



# CECIL COUNTY PUBLIC SCHOOLS PURCHASING DEPARTMENT

GEORGE WASHINGTON CARVER EDUCATION LEADERSHIP CENTER  
201 BOOTH STREET • ELKTON, MD 21921

phone: 410.996.5429 • fax: 410.996.1081 • [www.ccps.org](http://www.ccps.org)

Jeffrey A. Lawson, Ed.D.  
Superintendent of Schools

Diana B. Hawley  
President, Board of Education

September 19, 2024

## CCPS RFP#25-04 – NORTH EAST MIDDLE/HIGH SCHOOL REPLACEMENT PROJECT

### ADDENDUM #7

(Previous Addendums 1-6 were issued in original RFP#24-15 and included in the 06A rebid issued bid documents)

**This addendum is to provide the pre-bid agenda and attendance list and issued revisions to the contract documents as noted below.** Proposers and related parties will be responsible for reading and understanding all documents, the scope of work, addenda and all related solicitation documents issued. These documents will become attached to and part of the solicitation and award of bid contract.

ITEM No. 1 **PRE-BID AGENDA.**

ITEM No. 2 **PRE-BID ATTENDANCE LIST.**

ITEM No. 3 **CONTRACT DRAWINGS AND SPECIFICATIONS- Post general bid issued.**

1. **ASIs 01 and 02**
2. **PR 01**
3. **CLOSED RFIs 001- 0027, 029-031, 034. (open RFIs are excluded)**

Authorized Signature/Date: \_\_\_\_\_

Printed Name/Title: \_\_\_\_\_

Contractor Name: \_\_\_\_\_

Address: \_\_\_\_\_

**\*Note: Bidder must sign and submit Addenda with the proposal submission. The same person signing the Addenda acknowledgement(s) must sign the Bid Form.**

**Our Mission:** CCPS serves equitably through positive relationships as a safe, collaborative community. We will ensure all learners acquire the knowledge, skills, and qualities to be responsible, caring, and ethical citizens.



NORTH EAST MIDDLE/HIGH SCHOOL REPLACEMENT PROJECT  
CCPS RFP#25-04

NON-MANDATORY PRE-BID MEETING – 06A REBID  
Tuesday, September 10, 2024 @ 10AM

AGENDA

- 1) WELCOME & INTRODUCTIONS (Attendees please sign in with your contact information)
- 2) CONTRACT METHOD – Construction Management Advisor (CMa) – Multiple Prime
- 3) MBE OUTREACH / GOOD FAITH EFFORT DISCUSSION

6A – General Trades has an overall MBE goal of 20% participation with no sub goals.

4) BID INFORMATION:

- a. Bids due Tuesday, September 24, 2024 at 2PM. Bids submitted late will not be accepted
- b. If CCPS is unexpectedly closed on 9/24, the bid opening will be Wednesday, 9/25 @ 2:00PM
- c. Bids will be received at:  
Cecil County Public Schools  
George Washington Carver Education Leadership Center  
201 Booth Street, Elkton, MD 21921
- d. Bids will be publicly opened and read aloud following bid deadline.
- e. Bid documents can be obtained electronically from HESS Construction by requesting via email to [NEMHS@HESSconstruction.com](mailto:NEMHS@HESSconstruction.com)
- f. Questions may be sent to HESS at the same email address. All questions shall be submitted by 3PM on Friday, September 13, 2024. Answers to questions will be issued via addendum.
- g. Material substitutions – See Division 1 for instructions
- h. Addenda to the bid documents will be distributed to all plan holders by HESS and posted to eMMA website <https://procurement.maryland.gov/>
- i. Contractor must be registered with eMMA prior to contract award
- j. Funding Source – State/Local CIP
- k. Prevailing Wage – YES
- l. Tax Exempt - NO
- m. Bids shall be valid for ninety (90) calendar days after the receipt of the bid.
- n. Qualification of Bidders – Owner reserves the right to reject any bid if evidence submitted by, or investigation of, such bidder fails to satisfy the Owner that such bidder is properly qualified.
- o. 100% Performance and Payment Bonds are required within ten (10) days of notice of award.
- p. Liquidated Damages - \$3,500/calendar day
- q. Unit Prices stipulated on bid form
- r. Prime Contract work scopes – see 00 90 00. No deviations are accepted. If you have any questions, please submit pre-bid RFI.

5) BID SUBMISSION AND FORM:

- a. Bids must be submitted in sealed envelope addressed to CCPS Purchasing Department and labeled with the following information:
  - i. CCPS RFP#25-04 North East Middle/High School Replacement Project
  - ii. Bid offeror' name
  - iii. Prime Bid Package # and Description





- b. All bids must be prepared on forms provided in the project manual and submitted in triplicate (label one as original)
- c. All blank spaces on bid form shall be filled out by offeror.
  - i. Date
  - ii. Name of Contractor/Company
  - iii. Base Bid amount
  - iv. Alternates:
    - Alt 14 – Middle School Classrooms
    - Alt 15 – High School CTE
    - Alt 17 – High School Classrooms
  - v. Addenda acknowledged (Add 1-6 already part of bid docs)
  - vi. Buy American Steel & Manufactured Goods Acknowledgement
- d. All bids must be signed and sealed by person having legal authority of offeror's firm.
- e. Conditional bids shall not be accepted. Do not include a separate bid proposal with clarifications/qualifications to scope of work.
- f. 5% Bid Bond and MBE Forms should be prepared based on Base Bid amount.

6) BID ATTACHMENTS (Checklist on Bid Form)

_____	Anti-Bribery Affidavit
_____	Bid Bond / Certified Check as stipulated above.
_____	Consent of Surety as stipulated above.
_____	Plan for Utilization of Minority Business Enterprises (If available)
_____	MBE Attachment D-1A
	Part 2 - MBE UTILIZATION & FAIR SOLICITATION AFFIDAVIT
	Part 3 - MBE PARTICIPATION SCHEDULE
	Part 4 - SIGNATURE PAGE
_____	Corporate Diversity Addendum
_____	Contractor's Qualification Statement & AIA A305
_____	Certification Regarding Debarment
_____	Non-Collusion Affidavit
_____	Maryland Contractor's License
_____	References
_____	Sex Offender Certification
_____	Bid Form

7) RE-BID DOCUMENTS

This new RFP #25-04 for the re-bid of the 06A – General Trades package includes the below listed updated Division 00 and 01 specification sections:

00 11 13 Advertisement for bids  
00 21 13 instructions to bidders  
00 31 00 Available project information  
00 41 00 – Bid Form  
00 43 39 MBE



00 80 00 Preliminary Construction Schedule

00 90 00 Prima package scopes

01 23 00 Alternate Bids

as well as all previous bid documents (original drawings and specification plus Addenda #1-6) from the original RFP #24-15. Any further changes to the bid documents will be issued in a future Addenda.

Where RFI responses provided in Addenda #1-6 from the original RFI #24-15 refer to the 9B bid package, that 9B scope of work is now part of the 6A bid package.

8) WORK COMPLETION SCHEDULE:

Contract Award:

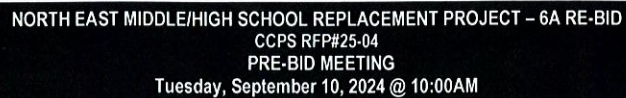
- a. 9/24/24 – Bid Opening
- b. 10/16/24 – Board of Education Approval of Contract
- c. 10/17/24 – Letter of Intent Provided
- d. 11/14/24 – IAC Approval of Contract, Execute Contract

<u>Milestone</u>	<u>Date</u>
<b>Phase 1 Construction Start</b>	6/15/24
Rough Grade Geothermal Field	10/31/24
Rough Grade Building Pad	11/29/24
Start of Structural Steel	4/14/25
Building Dry	1/15/26
Start of Wall Framing	6/15/25
Permanent Power	8/31/26
Complete HVAC Startup	12/1/26
<b>Phase 1 Substantial Completion</b>	5/15/27
<b>Phase 1 Final Completion</b>	7/15/27
<b>Phase 2 Construction Start</b>	6/15/27
<b>Phase 2 Substantial Completion</b>	5/15/28
<b>Phase 2 Final Completion</b>	6/15/28

9) QUESTIONS/COMMENTS

10) OPTIONAL SITE WALK

- a. If a firm would like additional site visits, please request an appointment through HESS.



COMPANY NAME	PRIME BIDDER OR SUBCONTRACTOR	BID PKG	CONTACT	PHONE	EMAIL
Hess		CM	Cameron MacKenzie	301-550-1724	cmackenzie@hessconstruction.com
Hess		CM	Joshua Postadan	301-520-5764	jpostadan@hessconstruction.com
GRIMM+PARKER		ARCHITECT	PAUL BRADSHAW	301-466-6249	pbradshaw@gparch.com
CCPS			Chuck Simpers		
HESS		CM	EDWARD	248-372-7765	trumb@hessconstruction.com
CCPS			Kerry Ratter	340-996-5401	KRatter@ccps.org



**NORTH EAST MIDDLE/HIGH SCHOOL REPLACEMENT PROJECT – 6A RE-BID**  
**CCPS RFP#25-04**  
**PRE-BID MEETING**  
**Tuesday, September 10, 2024 @ 10:00AM**

## SIGN-IN SHEET

COMPANY NAME	PRIME BIDDER OR SUBCONTRACTOR	BID PKG	CONTACT	PHONE	EMAIL
Brawner Builders	Prime	GA	Logan Vitek	410-344-3700	loganvitek@brawnbuilders.com
Strayer Contracting	Prime	6A	Andre Fiercy	410-686-4300	Estimating@strayercontracting.com
Oak Contracting	Prime	6A	Nathan Giordano	410-828-1200	njiordanooak contracting.com
A BODE CONSTRUCTION	PRIME	G A	Jean SINGLERON	200-565-0417	JSINGERON@ABODE-construction.com
Abode Construction	PRIME	G A	Mike DeGaHSELP	330-283-4559	mikedegahselpconstruction.com

**Logan Vitek**  
**Brawner**  
 Brawner Builders, Inc.  
 11011 McCormick Road  
 Suite 300  
 Hunt Valley, Maryland 21031  
 Phone: 410-666-2500  
 Fax: 410-666-2843  
 Cell: 410-344-3700  
 Direct: 410-584-1789  
[loganvitek@BrawnerBuilders.com](mailto:loganvitek@BrawnerBuilders.com)  
[www.BrawnerBuilders.com](http://www.BrawnerBuilders.com)

Celebrating 25 Years  
 1993 - 2018  
**Strayer Contracting, Inc.**  
 2200 Old Orems Rd. : Baltimore, MD 21220

Logan Vitek

**Brawner**

**Brawner Builders, Inc.**  
11011 McCormick Road  
Suite 300  
Hunt Valley, Maryland 21031

Phone: 410-666-2500  
Fax: 410-666-2843  
Cell: 410-344-3700  
Direct: 410-584-1789

loganvitek@BrawnerBuilders.com  
www.BrawnerBuilders.com



**Strayer Contracting, Inc.**

2200 Old Orems Rd. : Baltimore, MD 21220

**Andrew Fiery**  
*Sales Associate*

Phone: (410) 686-4300 • Cell: (410) 406-2366  
andrew.fiery@strayercontracting.com  
www.strayercontracting.com

# AIA<sup>®</sup> Document G710<sup>™</sup> – 2017

## Architect's Supplemental Instructions

**PROJECT:** *(name and address)*  
North East Middle/High School  
Cecil County Maryland

**CONTRACT INFORMATION:**  
Contract For: General Construction  
Date:

**ASI INFORMATION:**  
ASI Number: 001  
Date: August 9, 2024

**OWNER:** *(name and address)*  
Cecil County Public Schools  
George Washington Carver Center,  
201 Booth Street,  
Elkton, MD 21921

**ARCHITECT:** *(name and address)*  
Grimm + Parker Architecture Inc.

**CONTRACTOR:** *(name and address)*  
Multiple Prime Contractors

11720 Beltsville Drive  
Suite 600  
Calverton, MD 20705

Via HESS Construction Company LLC

The Contractor shall carry out the Work in accordance with the following supplemental instructions without change in Contract Sum or Contract Time. Proceeding with the Work in accordance with these instructions indicates your acknowledgment that there will be no change in the Contract Sum or Contract Time.

*(Insert a detailed description of the Architect's supplemental instructions and, if applicable, attach or reference specific exhibits.)*

For LEED compliance revise hardware types for doors A157 and A162 and, relocate thermostat from Office A137 to A140.

All as per attached narrative and revised drawings listed below.

Revised Drawings

**A306- DOOR SCHEDULE**

**M101A - LEVEL 01 AREA A PARTIAL FLOOR PLAN**

### ISSUED BY THE ARCHITECT:

Grimm + Parker Architecture Inc.

**ARCHITECT** *(Firm name)*



**SIGNATURE**

Paul Bradshaw, Principal  
**PRINTED NAME AND TITLE**

August 9 2024  
**DATE**



July 15, 2024

**PROJECT NAME** North East Middle & High School  
**PSC #** 07.044.23 / BTL  
**ASI.** 01  
**PROJECT#** GP22105.00

TO THE CONTRACT DRAWINGS AND SPECIFICATIONS FOR THE REFERENCED PROJECT, DATED 12/22/2023, AS PREPARED BY GRIMM & PARKER ARCHITECTS, 11720 BELTSVILLE DRIVE, SUITE 600, CALVERTON, MARYLAND 20705.

This Supplementary Instruction includes clarifications to the Contract Documents. The information includes the following:

**DRAWING ITEMS:**

**ARCHITECTURAL**

ITEM NO. A1                      SHEET A306 – DOOR SCHEDULE

Revise sheet A306A per attached reissued sheet:

**REVISE**                      Doors A157, A162, revise hardware type.

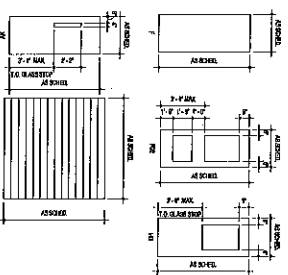
**MECHANICAL**

ITEM NO. M1                      SHEET M101A – LEVEL 01 AREA A PARTIAL FLOOR PLAN

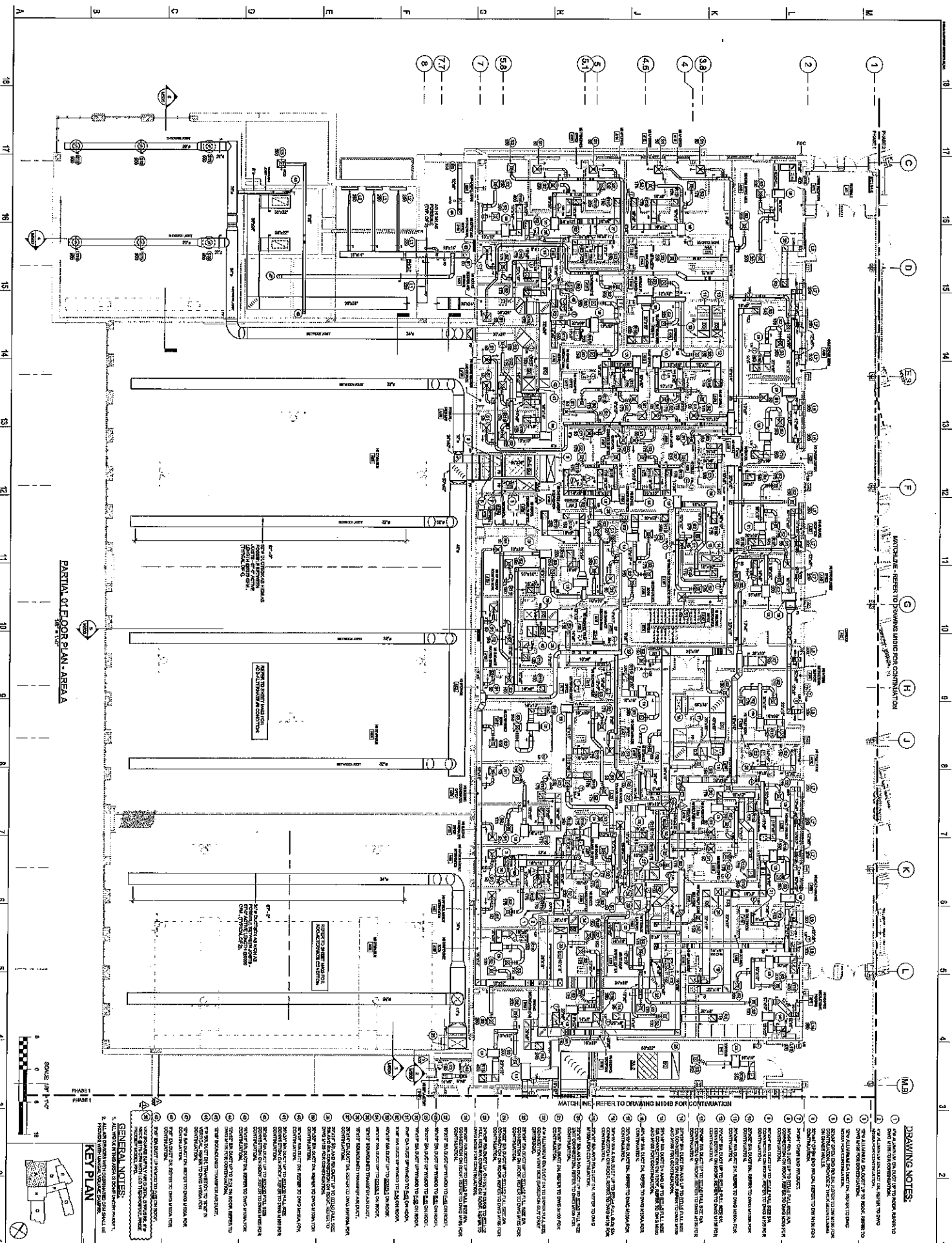
Revise sheet M101A per attached reissued sheet:

**REVISE**                      Thermostat location from HS SCHOOL COUNSELOR OFFICE A137 to Hs OUTSIDE AGENCY INTERVENTION A140.

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[illegible]





PARTIAL 01 FLOOR PLAN - AREA A

**DRAWING NOTES**

1. ALL MATERIALS SHALL BE OF THE BEST QUALITY AVAILABLE.
2. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE LATEST EDITIONS OF THE BUILDING CODES AND STANDARDS.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS.
4. THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL ADJACENT PROPERTIES AT ALL TIMES.
5. THE CONTRACTOR SHALL PROTECT ALL EXISTING UTILITIES AND STRUCTURES.
6. THE CONTRACTOR SHALL MAINTAIN ADEQUATE SAFETY BARRIERS AND SIGNAGE DURING CONSTRUCTION.
7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DISPOSING OF ALL DEBRIS AND WASTE MATERIALS.
8. THE CONTRACTOR SHALL MAINTAIN RECORDS OF ALL CONSTRUCTION ACTIVITIES.
9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY INSURANCE COVERAGE.
10. THE CONTRACTOR SHALL MAINTAIN ADEQUATE COMMUNICATION WITH THE ARCHITECT AND OWNER.
11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY LABORER SAFETY TRAINING.
12. THE CONTRACTOR SHALL MAINTAIN ADEQUATE RECORDS OF ALL MATERIALS AND LABOR USED.
13. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY INSPECTIONS AND APPROVALS.
14. THE CONTRACTOR SHALL MAINTAIN ADEQUATE RECORDS OF ALL CONSTRUCTION ACTIVITIES.
15. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY INSURANCE COVERAGE.
16. THE CONTRACTOR SHALL MAINTAIN ADEQUATE COMMUNICATION WITH THE ARCHITECT AND OWNER.
17. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY LABORER SAFETY TRAINING.
18. THE CONTRACTOR SHALL MAINTAIN ADEQUATE RECORDS OF ALL MATERIALS AND LABOR USED.

**GENERAL NOTES**

1. ALL MATERIALS SHALL BE OF THE BEST QUALITY AVAILABLE.
2. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE LATEST EDITIONS OF THE BUILDING CODES AND STANDARDS.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS.
4. THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL ADJACENT PROPERTIES AT ALL TIMES.
5. THE CONTRACTOR SHALL PROTECT ALL EXISTING UTILITIES AND STRUCTURES.
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17. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY LABORER SAFETY TRAINING.
18. THE CONTRACTOR SHALL MAINTAIN ADEQUATE RECORDS OF ALL MATERIALS AND LABOR USED.

**KEY PLAN**



LEVEL 01 AREA A PARTIAL FLOOR PLAN  
 NORTH EAST MIDDLE / HIGH SCHOOL  
 300 IRISHTOWN ROAD, NORTH EAST, MD

**G+P**  
 GRIHAM + PARKER  
 ARCHITECTS

11720 Bellevue Drive  
 Silver Spring, MD 20905  
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 FAX: 301.595.1001  
 www.alban-engineering.com

**M07A**  
 11/15/2017  
 11/15/2017



# AIA<sup>®</sup> Document G710<sup>™</sup> – 2017

## Architect's Supplemental Instructions

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**PROJECT:** *(name and address)*

North East Middle/High School  
Cecil County Maryland

**CONTRACT INFORMATION:**

Contract For: General Construction  
Date:

**ASI INFORMATION:**

ASI Number: 002  
Date: August 9, 2024

**OWNER:** *(name and address)*

Cecil County Public Schools  
George Washington Carver Center,  
201 Booth Street,  
Elkton, MD 21921

**ARCHITECT:** *(name and address)*

Grimm + Parker Architecture Inc.

**CONTRACTOR:** *(name and address)*

Multiple Contractors

11720 Beltsville Drive  
Suite 600  
Calverton, MD 20705

via: Hess Construction Company LLC

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The Contractor shall carry out the Work in accordance with the following supplemental instructions without change in Contract Sum or Contract Time. Proceeding with the Work in accordance with these instructions indicates your acknowledgment that there will be no change in the Contract Sum or Contract Time.

*(Insert a detailed description of the Architect's supplemental instructions and, if applicable, attach or reference specific exhibits.)*

Revisions to testing requirements of the specification sections listed below per the attached..

**06 16 43 - GYPSUM SHEATHING**

**07 27 26 - FLUID-APPLIED MEMBRANE AIR BARRIERS**

**09 91 23 - INTERIOR PAINTING**

**09 96 00 - HIGH-PERFORMANCE COATINGS**

**23 07 00 - HVAC INSULATION**

**26 32 13.16 - EMERGENCY ENGINE GENERATORS**

**26 41 13 - LIGHTNING PROTECTION FOR STRUCTURES**

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**ISSUED BY THE ARCHITECT:**

Grimm + Parker Architecture Inc.

**ARCHITECT** *(Firm name)*

**SIGNATURE**

Paul Bradshaw, Principal

**PRINTED NAME AND TITLE**

August 9 2024

**DATE**



August 9, 2024

**PROJECT NAME** North East Middle & High School  
**PSC #** 07.044.23 / BTL  
**ASI.** 02  
**PROJECT#** GP22105.00

TO THE CONTRACT DRAWINGS AND SPECIFICATIONS FOR THE REFERENCED PROJECT, DATED 12/22/2023, AS PREPARED BY GRIMM & PARKER ARCHITECTS, 11720 BELTSVILLE DRIVE, SUITE 600, CALVERTON, MARYLAND 20705.

This Supplementary Instruction includes clarifications to the Contract Documents. The information includes the following:

**SPECIFICATION ITEMS:**

- |            |   |
|------------|---|
| ITEM NO. 1 | <u>SECTION 06 16 43 - GYPSUM SHEATHING</u>  |
| ADD        | Paragraph 2.2.A added clarification for contractor option to provide field applied air barrier system or pre applied air barrier sheathing. |
| REVISE     | Paragraph 2.2.A to 2.2.B.   |
| REVISE     | Paragraph 3.2.D to add "(if selected as Contractor Option)."  |
| DELETE     | Paragraph 3.3.D Tests, in its entirety.   |
| REVISE     | Paragraph 3.3.E to 3.3.D.   |
| ITEM NO.2  | <u>SECTION 07 27 26 - FLUID-APPLIED MEMBRANE AIR BARRIERS ADD2 ASI02</u>  |
| DELETE     | Paragraph 3.5.C Testing Agency. in its entirety.  |
| REVISE     | Paragraph 3.5.D to 3.5.C.   |
| REVISE     | Paragraph 3.5.E to 3.5.D.   |
| REVISE     | Paragraph 3.5.F to 3.5.E.   |
| DELETE     | Paragraph 3.7 Field Test Schedule, in its entirety.   |
| ITEM NO. 3 | <u>SECTION 09 91 23 - INTERIOR PAINTING ASI02</u>   |
| DELETE     | Paragraph 3.4 Field Quality control in its entirety.  |
| REVISE     | Paragraph 3.5 to 3.4.   |
| REVISE     | Paragraph 3.6 to 3.5.   |
| ITEM NO. 4 | <u>SECTION 09 96 00 - HIGH-PERFORMANCE COATINGS ADD3 ASI02</u>  |
| DELETE     | Paragraph 3.4 Field Quality Control in its entirety.  |

**REVISE** Paragraph 3.5 to 3.4  
**REVISE** Paragraph 3.6 to 3.5  
**REVISE** Paragraph 3.7 to 3.6

ITEM NO. 5                    SECTION 23 07 00 – HVAC INSULATION

Revise section 23 07 00 per attached reissued sheets:

**REMOVE** Paragraph 3.12(A) & 3.12(B).  
**REVISE** Paragraph 3.12(C) to indicate random selection by Engineer.

ITEM NO. 6                    SECTION 26 32 13.16 – EMERGENCY ENGINE GENERATORS

Revise section 26 31 13.16 per attached reissued sheets:

**REMOVE** Paragraph 3.4(A).

ITEM NO. 7                    SECTION 26 41 13 – LIGHTNING PROTECTION FOR STRUCTURES

Revise section 26 41 13 per attached reissued sheets:

**REVISE** Paragraph 3.3(A) to clarify contractor responsibility.

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## **SECTION 06 16 43 - GYPSUM SHEATHING**

### **PART 1 - GENERAL**

#### **1.1 SUMMARY**

- A. Section Includes:
  - 1. Wall sheathing.
  - 2. Sheathing joint and penetration treatment.

#### **1.2 PREINSTALLATION MEETINGS**

- A. Preinstallation Conference: Conduct conference at project site.

#### **1.3 ACTION SUBMITTALS**

- A. Product Data: For each type of process and factory-fabricated product. Indicate component materials and dimensions and include construction and application details.
- B. Sustainability Submittals:
  - 1. Submit a completed Green Building Materials Certification Form that lists permanently installed products and indicates material costs. Attach letter from manufacturer(s) describing product(s) contribution to LEED v4, including, but not limited to, the following:
    - a. MR credit 2: Environmental Product Declarations (EPDs): Submit an Environmental Product Declaration.
    - b. MR credit 3: Sourcing of Raw Materials: Indicate percentage by weight of pre-consumer and post-consumer recycled content.
    - c. MR credit 4: Material Ingredients: Submit a Material Ingredient Report.
- C. Shop Drawings:
  - 1. Show locations and extent of sheathing, accessories, and assemblies specific to Project conditions.
  - 2. Include details for sheathing joints and cracks, counterflashing strips, penetrations, inside and outside corners, terminations, and tie-ins with adjoining construction.
  - 3. Include details of interfaces with other materials that form part of air barrier.
  - 4. Refer to Division 1 Section, "Special Project Procedures for Building Enclosure," for additional requirements including, but not limited to, coordination drawings and product compatibility.

#### **1.4 INFORMATIONAL SUBMITTALS**

- A. Field quality-control reports.

#### **1.5 QUALITY ASSURANCE**

- A. Mockups: Build mockups to set quality standards for materials and execution.
  - 1. Build integrated mockups of exterior wall assembly as indicated on Drawings, incorporating backup wall construction, window, storefront, door frame and sill, ties and other penetrations, and flashing to demonstrate crack and joint treatment and sealing of gaps, terminations, and penetrations of air-barrier sheathing assembly.
    - a. Coordinate construction of mockups to permit inspection of sheathing before external insulation and cladding are installed.
    - b. Include junction with roofing membrane, building corner condition, and foundation wall intersection.
    - c. If Architect determines mockups do not comply with requirements, reconstruct mockups until mockups are approved.

2. Approval of mockups does not constitute approval of deviations from the Contract Documents contained in mockups unless Architect specifically approves such deviations in writing.
  - B. Refer to Division 1 Section, "Special Project Procedures for Building Enclosure," for additional requirements including, but not limited to, coordination drawings and product compatibility.
- 1.6 DELIVERY, STORAGE, AND HANDLING
- A. Stack panels flat with spacers beneath and between each bundle to provide air circulation. Protect sheathing from weather by covering with waterproof sheeting, securely anchored. Provide for air circulation around stacks and under coverings.

## PART 2 - PRODUCTS

### 2.1 PERFORMANCE REQUIREMENTS

- A. Air-Barrier and Water-Resistant Glass-Mat Gypsum Sheathing Performance: Air-barrier and water-resistant glass-mat gypsum sheathing assembly, and seals with adjacent construction, shall be capable of performing as a continuous air barrier and as a liquid-water drainage plane flashed to discharge to the exterior incidental condensation or water penetration. Air-barrier assemblies shall be capable of accommodating substrate movement and of sealing substrate expansion and control joints, construction material changes, penetrations, tie-ins to other installed air barriers, and transitions at perimeter conditions without deterioration and air leakage exceeding specified limits.
- B. Sustainability Material Requirements:
  1. MR credit 2: Environmental Product Declarations (EPDs): Product must have at least one of the following publicly available resources.
    - a. Industry-Wide Environmental Product Declaration (EPD) that conforms to ISO 14025 and EN 15804 or ISO 21930 with a cradle to gate scope. Manufacturer must be recognized as a participant.
    - b. Product-specific Type III Environmental Product Declaration (EPD) that conforms to ISO 14025 and EN 15804 or ISO 21930 with a cradle to gate scope. Manufacturer and specified product name must be recognized as a participant.
  2. MR credit 4: Material Ingredients: Product must have a publicly available material ingredient report that demonstrates chemical inventory to at least 1,000 ppm or 0.1%. Manufacturer and product name must be recognized as a participant.

### 2.2 WALL SHEATHING

- A. Contractor has the option to provide field-applied air barrier system (Section 07 27 26) over glass-mat gypsum sheathing or pre-applied air barrier sheathing product specified within this section; provide the specified ABAA QAP inspections and air barrier testing, with selection of either option.

A.B. Glass-Mat Gypsum Sheathing: ASTM C1177/C1177M.

- a. CertainTeed Corporation; GlasRoc.
- b. CertainTeed Gypsum; CertainTeed GlasRoc Type X Sheathing.
- c. Continental Building Products, LLC; Weather Defense.
- d. Georgia-Pacific Gypsum LLC; Dens-Glass Gold.
- e. National Gypsum Company; Gold Bond eXP Sheathing.
- f. USG Corporation; Securock.

2. Type and Thickness: Type X, 5/8 inch thick.

- B.C. Air-Barrier and Water-Resistant Glass-Mat Gypsum Sheathing: ASTM C1177/C1177M, Type X, coated fiberglass mat gypsum sheathing with integral weather-resistant barrier and air barrier complying with ASTM E2178.

- a. USG Corporation; Securock ExoAir 430.
2. Thickness: 5/8 inch thick.
3. Edges: Square.
4. Flashing and Transitions Strips: As acceptable to sheathing manufacturer.
5. Air Permeance: Maximum 0.004 cfm/sq. ft. of surface area at 1.57-lbf/sq. ft. pressure difference when tested according to ASTM E2178.
6. Vapor Permeance: Minimum 20 perms when tested according to ASTM E96/E96M, Desiccant Method, Procedure A.
7. Sheathing Assembly Air Leakage: Maximum 0.04 cfm/sq. ft. of surface area at 1.57 lbf/sq. ft. when tested according to ASTM E2357.
8. Fire Propagation Characteristics: Complies with NFPA 285 testing as part of an approved assembly.
9. UV Resistance: Can be exposed to sunlight for [30] [90] [180] <Insert number> days according to manufacturer's written instructions.
10. Provide primers, transition strips, termination strips, joint reinforcing fabric and strips, joint sealants, counterflashing strips, flashing sheets and metal termination bars, termination mastic, substrate patching materials, adhesives, tapes, foam sealants, lap sealants, and other accessory materials that are recommended in writing by sheathing manufacturer to produce a complete air-barrier assembly and that are compatible with primary air-barrier material and adjacent construction to which they may seal.

## 2.3 FASTENERS

- A. General: Provide fasteners of size and type indicated that comply with requirements specified in this article for material and manufacture.
  1. For wall sheathing, provide fasteners with organic-polymer or other corrosion-protective coating having a salt-spray resistance of more than 800 hours according to ASTM B117.
- B. Power-Driven Fasteners: Fastener systems with an evaluation report acceptable to authorities having jurisdiction, based on ICC-ES AC70.
- C. Screws for Fastening Gypsum Sheathing to Cold-Formed Metal Framing: Steel drill screws, in length recommended by sheathing manufacturer for thickness of sheathing to be attached.
  1. For steel framing less than 0.0329 inch thick, use screws that comply with ASTM C1002.
  2. For steel framing from 0.033 to 0.112 inch thick, use screws that comply with ASTM C954.

## 2.4 SHEATHING JOINT-AND-PENETRATION TREATMENT MATERIALS

- A. Fiber Reinforced Fill Coat and Seam Treatment:
  1. Products: Subject to compliance with requirements and compatibility acceptance of air barrier and sheathing manufacturers, provide fiber-reinforced Silyl-Terminated-Polymer (STP) compound.
    - a. Polyguard Products, Inc.; Airluk STPE Detail-N-Joint.
    - b. Prosoco, Inc.; R-Guard Joint and Seam Filler.
    - c. Equal fiber-reinforced STP compound acceptable to air barrier manufacturer.
  2. Provide treatment at joints, fastener heads and around penetrations.

## PART 3 - EXECUTION

### 3.1 INSTALLATION, GENERAL

- A. Do not use materials with defects that impair quality of sheathing or pieces that are too small to use with minimum number of joints or optimum joint arrangement. Arrange joints so that pieces do not span between fewer than three support members.



- B. Cut panels at penetrations, edges, and other obstructions of work; fit tightly against abutting construction unless otherwise indicated.
- C. Securely attach to substrate by fastening as indicated, complying with the following:
  - 1. Table 2304.9.1, "Fastening Schedule," in the ICC's International Building Code.
  - 2. ICC-ES evaluation report for fastener.
- D. Coordinate wall sheathing installation with flashing and joint-sealant installation so these materials are installed in sequence and manner that prevent exterior moisture from passing through completed assembly.
- E. Do not bridge building expansion joints; cut and space edges of panels to match spacing of structural support elements.
- F. Coordinate sheathing installation with installation of materials installed over sheathing so sheathing is not exposed to precipitation or left exposed at end of the workday when rain is forecast.

### 3.2 GYPSUM SHEATHING INSTALLATION

- A. Comply with GA-253 and with manufacturer's written instructions.
  - 1. Fasten gypsum sheathing to cold-formed metal framing with screws.
  - 2. Install panels with a 3/8-inch gap where non-load-bearing construction abuts structural elements.
  - 3. Install panels with a 1/4-inch gap where they abut masonry or similar materials that might retain moisture, to prevent wicking.
- B. Apply fasteners so heads bear tightly against face of sheathing, but do not cut into facing.
- C. Fill joints, fastener heads and around penetrations, according to product manufacturer's instructions and accepted within mockups of exterior assemblies to receive air barrier materials.
  - 1. Apply elastomeric sealant to joints and fasteners and trowel flat. Apply sufficient amount of sealant to completely cover joints and fasteners after troweling. Seal other penetrations and openings.
- D. Air-Barrier and Water-Resistant Glass-Mat Gypsum Sheathing (if selected as Contractor option):
  - 1. Install accessory materials according to sheathing manufacturer's written instructions and details to form a seal with adjacent construction, to seal fasteners, and ensure continuity of air and water barrier.
    - a. Coordinate the installation of sheathing with installation of roofing membrane and base flashing to ensure continuity of air barrier with roofing membrane.
    - b. Install transition strip on roofing membrane or base flashing, so that a minimum of 3 inches of coverage is achieved over each substrate.
  - 2. Connect and seal sheathing material continuously to air barriers specified under other Sections as well as to roofing-membrane air barrier, concrete below-grade structures, floor-to-floor construction, exterior glazing and window systems, glazed curtain-wall systems, storefront systems, exterior louvers, exterior door framing, and other construction used in exterior wall openings, using accessory materials.
  - 3. Apply joint sealants forming part of air-barrier assembly within manufacturer's recommended application temperature ranges. Consult manufacturer when sealant cannot be applied within these temperature ranges.
  - 4. Wall Openings: Prime concealed, perimeter frame surfaces of windows, curtain walls, storefronts, and doors. Apply transition strip, so that a minimum of 3 inches of coverage is achieved over each substrate. Maintain 3 inches of full contact over firm bearing to perimeter frames, with not less than 1 inch of full contact.
    - a. Transition Strip: Roll firmly to enhance adhesion.

- b. Preformed Silicone Extrusion: Set in full bed of silicone sealant applied to walls, frame, and air-barrier material.
5. Fill gaps in perimeter frame surfaces of windows, curtain walls, storefronts, doors, and miscellaneous penetrations of sheathing material with foam sealant.
6. Seal strips and transition strips around masonry reinforcing or ties and penetrations with termination mastic.
7. Seal top of through-wall flashings to sheathing with an additional 6-inch- wide, transition strip.
8. Seal exposed edges of strips at seams, cuts, penetrations, and terminations not concealed by metal counterflashings or ending in reglets with termination mastic.
9. Repair punctures, voids, and deficient lapped seams in strips and transition strips extending 6 inches beyond repaired areas in strip direction.

### 3.3 FIELD QUALITY CONTROL

- A. ABAA Quality Assurance Program: Perform examinations, preparation, installation, testing, and inspections under ABAA's Quality Assurance Program, including the inspection of applied sheathing prior to application of air barrier materials.
  1. Services to be engaged by Contractor with no additional cost to the Owner.
  2. Allow inspectors access to scaffolding and work areas as needed to perform tests and inspections. Retesting of materials that fail to comply with specified requirements shall be done at Contractor's expense.
- B. Contractor Quality Control Inspections:
  1. Compatible materials have been used.
  2. Transitions at changes in direction and structural support at gaps have been provided.
  3. Connections between assemblies (sheathing and sealants) have complied with requirements for cleanliness, surface preparation and priming, structural support, integrity, and continuity of seal.
  4. All penetrations have been sealed.
- C. Additional Contractor Quality Control Inspections - Air-Barrier and Water-Resistant Glass-Mat Gypsum Sheathing: Air-barrier and water-resistant glass-mat gypsum sheathing, accessories, and installation are subject to inspection for compliance with requirements. Inspections may include the following:
  1. Continuity of air-barrier system has been achieved throughout the building envelope with no gaps or holes.
  2. Laps in strips and transition strips have complied with minimum requirements and have been shingled in the correct direction (or mastic has been applied on exposed edges), with no fishmouths.
  3. Termination mastic has been applied on cut edges.
  4. Strips and transition strips have been firmly adhered to substrate.
- ~~D. Tests — Air-Barrier and Water-Resistant Glass-Mat Gypsum Sheathing: Construction Manager will assign a qualified independent testing and inspection agency, under separate contract to the Owner, to perform field tests and inspections and prepare reports. As determined by testing agency, tests may be from among the following tests:~~
  - ~~1. Air Leakage Location Testing: Air barrier sheathing assemblies will be tested for evidence of air leakage according to ASTM E1186, chamber pressurization or depressurization with smoke tracers.~~
  - ~~2. Air Leakage Volume Testing: Air barrier assemblies will be tested for air leakage rate according to ASTM E783 or ASTM E2357.~~
  - ~~3. Air barriers will be considered defective if they do not pass tests and inspections.~~
  - ~~4. Repair damage to air barriers caused by testing; follow manufacturer's written instructions.~~

E.D. Prepare test and inspection reports.

**END OF SECTION 06 16 43**

## **SECTION 07 27 26 - FLUID-APPLIED MEMBRANE AIR BARRIERS**

### **PART 1 - GENERAL**

#### **1.1 SUMMARY**

**A. Section Includes:**

1. Vapor-permeable, fluid-applied air barriers.

#### **1.2 DEFINITIONS**

- A. Air-Barrier Accessory:** A transitional component of the air barrier that provides continuity.
- B. Air-Barrier Assembly:** The collection of air-barrier materials applied to an opaque wall, including joints and junctions to abutting construction, to bridge and seal air leakage pathways and gaps; including all accessories necessary for a complete installation.
- C. Air-Barrier Material:** A primary element that provides a continuous barrier to the movement of air.

#### **1.3 PREINSTALLATION MEETINGS**

**A. Preinstallation Conference:** Conduct conference at project site no less than three weeks prior to work.

1. **Participants:** Owner, Architect, Contractor, air barrier installer, air barrier manufacturer's representative, and installers whose work interfaces with or affects air barrier, including but not limited to installers of masonry, sheathing products, flashings, roofing, wall panel systems, curtainwall, storefront, doors, windows, and louvers.
2. **Agenda:**
  - a. Review air-barrier requirements and installation, special details, mockups, air-leakage and bond testing, air-barrier protection, and work scheduling that covers air barriers.
  - b. Review and finalize construction schedule and verify availability of materials, Installer's personnel, equipment, and facilities needed to make progress and avoid delays.
  - c. Include review of penetrations, building deflection joints, and other construction affecting air barrier installation.
  - d. Review methods, procedures, and construction sequence for air barrier and related construction, including review of manufacturer's written product specifications and installation instructions.
  - e. Review requirements for coordination of air barrier with adjacent materials and construction.
  - f. Review substrate conditions and finishes required to comply with manufacturer's requirements for installation of air barrier including fastening and flatness of substrate.

**B. Air Barrier Manufacturer's Acceptance:** Obtain manufacturer's acceptance of air barrier for intended use shown on Drawings and of compatibility of air barrier with all materials in contact with air barrier.

**C. Refer to Division 1 Sections, "Special Project Procedures for Building Enclosure" and "Exterior Enclosure Performance Requirements," for additional requirements.**

**D. Document proceedings, including corrective measures and actions required, and furnish copy of record to each participant.**

**1.4 ACTION SUBMITTALS**

- A. **Product Data:** Include manufacturer's written instructions for evaluating, preparing, and treating each substrate; technical data; dry film thickness; and tested physical and performance properties of products.
- B. **Shop Drawings:** For air-barrier assemblies.
  - 1. Show locations and extent of air-barrier materials, accessories, and assemblies specific to Project conditions.
  - 2. Include details for substrate joints and cracks, counterflashing strips, penetrations, inside and outside corners, terminations, and tie-ins with adjoining construction.
  - 3. Include details of interfaces with other materials that form part of air barrier including, but not limited to, the following as applicable to this Project:
    - a. Connection of air barrier in walls to roof membrane.
    - b. Connection of air barrier in walls to air barrier in foundation.
    - c. Application of air barrier to seismic and expansion joints.
    - d. Application of air barrier to openings and penetrations by windows, storefront framing, curtain wall framing, door frames, piping, conduit, ducts, masonry ties, screws, bolts, and similar components and penetrations.
    - e. Application of air barrier to exterior wall construction.
  - 4. Include details of mockups.

**1.5 INFORMATIONAL SUBMITTALS**

- A. **Qualification Data - Installer:** Include list of ABAA-certified installers and supervisors employed by installer, who work on Project.
  - 1. Submit evidence that Installer is currently accredited under ABAA Quality Assurance Program, including accreditation number for ABAA Certified Installers.
- B. **Certifications:**
  - 1. **Product Certificates:** From air-barrier manufacturer, certifying compatibility of air barriers and accessory materials with Project materials that connect to or that come in contact with the barrier.
  - 2. **Acceptance of Materials:** Submit document from air-barrier manufacturer certifying acceptance of materials proposed for use with air barrier that are not specified in this Section.
  - 3. **Substrate Compatibility:** Submit document from air-barrier manufacturer certifying that air barrier system materials used to adhere air barrier to substrate are chemically compatible.
  - 4. **ABAA Certification:** Submit evidence that air barrier system complies with requirements of ABAA Quality Assurance program specified in Quality Assurance article in this Section.
- C. **Product Test Reports:** For each air-barrier assembly, submit documentation from an approved independent testing laboratory certifying compliance with the air leakage rates of the air barrier membrane assembly, including primary membrane, primer and sealants have been tested to meet ASTM E2357, ICC-AC 38, Class A flame spread index and smoke development per ASTM E-84.
- D. **Field Quality-Control Reports:** Submit test results from testing specified in Field Quality Control article in Part 3 of this Section.
- E. **ABAA Registration:** Provide registration letter from ABAA to document job has been registered with ABAA to be performed and monitored in accordance with the ABAA QAP.
- F. **ABAA QAP Report:** Submit copy of ABAA Quality Assurance Program Report.

**1.6 QUALITY ASSURANCE**

- A. Installer Qualifications: An entity that employs installers and supervisors who are trained and approved by manufacturer.
  - 1. Installer shall be licensed by ABAA according to ABAA's Quality Assurance Program and shall employ ABAA-certified installers and supervisors on Project.
- B. Mockups: Build mockups to set quality standards for materials and execution.
  - 1. Build integrated mockups of exterior wall assembly as indicated on Drawings, incorporating backup wall construction, external cladding, window, storefront, door frame and sill, insulation, ties and other penetrations, and flashing to demonstrate surface preparation, crack and joint treatment, application of air barriers, and sealing of gaps, terminations, and penetrations of air-barrier assembly.
    - a. Coordinate construction of mockups to permit inspection and testing of air barrier before external insulation and cladding are installed.
    - b. Include junction with roofing membrane, building corner condition, and foundation wall intersection.
    - c. If Architect determines mockups do not comply with requirements, reconstruct mockups and apply air barrier until mockups are approved.
  - 2. Approval of mockups does not constitute approval of deviations from the Contract Documents contained in mockups unless Architect specifically approves such deviations in writing.
  - 3. Subject to compliance with requirements, approved mockups may become part of the completed Work if undisturbed at time of Substantial Completion.

**1.7 DELIVERY, STORAGE, AND HANDLING**

- A. Remove and replace liquid materials that cannot be applied within their stated shelf life.
- B. Protect stored materials from direct sunlight.

**1.8 FIELD CONDITIONS**

- A. Environmental Limitations: Apply air barrier within the range of ambient and substrate temperatures recommended in writing by air-barrier manufacturer.
  - 1. Protect substrates from environmental conditions that affect air-barrier performance.
  - 2. Do not apply air barrier to a damp or wet substrate or during snow, rain, fog, or mist.

**1.9 WARRANTY**

- A. Provide minimum 5-year assembly warranty.

**PART 2 - PRODUCTS****2.1 SOURCE LIMITATIONS**

- A. Obtain primary air-barrier materials and air-barrier accessories from single manufacturer.

**2.2 PERFORMANCE REQUIREMENTS**

- A. Air-Barrier Performance: Air-barrier assembly and seals with adjacent construction shall be capable of performing as a continuous air barrier and as a liquid-water drainage plane flashed to discharge to the exterior incidental condensation or water penetration. Air-barrier assemblies shall be capable of accommodating substrate movement and of sealing substrate expansion and control joints, construction material changes, penetrations, tie-ins to installed waterproofing, and transitions at perimeter conditions without deterioration and air leakage exceeding specified limits.

1. Movement/Control Joints: Provide air barrier assembly capable of accommodating movements of building and building materials, including providing expansion and control joints and applicable accessories required to accommodate these movements.
    - a. Provide air barrier assembly capable of withstanding combined design wind, fan, and stack pressures, positive and negative, on building envelope without damage or displacement and transferring loads to structure.
    - b. Provide air barrier assembly materials that do not displace adjacent materials and air barrier assembly materials under full load.
    - c. Provide air barrier assembly joined in airtight and flexible manner to air barrier materials incorporated into adjacent construction and that allows relative movement of assemblies due to thermal and moisture variations, creep, and anticipated seismic movement.
  2. Connections to Adjacent Materials: Provide connections to adjacent materials that prevent air leakage at following locations:
    - a. Foundation and walls, including penetrations, ties and anchors.
    - b. Walls, windows, curtain walls, storefronts, louvers and doors.
    - c. Different assemblies and fixed openings within those assemblies.
    - d. Wall and roof connections.
    - e. Floors/soffits over unconditioned space.
    - f. Walls, floor and roof across construction, control and expansion joints.
    - g. Walls, floors and roof to utility, pipe and duct penetrations.
    - h. Seismic and expansion joints.
    - i. All other potential air leakage pathways in building envelope.
- B. Air-Barrier Assembly Air Leakage: Maximum 0.04 cfm/sq. ft. of surface area at 1.57 lbf/sq. ft., when tested according to ASTM E2357.
- 2.3 AIR BARRIERS, VAPOR PERMEABLE
- A. Vapor-Permeable Air Barrier: Synthetic polymer membrane with an installed dry film thickness, according to manufacturer's written instructions, of 30 mils or thicker over smooth, void-free substrates.
1. Synthetic Polymer Type:
    - a. Products: Subject to compliance with requirements, provide one of the following:
      - 1) Carlisle Coatings & Waterproofing Inc.; Fire Resist Barritech VP.
      - 2) GCP Applied Technologies Inc.; Perm-A-Barrier VP or Perm-A-Barrier VP 20 LT.
      - 3) Henry Company; Air-Bloc All Weather.
      - 4) Tremco Incorporated; ExoAir 230.
      - 5) W.R. Meadows, Inc.; Air-Shield LMP.
  2. Physical and Performance Properties:
    - a. Air Permeance: Maximum 0.004 cfm/sq. ft. of surface area at 1.57-lbf/sq. ft. pressure difference; ASTM E2178.
    - b. Vapor Permeance: Minimum 10 perms; ASTM E96/E96M, Desiccant Method, Procedure A.
    - c. Ultimate Elongation: Minimum 200 percent; ASTM D412, Die C.
    - d. Adhesion to Substrate: Minimum 16 lbf/sq. in. when tested according to ASTM D4541.
    - e. Fire Propagation Characteristics: Passes NFPA 285 testing as part of an approved assembly.
    - f. UV Resistance: Can be exposed to sunlight for 180 days according to manufacturer's written instructions.



**2.4 ACCESSORY MATERIALS**

- A. Requirement: Provide primers, transition strips, termination strips, joint reinforcing fabric and strips, joint sealants, counterflashing strips, flashing sheets and metal termination bars, termination mastic, substrate patching materials, adhesives, tapes, foam sealants, lap sealants, and other accessory materials that are recommended in writing by air-barrier manufacturer to produce a complete air-barrier assembly and that are compatible with primary air-barrier material and adjacent construction to which they may seal.
- B. Primer: Liquid waterborne primer recommended for substrate by air-barrier material manufacturer.
- C. Stainless-Steel Sheet: ASTM A240/A240M, Type 304, 0.0250 inch thick, and Series 300 stainless-steel fasteners.
- D. Preformed Silicone Extrusion: Manufacturer's standard system consisting of cured low-modulus silicone extrusion, sized to fit opening widths, with a single-component, neutral-curing, Class 100/50 (low-modulus) silicone sealant for bonding extrusions to substrates.
  - 1. Products: Subject to compliance with requirements, provide one of the following:
    - a. GE Construction Sealants; Momentive Performance Materials Inc.
    - b. Pecora Corporation; Pecora XL-Span or Sil-Span.
    - c. The Dow Chemical Company; Dow Corning® 123 Silicone Seal.
    - d. Tremco Incorporated; Spectrem Simple Seal.

**PART 3 - EXECUTION****3.1 EXAMINATION**

- A. Examine substrates, areas, and conditions, with Installer present, for compliance with requirements and other conditions affecting performance of the Work.
  - 1. Verify that substrates are sound and free of oil, grease, dirt, excess mortar, or other contaminants.
  - 2. Verify that substrates have cured and aged for minimum time recommended in writing by air-barrier manufacturer.
  - 3. Verify that substrates are visibly dry and free of moisture. Test concrete substrates for capillary moisture by plastic sheet method according to ASTM D4263.
  - 4. Verify that masonry joints are flush and completely filled with mortar.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

**3.2 SURFACE PREPARATION**

- A. Clean, prepare, treat, fill, and seal substrate and joints and cracks in substrate according to manufacturer's written instructions and details. Provide clean, dust-free, and dry substrate for air-barrier application.
- B. Mask off adjoining surfaces not covered by air barrier to prevent spillage and overspray affecting other construction.
- C. Remove grease, oil, bitumen, form-release agents, paints, curing compounds, and other penetrating contaminants or film-forming coatings from concrete.
- D. Remove fins, ridges, mortar, and other projections and fill honeycomb, aggregate pockets, holes, and other voids in concrete with substrate-patching material.
- E. Remove excess mortar from masonry ties, shelf angles, and other obstructions.
- F. At changes in substrate plane, apply sealant or termination mastic beads at sharp corners and edges to form a smooth transition from one plane to another.

- G. Cover gaps in substrate plane and form a smooth transition from one substrate plane to another with stainless-steel sheet mechanically fastened to structural framing to provide continuous support for air barrier.
- H. Bridge isolation joints, expansion joints and discontinuous wall-to-wall, deck-to-wall, and deck-to-deck joints with air-barrier accessory material that accommodates joint movement according to manufacturer's written instructions and details.

### 3.3 INSTALLATION OF ACCESSORIES

- A. Install accessory materials according to air-barrier manufacturer's written instructions and details to form a seal with adjacent construction and ensure continuity of air and water barrier.
  - 1. Coordinate the installation of air barrier with installation of roofing membrane and base flashing to ensure continuity of air barrier with roofing membrane.
  - 2. Install transition strip on roofing membrane or base flashing so that a minimum of 3 inches of coverage is achieved over each substrate.
  - 3. Unless manufacturer recommends in writing against priming, apply primer to substrates at required rate and allow it to dry.
  - 4. Apply primer to substrates at required rate and allow it to dry. Limit priming to areas that will be covered by air-barrier material on same day. Reprime areas exposed for more than 24 hours.
- B. Connect and seal exterior wall air-barrier material continuously to roofing-membrane air barrier, concrete below-grade structures, floor-to-floor construction, exterior glazing and window systems, glazed curtain-wall systems, storefront systems, exterior louvers, exterior door framing, and other construction used in exterior wall openings, using accessory materials.
- C. At end of each working day, seal top edge of strips and transition strips to substrate with termination mastic.
- D. Apply joint sealants forming part of air-barrier assembly within manufacturer's recommended application temperature ranges. Consult manufacturer when sealant cannot be applied within these temperature ranges.
- E. Wall Openings: Prime concealed, perimeter frame surfaces of windows, curtain walls, storefronts, and doors. Apply preformed silicone extrusion so that a minimum of 3 inches of coverage is achieved over each substrate. Maintain 3 inches of full contact over firm bearing to perimeter frames, with not less than 1 inch of full contact.
  - 1. Preformed Silicone Extrusion: Set in full bed of silicone sealant applied to walls, frame, and air-barrier material.
- F. Fill gaps in perimeter frame surfaces of windows, curtain walls, storefronts, and doors, and miscellaneous penetrations of air-barrier material with foam sealant.
- G. Seal top of through-wall flashings to air barrier with an additional 6-inch- wide, transition strip.
- H. Seal exposed edges of strips at seams, cuts, penetrations, and terminations not concealed by metal counterflashings or ending in reglets with termination mastic.
- I. Repair punctures, voids, and deficient lapped seams in strips and transition strips. Slit and flatten fishmouths and blisters. Patch with transition strips extending 6 inches beyond repaired areas in strip direction.

### 3.4 INSTALLATION OF PRIMARY AIR-BARRIER MATERIAL

- A. Apply air-barrier material to form a seal with strips and transition strips and to achieve a continuous air barrier according to air-barrier manufacturer's written instructions and details. Apply air-barrier material within manufacturer's recommended application temperature ranges.
  - 1. Unless manufacturer recommends in writing against priming, apply primer to substrates at required rate and allow it to dry.

2. Limit priming to areas that will be covered by air-barrier material on same day. Reprime areas exposed for more than 24 hours.
  3. Where multiple prime coats are needed to achieve required bond, allow adequate drying time between coats.
- B. Air Barriers: Apply continuous unbroken air-barrier material to substrates according to the following thickness. Apply air-barrier material in full contact around protrusions such as masonry ties.
1. Vapor-Permeable, Air Barrier: Total dry film thickness as recommended in writing by manufacturer to comply with performance requirements, but not less than 30 mils, applied in one or more equal coats.
- C. Do not cover air barrier until it has been tested and inspected by testing agency.
- D. Correct deficiencies in or remove air barrier that does not comply with requirements; repair substrates and reapply air-barrier components.

### 3.5 FIELD QUALITY CONTROL

- A. ABAA Quality Assurance Program: Perform examinations, preparation, installation, testing, and inspections under ABAA's Quality Assurance Program.
1. Services to be engaged by Contractor with no additional cost to the Owner.
  2. Allow inspectors access to scaffolding and work areas as needed to perform tests and inspections. Retesting of materials that fail to comply with specified requirements shall be done at Contractor's expense.
- B. ABAA Installer Testing and Audits: Cooperate with ABAA testing agency, allowing ABAA testing agency access to work areas and staging and notifying ABAA testing agency in writing of schedule for Work of this Section to allow sufficient time for testing and inspection by ABAA testing agency. Do not cover Work of this section until testing and inspection by ABAA testing agency has been completed and accepted.
1. Cost of ABAA Testing and Audit: Arrange and pay for site inspections and testing by ABAA to verify conformance of air barrier with specified requirements, air barrier system manufacturer's installation instructions, and ABAA Site Quality Assurance Program.
  2. Extent of Audit and Testing: Provide audit and testing as follows:
    - a. Up to 10,000 sq. ft.: 1 audit/test.
    - b. 10,001 to 35,000 sq. ft.: 2 audits/tests.
    - c. 35,001 to 75,000 sq. ft.: 3 audits/tests.
    - d. 75,001 to 125,000 sq. ft.: 4 audits/tests.
    - e. 125,001 to 200,000 sq. ft.: 5 audits/tests.
    - f. 200,001 sq. ft. and over: 6 audits/tests.
  3. Reporting: Submit written audit/testing reports to Architect within 10 working days of date inspection and testing performed.
  4. Correction: If audit and testing reveals defects, promptly remove and replace defective air barriers at no additional cost to Owner.
- ~~C. Testing Agency: Construction Manager will assign a qualified independent testing and inspection agency, under separate contract to the Owner, to perform field tests and inspections and prepare reports.~~
- ~~1. Inspections: Air barrier materials, accessories, and installation are subject to inspection for compliance with requirements. Inspections may include the following:~~
    - ~~a. Continuity of air barrier system has been achieved throughout the building envelope with no gaps or holes.~~
    - ~~b. Air barrier dry film thickness.~~
    - ~~c. Adhesion tests.~~

- ~~d. Continuous structural support of air barrier system has been provided.~~
- ~~e. Masonry and concrete surfaces are smooth, clean, and free of cavities, protrusions, and mortar droppings.~~
- ~~f. Site conditions for application temperature and dryness of substrates have been maintained.~~
- ~~g. Maximum exposure time of materials to UV deterioration has not been exceeded.~~
- ~~h. Surfaces have been primed, if applicable.~~
- ~~i. Laps in strips and transition strips have complied with minimum requirements and have been shingled in the correct direction (or mastic has been applied on exposed edges), with no fishmouths.~~
- ~~j. Termination mastic has been applied on cut edges.~~
- ~~k. Strips and transition strips have been firmly adhered to substrate.~~
- ~~l. Compatible materials have been used.~~
- ~~m. Transitions at changes in direction and structural support at gaps have been provided.~~
- ~~n. Connections between assemblies (air barrier and sealants) have complied with requirements for cleanliness, surface preparation and priming, structural support, integrity, and continuity of seal.~~
- ~~o. All penetrations have been sealed.~~

2. Tests: Refer to schedule at end of this Section.

3. Air Leakage Location Testing: Air barrier assemblies will be tested for evidence of air leakage according to ASTM E1186, chamber pressurization or depressurization with smoke tracers or ASTM E1186, chamber depressurization using detection liquids.

4. Air Leakage Volume Testing: Air barrier assemblies will be tested for air leakage rate according to ASTM E783.

5. Adhesion Testing: Air barrier assemblies will be tested for required adhesion to substrate according to ASTM D4541 for each 600 sq. ft. of installed air barrier or part thereof.

D.C. Air barriers will be considered defective if they do not pass tests and inspections.

1. Apply additional air-barrier material, according to manufacturer's written instructions, where inspection results indicate insufficient thickness.
2. Remove and replace deficient air-barrier components for retesting as specified above.

E.D. Repair damage to air barriers caused by testing; follow manufacturer's written instructions.

F.E. Prepare test and inspection reports.

### 3.6 CLEANING AND PROTECTION

A. Protect air-barrier system from damage during application and remainder of construction period, according to manufacturer's written instructions.

1. Protect air barrier from exposure to UV light and harmful weather exposure as recommended in writing by manufacturer. If exposed to these conditions for longer than recommended, remove and replace air barrier or install additional, full-thickness, air-barrier application after repairing and preparing the overexposed materials according to air-barrier manufacturer's written instructions.
2. Protect air barrier from contact with incompatible materials and sealants not approved by air-barrier manufacturer.

B. Clean spills, stains, and soiling from construction that would be exposed in the completed work using cleaning agents and procedures recommended in writing by manufacturer of affected construction.

C. Remove masking materials after installation.

## 3.7 FIELD TEST SCHEDULE

## A. Field Quality Control Testing for Air Leakage:

Location/Test	Testing Standard	Description	Pass/Fail Criteria	Schedule and Type, Number of Tests
One location of System Window	ASTM E 783	Field air leakage testing	<0.09 cfm/sq.ft at 6.24 lbf/sq.ft.	10%, 50% and 90% completion: 4 tests
One location of Storefront	ASTM E 783	Field air leakage testing	<0.09 cfm/sq.ft at 6.24 lbf/sq.ft.	10%, 50% and 90% completion: 4 tests
Curtain Wall/ Metal Panels	ASTM E 783	Field air leakage testing	<0.09 cfm/sq.ft at 6.24 lbf/sq.ft.	10%, 50% and 90% completion: 4 tests
Curtain Wall and window Storefront perimeter sealant tests	ASTM E 1186	Sealant continuity using smoke test		50% and 90% of installed work completion: 12 locations
25 locations: transitions to adjacent systems, field of air barrier penetrations	ASTM E 1186	Field air leakage tests for air barrier assembly		Mock-up, and at 30% and 50% of installed work completion
Canopy and miscellaneous soffits	ASTM E 1186	Field air leakage tests for air barrier assembly		100% prior to cladding, including cladding attachments
Vertical and horizontal expansion joints, including transitions / changes in plane in EJ cover	ASTM E 1186	Field air and water leakage tests		Completion of system

B. Refer to other sections of the Project manual for testing requirements of building enclosure components including, but not limited to, roofing, openings and glazing.

END OF SECTION 07 27 26

## **SECTION 09 91 23 - INTERIOR PAINTING**

### **PART 1 - GENERAL**

#### **1.1 SUMMARY**

- A. Section Includes:
  - 1. Primers.
  - 2. Water-based finish coatings.
  - 3. Dry fall coatings.
- B. Project includes painted graphics where indicated; following application of specified interior paint system, apply graphics with specified top coat and the use of precision cut masking films manufactured especially for paint masking - similar to court graphics.

#### **1.2 ACTION SUBMITTALS**

- A. Product Data: For each type of product. Include preparation requirements and application instructions.
  - 1. Include preparation requirements and application instructions.
  - 2. Indicate VOC content.
- B. Sustainability Submittals: Comply with Section 01 81 13.
  - 1. Submit a completed Green Building Materials Certification Form that lists permanently installed products and indicates material costs. Attach letter from manufacturer(s) describing product(s) contribution to LEED v4, including, but not limited to, the following:
    - a. MR Credit 2: Environmental Product Declarations (EPDs): Submit an Environmental Product Declaration.
    - b. MR Credit 4: Material Ingredients: Submit a Material Ingredient Report.
    - c. EQ Credit 2: Low-Emitting Materials: Submit MSDS sheet indicating VOC content and VOC emission testing certificate for wet-applied interior adhesives, sealants, paints, and coatings. Indicate volume of product anticipated to be used on-site.
- C. Samples: For each type of topcoat product.
- D. Samples for Initial Selection: For each type of topcoat product.
- E. Samples for Verification: For each type of paint system and each color and gloss of topcoat.
  - 1. Submit Samples on rigid backing, 8 inches square.
  - 2. Apply coats on Samples in steps to show each coat required for system.
  - 3. Label each coat of each Sample.
  - 4. Label each Sample for location and application area.
- F. Product Schedule: Use same designations indicated on Drawings and in the Interior Painting Schedule to cross-reference paint systems specified in this Section. Include color designations.

#### **1.3 MAINTENANCE MATERIAL SUBMITTALS**

- A. Furnish extra materials that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.
  - 1. Paint Products: 5 percent, but not less than 1 gal. of each material and color applied.

#### **1.4 QUALITY ASSURANCE**

- A. Mockups: Apply mockups of each paint system indicated and each color and finish selected to verify preliminary selections made under Sample submittals and to demonstrate aesthetic effects and set quality standards for materials and execution.

1. Architect will select one surface to represent surfaces and conditions for application of each paint system.
    - a. Vertical and Horizontal Surfaces: Provide samples of at least 100 sq. ft..
    - b. Other Items: Architect will designate items or areas required.
  2. Final approval of color selections will be based on mockups.
    - a. If preliminary color selections are not approved, apply additional mockups of additional colors selected by Architect at no added cost to Owner.
  3. Approval of mockups does not constitute approval of deviations from the Contract Documents contained in mockups unless Architect specifically approves such deviations in writing.
  4. Subject to compliance with requirements, approved mockups may become part of the completed Work if undisturbed at time of Substantial Completion.
- 1.5 DELIVERY, STORAGE, AND HANDLING
- A. Store materials not in use in tightly covered containers in well-ventilated areas with ambient temperatures continuously maintained at not less than 45 deg F.
    1. Maintain containers in clean condition, free of foreign materials and residue.
    2. Remove rags and waste from storage areas daily.
- 1.6 FIELD CONDITIONS
- A. Apply paints only when temperature of surfaces to be painted and ambient air temperatures are between 50 and 95 deg F.
  - B. Do not apply paints when relative humidity exceeds 85 percent; at temperatures of less than 5 deg F above the dew point; or to damp or wet surfaces.

## PART 2 - PRODUCTS

### 2.1 PAINT PRODUCTS, GENERAL

- A. Material Compatibility:
  1. Materials for use within each paint system shall be compatible with one another and substrates indicated, under conditions of service and application as demonstrated by manufacturer, based on testing and field experience.
  2. For each coat in a paint system, products shall be recommended in writing by topcoat manufacturers for use in paint system and on substrate indicated.
- B. Sustainability Material Requirements:
  1. MR credit 2: Environmental Product Declarations (EPDs): Wet-applied interior adhesives, sealants, paints, and coatings products must have publicly available Product-specific Type III Environmental Product Declaration (EPD) that conforms to ISO 14025 and EN 15804 or ISO 21930 with a cradle to gate scope. Manufacturer and specified product name must be recognized as a participant.
  2. MR credit 4 (Option 1): Material Ingredients: Wet-applied interior adhesives, sealants, paints, and coatings products must have a publicly available material ingredient report that demonstrates chemical inventory to at least 1,000 ppm or 0.1%. Manufacturer and product name must be recognized as a participant.
  3. MR credit 4 (Option 2): Material Ingredients: Wet-applied interior adhesives, sealants, paints, and coatings products must have verification of ingredient optimization through Cradle to Cradle certification label, Cradle to Cradle Material Health certificate, and/or third-party verified Declare label with Red List compliance disclosing 99.9% of material ingredients.
  4. EQ credit 2: Low-Emitting Materials: Wet-applied interior adhesives, sealants, paints, and coatings must meet VOC content requirements of SCAQMD Rule 1113 (effective



February 5, 2016) and Rule 1168 (effective October 6, 2017). Use best efforts to select wet-applied interior adhesives, sealants, paints, and coatings that meet VOC emission testing requirements of California Department of Public Health (CDPH) Standard Method v1. 2-2017.

- C. Colors: As selected by Architect from manufacturer's full range.
  - 1. Twenty percent of surface area will be painted with deep tones.

### PART 3 - EXECUTION

#### 3.1 EXAMINATION

- A. Examine substrates and conditions, with Applicator present, for compliance with requirements for maximum moisture content and other conditions affecting performance of the Work.
- B. Maximum Moisture Content of Substrates: When measured with an electronic moisture meter as follows:
  - 1. Concrete: 12 percent.
  - 2. Masonry: 12 percent.
  - 3. Wood: 15 percent.
  - 4. Gypsum Board: 12 percent.
- C. Gypsum Board Substrates: Verify that finishing compound is sanded smooth.
- D. Verify suitability of substrates, including surface conditions and compatibility, with existing finishes and primers.
- E. Proceed with coating application only after unsatisfactory conditions have been corrected.
  - 1. Application of coating indicates acceptance of surfaces and conditions.

#### 3.2 PREPARATION

- A. Comply with manufacturer's written instructions and recommendations applicable to substrates and paint systems indicated.
- B. Remove hardware, covers, plates, and similar items already in place that are removable and are not to be painted. If removal is impractical or impossible because of size or weight of item, provide surface-applied protection before surface preparation and painting.
  - 1. After completing painting operations, use workers skilled in the trades involved to reinstall items that were removed. Remove surface-applied protection if any.
- C. Clean substrates of substances that could impair bond of paints, including dust, dirt, oil, grease, and incompatible paints and encapsulants.
  - 1. Remove incompatible primers and reprime substrate with compatible primers or apply tie coat as required to produce paint systems indicated.
- D. Concrete Substrates: Remove release agents, curing compounds, efflorescence, and chalk. Do not paint surfaces if moisture content or alkalinity of surfaces to be painted exceeds that permitted in manufacturer's written instructions.
- E. Masonry Substrates: Remove efflorescence and chalk. Do not paint surfaces if moisture content or alkalinity of surfaces or mortar joints exceeds that permitted in manufacturer's written instructions.
- F. Steel Substrates: Remove rust, loose mill scale, and shop primer, if any. Clean using methods recommended in writing by paint manufacturer but not less than the following:
  - 1. SSPC-SP 3.

- G. Shop-Primed Steel Substrates: Clean field welds, bolted connections, and areas where shop paint is abraded. Paint exposed areas with the same material as used for shop priming to comply with SSPC-PA 1 for touching up shop-primed surfaces.
- H. Galvanized-Metal Substrates: Remove grease and oil residue from galvanized sheet metal by mechanical methods to produce clean, lightly etched surfaces that promote adhesion of subsequently applied paints.
- I. Wood Substrates:
  - 1. Scrape and clean knots, and apply coat of knot sealer before applying primer.
  - 2. Sand surfaces that will be exposed to view, and dust off.
  - 3. Prime edges, ends, faces, undersides, and backsides of wood.
  - 4. After priming, fill holes and imperfections in the finish surfaces with putty or plastic wood filler. Sand smooth when dried.
- J. Cotton or Canvas Insulation Covering Substrates: Remove dust, dirt, and other foreign material that might impair bond of paints to substrates.

### 3.3 INSTALLATION

- A. Apply paints according to manufacturer's written instructions.
  - 1. Use applicators and techniques suited for paint and substrate indicated.
  - 2. Paint surfaces behind movable equipment and furniture same as similar exposed surfaces. Before final installation, paint surfaces behind permanently fixed equipment or furniture with prime coat only.
  - 3. Paint front and backsides of access panels, removable or hinged covers, and similar hinged items to match exposed surfaces.
  - 4. Do not paint over labels of independent testing agencies or equipment name, identification, performance rating, or nomenclature plates.
  - 5. Primers specified in painting schedules may be omitted on items that are factory primed or factory finished if acceptable to topcoat manufacturers.
- B. Tint each undercoat a lighter shade to facilitate identification of each coat if multiple coats of same material are to be applied. Tint undercoats to match color of topcoat, but provide sufficient difference in shade of undercoats to distinguish each separate coat.
- C. If undercoats or other conditions show through topcoat, apply additional coats until cured film has a uniform paint finish, color, and appearance.
- D. Apply paints to produce surface films without cloudiness, spotting, holidays, laps, brush marks, roller tracking, runs, sags, ropiness, or other surface imperfections. Cut in sharp lines and color breaks.
- E. Painting Fire-Suppression, Plumbing, HVAC, Electrical, Communication, and Electronic Safety and Security Work:
  - 1. Paint the following work where exposed in equipment rooms:
    - a. Equipment, including panelboards and switch gear.
    - b. Uninsulated metal piping.
    - c. Uninsulated plastic piping.
    - d. Pipe hangers and supports.
    - e. Metal conduit.
    - f. Plastic conduit.
    - g. Tanks that do not have factory-applied final finishes.
    - h. Duct, equipment, and pipe insulation having cotton or canvas insulation covering or other paintable jacket material.
    - i. Refer to MEP for additional items.
  - 2. Paint the following work where exposed in occupied spaces:
    - a. Equipment, including panelboards.

- b. Uninsulated metal piping.
  - c. Uninsulated plastic piping.
  - d. Pipe hangers and supports.
  - e. Metal conduit.
  - f. Plastic conduit.
  - g. Duct, equipment, and pipe insulation having cotton or canvas insulation covering or other paintable jacket material.
  - h. Other items as directed by Architect.
  - i. Refer to MEP for additional items.
3. Paint portions of internal surfaces of metal ducts, without liner, behind air inlets and outlets that are visible from occupied spaces.

### ~~3.4~~ FIELD QUALITY CONTROL

~~A. Dry Film Thickness Testing: Owner may engage the services of a qualified testing and inspecting agency to inspect and test paint for dry film thickness.~~

- ~~1. Contractor shall touch up and restore painted surfaces damaged by testing.~~
- ~~2. If test results show that dry film thickness of applied paint does not comply with paint manufacturer's written recommendations, Contractor shall pay for testing and apply additional coats as needed to provide dry film thickness that complies with paint manufacturer's written recommendations.~~

### ~~3.53.4~~ CLEANING AND PROTECTION

- A. At end of each workday, remove rubbish, empty cans, rags, and other discarded materials from Project site.
1. Do not clean equipment with free-draining water and prevent solvents, thinners, cleaners, and other contaminants from entering into waterways, sanitary and storm drain systems, and ground.
  2. Dispose of contaminants in accordance with requirements of authorities having jurisdiction.
  3. Allow empty paint cans to dry before disposal.
  4. Collect waste paint by type and deliver to recycling or collection facility.
- B. After completing paint application, clean spattered surfaces. Remove spattered paints by washing, scraping, or other methods. Do not scratch or damage adjacent finished surfaces.
- C. Protect work of other trades against damage from paint application. Correct damage to work of other trades by cleaning, repairing, replacing, and refinishing, as approved by Architect, and leave in an undamaged condition.
- D. At completion of construction activities of other trades, touch up and restore damaged or defaced painted surfaces.

### ~~3.63.5~~ INTERIOR PAINTING SCHEDULE

A. Concrete and Masonry Other Than Concrete Masonry Units:

1. Semi-Gloss Sheen:
  - a. Benjamin Moore & Co.:
    - 1) Primer (Unpainted Surfaces): Ultra Spec Masonry Int/Ext Acrylic Sealer (608).
    - 2) First and Second Coats: Ultra Spec 500 Waterborne Zero VOC Semi-Gloss N539.
  - b. Behr Process Corporation:
    - 1) Primer: Multi-Surface Interior/Exterior Primer & Sealer, 436
    - 2) First and Second Coats: Behr Pro i300 Interior Semi-Gloss Paint, PR370

- c. PPG Paints:
    - 1) Primer (Unpainted Surfaces): Speedhide Zero Int. Latex Quick Drying Primer/Sealer, 6-4900XI.
    - 2) First and Second Coats: Speedhide Zero Interior Flat Latex, 6-4510XI.
  - d. Sherwin-Williams Company:
    - 1) Primer (Unpainted Surfaces): Loxon Concrete and Masonry Primer LX02 Series.
    - 2) First and Second Coats: ProMar 200 Zero VOC Interior Latex Semi-Gloss, B31-2650 Series.
  - e. McCormick Paints:
    - 1) Primer (Unpainted Surfaces): Acrylok Interior/Exterior 100% Acrylic Masonry Primer 06451.
    - 2) First and Second Coats: McCormick Total Advantage Zero VOC Professional Coating Semi-Gloss 10 Series.
- B. Concrete Masonry Units:
- 1. Semi-Gloss Sheen:
    - a. Benjamin Moore & Co.:
      - 1) Block Filler (Unpainted Surfaces) - 2 Coats: Ultra Spec Hi-Build Masonry Block Filler (571).
      - 2) First and Second Color Coats: Ultra Spec 500 Waterborne Interior Semi-Gloss N539.
    - b. Behr Process Corporation:
      - 1) Block Filler (Unfinished Surfaces) - 2 Coats: Behr Pro Block Filler Primer, PR50
      - 2) First and Second Color Coats: Behr Pro i300 Interior Semi-Gloss Paint, PR370
    - c. PPG Architectural Coatings; PPG Paints:
      - 1) Block Filler (Unpainted Surfaces) - 2 Coats: Speedhide Latex Block Filler 6-15XI.
      - 2) First and Second Color Coats: Speedhide Zero Interior Semi-Gloss Latex Enamel, 6-4510XI Series.
    - d. Sherwin-Williams Company:
      - 1) Block Filler (Unpainted Surfaces) - 2 Coats: Conflex Block Filler CF1W50.
      - 2) First and Second Color Coats: ProMar 200 Zero VOC Interior Latex S/G, B31-2650 Series.
    - e. McCormick Paints:
      - 1) Block Filler (Unpainted Surfaces) - 2 Coats: McCormick Interior/Exterior Latex Block Filler 01015.
      - 2) First and Second Color Coats: McCormick Total Advantage Zero VOC Professional Coating Semi-Gloss 10 Series.
- C. Gypsum Board:
- 1. Flat Sheen:
    - a. Benjamin Moore & Co.:
      - 1) Primer (Unpainted Surfaces): Ultra Spec 500 Waterborne Zero VOC Primer Sealer N534.
      - 2) First and Second Coats: Ultra Spec 500 Waterborne Zero VOC Flat N536.

- b. Behr Process Corporation:
    - 1) Primer (Unpainted Surfaces) Drywall Plus Interior Drywall Primer & Sealer, 73
    - 2) First and Second Coats: Behr Pro i300 Interior Flat Paint, 310
  - c. PPG Paints:
    - 1) Primer (Unpainted Surfaces): Speedhide Zero Int. Latex Quick Drying Primer/Sealer, 6-4900XI.
    - 2) First and Second Coats: Speedhide Zero Interior Flat Latex I, 6-4110XI Series.
  - d. Sherwin-Williams Company:
    - 1) Primer (Unpainted Surfaces): ProMar 200 Zero VOC Interior Latex Primer, B28W2600.
    - 2) First and Second Coats: ProMar 200 Zero VOC Interior Latex Flat, B30-2650 Series.
  - e. McCormick Paints:
    - 1) Primer (Unpainted Surfaces): McCormick 1st Step Interior Vinyl Primer Sealer 06431.
    - 2) First and Second Coats: McCormick Total Advantage Zero VOC Professional Coating Flat 08 Series.
2. Low-Luster, Satin or Eggshell Sheen:
- a. Benjamin Moore & Co.:
    - 1) Primer (Unfinished Surfaces): Ultra Spec 500 Waterborne Interior Primer Sealer N534.
    - 2) First and Second Coats: Ultra Spec 500 Waterborne Zero VOC Eggshell Enamel N538.
  - b. Behr Process Corporation:
    - 1) Primer (Unpainted Surfaces) Drywall Plus Interior Drywall Primer & Sealer, 73
    - 2) First and Second Coats: Behr Pro i300 Interior Eggshell Paint, 330
  - c. PPG Paints:
    - 1) Primer (Unfinished Surfaces): Speedhide Zero Latex Quick Drying Primer/Sealer, 6-4900XI.
    - 2) First and Second Coats: Speedhide Zero Interior Eggshell Latex 6-4310XI Series.
  - d. Sherwin-Williams Company:
    - 1) Primer (Unfinished Surfaces): ProMar 200 Zero VOC Interior Latex Primer, B28W2600.
    - 2) First and Second Coats: ProMar 200 Zero VOC Interior Latex Eg-Shel, B20-2650 Series.
  - e. McCormick Paints:
    - 1) Primer (Unpainted Surfaces): McCormick 1st Step Interior Vinyl Primer Sealer 06431.
    - 2) First and Second Coats: McCormick Total Advantage Zero VOC Professional Coating Eggshell 09 Series.
- D. Woodwork and Hardboard - Painted:
- 1. Semi-Gloss Sheen:

- a. Benjamin Moore & Co.:
    - 1) Undercoat (Unfinished Surfaces): Fresh Start 100% Acrylic Superior Primer 023.
    - 2) First and Second Coats: Ultra Spec 500 Waterborne Interior Zero VOC Semi-Gloss 539.
  - b. Behr Process Corporation:
    - 1) Primer (Unpainted Surfaces): Drywall Plus Interior Drywall Primer & Sealer, 73
    - 2) First and Second Coats: Behr Pro i300 Interior Semi-Gloss Paint, 370
  - c. PPG Architectural Coatings; PPG Paints:
    - 1) Undercoat (Unfinished Surfaces): 17-921 Seal Grip Interior/Exterior Acrylic Universal Primer.
    - 2) First and Second Coats: Speedhide Zero Interior Semi-Gloss Latex Enamel, 6-4510XI Series.
  - d. Sherwin-Williams Company:
    - 1) Undercoat (Unfinished Surfaces): PrepRite ProBlock Latex Primer/Sealer B51W620.
    - 2) First and Second Coats: ProMar 200 Zero VOC Interior Latex S/G, B31-2600 Series; or Pro Industrial Acrylic Coating S/G B66-650.
  - e. McCormick Paints:
    - 1) Undercoat (Unpainted Surfaces): McCormick Unix Multi-Purpose Stain Blocking Interior/Exterior Primer 06460.
    - 2) First and Second Coats: McCormick Total Advantage Zero VOC Professional Coating Semi-Gloss 10 Series.
- E. Mechanical and Electrical Items: Use 3-coat system best suited to substrate, satin finish. Use heat resistant materials where required.
- F. Ferrous Metal:
- 1. Semi-Gloss Sheen:
    - a. Benjamin Moore & Co.:
      - 1) Primer (Unfinished Surfaces): Ultra Spec HP Acrylic Metal Primer HP04.
      - 2) First and Second Coats: Ultra Spec 500 Waterborne Interior Semi-Gloss 539.
    - b. Behr Process Corporation:
      - 1) Primer (Unfinished Surfaces): Multi-Surface Interior/Exterior Primer & Sealer, 436
      - 2) First and Second Coats: Behr Pro i300 Interior Semi-Gloss Paint, 370
    - c. PPG Paints:
      - 1) Primer (Unfinished Surfaces): Pitt Tech Plus 4020 PF
      - 2) First and Second Coats: Speedhide Zero Interior Semi-Gloss Latex Enamel, 6-4510XI Series.
    - d. Sherwin-Williams Company:
      - 1) Primer (Unfinished Surfaces): Pro-Cryl Universal Primer, B66-1310 Series.
      - 2) First and Second Coats: Pro Industrial Acrylic Coating S/G, B66-650.
    - e. McCormick Paints:
      - 1) Primer (Unfinished Surfaces): McCormick Unix Multi-Purpose Stain Blocking Interior/Exterior Primer 06460.

- 2) First and Second Coats: McCormick Interlok Interior/Exterior Acrylic Semi-Gloss Urethane DTM 45 Series.
2. Pigmented Polyurethane over Zinc-Rich and Epoxy System: High contact/high traffic areas such as, but not limited to doors and frames, stair risers, and railings.
  - a. Benjamin Moore & Company:
    - 1) Prime Coat: Corotech 100% Solids Epoxy Pre-Primer V155.
    - 2) Intermediate Coat: Ultra Spec HP Acrylic Metal Primer HP04.
    - 3) Topcoat - Semi-gloss: Coronado Rust Scat Waterborne Acrylic Enamel C90.
  - b. International Paint LLC:
    - 1) Prime Coat: Catha-Coat 302H.
    - 2) Intermediate Coat: Bar-Rust 231 Series.
    - 3) Topcoat - Semi-Gloss: Devthane378 Series.
  - c. PPG Paints:
    - 1) Prime Coat: 4020 PF.
    - 2) Intermediate Coat: PITT-GLAZE® WB1 Interior Pre-Catalyzed Water-Borne Acrylic Epoxy.
    - 3) Topcoat: PITT-GLAZE® WB1 Interior Pre-Catalyzed Water-Borne Acrylic Epoxy.
  - d. Sherwin-Williams Company:
    - 1) Prime Coat: Pro Industrial Pro-Cryl Universal Acrylic Primer B66-1310.
    - 2) Intermediate Coat: S-W Acrolon Waterbased Acrolon 100 WB Urethane.
    - 3) Topcoat: S-W Acrolon Waterbased Acrolon 100 WB Urethane.
  - e. Tnemec Company, Inc.:
    - 1) Prime (Shop) Coat: Series 94H2O Hydro-Zinc. Refer to applicable Division 05 Sections.
    - 2) Intermediate Coat: Series 287 Enviro-Pox.
    - 3) Topcoat - Semi-Gloss: Series 248-clear Everthane.
- G. Zinc-Coated (Galvanized) Metal:
  1. Semi-Gloss Sheen:
    - a. Benjamin Moore & Co.:
      - 1) Primer (Unfinished Surfaces): Ultra Spec HP Acrylic Metal Primer HP04.
      - 2) First and Second Coats: Ultra Spec 500 Waterborne Interior Semi-Gloss 539.
    - b. Behr Process Corporation:
      - 1) Primer (Unfinished Surfaces): Multi-Surface Interior/Exterior Primer & Sealer, 436
      - 2) First and Second Coats: Behr Pro i300 Interior Semi-Gloss Paint, 370
    - c. PPG Paints:
      - 1) Primer (Unfinished Surfaces): Pitt Tech Plus 4020PF
      - 2) First and Second Coats: Speedhide Zero Interior Semi-Gloss Latex Enamel, 6-4510XI Series.
    - d. Sherwin-Williams Company:
      - 1) Primer (Unfinished Surfaces): ProCryl-Universal Primer, B66-1310 Series.
      - 2) First and Second Coats: ProMar 200 Zero VOC Latex Semi-Gloss, B31-2600 Series, or Pro Industrial Acrylic Coating Semi-Gloss, B66-650.
    - e. McCormick Paints:

- 1) Primer (Unfinished Surfaces): McCormick Unix Multi-Purpose Stain Blocking Interior/Exterior Primer 06460.
  - 2) First and Second Coats: McCormick Interlok Interior/Exterior Acrylic Semi-Gloss Urethane DTM 45 Series.
2. Pigmented Polyurethane over Zinc-Rich and Epoxy System: High contact/high traffic areas such as, but not limited to doors and frames (including exterior side of exterior doors and frames) stair risers, and railings.
  - a. Benjamin Moore & Company:
    - 1) Prime Coat: Corotech 100% Solids Epoxy Pre-Primer V155.
    - 2) Intermediate Coat: Ultra Spec HP Acrylic Metal Primer HP04.
    - 3) Topcoat - Semi-gloss: Coronado Rust Scat Waterborne Acrylic Enamel C90.
  - b. International Paint LLC:
    - 1) Prime Coat: Catha-Coat 302H.
    - 2) Intermediate Coat: Bar-Rust 231 Series.
    - 3) Topcoat - Semi-Gloss: Devthane378 Series.
  - c. PPG Paints:
    - 1) Prime Coat: 4020 PF.
    - 2) Intermediate Coat: PITT-GLAZE® WB1 Interior Pre-Catalyzed Water-Borne Acrylic Epoxy.
    - 3) Topcoat: PITT-GLAZE® WB1 Interior Pre-Catalyzed Water-Borne Acrylic Epoxy.
  - d. Sherwin-Williams Company:
    - 1) Prime Coat: Pro Industrial Pro-Cryl Universal Acrylic Primer B66-1310.
    - 2) Intermediate Coat: S-W Acrolon Waterbased Acrolon 100 WB Urethane.
    - 3) Topcoat: S-W Acrolon Waterbased Acrolon 100 WB Urethane.
  - e. Tnemec Company, Inc.:
    - 1) Prime (Shop) Coat: Series 94H2O Hydro-Zinc. Refer to applicable Division 05 Sections.
    - 2) Intermediate Coat: Series 287 Enviro-Pox.
    - 3) Topcoat - Semi-Gloss: Series 248-clear Everthane.
- H. Overhead Exposed Construction (Deck, Joists, Steel) - Typical: One coat flat dry fallout coating system to cover formulated for compatibility with all substrates by any paint manufacturer specified in this Section. Use 100 percent acrylic, flash-rust-resistance dryfall.
  1. Benjamin Moore & Co.: Benjamin Moore Latex Dry Fall- Flat (395).
  2. Behr: Behr Pro Dryfall Paint Flat, 890
  3. PPG Paints: Speedhide Super Tech WB Interior 100% Acrylic Dry-Fog Latex 6-725XI.
  4. Sherwin-Williams Company: Pro Industrial Waterborne Acrylic Dryfall Flat, B42W00181.
  5. McCormick Paints: Interior Waterborne Acrylic Dry Fall 01219.
- I. Overhead Exposed Construction (Deck, Joists, Steel) - High-humidity Spaces: Refer to Division 9 Section, "High-Performance Coatings;" high humidity spaces include, but not limited to, gang toilets and locker rooms open to gang showers.
- J. Wood Fiber Acoustical Panels and Exposed Applied Fire Protection in Auditorium (Eggshell): One coat.
  1. Benjamin Moore & Co.: Benjamin Moore Latex Dry Fall Eggshell (396).
  2. Behr: Behr Pro i300 Interior Eggshell Paint, PR330
  3. PPG Paints: Super Tech WB Interior 100% Acrylic Dry-Fog Latex 6-724XI.
  4. Sherwin-Williams Company: Pro Industrial Waterborne Acrylic Dryfall Eg-Shel, B42W00182.



5. McCormick Paints: McCormick Total Advantage Zero VOC Professional Coating Eggshell 09 Series.
- K. Cotton or Canvas Insulation-Covering Substrates, Including Pipe and Duct Coverings:
  1. Benjamin Moore & Co.:
    - a. Primer: Ultra Spec 500 Interior Zero VOC Latex Primer N534.
    - b. First and Second Coats: Ultra Spec 500 Interior Zero VOC Latex Eggshell, N538.
  2. Behr Process Corporation:
    - a. Primer: Kilz 2 Interior/Exterior Water-Base Primer, 2000
    - b. First and Second Coats: Behr Pro i300 Interior Eggshell Paint, PR330
  3. PPG Paints:
    - a. Primer: Speedhide Zero Int. Latex Quick Drying Primer/Sealer, 6-4900XI.
    - b. First and Second Coats: Speedhide Zero Interior Eggshell Latex Enamel, 6-4310XI Series.
  4. Sherwin-Williams Company:
    - a. Primer: PrepRite ProBlock Latex Primer/Sealer, B51W620.
    - b. First and Second Coats: ProMar 200 Zero VOC Latex Eg-Shel, B202600 Series.
  5. McCormick Paints:
    - a. Top Coat: McCormick Total Advantage Zero VOC Professional Coating Eggshell 09 Series.
- L. Exposed PVC Piping:
  1. Benjamin Moore & Co.:
    - a. Bond Coat: STIX Waterborne Bonding Primer SXA-110; Inst-X.
    - b. First and Second Coats: Ultra Spec 500 Interior Zero VOC Latex Eggshell, 538.
  2. Behr Process Corporation:
    - a. Primer: Multi-Surface Interior/Exterior Primer & Sealer, 436.
    - b. First and Second Coats: Behr Pro i300 Interior Eggshell Paint, PR330.
  3. PPG Paints:
    - a. Bond Coat: SEAL GRIP 17-921 Interior/Exterior 100% Acrylic Universal Primer/Sealer.
    - b. First and Second Coats: Speedhide Zero Interior Eggshell Latex Enamel, 6-4310XI Series.
  4. Sherwin-Williams Company:
    - a. Bond Coat: PrepRite ProBlock Latex Primer/Sealer, B51W620.
    - b. First and Second Coats: ProMar 200 Zero VOC Latex Eg-Shel, B202600 Series.
  5. McCormick Paints:
    - a. Prime Coat: McCormick Unix Multi-Purpose Stain Blocking Interior/Exterior Primer 06460.
    - b. Top Coat: McCormick Total Advantage Zero VOC Professional Coating Eggshell 09 Series.

**END OF SECTION 09 91 23**

**SECTION 09 96 00 - HIGH-PERFORMANCE COATINGS****PART 1 - GENERAL****1.1 SUMMARY**

- A. Section includes surface preparation and the application of high-performance coating systems.

1. Exterior Substrates:

- a. ~~Concrete, vertical surfaces.~~
- b-a. Concrete masonry units (CMUs).
- c-b. Steel.
- d-c. Galvanized metal.

2. Interior Substrates:

- a. Concrete, vertical surfaces.
- b. Concrete masonry units (CMUs).
- c. Steel.
- d. Galvanized metal.
- e. Gypsum board.

**1.2 ACTION SUBMITTALS**

- A. Product Data: For each type of product. Include preparation requirements and application instructions.

1. Indicate VOC content.

- B. Sustainability Submittals - Interior Field-Applied Products: Comply with Section 01 81 13.

1. Submit a completed Green Building Materials Certification Form that lists permanently installed products and indicates material costs. Attach letter from manufacturer(s) describing product(s) contribution to LEED v4, including, but not limited to, the following:

- a. MR Credit 2: Environmental Product Declarations (EPDs): Submit an Environmental Product Declaration.
- b. MR Credit 4: Material Ingredients: Submit a Material Ingredient Report.
- c. EQ Credit 2: Low-Emitting Materials: Submit MSDS sheet indicating VOC content and VOC emission testing certificate for wet-applied interior adhesives, sealants, paints, and coatings. Indicate volume of product anticipated to be used on-site.

- C. Samples for Initial Selection: For each type of topcoat product indicated.

- D. Samples for Verification: For each type of coating system and each color and gloss of topcoat indicated.

- 1. Submit Samples on rigid backing, 8 inches square.
- 2. Apply coats on Samples in steps to show each coat required for system.
- 3. Label each coat of each Sample.
- 4. Label each Sample for location and application area.

- E. Product List: Cross-reference to coating system and locations of application areas. Use same designations indicated on Drawings and in schedules. Include color designations.

**1.3 MAINTENANCE MATERIAL SUBMITTALS**

- A. Furnish extra materials, from the same product run, that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.

1. Coatings: 5 percent, but not less than 1 gal. of each material and color applied.

**1.4 QUALITY ASSURANCE**

- A. Mockups: Apply mockups of each coating system indicated to verify preliminary selections made under Sample submittals and to demonstrate aesthetic effects and set quality standards for materials and execution.
  - 1. Architect will select one surface to represent surfaces and conditions for application of each coating system.
    - a. Wall and Ceiling Surfaces: Provide samples of at least 100 sq. ft..
    - b. Other Items: Architect will designate items or areas required.
  - 2. Final approval of color selections will be based on mockups.
    - a. If preliminary color selections are not approved, apply additional mockups of additional colors selected by Architect at no added cost to Owner.
  - 3. Approval of mockups does not constitute approval of deviations from the Contract Documents contained in mockups unless Architect specifically approves such deviations in writing.
  - 4. Subject to compliance with requirements, approved mockups may become part of the completed Work if undisturbed at time of Substantial Completion.

**1.5 DELIVERY, STORAGE, AND HANDLING**

- A. Store materials not in use in tightly covered containers in well-ventilated areas with ambient temperatures continuously maintained at not less than 45 deg F.
  - 1. Maintain containers in clean condition, free of foreign materials and residue.
  - 2. Remove rags and waste from storage areas daily.

**1.6 FIELD CONDITIONS**

- A. Apply coatings only when temperature of surfaces to be coated and ambient air temperatures are between 50 and 95 deg F.
- B. Do not apply coatings when relative humidity exceeds 85 percent; at temperatures less than 5 deg F above the dew point; or to damp or wet surfaces.
- C. Do not apply exterior coatings in snow, rain, fog, or mist.

**PART 2 - PRODUCTS****2.1 MANUFACTURERS**

- A. Products: Subject to compliance with requirements, provide one of the products listed in the Exterior High-Performance Coating Schedule or Interior High-Performance Coating Schedule for the coating category indicated.

**2.2 HIGH-PERFORMANCE COATINGS, GENERAL**

- A. Material Compatibility:
  - 1. Materials for use within each paint system shall be compatible with one another and substrates indicated, under conditions of service and application as demonstrated by manufacturer, based on testing and field experience.
  - 2. For each coat in a paint system, products shall be recommended in writing by topcoat manufacturers for use in paint system and on substrate indicated.
  - 3. Products shall be of same manufacturer for each coat in a coating system.
- B. Material Emissions and Pollutant Control: Verify not less than 85 percent of field-applied paints and coatings that are inside the weatherproofing system comply with one of the following:

1. Low-Emitting Materials: Verify VOC emissions comply with the requirements of the California Department of Public Health's "Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers." Verify formaldehyde emissions do not exceed 9 mcg/cu. m or 7 ppb, whichever is less.
  2. Verify VOC content does not exceed limits of authorities having jurisdiction and the following:
    - a. Flat Coatings: 50 g/L.
    - b. Nonflat Coatings: 100 g/L.
    - c. Nonflat - High-Gloss Coatings: 150 g/L.
    - d. Concrete/Masonry Sealers: 100 g/L.
    - e. Floor Coatings: 100 g/L.
    - f. Industrial Maintenance Coatings: 250 g/L.
    - g. Low-Solids Coatings: 120 g/L.
    - h. Mastic Texture Coatings: 100 g/L.
    - i. Metallic Pigmented Coatings: 500 g/L.
    - j. Pretreatment Wash Primers: 420 g/L.
    - k. Primers, Sealers, and Undercoaters: 100 g/L.
    - l. Reactive Penetrating Sealers: 350 g/L.
    - m. Recycled Coatings: 250 g/L.
    - n. Rust-Preventive Coatings: 250 g/L.
- C. Colors: As selected by Architect from manufacturer's full range.

### PART 3 - EXECUTION

#### 3.1 EXAMINATION

- A. Examine substrates and conditions, with Applicator present, for compliance with requirements for maximum moisture content and other conditions affecting performance of the Work.
- B. Maximum Moisture Content of Substrates: When measured with an electronic moisture meter as follows:
  1. Concrete: 12 percent.
  2. Masonry (Clay and CMUs): 12 percent.
  3. Gypsum Board: 12 percent.
- C. Gypsum Board Substrates: Verify that finishing compound is sanded smooth.
- D. Verify suitability of substrates, including surface conditions and compatibility, with existing finishes and primers.
- E. Proceed with coating application only after unsatisfactory conditions have been corrected.
  1. Application of coating indicates acceptance of surfaces and conditions.

#### 3.2 PREPARATION

- A. Comply with manufacturer's written instructions and recommendations in "MPI Architectural Painting Specification Manual" applicable to substrates and coating systems indicated.
- B. Remove hardware, covers, plates, and similar items already in place that are removable and are not to be painted. If removal is impractical or impossible because of size or weight of item, provide surface-applied protection before surface preparation and painting.
  1. After completing painting operations, use workers skilled in the trades involved to reinstall items that were removed. Remove surface-applied protection if any.
- C. Clean substrates of substances that could impair bond of coatings, including dust, dirt, oil, grease, and incompatible paints and encapsulants.

1. Remove incompatible primers and reprime substrate with compatible primers or apply tie coat as required to produce coating systems indicated.
- D. Concrete Substrates: Remove release agents, curing compounds, efflorescence, and chalk. Do not coat surfaces if moisture content or alkalinity of surfaces to be coated exceeds that permitted in manufacturer's written instructions.
- E. Masonry Substrates: Remove efflorescence and chalk. Do not coat surfaces if moisture content, alkalinity of surfaces, or alkalinity of mortar joints exceeds that permitted in manufacturer's written instructions.
- F. Steel Substrates: Remove rust, loose mill scale, and shop primer if any. Clean using methods recommended in writing by paint manufacturer but not less than the following:
  1. SSPC-SP 6/NACE No. 3.
- G. Shop-Primed Steel Substrates: Clean field welds, bolted connections, and areas where shop paint is abraded. Paint exposed areas with the same material as used for shop priming to comply with SSPC-PA 1 for touching up shop-primed surfaces.
- H. Galvanized-Metal Substrates: Remove grease and oil residue from galvanized sheet metal by mechanical methods to produce clean, lightly etched surfaces that promote adhesion of subsequently applied coatings.

### 3.3 APPLICATION

- A. Apply high-performance coatings according to manufacturer's written instructions and recommendations in "MPI Architectural Painting Specification Manual."
  1. Use applicators and techniques suited for coating and substrate indicated.
  2. Coat surfaces behind movable equipment and furniture same as similar exposed surfaces. Before final installation, coat surfaces behind permanently fixed equipment or furniture with prime coat only.
  3. Coat backsides of access panels, removable or hinged covers, and similar hinged items to match exposed surfaces.
  4. Do not apply coatings over labels of independent testing agencies or equipment name, identification, performance rating, or nomenclature plates.
- B. Tint each undercoat a lighter shade to facilitate identification of each coat if multiple coats of the same material are to be applied. Tint undercoats to match color of finish coat, but provide sufficient difference in shade of undercoats to distinguish each separate coat.
- C. If undercoats or other conditions show through final coat, apply additional coats until cured film has a uniform coating finish, color, and appearance.
- D. Apply coatings to produce surface films without cloudiness, spotting, holidays, laps, brush marks, runs, sags, ropiness, or other surface imperfections. Produce sharp glass lines and color breaks.

### 3.4 ~~FIELD QUALITY CONTROL~~

- A. ~~Dry Film Thickness Testing: Owner may engage the services of a qualified testing and inspecting agency to inspect and test coatings for dry film thickness.~~
  1. ~~Contractor shall touch-up and restore coated surfaces damaged by testing.~~
  2. ~~If test results show that dry film thickness of applied coating does not comply with coating manufacturer's written recommendations, Contractor shall pay for testing and apply additional coats as needed to provide dry film thickness that complies with coating manufacturer's written recommendations.~~

**3.53.4 CLEANING AND PROTECTION**

- A. At end of each workday, remove rubbish, empty cans, rags, and other discarded materials from Project site.
- B. After completing coating application, clean spattered surfaces. Remove spattered coatings by washing, scraping, or other methods. Do not scratch or damage adjacent finished surfaces.
- C. Protect work of other trades against damage from coating operation. Correct damage to work of other trades by cleaning, repairing, replacing, and recoating, as approved by Architect, and leave in an undamaged condition.
- D. At completion of construction activities of other trades, touch up and restore damaged or defaced coated surfaces.

**3.63.5 EXTERIOR HIGH-PERFORMANCE COATING SCHEDULE****A. ~~Concrete Substrates, Vertical Surfaces:~~****1. ~~Pigmented Polyurethane over Epoxy System (Gloss):~~****a. ~~Benjamin Moore & Company:~~**

- 1) ~~Prime Coat: Corotech Polyamide Epoxy V400.~~
- 2) ~~Intermediate Coat: Corotech Polyamide Epoxy V400.~~
- 3) ~~Topcoat Gloss: Corotech Aliphatic Acrylic Urethane Coating Gloss V500.~~

**b. ~~International Paint LLC:~~**

- 1) ~~Prime Coat: Devran 203.~~
- 2) ~~Intermediate Coat: Devran 203.~~
- 3) ~~Topcoat Gloss: Devthane 379 Series.~~

**c. ~~PPG Paints:~~**

- 1) ~~Prime Coat: Amerlock 2 VOC Epoxy Coating.~~
- 2) ~~Intermediate Coat: Amerlock 2 VOC Epoxy Coating.~~
- 3) ~~Topcoat Gloss: Amershield VOC Acrylic Polyurethane~~

**d. ~~Sherwin-Williams Company:~~**

- 1) ~~Prime Coat: S-W Pro Industrial Waterbased Catalyzed Epoxy Finish, B73-300 Series, B73-300~~
- 2) ~~Intermediate Coat: S-W Pro Industrial Waterbased Catalyzed Epoxy Finish, B73-300 Series.~~
- 3) ~~Topcoat Gloss: S-W Acrolon Waterbased Acrolon 100-WB Urethane.~~

**e. ~~Tnemec Company, Inc.:~~**

- 1) ~~Prime Coat: Series 27 W.B. Typoxy.~~
- 2) ~~Intermediate Coat: Series 27 W.B. Typoxy.~~
- 3) ~~Topcoat Semi-Gloss: Series 1081 Endura-Shield.~~

**B. ~~Concrete Substrates, Horizontal Surfaces:~~****1. ~~Epoxy Non-Slip Deck Coating System:~~****a. ~~Benjamin Moore & Company:~~**

- 1) ~~Prime Coat: As recommended in writing.~~
- 2) ~~Intermediate Coat: As recommended in writing.~~
- 3) ~~Topcoat Gloss: Corotech Polyamide Epoxy V400.~~

**b. ~~International Paint LLC:~~**

- 1) ~~Prime Coat: Pre Prime 167.~~
- 2) ~~Intermediate Coat: Devran 224V.~~

~~3) Topcoat - Gloss: Devran 224V with additive.~~~~c. PPG Paints:~~~~1) Prime Coat: As recommended in writing.~~~~2) Intermediate Coat: As recommended in writing.~~~~3) Topcoat - Gloss: Amerlock 2 VOC Epoxy Coating (self priming) with 98-848 AS anti-Slip Additive PPG Architectural Coatings, PPG Paints.~~~~d. Sherwin-Williams Company:~~~~1) Prime Coat: As recommended in writing.~~~~2) Intermediate Coat: As recommended in writing.~~~~3) Topcoat - Gloss: Armorseal® 8100 Water Based Epoxy Floor Coating-w Anti-Slip Additive~~~~e. Tnemec Company, Inc.:~~~~1) Prime Coat: Series 287 Enviro-Pox.~~~~2) Intermediate Coat: Not required.~~~~3) Topcoat - Semi-Gloss: Series 287 Enviro-Pox (add 4 ounces 211-2012 Fine Glass Beads).~~~~4) Topcoat - Gloss: Series 297 Enviro-Glaze (add 4 ounces 211-2012 Fine Glass Beads).~~C.A. CMU Substrates:

## 1. Pigmented Polyurethane over High-Build Epoxy System - Gloss:

## a. Benjamin Moore &amp; Company:

1) Block Filler: Corotech Epoxy Block Filler V163.

2) Intermediate Coat: Corotech Polyamide Epoxy V400.

3) Topcoat: Corotech Aliphatic Acrylic Urethane Coating Gloss V500.

## b. International Paint LLC:

1) Prime Coat: Tru-Glaze-WB 4015.

2) Intermediate Coat: Bar-Rust 231 Series.

3) Topcoat - Gloss: Devthane 379 Series.

## c. PPG Paints:

1) Prime Coat: Amercoat 68HS VOC Zinc Rich Epoxy Primer.

2) Intermediate Coat: Amerlock 2 VOC Epoxy Coating.

3) Topcoat: Amershield VOC Acrylic Polyurethane.

## d. Sherwin-Williams Company:

1) Prime Coat: Epoxy, S-W Cement Plex 875 Acrylic Block Filler.

2) Intermediate Coat: S-W Pro Industrial Waterbased Catalyzed Epoxy B73-300 Series.

3) Topcoat - Gloss: S-W Acrolon Waterbased Acrolon 100 WB Urethane.

## e. Tnemec Company, Inc.:

1) Prime Coat: Series 1254 EpoxoBlock WB.

2) Intermediate Coat: Series 27 W.B. Typoxy.

3) Topcoat - Gloss: Series 297 Enviro-Glaze.

D.B. Steel Substrates: Exposed structural canopy steel, steel hand and guardrails, angle lintels and hung plate substrates.

## 1. Pigmented Polyurethane over Zinc-Rich Primer System:

## a. Benjamin Moore &amp; Company:

- 1) Prime Coat: Corotech Organic Zinc Rich Primer V170.
  - 2) Intermediate Coat: Corotech Aliphatic Acrylic Urethane Coating Gloss V500.
  - 3) Corotech Aliphatic Acrylic Urethane Coating Gloss V500.
- b. Devoe Coatings:
- 1) Prime Coat: Cathacoat 302H.
  - 2) Intermediate Coat: Bar-Rust 231 Series.
  - 3) Topcoat - Gloss: Devthane 379.
- c. International Paint LLC:
- 1) Prime Coat: Cathacoat 302H.
  - 2) Intermediate Coat: Bar-Rust 231 Series.
  - 3) Topcoat - Gloss: Devthane 379 Series.
- d. PPG Paints:
- 1) Prime Coat: Amercoat 68HS VOC Zinc Rich Epoxy Primer.
  - 2) Intermediate Coat: Amerlock 2 VOC Epoxy Coating.
  - 3) Topcoat: Amershield VOC Acrylic Polyurethane.
- e. Sherwin-Williams Company:
- 1) Prime Coat: S-W Zinc Clad XI WB Inorganic Zinc-Rich Coating.
  - 2) Intermediate Coat: S-W Pro Industrial Waterbased Catalyzed Epoxy B73-300 Series.
  - 3) Topcoat: S-W Acrolon Waterbased Acrolon 100 WB Urethane Gloss Enamel.
- f. Tnemec Company, Inc.:
- 1) Prime (Shop) Coat: Series 94H2O Hydro Zinc. Refer to applicable Division 05 Section.
  - 2) Intermediate Coat: Series 27 W.B. Typoxy.
  - 3) Topcoat - Gloss: 1080 Endura-Shield.

