

GENERAL STRUCTURAL NOTES

(The following apply unless shown otherwise on the plans)

44. COLD-FORMED STEEL FRAMING NOTES - THE FOLLOWING APPLY UNLESS OTHERWISE SHOWN ON THE PLANS:

A. COLD-FORMED STEEL FRAMING MEMBERS SHALL BE OF THE SHAPE, SIZE, AND GAUGE SHOWN ON THE PLANS. ALL FRAMING MEMBERS SHALL COMPLY WITH I.C.C. REPORT NO. ESR-3064P.

B. MATERIAL: METAL FRAMING SHALL BE GALVANIZED UNLESS OTHERWISE NOTED, CONFORMING AS FOLLOWS:

ASTM A653 55 GRADE 50, CLASS 1 OR 3 Fy = 50 KSI 118, 97, 68, AND 54 MIL

ASTM A1011 55 GRADE 50 Fy = 50 KSI 118, 97, 68, AND 54 MIL

C. WELDING OF COLD-FORMED METAL FRAMING SHALL CONFORM TO AWS D13 AND SHALL BE PERFORMED BY WELDERS QUALIFIED TO PRODUCE THE SPECIFIED CLASSES OF WELD.

D. WALL FRAMING: ALL STUD WALLS SHOWN AND NOT OTHERWISE NOTED SHALL BE 400S162-43 @ 16" O.C. AT INTERIOR WALLS AND 600S162-43 AT 16" O.C. AT EXTERIOR WALLS.

ALL STUD WALLS SHALL HAVE THEIR BOTTOM TRACKS ATTACHED TO FRAMING BELOW WITH #10 SCREWS AT 16" O.C. OR ATTACHED TO CONCRETE WITH 5/32" DIAMETER DRIVE-PINS @ 16" O.C.

TRACK SECTIONS SHALL BE UNPUNCHED AND HAVE AT LEAST 1" FLANGES AND MATCH STUD THICKNESS.

WALLS WHICH HAVE SHEATHING CONNECTED ON ONE SIDE ONLY SHALL HAVE UNSHEATHED FLANGES LATERALLY SUPPORTED IN ACCORDANCE WITH THE DETAILS.

45. METAL BUILDING SYSTEM (MBS)

A. BUILDING MANUFACTURER SHALL DESIGN BUILDINGS FOR THE LOADS, SPANS AND CONDITIONS SHOWN ON THESE DRAWINGS.

B. ALL COLUMNS SHALL BE DESIGNED ASSUMING THEY ARE FREE TO ROTATE, DO NOT FIX COLUMN BASES.

C. DESIGN AND PROVIDE SUPPORTS AROUND OVERHEAD DOORS. A MINIMUM COLLATERAL LOADING OF 10 PSF SHALL BE INCLUDED IN THE DESIGN OF THE ROOF TO ACCOUNT FOR MISCELLANEOUS DEAD LOAD.

D. COORDINATE ALL DETAILS WHICH ARE SHOWN ON THESE DRAWINGS WITH THE PREFABRICATED BUILDING DESIGN.

E. COORDINATE THE FINAL FOUNDATION LOADINGS AND BASE PLATE CONFIGURATION WITH THE STRUCTURAL ENGINEER. FOUNDATION DESIGN SHOWN IN THESE PLANS MAY NEED TO BE REVISED BASED UPON THE FINAL DESIGN AND/OR COLUMN LOCATIONS.

F. SUBMIT SHOP DRAWINGS AND DESIGN CALCULATIONS TO THE ARCHITECT AND STRUCTURAL ENGINEER FOR REVIEW PRIOR TO FABRICATION. DESIGN SUBMITTALS SHALL BEAR THE STAMP AND SIGNATURE OF A STATE OF WASHINGTON REGISTERED PROFESSIONAL ENGINEER.

Provided sealed shop drawing reviewed by the EOR on site for inspection review.

NOT USED

STRUCTURAL OBSERVATION

AS NOTED IN IBC SECTION 1704.6 STRUCTURAL OBSERVATION IS REQUIRED FOR THIS PROJECT. STRUCTURAL OBSERVATION MEANS THE VISUAL OBSERVATION OF THE STRUCTURAL SYSTEM, INCLUDING BUT NOT LIMITED TO, THE ELEMENTS AND CONNECTIONS AT SIGNIFICANT CONSTRUCTION STAGES AND THE COMPLETED STRUCTURE FOR GENERAL CONFORMANCE TO THE APPROVED PLANS AND SPECIFICATIONS.

IN OUR STRUCTURAL OBSERVATION, WE WILL SELECT PORTIONS OF WORK TO REVIEW CLOSELY AS WELL AS OBSERVE THE STRUCTURAL SYSTEM FOR GENERAL CONFORMANCE TO THE APPROVED PLANS AND SPECIFICATIONS.

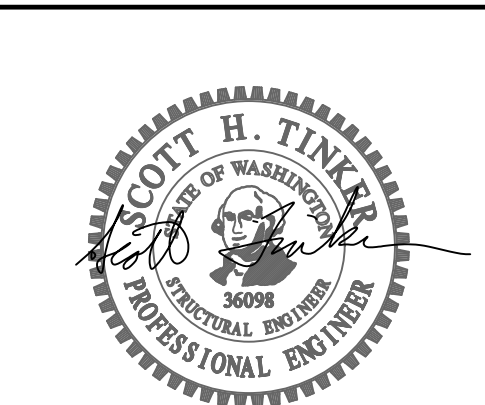
THE BUILDING OFFICIAL ALSO RECOGNIZES THAT STRUCTURAL REVIEW IS A TECHNIQUE EMPLOYED TO MINIMIZE THE RISK OF PROBLEMS ARISING DURING CONSTRUCTION. STRUCTURAL OBSERVATION BY THE DESIGN PROFESSIONAL DOES NOT CONSTITUTE WARRANTY OR GUARANTEE OF ANY TYPE.

ABBREVIATIONS

Table with 4 columns: Abbreviation, Description, Abbreviation, Description. Includes terms like Angle, Live Load, Maximum, Minimum, etc.



1511 THIRD AVENUE SUITE 323 SEATTLE, WA 98101



PROJECT: CENTERIS DATA CENTERS - TI

1023 39TH AVENUE SOUTHEAST PUYALLUP, WASHINGTON

APPROVAL:

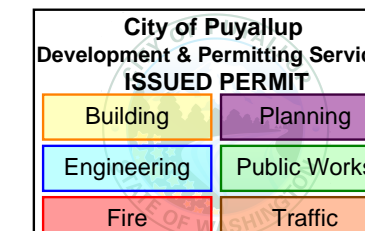


Table with 4 columns: NO., DESCRIPTION, DATE, BY. Contains permit correction records.

Table with 4 columns: NO., DESCRIPTION, DATE, BY. Contains project metadata like P.M., SHT, TVM, SCALE, AS SHOWN, DATE, 5/20/24, JOB NO., 23444.01.

GENERAL STRUCTURAL NOTES

SHEET NO.

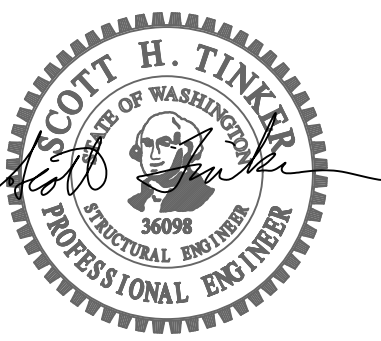
S1.1



1511 THIRD AVENUE
SUITE 323
SEATTLE, WA 98101
TEL 206.967.3800
FAX 206.967.3901
www.quantumce.com



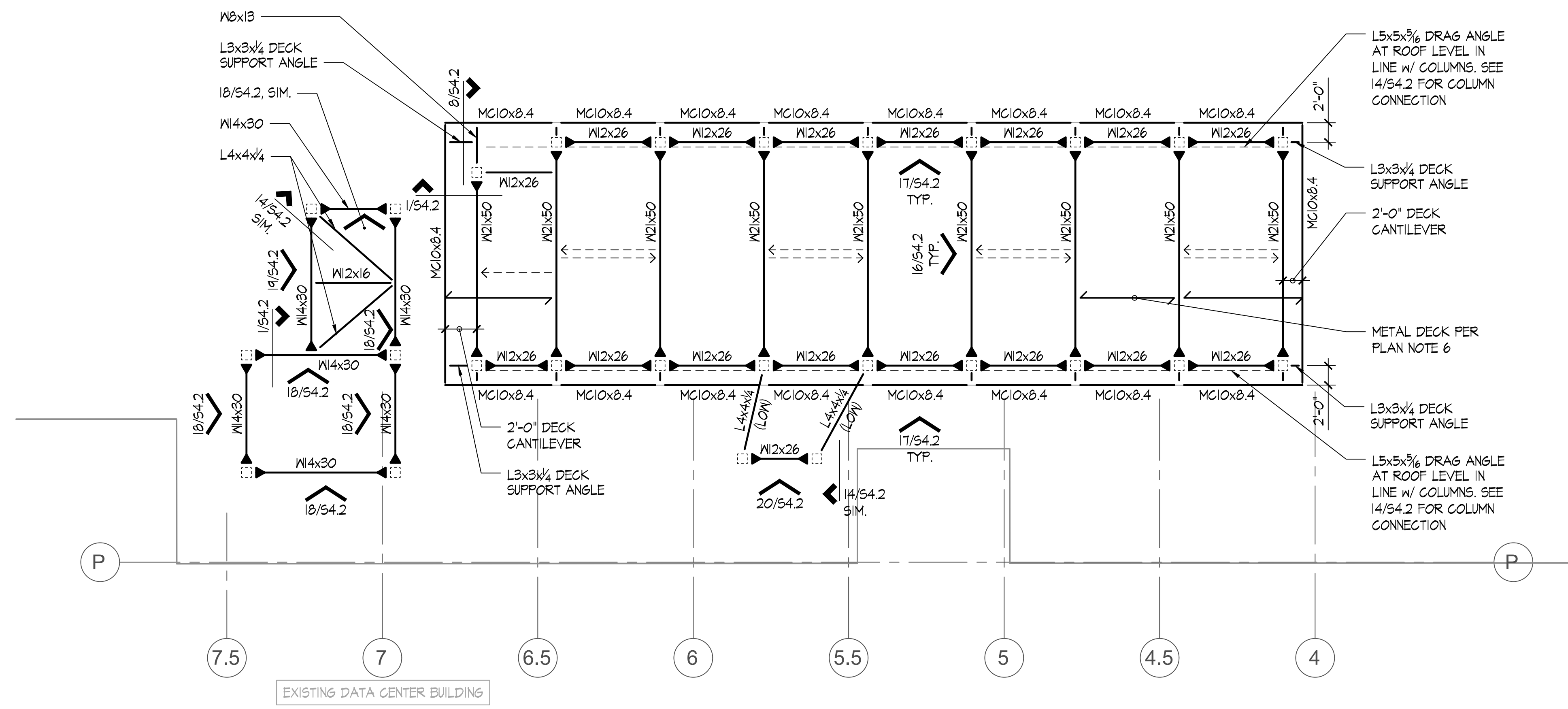
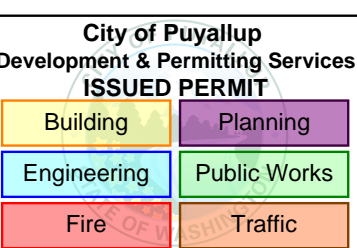
SEAL:



PROJECT:
**CENTERIS
DATA CENTERS - TI**

1023 39TH AVENUE
SOUTHEAST
PUYALLUP, WASHINGTON

APPROVAL:



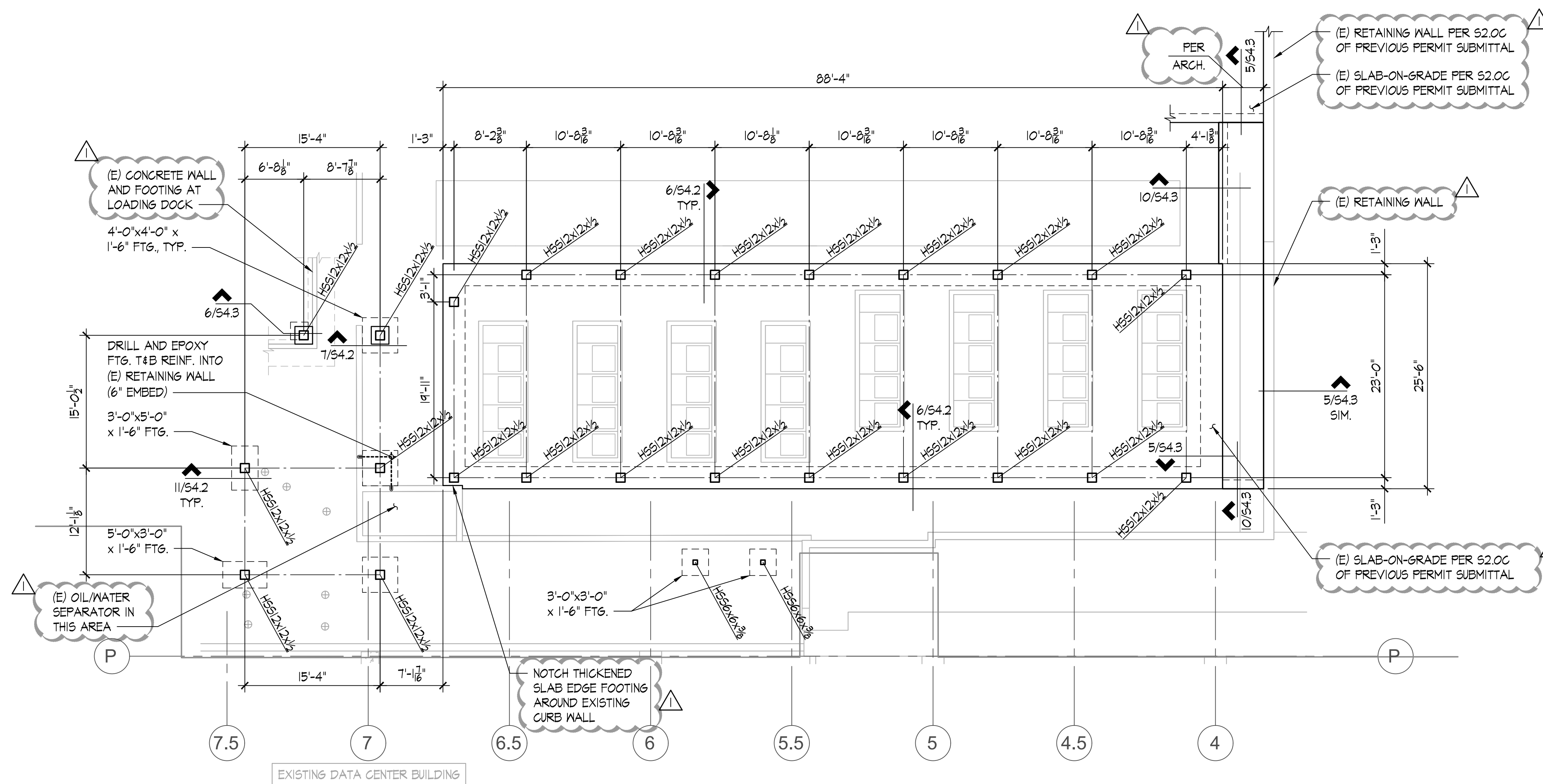
SWITCHGEAR ROOF FRAMING PLAN
SCALE: 1/8" = 1'-0"

ROOF FRAMING PLAN NOTES:

- ALL DIMENSIONS AND ELEVATIONS ON THE STRUCTURAL PLANS ARE FOR GENERAL INFORMATION ONLY AND SHALL BE VERIFIED BY THE CONTRACTOR WITH THE ARCHITECTURAL, MECHANICAL, ELECTRICAL, AND MANUFACTURER'S DRAWINGS BEFORE CONSTRUCTION BEGINS. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT AND ENGINEER IMMEDIATELY.
- ALL EXISTING INFORMATION IS ASSUMED AND SHALL BE FIELD VERIFIED. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT AND ENGINEER IMMEDIATELY.
- FOR STRUCTURAL GENERAL NOTES AND ABBREVIATIONS SEE SHEETS S1.0 TO S1.1.
- TOP OF STRUCTURAL STEEL ELEVATION VARIES. SEE ARCH. PLANS FOR BOTTOM OF DECK ELEVATION.
- SEE S4.2 FOR TYPICAL CONCRETE AND STEEL DETAILS.
- TYPICAL ROOF SYSTEM IS 3" 20 GA. METAL ROOF DECK PER S4.2.
- ALL STEEL TO BE GALVANIZED.
- STEEL FRAMES ARE DESIGNED TO SUPPORT CONDUIT LOAD OF 90 PSF MAX.

LEGEND:

- ⊙ INDICATES COLUMN BELOW
- INDICATES A MOMENT CONNECTION PER 10/54.2 OR 15/54.2
- INDICATES A BOTTOM FLANGE BRACE PER 12/54.2



SWITCHGEAR FOUNDATION PLAN
SCALE: 1/8" = 1'-0"

FOUNDATION PLAN NOTES:

- ALL DIMENSIONS AND ELEVATIONS ON THE STRUCTURAL PLANS ARE FOR GENERAL INFORMATION ONLY AND SHALL BE VERIFIED BY THE CONTRACTOR WITH THE ARCHITECTURAL, MECHANICAL, ELECTRICAL, AND MANUFACTURER'S DRAWINGS BEFORE CONSTRUCTION BEGINS. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT AND ENGINEER IMMEDIATELY.
- ALL EXISTING INFORMATION IS ASSUMED AND SHALL BE FIELD VERIFIED. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT AND ENGINEER IMMEDIATELY.
- FOR STRUCTURAL GENERAL NOTES AND ABBREVIATIONS SEE SHEETS S1.0 TO S1.1.
- FOR TYPICAL CONCRETE FOUNDATION DETAILS SEE SHEET S4.2.

LEGEND:

- ⊙ INDICATES COLUMN SIZE CALLED OUT AT BOTTOM OF COLUMN

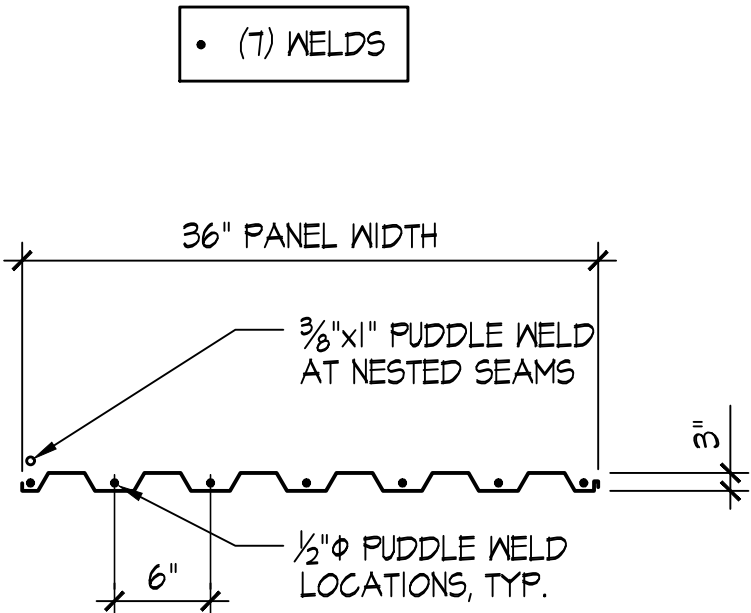
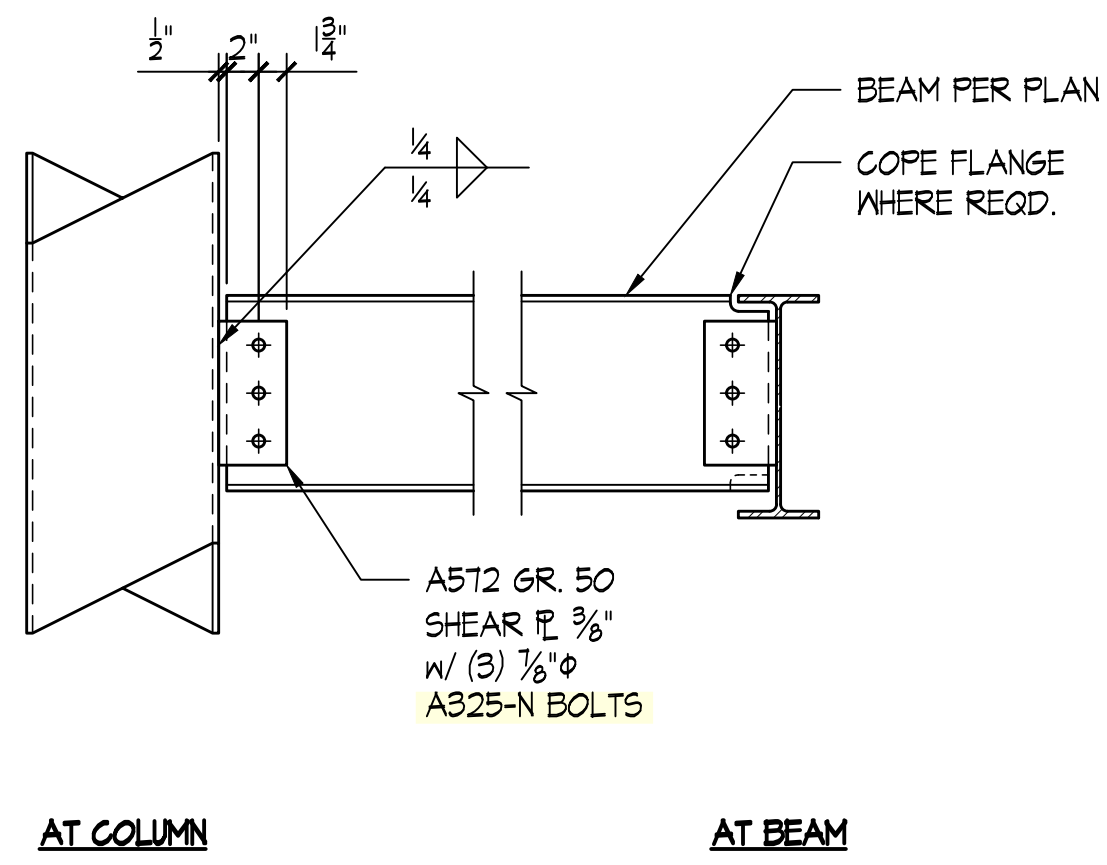
SWITCHGEAR SHELTER AND CONDUIT SUPPORT FRAME PERMIT CORRECTIONS		5/20/24
SWITCHGEAR SHELTER AND CONDUIT SUPPORT FRAME		4/12/24
NO.	DESCRIPTION	DATE BY
ISSUES: ○ REVISIONS: △		
P.M.	SHT	
P.E.	TVM	
DRAWN BY:	SC	
SCALE:	AS SHOWN	
DATE:	5/20/24	
JOB NO.	23444.01	
SHEET TITLE:		

**SWITCHGEAR
FOUNDATION / ROOF
FRAMING PLANS**

SHEET NO.

S2.1A

Welding to be done by an individual or fabricator who is WABO certified or approved by the Building Official to perform the work. All welds must be inspected and approved by a WABO certified special inspector.



