTICAL REINFORCEMENT	TIES	TYPE	REMARKS
	W x L				
P1	22" x 22"	(8) #6	(3)#3@2" TOP #3@10" OC	A	
P2	26" x 26"	(12) #6	(3)#3@2" TOP #3@10" OC	B	
P3	32" x 24"	(12) #6	(3)#3@2" TOP #3@10" OC	C	SEE PLAN FOR OFFSET ORIENTATION
P4	31" x 31"	(12) #6	(3)#3@2" TOP #3@10" OC	D	SEE PLAN FOR OFFSET ORIENTATION
P5	24" x 24"	(8) #6	(3)#3@2" TOP #3@10" OC	A	

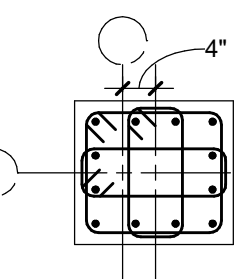
TYPES:



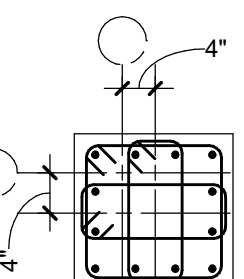
TYPE A



TYPE B



TYPE C



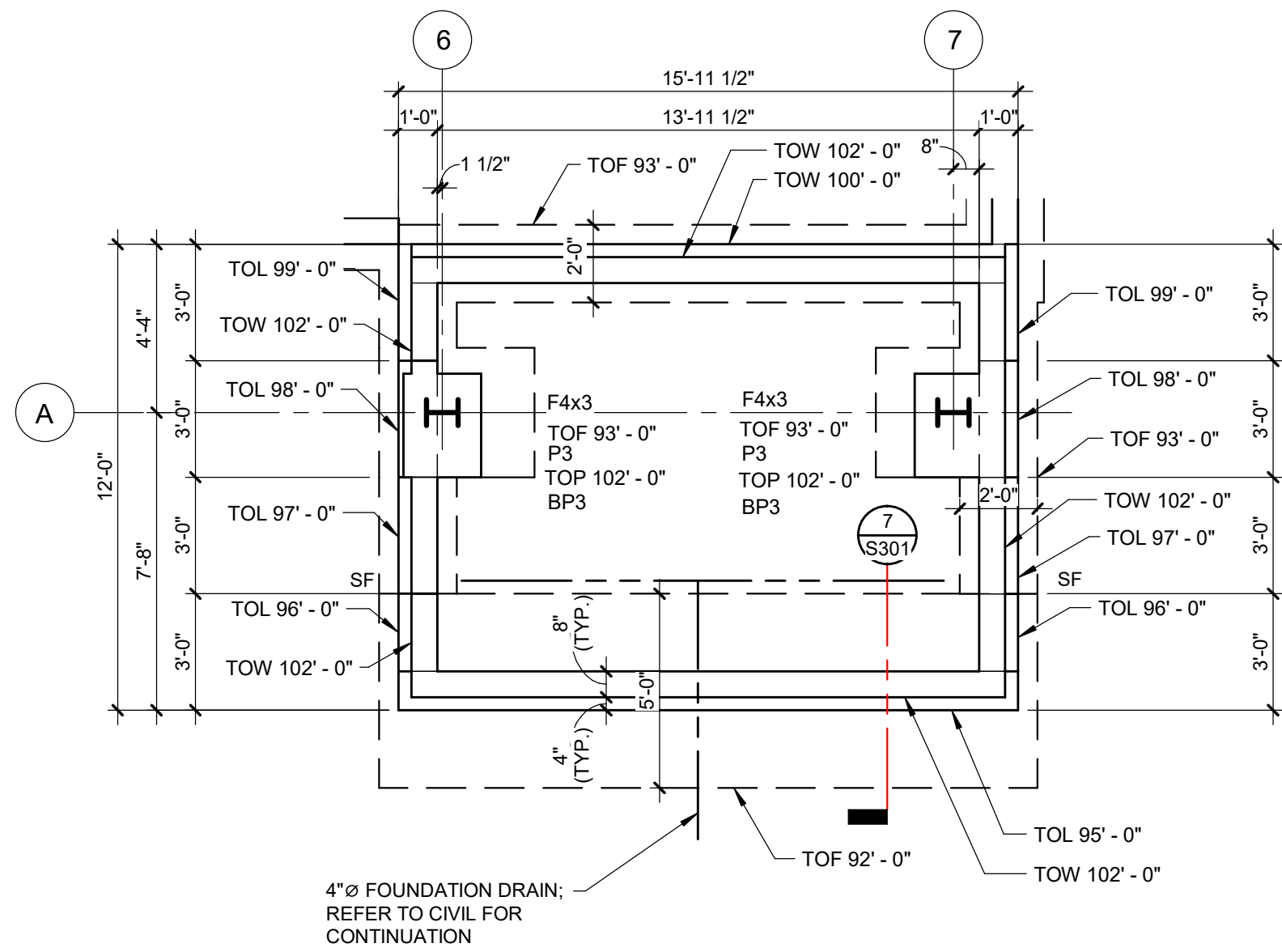
TYPE D

BASE PLATE SCHEDULE					
MARK	SIZE (WxL)	THICKNESS	ANCHOR DIA.	ANCHOR EMBED	DETAIL
BP1	16"x16"	3/4"	3/4"	9"	A
BP2	20"x20"	1 1/2"	1 1/2"	24"	B
BP3	11"x11"	3/4"	3/4"	9"	C

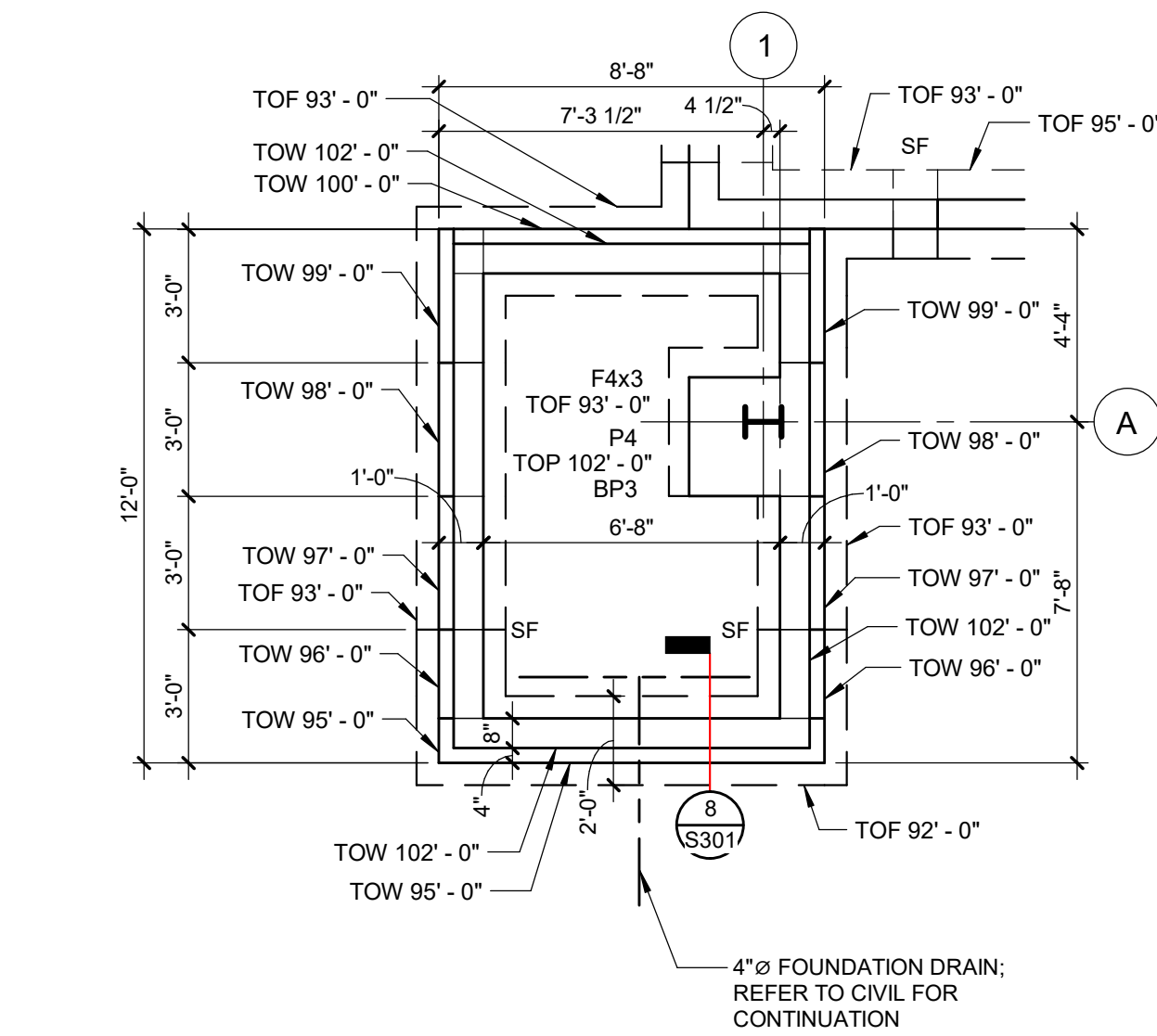
FOOTING SCHEDULE				
MARK	LENGTH	WIDTH	DEPTH	REINFORCEMENT
F4x3	3' - 4"	4' - 0"	1' - 0"	(5)#5 EACH WAY
F4	4' - 0"	4' - 0"	1' - 0"	(5)#5 EACH WAY
F5	5' - 0"	5' - 0"	1' - 0"	(6)#5 EACH WAY
F6	6' - 0"	6' - 0"	1' - 0"	(7)#5 EACH WAY
SKYRING	11' - 0"	16' - 10"	2' - 6"	TBD

NOTES

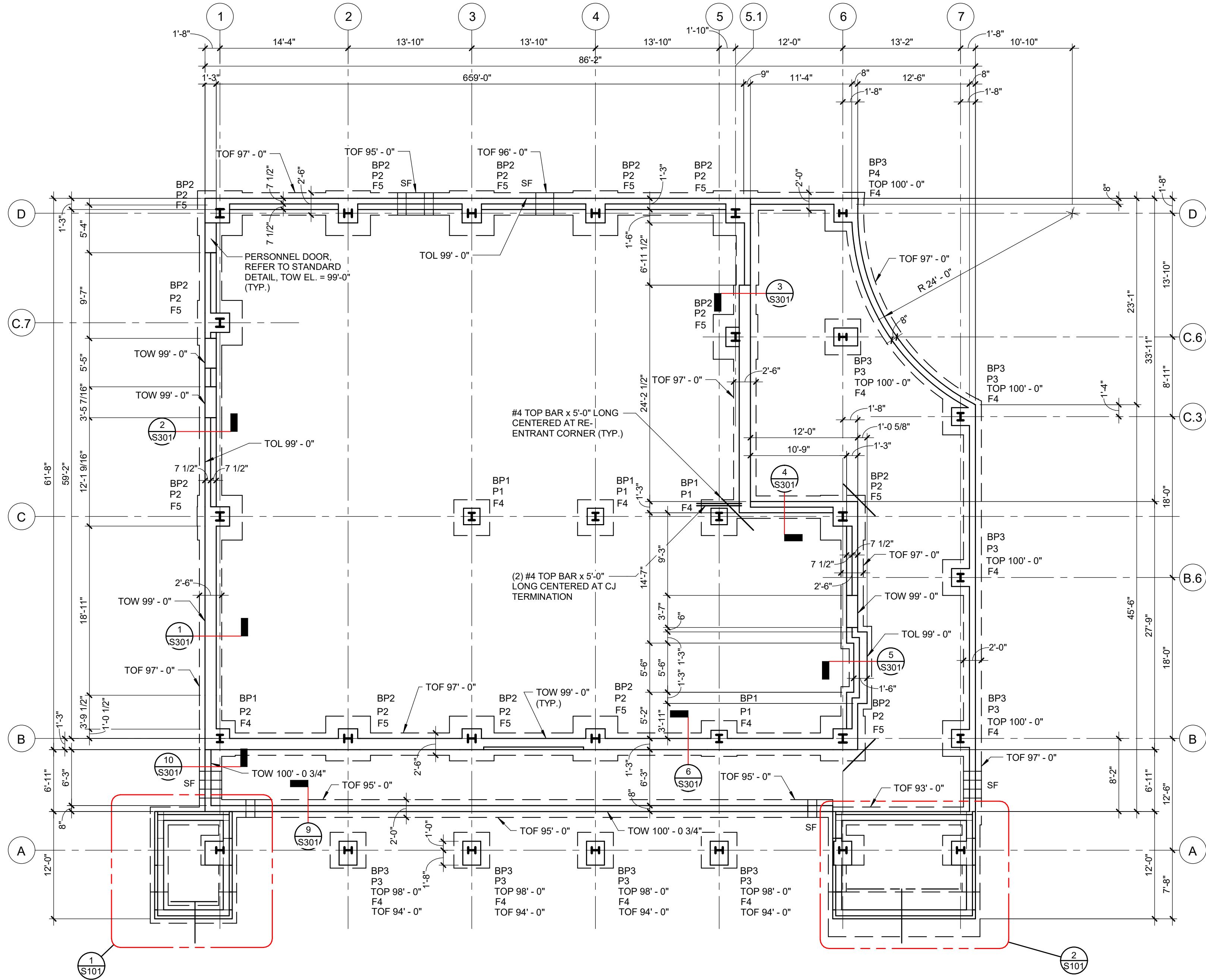
- TOP OF PIER ELEVATION = 99'-0", UNLESS NOTED OTHERWISE.
- TOP OF FOOTING ELEVATION = 97'-0", UNLESS NOTED OTHERWISE.
- TOP OF WALL ELEVATION = 100'-0", UNLESS NOTED OTHERWISE.
- REFER TO CIVIL AND ARCHITECTURAL FOR EXTERIOR SLABS AND STAIRS.



2 ENLARGED EAST FOUNDATION PLAN
SCALE: 1/4" = 1'-0"



1 ENLARGED WEST FOUNDATION PLAN
SCALE: 1/4" = 1'-0"

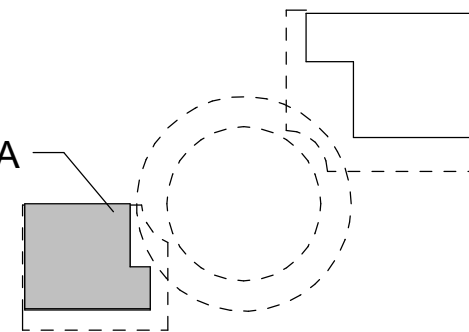


FOUNDATION PLAN - AREA A

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

KEY PLAN

AREA A



Van Buren Charter Township

Van Buren Township, MI

The Lakeside Park

REVISIONS

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Reviewer CJOTTE
Manager CKRETOVIC

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PROJECT NO.
2500281

SHEET NO.

S101

Van Buren Township, MI

The Lakeside Park

REVISIONS

10/12/2026	BIDS & PERMIT
09/21/2026	CD PEER REVIEW
09/09/2026	CD TEAM REVIEW
08/10/2026	CD 50% PROGRESS
06/22/2026	DD OWNER REVIEW
06/15/2026	DD PEER REVIEW
06/08/2026	DD 90 % PROGRESS
05/18/2026	DD 50 % PROGRESS
02/23/2026	SD OWNER REVIEW
02/13/2026	SD PEER REVIEW
02/09/2026	SD PROGRESS REVIEW

Drawn By	RMEISSNER
Designer	JCARTER
Reviewer	CJOTTE
Manager	CKRETOVIC

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PROJECT NO.
2500281

SHEET NO.

S102

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- ## NOTES

1. TOP OF PIER ELEVATION = 99'-0", UNLESS NOTED OTHERWISE.
2. TOP OF FOOTING ELEVATION = 97'-0", UNLESS NOTED OTHERWISE.
3. TOP OF WALL ELEVATION = 100'-0", UNLESS NOTED OTHERWISE.
4. REFER TO S101 FOR BASE PLATE, PIER, AND FOOTING SCHEDULES.
5. REFER TO CIVIL AND ARCHITECTURAL FOR EXTERIOR SLABS AND STAIRS.



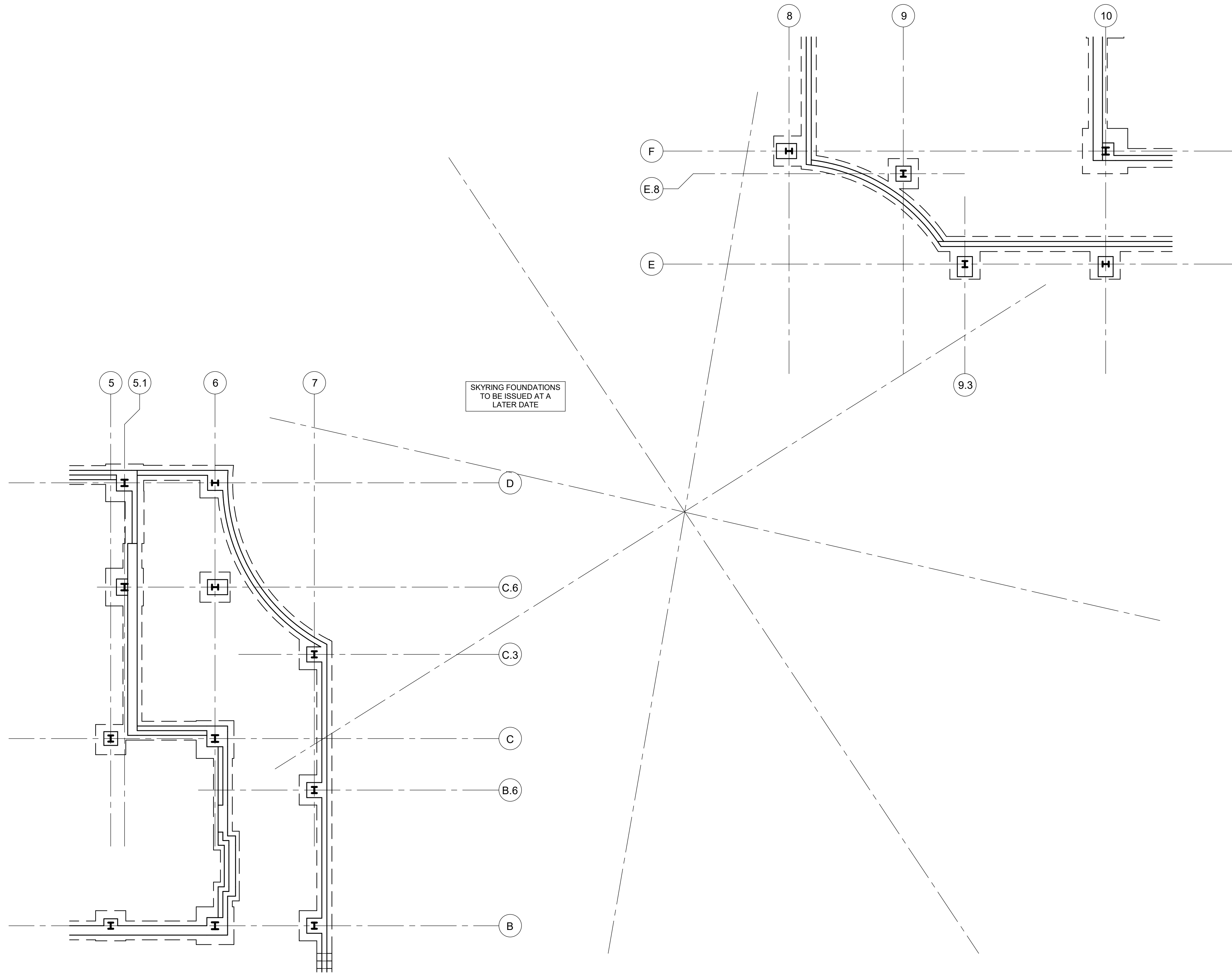
FOUNDATION PLAN - AREA B

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

KEY PLAN



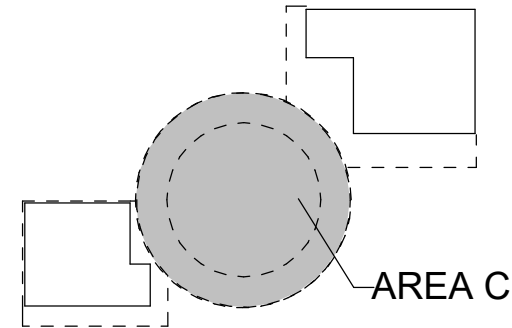
AREA E



FOUNDATION PLAN - AREA C

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

KEY PLAN



10/12/2026	BIDS & PERMIT
09/21/2026	CD PEER REVIEW
09/09/2026	CD TEAM REVIEW
08/10/2026	CD 50% PROGRESS
08/22/2026	DD OWNER REVIEW
06/15/2026	DD PEER REVIEW
06/08/2026	DD 90 % PROGRESS
05/18/2026	DD 90 % PROGRESS
02/23/2026	SD OWNER REVIEW
02/13/2026	SD PEER REVIEW
02/09/2026	SD PROGRESS REVIEW

Drawn By RMEISSNER
Designer JCARTER
Reviewer CJOTTE
Manager CKRETOVIC

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PROJECT NO.
2500281

SHEET NO.