E.C. Galvanized-Metal Substrates:

1. Pigmented Polyurethane over Epoxy Primer System:
  - a. Benjamin Moore & Company:
    - 1) Prime Coat: Corotech Waterborne Bonding Primer V175.
    - 2) Intermediate Coat: Corotech Aliphatic Acrylic Urethane Coating Gloss V500.
    - 3) Corotech Aliphatic Acrylic Urethane Coating Gloss V500.
  - b. International Paint LLC:
    - 1) Prime Coat: Devran 203.
    - 2) Intermediate Coat: Devthane 379 Series.
    - 3) Topcoat: Devthane 379 Series.
  - c. PPG Paints:
    - 1) Prime Coat: Amerlock 2 VOC.
    - 2) Intermediate Coat: Amerlock 2 VOC.
    - 3) Topcoat: Amershield VOC Acrylic Polyurethane.
  - d. Sherwin-Williams Company:
    - 1) Prime Coat: Pro Cryl Universal Primer B66-1310 or, for high abrasion areas: DTM Wash Primer B71Y00001.
    - 2) Intermediate Coat: Pro Industrial Waterbased Catalyzed Epoxy B73-300 Series.



- 3) Topcoat: S-W Acrolon Waterbased Acrolon 100 WB Urethane Gloss Enamel.

e. Tnemec Company, Inc.:

- 1) Prime Coat: Series 27 W.B. Typoxy.
- 2) Intermediate Coat: Series 27 W.B. Typoxy.
- 3) Topcoat - Gloss: 1080 Endura-Shield.

### **3.73.6 INTERIOR HIGH-PERFORMANCE COATING SCHEDULE**

A. Concrete Substrates, Vertical Surfaces:

1. Epoxy-Modified Latex System:

a. Benjamin Moore & Company:

- 1) Prime Coat: Super Spec Waterborne Latex Block Filler 160; squeegee into bugholes without removal of filler material from wall.
- 2) Intermediate Coat: Epoxy-modified latex, matching topcoat.
- 3) Topcoat - Semi-gloss: Super Spec HP Acrylic Epoxy Semi-Gloss Catalyzed P43.

b. Benjamin Moore & Company; Corotech Line:

- 1) Prime Coat: Corotech Epoxy Block Filler V163; squeegee into bugholes without removal of filler material from wall.
- 2) Intermediate Coat: Corotech Waterborne Amine Epoxy Coating V440.
- 3) Topcoat - Semi-gloss: Corotech Waterborne Amine Epoxy Coating V440.

c. International Paint LLC:

- 1) Prime Coat: Tru-Glaze WB 4015; squeegee into bugholes without removal of filler material from wall.
- 2) Intermediate Coat: Match topcoat.
- 3) Topcoat - Semi-Gloss: Tru-Glaze WB 4426.

d. PPG Paints:

- 1) Prime Coat: Pitt Glaze WB 16-90 Epoxy Block Filler; squeegee into bugholes without removal of filler material from wall.
- 2) Intermediate Coat: Epoxy-modified latex, matching topcoat.
- 3) Topcoat - Semi-gloss: Pitt Glaze WB 1 16-510 Series Water Based Pre-catalyzed Acrylic Epoxy.

e. Sherwin-Williams Company:

- 1) Prime Coat: Cement Plex 875 WB Epoxy Block Filler (high moisture areas), or S-W Loxon Block Surfacer, LX01 Series; squeegee into bugholes without removal of filler material from wall.
- 2) Intermediate Coat: Epoxy-modified latex, matching topcoat.
- 3) Topcoat - Gloss: Pro Industrial Water Based Catalyzed Epoxy EG B 73-300Series.

f. Tnemec Company, Inc.:

- 1) Prime Coat: Series 1254 EpoxoBlock WB; squeegee into bugholes without removal of filler material from wall.
- 2) Intermediate Coat: Series 27 W.B. Typoxy.
- 3) Topcoat - Semi-Gloss: Series 287 Enviro-Pox.

B. CMU Substrates:

1. Epoxy-Modified Latex System:

- a. Benjamin Moore & Company:
  - 1) Super Spec Waterborne Latex Block Filler 160; squeegee into pores without removal of filler material from wall.
  - 2) Intermediate Coat: Epoxy-modified latex, interior, matching topcoat.
  - 3) Topcoat - Semi-gloss: Super Spec HP Acrylic Epoxy Semi-Gloss Catalyzed P43.
- b. Benjamin Moore & Company; Corotech Line:
  - 1) Prime Coat: Corotech Epoxy Block Filler V163; squeegee into pores without removal of filler material from wall.
  - 2) Intermediate Coat: Corotech Waterborne Amine Epoxy Coating V440.
  - 3) Topcoat - Semi-gloss: Corotech Waterborne Amine Epoxy Coating V440.
- c. International Paint LLC:
  - 1) Prime Coat: Tru-Glaze WB 4015; squeegee into pores without removal of filler material from wall.
  - 2) Intermediate Coat: Matching topcoat.
  - 3) Topcoat - Semi Gloss: Tru-Glaze WB 4426.
- d. PPG Architectural Coatings, PPG Paints:
  - 1) Prime Coat: Pitt Glaze WB 16-90 Epoxy Block Filler; squeegee into pores without removal of filler material from wall.
  - 2) Intermediate Coat: Epoxy-modified latex, matching topcoat.
  - 3) Topcoat - Semi-gloss: Pitt Glaze WB 16-510 Series Pre-Catalyzed Acrylic Water Based Epoxy.
- e. Sherwin-Williams Company:
  - 1) Prime Coat: Cement Plex 875 WB Epoxy Block Filler (high moisture areas), or S-W Loxon Block Surfer, A24W200; squeegee into pores without removal of filler material from wall.
  - 2) Intermediate Coat: Epoxy-modified latex, matching topcoat.
  - 3) Topcoat - Gloss: Pro Ind. Water Based Catalyzed Epoxy Gloss B73-300 Series.
- f. Tnemec Company:
  - 1) Prime Coat: Series 1254 EpoxoBlock WB; squeegee into pores without removal of filler material from wall.
  - 2) Intermediate Coat: Series 27 W.B. Typoxy.
  - 3) Topcoat - Semi-Gloss: Series 287 Enviro-Pox.

**C. Steel Substrates:**

- 1. Epoxy-Modified Latex System: Low contact/low traffic areas such as, but not limited to exposed structural steel, overhead decking, pipes, ducts, etc.
  - a. Benjamin Moore & Company:
    - 1) Prime Coat: Corotech Acrylic Metal Primer V110.
    - 2) Intermediate Coat: Corotech Waterborne Amine Epoxy Coating V440.
    - 3) Topcoat: Corotech Waterborne Amine Epoxy Coating V440.
  - b. International Paint LLC:
    - 1) Prime Coat: Devran 203.
    - 2) Intermediate Coat: Tru-Glaze WB 4426.
    - 3) Topcoat: Tru-Glaze WB 4428.
  - c. PPG Paints:

- 
- 1) Prime Coat: Amerlock 2 VOC Epoxy
      - 2) Intermediate Coat: Amerlock 2 VOC Epoxy
      - 3) Topcoat - Gloss: Amerlock 2 VOC Epoxy
    - d. Sherwin-Williams Company:
      - 1) Prime Coat: S-W Pro Cryl Universal Metal Primer B66-310 Series.
      - 2) Intermediate Coat: Epoxy-modified latex, interior, matching topcoat.
      - 3) Topcoat - Gloss: Pro Ind. S-W Water Based Catalyzed Epoxy Gloss B73-300 Series.
    - e. Tnemec Company, Inc.:
      - 1) Prime Coat: Series 27 W.B. Typoxy.
      - 2) Intermediate Coat: Series 27 W.B. Typoxy.
      - 3) Topcoat - Gloss: Series 297 Enviro-Glaze.
  2. Pigmented Polyurethane over Zinc-Rich and Epoxy System: High contact/high traffic areas such as, but not limited to doors, frames, (including exterior side of exterior doors and frames) railing pipes, etc.
    - a. Benjamin Moore & Company:
      - 1) Prime Coat: Corotech Organic Zinc Rich Primer V170.
      - 2) Intermediate Coat: Corotech Polyamide Epoxy Primer V150.
      - 3) Topcoat - Semi-gloss: Corotech Aliphatic Acrylic Urethane Coating Semi-Gloss V510.
    - b. International Paint LLC:
      - 1) Prime Coat: Catha-Coat 302H.
      - 2) Intermediate Coat: Bar-Rust 231 Series.
      - 3) Topcoat - Semi-Gloss: Devthane378 Series.
    - c. PPG Paints:
      - 1) Prime Coat: Amercoat 68HS VOC Zinc Rich Epoxy Primer.
      - 2) Intermediate Coat: Amerlock 2 VOC Epoxy Coating.
      - 3) Topcoat: Amershield VOC Acrylic Polyurethane.
    - d. Sherwin-Williams Company:
      - 1) Prime Coat: S-W Zinc Clad XI WB Inorganic Zinc-Rich Coating.
      - 2) Intermediate Coat: S-W Acrolon Waterbased Acrolon 100 WB Urethane.
      - 3) Topcoat: S-W Acrolon Waterbased Acrolon 100 WB Urethane.
    - e. Tnemec Company, Inc.:
      - 1) Prime (Shop) Coat: Series 94H2O Hydro-Zinc. Refer to applicable Division 05 Sections.
      - 2) Intermediate Coat: Series 287 Enviro-Pox.
      - 3) Topcoat - Semi-Gloss: Series 248-clear Everthane.
- D. Galvanized-Metal Substrates:
1. Epoxy over Epoxy Primer System: Low contact/low traffic areas such as, but not limited to structural steel, overhead decking, pipes, ducts, etc.
    - a. Benjamin Moore & Company:
      - 1) Prime Coat: Corotech Polyamide Epoxy Primer V150.
      - 2) Intermediate Coat: Epoxy, matching topcoat.
      - 3) Topcoat - Semi-gloss: Corotech Polyamide Epoxy V400.
    - b. PPG Paints:

- 
- 1) Prime Coat: Amerlock 2 VOC Epoxy
      - 2) Intermediate Coat: Amerlock 2 VOC Epoxy
      - 3) Topcoat - Gloss: Amerlock 2 VOC Epoxy
    - c. International Paint LLC:
      - 1) Prime Coat: Devran 203.
      - 2) Intermediate Coat: Devran 224V.
      - 3) Topcoat: Devran 224V.
    - d. Tnemec Company, Inc.:
      - 1) Prime Coat: Series 27 W.B. Typoxy.
      - 2) Intermediate Coat: Series 27 W.B. Typoxy.
      - 3) Topcoat - Semi-Gloss: Series 287 Enviro-Pox.
  2. Pigmented Polyurethane over Epoxy Primer System: High contact/high traffic areas such as, but not limited to doors, frames, pipes, etc.
    - a. Benjamin Moore & Company:
      - 1) Prime Coat: Corotech Organic Zinc Rich Primer V170.
      - 2) Intermediate Coat: Corotech Polyamide Epoxy Primer V150.
      - 3) Topcoat - Semi-gloss: Corotech Aliphatic Acrylic Urethane Coating Semi-Gloss V510.
    - b. International Paint LLC:
      - 1) Prime Coat: Devran 203.
      - 2) Intermediate Coat: Devran 203.
      - 3) Topcoat - Semi-Gloss: Devthane378 Series.
    - c. PPG Architectural Coatings, PPG Paints:
      - 1) Prime Coat: Amerlock 2 VOC Epoxy
      - 2) Intermediate Coat: Amerlock 2 VOC Epoxy
      - 3) Topcoat - Gloss: Amershield VOC Acrylic Polyurethane
    - d. Sherwin-Williams Company:
      - 1) Prime Coat: DTM Wash Primer B71Y1.
      - 2) Intermediate Coat: S-W Acrolon Waterbased Acrolon 100 WB Urethane.
      - 3) Topcoat - Gloss: Acrolon Waterbased Acrolon 100 WB Urethane.
    - e. Tnemec Company, Inc.:
      - 1) Prime Coat: Series 27 W.B. Typoxy.
      - 2) Intermediate Coat: Series 27 W.B. Typoxy.
      - 3) Topcoat - Semi-Gloss: Series 1081 Endura-Shield.
- E. Gypsum Board Substrates:
1. Epoxy-Modified Latex System:
    - a. Benjamin Moore & Company:
      - 1) Prime Coat: Insl-X Aqua Lock Plus AQ-0400.
      - 2) Intermediate Coat: Pre-Catalyzed Waterborne Wall Epoxy Semi-Gloss V341.
      - 3) Topcoat Pre-Catalyzed Waterborne Wall Epoxy Semi-Gloss V341.
    - b. International Paint LLC:
      - 1) Prime Coat: Tru-Glaze WB 4030.
      - 2) Intermediate Coat: Match topcoat.
      - 3) Topcoat - Semi-Gloss: Tru-Glaze 4426.

c. PPG Paints:

- 1) Prime Coat: SPEEDHIDE Zero 6-4900XI Interior Latex Sealer Quick-Drying.
- 2) Intermediate Coat: Epoxy-modified latex, matching topcoat.
- 3) Topcoat - Semi-Gloss: Pitt Glaze WB 16-510 Series Pre-catalyzed Water Based Acrylic Epoxy.

d. Sherwin-Williams Company:

- 1) Prime Coat: Pro Mar 200 Zero VOC Interior Latex Primer.
- 2) Intermediate Coat: Epoxy-modified latex, matching topcoat.
- 3) Topcoat - Gloss: Pro Ind. Water Based Catalyzed Epoxy B73-300 Series.

e. Tnemec Company, Inc.:

- 1) Prime Coat: Series 151-1051 Elasto-Grip.
- 2) Intermediate Coat: Series W.B. Typoxy.
- 3) Topcoat - Semi-Gloss: Series 287 Tneme-Glaze.
- 4) Topcoat - Gloss: Series 297 Enviro-Glaze.

**END OF SECTION 09 96 00**

## SECTION 23 07 00 - HVAC INSULATION

### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

#### 1.2 SUMMARY

- A. Section Includes:

- 1. Insulation Materials:
  - a. Flexible elastomeric.
  - b. Mineral fiber.
- 2. Fire-rated insulation systems.
- 3. Insulating cements.
- 4. Adhesives.
- 5. Mastics.
- 6. Lagging adhesives.
- 7. Sealants.
- 8. Factory-applied jackets.
- 9. Field-applied fabric-reinforcing mesh.
- 10. Field-applied cloths.
- 11. Field-applied jackets.
- 12. Tapes.
- 13. Securements.
- 14. Corner angles.

- B. Related Sections:

- 1. Division 22 Section "Plumbing Insulation."
- 2. Division 23 Section "Metal Ducts" for duct liners
- 3. Division 23 section "Hangers and Supports for HVAC Piping and Equipment".

#### 1.3 SUBMITTALS

- A. Product Data: For each type of product indicated. Include thermal conductivity, thickness, and jackets (both factory and field applied, if any).

- B. Submittals:

- 1. Product Data for: Adhesives and sealants, documentation including printed statement of VOC content.
- 2. Laboratory Test Reports: For adhesives and sealants, documentation indicating that products comply with the testing and product requirements of the California Department of Health Services' "Standard Practice for the Testing of Volatile Organic Emissions from Various Sources Using Small-Scale Environmental Chambers."
- 3. Compliance with LEED V4 prerequisite and point requirements.

- C. Shop Drawings:

- 1. Detail application of protective shields, saddles, and inserts at hangers for each type of insulation and hanger.
- 2. Detail attachment and covering of heat tracing inside insulation.
- 3. Detail insulation application at pipe expansion joints for each type of insulation.

4. Detail insulation application at elbows, fittings, flanges, valves, and specialties for each type of insulation.
  5. Detail removable insulation at piping specialties, equipment connections, and access panels.
  6. Detail application of field-applied jackets.
  7. Detail application at linkages of control devices.
  8. Detail field application for each equipment type.
- D. Samples: For each type of insulation and jacket indicated. Identify each Sample, describing product and intended use.
1. Sample Sizes:
    - a. Preformed Pipe Insulation Materials: 12 inches (300 mm) long by NPS 2 (DN 50).
    - b. Sheet Form Insulation Materials: 12 inches (300 mm) square.
    - c. Jacket Materials for Pipe: 12 inches (300 mm) long by NPS 2 (DN 50).
    - d. Sheet Jacket Materials: 12 inches (300 mm) square.
    - e. Manufacturer's Color Charts: For products where color is specified, show the full range of colors available for each type of finish material.
- E. Qualification Data: For qualified Installer.
- F. Material Test Reports: From a qualified testing agency acceptable to authorities having jurisdiction indicating, interpreting, and certifying test results for compliance of insulation materials, sealers, attachments, cements, and jackets, with requirements indicated. Include dates of tests and test methods employed.
- G. Field quality-control reports.
- 1.4 QUALITY ASSURANCE
- A. Installer Qualifications: Skilled mechanics who have successfully completed an apprenticeship program or another craft training program certified by the Department of Labor, Bureau of Apprenticeship and Training.
  - B. Fire-Test-Response Characteristics: Insulation and related materials shall have fire-test-response characteristics indicated, as determined by testing identical products per ASTM E 84, by a testing and inspecting agency acceptable to authorities having jurisdiction. Factory label insulation and jacket materials and adhesive, mastic, tapes, and cement material containers, with appropriate markings of applicable testing and inspecting agency.
    1. Insulation Installed Indoors: Flame-spread index of 25 or less, and smoke-developed index of 50 or less.
    2. Insulation Installed Outdoors: Flame-spread index of 75 or less, and smoke-developed index of 150 or less.
- 1.5 DELIVERY, STORAGE, AND HANDLING
- A. Packaging: Insulation material containers shall be marked by manufacturer with appropriate ASTM standard designation, type and grade, and maximum use temperature.
- 1.6 COORDINATION
- A. Coordinate size and location of supports, hangers, and insulation shields specified in Division 23 Section "Hangers and Supports for HVAC Piping and Equipment."
  - B. Coordinate clearance requirements with piping Installer for piping insulation application, duct Installer for duct insulation application, and equipment Installer for equipment insulation application. Before preparing piping and ductwork Shop Drawings, establish and maintain clearance requirements for installation of insulation and field-applied jackets and finishes and for space required for maintenance.

## 1.7 SCHEDULING

- A. Schedule insulation application after pressure testing systems and, where required, after installing and testing heat tracing. Insulation application may begin on segments that have satisfactory test results.
- B. Complete installation and concealment of plastic materials as rapidly as possible in each area of construction.

## PART 2 - PRODUCTS

### 2.1 INSULATION MATERIALS

- A. Comply with requirements in Part 3 schedule articles for where insulating materials shall be applied.
- B. Products shall not contain asbestos, lead, mercury, or mercury compounds.
- C. Products that come in contact with stainless steel shall have a leachable chloride content of less than 50 ppm when tested according to ASTM C 871.
- D. Insulation materials for use on austenitic stainless steel shall be qualified as acceptable according to ASTM C 795.
- E. Foam insulation materials shall not use CFC or HCFC blowing agents in the manufacturing process.
- F. Flexible Elastomeric: Closed-cell, sponge- or expanded-rubber materials. Comply with ASTM C 534, Type I for tubular materials and Type II for sheet materials.
  - 1. Products: Subject to compliance with requirements, provide one of the following:
    - a. Aeroflex USA Inc.; Aerocel.
    - b. Armacell LLC; AP Armaflex.
    - c. RBX Corporation; Insul-Sheet 1800 and Insul-Tube 180.
- G. Mineral-Fiber Blanket Insulation: Mineral or glass fibers bonded with a thermosetting resin. Comply with ASTM C 553, Type II and ASTM C 1290, Type II with factory-applied vinyl jacket. Factory-applied jacket requirements are specified in "Factory-Applied Jackets" Article.
  - 1. Products: Subject to compliance with requirements, provide one of the following:
    - a. CertainTeed Corp.; Duct Wrap.
    - b. Johns Manville; Microlite.
    - c. Knauf Insulation; Duct Wrap.
    - d. Owens Corning; All-Service Duct Wrap.
- H. High-Temperature, Mineral-Fiber Blanket Insulation: Mineral or glass fibers bonded with a thermosetting resin. Comply with ASTM C 553, Type V, without factory-applied jacket.
  - 1. Products: Subject to compliance with requirements, provide one of the following:
    - a. Johns Manville; HTB 23 Spin-Glas.
    - b. Owens Corning; High Temperature Flexible Batt Insulations.
- I. Mineral-Fiber Board Insulation: Mineral or glass fibers bonded with a thermosetting resin. Comply with ASTM C 612, Type IA or Type IB. For duct and plenum applications, provide insulation with factory-applied ASJ. For equipment applications, provide insulation with factory-applied ASJ. Factory-applied jacket requirements are specified in "Factory-Applied Jackets" Article.
  - 1. Products: Subject to compliance with requirements, provide one of the following:
    - a. CertainTeed Corp.; Commercial Board.
    - b. Fibrex Insulations Inc.; FBX.



- c. Johns Manville; 800 Series Spin-Glas.
  - d. Knauf Insulation; Insulation Board.
  - e. Manson Insulation Inc.; AK Board.
  - f. Owens Corning; Fiberglas 700 Series.
- J. High-Temperature, Mineral-Fiber Board Insulation: Mineral or glass fibers bonded with a thermosetting resin. Comply with ASTM C 612, Type III, without factory-applied jacket.
- 1. Products: Subject to compliance with requirements, provide one of the following:
    - a. Fibrex Insulations Inc.; FBX.
    - b. Johns Manville; 1000 Series Spin-Glas.
    - c. Owens Corning; High Temperature Industrial Board Insulations.
    - d. Rock Wool Manufacturing Company; Delta Board.
    - e. Roxul Inc.; Roxul RW.
    - f. Thermafiber; Thermafiber Industrial Felt.
- K. Mineral-Fiber, Preformed Pipe Insulation:
- 1. Products: Subject to compliance with requirements, provide one of the following:
    - a. Fibrex Insulations Inc.; Coreplus 1200.
    - b. Johns Manville; Micro-Lok.
    - c. Knauf Insulation; 1000 Pipe Insulation.
    - d. Manson Insulation Inc.; Alley-K.
    - e. Owens Corning; Fiberglas Pipe Insulation.
  - 2. Type I, 850 deg F (454 deg C) Materials: Mineral or glass fibers bonded with a thermosetting resin. Comply with ASTM C 547, Type I, Grade A, with factory-applied - SSL. Factory-applied jacket requirements are specified in "Factory-Applied Jackets" Article.
  - 3. Type II, 1200 deg F (649 deg C) Materials: Mineral or glass fibers bonded with a thermosetting resin. Comply with ASTM C 547, Type II, Grade A, with factory-applied - SSL. Factory-applied jacket requirements are specified in "Factory-Applied Jackets" Article.
- L. Mineral-Fiber, Pipe and Tank Insulation: Mineral or glass fibers bonded with a thermosetting resin. Semirigid board material with factory-applied ASJ complying with ASTM C 1393, Type II or Type IIIA Category 2, or with properties similar to ASTM C 612, Type IB. Nominal density is 2.5 lb/cu. ft. (40 kg/cu. m) or more. Thermal conductivity (k-value) at 100 deg F (55 deg C) is 0.29 Btu x in./h x sq. ft. x deg F (0.042 W/m x K) or less. Factory-applied jacket requirements are specified in "Factory-Applied Jackets" Article.
- 1. Products: Subject to compliance with requirements, provide one of the following:
    - a. CertainTeed Corp.; CrimpWrap.
    - b. Johns Manville; MicroFlex.
    - c. Knauf Insulation; Pipe and Tank Insulation.
    - d. Owens Corning; Fiberglas Pipe and Tank Insulation.
- M. Removable ATC Valve Insulation Wrap: Insulated factory fabricated removable and reusable cover. Outer jacket shall be made of Dupont Tychem QC or equal, overlapping and completely covering the insulation with seams joined by tabs made from hook and loop fasteners (i.e. Velcro). Butt ends shall have sewn-in place elastic. Insulation shall have a minimum K-factor. 26, using fiberglass blanket, a minimum of 1" thick for line sizes 1-1/2" and smaller, 1-1/2" thick for line sizes over 2". Flame and smoke spread shall be 25/50 per SSTM E-84. No sweat or equal.
- N. Thermal inserts

1. Provide load bearing thermal inserts for 2" and larger piping systems at hangers and supports. Refer to specification section 230529 "Hangers and Supports for HVAC Piping and Equipment".

## 2.2 FIRE-RATED INSULATION SYSTEMS

- A. Fire-Rated Board: Structural-grade, press-molded, xonolite calcium silicate, fireproofing board suitable for operating temperatures up to 1700 deg F (927 deg C). Comply with ASTM C 656, Type II, Grade 6. tested and certified to provide a 2-hour fire rating by a NRTL acceptable to authority having jurisdiction.
  1. Products: Subject to compliance with requirements, provide the following:
    - a. Johns Manville; Super Firetemp M.
- B. Fire-Rated Blanket: High-temperature, flexible, blanket insulation with FSK jacket that is tested and certified to provide a 2-hour fire rating by a NRTL acceptable to authority having jurisdiction.
  1. Products: Subject to compliance with requirements, provide one of the following:
    - a. CertainTeed Corp.; FlameChek.
    - b. Johns Manville; Firetemp Wrap.
    - c. Nelson Firestop Products; Nelson FSB Flameshield Blanket.
    - d. Thermal Ceramics; FireMaster Duct Wrap.
    - e. 3M; Fire Barrier Wrap Products.
    - f. Unifrax Corporation; FyreWrap.

## 2.3 ADHESIVES

- A. Materials shall be compatible with insulation materials, jackets, and substrates and for bonding insulation to itself and to surfaces to be insulated, unless otherwise indicated.
- B. Flexible Elastomeric and Polyolefin Adhesive: Comply with MIL-A-24179A, Type II, Class I.
  1. Products: Subject to compliance with requirements, provide one of the following:
    - a. Aeroflex USA Inc.; AeroSeal.
    - b. Armacell LCC; 520 Adhesive.
    - c. Foster Products Corporation, H. B. Fuller Company; 85-75.
    - d. RBX Corporation; Rubatex Contact Adhesive.
  2. For indoor applications, use adhesive that has a VOC content of 50 g/L or less when calculated according to 40 CFR 59, Subpart D (EPA Method 24).
- C. Mineral-Fiber Adhesive: Comply with MIL-A-3316C, Class 2, Grade A.
  1. Products: Subject to compliance with requirements, provide one of the following:
    - a. Childers Products, Division of ITW; CP-82.
    - b. Foster Products Corporation, H. B. Fuller Company; 85-20.
    - c. ITW TACC, Division of Illinois Tool Works; S-90/80.
    - d. Marathon Industries, Inc.; 225.
    - e. Mon-Eco Industries, Inc.; 22-25.
  2. For indoor applications, use adhesive that has a VOC content of 80 g/L or less when calculated according to 40 CFR 59, Subpart D (EPA Method 24).
- D. ASJ Adhesive, and FSK Jacket Adhesive: Comply with MIL-A-3316C, Class 2, Grade A for bonding insulation jacket lap seams and joints.
  1. Products: Subject to compliance with requirements, provide one of the following:
    - a. Childers Products, Division of ITW; CP-82.
    - b. Foster Products Corporation, H. B. Fuller Company; 85-20.

- c. ITW TACC, Division of Illinois Tool Works; S-90/80.
  - d. Marathon Industries, Inc.; 225.
  - e. Mon-Eco Industries, Inc.; 22-25.
- 2. For indoor applications, use adhesive that has a VOC content of 50 g/L or less when calculated according to 40 CFR 59, Subpart D (EPA Method 24).
- E. PVC Jacket Adhesive: Compatible with PVC jacket.
  - 1. Products: Subject to compliance with requirements, provide one of the following:
    - a. Dow Chemical Company (The); 739, Dow Silicone.
    - b. Johns-Manville; Zeston Perma-Weld, CEEL-TITE Solvent Welding Adhesive.
    - c. P.I.C. Plastics, Inc.; Welding Adhesive.
    - d. Speedline Corporation; Speedline Vinyl Adhesive.
  - 2. For indoor applications, use adhesive that has a VOC content of 50 g/L or less when calculated according to 40 CFR 59, Subpart D (EPA Method 24).

## 2.4 MASTICS

- A. Materials shall be compatible with insulation materials, jackets, and substrates; comply with MIL-C-19565C, Type II.
  - 1. For indoor applications, use mastics that have a VOC content of 250 g/L or less when calculated according to 40 CFR 59, Subpart D (EPA Method 24).
- B. Vapor-Barrier Mastic: Water based; suitable for indoor and outdoor use on below ambient services.
  - 1. Products: Subject to compliance with requirements, provide one of the following:
    - a. Childers Products, Division of ITW; CP-35.
    - b. Foster Products Corporation, H. B. Fuller Company; 30-90.
    - c. ITW TACC, Division of Illinois Tool Works; CB-50.
    - d. Marathon Industries, Inc.; 590.
    - e. Mon-Eco Industries, Inc.; 55-40.
    - f. Vimasco Corporation; 749.
  - 2. Water-Vapor Permeance: ASTM E 96, Procedure B, 0.013 perm (0.009 metric perm) at 43-mil (1.09-mm) dry film thickness.
  - 3. Service Temperature Range: Minus 20 to plus 180 deg F (Minus 29 to plus 82 deg C).
  - 4. Solids Content: ASTM D 1644, 59 percent by volume and 71 percent by weight.
  - 5. Color: White.
- C. Vapor-Barrier Mastic: Solvent based; suitable for indoor use on below ambient services.
  - 1. Products: Subject to compliance with requirements, provide one of the following:
    - a. Childers Products, Division of ITW; CP-30.
    - b. Foster Products Corporation, H. B. Fuller Company; 30-35.
    - c. ITW TACC, Division of Illinois Tool Works; CB-25.
    - d. Marathon Industries, Inc.; 501.
    - e. Mon-Eco Industries, Inc.; 55-10.
  - 2. Water-Vapor Permeance: ASTM F 1249, 0.05 perm (0.03 metric perm) at 35-mil (0.9-mm) dry film thickness.
  - 3. Service Temperature Range: 0 to 180 deg F (Minus 18 to plus 82 deg C).
  - 4. Solids Content: ASTM D 1644, 44 percent by volume and 62 percent by weight.
  - 5. Color: White.
- D. Vapor-Barrier Mastic: Solvent based; suitable for outdoor use on below ambient services.
  - 1. Products: Subject to compliance with requirements, provide one of the following:

- a. Childers Products, Division of ITW; Encacel.
    - b. Foster Products Corporation, H. B. Fuller Company; 60-95/60-96.
    - c. Marathon Industries, Inc.; 570.
    - d. Mon-Eco Industries, Inc.; 55-70.
  2. Water-Vapor Permeance: ASTM F 1249, 0.05 perm (0.033 metric perm) at 30-mil (0.8-mm) dry film thickness.
  3. Service Temperature Range: Minus 50 to plus 220 deg F (Minus 46 to plus 104 deg C).
  4. Solids Content: ASTM D 1644, 33 percent by volume and 46 percent by weight.
  5. Color: White.
- E. Breather Mastic: Water based; suitable for indoor and outdoor use on above ambient services.
1. Products: Subject to compliance with requirements, provide one of the following:
    - a. Childers Products, Division of ITW; CP-10.
    - b. Foster Products Corporation, H. B. Fuller Company; 35-00.
    - c. ITW TACC, Division of Illinois Tool Works; CB-05/15.
    - d. Marathon Industries, Inc.; 550.
    - e. Mon-Eco Industries, Inc.; 55-50.
    - f. Vimasco Corporation; WC-1/WC-5.
  2. Water-Vapor Permeance: ASTM F 1249, 3 perms (2 metric perms) at 0.0625-inch (1.6-mm) dry film thickness.
  3. Service Temperature Range: Minus 20 to plus 200 deg F (Minus 29 to plus 93 deg C).
  4. Solids Content: 63 percent by volume and 73 percent by weight.
  5. Color: White.

## 2.5 LAGGING ADHESIVES

- A. Description: Comply with MIL-A-3316C Class I, Grade A and shall be compatible with insulation materials, jackets, and substrates.
1. For indoor applications, use lagging adhesives that have a VOC content of 250 g/L or less when calculated according to 40 CFR 59, Subpart D (EPA Method 24).
  2. Products: Subject to compliance with requirements, provide one of the following:
    - a. Childers Products, Division of ITW; CP-52.
    - b. Foster Products Corporation, H. B. Fuller Company; 81-42.
    - c. Marathon Industries, Inc.; 130.
    - d. Mon-Eco Industries, Inc.; 11-30.
    - e. Vimasco Corporation; 136.
  3. Fire-resistant, water-based lagging adhesive and coating for use indoors to adhere fire-resistant lagging cloths over duct, equipment, and pipe insulation.
  4. Service Temperature Range: Minus 50 to plus 180 deg F (Minus 46 to plus 82 deg C).
  5. Color: White.

## 2.6 SEALANTS

- A. FSK and Metal Jacket Flashing Sealants:
1. Products: Subject to compliance with requirements, provide one of the following:
    - a. Childers Products, Division of ITW; CP-76-8.
    - b. Foster Products Corporation, H. B. Fuller Company; 95-44.
    - c. Marathon Industries, Inc.; 405.
    - d. Mon-Eco Industries, Inc.; 44-05.
    - e. Vimasco Corporation; 750.
  2. Materials shall be compatible with insulation materials, jackets, and substrates.
  3. Fire- and water-resistant, flexible, elastomeric sealant.

4. Service Temperature Range: Minus 40 to plus 250 deg F (Minus 40 to plus 121 deg C).
5. Color: Aluminum.
6. For indoor applications, use sealants that have a VOC content of 250 g/L or less when calculated according to 40 CFR 59, Subpart D (EPA Method 24).

B. ASJ Flashing Sealants, Vinyl, and PVC Jacket Flashing Sealants:

1. Products: Subject to compliance with requirements, provide one of the following:
  - a. Childers Products, Division of ITW; CP-76.
2. Materials shall be compatible with insulation materials, jackets, and substrates.
3. Fire- and water-resistant, flexible, elastomeric sealant.
4. Service Temperature Range: Minus 40 to plus 250 deg F (Minus 40 to plus 121 deg C).
5. Color: White.
6. For indoor applications, use sealants that have a VOC content of 250 g/L or less when calculated according to 40 CFR 59, Subpart D (EPA Method 24).

2.7 FACTORY-APPLIED JACKETS

A. Insulation system schedules indicate factory-applied jackets on various applications. When factory-applied jackets are indicated, comply with the following:

1. ASJ: White, kraft-paper, or paper-free (Owens Corning Evolution) fiberglass-reinforced scrim with aluminum-foil backing; complying with ASTM C 1136, Type I.
2. ASJ-SSL: ASJ with self-sealing, pressure-sensitive, acrylic-based adhesive covered by a removable protective strip; complying with ASTM C 1136, Type I.
3. FSK Jacket: Aluminum-foil, fiberglass-reinforced scrim with kraft-paper backing; complying with ASTM C 1136, Type II.
4. FSP Jacket: Aluminum-foil, fiberglass-reinforced scrim with polyethylene backing; complying with ASTM C 1136, Type II.

2.8 FIELD-APPLIED CLOTHS

A. Woven Glass-Fiber Fabric: Comply with MIL-C-20079H, Type I, plain weave, and presized a minimum of 8 oz./sq. yd. (271 g/sq. m).

1. Products: Subject to compliance with requirements, available products that may be incorporated into the work, but are not limited to, the following:
  - a. Alpha Associates, Inc.; Alpha-Maritex 84215 and 84217/9485RW, Luben 59.

2.9 FIELD-APPLIED JACKETS

A. Field-applied jackets shall comply with ASTM C 921, Type I, unless otherwise indicated.

B. PVC Jacket: High-impact-resistant, UV-resistant PVC complying with ASTM D 1784, Class 16354-C; 20 mil thickness; roll stock ready for shop or field cutting and forming. Thickness is indicated in field-applied jacket schedules.

1. Products: Subject to compliance with requirements, provide one of the following:
  - a. Johns Manville; Zeston.
  - b. P.I.C. Plastics, Inc.; FG Series.
  - c. Proto PVC Corporation; LoSmoke.
  - d. Speedline Corporation; SmokeSafe.
2. Adhesive: As recommended by jacket material manufacturer.
3. Color: White.
4. Factory-fabricated fitting covers to match jacket if available; otherwise, field fabricate.

- a. Shapes: 45- and 90-degree, short- and long-radius elbows, tees, valves, flanges, unions, reducers, end caps, soil-pipe hubs, traps, mechanical joints, and P-trap and supply covers for lavatories.
5. Factory-fabricated tank heads and tank side panels.
- C. Metal Jacket:
  1. Products: Subject to compliance with requirements, provide one of the following:
    - a. Childers Products, Division of ITW; Metal Jacketing Systems.
    - b. PABCO Metals Corporation; Surefit.
    - c. RPR Products, Inc.; Insul-Mate.
  2. Aluminum Jacket: Comply with ASTM B 209 (ASTM B 209M), Alloy 3003, 3005, 3105 Temper H-14.
    - a. Factory cut and rolled to size.
    - b. Stucco embossed finish and thickness shall be based on the outer diameter of the insulation system per the requirements of ASTM-C1729 but not less than .024".
    - c. Moisture Barrier for Indoor Applications: 3-mil- (0.075-mm-) thick, heat-bonded polyethylene and Surlyn Polymers.
    - d. Moisture Barrier for Outdoor Applications: 3-mil- (0.075-mm-) thick, heat-bonded polyethylene and kraft paper.
    - e. Factory-Fabricated Fitting Covers(ITW ELL-Jacs Plus):
      - 1) Same material, finish, polyfilmed lined and thickness as jacket.
      - 2) Preformed 2-piece or gore, 45- and 90-degree, short- and long-radius elbows.
      - 3) Tee covers.
      - 4) Flange and union covers.
      - 5) End caps.
      - 6) Beveled collars.
      - 7) Valve covers.
      - 8) Field fabricate fitting covers only if factory-fabricated fitting covers are not available.

## 2.10 TAPES

- A. ASJ Tape: White vapor-retarder tape matching factory-applied jacket with acrylic adhesive, complying with ASTM C 1136.
  1. Products: Subject to compliance with requirements, provide one of the following:
    - a. Avery Dennison Corporation, Specialty Tapes Division; Fasson 0835.
    - b. Compac Corp.; 104 and 105.
    - c. Ideal Tape Co., Inc., an American Biltrite Company; 428 AWF ASJ.
    - d. Venture Tape; 1540 CW Plus, 1542 CW Plus, and 1542 CW Plus/SQ.
  2. Width: 3 inches (75 mm).
  3. Thickness: 11.5 mils (0.29 mm).
  4. Adhesion: 90 ounces force/inch (1.0 N/mm) in width.
  5. Elongation: 2 percent.
  6. Tensile Strength: 40 lbf/inch (7.2 N/mm) in width.
  7. ASJ Tape Disks and Squares: Precut disks or squares of ASJ tape.
- B. FSK Tape: Foil-face, vapor-retarder tape matching factory-applied jacket with acrylic adhesive; complying with ASTM C 1136.
  1. Products: Subject to compliance with requirements, provide one of the following:
    - a. Avery Dennison Corporation, Specialty Tapes Division; Fasson 0827.
    - b. Compac Corp.; 110 and 111.

- c. Ideal Tape Co., Inc., an American Biltrite Company; 491 AWF FSK.
    - d. Venture Tape; 1525 CW, 1528 CW, and 1528 CW/SQ.
  - 2. Width: 3 inches (75 mm).
  - 3. Thickness: 6.5 mils (0.16 mm).
  - 4. Adhesion: 90 ounces force/inch (1.0 N/mm) in width.
  - 5. Elongation: 2 percent.
  - 6. Tensile Strength: 40 lbf/inch (7.2 N/mm) in width.
  - 7. FSK Tape Disks and Squares: Precut disks or squares of FSK tape.
- C. PVC Tape: White vapor-retarder tape matching field-applied PVC jacket with acrylic adhesive. Suitable for indoor and outdoor applications.
- 1. Products: Subject to compliance with requirements, provide one of the following:
    - a. Avery Dennison Corporation, Specialty Tapes Division; Fasson 0555.
    - b. Compac Corp.; 130.
    - c. Ideal Tape Co., Inc., an American Biltrite Company; 370 White PVC tape.
    - d. Venture Tape; 1506 CW NS.
  - 2. Width: 2 inches (50 mm).
  - 3. Thickness: 6 mils (0.15 mm).
  - 4. Adhesion: 64 ounces force/inch (0.7 N/mm) in width.
  - 5. Elongation: 500 percent.
  - 6. Tensile Strength: 18 lbf/inch (3.3 N/mm) in width.
- D. Aluminum-Foil Tape: Vapor-retarder tape with acrylic adhesive.
- 1. Products: Subject to compliance with requirements, provide one of the following:
    - a. Avery Dennison Corporation, Specialty Tapes Division; Fasson 0800.
    - b. Compac Corp.; 120.
    - c. Ideal Tape Co., Inc., an American Biltrite Company; 488 AWF.
    - d. Venture Tape; 3520 CW.
  - 2. Width: 2 inches (50 mm).
  - 3. Thickness: 3.7 mils (0.093 mm).
  - 4. Adhesion: 100 ounces force/inch (1.1 N/mm) in width.
  - 5. Elongation: 5 percent.
  - 6. Tensile Strength: 34 lbf/inch (6.2 N/mm) in width.

## 2.11 SECUREMENTS

### A. Bands:

- 1. Products: Subject to compliance with requirements, provide one of the following:
  - a. Childers Products; Bands.
  - b. PABCO Metals Corporation; Bands.
  - c. RPR Products, Inc.; Bands.
- 2. Stainless Steel: ASTM A 167 or ASTM A 240/A 240M, Type 304 or 316; 0.015 inch (0.38 mm) thick, 3/4 inch (19 mm) wide with wing or closed seal.
- 3. Aluminum: ASTM B 209 (ASTM B 209M), Alloy 3003, 3005, 3105, or 5005; Temper H-14, 0.020 inch (0.51 mm) thick, 3/4 inch (19 mm), wide with wing or closed seal.
- 4. Springs: Twin spring set constructed of stainless steel with ends flat and slotted to accept metal bands. Spring size determined by manufacturer for application.

### B. Insulation Pins and Hangers:

- 1. Cupped-Head, Capacitor-Discharge-Weld Pins: Stainless steel- or zinc-coated steel pin, fully annealed for capacitor-discharge welding, 0.135-inch- (3.5-mm-) diameter shank,

length to suit depth of insulation indicated with integral 1-1/2-inch (38-mm) galvanized carbon-steel washer.

- a. Products: Subject to compliance with requirements, provide one of the following:
  - 1) AGM Industries, Inc.; CWP-1.
  - 2) GEMCO; Cupped Head Weld Pin.
  - 3) Midwest Fasteners, Inc.; Cupped Head.
  - 4) Nelson Stud Welding; CHP.
2. Metal, Adhesively Attached, Perforated-Base Insulation Hangers: Baseplate welded to projecting spindle that is capable of holding insulation, of thickness indicated, securely in position indicated when self-locking washer is in place. Comply with the following requirements:
  - a. Products: Subject to compliance with requirements, provide one of the following:
    - 1) AGM Industries, Inc.; Tactoo Insul-Hangers, Series T.
    - 2) GEMCO; Perforated Base.
    - 3) Midwest Fasteners, Inc.; Spindle.
  - b. Baseplate: Perforated, galvanized carbon-steel sheet, 0.030 inch (0.76 mm) thick by 2 inches (50 mm) square.
  - c. Spindle: Zinc-coated, low carbon steel, aluminum or stainless steel, fully annealed, 0.106-inch- (2.6-mm-) diameter shank, length to suit depth of insulation indicated.
  - d. Adhesive: Recommended by hanger manufacturer. Product with demonstrated capability to bond insulation hanger securely to substrates indicated without damaging insulation, hangers, and substrates.
3. Insulation-Retaining Washers: Self-locking washers formed from 0.015-inch- thick, galvanized-steel or stainless steel sheet, with beveled edge sized as required to hold insulation securely in place but not less than 1-1/2 inches (38 mm) in diameter.
  - a. Products: Subject to compliance with requirements, provide one of the following:
    - 1) AGM Industries, Inc.; RC-150.
    - 2) GEMCO; R-150.
    - 3) Midwest Fasteners, Inc.; WA-150.
    - 4) Nelson Stud Welding; Speed Clips.
  - b. Protect ends with capped self-locking washers incorporating a spring steel insert to ensure permanent retention of cap in exposed locations.
- C. Staples: Outward-clinching insulation staples, nominal 3/4-inch- (19-mm-) wide, stainless steel or Monel.
- D. Wire: 0.080-inch (2.0-mm) nickel-copper alloy or 0.062-inch (1.6 mm) soft annealed stainless steel..
  1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
    - a. C & F Wire.
    - b. Childers Products.
    - c. PABCO Metals Corporation.
    - d. RPR Products, Inc.

## 2.12 CORNER ANGLES

- A. Aluminum Corner Angles: 0.040 inch (1.0 mm) thick, minimum 1 by 1 inch (25 by 25 mm), aluminum according to ASTM B 209 (ASTM B 209M), Alloy 3003, 3005, 3105 or 5005; Temper H-14.



- B. Stainless-Steel Corner Angles: 0.024 inch (0.61 mm) thick, minimum 1 by 1 inch (25 by 25 mm), stainless steel according to ASTM A 167 or ASTM A 240/A 240M, Type 304 or 316.

### PART 3 - EXECUTION

#### 3.1 EXAMINATION

- A. Examine substrates and conditions for compliance with requirements for installation and other conditions affecting performance of insulation application.
  - 1. Verify that systems and equipment to be insulated have been tested and are free of defects.
  - 2. Verify that surfaces to be insulated are clean and dry.
  - 3. Proceed with installation only after unsatisfactory conditions have been corrected.

#### 3.2 PREPARATION

- A. Surface Preparation: Clean and dry surfaces to receive insulation. Remove materials that will adversely affect insulation application.
- B. Surface Preparation: Clean and prepare surfaces to be insulated. Before insulating, apply a corrosion coating to insulated surfaces as follows:
  - 1. Stainless Steel: Coat 300 series stainless steel with an epoxy primer 5 mils (0.127 mm) thick and an epoxy finish 5 mils (0.127 mm) thick if operating in a temperature range between 140 and 300 deg F (60 and 149 deg C). Consult coating manufacturer for appropriate coating materials and application methods for operating temperature range.
- C. Coordinate insulation installation with the trade installing heat tracing. Comply with requirements for heat tracing that apply to insulation.
- D. Mix insulating cements with clean potable water; if insulating cements are to be in contact with stainless-steel surfaces, use demineralized water.

#### 3.3 GENERAL INSTALLATION REQUIREMENTS

- A. Install insulation materials, accessories, and finishes with smooth, straight, and even surfaces; free of voids throughout the length of equipment, ducts and fittings, and piping including fittings, valves, and specialties.
- B. Install insulation materials, forms, vapor barriers or retarders, jackets, and thicknesses required for each item of equipment, duct system, and pipe system as specified in insulation system schedules.
- C. Install accessories compatible with insulation materials and suitable for the service. Install accessories that do not corrode, soften, or otherwise attack insulation or jacket in either wet or dry state.
- D. Install insulation with longitudinal seams at top and bottom of horizontal runs.
- E. Install multiple layers of insulation with longitudinal and end seams staggered.
- F. Do not weld brackets, clips, or other attachment devices to piping, fittings, and specialties.
- G. Keep insulation materials dry during application and finishing.
- H. Install insulation with tight longitudinal seams and end joints. Bond seams and joints with adhesive recommended by insulation material manufacturer.
- I. Install insulation with least number of joints practical.
- J. Where vapor barrier is indicated, seal joints, seams, and penetrations in insulation at hangers, supports, anchors, and other projections with vapor-barrier mastic.

1. Install insulation continuously through hangers and around anchor attachments.
  2. For insulation application where vapor barriers are indicated, extend insulation on anchor legs from point of attachment to supported item to point of attachment to structure. Taper and seal ends at attachment to structure with vapor-barrier mastic.
  3. Install insert materials and install insulation to tightly join the insert. Seal insulation to insulation inserts with adhesive or sealing compound recommended by insulation material manufacturer.
  4. Cover inserts with jacket material matching adjacent pipe insulation. Install shields over jacket, arranged to protect jacket from tear or puncture by hanger, support, and shield.
- K. Apply adhesives, mastics, and sealants at manufacturer's recommended coverage rate and wet and dry film thicknesses.
- L. Install insulation with factory-applied jackets as follows:
1. Draw jacket tight and smooth.
  2. Cover circumferential joints with 3-inch- (75-mm-) wide strips, of same material as insulation jacket. Secure strips with adhesive and outward clinching staples along both edges of strip, spaced 4 inches (100 mm) o.c.
  3. Overlap jacket longitudinal seams at least 1-1/2 inches (38 mm). Install insulation with longitudinal seams at bottom of pipe. Clean and dry surface to receive self-sealing lap. Staple laps with outward clinching staples along edge at 2 inches (50 mm) o.c.
    - a. For below ambient services, apply vapor-barrier mastic over staples.
  4. Cover joints and seams with tape as recommended by insulation material manufacturer to maintain vapor seal.
  5. Where vapor barriers are indicated, apply vapor-barrier mastic on seams and joints and at ends adjacent to duct and pipe flanges and fittings.
- M. Cut insulation in a manner to avoid compressing insulation more than 75 percent of its nominal thickness.
- N. Finish installation with systems at operating conditions. Repair joint separations and cracking due to thermal movement.
- O. Repair damaged insulation facings by applying same facing material over damaged areas. Extend patches at least 4 inches (100 mm) beyond damaged areas. Adhere, staple, and seal patches similar to butt joints.
- P. For above ambient services, do not install insulation to the following:
1. Vibration-control devices.
  2. Testing agency labels and stamps.
  3. Nameplates and data plates.
  4. Manholes.
  5. Handholes.
  6. Cleanouts.
- Q. Provide removable insulation sections to cover parts of equipment which must be opened periodically for maintenance such as vessel covers, fasteners, flanges, frames and accessories.
- R. Provide load bearing thermal inserts for 2" and larger pipe hangers and supports.

### 3.4 PENETRATIONS

- A. Insulation Installation at Roof Penetrations: Install insulation continuously through roof penetrations.
1. Seal penetrations with flashing sealant.
  2. For applications requiring only indoor insulation, terminate insulation above roof surface and seal with joint sealant. For applications requiring indoor and outdoor insulation,

- install insulation for outdoor applications tightly joined to indoor insulation ends. Seal joint with joint sealant.
- 3. Extend jacket of outdoor insulation outside roof flashing at least 2 inches (50 mm) below top of roof flashing.
- 4. Seal jacket to roof flashing with flashing sealant.
- B. Insulation Installation at Underground Exterior Wall Penetrations: Terminate insulation flush with sleeve seal. Seal terminations with flashing sealant.
- C. Insulation Installation at Aboveground Exterior Wall Penetrations: Install insulation continuously through wall penetrations.
  - 1. Seal penetrations with flashing sealant.
  - 2. For applications requiring only indoor insulation, terminate insulation inside wall surface and seal with joint sealant. For applications requiring indoor and outdoor insulation, install insulation for outdoor applications tightly joined to indoor insulation ends. Seal joint with joint sealant.
  - 3. Extend jacket of outdoor insulation outside wall flashing and overlap wall flashing at least 2 inches (50 mm).
  - 4. Seal jacket to wall flashing with flashing sealant.
- D. Insulation Installation at Interior Wall and Partition Penetrations (That Are Not Fire Rated): Install insulation continuously through walls and partitions.
- E. Insulation Installation at Fire-Rated Wall and Partition Penetrations: Install insulation continuously through penetrations of fire-rated walls and partitions. Terminate insulation at fire damper sleeves for fire-rated wall and partition penetrations. Externally insulate damper sleeves to match adjacent insulation and overlap duct insulation at least 2 inches (50 mm).
  - 1. Comply with requirements in Division 07 Section "Penetration Firestopping" firestopping and fire-resistive joint sealers.
- F. Insulation Installation at Floor Penetrations:
  - 1. Duct: Install insulation continuously through floor penetrations that are not fire rated. For penetrations through fire-rated assemblies, terminate insulation at fire damper sleeves and externally insulate damper sleeve beyond floor to match adjacent duct insulation. Overlap damper sleeve and duct insulation at least 2 inches (50 mm).
  - 2. Pipe: Install insulation continuously through floor penetrations.
  - 3. Seal penetrations through fire-rated assemblies. Comply with requirements in Division 07 Section "Penetration Firestopping."

### 3.5 EQUIPMENT, TANK, AND VESSEL INSULATION INSTALLATION

- A. Mineral Fiber, Pipe and Tank Insulation Installation for Tanks and Vessels: Secure insulation with adhesive and anchor pins and speed washers.
  - 1. Apply adhesives according to manufacturer's recommended coverage rates per unit area, for 100 percent coverage of tank and vessel surfaces.
  - 2. Groove and score insulation materials to fit as closely as possible to equipment, including contours. Bevel insulation edges for cylindrical surfaces for tight joints. Stagger end joints.
  - 3. Protect exposed corners with secured corner angles.
  - 4. Install adhesively attached or self-sticking insulation hangers and speed washers on sides of tanks and vessels as follows:
    - a. Do not weld anchor pins to ASME-labeled pressure vessels.
    - b. Select insulation hangers and adhesive that are compatible with service temperature and with substrate.
    - c. On tanks and vessels, maximum anchor-pin spacing is 3 inches (75 mm) from insulation end joints, and 16 inches (400 mm) o.c. in both directions.

- d. Do not overcompress insulation during installation.
  - e. Cut and miter insulation segments to fit curved sides and domed heads of tanks and vessels.
  - f. Impale insulation over anchor pins and attach speed washers.
  - g. Cut excess portion of pins extending beyond speed washers or bend parallel with insulation surface. Cover exposed pins and washers with tape matching insulation facing.
5. Secure each layer of insulation with stainless-steel or aluminum bands. Select band material compatible with insulation materials.
  6. Where insulation hangers on equipment and vessels are not permitted or practical and where insulation support rings are not provided, install a girdle network for securing insulation. Stretch prestressed aircraft cable around the diameter of vessel and make taut with clamps, turnbuckles, or breather springs. Place one circumferential girdle around equipment approximately 6 inches (150 mm) from each end. Install wire or cable between two circumferential girdles 12 inches (300 mm) o.c. Install a wire ring around each end and around outer periphery of center openings, and stretch prestressed aircraft cable radially from the wire ring to nearest circumferential girdle. Install additional circumferential girdles along the body of equipment or tank at a minimum spacing of 48 inches (1200 mm) o.c. Use this network for securing insulation with tie wire or bands.
  7. Stagger joints between insulation layers at least 3 inches (75 mm).
  8. Install insulation in removable segments on equipment access doors, manholes, handholes, and other elements that require frequent removal for service and inspection.
  9. Bevel and seal insulation ends around manholes, handholes, ASME stamps, and nameplates.
  10. For equipment with surface temperatures below ambient, apply mastic to open ends, joints, seams, breaks, and punctures in insulation.
- B. Flexible Elastomeric Thermal Insulation Installation for Tanks and Vessels: Install insulation over entire surface of tanks and vessels.
1. Apply 100 percent coverage of adhesive to surface with manufacturer's recommended adhesive.
  2. Seal longitudinal seams and end joints.
- C. Insulation Installation on Pumps:
1. For geothermal water pumps fabricate metal boxes lined with insulation. Fit boxes around pumps and coincide box joints with splits in pump casings. Fabricate joints with outward bolted flanges. Bolt flanges on 6-inch (150-mm) centers, starting at corners. Install 3/8-inch- (10-mm-) diameter fasteners with wing nuts. Alternatively, secure the box sections together using a latching mechanism.
  2. Fabricate boxes from aluminum or stainless steel, at least 0.040 inch (1.0 mm) thick.
  3. For below ambient services, install a vapor barrier at seams, joints, and penetrations. Seal between flanges with replaceable gasket material to form a vapor barrier.

### 3.6 GENERAL PIPE INSULATION INSTALLATION

- A. Requirements in this article generally apply to all insulation materials except where more specific requirements are specified in various pipe insulation material installation articles.
- B. Insulation Installation on Fittings, Valves, Strainers, Flanges, and Unions:
1. Install insulation over fittings, valves, strainers, flanges, unions, and other specialties with continuous thermal and vapor-retarder integrity, unless otherwise indicated.
  2. Insulate pipe elbows using preformed fitting insulation or mitered fittings made from same material and density as adjacent pipe insulation. Each piece shall be butted tightly against adjoining piece and bonded with adhesive. Fill joints, seams, voids, and irregular surfaces with insulating cement finished to a smooth, hard, and uniform contour that is uniform with adjoining pipe insulation.

3. Insulate tee fittings with preformed fitting insulation or sectional pipe insulation of same material and thickness as used for adjacent pipe. Cut sectional pipe insulation to fit. Butt each section closely to the next and hold in place with tie wire. Bond pieces with adhesive.
  4. Insulate valves using preformed fitting insulation or reusable valve wraps. Overlap adjoining pipe insulation by not less than two times the thickness of pipe insulation, or one pipe diameter, whichever is thicker. For valves, insulate up to and including the bonnets, valve stuffing-box studs, bolts, and nuts. Fill joints, seams, and irregular surfaces with insulating cement.
  5. Insulate strainers using preformed fitting insulation or sectional pipe insulation of same material, density, and thickness as used for adjacent pipe. Overlap adjoining pipe insulation by not less than two times the thickness of pipe insulation, or one pipe diameter, whichever is thicker. Fill joints, seams, and irregular surfaces with insulating cement. Insulate strainers so strainer basket flange or plug can be easily removed and replaced without damaging the insulation and jacket. Provide a removable reusable insulation cover. For below ambient services, provide a design that maintains vapor barrier.
  6. Insulate flanges and unions using a section of oversized preformed pipe insulation. Overlap adjoining pipe insulation by not less than two times the thickness of pipe insulation, or one pipe diameter, whichever is thicker.
  7. Cover segmented insulated surfaces with a layer of finishing cement and coat with a mastic. Install vapor-barrier mastic for below ambient services and a breather mastic for above ambient services. Reinforce the mastic with fabric-reinforcing mesh. Trowel the mastic to a smooth and well-shaped contour.
  8. For services not specified to receive a field-applied jacket except for flexible elastomeric and polyolefin, install fitted PVC cover over elbows, tees, strainers, valves, flanges, and unions. Terminate ends with PVC end caps. Tape PVC covers to adjoining insulation facing using PVC tape.
  9. Stencil or label the outside insulation jacket of each union with the word "UNION." Match size and color of pipe labels.
  10. Heating hot water coil piping trim to terminal units (blower coil units, VAV units) does not need to be insulated if located a minimum of three (3) feet from the coil when located in air conditioning ductwork.
  11. Insulate all heating coils and all connecting piping within 3 feet of coil when located in air conditioning ductwork.
  12. All valve stems shall be sealed with caulking.
  13. Provide removable/flexible insulation covers with draw string ends and Velcro fastener for geothermal water control valves (i.e., WSHP units). Covers shall be as manufactured by NoSweat Reusable Valve Wraps or equal.
- C. Insulate instrument connections for thermometers, pressure gages, pressure temperature taps, test connections, flow meters, sensors, switches, and transmitters on insulated pipes, vessels, and equipment. Shape insulation at these connections by tapering it to and around the connection with insulating cement and finish with finishing cement, mastic, and flashing sealant.
- D. Install removable insulation covers at locations indicated. Installation shall conform to the following:
1. Make removable flange and union insulation from sectional pipe insulation of same thickness as that on adjoining pipe. Install same insulation jacket as adjoining pipe insulation.
  2. When flange and union covers are made from sectional pipe insulation, extend insulation from flanges or union long at least two times the insulation thickness over adjacent pipe insulation on each side of flange or union. Secure flange cover in place with stainless-steel or aluminum bands. Select band material compatible with insulation and jacket.
  3. Construct removable valve insulation covers in same manner as for flanges except divide the two-part section on the vertical center line of valve body.

4. When covers are made from block insulation, make two halves, each consisting of mitered blocks wired to stainless-steel fabric. Secure this wire frame, with its attached insulation, to flanges with tie wire. Extend insulation at least 2 inches (50 mm) over adjacent pipe insulation on each side of valve. Fill space between flange or union cover and pipe insulation with insulating cement. Finish cover assembly with insulating cement applied in two coats. After first coat is dry, apply and trowel second coat to a smooth finish.
5. Unless a PVC jacket is indicated in field-applied jacket schedules, finish exposed surfaces with a metal jacket.

### 3.7 FLEXIBLE ELASTOMERIC INSULATION INSTALLATION

- A. Seal longitudinal seams and end joints with manufacturer's recommended adhesive to eliminate openings in insulation that allow passage of air to surface being insulated.
- B. Insulation Installation on Pipe Flanges:
  1. Install pipe insulation to outer diameter of pipe flange.
  2. Make width of insulation section same as overall width of flange and bolts, plus twice the thickness of pipe insulation.
  3. Fill voids between inner circumference of flange insulation and outer circumference of adjacent straight pipe segments with cut sections of sheet insulation of same thickness as pipe insulation.
  4. Secure insulation to flanges and seal seams with manufacturer's recommended adhesive to eliminate openings in insulation that allow passage of air to surface being insulated.
- C. Insulation Installation on Pipe Fittings and Elbows:
  1. Install mitered sections of pipe insulation.
  2. Secure insulation materials and seal seams with manufacturer's recommended adhesive to eliminate openings in insulation that allow passage of air to surface being insulated.
- D. Insulation Installation on Valves and Pipe Specialties:
  1. Install preformed valve covers manufactured of same material as pipe insulation when available.
  2. When preformed valve covers are not available, install reusable valve wrap covers.
  3. Install insulation to flanges as specified for flange insulation application.
  4. Secure insulation to valves and specialties and seal seams with manufacturer's recommended adhesive to eliminate openings in insulation that allow passage of air to surface being insulated.

### 3.8 MINERAL-FIBER INSULATION INSTALLATION

- A. Insulation Installation on Straight Pipes and Tubes:
  1. Secure each layer of preformed pipe insulation to pipe with wire or bands and tighten bands without deforming insulation materials.
  2. Where vapor barriers are indicated, seal longitudinal seams, end joints, and protrusions with vapor-barrier mastic and joint sealant.
  3. For insulation with factory-applied jackets on above ambient surfaces, secure laps with outward clinched staples at 6 inches (150 mm) o.c.
  4. For insulation with factory-applied jackets on below ambient surfaces, do not staple longitudinal tabs but secure tabs with additional adhesive as recommended by insulation material manufacturer and seal with vapor-barrier mastic and flashing sealant.
- B. Insulation Installation on Pipe Flanges:
  1. Install preformed pipe insulation to outer diameter of pipe flange.
  2. Make width of insulation section same as overall width of flange and bolts, plus twice the thickness of pipe insulation.

3. Fill voids between inner circumference of flange insulation and outer circumference of adjacent straight pipe segments with mineral-fiber blanket insulation.
  4. Install jacket material with manufacturer's recommended adhesive, overlap seams at least 1 inch (25 mm), and seal joints with flashing sealant.
- C. Insulation Installation on Pipe Fittings and Elbows:
1. Install preformed sections of same material as straight segments of pipe insulation when available.
  2. When preformed insulation elbows and fittings are not available, install mitered sections of pipe insulation, to a thickness equal to adjoining pipe insulation. Secure insulation materials with wire or bands.
- D. Insulation Installation on Valves and Pipe Specialties:
1. Install preformed sections of same material as straight segments of pipe insulation when available.
  2. When preformed sections are not available, install mitered sections of pipe insulation to valve body.
  3. Arrange insulation to permit access to packing and to allow valve operation without disturbing insulation.
  4. Install insulation to flanges as specified for flange insulation application.
- E. Blanket Insulation Installation on Ducts and Plenums: Secure with adhesive and insulation pins.
1. Apply adhesives according to manufacturer's recommended coverage rates per unit area, for 100 percent coverage of duct and plenum surfaces.
  2. Apply adhesive to entire circumference of ducts and to all surfaces of fittings and transitions.
  3. Install either capacitor-discharge-weld pins and speed washers or cupped-head, capacitor-discharge-weld pins on sides and bottom of horizontal ducts and sides of vertical ducts as follows:
    - a. On duct sides with dimensions 18 inches (450 mm) and smaller, place pins along longitudinal centerline of duct. Space 3 inches (75 mm) maximum from insulation end joints, and 16 inches (400 mm) o.c.
    - b. On duct sides with dimensions larger than 18 inches (450 mm), place pins 16 inches (400 mm) o.c. each way, and 3 inches (75 mm) maximum from insulation joints. Install additional pins to hold insulation tightly against surface at cross bracing.
    - c. Pins may be omitted from top surface of horizontal, rectangular ducts and plenums.
    - d. Do not overcompress insulation during installation.
    - e. Impale insulation over pins and attach speed washers.
    - f. Cut excess portion of pins extending beyond speed washers or bend parallel with insulation surface. Cover exposed pins and washers with tape matching insulation facing.
  4. For ducts and plenums with surface temperatures below ambient, install a continuous unbroken vapor barrier. Create a facing lap for longitudinal seams and end joints with insulation by removing 2 inches (50 mm) from 1 edge and 1 end of insulation segment. Secure laps to adjacent insulation section with 1/2-inch (13-mm) outward-clinching staples, 1 inch (25 mm) o.c. Install vapor barrier consisting of factory- or field-applied jacket, adhesive, vapor-barrier mastic, and sealant at joints, seams, and protrusions.
    - a. Repair punctures, tears, and penetrations with tape or mastic to maintain vapor-barrier seal.
    - b. Install vapor stops for ductwork and plenums operating below 50 deg F (10 deg C) at 18-foot (5.5-m) intervals. Vapor stops shall consist of vapor-barrier mastic applied in a Z-shaped pattern over insulation face, along butt end of insulation, and

over the surface. Cover insulation face and surface to be insulated a width equal to 2 times the insulation thickness but not less than 3 inches (75 mm).

5. Overlap unfaced blankets a minimum of 2 inches (50 mm) on longitudinal seams and end joints. At end joints, secure with steel bands spaced a maximum of 18 inches (450 mm) o.c.
  6. Install insulation on rectangular duct elbows and transitions with a full insulation section for each surface. Install insulation on round and flat-oval duct elbows with individually mitered gores cut to fit the elbow.
  7. Insulate duct stiffeners, hangers, and flanges that protrude beyond insulation surface with 6-inch- (150-mm-) wide strips of same material used to insulate duct. Secure on alternating sides of stiffener, hanger, and flange with pins spaced 6 inches (150 mm) o.c.
- F. Board Insulation Installation on Ducts and Plenums: Secure with adhesive and insulation pins.
1. Apply adhesives according to manufacturer's recommended coverage rates per unit area, for 100 percent coverage of duct and plenum surfaces.
  2. Apply adhesive to entire circumference of ducts and to all surfaces of fittings and transitions.
  3. Install either capacitor-discharge-weld pins and speed washers or cupped-head, capacitor-discharge-weld pins on sides and bottom of horizontal ducts and sides of vertical ducts as follows:
    - a. On duct sides with dimensions 18 inches (450 mm) and smaller, place pins along longitudinal centerline of duct. Space 3 inches (75 mm) maximum from insulation end joints, and 16 inches (400 mm) o.c.
    - b. On duct sides with dimensions larger than 18 inches (450 mm), space pins 16 inches (400 mm) o.c. each way, and 3 inches (75 mm) maximum from insulation joints. Install additional pins to hold insulation tightly against surface at cross bracing.
    - c. Pins may be omitted from top surface of horizontal, rectangular ducts and plenums.
    - d. Do not overcompress insulation during installation.
    - e. Cut excess portion of pins extending beyond speed washers or bend parallel with insulation surface. Cover exposed pins and washers with tape matching insulation facing.
  4. For ducts and plenums with surface temperatures below ambient, install a continuous unbroken vapor barrier. Create a facing lap for longitudinal seams and end joints with insulation by removing 2 inches (50 mm) from 1 edge and 1 end of insulation segment. Secure laps to adjacent insulation section with 1/2-inch (13-mm) outward-clinching staples, 1 inch (25 mm) o.c. Install vapor barrier consisting of factory- or field-applied jacket, adhesive, vapor-barrier mastic, and sealant at joints, seams, and protrusions.
    - a. Repair punctures, tears, and penetrations with tape or mastic to maintain vapor-barrier seal.
    - b. Install vapor stops for ductwork and plenums operating below 50 deg F (10 deg C) at 18-foot (5.5-m) intervals. Vapor stops shall consist of vapor-barrier mastic applied in a Z-shaped pattern over insulation face, along butt end of insulation, and over the surface. Cover insulation face and surface to be insulated a width equal to 2 times the insulation thickness but not less than 3 inches (75 mm).
  5. Install insulation on rectangular duct elbows and transitions with a full insulation section for each surface. Groove and score insulation to fit as closely as possible to outside and inside radius of elbows. Install insulation on round and flat-oval duct elbows with individually mitered gores cut to fit the elbow.
  6. Insulate duct stiffeners, hangers, and flanges that protrude beyond insulation surface with 6-inch- (150-mm-) wide strips of same material used to insulate duct. Secure on alternating sides of stiffener, hanger, and flange with pins spaced 6 inches (150 mm) o.c.



7. For exterior ductwork slope external insulation a minimum of 1" per 12 linear inches on top of duct while maintaining a minimum of 2" insulation thickness.

### 3.9 FIELD-APPLIED JACKET INSTALLATION

- A. Where glass-cloth jackets are indicated, install directly over bare insulation or insulation with factory-applied jackets.
  1. Draw jacket smooth and tight to surface with 2-inch (50-mm) overlap at seams and joints.
  2. Embed glass cloth between two 0.062-inch- (1.6-mm-) thick coats of lagging adhesive.
  3. Completely encapsulate insulation with coating, leaving no exposed insulation.
- B. Where FSK jackets are indicated, install as follows:
  1. Draw jacket material smooth and tight.
  2. Install lap or joint strips with same material as jacket.
  3. Secure jacket to insulation with manufacturer's recommended adhesive.
  4. Install jacket with 1-1/2-inch (38-mm) laps at longitudinal seams and 3-inch- (75-mm-) wide joint strips at end joints.
  5. Seal openings, punctures, and breaks in vapor-retarder jackets and exposed insulation with vapor-barrier mastic.
- C. Where PVC jackets are indicated, install with 1-inch (25-mm) overlap at longitudinal seams and end joints; for horizontal applications, install with longitudinal seams along top and bottom of tanks and vessels. Seal with manufacturer's recommended adhesive.
  1. Apply two continuous beads of adhesive to seams and joints, one bead under lap and the finish bead along seam and joint edge.
- D. Where metal jackets are indicated, install with 2-inch (50-mm) overlap at longitudinal seams and end joints. Overlap longitudinal seams arranged to shed water. Seal end joints with weatherproof sealant recommended by insulation manufacturer. Secure jacket with stainless-steel bands 12 inches (300 mm) o.c. and at end joints.

### 3.10 FIRE-RATED INSULATION SYSTEM INSTALLATION

- A. Where fire-rated insulation system is indicated, secure system to ducts and duct hangers and supports to maintain a continuous fire rating.
- B. Insulate duct access panels and doors to achieve same fire rating as duct.
- C. Install firestopping at penetrations through fire-rated assemblies. Fire-stop systems are specified in Division 07 Section "Penetration Firestopping."

### 3.11 FINISHES

- A. Duct, Equipment, and Pipe Insulation with ASJ, Glass-Cloth, or Other Paintable Jacket Material: Paint jacket with paint system identified below and as specified in Division 09 painting Sections.
  1. Flat Acrylic Finish: Two finish coats over a primer that is compatible with jacket material and finish coat paint. Add fungicidal agent to render fabric mildew proof.
    - a. Finish Coat Material: Interior, flat, latex-emulsion size.
- B. Flexible Elastomeric Thermal Insulation: After adhesive has fully cured, apply two coats of insulation manufacturer's recommended protective coating.
- C. Color: Final color as selected by Architect. Vary first and second coats to allow visual inspection of the completed Work.
- D. Do not field paint aluminum or stainless-steel jackets.

### 3.12 FIELD QUALITY CONTROL

~~A. Testing Agency: Owner will engage a qualified testing agency to perform tests and inspections.~~

~~B. Perform tests and inspections.~~

C. Tests and Inspections:

1. Inspect ductwork, randomly selected by **Engineer**, by removing field-applied jacket and insulation in layers in reverse order of their installation. Extent of inspection shall be limited to one location(s) for each duct system defined in the "Duct Insulation Schedule, General" Article.
2. Inspect field-insulated equipment, randomly selected by **Engineer**, by removing field-applied jacket and insulation in layers in reverse order of their installation. Extent of inspection shall be limited to one location(s) for each type of equipment defined in the "Equipment Insulation Schedule" Article. For large equipment, remove only a portion adequate to determine compliance.
3. Inspect pipe, fittings, strainers, and valves, randomly selected by **Engineer**, by removing field-applied jacket and insulation in layers in reverse order of their installation. Extent of inspection shall be limited to three locations of straight pipe, three locations of threaded fittings, three locations of welded fittings, two locations of threaded strainers, two locations of welded strainers, three locations of threaded valves, and three locations of flanged valves for each pipe service defined in the "Piping Insulation Schedule, General" Article.

D. All insulation applications will be considered defective Work if sample inspection reveals noncompliance with requirements.

### 3.13 DUCT INSULATION SCHEDULE, GENERAL

A. Plenums and Ducts Requiring Insulation:

1. Indoor, concealed supply and outdoor air.
2. Indoor, exposed supply and outdoor air.
3. Indoor, concealed return/relief air.
4. Indoor, exposed return/relief located in nonconditioned occupied space.
5. Indoor, concealed, Type I, commercial, kitchen hood exhaust.
6. Indoor, relief / exhaust downstream from heat recovery units/devices.
7. Indoor, concealed exhaust between isolation damper and penetration of building exterior.
8. Indoor, exposed exhaust between isolation damper and penetration of building exterior.
9. Outdoor, concealed supply and return.
10. Outdoor, exposed supply and return.

B. Items Not Insulated:

1. Fibrous-glass ducts.
2. Metal ducts with duct liner of sufficient thickness to comply with energy code and ASHRAE/IESNA 90.1, unless otherwise indicated.
3. Factory-insulated flexible ducts.
4. Factory-insulated plenums and casings.
5. Flexible connectors.
6. Vibration-control devices.
7. Factory-insulated access panels and doors.
8. Exposed return/relief ducts in an occupied conditioned space

### 3.14 INDOOR DUCT AND PLENUM INSULATION SCHEDULE

A. Concealed, round and flat-oval, supply-air duct insulation shall be the following:

1. Mineral-Fiber Blanket: 2 inches (51 mm) thick and 1.5-lb/cu. ft. (24-kg/cu. m) nominal density.

- B. Concealed, round and flat-oval, return-air duct insulation shall be the following:
  - 1. Mineral-Fiber Blanket: 2 inches (51 mm) thick and 1.5-lb/cu. ft. (24-kg/cu. m) nominal density.
- C. Concealed, round and flat-oval, outdoor-air duct insulation shall be the following:
  - 1. Mineral-Fiber Blanket: 2 inches (51 mm) thick and 1.5-lb/cu. ft. (24-kg/cu. m) nominal density.
- D. Concealed, round and flat-oval, exhaust-air duct insulation shall be the following:
  - 1. Mineral-Fiber Blanket: 2 inches (51 mm) thick and 1.5-lb/cu. ft. (24-kg/cu. m) nominal density.
- E. Concealed, rectangular, supply-air duct insulation shall be the following:
  - 1. Mineral-Fiber Blanket: 2 inches (51 mm) thick and 1.5-lb/cu. ft. (24-kg/cu. m) nominal density.
- F. Concealed, rectangular, return/relief-air duct insulation shall be the following:
  - 1. Mineral-Fiber Blanket: 2 inches (51 mm) thick and 1.5-lb/cu. ft. (24-kg/cu. m) nominal density.
- G. Concealed, rectangular, outdoor-air duct insulation shall be the following:
  - 1. Mineral-Fiber Blanket: 2 inches (51 mm) thick and 1.5-lb/cu. ft. (24-kg/cu. m) nominal density.
- H. Concealed, rectangular, exhaust-air duct insulation from heat recovery units and all exhaust air duct insulation between isolation damper and penetration of building exterior shall be the following:
  - 1. Mineral-Fiber Blanket: 2 inches (51 mm) thick and 1.5-lb/cu. ft. (24-kg/cu. m) nominal density.
- I. Concealed, Type I, Commercial, Kitchen Hood Exhaust Duct and Plenum Insulation: Fire-rated blanket or board; thickness as required to achieve 2-hour fire rating.
- J. Concealed, supply-air plenum insulation shall be the following:
  - 1. Mineral-Fiber Blanket: 2 inches (51 mm) thick and 1.5-lb/cu. ft. (24-kg/cu. m) nominal density.
- K. Concealed, return/relief-air plenum insulation shall be the following:
  - 1. Mineral-Fiber Blanket: 2 inches (51 mm) thick and 1.5-lb/cu. ft. (24-kg/cu. m) nominal density.
- L. Concealed, outdoor-air plenum insulation shall be the following:
  - 1. Mineral-Fiber Blanket: 2 inches (51 mm) thick and 1.5-lb/cu. ft. (24-kg/cu. m) nominal density.
- M. Concealed, exhaust-air plenum insulation shall be the following:
  - 1. Mineral-Fiber Blanket: 2 inches (51 mm) thick and 1.5-lb/cu. ft. (24-kg/cu. m) nominal density.
- N. Exposed, in occupied areas, round and flat-oval, supply-air duct insulation shall be the following:
  - 1. Exposed ductwork in occupied spaces does not require external insulation. Exposed ductwork shall be double wall pre-insulated.
- O. Exposed, in occupied areas, round and flat-oval, return-air duct insulation shall be the following:

1. Exposed ductwork in occupied spaces does not require external insulation. Exposed ductwork shall be double wall pre-insulated.
- P. Exposed, in occupied areas, round and flat-oval, outdoor-air duct insulation shall be the following:
  1. Exposed ductwork in occupied spaces does not require external insulation. Exposed ductwork shall be double wall pre-insulated.
- Q. Exposed, in occupied areas, round and flat-oval, exhaust-air duct insulation shall be the following:
  1. Exposed ductwork in occupied spaces does not require external insulation. Exposed ductwork shall be double wall pre-insulated.
- R. Exposed, rectangular, supply-air duct insulation shall be the following:
  1. Mineral-Fiber Board: 2 inches (51 mm) thick and 6-lb/cu. ft. (96-kg/cu. m) nominal density.
- S. Exposed, rectangular, return/relief-air duct insulation shall be the following:
  1. Mineral-Fiber Board: 2 inches (51 mm) thick and 6-lb/cu. ft. (96-kg/cu. m) nominal density.
- T. Exposed, rectangular, outdoor-air duct insulation shall be the following:
  1. Mineral-Fiber Board: 2 inches (51 mm) thick and 6-lb/cu. ft. (96-kg/cu. m) nominal density.
- U. Exposed, rectangular, exhaust-air duct insulation shall be the following:
  1. Mineral-Fiber Board: 2 inches (51 mm) thick and 6-lb/cu. ft. (96-kg/cu. m) nominal density.
- V. Exposed, Type I, Commercial, Kitchen Hood Exhaust Duct and Plenum Insulation: Fire-rated blanket or board; thickness as required to achieve 2-hour fire rating.
- W. Exposed, supply-air plenum insulation shall be the following:
  1. Mineral-Fiber Board: 2 inches (51 mm) thick and 6-lb/cu. ft. (96-kg/cu. m) nominal density.
- X. Exposed, return/relief-air plenum insulation shall be the following:
  1. Mineral-Fiber Board: 2 inches (51 mm) thick and 6-lb/cu. ft. (96-kg/cu. m) nominal density.
- Y. Exposed, outdoor-air plenum insulation shall be the following:
  1. Mineral-Fiber Board: 2 inches (51 mm) thick and 6-lb/cu. ft. (96-kg/cu. m) nominal density.
- Z. Exposed, exhaust-air plenum insulation shall be the following:
  1. Mineral-Fiber Board: 2 inches (51 mm) thick and 6-lb/cu. ft. (96-kg/cu. m) nominal density.

### 3.15 EQUIPMENT INSULATION SCHEDULE

- A. Insulation materials and thicknesses are identified below. If more than one material is listed for a type of equipment, selection from materials listed is Contractor's option.
- B. Insulate indoor and outdoor equipment in paragraphs below that is not factory insulated.
- C. Geothermal-water pump insulation shall be the following:

1. Mineral-Fiber Board: 2 inch thick and 6-lb/cu. ft. (96-kg/cu. m) nominal density. Insulation shall be formed and installed to be removable and reinstalled.
  - D. Geothermal water expansion / compression tank insulation shall be the following:
    1. Mineral-Fiber Pipe and Tank Wrap: 1 inch (25 mm) thick and 2.5-lb/cu. ft. (40-kg/cu. m) nominal density.
    2. Flexible Elastomeric: 1 inch (25 mm) thick.
  - E. Geothermal-water air-separator insulation shall be the following:
    1. Mineral-Fiber Pipe and Tank Wrap: 1 inch (25 mm) thick and 2.5-lb/cu. ft. (40-kg/cu. m) nominal density.
    2. Flexible Elastomeric: 1-inch (25 mm) thick.
- 3.16 PIPING INSULATION SCHEDULE, GENERAL
- A. Acceptable preformed pipe and tubular insulation materials and thicknesses are identified for each piping system and pipe size range. If more than one material is listed for a piping system, selection from materials listed is Contractor's option.
  - B. Items Not Insulated: Unless otherwise indicated, do not install insulation on the following:
    1. Drainage piping located in crawl spaces.
    2. Underground piping.
    3. Chrome-plated pipes and fittings unless there is a potential for personnel injury.
- 3.17 INDOOR PIPING INSULATION SCHEDULE
- A. Condensate and Equipment Drain Water below 60 Deg F (16 Deg C):
    1. All Pipe Sizes: Insulation shall be one of the following:
      - a. Mineral-Fiber, Preformed Pipe Insulation, Type I: 1 inch (25 mm) thick.
      - b. Flexible Elastomeric: 1 inch (25 mm) thick.
  - B. Geothermal water and Heating Water Supply and Return:
    1. Two-inches and smaller: Insulation shall be the following:
      - a. Mineral-Fiber, Preformed Pipe, Type I: 1/2 inch (38 mm) thick.
    2. Two-and one-half inches and larger: Insulation shall be the following:
      - a. Mineral-fiber, pre-formed pipe, Type I: 1 inch (50 mm) thick.
  - C. Split System Refrigerant Suction and Hot-Gas Piping:
    1. All Pipe Sizes: Insulation shall be the following:
      - a. Flexible Elastomeric: 1 inch (25 mm) thick.
  - D. Refrigerant Suction and Hot-Gas Flexible Tubing:
    1. All Pipe Sizes: Insulation shall be the following:
      - a. Flexible Elastomeric: 1 inch (25 mm) thick.
- 3.18 OUTDOOR, ABOVEGROUND PIPING INSULATION SCHEDULE
- A. Refrigerant Suction and Hot-Gas Piping:
    1. All Pipe Sizes: Insulation shall be one of the following:
      - a. Flexible Elastomeric: 2 inches (50 mm) thick.
      - b. Mineral Fiber, preformed pipe, type 1: 2 inch (50 mm) thick.
  - B. Refrigerant Suction and Hot-Gas Flexible Tubing:

1. All Pipe Sizes: Insulation shall be one of the following:
  - a. Flexible Elastomeric: 2 inches (50 mm) thick.
  - b. Mineral Fiber, preformed pipe, type 1: 2 inch (50 mm) thick.

C. Geothermal water piping

1. For all geothermal piping including valves. Located in rooftop air handling/DOAS units insulation shall be:
  - a. Mineral fiber, performed pipe, type 1: 2 inch (50 mm) thick- all sizes.

3.19 INDOOR, FIELD-APPLIED JACKET SCHEDULE

- A. Install jacket over insulation material. For insulation with factory-applied jacket, install the field-applied jacket over the factory-applied jacket.
- B. If more than one material is listed, selection from materials listed is Contractor's option.
- C. Ducts and Plenums, Concealed:
  1. None.
- D. Ducts and Plenums, Exposed:
  1. None.
- E. Equipment, Concealed:
  1. None.
- F. Hydronic Equipment, Exposed, up to 48 Inches (1200 mm) in Diameter or with Flat Surfaces up to 72 Inches (1800 mm):
  1. None.
- G. Hydronic Equipment, Exposed, Larger Than 48 Inches (1200 mm) in Diameter or with Flat Surfaces Larger Than 72 Inches (1800 mm):
  1. None.
- H. Piping, Concealed:
  1. None.
- I. Piping, exposed in public areas (excludes mechanical equipment rooms and penthouses):
  1. PVC 20 mils (0.5 mm) thick.

3.20 OUTDOOR, FIELD-APPLIED JACKET SCHEDULE

- A. Install jacket over insulation material. For insulation with factory-applied jacket, install the field-applied jacket over the factory-applied jacket. Provide Insulation jacket for cooler/freezer outdoor refrigerant piping in addition to piping insulation provided under division 21, 22 and 23.
- B. If more than one material is listed, selection from materials listed is Contractor's option.
- C. Piping, Exposed:
  1. Aluminum, Stucco embossed with Z-Shaped Locking Seam: 0.024 inch (minimum) thick.
  2. Aluminum 2-piece tee and fitting covers: .024-inch thickness.
- D. Refrigerant Tubing (1 1/8" or less):
  1. Flexible, UV resistant, weatherproof PVC insulation cover with continuous full enclosure fastening system, Airex Flexguard in white or equal.
- E. Ductwork:

1. VentureClad model 1579 GCW-WME embossed white with adhesive and membrane, UL723 classified/ASTM E84, heavy duty jacketing system, 16 mils thick. Install per the manufacturers recommendations.

**END OF SECTION 23 07 00**

## SECTION 26 32 13.16 - EMERGENCY ENGINE GENERATORS

### PART 1 - GENERAL

#### 1.1 SUMMARY

- A. Section includes packaged engine generators for emergency use with the following features:
  - 1. Diesel engine.
  - 2. Unit-mounted cooling system.
  - 3. Unit-mounted control and monitoring.
  - 4. Outdoor enclosure.
  - 5. Generator overcurrent and fault protection.
  - 6. Generator, exciter, and voltage regulator.
- B. Related Requirements:
  - 1. Section 263600 "Transfer Switches" for transfer switches including sensors and relays to initiate automatic-starting and -stopping signals for engine generators.

#### 1.2 DEFINITIONS

- A. EPS: Emergency power supply.
- B. EPSS: Emergency power supply system.

#### 1.3 ACTION SUBMITTALS

- A. Product Data: For each type of product.
- B. Shop Drawings:
  - 1. Include plans and elevations for engine generator and other components specified.
  - 2. Include details of equipment assemblies. Indicate dimensions, weights, loads, required clearances, method of field assembly, components, and location and size of each field connection.
  - 3. Identify fluid drain ports and clearance requirements for proper fluid drain.
  - 4. Design calculations for selecting vibration isolators and seismic restraints and for designing vibration isolation bases.
  - 5. Vibration Isolation Base Details: Detail fabrication, including anchorages and attachments to structure and supported equipment. Include base weights.
  - 6. Include diagrams for power, signal, and control wiring. Complete schematic, wiring, and interconnection diagrams showing terminal markings for EPS equipment and functional relationship between all electrical components.

#### 1.4 INFORMATIONAL SUBMITTALS

- A. Qualification Data: For Installer, manufacturer and testing agency.



- B. Seismic Qualification Data: Certificates, for engine generator, accessories, and components, from manufacturer.
  - C. Source quality-control reports.
  - D. Field quality-control reports.
  - E. Warranty.
- 1.5 CLOSEOUT SUBMITTALS
- A. Operation and maintenance data.
- 1.6 QUALITY ASSURANCE
- A. Installer Qualifications: An authorized representative who is trained and approved by manufacturer.
  - B. Testing Agency Qualifications: Accredited by NETA.
    - 1. Testing Agency's Field Supervisor: Certified by NETA to supervise on-site testing.
- 1.7 WARRANTY
- A. Manufacturer's Warranty: Manufacturer agrees to repair or replace components of packaged engine generators and associated auxiliary components that fail in materials or workmanship within specified warranty period.
    - 1. Warranty Period: Five (5), years comprehensive warranty, from date of Substantial Completion.

## PART 2 - PRODUCTS

### 2.1 MANUFACTURERS

- A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
  - 1. Kohler Power Systems
  - 2. MTU Onsite Energy Corporation.
  - 3. Cummins Power Generation.
  - 4. Caterpillar, Inc.; Electric Power Division.
  - 5. **Generac Power Systems**

### 2.2 PERFORMANCE REQUIREMENTS

- A. Seismic Performance: Engine generator housing, engine generator, batteries, battery racks, silencers, sound attenuating equipment, accessories, and components shall withstand the effects of earthquake motions determined according to ASCE/SEI 7.

1. The term "withstand" means "the unit will remain in place without separation of any parts when subjected to the seismic forces specified and the unit will be fully operational after the seismic event."
  2. Shake-table testing shall comply with ICC-ES AC156. Testing shall be performed with all fluids at worst-case normal levels.
- B. B11 Compliance: Comply with B11.19.
- C. NFPA Compliance:
1. Comply with NFPA 37.
  2. Comply with NFPA 70.
  3. Comply with NFPA 99.
  4. Comply with NFPA 110 requirements for Level 1 2 EPSS.
- D. UL Compliance: Comply with UL 2200.
- E. Engine Exhaust Emissions: Comply with EPA Tier 3 requirements and applicable state and local government requirements.
- F. Noise Emission: Comply with applicable state and local government requirements for maximum noise level at adjacent property boundaries due to sound emitted by engine generator, including engine, engine exhaust, engine cooling-air intake and discharge, and other components of installation.
- G. Environmental Conditions: Engine generator system shall withstand the following environmental conditions without mechanical or electrical damage or degradation of performance capability:
1. Ambient Temperature: 5 to 104 deg F (Minus 15 to plus 40 deg C).
  2. Relative Humidity: Zero to 95 percent.
  3. Altitude: Sea level to 1000 feet (300 m).

## 2.3 ENGINE GENERATOR ASSEMBLY DESCRIPTION

- A. Mounting Frame: Structural-steel framework to maintain alignment of mounted components without depending on concrete foundation. Provide lifting attachments sized and spaced to prevent deflection of base during lifting and moving.
1. Rigging Diagram: Inscribed on metal plate permanently attached to mounting frame to indicate location and lifting capacity of each lifting attachment and engine generator center of gravity.
- B. Capacities and Characteristics:
1. Power Output Ratings: Nominal ratings as indicated at 0.8 power factor excluding power required for the continued and repeated operation of the unit and auxiliaries, with capacity as required to operate as a unit as evidenced by records of prototype testing.
  2. Nameplates: For each major system component to identify manufacturer's name and address, and model and serial number of component.
- C. Engine Generator Performance:
1. Steady-State Voltage Operational Bandwidth: 3 percent of rated output voltage, from no load to full load.

2. Transient Voltage Performance: Not more than 20 percent variation for 50 percent step-load increase or decrease. Voltage shall recover and remain within the steady-state operating band within three seconds.
3. Steady-State Frequency Operational Bandwidth: 0.5 percent of rated frequency, from no load to full load.
4. Steady-State Frequency Stability: When system is operating at any constant load within the rated load, there shall be no random speed variations outside the steady-state operational band and no hunting or surging of speed.
5. Transient Frequency Performance: Less than 5 percent variation for 50 percent step-load increase or decrease. Frequency shall recover and remain within the steady-state operating band within five seconds.
6. Output Waveform: At no load, harmonic content measured line to line or line to neutral shall not exceed 5 percent total and 3 percent for single harmonics. Telephone influence factor, determined according to NEMA MG 1, shall not exceed 50 percent.
7. Sustained Short-Circuit Current: For a three-phase, bolted short circuit at system output terminals, system shall supply a minimum of 250 percent of rated full-load current for not less than 10 seconds and then clear the fault automatically, without damage to generator system components.
8. Start Time: Comply with NFPA 110, Type 10, system requirements.

## 2.4 ENGINE

A. Fuel: Diesel.

**B. Basis of Design: Kohler KD1250 with KH04590T04D alternator.**

C. Lubrication System: Engine or skid mounted.

1. Filter and Strainer: Rated to remove 90 percent of particles 5 micrometers and smaller while passing full flow.
2. Thermostatic Control Valve: Control flow in system to maintain optimum oil temperature. Unit shall be capable of full flow and is designed to be fail-safe.
3. Crankcase Drain: Arranged for complete gravity drainage to an easily removable container with no disassembly and without use of pumps, siphons, special tools, or appliances.

D. Jacket Coolant Heater: Electric-immersion type, factory installed in coolant jacket system. Comply with NFPA 110 requirements for Level 1 equipment for heater capacity and with UL 499.

E. Cooling System: Closed loop, liquid cooled, with radiator factory mounted on engine generator mounting frame and integral engine-driven coolant pump.

1. Coolant: Solution of 50 percent ethylene-glycol-based antifreeze and 50 percent water, with anticorrosion additives as recommended by engine manufacturer.
2. Size of Radiator: Adequate to contain expansion of total system coolant, from cold start to 110 percent load condition.
3. Expansion Tank: Constructed of welded steel plate and rated to withstand maximum closed-loop coolant-system pressure for engine used. Equip with gage glass and petcock.
4. Temperature Control: Self-contained, thermostatic-control valve modulates coolant flow automatically to maintain optimum constant coolant temperature as recommended by engine manufacturer.

5. Coolant Hose: Flexible assembly with inside surface of nonporous rubber and outer covering of aging-, UV-, and abrasion-resistant fabric.
  - a. Rating: 50-psig (345-kPa) maximum working pressure with coolant at 180 deg F (82 deg C), and noncollapsible under vacuum.
  - b. End Fittings: Flanges or steel pipe nipples with clamps to suit piping and equipment connections.
- F. Muffler/Silencer: Critical type, sized as recommended by engine manufacturer and selected with exhaust piping system to not exceed engine manufacturer's engine backpressure requirements.
  1. Minimum sound attenuation of 25 dB at 500 Hz.
  2. Sound level measured at a distance of 25 feet (8 m) from exhaust discharge after installation is complete shall be 78 dBA or less.
- G. Air-Intake Filter: Heavy-duty, engine-mounted air cleaner with replaceable dry-filter element and "blocked filter" indicator.
- H. Starting System: 24-V electric, with negative ground.
  1. Components: Sized so they are not damaged during a full engine-cranking cycle, with ambient temperature at maximum specified in "Performance Requirements" Article.
  2. Cranking Motor: Heavy-duty unit that automatically engages and releases from engine flywheel without binding.
  3. Cranking Cycle: As required by NFPA 110 for system level specified.
  4. Battery: Adequate capacity within ambient temperature range specified in "Performance Requirements" Article to provide specified cranking cycle at least twice without recharging.
  5. Battery Cable: Size as recommended by engine manufacturer for cable length indicated. Include required interconnecting conductors and connection accessories.
  6. Battery Compartment: Factory fabricated of metal with acid-resistant finish and thermal insulation. Thermostatically controlled heater shall be arranged to maintain battery above 50 deg F (10 deg C) regardless of external ambient temperature within range specified in "Performance Requirements" Article. Include accessories required to support and fasten batteries in place. Provide ventilation to exhaust battery gases.
  7. Battery-Charging Alternator: Factory mounted on engine with solid-state voltage regulation and 35-A minimum continuous rating.
  8. Battery Charger: Current-limiting, automatic-equalizing and float-charging type. Unit shall comply with UL 1236 and include the following features:
    - a. Operation: Equalizing-charging rate of 10 A shall be initiated automatically after battery has lost charge until an adjustable equalizing voltage is achieved at battery terminals. Unit shall then be automatically switched to a lower float-charging mode and shall continue to operate in that mode until battery is discharged again.
    - b. Automatic Temperature Compensation: Adjust float and equalize voltages for variations in ambient temperature from minus 40 to 140 deg F (minus 40 to plus 60 deg C) to prevent overcharging at high temperatures and undercharging at low temperatures.
    - c. Automatic Voltage Regulation: Maintain constant output voltage regardless of input voltage variations up to plus or minus 10 percent.
    - d. Ammeter and Voltmeter: Flush mounted in door. Meters shall indicate charging rates.
    - e. Safety Functions: Sense abnormally low battery voltage and close contacts providing low battery voltage indication on control and monitoring panel. Sense high battery voltage and loss of ac input or dc output of battery charger. Either

condition shall close contacts that provide a battery-charger malfunction indication at system control and monitoring panel.

- f. Enclosure and Mounting: NEMA 250, Type 1, wall-mounted cabinet.

## 2.5 FUEL SYSTEM

### A. Engine Fuel System:

1. Fuel Filters: One for each fuel type.
2. Manual Fuel Shutoff Valves: One for each fuel type.
3. Flexible Fuel Connectors: Minimum one for each fuel connection.

- B. Main Fuel Pump: Mounted on engine. Pump ensures adequate primary fuel flow under starting and load conditions.

## 2.6 FUEL STORAGE

- A. Base-Mounted Fuel Tank: Factory installed and piped, complying with UL 142 fuel tank. Features include the following:

1. Tank level indicator.
2. Capacity: Fuel for minimum **24** hours' continuous operation at 100 percent rated power output.
3. Vandal-resistant fill cap.
4. Containment Provision: Comply with requirements of authorities having jurisdiction.

- B. Provide full tank for owner after all testing/startup has been completed.

## 2.7 CONTROL AND MONITORING

- A. Automatic Starting System Sequence of Operation: When mode-selector switch on the control and monitoring panel is in the automatic position, remote-control contacts in one or more separate automatic transfer switches initiate starting and stopping of engine generator. When mode-selector switch is switched to the on position, engine generator starts. The off position of same switch initiates engine generator shutdown. When engine generator is running, specified system or equipment failures or derangements automatically shut down engine generator and initiate alarms.

- B. Provide minimum run-time control set for 30 minutes, with override only by operation of a remote emergency-stop switch.

- C. Comply with UL 508A.

- D. Configuration: Operating and safety indications, protective devices, basic system controls, and engine gages shall be grouped in a common wall-mounted control and monitoring panel. Panel shall be powered from the engine generator battery.

- E. Control and Monitoring Panel:

1. Digital controller with integrated LCD display, controls, and microprocessor, capable of local and remote control, monitoring, and programming, with battery backup.
2. Analog control panel with dedicated gages and indicator lights for the instruments and alarms indicated below.

3. Instruments: Located on the control and monitoring panel and viewable during operation.
  - a. Engine lubricating-oil pressure gage.
  - b. Engine-coolant temperature gage.
  - c. DC voltmeter (alternator battery charging).
  - d. Running-time meter.
  - e. AC voltmeter, connected to a phase selector switch.
  - f. AC ammeter, connected to a phase selector switch.
  - g. AC frequency meter.
  - h. Generator-voltage adjusting rheostat.
4. Controls and Protective Devices: Controls, shutdown devices, and common visual alarm indication as required by NFPA 110 for Level 1 system, including the following:
  - a. Control switch not in automatic position alarm.
  - b. Overcrank alarm.
  - c. Overcrank shutdown device.
  - d. High engine temperature pre-alarm.
  - e. High engine temperature.
  - f. High engine temperature shutdown device.
  - g. Overspeed alarm.
  - h. Overspeed shutdown device.
  - i. Coolant low-level alarm.
  - j. Coolant low-level shutdown device.
  - k. Coolant high-temperature prealarm.
  - l. Coolant high-temperature alarm.
  - m. Coolant low-temperature alarm.
  - n. Coolant high-temperature shutdown device.
  - o. EPS load indicator.
  - p. Battery high-voltage alarm.
  - q. Low-cranking voltage alarm.
  - r. Battery-charger malfunction alarm.
  - s. Battery low-voltage alarm.
  - t. Lamp test.
  - u. Contacts for local and remote common alarm.
  - v. Low-starting air pressure alarm.
  - w. Low-starting hydraulic pressure alarm.
  - x. Remote manual-stop shutdown device.
  - y. Air shutdown damper alarm when used.
  - z. Air shutdown damper shutdown device when used.
  - aa. Generator overcurrent-protective-device not-closed alarm.
- F. Common Remote Panel with Common Audible Alarm: Comply with NFPA 110 requirements for Level 1 systems. Include necessary contacts and terminals in control and monitoring panel. Remote panel shall be powered from the engine generator battery.
- G. Remote Alarm Annunciator: Comply with NFPA 99. An LED indicator light labeled with proper alarm conditions shall identify each alarm event, and a common audible signal shall sound for each alarm condition. Silencing switch in face of panel shall silence signal without altering visual indication. Connect so that after an alarm is silenced, clearing of initiating condition will reactivate alarm until silencing switch is reset. Cabinet and faceplate are surface- or flush-mounting type to suit mounting conditions indicated.
  1. Overcrank alarm.
  2. Coolant low-temperature alarm.
  3. High engine temperature pre-alarm.
  4. High engine temperature alarm.

5. Low lube oil pressure alarm.
6. Overspeed alarm.
7. Low-fuel main tank alarm.
8. Low coolant level alarm.
9. Low-cranking voltage alarm.
10. Contacts for local and remote common alarm.
11. Audible-alarm silencing switch.
12. Air shutdown damper when used.
13. Run-Off-Auto switch.
14. Control switch not in automatic position alarm.
15. Fuel tank derangement alarm.
16. Fuel tank high-level shutdown of fuel supply alarm.
17. Lamp test.
18. Low-cranking voltage alarm.
19. Generator overcurrent-protective-device not-closed alarm.

- H. Supporting Items: Include sensors, transducers, terminals, relays, and other devices and include wiring required to support specified items. Locate sensors and other supporting items on engine or generator unless otherwise indicated.

## 2.8 GENERATOR OVERCURRENT AND FAULT PROTECTION

- A. Generator Disconnect Switch: Molded-case type; 100 percent rated.
1. Trip Rating: Matched to generator output rating.
  2. Shunt Trip: Connected to trip switch when signaled by generator protector or by other protective devices.
- B. Generator Protector: Microprocessor-based unit shall continuously monitor current level in each phase of generator output, integrate generator heating effect over time, and predict when thermal damage of alternator will occur. When signaled by generator protector or other engine generator protective devices, a shunt-trip device in the generator disconnect switch shall open the switch to disconnect the generator from load circuits. Protector performs the following functions:
1. Initiates a generator overload alarm when generator has operated at an overload equivalent to 110 percent of full-rated load for 60 seconds. Indication for this alarm is integrated with other engine generator malfunction alarms. Contacts shall be available for load shed functions.
  2. Under single- or three-phase fault conditions, regulates generator to 300 percent of rated full-load current for up to 10 seconds.
  3. As overcurrent heating effect on the generator approaches the thermal damage point of the unit, protector switches the excitation system off, opens the generator disconnect device, and shuts down the engine generator.
  4. Senses clearing of a fault by other overcurrent devices and controls recovery of rated voltage to avoid overshoot.
- C. Ground-Fault Indication: Comply with NFPA 70 Article 700, "Emergency System" signals for ground fault.
1. Indicate ground fault with other engine generator alarm indications.
  2. Trip generator protective device on ground fault.

## 2.9 GENERATOR, EXCITER, AND VOLTAGE REGULATOR

- A. Comply with NEMA MG 1.
- B. Drive: Generator shaft shall be directly connected to engine shaft. Exciter shall be rotated integrally with generator rotor.
- C. Electrical Insulation: Class H.
- D. Stator-Winding Leads: Brought out to terminal box to permit future reconnection for other voltages if required.
- E. Construction shall prevent mechanical, electrical, and thermal damage due to vibration, overspeed up to 125 percent of rating, and heat during operation at 110 percent of rated capacity.
- F. Enclosure: Dripproof.
- G. Instrument Transformers: Mounted within generator enclosure.
- H. Voltage Regulator: Solid-state type, separate from exciter, providing performance as specified and as required by NFPA 110.
  - 1. Adjusting Rheostat on Control and Monitoring Panel: Provide plus or minus 5 percent adjustment of output-voltage operating band.
- I. Strip Heater: Thermostatically controlled unit arranged to maintain stator windings above dew point.
- J. Windings: Two-thirds pitch stator winding and fully linked amortisseur winding.
- K. Subtransient Reactance: 12 percent, maximum.

## 2.10 OUTDOOR WEATHERPROOF/SOUND ATTENUATED GENERATOR-SET ENCLOSURE

- A. Description:
  - 1. Construction: Galvanized-steel, metal-clad, integral structural-steel-framed building erected on concrete foundation. Sound attenuated for 75dBA maximum sound level measured on all four sides of enclosure, at 23 feet (7 meters) with generator running at full load.
  - 2. Structural Design and Anchorage: Comply with ASCE 7 for wind loads.
  - 3. Louvers: Equipped with bird screen and filter arranged to permit air circulation when engine is not running while excluding exterior dust, birds, and rodents.
  - 4. Hinged Doors: With padlocking provisions.
  - 5. Ventilation: Louvers equipped with bird screen and filter arranged to permit air circulation while excluding exterior dust, birds, and rodents.
  - 6. Thermal Insulation: Manufacturer's standard materials and thickness selected in coordination with space heater to maintain winter interior temperature within operating limits required by engine-generator-set components.
  - 7. Muffler Location: Within enclosure.



- B. Engine Cooling Airflow through Enclosure: Maintain temperature rise of system components within required limits when unit operates at 110 percent of rated located for 2 hours with ambient temperature at top of range specified in system service conditions.
  - 1. Louvers: Fixed-engine, cooling-air inlet and discharge. Storm-proof and drainable louvers prevent entry of rain and snow.
- C. Interior Lights with Switch: Factory-wired, vaporproof-type fixtures within housing; arranged to illuminate controls and accessible interior. Arrange for external electrical connection.
  - 1. AC lighting system and connection point for operation when remote source is available.
  - 2. DC lighting system for operation when remote source and generator are both unavailable.
- D. Convenience Outlets: Factory wired, GFCI. Arrange for external electrical connection.

## 2.11 SOURCE QUALITY CONTROL

- A. Prototype Testing: Factory test engine generator using same engine model, constructed of identical or equivalent components and equipped with identical or equivalent accessories.
  - 1. Tests: Comply with NFPA 110, Level 1 Energy Converters and with IEEE 115.

## PART 3 - EXECUTION

### 3.1 INSTALLATION

- A. Comply with packaged engine generator manufacturers' written installation and alignment instructions and with NFPA 110.
- B. Equipment Mounting:
  - 1. Install packaged engine generators on cast-in-place concrete equipment bases. Comply with requirements for equipment bases and foundations specified in Section 033000 "Cast-in-Place Concrete."
  - 2. Coordinate size and location of concrete bases for packaged engine generators. Cast anchor-bolt inserts into bases. Concrete, reinforcement, and formwork requirements are specified with concrete.
- C. Install packaged engine generator to provide access, without removing connections or accessories, for periodic maintenance.
- D. Cooling System: Install Schedule 40 black steel piping with welded joints for cooling water piping between engine generator and heat exchanger.
  - 1. Install isolating thimbles where exhaust piping penetrates combustible surfaces. Provide a minimum of 9 inches (225 mm) of clearance from combustibles.
  - 2. Insulate cooling-system piping and components according to requirements in Section 230700 "HVAC Insulation."
- E. Drain Piping: Install condensate drain piping to muffler drain outlet with a shutoff valve, stainless-steel flexible connector, and Schedule 40 black steel pipe with welded joints.

- F. Electrical Wiring: Install electrical devices furnished by equipment manufacturers but not specified to be factory mounted.
- G. Provide full tank for owner after all testing is completed.

### 3.2 CONNECTIONS

- A. Piping installation requirements are specified in other Sections. Drawings indicate general arrangement of piping and specialties.
- B. Connect fuel, cooling-system, and exhaust-system piping adjacent to packaged engine generator to allow service and maintenance.
- C. Connect cooling-system water piping to engine generator and remote radiator with flexible connectors.
- D. Connect engine exhaust pipe to engine with flexible connector.
- E. Ground equipment according to Section 260526 "Grounding and Bonding for Electrical Systems."
- F. Connect wiring according to Section 260519 "Low-Voltage Electrical Power Conductors and Cables." Provide a minimum of one 90-degree bend in flexible conduit routed to the engine generator from a stationary element.
- G. Balance single-phase loads to obtain a maximum of 10 percent unbalance between any two phases.

### 3.3 IDENTIFICATION

- A. Identify system components according to Section 230553 "Identification for HVAC Piping and Equipment" and Section 260553 "Identification for Electrical Systems."
- B. Install a sign indicating the generator neutral is bonded to the main service neutral at the main service location.

### 3.4 FIELD QUALITY CONTROL

- ~~A. Testing Agency: Owner will engage a qualified testing agency to perform tests and inspections.~~
- B. Testing Agency: Engage a qualified testing agency to perform tests and inspections.
- C. Manufacturer's Field Service: Engage a factory-authorized service representative to test and inspect components, assemblies, and equipment installations, including connections.
- D. Perform tests and inspections with the assistance of a factory-authorized service representative.
- E. Tests and Inspections:

1. Perform tests recommended by manufacturer and each visual and mechanical inspection and electrical and mechanical test listed in first two subparagraphs below, as specified in NETA ATS. Certify compliance with test parameters.
    - a. Visual and Mechanical Inspection:
      - 1) Compare equipment nameplate data with Drawings and the Specifications.
      - 2) Inspect physical and mechanical condition.
      - 3) Inspect anchorage, alignment, and grounding.
      - 4) Verify that the unit is clean.
    - b. Electrical and Mechanical Tests:
      - 1) Perform insulation-resistance tests according to IEEE 43.
        - a) Machines Larger Than 200 hp (150 kW): Test duration shall be 10 minutes. Calculate polarization index.
        - b) Machines 200 hp (150 kW) or Less: Test duration shall be one minute. Calculate the dielectric-absorption ratio.
      - 2) Test protective relay devices.
      - 3) Verify phase rotation, phasing, and synchronized operation as required by the application.
      - 4) Functionally test engine shutdown for low oil pressure, overtemperature, overspeed, and other protection features as applicable.
      - 5) Perform vibration test for each main bearing cap.
      - 6) Conduct performance test according to NFPA 110.
      - 7) Verify correct functioning of the governor and regulator.
  2. NFPA 110 Acceptance Tests: Perform tests required by NFPA 110 that are additional to those specified here including, but not limited to, single-step full-load pickup test.
  3. Battery-Charger Tests: Verify specified rates of charge for both equalizing and float-charging conditions.
  4. System Integrity Tests: Methodically verify proper installation, connection, and integrity of each element of engine generator system before and during system operation. Check for air, exhaust, and fluid leaks.
  5. Exhaust Emissions Test: Comply with applicable government test criteria.
  6. Voltage and Frequency Transient Stability Tests: Use recording oscilloscope to measure voltage and frequency transients for 50 and 100 percent step-load increases and decreases, and verify that performance is as specified.
  7. Harmonic-Content Tests: Measure harmonic content of output voltage at 25 and 100 percent of rated linear load. Verify that harmonic content is within specified limits.
  8. Noise Level Tests: Measure A-weighted level of noise emanating from engine generator installation, including engine exhaust and cooling-air intake and discharge, at four locations 23 feet (7 m) from edge of the generator enclosure, and compare measured levels with required values.
- F. Coordinate tests with tests for transfer switches and run them concurrently.
- G. Test instruments shall have been calibrated within the past 12 months, traceable to NIST Calibration Services, and adequate for making positive observation of test results. Make calibration records available for examination on request.
- H. Leak Test: After installation, charge exhaust, coolant, and fuel systems and test for leaks. Repair leaks and retest until no leaks exist.