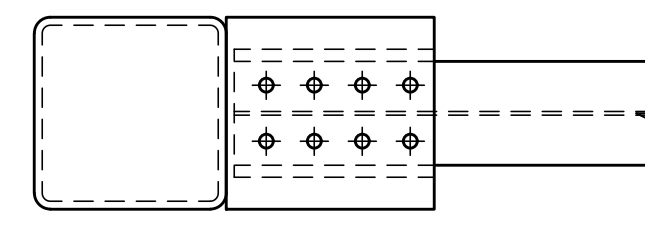
TYPE = 3/16\"/>

ROOF DECK DIAPHRAGM CONNECTION SCHEDULE		
PUDDLE WELDS PER PANEL - ENDS	PUNCHLOK/DELTA GRIP SIDE SEAMS	CAPACITY PLF $\phi 5n$
7	12" O.C.	1243

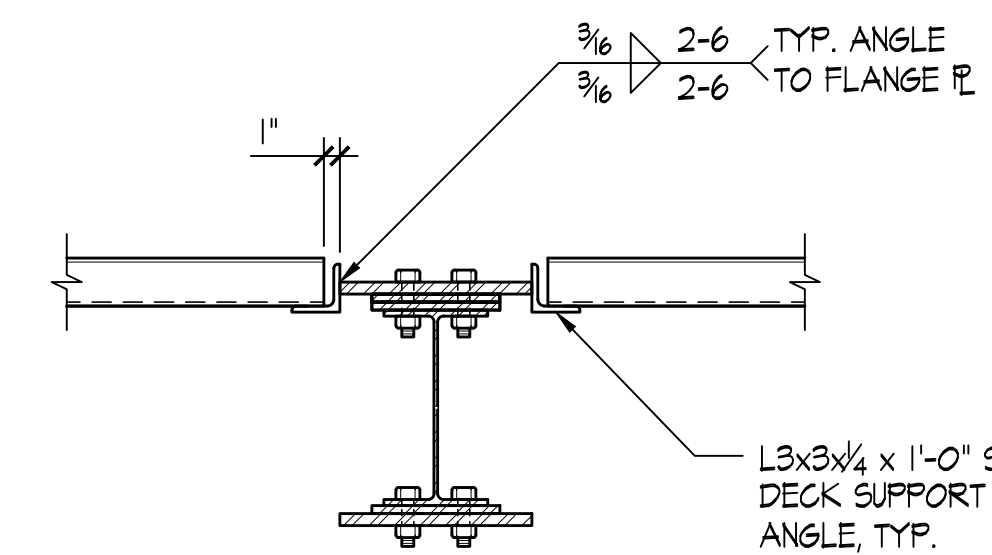
- NOTES:**
- MAXIMUM DECK SPAN = 11'-0" CLEARSPAN (TWO OR MORE CONTINUOUS SPANS).
 - PROVIDE 1/2" PUDDLE WELDS PER PANEL TO ALL SUPPORTS PERPENDICULAR TO DECK FLUTES (PER SCHEDULE), U.O.N.
 - PROVIDE 1/2" PUDDLE WELDS @ 6" O.C. TO ALL DRAG ANGLES PARALLEL TO DECK FLUTES.
 - DECK TYPE MUST MEET OR EXCEED CRITERIA LISTED, INCLUDING I.C.G. OR IAPMO RESEARCH REPORT ALLOWABLE SHEAR LOADS.



