



SCHEDULE OF STRUCTURAL SPECIAL INSPECTION SERVICES

Building Risk Category III

The following are the structural special inspection categories for this project. See the tables on this sheet for the special inspections recommended to be performed under each category. The special inspector should be familiar with the requirements of the NC Building Code Chapter 17 and the items in each category that require special inspections. See specifications for required testing not included on this sheet:

- ☒ Soils
- ☒ Concrete Construction
- ☒ Structural Steel Construction
- ☒ Cold-Formed Steel Deck
- ☐ Open-Web Steel Joists and Joist Girders
- ☐ Cold-Formed Steel Trusses Spanning 60 ft or Greater
- ☐ Masonry Construction
- ☐ Wood Construction
- ☐ Retaining Walls Exceeding 5 ft of Unbalanced Backfill Height
- ☐ Driven Deep Foundations
- ☐ Cast-In-Place Deep Foundations
- ☐ Helical Pile Foundations
- ☐ Special Inspections for Wind Resistance
- ☐ Special Inspections for Seismic Resistance
- ☐ Structural Observations for Seismic Resistance by Registered Design Professional
- ☐ Structural Observations for Wind Requirements by Registered Design Professional

The Owner or the Owner's Agent is to hire a special inspection and testing agent to oversee, record and document all indicated special inspections according to the requirements of the NC Building Code Chapter 17. The inspection and testing agents shall be engaged by the Owner or the Owner's Agent and not by the Contractor or the Subcontractor whose work is to be inspected or tested. Any conflict of interest must be disclosed to the Building Official prior to commencing work. The inspection and testing agents are to be certified for the type of work involved. Tests and inspections indicated will be based upon the requirements of the applicable building codes and the contract documents (full procedures for required testing and inspections are not included in these tables).

REQUIRED SPECIAL INSPECTIONS AND TESTS OF SOILS		
VERIFICATION AND INSPECTION TASK	FREQUENCY OF INSPECTION	
	CONTINUOUS DURING TASK LISTED	PERIODIC DURING TASK LISTED
1. Verify materials below shallow foundations are adequate to achieve the design bearing capacity.	--	X
2. Verify excavations are extended to proper depth and have reached proper material.	--	X
3. Perform classification and testing of controlled fill materials.	--	X
4. Verify use of proper materials, densities and lift thicknesses during placement and compaction of controlled fill.	X	--
5. Prior to placement of controlled fill, observe subgrade and verify that site has been prepared properly.	--	X
<b>Note:</b> The approved geotechnical report and the construction documents shall be used to determine compliance (the most stringent controlling). During fill placement, the special inspector shall verify that the proper materials and procedures are used in accordance with the provisions of the approved geotechnical report and construction documents.		

REQUIRED VERIFICATION AND INSPECTION OF CONCRETE CONSTRUCTION			
Inspections shall verify general compliance with the design documents and approved submittals as well as referenced code sections.			
VERIFICATION AND INSPECTION	FREQUENCY OF INSPECTION		REFERENCED STANDARD
	CONTINUOUS DURING TASK LISTED	PERIODIC DURING TASK LISTED	
1. Inspection of reinforcing steel and placement for general compliance with the design documents and approved submittals.	--	X	ACI 318: Ch.20, 25.2, 25.3, 26.6.1-26.6.3
2. Inspect anchors cast in concrete for general compliance with the design documents (including grade, diameter, gage, and embedment depth).	--	X	ACI 318: 17.8.2
3. Inspect anchors/rebar post-installed in hardened concrete members. Verify installation procedure is in strict compliance with the manufacturer's instructions. Obtain installer's certification for installation of adhesive anchors/rebar before work begins. a. Adhesive anchors/rebar installed in horizontally or upwardly inclined orientations to resist sustained tension loads. b. Mechanical anchors and adhesive anchors/rebar not define in 3.a.	X	--	ACI 318: 17.8.2.4
	--	X	ACI 318: 17.8.2
4. Verify use of required design mix.	--	X	ACI 318: Ch.19, 26.4.3, 26.4.4
5. Prior to concrete placement, fabricate specimens for strength tests, perform slump and air content tests, and determine the temperature of the concrete. Verify compliance.	X	--	ASTM C 172 ASTM C 31 ACI 318: 26.4, 26.12
6. Inspection of concrete placement for proper application techniques.	X	--	ACI 318: 26.5
7. Verify maintenance of specified curing temperature and techniques.	--	X	ACI 318: 26.5.3-26.5.5
8. Verification of in-situ concrete strength prior to removal of shores and forms from beams and structural slabs.	--	X	ACI 318: 26.11.2
9. Inspect formwork for shape, general location and dimensions of the concrete member being formed.	--	X	ACI 318: 26.11.1.2(b)
10. Inspect footing excavations for shape, general location and dimensions of the concrete member being formed.	--	X	
11. Inspect erection of precast concrete members.	--	X	ACI 318: Ch. 26.8

REQUIRED SPECIAL INSPECTIONS OF STRUCTURAL STEEL CONSTRUCTION		
Inspections shall verify general compliance with the construction documents, approved submittals, and AISC 360.		
VERIFICATION AND INSPECTION	FREQUENCY OF INSPECTION	
	CONTINUOUS DURING TASK LISTED	PERIODIC DURING TASK LISTED
1. Obtain fabricator's AISC certification and submit a copy to the <i>Building Official</i> .		
2. Material verification of structural steel components (including fasteners).	--	X
3. Verify compliance with the details shown on the construction documents, such as braces, stiffeners, and member locations.  <b>Exception:</b> Special Inspection of railing systems composed of structural steel elements is limited to welding inspection of the welds at the base of cantilevered rail posts.	--	X
4. Verify proper application of joint details at each connection.	X Inspect all	--
5. Structural steel welding:  a. Inspection Tasks Prior to Welding (QA tasks listed in AISC 360 Table N5.4-1).  b. Inspection Tasks During Welding (QA tasks listed in AISC 360 Table N5.4-2).  c. Inspection Tasks After Welding (QA tasks listed in AISC 360 Table N5.4-3).	As indicated in the referenced tables of AISC 360	
d. Nondestructive testing (NDT) of welded joints: 1) Complete penetration groove welds 5/16" or greater in Risk Category III or IV.	UT on 100%, may reduce to 25% per AISC 360, N5e.	
2) Complete penetration groove welds 5/16" or greater in Risk Category II.	UT on 10% may increase to 100% per AISC 360, N5f.	
3) Fabricator's NDT reports when fabricator performs NDT.		
6. Structural steel bolting:  a. Inspection Tasks Prior to Bolting (QA tasks listed in AISC 360, Table N5.6-1).  b. Inspection Tasks During Bolting (QA tasks listed in AISC 360, Table N5.6-2).  c. Inspection Tasks After Bolting (QA tasks listed in AISC 360, Table N5.6-3).	As indicated in the referenced tables of AISC 360	
7. Inspection of steel elements of composite construction prior to concrete placement in accordance with QA tasks listed in AISC 360, Table N6.1	As indicated in the referenced table of AISC 360	
8. At completion of fabrication, obtain a certificate of compliance from the fabricator stating that the work was performed in accordance with the approved construction documents and submit it to the <i>Building Official</i> .		
9. At completion of erection, obtain a certificate of compliance from the erector stating that the materials supplied and work performed by the erector are in accordance with the approved construction documents and submit it to the <i>Building Official</i> .		

REQUIRED SPECIAL INSPECTIONS OF COLD-FORMED STEEL DECK	
Inspections shall verify general compliance with the construction documents and approved submittals. Special Inspections and qualification of welding inspectors for cold-formed steel floor and roof deck shall be in accordance with the quality assurance inspection requirements of the "QA/QC Standard for Quality Control and Quality Assurance for Installation of Steel Deck" by the American National Standards Institute / Steel Deck Institute.	
VERIFICATION AND INSPECTION	
1. Obtain fabricator's SDI certification and submit a copy to the <i>Building Official</i> .	
2. Verify deck materials are represented by appropriate mill certifications.	
3. Field welding of deck in accordance with AWS D1.3, SDI C, SDI NC, and SDI RD.	
4. Installation of mechanical fasteners in accordance with SDI C, SDI NC, SDI RD, and manufacturer's instructions.	
5. Steel deck installation in accordance with the construction documents, installation drawings, shop drawings, design documents and applicable referenced standards.	
6. Scope of inspections shall comply with the quality assurance inspection requirements of Appendix 1 of the "QA/QC Standard for Quality Control and Quality Assurance for Installation of Steel Deck" by the American National Standards Institute / Steel Deck Institute.	
8. At completion of fabrication, obtain a certificate of compliance from the fabricator stating that the work was performed in accordance with the approved construction documents and submit it to the <i>Building Official</i> .	