- I. Operational Test: After electrical circuitry has been energized, start units to confirm proper motor rotation and unit operation for generator and associated equipment.
- J. Test and adjust controls and safeties. Replace damaged and malfunctioning controls and equipment.
- K. Remove and replace malfunctioning units and retest/reinspect as specified above.
- L. Retest: Correct deficiencies identified by tests and observations, and retest until specified requirements are met.
- M. Report results of tests and inspections in writing. Record adjustable relay settings and measured insulation resistances, time delays, and other values and observations. Attach a label or tag to each tested component indicating satisfactory completion of tests.

### 3.5 DEMONSTRATION

- A. Engage a factory-authorized service representative to train Owner's maintenance personnel to adjust, operate, and maintain packaged engine generators.

**END OF SECTION 26 32 13.16**

## **SECTION 26 41 13 - LIGHTNING PROTECTION FOR STRUCTURES**

### **PART 1 - GENERAL**

#### **1.1 SUMMARY**

- A. Section includes lightning protection system for the following:
  - 1. Ordinary structures.

#### **1.2 ACTION SUBMITTALS**

- A. Product Data: For each type of product.
- B. Shop Drawings:
  - 1. Include layouts of the lightning protection system, with details of the components to be used in the installation.
  - 2. Include raceway locations needed for the installation of conductors.
  - 3. Details of air terminals, ground rods, ground rings, conductor supports, splices, and terminations, including concealment requirements.
  - 4. Calculations required by NFPA 780 for bonding of metal bodies.

#### **1.3 INFORMATIONAL SUBMITTALS**

- A. Coordination Drawings: Lightning protection system Shop Drawings, drawn to scale, coordinated with each other, using input from installers of the items involved:
- B. Qualification Data: For Installer.
- C. Product certificates.
- D. Field quality-control reports.

#### **1.4 CLOSEOUT SUBMITTALS**

- A. Maintenance data.
- B. Completion Certificate:
  - 1. UL Master Label Certificate.

#### **1.5 QUALITY ASSURANCE**

- A. Installer Qualifications: LPI Master Installer.

### **PART 2 - PRODUCTS**

#### **2.1 MANUFACTURERS**

- A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
  - 1. Advanced Lightning Technology, LTD.
  - 2. East Coast Lightning Equipment Inc.
  - 3. ERICO International Corporation.
  - 4. Harger Lightning & Grounding.
  - 5. Heary Bros. Lightning Protection Co. Inc.
  - 6. Independent Protection Co.
  - 7. National Lightning Protection.
  - 8. Preferred Lightning Protection.
  - 9. Robbins Lightning, Inc.

## 2.2 PERFORMANCE REQUIREMENTS

- A. NFPA Lightning Protection Standard: Comply with NFPA 780 requirements for school buildings.
- B. UL Lightning Protection Standard: Comply with UL 96A requirements for school buildings.
- C. Lightning Protection Components, Devices, and Accessories: Listed and labeled by a qualified testing agency as complying with UL 96, and marked for intended location and application.

## 2.3 MATERIALS

- A. Air Terminals:
  - 1. Copper unless otherwise indicated.
  - 2. 324 inches (610 mm) long.
  - 3. Rounded tip.
  - 4. Threaded base support.
- B. Class 1 Main Conductors:
  - 1. Stranded Copper: 57,400 circular mils in diameter.
- C. Secondary Conductors:
  - 1. Stranded Copper: 26,240 circular mils in diameter.
- D. Ground Loop Conductor: Stranded copper.
- E. Ground Rods:
  - 1. Material: Solid copper.
  - 2. Diameter: 3/4 inch (19 mm).
  - 3. Rods shall be not less than 120 inches (3050 mm) long.

## PART 3 - EXECUTION

### 3.1 INSTALLATION

- A. Install lightning protection components and systems according to UL 96A and NFPA 780.
- B. Install conductors with direct paths from air terminals to ground connections. Avoid bends less than 90 degrees and 8 inches (203 mm) in radius and narrow loops.
- C. Conceal conductors within normal view from exterior locations at grade within 200 feet (60 m) of building. Comply with requirements for concealed installations in UL 96A and concealed systems in NFPA 780.
- D. Ground Ring Electrode: The conductor shall be not less than the main-size lightning conductor.

### 3.2 CONNECTIONS

- A. Aboveground concealed connections, and connections in earth or concrete, shall be done by exothermic welds or by high-compression fittings listed for the purpose.
- B. Aboveground exposed connections shall be done using the following types of connectors, listed and labeled for the purpose: exothermic weld.
- C. Bonding Straps and Jumpers: Install in locations accessible for inspection and maintenance, except where routed through short lengths of conduit.
  - 1. Bonding to Structure: Bond straps directly to basic structure, taking care not to penetrate any adjacent parts.
  - 2. Bonding to Equipment Mounted on Vibration Isolation Hangers and Supports: Install bonding so vibration is not transmitted to rigidly mounted equipment.

3.3 FIELD QUALITY CONTROL

- A. Special Inspections: **Contractor shall** engage a qualified special inspector to perform the following special inspections:
  - 1. Perform inspections as required to obtain a UL Master Label for system.
- B. Prepare test and inspection reports and certificates.
- C. Notify Architect at least 48 hours in advance of in section before concealing lightning protection components.

**END OF SECTION 26 41 13**



# Document G709™ – 2018

## Proposal Request

**PROJECT:** *(name and address)*  
North East Middle/High School  
Cecil County Maryland

**OWNER:** *(name and address)*  
Cecil County Public Schools  
George Washington Carver Center,  
201 Booth Street,  
Elkton, MD 21921

**CONTRACT INFORMATION:**  
Contract For: General Construction  
Date:

**ARCHITECT:** *(name and address)*  
Grimm + Parker Architecture Inc.

11720 Beltsville Drive  
Suite 600  
Calverton, MD 20705

Architect's Project Number: 22105.00  
Proposal Request Number: 001  
Proposal Request Date: August 9, 2024

**CONTRACTOR:** *(name and address)*  
Multiple Prime Contractors

Via: HESS Construction Co (Construction  
Manager)

The Owner requests an itemized proposal for changes to the Contract Sum and Contract Time for proposed modifications to the Contract Documents described herein. The Contractor shall submit this proposal within Seven (7) days or notify the Architect in writing of the anticipated date of submission.

*(Insert a detailed description of the proposed modifications to the Contract Documents and, if applicable, attach or reference specific exhibits.)*

Revisions to Mechanical and electrical drawings to coordinate with LEED requirements. Revisions are as per attached narrative and attached revised sheets dated 7/15/2024

### Revised Sheets:

M101A – LEVEL 01 AREA A PARTIAL FLOOR PLAN,  
M103GA – LEVEL 03 AREA G PARTIAL FLOOR PLAN,  
E201A – LEVEL 01 AREA A PARTIAL FLOOR PLAN – POWER  
E203G – LEVEL 03 AREA G PARTIAL FLOOR PLAN – POWER  
E713 – PANEL SCHEDULES  
E715 – PANEL SCHEDULES

**THIS IS NOT A CHANGE ORDER, A CONSTRUCTION CHANGE DIRECTIVE, OR A DIRECTION TO PROCEED WITH THE WORK DESCRIBED IN THE PROPOSED MODIFICATIONS.**

### REQUESTED BY THE ARCHITECT:

Paul Bradshaw, ALEP, Principal  
PRINTED NAME AND TITLE



# DRAFT AIA® Document G709™ - 2018

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**PROJECT:** *(name and address)*  
North East Middle/High School  
Cecil County Maryland

**CONTRACT INFORMATION:**  
Contract For: General Construction  
Date:

Architect's Project Number: 22105.00  
Proposal Request Number: 001  
Proposal Request Date: August 9, 2024

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Cecil County Public Schools  
George Washington Carver Center,  
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Grimm + Parker Architecture Inc.

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### REQUESTED BY THE ARCHITECT:

Paul Bradshaw, ALEP, Principal  
PRINTED NAME AND TITLE



July, 15, 2024

**PROJECT NAME** North East Middle & High School  
**PSC #** 07.044.23 / BTL  
**PR.** 01  
**PROJECT#** GP22105.00

TO THE CONTRACT DRAWINGS AND SPECIFICATIONS FOR THE REFERENCED PROJECT, DATED 12/22/2023, AS PREPARED BY GRIMM & PARKER ARCHITECTS, 11720 BELTSVILLE DRIVE, SUITE 600, CALVERTON, MARYLAND 20705.

This Proposal Request includes changes and clarifications to the Contract Documents. The information includes the following:

**DRAWING ITEMS:**

**MECHANICAL**

ITEM NO. M1                      SHEET M101A – LEVEL 01 AREA A PARTIAL FLOOR PLAN

Revise sheet M101A per attached reissued sheet:

**REVISE**                      S2-175 cfm diffuser to VAV digital diffuser-175 cfm in HS treatment A156  
**ADD**                         Thermostat associated with VAV digital diffuser in HS treatment A156

**REVISE**                      S2-175 cfm diffuser to VAV digital diffuser-175 cfm in MS OUTSIDE AGENCY INTERVENTION A168  
**ADD**                         Thermostat associated with VAV digital diffuser in MS OUTSIDE AGENCY INTERVENTION A168

**ADD**                         Drawing note Bubble 50. VAV SQUARE SUPPLY AIR DIGITAL DIFFUSER. 8"Ø NECK @175 CFM WITH LCD THERMOSTAT. PRICE PRODIGY MODEL PPD.

ITEM NO. M2                      SHEET M103GA – LEVEL 03 AREA G PARTIAL FLOOR PLAN

Revise sheet M103G per attached reissued sheet:

**ADD**                         R2-170 grille and associated duct work in Chemistry Prep Room G312 with volume damper to 36"x16" R/A duct.

**REVISE**                      26"x8" R/A duct to 32"x8".  
**REVISE**                      15"x8" R/A duct to 24"x8" R/A.

**ADD** R2-170 grille and associated duct in Chemical storage G319 with volume damper to 32"x8" R/A duct.

**ADD** Drawing note Bubble 70. 24"x8" R/A DUCT UP W/FD. TRANSITION TO 15"x8" IN VERTICAL. REFER TO DWG M302G FOR CONTINUATION.

**REVISE** S3-350 cfm diffuser to VAV digital diffuser-350 cfm in Physics Prep room G321.  
**REVISE** 10"Ø connection with volume damper to digital diffuser to 12"Ø with 12"Ø volume damper in Physics Prep room G321.

**ADD** Thermostat associated with VAV digital diffuser in in Physics Prep room G321.

**ADD** Drawing note Bubble 71. VAV SQUARE SUPPLY AIR DIGITAL DIFFUSER. 12"Ø NECK @350 CFM WITH LCD THERMOSTAT. PRICE PRODIGY MODEL PPD.

#### **ELECTRICAL**

ITEM NO. E1 SHEET E201A – LEVEL 01 AREA A PARTIAL FLOOR PLAN – POWER

Revise sheet E201A per attached reissued sheet:

**ADD** Circuit for digital diffuser in HS treatment A156 & MS OUTSIDE AGENCY INTERVENTION A168.

**ADD** Drawing note 10 indicating to provide appropriate transformer for digital diffuser.

ITEM NO. E2 SHEET E203G – LEVEL 03 AREA G PARTIAL FLOOR PLAN – POWER

Revise sheet E203G per attached reissued sheet:

**ADD** Circuit for digital diffuser in Physics Prep room G321

**ADD** Drawing note 12 indicating to provide appropriate transformer for digital diffuser.

ITEM NO. E3 SHEET E713 – PANEL SCHEDULES

Revise sheet E713 per attached reissued sheet:

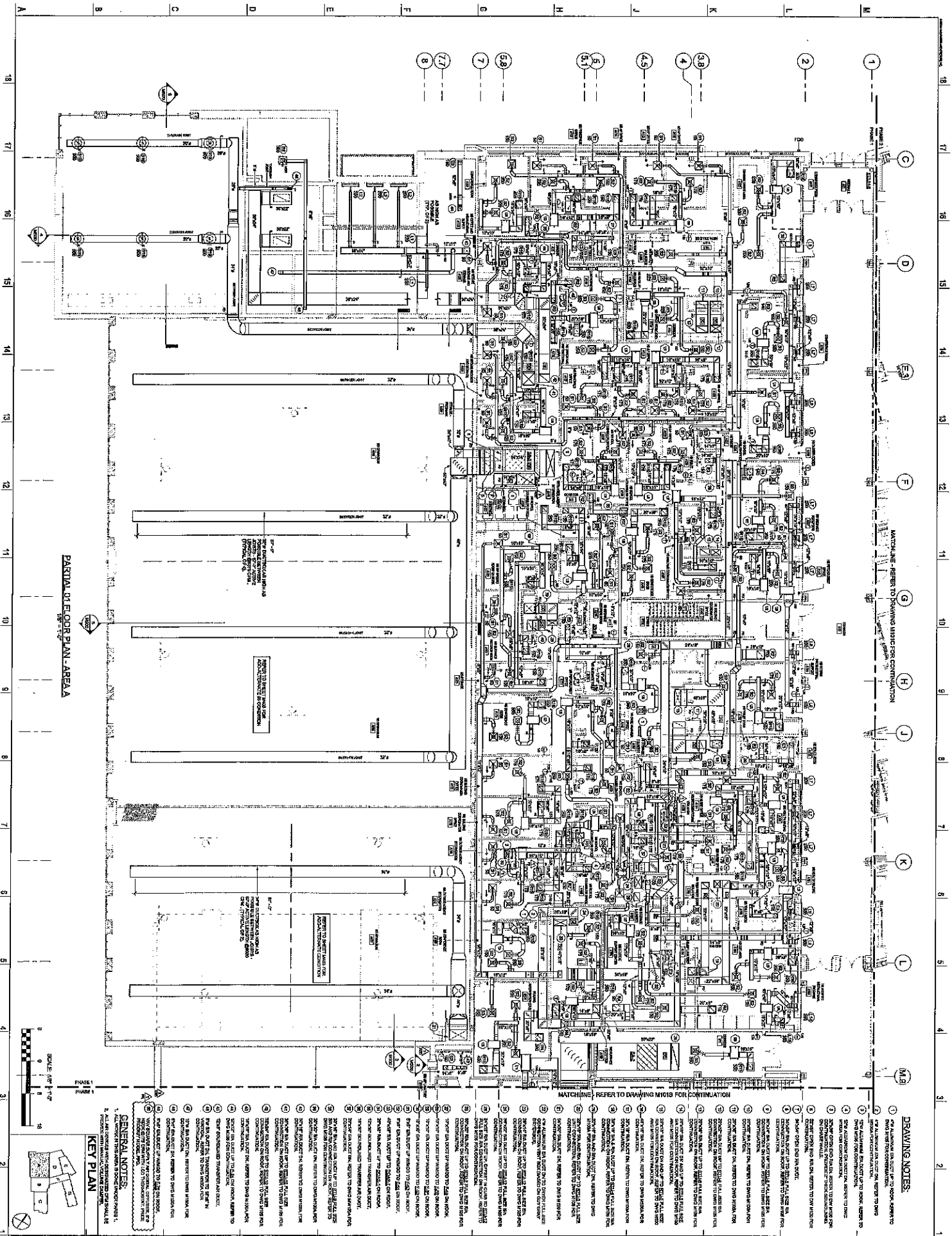
**ADD** Circuit for digital diffuser in Panel R1A.

ITEM NO. E4 SHEET E715 – PANEL SCHEDULES

Revise sheet E715 per attached reissued sheet:

**ADD** Circuit for digital diffuser in Panel R3G.

\*\*\*\*\*



DRAWING NOTES:

- [illegible]

<b>KEY PLAN</b>
-----------------



LEVEL 01 AREA A PARTIAL FLOOR PLAN

NORTH EAST MIDDLE / HIGH SCHOOL  
300 IRISHTOWN ROAD, NORTH EAST, MD

GP #22105

**G+P**  
GRIMM + PARKER  
ARCHITECTS

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THIRD FLOOR, NEWTON, MASSACHUSETTS 02459  
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P.R. 21046

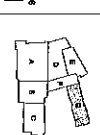
TO OUR OWNERS AND THE DESIGN AND ENGINEERING FIRMS ENGAGING AND  
INTERESTED IN OUR ENGINEERING, WE AND OUR STAFF ARE AT YOUR SERVICE  
IN ALL MANNER OF OUR ENGINEERING AND DESIGN SERVICES. WE ARE  
ALBAN ENGINEERING, INC. OFFICE 617-552-1000

20. **SECRET AND SHUT UP WITH, TRANSMISSION TO SPEAK IN VERTICAL, REFER TO DIME INDEX FOR CONSULTATION.**
21. **WAVE POLARIZED BURNING AND DIGITAL OPERATIONS, TERRY NIXON @ 200 CHAM WITH LEO THUNDERBOLT, PRICE PROCTOR MODEL, 1990.**

1. ALL WORK IN THIS AREA IS DONE UNDER PHASE 2.
2. ALL AIR DEVICES WITH DISCONNECTED CPM SHALL BE PROVIDED WITH MANUAL VOLUNTARY DRAINAGE.

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70.

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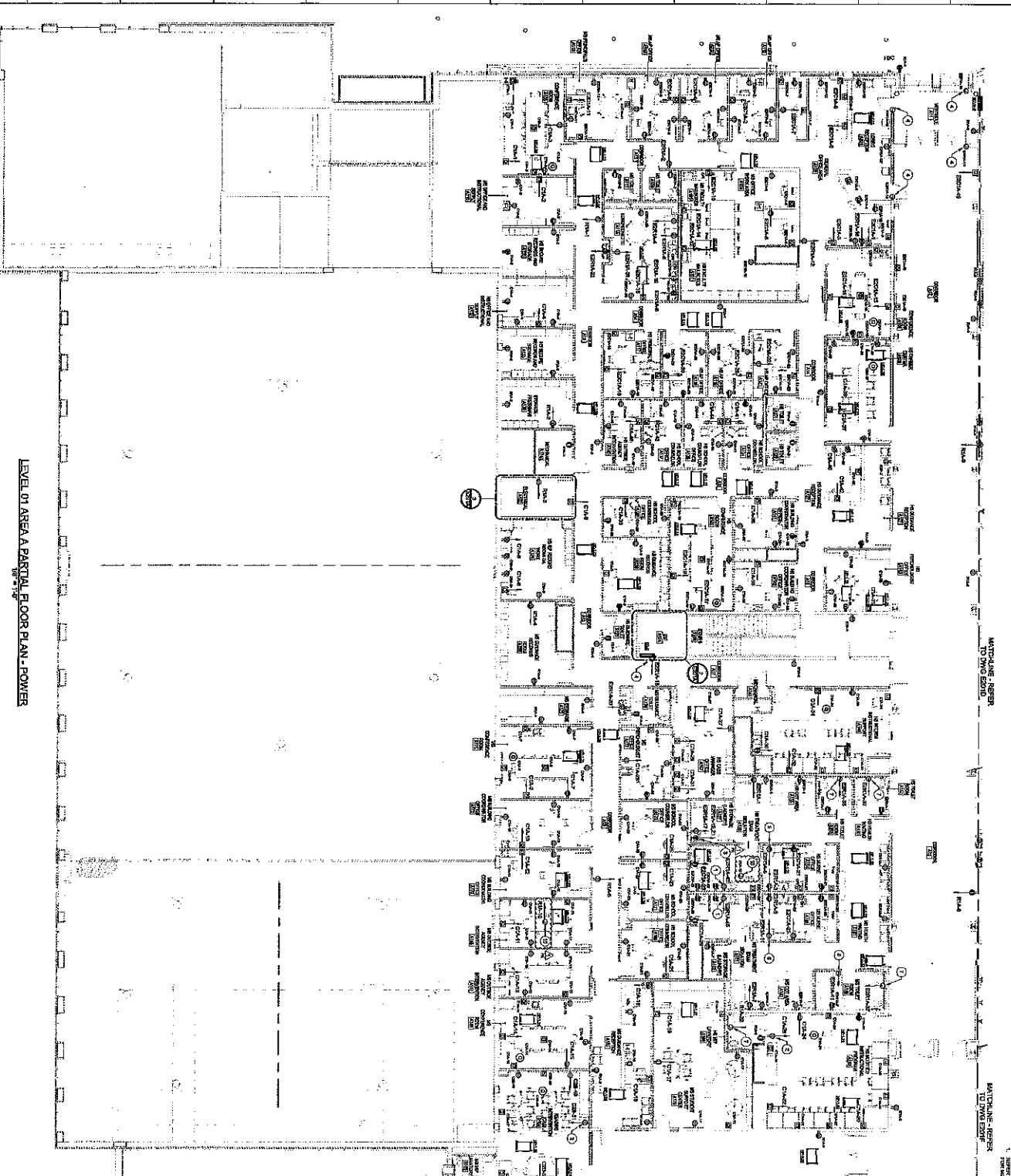
GP #22105

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P.O. BOX 31035



LEVEL 01 AREA A PARTIAL FLOOR PLAN - POWER

- GENERAL NOTES:**
1. REFER TO MECHANICAL EQUIPMENT SCHEDULES.
  2. REFER TO ELECTRICAL EQUIPMENT SCHEDULES.
  3. REFER TO MECHANICAL EQUIPMENT SCHEDULES.
  4. REFER TO ELECTRICAL EQUIPMENT SCHEDULES.
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MATCHLINE - REFER TO DWG E201B

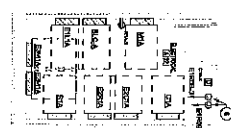
SCALE: 1/8" = 1'-0"

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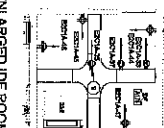


KEY PLAN

2 ENLARGED ELECTRICAL ROOM A122



2 ENLARGED JDE ROOM A174



LEVEL 01 AREA A PARTIAL FLOOR PLAN - POWER

NORTH EAST MIDDLE / HIGH SCHOOL

300 IRISHTOWN ROAD, NORTH EAST, MD

G+P

GRIMM + PARKER

ARCHITECTS

11720 Beltsville Drive

Suite 500

Chillum, MD 20759

Tel: 301.895.1000

www.grimmparker.com

ALBAN

ENGINEERING, INC.

300 INTERNATIONAL DRIVE, SUITE 100

ROCKVILLE, MD 20850

TEL: 301.581.1000

WWW.ALBAN-ENGINEERING.COM

DATE: 01/11/2011

BY: [Signature]

CHECKED: [Signature]

APPROVED: [Signature]







# Branch Panel: R2G

LOCATION: EASTMONT, OH  
 VOLUME: 12000 TYP  
 WIRE: 4  
 ALC: 12000 TYP  
 MISC: 12000 TYP  
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## Fuse Panel: E11F

WIRE SIZE		A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	AG	AH	AI	AJ	AK	AL	AM	AN	AO	AP	AQ	AR	AS	AT	AU	AV	AW	AX	AY	AZ	BA	BB	BC	BD	BE	BF	BG	BH	BI	BJ	BK	BL	BM	BN	BO	BP	BQ	BR	BS	BT	BU	BV	BW	BX	BY	BZ	CA	CB	CC	CD	CE	CF	CG	CH	CI	CJ	CK	CL	CM	CN	CO	CP	CQ	CR	CS	CT	CU	CV	CW	CX	CY	CZ	DA	DB	DC	DD	DE	DF	DG	DH	DI	DJ	DK	DL	DM	DN	DO	DP	DQ	DR	DS	DT	DU	DV	DW	DX	DY	DZ	EA	EB	EC	ED	EE	EF	EG	EH	EI	EJ	EK	EL	EM	EN	EO	EP	EQ	ER	ES	ET	EU	EV	EW	EX	EY	EZ	FA	FB	FC	FD	FE	FF	FG	FH	FI	FJ	FK	FL	FM	FN	FO	FP	FQ	FR	FS	FT	FU	FV	FW	FX	FY	FZ	GA	GB	GC	GD	GE	GF	GG	GH	GI	GJ	GK	GL	GM	GN	GO	GP	GQ	GR	GS	GT	GU	GV	GW	GX	GY	GZ	HA	HB	HC	HD	HE	HF	HG	HH	HI	HJ	HK	HL	HM	HN	HO	HP	HQ	HR	HS	HT	HU	HV	HW	HX	HY	HZ	IA	IB	IC	ID	IE	IF	IG	IH	II	IJ	IK	IL	IM	IN	IO	IP	IQ	IR	IS	IT	IU	IV	IW	IX	IY	IZ	JA	JB	JC	JD	JE	JF	JG	JH	JI	IJ	JK	KL	JM	JN	JO	JP	JQ	JR	JS	JT	JU	JV	JW	JX	JY	JZ	KA	KB	KC	KD	KE	KF	KG	KH	KI	KJ	KK	KL	KM	KN	KO	KP	KQ	KR	KS	KT	KU	KV	KW	KX	KY	KZ	LA	LB	LC	LD	LE	LF	LG	LH	LI	LJ	LK	LM	LN	LO	LP	LQ	LR	LS	LT	LU	LV	LW	LX	LY	LZ	MA	MB	MC	MD	ME	MF	MG	MH	MI	MJ	MK	ML	MM	MN	MO	MP	MQ	MR	MS	MT	MU	MV	MW	MX	MY	MZ	NA	NB	NC	ND	NE	NF	NG	NH	NI	NJ	NK	NL	NM	NN	NO	NP	NQ	NR	NS	NT	NU	NV	NW	NX	NY	NZ	OA	OB	OC	OD	OE	OF	OG	OH	OI	OJ	OK	OL	OM	ON	OO	OP	OQ	OR	OS	OT	OU	OV	OW	OX	OY	OZ	PA	PB	PC	PD	PE	PF	PG	PH	PI	PJ	PK	PL	PM	PN	PO	PP	PQ	PR	PS	PT	PU	PV	PW	PX	PY	PZ	QA	QB	QC	QD	QE	QF	QG	QH	QI	QJ	QK	QL	QM	QN	QO	QP	QQ	QR	QS	QT	QU	QV	QW	QX	QY	QZ	RA	RB	RC	RD	RE	RF	RG	RH	RI	RJ	RK	RL	RM	RN	RO	RP	RQ	RR	RS	RT	RU	RV	RW	RX	RY	RZ	SA	SB	SC	SD	SE	SF	SG	SH	SI	SJ	SK	SL	SM	SN	SO	SP	SQ	SR	SS	ST	SU	SV	SW	SX	SY	SZ	TA	TB	TC	TD	TE	TF	TG	TH	TI	TJ	TK	TL	TM	TN	TO	TP	TQ	TR	TS	TT	TU	TV	TW	TX	TY	TZ	UA	UB	UC	UD	UE	UF	UG	UH	UI	UJ	UK	UL	UM	UN	UO	UP	UQ	UR	US	UT	UU	UV	UW	UX	UY	UZ	VA	VB	VC	VD	VE	VF	VG	VH	VI	VJ	VK	VL	VM	VN	VO	VP	VQ	VR	VS	VT	VU	VV	VW	VX	VY	VZ	WA	WB	WC	WD	WE	WF	WG	WH	WI	WJ	WK	WL	WM	WN	WO	WP	WQ	WR	WS	WT	WU	WV	WW	WX	WY	WZ	XA	XB	XC	XD	XE	XF	YG	YH	YI	YJ	YK	YL	YM	YN	YO	YP	YQ	YR	YS	YT	YU	YV	YW	YX	YY	YZ	ZA
WIRE SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	AG	AH	AI	AJ	AK	AL	AM	AN	AO	AP	AQ	AR	AS	AT	AU	AV	AW	AX	AY	AZ	BA	BB	BC	BD	BE	BF	BG	BH	BI	BJ	BK	BL	BM	BN	BO	BP	BQ	BR	BS	BT	BU	BV	BW	BX	BY	BZ	CA	CB	CC	CD	CE	CF	CG	CH	CI	CJ	CK	CL	CM	CN	CO	CP	CQ	CR	CS	CT	CU	CV	CW	CX	CY	CZ	DA	DB	DC	DD	DE	DF	DG	DH	DI	DJ	DK	DL	DM	DN	DO	DP	DQ	DR	DS	DT	DU	DV	DW	DX	DY	DZ	EA	EB	EC	ED	EE	EF	EG	EH	EI	EJ	EK	EL	EM	EN	EO	EP	EQ	ER	ES	ET	EU	EV	EW	EX	EY	EZ	FA	FB	FC	FD	FE	FF	FG	FH	FI	FJ	FK	FL	FM	FN	FO	FP	FQ	FR	FS	FT	FU	FV	FW	FX	FY	FZ	GA	GB	GC	GD	GE	GF	GG	GH	GI	GJ	GK	GL	GM	GN	GO	GP	GQ	GR	GS	GT	GU	GV	GW	GX	GY	GZ	HA	HB	HC	HD	HE	HF	HG	HH	HI	HJ	HK	HL	HM	HN	HO	HP	HQ	HR	HS	HT	HU	HV	HW	HX	HY	HZ	IA	IB	IC	ID	IE	IF	IG	IH	II	IJ	IK	IL	IM	IN	IO	IP	IQ	IR	IS	IT	IU	IV	IW	IX	IY	IZ	JA	JB	JC	JD	JE	JF	JG	JH	JI	IJ	JK	KL	JM	JN	JO	JP	JQ	JR	JS	JT	JU	JV	JW	JX	JY	JZ	KA	KB	KC	KD	KE	KF	KG	KH	KI	KJ	KK	KL	KM	KN	KO	KP	KQ	KR	KS	KT	KU	KV	KW	KX	KY	KZ	LA	LB	LC	LD	LE	LF	LG	LH	LI	LJ	LK	LM	LN	LO	LP	LQ	LR	LS	LT	LU	LV	LW	LX	LY	LZ	MA	MB	MC	MD	ME	MF	MG	MH	MI	MJ	MK	ML	MM	MN	MO	MP	MQ	MR	MS	MT	MU	MV	MW	MX	MY	MZ	NA	NB	NC	ND	NE	NF	NG	NH	NI	NJ	NK	NL	NM	NN	NO	NP	NQ	NR	NS	NT	NU	NV	NW	NX	NY	NZ	OA	OB	OC	OD	OE	OF	OG	OH	OI	OJ	OK	OL	OM	ON	OO	OP	OQ	OR	OS	OT	OU	OV	OW	OX	OY	OZ	PA	PB	PC	PD	PE	PF	PG	PH	PI	PJ	PK	PL	PM	PN	PO	PP	PQ	PR	PS	PT	PU	PV	PW	PX	PY	PZ	QA	QB	QC	QD	QE	QF	QG	QH	QI	QJ	QK	QL	QM	QN	QO	QP	QQ	QR	QS	QT	QU	QV	QW	QX	QY	QZ	RA	RB	RC	RD	RE	RF	RG	RH	RI	RJ	RK	RL	RM	RN	RO	RP	RQ	RR	RS	RT	RU	RV	RW	RX	RY	RZ	SA	SB	SC	SD	SE	SF	SG	SH	SI	SJ	SK	SL	SM	SN	SO	SP	SQ	SR	SS	ST	SU	SV	SW	SX	SY	SZ	TA	TB	TC	TD	TE	TF	TG	TH	TI	TJ	TK	TL	TM	TN	TO	TP	TQ	TR	TS	TT	TU	TV	TW	TX	TY	TZ	UA	UB	UC	UD	UE	UF	UG	UH	UI	UJ	UK	UL	UM	UN	UO	UP	UQ	UR	US	UT	UU	UV	UW	UX	UY	UZ	VA	VB	VC	VD	VE	VF	VG	VH	VI	VJ	VK	VL	VM	VN	VO	VP	VQ	VR	VS	VT	VU	VV	VW	VX	VY	VZ	WA	WB	WC	WD	WE	WF	WG	WH	WI	WJ	WK	WL	WM	WN	WO	WP	WQ	WR	WS	WT	WU	WV	WW	WX	WY	WZ	XA	XB	XC	XD	XE	XF	YG	YH	YI	YJ	YK	YL	YM	YN	YO	YP	YQ	YR	YS	YT	YU	YV	YW	YX	YY	YZ	ZA	
WIRE SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	AG	AH	AI	AJ	AK	AL	AM	AN	AO	AP	AQ	AR	AS	AT	AU	AV	AW	AX	AY	AZ	BA	BB	BC	BD	BE	BF	BG	BH	BI	BJ	BK	BL	BM	BN	BO	BP	BQ	BR	BS	BT	BU	BV	BW	BX	BY	BZ	CA	CB	CC	CD	CE	CF	CG	CH	CI	CJ	CK	CL	CM	CN	CO	CP	CQ	CR	CS	CT	CU	CV	CW	CX	CY	CZ	DA	DB	DC	DD	DE	DF	DG	DH	DI	DJ	DK	DL	DM	DN	DO	DP	DQ	DR	DS	DT	DU	DV	DW	DX	DY	DZ	EA	EB	EC	ED	EE	EF	EG	EH	EI	EJ	EK	EL	EM	EN	EO	EP	EQ	ER	ES	ET	EU	EV	EW	EX	EY	EZ	FA	FB	FC	FD	FE	FF	FG	FH	FI	FJ	FK	FL	FM	FN	FO	FP	FQ	FR	FS	FT	FU	FV	FW	FX	FY	FZ	GA	GB	GC	GD	GE	GF	GG	GH	GI	GJ	GK	GL	GM	GN	GO	GP	GQ	GR	GS	GT	GU	GV	GW	GX	GY	GZ	HA	HB	HC	HD	HE	HF	HG	HH	HI	HJ	HK	HL	HM	HN	HO	HP	HQ	HR	HS	HT	HU	HV	HW	HX	HY	HZ	IA	IB	IC	ID	IE	IF	IG	IH	II	IJ	IK	IL	IM	IN	IO	IP	IQ	IR	IS	IT	IU	IV	IW	IX	IY	IZ	JA	JB	JC	JD	JE	JF	JG	JH	JI	IJ	JK	KL	JM	JN	JO	JP	JQ	JR	JS	JT	JU	JV	JW	JX	JY	JZ	KA	KB	KC	KD	KE	KF	KG	KH	KI	KJ	KK	KL	KM	KN	KO	KP	KQ	KR	KS	KT	KU	KV	KW	KX	KY	KZ	LA	LB	LC	LD	LE	LF	LG	LH	LI	LJ	LK	LM	LN	LO	LP	LQ	LR	LS	LT	LU	LV	LW	LX	LY	LZ	MA	MB	MC	MD	ME	MF	MG	MH	MI	MJ	MK	ML	MM	MN	MO	MP	MQ	MR	MS	MT	MU	MV	MW	MX	MY	MZ	NA	NB	NC	ND	NE	NF	NG	NH	NI	NJ	NK	NL	NM	NN	NO	NP	NQ	NR	NS	NT	NU	NV	NW	NX	NY	NZ	OA	OB	OC	OD	OE	OF	OG	OH	OI	OJ	OK	OL	OM	ON	OO	OP	OQ	OR	OS	OT	OU	OV	OW	OX	OY	OZ	PA	PB	PC	PD	PE	PF	PG	PH	PI	PJ	PK	PL	PM	PN	PO	PP	PQ	PR	PS	PT	PU	PV	PW	PX	PY	PZ	QA	QB	QC	QD	QE	QF	QG	QH	QI	QJ	QK	QL	QM	QN	QO	QP	QQ	QR	QS	QT	QU	QV	QW	QX	QY	QZ	RA	RB	RC	RD	RE	RF	RG	RH	RI	RJ	RK	RL	RM	RN	RO	RP	RQ	RR	RS	RT	RU	RV	RW	RX	RY	RZ	SA	SB	SC	SD	SE	SF	SG	SH	SI	SJ	SK	SL	SM	SN	SO	SP	SQ	SR	SS	ST	SU	SV	SW	SX	SY	SZ	TA	TB	TC	TD	TE	TF	TG	TH	TI	TJ	TK	TL	TM	TN	TO	TP	TQ	TR	TS	TT	TU	TV	TW	TX	TY	TZ	UA	UB	UC	UD	UE	UF	UG	UH	UI	UJ	UK	UL	UM	UN	UO	UP	UQ	UR	US	UT	UU	UV	UW	UX	UY	UZ	VA	VB	VC	VD	VE	VF	VG	VH	VI	VJ	VK	VL	VM	VN	VO	VP	VQ	VR	VS	VT	VU	VV	VW	VX	VY	VZ	WA	WB	WC	WD	WE	WF	WG	WH	WI	WJ	WK	WL	WM	WN	WO	WP	WQ	WR	WS	WT	WU	WV	WW	WX	WY	WZ	XA	XB	XC	XD	XE	XF	YG	YH	YI	YJ	YK	YL	YM	YN	YO	YP	YQ	YR	YS	YT	YU	YV	YW	YX	YY	YZ	ZA	
WIRE SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	AG	AH	AI	AJ	AK	AL	AM	AN	AO	AP	AQ	AR	AS	AT	AU	AV	AW	AX	AY	AZ	BA	BB	BC	BD	BE	BF	BG	BH	BI	BJ	BK	BL	BM	BN	BO	BP	BQ	BR	BS	BT	BU	BV	BW	BX	BY	BZ	CA	CB	CC	CD	CE	CF	CG	CH	CI	CJ	CK	CL	CM	CN	CO	CP	CQ	CR	CS	CT	CU	CV	CW	CX	CY	CZ	DA	DB																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	

## RFI detail

## #001 Additional Survey Information (Original Survey)



Status	<div><div></div>Closed</div>
Created on	Jun 25, 2024 by <b>Ken Thompson</b> (HESS Construction Co., LLC)
RFI type	Default RFI workflow
Ball in court	<b>Ken Thompson</b> (HESS Construction Co., LLC)
Answered	Jul 16, 2024 by <b>Alexander Whallon</b> (McCrone), <b>Patrick Byrne</b> (Grimm and Parker)

### Question

We are beginning work on the Northeast Middle and High School at 300 Irishtown Rd, Northeast, MD 21901 and wish to inquire about the survey that was done prior to design.

We are struggling to find the information related to the datums used in establishing the coordinates shown in the existing conditions plan.

Can we get some clarification on this

#### Suggested answer

Provide the requested original/existing survey information

### Official response

Alexander Whallon (McCrone): I've copied Dan Speakman's response below:

"Here is the response I got from our survey department:

Point #3 has been checked at least 4 times all within 0.04' vertically.

Point #60000 has been checked at least 5 times all within 0.07' vertically.

Point #60001 has been checked at least 3 times all within 0.02' vertically.

I did notice in the coordinate list provided that their horizontal coordinates don't match us by as much as 1.78' at point 60001 (1.43' at pt# 60000, and 0.04' at pt# 3)

I'm wondering if they are using the US Foot or International?

I hope this helps."

Patrick Byrne (Grimm and Parker): See attached response.

By **Alexander Whallon** (McCrone), **Patrick Byrne** (Grimm and Parker) - Jul 16, 2024, 2:29 PM EDT

References and Attachments

Files (3)

- [#001 - Addition Survey Information Response.pdf](#)
- [Control-Corners - Received from McCrone 7.18.24.txt](#)
- [Control\\_Corners\\_NEMS - Received from McCrone 7.18.24.pdf](#)

Impact

Cost impact -

Schedule impact -

Other attributes

Priority Normal

Discipline -

Category -

Location Site





Location details -


External id -

Co-reviewer(s)  Alexander Whallon (McCrone)

Posted to Drawings/  
Specifications -

Trade's RFI No. -

Activities	By	At
<b>Joshua Postadan</b> changed the status from  <b>Open</b> Answered to  <b>Closed</b> <b>Official response:</b> Alexander Whallon (McCrone): I've copied Dan Speakman's response below:  "Here is the response I got from our survey department:  Point #3 has been checked at least 4 times all within 0.04' vertically. Point #60000 has been checked at least 5 times all within 0.07' vertically. Point #60001 has been checked at least 3 times all within 0.02' vertically.  I did notice in the coordinate list provided that their horizontal coordinates don't match us by as much as 1.78' at point 60001 (1.43' at pt# 60000, and 0.04' at pt# 3)  I'm wondering if they are using the US Foot or International?  I hope this helps." Patrick Byrne (Grimm and Parker): See attached response.		
Please see the References section of this RFI for the following attachments: "Control-Corners - Received from McCrone 7.18.24" "Control_Corners_NEMS - Received from McCrone 7.18.24" Horst has confirmed that these attachments included the requested datum information and were sufficient to close this RFI. Please review the response to RFI #001. Provide notification of any cost implications immediately. If a proposal has cost impacts, please request an RFQ from HESS. Send a proposal no later than the close of business within 7 days of receipt of this RFI response. HESS will consider this as a no cost change and close this issue should a proposal not be received by this date. A lack of response for any credit items will prompt HESS Construction to assign a cost value that will be deducted from your contract sum. Note: The RFQ is simply an administrative tracking tool, and in no way represents that additional work, cost or time is acknowledged, authorized, directed, or approved.	<b>Joshua Postadan</b>	Jul 22, 2024, 10:01 AM EDT
<b>Joshua Postadan</b> added a reference to a File <b>Control_Corners_NEMS - Received from McCrone 7.18.24.pdf</b>	<b>Joshua Postadan</b>	Jul 22, 2024, 9:59 AM EDT
<b>Joshua Postadan</b> added a reference to a File <b>Control-Corners - Received from McCrone 7.18.24.txt</b>	<b>Joshua Postadan</b>	Jul 22, 2024, 9:59 AM EDT
<b>Alexander Whallon</b> changed the status from  <b>Open</b> In Review to  <b>Open</b> Answered set Ball in court to <b>Ken Thompson</b> (HESS Construction Co., LLC)	<b>Alexander Whallon</b>	Jul 16, 2024, 2:29 PM EDT

<b>Alexander Whallon</b> added a response: I've copied Dan Speakman's response below: "Here is the response I got from our survey department: Point #3 has been checked at least 4 times all within 0.04' vertically. Point #60000 has been checked at least 5 times all within 0.07' vertically. Point #60001 has been checked at least 3 times all within 0.02' vertically. I did notice in the coordinate list provided that their horizontal coordinates don't match us by as much as 1.78' at point 60001 (1.43' at pt# 60000, and 0.04' at pt# 3) I'm wondering if they are using the US Foot or International? I hope this helps."	<b>Alexander Whallon</b>	Jul 16, 2024, 2:29 PM EDT
changed the <b>co-reviewer(s)</b> to <b>Alexander Whallon</b> (McCrone)	<b>Patrick Byrne</b>	Jul 16, 2024, 2:23 PM EDT
set Ball in court to <b>Patrick Byrne</b> (Grimm and Parker), <b>Alexander Whallon</b> (McCrone)	<b>Patrick Byrne</b>	Jul 11, 2024, 3:05 PM EDT
<b>Patrick Byrne</b> cleared <b>co-reviewer(s)</b>	<b>Patrick Byrne</b>	Jul 11, 2024, 3:05 PM EDT
<b>Patrick Byrne</b> added a reference to a File <b>#001 - Addition Survey Information Response.pdf</b>	<b>Patrick Byrne</b>	Jul 11, 2024, 9:35 AM EDT
<b>Patrick Byrne</b> added a response: See attached response.	<b>Patrick Byrne</b>	Jul 11, 2024, 9:35 AM EDT
changed the <b>co-reviewer(s)</b> to <b>Alexander Whallon</b> (McCrone)	<b>Patrick Byrne</b>	Jul 2, 2024, 9:46 PM EDT
<b>Ken Thompson</b> changed title to: <i>Additional Survey Information (Original Survey)</i>	<b>Ken Thompson</b>	Jun 28, 2024, 7:33 AM EDT
changed the <b>watchers</b> to <b>jhess jhess</b> (Horst Excavating Company), <b>aroberts aroberts</b> (Horst Excavating Company), <b>mhigh mhigh</b> (Horst Excavating Company), <b>routman routman</b> (Horst Excavating Company), <b>HESS PROJECT TEAM</b>	<b>Joshua Postadan</b>	Jun 26, 2024, 7:04 AM EDT
changed the <b>watchers</b> to <b>jhess jhess</b> (Horst Excavating Company), <b>aroberts aroberts</b> (Horst Excavating Company), <b>mhigh mhigh</b> (Horst Excavating Company), <b>routman routman</b> (Horst Excavating Company), <b>HESS PROJECT TEAM, Horst Excavating Company</b>	<b>Joshua Postadan</b>	Jun 26, 2024, 7:04 AM EDT
changed the <b>watchers</b> to <b>HESS PROJECT TEAM</b>	<b>Joshua Postadan</b>	Jun 25, 2024, 3:22 PM EDT
<b>Joshua Postadan</b> cleared <b>watchers</b>	<b>Joshua Postadan</b>	Jun 25, 2024, 3:21 PM EDT
<b>Ken Thompson</b> (HESS Construction Co., LLC) created this RFI in  <b>Open In Review</b> status and set Ball in court to <b>Patrick Byrne</b> (Grimm and Parker), Former User.	<b>Ken Thompson</b>	Jun 25, 2024, 3:19 PM EDT

RFI detail

#001 Addition Survey Information (Original Survey)



Status	<div><div></div>Open</div> In Review
Created on	Jun 25, 2024 by Ken Thompson (HESS Construction Co., LLC)
RFI type	Default RFI workflow
Ball in court	Patrick Byrne (Grimm and Parker) Dan Speakman (McCrone)
Due date	Jul 2, 2024

Question

We are beginning work on the Northeast Middle and High School at 300 Irishtown Rd, Northeast, MD 21901 and wish to inquire about the survey that was done prior to design.

We are struggling to find the information related to the datums used in establishing the coordinates shown in the existing conditions plan.

Can we get some clarification on this

**Suggested answer**

Provide the requested original/existing survey information


Impact

Cost impact	-
Schedule impact	-

Other attributes

Priority	Normal
Discipline	-
Category	-
Location	Site
Location details	-

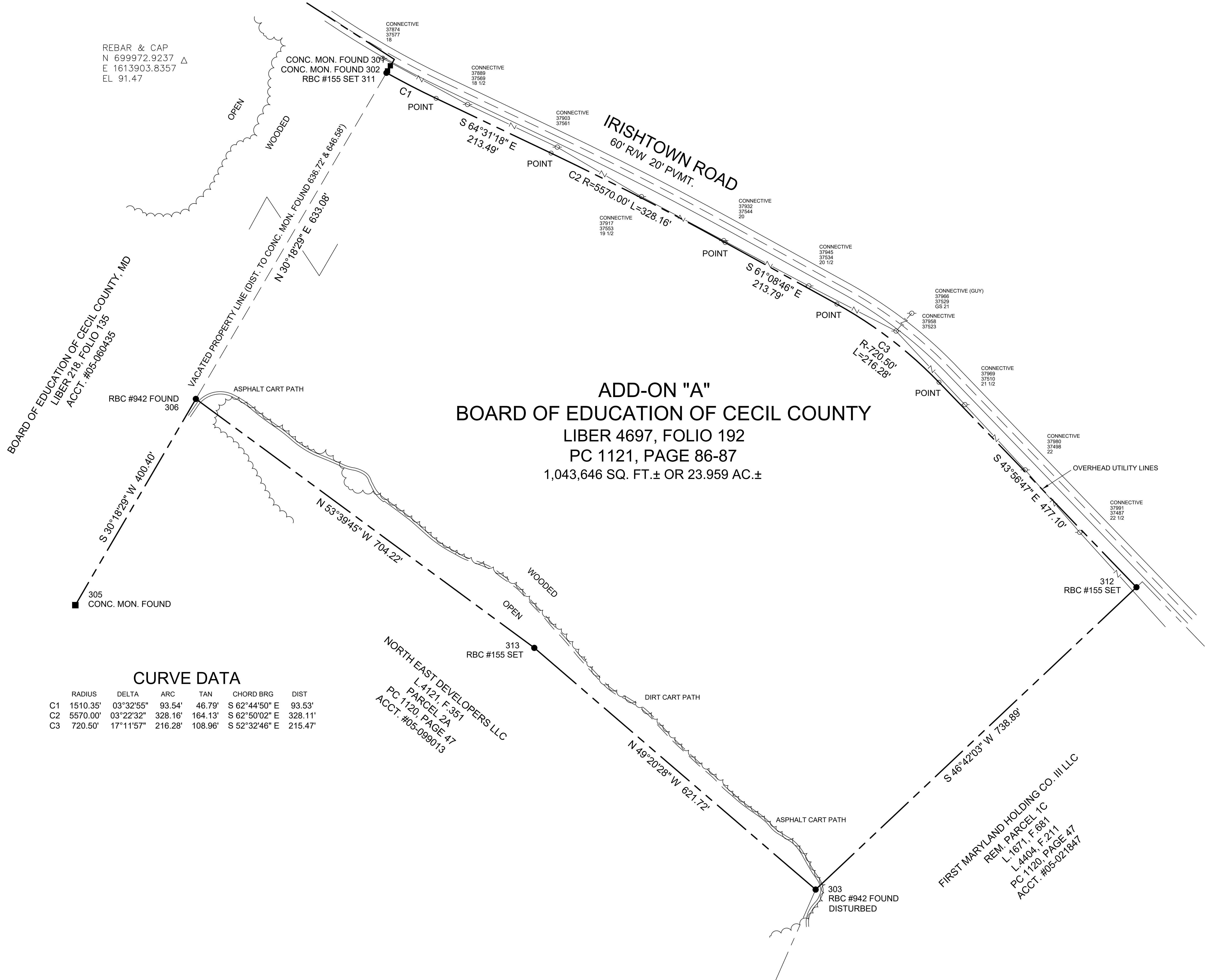
External id	-
Co-reviewer(s)	
Posted to Drawings/ Specifications	-
Trade's RFI No.	-

Activities	By	At
changed the <b>watchers</b> to <b>HESS PROJECT TEAM</b>	<b>Joshua Postadan</b>	Jun 25, 2024, 3:22 PM EDT
<b>Joshua Postadan</b> cleared <b>watchers</b>	<b>Joshua Postadan</b>	Jun 25, 2024, 3:21 PM EDT
<b>Ken Thompson</b> (HESS Construction Co., LLC) created this RFI in  <b>Open</b> In Review status and set Ball in court to <b>Patrick Byrne</b> (Grimm and Parker), Former User.	<b>Ken Thompson</b>	Jun 25, 2024, 3:19 PM EDT

G+P Response:  
As noted in the progress meeting on 7/10, McCrone checked their layout data multiple times, and all points came within 0.04' of the design and appear to be within layout tolerances. Please advise what else can be done by the design team to facilitate the layout process.

Patrick Byrne 7.11.2024

REBAR & CAP  
N 699972.9237 Δ  
E 1613903.8357  
EL. 91.47



NAD 83/2011  
(EPOCH 2010.0)



## RFI detail

## #002 Masonry Windowsill Constructability



Status	<div><div></div>Closed</div>
Created on	Jun 27, 2024 by <b>Glenn Feldstein</b> (George Moehrle Masonry)
RFI type	Architectural RFI REVs
Ball in court	<b>Glenn Feldstein</b> (George Moehrle Masonry)
Answered	Jul 1, 2024 by <b>Patrick Byrne</b> (Grimm and Parker)

### Question

Details B6 & B12/A423 show the back of special brick shape sills abutting the fiberglass reinforced plastic angle. Please advise if these brick should be shifted out 1/2" to provide space for differential movement to avoid brick being pushed loose over the life of the building.

### Official response

Patrick Byrne (Grimm and Parker): See attached RFI response.

By **Patrick Byrne** (Grimm and Parker) - Jul 1, 2024, 11:38 PM EDT

### References and Attachments

#### Files (3)

- [#002 - Masonry Windowsill Constructability Response.pdf](#)
- [Email from Glass Industries Confirming Angle Reduction - RFI 002.pdf](#)
- [RFI 002 - A423 Markup.pdf](#)







#### Sheets (1)


- [A423](#)

### Impact

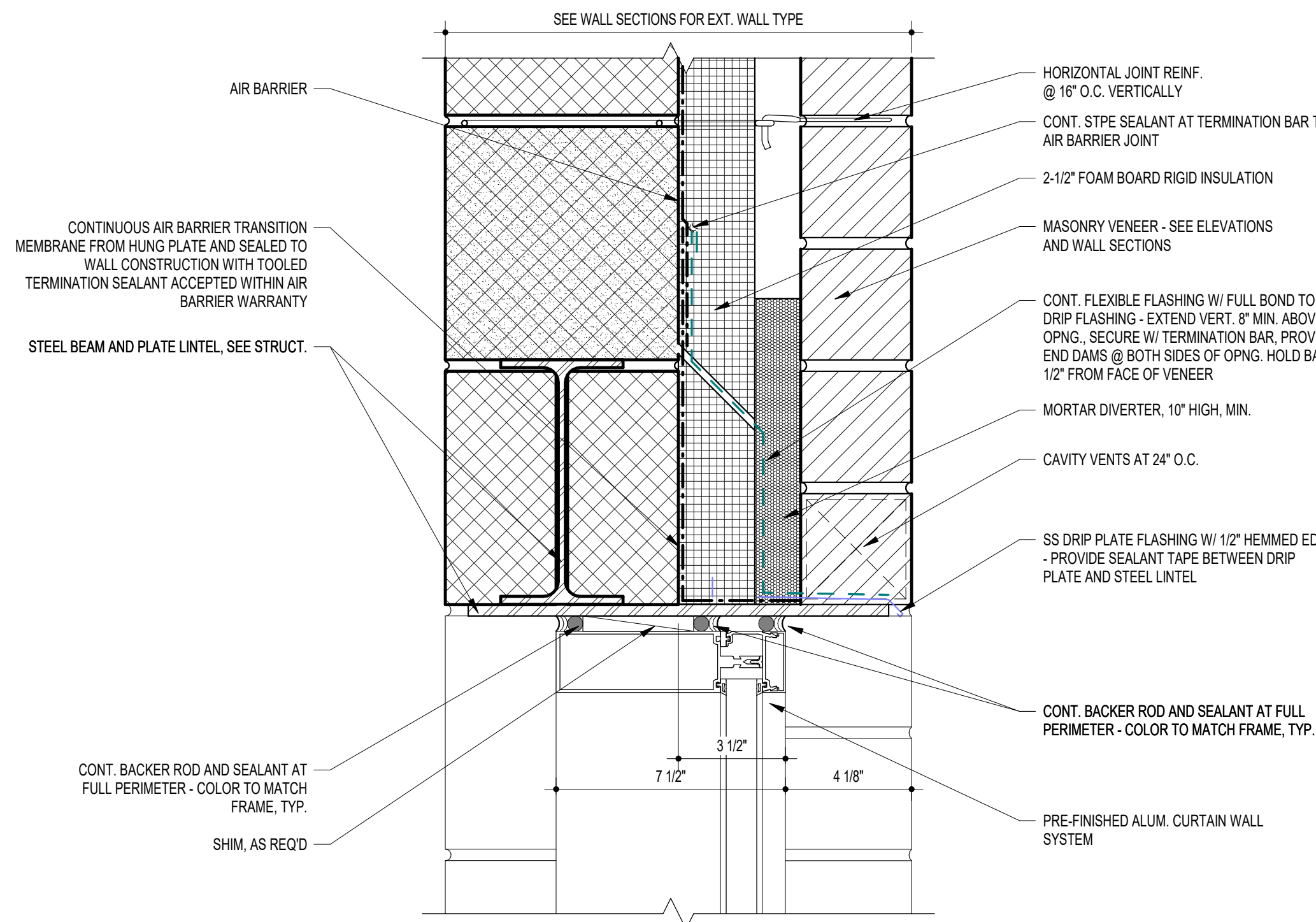
Cost impact	Unknown
Schedule impact	No

Other attributes	
Priority	Normal
Discipline	Masonry
Category	Constructability
Location	-
Location details	Building Facade
External id	-
Co-reviewer(s)	
Posted to Drawings/ Specifications	YES
Trade's RFI No.	-

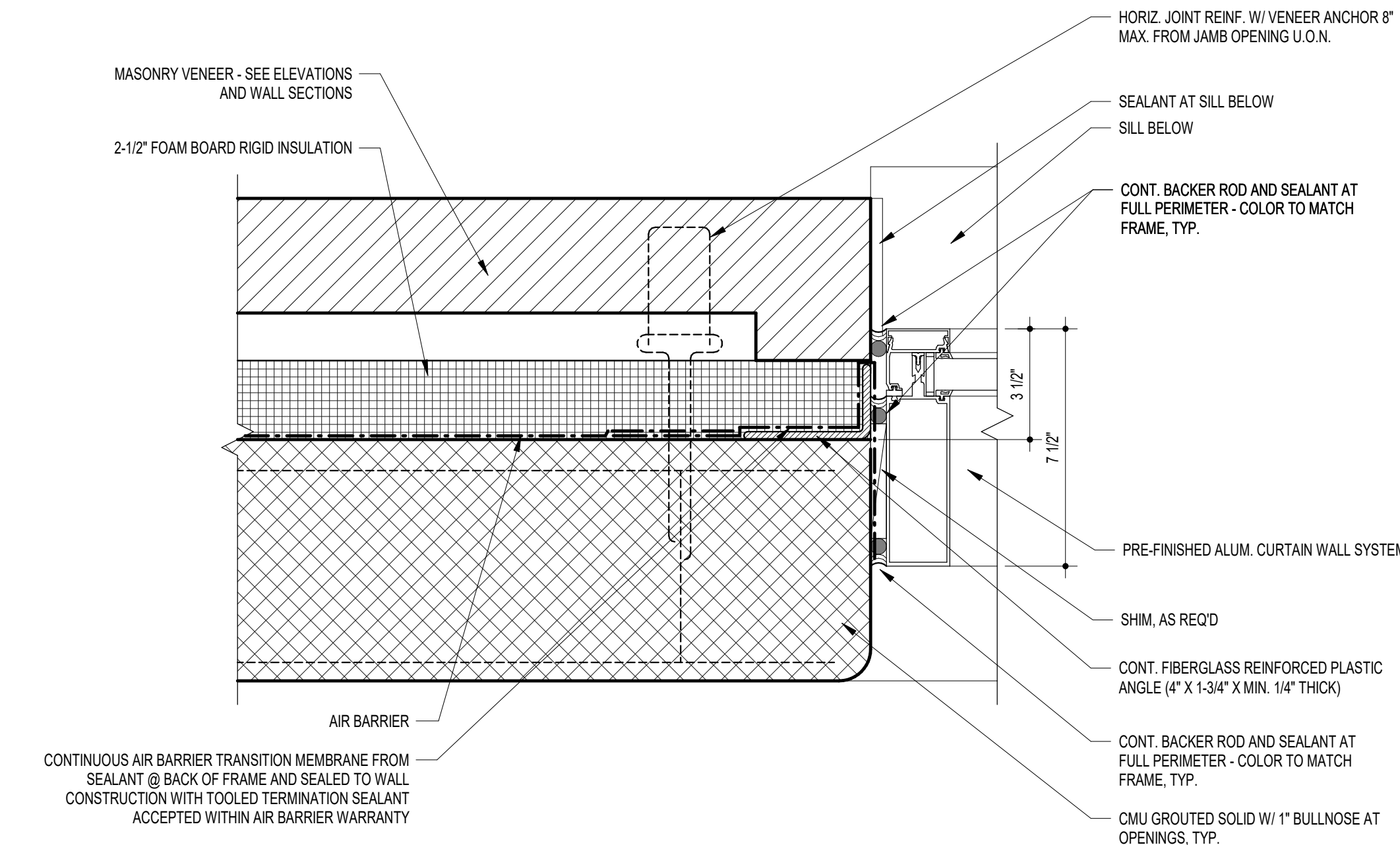
Activities	By	At
Please see attached email from the glass & glazing contractor (Glass Industries) for confirmation that the fiberglass reinforced angle can be reduced by 3/4", as requested by Moehlrle Masonry	Joshua Postadan	Aug 8, 2024, 8:49 AM EDT
Joshua Postadan added a reference to a File <b>Email from Glass Industries Confirming Angle Reduction - RFI 002.pdf</b>	Joshua Postadan	Aug 8, 2024, 8:48 AM EDT
Joshua Postadan changed the status from  <b>Open</b> Answered to  <b>Closed</b> <b>Official response:</b> Patrick Byrne (Grimm and Parker): See attached RFI response. set Ball in court to <b>Glenn Feldstein</b> (George Moehrle Masonry)	Joshua Postadan	Jul 2, 2024, 7:12 AM EDT
Glenn, Please see attached for the architect's RFI response. Please review and respond as needed. Please advise of any cost/time impacts associated with this RFI within 5 business days of this RFI being closed. If this RFI needs to be re-opened for further questions/responses from Moehrle, please advise the HESS team accordingly. Thank you,	Joshua Postadan	Jul 2, 2024, 7:12 AM EDT
Patrick Byrne added a reference to a File <b>#002 - Masonry Windowsill Constructability Response.pdf</b>	Patrick Byrne	Jul 1, 2024, 11:39 PM EDT
Patrick Byrne changed the status from  <b>Open</b> In Review to  <b>Open</b> Answered set Ball in court to <b>Joshua Postadan</b> (HESS Construction Co., LLC)	Patrick Byrne	Jul 1, 2024, 11:38 PM EDT
Patrick Byrne added a response: See attached RFI response.	Patrick Byrne	Jul 1, 2024, 11:38 PM EDT
changed the <b>Posted to Drawings/Specifications</b> to <b>YES</b>	Joshua Postadan	Jul 1, 2024, 1:31 PM EDT
Joshua Postadan added a reference to a File <b>RFI 002 - A423 Markup.pdf</b>	Joshua Postadan	Jul 1, 2024, 10:06 AM EDT
Joshua Postadan changed the status from  <b>Open</b> Waiting for Submission to  <b>Open</b> In Review set Ball in court to <b>Patrick Byrne</b> (Grimm and Parker) changed the <b>ID</b> to <b>002</b> changed the <b>watchers</b> to <b>Glenn Feldstein</b> (George Moehrle Masonry), <b>HESS PROJECT TEAM</b>	Joshua Postadan	Jul 1, 2024, 10:03 AM EDT
Joshua Postadan added a reference to a Sheet <b>A423</b>	Joshua Postadan	Jul 1, 2024, 10:01 AM EDT
changed the <b>due date</b> to Jul 7, 2024	Joshua Postadan	Jul 1, 2024, 10:00 AM EDT

changed the <b>question</b> to <i>Details B6 &amp; B12/A423 show the back of special brick shape sills abutting the fiberglass reinforced plastic angle. Please advise if these brick should be shifted out 1/2" to provide space for differential movement to avoid brick being pushed loose over the life of the building.</i>	<b>Joshua Postadan</b>	Jul 1, 2024, 9:58 AM EDT
changed the <b>cost impact</b> to <i>Unknown</i>	<b>Joshua Postadan</b>	Jul 1, 2024, 9:58 AM EDT
changed the <b>cost impact</b> to <i>No</i>	<b>Joshua Postadan</b>	Jul 1, 2024, 9:57 AM EDT
changed the <b>schedule impact</b> to <i>No</i>	<b>Joshua Postadan</b>	Jul 1, 2024, 9:57 AM EDT
changed the <b>location details</b> to <i>Building Facade</i>	<b>Joshua Postadan</b>	Jul 1, 2024, 9:57 AM EDT
<b>Joshua Postadan</b> changed title to: <i>Masonry Windowsill Constructability</i>	<b>Joshua Postadan</b>	Jul 1, 2024, 9:50 AM EDT
<b>Glenn Feldstein</b> (George Moehrle Masonry) created this RFI in <b>Open</b>  <b>Waiting for Submission</b> status and set Ball in court to <b>Joshua Postadan</b> (HESS Construction Co., LLC).	<b>Glenn Feldstein</b>	Jun 27, 2024, 4:12 PM EDT

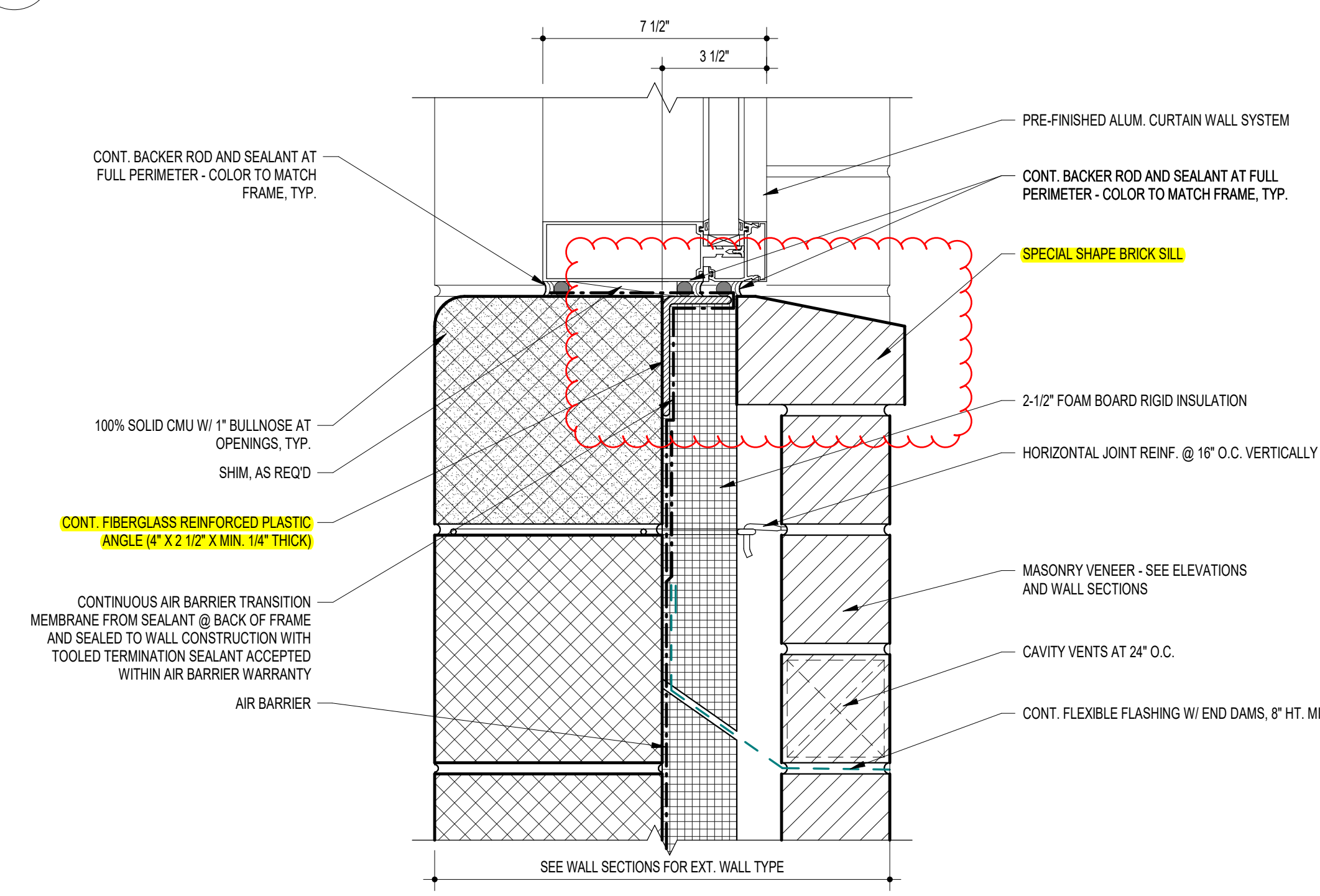




J6 HEAD DETAIL - CW @ CMU  
3" = 1'-0"



E6 JAMB DETAIL - CW @ CMU  
3" = 1'-0"



B6 SILL DETAIL - CW @ CMU  
3" = 1'-0"

1. A CONTINUOUS AIR BARRIER IS REQUIRED. JOINTS AND SEAMS MUST BE SEALED INCLUDING ALL TRANSITIONS AND CHANGES IN MATERIALS. PENETRATIONS OF AIR BARRIER MUST BE GASKETED OR SEALED IN A MANNER COMPATIBLE WITH OTHER MATERIALS AND ACCEPTED BY AIR BARRIER MANUFACTURER. LINE OF PRIMARY SEALANT AT CV AND SF TO ENGAGE AIR BARRIER OR AIR BARRIER TRANSITION MEMBRANE AT ALL LOCATIONS.
2. FIBERGLASS REINFORCED PLASTIC ANGLES TO BE PROVIDED BY STOREFRONT AND CURTAINWALL MANUF. WHERE STOREFRONT OR CURTAINWALL SYSTEMS ARE ATTACHED TO FIBERGLASS REINFORCED PLASTIC ANGLES, ANGLES SHALL BE ENGINEERED FOR SYSTEM DESIGN LOADS.
3. WHERE FIBERGLASS REINFORCED PLASTIC ANGLES ARE ATTACHED TO CMU, METHOD OF ATTACHMENT TO BE APPROVED BY STRUCTURAL ENGINEER.
4. REFER TO STRUCTURAL DRAWINGS FOR ADDITIONAL LOCATIONS WHERE GROUTED CMU IS REQUIRED.

www.grimmandparker.com

GRIMM + PARKER  
ARCHITECTS

[illegible]

RMM AND PARKER ARCHITECTURE, INC.



RFI detail

#002 Masonry Windowsill Constructability



Status	<div><div></div>Open</div> In Review
Created on	Jun 27, 2024 by <b>Glenn Feldstein</b> (George Moehrle Masonry)
RFI type	Architectural RFI REVs
Ball in court	<b>Patrick Byrne</b> (Grimm and Parker)
Due date	Jul 8, 2024

Question

Details B6 & B12/A423 show the back of special brick shape sills abutting the fiberglass reinforced plastic angle. Please advise if these brick should be shifted out 1/2" to provide space for differential movement to avoid brick being pushed loose over the life of the building.

References

Files (1)

- [RFI 002 - A423 Markup.pdf](#)

Sheets (1)

- [A423](#)

Impact

Cost impact	Unknown
Schedule impact	No

Other attributes




Priority	Normal
Discipline	Masonry

<b>Category</b>	Constructability
<b>Location</b>	-
<b>Location details</b>	Building Facade
<b>External id</b>	-
<b>Co-reviewer(s)</b>	
<b>Posted to Drawings/ Specifications</b>	YES
<b>Trade's RFI No.</b>	-

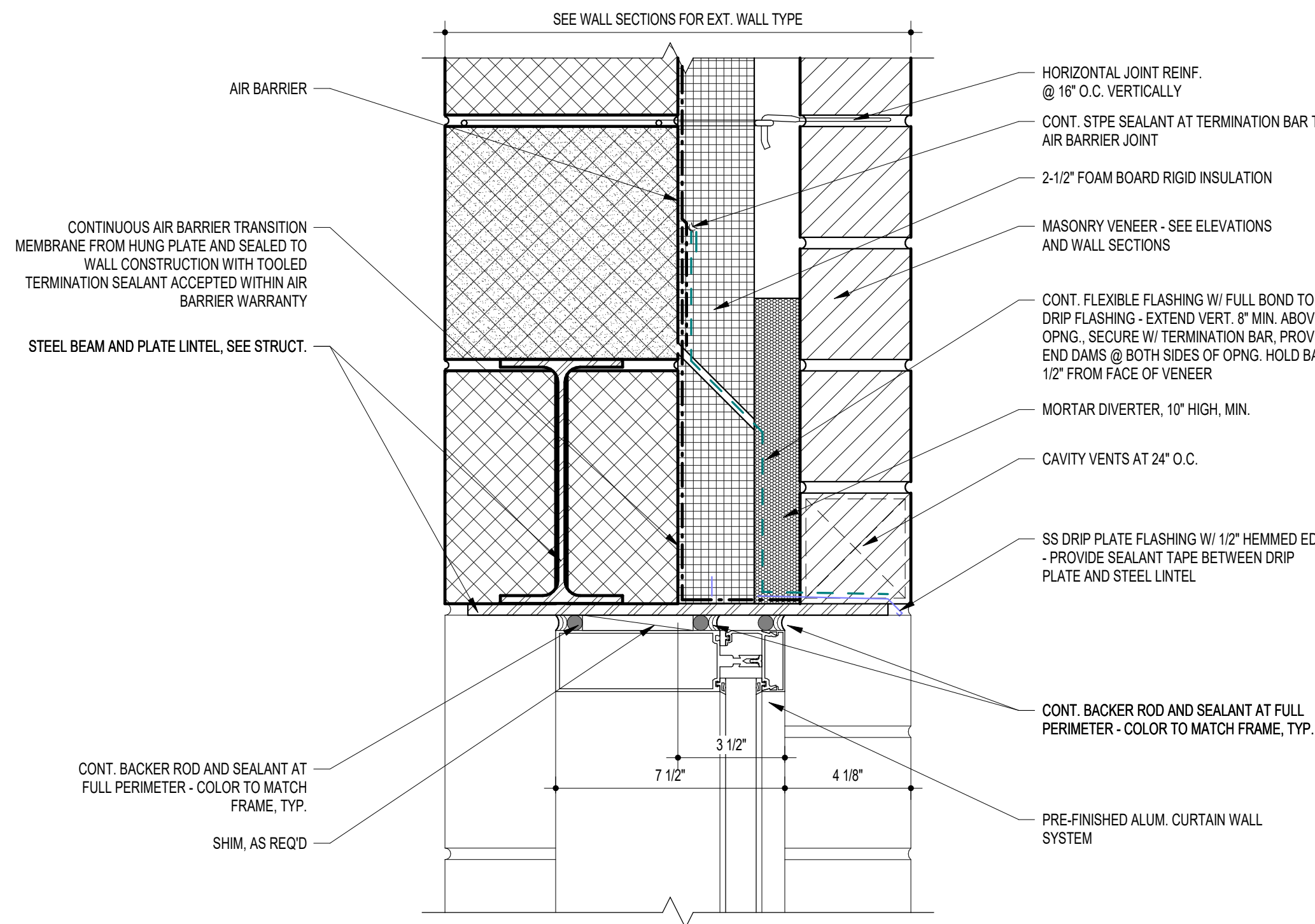
**G+P Response:**

The special shaped brick can remain as dimensioned. There is a 1/4" gap between the fiberglass reinforced angle and the brick. If the angle is not required for curtain wall or storefront structural support, then the horizontal leg of the angle can be reduced by 1/4" to 1/2" if needed. The angle will still need to serve as a cavity closure piece to support the backer rod and sealant.

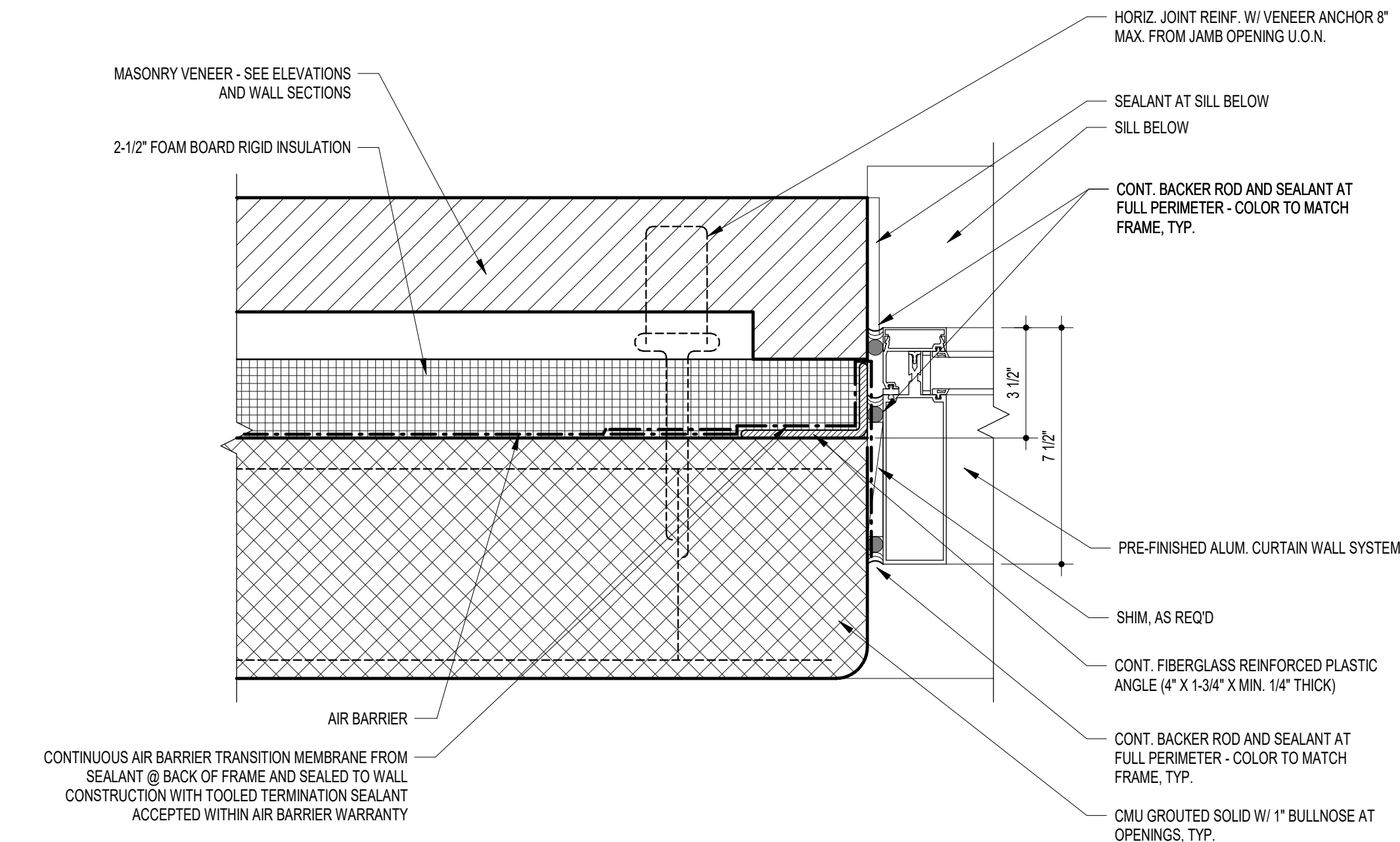
Patrick Byrne 7.1.2024

Activities	By	At
changed the <b>Posted to Drawings/Specifications</b> to <i>YES</i>	<b>Joshua Postadan</b>	Jul 1, 2024, 1:31 PM EDT
<b>Joshua Postadan</b> added a reference to a file <b>RFI 002 - A423 Markup.pdf</b>	<b>Joshua Postadan</b>	Jul 1, 2024, 10:06 AM EDT
<b>Joshua Postadan</b> changed the status from  <b>Open</b> Waiting for Submission to  <b>Open</b> In Review set Ball in court to <b>Patrick Byrne</b> (Grimm and Parker) changed the <b>ID</b> to <i>002</i> changed the <b>watchers</b> to <b>Glenn Feldstein</b> (George Moehrle Masonry), <b>HESS PROJECT TEAM</b>	<b>Joshua Postadan</b>	Jul 1, 2024, 10:03 AM EDT
<b>Joshua Postadan</b> added a reference to a sheet <b>A423</b>	<b>Joshua Postadan</b>	Jul 1, 2024, 10:01 AM EDT
changed the <b>due date</b> to Jul 7, 2024	<b>Joshua Postadan</b>	Jul 1, 2024, 10:00 AM EDT
changed the <b>question</b> to <i>Details B6 &amp; B12/A423 show the back of special brick shape sills abutting the fiberglass reinforced plastic angle. Please advise if these brick should be shifted out 1/2" to provide space for differential movement to avoid brick being pushed loose over the life of the building.</i>	<b>Joshua Postadan</b>	Jul 1, 2024, 9:58 AM EDT
changed the <b>cost impact</b> to <i>Unknown</i>	<b>Joshua Postadan</b>	Jul 1, 2024, 9:58 AM EDT
changed the <b>cost impact</b> to <i>No</i>	<b>Joshua Postadan</b>	Jul 1, 2024, 9:57 AM EDT
changed the <b>schedule impact</b> to <i>No</i>	<b>Joshua Postadan</b>	Jul 1, 2024, 9:57 AM EDT
changed the <b>location details</b> to <i>Building Facade</i>	<b>Joshua Postadan</b>	Jul 1, 2024, 9:57 AM EDT
<b>Joshua Postadan</b> changed title to: <i>Masonry Windowsill Constructability</i>	<b>Joshua Postadan</b>	Jul 1, 2024, 9:50 AM EDT
<b>Glenn Feldstein</b> (George Moehrle Masonry) created this RFI in  <b>Open</b> Waiting for Submission status and set Ball in court to <b>Joshua Postadan</b> (HESS Construction Co., LLC).	<b>Glenn Feldstein</b>	Jun 27, 2024, 4:12 PM EDT

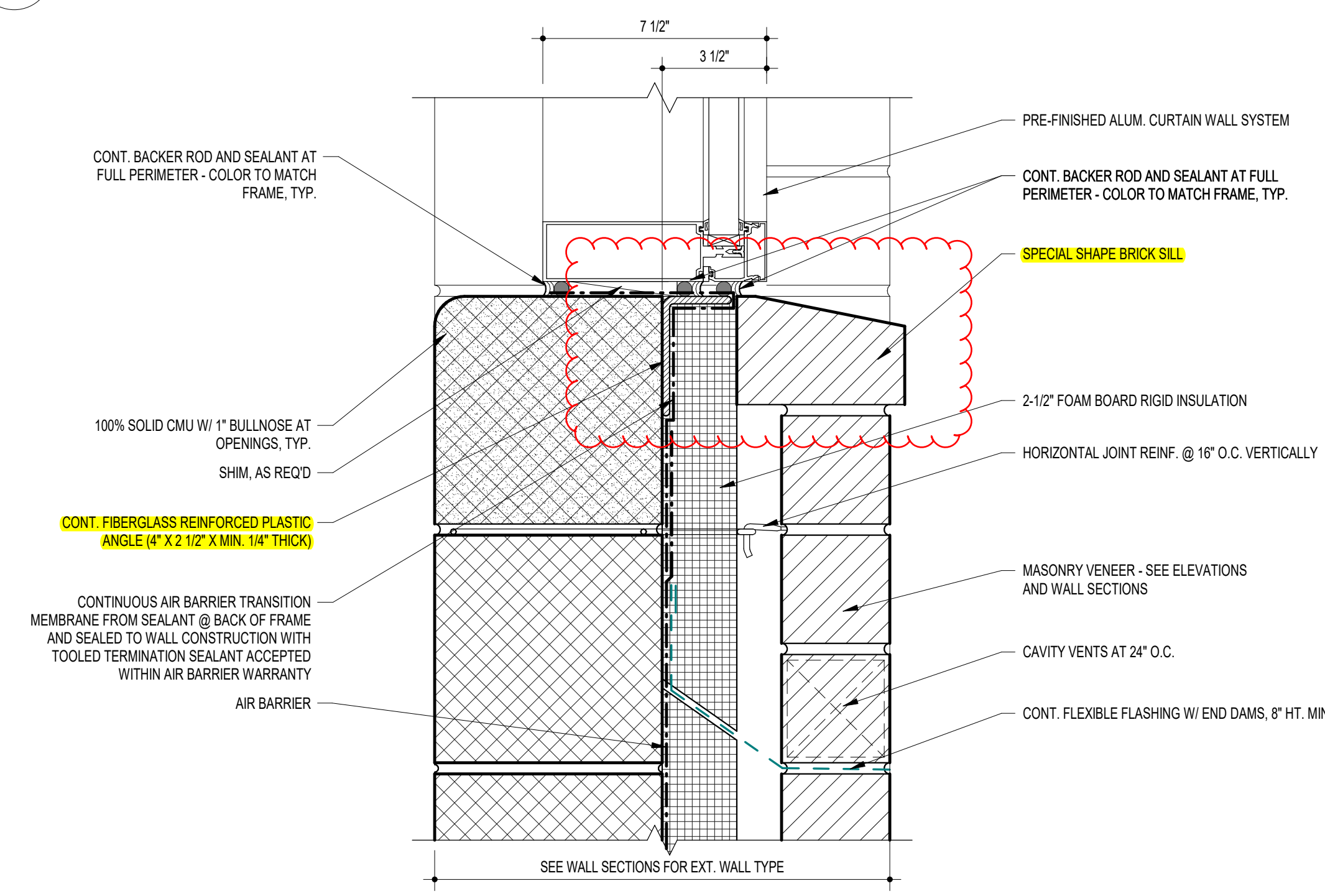




J6 HEAD DETAIL - CW @ CMU  
3" = 1'-0"



E6 JAMB DETAIL - CW @ CMU  
3" = 1'-0"



B6 SILL DETAIL - CW @ CMU  
3" = 1'-0"

1. A CONTINUOUS AIR BARRIER IS REQUIRED. JOINTS AND SEAMS MUST BE SEALED INCLUDING ALL TRANSITIONS AND CHANGES IN MATERIALS. PENETRATIONS OF AIR BARRIER MUST BE GASKETED OR SEALED IN A MANNER COMPATIBLE WITH OTHER MATERIALS AND ACCEPTED BY AIR BARRIER MANUFACTURER. LINE OF PRIMARY SEALANT AT CW AND SF TO ENGAGE AIR BARRIER OR AIR BARRIER TRANSITION MEMBRANE AT ALL LOCATIONS.
2. FIBERGLASS REINFORCED PLASTIC ANGLES TO BE PROVIDED BY STOREFRONT AND CURTAINWALL MANUF. WHERE STOREFRONT OR CURTAINWALL SYSTEMS ARE ATTACHED TO FIBERGLASS REINFORCED PLASTIC ANGLES, ANGLES SHALL BE ENGINEERED FOR SYSTEM DESIGN LOADS.
3. WHERE FIBERGLASS REINFORCED PLASTIC ANGLES ARE ATTACHED TO CMU, METHOD OF ATTACHMENT TO BE APPROVED BY STRUCTURAL ENGINEER.
4. REFER TO STRUCTURAL DRAWINGS FOR ADDITIONAL LOCATIONS WHERE GROUTED CMU IS REQUIRED.

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NORTHEAST MIDDLE / HIGH SCHOOL  
300 IRISHTOWN ROAD, NORTHEAST, MD

**A423**  
12/22/2023  
BID SET  
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12/22/2023  
BID SET

© GRIMM AND PARKER ARCHITECTURE, INC.



**From:** Justin Schneider <justin@glassind.com>  
**Sent:** Wednesday, July 31, 2024 6:39 PM  
**To:** Joshua Postadan  
**Cc:** Ken Thompson; Cameron MacKenzie; Kevin Gill  
**Subject:** Re: NEMHS - RFI #002 Response - Glass Industries - RFIC-1

**CAUTION:** This e-mail originated from outside of HESS Construction. Do not click links or open attachments, unless you recognize the sender and know the content is safe.

Yes, we will be anchored further to the interior.

(PLEASE NOTE OUR CHANGE OF ADDRESS LISTED BELOW)

Thanks,  
Justin Schneider, Principal  
Glass Industries, LLC.  
226 N. Franklintown Road | Baltimore, MD 21223  
443-750-0042 (P) | [www.glassind.com](http://www.glassind.com)



On Wed, Jul 31, 2024 at 12:39 PM Joshua Postadan <[JPostadan@hessconstruction.com](mailto:JPostadan@hessconstruction.com)> wrote:

Justin,

Understood. But to clarify, the ¾" reduction is permissible and will still allow for proper curtain wall/storefront structural support?

Thank you,

**HESS**

**Joshua Postadan**  
Project Manager

C 301.520.5764

1445 Research Blvd, Suite 475  
Rockville, MD 20850



---

**From:** Justin Schneider <[justin@glassind.com](mailto:justin@glassind.com)>

**Sent:** Tuesday, July 30, 2024 4:13 PM

**To:** Joshua Postadan <[JPostadan@hessconstruction.com](mailto:JPostadan@hessconstruction.com)>

**Cc:** Ken Thompson <[KThompson@hessconstruction.com](mailto:KThompson@hessconstruction.com)>; Cameron MacKenzie  
<[CMacKenzie@hessconstruction.com](mailto:CMacKenzie@hessconstruction.com)>

**Subject:** Re: NEMHS - RFI #002 Response - Glass Industries - RFIC-1

**CAUTION:** This e-mail originated from outside of HESS Construction. Do not click links or open attachments, unless you recognize the sender and know the content is safe.

Joshua,

There is no change in price as the angle has to be ripped either way.

(PLEASE NOTE OUR CHANGE OF ADDRESS LISTED BELOW)

Thanks,  
Justin Schneider, Principal  
Glass Industries, LLC.  
226 N. Franklinton Road | Baltimore, MD 21223

443-750-0042 (P) | [www.glassind.com](http://www.glassind.com)



On Mon, Jul 29, 2024 at 4:09 PM Justin Schneider <[justin@glassind.com](mailto:justin@glassind.com)> wrote:

I sent the info to the manufacturer, will let you know when I hear back from them.

(PLEASE NOTE OUR CHANGE OF ADDRESS LISTED BELOW)

Thanks,  
Justin Schneider, Principal  
Glass Industries, LLC.  
226 N. Franklinton Road | Baltimore, MD 21223

443-750-0042 (P) | [www.glassind.com](http://www.glassind.com)



On Fri, Jul 26, 2024 at 12:21 PM Joshua Postadan <[JPostadan@hessconstruction.com](mailto:JPostadan@hessconstruction.com)> wrote:

Justin,

The mason would like to know if we can reduce this angle by  $\frac{3}{4}$ ". Please advise.

Thank you,



**Joshua Postadan**

**Project Manager**

C 301.520.5764

1445 Research Blvd, Suite 475  
Rockville, MD 20850



**From:** Justin Schneider <[justin@glassind.com](mailto:justin@glassind.com)>

**Sent:** Monday, July 8, 2024 9:28 AM

**To:** Joshua Postadan <[JPostadan@hessconstruction.com](mailto:JPostadan@hessconstruction.com)>

**Subject:** Re: NEMHS - RFI #002 Response - Glass Industries - RFIC-1

**CAUTION:** This e-mail originated from outside of HESS Construction. Do not click links or open attachments, unless you recognize the sender and know the content is safe.

Joshua,

I guess we would need to know if the mason wants us to reduce the size by 1/4" or 1/2". It seems that G+P is leaving that up to them by saying the angle "can be reduced by 1/4" to 1/2" if needed".

(PLEASE NOTE OUR CHANGE OF ADDRESS LISTED BELOW)

Thanks,  
Justin Schneider, Principal  
Glass Industries, LLC.  
226 N. Franklintown Road | Baltimore, MD 21223

443-750-0042 (P) | [www.glassind.com](http://www.glassind.com)



On Mon, Jul 8, 2024 at 8:47 AM Joshua Postadan <[JPostadan@hessconstruction.com](mailto:JPostadan@hessconstruction.com)> wrote:

Justin,

Any comments on this RFI? See the response attached

Thank you,



**Joshua Postadan**

Project Manager

C 301.520.5764

1445 Research Blvd, Suite 475  
Rockville, MD 20850



---

**From:** Joshua Postadan

**Sent:** Tuesday, July 2, 2024 9:33 AM

**To:** Justin Schneider <[justin@glassind.com](mailto:justin@glassind.com)>

**Subject:** RE: NEMHS - RFI #002 Response - Glass Industries - RFIC-1

Justin,

I'll need to investigate this since you're not in Autodesk yet. For now, please see attached pdf export of the response.

Thank you,



**Joshua Postadan**  
Project Manager

C 301.520.5764

1445 Research Blvd, Suite 475  
Rockville, MD 20850



---

**From:** Justin Schneider <[justin@glassind.com](mailto:justin@glassind.com)>  
**Sent:** Tuesday, July 2, 2024 9:32 AM  
**To:** Joshua Postadan <[JPostadan@hessconstruction.com](mailto:JPostadan@hessconstruction.com)>  
**Subject:** Fwd: NEMHS - RFI #002 Response - Glass Industries - RFIC-1

**CAUTION:** This e-mail originated from outside of HESS Construction. Do not click links or open attachments, unless you recognize the sender and know the content is safe.

Joshua,

I received this notification, but there was no attachment or anything. Can you let me know how to access the actual RFI response?

(PLEASE NOTE OUR CHANGE OF ADDRESS LISTED BELOW)

Thanks,  
Justin Schneider, Principal  
Glass Industries, LLC.  
226 N. Franklinton Road | Baltimore, MD 21223

443-750-0042 (P) | [www.glassind.com](http://www.glassind.com)



----- Forwarded message -----

From: **Joshua Postadan (Autodesk Construction Cloud)** <[reply@acc.autodesk.com](mailto:reply@acc.autodesk.com)>

Date: Tue, Jul 2, 2024 at 9:08 AM

Subject: NEMHS - RFI #002 Response - Glass Industries - RFIC-1

To: <[justin@glassind.com](mailto:justin@glassind.com)>

HESS Construction Company, LLC. • 10-23-001 North East MS/HS

You can respond to this by replying to this email

**New correspondence created and is now available in your project**

**NEMHS - RFI #002 Response - Glass Industries**

Type

RFI



Status

-

Due date

-

References

1

## **Content RFIC-1-1**

From

Joshua Postadan <[jpostadan@hessconstruction.com](mailto:jpostadan@hessconstruction.com)>

To

Justin Schneider (non-member) <[justin@glassind.com](mailto:justin@glassind.com)>

CC

Cameron MacKenzie <[cmackenzie@hessconstruction.com](mailto:cmackenzie@hessconstruction.com)> , Ken Thompson  
<[kthompson@hessconstruction.com](mailto:kthompson@hessconstruction.com)>

Sent date

July 02, 2024, 09:06 AM (GMT -04:00)

Content

Justin,

Please review the response to RFI #002. Provide notification of any cost implications immediately. If a proposal has cost impacts, please request an RFQ from HESS. Send a proposal no later than the close of business within 7 days of receipt of this RFI response. HESS will consider this as a no cost change and close this issue should a proposal not be received by this date. A lack of response for any credit items will prompt HESS Construction to assign a cost value that will be deducted from your contract sum.

Note: The RFQ is simply an administrative tracking tool, and in no way represents that additional work, cost or time is acknowledged, authorized, directed, or approved.

Thank you,



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Email ID: 636979cb-f667-4ac4-a2dd-8d0946c5d138

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## RFI detail

## #003 Manufactured Stone Jambs



Status	<div><div></div>Closed</div>
Created on	Jun 27, 2024 by <b>Glenn Feldstein</b> (George Moehrle Masonry)
RFI type	Architectural RFI REVs
Ball in court	<b>Glenn Feldstein</b> (George Moehrle Masonry)
Answered	Jul 29, 2024 by <b>Patrick Byrne</b> (Grimm and Parker)

### Question

Curtain wall jamb details at manufactured stone (A423) depict the veneer returning back to close the cavity. However, the manufactured stone products do not offer L-shaped units. Please confirm these jambs should be bonded for the 1.5-2.5" returns.

Also please confirm the irregular stone faces will not interfere with rough opening sizes/installation of curtain walls/windows.

### Official response

Patrick Byrne (Grimm and Parker): See attached RFI response.

Updated Response: 7-29-2024

The jambs in question shall be installed in the bonding pattern indicated in the contract documents.

By **Patrick Byrne** (Grimm and Parker) - Jul 29, 2024, 1:11 PM EDT

### References and Attachments









#### Files (2)




- [#003 - Manufactured Stone Jambs-Response.pdf](#)
- [RFI 003 - A423 Markup.pdf](#)

#### Sheets (1)

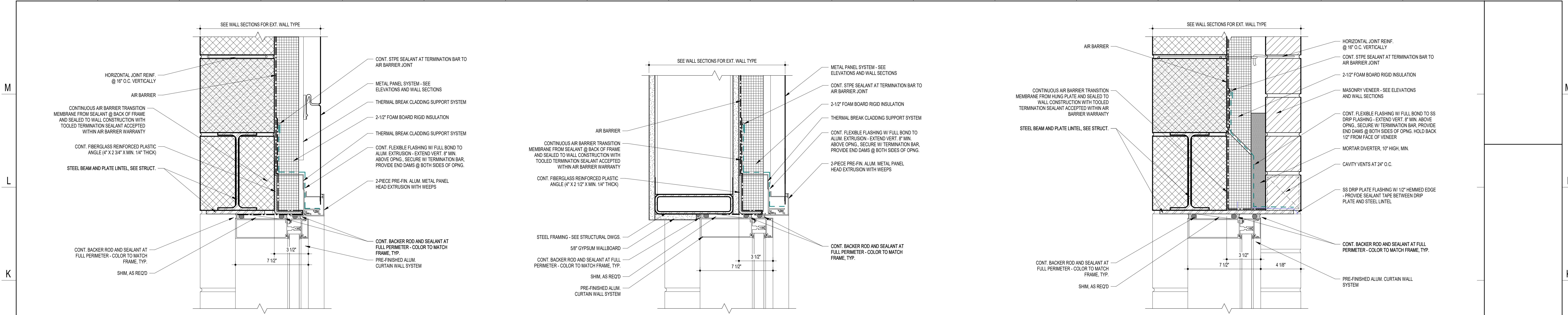
- [A423](#)

<b>Impact</b>	
Cost impact	Unknown
Schedule impact	Unknown
<b>Other attributes</b>	
Priority	Normal
Discipline	Masonry
Category	Constructability
Location	-
Location details	Building Facade
External id	-
Co-reviewer(s)	
Posted to Drawings/ Specifications	YES
Trade's RFI No.	-

Activities	By	At
<b>Joshua Postadan</b> changed the status from  <b>Open</b> Answered to  <b>Closed</b> <b>Official response:</b> Patrick Byrne (Grimm and Parker): See attached RFI response. Updated Response: 7-29-2024 The jambs in question shall be installed in the bonding pattern indicated in the contract documents. set Ball in court to <b>Glenn Feldstein</b> (George Moehrle Masonry)	<b>Joshua Postadan</b>	Jul 29, 2024, 1:43 PM EDT
Grimm and Parker response received 7/29/2024: "See attached RFI response. Updated Response: 7-29-2024 The jambs in question shall be installed in the bonding pattern indicated in the contract documents." Please review the response to RFI #003. Provide notification of any cost implications immediately. If a proposal has cost impacts, please request an RFQ from HESS. Send a proposal no later than the close of business within 7 days of receipt of this RFI response. HESS will consider this as a no cost change and close this issue should a proposal not be received by this date. A lack of response for any credit items will prompt HESS Construction to assign a cost value that will be deducted from your contract sum. Note: The RFQ is simply an administrative tracking tool, and in no way represents that additional work, cost or time is acknowledged, authorized, directed, or approved.	<b>Joshua Postadan</b>	Jul 29, 2024, 1:43 PM EDT
<b>Patrick Byrne</b> changed the status from  <b>Open</b> In Review to  <b>Open</b> Answered set Ball in court to <b>Joshua Postadan</b> (HESS Construction Co., LLC)	<b>Patrick Byrne</b>	Jul 29, 2024, 1:11 PM EDT
<b>Patrick Byrne</b> updated a response: See attached RFI response. Updated Response: 7-29-2024 The jambs in question shall be installed in the bonding pattern indicated in the contract documents.	<b>Patrick Byrne</b>	Jul 29, 2024, 1:11 PM EDT
The jambs in question shall be installed in the bonding pattern indicated in the contract documents.	<b>Patrick Byrne</b>	Jul 29, 2024, 1:10 PM EDT
<b>Joshua Postadan</b> changed the status from  <b>Open</b> Answered to  <b>Open</b> In Review changed the <b>due date</b> to Aug 1, 2024 set Ball in court to <b>Patrick Byrne</b> (Grimm and Parker)	<b>Joshua Postadan</b>	Jul 26, 2024, 10:57 AM EDT
This RFI is being returned for review based on discussions in the 7/23/24 meeting with GP, Moehrle Masonry, and HESS.	<b>Joshua Postadan</b>	Jul 26, 2024, 10:57 AM EDT
<b>Patrick Byrne</b> added a reference to a File <b>#003 - Manufactured Stone Jambs-Response.pdf</b>	<b>Patrick Byrne</b>	Jul 8, 2024, 9:42 AM EDT
<b>Patrick Byrne</b> changed the status from  <b>Open</b> In Review to  <b>Open</b> Answered set Ball in court to <b>Joshua Postadan</b> (HESS Construction Co., LLC)	<b>Patrick Byrne</b>	Jul 8, 2024, 9:41 AM EDT

<b>Patrick Byrne</b> added a response: See attached RFI response.	<b>Patrick Byrne</b>	Jul 8, 2024, 9:41 AM EDT
changed the <b>Posted to Drawings/Specifications</b> to <i>YES</i>	<b>Joshua Postadan</b>	Jul 1, 2024, 1:31 PM EDT
<b>Joshua Postadan</b> changed the status from  <b>Open</b> Waiting for Submission to  <b>Open</b> In Review set Ball in court to <b>Patrick Byrne</b> (Grimm and Parker) changed the <b>ID</b> to 003	<b>Joshua Postadan</b>	Jul 1, 2024, 10:26 AM EDT
changed the <b>schedule impact</b> to <i>Unknown</i>	<b>Joshua Postadan</b>	Jul 1, 2024, 10:26 AM EDT
changed the <b>cost impact</b> to <i>Unknown</i>	<b>Joshua Postadan</b>	Jul 1, 2024, 10:26 AM EDT
changed the <b>due date</b> to Jul 7, 2024	<b>Joshua Postadan</b>	Jul 1, 2024, 10:26 AM EDT
changed the <b>watchers</b> to <b>Glenn Feldstein</b> (George Moehrle Masonry), <b>HESS PROJECT TEAM</b>	<b>Joshua Postadan</b>	Jul 1, 2024, 10:25 AM EDT
changed the <b>location details</b> to <i>Building Facade</i>	<b>Joshua Postadan</b>	Jul 1, 2024, 10:24 AM EDT
<b>Joshua Postadan</b> added a reference to a File <b>RFI 003 - A423 Markup.pdf</b>	<b>Joshua Postadan</b>	Jul 1, 2024, 10:24 AM EDT
<b>Joshua Postadan</b> added a reference to a Sheet <b>A423</b>	<b>Joshua Postadan</b>	Jul 1, 2024, 10:23 AM EDT
<b>Glenn Feldstein</b> (George Moehrle Masonry) created this RFI in  <b>Open</b> Waiting for Submission status and set Ball in court to <b>Joshua Postadan</b> (HESS Construction Co., LLC).	<b>Glenn Feldstein</b>	Jun 27, 2024, 4:06 PM EDT

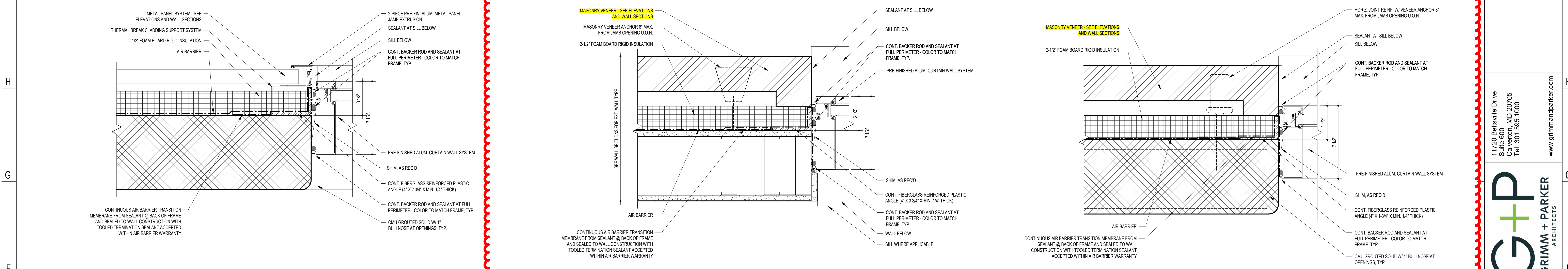




J18 HEAD DETAIL - CW @ CMU  
3" = 1'-0"

J12 HEAD DETAIL - CW @ MTL STUDS W/ MTL PANEL  
3" = 1'-0"

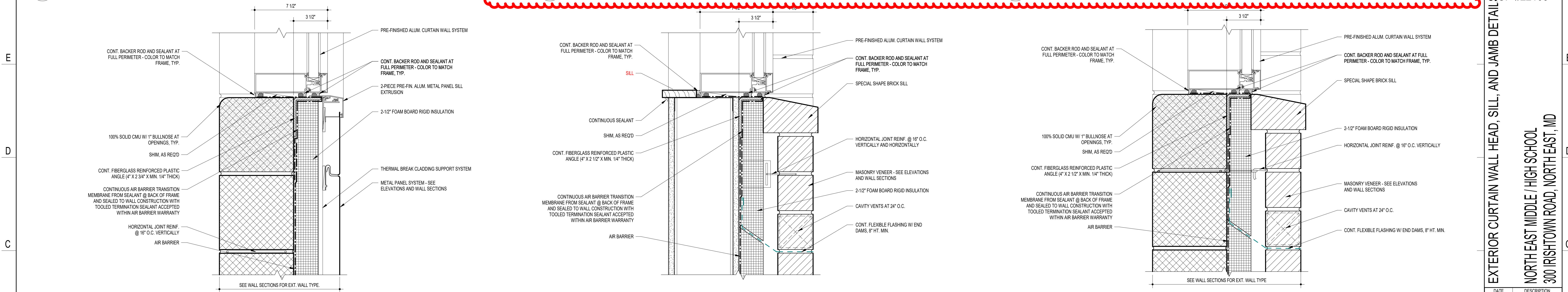
J0 HEAD DETAIL - CW @ CMU  
3" = 1'-0"



E18 JAMB DETAIL - CW @ CMU W/ MTL. PANEL  
3" = 1'-0"

E12 JAMB DETAIL - CW @ MTL STUDS  
3" = 1'-0"

E0 JAMB DETAIL - CW @ CMU  
3" = 1'-0"



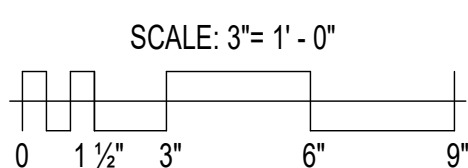
B18 SILL DETAIL - CW @ CMU W/ MTL. PANEL  
3" = 1'-0"

B12 SILL DETAIL - CW @ MTL STUDS  
3" = 1'-0"

B6 SILL DETAIL - CW @ CMU  
3" = 1'-0"

EXTERIOR FRAME DETAIL NOTES

1. A CONTINUOUS AIR BARRIER IS REQUIRED. JOINTS AND SEAMS MUST BE SEALED INCLUDING ALL TRANSITIONS AND CHANGES IN MATERIALS. PENETRATIONS OF AIR BARRIER MUST BE GASKETED OR SEALED IN A MANNER COMPATIBLE WITH OTHER MATERIALS AND ACCEPTED BY AIR BARRIER MANUFACTURER. LINE OF PRIMARY SEALANT AT CW AND SF TO ENGAGE AIR BARRIER OR AIR BARRIER TRANSITION MEMBRANE AT ALL LOCATIONS.
2. FIBERGLASS REINFORCED PLASTIC ANGLES TO BE PROVIDED BY STOREFRONT AND CURTAINWALL MANUF. WHERE STOREFRONT OR CURTAINWALL SYSTEMS ARE ATTACHED TO FIBERGLASS REINFORCED PLASTIC ANGLES, ANGLES SHALL BE ENGINEERED FOR SYSTEM DESIGN LOADS.
3. WHERE FIBERGLASS REINFORCED PLASTIC ANGLES ARE ATTACHED TO CMU, METHOD OF ATTACHMENT TO BE APPROVED BY STRUCTURAL ENGINEER.
4. REFER TO STRUCTURAL DRAWINGS FOR ADDITIONAL LOCATIONS WHERE GROUTED CMU IS REQUIRED.



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GP #22105

EXTERIOR CURTAIN WALL HEAD, SILL, AND JAMB DETAILS  
NORTH EAST MIDDLE / HIGH SCHOOL  
300 IRISTOWN ROAD, NORTH EAST, MD

DATE	DESCRIPTION

A423

12/22/2023  
BID SET



## RFI detail

## #003 Manufactured Stone Jambs



Status	<span>Open</span> In Review
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Created on	Jun 27, 2024 by <b>Glenn Feldstein</b> (George Moehrle Masonry)
------------	---

RFI type	Architectural RFI REVs
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Ball in court	<b>Patrick Byrne</b> (Grimm and Parker)
---------------	---

Due date	Jul 8, 2024 (1 day late)
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### Question

Curtain wall jamb details at manufactured stone (A423) depict the veneer returning back to close the cavity. However, the manufactured stone products do not offer L-shaped units. Please confirm these jambs should be bonded for the 1.5-2.5" returns.

Also please confirm the irregular stone faces will not interfere with rough opening sizes/installation of curtain walls/windows.