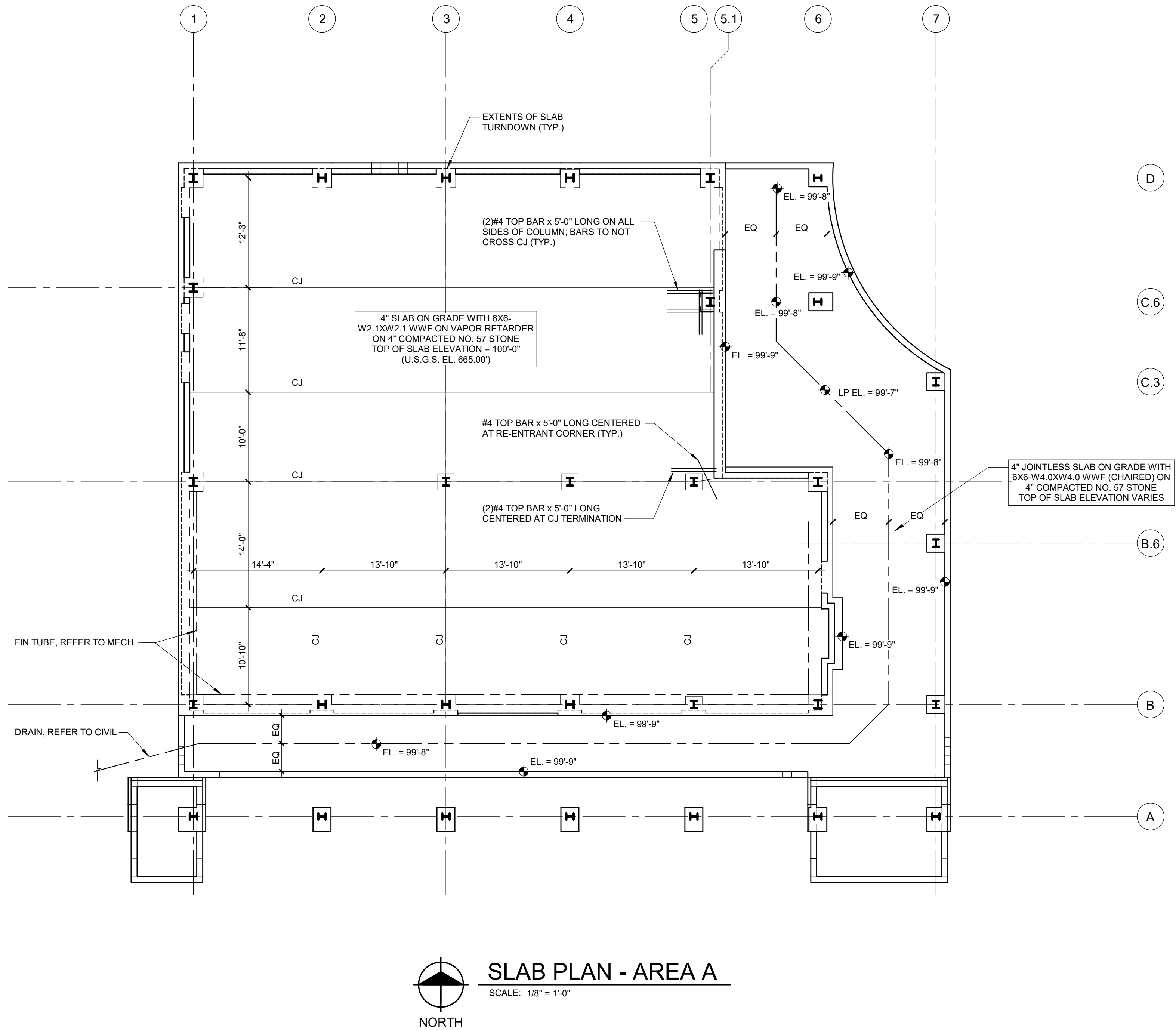
S103

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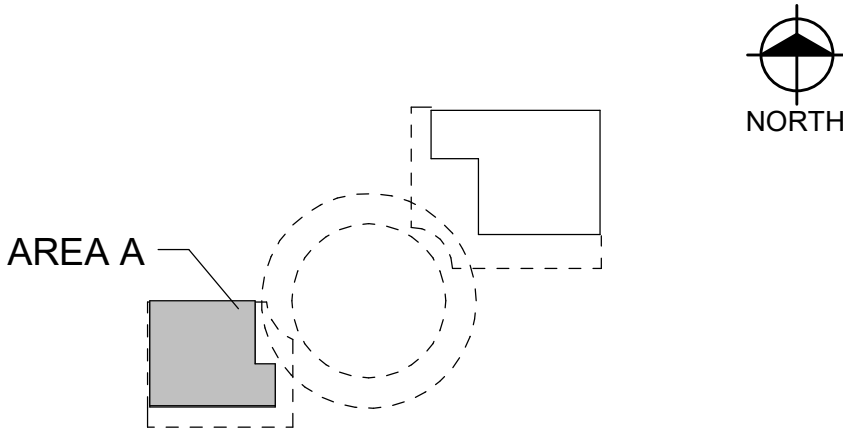
Van Buren Charter Township

Van Buren Township, MI

The Lakeside Park



KEY PLAN



Van Buren Charter Township

Van Buren Township, MI

The Lakeside Park

REVISIONS	
10/12/2026	BIDS & PERMIT
09/21/2026	CD PEER REVIEW
09/09/2026	CD TEAM REVIEW
08/10/2026	CD 50% PROGRESS
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06/15/2026	DD PEER REVIEW
06/08/2026	DD 90 % PROGRESS
05/18/2026	DD 50 % PROGRESS
02/23/2026	SD OWNER REVIEW
02/13/2026	SD PEER REVIEW
02/09/2026	SD PROGRESS REVIEW

Drawn By RMEISSNER
Designer JCARTER
Reviewer CJOTTE
Manager CKRETOVIC

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PROJECT NO.
2500281

SHEET NO.

S104



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



Van Buren Township, MI

The Lakeside Park

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09/09/2026	CD TEAM REVIEW
08/10/2026	CD 50% PROGRESS
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05/18/2026	DD 50 % PROGRESS
02/23/2026	SD OWNER REVIEW
02/13/2026	SD PEER REVIEW
02/09/2026	SD PROGRESS REVIEW

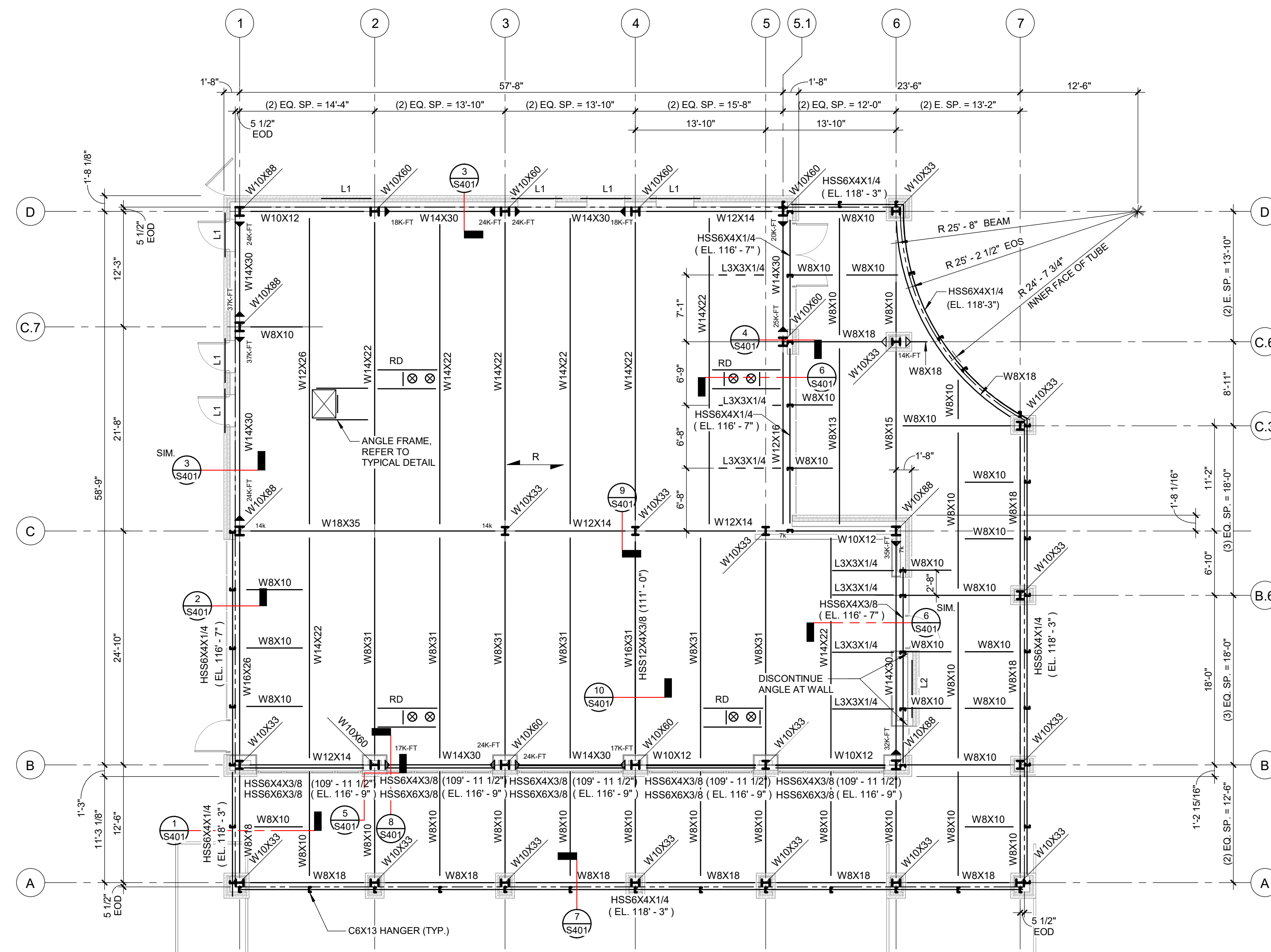
Drawn By	RMEISSNER
Designer	JCARTER
Reviewer	CJOTTE
Manager	CKRETOVIC

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2500281

SHEET NO.

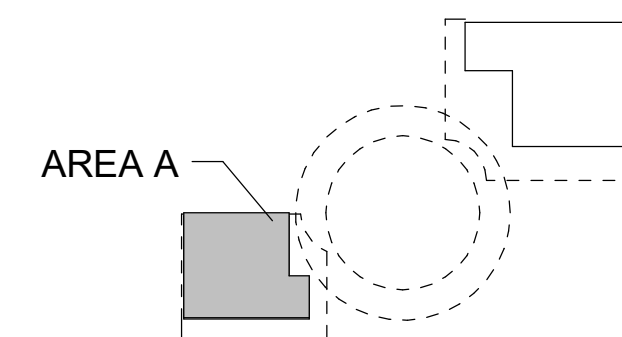
S105



ROOF FRAMING PLAN - AREA A

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

KEY PLAN



AREA A

NOTES

1. TOP OF STEEL ELEVATION = 119'-2", UNLESS NOTED OTHERWISE.
2. EXTERIOR COLUMNS, BEAMS, HANGER ASSEMBLY, AND ASSOCIATED CONNECTIONS TO BE HOT-DIP GALVANIZED AFTER FABRICATION. TOUCH UP ALL DAMAGED GALVANIZED AREAS WITH A ZINC-RICH PAINT.
3. PROVIDE 3/8" DIAMETER TYPE 304 STAINLESS STEEL DOWEL PINS AT HANGER ASSEMBLY LIMESTONE BEARING LOCATIONS. PINS TO BE WELDED AND TO PROJECT 2" ABOVE HORIZONTAL LINE OF UPEL ANGLE AND TO BE EMBEDDED 1 1/2" MINIMUM INTO LIMESTONE. COORDINATE PREPACING WITH LIMESTONE FABRICATOR'S SHOP DRAWINGS. REPAIR DAMAGED GALVANIZED COATING WITH ZINC-RICH PAINT.

Van Buren Township, MI

The Lakeside Park

REVISIONS

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09/21/2026	CD PEER REVIEW
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06/15/2026	DD PEER REVIEW
06/08/2026	DD 90 % PROGRESS
05/18/2026	DD 50 % PROGRESS
02/23/2026	SD OWNER REVIEW
02/13/2026	SD PEER REVIEW
02/09/2026	SD PROGRESS REVIEW

Drawn By	RMEISSNER
Designer	JCARTER
Reviewer	CJOTTE
Manager	CKRETOVIC

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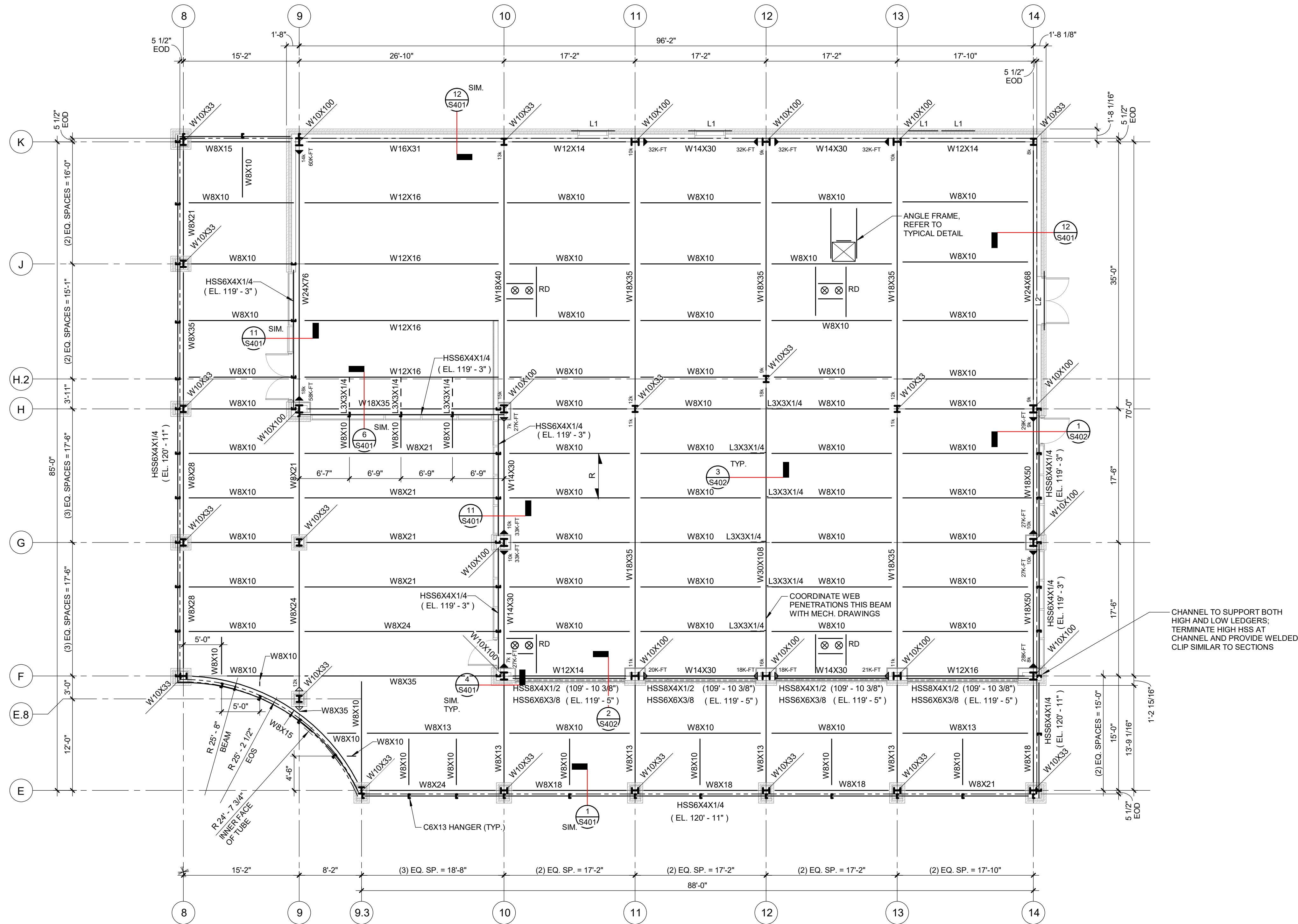
PROJECT NO.
2500281

SHEET NO.

S201

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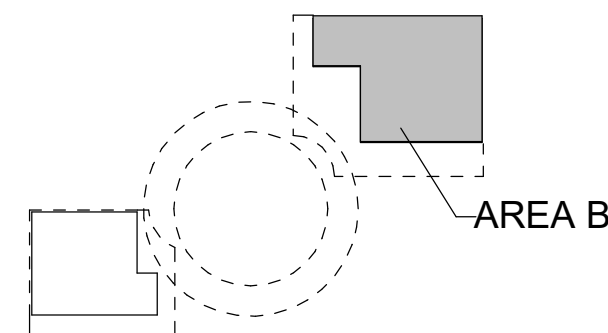




ROOF FRAMING PLAN - AREA B

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

KEY PLAN



NOTES

1. TOP OF STEEL ELEVATION = 121'-10", UNLESS NOTED OTHERWISE.
2. EXTERIOR COLUMNS, BEAMS, HANGER ASSEMBLY, AND ASSOCIATED CONNECTIONS TO BE HOT-DIP GALVANIZED AFTER FABRICATION. TOUCH UP ALL DAMAGED GALVANIZED AREAS WITH A ZINC-RICH PAINT.
3. PROVIDE 3/8" DIAMETER TYPE 304 STAINLESS STEEL DOWEL PINS AT HANGER ASSEMBLY LIMESTONE BEARING LOCATIONS. PINS TO BE WELDED AND TO PROJECT 2" ABOVE HORIZONTAL LEG OF LINTEL ANGLE AND TO BE EMBEDDED 1-1/2" MINIMUM INTO LIMESTONE. COORDINATE PIN SPACING WITH LIMESTONE FABRICATOR'S SHOP DRAWINGS. REPAIR DAMAGED GALVANIZED COATING WITH ZINC-RICH PAINT.