FF

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07/31/23

Part 3

SCHEDULE OF STRUCTURAL SPECIAL INSPECTIONS

Fayetteville Regional Airport Airline Terminal Improvements - Part 3  
400 Airport Road  
Fayetteville, North Carolina 28306

DRAWN BY: \_\_\_\_\_ Author

REVIEWED BY: \_\_\_\_\_ SE

DATE: 04/03/22

PROJECT NO: 23-58

NOTES: \_\_\_\_\_

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REVISIONS

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△		

SHEET NUMBER

50.02



1. REFERENCED EL. 0'-0" = EXISTING BUILDING LEVEL 2 FINISH FLOOR [194.19]. TOP OF FOOTING ELEVATIONS SHOWN ON FOUNDATION PLAN ARE REFERENCED TO LEVEL 1 FINISH FLOOR AT CONCOURSE B (182.19).
2. SEE GENERAL NOTES AND TYPICAL DETAILS ON SHEET S0.01.
3. SEE ARCH. DWGS. FOR DIMENSIONS NOT SHOWN.
4. SEE ARCHITECTURAL DRAWINGS FOR DEMOLITION WORK.
5. ALL COLUMN FOOTINGS ARE CENTERED ON COLUMNS U.N.O. ON PLAN OR IN SECTIONS.
6. SEE ARCHITECTURAL AND CIVIL DRAWINGS FOR EXTERIOR SLABS.
7. GENERAL CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING EXISTING DIMENSIONS, ELEVATIONS, GENERAL CONDITIONS, AND BUILDING ORIENTATION BEFORE FABRICATING STEEL. EXISTING BUILDINGS MAY HAVE MINOR MISALIGNMENT BETWEEN THEM. CONTRACTOR IS RESPONSIBLE FOR MAKING MINOR ADJUSTMENTS IN ORDER TO FIT STEEL FRAME BETWEEN EXISTING BUILDINGS. NOTIFY ARCHITECT AND ENGINEER OF ANY SIGNIFICANT DISCREPANCIES. ALL ADJUSTMENTS WILL BE APPROVED BY THE ARCHITECT AND ENGINEER.
8. SEE ARCH. DWGS., SPECIFICATIONS, AND GENERAL NOTES FOR EXTERIOR METAL STUD WALL REQUIREMENTS. METAL STUD NC REGISTERED ENGINEER IS TO DESIGN METAL STUDS AND THEIR CONNECTIONS TO STRUCTURE FOR COMPONENT AND CLADDING WIND LOADS.

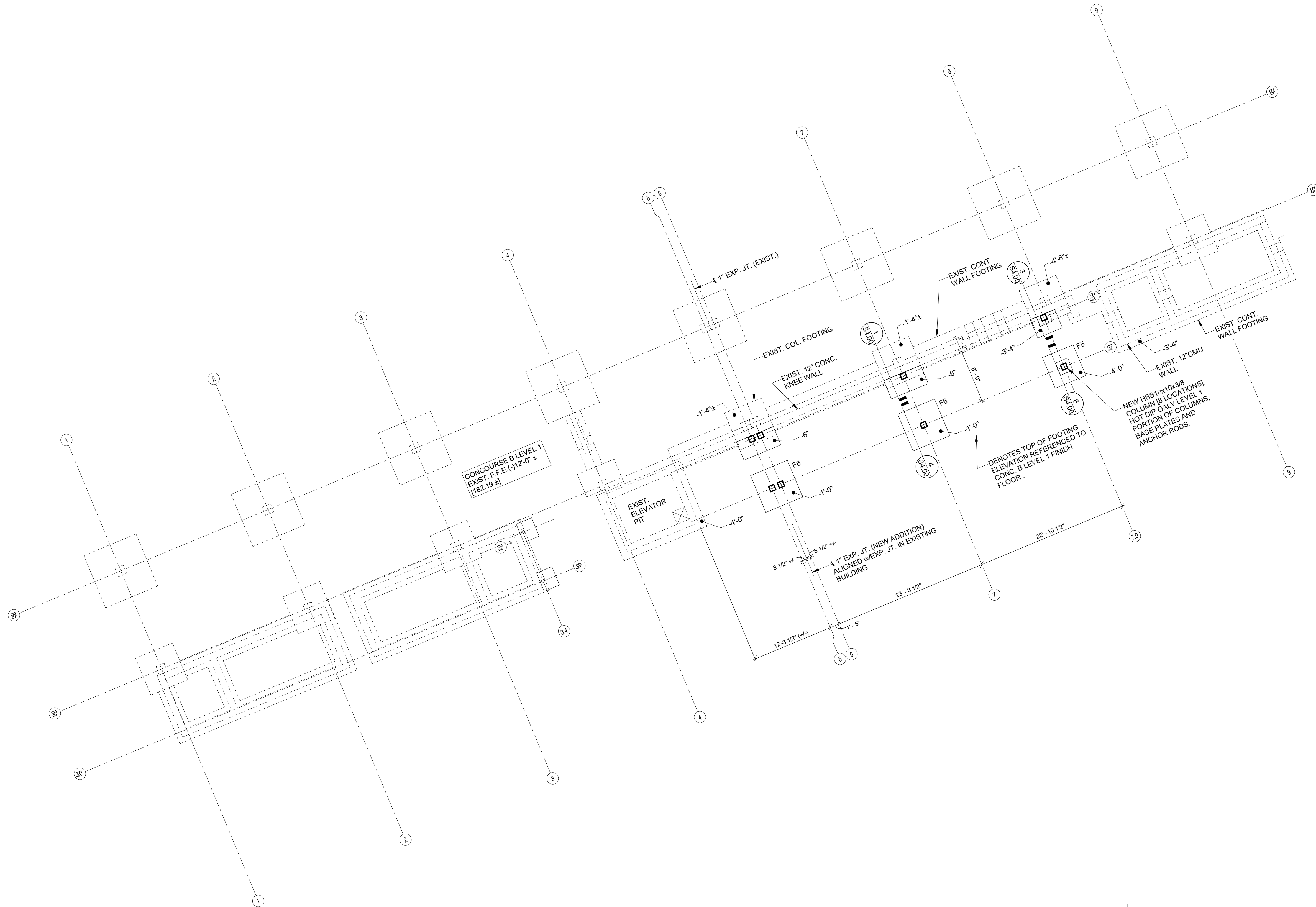
FOUNDATION PLAN NOTES

2  
\$1.00

NOT TO SCALE

FOOTING SCHEDULE

TYPE	LENGTH	WIDTH	THICKNESS	REINFORCING E.W. BOTTOM (U.N.O.)
F5	5'-0"	5'-0"	1'-6"	(7)#5
F6	6'-0"	6'-0"	1'-6"	(8)#5





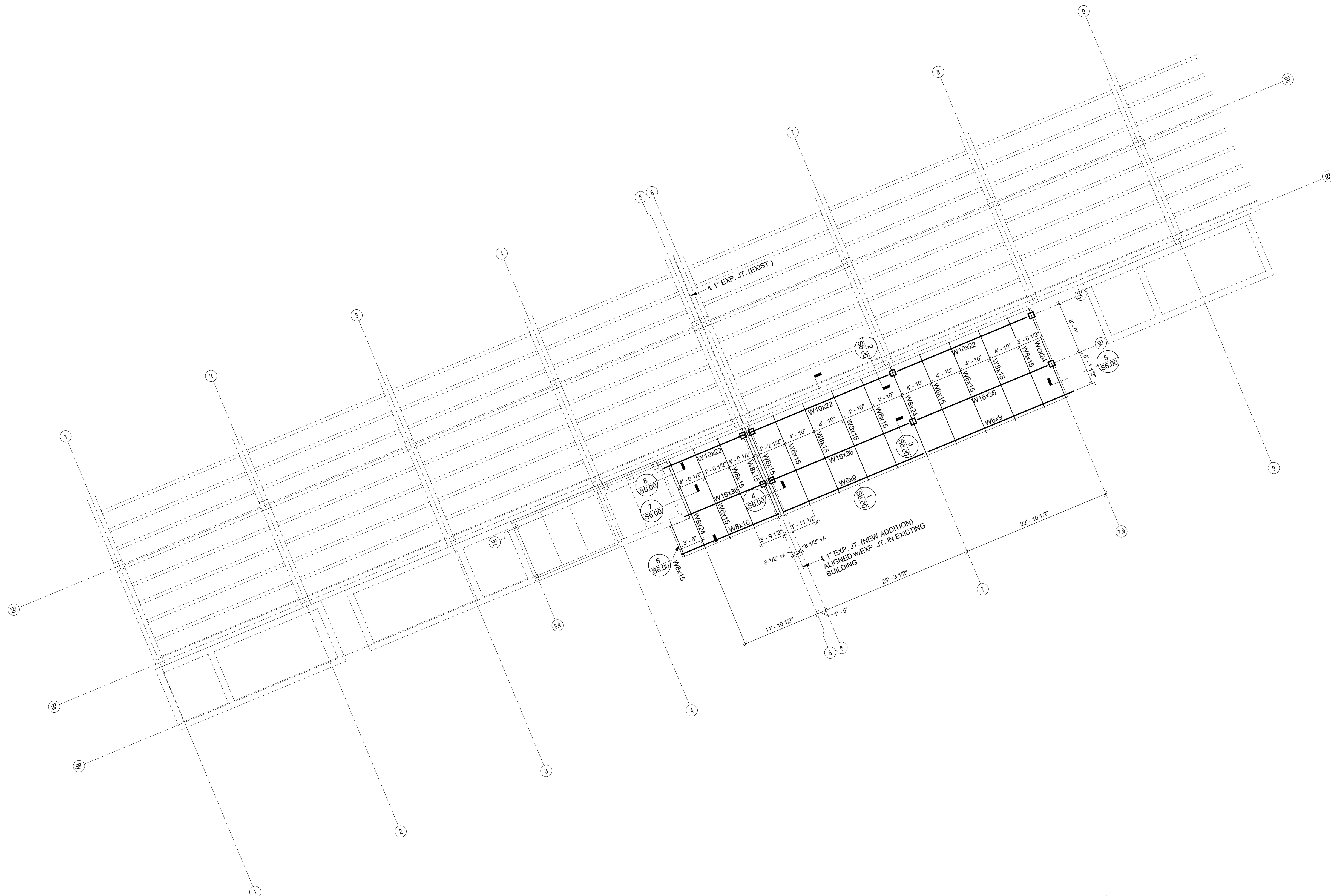
1. REFERENCED EL. 0'-0" = EXISTING BUILDING LEVEL 2 FINISH FLOOR [194.19].
2. SEE GENERAL NOTES & TYPICAL DETAILS ON SHEET S0.01.
3. BEAMS DENOTED (H) & (L) MEAN HIGH AND LOW ELEVATION, RESPECTIVELY.
4. GENERAL CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING AND/OR DETERMINING EXISTING DIMENSIONS, ELEVATIONS, GENERAL CONDITIONS AND BUILDING ORIENTATION BEFORE FABRICATING STEEL. EXISTING BUILDINGS MAY HAVE MINOR MISALIGNMENT BETWEEN THEM. CONTRACTOR IS RESPONSIBLE FOR MAKING MINOR ADJUSTMENTS IN ORDER TO FIT STEEL FRAME BETWEEN AND ALONG EXISTING BUILDINGS. NOTIFY ARCHITECT AND ENGINEER OF ANY SIGNIFICANT DISCREPANCIES. ALL ADJUSTMENTS WILL BE APPROVED BY THE ARCHITECT AND ENGINEER.
5. SEE ARCHITECTURAL DRAWINGS FOR DIMENSIONS NOT SHOWN.
6. SEE ARCHITECTURAL DRAWINGS FOR DEMOLITION WORK.
7. SEE ARCH. DWGS., SPECIFICATIONS, AND GENERAL NOTES FOR EXTERIOR METAL STUD WALL REQUIREMENTS. METAL STUD NC REGISTERED ENGINEER IS TO DESIGN METAL STUDS AND THEIR CONNECTIONS TO STRUCTURE FOR COMPONENT AND CLADDING WIND LOADS.
8. SEE ARCHITECTURAL AND MECHANICAL DRAWINGS FOR ROOF OPENINGS. PROVIDE ROOF OPENING FRAMES PER TYPICAL DETAIL ON SHEET S0.01.