### References

#### Files (1)

- [RFI 003 - A423 Markup.pdf](#)

#### Sheets (1)

- [A423](#)

### Impact

Cost impact	Unknown
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Schedule impact	Unknown
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### Other attributes




Priority	Normal
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<b>Discipline</b>	Masonry
<b>Category</b>	Constructability
<b>Location</b>	-
<b>Location details</b>	Building Facade
<b>External id</b>	-
<b>Co-reviewer(s)</b>	
<b>Posted to Drawings/ Specifications</b>	YES
<b>Trade's RFI No.</b>	-

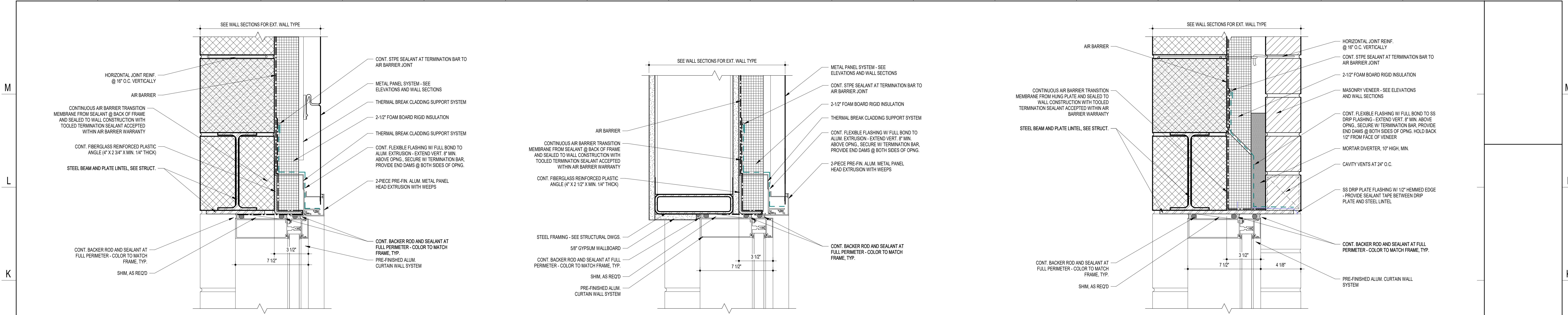
**G+P Response:**

The jambs will either be bonded or be a cut piece of masonry with a head joint. Both conditions should be prepared for a review at the mock up wall. Final direction to be provided by G+P based on the mock-up panel review.

Patrick Byrne 7.8.2024

Activities	By	At
changed the <b>Posted to Drawings/Specifications</b> to <i>YES</i>	<b>Joshua Postadan</b>	Jul 1, 2024, 1:31 PM EDT
<b>Joshua Postadan</b> changed the status from  <b>Open</b> Waiting for Submission to  <b>Open</b> In Review set Ball in court to <b>Patrick Byrne</b> (Grimm and Parker) changed the <b>ID</b> to <i>003</i>	<b>Joshua Postadan</b>	Jul 1, 2024, 10:26 AM EDT
changed the <b>schedule impact</b> to <i>Unknown</i>	<b>Joshua Postadan</b>	Jul 1, 2024, 10:26 AM EDT
changed the <b>cost impact</b> to <i>Unknown</i>	<b>Joshua Postadan</b>	Jul 1, 2024, 10:26 AM EDT
changed the <b>due date</b> to Jul 7, 2024	<b>Joshua Postadan</b>	Jul 1, 2024, 10:26 AM EDT
changed the <b>watchers</b> to <b>Glenn Feldstein</b> (George Moehrle Masonry), <b>HESS PROJECT TEAM</b>	<b>Joshua Postadan</b>	Jul 1, 2024, 10:25 AM EDT
changed the <b>location details</b> to <i>Building Facade</i>	<b>Joshua Postadan</b>	Jul 1, 2024, 10:24 AM EDT
<b>Joshua Postadan</b> added a reference to a file <b>RFI 003 - A423 Markup.pdf</b>	<b>Joshua Postadan</b>	Jul 1, 2024, 10:24 AM EDT
<b>Joshua Postadan</b> added a reference to a sheet <b>A423</b>	<b>Joshua Postadan</b>	Jul 1, 2024, 10:23 AM EDT
<b>Glenn Feldstein</b> (George Moehrle Masonry) created this RFI in  <b>Open</b> Waiting for Submission status and set Ball in court to <b>Joshua Postadan</b> (HESS Construction Co., LLC).	<b>Glenn Feldstein</b>	Jun 27, 2024, 4:06 PM EDT

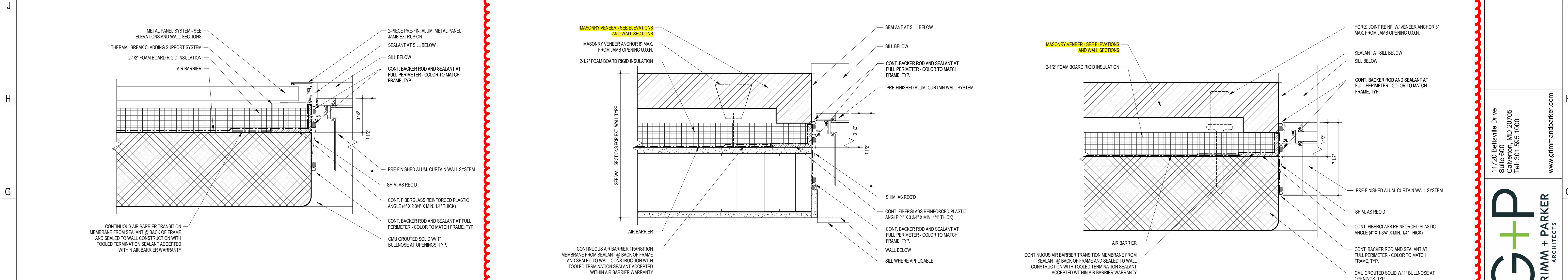




J18 HEAD DETAIL - CW @ CMU  
3" = 1'-0"

J12 HEAD DETAIL - CW @ MTL STUDS W/ MTL PANEL  
3" = 1'-0"

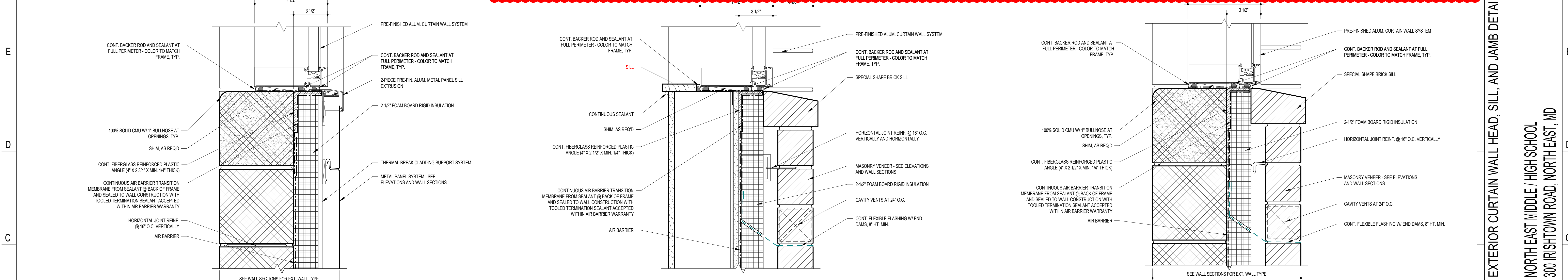
J30 HEAD DETAIL - CW @ CMU  
3" = 1'-0"



E18 JAMB DETAIL - CW @ CMU W/ MTL. PANEL  
3" = 1'-0"

E12 JAMB DETAIL - CW @ MTL STUDS  
3" = 1'-0"

E6 JAMB DETAIL - CW @ CMU  
3" = 1'-0"



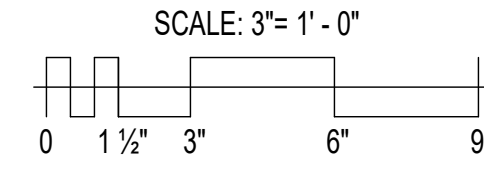
B18 SILL DETAIL - CW @ CMU W/ MTL. PANEL  
3" = 1'-0"

B12 SILL DETAIL - CW @ MTL STUDS  
3" = 1'-0"

B6 SILL DETAIL - CW @ CMU  
3" = 1'-0"

EXTERIOR FRAME DETAIL NOTES

1. A CONTINUOUS AIR BARRIER IS REQUIRED. JOINTS AND SEAMS MUST BE SEALED INCLUDING ALL TRANSITIONS AND CHANGES IN MATERIALS. PENETRATIONS OF AIR BARRIER MUST BE GASKETED OR SEALED IN A MANNER COMPATIBLE WITH OTHER MATERIALS AND ACCEPTED BY AIR BARRIER MANUFACTURER. LINE OF PRIMARY SEALANT AT CW AND SF TO ENGAGE AIR BARRIER OR AIR BARRIER TRANSITION MEMBRANE AT ALL LOCATIONS.
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GP #22105

EXTERIOR CURTAIN WALL HEAD, SILL, AND JAMB DETAILS  
NORTH EAST MIDDLE / HIGH SCHOOL  
300 IRISTOWN ROAD, NORTH EAST, MD

DATE	DESCRIPTION

A423  
12/22/2023  
BID SET



## RFI detail

## #004 Knox Box Model &amp; Location



Status	<div><div></div>Closed</div>
Created on	Jun 27, 2024 by <b>Glenn Feldstein</b> (George Moehrle Masonry)
RFI type	Architectural RFI REVs
Ball in court	<b>Glenn Feldstein</b> (George Moehrle Masonry)
Answered	Jul 1, 2024 by <b>Patrick Byrne</b> (Grimm and Parker)

### Question

04A SOW #7 states "bronze, recessed w/ decorative frame" but additional information is needed to submit the Knox Box. Please provide installation location/height along with desired model number, color and all other pertinent information.

On previous G+P projects we used a KnoxVault 4400- <https://www.knoxbox.com/products/commercial-knoxboxes/knoxvault-4400/c-24/c-80/p-7044>

#### Suggested answer

Basis of design provided in specification section 08 71 00 Door Hardware. HESS to confirm location(s) with Cecil County Fire Department

### Official response

Patrick Byrne (Grimm and Parker): See attached RFI response.

*By **Patrick Byrne** (Grimm and Parker) - Jul 1, 2024, 11:57 AM EDT*

### References and Attachments







#### Files (2)


- [#004 - Knox Box Model & Location Response.pdf](#)
- [04A SOW Markup.pdf](#)

### Impact

Cost impact	Unknown
-------------	---------

Schedule impact	No
Other attributes	
Priority	Normal
Discipline	Masonry
Category	Documentation Incomplete
Location	-
Location details	-
External id	-
Co-reviewer(s)	
Posted to Drawings/ Specifications	-
Trade's RFI No.	-

Activities	By	At
<b>Joshua Postadan</b> changed the status from  <b>Open</b> Answered to  <b>Closed</b> <b>Official response:</b> Patrick Byrne (Grimm and Parker): See attached RFI response. set Ball in court to <b>Glenn Feldstein</b> (George Moehrle Masonry)	<b>Joshua Postadan</b>	Aug 30, 2024, 8:57 AM EDT
Please review the response to RFI #004. Provide notification of any cost implications immediately. If a proposal has cost impacts, please request an RFQ from HESS. Send a proposal no later than the close of business within 7 days of receipt of this RFI response. HESS will consider this as a no cost change and close this issue should a proposal not be received by this date. A lack of response for any credit items will prompt HESS Construction to assign a cost value that will be deducted from your contract sum. Note: The RFQ is simply an administrative tracking tool, and in no way represents that additional work, cost or time is acknowledged, authorized, directed, or approved.	<b>Joshua Postadan</b>	Aug 30, 2024, 8:57 AM EDT
<b>Patrick Byrne</b> added a reference to a File <b>#004 - Knox Box Model &amp; Location Response.pdf</b>	<b>Patrick Byrne</b>	Jul 1, 2024, 11:58 AM EDT
<b>Patrick Byrne</b> changed the status from  <b>Open</b> In Review to  <b>Open</b> Answered set Ball in court to <b>Joshua Postadan</b> (HESS Construction Co., LLC)	<b>Patrick Byrne</b>	Jul 1, 2024, 11:57 AM EDT
<b>Patrick Byrne</b> added a response: See attached RFI response.	<b>Patrick Byrne</b>	Jul 1, 2024, 11:57 AM EDT
<b>Joshua Postadan</b> changed the status from  <b>Open</b> Waiting for Submission to  <b>Open</b> In Review set Ball in court to <b>Patrick Byrne</b> (Grimm and Parker) changed the <b>ID</b> to <i>004</i>	<b>Joshua Postadan</b>	Jul 1, 2024, 11:03 AM EDT
changed the <b>suggested answer</b> to <i>Basis of design provided in specification section 08 71 00 Door Hardware. HESS to confirm location(s) with Cecil County Fire Department</i>	<b>Joshua Postadan</b>	Jul 1, 2024, 11:02 AM EDT
changed the <b>suggested answer</b> to <i>HESS to confirm location(s) with Cecil County Fire Department</i>	<b>Joshua Postadan</b>	Jul 1, 2024, 11:02 AM EDT
<b>Joshua Postadan</b> changed title to: <i>Knox Box Model &amp; Location</i>	<b>Joshua Postadan</b>	Jul 1, 2024, 10:55 AM EDT
<b>Joshua Postadan</b> added a reference to a File <b>04A SOW Markup.pdf</b>	<b>Joshua Postadan</b>	Jul 1, 2024, 10:54 AM EDT
changed the <b>cost impact</b> to <i>Unknown</i>	<b>Joshua Postadan</b>	Jul 1, 2024, 10:53 AM EDT
changed the <b>schedule impact</b> to <i>No</i>	<b>Joshua Postadan</b>	Jul 1, 2024, 10:53 AM EDT

changed the <b>schedule impact</b> to <i>Unknown</i>	<b>Joshua Postadan</b>	Jul 1, 2024, 10:53 AM EDT
changed the <b>due date</b> to Jul 7, 2024	<b>Joshua Postadan</b>	Jul 1, 2024, 10:52 AM EDT
changed the <b>watchers</b> to <b>Glenn Feldstein</b> (George Moehrle Masonry), <b>HESS PROJECT TEAM</b>	<b>Joshua Postadan</b>	Jul 1, 2024, 10:52 AM EDT
changed the <b>suggested answer</b> to <i>HESS to confirm location(s) with Fire Marshall and if basis of design product in Specification Section 08 71 00 Door Hardware (Knox Company Series 3200 "Knox Box") is acceptable.</i>	<b>Joshua Postadan</b>	Jul 1, 2024, 10:52 AM EDT
changed the <b>suggested answer</b> to <i>HESS to confirm with Fire Marshall if basis of design product in Specification Section 08 71 00 Door Hardware (Knox Company Series 3200 "Knox Box") is acceptable.</i>	<b>Joshua Postadan</b>	Jul 1, 2024, 10:51 AM EDT
changed the <b>suggested answer</b> to <i>HESS to confirm with Fire Marshall if basis of design product in Specification Section 08 71 00 Door Hardware (Knox Company Series 3200 "Knox Box") is acceptable</i>	<b>Joshua Postadan</b>	Jul 1, 2024, 10:51 AM EDT
changed the <b>suggested answer</b> to <i>HESS to confirm if basis of design product in Specification Section 08 71 00 Door Hardware (</i>	<b>Joshua Postadan</b>	Jul 1, 2024, 10:50 AM EDT
changed the <b>suggested answer</b> to <i>HESS to confirm if basis of design product in</i>	<b>Joshua Postadan</b>	Jul 1, 2024, 10:50 AM EDT
<b>Glenn Feldstein</b> (George Moehrle Masonry) created this RFI in  <b>Open</b> Waiting for Submission status and set Ball in court to <b>Joshua Postadan</b> (HESS Construction Co., LLC).	<b>Glenn Feldstein</b>	Jun 27, 2024, 3:57 PM EDT




2. Contractor shall furnish and install all masonry work required by the Contract Documents, including, but not limited to, all brick, block, architectural pre-cast concrete (plant cast), shear walls, glazed block, ground face, split face, mortar, grout, masonry fill, parging, mortar washes, masonry reinforcement (vertical and horizontal), masonry and cast stone steel reinforcement bars, joint reinforcement, masonry lintels, ties and masonry anchors, point up, insulation (mineral wool, compressible, rigid, perlite, and the like for sound ratings) contiguous to this Contractor's work, masonry fire walls, masonry portal frame columns, column isolation, isolation strips, building paper, flashing, pre-molded control joints, weeps, flashings, mortar netting, samples, mock-ups, masonry cleaners, sealers, and dampproofing and/or waterproofing, spray and roll on vapor or air barrier, head of wall fireproofing, elevated slab edge to masonry wall fireproofing, and or smoke barriers, interior and exterior control joint caulking, final cleaning and washdown inclusive of louvers, window, curtainwall, storefront frame and glass protection and all other items required for a complete Masonry scope of work.
3. Contractor shall install only all loose angle lintels, beam lintels, anchor bolts (embedded in masonry) bolted structural steel, structural angles, structural tubing (anchors furnished by others) attached to masonry, and the like that are supplied by others. Contractor to include installation of elevator hoist beam. Contractor shall grout all bearing/leveling plates at all CMU walls. Contractor shall install all angles that are to be bolted to the CMU; this contractor shall furnish the epoxy material while all other items will be furnished by the 05A contractor.
4. Contractor shall coordinate the install of all hollow metal frames located within masonry walls furnished by the 06A contractor and set by the 06A contractor. This contractor shall ensure hollow metal frames remain installed plumb, level, square, and true to line until the frame is completely enclosed in masonry. Contractor shall be responsible for any repair or damage costs to the hollow metal frames.
5. Contractor shall furnish and install all masonry work associated with exterior site features that require masonry ie... site sign and site walls.
6. Contractor shall furnish and install all build in place expansion joints (rated, non-rated, expand-o flash joint covers, and the like) and accessories located at and within interior and exterior masonry walls.
7. Contractor includes furnish and install all Knox boxes located within masonry walls. Contractor to coordinate with local fire marshal for approval and installation. Type to be recessed and include decorative frame, finish bronze or equal.
8. Contractor shall be responsible for installation of all openings within masonry walls where required by other trades. Contractor shall provide adequate protection at designated openings for feeding of material to the building. Contractor shall remove the protection as directed by the Construction Manager.
9. Any wall penetration required by other trades which has a diameter or horizontal dimension greater than 12" shall require a lintel be installed. The majority of lintels will be masonry, contractor to refer to structural notes for requirements.
10. In the event an opening is required in a masonry wall and is not properly coordinated between the other trades and the 04A contractor, it is the other trades sole responsibility to implement the required fix. All other trades are required to perform layout of required openings as the walls progress. All costs to either saw-cut, or tooth cmu to allow for the opening is the responsibility of the other trades. In the event this contractor has missed the indicated opening, or has miss-sized the opening, the costs required for the fix is the responsibility of this contractor.
11. Contractor shall furnish and install all grouting where required for hollow metal frames, bearing plates, sills, bond beams, wall reinforcing, and other areas that are required.

## RFI detail

## #004 Knox Box Model &amp; Location



Status	 <b>Open</b> In Review
Created on	Jun 27, 2024 by <b>Glenn Feldstein</b> (George Moehrle Masonry)
RFI type	Architectural RFI REVs
Ball in court	<b>Patrick Byrne</b> (Grimm and Parker)
Due date	Jul 8, 2024

### Question

04A SOW #7 states "bronze, recessed w/ decorative frame" but additional information is needed to submit the Knox Box. Please provide installation location/height along with desired model number, color and all other pertinent information.

On previous G+P projects we used a KnoxVault 4400- <https://www.knoxbox.com/products/commercial-knoxboxes/knoxvault-4400/c-24/c-80/p-7044>

#### Suggested answer

Basis of design provided in specification section 08 71 00 Door Hardware. HESS to confirm location(s) with Cecil County Fire Department

### References

#### Files (1)

- [04A SOW Markup.pdf](#)

### Impact

Cost impact	Unknown
Schedule impact	No

### Other attributes

Priority	Normal
----------	--------

<b>Discipline</b>	Masonry
<b>Category</b>	Documentation Incomplete
<b>Location</b>	-
<b>Location details</b>	-
<b>External id</b>	-
<b>Co-reviewer(s)</b>	
<b>Posted to Drawings/ Specifications</b>	-
<b>Trade's RFI No.</b>	-

**G+P Response:**

Location to be finalized in the field with input from the Fire Marshal. See 087100 for basis of design Knox Box model. Finish to be selected by architect through the submittal process. Final size of Knox Box to be determined with input from the Owner and their key/key card requirements.

Patrick Byrne 7.1.2024

Activities	By	At
<b>Joshua Postadan</b> changed the status from <b>Open</b> Waiting for Submission to <b>Open</b> In Review set Ball in court to <b>Patrick Byrne</b> (Grimm and Parker) changed the <b>ID</b> to 004	<b>Joshua Postadan</b>	Jul 1, 2024, 11:03 AM EDT
changed the <b>suggested answer</b> to <i>Basis of design provided in specification section 08 71 00 Door Hardware. HESS to confirm location(s) with Cecil County Fire Department</i>	<b>Joshua Postadan</b>	Jul 1, 2024, 11:02 AM EDT
changed the <b>suggested answer</b> to <i>HESS to confirm location(s) with Cecil County Fire Department</i>	<b>Joshua Postadan</b>	Jul 1, 2024, 11:02 AM EDT
<b>Joshua Postadan</b> changed title to: <i>Knox Box Model &amp; Location</i>	<b>Joshua Postadan</b>	Jul 1, 2024, 10:55 AM EDT
<b>Joshua Postadan</b> added a reference to a file <b>04A SOW Markup.pdf</b>	<b>Joshua Postadan</b>	Jul 1, 2024, 10:54 AM EDT
changed the <b>cost impact</b> to <i>Unknown</i>	<b>Joshua Postadan</b>	Jul 1, 2024, 10:53 AM EDT
changed the <b>schedule impact</b> to <i>No</i>	<b>Joshua Postadan</b>	Jul 1, 2024, 10:53 AM EDT
changed the <b>schedule impact</b> to <i>Unknown</i>	<b>Joshua Postadan</b>	Jul 1, 2024, 10:53 AM EDT
changed the <b>due date</b> to Jul 7, 2024	<b>Joshua Postadan</b>	Jul 1, 2024, 10:52 AM EDT
changed the <b>watchers</b> to <b>Glenn Feldstein</b> (George Moehrle Masonry), <b>HESS PROJECT TEAM</b>	<b>Joshua Postadan</b>	Jul 1, 2024, 10:52 AM EDT
changed the <b>suggested answer</b> to <i>HESS to confirm location(s) with Fire Marshall and if basis of design product in Specification Section 08 71 00 Door Hardware (Knox Company Series 3200 "Knox Box") is acceptable.</i>	<b>Joshua Postadan</b>	Jul 1, 2024, 10:52 AM EDT
changed the <b>suggested answer</b> to <i>HESS to confirm with Fire Marshall if basis of design product in Specification Section 08 71 00 Door Hardware (Knox Company Series 3200 "Knox Box") is acceptable.</i>	<b>Joshua Postadan</b>	Jul 1, 2024, 10:51 AM EDT
changed the <b>suggested answer</b> to <i>HESS to confirm with Fire Marshall if basis of design product in Specification Section 08 71 00 Door Hardware (Knox Company Series 3200 "Knox Box") is acceptable</i>	<b>Joshua Postadan</b>	Jul 1, 2024, 10:51 AM EDT
changed the <b>suggested answer</b> to <i>HESS to confirm if basis of design product in Specification Section 08 71 00 Door Hardware (</i>	<b>Joshua Postadan</b>	Jul 1, 2024, 10:50 AM EDT
changed the <b>suggested answer</b> to <i>HESS to confirm if basis of design product in</i>	<b>Joshua Postadan</b>	Jul 1, 2024, 10:50 AM EDT

Glenn Feldstein

(George Moehrle Masonry)

 created this RFI in 

Open

Waiting for Submission

 status and set Ball in court to 

Joshua Postadan

(HESS Construction Co., LLC).

Glenn Feldstein

Jun 27, 2024, 3:57 PM

EDT

2. Contractor shall furnish and install all masonry work required by the Contract Documents, including, but not limited to, all brick, block, architectural pre-cast concrete (plant cast), shear walls, glazed block, ground face, split face, mortar, grout, masonry fill, parging, mortar washes, masonry reinforcement (vertical and horizontal), masonry and cast stone steel reinforcement bars, joint reinforcement, masonry lintels, ties and masonry anchors, point up, insulation (mineral wool, compressible, rigid, perlite, and the like for sound ratings) contiguous to this Contractor's work, masonry fire walls, masonry portal frame columns, column isolation, isolation strips, building paper, flashing, pre-molded control joints, weeps, flashings, mortar netting, samples, mock-ups, masonry cleaners, sealers, and dampproofing and/or waterproofing, spray and roll on vapor or air barrier, head of wall fireproofing, elevated slab edge to masonry wall fireproofing, and or smoke barriers, interior and exterior control joint caulking, final cleaning and washdown inclusive of louvers, window, curtainwall, storefront frame and glass protection and all other items required for a complete Masonry scope of work.
3. Contractor shall install only all loose angle lintels, beam lintels, anchor bolts (embedded in masonry) bolted structural steel, structural angles, structural tubing (anchors furnished by others) attached to masonry, and the like that are supplied by others. Contractor to include installation of elevator hoist beam. Contractor shall grout all bearing/leveling plates at all CMU walls. Contractor shall install all angles that are to be bolted to the CMU; this contractor shall furnish the epoxy material while all other items will be furnished by the 05A contractor.
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6. Contractor shall furnish and install all build in place expansion joints (rated, non-rated, expand-o flash joint covers, and the like) and accessories located at and within interior and exterior masonry walls.
7. Contractor includes furnish and install all Knox boxes located within masonry walls. Contractor to coordinate with local fire marshal for approval and installation. Type to be recessed and include decorative frame, finish bronze or equal.
8. Contractor shall be responsible for installation of all openings within masonry walls where required by other trades. Contractor shall provide adequate protection at designated openings for feeding of material to the building. Contractor shall remove the protection as directed by the Construction Manager.
9. Any wall penetration required by other trades which has a diameter or horizontal dimension greater than 12" shall require a lintel be installed. The majority of lintels will be masonry, contractor to refer to structural notes for requirements.
10. In the event an opening is required in a masonry wall and is not properly coordinated between the other trades and the 04A contractor, it is the other trades sole responsibility to implement the required fix. All other trades are required to perform layout of required openings as the walls progress. All costs to either saw-cut, or tooth cmu to allow for the opening is the responsibility of the other trades. In the event this contractor has missed the indicated opening, or has miss-sized the opening, the costs required for the fix is the responsibility of this contractor.
11. Contractor shall furnish and install all grouting where required for hollow metal frames, bearing plates, sills, bond beams, wall reinforcing, and other areas that are required.

## RFI detail

## #005.1 Masonry Flashings &amp; Fenestration Details



Status	<div><div></div>Closed</div>
Created on	Jun 27, 2024 by <b>Glenn Feldstein</b> (George Moehrle Masonry)
RFI type	Architectural RFI REVs
Ball in court	<b>Glenn Feldstein</b> (George Moehrle Masonry)
Answered	Aug 30, 2024 by <b>Patrick Byrne</b> (Grimm and Parker)

### Question

- Spec 072726 2.4 D includes products for a preformed silicone extrusion for bonding extrusions to substrates, however, none of the details in the drawings show this. Please confirm use of this product is not required.
- Typical fenestration details on sheet A422 call for "sealant tape between drip plate and steel lintel," however no product is specified in section 042000. Drip plate will be sealed to steel lintels with the same sealant/mastic used to lap seams in the flashing. Please confirm this meets the requirement and additional sealant tape is not required.
- York Weep Armor is specified under 042000 2.7 C 6 but not shown in the typical details. Please advise if this is required and if so, please provide detailing showing how this fits/functions with base of wall mortar collection product in the cavity.
- Details B18 & J12/A422 (and other similar) show "SS Drip Plate Flashing W/ Hemmed Edge" running from face of brick, through the cavity (with solid grout or steel below) and turning up the substrate with continuous flexible flashing on top. However, other typical through wall flashing details on sheets A422 & 423 only show the continuous flexible flashing spanning the cavity (without support from grout below). Please confirm the drip edge in details B18 & J12/A422 can be reduced to 3" deep as long as flexible through-wall flashing is fully supported.
- Several details on sheets A422-427 do not always show SS drip plates at face of brick veneer, but spec 042000 2.7 B 3 calls for a drip edge where "flashing is partly exposed and is indicated to terminate at the wall face." Please confirm SS drip edge shall be used at all masonry through wall flashing locations unless a roofer's reglet (or sim.) is required.

### Official response

Patrick Byrne (Grimm and Parker): The preformed silicone extrusion is meant to be used at curtainwall openings, but our detail reflects other information. Please proceed with the installation per the detail and disregard the use of the preformed silicone extrusion.

Updated Response 8/8/2024:

Please keep the Weep Armor product in the scope. The benefit of the installation outweighs the proposed credit.

Updated Response 8/30/2024:

Rather than continue to fight with the mason on this issue, we'll accept the credit for deletion of the work. We disagree with Moehrle's reasoning for requesting the deletion but we wish to move on from this issue. Please let me know if you need anything from me on this item in terms of a PR for the credit.

*By Patrick Byrne (Grimm and Parker) - Aug 30, 2024, 4:41 PM EDT*

References and Attachments

Files (6)

- #005 - Masonry Flashings & Fenestration Details Response.pdf
- #005.1 - Masonry Flashings & Fenestration Details Response.pdf
- 2-004 York Cavity Drainage Letter 2024-07-09.pdf
- RE 24-004 NEAMSHS- Weep Armor.msg
- RE RFI 005 NEMHS- Weep Armor.msg
- RFI 005 - A422 Markup.pdf









Impact

Cost impact	Unknown
Schedule impact	No

Other attributes

Priority	Normal
Discipline	Exterior Envelope, Masonry
Category	Constructability, Design Coordination, Documentation Conflict
Location	-
Location details	Building facade
External id	-
Co-reviewer(s)	
Posted to Drawings/ Specifications	YES
Trade's RFI No.	-



Activities	By	At
<b>Joshua Postadan</b> changed the status from  <b>Open</b> Answered to  <b>Closed</b> <b>Official response:</b> Patrick Byrne (Grimm and Parker): The preformed silicone extrusion is meant to be used at curtainwall openings, but our detail reflects other information. Please proceed with the installation per the detail and disregard the use of the preformed silicone extrusion.  Updated Response 8/8/2024: Please keep the Weep Armor product in the scope. The benefit of the installation outweighs the proposed credit.  Updated Response 8/30/2024: Rather than continue to fight with the mason on this issue, we'll accept the credit for deletion of the work. We disagree with Moehrle's reasoning for requesting the deletion but we wish to move on from this issue. Please let me know if you need anything from me on this item in terms of a PR for the credit. set Ball in court to <b>Glenn Feldstein</b> (George Moehrle Masonry)	<b>Joshua Postadan</b>	Sep 3, 2024, 8:58 AM EDT
<b>Patrick Byrne</b> changed the status from  <b>Open</b> In Review to  <b>Open</b> Answered set Ball in court to <b>Joshua Postadan</b> (HESS Construction Co., LLC)	<b>Patrick Byrne</b>	Aug 30, 2024, 4:41 PM EDT
<b>Patrick Byrne</b> updated a response: The preformed silicone extrusion is meant to be used at curtainwall openings, but our detail reflects other information. Please proceed with the installation per the detail and disregard the use of the preformed silicone extrusion. Updated Response 8/8/2024: Please keep the Weep Armor product in the scope. The benefit of the installation outweighs the proposed credit. Updated Response 8/30/2024: Rather than continue to fight with the mason on this issue, we'll accept the credit for deletion of the work. We disagree with Moehrle's reasoning for requesting the deletion but we wish to move on from this issue. Please let me know if you need anything from me on this item in terms of a PR for the credit.	<b>Patrick Byrne</b>	Aug 30, 2024, 4:41 PM EDT
<b>Joshua Postadan</b> changed the status from  <b>Open</b> Answered to  <b>Open</b> In Review changed the <b>due date</b> to Aug 29, 2024 set Ball in court to <b>Patrick Byrne</b> (Grimm and Parker)	<b>Joshua Postadan</b>	Aug 29, 2024, 8:10 AM EDT
<b>Joshua Postadan</b> changed the status from  <b>Closed</b> to  <b>Open</b> Answered set Ball in court to <b>Joshua Postadan</b> (HESS Construction Co., LLC)	<b>Joshua Postadan</b>	Aug 29, 2024, 7:26 AM EDT
Per email discussion with G+P, G+P has opted to accept the credit for deleting the Weep Armor. RFI re-opened to provide a revised response.	<b>Joshua Postadan</b>	Aug 29, 2024, 7:26 AM EDT

**Joshua Postadan**

changed the status from  **Open** Answered to  **Closed**

**Official response:** Patrick Byrne (Grimm and Parker): The preformed silicone extrusion is meant to be used at curtainwall openings, but our detail reflects other information. Please proceed with the installation per the detail and disregard the use of the preformed silicone extrusion.

**Joshua Postadan**

Aug 22, 2024, 9:11 AM EDT

Updated Response 8/8/2024:

Please keep the Weep Armor product in the scope. The benefit of the installation outweighs the proposed credit.

set Ball in court to **Glenn Feldstein** (George Moehrle Masonry)

changed the **watchers** to **Glenn Feldstein** (George Moehrle Masonry),


**HESS PROJECT TEAM, George Moehrle Masonry**

Please review the response to RFI #005.1. Provide notification of any cost implications immediately. If a proposal has cost impacts, please request an RFQ from HESS. Send a proposal no later than the close of business within 7 days of receipt of this RFI response. HESS will consider this as a no cost change and close this issue should a proposal not be received by this date. A lack of response for any credit items will prompt HESS Construction to assign a cost value that will be deducted from your contract sum. Note: The RFQ is simply an administrative tracking tool, and in no way represents that additional work, cost or time is acknowledged, authorized, directed, or approved.

**Joshua Postadan**

Aug 22, 2024, 9:11 AM EDT

**Patrick Byrne**

changed the status from  **Open** In Review to  **Open** Answered  
set Ball in court to **Joshua Postadan** (HESS Construction Co., LLC)

**Patrick Byrne**



Aug 8, 2024, 12:36 PM EDT

**Patrick Byrne** updated a response: The preformed silicone extrusion is meant to be used at curtainwall openings, but our detail reflects other information. Please proceed with the installation per the detail and disregard the use of the preformed silicone extrusion. Updated Response 8/8/2024: Please keep the Weep Armor product in the scope. The benefit of the installation outweighs the proposed credit.

**Patrick Byrne**

Aug 8, 2024, 12:36 PM EDT

**Joshua Postadan**

changed the status from  **Open** Answered to  **Open** In Review  
changed the **due date** to Aug 8, 2024  
set Ball in court to **Patrick Byrne** (Grimm and Parker)

**Joshua Postadan**

Aug 5, 2024, 12:48 PM EDT

Moehrle confirmed credit for deleting Weep Armor would be \$5,000. Please confirm whether the Weep Armor can be deleted.

**Joshua Postadan**

Aug 5, 2024, 12:48 PM EDT

The cavity mortar collection question remains open.

**Glenn Feldstein**

Jul 29, 2024, 4:47 PM EDT

**Patrick Byrne**

changed the status from  **Open** In Review to  **Open** Answered  
set Ball in court to **Joshua Postadan** (HESS Construction Co., LLC)

**Patrick Byrne**



Jul 29, 2024, 3:24 PM EDT

**Patrick Byrne** updated a response: The preformed silicone extrusion is meant to be used at curtainwall openings, but our detail reflects other information. Please proceed with the installation per the detail and disregard the use of the preformed silicone extrusion.

**Patrick Byrne**

Jul 29, 2024, 3:24 PM EDT

#### **Joshua Postadan**

changed the status from  **Open** Answered to  **Open** In Review  
changed the **due date** to Aug 1, 2024  
set Ball in court to **Patrick Byrne** (Grimm and Parker)

**Joshua Postadan**

Jul 26, 2024, 10:55 AM EDT

Returning for review based on discussion in 7/23/24 meeting with GP, Moehrle Masonry, and HESS.

**Joshua Postadan**

Jul 26, 2024, 10:55 AM EDT

Let's table this for further discussion at a meeting next week. The details and specs don't align. We're required to lay masonry units in a full bed of mortar 42000 3.6) but can't do this with Weep Armor embedded in the back of the joint. Additionally, 42000 3.8 only states to install the mortar diverter product, not the cavity mortar control product.

**Glenn Feldstein**

Jul 12, 2024, 7:28 AM EDT

**Patrick Byrne** added a reference to a File **#005.1 - Masonry Flashings & Fenestration Details Response.pdf**

**Patrick Byrne**

Jul 11, 2024, 9:27 AM EDT

#### **Patrick Byrne**

changed the status from  **Open** In Review to  **Open** Answered  
set Ball in court to **Joshua Postadan** (HESS Construction Co., LLC)

**Patrick Byrne**



Jul 11, 2024, 9:24 AM EDT

**Patrick Byrne** added a response: See attached response and correspondence from York Flashings.

**Patrick Byrne**

Jul 11, 2024, 9:24 AM EDT

#### **Joshua Postadan**

changed the status from  **Open** Answered to  **Open** In Review  
changed the **due date** to Jul 14, 2024  
set Ball in court to **Patrick Byrne** (Grimm and Parker)

**Joshua Postadan**

Jul 11, 2024, 8:23 AM EDT

04A Contractor will not warrant the flashing system should the design team require both the York Weep Armor along with an additional cavity drainage product as it goes against the flashing manufacturer's recommended installation. Please see York Cavity Drainage Letter attached for reference. Please select one of the products to be used at the base of cavity walls.

**Joshua Postadan**


Jul 11, 2024, 8:23 AM EDT

Please provide documentation from York Flashings to back up the conversation. We cannot operate with verbal communication superseding written documentation.

**Glenn Feldstein**

Jul 11, 2024, 8:15 AM EDT

#### **Joshua Postadan**

changed the status from  **Closed** to  **Open** Answered  
set Ball in court to **Joshua Postadan** (HESS Construction Co., LLC)  
changed the **ID** to 005.1

**Joshua Postadan**

Jul 11, 2024, 8:10 AM EDT

04A Contractor will not warrant the flashing system should the design team require both the York Weep Armor along with an additional cavity drainage product as it goes against the flashing manufacturer's recommended installation. Please see the attached York Cavity Drainage Letter for reference. 04A contractor requests that only one of these products be used at the base of cavity walls.

**Joshua Postadan**

Jul 11, 2024, 8:10 AM EDT

**Joshua Postadan** added a reference to a File **2-004 York Cavity Drainage Letter 2024-07-09.pdf**

**Joshua Postadan**

Jul 11, 2024, 8:08 AM EDT

**Joshua Postadan** added a reference to a File **RE RFI 005 NEMHS- Weep Armor.msg**

**Joshua Postadan**

Jul 8, 2024, 3:15 PM EDT

**Joshua Postadan**

changed the status from  **Open** Answered to  **Closed**

**Official response:** Patrick Byrne (Grimm and Parker): My conversation with the representative at York Flashings was that the two items complement each other and are not redundant. Please install both as required.

set Ball in court to **Glenn Feldstein** (George Moehrle Masonry)

**Joshua Postadan**

Jul 8, 2024, 3:14 PM EDT

G+P Response received 7/2/24: "1. The preformed silicone extrusion is required at joints where there is a change in substrate, CMU expansion joints, gyp sheathing vertical expansion joints, masonry expansion joints between CMU and concrete, etc. See details on sheet A427. 2. See attached basis-of-design product from York Flashings - UniverSeal US-100 Liquid Tape, or approved equal. 3. Both the Weep-Armor and Weep-Net are required. The Weep-Armor is installed first (see attached cut sheet) and the Weep-Net rests on top of the Weep-Armor. 4. No. Install drip edge per details. 5. Paragraph 2.7B begins with "UNLESS OTHERWISE INDICATED...". Install the flexible flashing as detailed on the contract documents. Patrick Byrne 7.2.2024" Please note that the official response currently shown in Autodesk as of 7/8/24 is in reference to email attached from York Flashings

**Joshua Postadan**

Jul 8, 2024, 3:14 PM EDT

**Patrick Byrne**

changed the status from  **Open** In Review to  **Open** Answered set Ball in court to **Joshua Postadan** (HESS Construction Co., LLC)

**Patrick Byrne**

Jul 8, 2024, 3:05 PM EDT

**Patrick Byrne** added a response: My conversation with the representative at York Flashings was that the two items complement each other and are not redundant. Please install both as required.

**Patrick Byrne**



Jul 8, 2024, 3:05 PM EDT

**Joshua Postadan** added a reference to a File **RE 24-004 NEAMSHS- Weep Armor.msg**

**Joshua Postadan**

Jul 8, 2024, 3:02 PM EDT

**Joshua Postadan**

changed the status from  **Open** Answered to  **Open** In Review set Ball in court to **Patrick Byrne** (Grimm and Parker)

**Joshua Postadan**

Jul 8, 2024, 3:01 PM EDT

Patrick, We are returning for review to address a follow-up from Moehrle Masonry regarding Item 3 in your response. Please see attached email from York Flashings indicating that installing both the Weep Armor and the mortar netting is redundant. Moehrle Masonry is suggesting deleting the Weep Armor since it gets turned into the back of the bed joint and may fall out over time. Please confirm if deleting either the Weep Armor or the base of cavity mortar collection device is acceptable.

**Joshua Postadan**

Jul 8, 2024, 3:01 PM EDT

**Joshua Postadan** removed a reference to a Sheet

**Joshua Postadan**

Jul 2, 2024, 10:49 AM EDT

**Joshua Postadan** removed a reference to a Sheet

**Joshua Postadan**

Jul 2, 2024, 10:49 AM EDT

**Patrick Byrne** added a reference to a File **#005 - Masonry Flashings & Fenestration Details Response.pdf**

**Patrick Byrne**

Jul 2, 2024, 9:58 AM EDT

**Patrick Byrne**

changed the status from  **Open** In Review to  **Open** Answered set Ball in court to **Joshua Postadan** (HESS Construction Co., LLC)

**Patrick Byrne**

Jul 2, 2024, 9:58 AM EDT

**Patrick Byrne** added a response: See attached RFI response.

**Patrick Byrne**



Jul 2, 2024, 9:58 AM EDT

changed the **Posted to Drawings/Specifications** to *YES*

**Joshua Postadan**

Jul 1, 2024, 1:31 PM EDT

**Joshua Postadan**

changed the status from  **Open** Waiting for Submission to  **Open** In Review set Ball in court to **Patrick Byrne** (Grimm and Parker)  
changed the **ID** to 005

**Joshua Postadan**

Jul 1, 2024, 12:40 PM EDT

changed the **category** to *Constructability, Design Coordination, Documentation Conflict*

**Joshua Postadan**

Jul 1, 2024, 12:38 PM EDT

changed the **schedule impact** to *No*

**Joshua Postadan**

Jul 1, 2024, 12:37 PM EDT

changed the **due date** to Jul 7, 2024

**Joshua Postadan**

Jul 1, 2024, 12:37 PM EDT

changed the **location details** to *Building facade*

**Joshua Postadan**

Jul 1, 2024, 12:37 PM EDT

changed the **watchers** to **Glenn Feldstein** (George Moehrle Masonry), **HESS PROJECT TEAM**

**Joshua Postadan**

Jul 1, 2024, 12:37 PM EDT

**Joshua Postadan** added a reference to a File **RFI 005 - A422 Markup.pdf**

**Joshua Postadan**

Jul 1, 2024, 12:37 PM EDT

**Joshua Postadan** added a reference to a Sheet

**Joshua Postadan**

Jul 1, 2024, 12:33 PM EDT

**Joshua Postadan** added a reference to a Sheet

**Joshua  
Postadan**

Jul 1, 2024, 12:33 PM  
EDT

changed the **question** to • *Spec 072726 2.4 D includes products for a preformed silicone extrusion for bonding extrusions to substrates, however, none of the details in the drawings show this. Please confirm use of this product is not required.* • *Typical fenestration details on sheet A422 call for "sealant tape between drip plate and steel lintel," however no product is specified in section 042000. Drip plate will be sealed to steel lintels with the same sealant/mastic used to lap seams in the flashing. Please confirm this meets the requirement and additional sealant tape is not required.* • *York Weep Armor is specified under 042000 2.7 C 6 but not shown in the typical details. Please advise if this is required and if so, please provide detailing showing how this fits/functions with base of wall mortar collection product in the cavity.* • *Details B18 & J12/A422 (and other similar) show "SS Drip Plate Flashing W/ Hemmed Edge" running from face of brick, through the cavity (with solid grout or steel below) and turning up the substrate with continuous flexible flashing on top. However, other typical through wall flashing details on sheets A422 & 423 only show the continuous flexible flashing spanning the cavity (without support from grout below). Please confirm the drip edge in details B18 & J12/A422 can be reduced to 3" deep as long as flexible through-wall flashing is fully supported.* • *Several details on sheets A422-427 do not always show SS drip plates at face of brick veneer, but spec 042000 2.7 B 3 calls for a drip edge where "flashing is partly exposed and is indicated to terminate at the wall face." Please confirm SS drip edge shall be used at all masonry through wall flashing locations unless a roofer's reglet (or sim.) is required.*

**Joshua  
Postadan**

Jul 1, 2024, 11:07 AM  
EDT

**Joshua Postadan** changed title to: *Masonry Flashings & Fenestration Details*

**Joshua  
Postadan**

Jul 1, 2024, 11:05 AM  
EDT

**Joshua Postadan** changed title to: *Masonry Flashings & Penetration Details*

**Joshua  
Postadan**

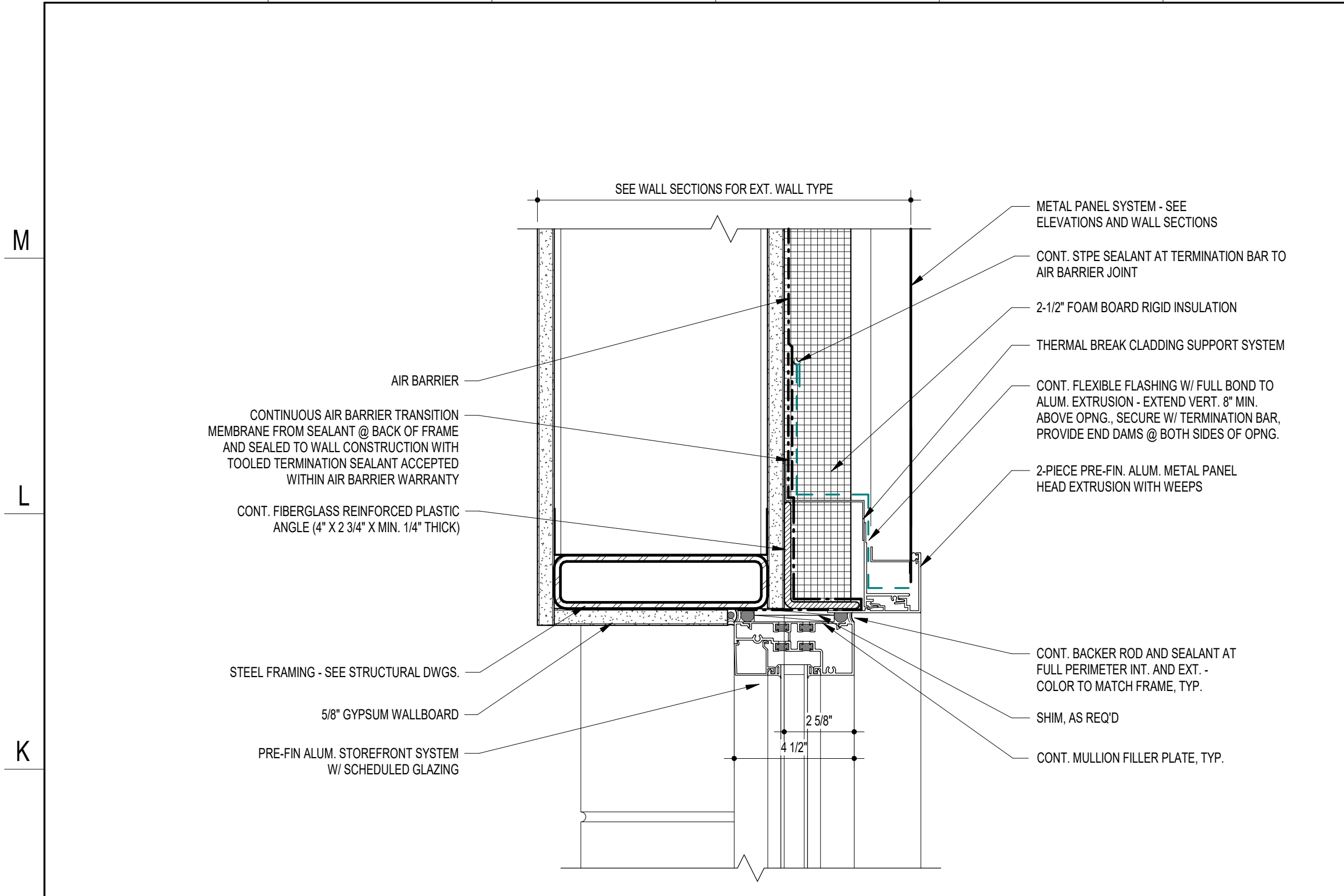
Jul 1, 2024, 11:04 AM  
EDT

**Glenn Feldstein** (George Moehrle Masonry) created this RFI in **Open** Waiting for Submission status and set Ball in court to **Joshua Postadan** (HESS Construction Co., LLC).

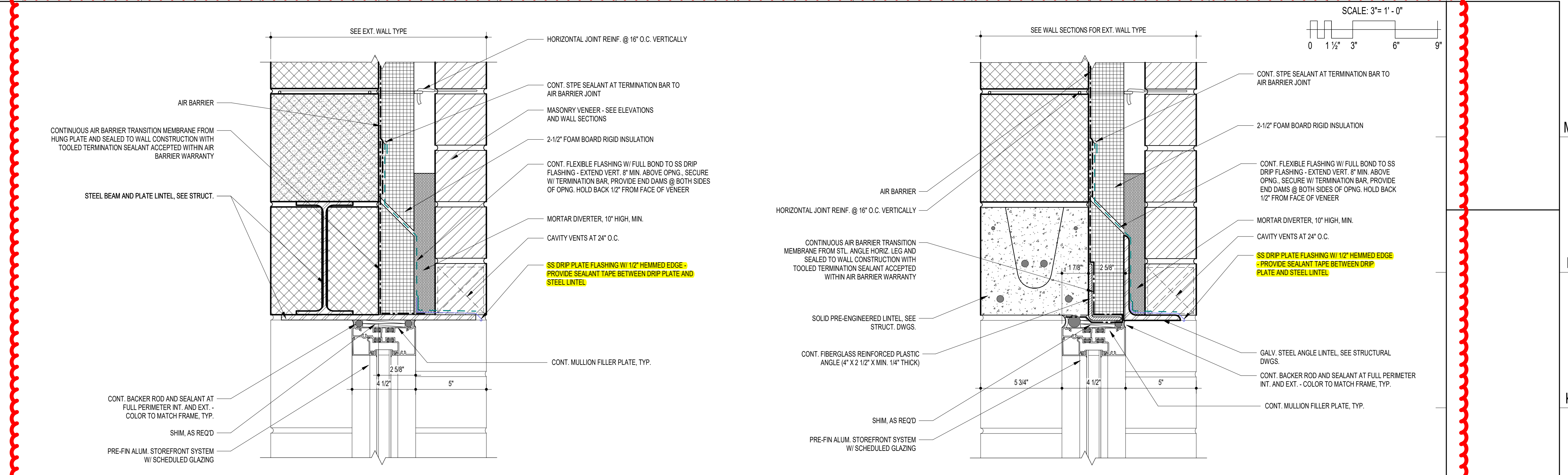
**Glenn  
Feldstein**

Jun 27, 2024, 3:02 PM  
EDT



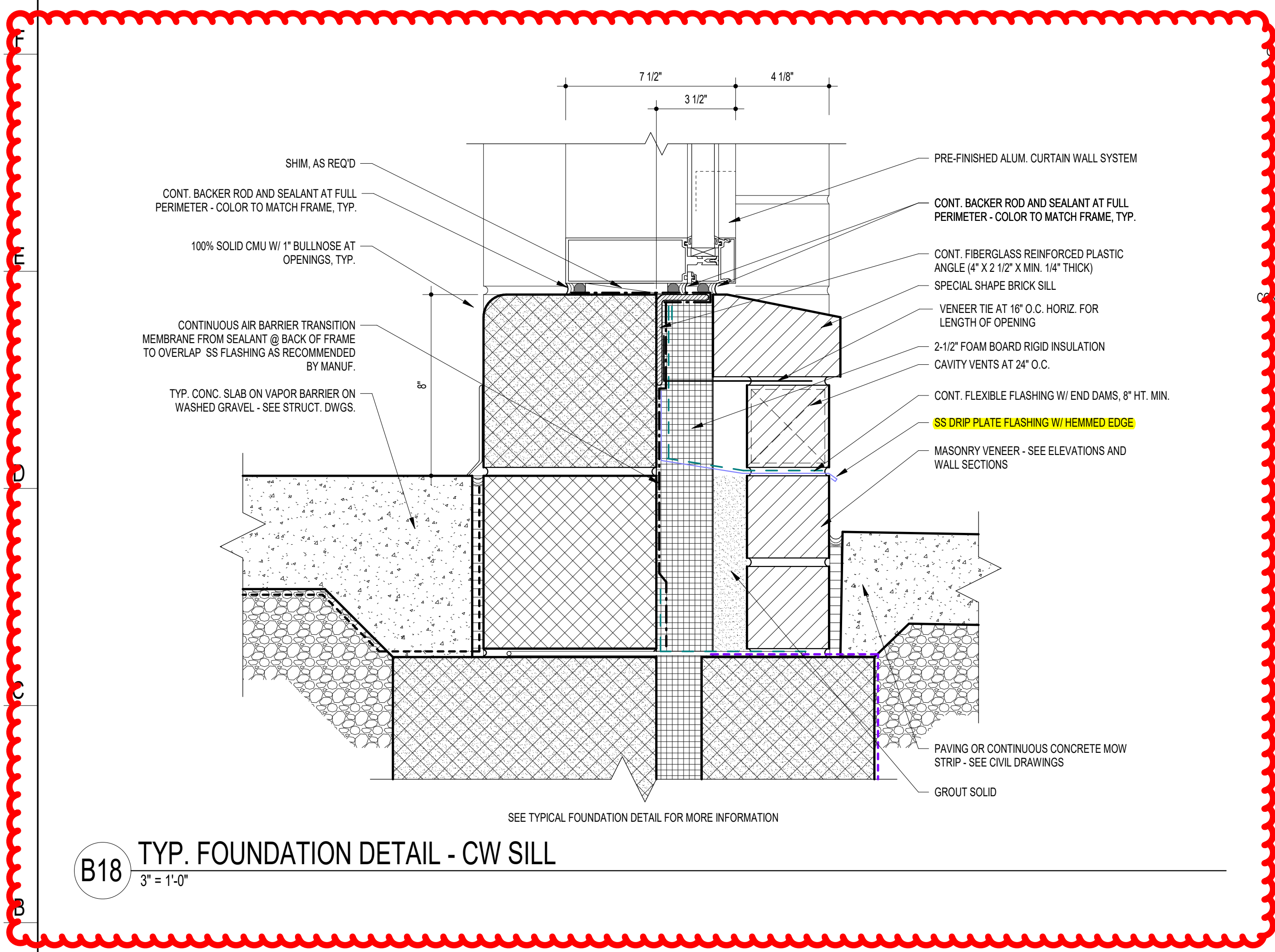


J18 HEAD DETAIL - SF @ MTL. STUDS W/ MTL. PANEL  
3/8" = 1'-0"

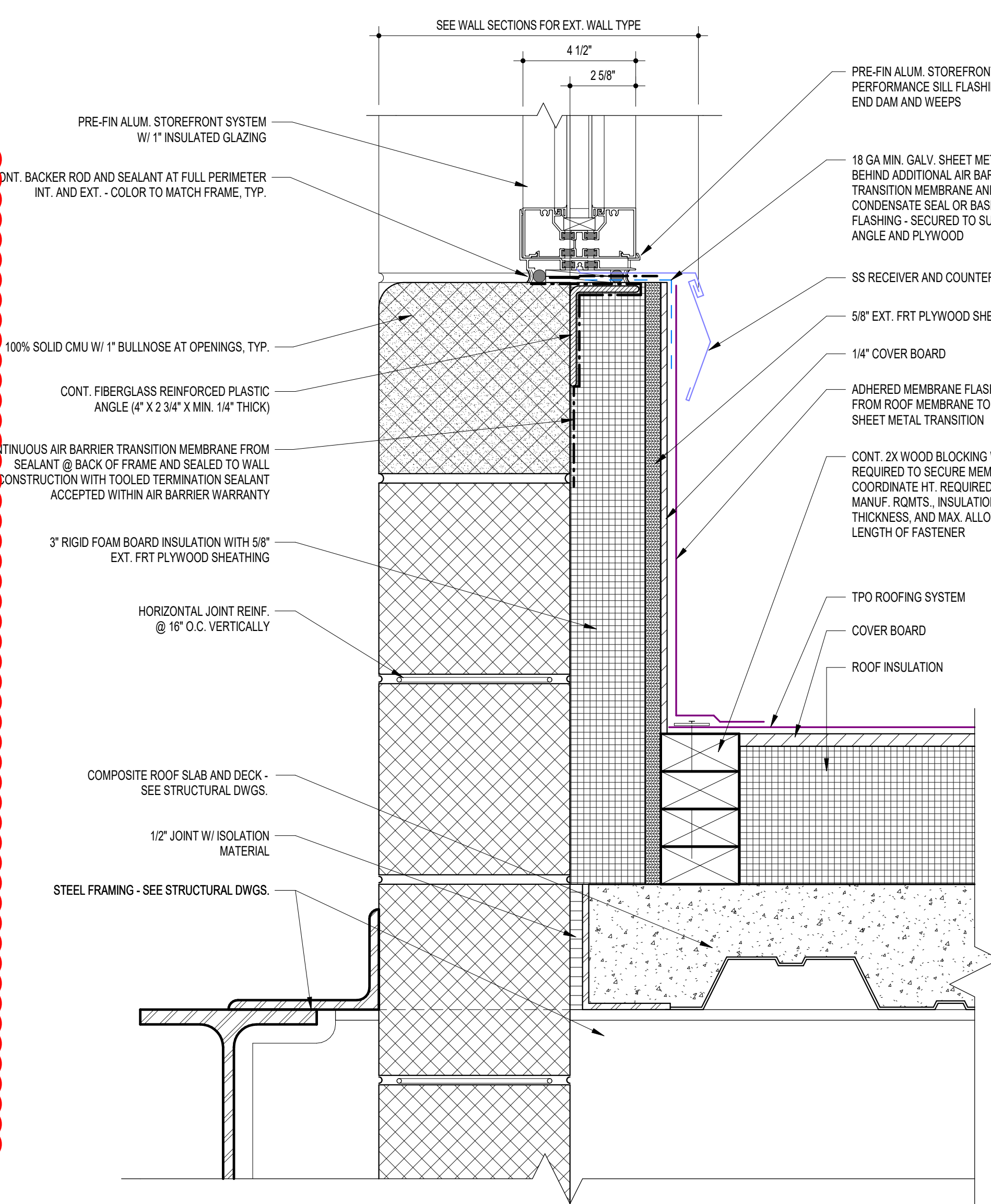


J12 HEAD DETAIL - STOREFRONT @ CMU  
3/8" = 1'-0"

J6 HEAD DETAIL - STOREFRONT @ CMU  
3/8" = 1'-0"

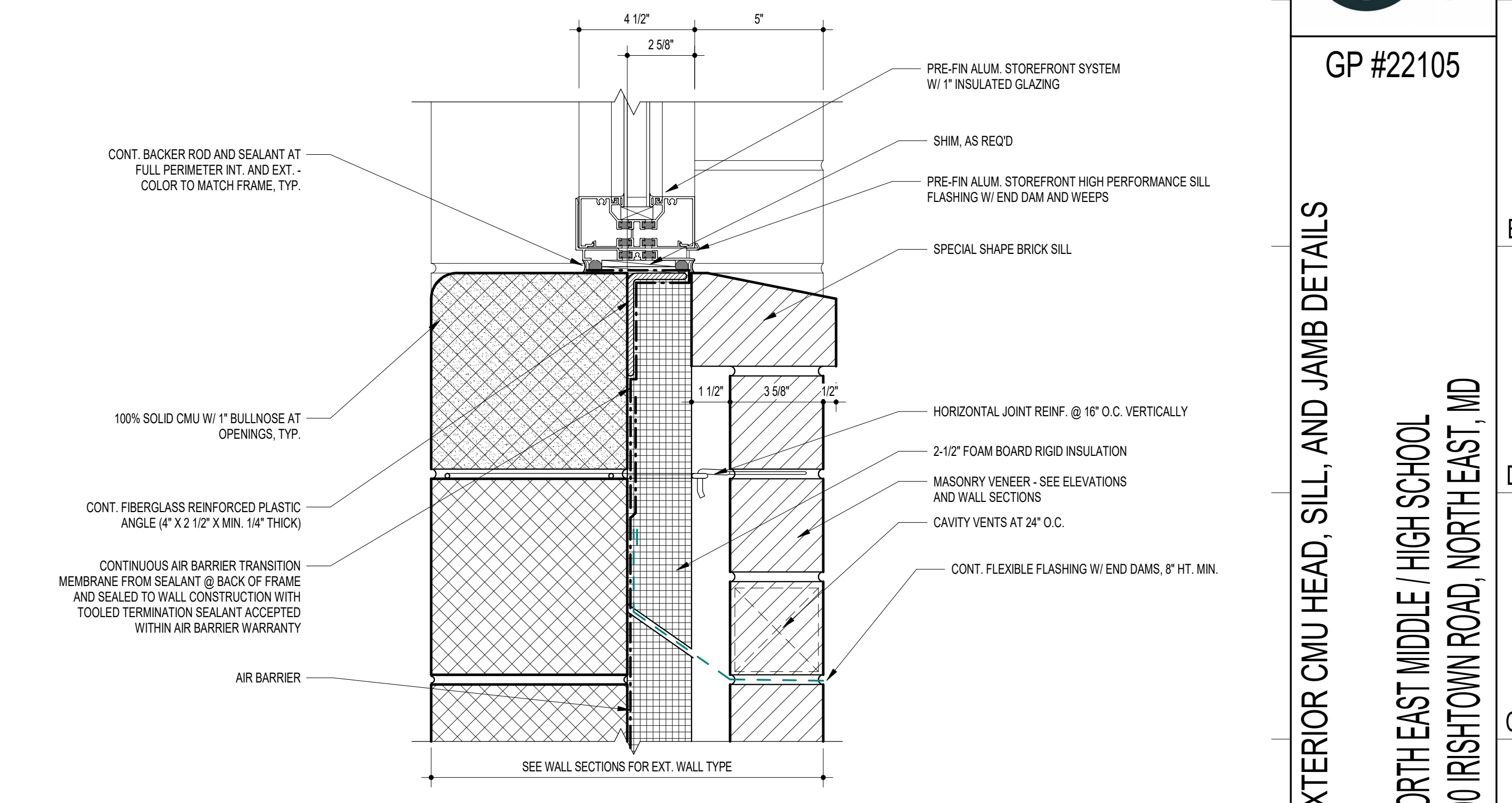


B18 TYP. FOUNDATION DETAIL - CW SILL  
3/8" = 1'-0"



A12 LOW ROOF FLASHING AND SILL DET. @ CLERESTORY  
3/8" = 1'-0"

F6 JAMB DETAIL - STOREFRONT @ CMU  
3/8" = 1'-0"



B6 SILL DETAIL - STOREFRONT @ CMU  
3/8" = 1'-0"

### EXTERIOR FRAME DETAIL NOTES

1. A CONTINUOUS AIR BARRIER IS REQUIRED. JOINTS AND SEAMS MUST BE SEALED INCLUDING ALL TRANSITIONS AND CHANGES IN MATERIALS. PENETRATIONS OF AIR BARRIER MUST BE GASKETED OR SEALED IN A MANNER COMPATIBLE WITH OTHER MATERIALS AND ACCEPTED BY AIR BARRIER MANUFACTURER. LINE OF PRIMARY SEALANT AT CW AND SF TO ENGAGE AIR BARRIER OR AIR BARRIER TRANSITION MEMBRANE AT ALL LOCATIONS.
2. FIBERGLASS REINFORCED PLASTIC ANGLES TO BE PROVIDED BY STOREFRONT AND CURTAINWALL MANUF. WHERE STOREFRONT OR CURTAINWALL SYSTEMS ARE ATTACHED TO FIBERGLASS REINFORCED PLASTIC ANGLES, ANGLES SHALL BE ENGINEERED FOR SYSTEM DESIGN LOADS.
3. WHERE FIBERGLASS REINFORCED PLASTIC ANGLES ARE ATTACHED TO CMU, METHOD OF ATTACHMENT TO BE APPROVED BY STRUCTURAL ENGINEER.
4. REFER TO STRUCTURAL DRAWINGS FOR ADDITIONAL LOCATIONS WHERE GROUTED CMU IS REQUIRED.

11720 Beltsville Drive  
Suite 600  
Calverton, MD 20705  
Tel. 301.595.1000



GP #22105

EXTERIOR CMU HEAD, SILL, AND JAMB DETAILS  
NORTH EAST MIDDLE / HIGH SCHOOL  
300 IRISTOWN ROAD, NORTH EAST, MD

DATE	DESCRIPTION

A422


12/22/2023  
BID SET



## RFI detail

## #005 Masonry Flashings &amp; Fenestration Details



Status	 <b>Open</b> In Review
Created on	Jun 27, 2024 by <b>Glenn Feldstein</b> (George Moehrle Masonry)
RFI type	Architectural RFI REVs
Ball in court	<b>Patrick Byrne</b> (Grimm and Parker)
Due date	Jul 8, 2024

### Question

- 1 • Spec 072726 2.4 D includes products for a preformed silicone extrusion for bonding extrusions to substrates, however, none of the details in the drawings show this. Please confirm use of this product is not required.
- 2 • Typical fenestration details on sheet A422 call for “sealant tape between drip plate and steel lintel,” however no product is specified in section 042000. Drip plate will be sealed to steel lintels with the same sealant/mastic used to lap seams in the flashing. Please confirm this meets the requirement and additional sealant tape is not required.
- 3 • York Weep Armor is specified under 042000 2.7 C 6 but not shown in the typical details. Please advise if this is required and if so, please provide detailing showing how this fits/functions with base of wall mortar collection product in the cavity.
- 4 • Details B18 & J12/A422 (and other similar) show “SS Drip Plate Flashing W/ Hemmed Edge” running from face of brick, through the cavity (with solid grout or steel below) and turning up the substrate with continuous flexible flashing on top. However, other typical through wall flashing details on sheets A422 & 423 only show the continuous flexible flashing spanning the cavity (without support from grout below). Please confirm the drip edge in details B18 & J12/A422 can be reduced to 3” deep as long as flexible through-wall flashing is fully supported.
- 5 • Several details on sheets A422-427 do not always show SS drip plates at face of brick veneer, but spec 042000 2.7 B 3 calls for a drip edge where “flashing is partly exposed and is indicated to terminate at the wall face.” Please confirm SS drip edge shall be used at all masonry through wall flashing locations unless a roofer’s reglet (or sim.) is required.

### References

#### Files (1)

- [RFI 005 - A422 Markup.pdf](#)



**Sheets (2)**

- [A423](#)
- [A422](#)

**Impact**

Cost impact	Unknown
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Schedule impact	No
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**Other attributes**

Priority	Normal
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Discipline	Exterior Envelope, Masonry
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Category	Constructability, Design Coordination, Documentation Conflict
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Location	-
----------	---

Location details	Building facade
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External id	-
-------------	---

Co-reviewer(s)	
----------------	--

Posted to Drawings/ Specifications	YES
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Trade's RFI No.	-
-----------------	---

**Comments****By****At**

No comments were added to this RFI.

**G+P Response:**

1. The preformed silicone extrusion is required at joints where there is a change in substrate, CMU expansion joints, gyp sheathing vertical expansion joints, masonry expansion joints between CMU and concrete, etc. See details on sheet A427.
2. See attached basis-of-design product from York Flashings - UniverSeal US-100 Liquid Tape, or approved equal.
3. Both the Weep-Armor and Weep-Net are required. The Weep-Armor is installed first (see attached cut sheet) and the Weep-Net rests on top of the Weep-Armor.
4. No. Install drip edge per details.
5. Paragraph 2.7.B begins with "UNLESS OTHERWISE INDICATED...". Install the flexible flashing as detailed on the contract documents.

**Patrick Byrne 7.2.2024**

## Weep-Armor™

### Description

A free-draining mesh, made from polymer strands that will not degrade within the wall cavity. This wicking fabric is designed to keep weep holes clear of mortar droppings and debris. When placed in the cavity on top of the through-wall flashing at the base of a wall, the Weep-Armor shields and provides water a path to the weep hole vents. Weep-Armor does not oxidize, rot, support mold or fungus, or react with common building materials,

### WEEP-ARMOR™

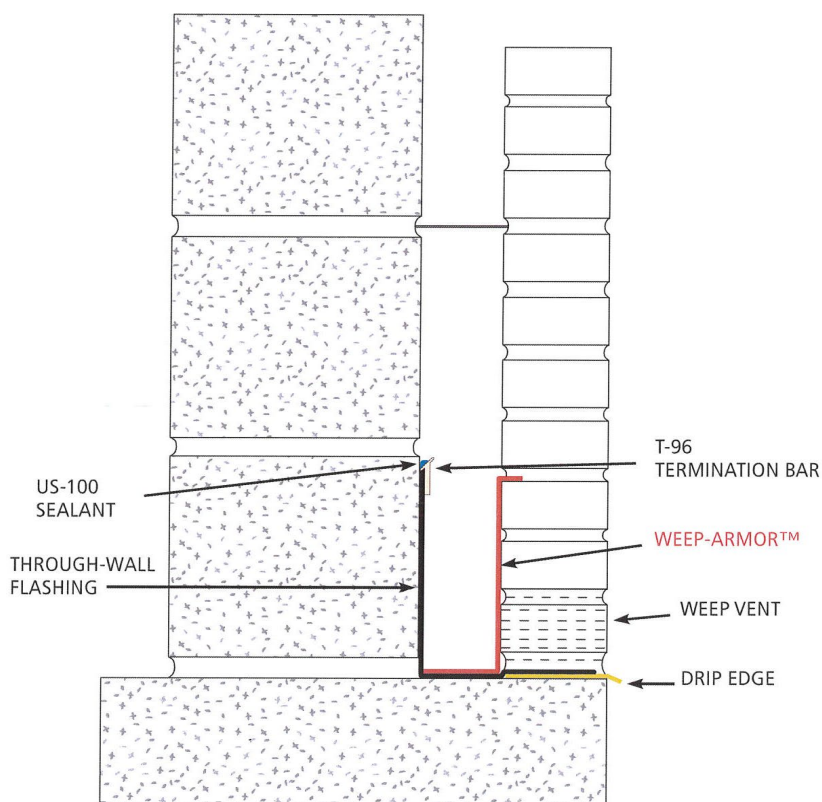
DRAWING HAS BEEN EXPANDED FOR CLARITY

### Description & Benefits:

- One size fits cavity spacing 1' to 6"
- Keeps weep vents clear of:
  - Mortar dropping
  - Dirt, silt, fines
  - Construction debris
- Prevents insect intrusion
- Mold resistant: passes ASTM D3273
- Fire resistant: passes ASTM E84, Class A
- Life of the wall warranty
- Compatible with:
  - Air barriers
  - Spray Polyurethane Foam
  - Cavity wall insulations
  - Construction sealants

### Polymer Strands:

- Made of 93% recycled content



Submittal Date: \_\_\_\_\_ Bid Date: \_\_\_\_\_

Project: \_\_\_\_\_

Project Address: \_\_\_\_\_

Contractor: \_\_\_\_\_ Phone: \_\_\_\_\_ E-mail: \_\_\_\_\_

Notes: \_\_\_\_\_

Architectural Firm: \_\_\_\_\_ Project Architect: \_\_\_\_\_

☐ Approved

☐ Not Approved

Remarks: \_\_\_\_\_



# UniverSeal US-100 LIQUID TAPE

## Polyether Sealant, Vertical Seam Sealer

### Key Properties

- Compatible with all York's flashings
- Compatible with concrete, brick and masonry
- Compatible with foam board & exterior gypsum sheathing
- No VOCs (volatile organic compounds)
- No solvents

### Description

**UniverSeal US-100 LIQUID TAPE** is a polyether based, moisture curing, elastomeric sealant. It forms a seamless, monolithic exterior working surface that will keep the structure watertight. Its distinctive blue color allows for quick & easy visual verification that all seams and gaps have been effectively sealed from wind and rain.

**UniverSeal US-100 LIQUID TAPE** is a non-shrinking, 100% solids, moisture-cure polymer and contains no solvents and trace amounts of VOC's. It skins in one hour, cures completely in three to seven days (cure rate varies with temperature and relative humidity) and is paintable within 24 hours.

### Uses

**UniverSeal US-100 LIQUID TAPE** is for use on ASTM C 1177 exterior gypsum sheathing (Dens Glass Gold®), Foamular®, Styrofoam®, EPS, fiber-board and plywood construction materials. It can be left exposed for up to 6 months. It is compatible with asphaltic materials. **US-100** is also recommended for use as a term bar sealant with all of York's flashings and in that application can be applied over the airbarrier coatings and is also appropriate for use with masonry back-up walls.

**UniverSeal US-100 LIQUID TAPE** incorporated into the project allows compliance to International Energy Conservation Code (IECC) mandatory requirements to seal the building envelope (seal all joints between construction material) (Section 502.4.3), mandatory Air Leakage control (Section 502.4) and mandatory Moisture Control (Section 502.5).

### Technical Data

- Elongation ASTM D412/C1135 200%
- Viscosity: non-slump, gun grade mastic 750, 000 cps @ 72°F
- Skin Over Time: 25 minutes @ 72°F 40% RH
- Set time (60mil film): 1 hour @ 72°F 40% RH
- Appearance: lightly textured, distinctive blue color
- Density: specific gravity = 1.1 or (8.0# / gallon)
- Durometer: 27 Shore A
- Odor: mild mint ester
- VOCs: 15.7 grams per liter
- Solids: 100%
- Exposure: 6 months
- Packaging: Quart tubes, 12 tubes to a carton

### Approved for use with polystyrene by:

- Dow
- Kingspan Greenguard
- Owens Corning Foamular

# UniverSeal US-100

## Application:

- Surface must be clean & free from dirt, oil & debris
- Do not apply below 32°F (0°C), due to frost
- Do not apply membrane to a substrate that has absorbed water
- Maintain **US-100** at room temperature before applying

**UniverSeal US-100 Liquid Tape** is a Polyether based, moisture curing, elastomeric, seam sealer for use on gypsum board cladding, Foamular®, Styrofoam®, EPS, fiber-board, plywood, masonry construction materials, and many other substrates.

**UniverSeal US-100 Liquid Tape** forms a seamless, monolithic exterior working surface that will keep the structure watertight. Its distinctive blue color verifies that all the seams and gaps have been effectively sealed from wind and rain.

**UniverSeal US-100 Liquid Tape** is solvent free and will not shrink when tooled in place. It does not contain any Polypropylene Glycol.

**UniverSeal US-100 Liquid Tape** is very fast setting and develops most of its properties within forty-five minutes after application. It becomes tack free in twenty minutes. It cures to a firm rubber seal in one hour. For best finishing performance do not allow un-tooled beads to stand for more than ten minutes. May be left exposed up to 6 months.

Prior to applying an air barrier coating **UniverSeal US-100 Liquid Tape** is installed over caps in adjacent wall cladding, sheathing and insulation board. Do not apply over air barrier coatings or other functional coatings without first testing adhesion.



July 9, 2024

Re: Cavity drainage

Glenn,

Thank you for using York products on your upcoming project. The use of both Weep Armor and Weep Net (mortar deflection netting) in the cavity is not required. Per the published Multi-Flash SS installation instructions, the recommendation is to use Weep Armor or netting.

You can find these instructions online in the Multi-Flash SS tech data sheet, <https://yorkflashings.com/products/multi-flash-ss> or attached.

**Weep Holes:** All flashing installed through masonry shall provide proper drainage to the outside. Weep holes shall be provided in the head joints on the first course immediately on top of the flashing. Weep holes shall be kept free of mortar droppings with a fabric or netting weep vent protection material.

Best Regards,

A handwritten signature in black ink, appearing to read "Meagan Elfert", written over a light blue rectangular background.

Meagan Elfert

Vice President

[melfert@yorkmfg.com](mailto:melfert@yorkmfg.com)



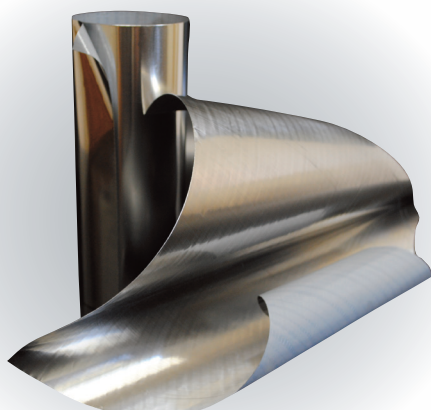


# Multi-Flash<sup>TM</sup> SS

## Stainless Steel Fabric Flashing

### Key Properties

- Type 304 (standard) & Type 316 stainless steel for more corrosive or coastal areas
- Life of the wall warranty
- Best in class puncture and tear resistance
- Fire resistant: ASTM E84 Class A material
- Mold resistant: passes ASTM D3273
- Heat resistant: will not degrade in high heat applications (like SPF applications)
- Stainless steel face is an excellent surface for air barriers & sealants to adhere to
- Exceeds all performance specifications for York's copper fabric flashing
- Unlimited UV exposure: to prevent damage, the product must be concealed within 180 days
- Flexible, easy to cut and form by hand
- Made of 60% recycled material & recyclable ♻️
- 60' rolls for fewer lap joints
- Non-staining: can be used with limestone
- HPD available



Available in:

12", 18", 24", 36" x 60' Custom sizes upon request.

### Description

**Multi-Flash<sup>TM</sup> SS** has been designed with a flexible 2 mil sheet of Type 304 stainless steel laminated on one side to a polymer fabric. **Multi-Flash<sup>TM</sup> SS** offers best-in-class puncture and tear resistance.

### Uses

- Through-wall flashing
- Transition membrane (air barriers, roofing, waterproofing)
- Window & door sill pan flashing
- Jamb closure flashing
- Roof-to-wall flashing
- Deck ledger flashing
- Compatible with:
  - Air barriers
  - Spray polyurethane foam
  - Insulation boards
  - Construction sealants

### Through-Wall Flashing Instructions

**Surface Preparation:** All surfaces receiving through-wall flashings shall be free from loose materials, and reasonably smooth. There shall be no slopes that will form pockets or prevent free drainage of water to the exterior surfaces of the wall. All work shall be executed in conformance with accepted trade practice. Install with stainless steel facing outward.



**Application** of through-wall flashing for backup walls built with masonry or studs with sheathing. **Stainless Steel faces up and to the outside.**

**Horizontal Masonry Surfaces:** Flashing shall be laid on a bed of approved sealant and topped with a fresh bed of mortar. Flashing shall be set flush with the exterior face of the wall.

**Vertical Masonry Surfaces:** Spot the surface with an approved sealant until the masonry is set. Terminate in one of the following ways:

- Use a termination bar to fasten the flashing to the backer wall and seal the top edge with an approved sealant.
- Use other methods indicated in the drawings.

**Foundation Sill Flashing:** The flashing for foundation sills shall be laid on a bed of approved sealant and topped with a fresh bed of mortar. Flashing shall be set flush with the exterior face of the masonry and turned up on the inside not less than 2" or be carried upward across the cavity a minimum of 6". Flashing will then be secured to the backer wall as stated above. Where sill and column meet, flashing shall be brought a minimum of 10" up the column and be secured with an approved sealant and termination bar.

**Cavity Wall Flashing:** Flashing shall be set in a bed of approved sealant and topped with a bed of mortar. Flashing shall be set flush with the exterior face of the masonry wall and carried through the wall, across the cavity, upward a minimum of 8", and secured to the backer wall as described above in the Vertical Masonry Surfaces section.

**Shelf Angle Flashing:** Shelf angle flashing shall be trimmed flush with the outside toe of the shelf angle, go up the face of the beam, and then through the wall turning up on the inside not less than 2".

**Parapets or Copings:** Flashing for parapets or copings shall be installed in a bed of approved sealant and topped with a fresh bed of mortar. Flashing shall be placed flush with the exterior faces of both sides of the wall.

**Head and Sill Flashing:** The flashing shall be placed flush with the outside of the wall or lintel angle, then carried through or up the wall as indicated. Flashing shall extend 6" beyond each side of the opening and be turned up at the sides to create end dams.

**Other Areas:** All membrane flashing at other locations shall be installed in accordance with the manufacturer's recommendations.

**Joining of Materials:** Joints shall be made by using **York 304 SA** and embedding each side of the connecting flashing 2" on this butyl tape. Another option is lapping the flashing a minimum of 6" and coating the contacting surfaces with an approved sealant. Using an interlocking lap per manufacturer's detail is also acceptable with the use of an approved sealant. All edges must be sealed.

**Weep Holes:** All flashing installed through masonry shall provide proper drainage to the outside. Weep holes shall be provided in the head joints on the first course immediately on top of the flashing. Weep holes shall be kept free of mortar droppings with a fabric or netting weep vent protection material.

**Corners and End Dams:** Corners and end dams can be made per instructions on York's website ([www.yorkflashings.com](http://www.yorkflashings.com)) or use **York's preformed corners and end dams**. End dams shall be folded, not cut.


TECHNICAL DATA MULTI-FLASH™ SS		
PROPERTY	TEST METHOD	MULTI-FLASH SS
Puncture (PSI)	ASTM E154	2,500+
Tensile	ASTM D412	100,000+
Fire Resistant	ASTM E84	Pass
Mold Resistant	ASTM D3273	Pass
Recycled Content		60% - 70%
Recyclable Material		Yes
UV Exposure (days)		Unlimited
Warranty		Lifetime



## RFI detail

## #005.1 Masonry Flashings &amp; Fenestration Details



Status	 <b>Open</b> In Review
Created on	Jun 27, 2024 by <b>Glenn Feldstein</b> (George Moehrle Masonry)
RFI type	Architectural RFI REVs
Ball in court	<b>Patrick Byrne</b> (Grimm and Parker)
Due date	Jul 15, 2024

### Question

- Spec 072726 2.4 D includes products for a preformed silicone extrusion for bonding extrusions to substrates, however, none of the details in the drawings show this. Please confirm use of this product is not required.
- Typical fenestration details on sheet A422 call for "sealant tape between drip plate and steel lintel," however no product is specified in section 042000. Drip plate will be sealed to steel lintels with the same sealant/mastic used to lap seams in the flashing. Please confirm this meets the requirement and additional sealant tape is not required.
- York Weep Armor is specified under 042000 2.7 C 6 but not shown in the typical details. Please advise if this is required and if so, please provide detailing showing how this fits/functions with base of wall mortar collection product in the cavity.
- Details B18 & J12/A422 (and other similar) show "SS Drip Plate Flashing W/ Hemmed Edge" running from face of brick, through the cavity (with solid grout or steel below) and turning up the substrate with continuous flexible flashing on top. However, other typical through wall flashing details on sheets A422 & 423 only show the continuous flexible flashing spanning the cavity (without support from grout below). Please confirm the drip edge in details B18 & J12/A422 can be reduced to 3" deep as long as flexible through-wall flashing is fully supported.
- Several details on sheets A422-427 do not always show SS drip plates at face of brick veneer, but spec 042000 2.7 B 3 calls for a drip edge where "flashing is partly exposed and is indicated to terminate at the wall face." Please confirm SS drip edge shall be used at all masonry through wall flashing locations unless a roofer's reglet (or sim.) is required.

### References

#### Files (5)

- [#005 - Masonry Flashings & Fenestration Details Response.pdf](#)
- [2-004 York Cavity Drainage Letter 2024-07-09.pdf](#)
- [RE 24-004 NEAMSHS- Weep Armor.msg](#)
- [RE RFI 005 NEMHS- Weep Armor.msg](#)

- [RFI 005 - A422 Markup.pdf](#)

## Impact

Cost impact	Unknown
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Schedule impact	No
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## Other attributes

Priority	Normal
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Discipline	Exterior Envelope, Masonry
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Category	Constructability, Design Coordination, Documentation Conflict
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Location	-
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Location details	Building facade
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External id	-
-------------	---

Co-reviewer(s)	
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Posted to Drawings/ Specifications	YES
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Trade's RFI No.	-
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### G+P Response:

See attached correspondence from York Flashings Senior Technical Manager. Please note in the letter provided by the 04A contractor, nowhere does it state that the two components are incompatible or will void any warranty provided by the flashing manufacturer. The letter simply states that the use of both products isn't mandatory.

Patrick Byrne 7.11.2024

## Patrick Byrne

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**From:** Dave Carroll <dcarroll@yorkmfg.com>  
**Sent:** Thursday, July 11, 2024 9:02 AM  
**To:** Patrick Byrne  
**Subject:** York Flashings

You don't often get email from dcarroll@yorkmfg.com. [Learn why this is important](#)

Patrick,

Thank you for your call regarding the combined use of York's Weep Net with Weep Armor. I applaud your belt & suspenders approach to moisture management. There are no compatibility or warranty issues with this design. Please don't hesitate to contact me should you have further questions or concerns.

Best regards,

DC









**Dave Carroll**  
Senior Technical Manager  
York Flashings



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**C** (207) 651-5738  
**D** (207) 206-1399  
**O** (800) 551-2828  
**E** dcarroll@yorkmfg.com  
**W** www.yorkflashings.com



Activities	By	At
<b>Joshua Postadan</b> changed the status from  <b>Open</b> Answered to  <b>Open</b> In Review changed the <b>due date</b> to Jul 14, 2024 set Ball in court to <b>Patrick Byrne</b> (Grimm and Parker)	<b>Joshua Postadan</b>	Jul 11, 2024, 8:23 AM EDT
04A Contractor will not warrant the flashing system should the design team require both the York Weep Armor along with an additional cavity drainage product as it goes against the flashing manufacturer's recommended installation. Please see York Cavity Drainage Letter attached for reference. Please select one of the products to be used at the base of cavity walls.	<b>Joshua Postadan</b>	Jul 11, 2024, 8:23 AM EDT
Please provide documentation from York Flashings to back up the conversation. We cannot operate with verbal communication superseding written documentation.	<b>Glenn Feldstein</b>	Jul 11, 2024, 8:15 AM EDT
<b>Joshua Postadan</b> changed the status from  <b>Closed</b> to  <b>Open</b> Answered set Ball in court to <b>Joshua Postadan</b> (HESS Construction Co., LLC) changed the <b>ID</b> to 005.1	<b>Joshua Postadan</b>	Jul 11, 2024, 8:10 AM EDT
04A Contractor will not warrant the flashing system should the design team require both the York Weep Armor along with an additional cavity drainage product as it goes against the flashing manufacturer's recommended installation. Please see the attached York Cavity Drainage Letter for reference. 04A contractor requests that only one of these products be used at the base of cavity walls.	<b>Joshua Postadan</b>	Jul 11, 2024, 8:10 AM EDT
<b>Joshua Postadan</b> added a reference to a file <b>2-004 York Cavity Drainage Letter 2024-07-09.pdf</b>	<b>Joshua Postadan</b>	Jul 11, 2024, 8:08 AM EDT
<b>Joshua Postadan</b> added a reference to a file <b>RE RFI 005 NEMHS- Weep Armor.msg</b>	<b>Joshua Postadan</b>	Jul 8, 2024, 3:15 PM EDT
<b>Joshua Postadan</b> changed the status from  <b>Open</b> Answered to  <b>Closed</b>  <b>Official response:</b> Patrick Byrne (Grimm and Parker): My conversation with the representative at York Flashings was that the two items complement each other and are not redundant. Please install both as required. set Ball in court to <b>Glenn Feldstein</b> (George Moehrle Masonry)	<b>Joshua Postadan</b>	Jul 8, 2024, 3:14 PM EDT

G+P Response received 7/2/24: "1. The preformed silicone extrusion is required at joints where there is a change in substrate, CMU expansion joints, gyp sheathing vertical expansion joints, masonry expansion joints between CMU and concrete, etc. See details on sheet A427. 2. See attached basis-of-design product from York Flashings - UniverSeal US-100 Liquid Tape, or approved equal. 3. Both the Weep-Armor and Weep-Net are required. The Weep-Armor is installed first (see attached cut sheet) and the Weep-Net rests on top of the Weep-Armor. 4. No. Install drip edge per details. 5. Paragraph 2.7B begins with "UNLESS OTHERWISE INDICATED...". Install the flexible flashing as detailed on the contract documents. Patrick Byrne 7.2.2024" Please note that the official response currently shown in Autodesk as of 7/8/24 is in reference to email attached from York Flashings

**Joshua Postadan**

Jul 8, 2024, 3:14 PM EDT

**Patrick Byrne**

changed the status from  **Open** In Review to  **Open** Answered set Ball in court to **Joshua Postadan** (HESS Construction Co., LLC)

**Patrick Byrne**

Jul 8, 2024, 3:05 PM EDT

**Patrick Byrne** added a response: My conversation with the representative at York Flashings was that the two items complement each other and are not redundant. Please install both as required.

**Patrick Byrne**



Jul 8, 2024, 3:05 PM EDT

**Joshua Postadan** added a reference to a file **RE 24-004 NEAMSHS-Weep Armor.msg**

**Joshua Postadan**

Jul 8, 2024, 3:02 PM EDT

**Joshua Postadan**

changed the status from  **Open** Answered to  **Open** In Review set Ball in court to **Patrick Byrne** (Grimm and Parker)

**Joshua Postadan**

Jul 8, 2024, 3:01 PM EDT

Patrick, We are returning for review to address a follow-up from Moehrle Masonry regarding Item 3 in your response. Please see attached email from York Flashings indicating that installing both the Weep Armor and the mortar netting is redundant. Moehrle Masonry is suggesting deleting the Weep Armor since it gets turned into the back of the bed joint and may fall out over time. Please confirm if deleting either the Weep Armor or the base of cavity mortar collection device is acceptable.

**Joshua Postadan**

Jul 8, 2024, 3:01 PM EDT

**Joshua Postadan** removed reference to a sheet

**Joshua Postadan**

Jul 2, 2024, 10:49 AM EDT

**Joshua Postadan** removed reference to a sheet

**Joshua Postadan**

Jul 2, 2024, 10:49 AM EDT

**Patrick Byrne** added a reference to a file **#005 - Masonry Flashings & Fenestration Details Response.pdf**

**Patrick Byrne**



Jul 2, 2024, 9:58 AM EDT

**Patrick Byrne**

changed the status from  **Open** In Review to  **Open** Answered set Ball in court to **Joshua Postadan** (HESS Construction Co., LLC)

**Patrick Byrne**

Jul 2, 2024, 9:58 AM EDT

<b>Patrick Byrne</b> added a response: See attached RFI response.	<b>Patrick Byrne</b>	Jul 2, 2024, 9:58 AM EDT
changed the <b>Posted to Drawings/Specifications</b> to <i>YES</i>	<b>Joshua Postadan</b>	Jul 1, 2024, 1:31 PM EDT
<b>Joshua Postadan</b> changed the status from  <b>Open</b> Waiting for Submission to  <b>Open</b> In Review set Ball in court to <b>Patrick Byrne</b> (Grimm and Parker) changed the <b>ID</b> to 005	<b>Joshua Postadan</b>	Jul 1, 2024, 12:40 PM EDT
changed the <b>category</b> to <i>Constructability, Design Coordination, Documentation Conflict</i>	<b>Joshua Postadan</b>	Jul 1, 2024, 12:38 PM EDT
changed the <b>schedule impact</b> to <i>No</i>	<b>Joshua Postadan</b>	Jul 1, 2024, 12:37 PM EDT
changed the <b>due date</b> to Jul 7, 2024	<b>Joshua Postadan</b>	Jul 1, 2024, 12:37 PM EDT
changed the <b>location details</b> to <i>Building facade</i>	<b>Joshua Postadan</b>	Jul 1, 2024, 12:37 PM EDT
changed the <b>watchers</b> to <b>Glenn Feldstein</b> (George Moehrle Masonry), <b>HESS PROJECT TEAM</b>	<b>Joshua Postadan</b>	Jul 1, 2024, 12:37 PM EDT
<b>Joshua Postadan</b> added a reference to a file <b>RFI 005 - A422 Markup.pdf</b>	<b>Joshua Postadan</b>	Jul 1, 2024, 12:37 PM EDT
<b>Joshua Postadan</b> added a reference to a sheet	<b>Joshua Postadan</b>	Jul 1, 2024, 12:33 PM EDT
<b>Joshua Postadan</b> added a reference to a sheet	<b>Joshua Postadan</b>	Jul 1, 2024, 12:33 PM EDT

changed the **question** to • Spec 072726 2.4 D includes products for a preformed silicone extrusion for bonding extrusions to substrates, however, none of the details in the drawings show this. Please confirm use of this product is not required. • Typical fenestration details on sheet A422 call for "sealant tape between drip plate and steel lintel," however no product is specified in section 042000. Drip plate will be sealed to steel lintels with the same sealant/mastic used to lap seams in the flashing. Please confirm this meets the requirement and additional sealant tape is not required. • York Weep Armor is specified under 042000 2.7 C 6 but not shown in the typical details. Please advise if this is required and if so, please provide detailing showing how this fits/functions with base of wall mortar collection product in the cavity. • Details B18 & J12/A422 (and other similar) show "SS Drip Plate Flashing W/ Hemmed Edge" running from face of brick, through the cavity (with solid grout or steel below) and turning up the substrate with continuous flexible flashing on top. However, other typical through wall flashing details on sheets A422 & 423 only show the continuous flexible flashing spanning the cavity (without support from grout below). Please confirm the drip edge in details B18 & J12/A422 can be reduced to 3" deep as long as flexible through-wall flashing is fully supported. • Several details on sheets A422-427 do not always show SS drip plates at face of brick veneer, but spec 042000 2.7 B 3 calls for a drip edge where "flashing is partly exposed and is indicated to terminate at the wall face." Please confirm SS drip edge shall be used at all masonry through wall flashing locations unless a roofer's reglet (or sim.) is required.

**Joshua Postadan**

Jul 1, 2024, 11:07 AM EDT

**Joshua Postadan** changed title to: *Masonry Flashings & Fenestration Details*

**Joshua Postadan**

Jul 1, 2024, 11:05 AM EDT

**Joshua Postadan** changed title to: *Masonry Flashings & Penetration Details*

**Joshua Postadan**

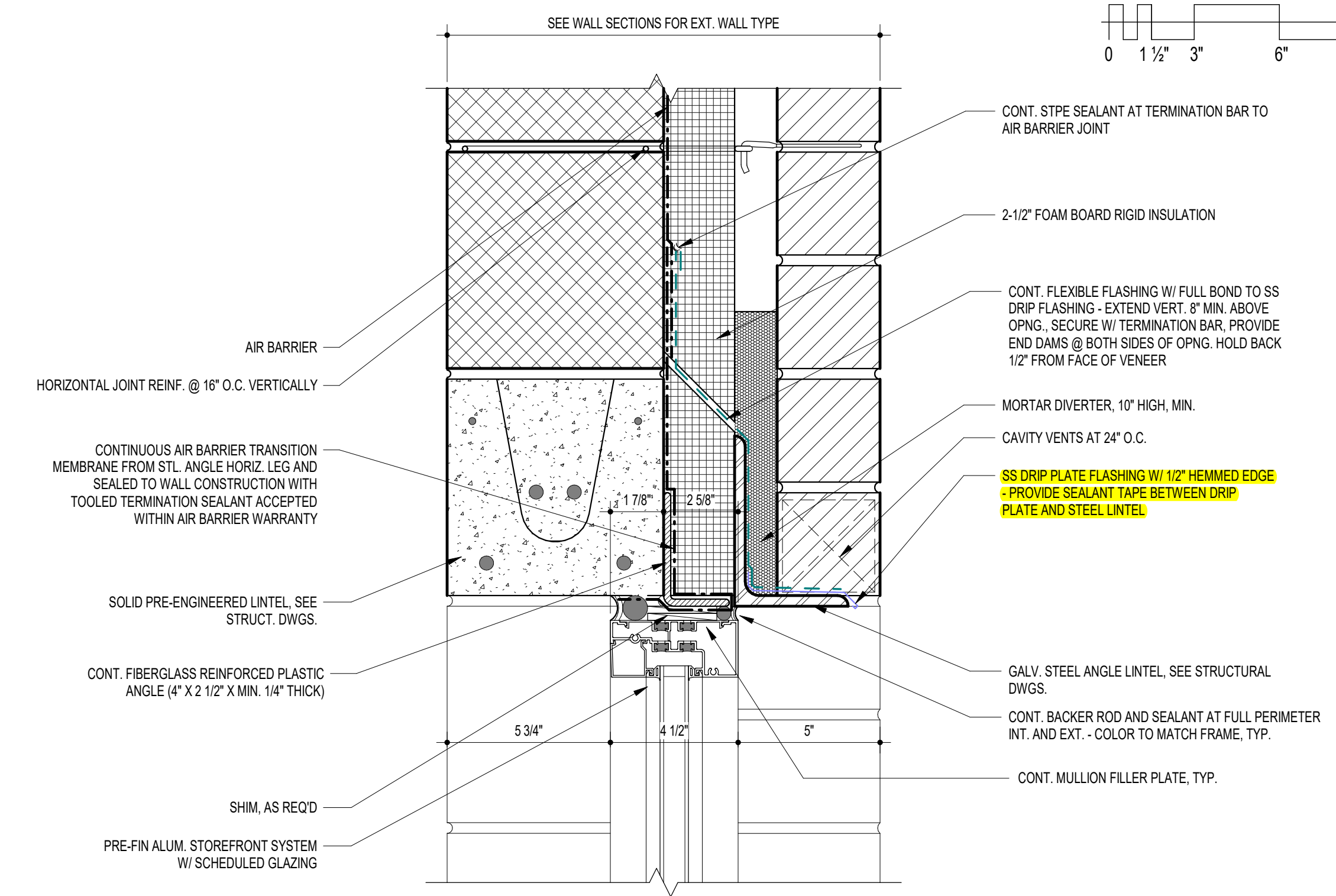
Jul 1, 2024, 11:04 AM EDT

**Glenn Feldstein** (George Moehrle Masonry) created this RFI in **Open** Waiting for Submission status and set Ball in court to **Joshua Postadan** (HESS Construction Co., LLC).

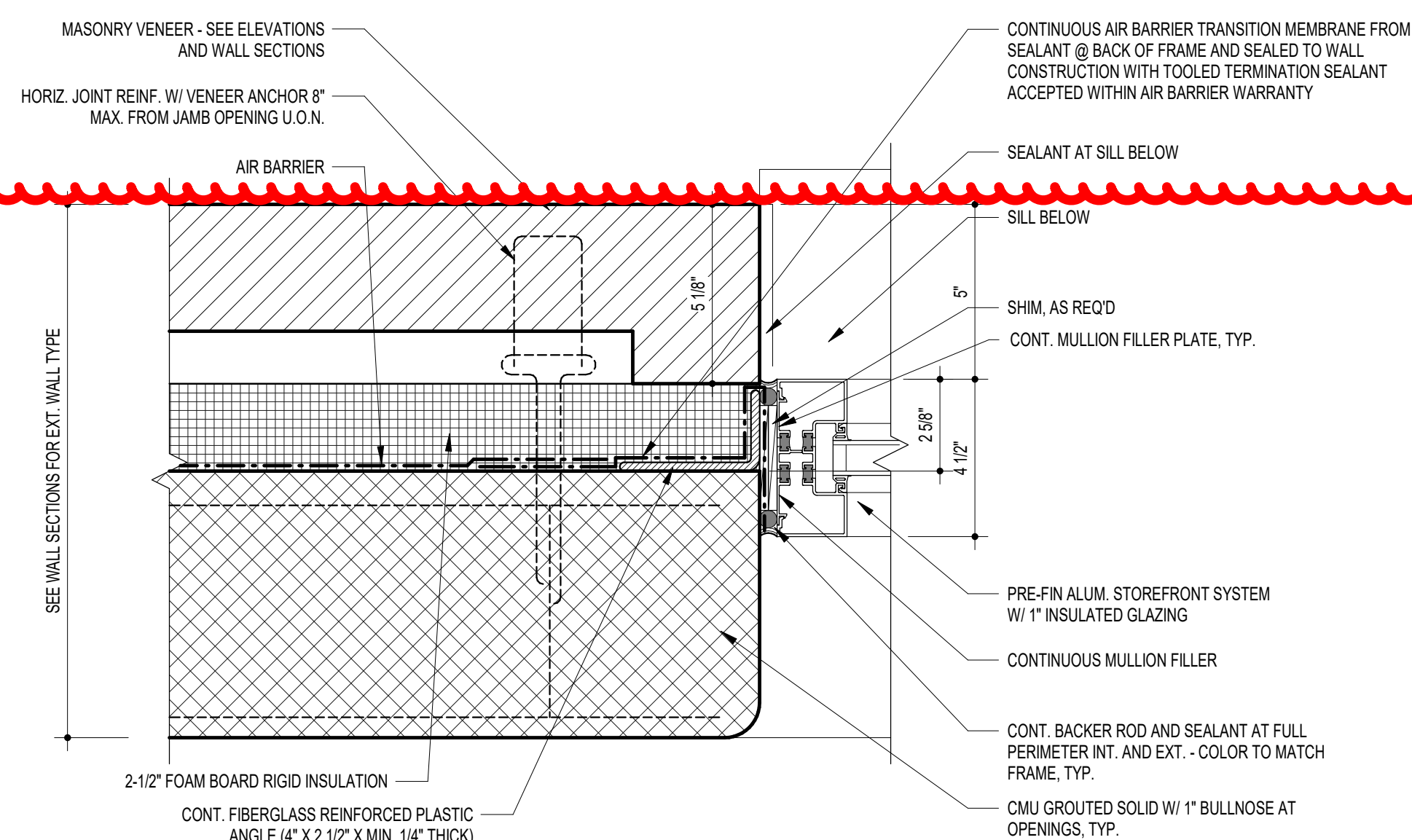
**Glenn Feldstein**

Jun 27, 2024, 3:02 PM EDT

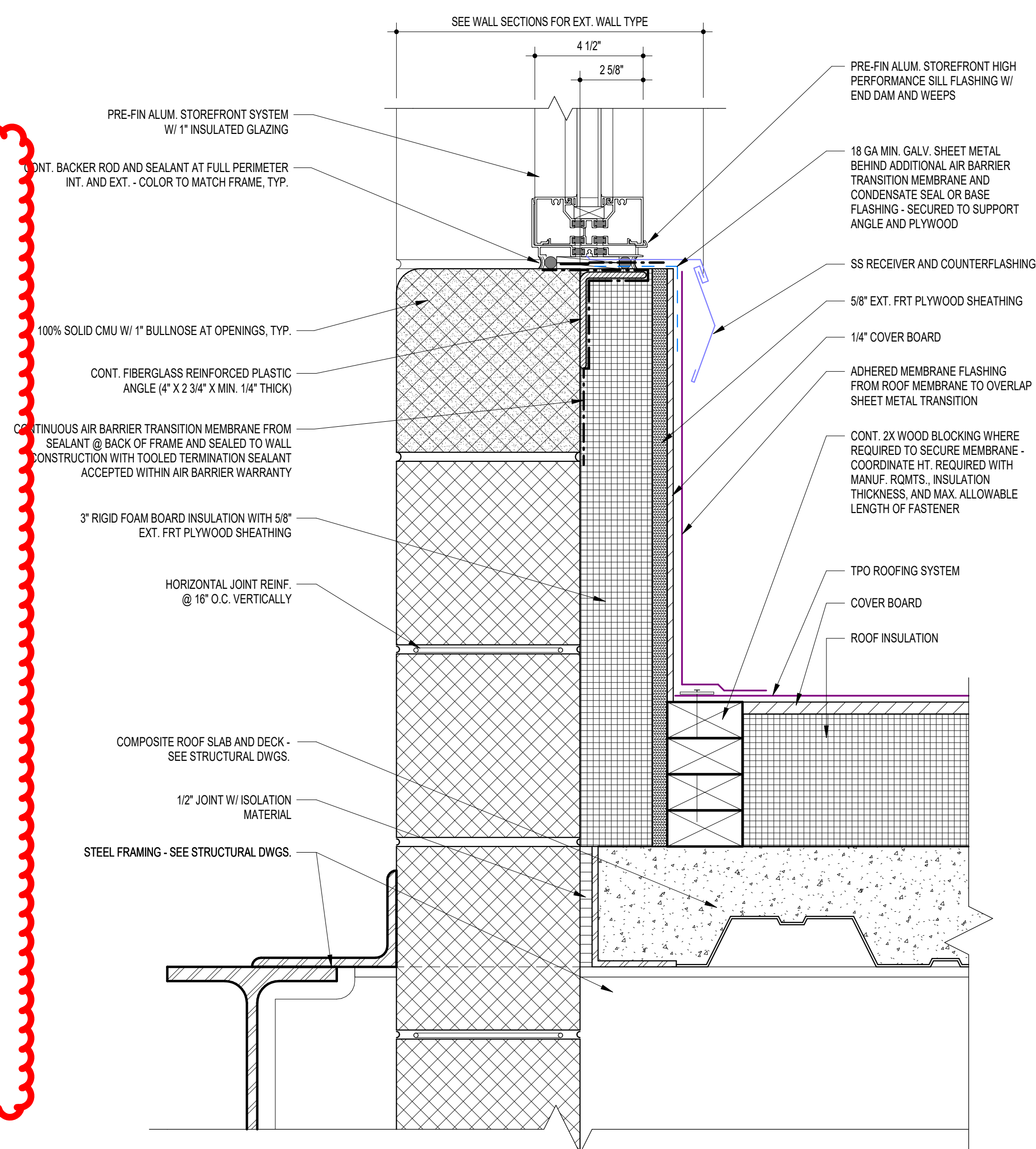




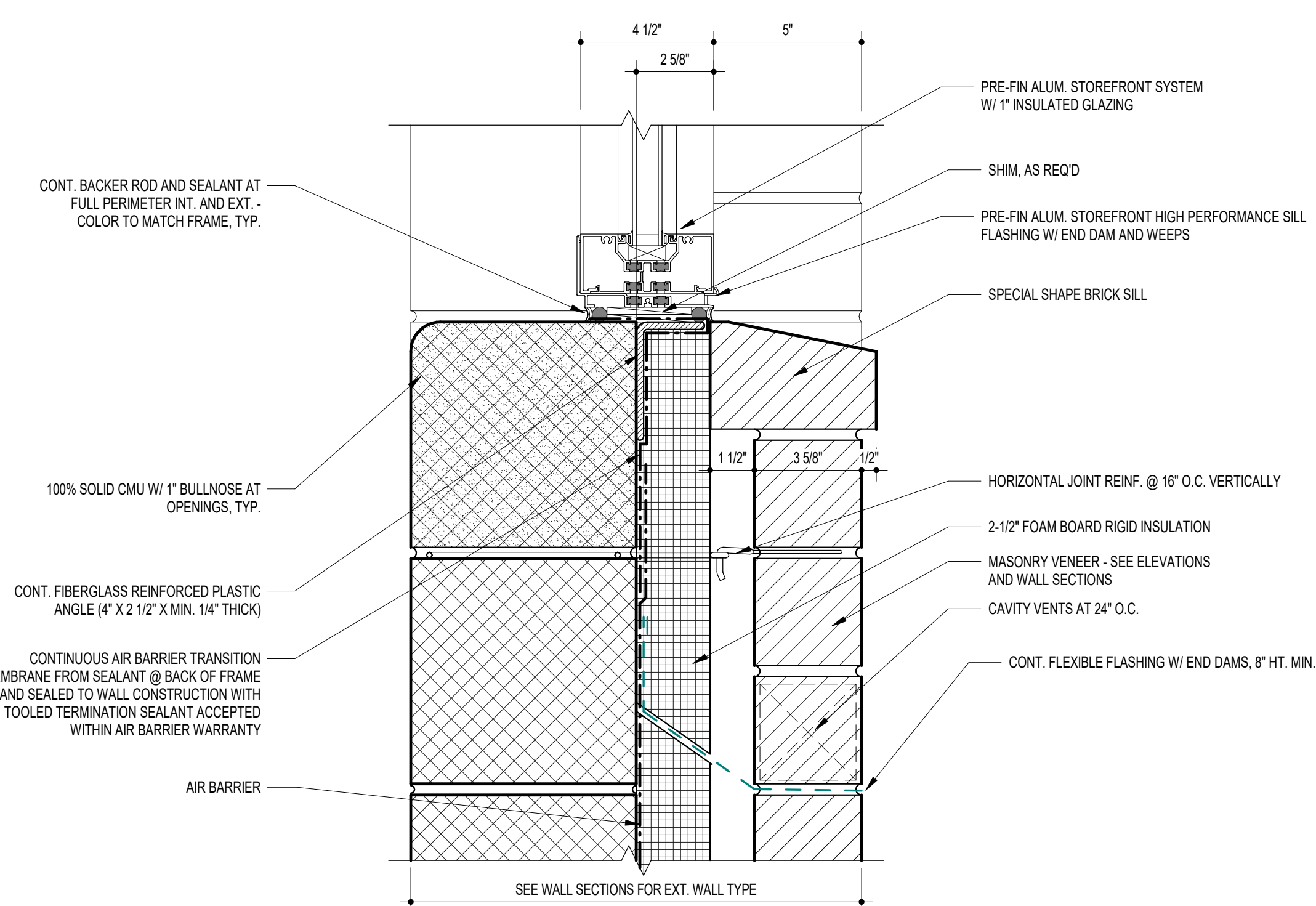
J6 HEAD DETAIL - STOREFRONT @ CMU  
3" = 1'-0"



F6 JAMB DETAIL - STOREFRONT @ CMU  
3" = 1'-0"



**A12** LOW ROOF FLASHING AND SILL DET. @ CLERESTORY  
3" = 1'-0"



B6 SILL DETAIL - STOREFRONT @ CMU  
3" = 1'-0"

1. A CONTINUOUS AIR BARRIER IS REQUIRED. JOINTS AND SEAMS MUST BE SEALED INCLUDING ALL TRANSOMIONS AND CHANGES IN MATERIALS. PENETRATIONS OF AIR BARRIER MUST BE CASIETED OR SEALED IN A MANNER COMPATIBLE WITH OTHER MATERIALS AND ACCEPTED BY AIR BARRIER MANUFACTURER. LINE OF PRIMARY SEALANT AT CW AND SF TO ENGAGE AIR BARRIER OR AIR BARRIER TRANSITION MEMBRANE AT ALL LOCATIONS.
2. FIBERGLASS REINFORCED PLASTIC ANGLES TO BE PROVIDED BY STOREFRONT AND CURTAINWALL MANUF. WHERE STOREFRONT OR CURTAINWALL SYSTEMS ARE ATTACHED TO FIBERGLASS REINFORCED PLASTIC ANGLES, ANGLES SHALL BE ENGINEERED FOR SYSTEM DESIGN LOADS.
3. WHERE FIBERGLASS REINFORCED PLASTIC ANGLES ARE ATTACHED TO CMU, METHOD OF ATTACHMENT TO BE APPROVED BY STRUCTURAL ENGINEER.
4. REFER TO STRUCTURAL DRAWINGS FOR ADDITIONAL LOCATIONS WHERE GROUDED CMU IS REQUIRED.

www.grimmandparker.com



EXTERIOR CMU HEAD, SILL, AND JAMB DETAILS  
NORTH EAST MIDDLE / HIGH SCHOOL  
3000 IRISTOWN ROAD, NORTH EAST, MD

[illegible]


12/22/2023  
BID SET



## RFI detail

## #005 Masonry Flashings &amp; Fenestration Details



Status	 <b>Open</b> In Review
Created on	Jun 27, 2024 by <b>Glenn Feldstein</b> (George Moehrle Masonry)
RFI type	Architectural RFI REVs
Ball in court	<b>Patrick Byrne</b> (Grimm and Parker)
Due date	Jul 8, 2024

### Question

- 1 • Spec 072726 2.4 D includes products for a preformed silicone extrusion for bonding extrusions to substrates, however, none of the details in the drawings show this. Please confirm use of this product is not required.
- 2 • Typical fenestration details on sheet A422 call for “sealant tape between drip plate and steel lintel,” however no product is specified in section 042000. Drip plate will be sealed to steel lintels with the same sealant/mastic used to lap seams in the flashing. Please confirm this meets the requirement and additional sealant tape is not required.
- 3 • York Weep Armor is specified under 042000 2.7 C 6 but not shown in the typical details. Please advise if this is required and if so, please provide detailing showing how this fits/functions with base of wall mortar collection product in the cavity.
- 4 • Details B18 & J12/A422 (and other similar) show “SS Drip Plate Flashing W/ Hemmed Edge” running from face of brick, through the cavity (with solid grout or steel below) and turning up the substrate with continuous flexible flashing on top. However, other typical through wall flashing details on sheets A422 & 423 only show the continuous flexible flashing spanning the cavity (without support from grout below). Please confirm the drip edge in details B18 & J12/A422 can be reduced to 3” deep as long as flexible through-wall flashing is fully supported.
- 5 • Several details on sheets A422-427 do not always show SS drip plates at face of brick veneer, but spec 042000 2.7 B 3 calls for a drip edge where “flashing is partly exposed and is indicated to terminate at the wall face.” Please confirm SS drip edge shall be used at all masonry through wall flashing locations unless a roofer’s reglet (or sim.) is required.