Van Buren Charter Township

Van Buren Township, MI

The Lakeside Park

REVISIONS

10/12/2026	BIDS & PERMIT
09/21/2026	CD PEER REVIEW
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05/18/2026	DD 50 % PROGRESS
02/23/2026	SD OWNER REVIEW
02/13/2026	SD PEER REVIEW
02/09/2026	SD PROGRESS REVIEW

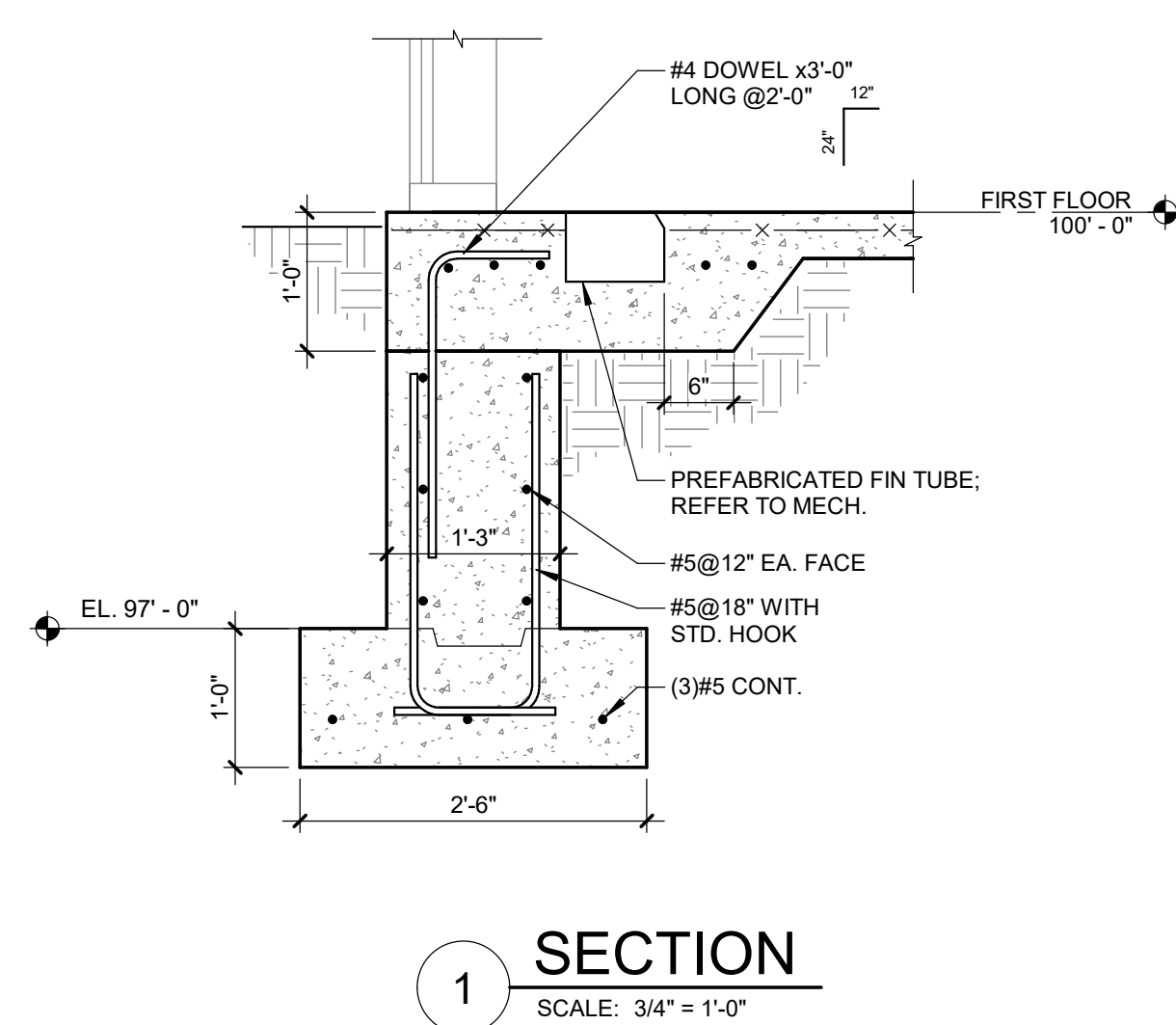
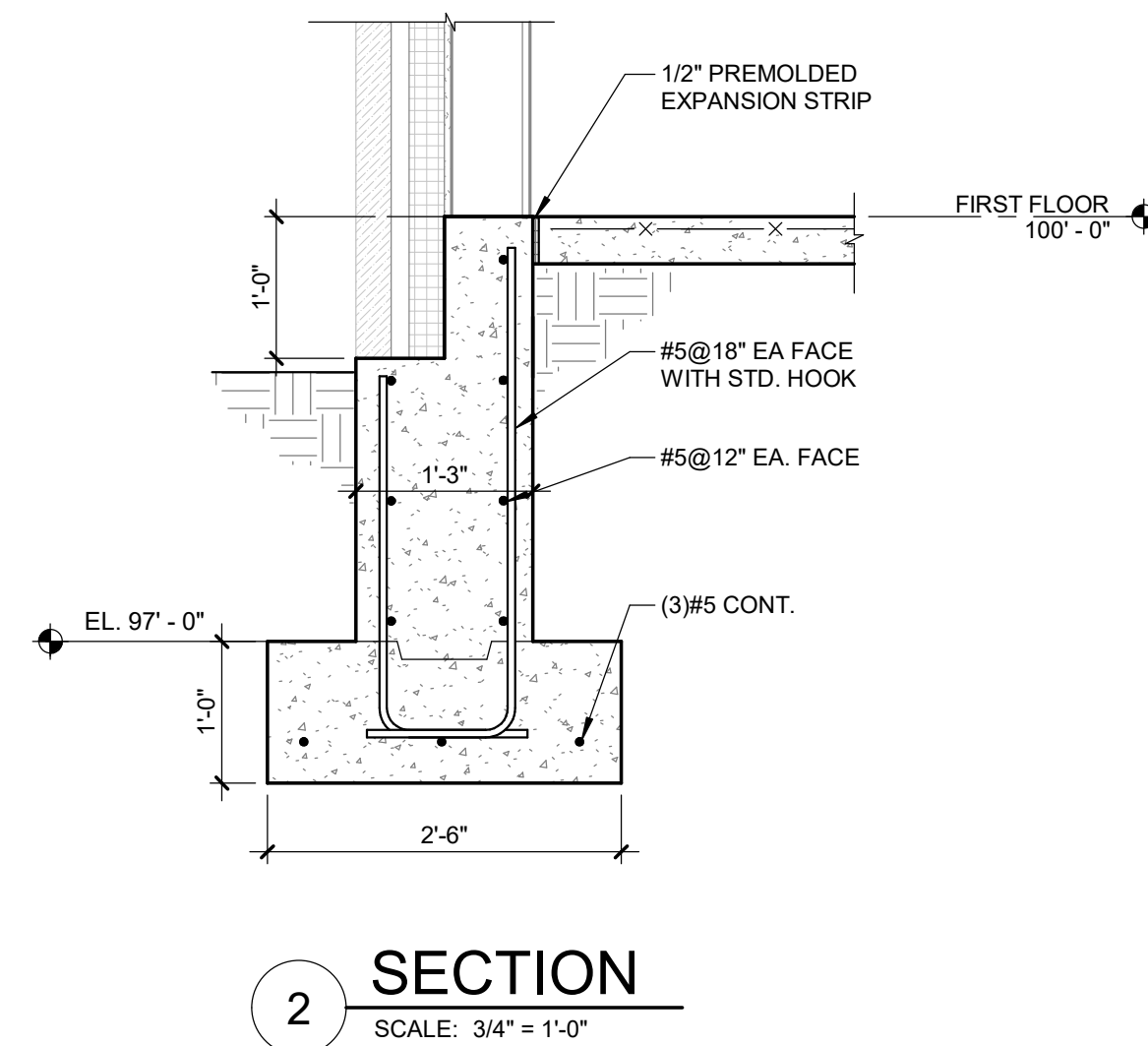
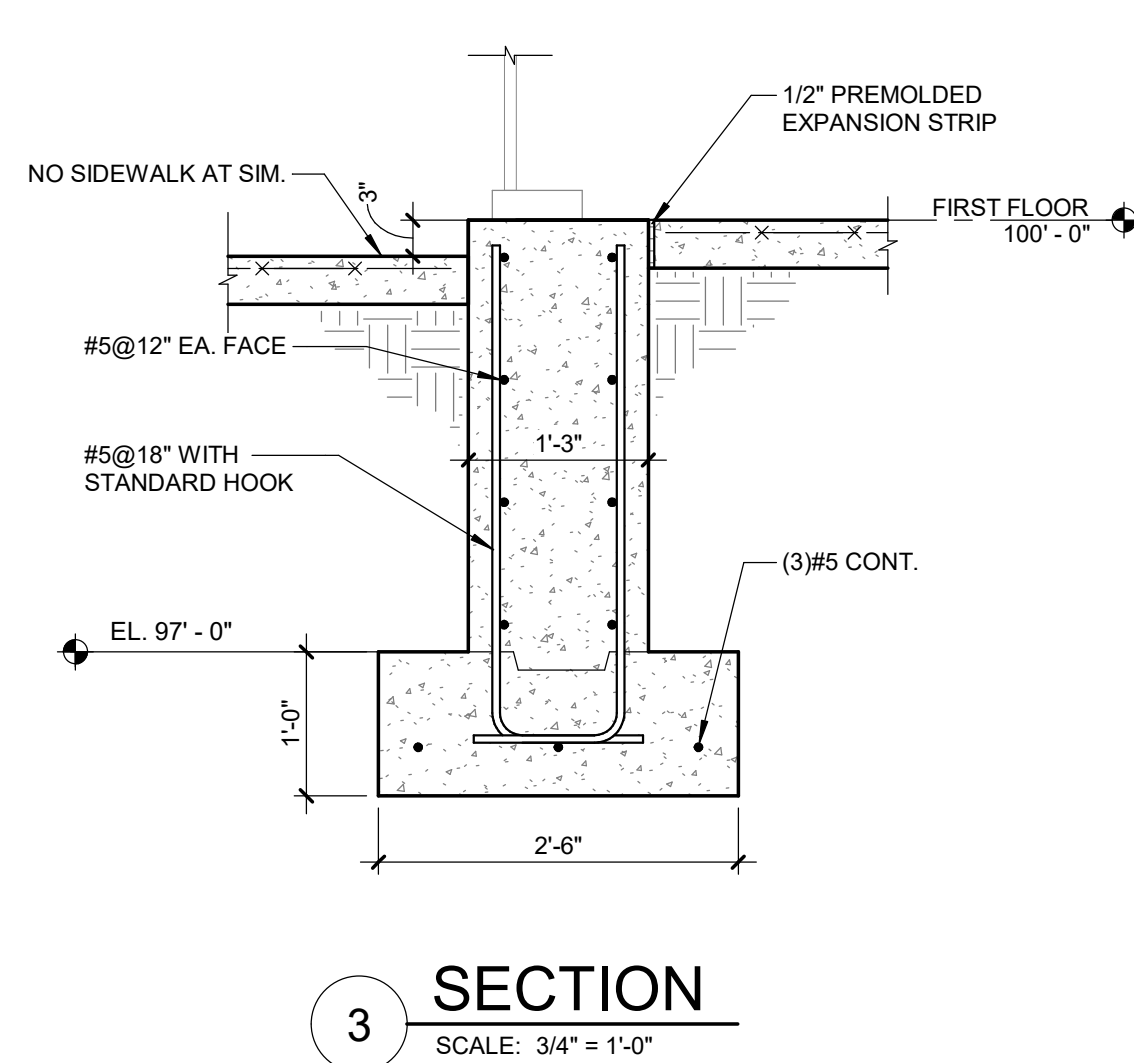
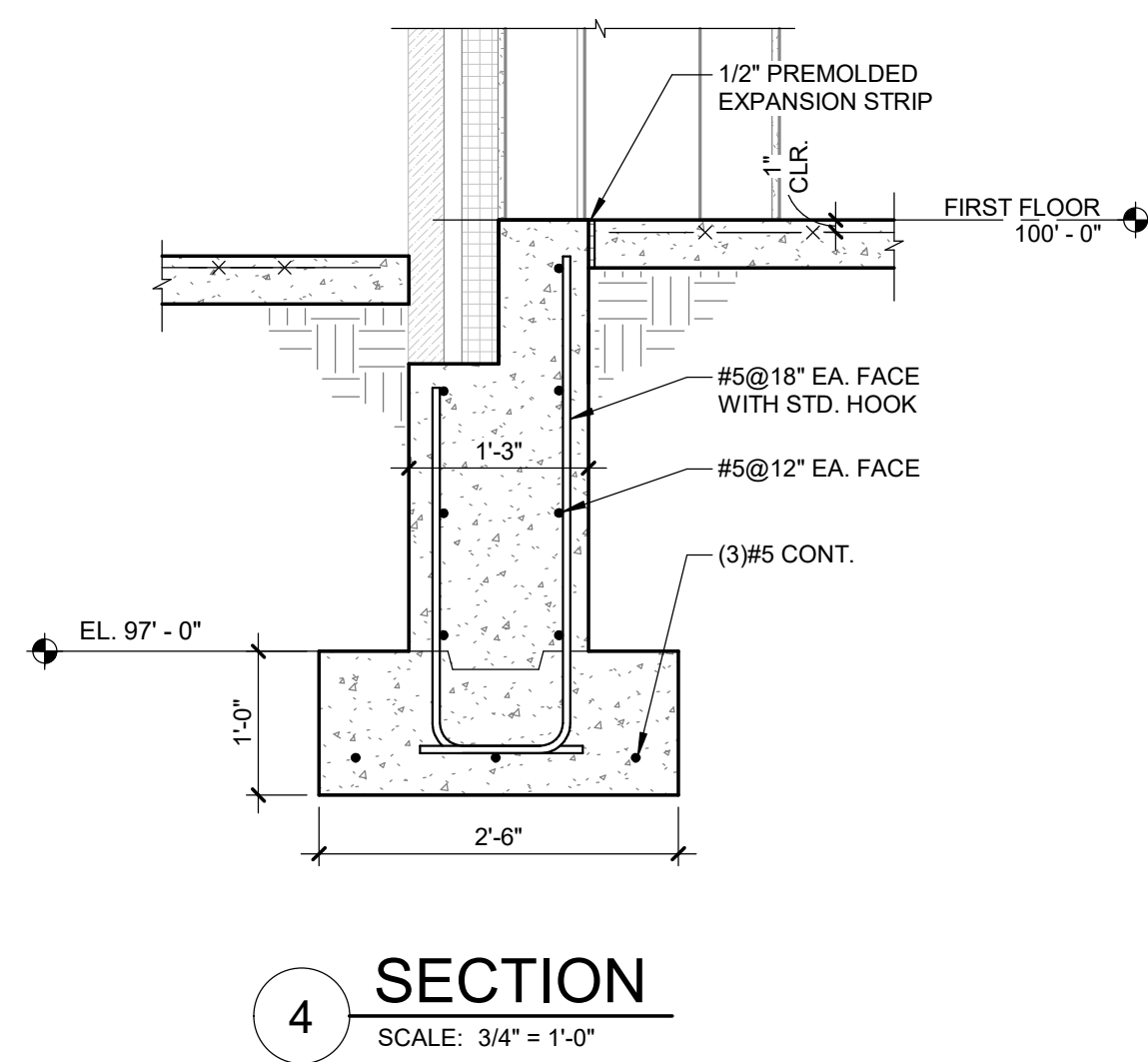
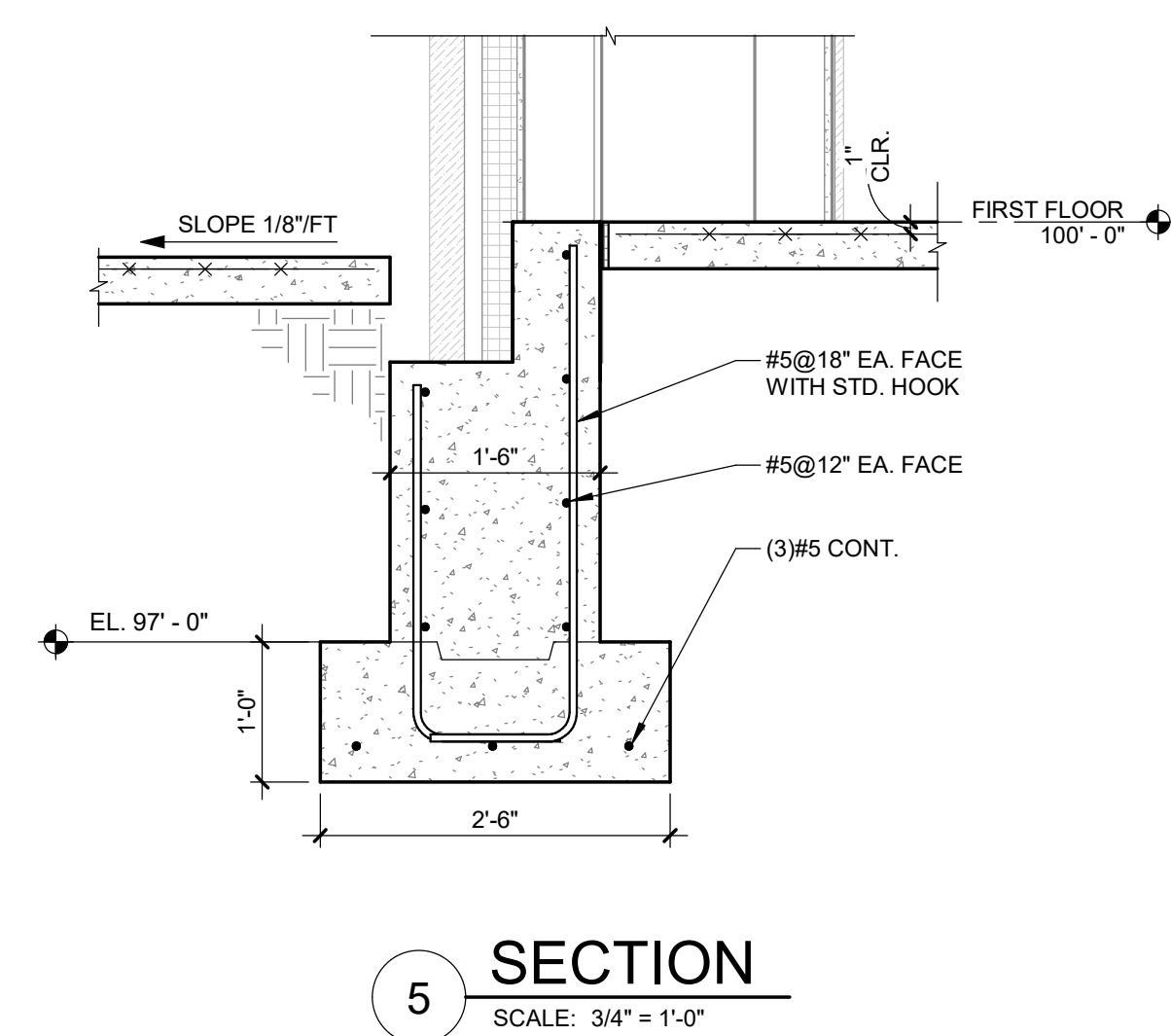
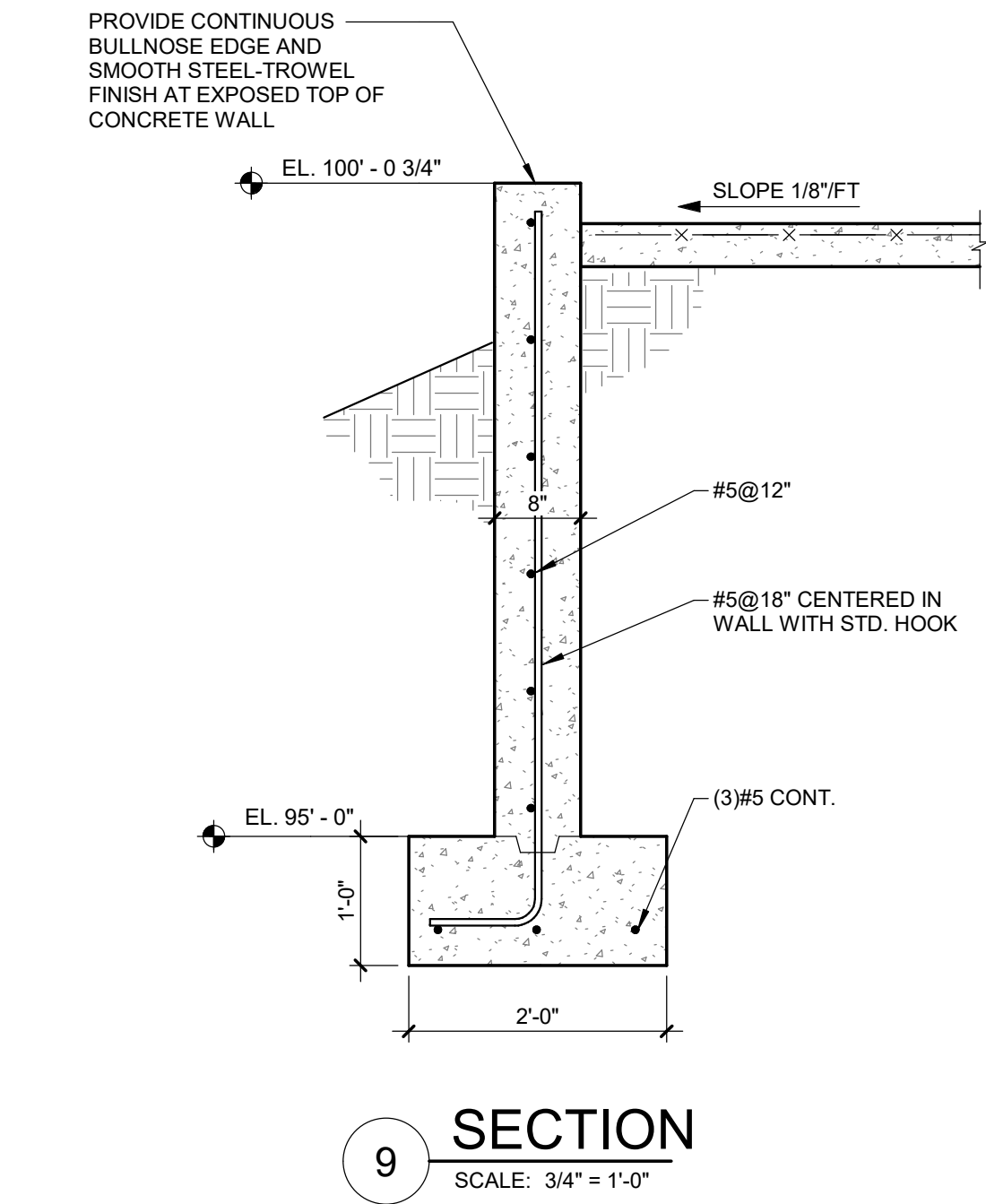
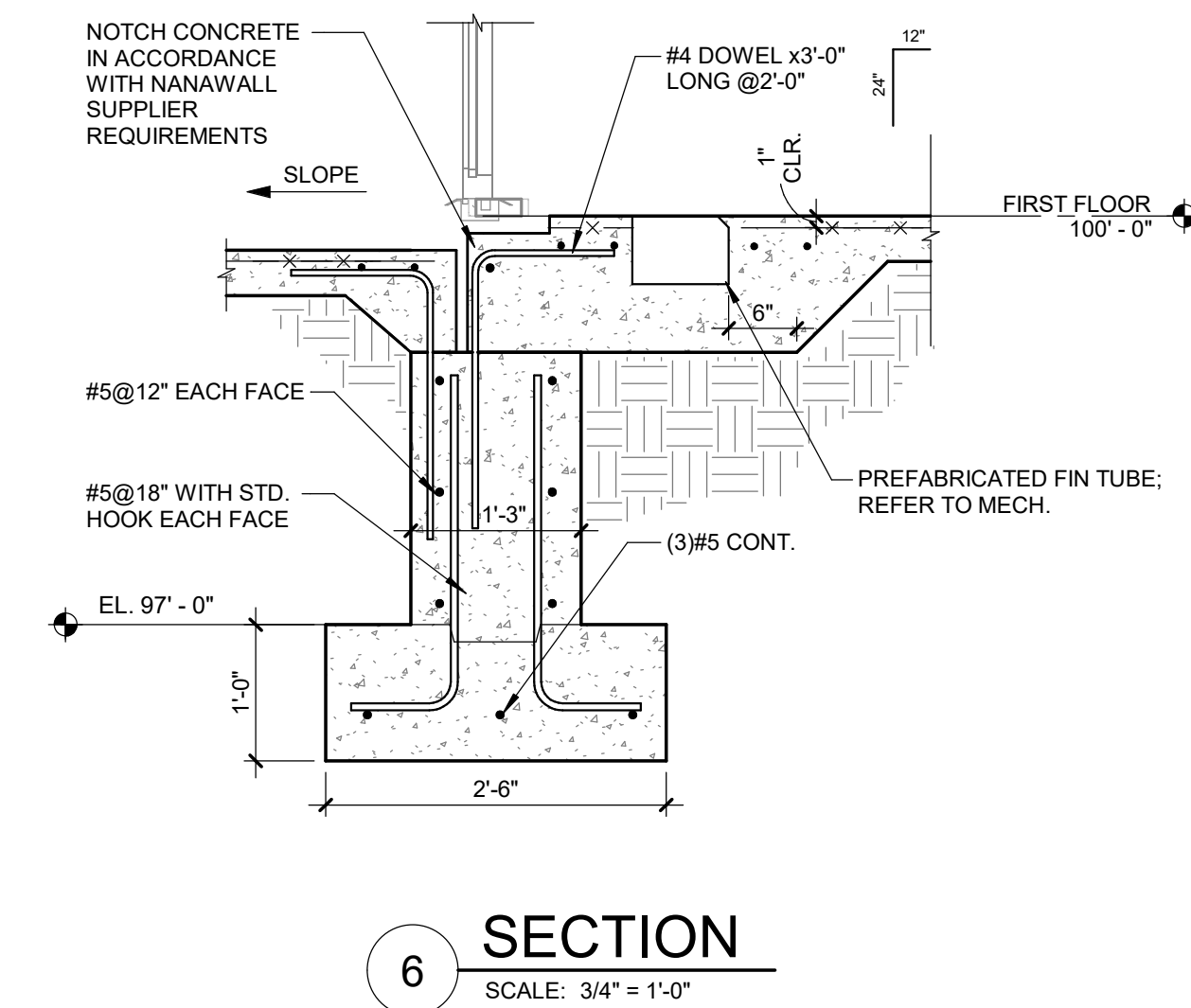
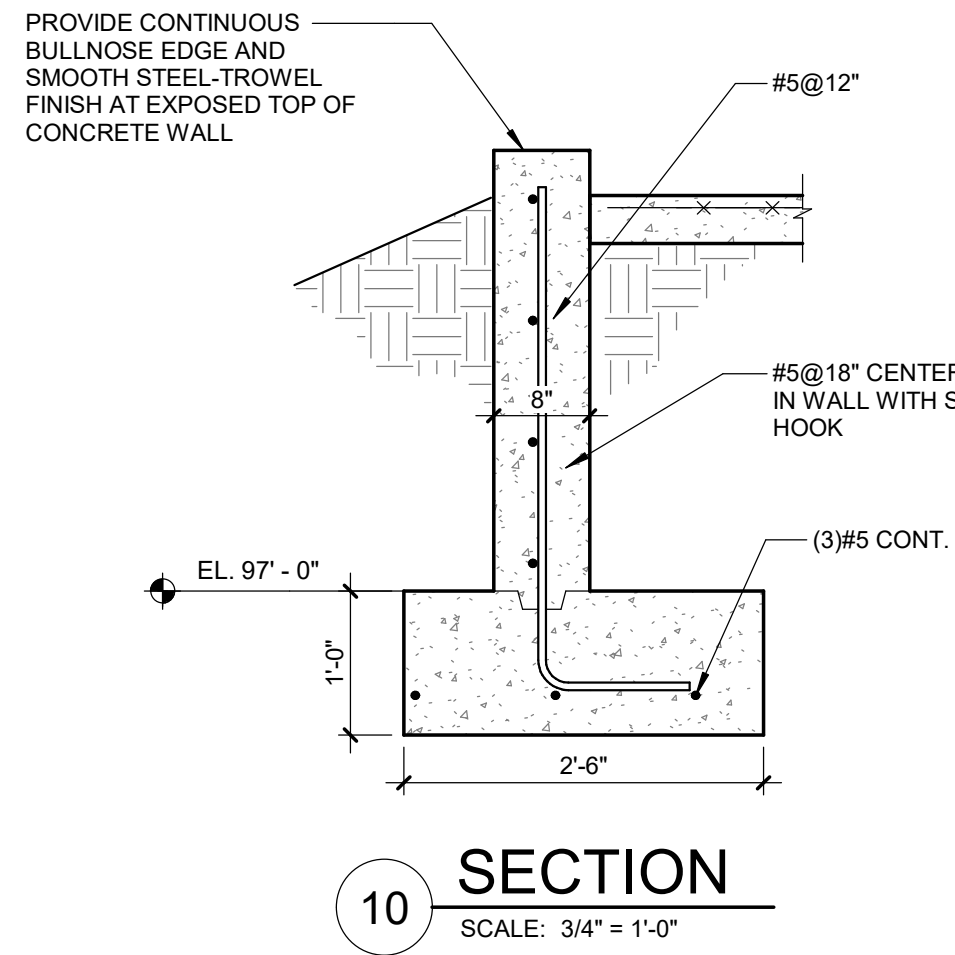
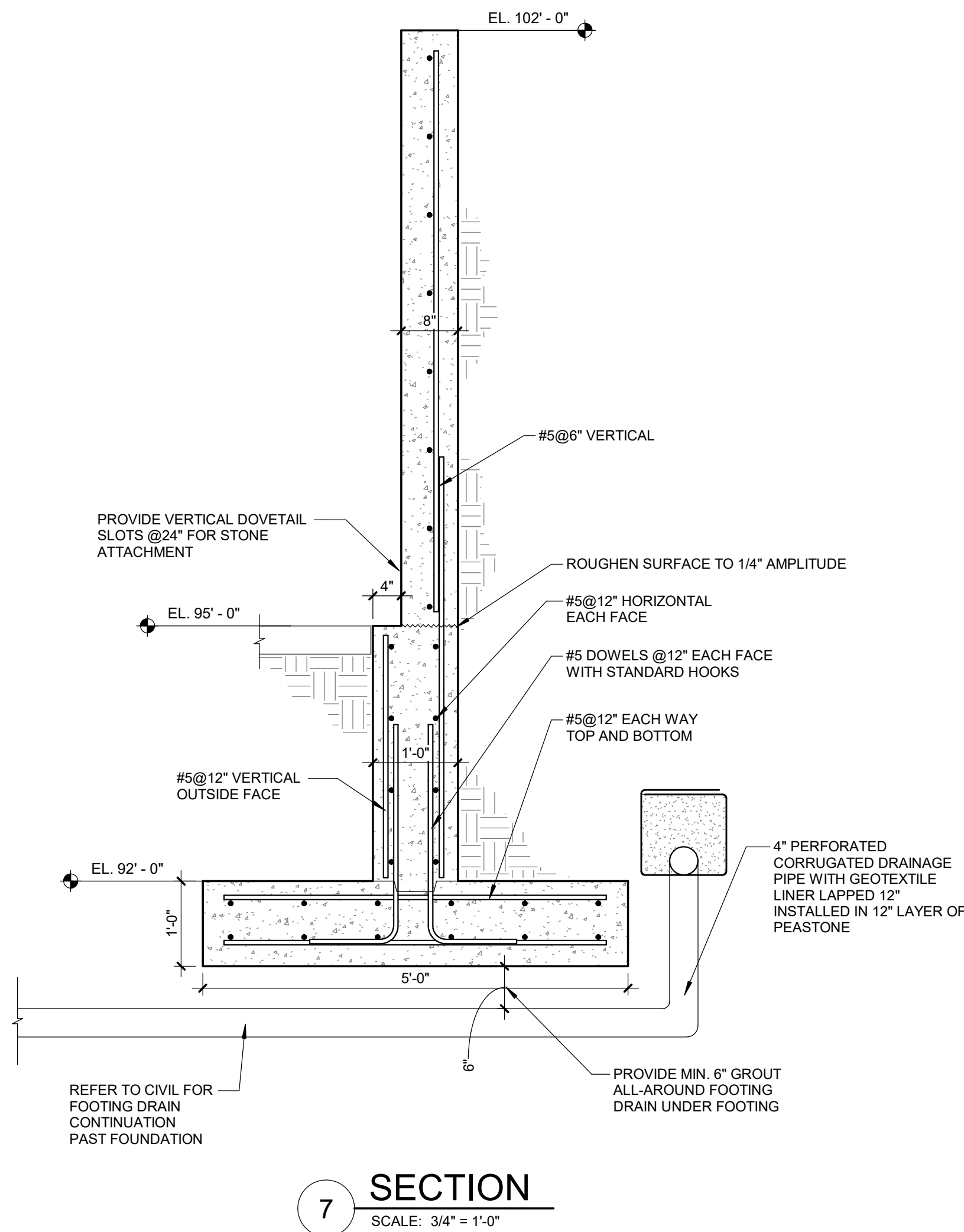
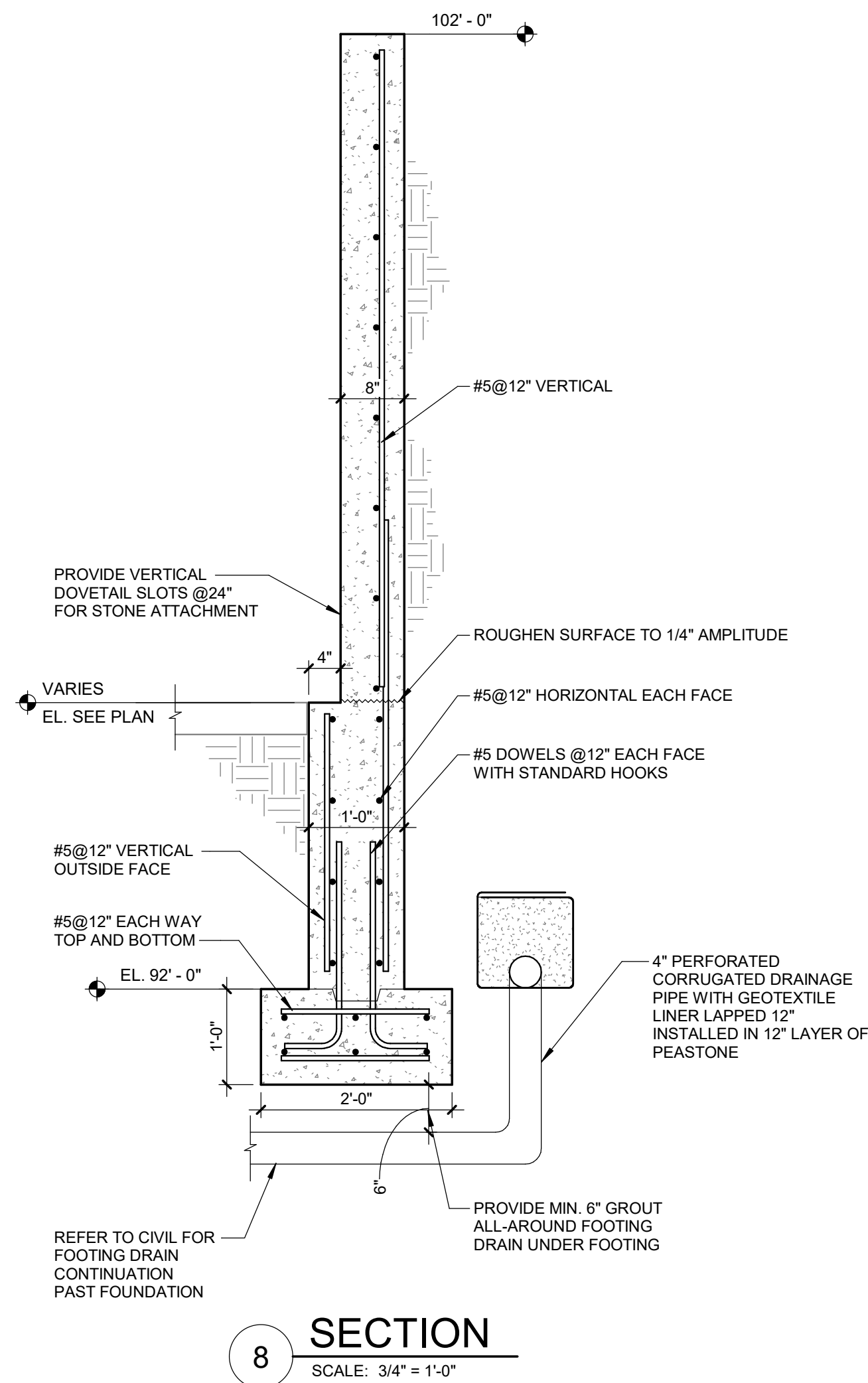
Drawn By RMEISSNER
Designer JCARTER
Reviewer CJOTTE
Manager CKRETOVIC