ROOF FRAMING PLAN NOTES

2

NOT TO SCALE

S3.00



PARTIAL ROOF FRAMING PLAN - CONCOURSE B

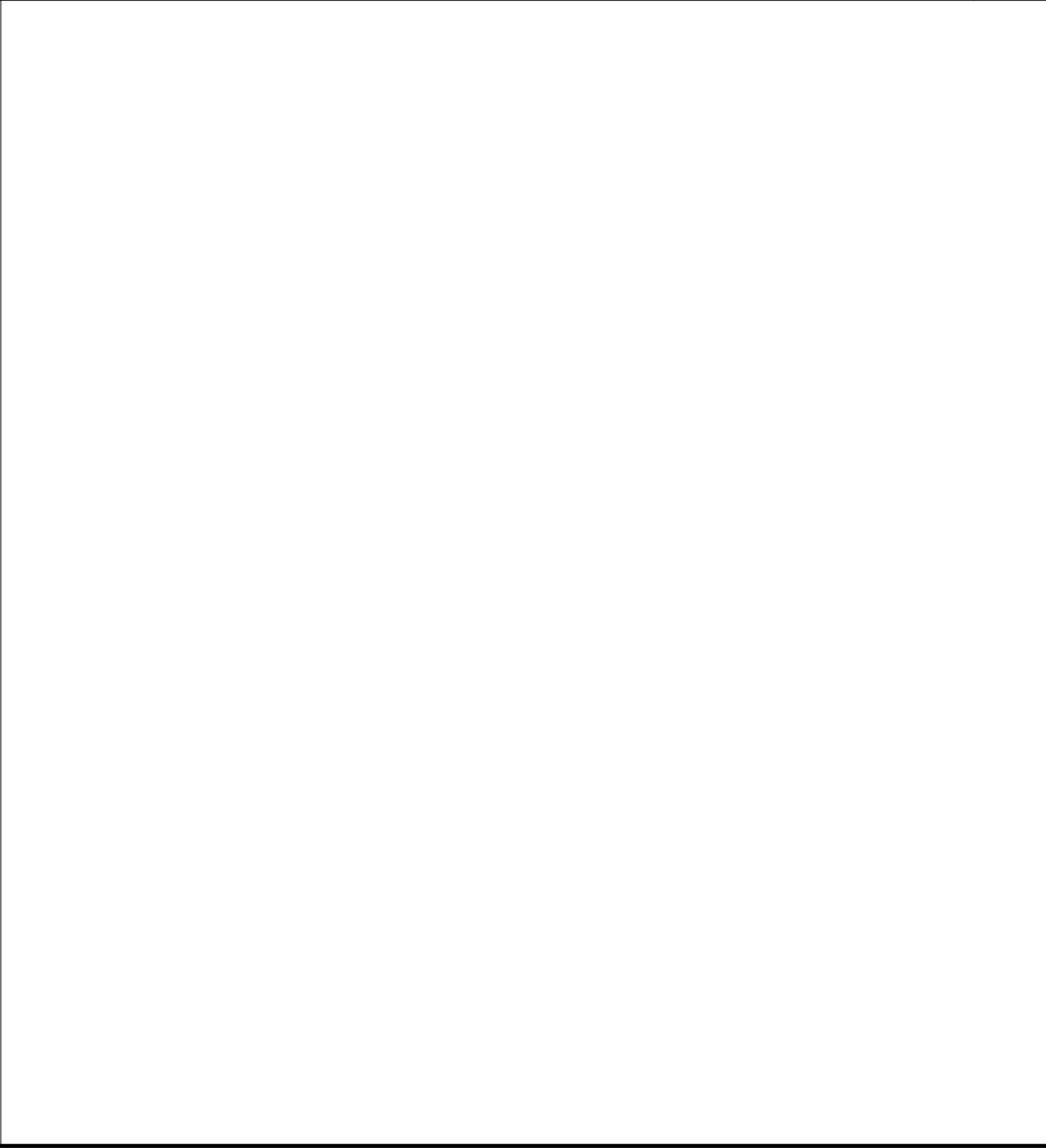