### References

#### Files (1)

- [RFI 005 - A422 Markup.pdf](#)

**Sheets (2)**

- [A423](#)
- [A422](#)

**Impact**

Cost impact	Unknown
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Schedule impact	No
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**Other attributes**

Priority	Normal
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Discipline	Exterior Envelope, Masonry
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Category	Constructability, Design Coordination, Documentation Conflict
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Location	-
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Location details	Building facade
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External id	-
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Co-reviewer(s)	
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Posted to Drawings/ Specifications	YES
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Trade's RFI No.	-
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**Comments****By****At**

No comments were added to this RFI.

**G+P Response:**

1. The preformed silicone extrusion is required at joints where there is a change in substrate, CMU expansion joints, gyp sheathing vertical expansion joints, masonry expansion joints between CMU and concrete, etc. See details on sheet A427.
2. See attached basis-of-design product from York Flashings - UniverSeal US-100 Liquid Tape, or approved equal.
3. Both the Weep-Armor and Weep-Net are required. The Weep-Armor is installed first (see attached cut sheet) and the Weep-Net rests on top of the Weep-Armor.
4. No. Install drip edge per details.
5. Paragraph 2.7.B begins with "UNLESS OTHERWISE INDICATED...". Install the flexible flashing as detailed on the contract documents.

**Patrick Byrne 7.2.2024**

## Weep-Armor™

### Description

A free-draining mesh, made from polymer strands that will not degrade within the wall cavity. This wicking fabric is designed to keep weep holes clear of mortar droppings and debris. When placed in the cavity on top of the through-wall flashing at the base of a wall, the Weep-Armor shields and provides water a path to the weep hole vents. Weep-Armor does not oxidize, rot, support mold or fungus, or react with common building materials,

### WEEP-ARMOR™

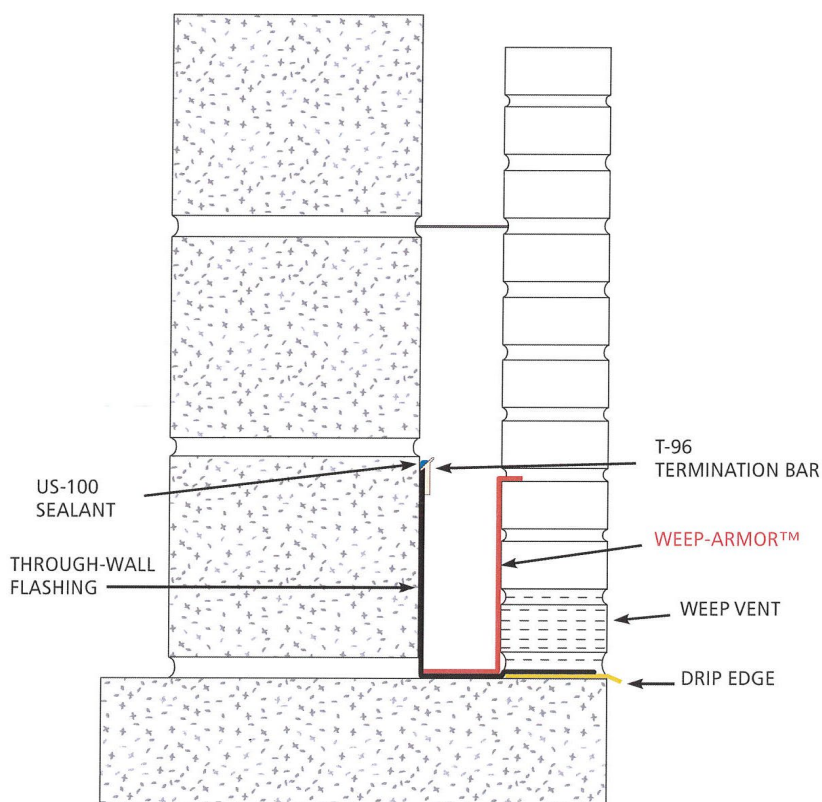
DRAWING HAS BEEN EXPANDED FOR CLARITY

### Description & Benefits:

- One size fits cavity spacing 1' to 6"
- Keeps weep vents clear of:
  - Mortar dropping
  - Dirt, silt, fines
  - Construction debris
- Prevents insect intrusion
- Mold resistant: passes ASTM D3273
- Fire resistant: passes ASTM E84, Class A
- Life of the wall warranty
- Compatible with:
  - Air barriers
  - Spray Polyurethane Foam
  - Cavity wall insulations
  - Construction sealants

### Polymer Strands:

- Made of 93% recycled content



Submittal Date: \_\_\_\_\_ Bid Date: \_\_\_\_\_

Project: \_\_\_\_\_

Project Address: \_\_\_\_\_

Contractor: \_\_\_\_\_ Phone: \_\_\_\_\_ E-mail: \_\_\_\_\_

Notes: \_\_\_\_\_

Architectural Firm: \_\_\_\_\_ Project Architect: \_\_\_\_\_

☐ Approved

☐ Not Approved

Remarks: \_\_\_\_\_



# UniverSeal US-100

## LIQUID TAPE

### Polyether Sealant, Vertical Seam Sealer

#### Key Properties

- Compatible with all York's flashings
- Compatible with concrete, brick and masonry
- Compatible with foam board & exterior gypsum sheathing
- No VOCs (volatile organic compounds)
- No solvents

#### Description

**UniverSeal US-100 LIQUID TAPE** is a polyether based, moisture curing, elastomeric sealant. It forms a seamless, monolithic exterior working surface that will keep the structure watertight. Its distinctive blue color allows for quick & easy visual verification that all seams and gaps have been effectively sealed from wind and rain.

**UniverSeal US-100 LIQUID TAPE** is a non-shrinking, 100% solids, moisture-cure polymer and contains no solvents and trace amounts of VOC's. It skins in one hour, cures completely in three to seven days (cure rate varies with temperature and relative humidity) and is paintable within 24 hours.

#### Uses

**UniverSeal US-100 LIQUID TAPE** is for use on ASTM C 1177 exterior gypsum sheathing (Dens Glass Gold®), Foamular®, Styrofoam®, EPS, fiber-board and plywood construction materials. It can be left exposed for up to 6 months. It is compatible with asphaltic materials. **US-100** is also recommended for use as a term bar sealant with all of York's flashings and in that application can be applied over the airbarrier coatings and is also appropriate for use with masonry back-up walls.

**UniverSeal US-100 LIQUID TAPE** incorporated into the project allows compliance to International Energy Conservation Code (IECC) mandatory requirements to seal the building envelope (seal all joints between construction material) (Section 502.4.3), mandatory Air Leakage control (Section 502.4) and mandatory Moisture Control (Section 502.5).

#### Technical Data

- Elongation ASTM D412/C1135 200%
- Viscosity: non-slump, gun grade mastic 750, 000 cps @ 72°F
- Skin Over Time: 25 minutes @ 72°F 40% RH
- Set time (60mil film): 1 hour @ 72°F 40% RH
- Appearance: lightly textured, distinctive blue color
- Density: specific gravity = 1.1 or (8.0# / gallon)
- Durometer: 27 Shore A
- Odor: mild mint ester
- VOCs: 15.7 grams per liter
- Solids: 100%
- Exposure: 6 months
- Packaging: Quart tubes, 12 tubes to a carton

#### Approved for use with polystyrene by:

- Dow
- Kingspan Greenguard
- Owens Corning Foamular

# UniverSeal US-100

## Application:

- Surface must be clean & free from dirt, oil & debris
- Do not apply below 32°F (0°C), due to frost
- Do not apply membrane to a substrate that has absorbed water
- Maintain **US-100** at room temperature before applying

**UniverSeal US-100 Liquid Tape** is a Polyether based, moisture curing, elastomeric, seam sealer for use on gypsum board cladding, Foamular®, Styrofoam®, EPS, fiber-board, plywood, masonry construction materials, and many other substrates.

**UniverSeal US-100 Liquid Tape** forms a seamless, monolithic exterior working surface that will keep the structure watertight. Its distinctive blue color verifies that all the seams and gaps have been effectively sealed from wind and rain.

**UniverSeal US-100 Liquid Tape** is solvent free and will not shrink when tooled in place. It does not contain any Polypropylene Glycol.

**UniverSeal US-100 Liquid Tape** is very fast setting and develops most of its properties within forty-five minutes after application. It becomes tack free in twenty minutes. It cures to a firm rubber seal in one hour. For best finishing performance do not allow un-tooled beads to stand for more than ten minutes. May be left exposed up to 6 months.

Prior to applying an air barrier coating **UniverSeal US-100 Liquid Tape** is installed over caps in adjacent wall cladding, sheathing and insulation board. Do not apply over air barrier coatings or other functional coatings without first testing adhesion.



July 9, 2024

Re: Cavity drainage

Glenn,

Thank you for using York products on your upcoming project. The use of both Weep Armor and Weep Net (mortar deflection netting) in the cavity is not required. Per the published Multi-Flash SS installation instructions, the recommendation is to use Weep Armor or netting.

You can find these instructions online in the Multi-Flash SS tech data sheet, <https://yorkflashings.com/products/multi-flash-ss> or attached.

**Weep Holes:** All flashing installed through masonry shall provide proper drainage to the outside. Weep holes shall be provided in the head joints on the first course immediately on top of the flashing. Weep holes shall be kept free of mortar droppings with a fabric or netting weep vent protection material.

Best Regards,

A handwritten signature in black ink, appearing to read "Meagan Elfert", written over a light blue rectangular background.

Meagan Elfert

Vice President

[melfert@yorkmfg.com](mailto:melfert@yorkmfg.com)



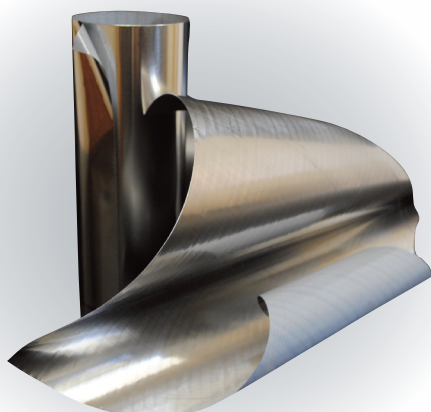


# Multi-Flash<sup>TM</sup> SS

## Stainless Steel Fabric Flashing

### Key Properties

- Type 304 (standard) & Type 316 stainless steel for more corrosive or coastal areas
- Life of the wall warranty
- Best in class puncture and tear resistance
- Fire resistant: ASTM E84 Class A material
- Mold resistant: passes ASTM D3273
- Heat resistant: will not degrade in high heat applications (like SPF applications)
- Stainless steel face is an excellent surface for air barriers & sealants to adhere to
- Exceeds all performance specifications for York's copper fabric flashing
- Unlimited UV exposure: to prevent damage, the product must be concealed within 180 days
- Flexible, easy to cut and form by hand
- Made of 60% recycled material & recyclable ♻️
- 60' rolls for fewer lap joints
- Non-staining: can be used with limestone
- HPD available



Available in:

12", 18", 24", 36" x 60' Custom sizes upon request.

### Description

**Multi-Flash<sup>TM</sup> SS** has been designed with a flexible 2 mil sheet of Type 304 stainless steel laminated on one side to a polymer fabric. **Multi-Flash<sup>TM</sup> SS** offers best-in-class puncture and tear resistance.

### Uses

- Through-wall flashing
- Transition membrane (air barriers, roofing, waterproofing)
- Window & door sill pan flashing
- Jamb closure flashing
- Roof-to-wall flashing
- Deck ledger flashing
- Compatible with:
  - Air barriers
  - Spray polyurethane foam
  - Insulation boards
  - Construction sealants

### Through-Wall Flashing Instructions

**Surface Preparation:** All surfaces receiving through-wall flashings shall be free from loose materials, and reasonably smooth. There shall be no slopes that will form pockets or prevent free drainage of water to the exterior surfaces of the wall. All work shall be executed in conformance with accepted trade practice. Install with stainless steel facing outward.



**Application** of through-wall flashing for backup walls built with masonry or studs with sheathing. **Stainless Steel faces up and to the outside.**

**Horizontal Masonry Surfaces:** Flashing shall be laid on a bed of approved sealant and topped with a fresh bed of mortar. Flashing shall be set flush with the exterior face of the wall.

**Vertical Masonry Surfaces:** Spot the surface with an approved sealant until the masonry is set. Terminate in one of the following ways:

- Use a termination bar to fasten the flashing to the backer wall and seal the top edge with an approved sealant.
- Use other methods indicated in the drawings.

**Foundation Sill Flashing:** The flashing for foundation sills shall be laid on a bed of approved sealant and topped with a fresh bed of mortar. Flashing shall be set flush with the exterior face of the masonry and turned up on the inside not less than 2" or be carried upward across the cavity a minimum of 6". Flashing will then be secured to the backer wall as stated above. Where sill and column meet, flashing shall be brought a minimum of 10" up the column and be secured with an approved sealant and termination bar.

**Cavity Wall Flashing:** Flashing shall be set in a bed of approved sealant and topped with a bed of mortar. Flashing shall be set flush with the exterior face of the masonry wall and carried through the wall, across the cavity, upward a minimum of 8", and secured to the backer wall as described above in the Vertical Masonry Surfaces section.

**Shelf Angle Flashing:** Shelf angle flashing shall be trimmed flush with the outside toe of the shelf angle, go up the face of the beam, and then through the wall turning up on the inside not less than 2".

**Parapets or Copings:** Flashing for parapets or copings shall be installed in a bed of approved sealant and topped with a fresh bed of mortar. Flashing shall be placed flush with the exterior faces of both sides of the wall.

**Head and Sill Flashing:** The flashing shall be placed flush with the outside of the wall or lintel angle, then carried through or up the wall as indicated. Flashing shall extend 6" beyond each side of the opening and be turned up at the sides to create end dams.

**Other Areas:** All membrane flashing at other locations shall be installed in accordance with the manufacturer's recommendations.

**Joining of Materials:** Joints shall be made by using **York 304 SA** and embedding each side of the connecting flashing 2" on this butyl tape. Another option is lapping the flashing a minimum of 6" and coating the contacting surfaces with an approved sealant. Using an interlocking lap per manufacturer's detail is also acceptable with the use of an approved sealant. All edges must be sealed.

**Weep Holes:** All flashing installed through masonry shall provide proper drainage to the outside. Weep holes shall be provided in the head joints on the first course immediately on top of the flashing. Weep holes shall be kept free of mortar droppings with a fabric or netting weep vent protection material.

**Corners and End Dams:** Corners and end dams can be made per instructions on York's website ([www.yorkflashings.com](http://www.yorkflashings.com)) or use **York's preformed corners and end dams**. End dams shall be folded, not cut.

TECHNICAL DATA MULTI-FLASH™ SS		
PROPERTY	TEST METHOD	MULTI-FLASH SS
Puncture (PSI)	ASTM E154	2,500+
Tensile	ASTM D412	100,000+
Fire Resistant	ASTM E84	Pass
Mold Resistant	ASTM D3273	Pass
Recycled Content		60% - 70%
Recyclable Material		Yes
UV Exposure (days)		Unlimited
Warranty		Lifetime

RFI detail

#006 Special Masonry Veneer Shapes



Status	<div><div></div>Closed</div>
Created on	Jun 27, 2024 by <b>Glenn Feldstein</b> (George Moehrle Masonry)
RFI type	Architectural RFI REVs
Ball in court	<b>Glenn Feldstein</b> (George Moehrle Masonry)
Answered	Aug 6, 2024 by <b>Patrick Byrne</b> (Grimm and Parker)

Question

Please provide dimensioned details of all special brick shapes:

- o Sill A18/A425
- o Obtuse corner A101D (A'/1#) - please provide angle (105deg?)
- o Acute corner A101D (CL-C'/1#)- please provide angle (75deg?)
- o Obtuse corner K10/A519- please confirm 105deg angle
- o Obtuse corner H4/A518- please confirm 105deg angle
- o Please note that the chamfered building stone call out on sheet A101E (at corner CL-D'/1#) cannot be manufactured. Please confirm use of a straight joint is acceptable.

**Suggested answer**

Straight joint with sealant to match control joints is acceptable.

Official response

Patrick Byrne (Grimm and Parker): Provide custom sample delivered to my office at your earliest convenience.

*By **Patrick Byrne** (Grimm and Parker) - Aug 6, 2024, 2:37 PM EDT*

References and Attachments

Files (3)

- [#006 - Special Masonry Veneer Shapes Response.pdf](#)
- [#006 - Special Masonry Veneer Shapes Revised Response.pdf](#)
- [RFI 006 Markup.pdf](#)

Sheets (4)

- [A519](#)
- [A425](#)
- [A101D](#)
- [A518](#)

Submittals (1)

<div>Closed</div>	<a href="#">#042000-004 - Brick, Manufactured Stone, Masonry Cement, and Weep Holes - Samples</a>		
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Impact

Cost impact	Unknown
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Schedule impact	No
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Other attributes

Priority	Normal
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Discipline	Masonry
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Category	Documentation Incomplete
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Location	-
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Location details	See markups on sheets. Various locations
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External id	-
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Co-reviewer(s)

Posted to Drawings/ Specifications	YES
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Trade's RFI No.	-
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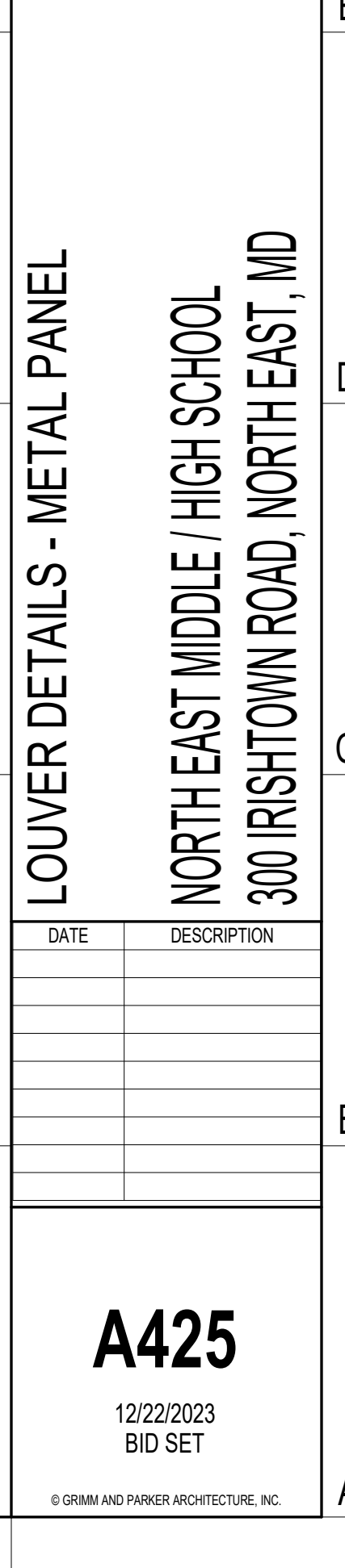
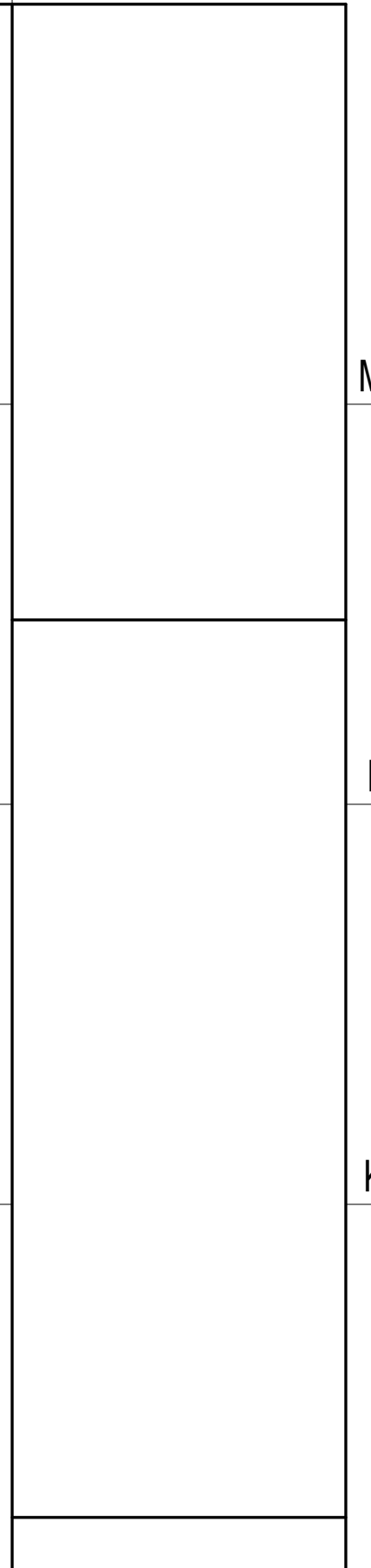
Activities	By	At
<b>Joshua Postadan</b> changed the status from  <b>Open</b> Answered to  <b>Closed</b> <b>Official response:</b> Patrick Byrne (Grimm and Parker): Provide custom sample delivered to my office at your earliest convenience. set Ball in court to <b>Glenn Feldstein</b> (George Moehrle Masonry)	<b>Joshua Postadan</b>	Aug 29, 2024, 8:21 AM EDT
The sample requested from Grimm + Parker is being tracked under Submittal 04 20 00-004. Please review the response to RFI #006. Provide notification of any cost implications immediately. If a proposal has cost impacts, please request an RFQ from HESS. Send a proposal no later than the close of business within 7 days of receipt of this RFI response. HESS will consider this as a no cost change and close this issue should a proposal not be received by this date. A lack of response for any credit items will prompt HESS Construction to assign a cost value that will be deducted from your contract sum. Note: The RFQ is simply an administrative tracking tool, and in no way represents that additional work, cost or time is acknowledged, authorized, directed, or approved.	<b>Joshua Postadan</b>	Aug 29, 2024, 8:21 AM EDT
<b>Patrick Byrne</b> changed the status from  <b>Open</b> In Review to  <b>Open</b> Answered set Ball in court to <b>Joshua Postadan</b> (HESS Construction Co., LLC)	<b>Patrick Byrne</b>	Aug 6, 2024, 2:37 PM EDT
<b>Patrick Byrne</b> updated a response: Provide custom sample delivered to my office at your earliest convenience.	<b>Patrick Byrne</b>	Aug 6, 2024, 2:37 PM EDT
<b>Joshua Postadan</b> changed the status from  <b>Open</b> Answered to  <b>Open</b> In Review changed the <b>due date</b> to Aug 11, 2024 set Ball in court to <b>Patrick Byrne</b> (Grimm and Parker)	<b>Joshua Postadan</b>	Aug 5, 2024, 12:59 PM EDT
Returning for review as G+P is in contact with PVB for custom cast stone piece.	<b>Joshua Postadan</b>	Aug 5, 2024, 12:59 PM EDT
<b>Patrick Byrne</b> Has there been any updates on the custom cast piece from the manufacturer?	<b>Joshua Postadan</b>	Jul 18, 2024, 12:21 PM EDT
<b>Patrick Byrne</b> changed the status from  <b>Open</b> In Review to  <b>Open</b> Answered set Ball in court to <b>Joshua Postadan</b> (HESS Construction Co., LLC)	<b>Patrick Byrne</b>	Jul 16, 2024, 4:58 PM EDT
<b>Patrick Byrne</b> added a response: See updated response.	<b>Patrick Byrne</b>	Jul 16, 2024, 4:58 PM EDT
<b>Patrick Byrne</b> added a reference to a File <b>#006 - Special Masonry Veneer Shapes Revised Response.pdf</b>	<b>Patrick Byrne</b>	Jul 16, 2024, 4:57 PM EDT
<b>Joshua Postadan</b> changed the status from  <b>Open</b> Answered to  <b>Open</b> In Review changed the <b>due date</b> to Jul 17, 2024 set Ball in court to <b>Patrick Byrne</b> (Grimm and Parker)	<b>Joshua Postadan</b>	Jul 11, 2024, 7:12 AM EDT

The floor plans call for chamfered shapes but the enlarged details and plans do not show a chamfer. Please provide a drawing/detail showing the desired special shapes at each location.	<b>Joshua Postadan</b>	Jul 11, 2024, 7:12 AM EDT
<b>Patrick Byrne</b> added a reference to a File <b>#006 - Special Masonry Veneer Shapes Response.pdf</b>	<b>Patrick Byrne</b>	Jul 8, 2024, 2:39 PM EDT
<b>Patrick Byrne</b> changed the status from  <b>Open</b> In Review to  <b>Open</b> Answered set Ball in court to <b>Joshua Postadan</b> (HESS Construction Co., LLC)	<b>Patrick Byrne</b>	Jul 8, 2024, 2:38 PM EDT
<b>Patrick Byrne</b> added a response: See attached RFI response.	<b>Patrick Byrne</b>	Jul 8, 2024, 2:38 PM EDT
<b>Joshua Postadan</b> added a reference to a File <b>RFI 006 Markup.pdf</b>	<b>Joshua Postadan</b>	Jul 1, 2024, 2:47 PM EDT
<b>Joshua Postadan</b> changed the status from  <b>Open</b> Waiting for Submission to  <b>Open</b> In Review set Ball in court to <b>Patrick Byrne</b> (Grimm and Parker)	<b>Joshua Postadan</b>	Jul 1, 2024, 2:17 PM EDT
changed the <b>location details</b> to <i>See markups on sheets. Various locations</i>	<b>Joshua Postadan</b>	Jul 1, 2024, 2:17 PM EDT
changed the <b>question</b> to <i>Please provide dimensioned details of all special brick shapes: o Sill A18/A425 o Obtuse corner A101D (A'1#) - please provide angle (105deg?) o Acute corner A101D (CL-C'1#)- please provide angle (75deg?) o Obtuse corner K10/A519- please confirm 105deg angle o Obtuse corner H4/A518- please confirm 105deg angle o Please note that the chamfered building stone call out on sheet A101E (at corner CL-D'1#) cannot be manufactured. Please confirm use of a straight joint is acceptable.</i>	<b>Joshua Postadan</b>	Jul 1, 2024, 2:12 PM EDT
changed the <b>ID</b> to 006	<b>Joshua Postadan</b>	Jul 1, 2024, 1:56 PM EDT
<b>Joshua Postadan</b> added a reference to a Sheet <b>A519</b>	<b>Joshua Postadan</b>	Jul 1, 2024, 1:48 PM EDT
<b>Joshua Postadan</b> added a reference to a Sheet <b>A518</b>	<b>Joshua Postadan</b>	Jul 1, 2024, 1:48 PM EDT
<b>Joshua Postadan</b> added a reference to a Sheet <b>A101D</b>	<b>Joshua Postadan</b>	Jul 1, 2024, 1:48 PM EDT
<b>Joshua Postadan</b> added a reference to a Sheet <b>A425</b>	<b>Joshua Postadan</b>	Jul 1, 2024, 1:48 PM EDT
changed the <b>Posted to Drawings/Specifications</b> to YES	<b>Joshua Postadan</b>	Jul 1, 2024, 1:48 PM EDT
changed the <b>due date</b> to Jul 7, 2024	<b>Joshua Postadan</b>	Jul 1, 2024, 1:47 PM EDT



changed the <b>cost impact</b> to <i>Unknown</i>	<b>Joshua Postadan</b>	Jul 1, 2024, 1:47 PM EDT
changed the <b>schedule impact</b> to <i>No</i>	<b>Joshua Postadan</b>	Jul 1, 2024, 1:47 PM EDT
changed the <b>watchers</b> to <b>Glenn Feldstein</b> (George Moehrle Masonry), <b>HESS PROJECT TEAM</b>	<b>Joshua Postadan</b>	Jul 1, 2024, 1:47 PM EDT
changed the <b>question</b> to <i>Please provide dimensioned details of all special brick shapes: o Sill A18/A425 o Obtuse corner A101D (A'11#) - please provide angle (105deg?) o Acute corner A101D (CL-C'11#)- please provide angle (75deg?) o Obtuse corner K10/A519- please confirm 105deg angle o Obtuse corner H4/A518- please confirm 105deg angle o Please note that the chamfered building stone call out on sheet A101 (at corner CL-D'11#) cannot be manufactured. Please confirm use of a straight joint is acceptable.</i>	<b>Joshua Postadan</b>	Jul 1, 2024, 1:37 PM EDT
changed the <b>question</b> to <i>Please provide dimensioned details of all special brick shapes: o Sill A18/A425 o Obtuse corner A101D (A'11#)please provide angle (105deg?) o Acute corner A101D (CL-C'11#)- please provide angle (75deg?) o Obtuse corner K10/A519- please confirm 105deg angle o Obtuse corner H4/A518- please confirm 105deg angle o Please note that the chamfered building stone call out on sheet A101 (at corner CL-D'11#) cannot be manufactured. Please confirm use of a straight joint is acceptable.</i>	<b>Joshua Postadan</b>	Jul 1, 2024, 1:37 PM EDT
<b>Glenn Feldstein</b> (George Moehrle Masonry) created this RFI in <b>Open</b> Waiting for Submission status and set Ball in court to <b>Joshua Postadan</b> (HESS Construction Co., LLC).	<b>Glenn Feldstein</b>	Jun 27, 2024, 2:46 PM EDT

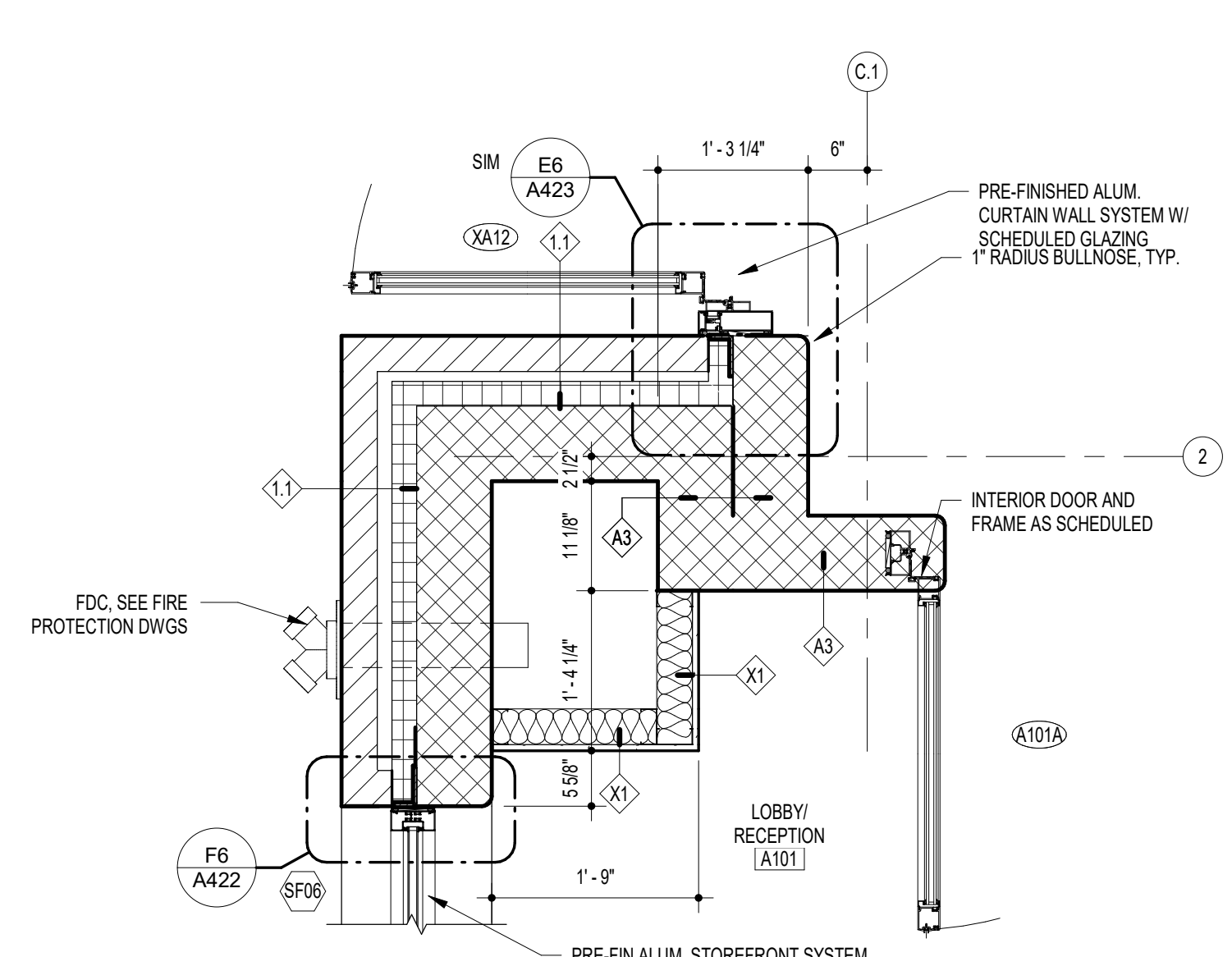




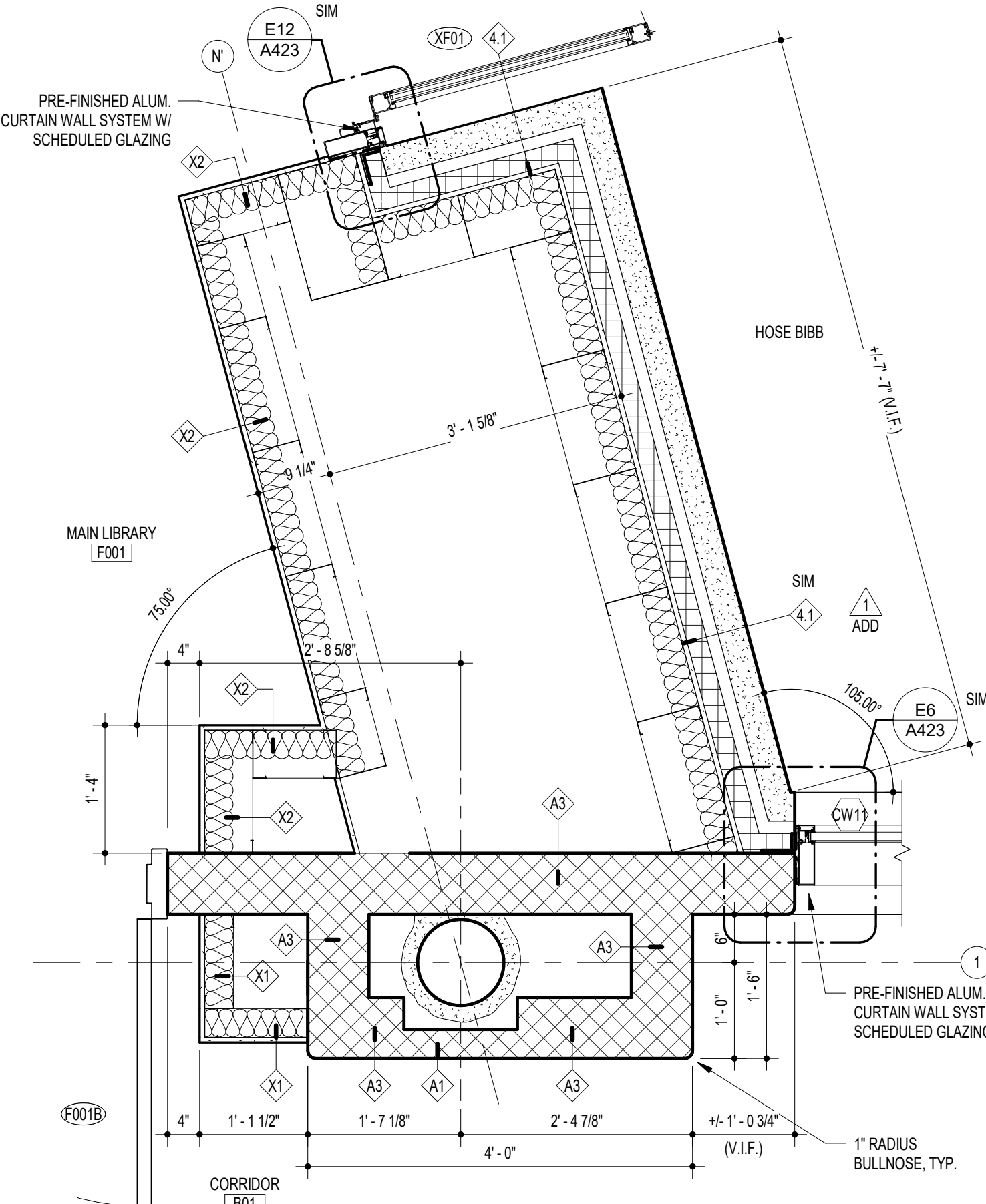
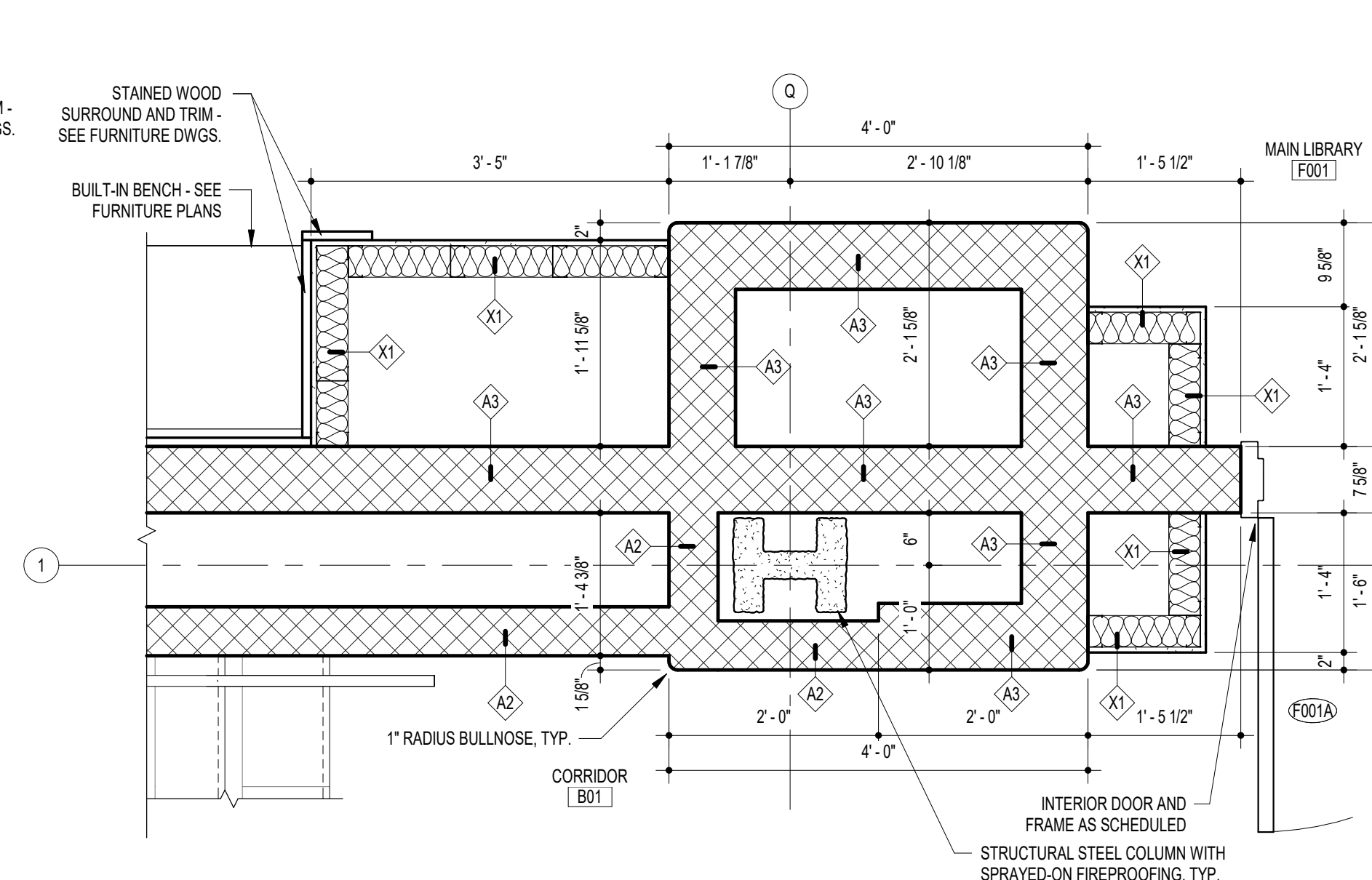
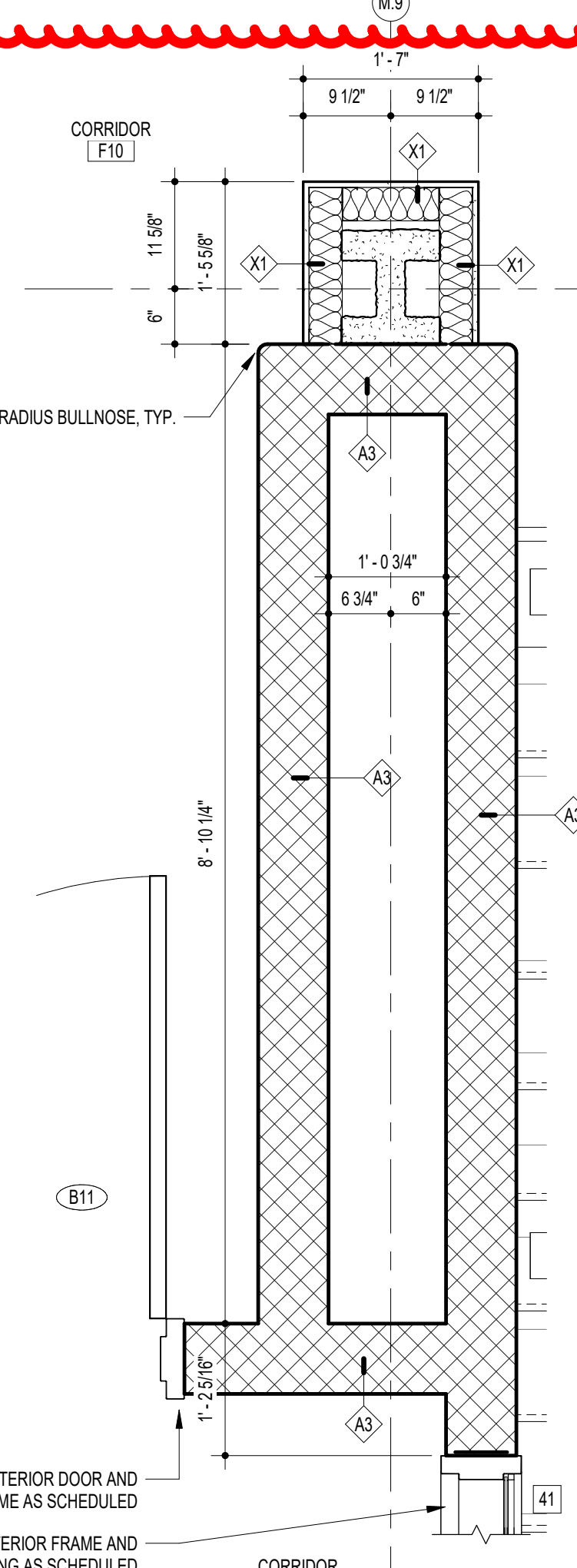
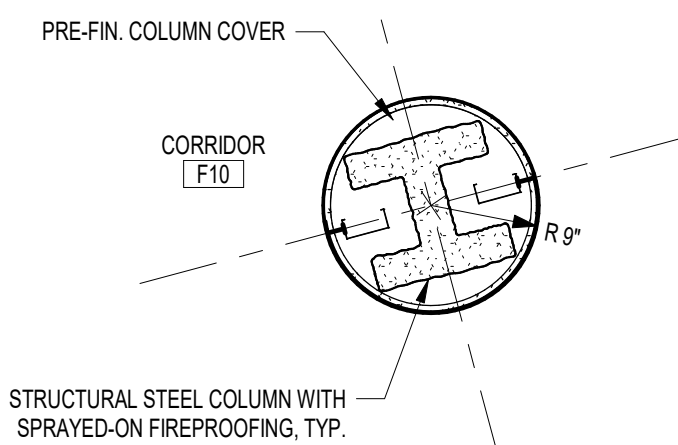
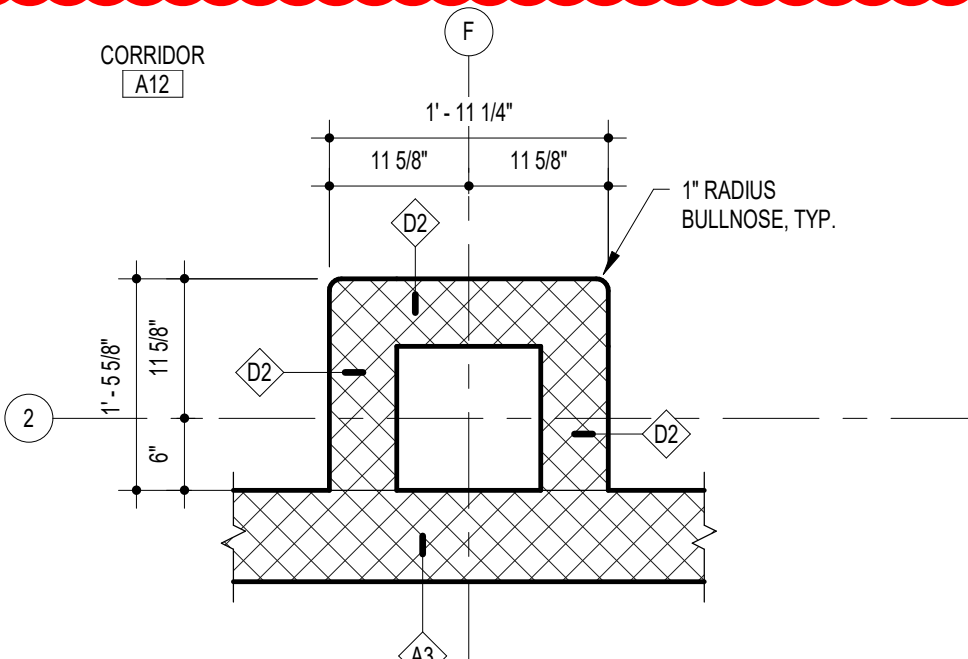
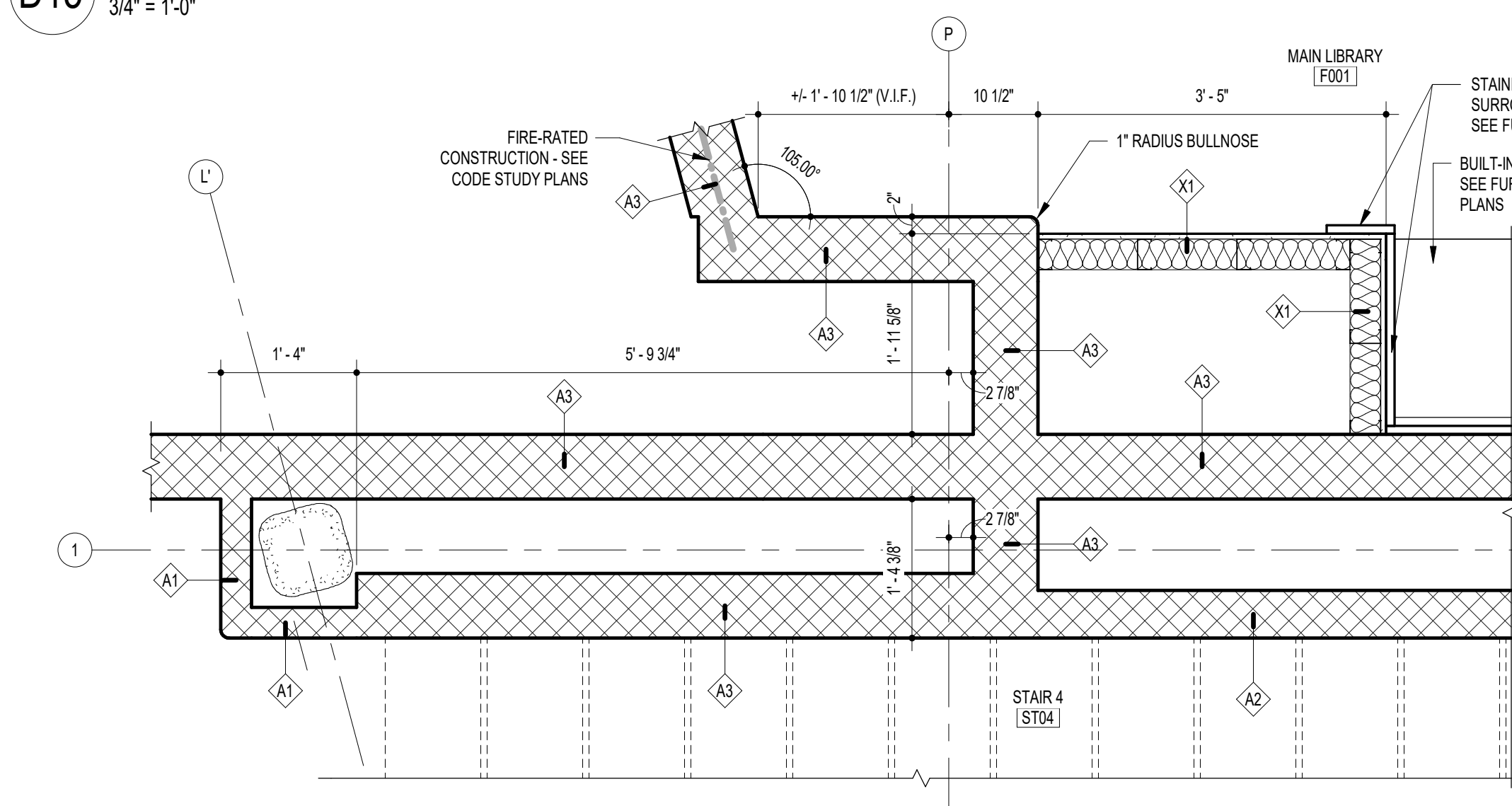
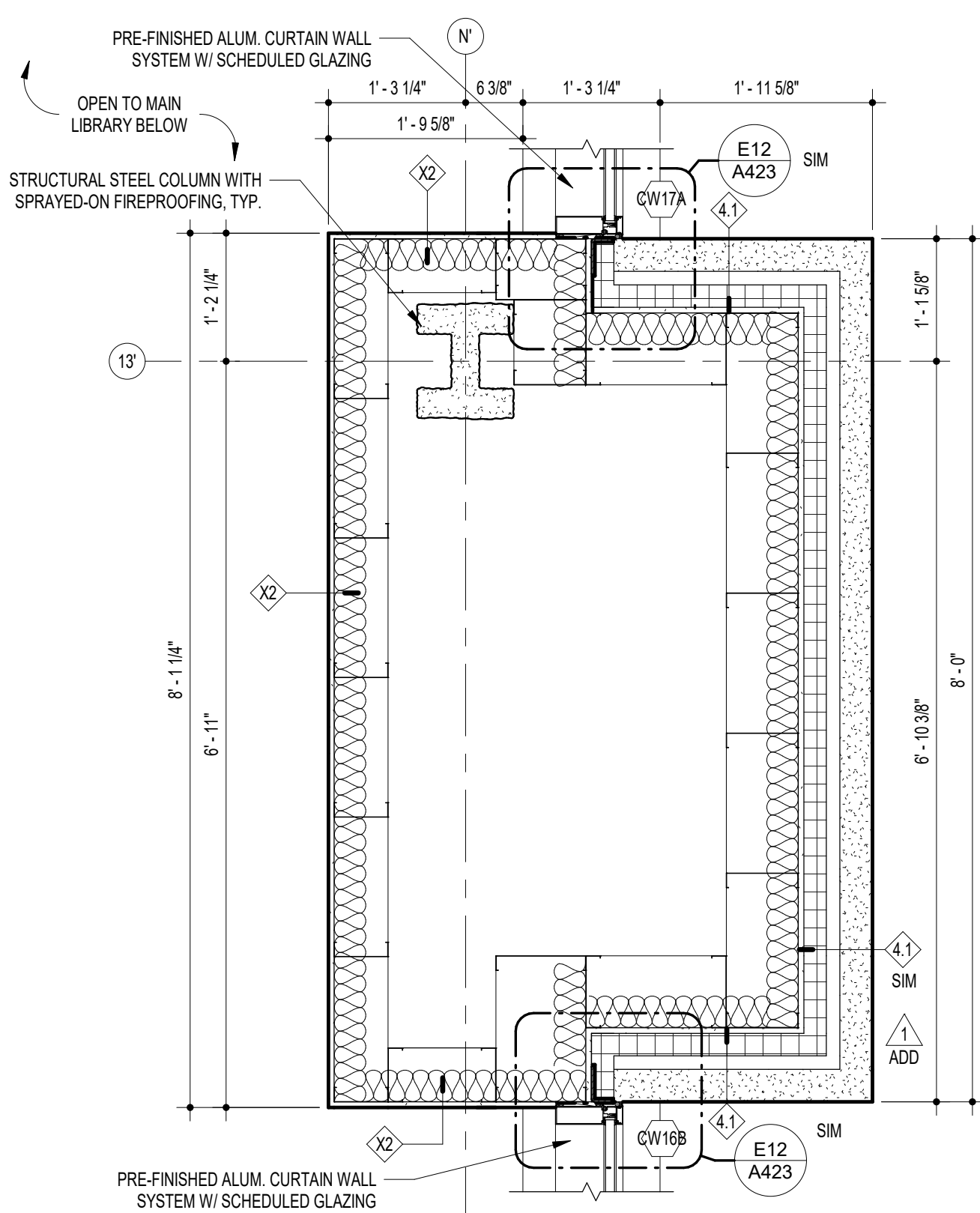
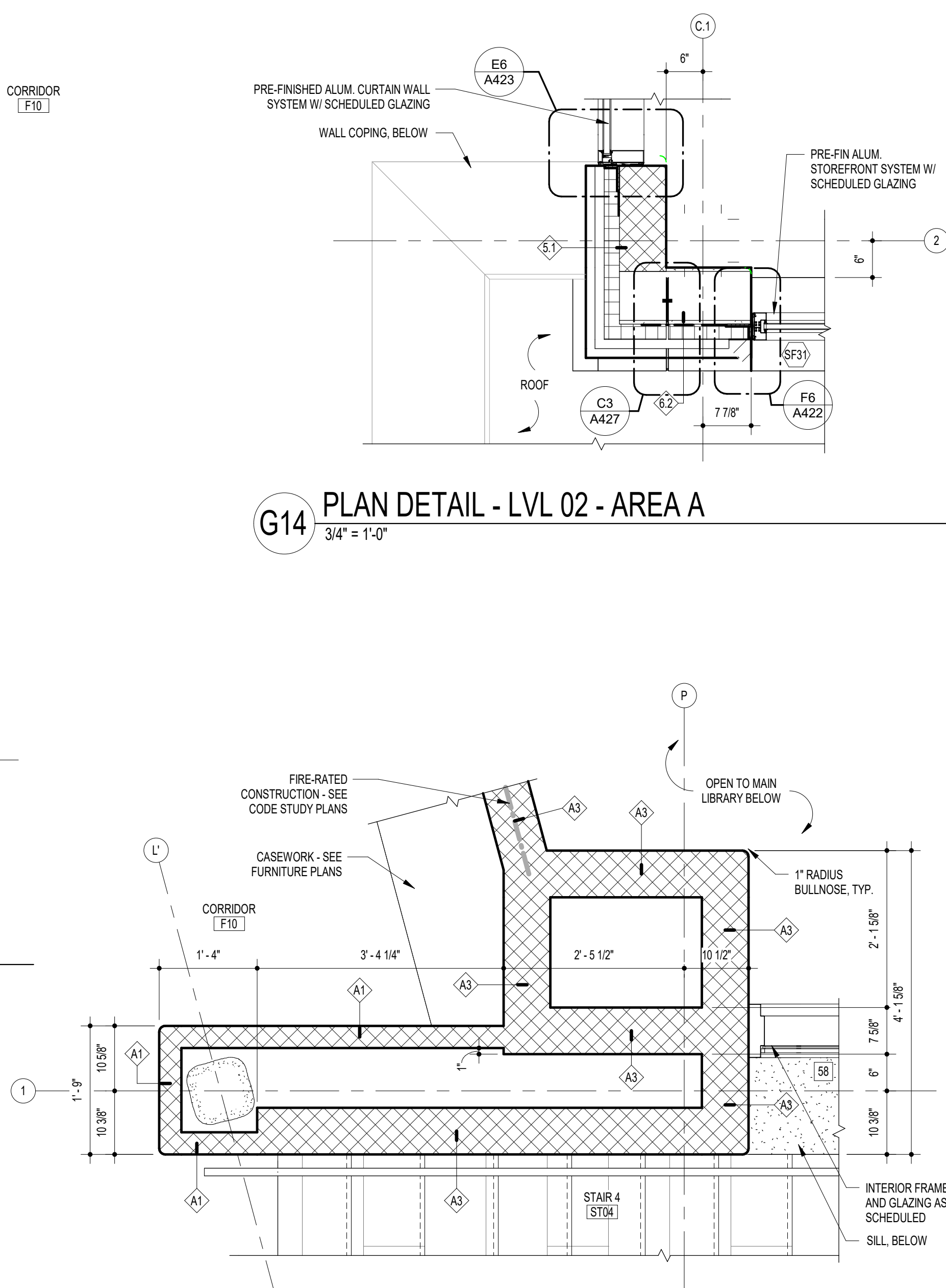
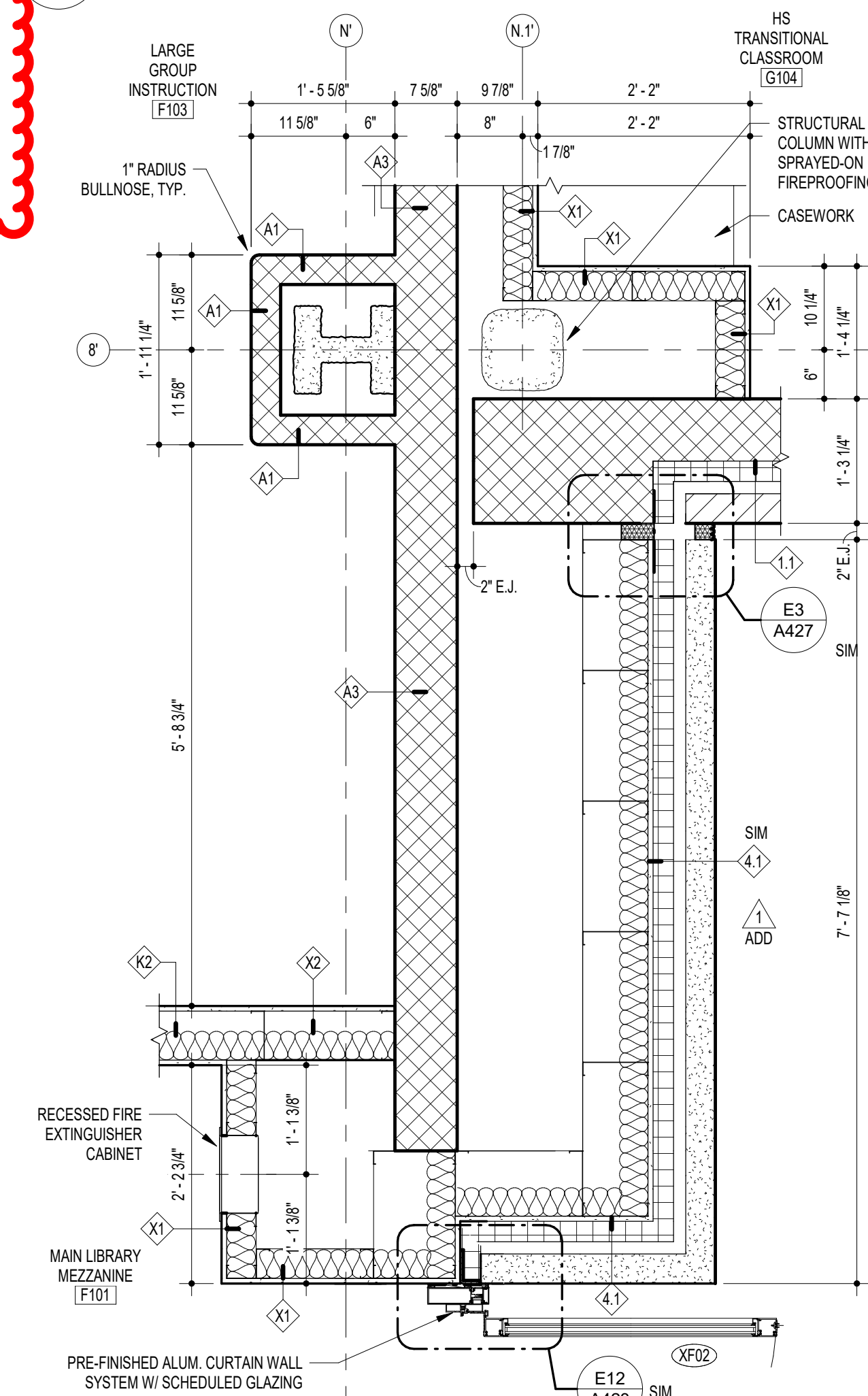
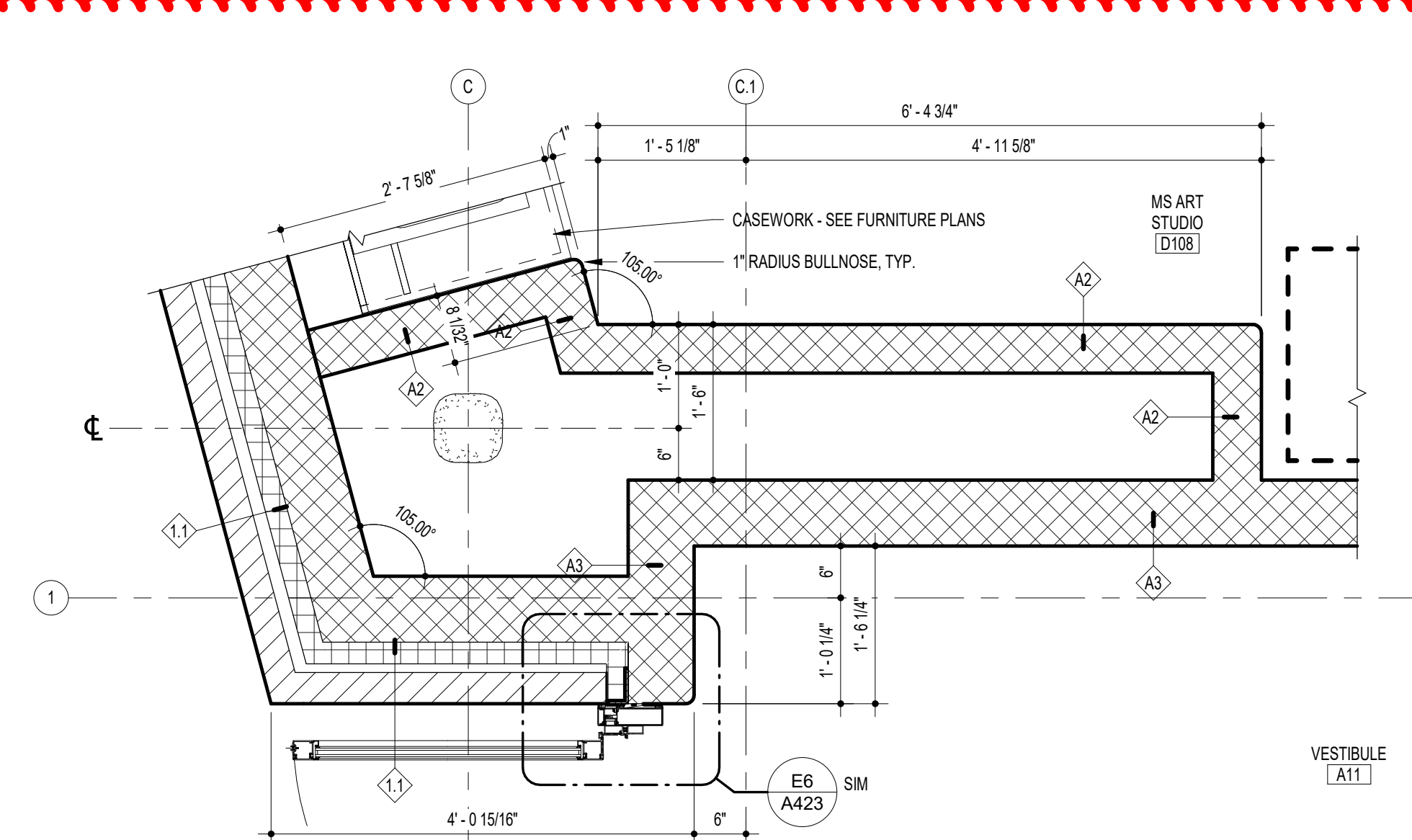




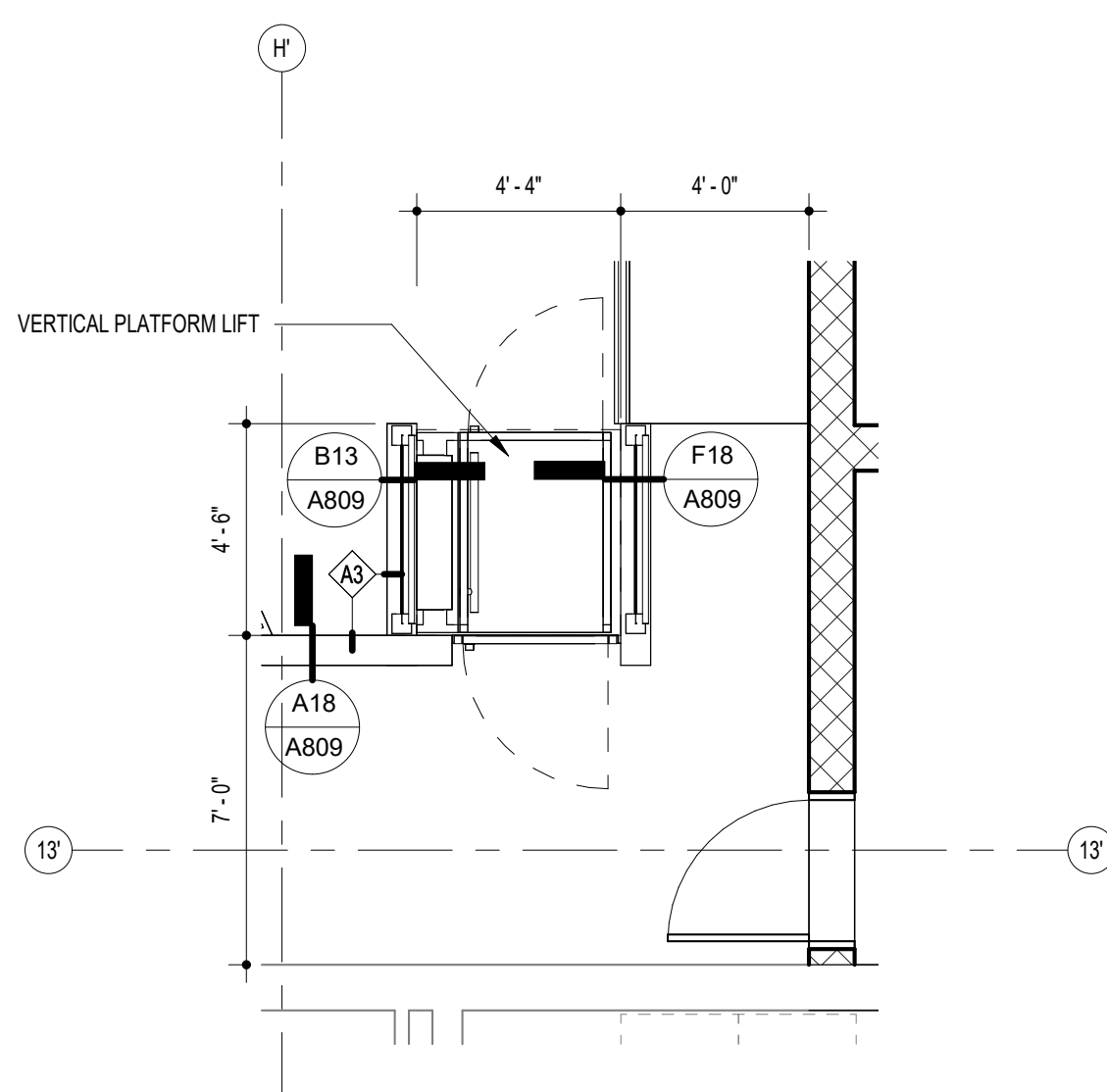




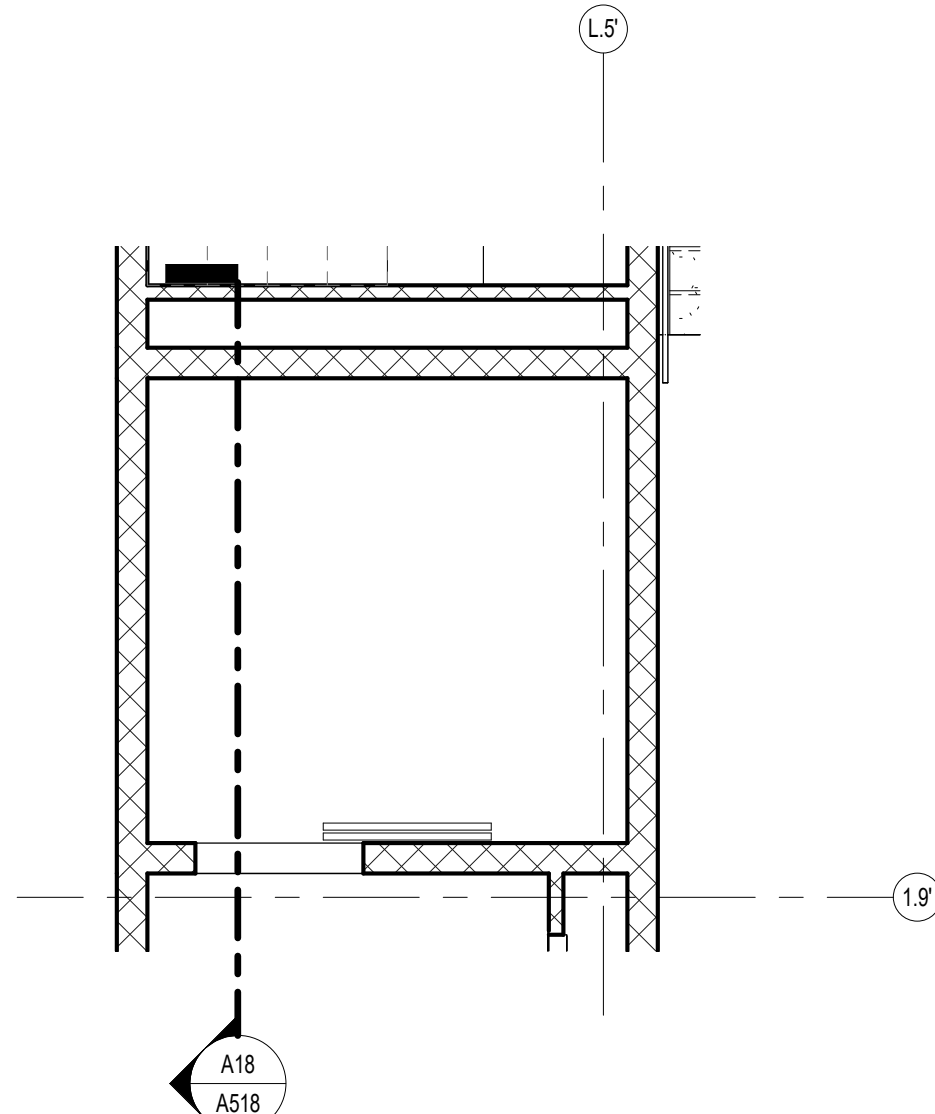
K10 PLAN DETAIL - LVL 01 - AREA D  
3/4" = 1'-0"



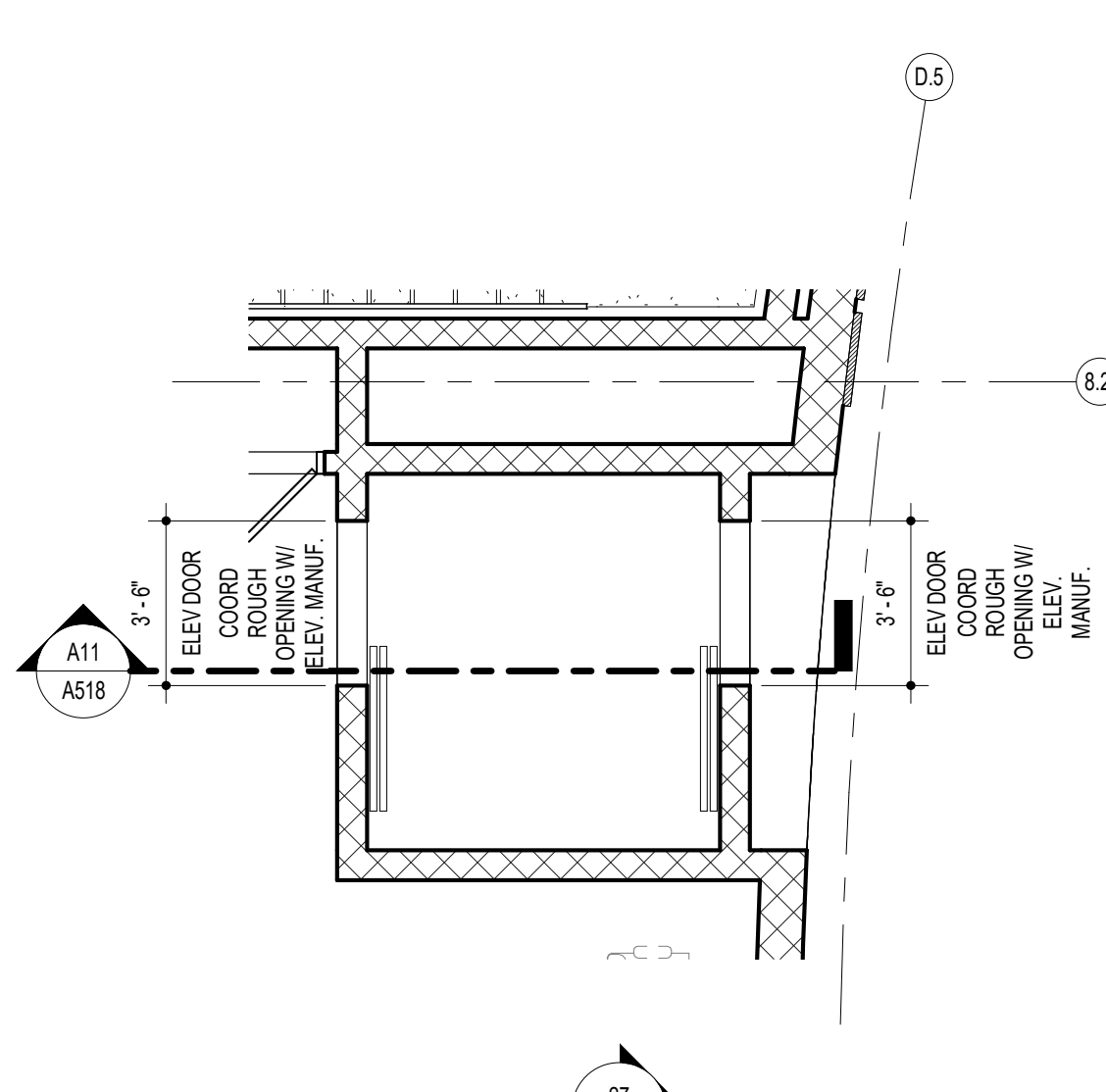




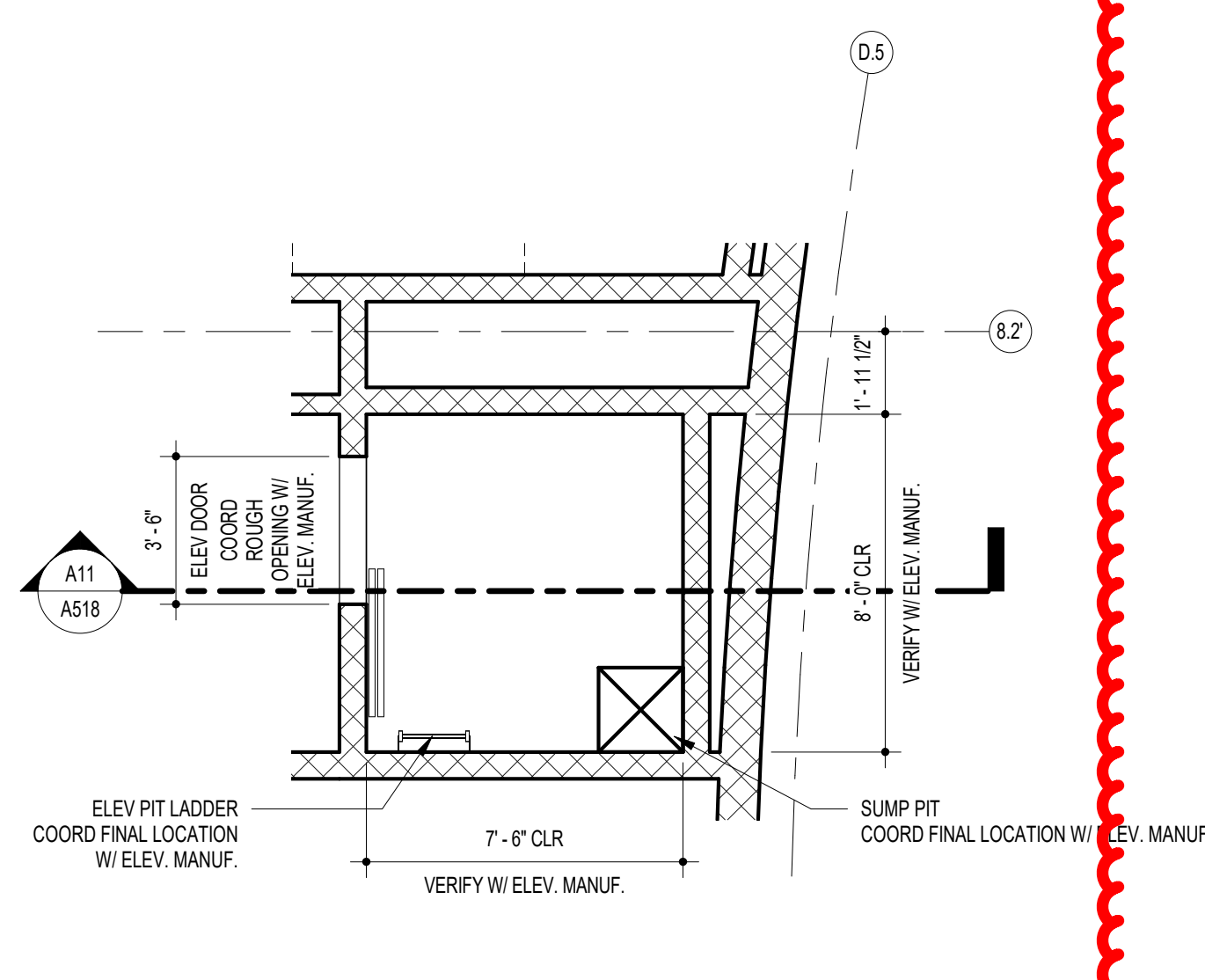
H17 PLATFORM LIFT PLAN  
1/4" = 1'-0"



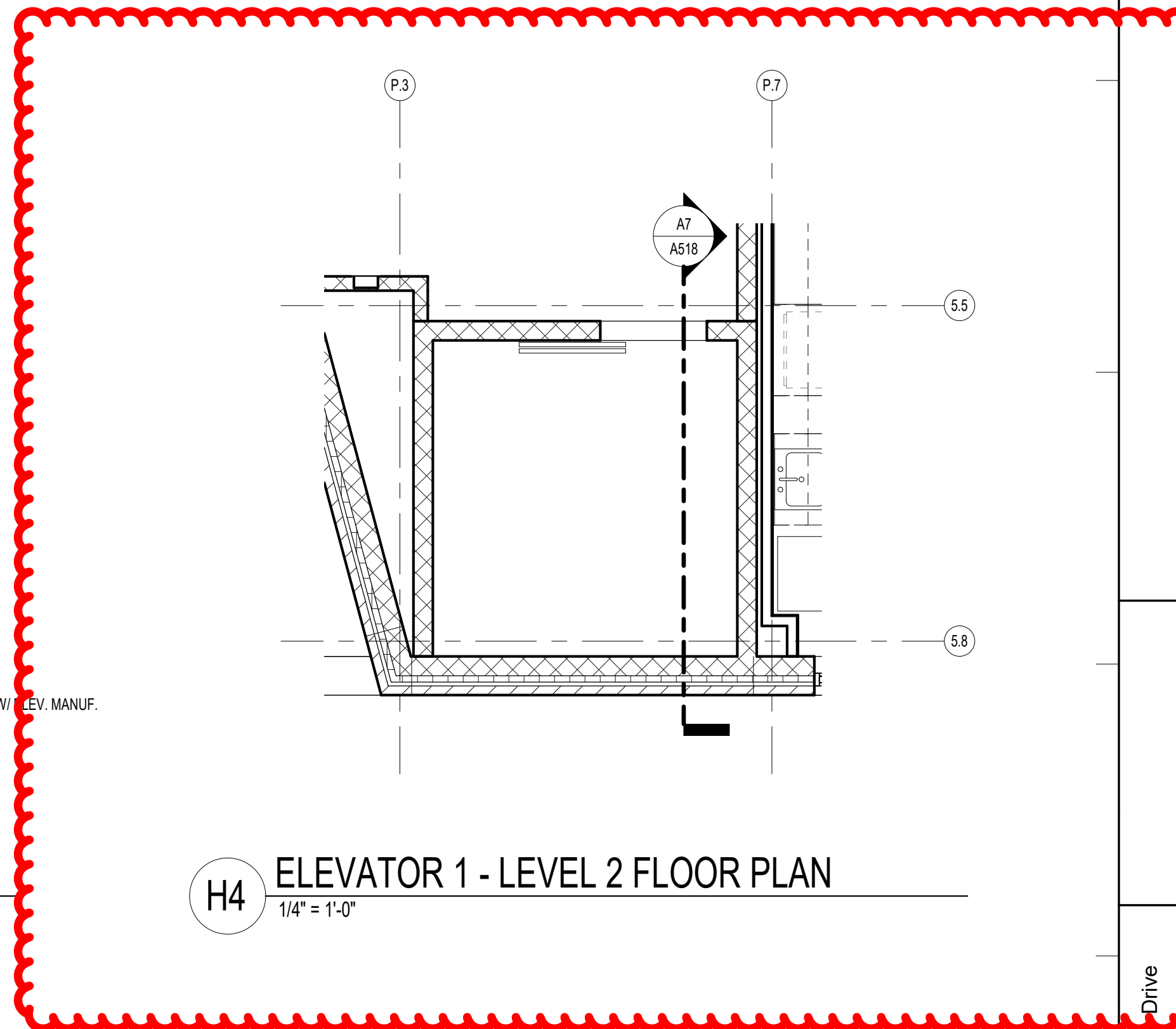
H14 ELEVATOR 3 - LEVEL 3 FLOOR PLAN  
1/4" = 1'-0"



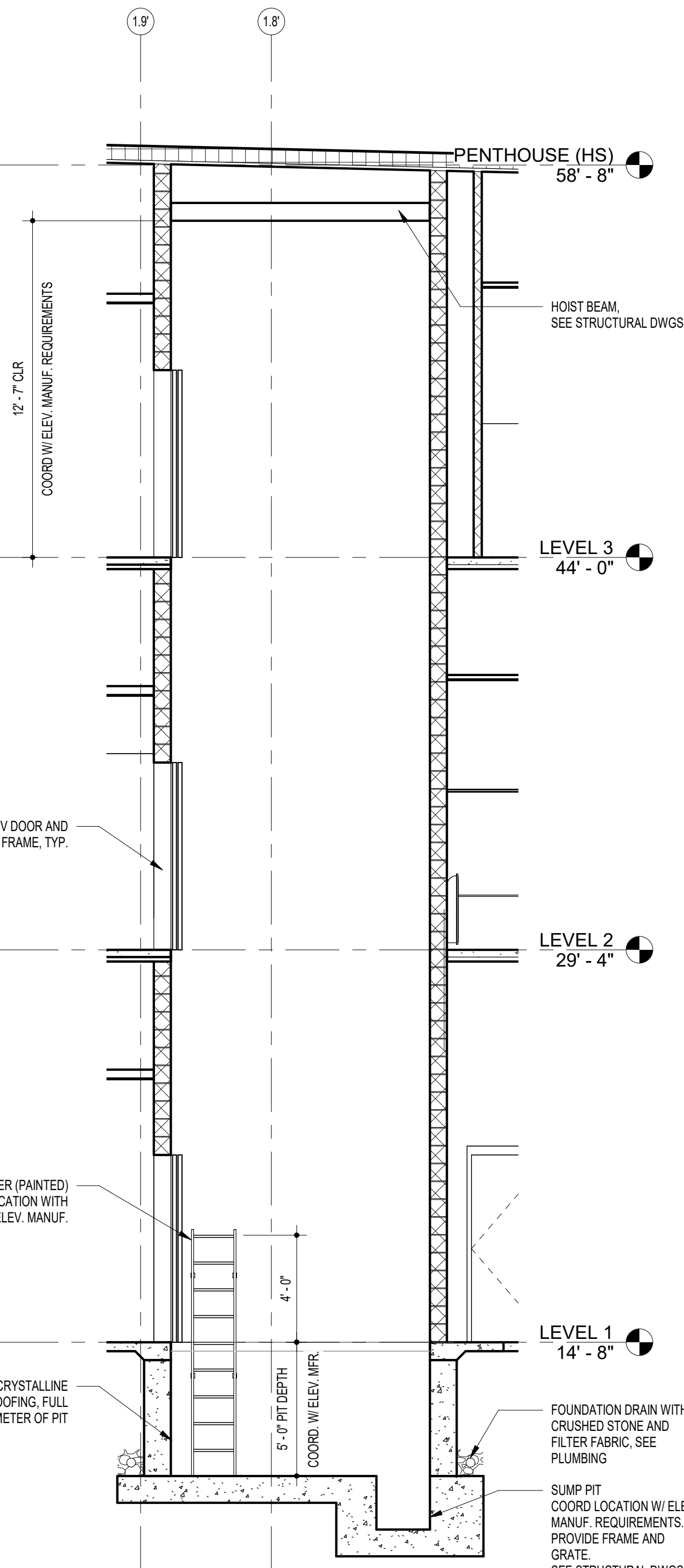
H11 ELEVATOR 2 - BALCONY LEVEL FLOOR PLAN  
1/4" = 1'-0"



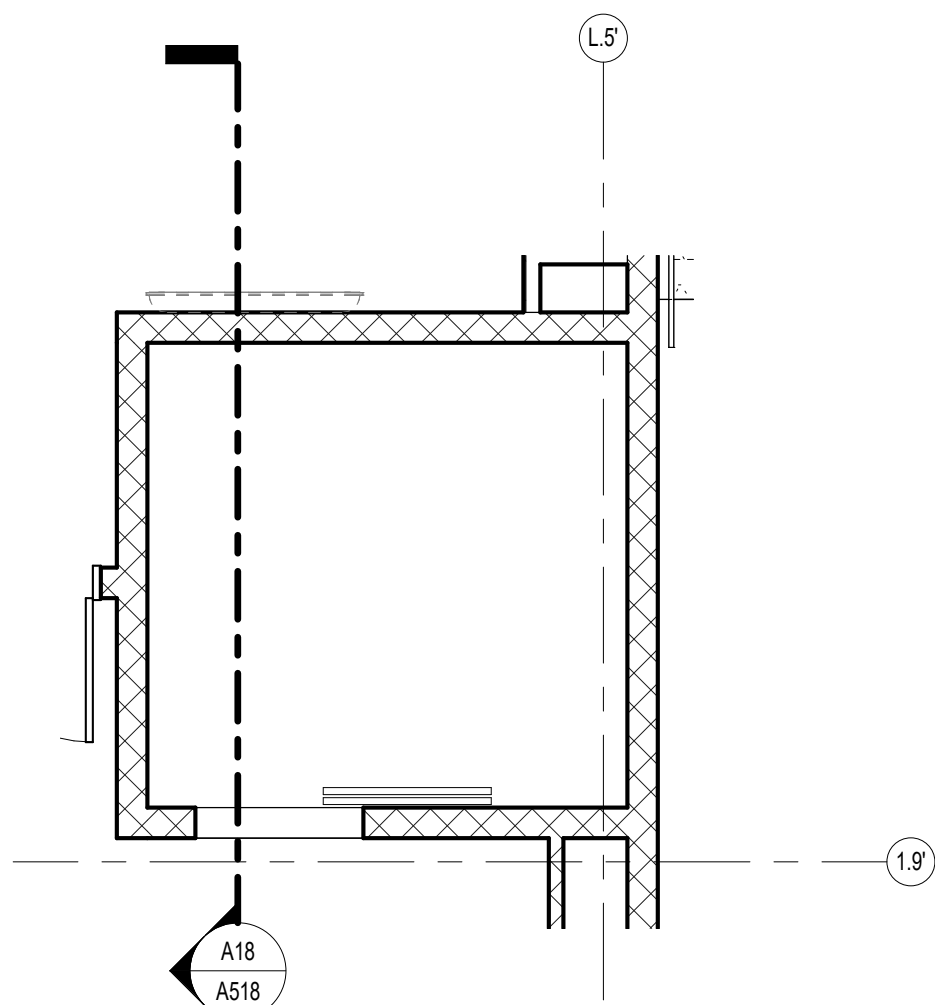
H7 ELEVATOR 2 - LEVEL 1 FLOOR PLAN  
1/4" = 1'-0"



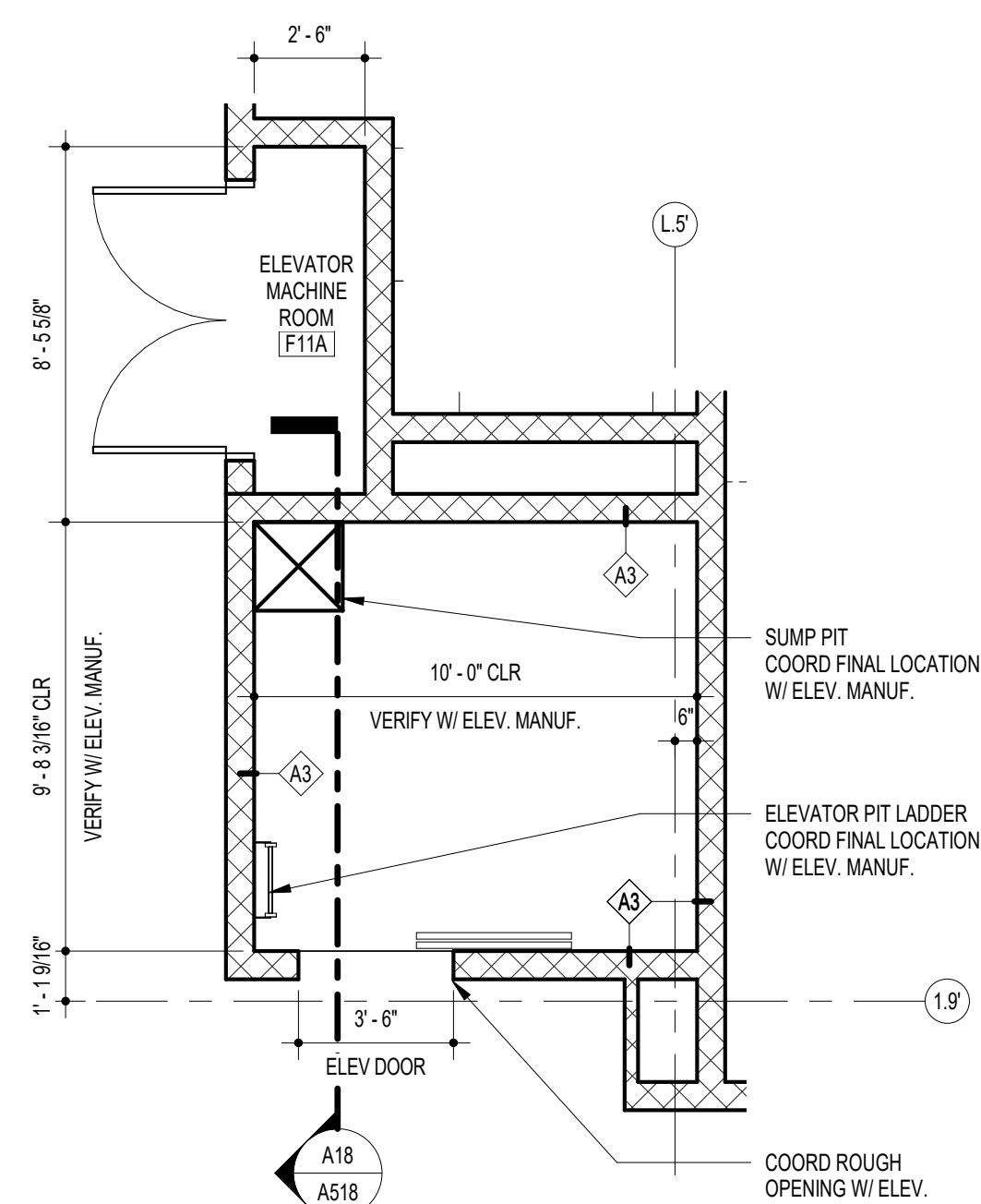
H4 ELEVATOR 1 - LEVEL 2 FLOOR PLAN  
1/4" = 1'-0"



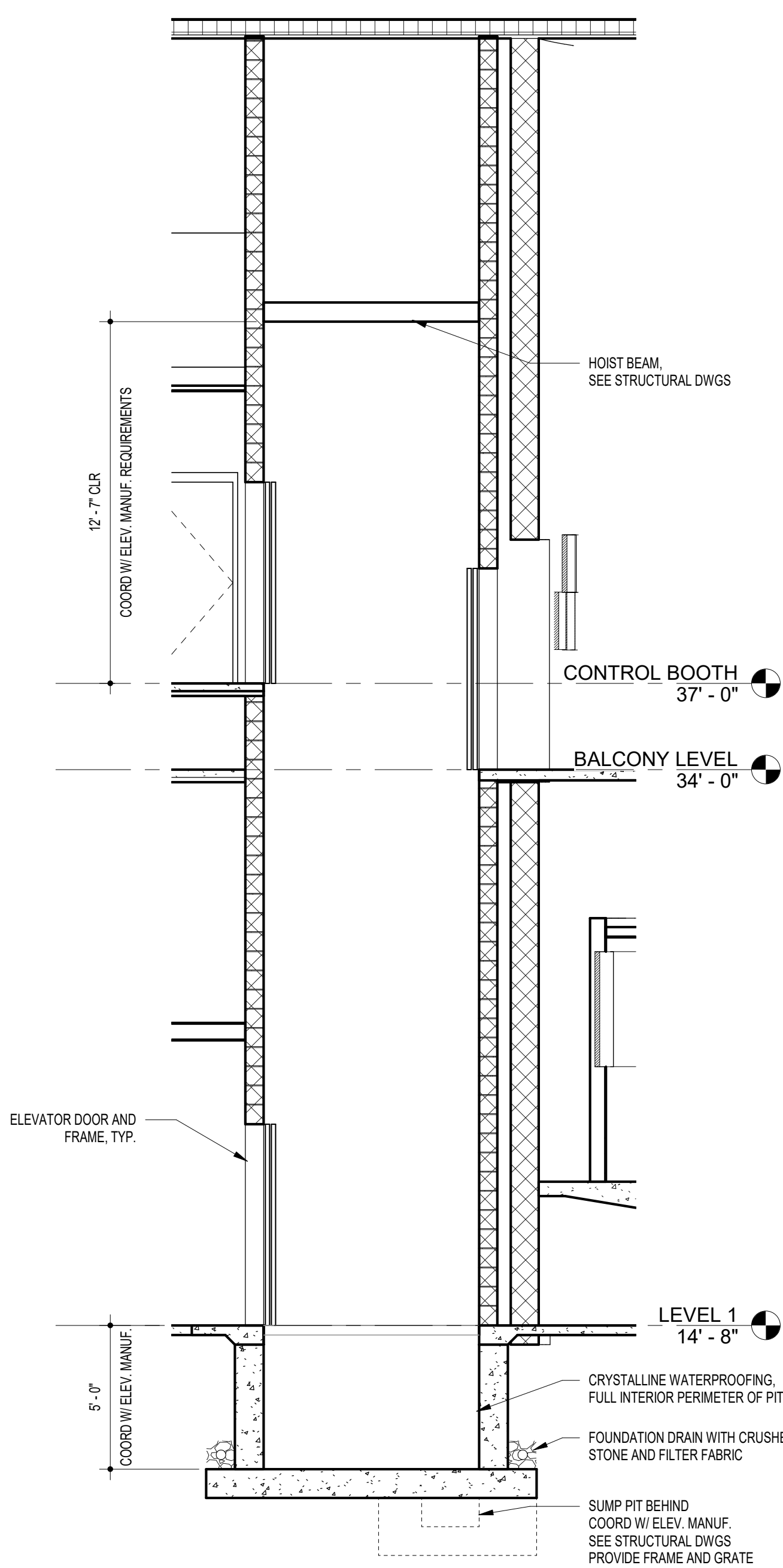
A18 ELEVATOR 3 - SECTION  
1/4" = 1'-0"



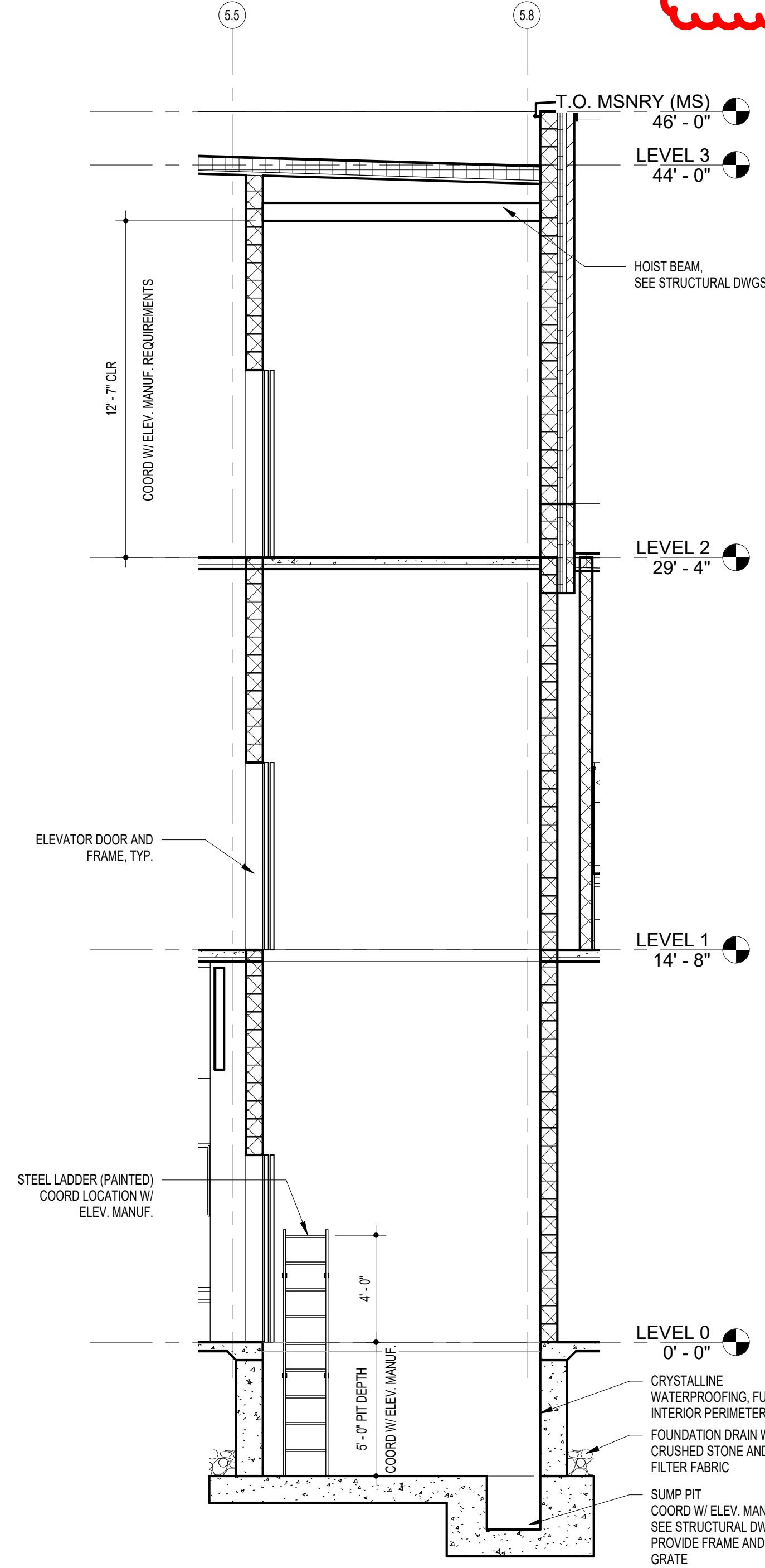
D14 ELEVATOR 3 - LEVEL 2 FLOOR PLAN  
1/4" = 1'-0"



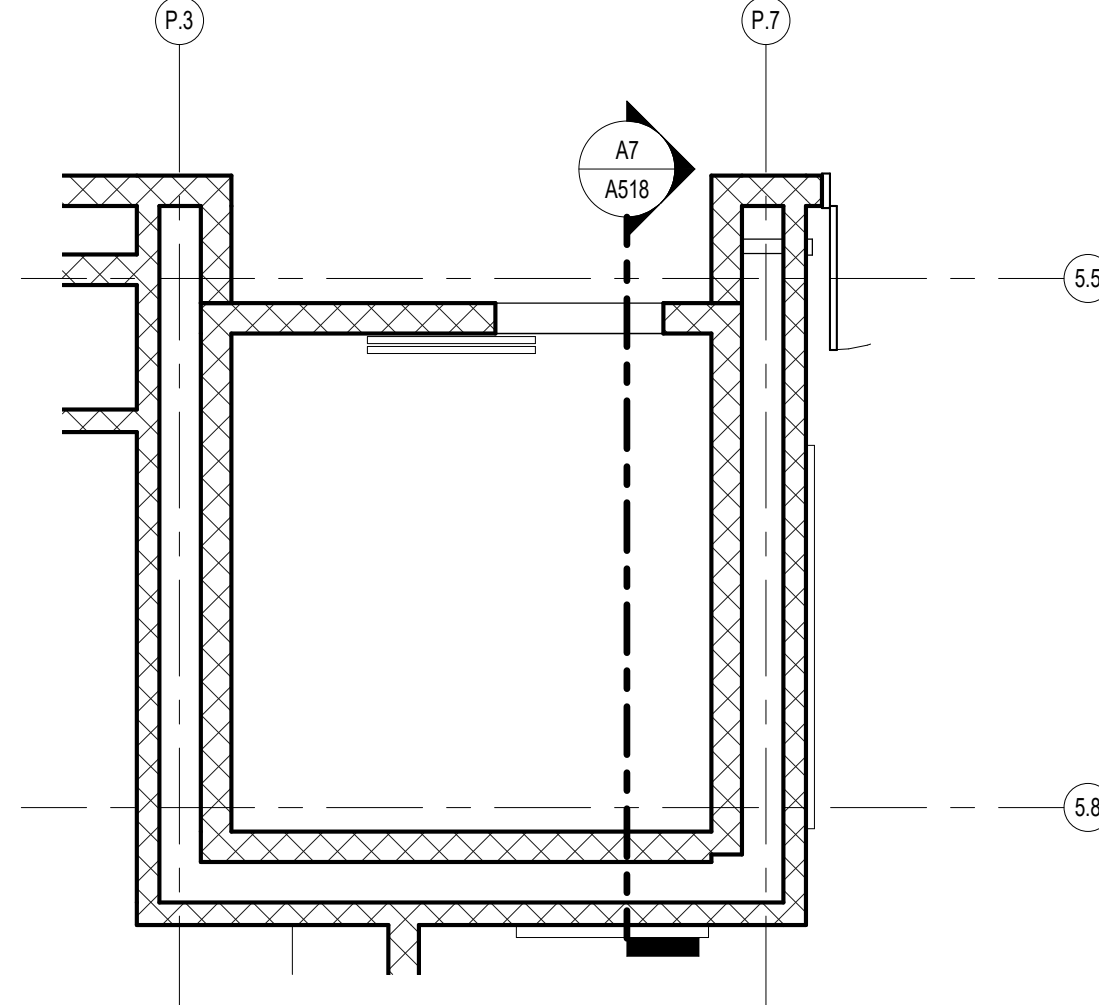
A14 ELEVATOR 3 - LEVEL 1 FLOOR PLAN  
1/4" = 1'-0"



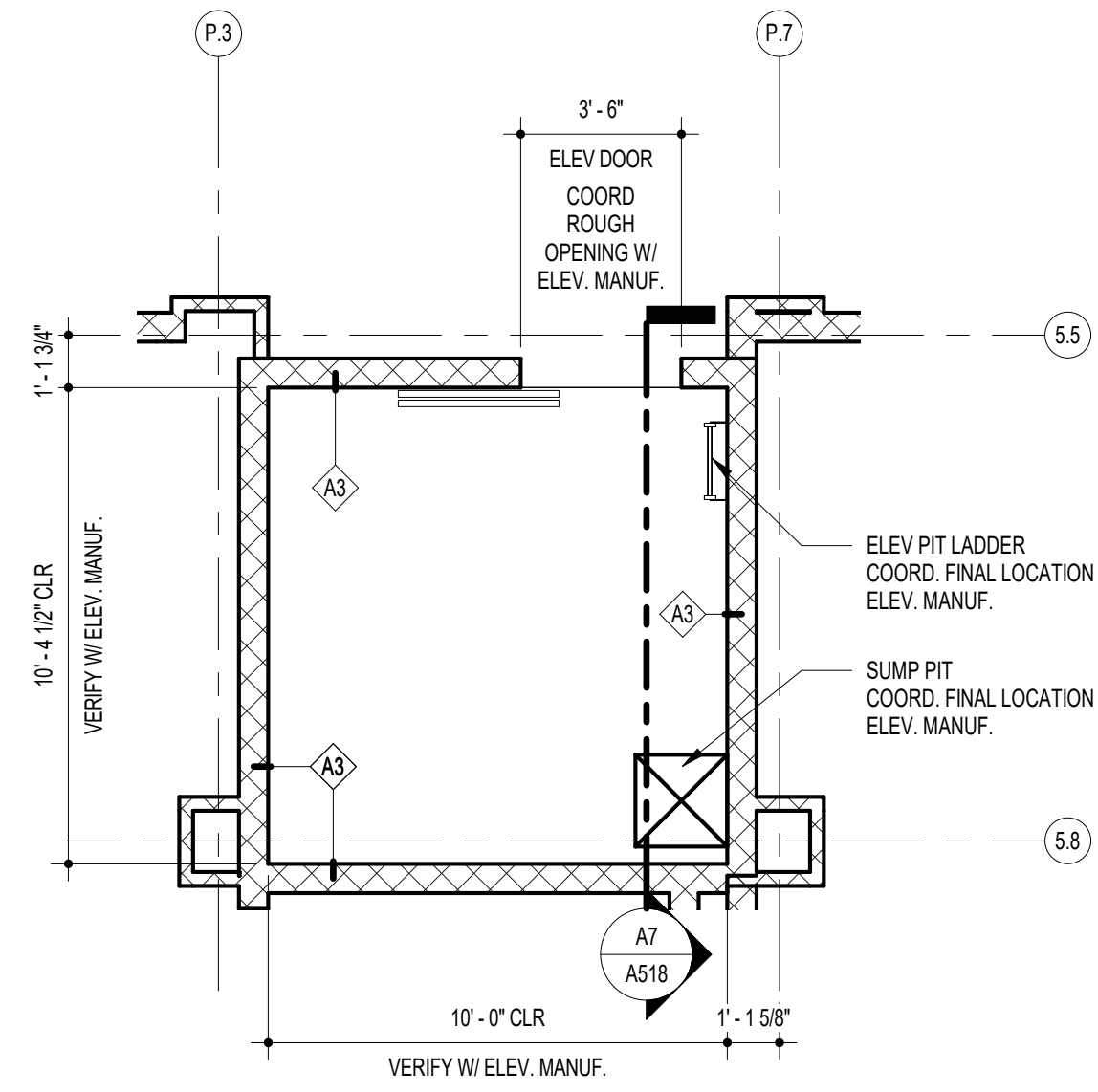
A11 ELEVATOR 2 - SECTION  
1/4" = 1'-0"



A7 ELEVATOR 1 - SECTION  
1/4" = 1'-0"



D4 ELEVATOR 1 - LEVEL 1 FLOOR PLAN  
1/4" = 1'-0"



A4 ELEVATOR 1 - LEVEL 0 FLOOR PLAN  
1/4" = 1'-0"

11720 Beltsville Drive  
Suite 600  
Calverton, MD 20618  
Tel: 301.595.1000  
www.grimmandparker.com



GP #22105

ENLARGED ELEVATOR PLANS & DETAILS  
NORTH EAST MIDDLE / HIGH SCHOOL  
300 IRISTOWN ROAD, NORTH EAST, MD

DATE	DESCRIPTION

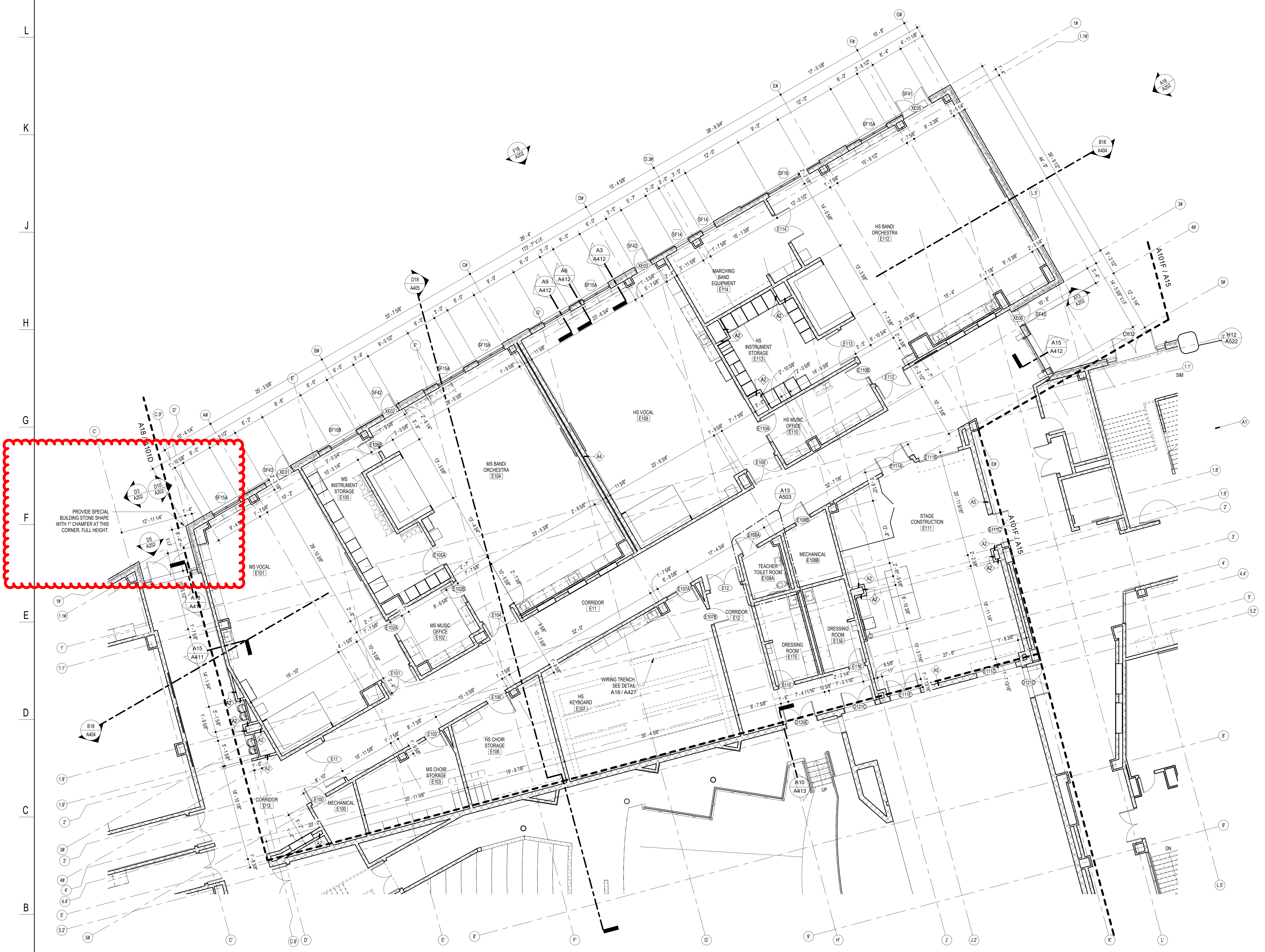
A518

12/22/2023  
BID SET



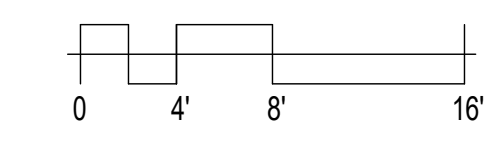
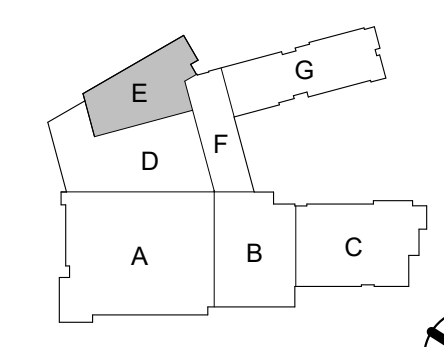
GENERAL PLAN NOTES

1. REFER TO SHEET A302 FOR WALL TYPES AS REFERENCED ON PLANS WITH THE DIAMOND SYMBOL.
2. TYPICAL CMU INTERIOR PARTITION TO BE TYPE A3 UNLESS INDICATED OTHERWISE BY WALL TYPE SYMBOLS, WALL SECTIONS OR OTHER DETAILS.
3. TYPICAL GYPSUM BOARD STUD WALL PARTITION TO BE TYPE K1 UNLESS INDICATED OTHERWISE BY WALL TYPE SYMBOLS, WALL SECTIONS OR OTHER DETAILS.
4. TYPICAL CMU CHASE WALLS TO BE TYPE A1 UNLESS INDICATED OTHERWISE BY WALL TYPE SYMBOLS, WALL SECTIONS OR OTHER DETAILS.
5. TYPICAL GYPSUM BOARD CHASE WALLS TO BE TYPE X1 UNLESS INDICATED OTHERWISE BY WALL TYPE SYMBOLS, WALL SECTIONS OR OTHER DETAILS.
6. UNLESS NOTED OTHERWISE, WALLS MUST EXTEND TO THE ROOF OR FLOOR DECK ABOVE AND BE SEALED IN ACCORDANCE WITH THE WALL TERMINATION DETAILS. REFER TO THE CODE STUDY PLAN FOR IDENTIFICATION OF ALL SMOKE AND FIRE WALL CONDITIONS. PERIMETER CORRIDOR AND LOBBY WALLS MUST BE BUILT TO RESIST THE PASSAGE OF SMOKE.
7. DIMENSIONS ON PLANS ARE FROM FACE OF MASONRY TO FACE OF MASONRY, FACE OF MASONRY TO FACE OF GYPSUM BOARD OR FACE OF GYPSUM BOARD TO FACE OF GYPSUM BOARD.
8. COLUMN GRID LINES ARE FOR REFERENCE ONLY. REFER TO STRUCTURAL DRAWINGS FOR COLUMN LOCATIONS.
9. FE- INDICATES A FIRE EXTINGUISHER WITH A RECESSED CABINET, FE- INDICATES A FIRE EXTINGUISHER WITH A WALL MOUNTING BRACKET.
10. UNLESS SPECIFICALLY INDICATED OTHERWISE, THE SAME WALL TYPE NEXT TO A DOOR OR OPENING TO CONTINUE OVER THE DOOR OR OPENING.
11. PLAN LOCATION OF DOORS AND FRAMES RELATIVE TO THE PLANE OF THE WALL IS DIAGNOSTIC ONLY. REFER TO THE REFERENCED JAMB AND HEAD CONDITION DETAILS TO DETERMINE ACTUAL PLACEMENT OF DOOR AND FRAME.