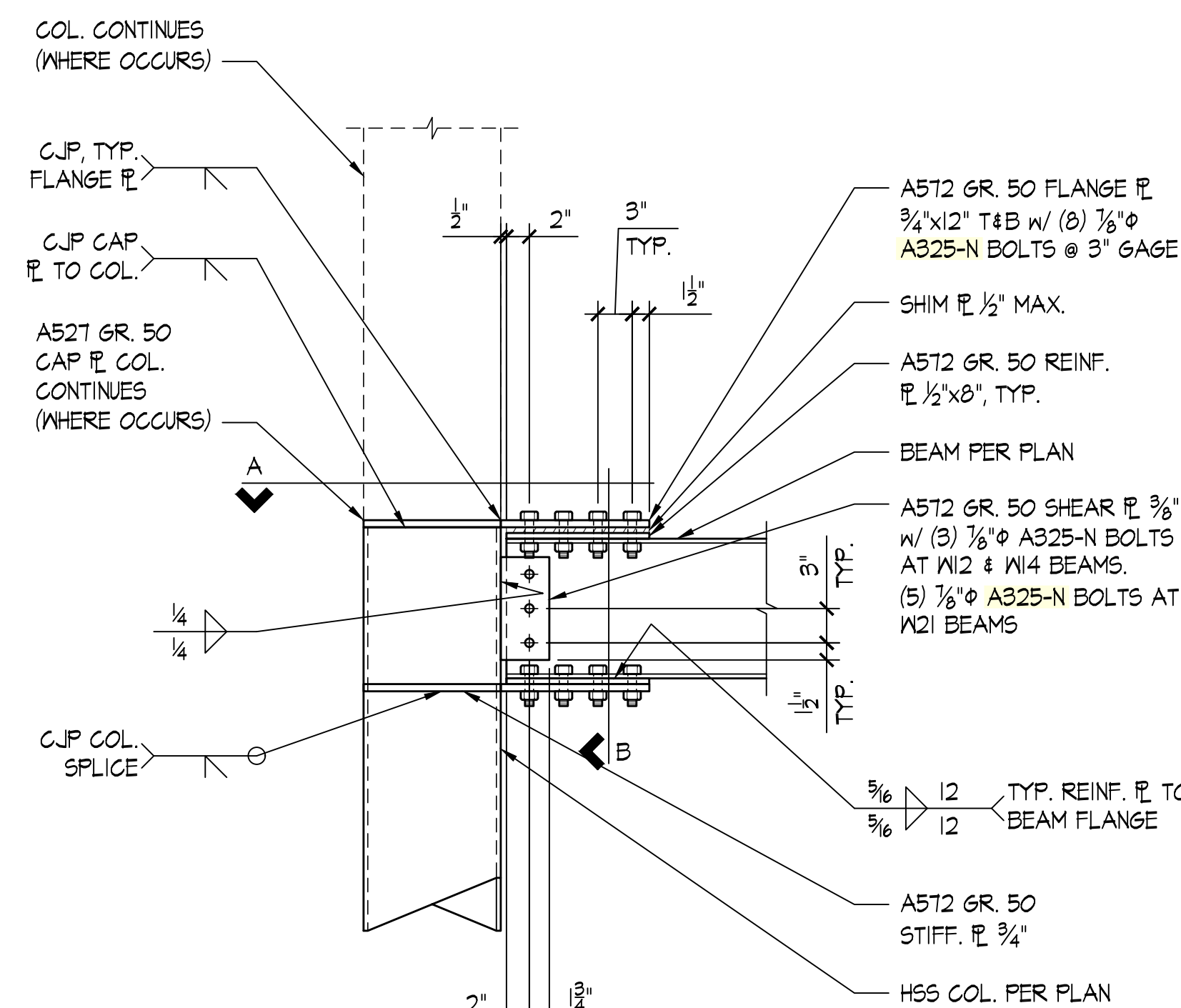
PRCNC20240601



SECTION A

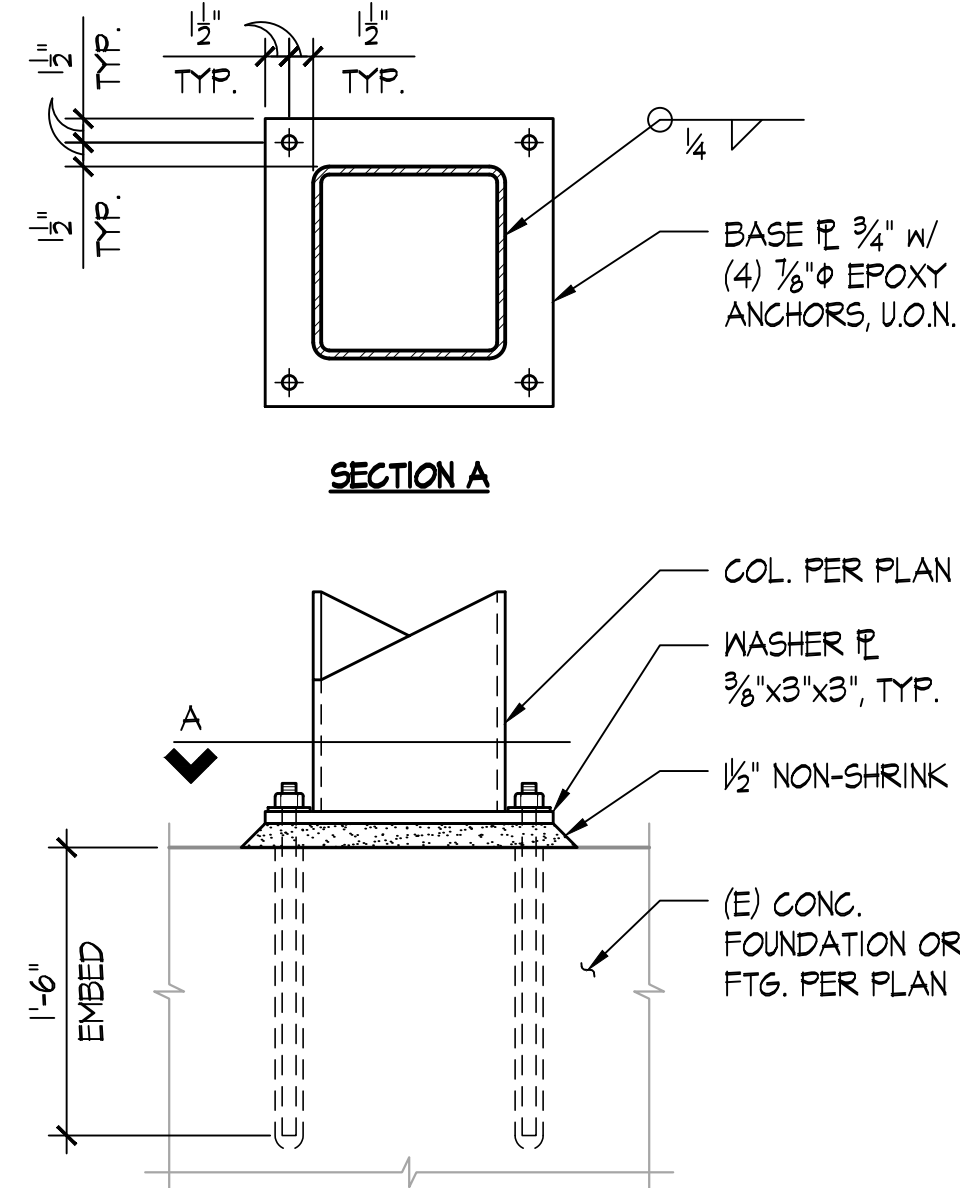


SECTION B

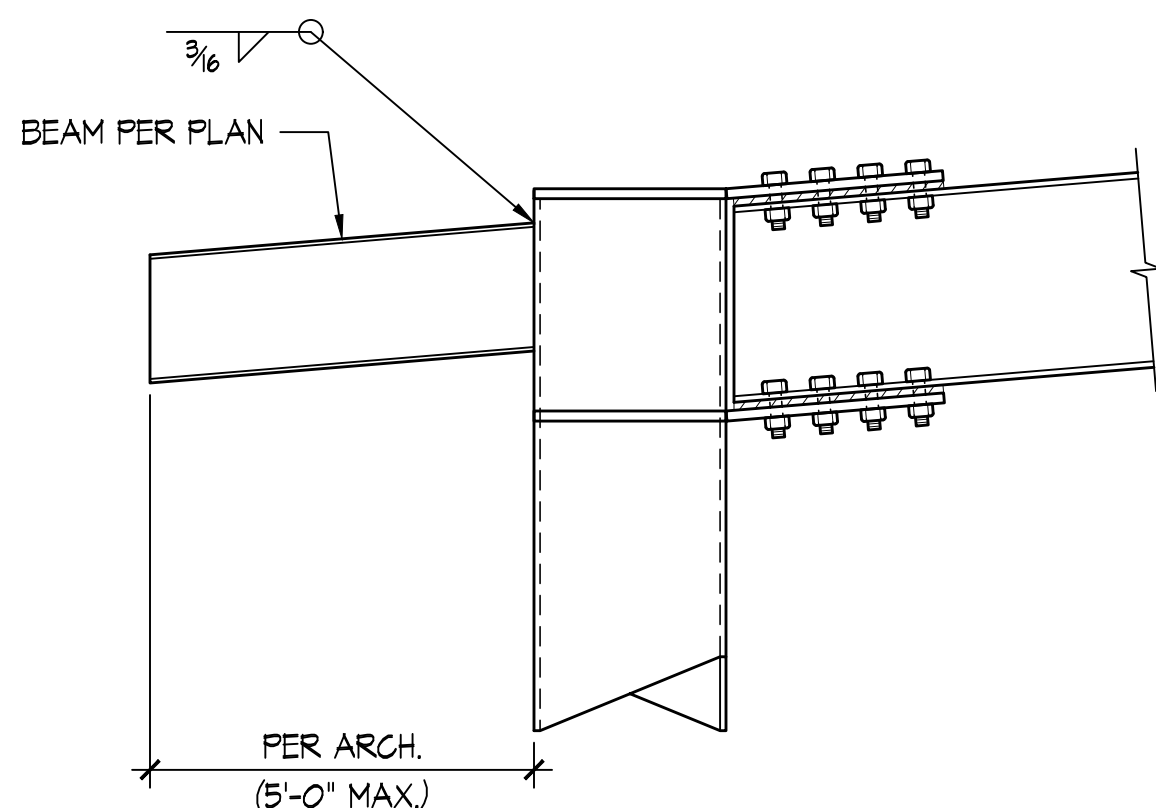
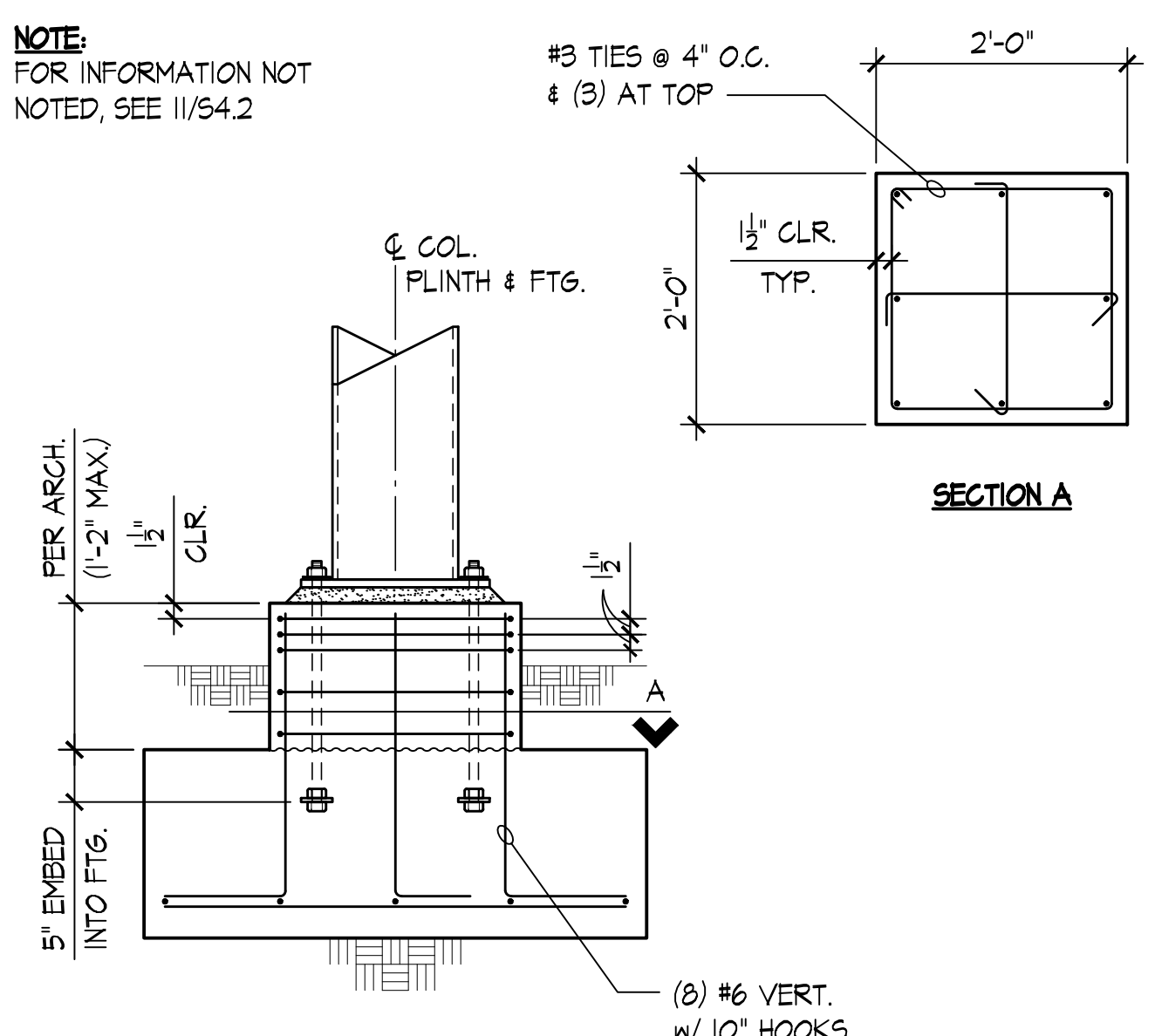


- NOTES:**
- CONNECTION ON BOTH SIDES WHERE OCCURS.
 - NO ROOF DECK WHERE DOES NOT OCCUR PER PLAN.
 - SEE 15/54.2 FOR SLOPED CONDITION.