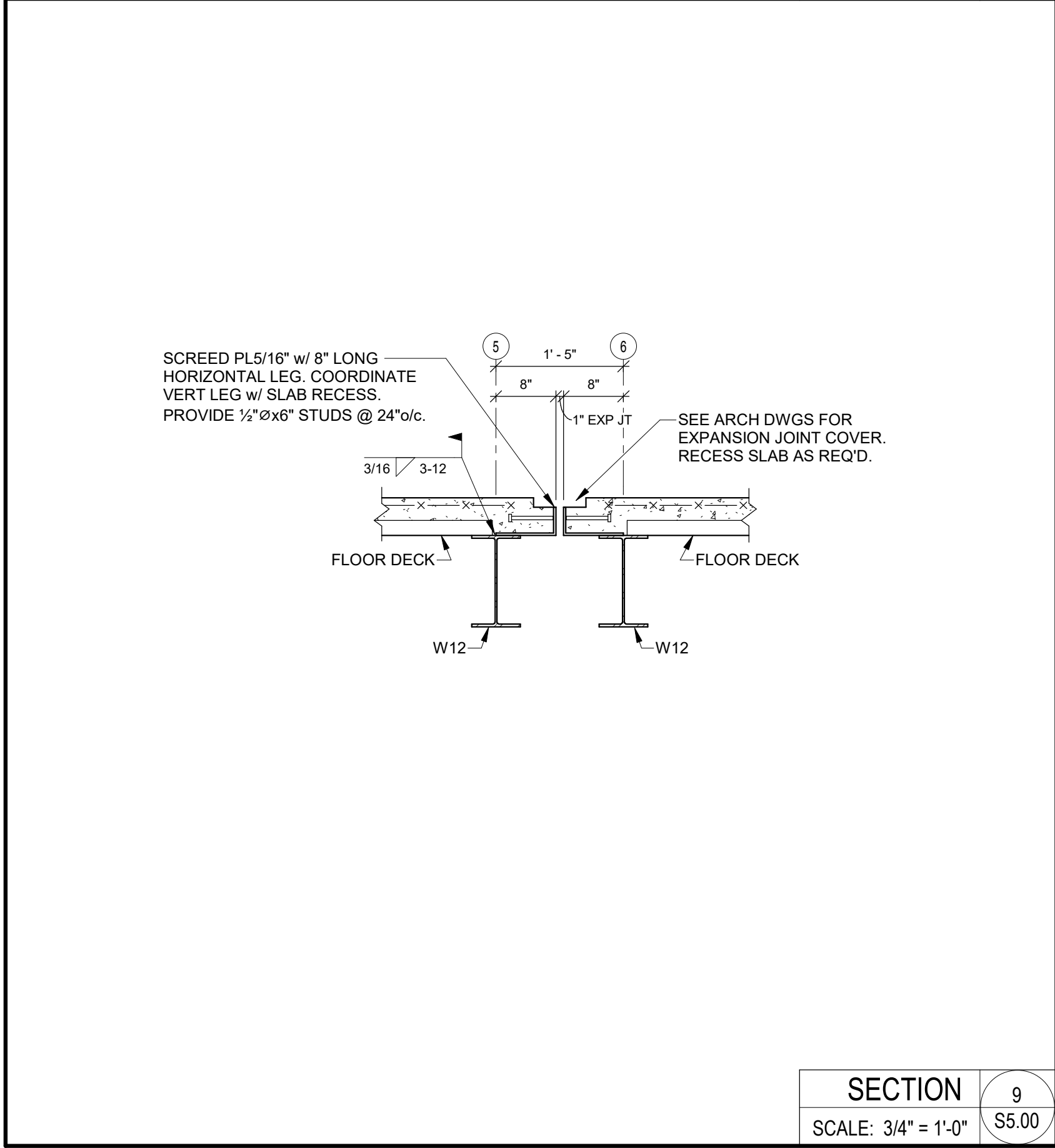
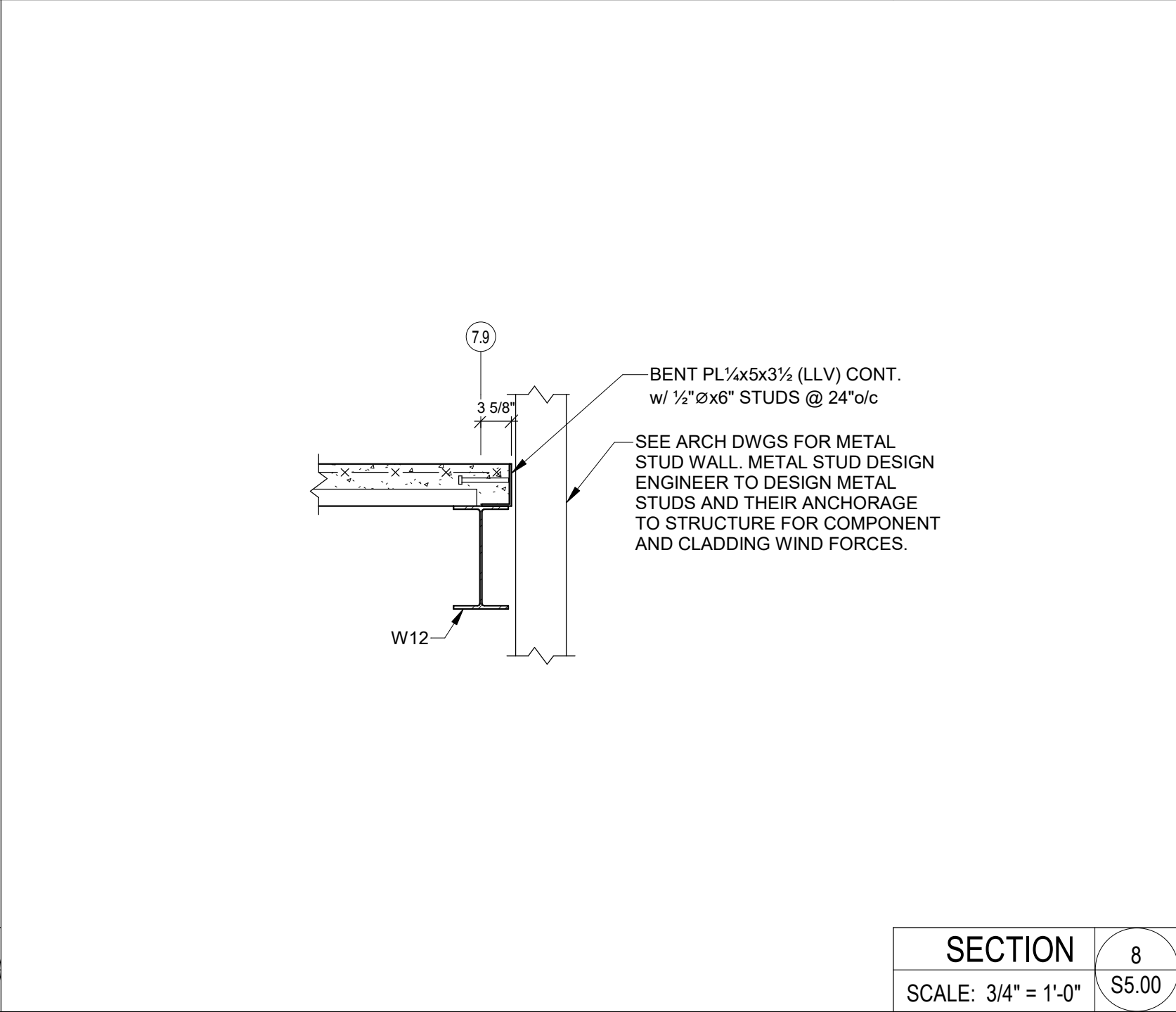
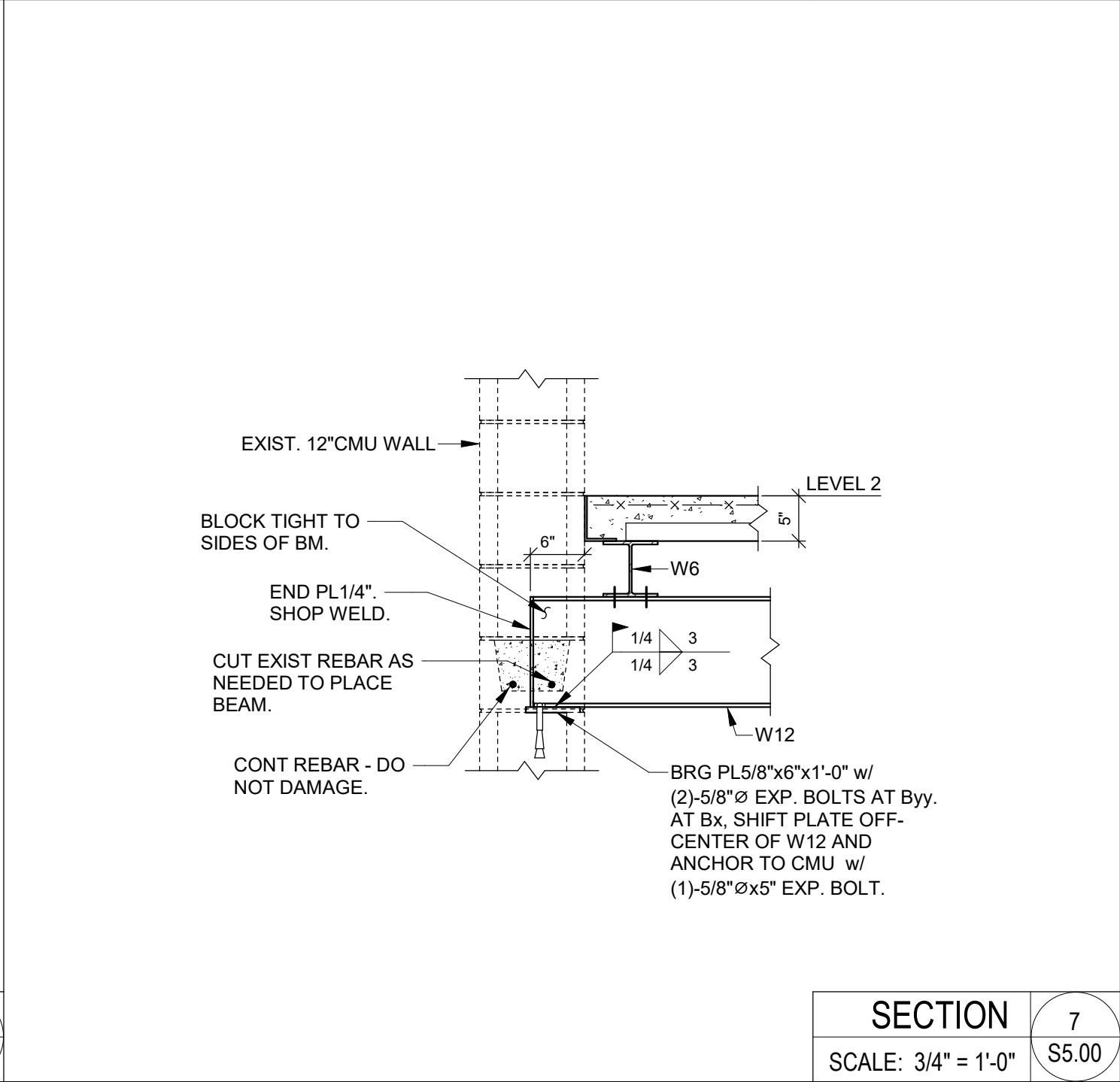