A18 LEVEL 01 AREA E PARTIAL PLAN  
1/8" = 1'-0"

KEY PLAN



11720 Beltsville Drive  
Suite 600  
Calverton, MD 20705  
Tel. 301.595.1000  
www.grimmandparker.com



GP #22105

LEVEL 01 AREA E PARTIAL FLOOR PLAN  
NORTH EAST MIDDLE / HIGH SCHOOL  
300 IRISHTOWN ROAD, NORTH EAST, MD

DATE	DESCRIPTION


A101E  
12/22/2023  
BID SET



## RFI detail

## #006 Special Masonry Veneer Shapes



Status	 <b>Open</b> In Review
Created on	Jun 27, 2024 by <b>Glenn Feldstein</b> (George Moehrle Masonry)
RFI type	Architectural RFI REVs
Ball in court	<b>Patrick Byrne</b> (Grimm and Parker)
Due date	Jul 8, 2024

### Question

Please provide dimensioned details of all special brick shapes:

- o Sill A18/A425
- o Obtuse corner A101D (A'/1#) - please provide angle (105deg?)
- o Acute corner A101D (CL-C'/1#)- please provide angle (75deg?)
- o Obtuse corner K10/A519- please confirm 105deg angle
- o Obtuse corner H4/A518- please confirm 105deg angle
- o Please note that the chamfered building stone call out on sheet A101E (at corner CL-D'/1#) cannot be manufactured. Please confirm use of a straight joint is acceptable.

**Suggested answer**

Straight joint with sealant to match control joints is acceptable.

### References

**Files (1)**

- [RFI 006 Markup.pdf](#)

**Sheets (4)**

- [A519](#)
- [A425](#)
- [A101D](#)
- [A518](#)

## Impact

Cost impact	Unknown
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Schedule impact	No
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## Other attributes

Priority	Normal
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Discipline	Masonry
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Category	Documentation Incomplete
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Location	-
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Location details	See markups on sheets. Various locations
------------------	--

External id	-
-------------	---

Co-reviewer(s)	
----------------	--

Posted to Drawings/ Specifications	YES
---------------------------------------	-----



Trade's RFI No.	-
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## G+P Response:

1. See attached detail on sheet A425 for dimensions.
2. 105 degree interior angle is correct.
3. 75 degree interior angle is correct.
4. 105 degree interior angle is correct.
5. 105 degree interior angle is correct.
6. Use of straight joint is not acceptable. We are working with the manufacturer on the creation of a custom cast piece and will advise of final solution.

Patrick Byrne 7.8.2024



Activities	By	At
<b>Joshua Postadan</b> added a reference to a file <b>RFI 006 Markup.pdf</b>	<b>Joshua Postadan</b>	Jul 1, 2024, 2:47 PM EDT
<b>Joshua Postadan</b> changed the status from  <b>Open</b> Waiting for Submission to  <b>Open</b> In Review set Ball in court to <b>Patrick Byrne</b> (Grimm and Parker)	<b>Joshua Postadan</b>	Jul 1, 2024, 2:17 PM EDT
changed the <b>location details</b> to <i>See markups on sheets. Various locations</i>	<b>Joshua Postadan</b>	Jul 1, 2024, 2:17 PM EDT
changed the <b>question</b> to <i>Please provide dimensioned details of all special brick shapes: o Sill A18/A425 o Obtuse corner A101D (A'/1#) - please provide angle (105deg?) o Acute corner A101D (CL-C'/1#)- please provide angle (75deg?) o Obtuse corner K10/A519- please confirm 105deg angle o Obtuse corner H4/A518- please confirm 105deg angle o Please note that the chamfered building stone call out on sheet A101E (at corner CL-D'/1#) cannot be manufactured. Please confirm use of a straight joint is acceptable.</i>	<b>Joshua Postadan</b>	Jul 1, 2024, 2:12 PM EDT
changed the <b>ID</b> to 006	<b>Joshua Postadan</b>	Jul 1, 2024, 1:56 PM EDT
<b>Joshua Postadan</b> added a reference to a sheet <b>A519</b>	<b>Joshua Postadan</b>	Jul 1, 2024, 1:48 PM EDT
<b>Joshua Postadan</b> added a reference to a sheet <b>A518</b>	<b>Joshua Postadan</b>	Jul 1, 2024, 1:48 PM EDT
<b>Joshua Postadan</b> added a reference to a sheet <b>A101D</b>	<b>Joshua Postadan</b>	Jul 1, 2024, 1:48 PM EDT
<b>Joshua Postadan</b> added a reference to a sheet <b>A425</b>	<b>Joshua Postadan</b>	Jul 1, 2024, 1:48 PM EDT
changed the <b>Posted to Drawings/Specifications</b> to YES	<b>Joshua Postadan</b>	Jul 1, 2024, 1:48 PM EDT
changed the <b>due date</b> to Jul 7, 2024	<b>Joshua Postadan</b>	Jul 1, 2024, 1:47 PM EDT
changed the <b>cost impact</b> to <i>Unknown</i>	<b>Joshua Postadan</b>	Jul 1, 2024, 1:47 PM EDT
changed the <b>schedule impact</b> to <i>No</i>	<b>Joshua Postadan</b>	Jul 1, 2024, 1:47 PM EDT
changed the <b>watchers</b> to <b>Glenn Feldstein</b> (George Moehrle Masonry), <b>HESS PROJECT TEAM</b>	<b>Joshua Postadan</b>	Jul 1, 2024, 1:47 PM EDT

changed the **question** to *Please provide dimensioned details of all special brick shapes: o Sill A18/A425 o Obtuse corner A101D (A'1#) - please provide angle (105deg?) o Acute corner A101D (CL-C'1#)- please provide angle (75deg?) o Obtuse corner K10/A519- please confirm 105deg angle o Obtuse corner H4/A518- please confirm 105deg angle o Please note that the chamfered building stone call out on sheet A101 (at corner CL-D'1#) cannot be manufactured. Please confirm use of a straight joint is acceptable.*

**Joshua  
Postadan**

Jul 1, 2024, 1:37 PM  
EDT

changed the **question** to *Please provide dimensioned details of all special brick shapes: o Sill A18/A425 o Obtuse corner A101D (A'1#)please provide angle (105deg?) o Acute corner A101D (CL-C'1#)- please provide angle (75deg?) o Obtuse corner K10/A519- please confirm 105deg angle o Obtuse corner H4/A518- please confirm 105deg angle o Please note that the chamfered building stone call out on sheet A101 (at corner CL-D'1#) cannot be manufactured. Please confirm use of a straight joint is acceptable.*

**Joshua  
Postadan**

Jul 1, 2024, 1:37 PM  
EDT

**Glenn Feldstein** (George Moehrle Masonry) created this RFI in **Open** Waiting for Submission status and set Ball in court to **Joshua Postadan** (HESS Construction Co., LLC).

**Glenn  
Feldstein**

Jun 27, 2024, 2:46 PM  
EDT



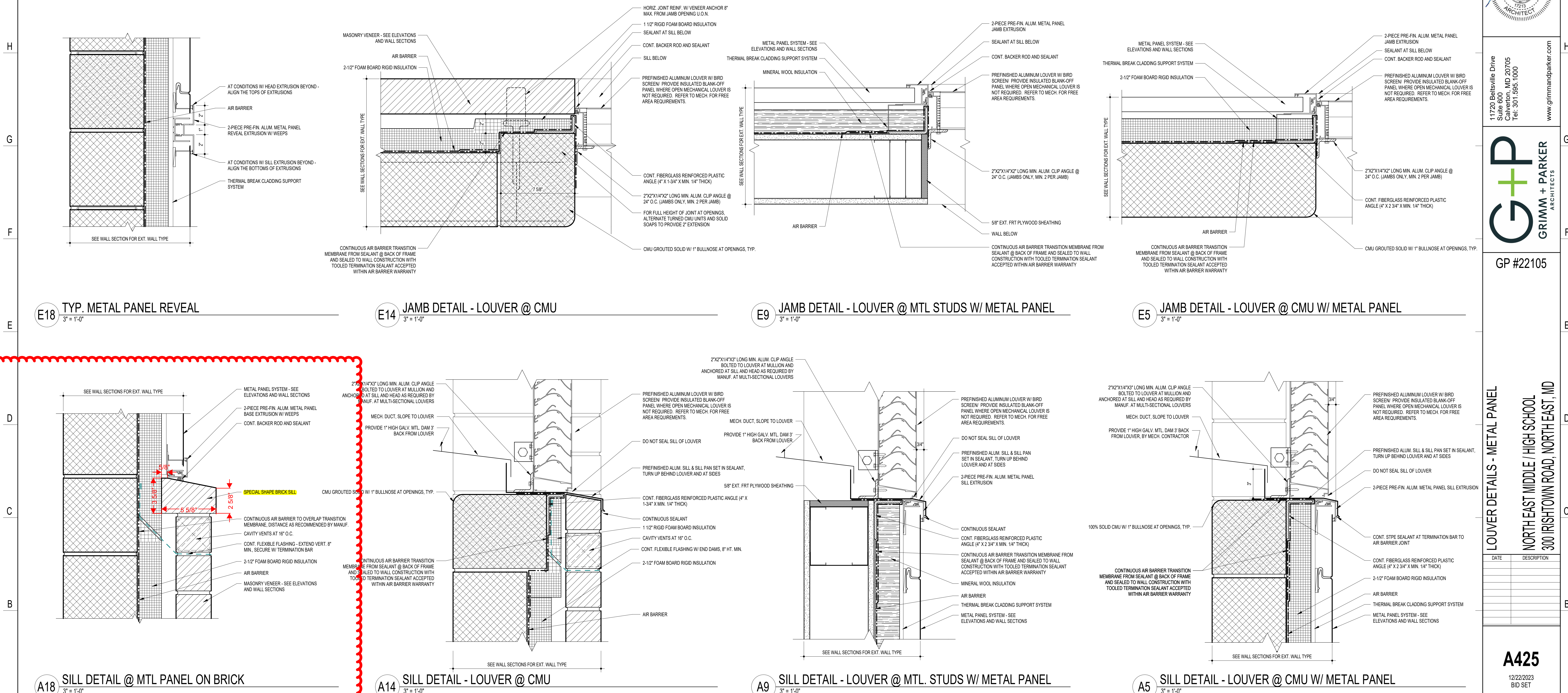


**G + P**  
**GRIMM + PARKER**

LOUVER DETAILS - METAL PANEL  
NORTH EAST MIDDLE / HIGH SCHOOL  
3000 BRISHTOWN ROAD NORTH EAST MD

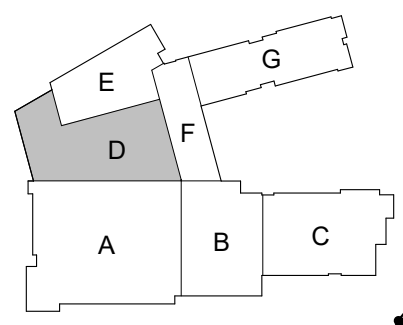
DATE	DESCRIPTION

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1. REFER TO SHEET A302 FOR WALL TYPES AS REFERENCED ON PLANS WITH THE DIAMOND SYMBOL.
2. TYPE 1 UNLESS INDICATED OTHERWISE BY THE TYPE A3 UNLESS INDICATED OTHERWISE BY WALL TYPE SYMBOLS, WALL SECTIONS OR OTHER DETAILS.
3. TYPICAL GYPSUM BOARD/STUCCO PARTITION TO BE TYPE K1 UNLESS INDICATED OTHERWISE BY WALL TYPE SYMBOLS, WALL SECTIONS OR OTHER DETAILS.
4. TYPICAL CMU CHASE WALLS TO BE TYPE A1 UNLESS INDICATED OTHERWISE BY WALL TYPE SYMBOLS, WALL SECTIONS OR OTHER DETAILS.
5. TYPICAL GYPSUM BOARD CHASE WALLS TO BE TYPE K1 UNLESS INDICATED OTHERWISE BY WALL TYPE SYMBOLS, WALL SECTIONS OR OTHER DETAILS.
6. UNLESS NOTED OTHERWISE, WALLS MUST EXTEND TO THE ROOF OR FLOOR FINISH AND BE SEaled TO THE FINISH SURFACE OF THE PARTITION DETAILS. REFER TO THE CODE STUDY PLAN FOR IDENTIFICATION OF ALL SMOKE AND FIRE WALL CONDITIONS. PERIMETER CORRIDOR AND LOBBY WALLS ARE TO BE BUILT TO THE FINISH SURFACE OF THE PARTITION DETAILS.
7. DIMENSIONS ON PLANS ARE FROM FACE OF MASONRY TO FACE OF MASONRY, FACE OF MASONRY TO FACE OF GYPSUM BOARD OR FACE OF STRUCTURAL GLASS.
8. COLUMN GRID LINES ARE FOR REFERENCE ONLY. REFER TO STRUCTURAL DRAWINGS FOR COLUMN LOCATIONS.
9. FE-INDICATES A FIRE EXTINGUISHER WITH A RECESSED CABINET. FE-INDICATES A FIRE EXTINGUISHER WITH A WALL MOUNTING BRACKET.
10. UNLESS SPECIFICALLY INDICATED OTHERWISE, THE SAME WALL TYPE NEXT TO DOORS OR OPENINGS SHALL BE THE SAME WALL TYPE.
11. PLAN LOCATION OF DOORS AND FRAMES RELATIVE TO THE PLANE OF THE WALL IS DIAGRAMMATIC ONLY. REFER TO THE RELEVANT JAMB AND HEAD COORDINATION DETAILS TO DETERMINE ACTUAL PLACEMENT OF DOOR AND FRAME.



NORTH EAST MIDDLE / HIGH SCHOOL  
3300 IRISHTOWN ROAD, NORTH EAST, MD

DATE	DESCRIPTION
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1000

A101D

A101D

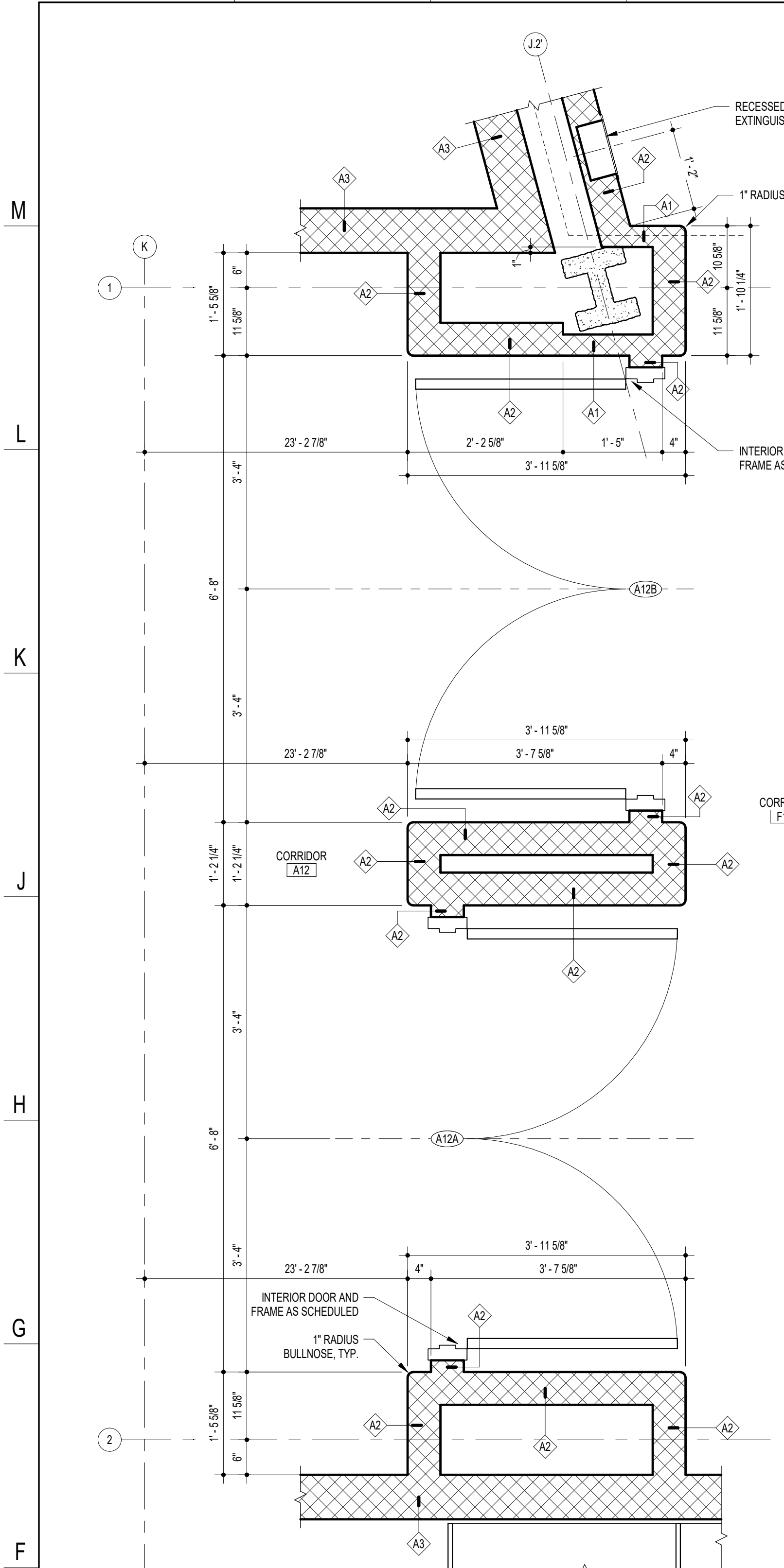
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12/22/2023  
BID SET

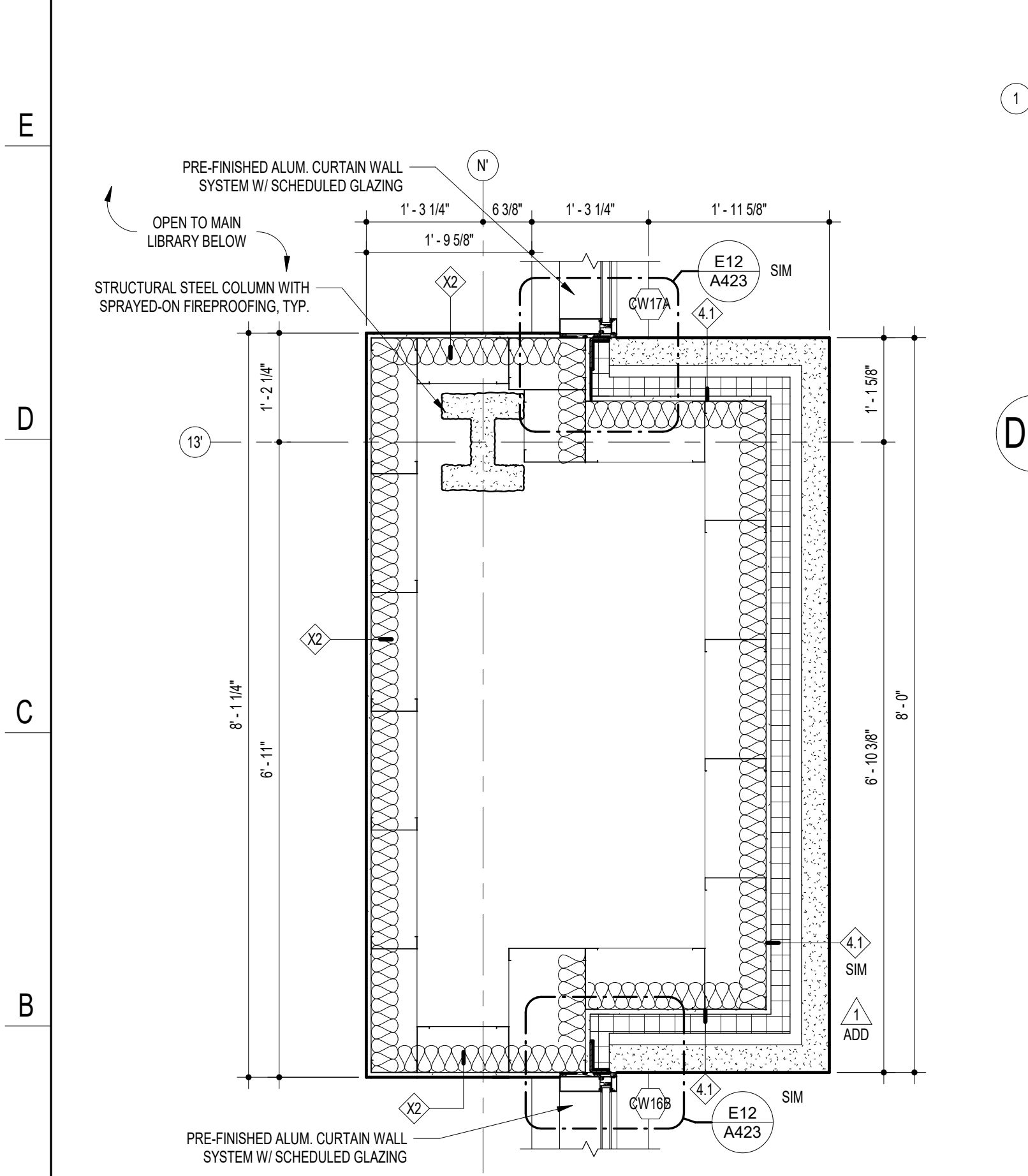
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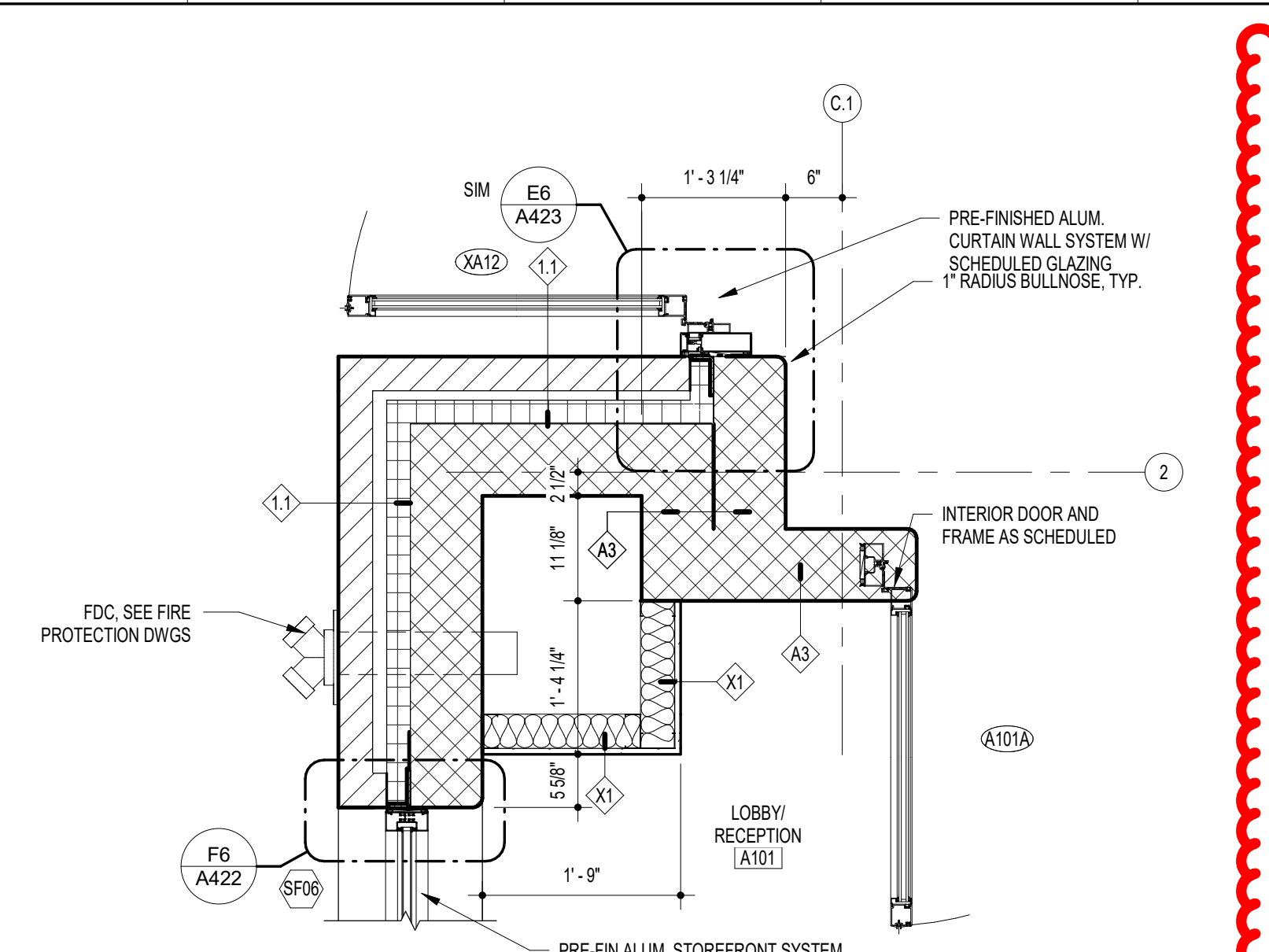




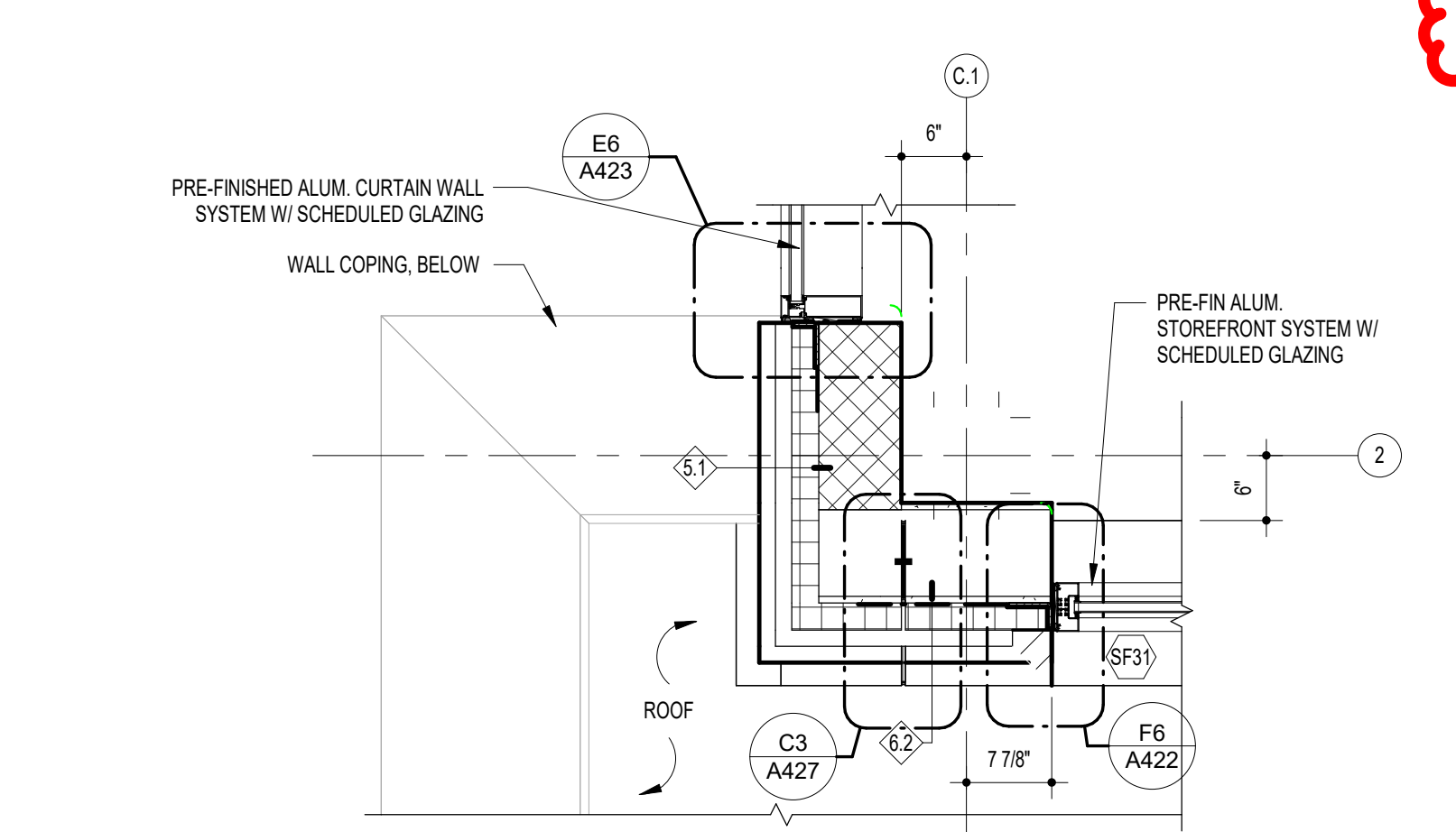
E18 PLAN DETAIL - LVL 01 - AREA A  
3/4" = 1'-0"



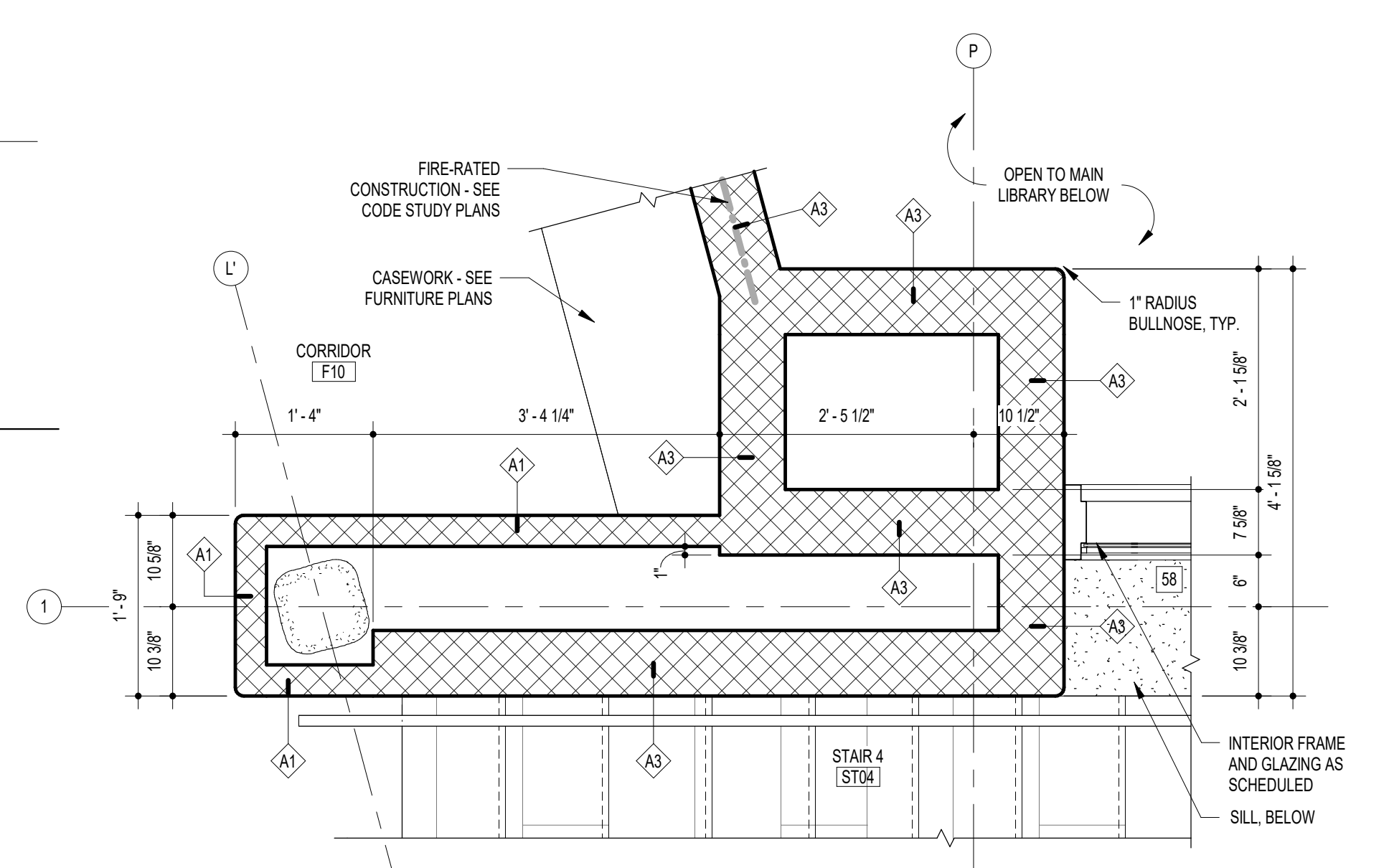
A18 PLAN DETAIL - LVL 01 - AREA F  
3/4" = 1'-0"



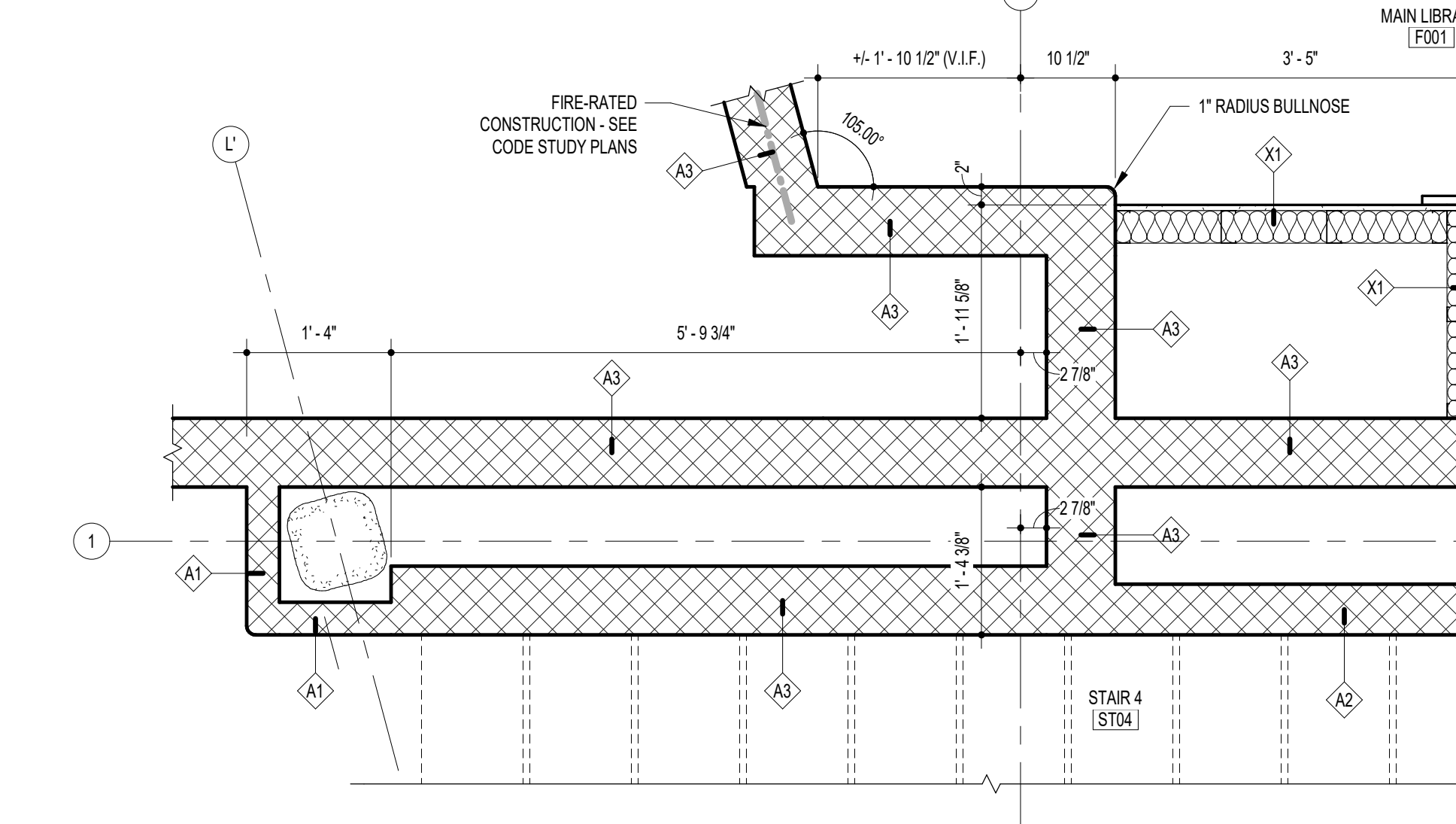
K14 PLAN DETAIL - LVL 01 - AREA A  
3/4" = 1'-0"



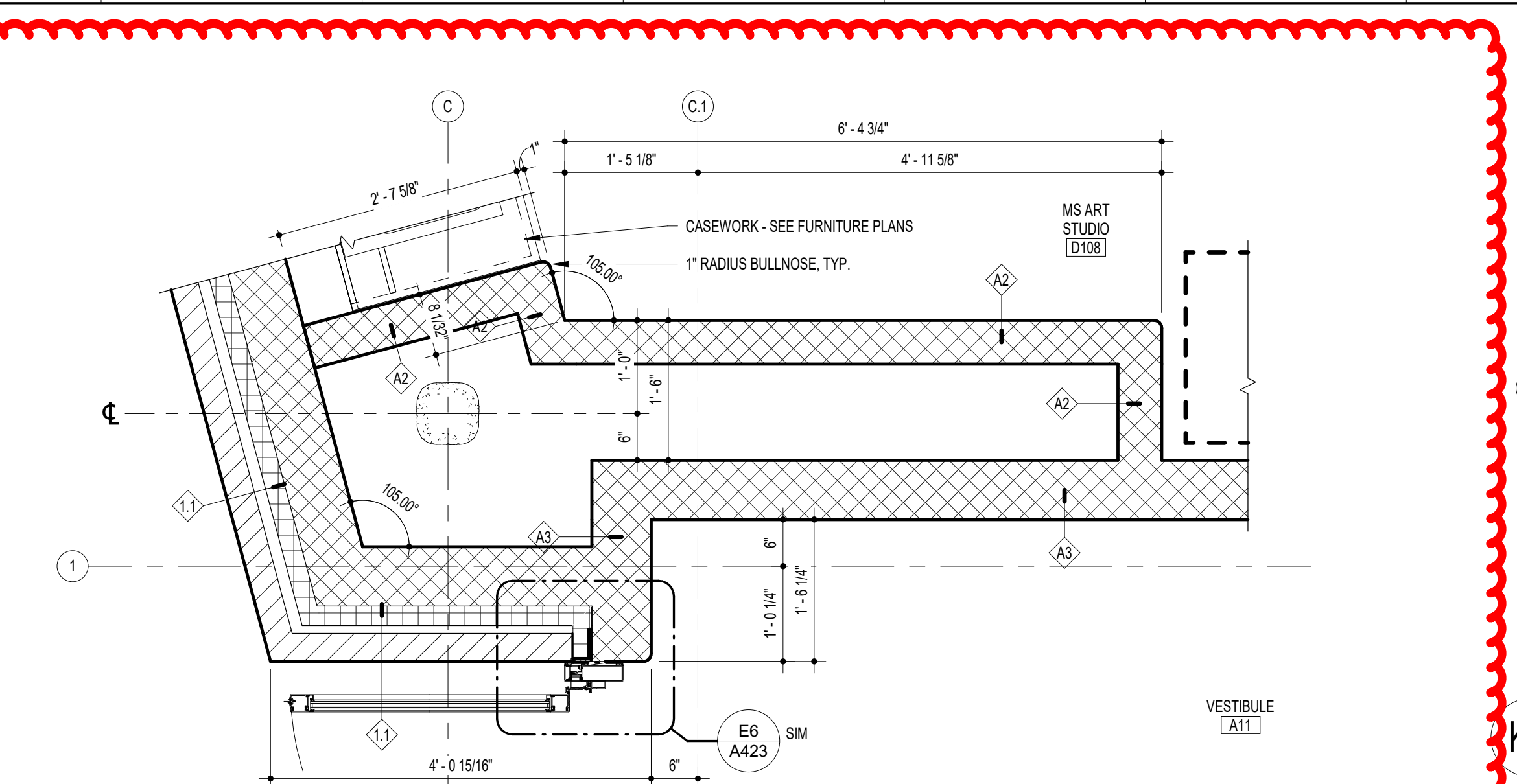
G14 PLAN DETAIL - LVL 02 - AREA A  
3/4" = 1'-0"



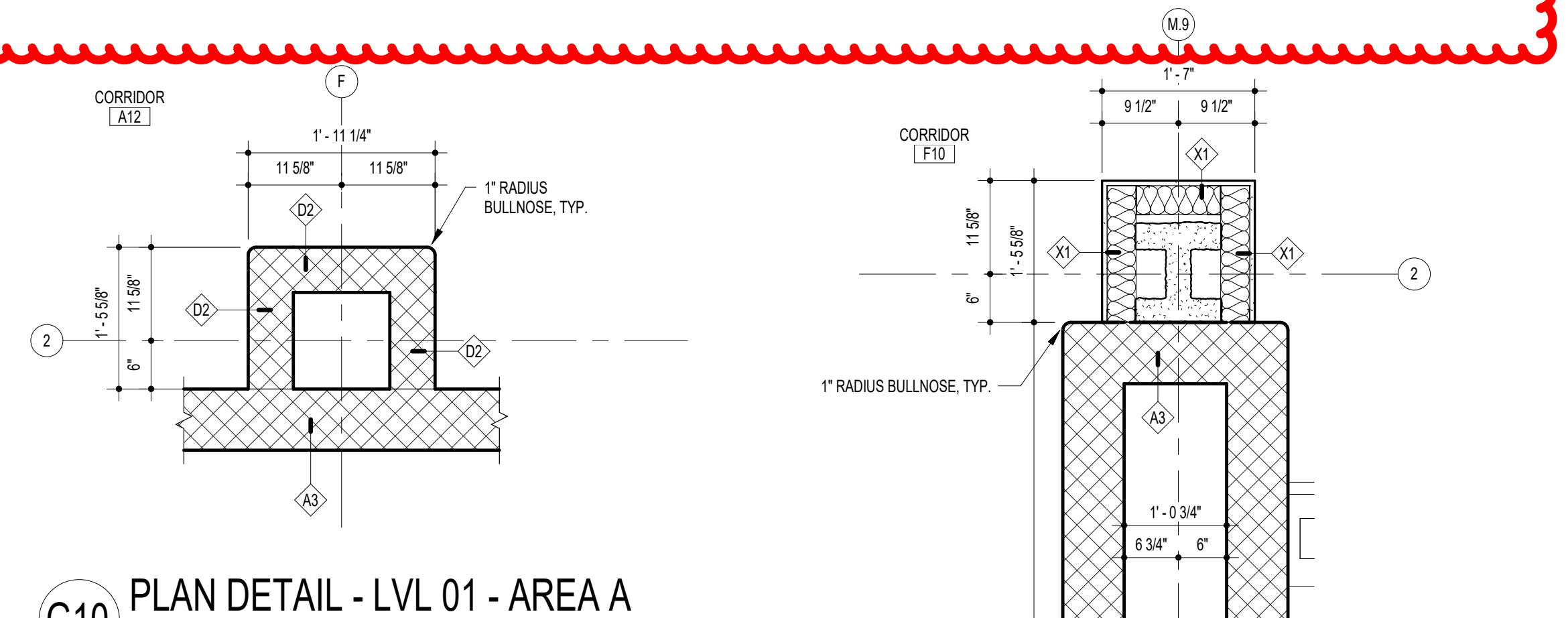
D15 PLAN DETAIL - LVL 01 - AREA F  
3/4" = 1'-0"



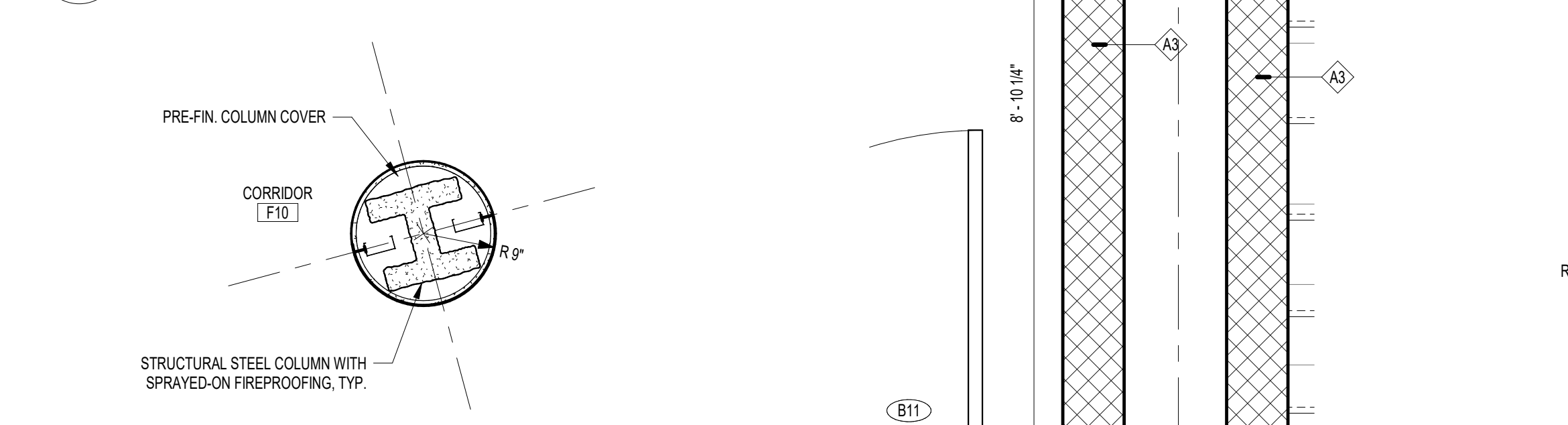
A15 PLAN DETAIL - LVL 00 - AREA F  
3/4" = 1'-0"



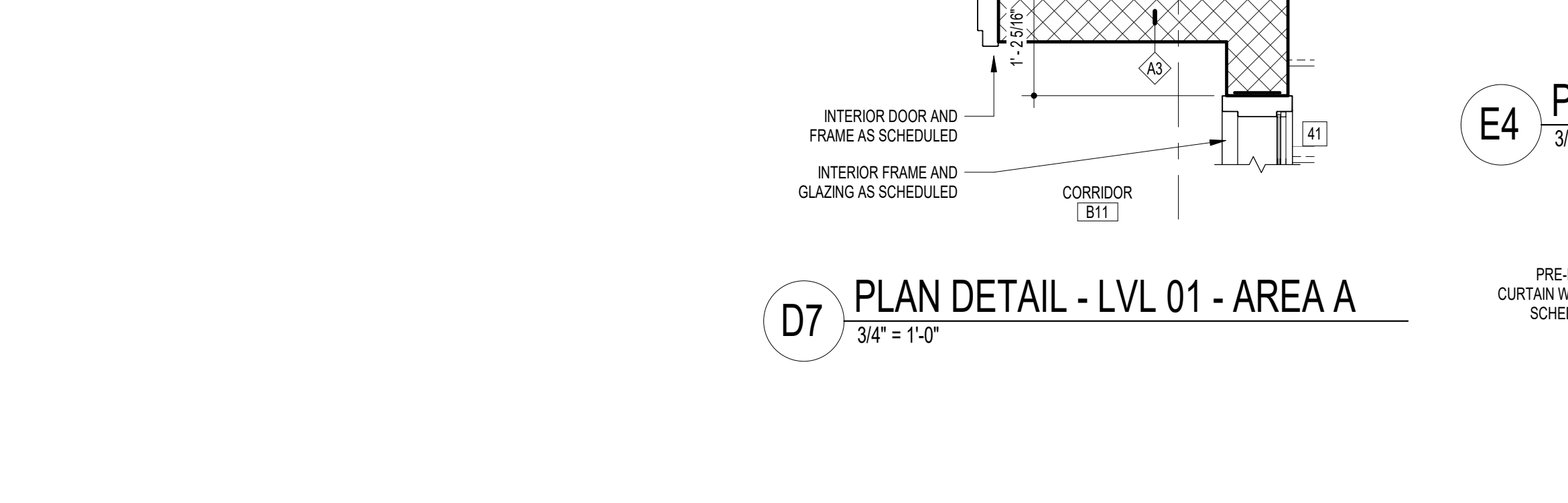
K10 PLAN DETAIL - LVL 01 - AREA D  
3/4" = 1'-0"



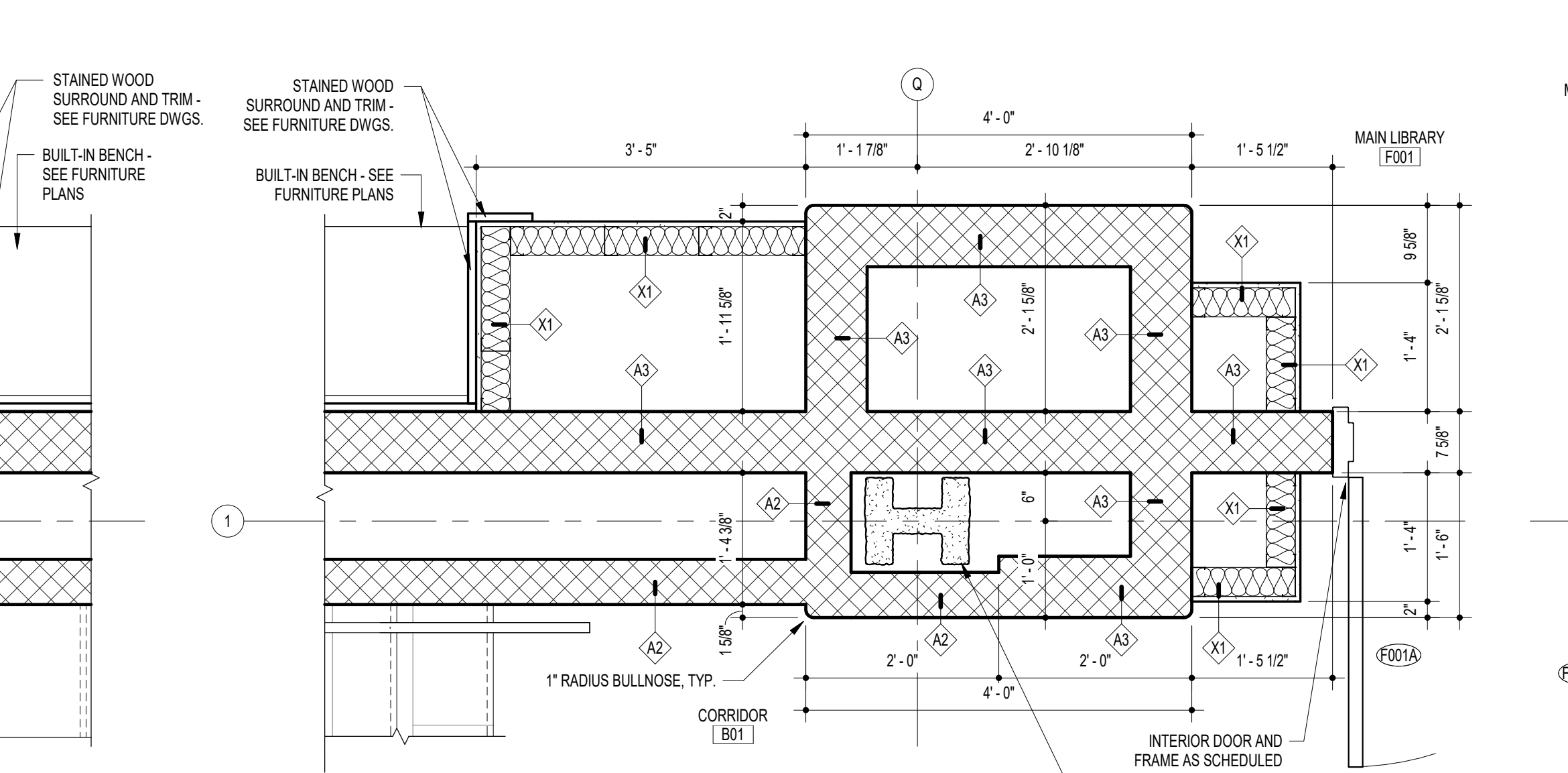
G10 PLAN DETAIL - LVL 01 - AREA A  
3/4" = 1'-0"



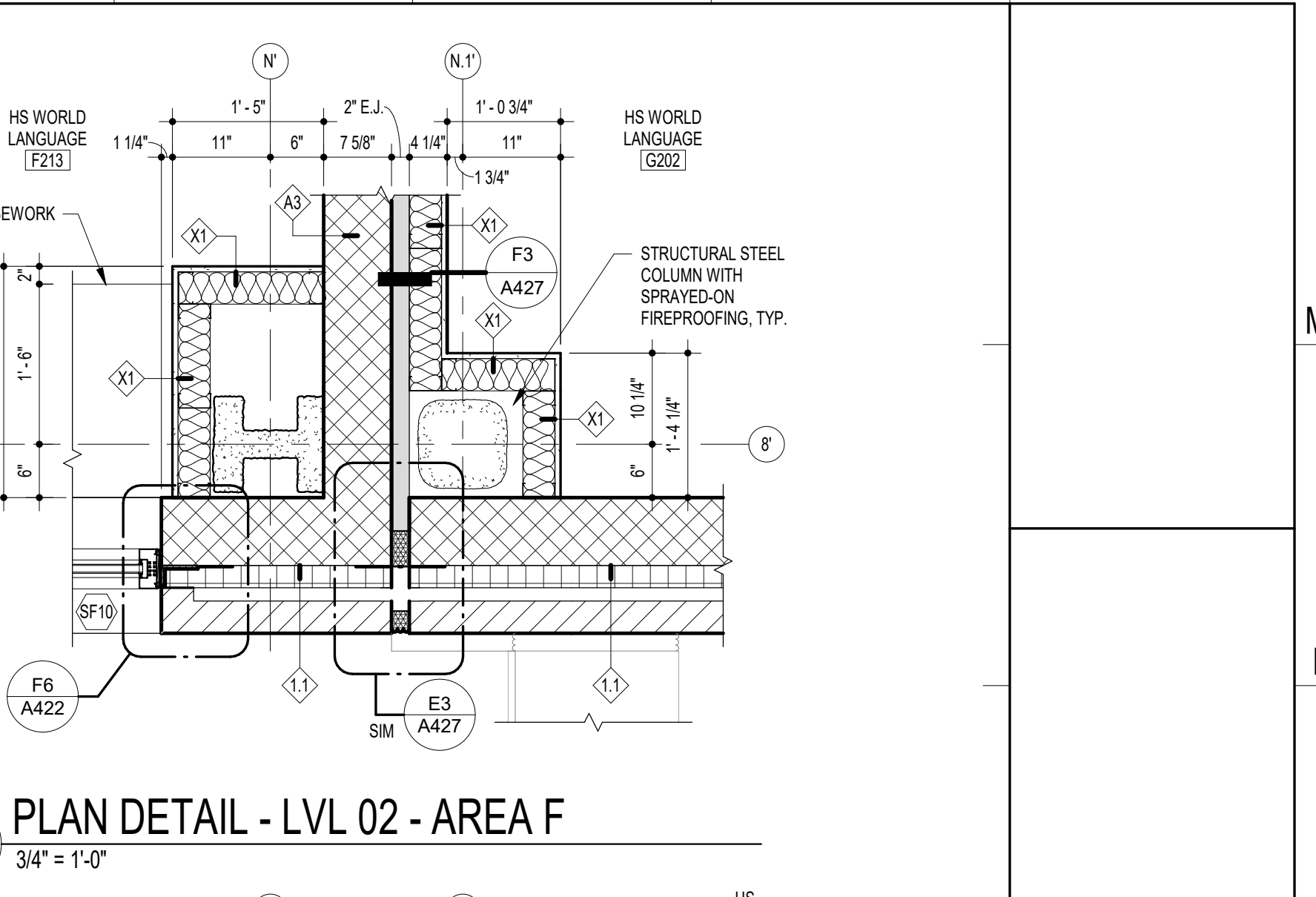
F10 PLAN DETAIL - LVL 01 - AREA F  
3/4" = 1'-0"



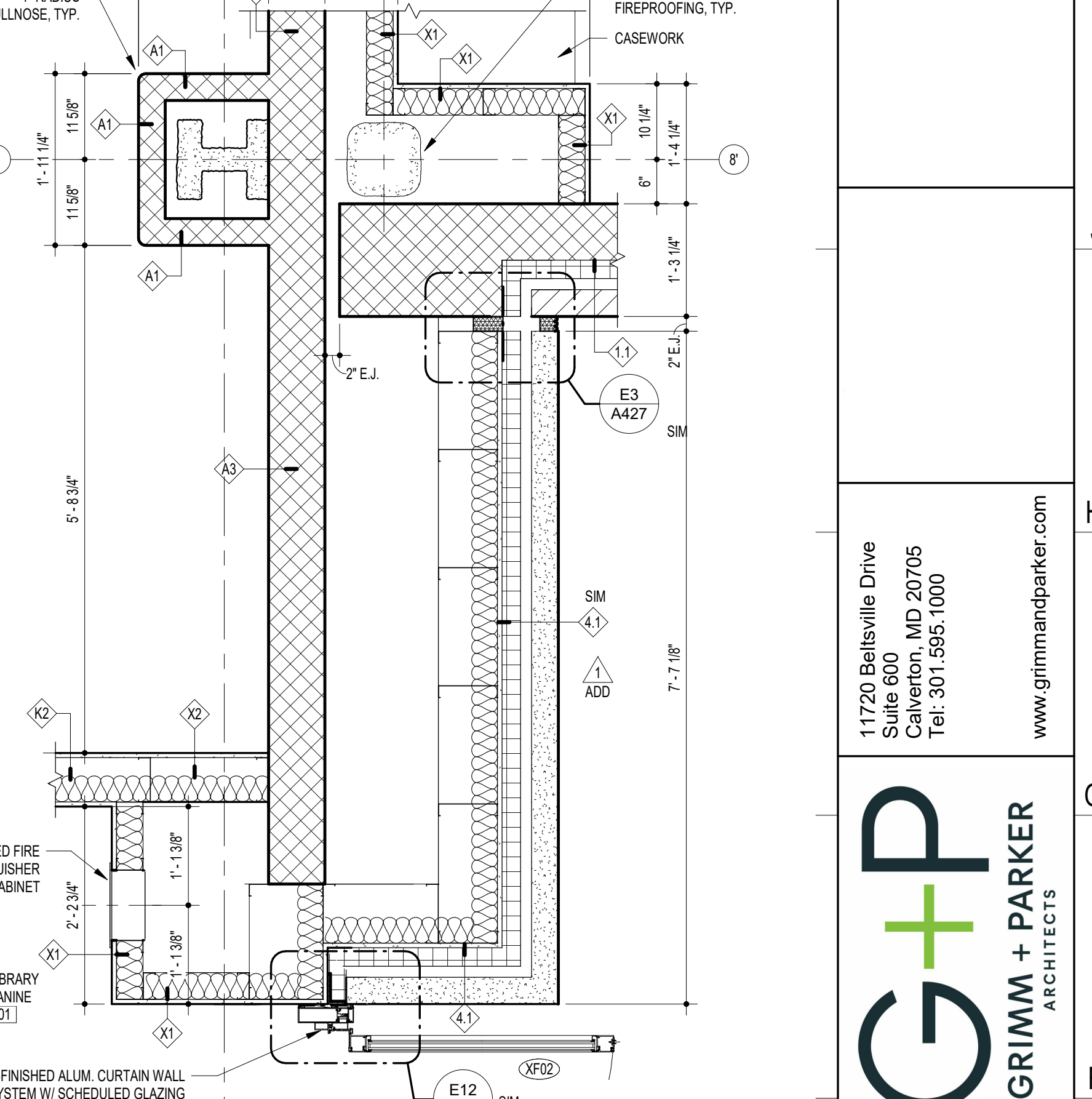
D7 PLAN DETAIL - LVL 01 - AREA A  
3/4" = 1'-0"



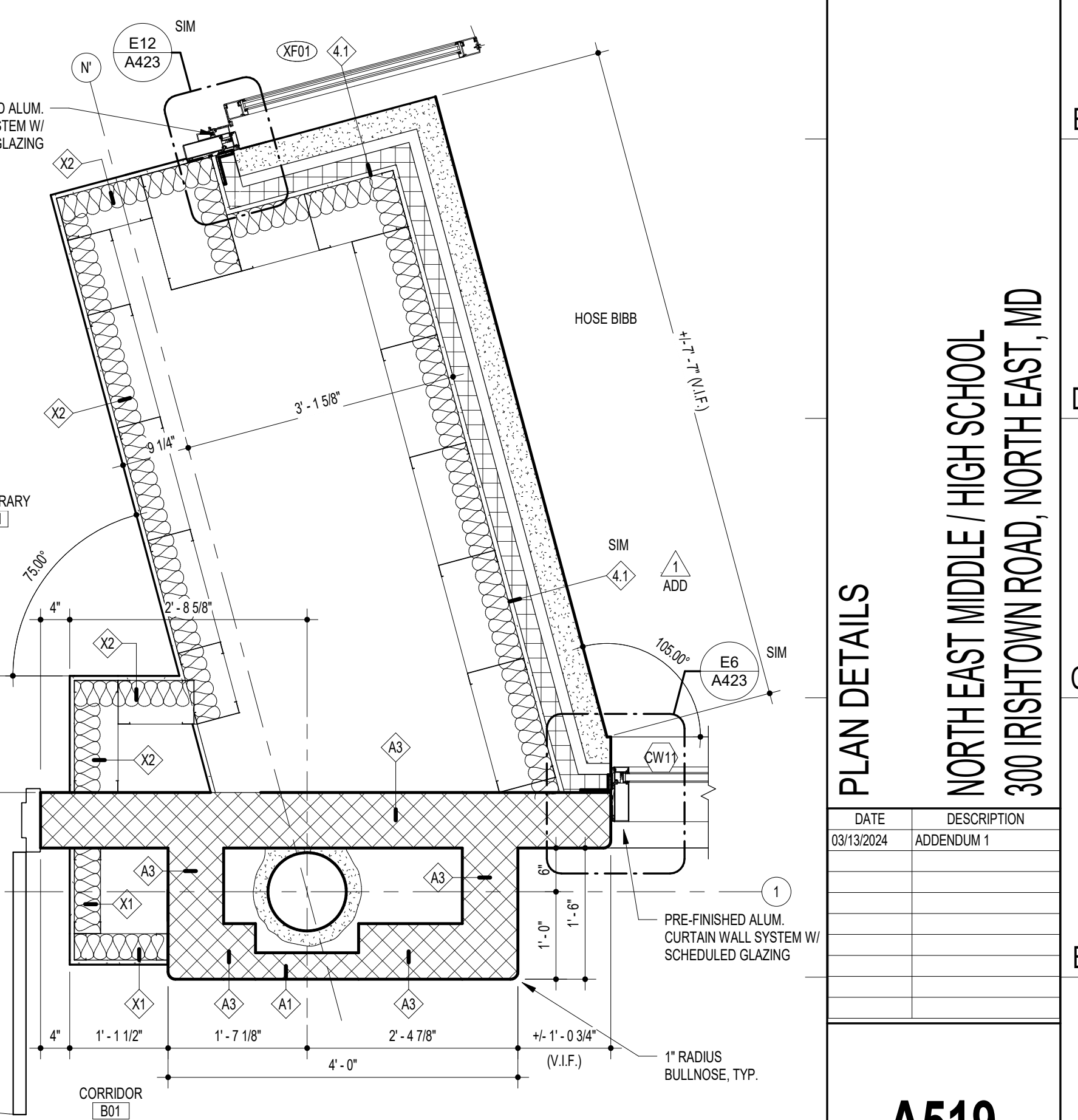
A9 PLAN DETAIL - LVL 00 - AREA F  
3/4" = 1'-0"



K4 PLAN DETAIL - LVL 02 - AREA F  
3/4" = 1'-0"

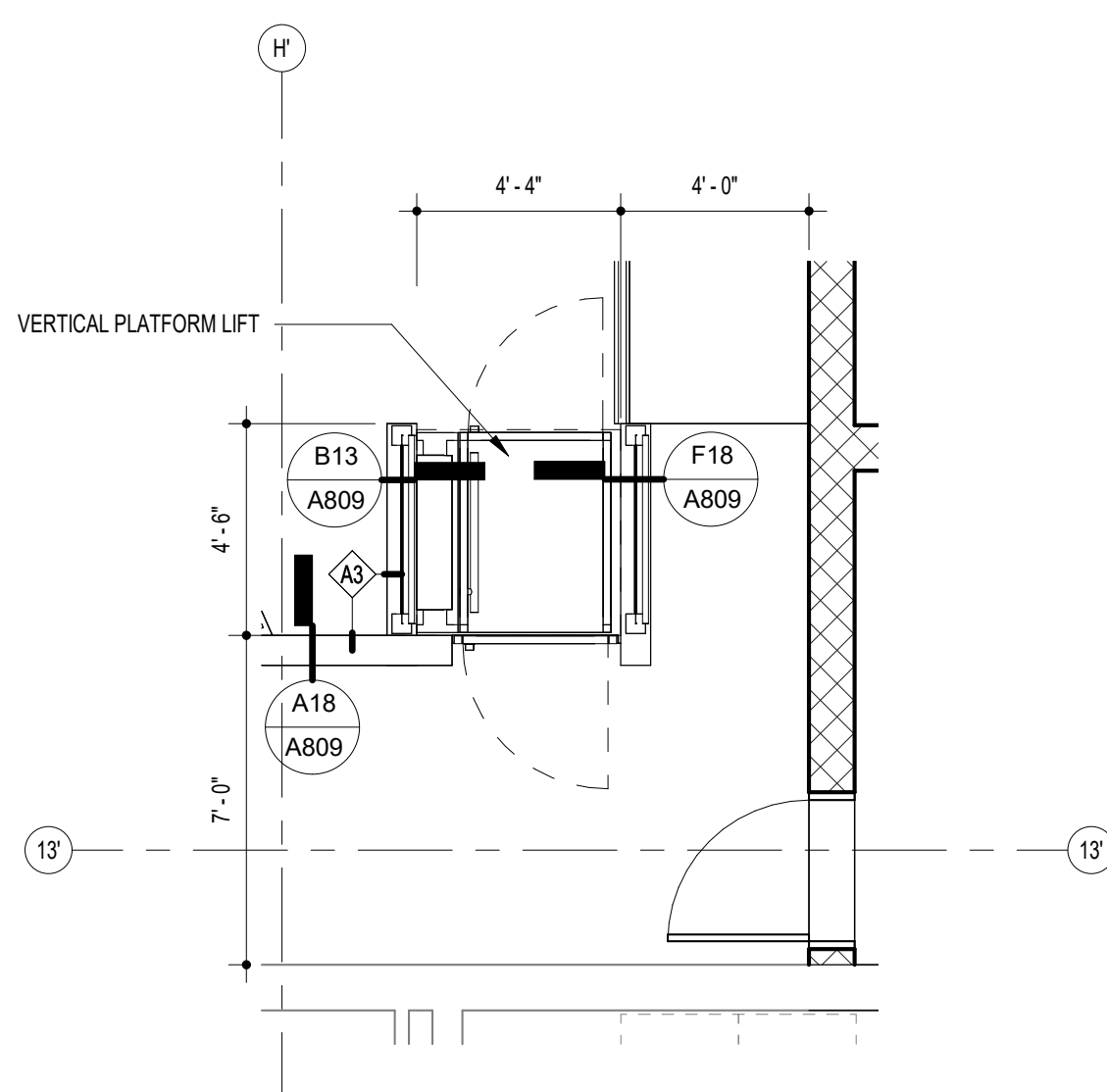


E4 PLAN DETAIL - LVL 01 - AREA F  
3/4" = 1'-0"

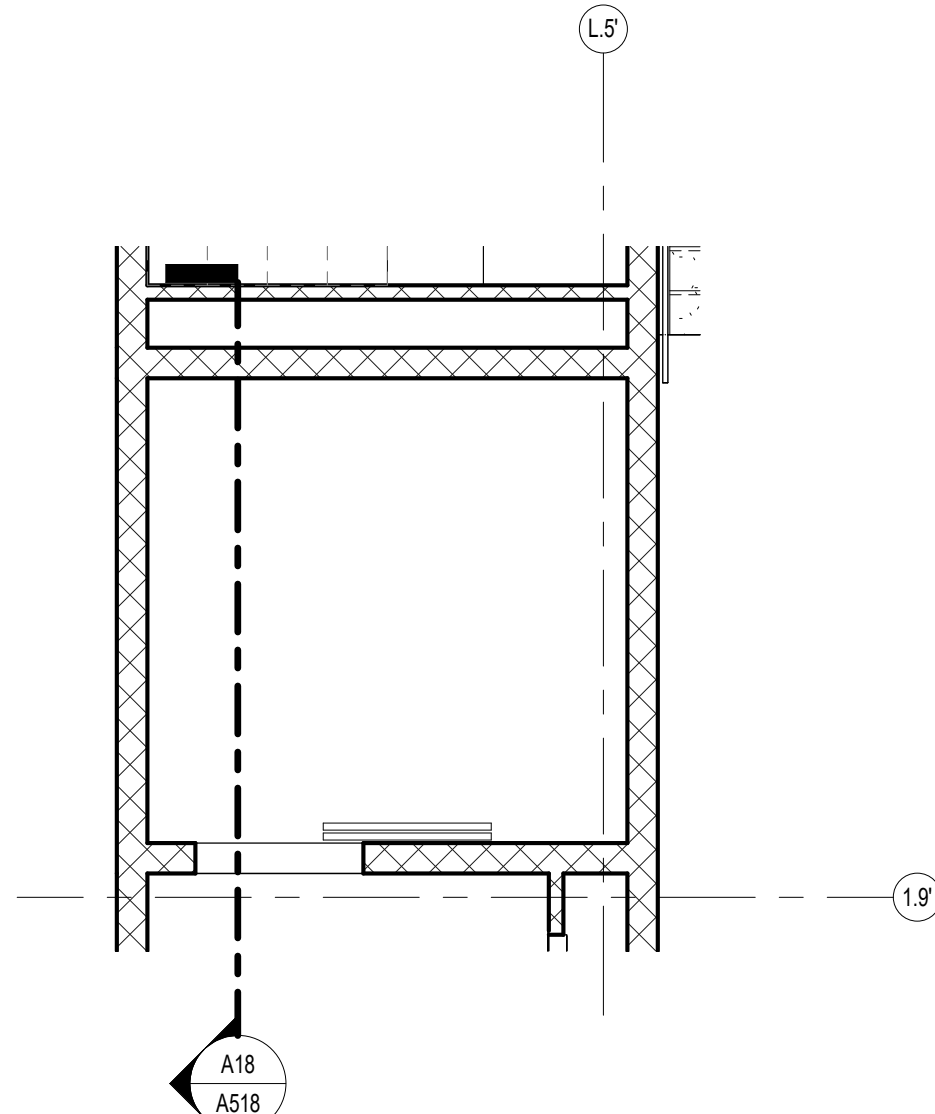


A4 PLAN DETAIL - LVL 00 - AREA F  
3/4" = 1'-0"

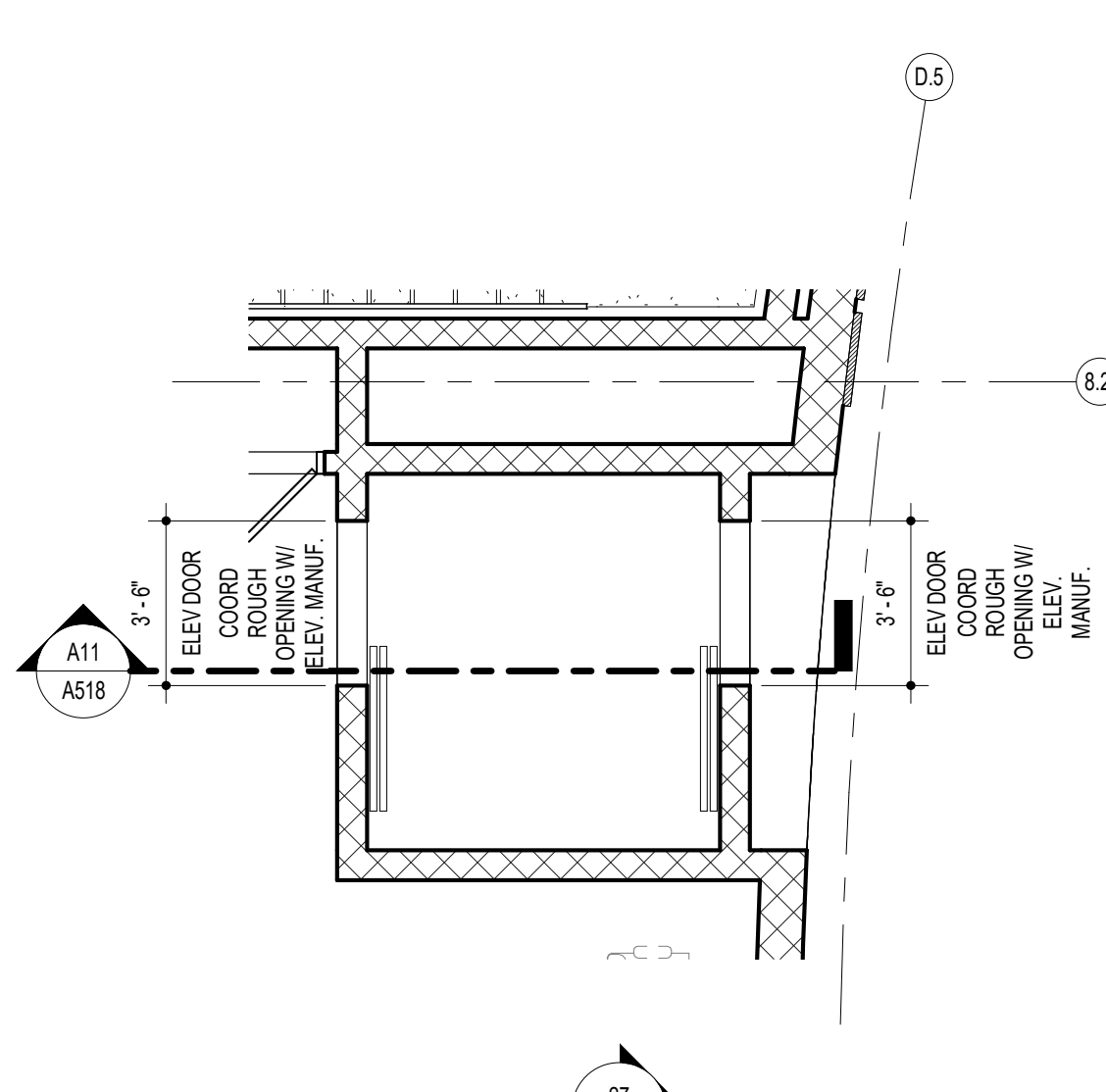




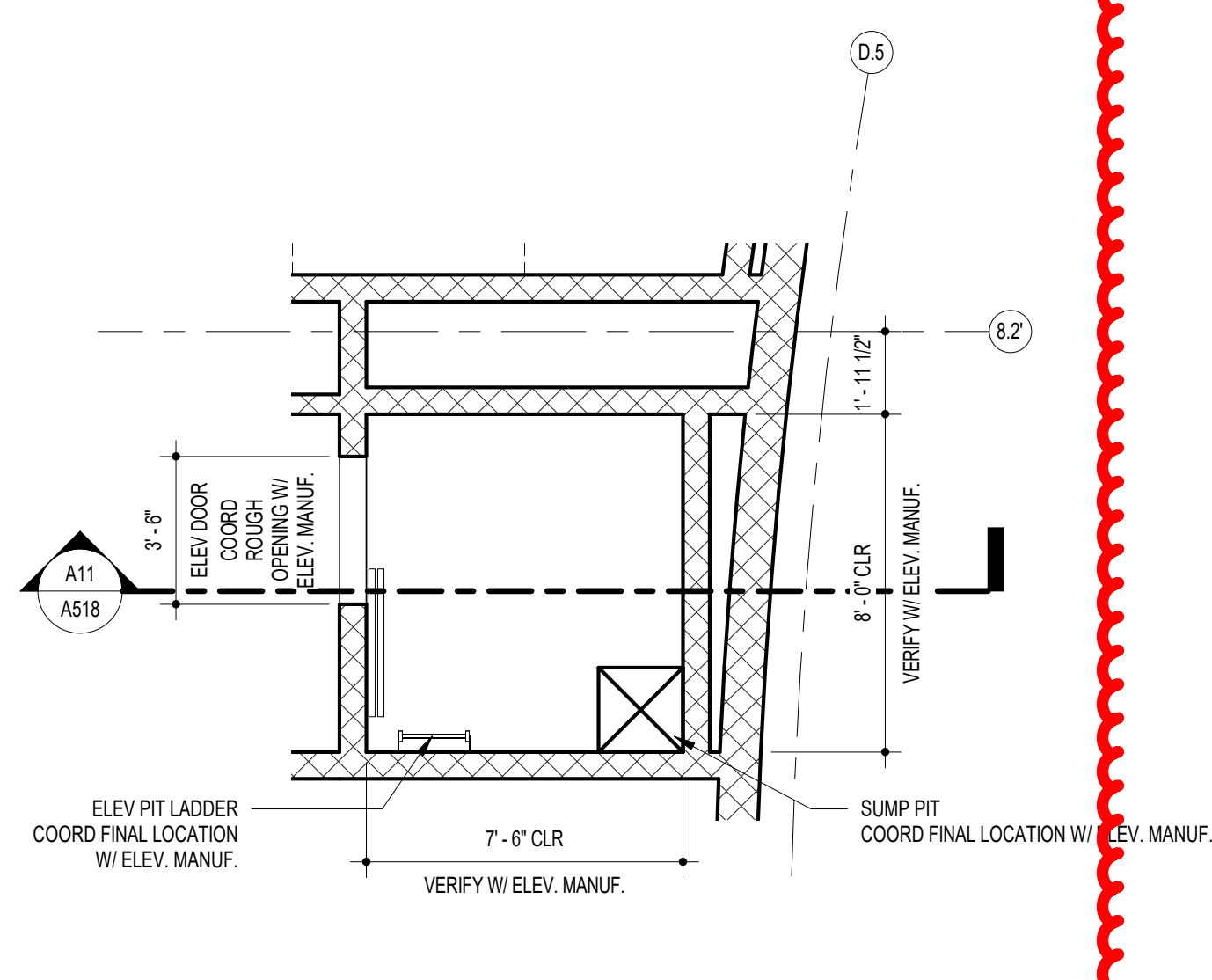
H17 PLATFORM LIFT PLAN  
1/4" = 1'-0"



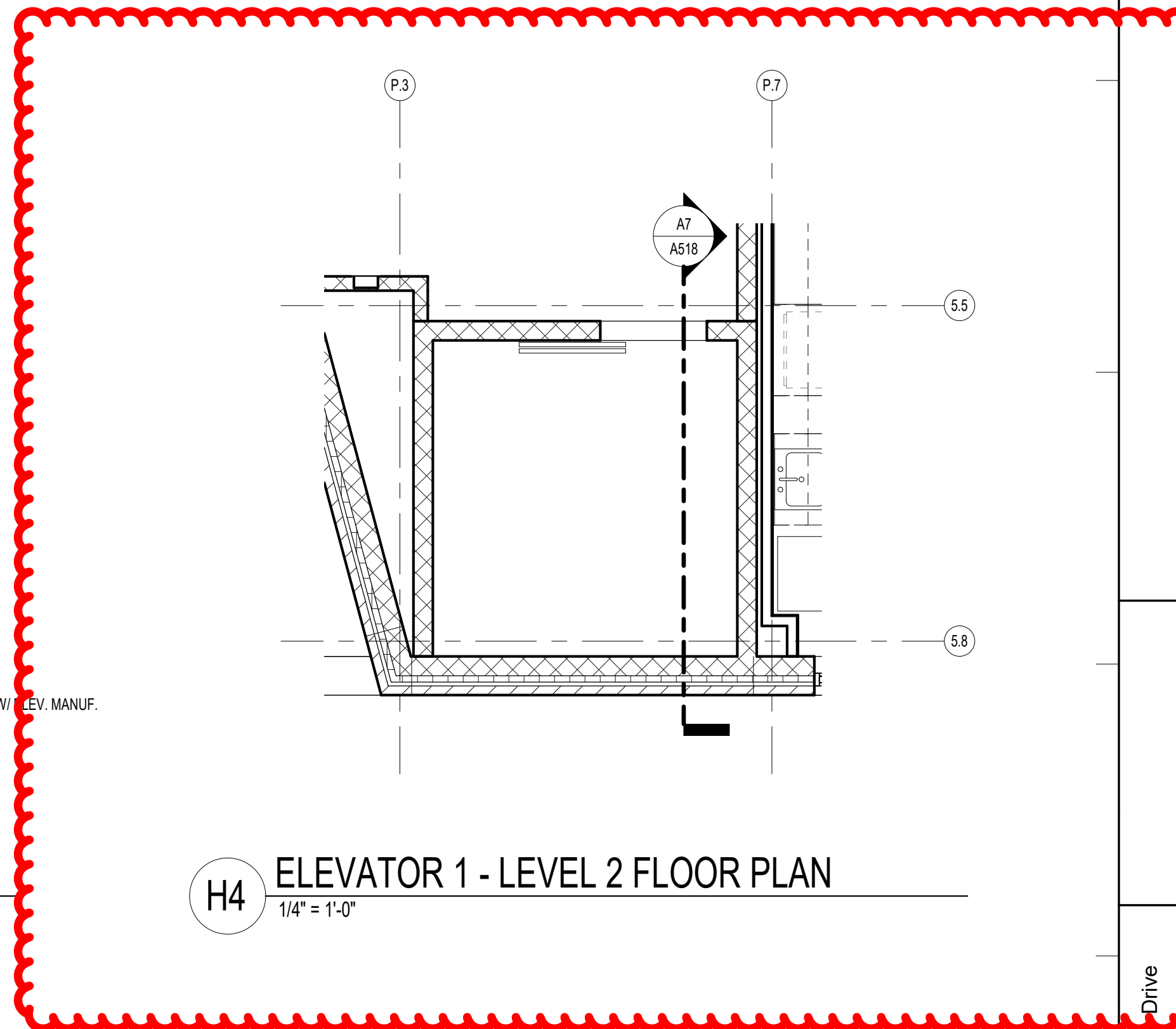
H14 ELEVATOR 3 - LEVEL 3 FLOOR PLAN  
1/4" = 1'-0"



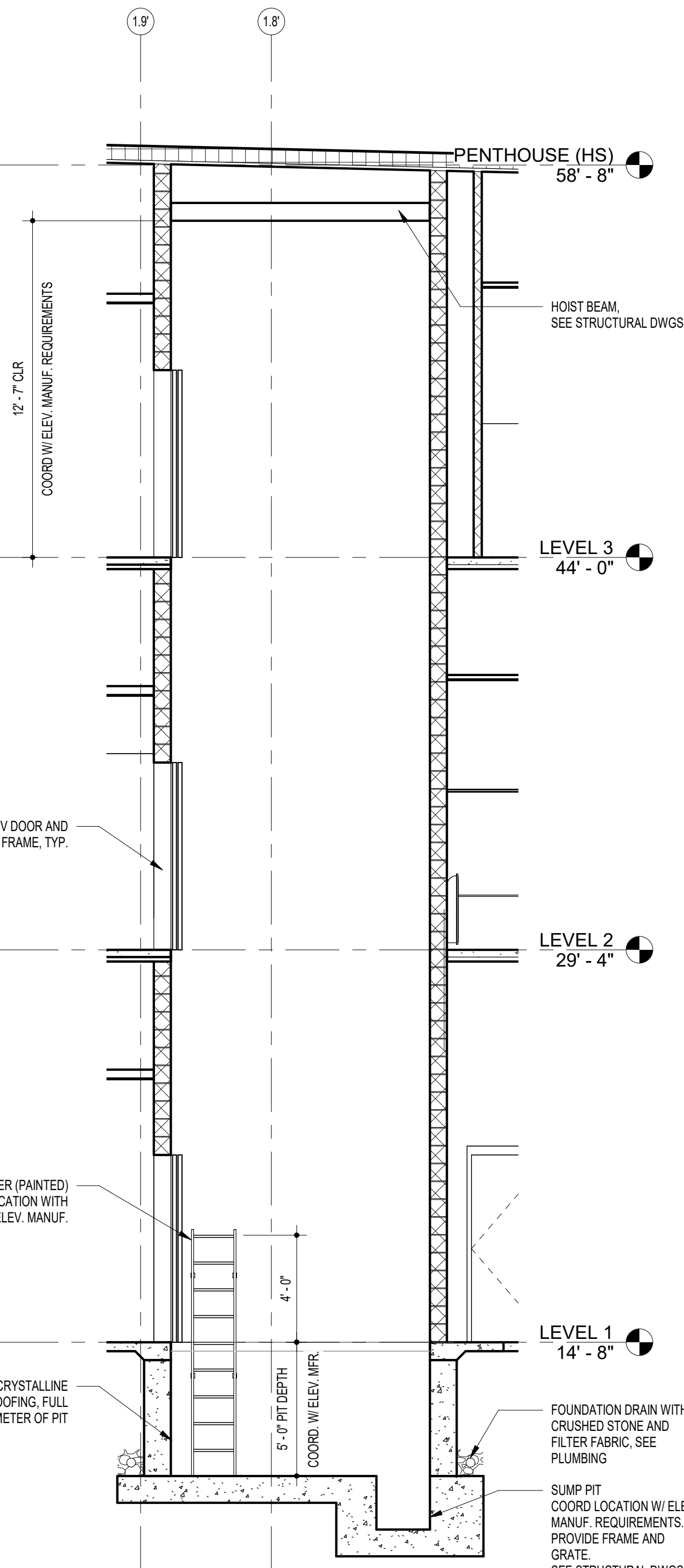
H11 ELEVATOR 2 - BALCONY LEVEL FLOOR PLAN  
1/4" = 1'-0"



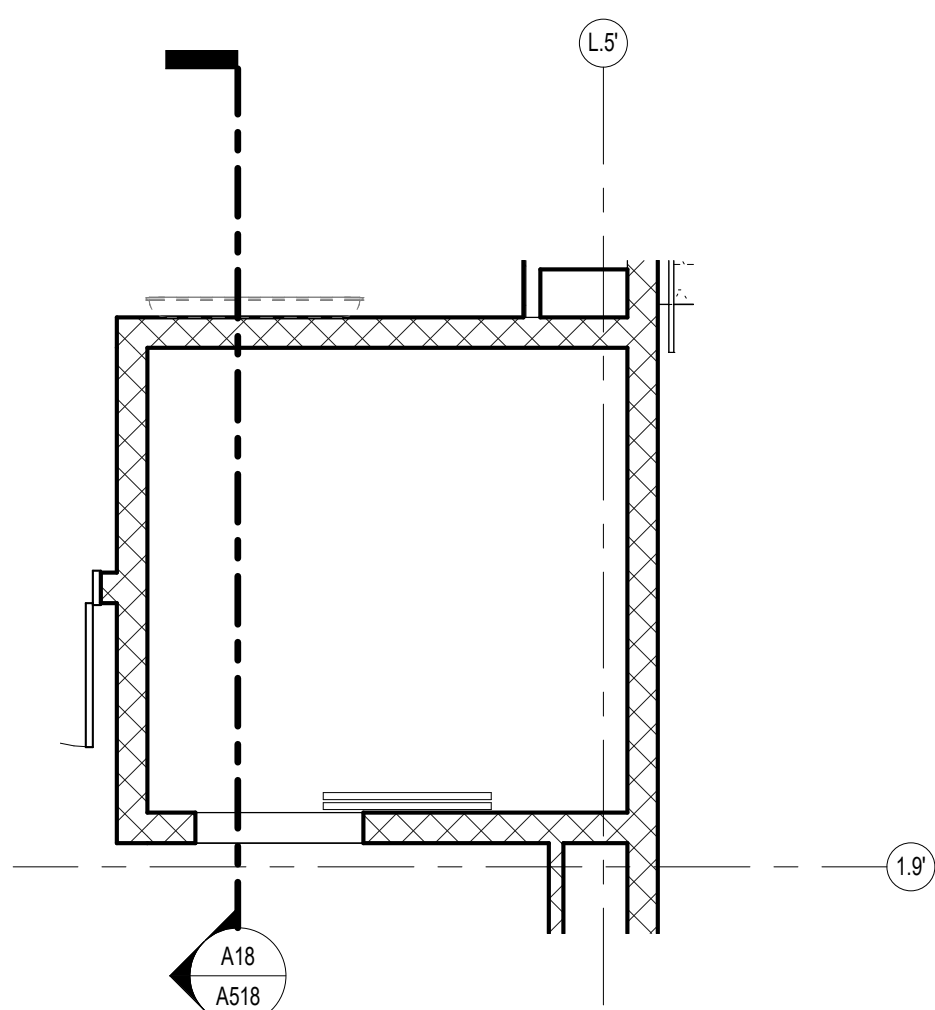
H7 ELEVATOR 2 - LEVEL 1 FLOOR PLAN  
1/4" = 1'-0"



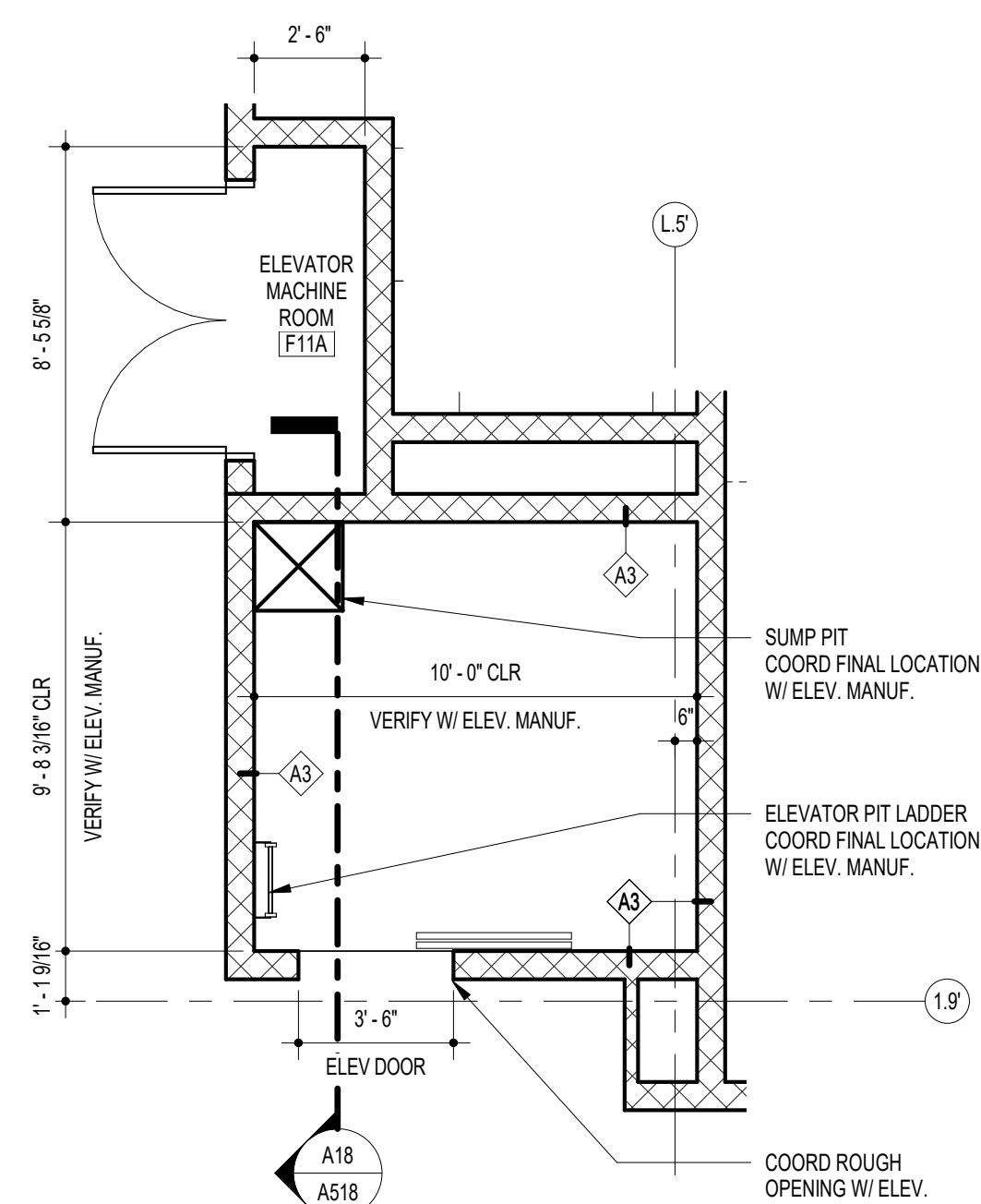
H4 ELEVATOR 1 - LEVEL 2 FLOOR PLAN  
1/4" = 1'-0"



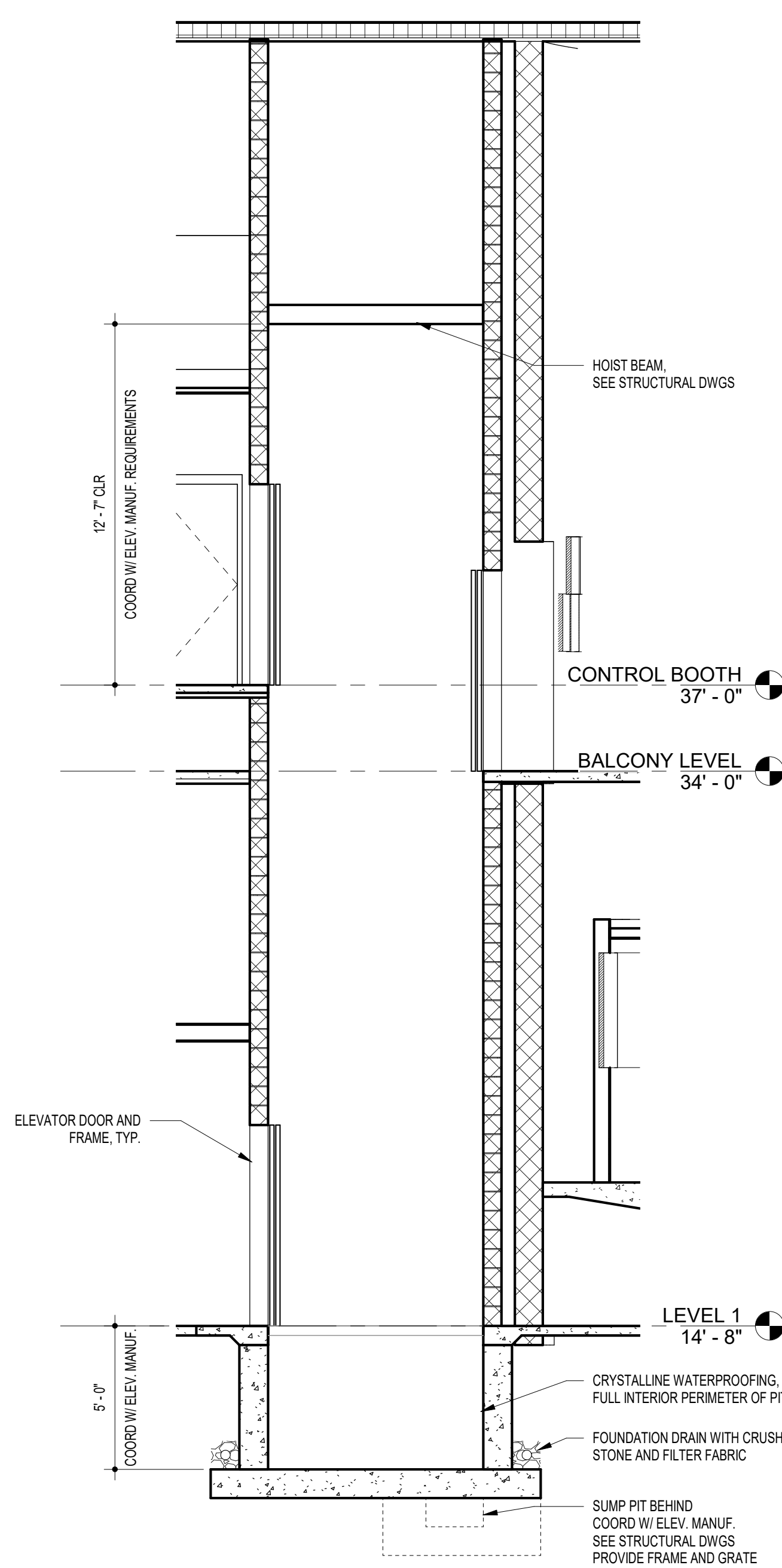
A18 ELEVATOR 3 - SECTION  
1/4" = 1'-0"



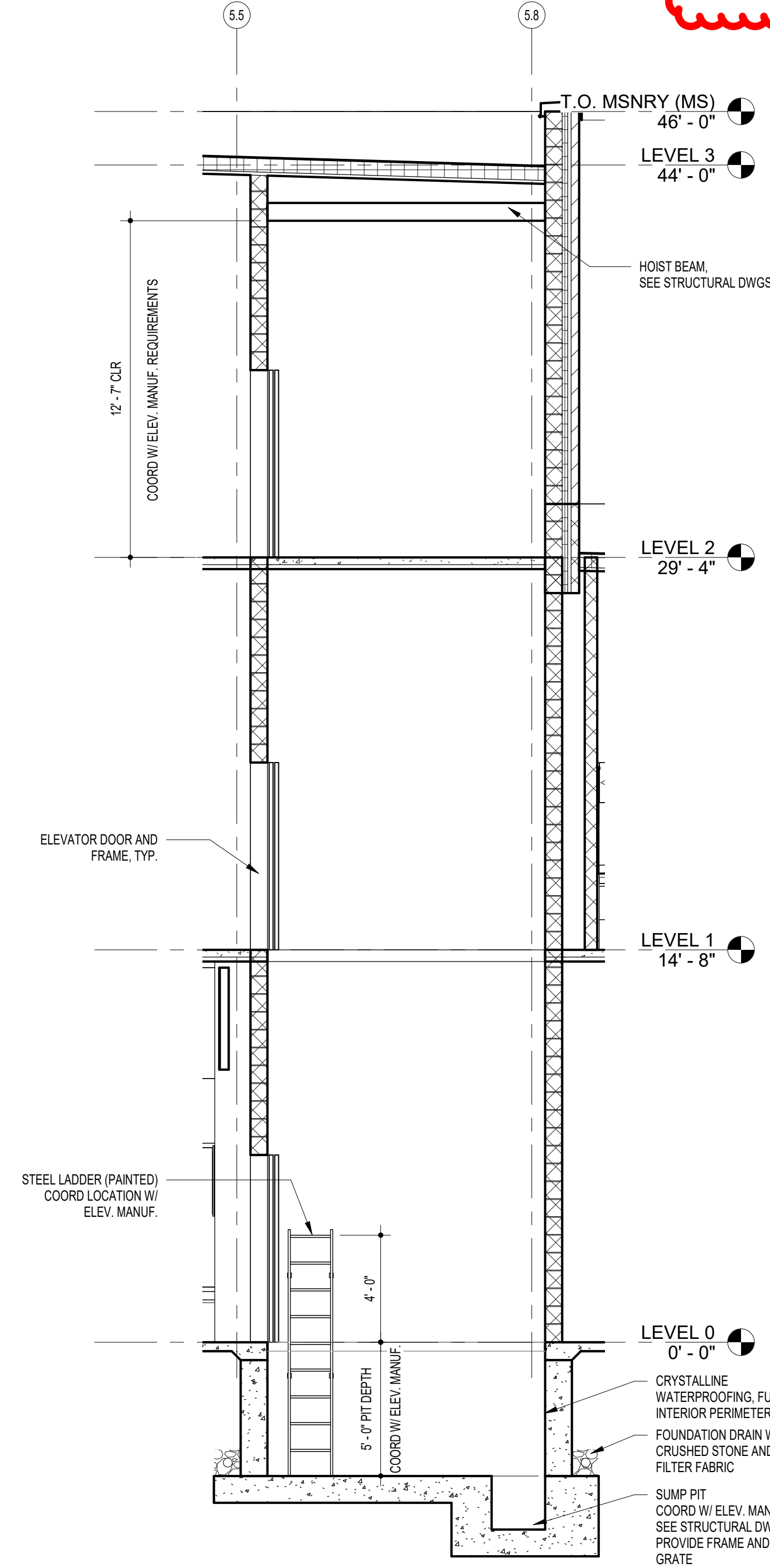
D14 ELEVATOR 3 - LEVEL 2 FLOOR PLAN  
1/4" = 1'-0"



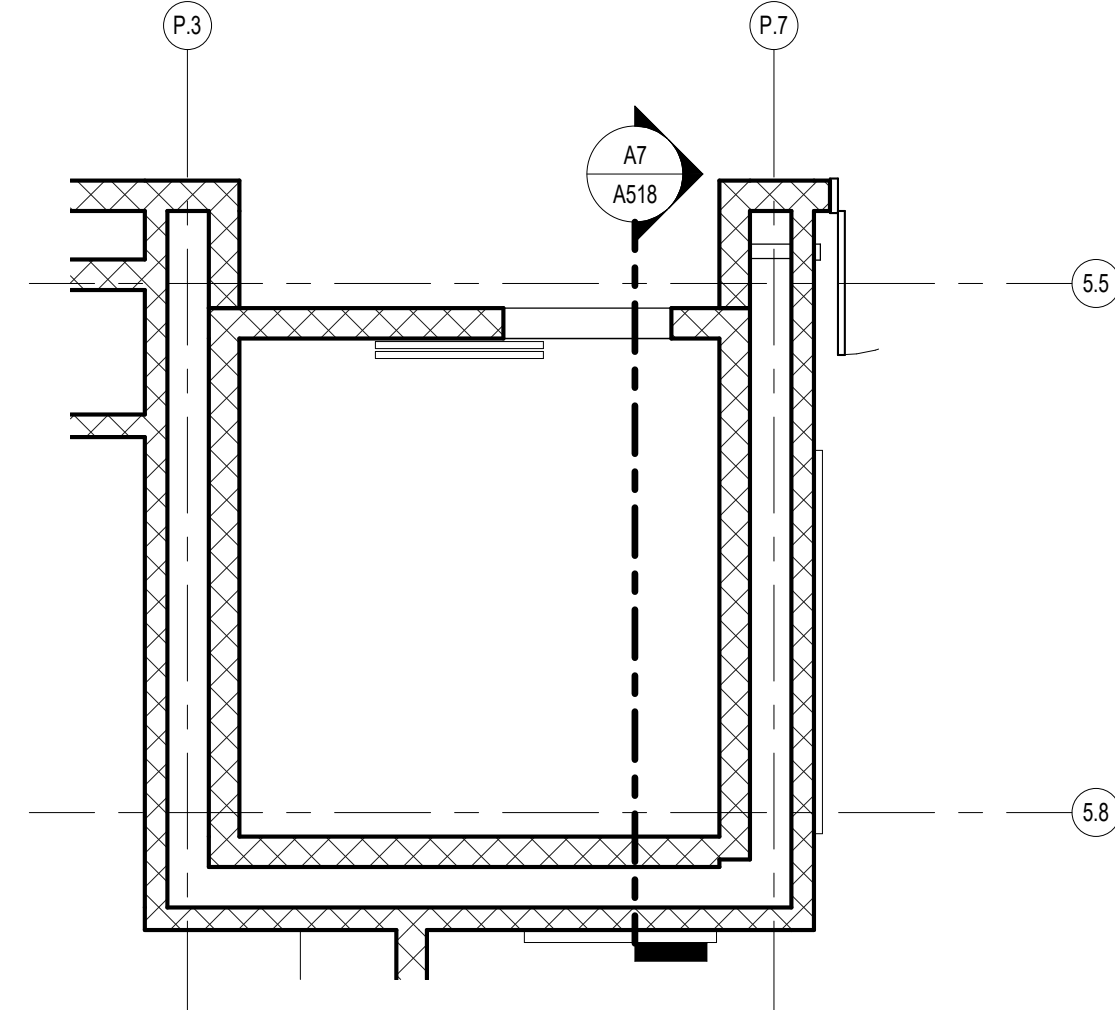
A14 ELEVATOR 3 - LEVEL 1 FLOOR PLAN  
1/4" = 1'-0"



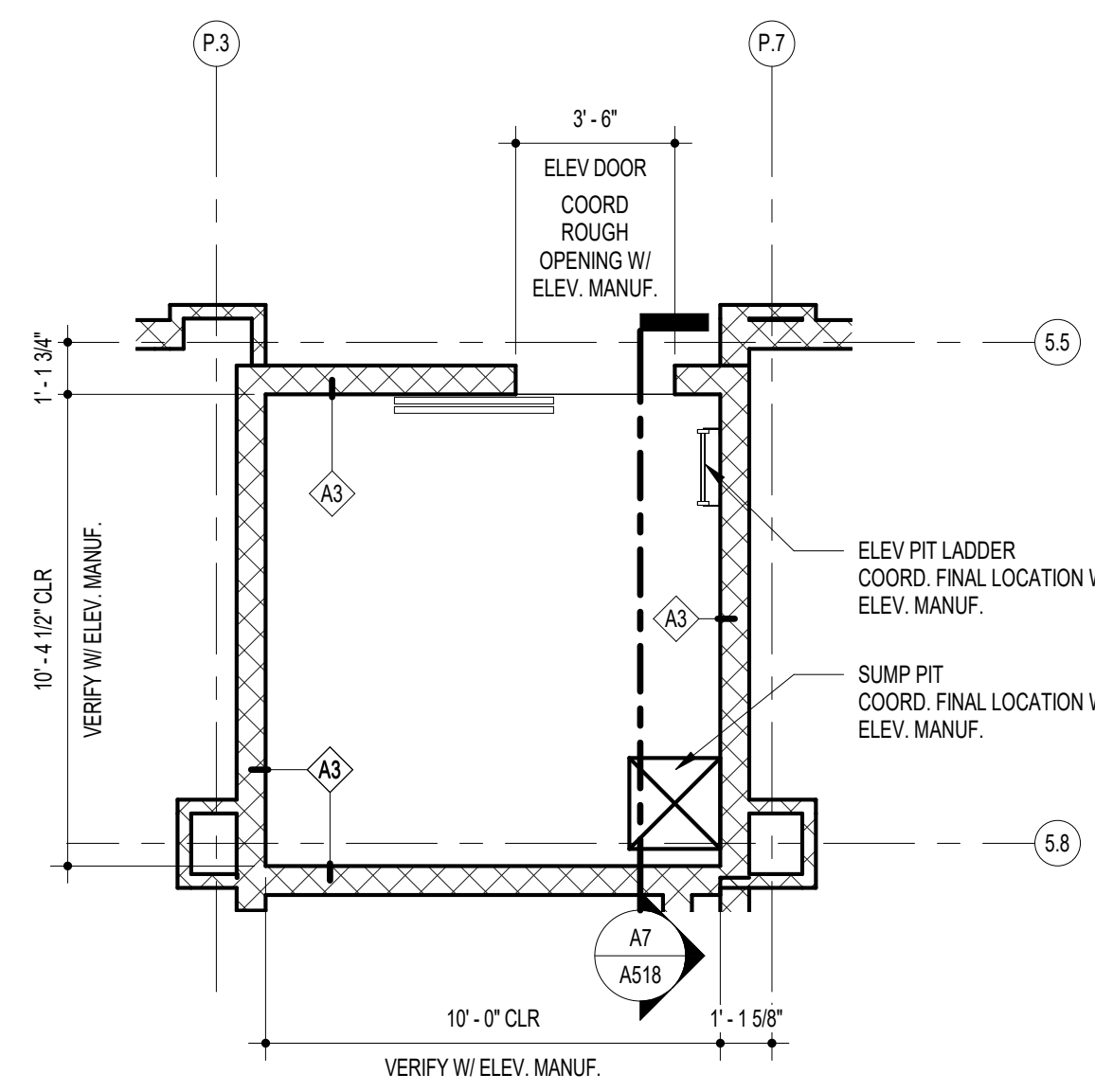
A11 ELEVATOR 2 - SECTION  
1/4" = 1'-0"



A7 ELEVATOR 1 - SECTION  
1/4" = 1'-0"



D4 ELEVATOR 1 - LEVEL 1 FLOOR PLAN  
1/4" = 1'-0"



A4 ELEVATOR 1 - LEVEL 0 FLOOR PLAN  
1/4" = 1'-0"

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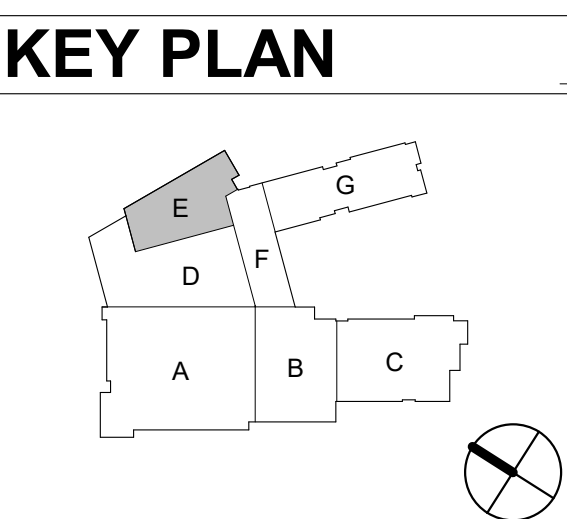
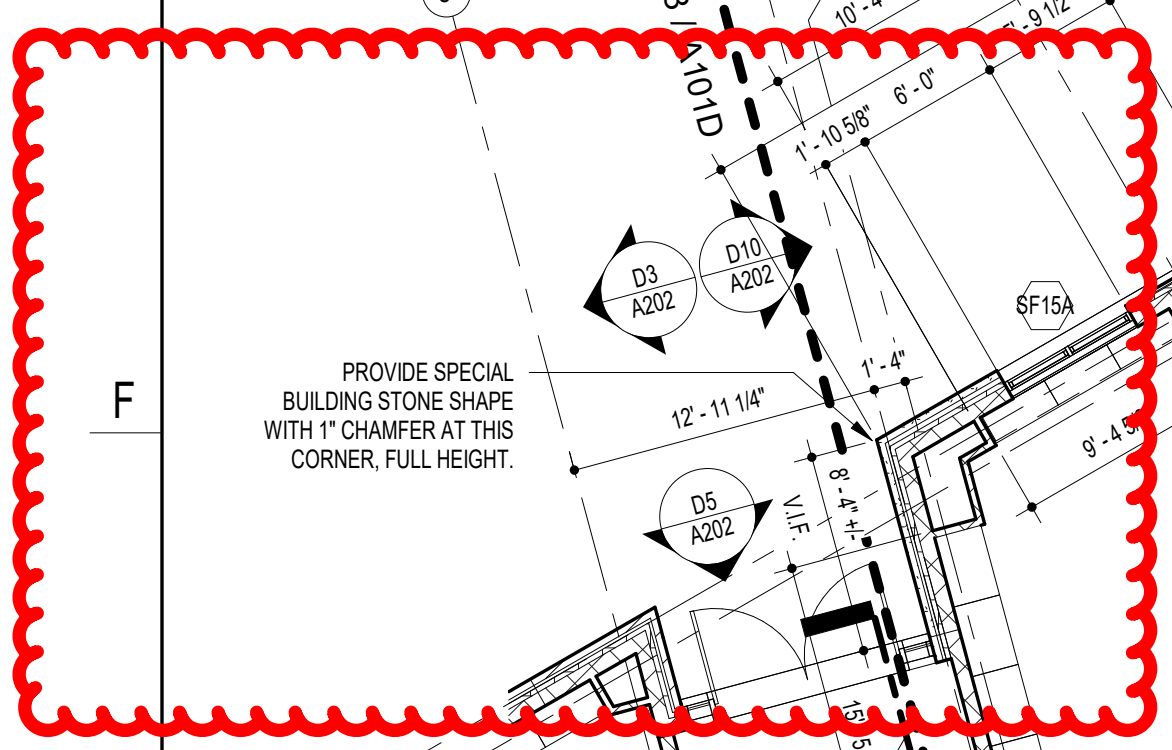
GP #22105

ENLARGED ELEVATOR PLANS & DETAILS  
NORTH EAST MIDDLE / HIGH SCHOOL  
300 IRISTOWN ROAD, NORTH EAST, MD

DATE	DESCRIPTION

**A518**  
12/22/2023  
BID SET  
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DATE	DESCRIPTION


**A101E**  
12/22/2023  
BID SET



## RFI detail

## #006 Special Masonry Veneer Shapes



Status	 <b>Open</b> In Review
Created on	Jun 27, 2024 by <b>Glenn Feldstein</b> (George Moehrle Masonry)
RFI type	Architectural RFI REVs
Ball in court	<b>Patrick Byrne</b> (Grimm and Parker)
Due date	Jul 8, 2024

### Question

Please provide dimensioned details of all special brick shapes:

- o Sill A18/A425
- o Obtuse corner A101D (A'/1#) - please provide angle (105deg?)
- o Acute corner A101D (CL-C'/1#)- please provide angle (75deg?)
- o Obtuse corner K10/A519- please confirm 105deg angle
- o Obtuse corner H4/A518- please confirm 105deg angle
- o Please note that the chamfered building stone call out on sheet A101E (at corner CL-D'/1#) cannot be manufactured. Please confirm use of a straight joint is acceptable.