W12 & W14 SHEAR CONNECTION SCALE: NONE

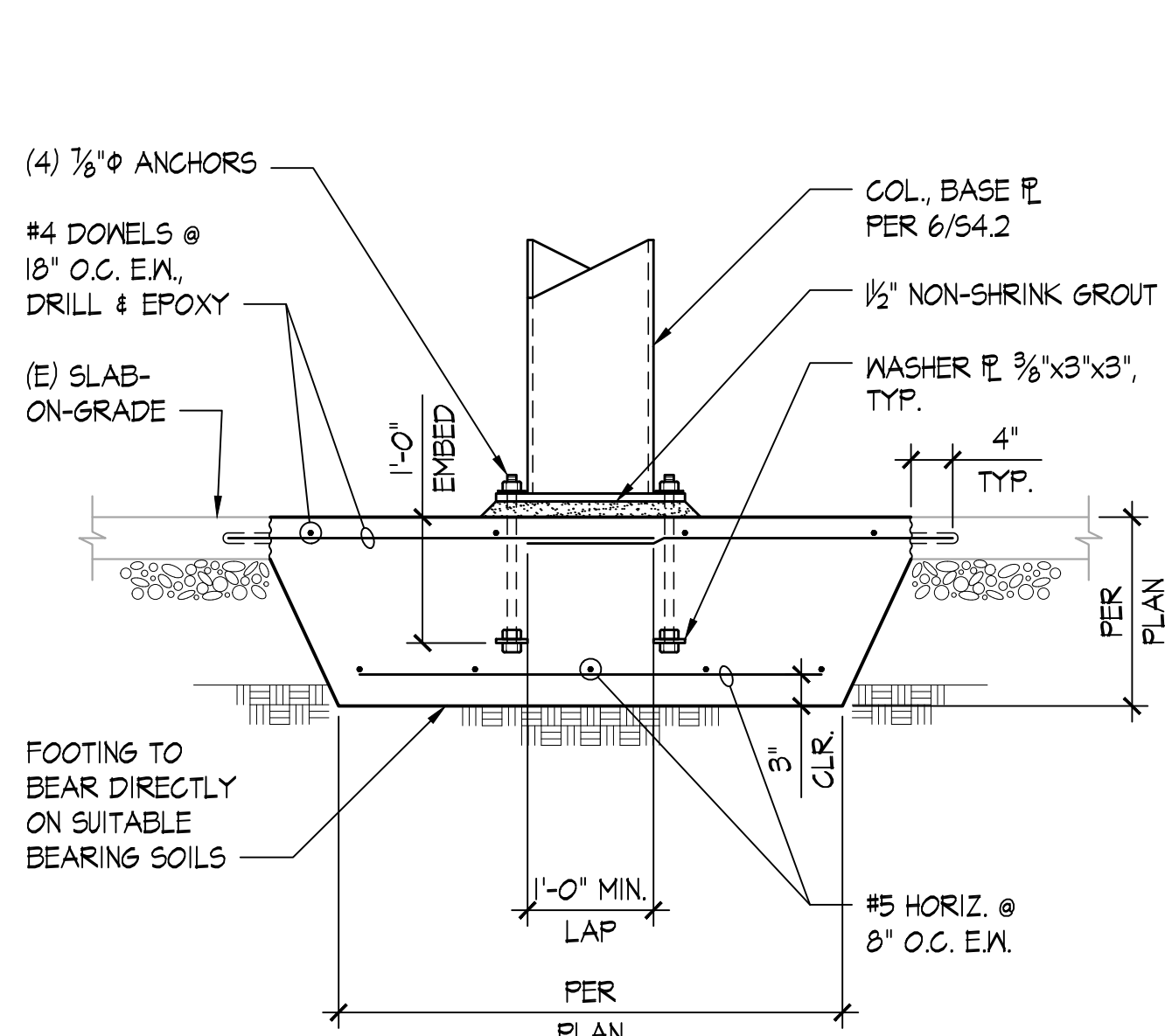


TYPICAL 1/2\"/>

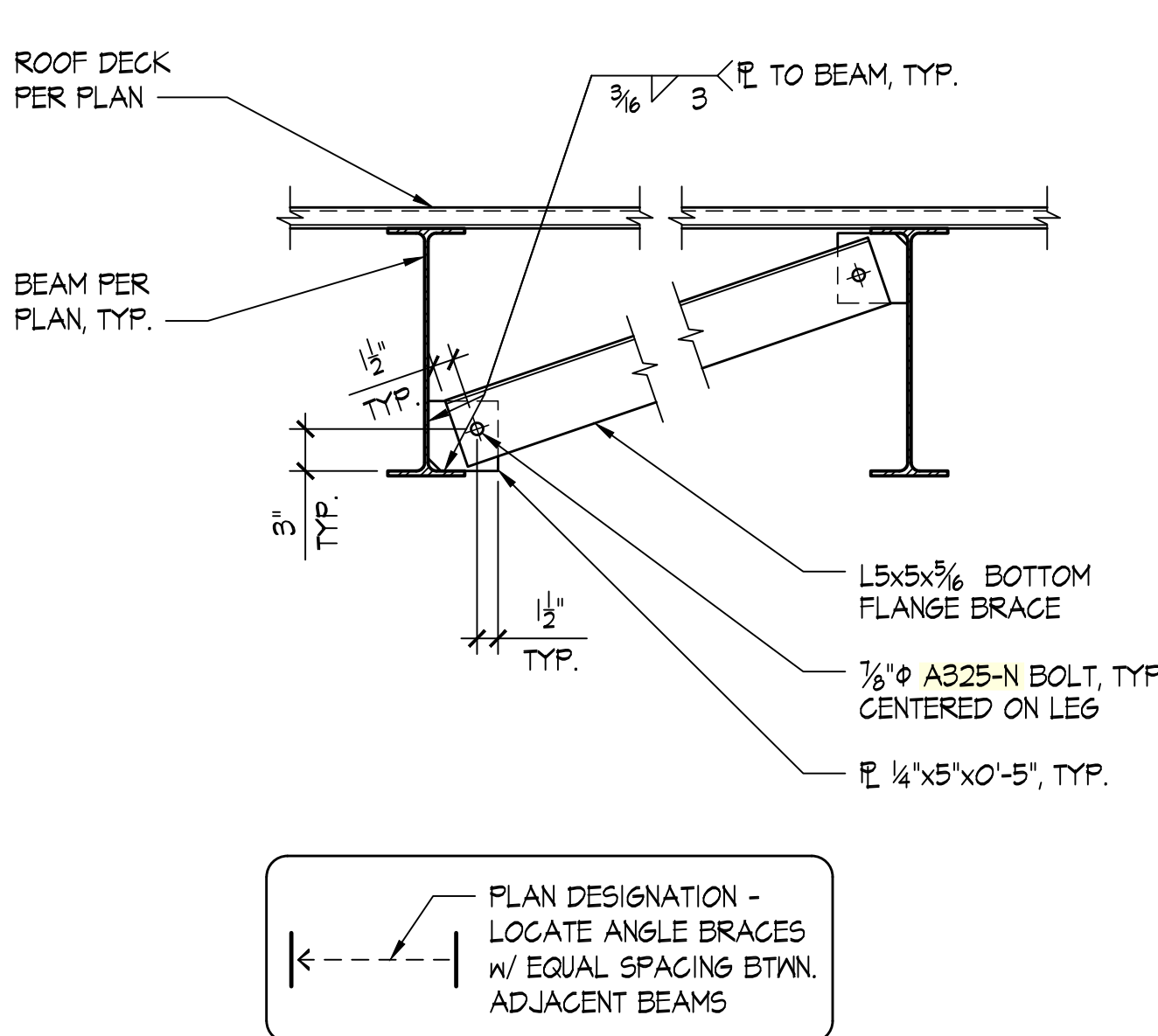


NOTE: FOR INFORMATION NOT NOTED, SEE 15/54.2

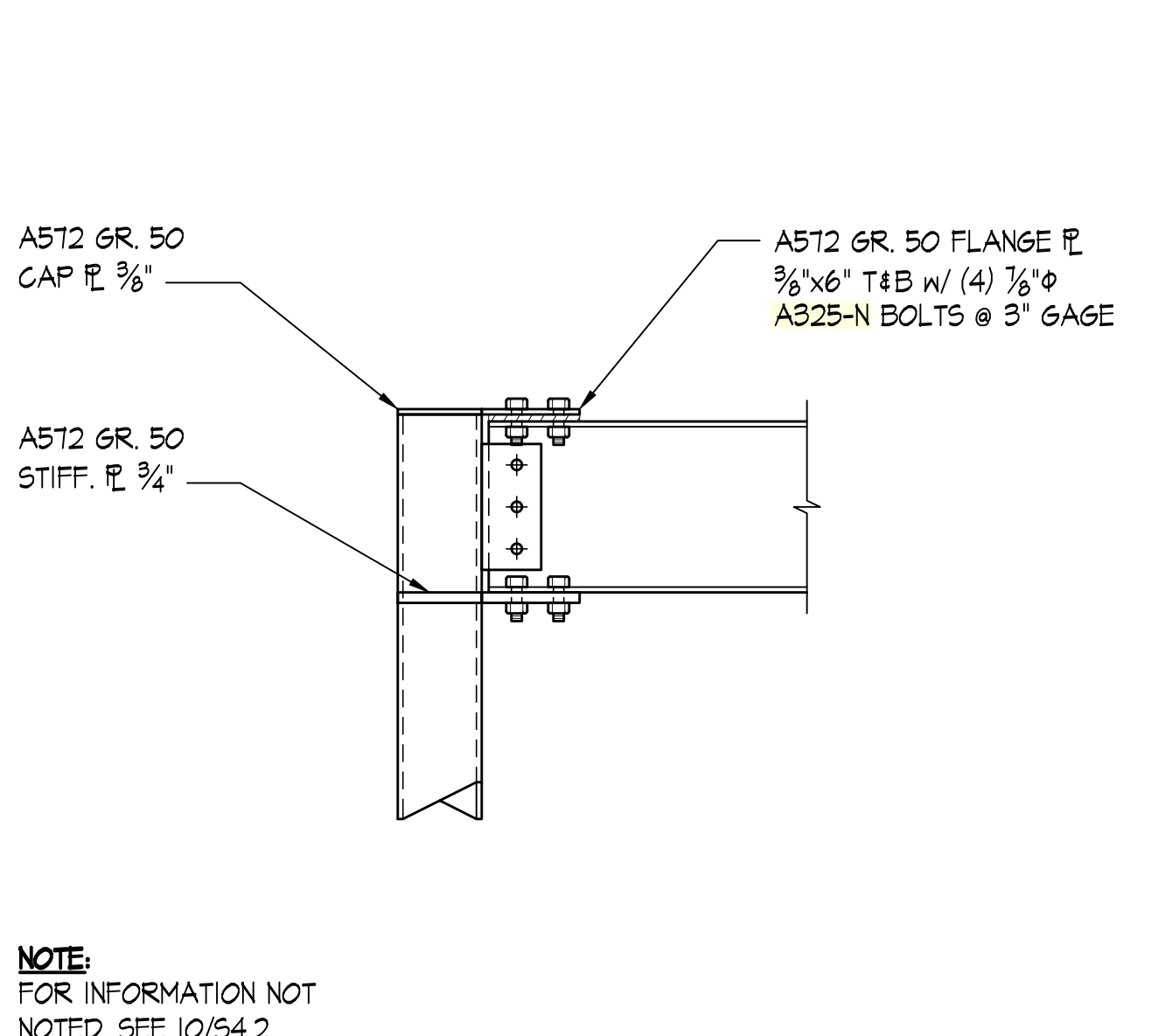
TYPICAL COLUMN BASE PLATE SCALE: NONE



TYPICAL SPREAD FOOTING W/ PLINTH SCALE: NONE

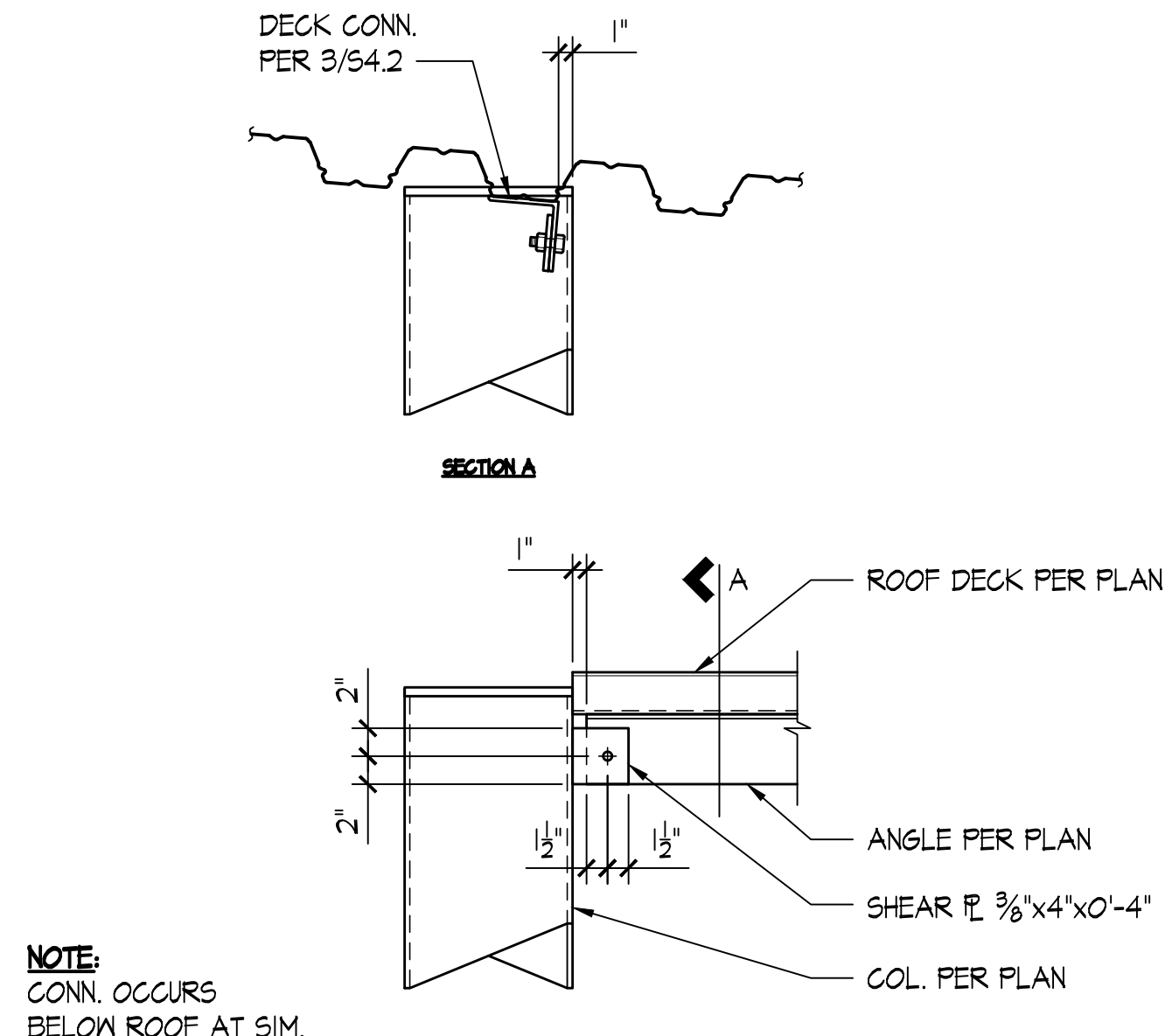


DETAIL SCALE: NONE



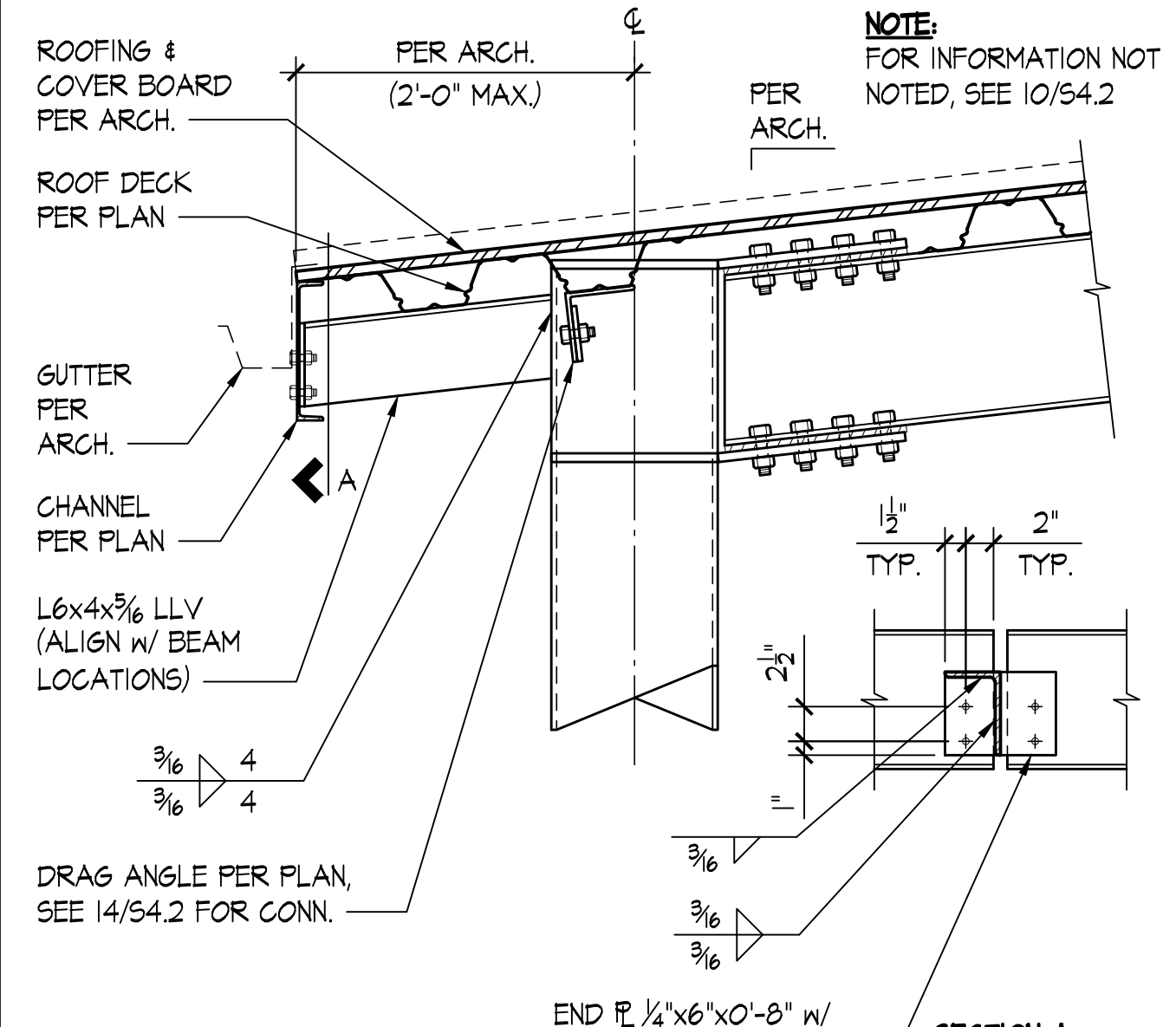
NOTE: FOR INFORMATION NOT NOTED, SEE 10/54.2