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PROJECT NO.
2500281

SHEET NO.

S202



Van Buren Charter Township

Van Buren Township, MI

The Lakeside Park

REVISIONS

10/12/2026	BIDS & PERMIT
09/21/2026	CD PEER REVIEW
09/09/2026	CD TEAM REVIEW
08/10/2026	CD 50% PROGRESS
08/22/2026	DD OWNER REVIEW
06/15/2026	DD PEER REVIEW
06/08/2026	DD 90 % PROGRESS
05/18/2026	DD 90 % PROGRESS
02/23/2026	SD OWNER REVIEW
02/13/2026	SD PEER REVIEW
02/09/2026	SD PROGRESS REVIEW

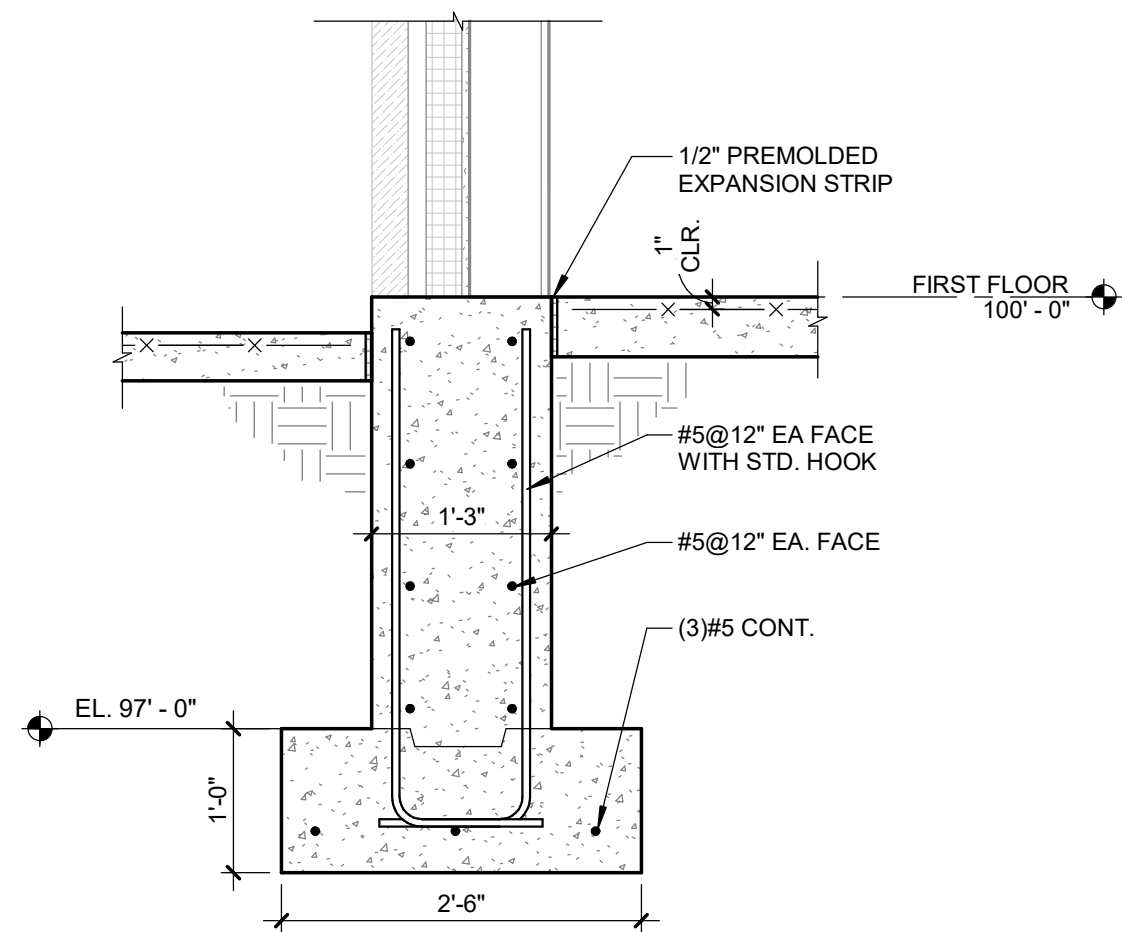
Drawn By RMEISSNER
Designer JCARTER
Reviewer CJOTTE
Manager CKRETOVIC

Hard copy is intended to be 24"x36" when plotted. Scale(s) indicated and graphic quality may not be accurate for any other size.