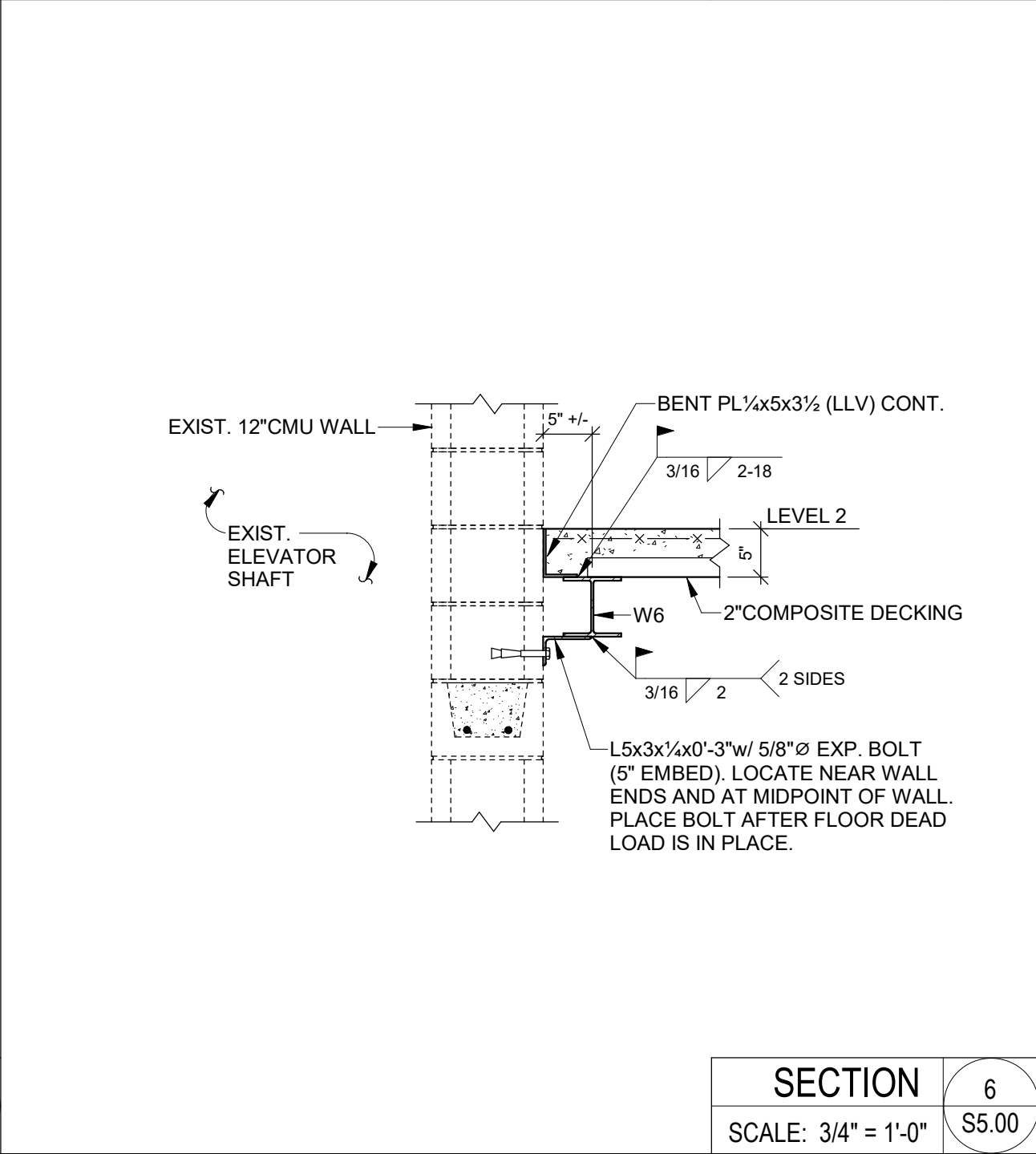
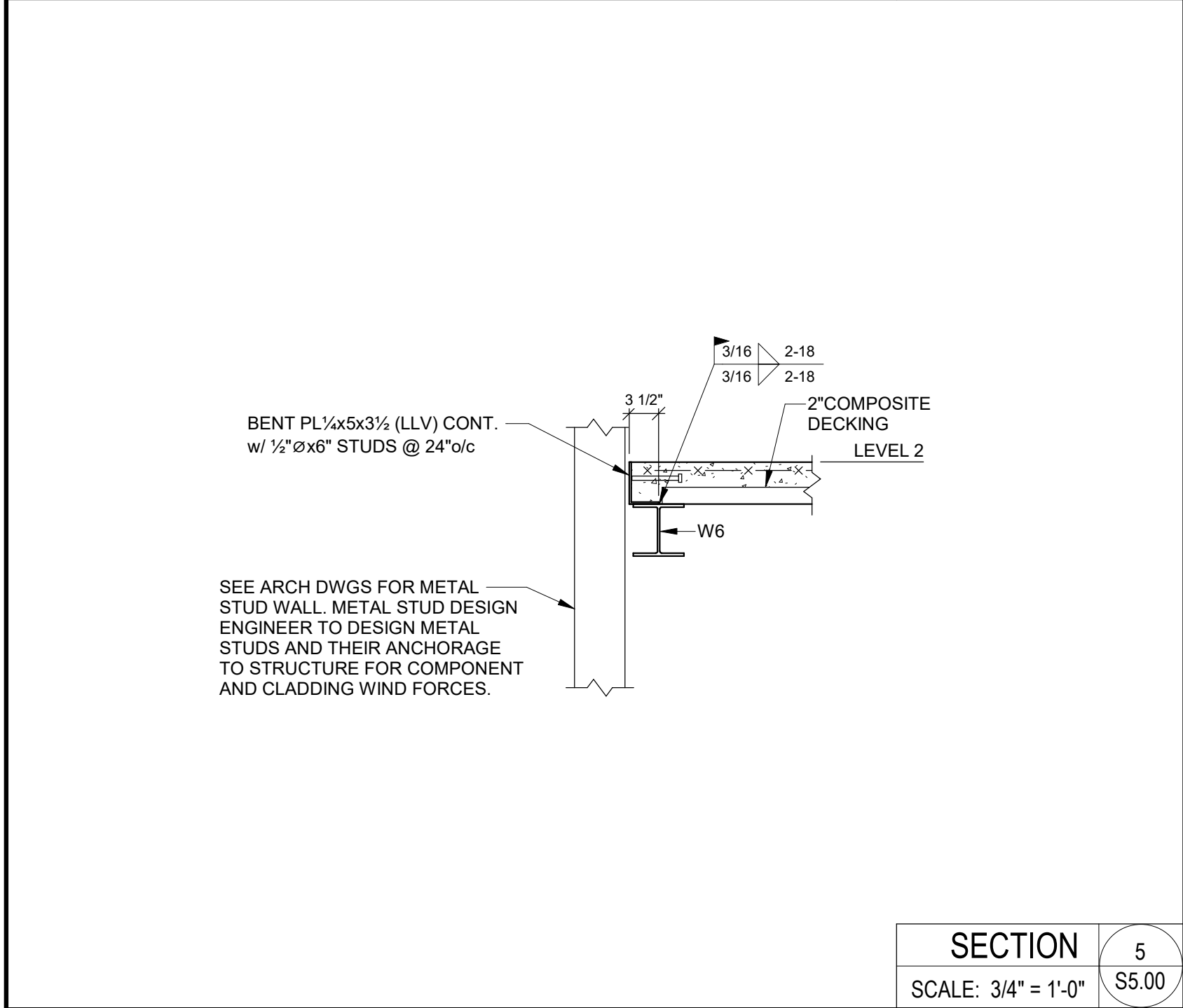
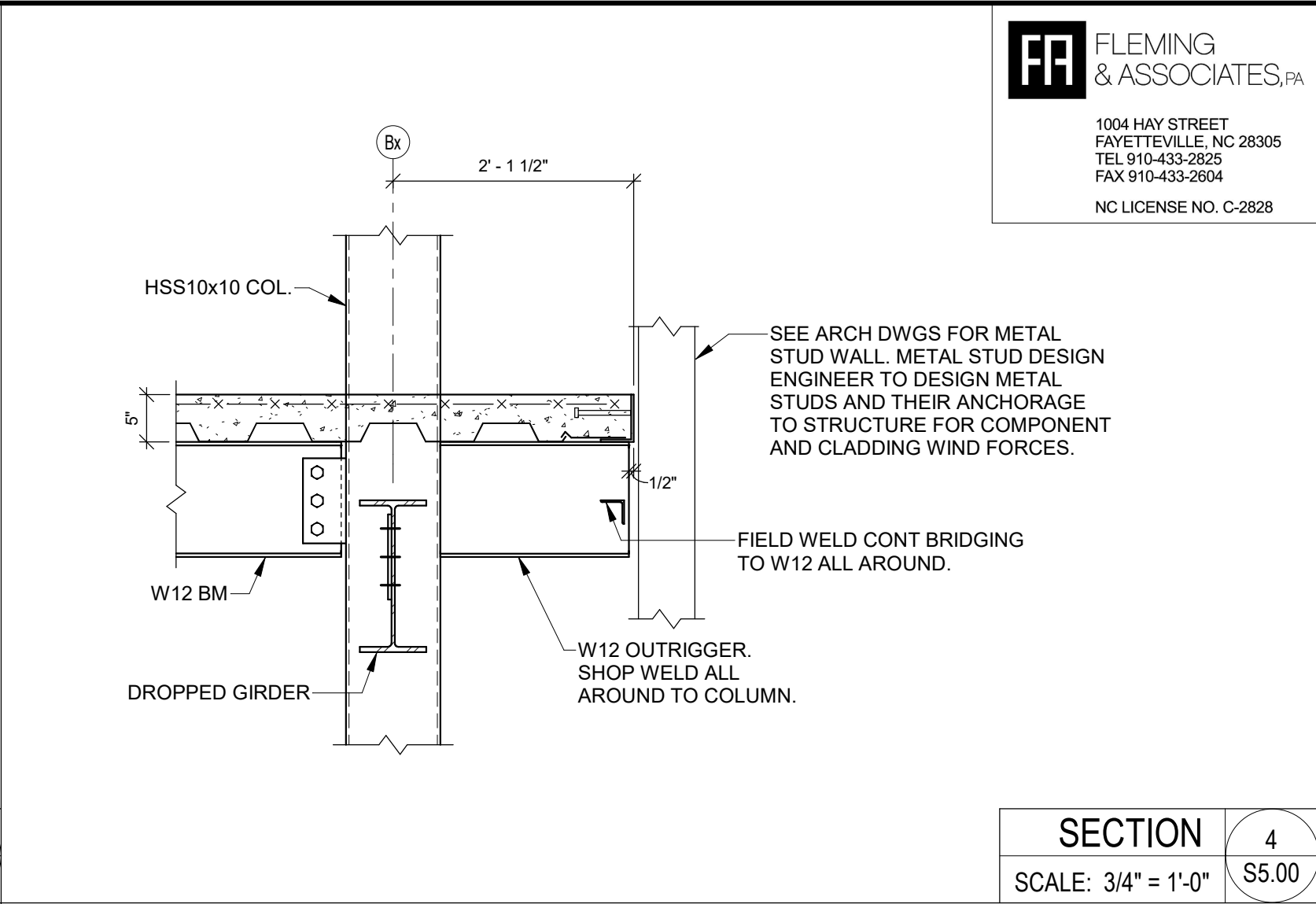