TYPICAL BOLTED MOMENT CONNECTION SCALE: NONE



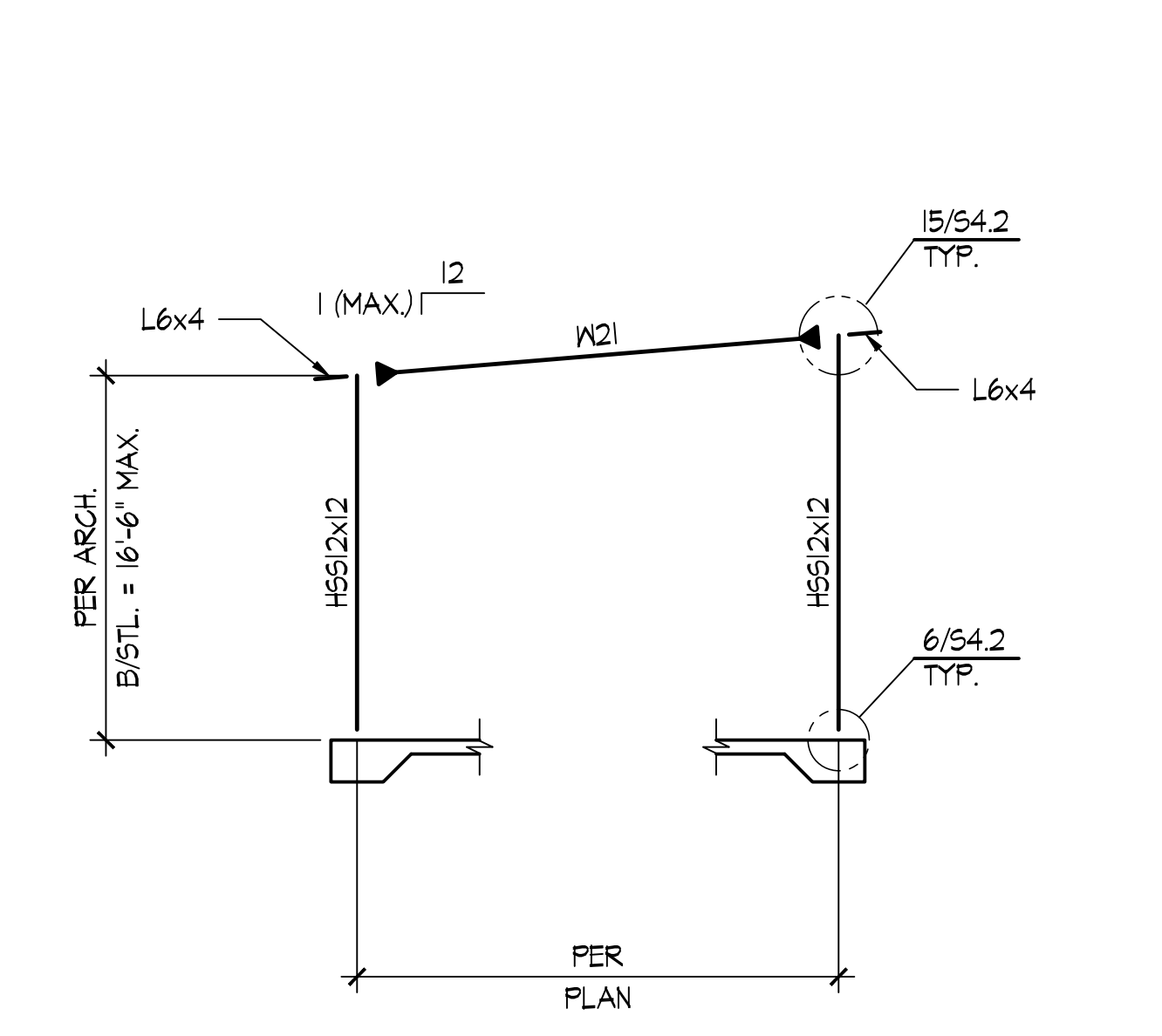
NOTE: CONN. OCCURS BELOW ROOF AT SIM.

TYPICAL SLOPED BOLTED MOMENT CONNECTION SCALE: NONE

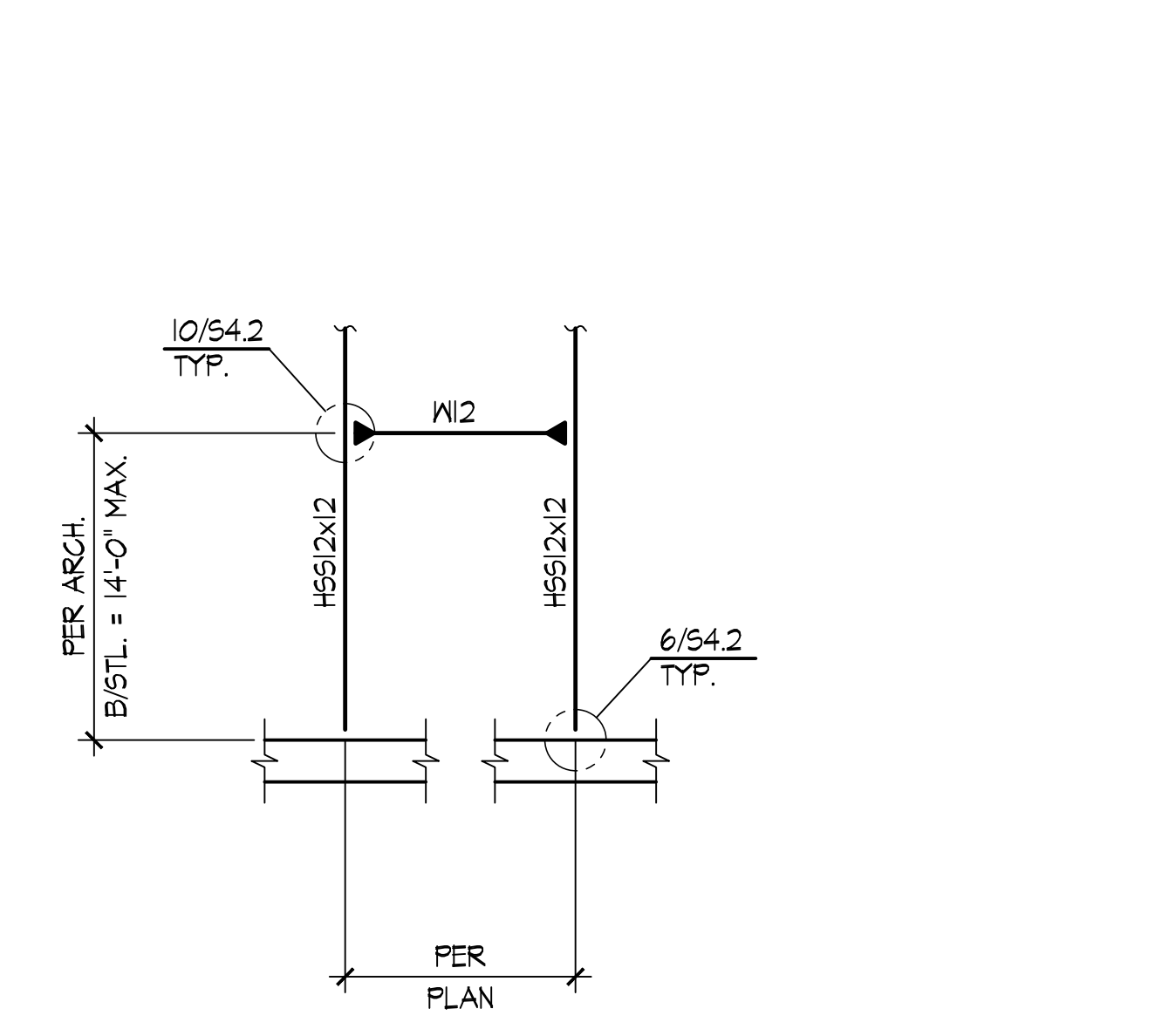


NOTE: FOR INFORMATION NOT NOTED, SEE 10/54.2

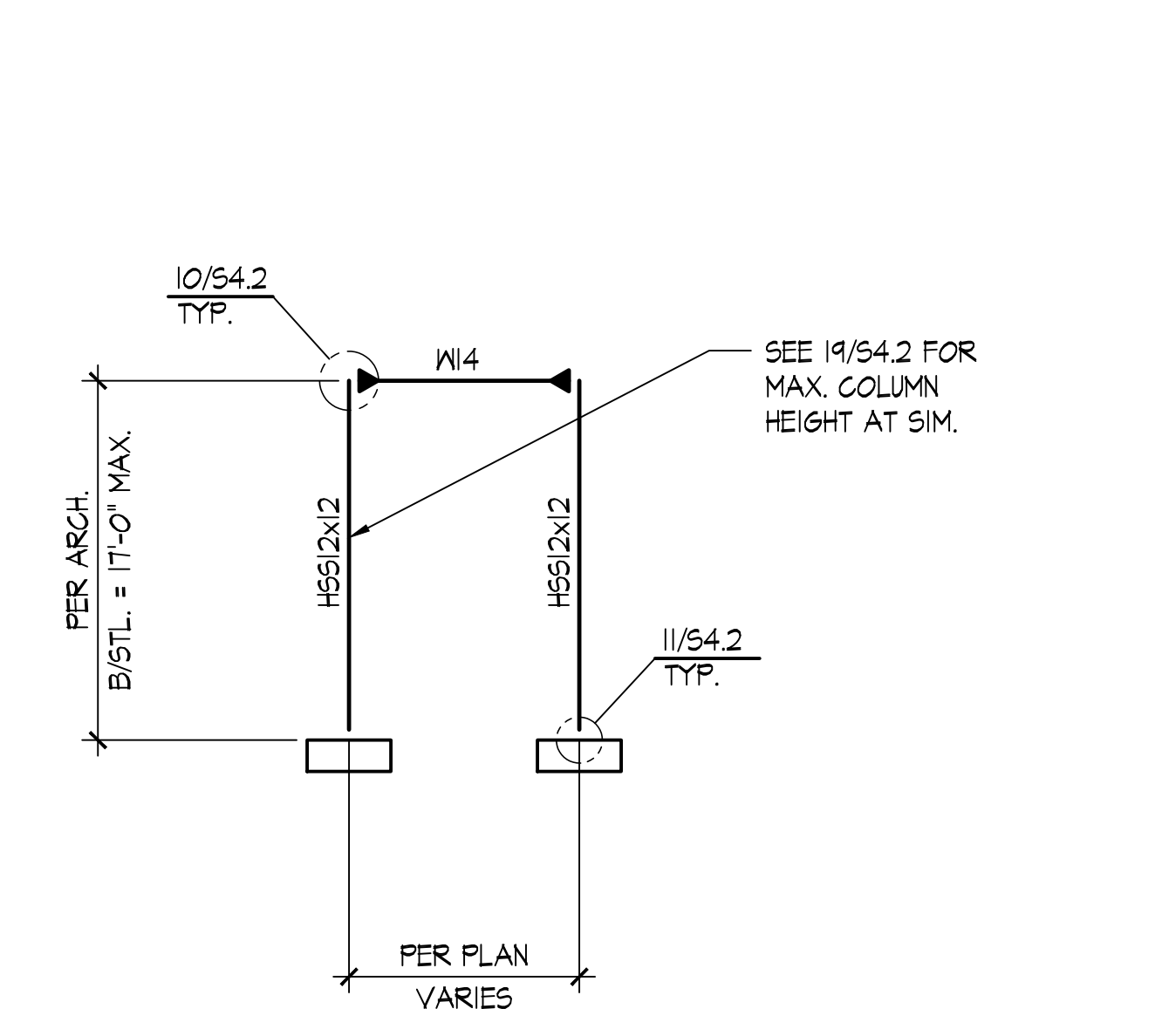
TYPICAL SPREAD FOOTING AT EXISTING SLAB-ON-GRADE SCALE: NONE