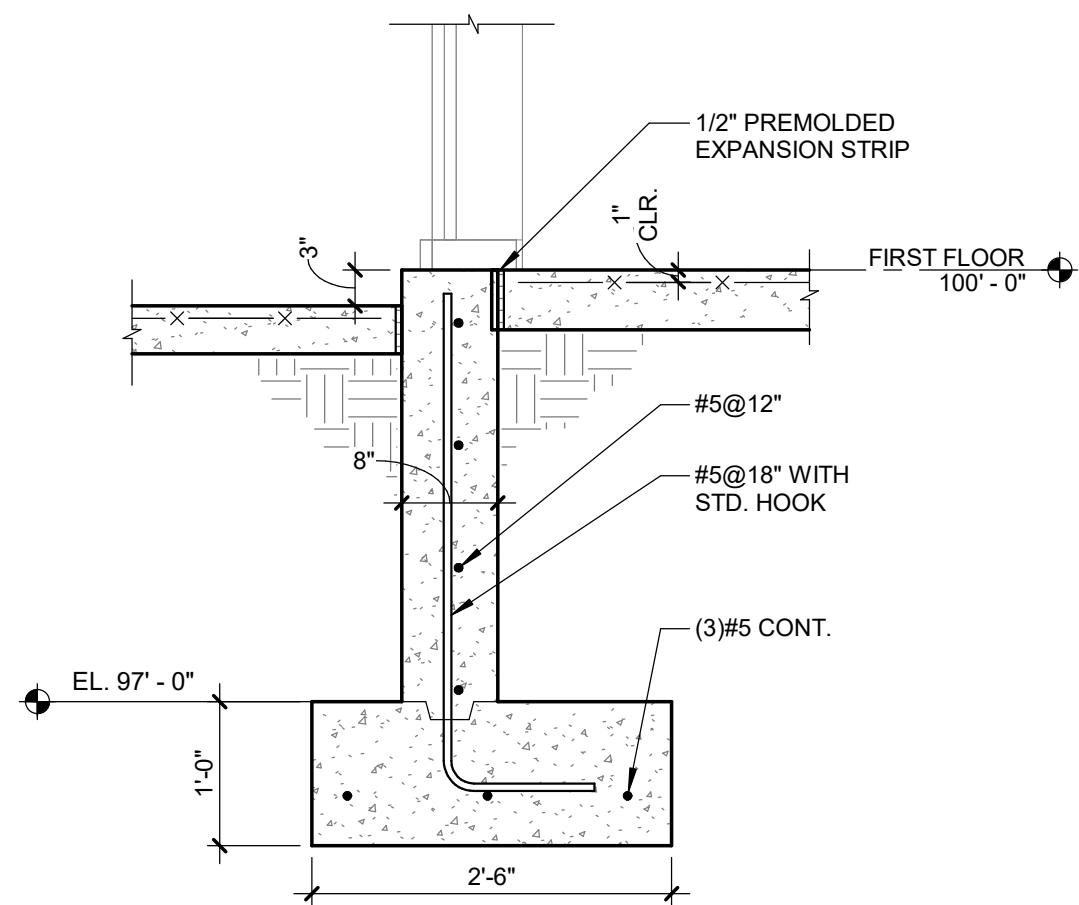
PROJECT NO.
2500281

SHEET NO.

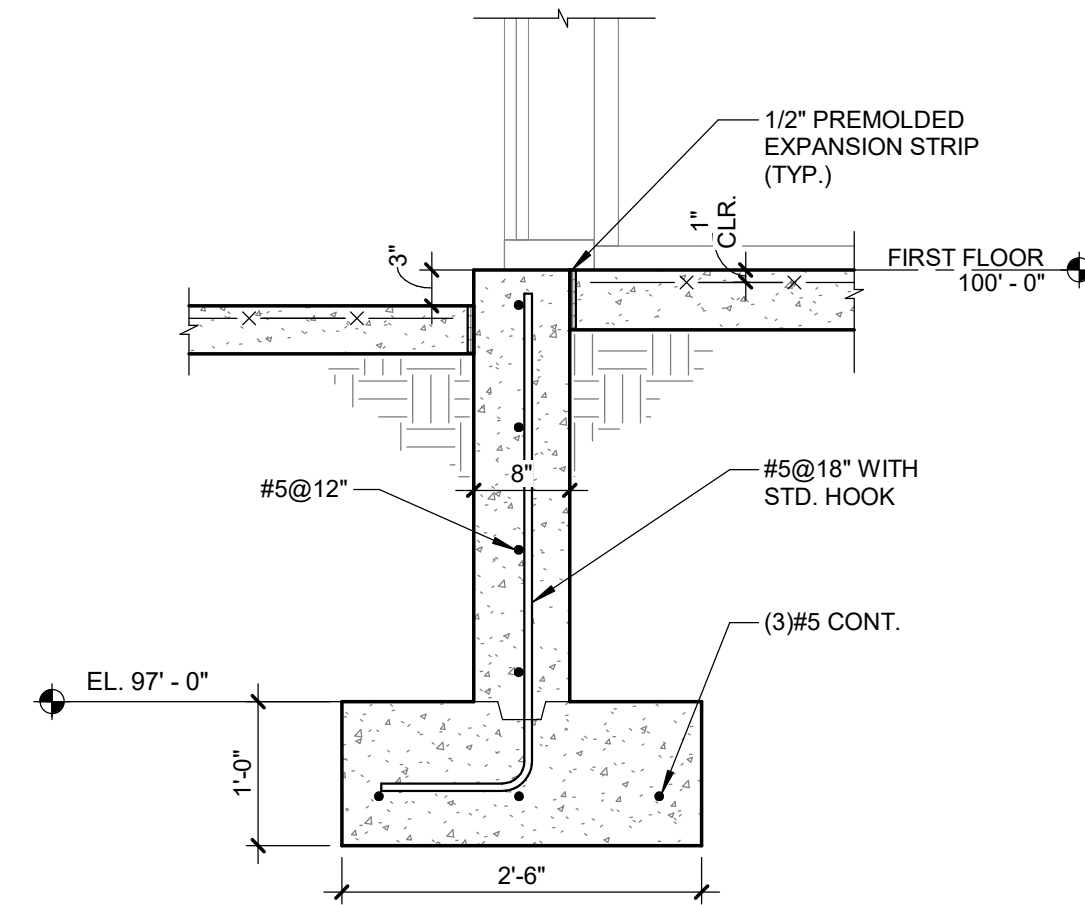
S301



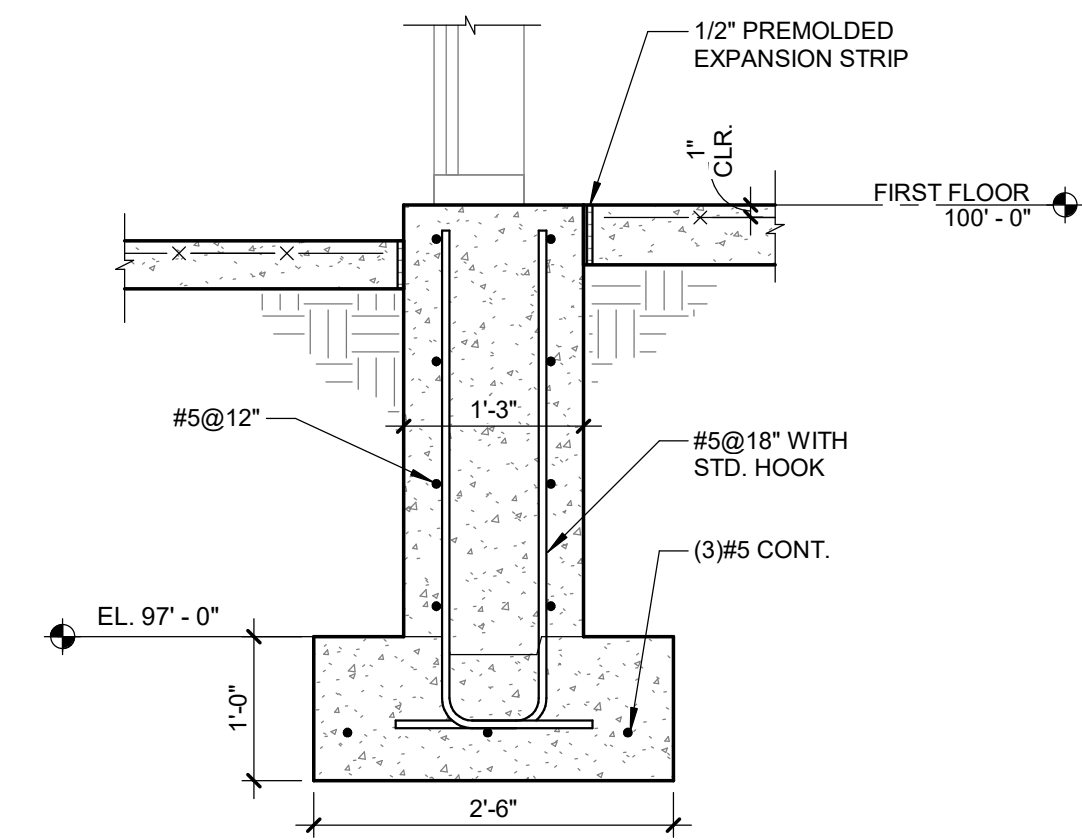
4 SECTION
SCALE: 3/4" = 1'-0"



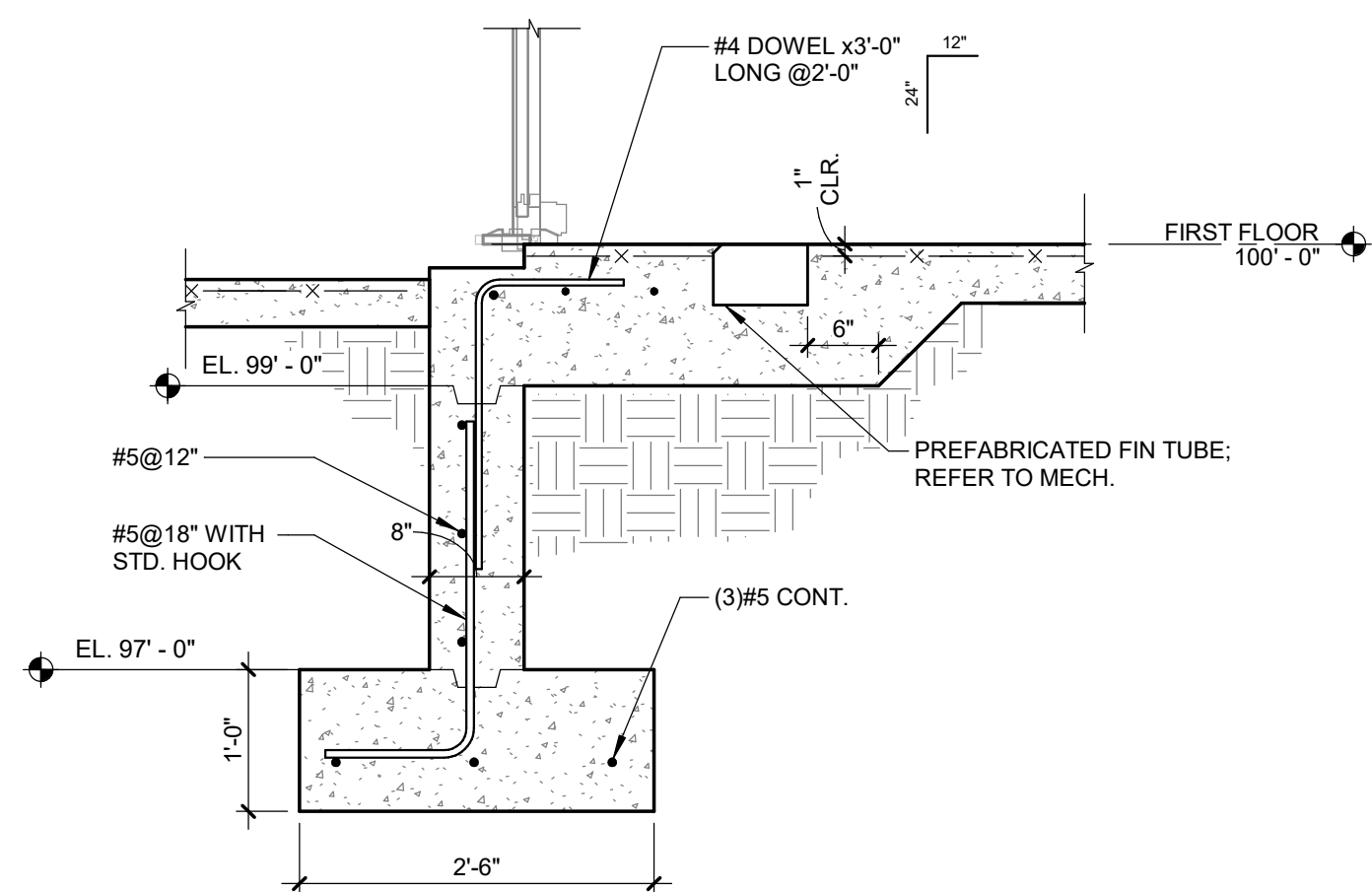
3 SECTION
SCALE: 3/4" = 1'-0"



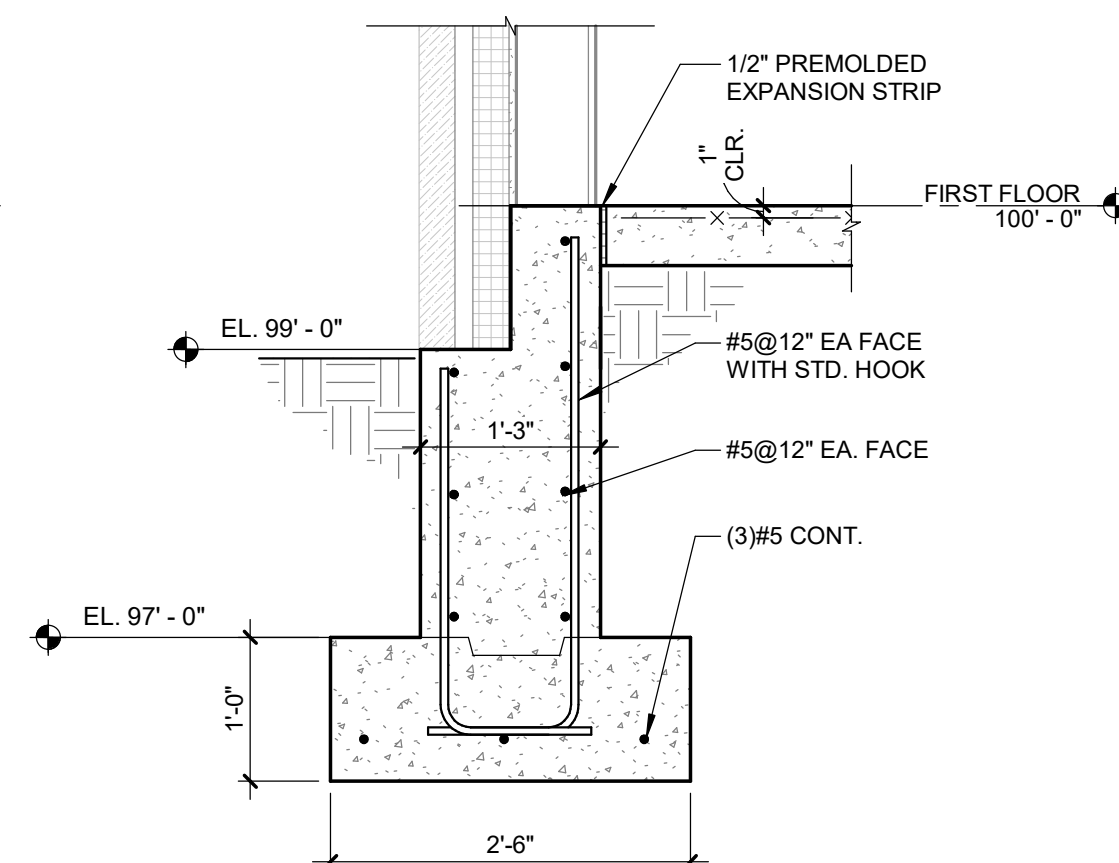
2 SECTION
SCALE: 3/4" = 1'-0"



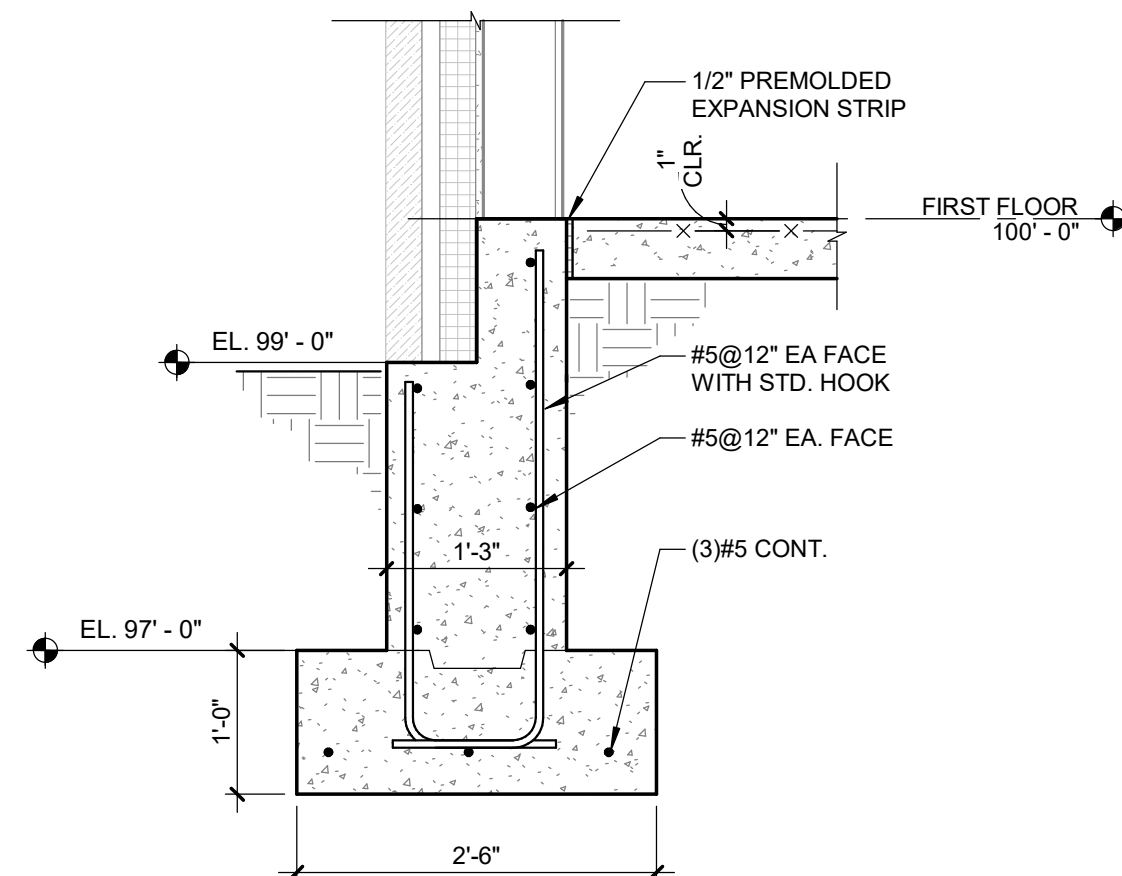
1 SECTION
SCALE: 3/4" = 1'-0"