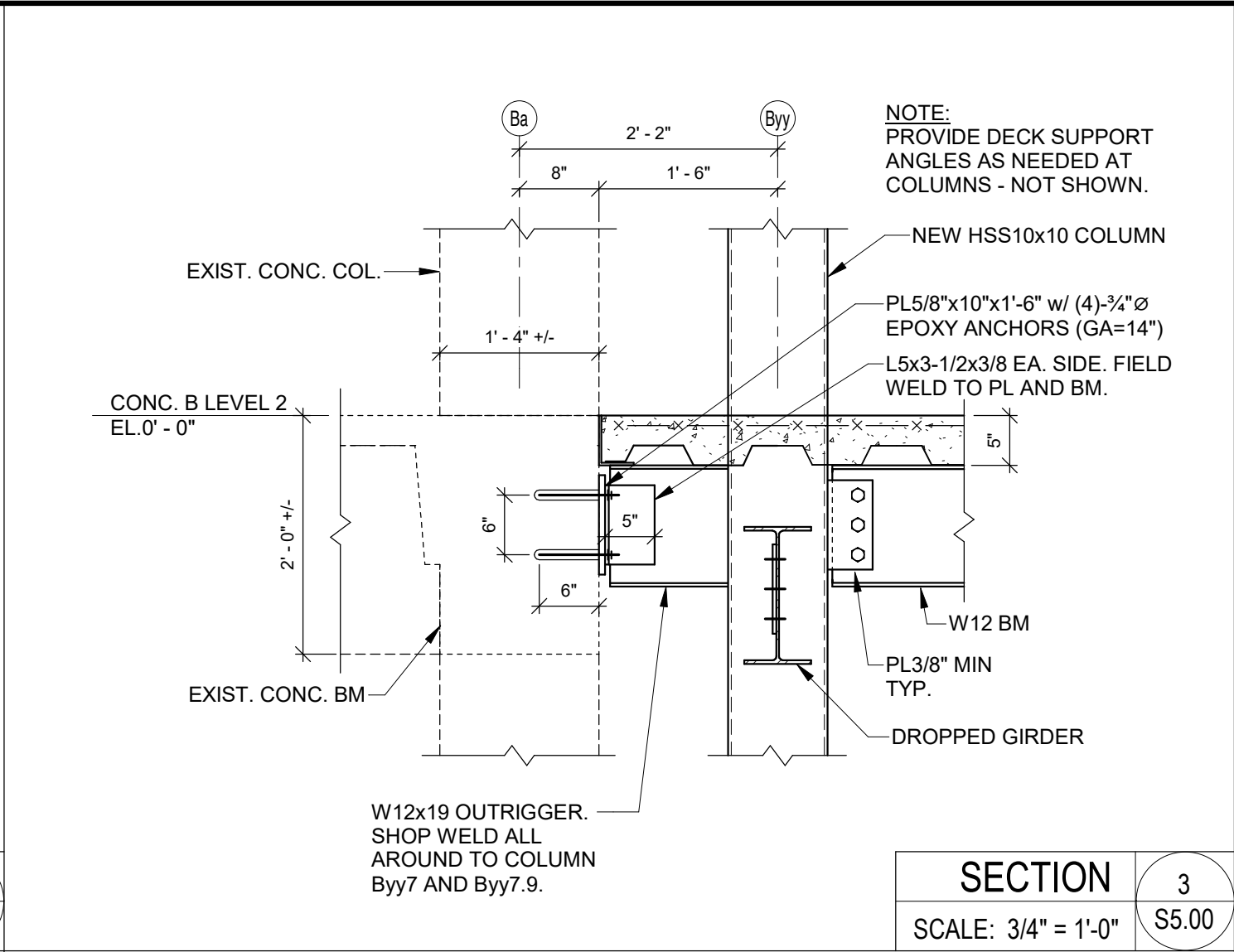
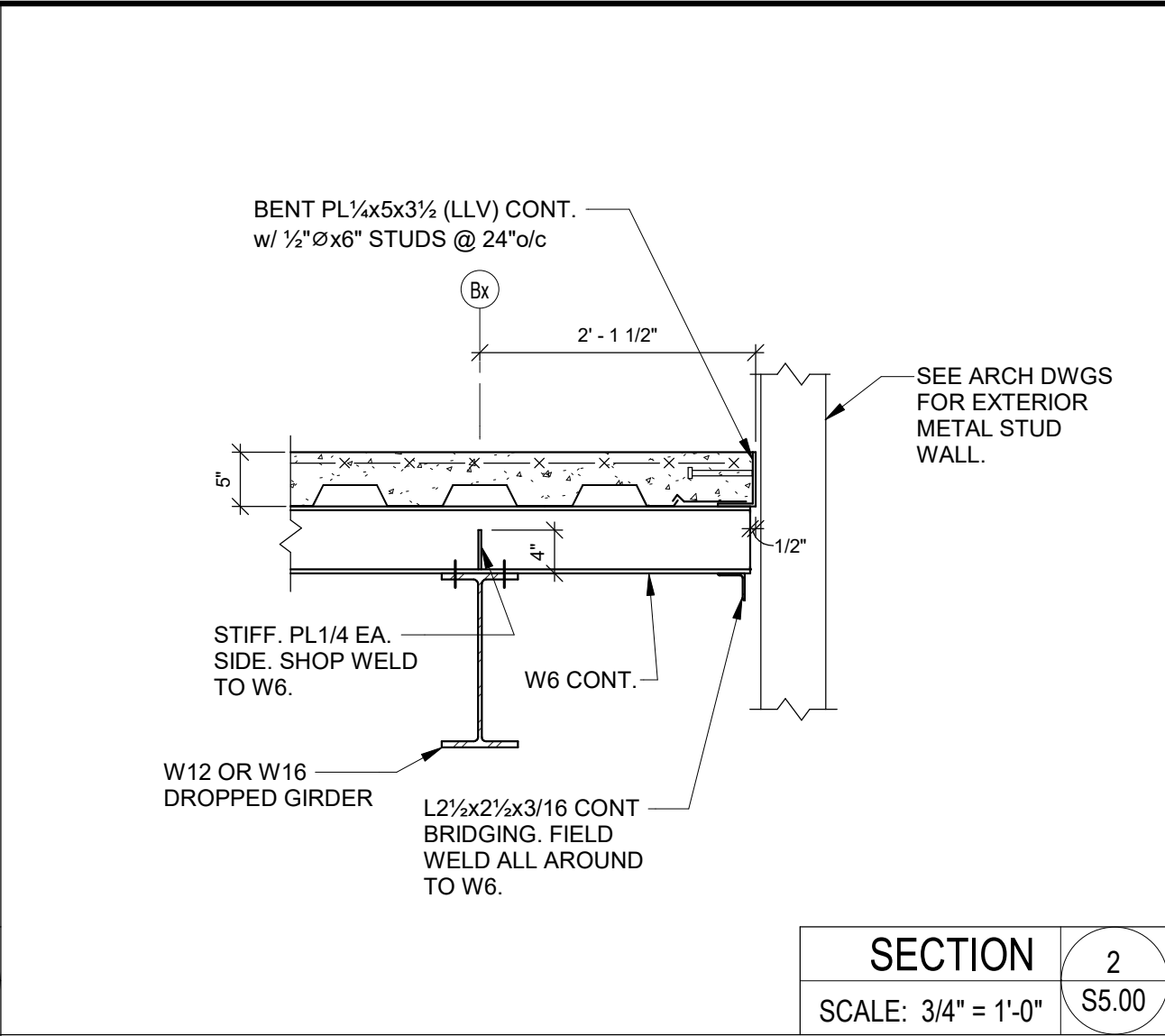
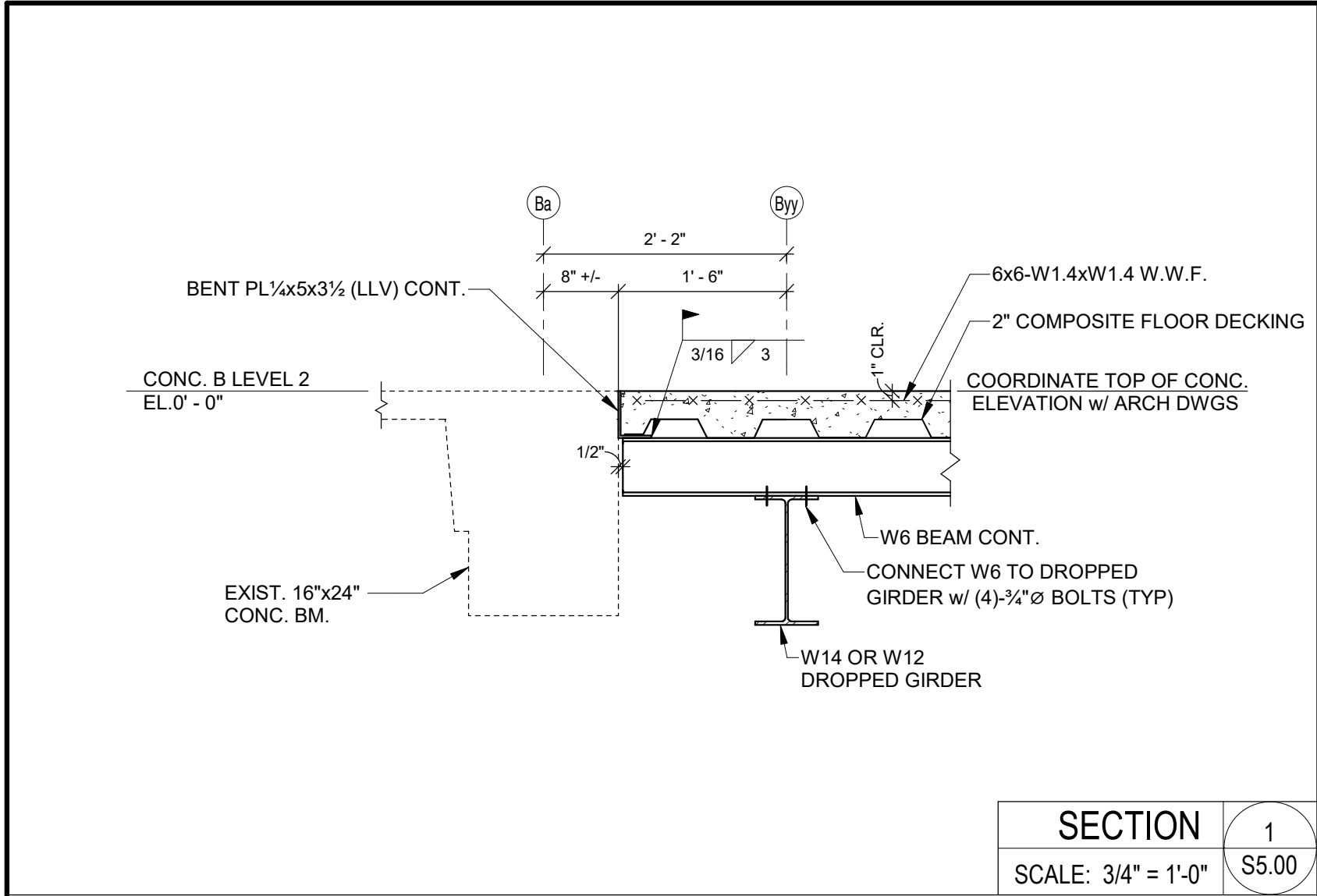
1