### Suggested answer

Straight joint with sealant to match control joints is acceptable.

### References

#### Files (1)

- [RFI 006 Markup.pdf](#)

#### Sheets (4)

- [A519](#)
- [A425](#)
- [A101D](#)
- [A518](#)

## Impact

Cost impact	Unknown
-------------	---------

Schedule impact	No
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## Other attributes

Priority	Normal
----------	--------

Discipline	Masonry
------------	---------

Category	Documentation Incomplete
----------	--------------------------

Location	-
----------	---

Location details	See markups on sheets. Various locations
------------------	--

External id	-
-------------	---

Co-reviewer(s)	
----------------	--

Posted to Drawings/ Specifications	YES
---------------------------------------	-----

Trade's RFI No.	-
-----------------	---

### G+P Response:



1. See attached detail on sheet A425 for dimensions.
2. 105 degree interior angle is correct.
3. 75 degree interior angle is correct.
4. 105 degree interior angle is correct.
5. 105 degree interior angle is correct.
6. Use of straight joint is not acceptable. We are working with the manufacturer on the creation of a custom cast piece and will advise of final solution.

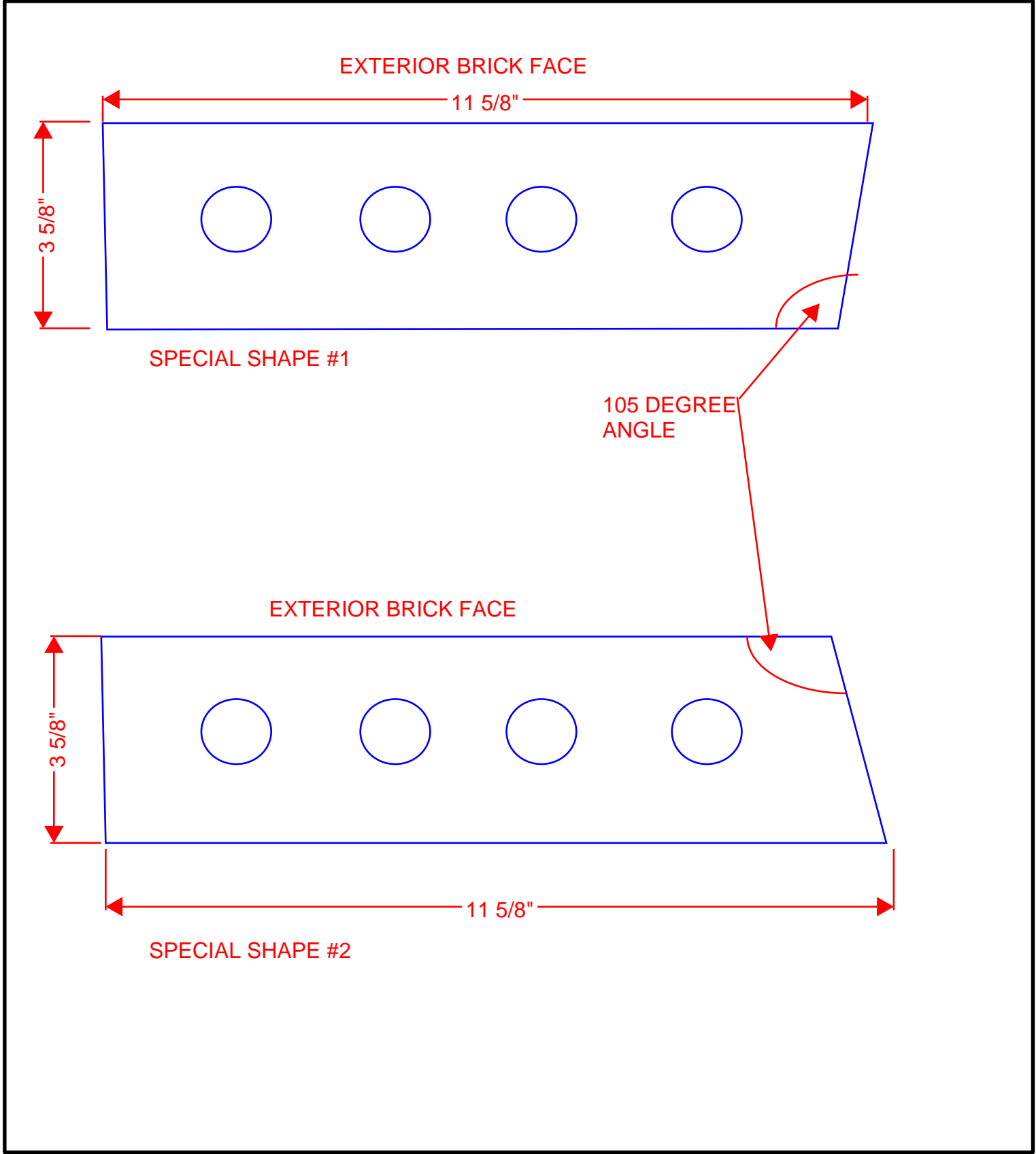
Patrick Byrne 7.8.2024

### UPDATED RESPONSE 7.16.2024

See attached sketch for special shaped bricks required at obtuse and acute angles.

Patrick Byrne 7.16.2024

Activities	By	At
<b>Joshua Postadan</b> added a reference to a file <b>RFI 006 Markup.pdf</b>	<b>Joshua Postadan</b>	Jul 1, 2024, 2:47 PM EDT
<b>Joshua Postadan</b> changed the status from  <b>Open</b> Waiting for Submission to  <b>Open</b> In Review set Ball in court to <b>Patrick Byrne</b> (Grimm and Parker)	<b>Joshua Postadan</b>	Jul 1, 2024, 2:17 PM EDT
changed the <b>location details</b> to <i>See markups on sheets. Various locations</i>	<b>Joshua Postadan</b>	Jul 1, 2024, 2:17 PM EDT
changed the <b>question</b> to <i>Please provide dimensioned details of all special brick shapes: o Sill A18/A425 o Obtuse corner A101D (A'/1#) - please provide angle (105deg?) o Acute corner A101D (CL-C'/1#)- please provide angle (75deg?) o Obtuse corner K10/A519- please confirm 105deg angle o Obtuse corner H4/A518- please confirm 105deg angle o Please note that the chamfered building stone call out on sheet A101E (at corner CL-D'/1#) cannot be manufactured. Please confirm use of a straight joint is acceptable.</i>	<b>Joshua Postadan</b>	Jul 1, 2024, 2:12 PM EDT
changed the <b>ID</b> to 006	<b>Joshua Postadan</b>	Jul 1, 2024, 1:56 PM EDT
<b>Joshua Postadan</b> added a reference to a sheet <b>A519</b>	<b>Joshua Postadan</b>	Jul 1, 2024, 1:48 PM EDT
<b>Joshua Postadan</b> added a reference to a sheet <b>A518</b>	<b>Joshua Postadan</b>	Jul 1, 2024, 1:48 PM EDT
<b>Joshua Postadan</b> added a reference to a sheet <b>A101D</b>	<b>Joshua Postadan</b>	Jul 1, 2024, 1:48 PM EDT
<b>Joshua Postadan</b> added a reference to a sheet <b>A425</b>	<b>Joshua Postadan</b>	Jul 1, 2024, 1:48 PM EDT
changed the <b>Posted to Drawings/Specifications</b> to YES	<b>Joshua Postadan</b>	Jul 1, 2024, 1:48 PM EDT
changed the <b>due date</b> to Jul 7, 2024	<b>Joshua Postadan</b>	Jul 1, 2024, 1:47 PM EDT
changed the <b>cost impact</b> to <i>Unknown</i>	<b>Joshua Postadan</b>	Jul 1, 2024, 1:47 PM EDT
changed the <b>schedule impact</b> to <i>No</i>	<b>Joshua Postadan</b>	Jul 1, 2024, 1:47 PM EDT
changed the <b>watchers</b> to <b>Glenn Feldstein</b> (George Moehrle Masonry), <b>HESS PROJECT TEAM</b>	<b>Joshua Postadan</b>	Jul 1, 2024, 1:47 PM EDT



NORTH EAST MIDDLE HIGH SCHOOL

SCALE: NTS

DATE  
7/16/2024

RFI  
06



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changed the **question** to *Please provide dimensioned details of all special brick shapes: o Sill A18/A425 o Obtuse corner A101D (A'1#) - please provide angle (105deg?) o Acute corner A101D (CL-C'1#)- please provide angle (75deg?) o Obtuse corner K10/A519- please confirm 105deg angle o Obtuse corner H4/A518- please confirm 105deg angle o Please note that the chamfered building stone call out on sheet A101 (at corner CL-D'1#) cannot be manufactured. Please confirm use of a straight joint is acceptable.*

**Joshua  
Postadan**

Jul 1, 2024, 1:37 PM  
EDT

changed the **question** to *Please provide dimensioned details of all special brick shapes: o Sill A18/A425 o Obtuse corner A101D (A'1#)please provide angle (105deg?) o Acute corner A101D (CL-C'1#)- please provide angle (75deg?) o Obtuse corner K10/A519- please confirm 105deg angle o Obtuse corner H4/A518- please confirm 105deg angle o Please note that the chamfered building stone call out on sheet A101 (at corner CL-D'1#) cannot be manufactured. Please confirm use of a straight joint is acceptable.*

**Joshua  
Postadan**

Jul 1, 2024, 1:37 PM  
EDT

**Glenn Feldstein** (George Moehrle Masonry) created this RFI in **Open** Waiting for Submission status and set Ball in court to **Joshua Postadan** (HESS Construction Co., LLC).

**Glenn  
Feldstein**

Jun 27, 2024, 2:46 PM  
EDT



M

L

K

J

H

G

F

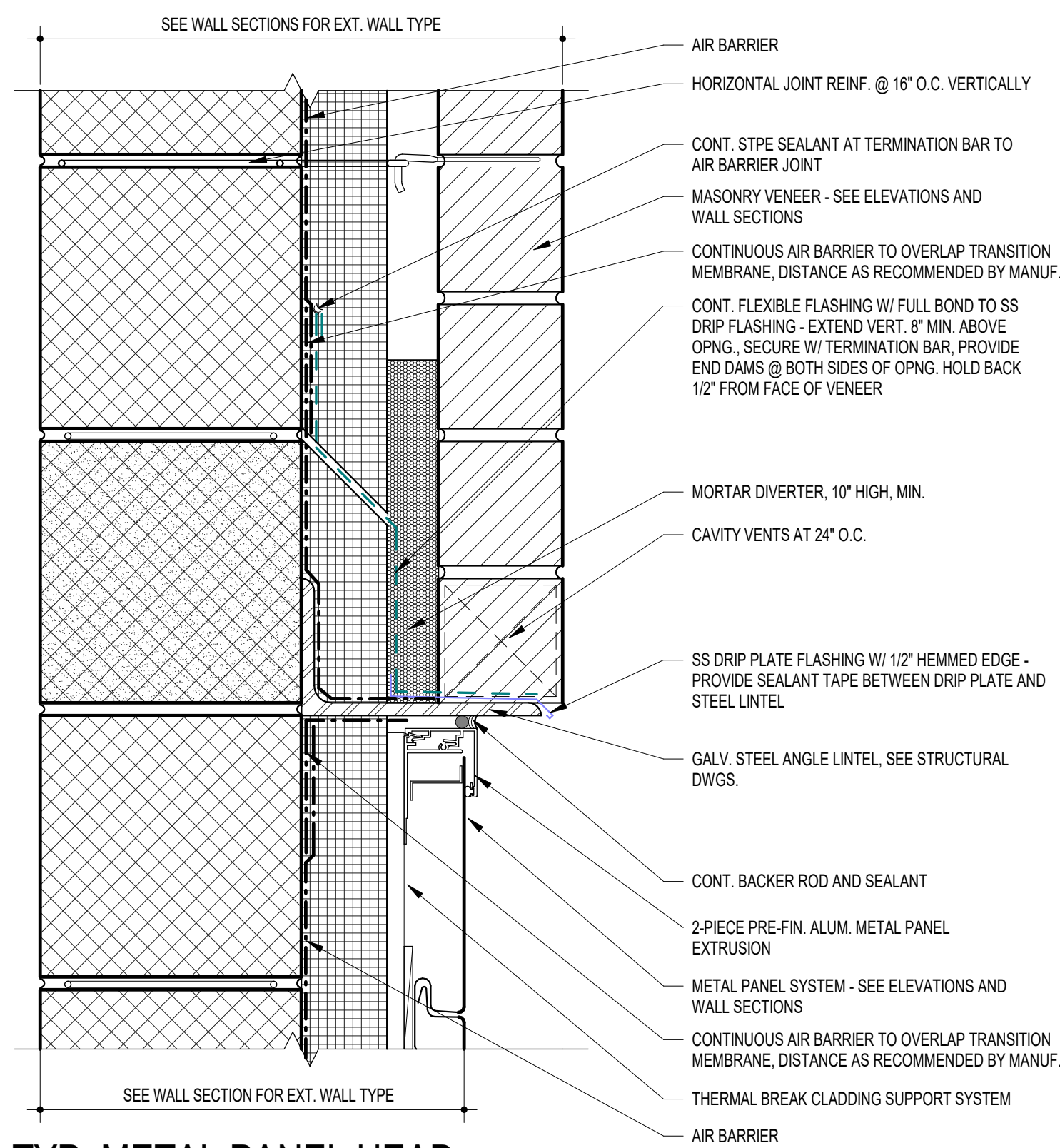
E

D

C

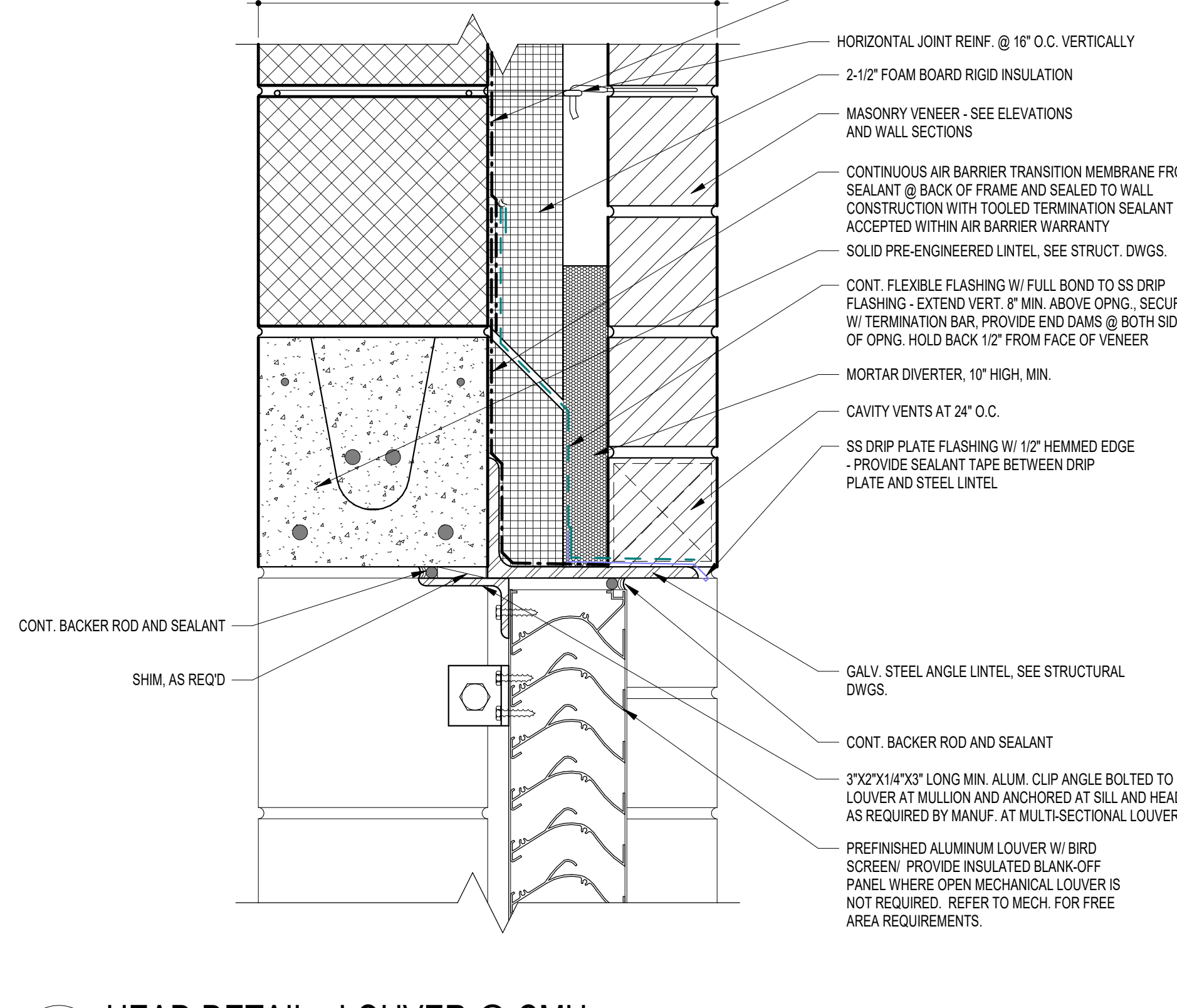
B

A

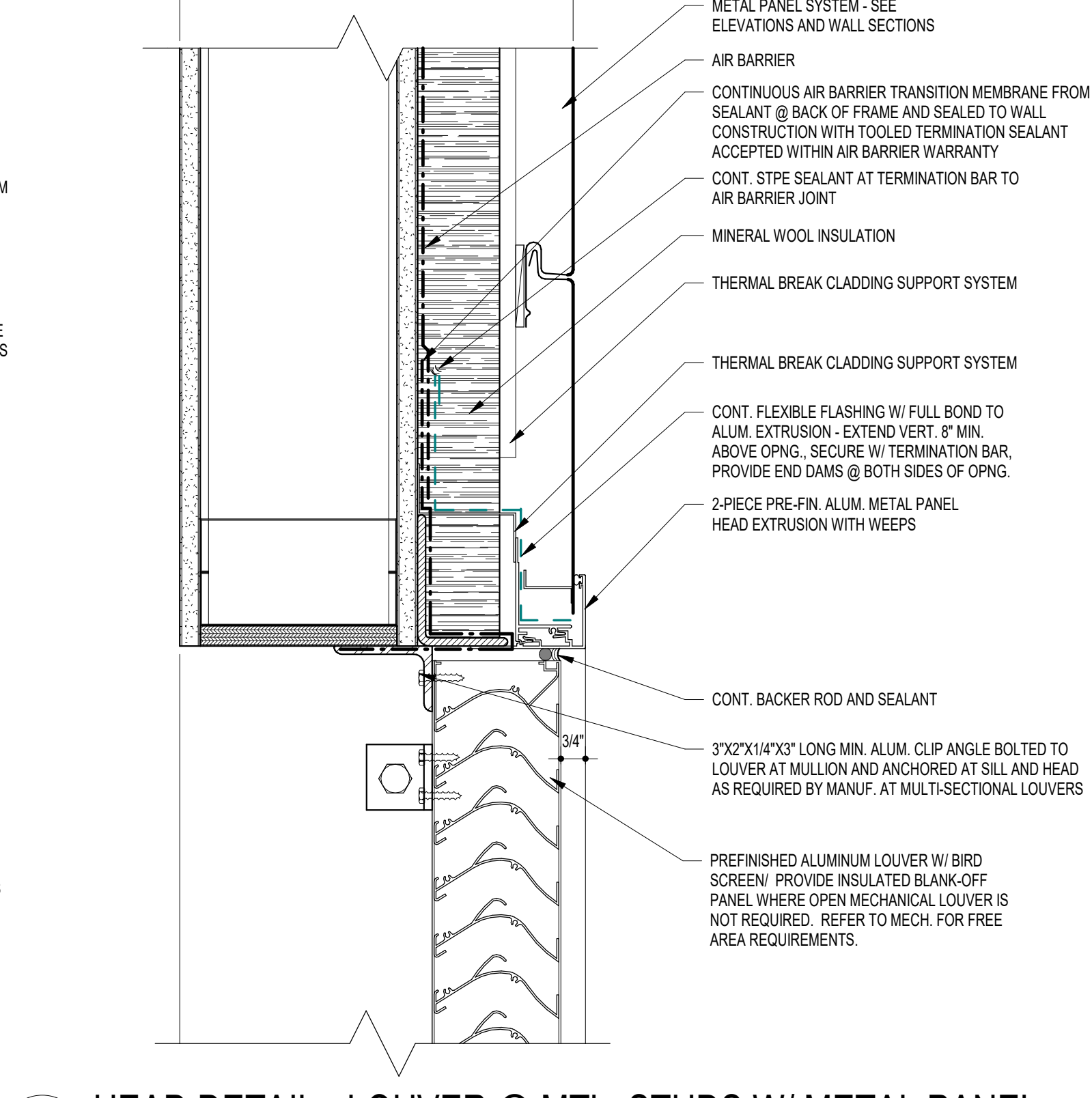


**J18 TYP. METAL PANEL HEAD**  
3" = 1'-0"

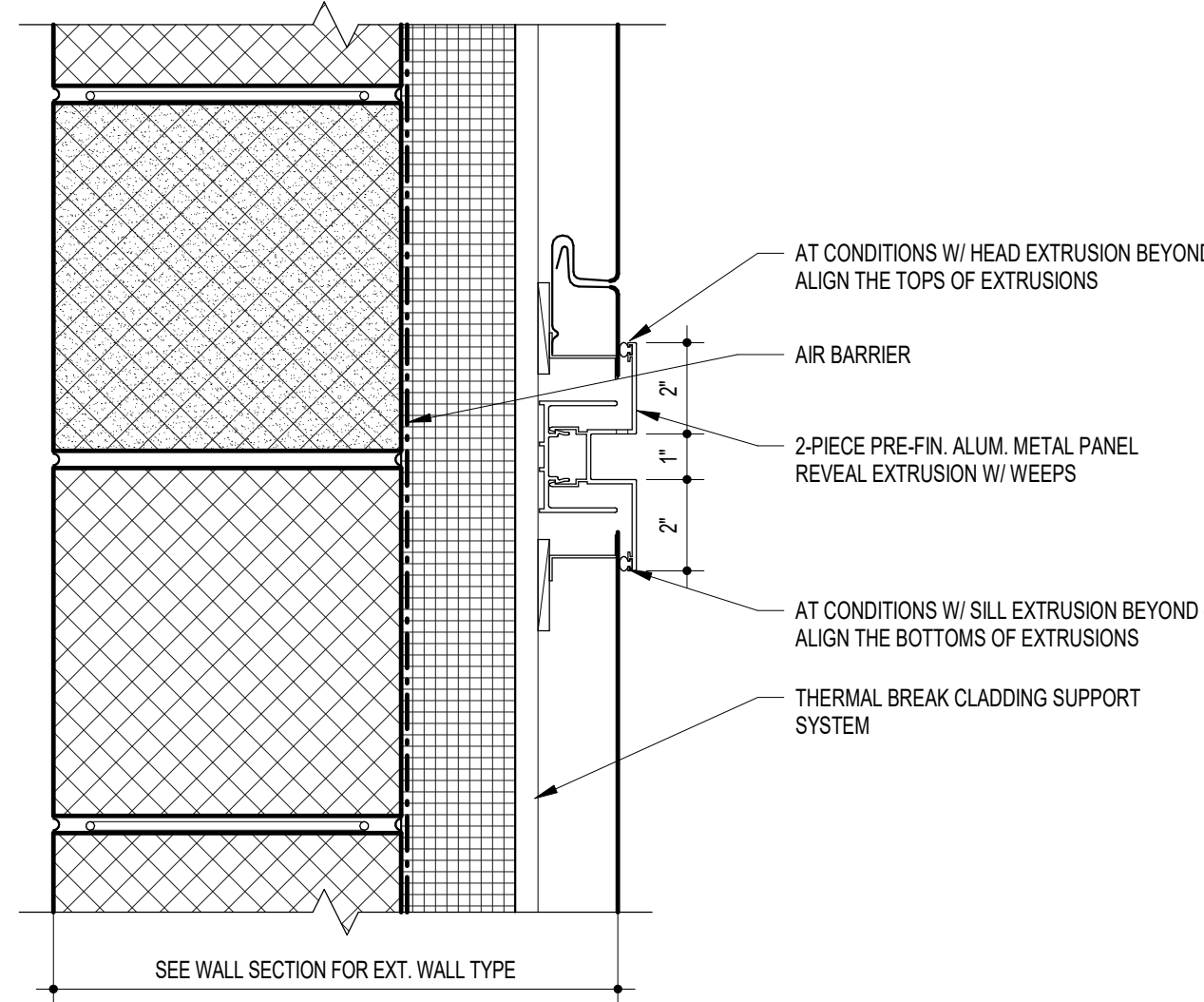
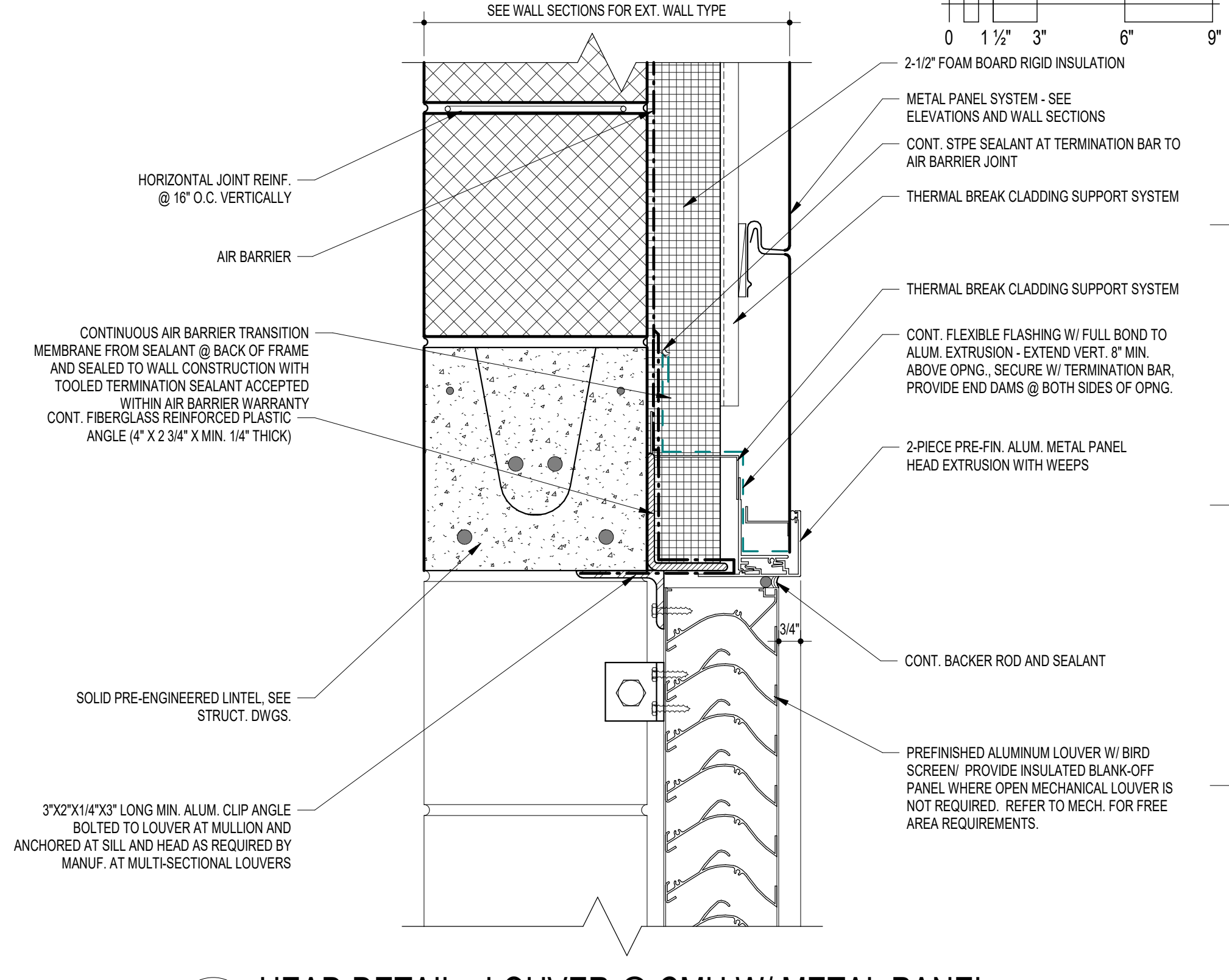
**J14 HEAD DETAIL - LOUVER @ CMU**  
3" = 1'-0"



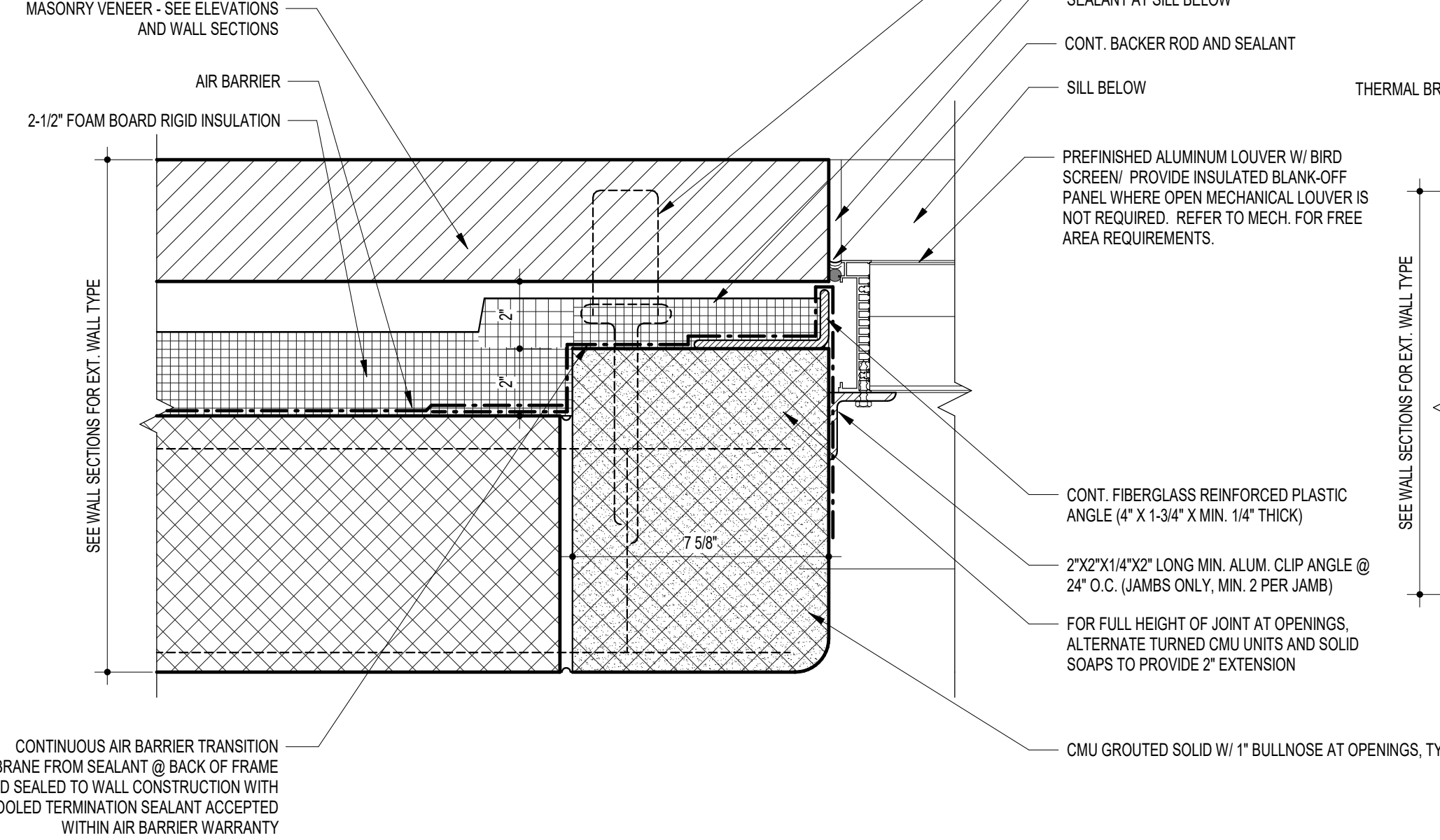
**J9 HEAD DETAIL - LOUVER @ MTL. STUDS W/ METAL PANEL**  
3" = 1'-0"



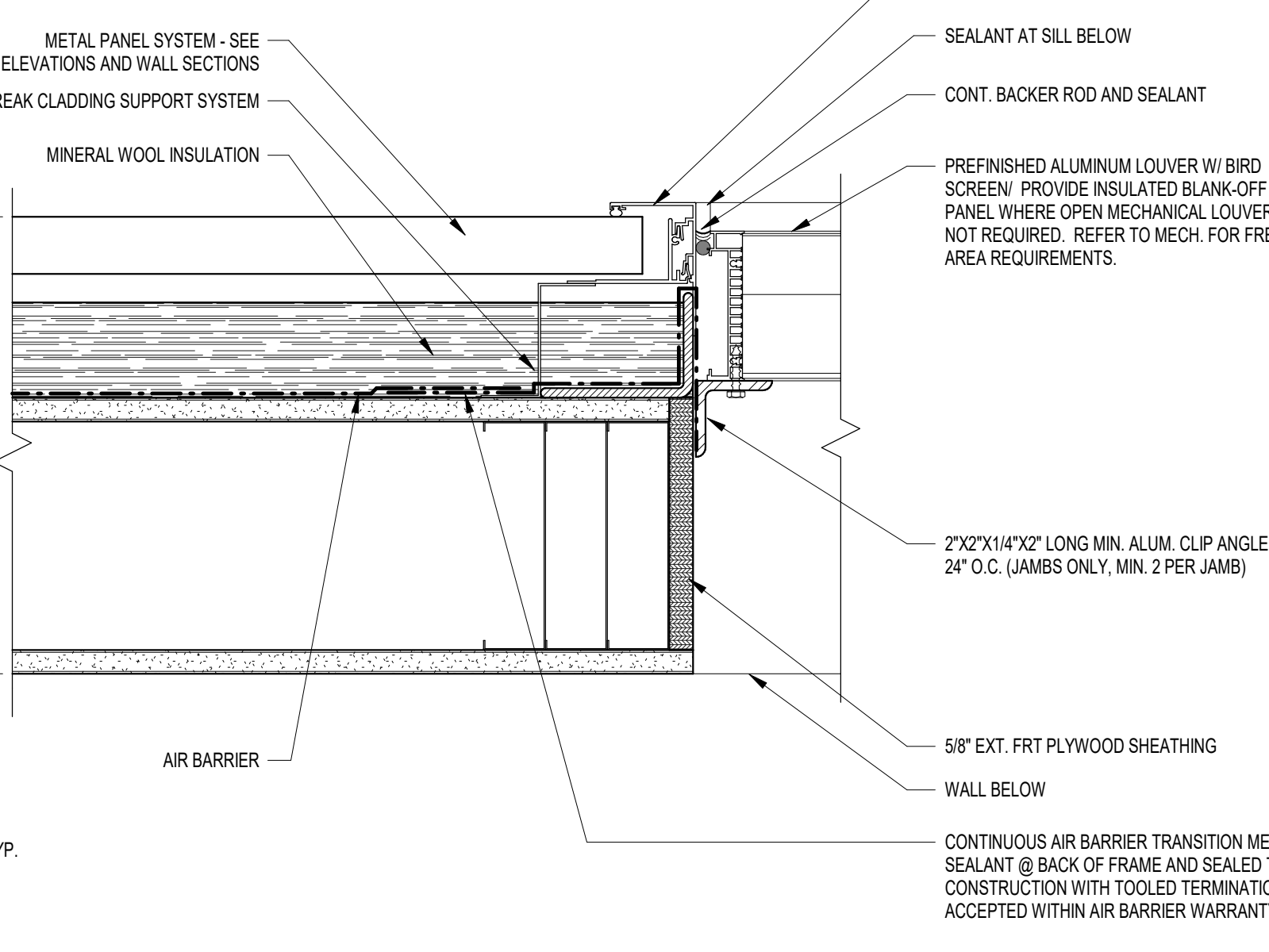
**J5 HEAD DETAIL - LOUVER @ CMU W/ METAL PANEL**  
3" = 1'-0"



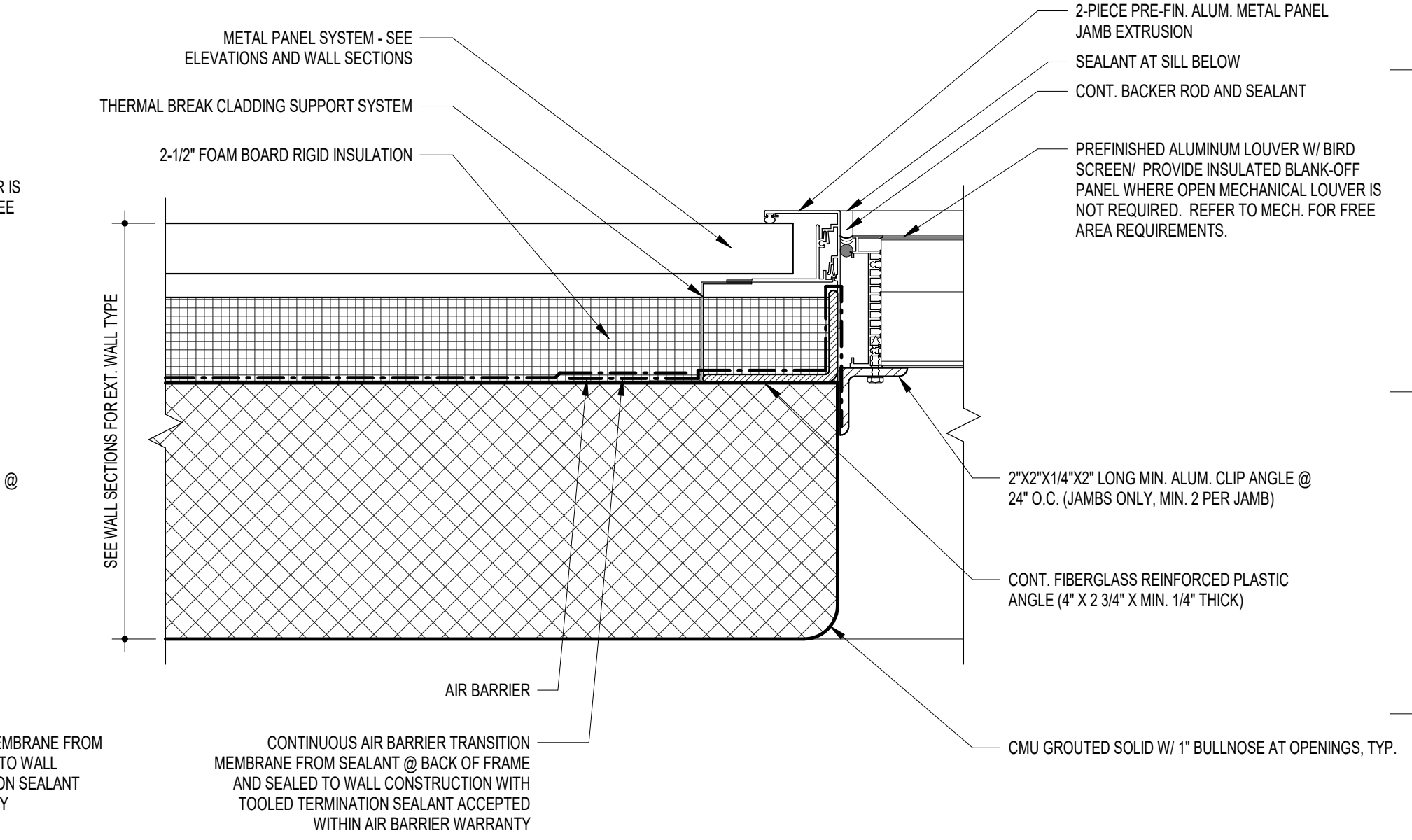
**E18 TYP. METAL PANEL REVEAL**  
3" = 1'-0"



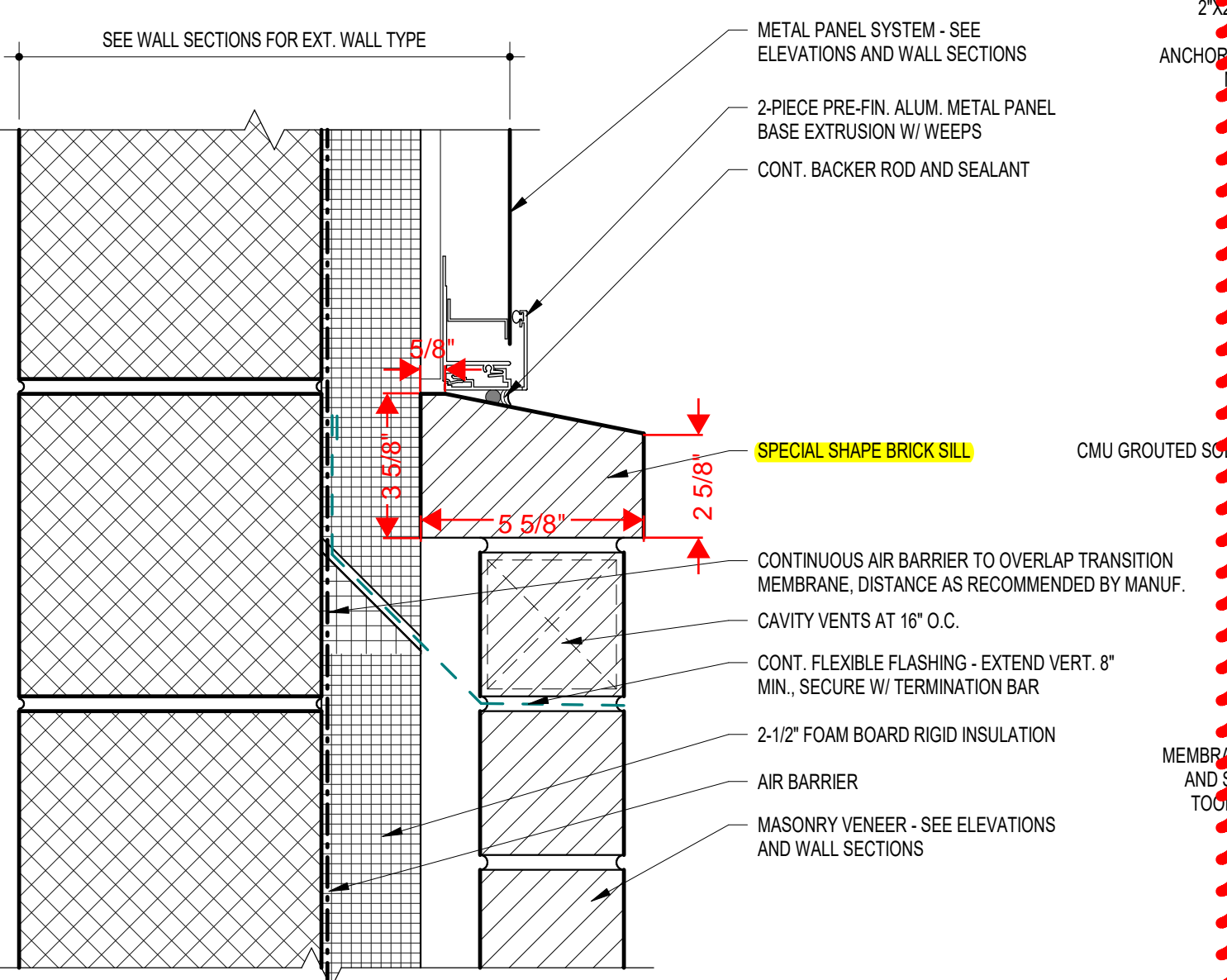
**E14 JAMB DETAIL - LOUVER @ CMU**  
3" = 1'-0"



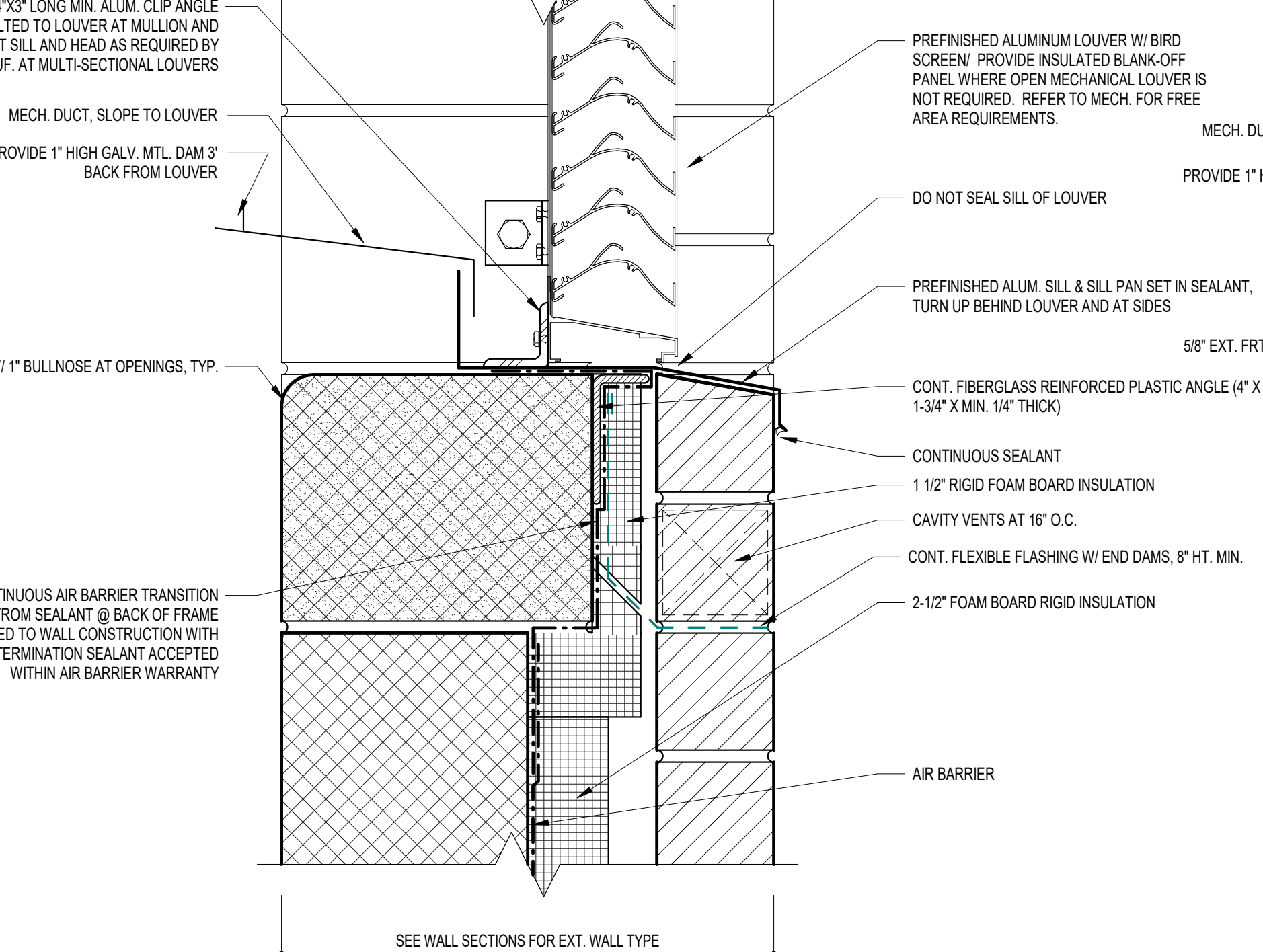
**E9 JAMB DETAIL - LOUVER @ MTL. STUDS W/ METAL PANEL**  
3" = 1'-0"



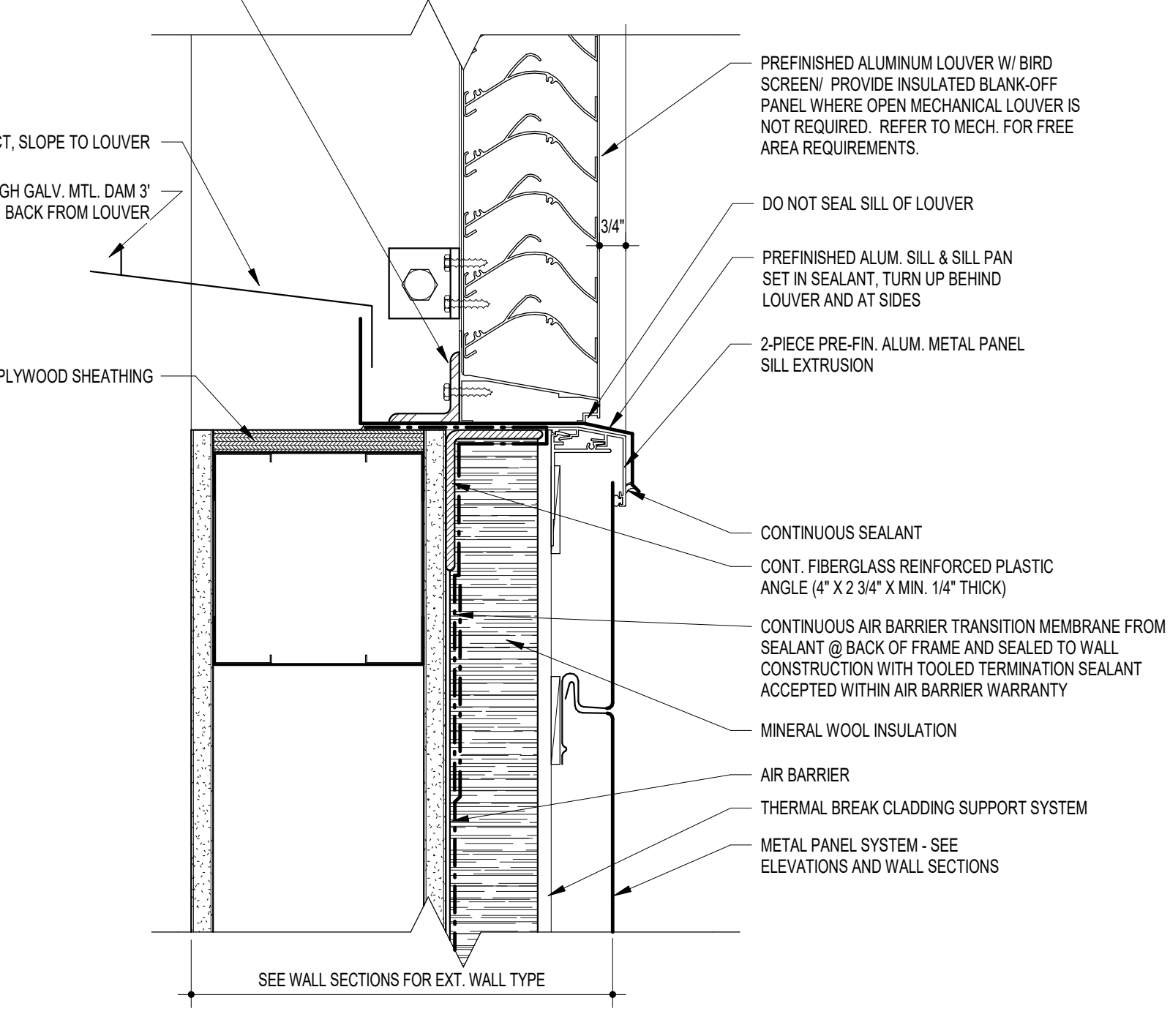
**E5 JAMB DETAIL - LOUVER @ CMU W/ METAL PANEL**  
3" = 1'-0"



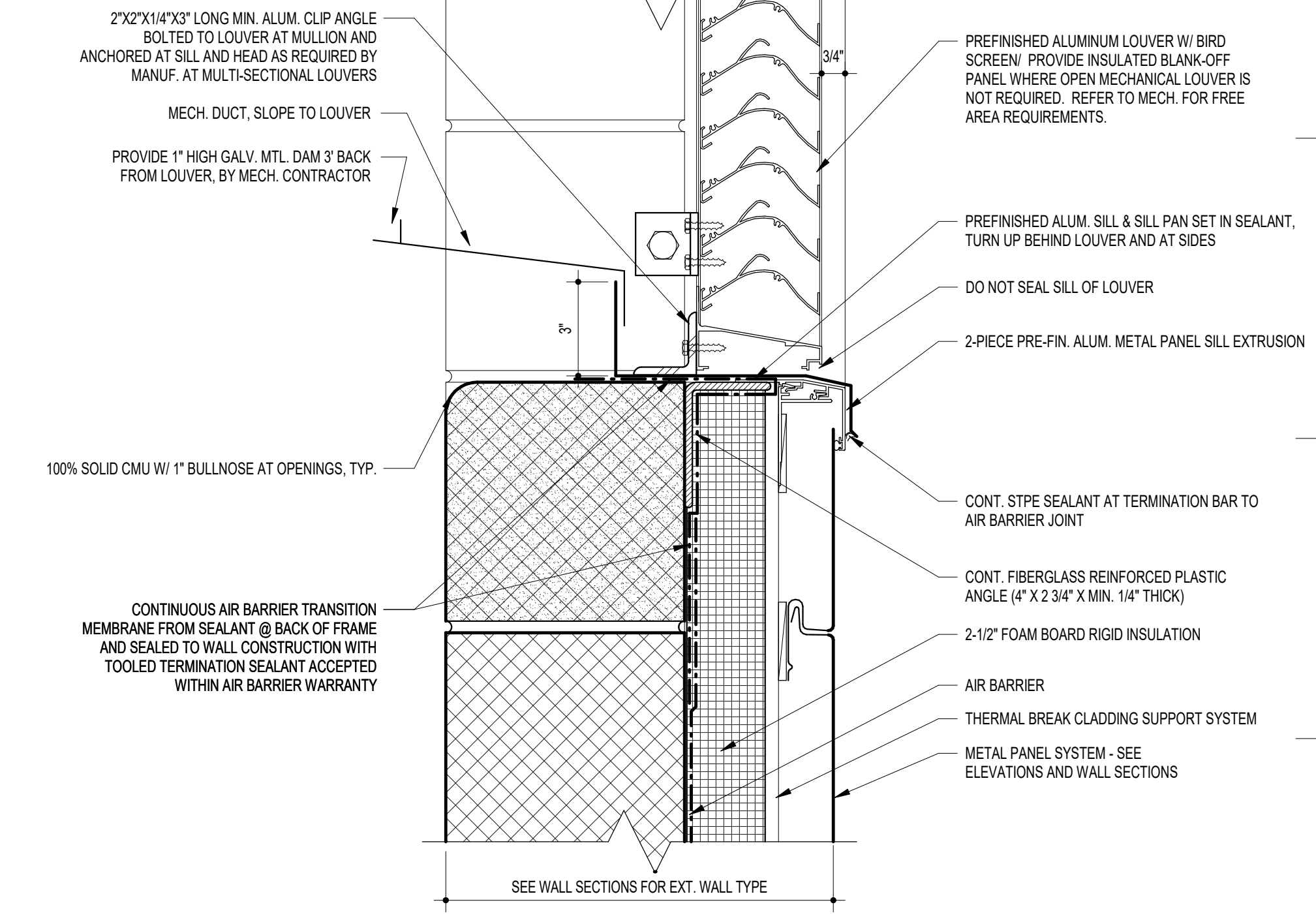
**A18 SILL DETAIL @ MTL. PANEL ON BRICK**  
3" = 1'-0"



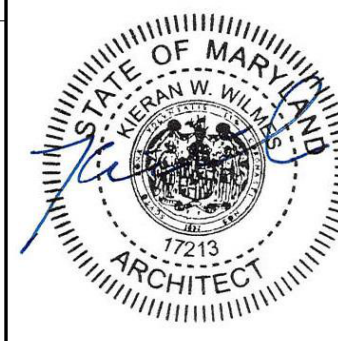
**A14 SILL DETAIL - LOUVER @ CMU**  
3" = 1'-0"



**A9 SILL DETAIL - LOUVER @ MTL. STUDS W/ METAL PANEL**  
3" = 1'-0"



**A5 SILL DETAIL - LOUVER @ CMU W/ METAL PANEL**  
3" = 1'-0"



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GP #22105

LOUVER DETAILS - METAL PANEL  
NORTH EAST MIDDLE / HIGH SCHOOL  
300 IRISTOWN ROAD, NORTH EAST, MD

DATE	DESCRIPTION

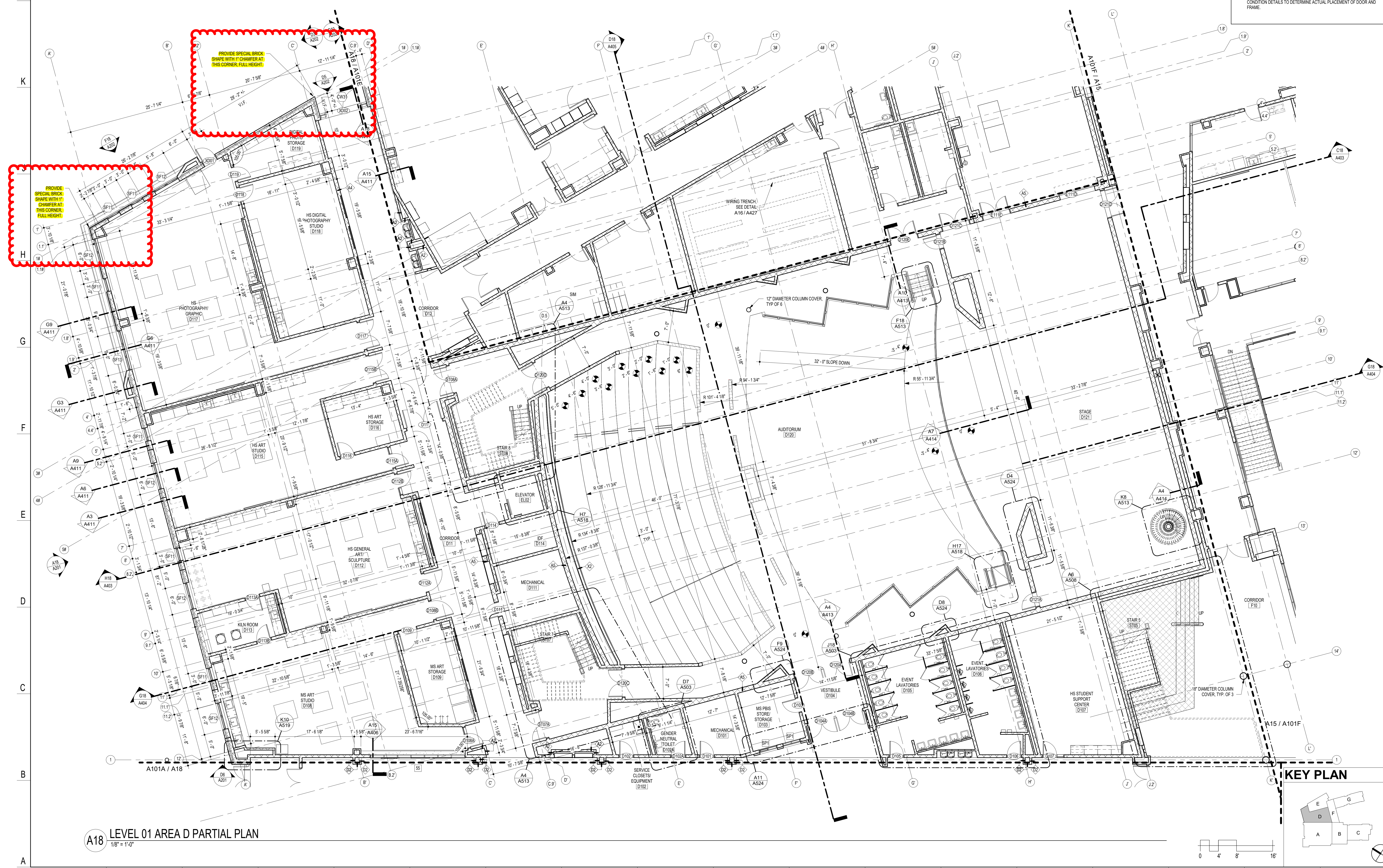
**A425**

12/22/2023  
BID SET



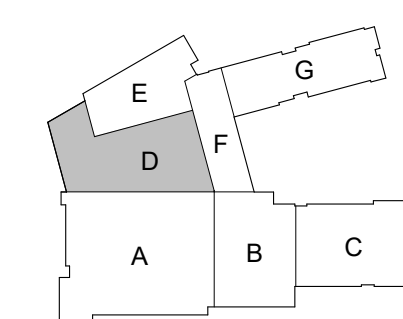
GENERAL PLAN NOTES

1. REFER TO SHEET A302 FOR WALL TYPES AS REFERENCED ON PLANS WITH THE DIAMOND SYMBOL.
2. TYPICAL CMU INTERIOR PARTITION TO BE TYPE A3 UNLESS INDICATED OTHERWISE BY WALL TYPE SYMBOLS, WALL SECTIONS OR OTHER DETAILS.
3. TYPICAL GYPSUM BOARD STUD WALL PARTITION TO BE TYPE K1 UNLESS INDICATED OTHERWISE BY WALL TYPE SYMBOLS, WALL SECTIONS OR OTHER DETAILS.
4. TYPICAL CMU CHASE WALLS TO BE TYPE A1 UNLESS INDICATED OTHERWISE BY WALL TYPE SYMBOLS, WALL SECTIONS OR OTHER DETAILS.
5. TYPICAL GYPSUM BOARD CHASE WALLS TO BE TYPE K1 UNLESS INDICATED OTHERWISE BY WALL TYPE SYMBOLS, WALL SECTIONS OR OTHER DETAILS.
6. UNLESS NOTED OTHERWISE, WALLS MUST EXTEND TO THE ROOF OR FLOOR DECK ABOVE AND BE SEALED IN ACCORDANCE WITH THE WALL TERMINATION DETAILS. REFER TO THE CODE STUDY PLAN FOR IDENTIFICATION OF ALL SMOKE AND FIRE WALL CONDITIONS. PERIMETER CORRIDOR AND LOBBY WALLS MUST BE BUILT TO RESIST THE PASSAGE OF SMOKE.
7. DIMENSIONS ON PLANS ARE FROM FACE OF MASONRY TO FACE OF MASONRY, FACE OF MASONRY TO FACE OF GYPSUM BOARD OR FACE OF GYPSUM BOARD TO FACE OF GYPSUM BOARD.
8. COLUMN GRID LINES ARE FOR REFERENCE ONLY. REFER TO STRUCTURAL DRAWINGS FOR COLUMN LOCATIONS.
9. FE- INDICATES A FIRE EXTINGUISHER WITH A RECESSED CABINET. FE- INDICATES A FIRE EXTINGUISHER WITH A WALL MOUNTING BRACKET.
10. UNLESS SPECIFICALLY INDICATED OTHERWISE, THE SAME WALL TYPE NEXT TO A DOOR OR OPENING TO CONTINUE OVER THE DOOR OR OPENING.
11. PLAN LOCATION OF DOORS AND FRAMES RELATIVE TO THE PLANE OF THE WALL IS DIAGNOSTIC ONLY. REFER TO THE REFERENCED JAMB AND HEAD CONDITION DETAILS TO DETERMINE ACTUAL PLACEMENT OF DOOR AND FRAME.



A18 LEVEL 01 AREA D PARTIAL PLAN  
1/8" = 1'-0"

KEY PLAN



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GP #22105

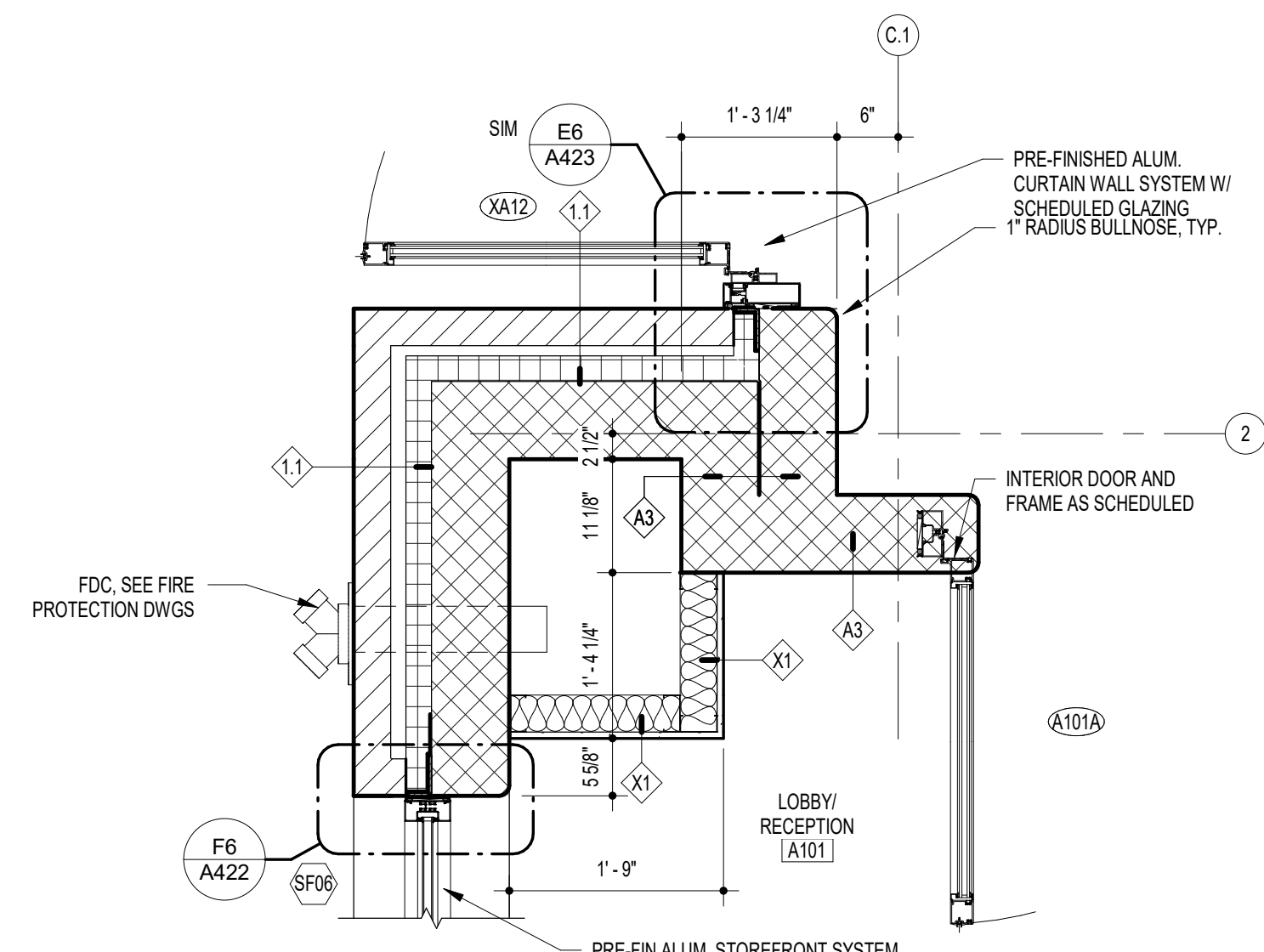
LEVEL 01 AREA D PARTIAL FLOOR PLAN  
NORTH EAST MIDDLE / HIGH SCHOOL  
300 IRISTOWN ROAD, NORTH EAST, MD

DATE	DESCRIPTION

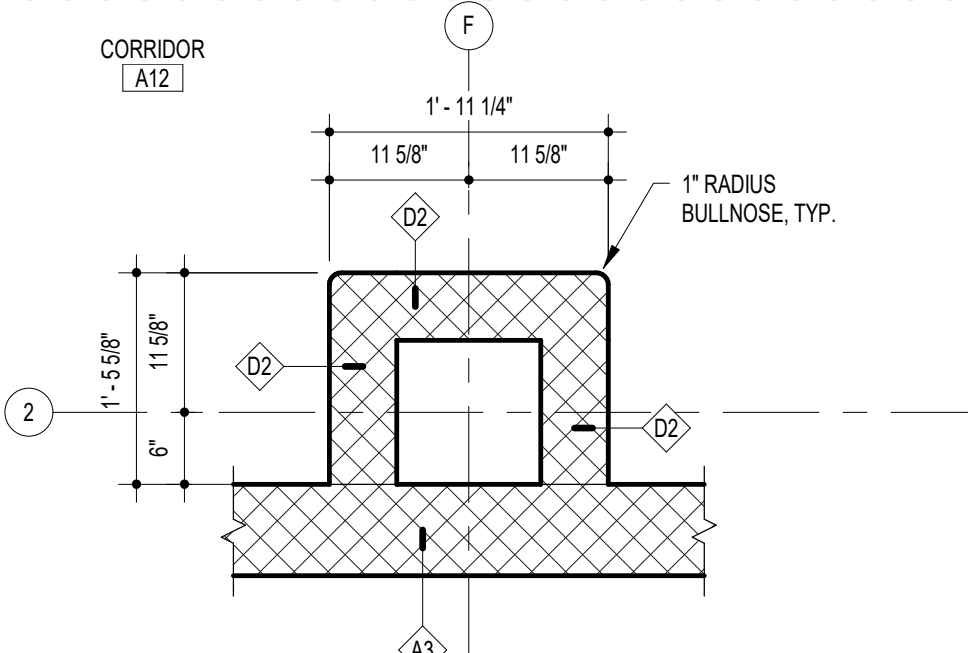
**A101D**  
12/22/2023  
BID SET

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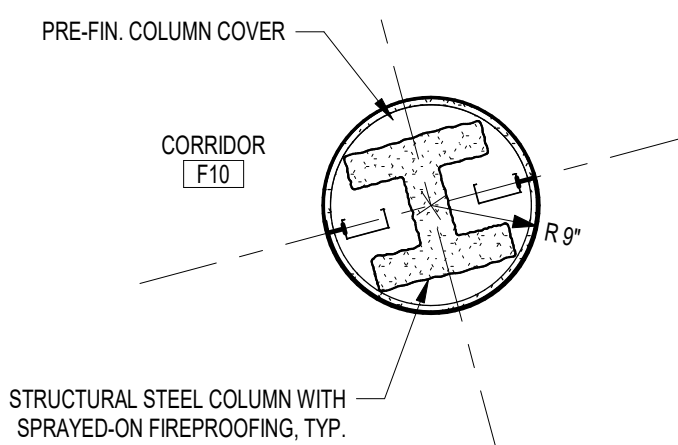




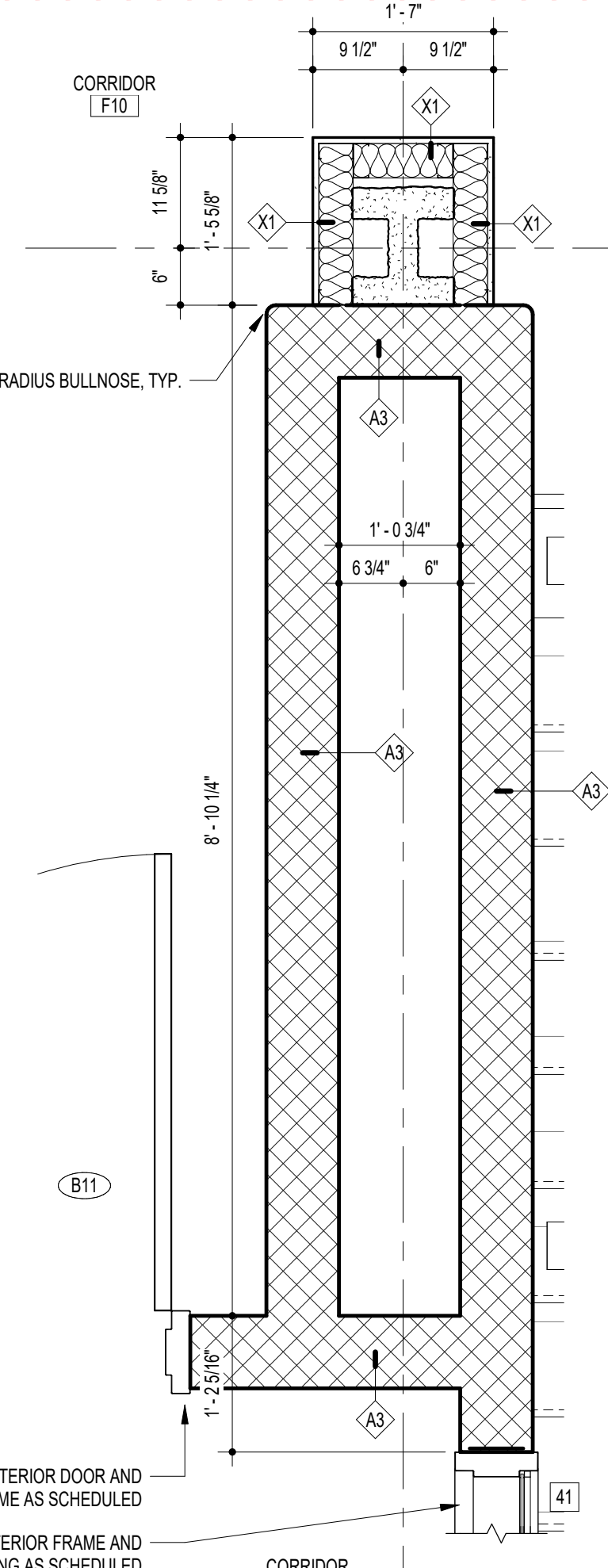
K10 PLAN DETAIL - LVL 01 - AREA D  
3/4" = 1'-0"



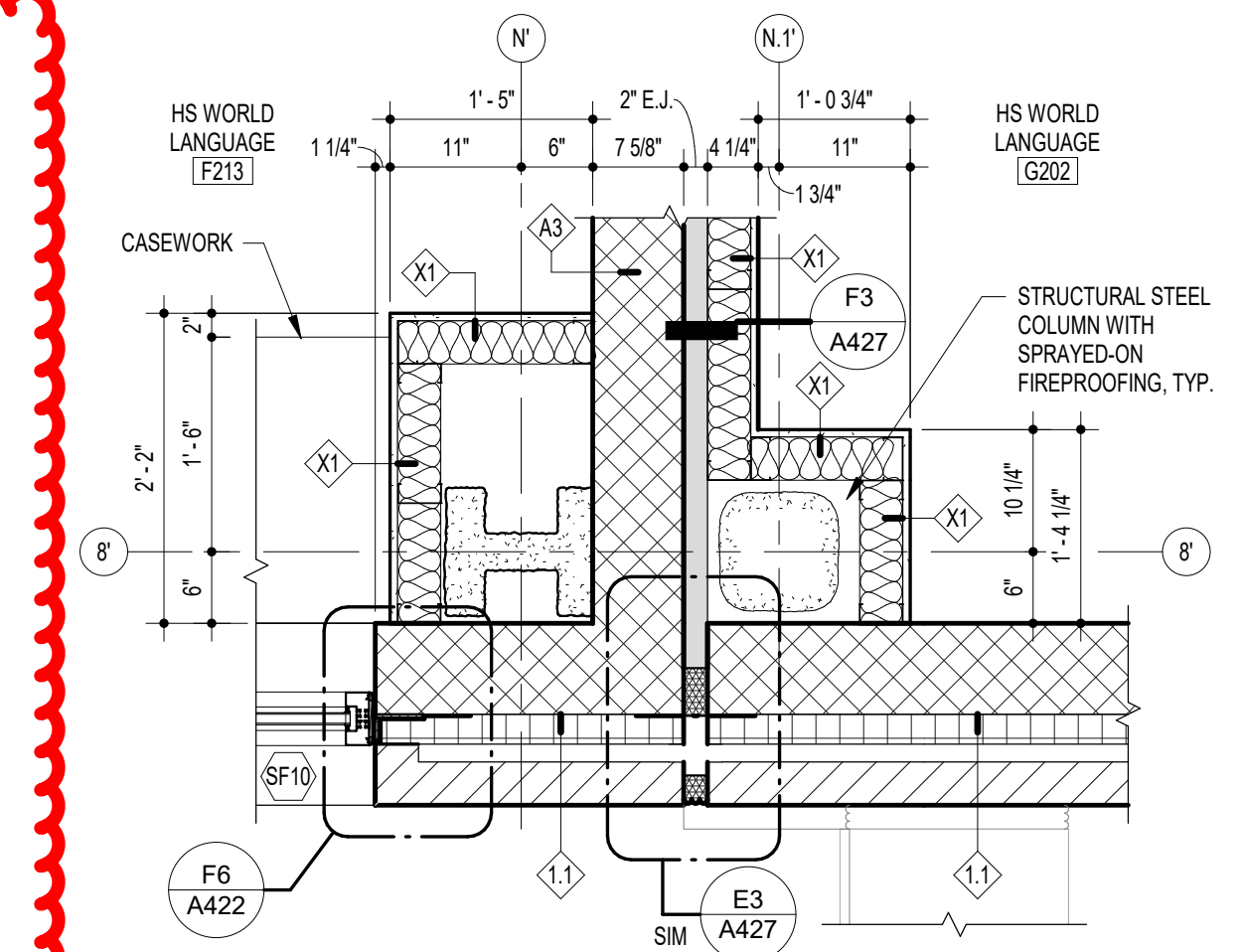
G10 PLAN DETAIL - LVL 01 - AREA A  
3/4" = 1'-0"



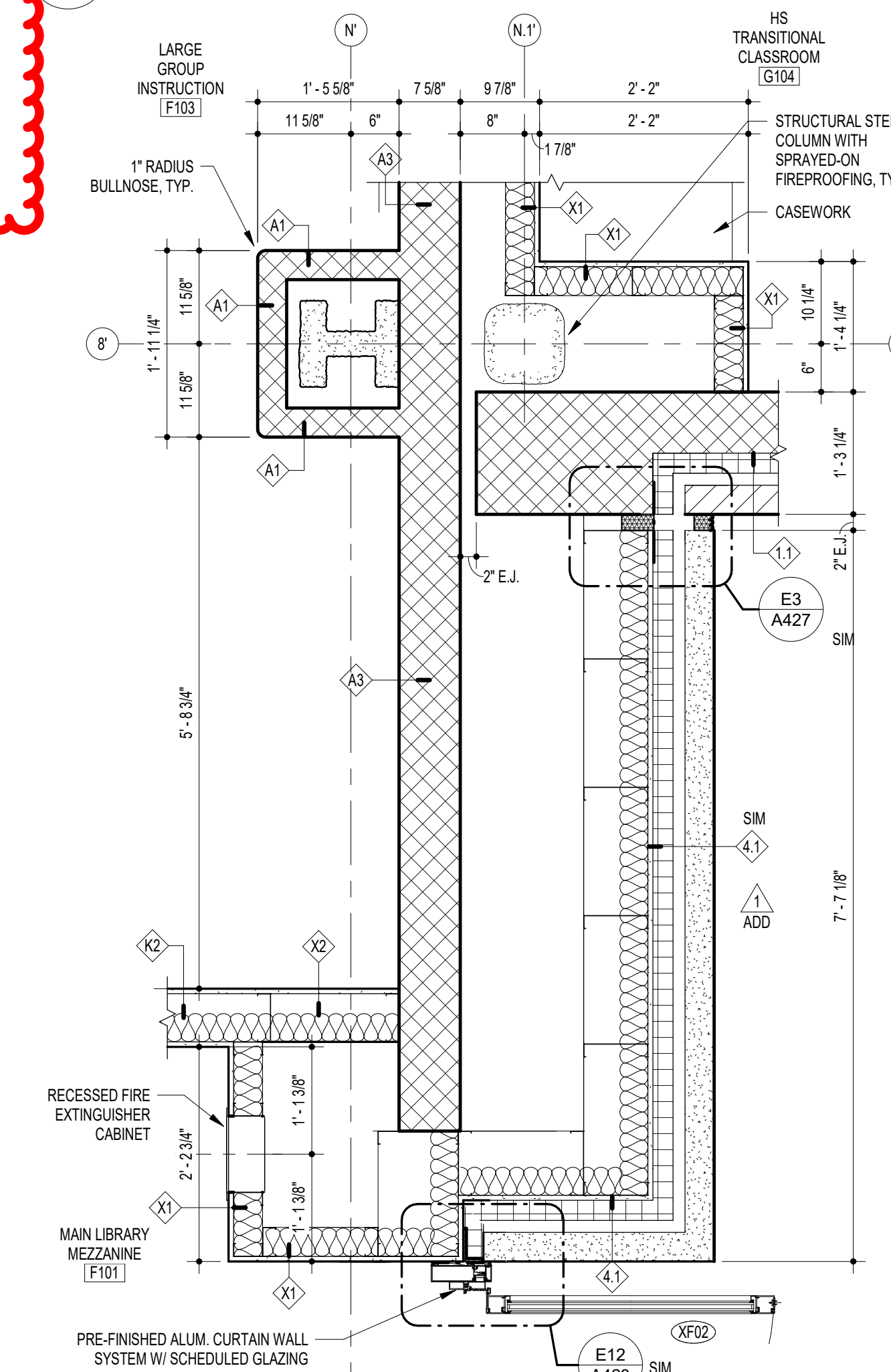
F10 PLAN DETAIL - LVL 01 - AREA F  
3/4" = 1'-0"



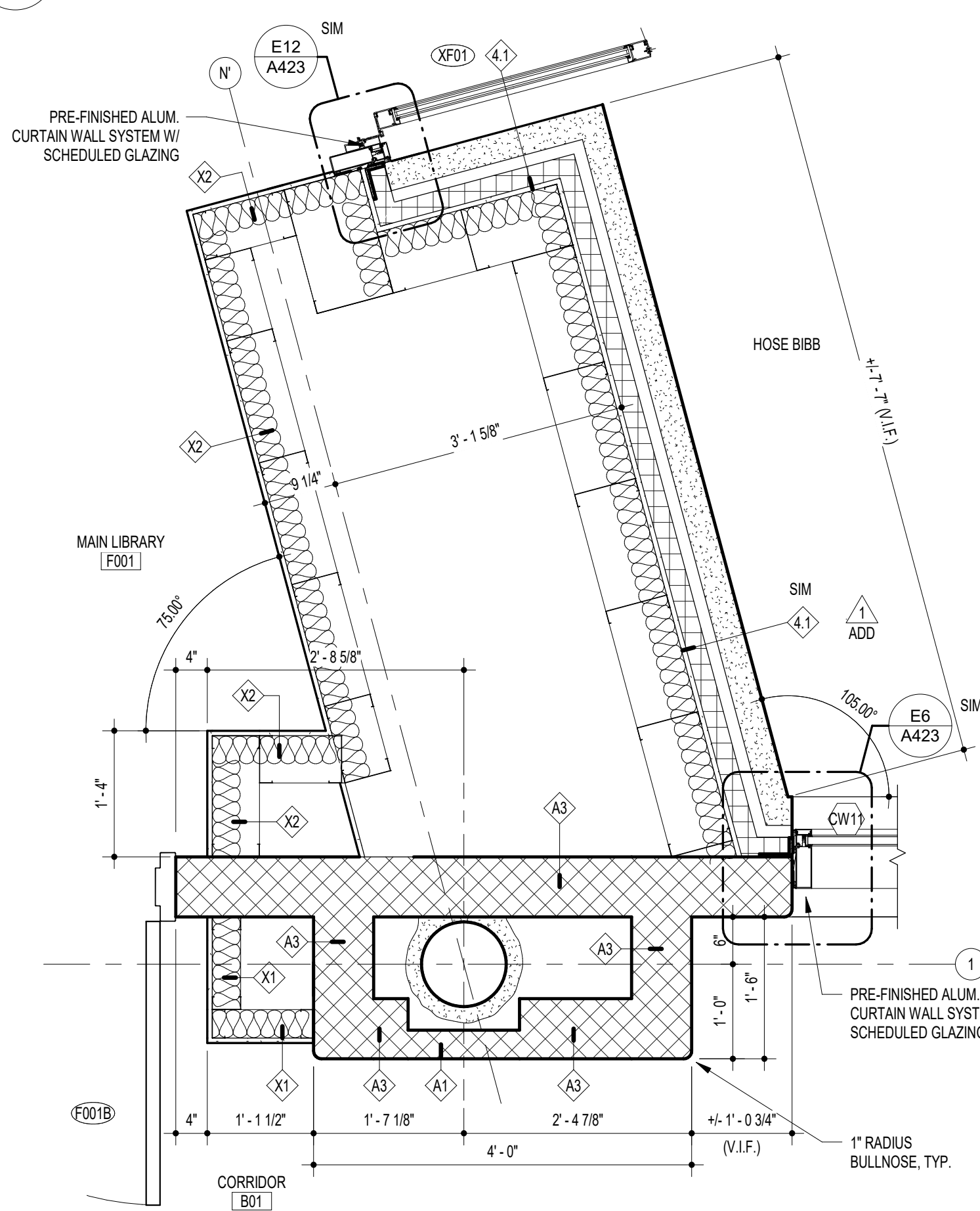
D7 PLAN DETAIL - LVL 01 - AREA A  
3/4" = 1'-0"



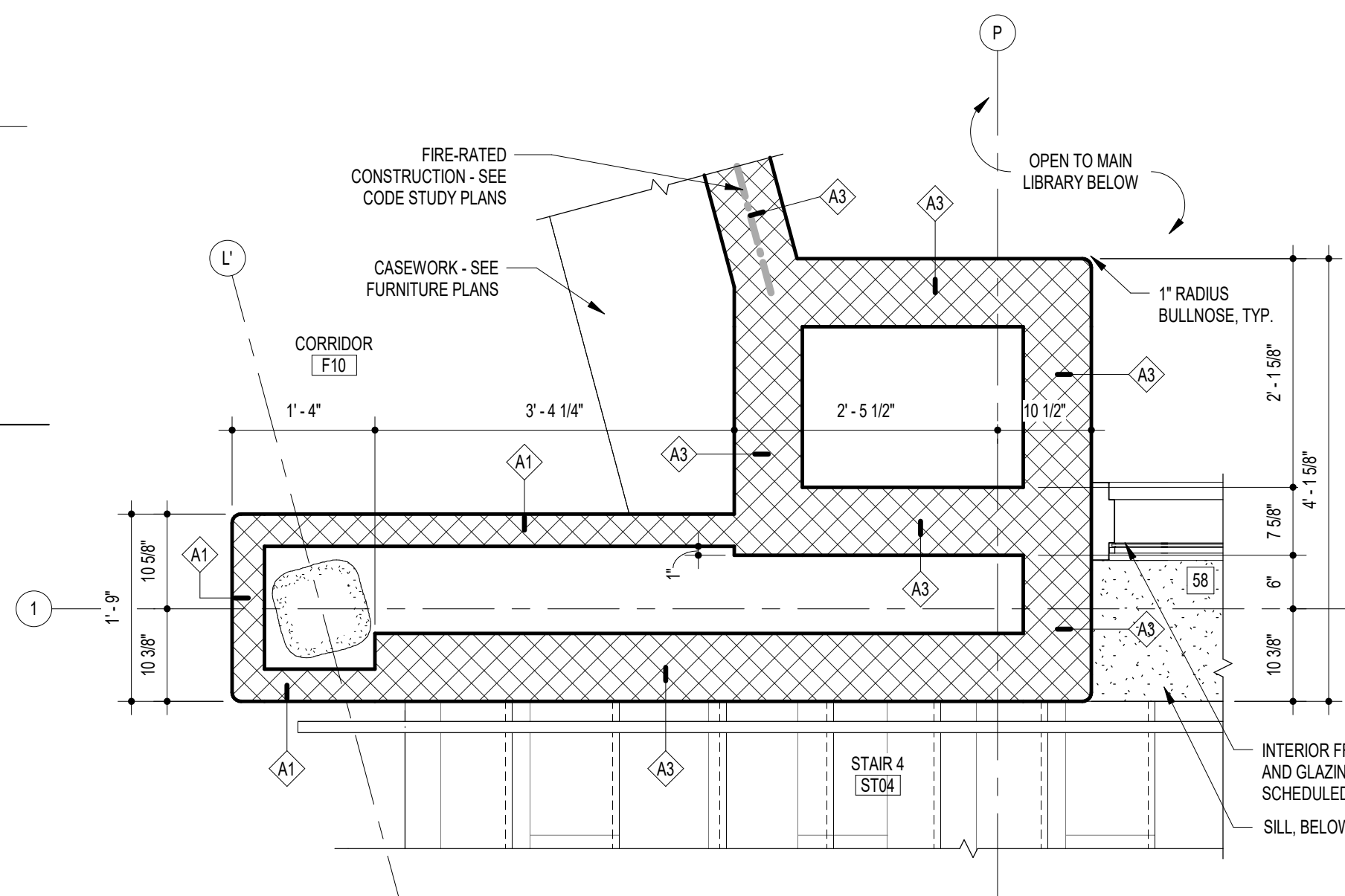
K4 PLAN DETAIL - LVL 02 - AREA F  
3/4" = 1'-0"



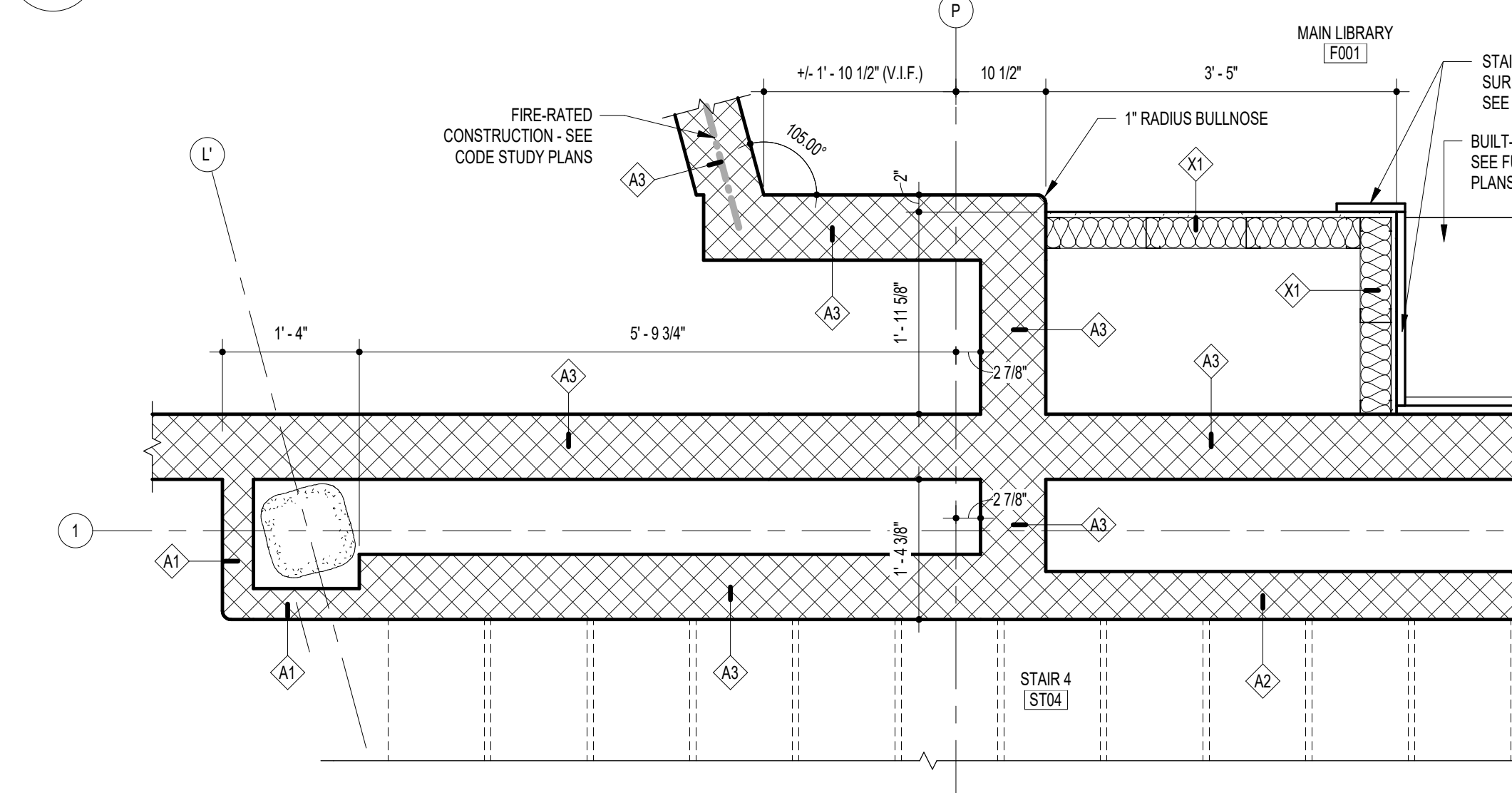
E4 PLAN DETAIL - LVL 01 - AREA F  
3/4" = 1'-0"



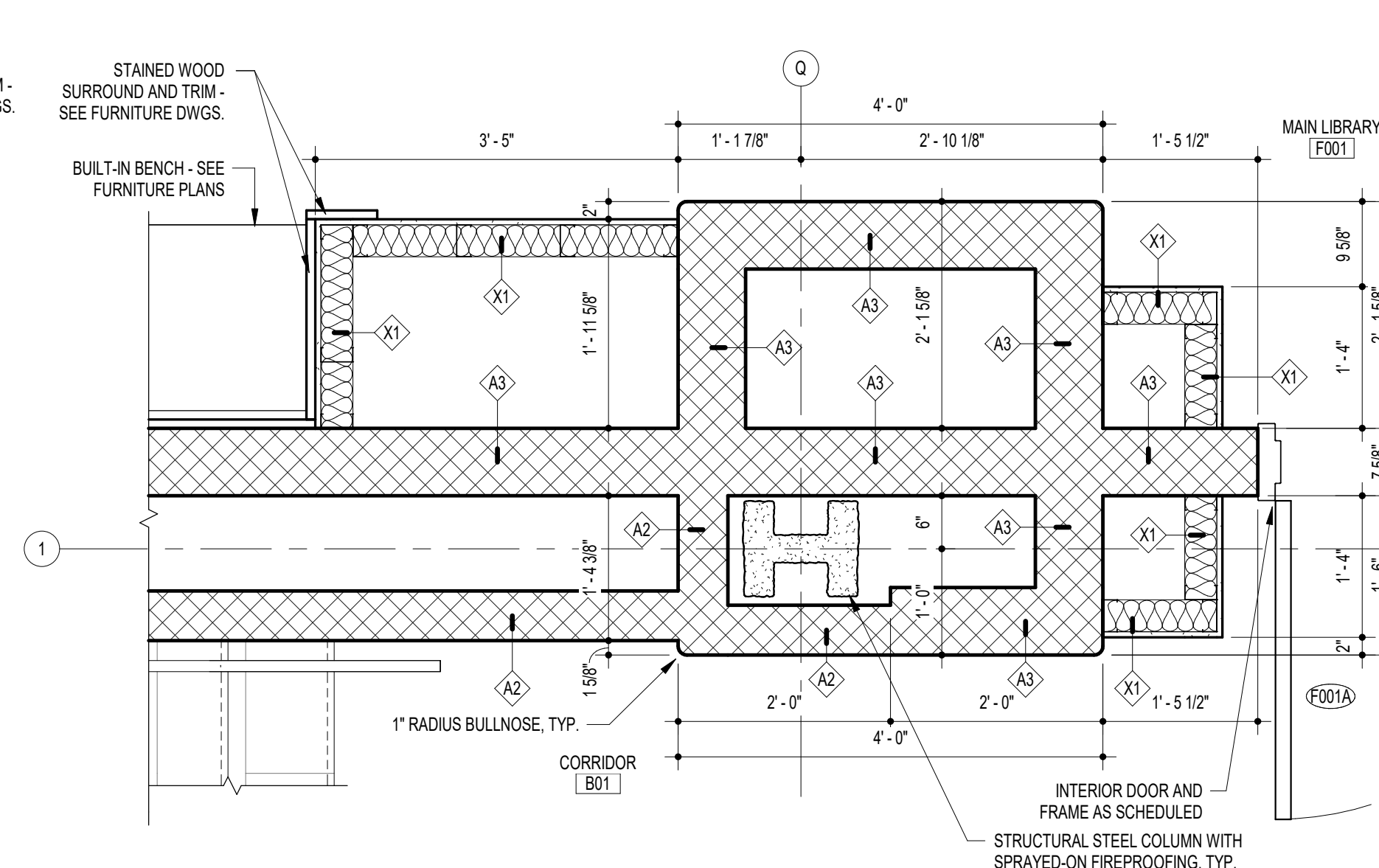
A4 PLAN DETAIL - LVL 00 - AREA F  
3/4" = 1'-0"