7 SECTION
SCALE: 3/4" = 1'-0"



6 SECTION
SCALE: 3/4" = 1'-0"



5 SECTION
SCALE: 3/4" = 1'-0"

Van Buren Charter Township

Van Buren Township, MI

The Lakeside Park

REVISIONS

10/12/2026	BIDS & PERMIT
09/21/2026	CD PEER REVIEW
09/09/2026	CD TEAM REVIEW
08/10/2026	CD 50% PROGRESS
08/22/2026	DD OWNER REVIEW
06/15/2026	DD PEER REVIEW
06/08/2026	DD 90 % PROGRESS
05/18/2026	DD 90 % PROGRESS
02/23/2026	SD OWNER REVIEW
02/13/2026	SD PEER REVIEW
02/09/2026	SD PROGRESS REVIEW

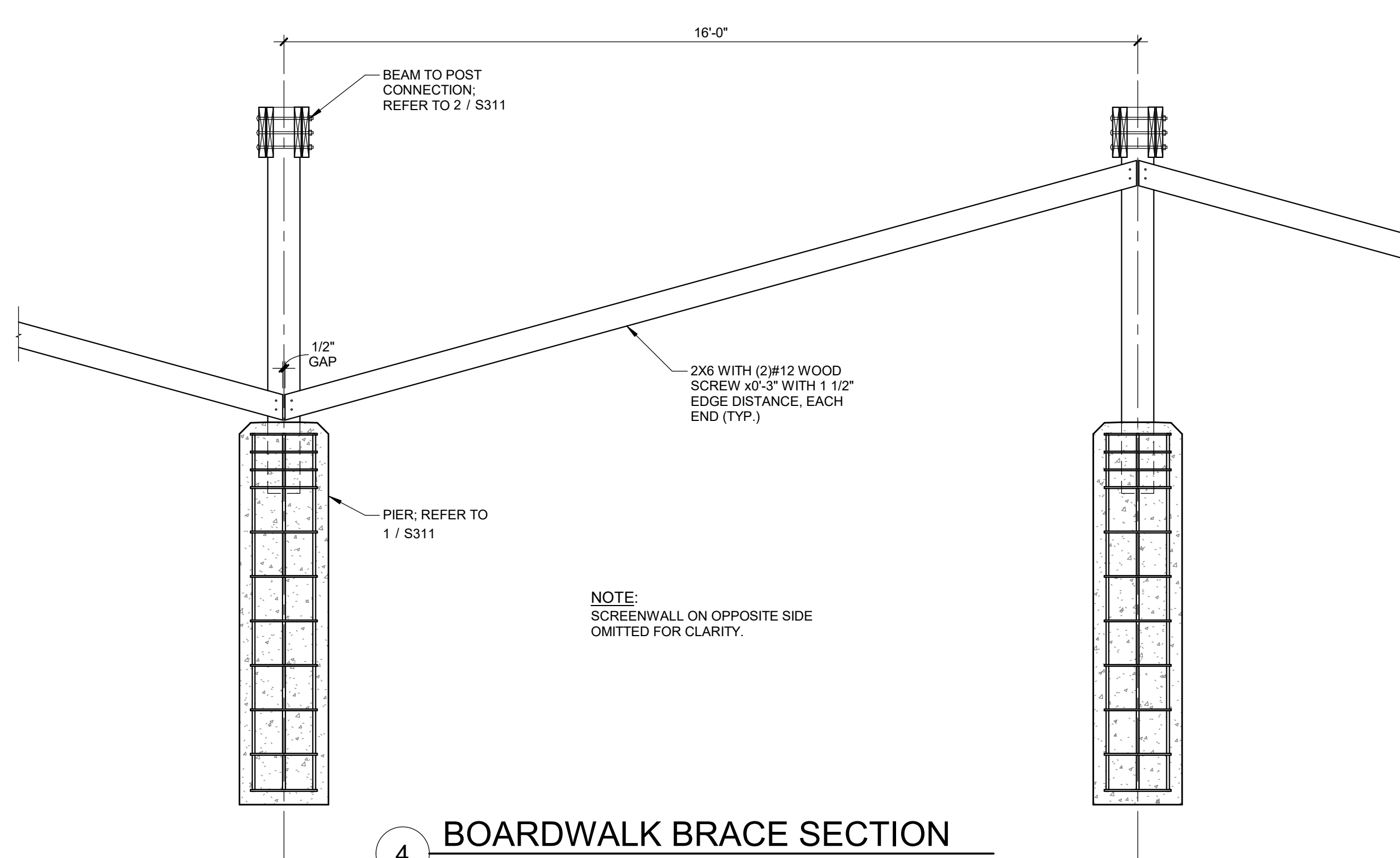
Drawn By RMEISSNER
Designer JCARTER
Reviewer CJOTTE
Manager CKRETOVIC

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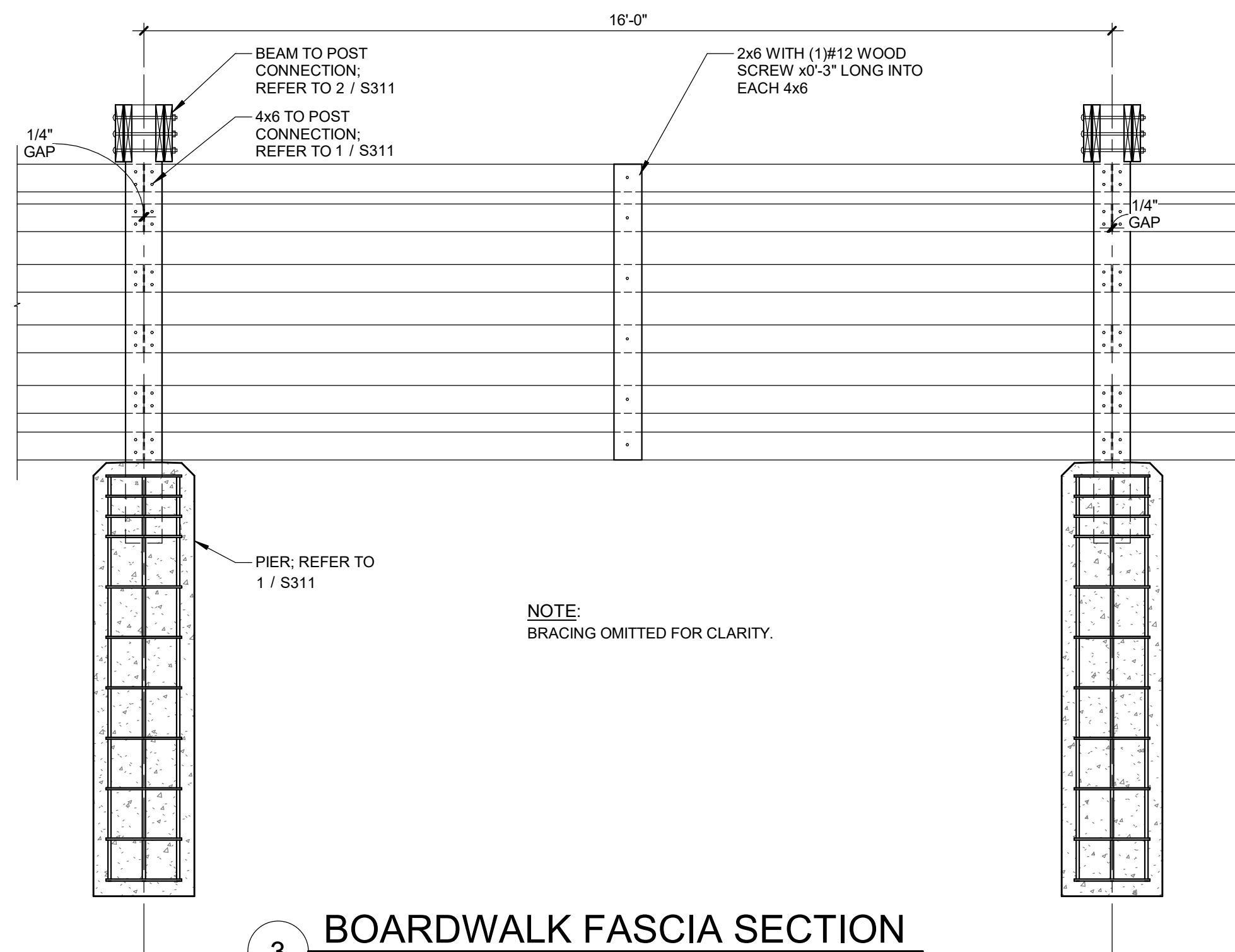
PROJECT NO.
2500281

SHEET NO.

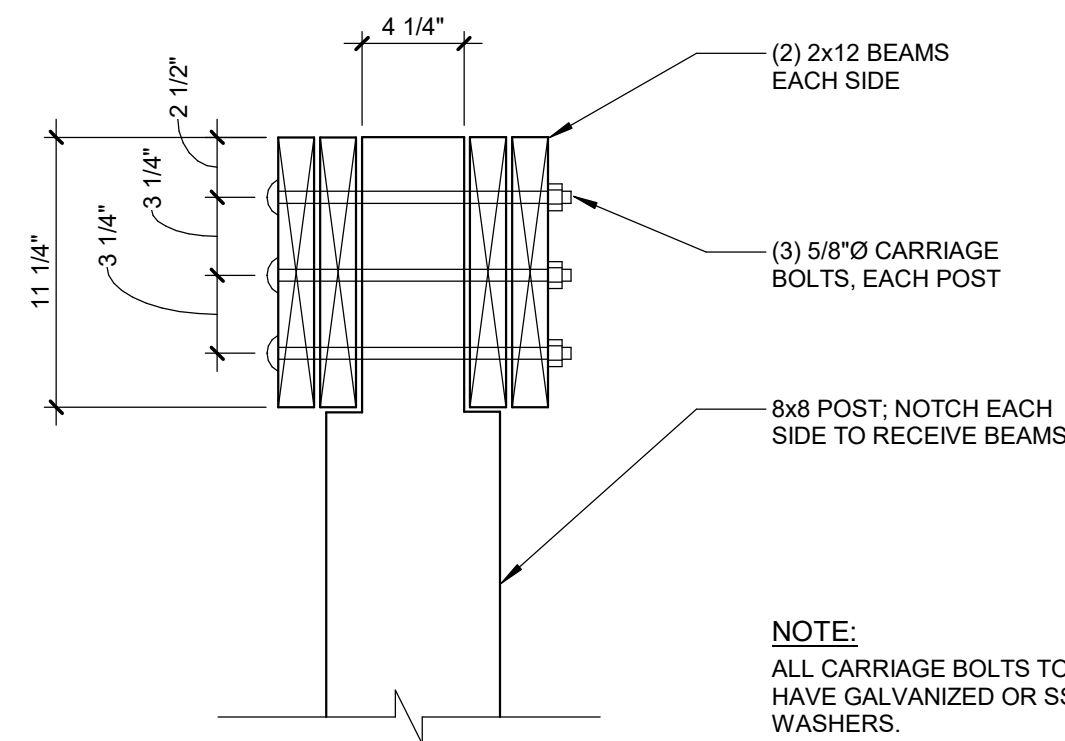
S302



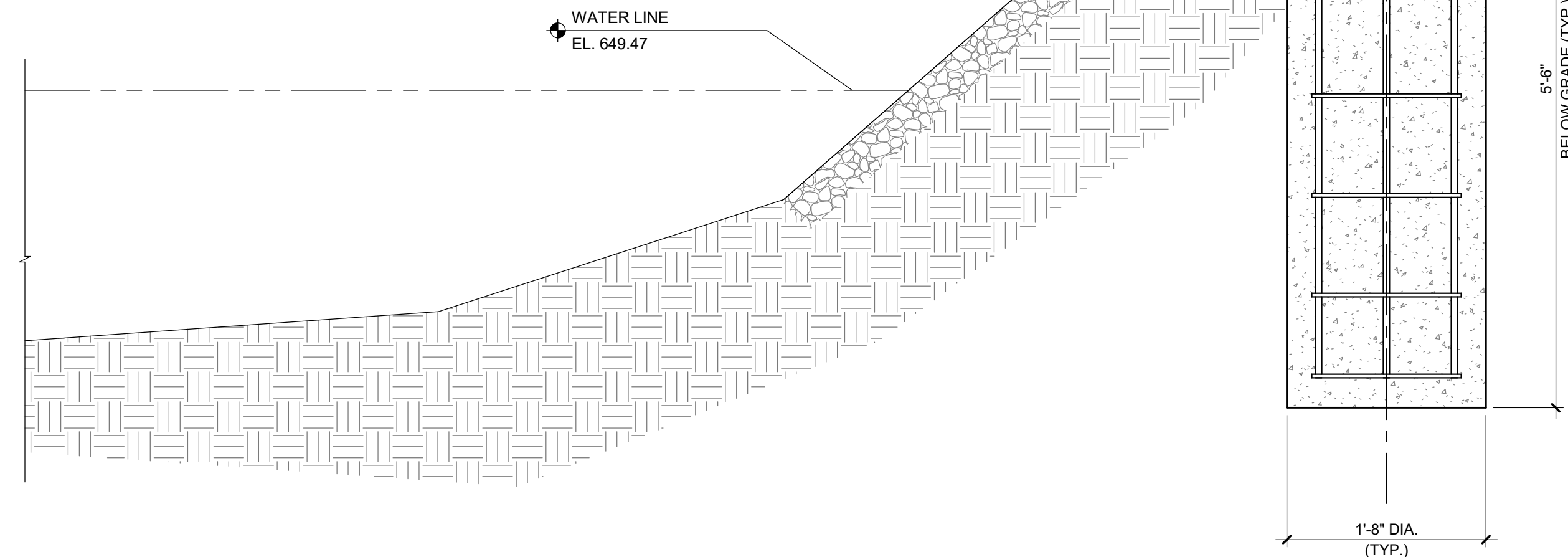
4 BOARDWALK BRACE SECTION
SCALE: 1/2" = 1'-0"



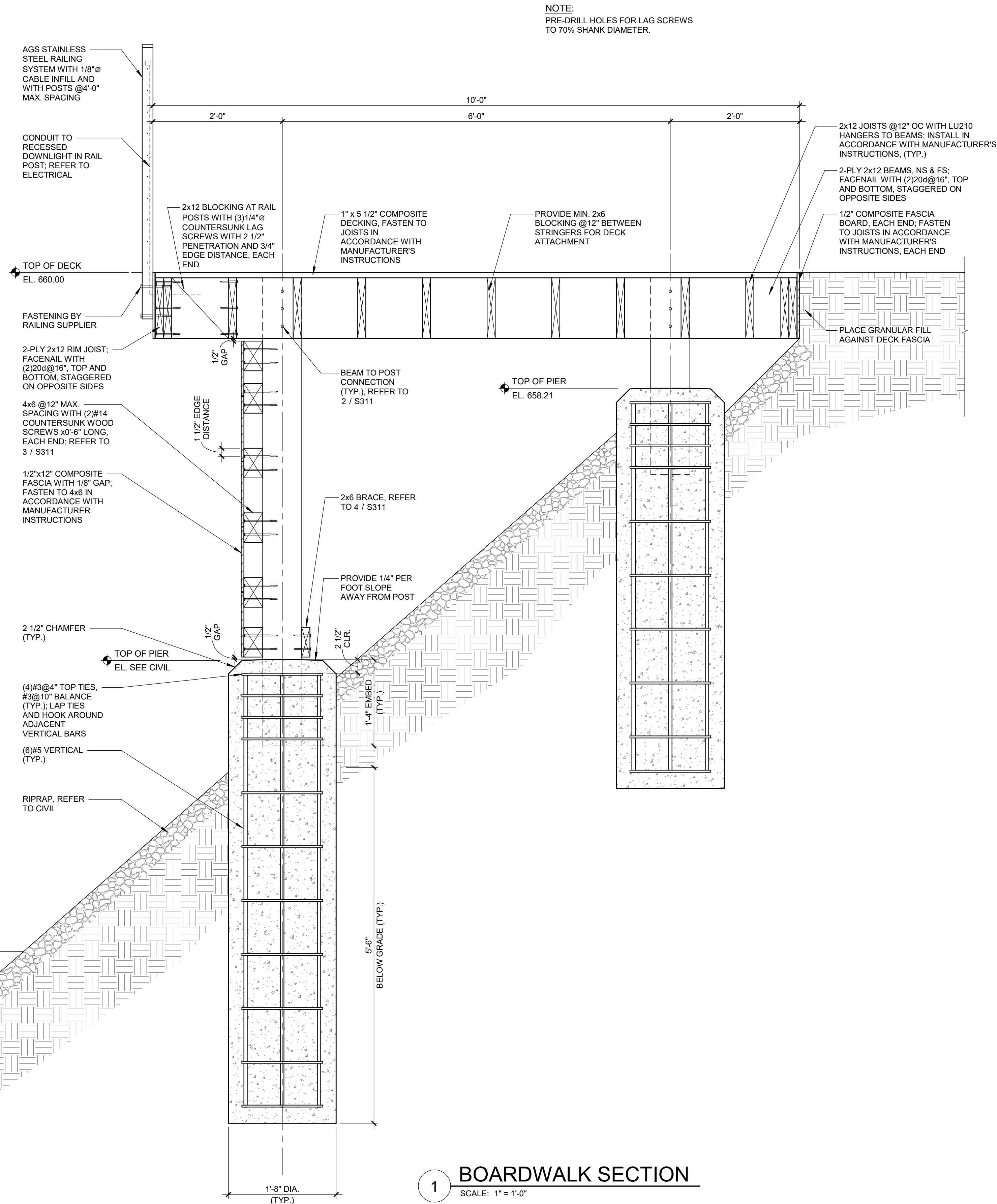
3 BOARDWALK FASCIA SECTION
SCALE: 1/2" = 1'-0"



2 BEAM TO POST CONNECTION
SCALE: 1 1/2" = 1'-0"



1 BOARDWALK SECTION
SCALE: 1" = 1'-0"



REVISIONS

10/12/2026	BIDS & PERMIT
09/21/2026	CD PEER REVIEW
09/09/2026	CD TEAM REVIEW
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06/15/2026	DD PEER REVIEW
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05/18/2026	DD 90 % PROGRESS
02/23/2026	SD OWNER REVIEW
02/13/2026	SD PEER REVIEW
02/09/2026	SD PROGRESS REVIEW