1/8" = 1'-0"

S3.00







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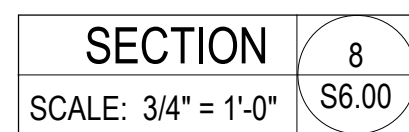
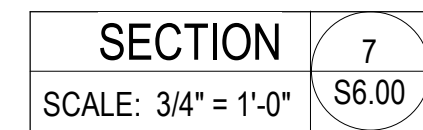
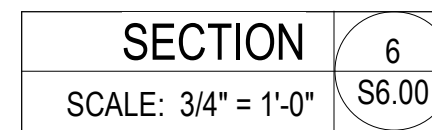
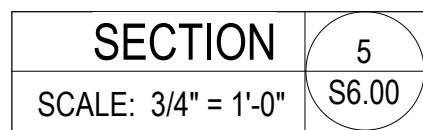
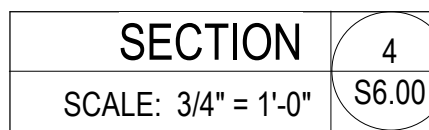
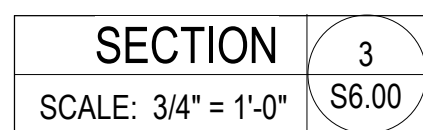
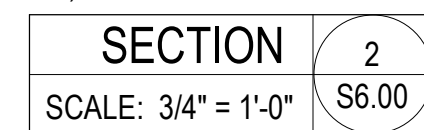
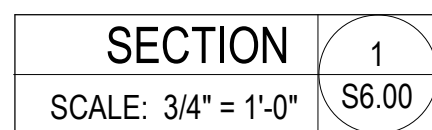
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CAROL J. DUNCAN  
07/31/23

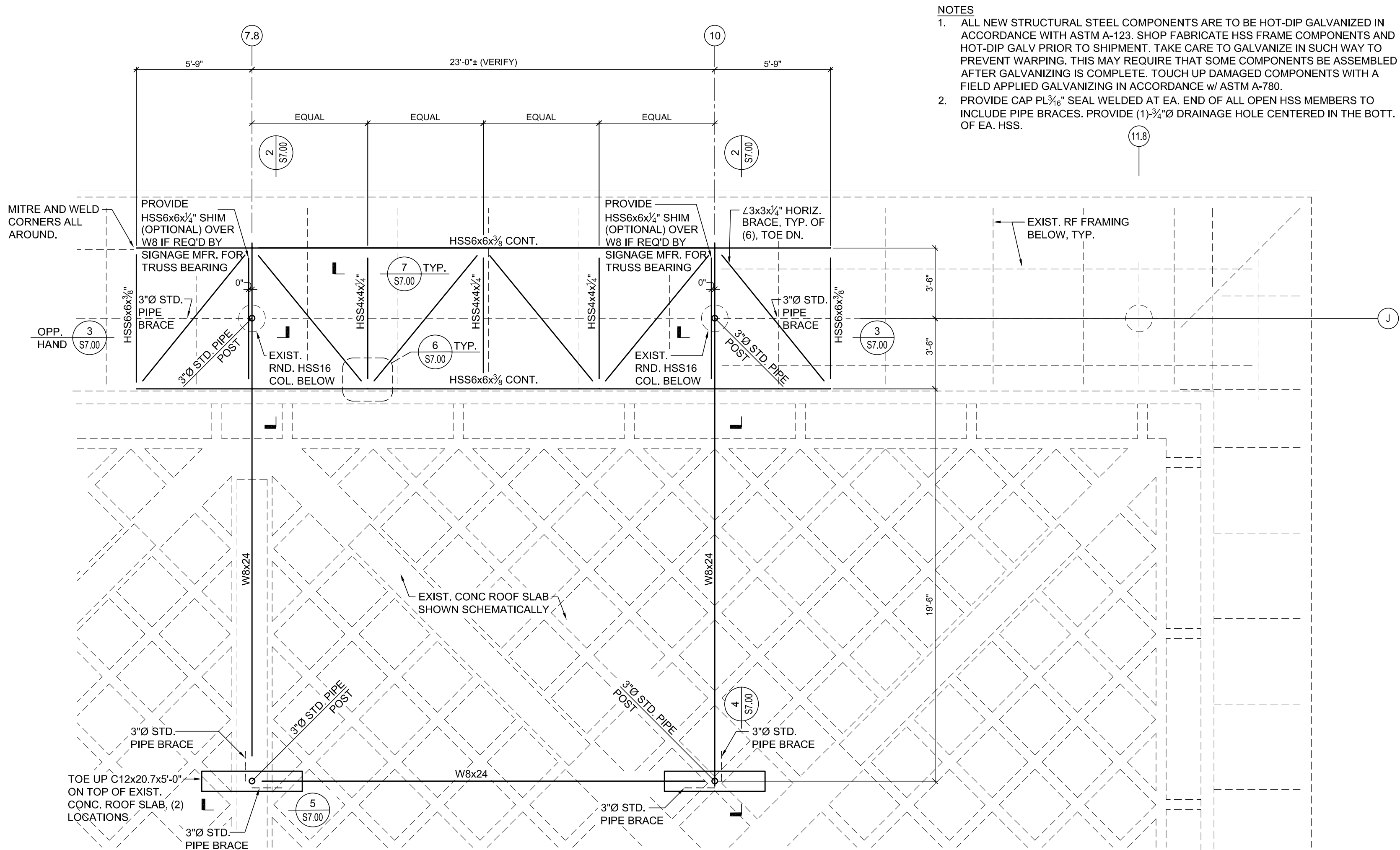
Fayetteville Regional Airport Airline Terminal Improvements - Part 3  
FLOOR SECTIONS  
400 Airport Road  
Fayetteville, North Carolina 28306