TYPICAL ROOF EDGE - JOISTS PARALLEL SCALE: NONE

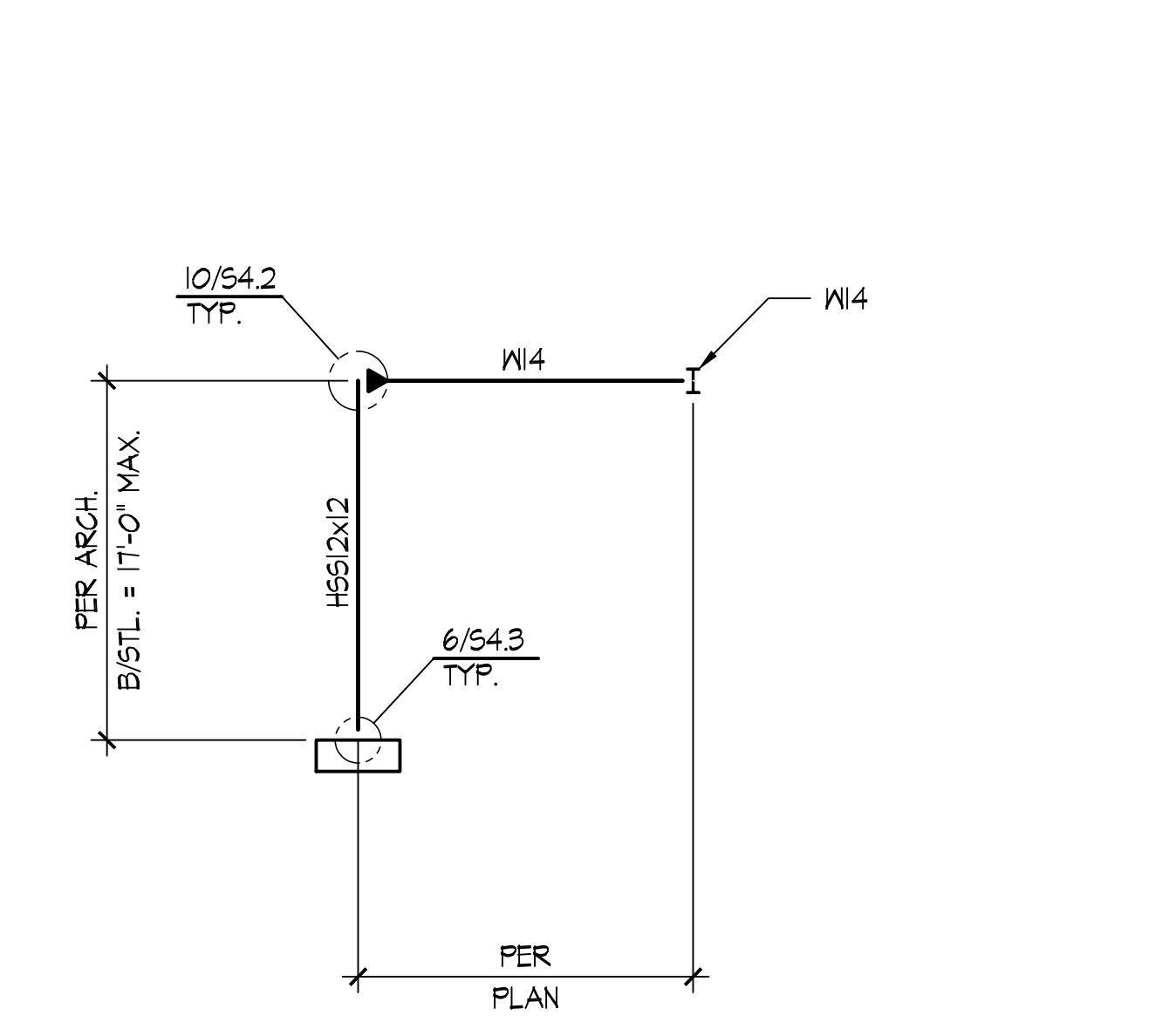


MOMENT CONNECTION AT H66x6 SCALE: NONE

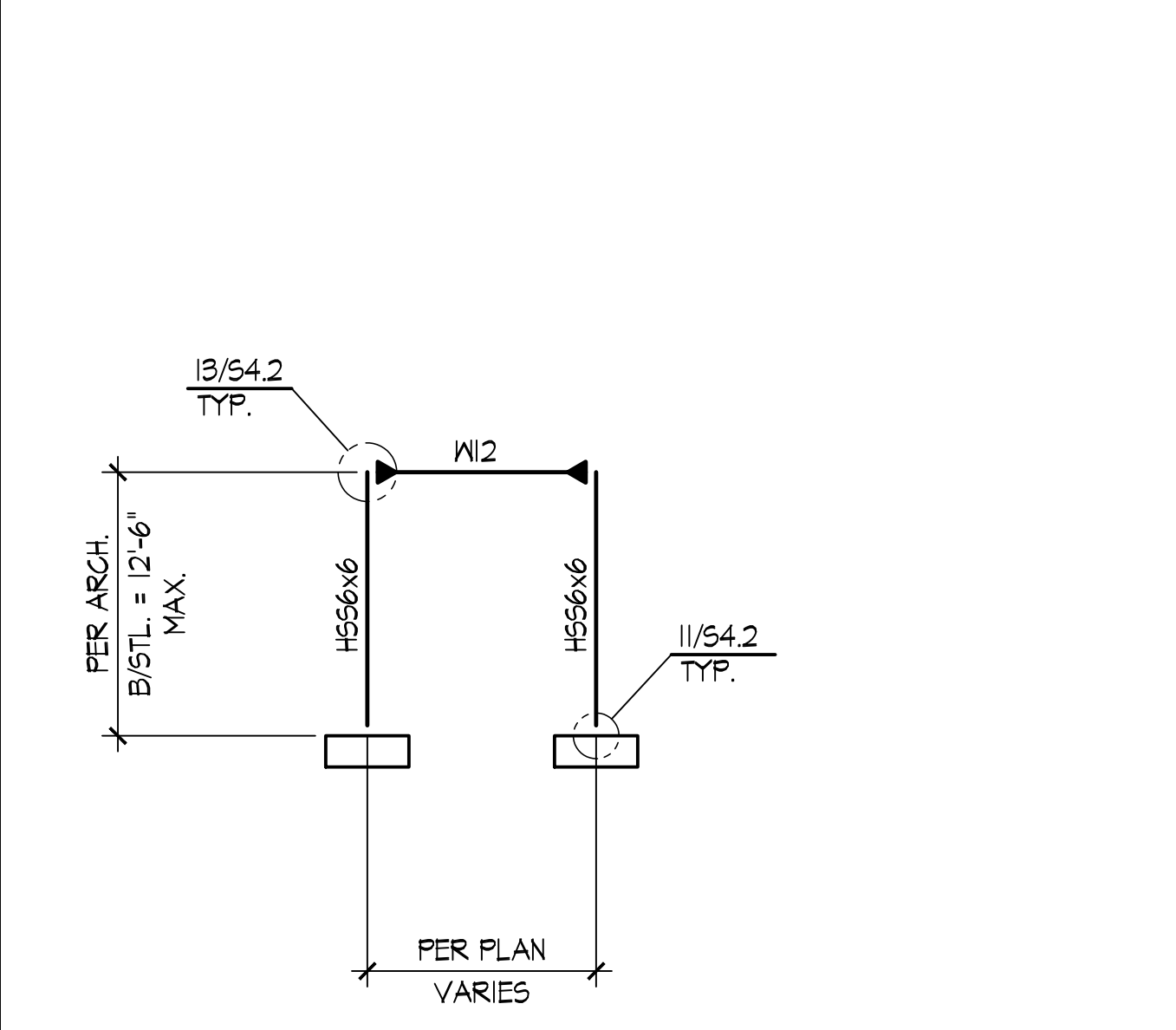


SEE 19/54.2 FOR MAX. COLUMN HEIGHT AT SIM.

DRAG ANGLE CONNECTION SCALE: NONE



TYPICAL SLOPED BOLTED MOMENT CONNECTION SCALE: NONE



MOMENT FRAME 1 SCALE: NONE

MOMENT FRAME 2 SCALE: NONE

MOMENT FRAME 3 SCALE: NONE

MOMENT FRAME 4 SCALE: NONE

MOMENT FRAME 5 SCALE: NONE

MOMENT FRAME 6 SCALE: NONE

MOMENT FRAME 7 SCALE: NONE

MOMENT FRAME 8 SCALE: NONE

MOMENT FRAME 9 SCALE: NONE

MOMENT FRAME 10 SCALE: NONE

NO.	DESCRIPTION	DATE	BY
1	SWITCHGEAR SHELTER AND CONDUIT SUPPORT FRAME PERMIT CORRECTIONS	5/20/24	
2	SWITCHGEAR SHELTER AND CONDUIT SUPPORT FRAME	4/12/24	

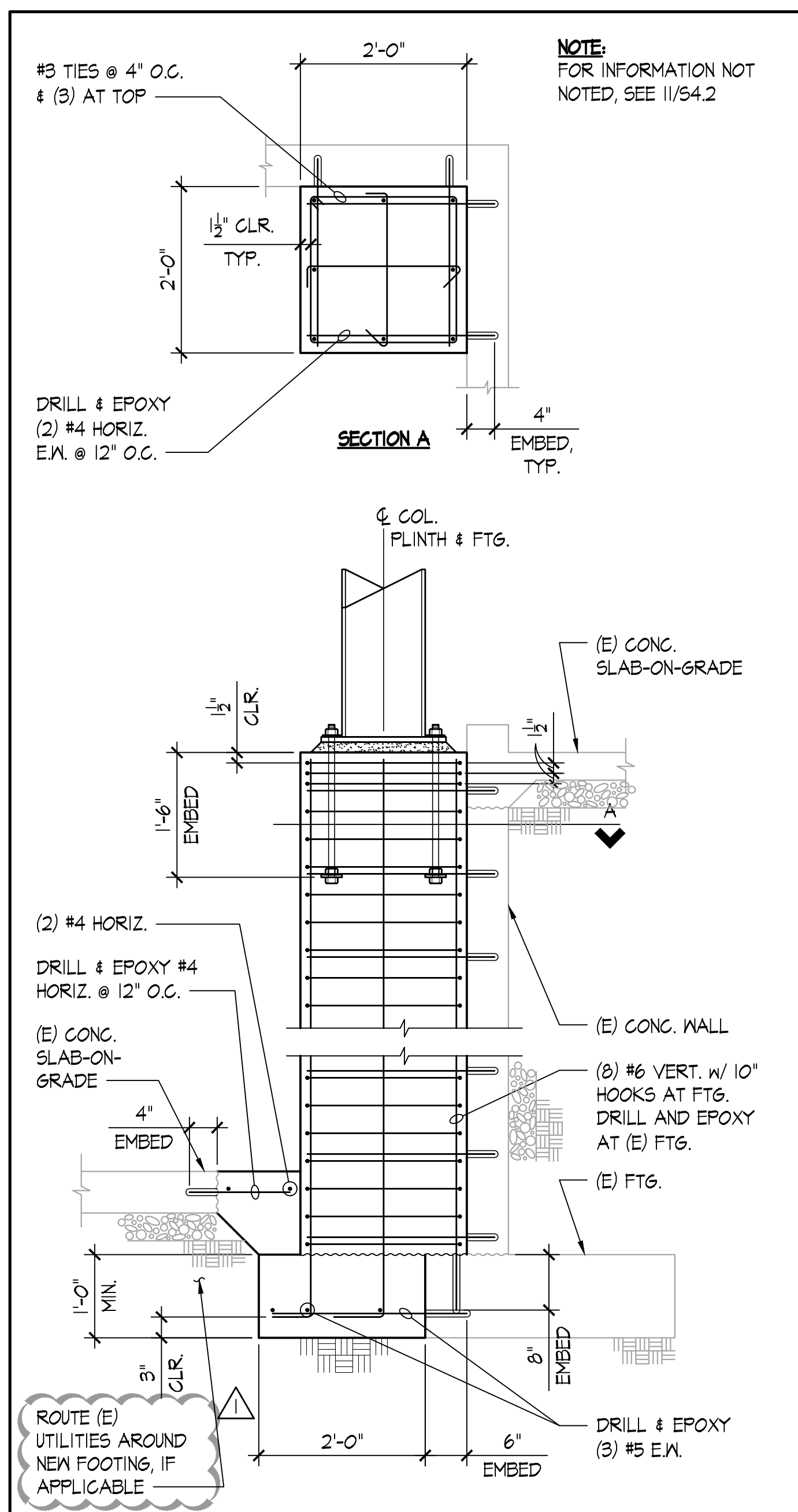
ISSUES: REVISIONS:

P.M. SHT
P.E. TVM
DRAWN BY: SC
SCALE: AS SHOWN
DATE: 5/20/24
JOB NO. 23444.01
SHEET TITLE:

DETAILS

SHEET NO.

S4.2



DETAIL SCALE: 1/4"=1'-0" 2

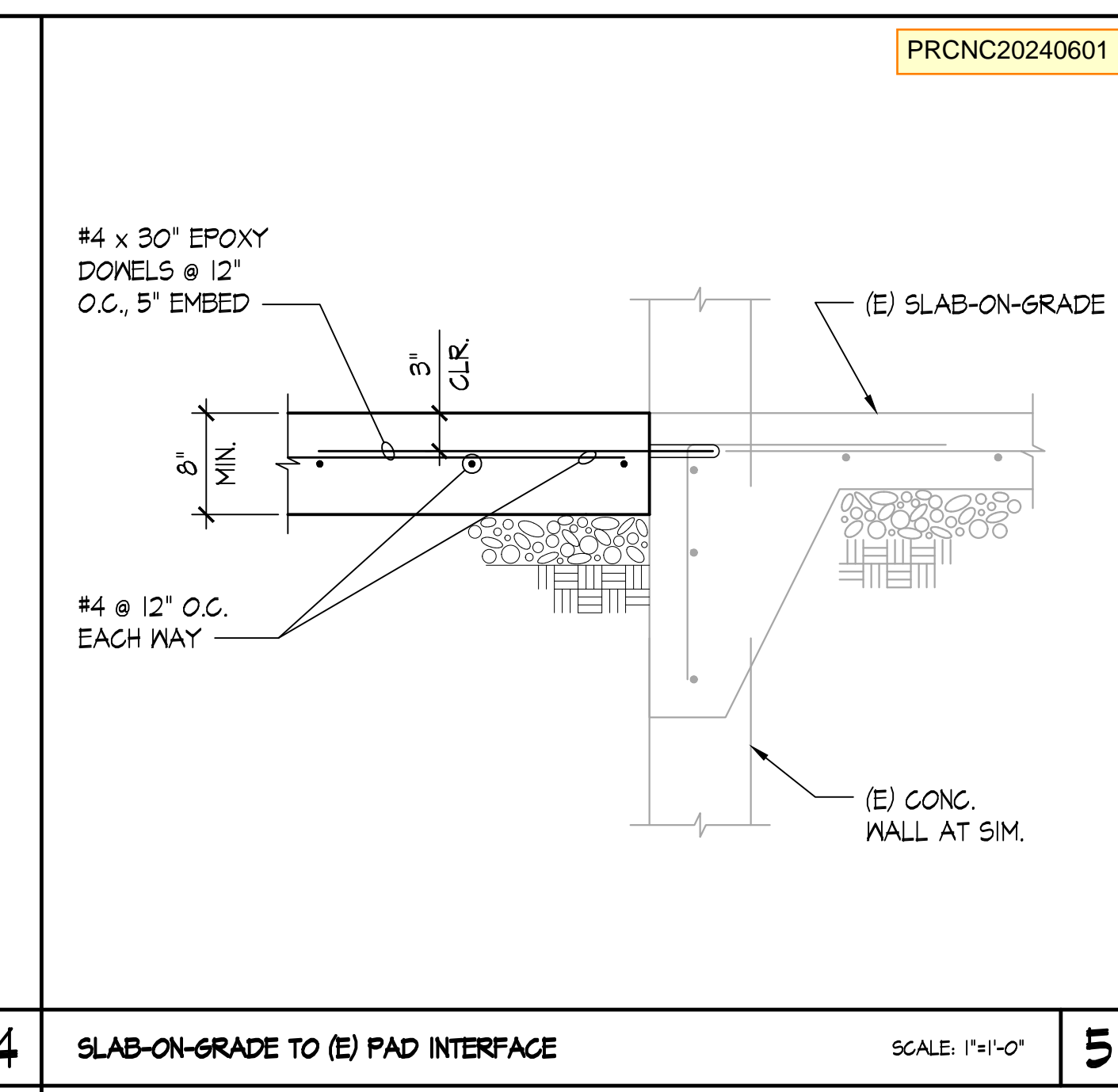
DETAIL SCALE: 1/4"=1'-0" 7

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

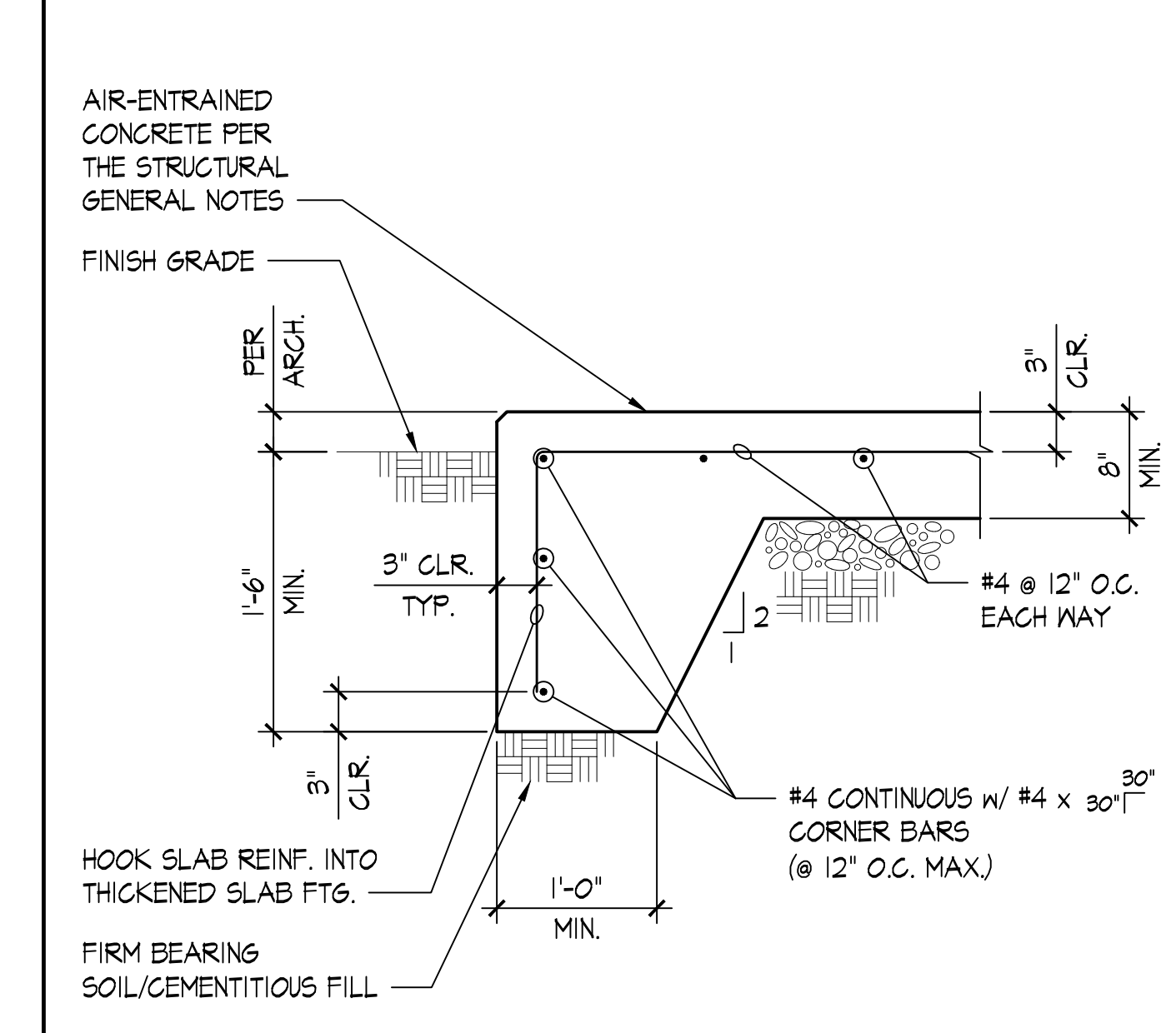
DETAIL SCALE: 1/4"=1'-0" 8

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

DETAIL SCALE: 1/4"=1'-0" 9



SLAB-ON-GRADE TO (E) PAD INTERFACE SCALE: 1/4"=1'-0" 5



THICKENED SLAB EDGE SCALE: 1/4"=1'-0" 10

COLUMN FOUNDATION AT LOADING DOCK CORNER SCALE: 3/4"=1'-0" 6

DETAIL SCALE: 1/4"=1'-0" 11

DETAIL SCALE: 1/4"=1'-0" 16

DETAIL SCALE: 1/4"=1'-0" 12

DETAIL SCALE: 1/4"=1'-0" 17

DETAIL SCALE: 1/4"=1'-0" 13

DETAIL SCALE: 1/4"=1'-0" 18

DETAIL SCALE: 1/4"=1'-0" 14

DETAIL SCALE: 1/4"=1'-0" 19

PRCNC20240601

QUANTUM
CONSULTING ENGINEERS

1511 THIRD AVENUE
SUITE 323
SEATTLE, WA 98101
TEL 206.957.3800
FAX 206.957.3901
www.quantumce.com

centeris
Centers for Information Systems

SEAL:

PROJECT:
**CENTERIS
DATA CENTERS - TI**

1023 39TH AVENUE
SOUTHEAST
PUYALLUP, WASHINGTON

APPROVAL:

City of Puyallup
Development & Permitting Services
ISSUED PERMIT

Building	Planning
Engineering	Public Works
Fire	Traffic

NO.	DESCRIPTION	DATE	BY
1	SWITCHGEAR SHELTER AND CONDUIT SUPPORT FRAME PERMIT CORRECTIONS	5/20/24	
2	SWITCHGEAR SHELTER AND CONDUIT SUPPORT FRAME	4/12/24	

ISSUES: REVISIONS:

P.M. SHT
P.E. TVM
DRAWN BY: SC
SCALE: AS SHOWN
DATE: 5/20/24
JOB NO. 23444.01
SHEET TITLE:

DETAILS

SHEET NO.

S4.3