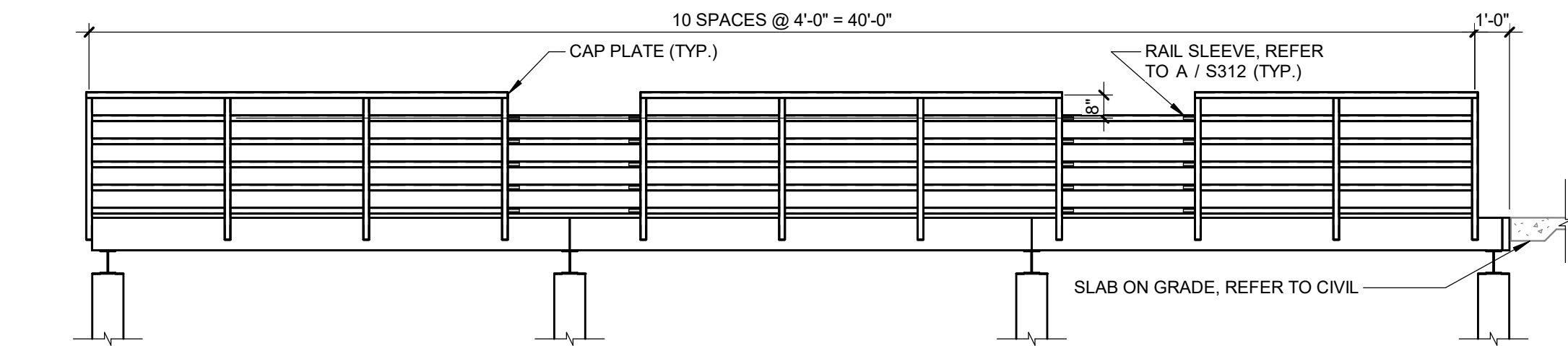
Drawn By	RMEISSNER
Designer	JCARTER
Reviewer	CJOTTE
Manager	CKRETOVIC

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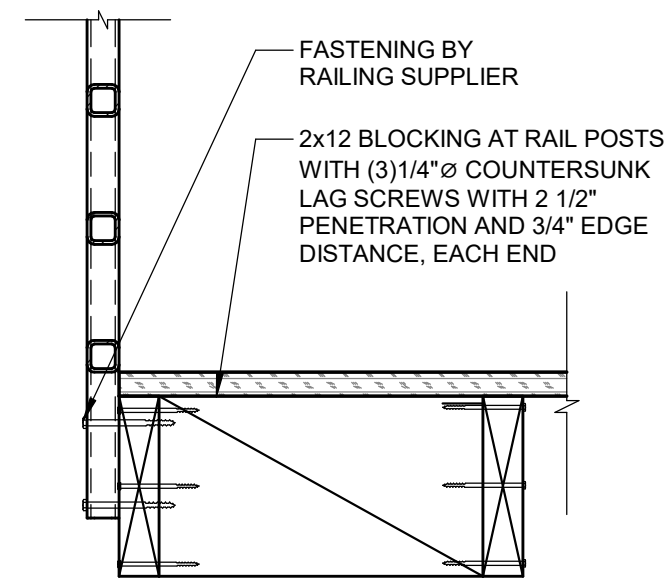
PROJECT NO.
2500281

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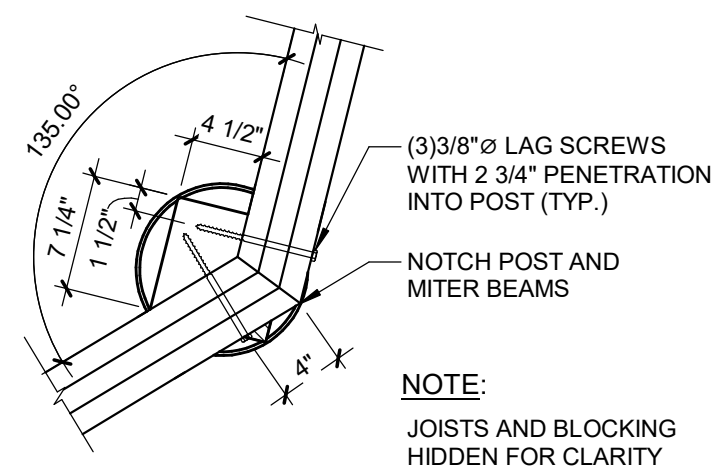
S311



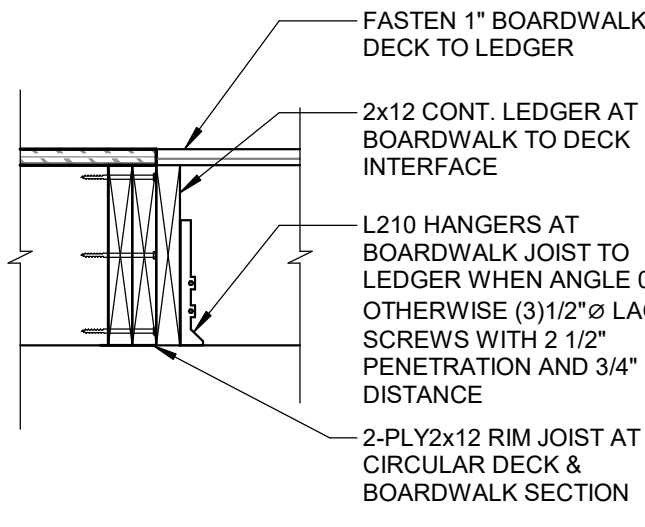
B ELEVATION
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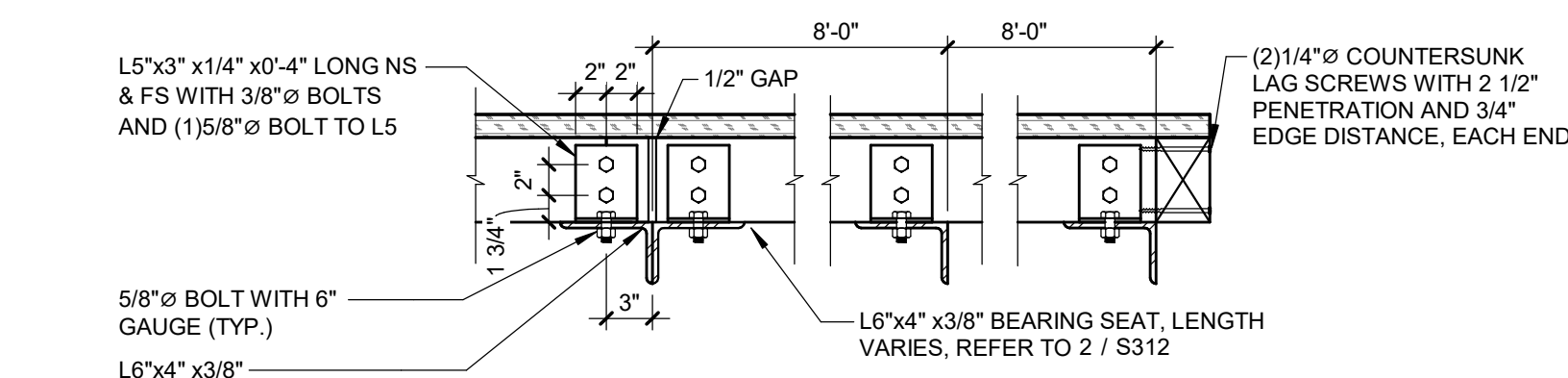
10 SECTION
SCALE: 1" = 1'-0"



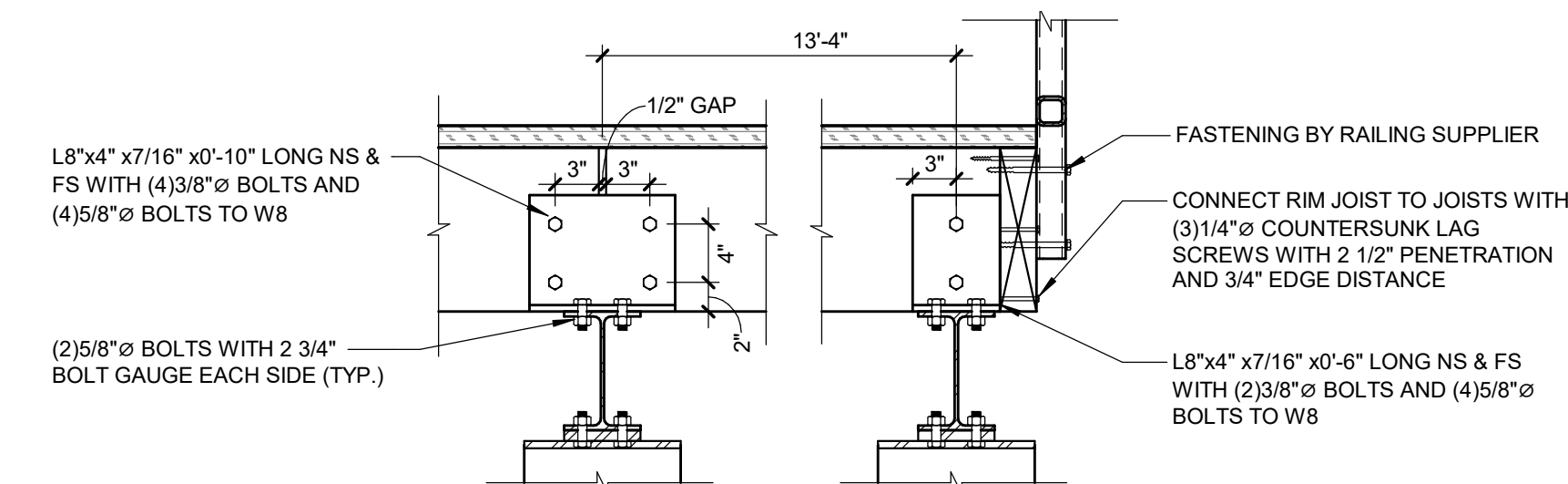
9 DETAIL
SCALE: 1" = 1'-0"



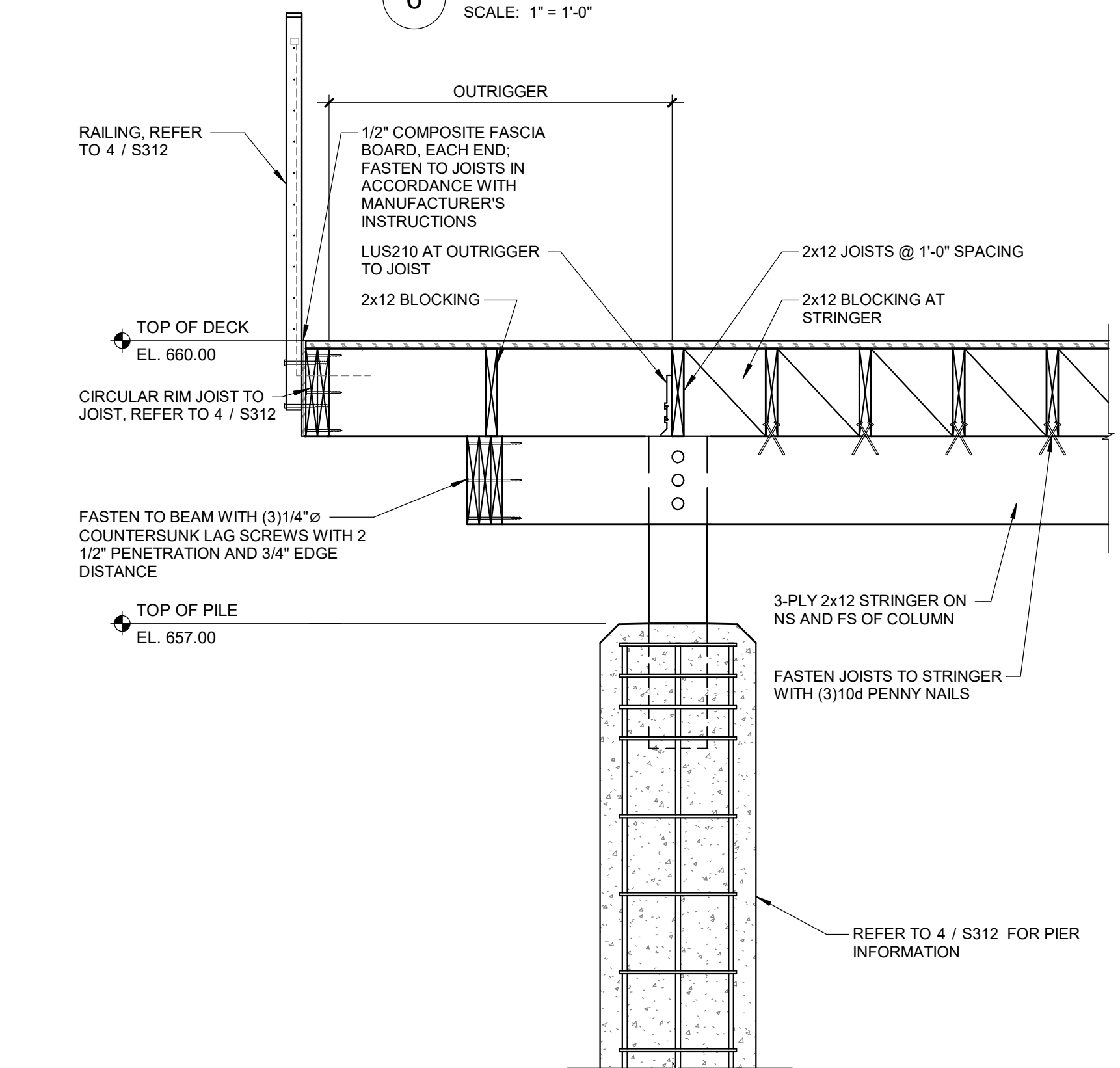
8 SECTION
SCALE: 1" = 1'-0"



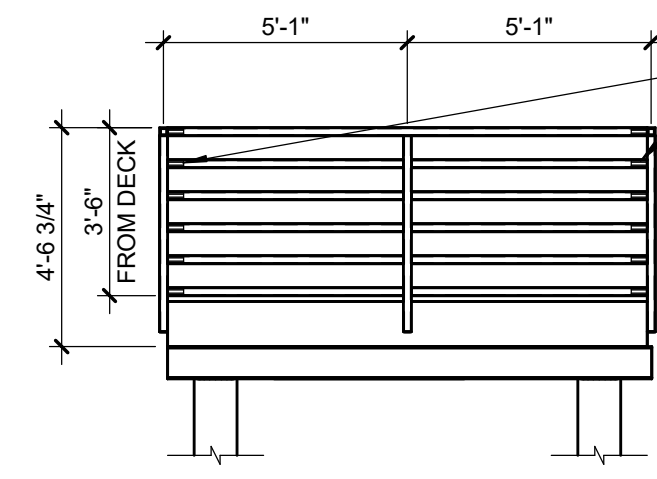
7 SECTION
SCALE: 1" = 1'-0"



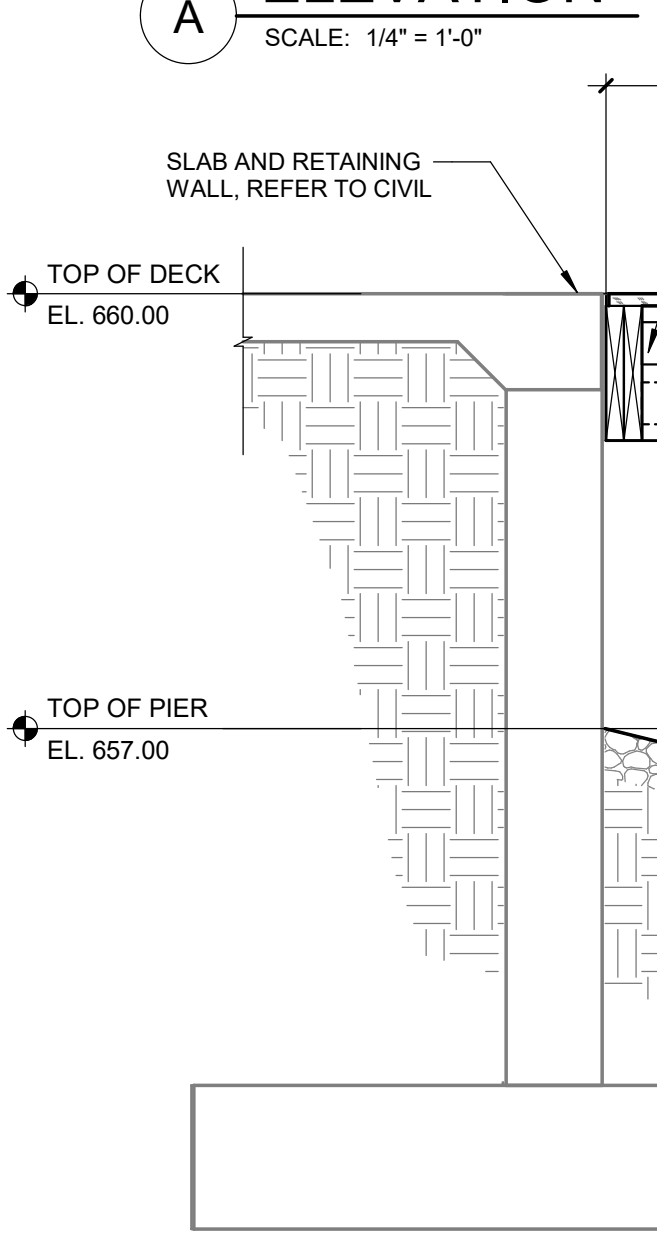
6 SECTION
SCALE: 1" = 1'-0"



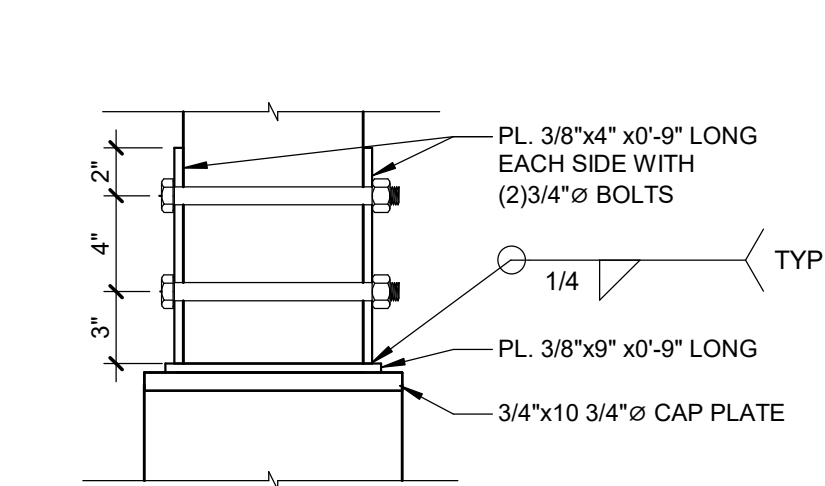
3 SECTION
SCALE: 3/4" = 1'-0"