DRAWN BY: \_\_\_\_\_ Author  
REVIEWED BY: \_\_\_\_\_ SF  
DATE: 09/19/22  
PROJECT NO: 23-58  
NOTES: \_\_\_\_\_

REVISIONS  
SHEET NUMBER  
55.00







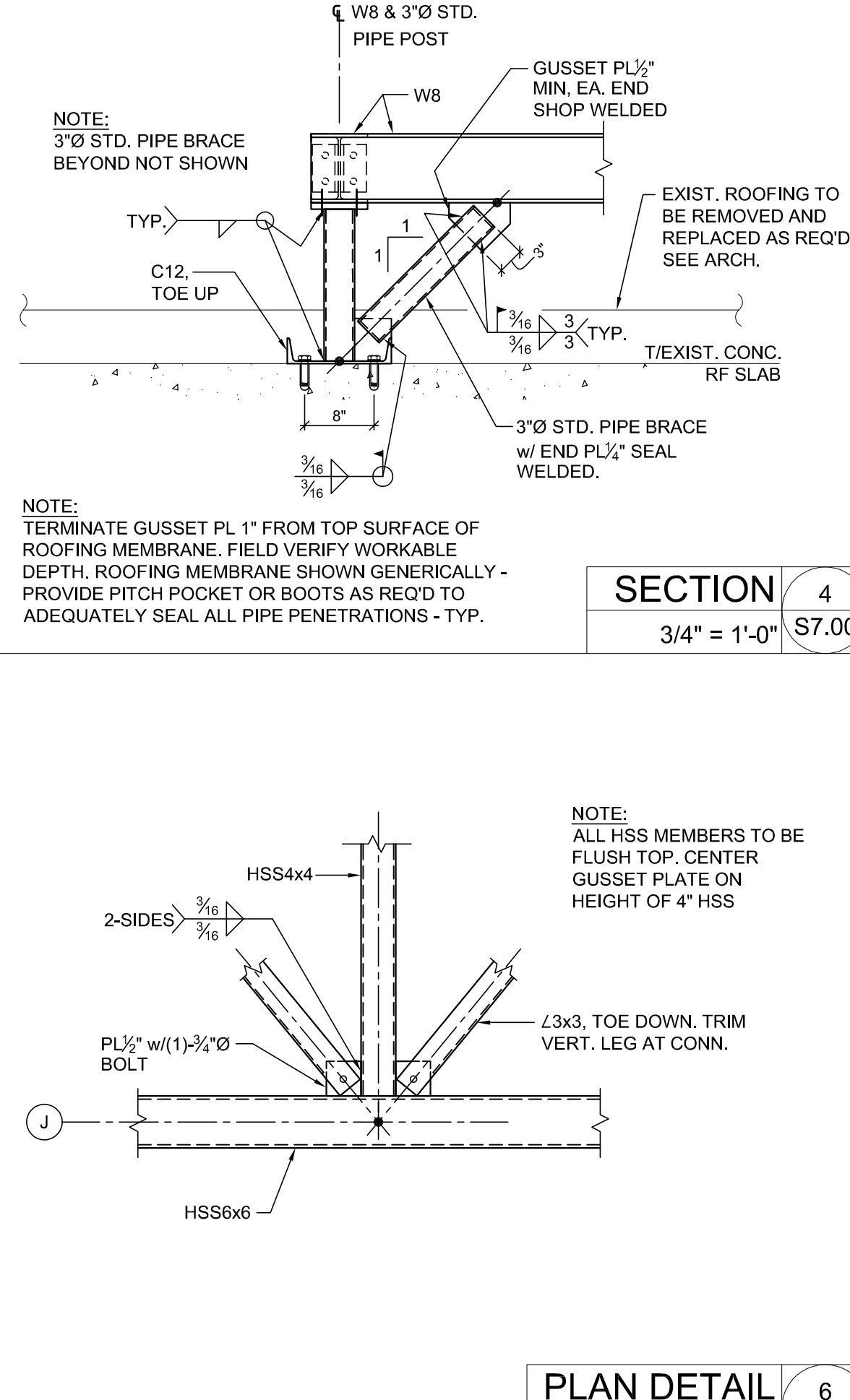
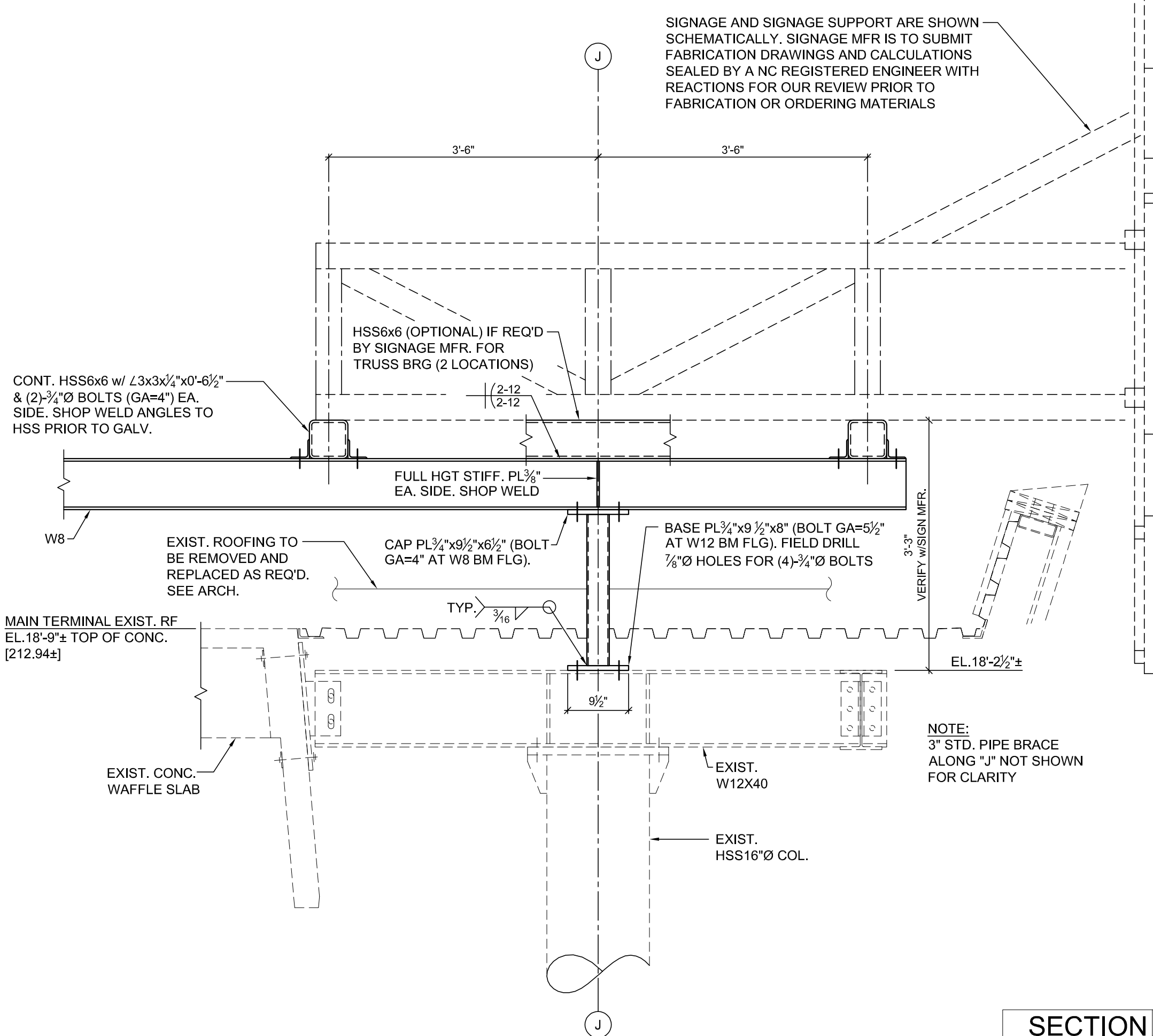
**Scope of Work:**  
Provide structural support for new airport signage at main terminal roof.

**1. Materials**

A. Structural Steel	ASTM A-36 U.N.O.
B. HSS Rectangular	ASTM A-992 at all beams
C. Structural Pipe	ASTM A-500 Gr.C, Fy=50ksi
D. Bolts	ASTM A-53 Gr.B, Fy=39ksi
	ASTM F-3125, Gr.A-325N w/ASTM A-563 heavy hex nuts and ASTM F-436 washers (U.N.O.)
E. Expansion Bolts	Hilti Kwik Bolt III (or equal)
F. Epoxy Anchoring System	Hilti HIT-HY 270 (or equal) for anchorage to concrete

**2. Superstructure**

- All welders, shop and field, will be certified for the type of work involved. Submit certifications.
- All structural bolts will have heavy hex nuts.
- Unless shown otherwise all field welds will be 3/16 inch fillet welds.
- General Contractor to verify all existing dimensions, elevations, and conditions before fabricating steel.** Notify the engineer of any significant discrepancies
- Coatings - **Hot-dip galvanize steel according to ASTM A-123. Touch up welds and damaged areas with a field applied galvanizing according to ASTM A780.**
- General Contractor will be responsible for properly guying and bracing the structure to resist live, dead, wind, and construction loads during construction. An unstable condition exists until all the structural components are in place.
- General Contractor is responsible to coordinate locations of braces, bridging, and miscellaneous framing to avoid conflict with ducts, plumbing, or any other utility.



**NOTES**  
NO SCALE S7.00

**SECTION 7**  
3/4" = 1'-0" S7.00