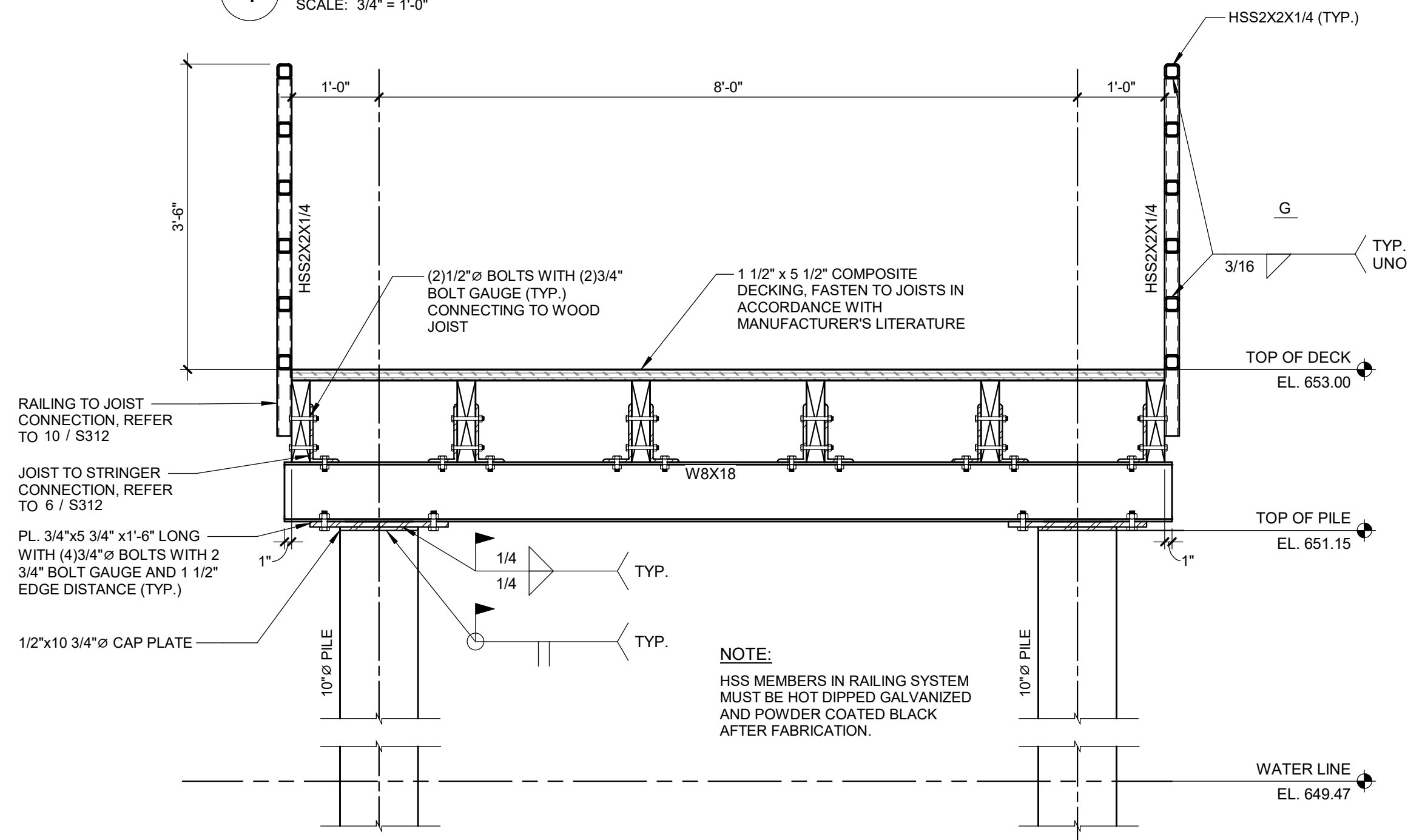
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SCALE: 1/4" = 1'-0"



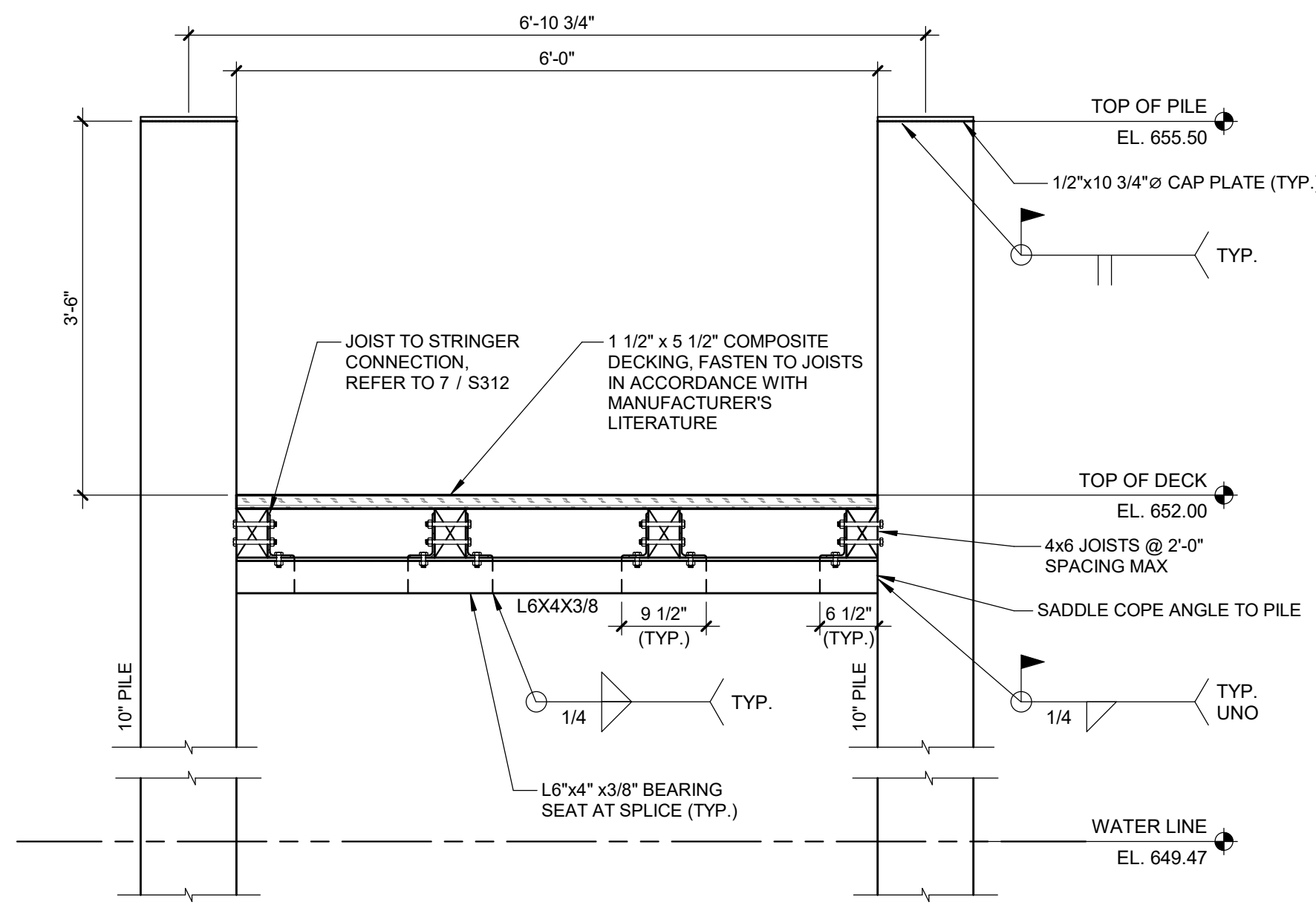
5 SECTION
SCALE: 1 1/2" = 1'-0"



4 SECTION
SCALE: 3/4" = 1'-0"



1 SECTION
SCALE: 3/4" = 1'-0"



2 SECTION
SCALE: 3/4" = 1'-0"

PROVIDE 4" LONG INTERNAL HSS 1 1/4x1/14x1/4 SLEEVE SHOP WELDED TO POST. SLIDE RAIL OVER SLEEVE UNTIL RAIL ABUTS POST. FASTEN WITH (2) 5/16" TYPE 316 SS BUTTON HEAD MACHINE SCREWS THROUGH UNDERSIDE OF RAIL INTO WELDED SS NUTS AND APPLY BLUE THREADLOCKER

NOTES:
1. CARRIAGE BOLTS TO HAVE GALVANIZED OR SS WASHERS.
2. CENTER SUPPORT JOISTS HIDDEN FOR CLARITY.

NOTE:
HSS MEMBERS IN RAILING SYSTEM MUST BE HOT DIPPED GALVANIZED AND POWDER COATED BLACK AFTER FABRICATION.

Van Buren Charter Township

Van Buren Township, MI

The Lakeside Park

fishbeck
Engineers | Architects | Scientists | Constructors

REVISIONS

10/12/2026	BIDS & PERMIT
09/21/2026	CD PEER REVIEW
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Drawn By RMEISSNER
Designer JCARTER
Reviewer CJOTTE
Manager CKRETOVIC

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PROJECT NO.
2500281

SHEET NO.

S312

Van Buren Township, MI

The Lakeside Park

REVISIONS

10/12/2026	BIDS & PERMIT
09/21/2026	CD PEER REVIEW
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Drawn By	RMEISSNER
Designer	JCARTER
Reviewer	CJOTTE
Manager	CKRETOVIC

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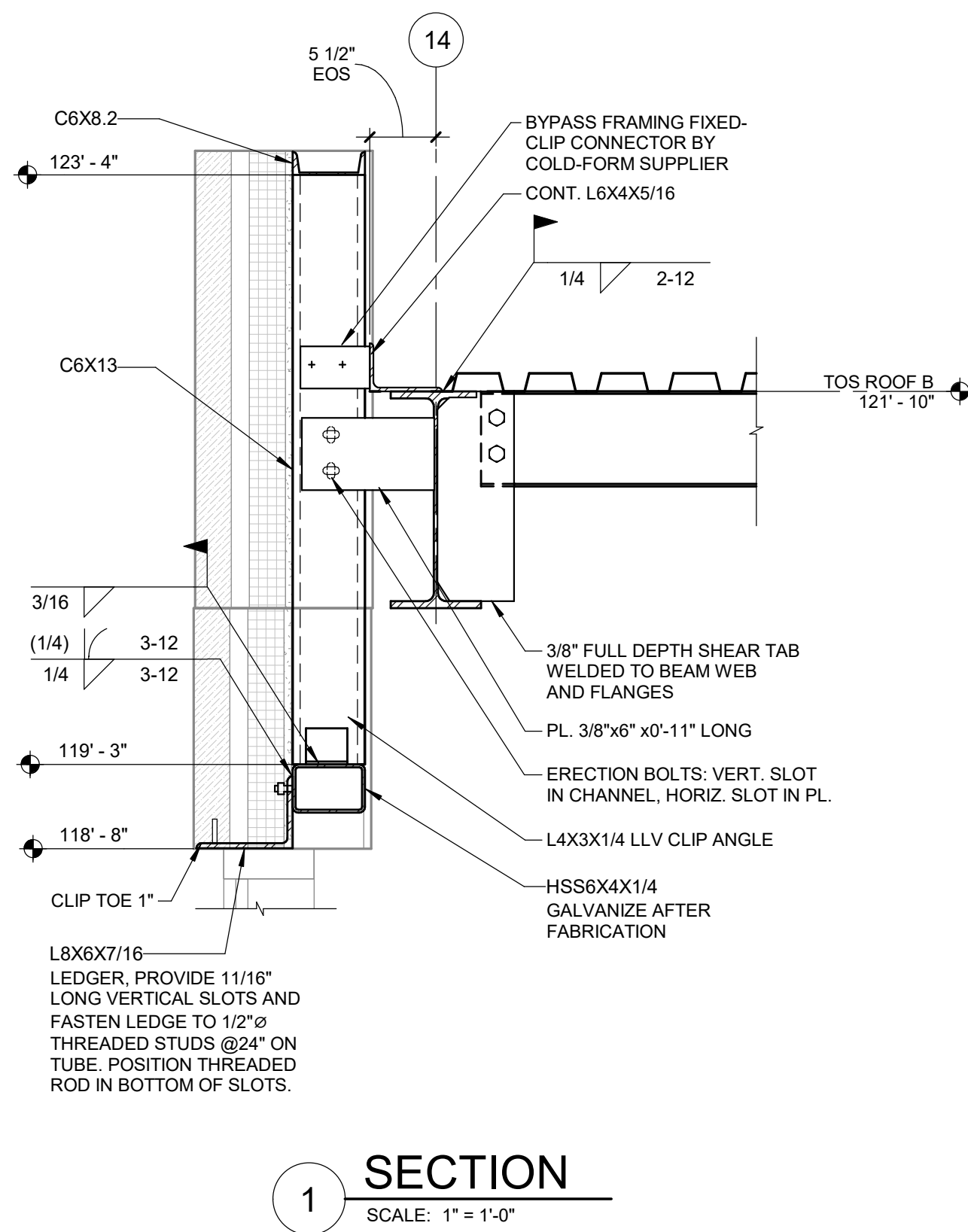
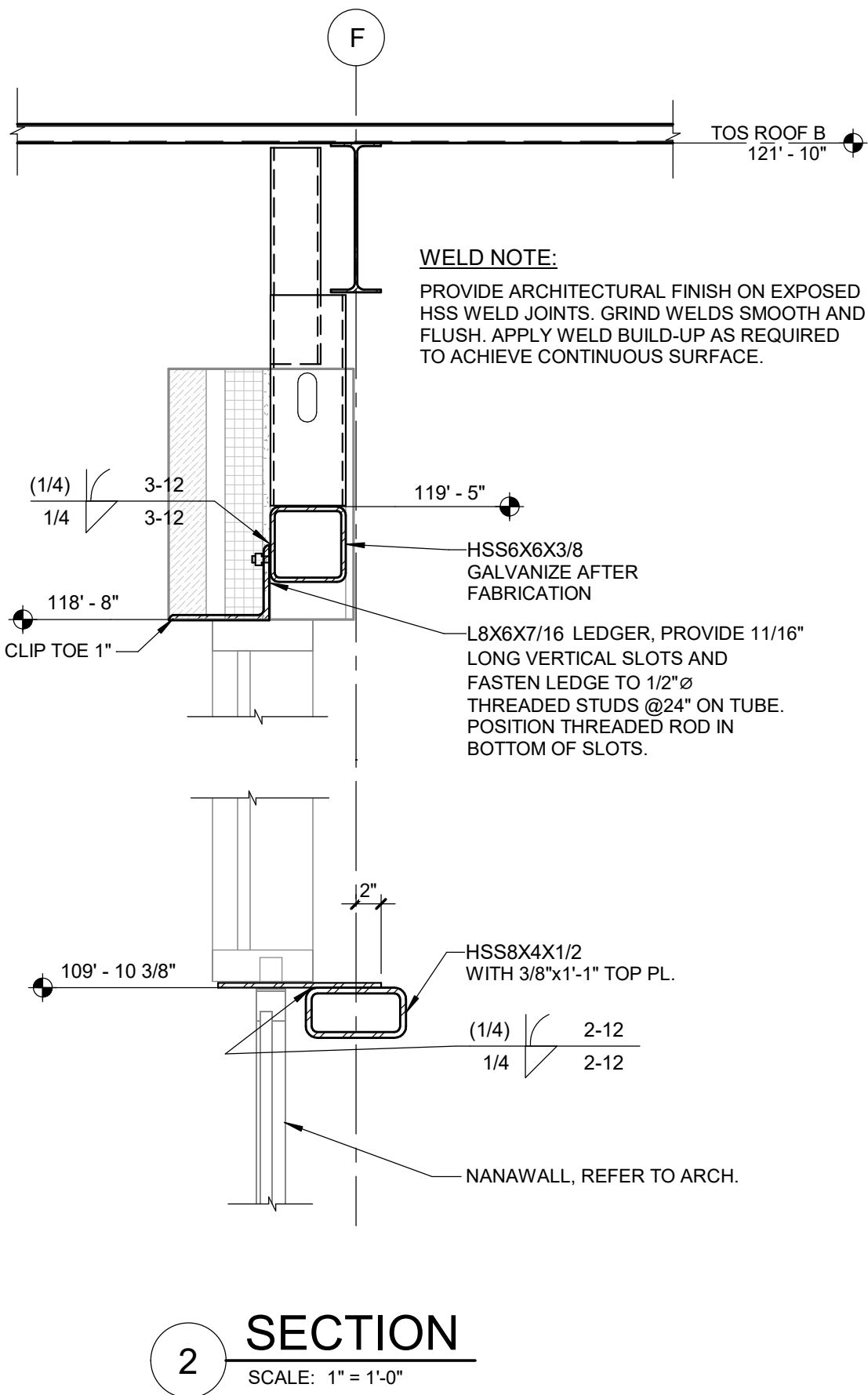
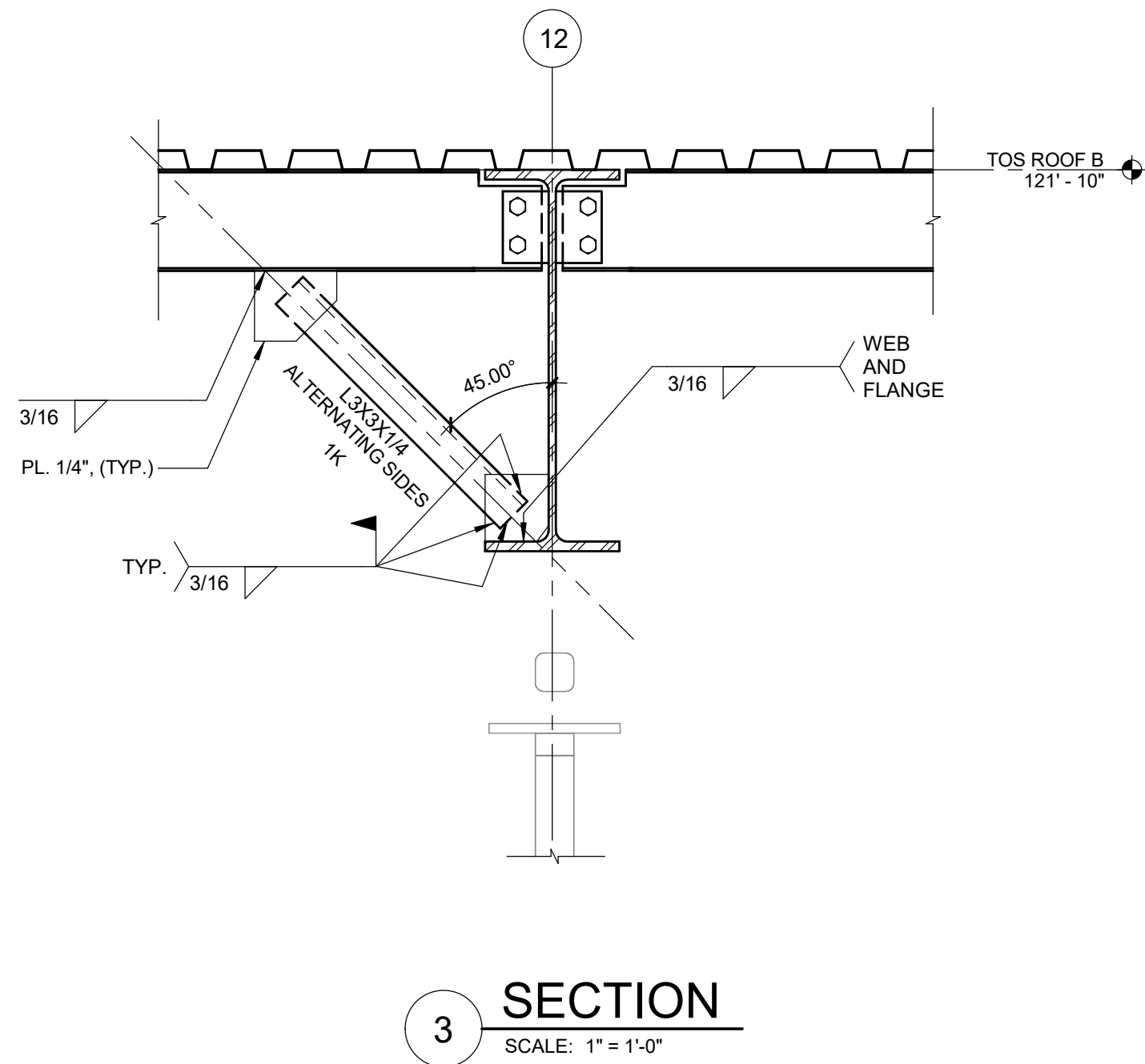
PROJECT NO.
2500281

SHEET NO.

S401

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Van Buren Charter Township

Van Buren Township, MI

The Lakeside Park

REVISIONS

10/12/2026	BIDS & PERMIT
09/21/2026	CD PEER REVIEW
09/09/2026	CD TEAM REVIEW
08/10/2026	CD 50% PROGRESS
08/22/2026	DD OWNER REVIEW
06/15/2026	DD PEER REVIEW
06/08/2026	DD 90 % PROGRESS
05/18/2026	DD 50 % PROGRESS
02/23/2026	SD OWNER REVIEW
02/13/2026	SD PEER REVIEW
02/09/2026	SD PROGRESS REVIEW

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