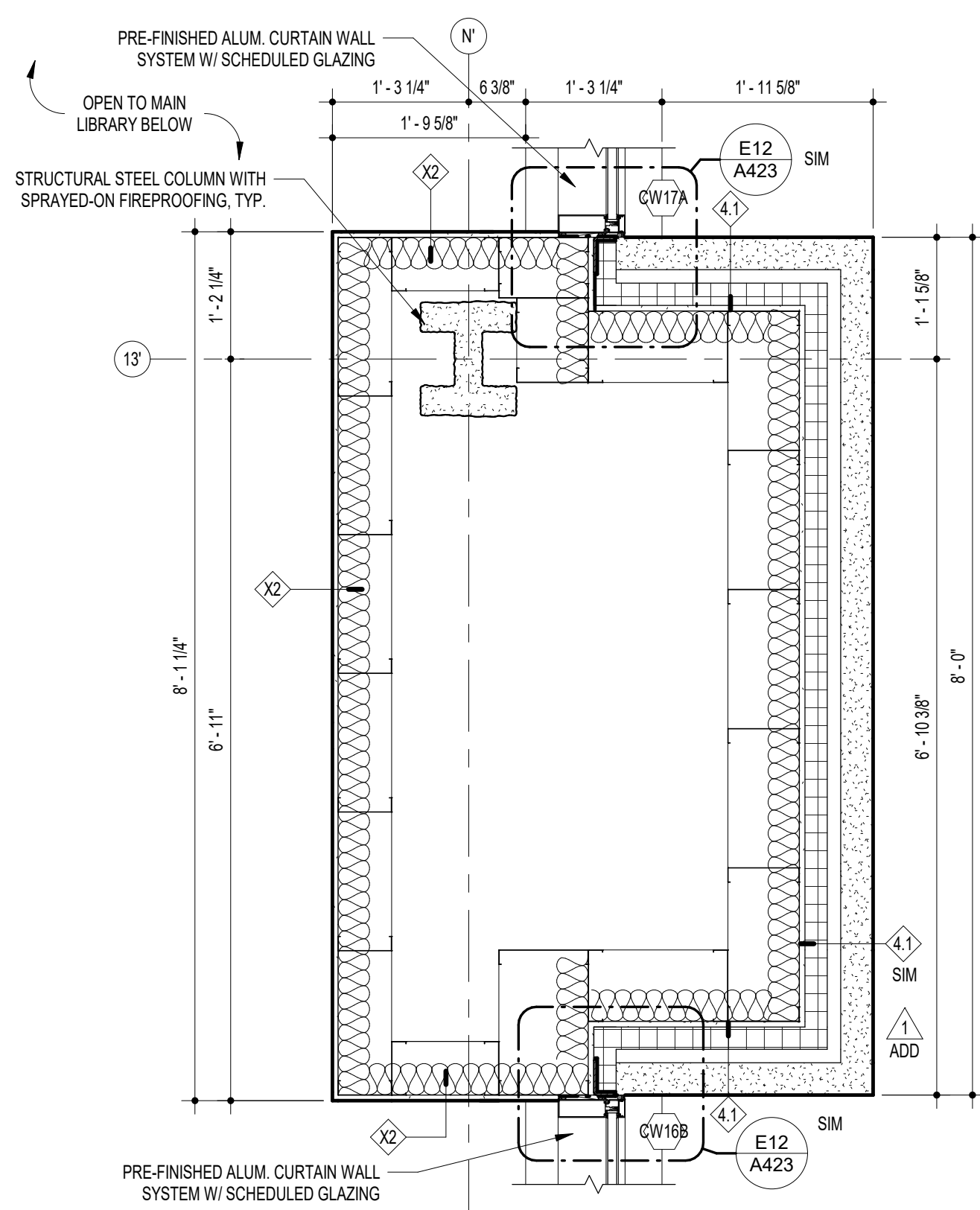
D15 PLAN DETAIL - LVL 01 - AREA F  
3/4" = 1'-0"



A15 PLAN DETAIL - LVL 00 - AREA F  
3/4" = 1'-0"

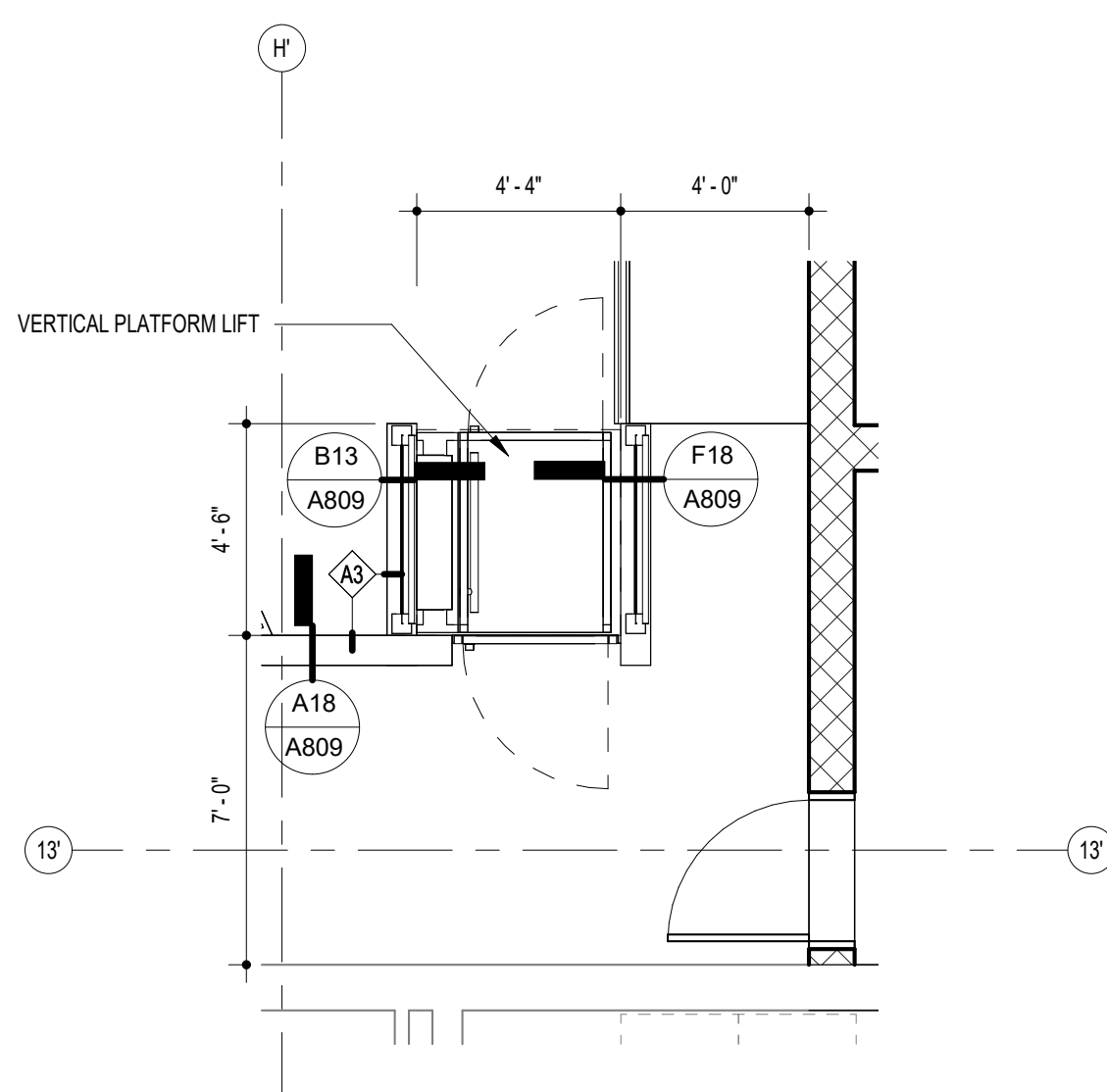


A9 PLAN DETAIL - LVL 00 - AREA F  
3/4" = 1'-0"

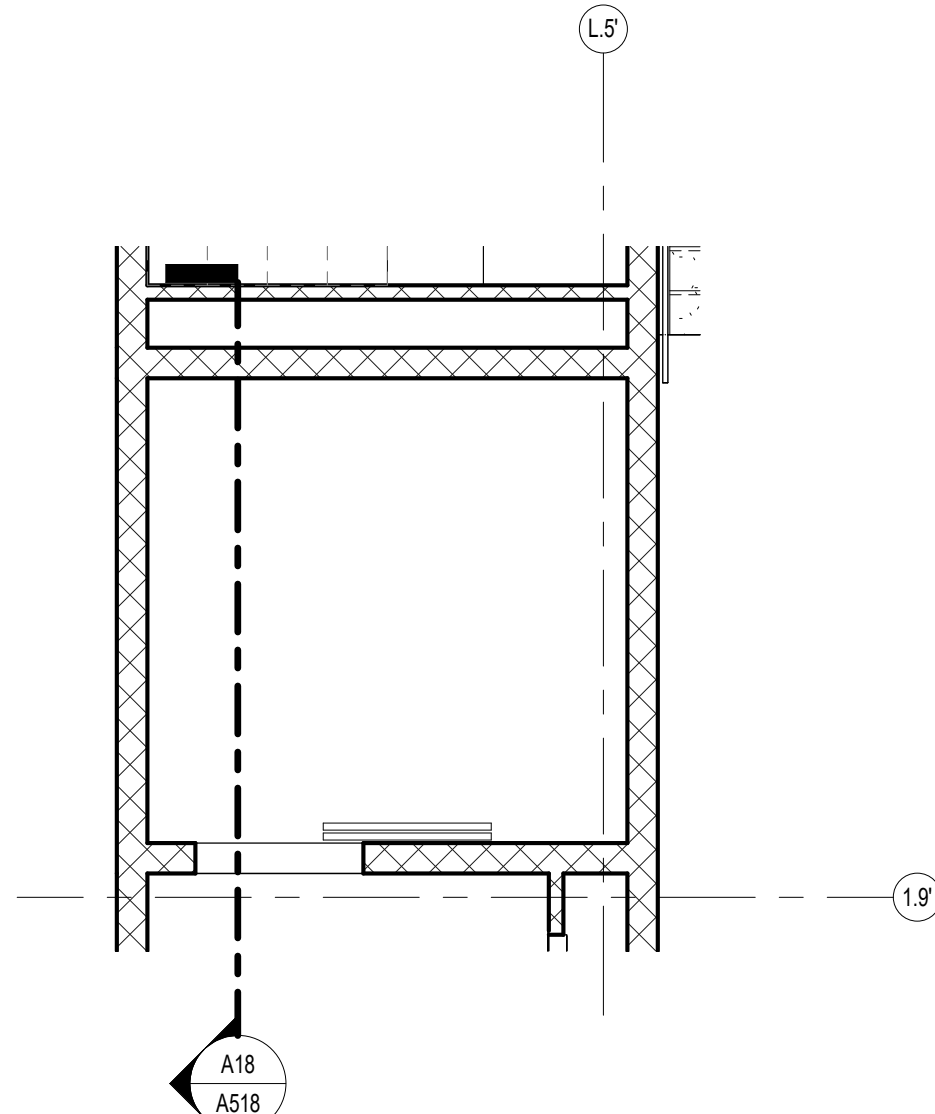


A18 PLAN DETAIL - LVL 01 - AREA F  
3/4" = 1'-0"

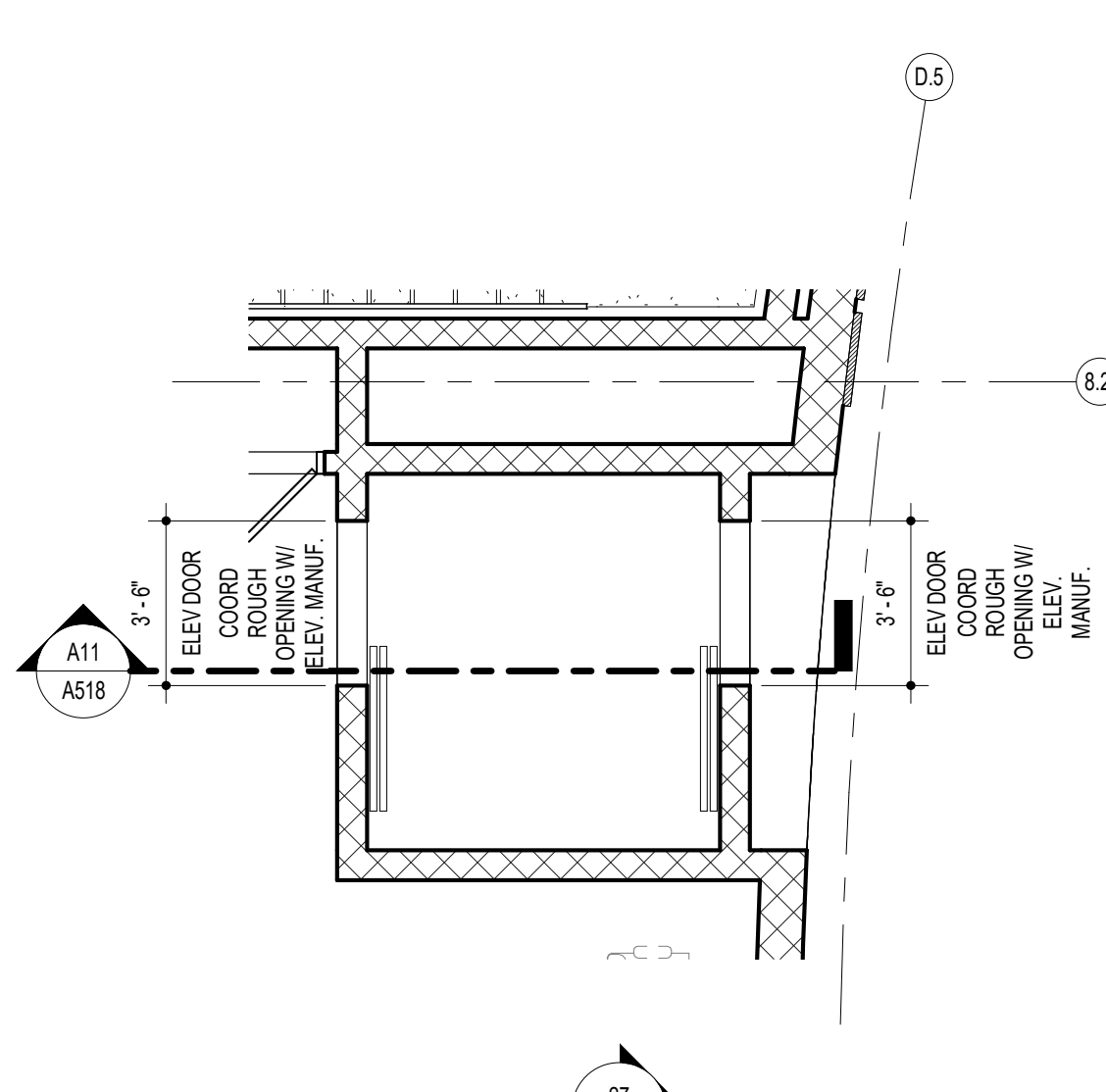




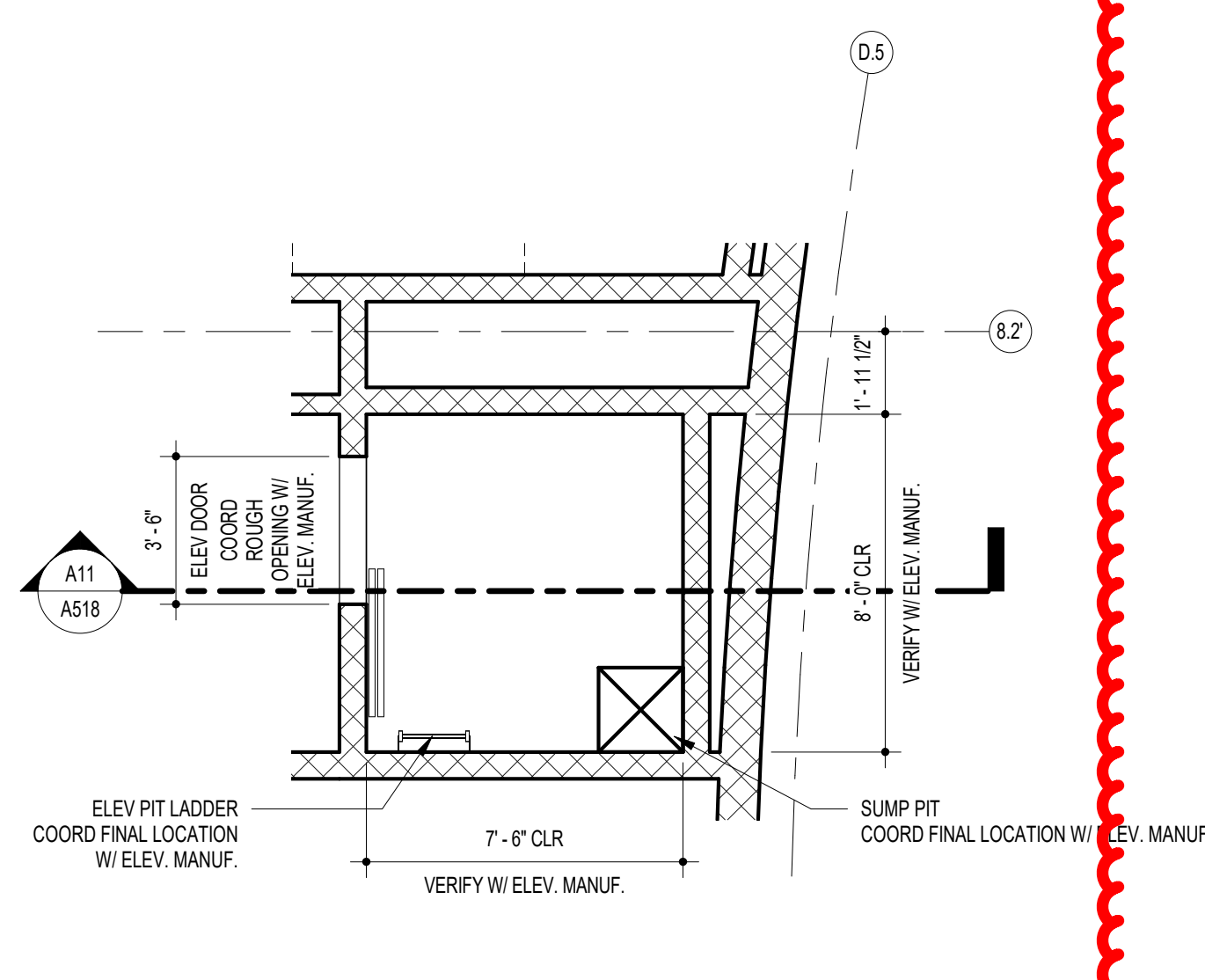
H17 PLATFORM LIFT PLAN  
1/4" = 1'-0"



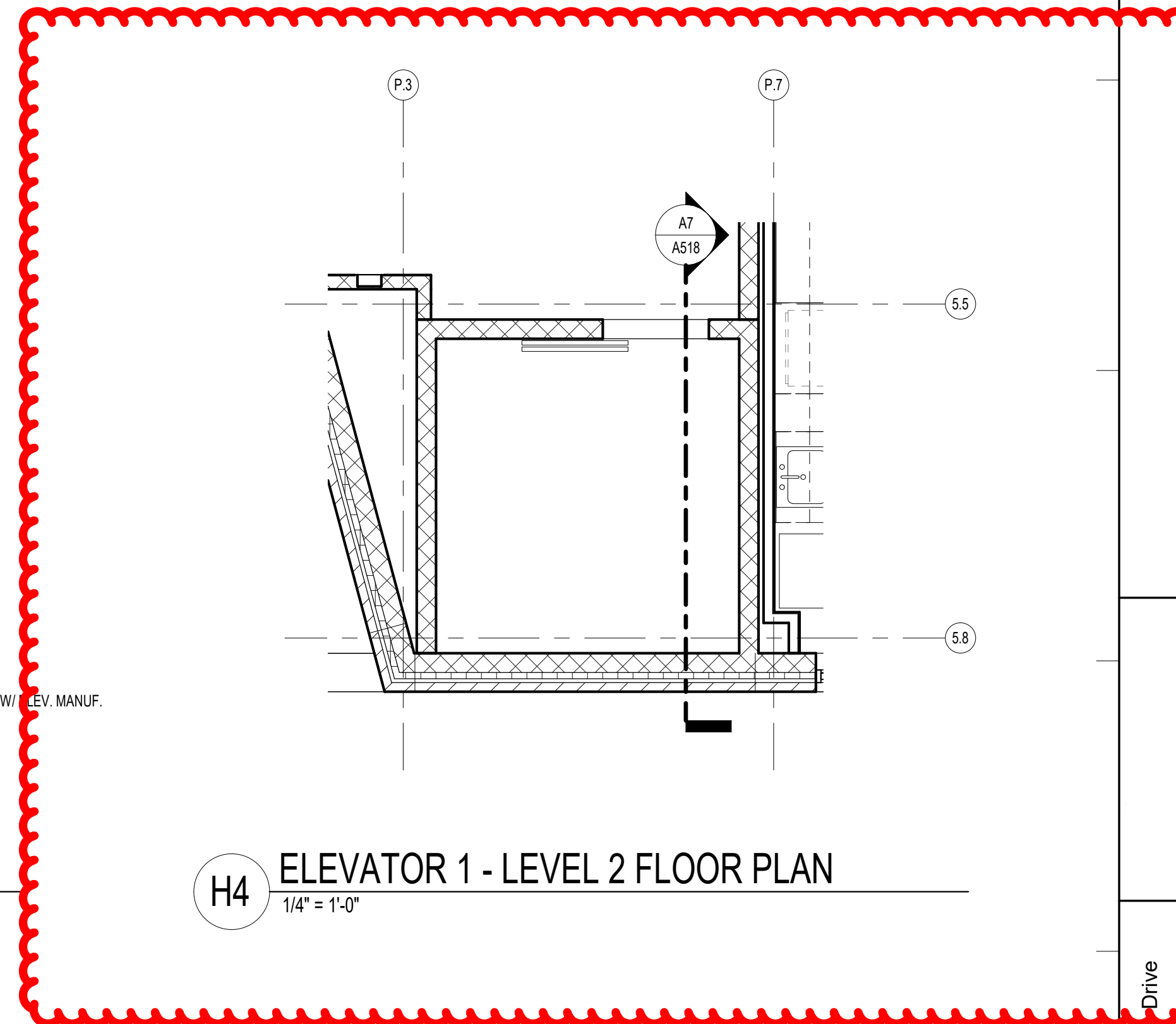
H14 ELEVATOR 3 - LEVEL 3 FLOOR PLAN  
1/4" = 1'-0"



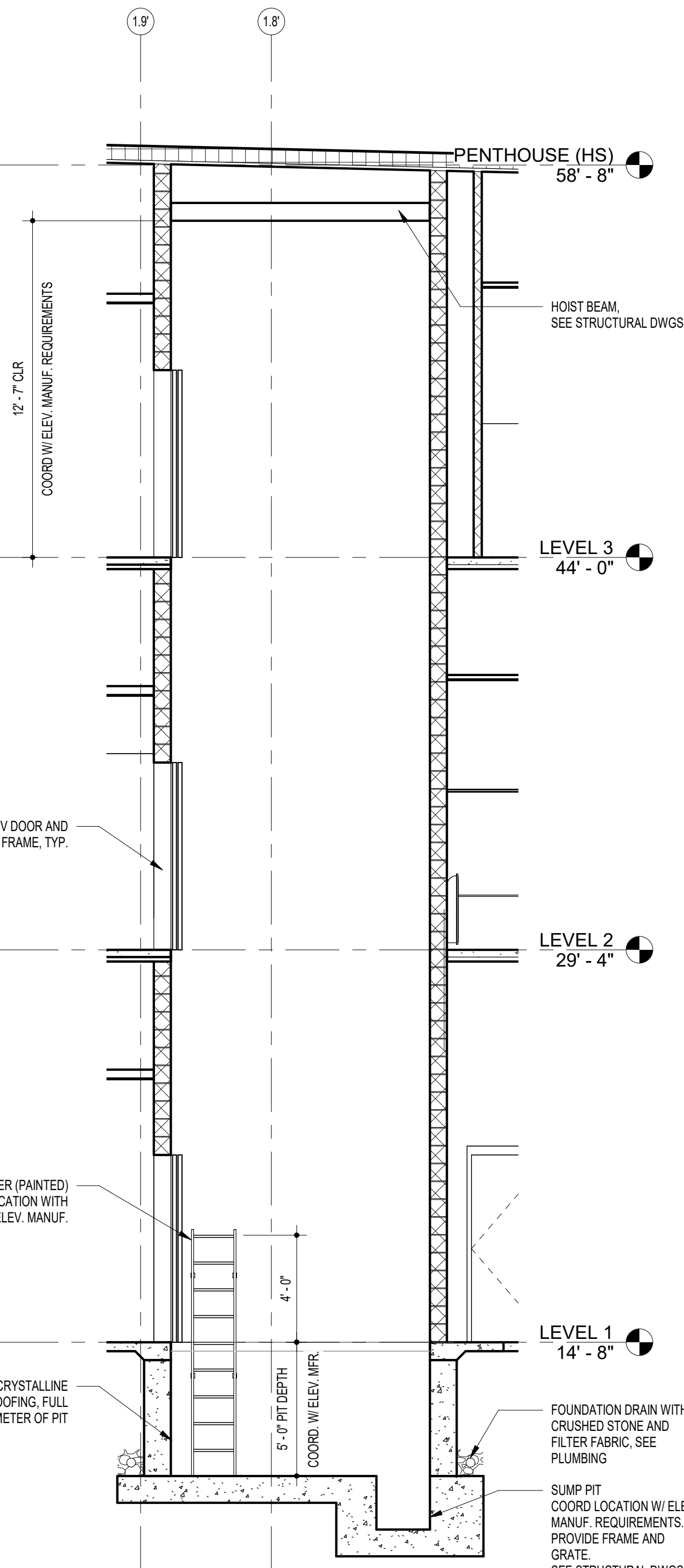
H11 ELEVATOR 2 - BALCONY LEVEL FLOOR PLAN  
1/4" = 1'-0"



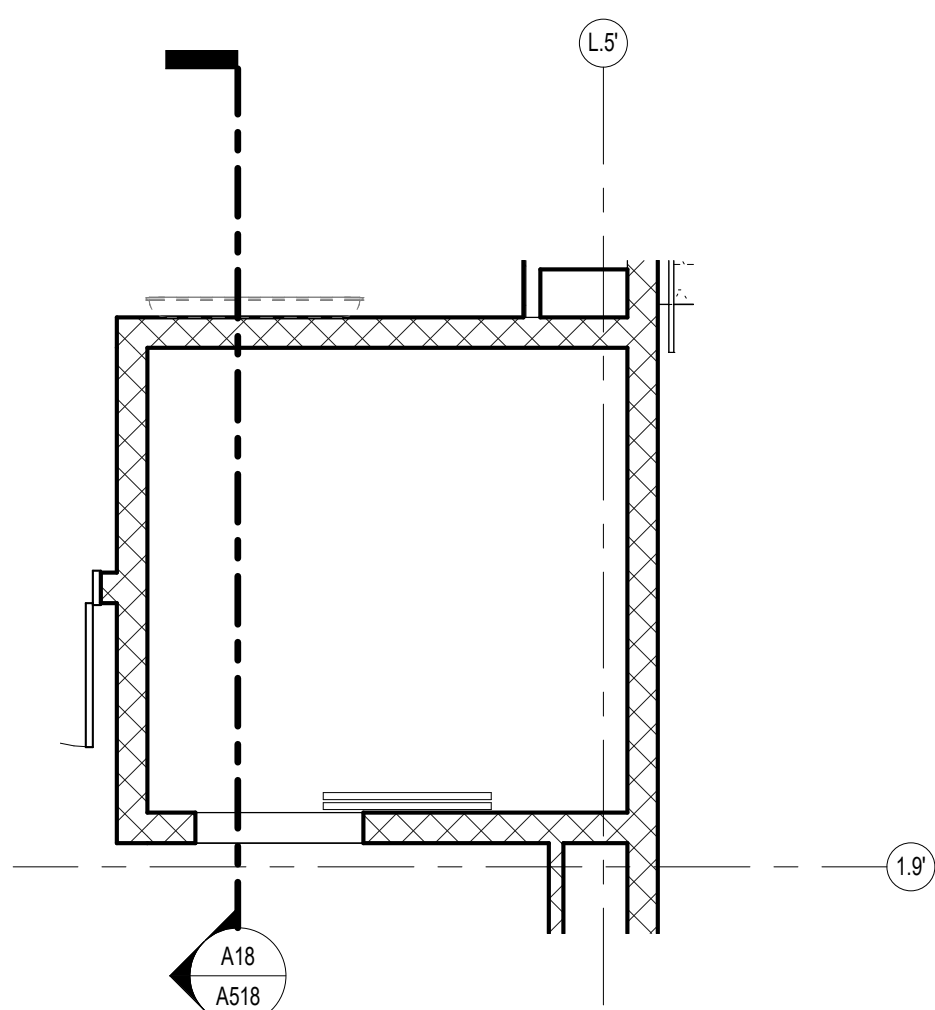
H7 ELEVATOR 2 - LEVEL 1 FLOOR PLAN  
1/4" = 1'-0"



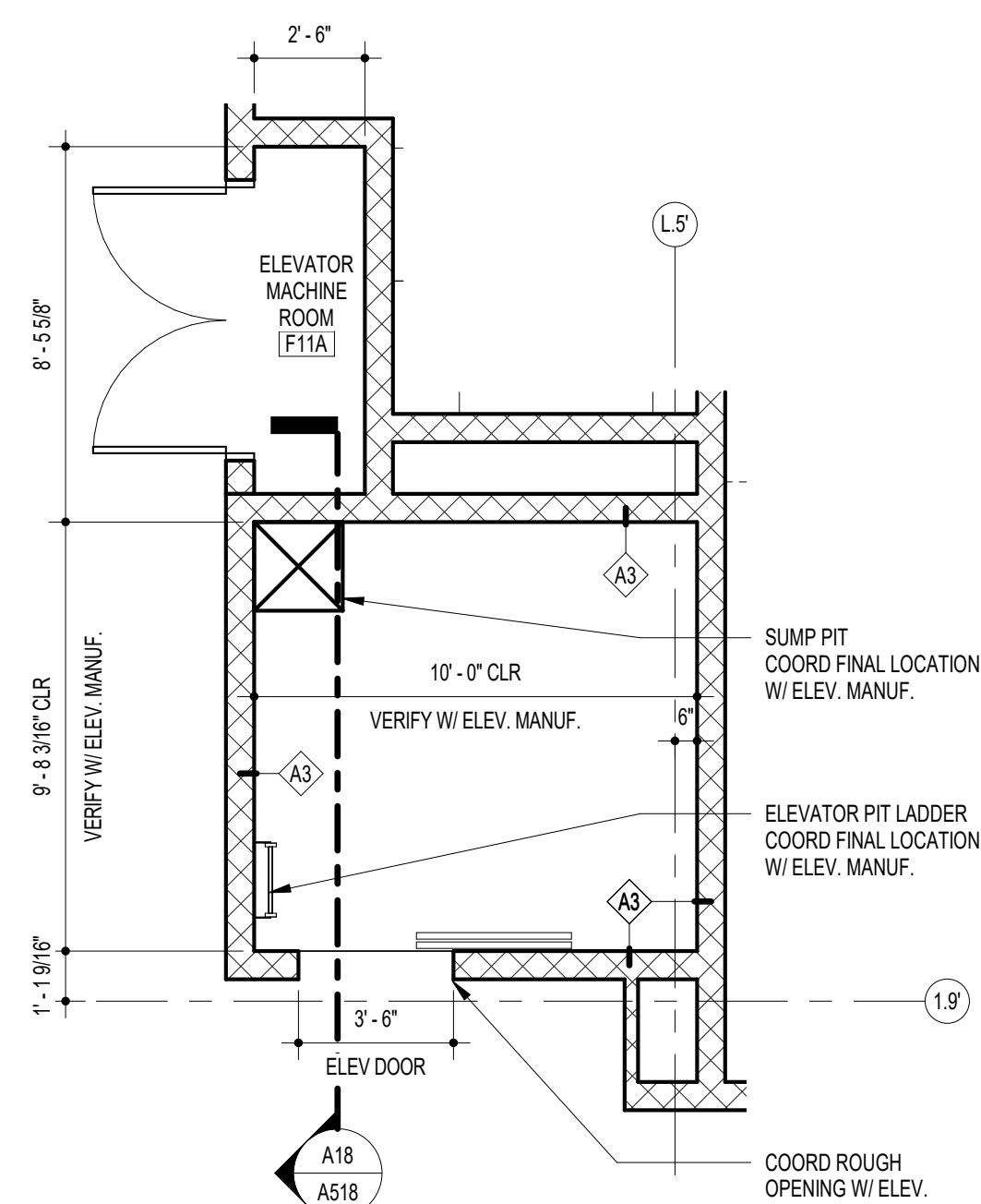
H4 ELEVATOR 1 - LEVEL 2 FLOOR PLAN  
1/4" = 1'-0"



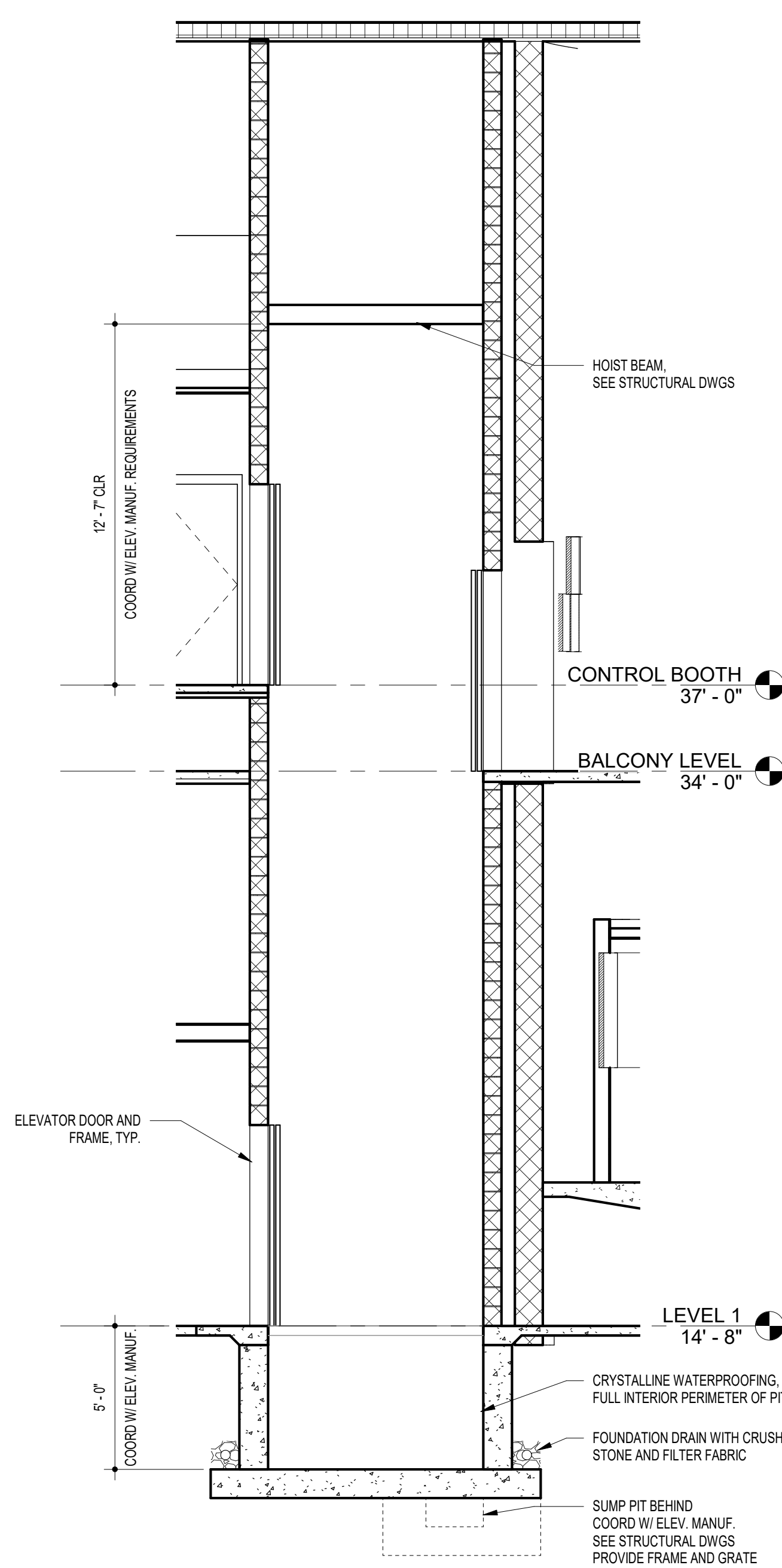
A18 ELEVATOR 3 - SECTION  
1/4" = 1'-0"



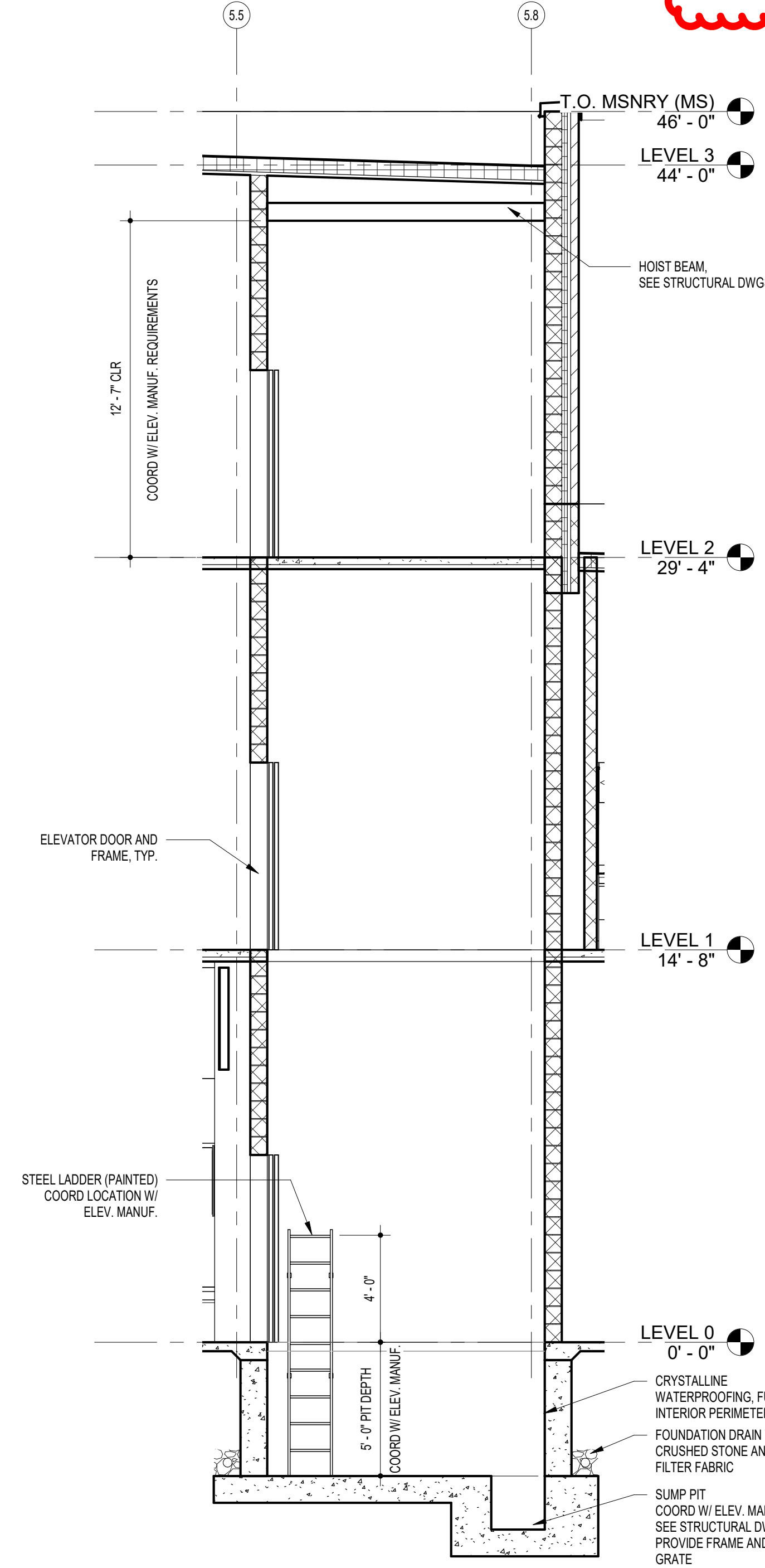
D14 ELEVATOR 3 - LEVEL 2 FLOOR PLAN  
1/4" = 1'-0"



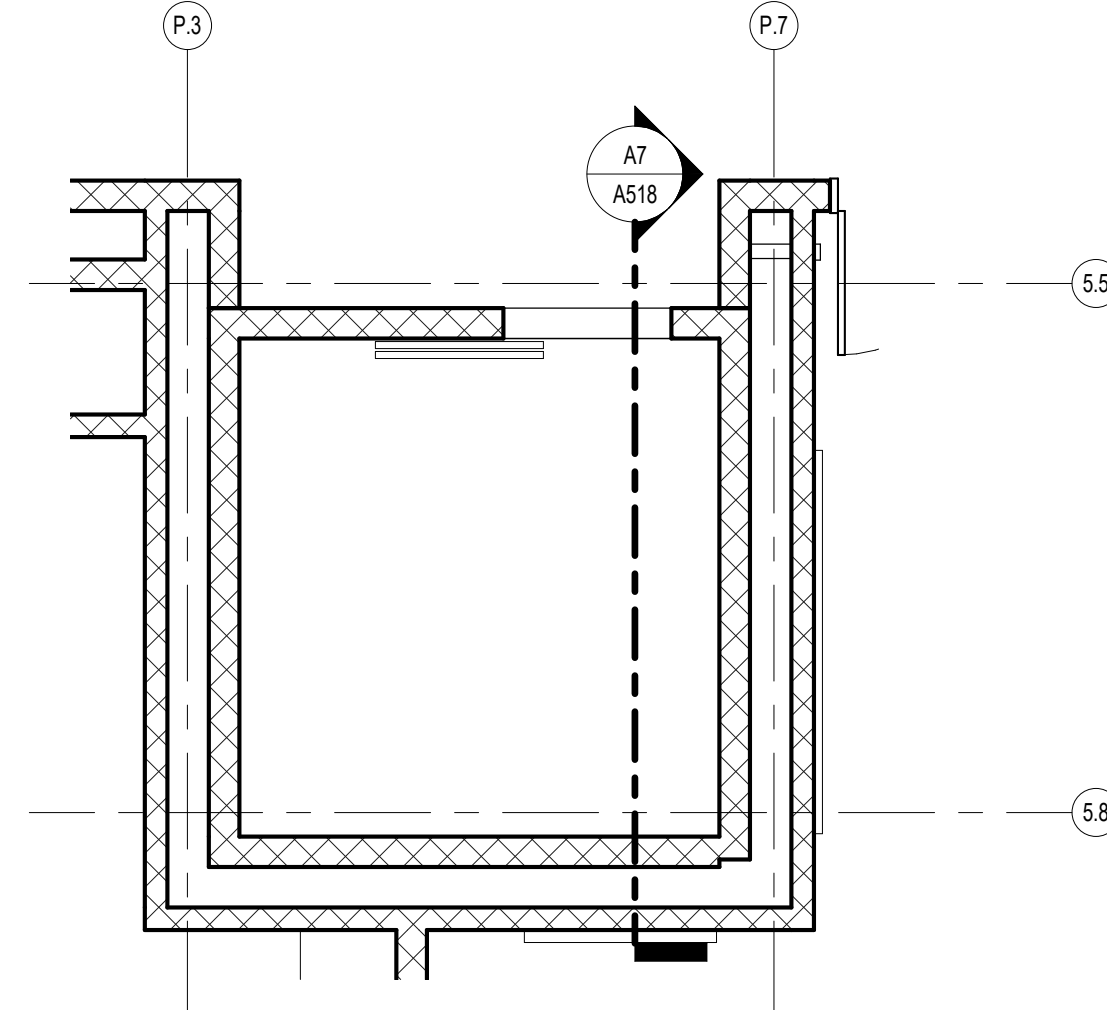
A14 ELEVATOR 3 - LEVEL 1 FLOOR PLAN  
1/4" = 1'-0"



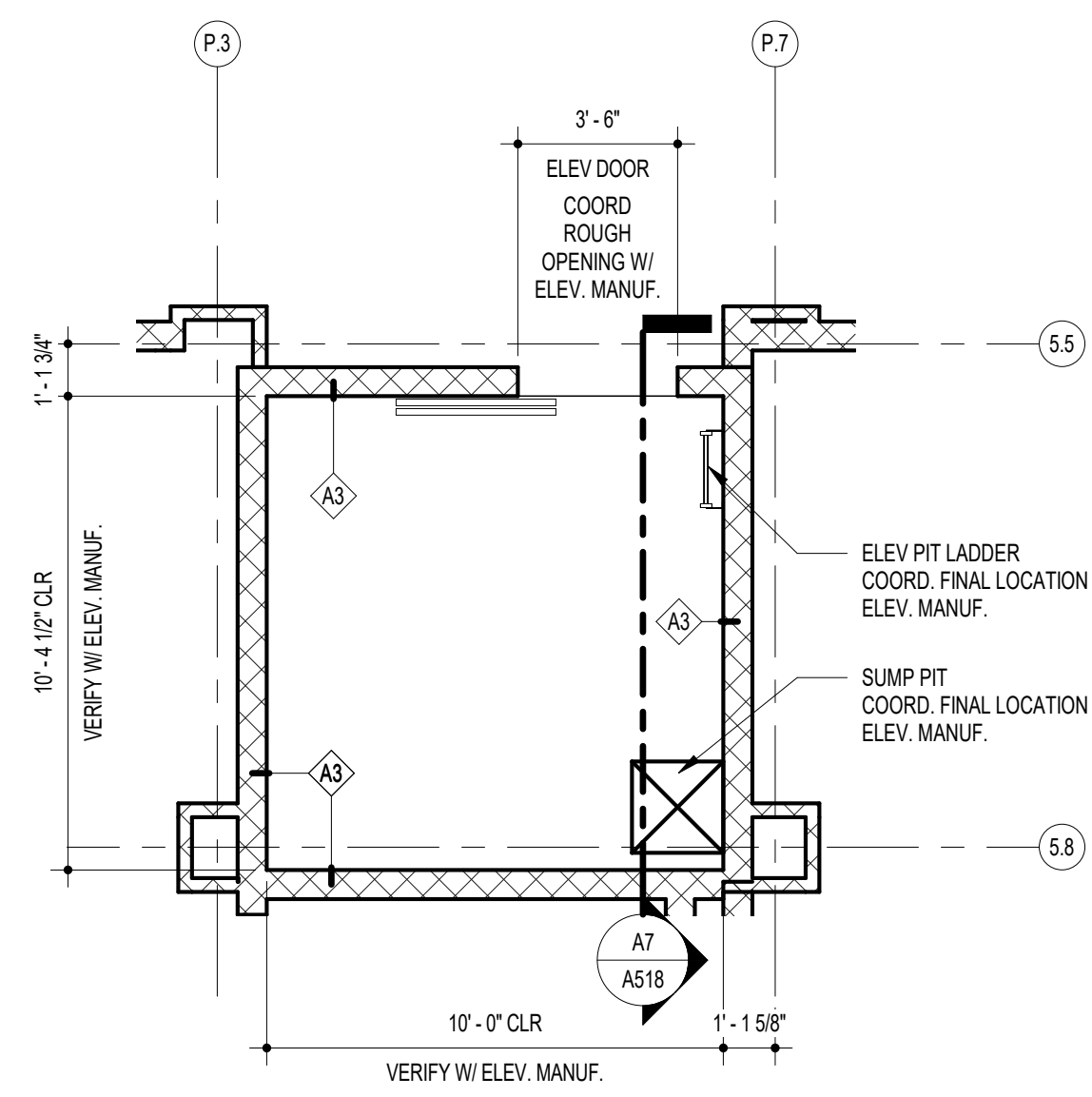
A11 ELEVATOR 2 - SECTION  
1/4" = 1'-0"



A7 ELEVATOR 1 - SECTION  
1/4" = 1'-0"



D4 ELEVATOR 1 - LEVEL 1 FLOOR PLAN  
1/4" = 1'-0"



A4 ELEVATOR 1 - LEVEL 0 FLOOR PLAN  
1/4" = 1'-0"

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**GP #22105**

**GP**  
GRIMM + PARKER  
ARCHITECTS

**ENLARGED ELEVATOR PLANS & DETAILS**  
NORTH EAST MIDDLE / HIGH SCHOOL  
300 IRISTOWN ROAD, NORTH EAST, MD

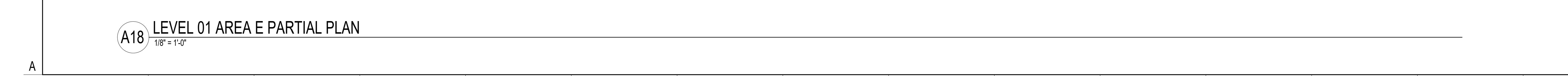
DATE	DESCRIPTION

**A518**  
12/22/2023  
BID SET

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- 1. REFER TO SHEET 3002Z FOR WALL TYPES AS REFERENCED ON PLANS WITH THE DIAMOND SYMBOL.
- 2. TYPICAL CMU INTERIOR PARTITION TO BE TYPE A UNLESS INDICATED OTHERWISE BY WALL TYPE SYMBOLS, WALL SECTIONS OR OTHER DETAILS.
- 3. TYPICAL GYPSUM BOARD/SOLID WALL PARTITION TO BE TYPE K UNLESS INDICATED OTHERWISE BY WALL TYPE SYMBOLS, WALL SECTIONS OR OTHER DETAILS.
- 4. TYPICAL CMU CHASE WALLS TO BE TYPE A UNLESS INDICATED OTHERWISE BY WALL TYPE SYMBOLS, WALL SECTIONS OR OTHER DETAILS.
- 5. TYPICAL GYPSUM BOARD PARTITION TO BE TYPE K UNLESS INDICATED OTHERWISE BY WALL TYPE SYMBOLS, WALL SECTIONS OR OTHER DETAILS.
- 6. UNLESS NOTED OTHERWISE, WALLS MUST EXTEND TO THE ROOF OR FLOOR FINISH AND BE SEISMICALLY BRACED TO THE STRUCTURE FOR LATERAL DRIFT. DETAILS REFER TO THE CODE STUDY PLAN FOR IDENTIFICATION OF ALL SMOKE AND FIRE WALL CONDITIONS. PERIMETER CORRIDOR AND LOBBY WALLS SHALL BE BUILT TO THE MINIMUM WALL RATING REQUIRED BY THE CODE. DIMENSIONS ON PLANS ARE FOR FACE OF MASONRY TO FACE OF MASONRY. FACE OF MASONRY TO FACE OF GYPSUM BOARD OR FACE OF GYPSUM BOARD TO FACE OF GYPSUM BOARD.
- 7. COLUMN GRID LINES ARE FOR REFERENCE ONLY. REFER TO STRUCTURAL DRAWINGS FOR COLUMN LOCATIONS.
- 8. INDICATES A FIRE EXTINGUISHER WITH A RECESSED CABINET. FE- INDICATES A FIRE EXTINGUISHER WITH A WALL MOUNTING BRACKET.
- 9. UNLESS SPECIFICALLY INDICATED OTHERWISE, THE SAME WALL TYPE NEXT TO ROOF OR FLOORING SHALL BE USED FOR THE WALL TYPE.
- 11. PLAN LOCATION OF DOORS AND FRAMES RELATIVE TO THE PLANE OF THE WALL IS DIAGRAMMATIC ONLY. REFER TO THE REFERENCE JAMB AND HEAD AND SILL DETAILS TO DETERMINE ACTUAL PLACEMENT OF DOOR AND FRAME.

[illegible]

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ARCHITECTS

GP #22105



## RFI detail

## #007.1 Masonry Control Joint Layout



Status	<div><div></div>Closed</div>
Created on	Jun 27, 2024 by <b>Glenn Feldstein</b> (George Moehrle Masonry)
RFI type	Architectural RFI REVs
Ball in court	<b>Glenn Feldstein</b> (George Moehrle Masonry)
Answered	Jul 8, 2024 by <b>Patrick Byrne</b> (Grimm and Parker)

### Question

Note #9 on sheet S001 under the MASONRY CONTROL JOINTS section states "Prior to construction, the Contractor shall prepare a masonry control joint layout and submit to the Architect/Engineer for review. The submittal shall include a dimensioned layout of all vertical control joints in masonry walls and masonry or brick veneer."

Moehrle Masonry cannot provide a layout for CJs in CMU as these need to be coordinated with steel embeds and MEP penetrations during construction. As the IBC requires masonry control joints to be laid out by the Architect, we kindly request updated drawings including these for CMU (veneer CJs are already shown) and a waiver of this submittal requirement.

#### Suggested answer

The requirement for submission of masonry control joint drawings is waived. Mason to coordinate CMU control joints with the work of other trades during the course of construction in accordance with TMS 402.

### Official response

Patrick Byrne (Grimm and Parker): See attached RFI response.

*By **Patrick Byrne** (Grimm and Parker) - Jul 8, 2024, 9:36 AM EDT*

### References and Attachments

#### Files (2)

- [#007 - Masonry Control Joint Layout Response.pdf](#)
- [#007.1 - Masonry Control Joint Layout Response.pdf](#)

Sheets (1)

- S001

Impact

Cost impactUnknown

Schedule impactUnknown

Other attributes

PriorityNormal

DisciplineMasonry

CategoryDesign Coordination

Location-

Location detailsMasonry walls and veneer









External id-

Co-reviewer(s)

Posted to Drawings/  
SpecificationsYES

Trade's RFI No.-



Activities	By	At
<b>Joshua Postadan</b> changed the status from  <b>Open</b> Answered to  <b>Closed</b> <b>Official response:</b> Patrick Byrne (Grimm and Parker): See attached RFI response. set Ball in court to <b>Glenn Feldstein</b> (George Moehrle Masonry)	<b>Joshua Postadan</b>	Jul 8, 2024, 2:47 PM EDT
Response received from Grimm + Parker 7/8/24: "G+P Response: The masonry contractor has a contractual obligation to provide the requested shop drawings per the note on the structural drawings referenced in the body of the RFI. Masonry contractor shall provide dimensioned control joint layouts as part of their masonry reinforcing shop drawings. Masonry veneer control joints are indicated on the contract documents. HESS shall coordinate the location of the control joints with all other applicable trades and advise if additional control joints or the relocation of control joints are required. Patrick Byrne 7.8.2024"	<b>Joshua Postadan</b>	Jul 8, 2024, 2:47 PM EDT
changed the <b>due date</b> to Jul 14, 2024	<b>Joshua Postadan</b>	Jul 8, 2024, 10:06 AM EDT
G+P is required by code (referenced in the specs) to include masonry control joint locations as part of the Contract Documents. We understand this is difficult to coordinate with MEPs and steel bearing, so if the Architect is unable to incorporate these in to the design of the building, the masonry subcontractor cannot be expected to design these for G+P (we are not qualified/licensed designers). Either Hess can provide these coordinated control joint layout drawings to Moehrle, or Moehrle can provide as-builts after everything is coordinated in the field.	<b>Glenn Feldstein</b>	Jul 8, 2024, 9:48 AM EDT
<b>Patrick Byrne</b> added a reference to a File <b>#007.1 - Masonry Control Joint Layout Response.pdf</b>	<b>Patrick Byrne</b>	Jul 8, 2024, 9:37 AM EDT
<b>Patrick Byrne</b> changed the status from  <b>Open</b> In Review to  <b>Open</b> Answered set Ball in court to <b>Joshua Postadan</b> (HESS Construction Co., LLC)	<b>Patrick Byrne</b>	Jul 8, 2024, 9:36 AM EDT
<b>Patrick Byrne</b> added a response: See attached RFI response.	<b>Patrick Byrne</b>	Jul 8, 2024, 9:36 AM EDT
<b>Joshua Postadan</b> changed the status from  <b>Open</b> Answered to  <b>Open</b> In Review set Ball in court to <b>Patrick Byrne</b> (Grimm and Parker)	<b>Joshua Postadan</b>	Jul 8, 2024, 7:52 AM EDT
Patrick, Please see the additional comment we received from Moehrle Masonry on 7/2/24 and provide a response. Thank you,	<b>Joshua Postadan</b>	Jul 8, 2024, 7:52 AM EDT
<b>Joshua Postadan</b> changed the status from  <b>Closed</b> to  <b>Open</b> Answered	<b>Joshua Postadan</b>	Jul 8, 2024, 7:47 AM EDT

set Ball in court to **Joshua Postadan** (HESS Construction Co., LLC)  
changed the **ID** to **007.1**

Received comment from Moehrle Masonry on 7/2/24 - According to the national masonry model code mandatory requirements checklist for designers, in the specification section, TMS 602, of "Building Code Requirements and Specification for Masonry Structures," (TMS 402/ACI 530/ASCE 5 and TMS 602/ACI 530.1/ASCE 6), Page S-31, Part 3.3 F.7, designers are required to "indicate type and location of movement joints on the project drawings." Furthermore, TMS 402, Section 6.1.6.3, states it is the responsibility of the building designer to "design and detail the veneer to accommodate differential movement." We should put this in the design team's court to coordinate our control joint layout with the MEP penetrations and bearing plate locations for the other buildings. Please provide the desired locations of all masonry control joints

**Joshua Postadan**

Jul 8, 2024, 7:47 AM  
EDT

According to the national masonry model code mandatory requirements checklist for designers, in the specification section, TMS 602, of "Building Code Requirements and Specification for Masonry Structures," (TMS 402/ACI 530/ASCE 5 and TMS 602/ACI 530.1/ASCE 6), Page S-31, Part 3.3 F.7, designers are required to "indicate type and location of movement joints on the project drawings." Furthermore, TMS 402, Section 6.1.6.3, states it is the responsibility of the building designer to "design and detail the veneer to accommodate differential movement." We should put this in the design team's court to coordinate our control joint layout with the MEP penetrations and bearing plate locations for the other buildings. Please provide the desired locations of all masonry control joints.

**Glenn Feldstein**

Jul 2, 2024, 2:59 PM  
EDT

**Joshua Postadan**

changed the status from  **Open** Answered to  **Closed**

**Official response:** Patrick Byrne (Grimm and Parker): See attached RFI response.

set Ball in court to **Glenn Feldstein** (George Moehrle Masonry)

**Joshua Postadan**

Jul 2, 2024, 7:05 AM  
EDT

Glenn, Please see attached RFI response from the architect. Please review and address as needed. Please advise of any cost/time impacts associated with this RFI within 5 business days. If this RFI needs to be re-opened, please advise the HESS team accordingly. Thank you,

**Joshua Postadan**

Jul 2, 2024, 7:05 AM  
EDT

**Patrick Byrne** added a reference to a File **#007 - Masonry Control Joint Layout Response.pdf**

**Patrick Byrne**

Jul 1, 2024, 11:01 PM  
EDT

**Patrick Byrne**

changed the status from  **Open** In Review to  **Open** Answered  
set Ball in court to **Joshua Postadan** (HESS Construction Co., LLC)

**Patrick Byrne**

Jul 1, 2024, 11:00 PM  
EDT

**Patrick Byrne** added a response: See attached RFI response.

**Patrick Byrne**


Jul 1, 2024, 11:00 PM  
EDT

Joshua Postadan changed the status from <b>Open</b> Waiting for Submission to <b>Open</b> In Review set Ball in court to <b>Patrick Byrne</b> (Grimm and Parker)	Joshua Postadan	Jul 1, 2024, 2:21 PM EDT
changed the <b>ID</b> to 007	Joshua Postadan	Jul 1, 2024, 2:21 PM EDT
changed the <b>watchers</b> to <b>Glenn Feldstein</b> (George Moehrle Masonry), <b>HESS PROJECT TEAM</b>	Joshua Postadan	Jul 1, 2024, 2:20 PM EDT
changed the <b>Posted to Drawings/Specifications</b> to YES	Joshua Postadan	Jul 1, 2024, 1:30 PM EDT
changed the <b>category</b> to <i>Design Coordination</i>	Joshua Postadan	Jul 1, 2024, 1:30 PM EDT
changed the <b>schedule impact</b> to <i>Unknown</i>	Joshua Postadan	Jul 1, 2024, 1:30 PM EDT
changed the <b>cost impact</b> to <i>Unknown</i>	Joshua Postadan	Jul 1, 2024, 1:30 PM EDT
changed the <b>cost impact</b> to <i>No</i>	Joshua Postadan	Jul 1, 2024, 1:30 PM EDT
changed the <b>due date</b> to Jul 7, 2024	Joshua Postadan	Jul 1, 2024, 1:30 PM EDT
changed the <b>location details</b> to <i>Masonry walls and veneer</i>	Joshua Postadan	Jul 1, 2024, 1:30 PM EDT
Joshua Postadan added a reference to a Sheet <b>S001</b>	Joshua Postadan	Jul 1, 2024, 1:30 PM EDT
changed the <b>question</b> to <i>Note #9 on sheet S001 under the MASONRY CONTROL JOINTS section states "Prior to construction, the Contractor shall prepare a masonry control joint layout and submit to the Architect/Engineer for review. The submittal shall include a dimensioned layout of all vertical control joints in masonry walls and masonry or brick veneer." Moehrle Masonry cannot provide a layout for CJs in CMU as these need to be coordinated with steel embeds and MEP penetrations during construction. As the IBC requires masonry control joints to be laid out by the Architect, we kindly request updated drawings including these for CMU (veneer CJs are already shown) and a waiver of this submittal requirement.</i>	Joshua Postadan	Jul 1, 2024, 1:27 PM EDT

changed the **question** to Note #9 on sheet S001 under the states "Prior to construction, the Contractor shall prepare a masonry control joint layout and submit to the Architect/Engineer for review. The submittal shall include a dimensioned layout of all vertical control joints in masonry walls and masonry or brick veneer." Moehrle Masonry cannot provide a layout for CJs in CMU as these need to be coordinated with steel embeds and MEP penetrations during construction. As the IBC requires masonry control joints to be laid out by the Architect, we kindly request updated drawings including these for CMU (veneer CJs are already shown) and a waiver of this submittal requirement.

Joshua Postadan

Jul 1, 2024, 1:27 PM EDT

**Glenn Feldstein** (George Moehrle Masonry) created this RFI in  **Open** Waiting for Submission status and set Ball in court to **Joshua Postadan** (HESS Construction Co., LLC).

Glenn Feldstein

Jun 27, 2024, 2:57 PM EDT

## RFI detail

## #007 Masonry Control Joint Layout



Status	<span style="color: orange;">■</span> <b>Open</b> In Review
Created on	Jun 27, 2024 by <b>Glenn Feldstein</b> (George Moehrle Masonry)
RFI type	Architectural RFI REVs
Ball in court	<b>Patrick Byrne</b> (Grimm and Parker)
Due date	Jul 8, 2024

### Question

Note #9 on sheet S001 under the MASONRY CONTROL JOINTS section states "Prior to construction, the Contractor shall prepare a masonry control joint layout and submit to the Architect/Engineer for review. The submittal shall include a dimensioned layout of all vertical control joints in masonry walls and masonry or brick veneer."

Moehrle Masonry cannot provide a layout for CJs in CMU as these need to be coordinated with steel embeds and MEP penetrations during construction. As the IBC requires masonry control joints to be laid out by the Architect, we kindly request updated drawings including these for CMU (veneer CJs are already shown) and a waiver of this submittal requirement.

#### Suggested answer

~~The requirement for submission of masonry control joint drawings is waived. Mason to coordinate CMU control joints with the work of other trades during the course of construction in accordance with TMS 402.~~

### References

#### Sheets (1)

- S001

### Impact

Cost impact	Unknown
Schedule impact	Unknown





**Other attributes**

<b>Priority</b>	Normal
<b>Discipline</b>	Masonry
<b>Category</b>	Design Coordination
<b>Location</b>	-
<b>Location details</b>	Masonry walls and veneer
<b>External id</b>	-
<b>Co-reviewer(s)</b>	
<b>Posted to Drawings/ Specifications</b>	YES
<b>Trade's RFI No.</b>	-

**G+P Response:**

Masonry contractor shall provide dimensioned control joint layouts as part of the their masonry reinforcing shop drawings. Masonry veneer control joints are indicated on the contract documents. HESS shall coordinate the location of the control joints with all other applicable trades and advise if additional control joints or the relocation of control joints are required.


Patrick Byrne 7.1.2024

Activities	By	At
<b>Joshua Postadan</b> changed the status from  <b>Open</b> Waiting for Submission to  <b>Open</b> In Review set Ball in court to <b>Patrick Byrne</b> (Grimm and Parker)	<b>Joshua Postadan</b>	Jul 1, 2024, 2:21 PM EDT
changed the <b>ID</b> to 007	<b>Joshua Postadan</b>	Jul 1, 2024, 2:21 PM EDT
changed the <b>watchers</b> to <b>Glenn Feldstein</b> (George Moehrle Masonry), <b>HESS PROJECT TEAM</b>	<b>Joshua Postadan</b>	Jul 1, 2024, 2:20 PM EDT
changed the <b>Posted to Drawings/Specifications</b> to YES	<b>Joshua Postadan</b>	Jul 1, 2024, 1:30 PM EDT
changed the <b>category</b> to <i>Design Coordination</i>	<b>Joshua Postadan</b>	Jul 1, 2024, 1:30 PM EDT
changed the <b>schedule impact</b> to <i>Unknown</i>	<b>Joshua Postadan</b>	Jul 1, 2024, 1:30 PM EDT
changed the <b>cost impact</b> to <i>Unknown</i>	<b>Joshua Postadan</b>	Jul 1, 2024, 1:30 PM EDT
changed the <b>cost impact</b> to <i>No</i>	<b>Joshua Postadan</b>	Jul 1, 2024, 1:30 PM EDT
changed the <b>due date</b> to Jul 7, 2024	<b>Joshua Postadan</b>	Jul 1, 2024, 1:30 PM EDT
changed the <b>location details</b> to <i>Masonry walls and veneer</i>	<b>Joshua Postadan</b>	Jul 1, 2024, 1:30 PM EDT
<b>Joshua Postadan</b> added a reference to a sheet <b>S001</b>	<b>Joshua Postadan</b>	Jul 1, 2024, 1:30 PM EDT
changed the <b>question</b> to <i>Note #9 on sheet S001 under the MASONRY CONTROL JOINTS section states "Prior to construction, the Contractor shall prepare a masonry control joint layout and submit to the Architect/Engineer for review. The submittal shall include a dimensioned layout of all vertical control joints in masonry walls and masonry or brick veneer." Moehrle Masonry cannot provide a layout for CJs in CMU as these need to be coordinated with steel embeds and MEP penetrations during construction. As the IBC requires masonry control joints to be laid out by the Architect, we kindly request updated drawings including these for CMU (veneer CJs are already shown) and a waiver of this submittal requirement.</i>	<b>Joshua Postadan</b>	Jul 1, 2024, 1:27 PM EDT

changed the **question** to Note #9 on sheet S001 under the states "Prior to construction, the Contractor shall prepare a masonry control joint layout and submit to the Architect/Engineer for review. The submittal shall include a dimensioned layout of all vertical control joints in masonry walls and masonry or brick veneer." Moehrle Masonry cannot provide a layout for CJs in CMU as these need to be coordinated with steel embeds and MEP penetrations during construction. As the IBC requires masonry control joints to be laid out by the Architect, we kindly request updated drawings including these for CMU (veneer CJs are already shown) and a waiver of this submittal requirement.

Joshua Postadan

Jul 1, 2024, 1:27 PM EDT

**Glenn Feldstein** (George Moehrle Masonry) created this RFI in  **Open** Waiting for Submission status and set Ball in court to **Joshua Postadan** (HESS Construction Co., LLC).

Glenn Feldstein

Jun 27, 2024, 2:57 PM EDT

## RFI detail

## #007.1 Masonry Control Joint Layout



Status	<span style="color: orange;">■</span> <b>Open</b> In Review
Created on	Jun 27, 2024 by <b>Glenn Feldstein</b> (George Moehrle Masonry)
RFI type	Architectural RFI REVs
Ball in court	<b>Patrick Byrne</b> (Grimm and Parker)
Due date	Jul 8, 2024 (1 day late)

**Question**

This RFI is a new RFI and was not given the proper review time.

Note #9 on sheet S001 under the MASONRY CONTROL JOINTS section states "Prior to construction, the Contractor shall prepare a masonry control joint layout and submit to the Architect/Engineer for review. The submittal shall include a dimensioned layout of all vertical control joints in masonry walls and masonry or brick veneer."

Moehrle Masonry cannot provide a layout for CJs in CMU as these need to be coordinated with steel embeds and MEP penetrations during construction. As the IBC requires masonry control joints to be laid out by the Architect, we kindly request updated drawings including these for CMU (veneer CJs are already shown) and a waiver of this submittal requirement.

**Suggested answer**

The requirement for submission of masonry control joint drawings is waived. Mason to coordinate CMU control joints with the work of other trades during the course of construction in accordance with TMS 402.

**References****Files (1)**

- [#007 - Masonry Control Joint Layout Response.pdf](#)

**Sheets (1)**

- [S001](#)

**Impact**

Cost impact	Unknown
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Schedule impact	Unknown
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## Other attributes

Priority	Normal
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Discipline	Masonry
------------	---------

Category	Design Coordination
----------	---------------------

Location	-
----------	---

Location details	Masonry walls and veneer
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External id	-
-------------	---

Co-reviewer(s)	
----------------	--

Posted to Drawings/ Specifications	YES
---------------------------------------	-----







Trade's RFI No.	-
-----------------	---





### G+P Response:

The masonry contractor has a contractual obligation to provide the requested shop drawings per the note on the structural drawings referenced in the body of the RFI.

Masonry contractor shall provide dimensioned control joint layouts as part of the their masonry reinforcing shop drawings. Masonry veneer control joints are indicated on the contract documents. HESS shall coordinate the location of the control joints with all other applicable trades and advise if additional control joints or the relocation of control joints are required.

Patrick Byrne 7.8.2024

Activities	By	At
<b>Joshua Postadan</b> changed the status from  <b>Open</b> Answered to  <b>Open</b> In Review set Ball in court to <b>Patrick Byrne</b> (Grimm and Parker)	<b>Joshua Postadan</b>	Jul 8, 2024, 7:52 AM EDT
Patrick, Please see the additional comment we received from Moehrle Masonry on 7/2/24 and provide a response. Thank you,	<b>Joshua Postadan</b>	Jul 8, 2024, 7:52 AM EDT
<b>Joshua Postadan</b> changed the status from  <b>Closed</b> to  <b>Open</b> Answered set Ball in court to <b>Joshua Postadan</b> (HESS Construction Co., LLC) changed the <b>ID</b> to 007.1	<b>Joshua Postadan</b>	Jul 8, 2024, 7:47 AM EDT
Received comment from Moehrle Masonry on 7/2/24 - According to the national masonry model code mandatory requirements checklist for designers, in the specification section, TMS 602, of "Building Code Requirements and Specification for Masonry Structures," (TMS 402/ACI 530/ASCE 5 and TMS 602/ACI 530.1/ASCE 6), Page S-31, Part 3.3 F.7, designers are required to "indicate type and location of movement joints on the project drawings." Furthermore, TMS 402, Section 6.1.6.3, states it is the responsibility of the building designer to "design and detail the veneer to accommodate differential movement." We should put this in the design team's court to coordinate our control joint layout with the MEP penetrations and bearing plate locations for the other buildings. Please provide the desired locations of all masonry control joints	<b>Joshua Postadan</b>	Jul 8, 2024, 7:47 AM EDT
According to the national masonry model code mandatory requirements checklist for designers, in the specification section, TMS 602, of "Building Code Requirements and Specification for Masonry Structures," (TMS 402/ACI 530/ASCE 5 and TMS 602/ACI 530.1/ASCE 6), Page S-31, Part 3.3 F.7, designers are required to "indicate type and location of movement joints on the project drawings." Furthermore, TMS 402, Section 6.1.6.3, states it is the responsibility of the building designer to "design and detail the veneer to accommodate differential movement." We should put this in the design team's court to coordinate our control joint layout with the MEP penetrations and bearing plate locations for the other buildings. Please provide the desired locations of all masonry control joints.	<b>Glenn Feldstein</b>	Jul 2, 2024, 2:59 PM EDT
<b>Joshua Postadan</b> changed the status from  <b>Open</b> Answered to  <b>Closed</b> <b>Official response:</b> Patrick Byrne (Grimm and Parker): See attached RFI response. set Ball in court to <b>Glenn Feldstein</b> (George Moehrle Masonry)	<b>Joshua Postadan</b>	Jul 2, 2024, 7:05 AM EDT
Glenn, Please see attached RFI response from the architect. Please review and address as needed. Please advise of any cost/time impacts associated with this RFI within 5 business days. If this RFI needs to be re-opened, please advise the HESS team accordingly. Thank you,	<b>Joshua Postadan</b>	Jul 2, 2024, 7:05 AM EDT

<b>Patrick Byrne</b> added a reference to a file <b>#007 - Masonry Control Joint Layout Response.pdf</b>	<b>Patrick Byrne</b>	Jul 1, 2024, 11:01 PM EDT
<b>Patrick Byrne</b> changed the status from  <b>Open</b> In Review to  <b>Open</b> Answered set Ball in court to <b>Joshua Postadan</b> (HESS Construction Co., LLC)	<b>Patrick Byrne</b>	Jul 1, 2024, 11:00 PM EDT
<b>Patrick Byrne</b> added a response: See attached RFI response.	<b>Patrick Byrne</b>	Jul 1, 2024, 11:00 PM EDT
<b>Joshua Postadan</b> changed the status from  <b>Open</b> Waiting for Submission to  <b>Open</b> In Review set Ball in court to <b>Patrick Byrne</b> (Grimm and Parker)	<b>Joshua Postadan</b>	Jul 1, 2024, 2:21 PM EDT
changed the <b>ID</b> to 007	<b>Joshua Postadan</b>	Jul 1, 2024, 2:21 PM EDT
changed the <b>watchers</b> to <b>Glenn Feldstein</b> (George Moehrle Masonry), <b>HESS PROJECT TEAM</b>	<b>Joshua Postadan</b>	Jul 1, 2024, 2:20 PM EDT
changed the <b>Posted to Drawings/Specifications</b> to YES	<b>Joshua Postadan</b>	Jul 1, 2024, 1:30 PM EDT
changed the <b>category</b> to <i>Design Coordination</i>	<b>Joshua Postadan</b>	Jul 1, 2024, 1:30 PM EDT
changed the <b>schedule impact</b> to <i>Unknown</i>	<b>Joshua Postadan</b>	Jul 1, 2024, 1:30 PM EDT
changed the <b>cost impact</b> to <i>Unknown</i>	<b>Joshua Postadan</b>	Jul 1, 2024, 1:30 PM EDT
changed the <b>cost impact</b> to <i>No</i>	<b>Joshua Postadan</b>	Jul 1, 2024, 1:30 PM EDT
changed the <b>due date</b> to Jul 7, 2024	<b>Joshua Postadan</b>	Jul 1, 2024, 1:30 PM EDT
changed the <b>location details</b> to <i>Masonry walls and veneer</i>	<b>Joshua Postadan</b>	Jul 1, 2024, 1:30 PM EDT
<b>Joshua Postadan</b> added a reference to a sheet <b>S001</b>	<b>Joshua Postadan</b>	Jul 1, 2024, 1:30 PM EDT

changed the **question** to Note #9 on sheet S001 under the MASONRY CONTROL JOINTS section states "Prior to construction, the Contractor shall prepare a masonry control joint layout and submit to the Architect/Engineer for review. The submittal shall include a dimensioned layout of all vertical control joints in masonry walls and masonry or brick veneer." Moehrle Masonry cannot provide a layout for CJs in CMU as these need to be coordinated with steel embeds and MEP penetrations during construction. As the IBC requires masonry control joints to be laid out by the Architect, we kindly request updated drawings including these for CMU (veneer CJs are already shown) and a waiver of this submittal requirement.

**Joshua  
Postadan**

Jul 1, 2024, 1:27 PM  
EDT

changed the **question** to Note #9 on sheet S001 under the states "Prior to construction, the Contractor shall prepare a masonry control joint layout and submit to the Architect/Engineer for review. The submittal shall include a dimensioned layout of all vertical control joints in masonry walls and masonry or brick veneer." Moehrle Masonry cannot provide a layout for CJs in CMU as these need to be coordinated with steel embeds and MEP penetrations during construction. As the IBC requires masonry control joints to be laid out by the Architect, we kindly request updated drawings including these for CMU (veneer CJs are already shown) and a waiver of this submittal requirement.

**Joshua  
Postadan**

Jul 1, 2024, 1:27 PM  
EDT

**Glenn Feldstein** (George Moehrle Masonry) created this RFI in **Open** Waiting for Submission status and set Ball in court to **Joshua Postadan** (HESS Construction Co., LLC).

**Glenn  
Feldstein**

Jun 27, 2024, 2:57 PM  
EDT



## RFI detail

## #007 Masonry Control Joint Layout



Status	<span style="color: orange;">■</span> <b>Open</b> In Review
Created on	Jun 27, 2024 by <b>Glenn Feldstein</b> (George Moehrle Masonry)
RFI type	Architectural RFI REVs
Ball in court	<b>Patrick Byrne</b> (Grimm and Parker)
Due date	Jul 8, 2024

### Question

Note #9 on sheet S001 under the MASONRY CONTROL JOINTS section states "Prior to construction, the Contractor shall prepare a masonry control joint layout and submit to the Architect/Engineer for review. The submittal shall include a dimensioned layout of all vertical control joints in masonry walls and masonry or brick veneer."

Moehrle Masonry cannot provide a layout for CJs in CMU as these need to be coordinated with steel embeds and MEP penetrations during construction. As the IBC requires masonry control joints to be laid out by the Architect, we kindly request updated drawings including these for CMU (veneer CJs are already shown) and a waiver of this submittal requirement.

#### Suggested answer

~~The requirement for submission of masonry control joint drawings is waived. Mason to coordinate CMU control joints with the work of other trades during the course of construction in accordance with TMS 402.~~

### References

#### Sheets (1)

- S001

### Impact

Cost impact	Unknown
Schedule impact	Unknown



**Other attributes**

<b>Priority</b>	Normal
<b>Discipline</b>	Masonry
<b>Category</b>	Design Coordination
<b>Location</b>	-
<b>Location details</b>	Masonry walls and veneer
<b>External id</b>	-
<b>Co-reviewer(s)</b>	
<b>Posted to Drawings/ Specifications</b>	YES
<b>Trade's RFI No.</b>	-

**G+P Response:**

Masonry contractor shall provide dimensioned control joint layouts as part of the their masonry reinforcing shop drawings. Masonry veneer control joints are indicated on the contract documents. HESS shall coordinate the location of the control joints with all other applicable trades and advise if additional control joints or the relocation of control joints are required.


Patrick Byrne 7.1.2024

Activities	By	At
<b>Joshua Postadan</b> changed the status from  <b>Open</b> Waiting for Submission to  <b>Open</b> In Review set Ball in court to <b>Patrick Byrne</b> (Grimm and Parker)	<b>Joshua Postadan</b>	Jul 1, 2024, 2:21 PM EDT
changed the <b>ID</b> to 007	<b>Joshua Postadan</b>	Jul 1, 2024, 2:21 PM EDT
changed the <b>watchers</b> to <b>Glenn Feldstein</b> (George Moehrle Masonry), <b>HESS PROJECT TEAM</b>	<b>Joshua Postadan</b>	Jul 1, 2024, 2:20 PM EDT
changed the <b>Posted to Drawings/Specifications</b> to YES	<b>Joshua Postadan</b>	Jul 1, 2024, 1:30 PM EDT
changed the <b>category</b> to <i>Design Coordination</i>	<b>Joshua Postadan</b>	Jul 1, 2024, 1:30 PM EDT
changed the <b>schedule impact</b> to <i>Unknown</i>	<b>Joshua Postadan</b>	Jul 1, 2024, 1:30 PM EDT
changed the <b>cost impact</b> to <i>Unknown</i>	<b>Joshua Postadan</b>	Jul 1, 2024, 1:30 PM EDT
changed the <b>cost impact</b> to <i>No</i>	<b>Joshua Postadan</b>	Jul 1, 2024, 1:30 PM EDT
changed the <b>due date</b> to Jul 7, 2024	<b>Joshua Postadan</b>	Jul 1, 2024, 1:30 PM EDT
changed the <b>location details</b> to <i>Masonry walls and veneer</i>	<b>Joshua Postadan</b>	Jul 1, 2024, 1:30 PM EDT
<b>Joshua Postadan</b> added a reference to a sheet <b>S001</b>	<b>Joshua Postadan</b>	Jul 1, 2024, 1:30 PM EDT
changed the <b>question</b> to <i>Note #9 on sheet S001 under the MASONRY CONTROL JOINTS section states "Prior to construction, the Contractor shall prepare a masonry control joint layout and submit to the Architect/Engineer for review. The submittal shall include a dimensioned layout of all vertical control joints in masonry walls and masonry or brick veneer." Moehrle Masonry cannot provide a layout for CJs in CMU as these need to be coordinated with steel embeds and MEP penetrations during construction. As the IBC requires masonry control joints to be laid out by the Architect, we kindly request updated drawings including these for CMU (veneer CJs are already shown) and a waiver of this submittal requirement.</i>	<b>Joshua Postadan</b>	Jul 1, 2024, 1:27 PM EDT

changed the **question** to Note #9 on sheet S001 under the states "Prior to construction, the Contractor shall prepare a masonry control joint layout and submit to the Architect/Engineer for review. The submittal shall include a dimensioned layout of all vertical control joints in masonry walls and masonry or brick veneer." Moehrle Masonry cannot provide a layout for CJs in CMU as these need to be coordinated with steel embeds and MEP penetrations during construction. As the IBC requires masonry control joints to be laid out by the Architect, we kindly request updated drawings including these for CMU (veneer CJs are already shown) and a waiver of this submittal requirement.

**Joshua Postadan**

Jul 1, 2024, 1:27 PM EDT

**Glenn Feldstein** (George Moehrle Masonry) created this RFI in  **Open** Waiting for Submission status and set Ball in court to **Joshua Postadan** (HESS Construction Co., LLC).

**Glenn Feldstein**

Jun 27, 2024, 2:57 PM EDT



## RFI detail

## #008 Area B Wall Type Conflict



Status	<div><div></div>Closed</div>
Created on	Jun 27, 2024 by <b>Glenn Feldstein</b> (George Moehrle Masonry)
RFI type	Architectural RFI REVs
Ball in court	<b>Glenn Feldstein</b> (George Moehrle Masonry)
Answered	Jul 8, 2024 by <b>Patrick Byrne</b> (Grimm and Parker)

### Question

At Level 00 Area B (A100B) the CMU wall on CL-M.9 is called out as wall type A4 which is 10" CMU, however structural section A/S404 calls this to be an 8" CMU wall. Please confirm the which size CMU should be used to construct this wall?

**Suggested answer**

CMU to be sized and reinforced per structural drawings.

### Official response

Patrick Byrne (Grimm and Parker): See attached RFI response and revised drawings.

*By **Patrick Byrne** (Grimm and Parker) - Jul 8, 2024, 1:25 PM EDT*


### References and Attachments







**Files (3)**


- [#008 - Area B Wall Type Conflict Response.pdf](#)
- [A100A - LEVEL 00 AREA A PARTIAL FLOOR PLAN-RFI 8.pdf](#)
- [A100B - LEVEL 00 AREA B PARTIAL FLOOR PLAN-RFI 8.pdf](#)

**Sheets (2)**

- [A100B](#)
- [S404](#)

Impact	
Cost impact	No
Schedule impact	No
Other attributes	
Priority	Normal
Discipline	Masonry
Category	Documentation Conflict
Location	Area B
Location details	CMU Wall along column line M.9
External id	-
Co-reviewer(s)	 Cesar Flores (Columbia Engineering)
Posted to Drawings/ Specifications	YES
Trade's RFI No.	-

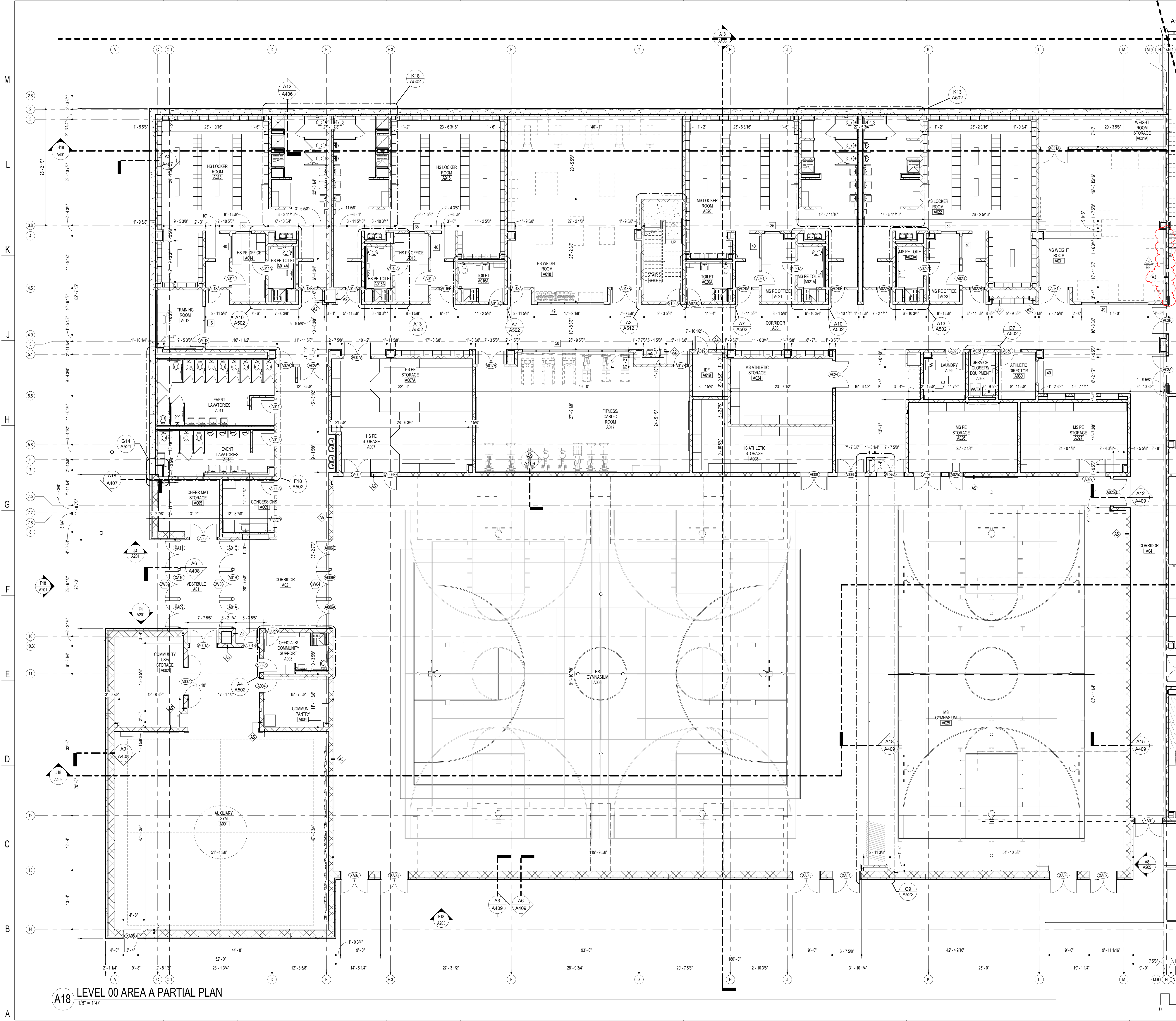
Activities	By	At
<b>Joshua Postadan</b> changed the status from  <b>Open</b> Answered to  <b>Closed</b> <b>Official response:</b> Patrick Byrne (Grimm and Parker): See attached RFI response and revised drawings. set Ball in court to <b>Glenn Feldstein</b> (George Moehrle Masonry)	<b>Joshua Postadan</b>	Jul 11, 2024, 8:16 AM EDT
G+P Response received 7/8/24: "Provide 8" CMU block per structural drawings. See revised sheets A100A and A100B Patrick Byrne 7.8.2024." Please review the response to RFI #008. Provide notification of any cost implications immediately. If a proposal has cost impacts, please request an RFQ from HESS. Send a proposal no later than the close of business within 7 days of receipt of this RFI response. HESS will consider this as a no cost change and close this issue should a proposal not be received by this date. A lack of response for any credit items will prompt HESS Construction to assign a cost value that will be deducted from your contract sum. Note: The RFQ is simply an administrative tracking tool, and in no way represents that additional work, cost or time is acknowledged, authorized, directed, or approved.	<b>Joshua Postadan</b>	Jul 11, 2024, 8:16 AM EDT
<b>Patrick Byrne</b> added a reference to a File <b>#008 - Area B Wall Type Conflict Response.pdf</b>	<b>Patrick Byrne</b>	Jul 8, 2024, 1:26 PM EDT
<b>Patrick Byrne</b> added a reference to a File <b>A100B - LEVEL 00 AREA B PARTIAL FLOOR PLAN-RFI 8.pdf</b>	<b>Patrick Byrne</b>	Jul 8, 2024, 1:26 PM EDT
<b>Patrick Byrne</b> added a reference to a File <b>A100A - LEVEL 00 AREA A PARTIAL FLOOR PLAN-RFI 8.pdf</b>	<b>Patrick Byrne</b>	Jul 8, 2024, 1:26 PM EDT
<b>Patrick Byrne</b> changed the status from  <b>Open</b> In Review to  <b>Open</b> Answered set Ball in court to <b>Joshua Postadan</b> (HESS Construction Co., LLC)	<b>Patrick Byrne</b>	Jul 8, 2024, 1:25 PM EDT
<b>Patrick Byrne</b> added a response: See attached RFI response and revised drawings.	<b>Patrick Byrne</b>	Jul 8, 2024, 1:25 PM EDT
changed the <b>co-reviewer(s)</b> to <b>Cesar Flores</b> (Columbia Engineering)	<b>Patrick Byrne</b>	Jul 1, 2024, 11:03 PM EDT
<b>Joshua Postadan</b> changed the status from  <b>Open</b> Waiting for Submission to  <b>Open</b> In Review changed the <b>due date</b> to Jul 7, 2024 set Ball in court to <b>Patrick Byrne</b> (Grimm and Parker)	<b>Joshua Postadan</b>	Jul 1, 2024, 2:53 PM EDT
<b>Joshua Postadan</b> added a reference to a Sheet <b>S404</b>	<b>Joshua Postadan</b>	Jul 1, 2024, 2:50 PM EDT
<b>Joshua Postadan</b> added a reference to a Sheet <b>A100B</b>	<b>Joshua Postadan</b>	Jul 1, 2024, 2:50 PM EDT

changed the <b>Posted to Drawings/Specifications</b> to <i>YES</i>	<b>Joshua Postadan</b>	Jul 1, 2024, 2:50 PM EDT
changed the <b>watchers</b> to <b>Glenn Feldstein</b> (George Moehrle Masonry), <b>HESS PROJECT TEAM</b>	<b>Joshua Postadan</b>	Jul 1, 2024, 2:50 PM EDT
changed the <b>schedule impact</b> to <i>No</i>	<b>Joshua Postadan</b>	Jul 1, 2024, 2:50 PM EDT
changed the <b>location details</b> to <i>CMU Wall along column line M.9</i>	<b>Joshua Postadan</b>	Jul 1, 2024, 2:50 PM EDT
changed the <b>question</b> to <i>At Level 00 Area B (A100B) the CMU wall on CL-M.9 is called out as wall type A4 which is 10" CMU, however structural section A/S404 calls this to be an 8" CMU wall. Please confirm the which size CMU should be used to construct this wall?</i>	<b>Joshua Postadan</b>	Jul 1, 2024, 2:49 PM EDT
changed the <b>ID</b> to <i>008</i>	<b>Joshua Postadan</b>	Jul 1, 2024, 2:48 PM EDT
<b>Glenn Feldstein</b> (George Moehrle Masonry) created this RFI in <b>Open</b>  Waiting for Submission status and set Ball in court to <b>Joshua Postadan</b> (HESS Construction Co., LLC).	<b>Glenn Feldstein</b>	Jun 27, 2024, 2:41 PM EDT

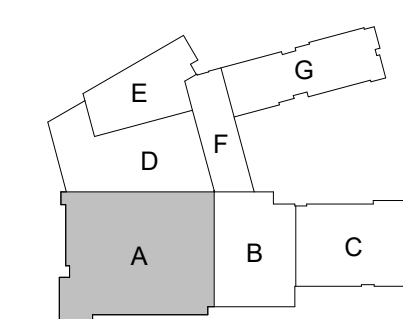


GENERAL PLAN NOTES

1. REFER TO SHEET A302 FOR WALL TYPES AS REFERENCED ON PLANS WITH THE DIAMOND SYMBOL.
2. TYPICAL CMU INTERIOR PARTITION TO BE TYPE A3 UNLESS INDICATED OTHERWISE BY WALL TYPE SYMBOLS. WALL SECTIONS OR OTHER DETAILS.
3. TYPICAL GYPSUM BOARD STUD WALL PARTITION TO BE TYPE K1 UNLESS INDICATED OTHERWISE BY WALL TYPE SYMBOLS. WALL SECTIONS OR OTHER DETAILS.
4. TYPICAL CMU CHASE WALLS TO BE TYPE A1 UNLESS INDICATED OTHERWISE BY WALL TYPE SYMBOLS. WALL SECTIONS OR OTHER DETAILS.
5. TYPICAL GYPSUM BOARD CHASE WALLS TO BE TYPE X1 UNLESS INDICATED OTHERWISE BY WALL TYPE SYMBOLS. WALL SECTIONS OR OTHER DETAILS.
6. UNLESS NOTED OTHERWISE, WALLS MUST EXTEND TO THE ROOF OR FLOOR DECK ABOVE AND BE SEALED IN ACCORDANCE WITH THE WALL TERMINATION DETAILS. REFER TO THE CODE STUDY PLAN FOR IDENTIFICATION OF ALL SMOKE AND FIRE WALL CONDITIONS. PERIMETER CORRIDOR AND LOBBY WALLS MUST BE BUILT TO RESIST THE PASSAGE OF SMOKE.
7. DIMENSIONS ON PLANS ARE FROM FACE OF MASONRY TO FACE OF MASONRY, FACE OF MASONRY TO FACE OF GYPSUM BOARD OR FACE OF GYPSUM BOARD TO FACE OF GYPSUM BOARD.
8. COLUMN GRID LINES ARE FOR REFERENCE ONLY. REFER TO STRUCTURAL DRAWINGS FOR COLUMN LOCATIONS.
9. FEC - INDICATES A FIRE EXTINGUISHER WITH A RECESSED CABINET. FE - INDICATES A FIRE EXTINGUISHER WITH A WALL MOUNTING BRACKET.
10. UNLESS SPECIFICALLY INDICATED OTHERWISE, THE SAME WALL TYPE NEXT TO A DOOR OR OPENING TO CONTINUE OVER THE DOOR OR OPENING.
11. PLAN LOCATION OF DOORS AND FRAMES RELATIVE TO THE PLANE OF THE WALL IS DIAGRAMMATIC ONLY. REFER TO THE REFERENCED JAMB AND HEAD CONDITION DETAILS TO DETERMINE ACTUAL PLACEMENT OF DOOR AND FRAME.



KEY PLAN



A18 LEVEL 00 AREA A PARTIAL PLAN  
1/8" = 1'-0"

11720 Beltsville Drive  
Suite 600  
Calverton, MD 20705  
Tel. 301.595.1000  
www.grimmandparker.com



GP #22105

LEVEL 00 AREA A PARTIAL FLOOR PLAN  
NORTH EAST MIDDLE / HIGH SCHOOL  
300 IRISTOWN ROAD, NORTH EAST, MD

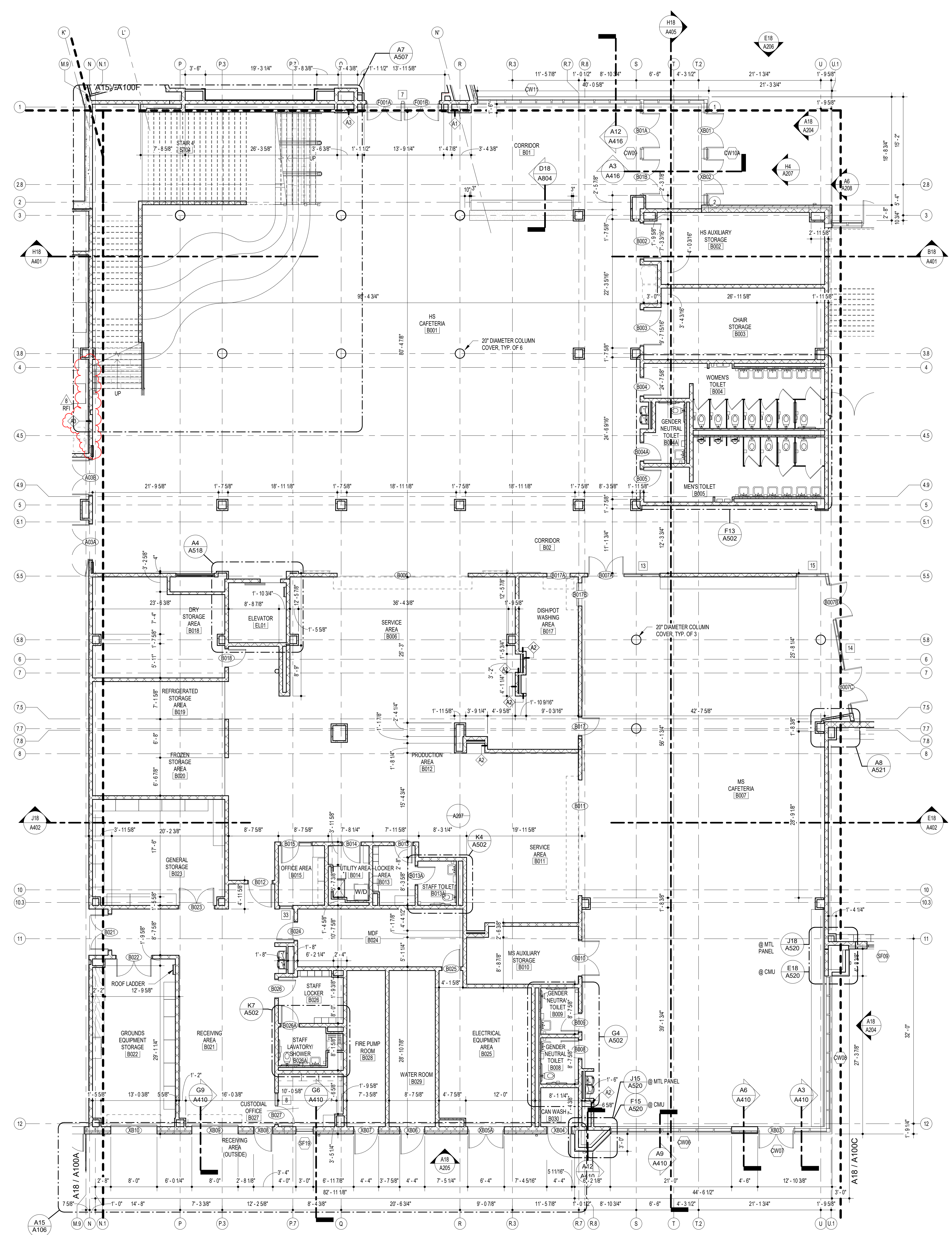
DATE	DESCRIPTION
07/08/2024	RFI 6

A100A  
12/22/2023  
BID SET



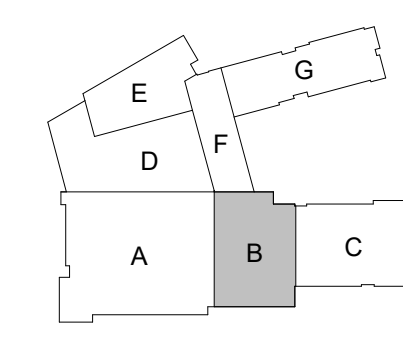
GENERAL PLAN NOTES

1. REFER TO SHEET A302 FOR WALL TYPES AS REFERENCED ON PLANS WITH THE DIAMOND SYMBOL.
2. TYPICAL CMU INTERIOR PARTITION TO BE TYPE A3 UNLESS INDICATED OTHERWISE BY WALL TYPE SYMBOLS. WALL SECTIONS OR OTHER DETAILS.
3. TYPICAL GYPSUM BOARD STUD WALL PARTITION TO BE TYPE K1 UNLESS INDICATED OTHERWISE BY WALL TYPE SYMBOLS. WALL SECTIONS OR OTHER DETAILS.
4. TYPICAL CMU CHASE WALLS TO BE TYPE A1 UNLESS INDICATED OTHERWISE BY WALL TYPE SYMBOLS. WALL SECTIONS OR OTHER DETAILS.
5. TYPICAL GYPSUM BOARD CHASE WALLS TO BE TYPE X1 UNLESS INDICATED OTHERWISE BY WALL TYPE SYMBOLS. WALL SECTIONS OR OTHER DETAILS.
6. UNLESS NOTED OTHERWISE, WALLS MUST EXTEND TO THE ROOF OR FLOOR DECK ABOVE AND BE SEALED IN ACCORDANCE WITH THE WALL TERMINATION DETAILS. REFER TO THE CODE STUDY PLAN FOR IDENTIFICATION OF ALL SMOKE AND FIRE WALL CONDITIONS. PERIMETER CORRIDOR AND LOBBY WALLS MUST BE BUILT TO RESIST THE PASSAGE OF SMOKE.
7. DIMENSIONS ON PLANS ARE FROM FACE OF MASONRY TO FACE OF MASONRY, FACE OF MASONRY TO FACE OF GYPSUM BOARD OR FACE OF GYPSUM BOARD TO FACE OF GYPSUM BOARD.
8. COLUMN GRID LINES ARE FOR REFERENCE ONLY. REFER TO STRUCTURAL DRAWINGS FOR COLUMN LOCATIONS.
9. FEC - INDICATES A FIRE EXTINGUISHER WITH A RECESSED CABINET. FE - INDICATES A FIRE EXTINGUISHER WITH A WALL MOUNTING BRACKET.
10. UNLESS SPECIFICALLY INDICATED OTHERWISE, THE SAME WALL TYPE NEXT TO A DOOR OR OPENING TO CONTINUE OVER THE DOOR OR OPENING.
11. PLAN LOCATION OF DOORS AND FRAMES RELATIVE TO THE PLANE OF THE WALL IS DIAGRAMMATIC ONLY. REFER TO THE REFERENCED JAMB AND HEAD CONDITION DETAILS TO DETERMINE ACTUAL PLACEMENT OF DOOR AND FRAME.



A15 LEVEL 00 AREA B PARTIAL PLAN  
1/8" = 1'-0"

KEY PLAN



11720 Beltsville Drive  
Suite 600  
Calverton, MD 20705  
Tel. 301.595.1000  
www.grimmandparker.com



GP #22105

LEVEL 00 AREA B PARTIAL FLOOR PLAN  
NORTH EAST MIDDLE / HIGH SCHOOL  
300 IRISTOWN ROAD, NORTH EAST, MD

DATE	DESCRIPTION
07/08/2024	RFI 6

A100B  
12/22/2023  
BID SET

RFI detail

#008 Area B Wall Type Conflict



Status	<div><div></div>Open</div> In Review
Created on	Jun 27, 2024 by <b>Glenn Feldstein</b> (George Moehrle Masonry)
RFI type	Architectural RFI REVs
Ball in court	<b>Patrick Byrne</b> (Grimm and Parker)
Due date	Jul 8, 2024 (1 day late)

Question

At Level 00 Area B (A100B) the CMU wall on CL-M.9 is called out as wall type A4 which is 10" CMU, however structural section A/S404 calls this to be an 8" CMU wall. Please confirm the which size CMU should be used to construct this wall?

Suggested answer

CMU to be sized and reinforced per structural drawings.

References

Sheets (2)


- A100B
- S404

Impact

Cost impact	No
Schedule impact	No

Other attributes

Priority	Normal
Discipline	Masonry




Category	Documentation Conflict
Location	Area B
Location details	CMU Wall along column line M.9
External id	-
Co-reviewer(s)	 <b>Cesar Flores</b> (Columbia Engineering)
Posted to Drawings/ Specifications	YES
Trade's RFI No.	-

**G+P Response:**

Provide 8" CMU block per structural drawings. See revised sheets A100A and A100B.

Patrick Byrne 7.8.2024.



Activities	By	At
changed the <b>co-reviewer(s)</b> to <b>Cesar Flores</b> (Columbia Engineering)	<b>Patrick Byrne</b>	Jul 1, 2024, 11:03 PM EDT
<b>Joshua Postadan</b> changed the status from  <b>Open</b> Waiting for Submission to  <b>Open</b> In Review changed the <b>due date</b> to Jul 7, 2024 set Ball in court to <b>Patrick Byrne</b> (Grimm and Parker)	<b>Joshua Postadan</b>	Jul 1, 2024, 2:53 PM EDT
<b>Joshua Postadan</b> added a reference to a sheet <b>S404</b>	<b>Joshua Postadan</b>	Jul 1, 2024, 2:50 PM EDT
<b>Joshua Postadan</b> added a reference to a sheet <b>A100B</b>	<b>Joshua Postadan</b>	Jul 1, 2024, 2:50 PM EDT
changed the <b>Posted to Drawings/Specifications</b> to <b>YES</b>	<b>Joshua Postadan</b>	Jul 1, 2024, 2:50 PM EDT
changed the <b>watchers</b> to <b>Glenn Feldstein</b> (George Moehrle Masonry), <b>HESS PROJECT TEAM</b>	<b>Joshua Postadan</b>	Jul 1, 2024, 2:50 PM EDT
changed the <b>schedule impact</b> to <b>No</b>	<b>Joshua Postadan</b>	Jul 1, 2024, 2:50 PM EDT
changed the <b>location details</b> to <i>CMU Wall along column line M.9</i>	<b>Joshua Postadan</b>	Jul 1, 2024, 2:50 PM EDT
changed the <b>question</b> to <i>At Level 00 Area B (A100B) the CMU wall on CL-M.9 is called out as wall type A4 which is 10" CMU, however structural section A/S404 calls this to be an 8" CMU wall. Please confirm the which size CMU should be used to construct this wall?</i>	<b>Joshua Postadan</b>	Jul 1, 2024, 2:49 PM EDT
changed the <b>ID</b> to 008	<b>Joshua Postadan</b>	Jul 1, 2024, 2:48 PM EDT
<b>Glenn Feldstein</b> (George Moehrle Masonry) created this RFI in  <b>Open</b> Waiting for Submission status and set Ball in court to <b>Joshua Postadan</b> (HESS Construction Co., LLC).	<b>Glenn Feldstein</b>	Jun 27, 2024, 2:41 PM EDT

RFI detail

#009.1 Exterior Base of Wall Details



Status	<div><div></div>Closed</div>
Created on	Jun 27, 2024 by <b>Glenn Feldstein</b> (George Moehrle Masonry)
RFI type	Default RFI workflow
Ball in court	<b>Glenn Feldstein</b> (George Moehrle Masonry)
Answered	Jul 2, 2024 by <b>Patrick Byrne</b> (Grimm and Parker)

Question

Typical foundation detail (A7/A427) shows the damp proofing starting on the outer wythe of CMU, crossing horizontally through the block and insulation with a flexible stainless steel transition, then continuing up on the inner wythe. Due to the inefficiency of grouting/waiting for the grout to cure before crossing through the CMU and the irregular surfaces between CMU and insulation along with the excavation typically being about as wide as the concrete footing (no space to stand on the footing outside the foundation to apply damp proofing), we propose damp proofing the inner wythe of CMU as shown on the attached detail. Please note this same revised detail was approved by G+P at Clarksburg ES.

Additionally, spec 071113 3.3 B requires damp proofing to extend down the face of concrete footings a minimum of 6", but the wall section details do not show this. Please confirm damp proofing is not required to extend down face of footing.

Suggested answer

Included detail is approved for use. Damp proofing to be installed per section details and is not required to extend down face of footings.

Official response

Patrick Byrne (Grimm and Parker): See attached RFI response.

By **Patrick Byrne** (Grimm and Parker) - Jul 2, 2024, 5:58 PM EDT

References and Attachments

Files (4)

#009 - Exterior Base of Wall Details Response.pdf

#009.1 - Exterior Base of Wall Details Response 2024-07-11.pdf







- [Proposed Base of Wall Detail.png](#)
- [RFI 009 - A427 Markup.pdf](#)

Impact

Cost impact	Unknown
Schedule impact	No

Other attributes

Priority	Normal
Discipline	Masonry
Category	Constructability, Design Coordination
Location	-
Location details	Typical foundation detail w/ CMU
External id	-
Co-reviewer(s)	
Posted to Drawings/ Specifications	NO
Trade's RFI No.	-

Activities	By	At
<b>Joshua Postadan</b> changed the status from  <b>Open</b> Answered to  <b>Closed</b> set Ball in court to <b>Glenn Feldstein</b> (George Moehrle Masonry)	<b>Joshua Postadan</b>	Aug 30, 2024, 7:38 AM EDT
Please review the response to RFI #009.1. Provide notification of any cost implications immediately. If a proposal has cost impacts, please request an RFQ from HESS. Send a proposal no later than the close of business within 7 days of receipt of this RFI response. HESS will consider this as a no cost change and close this issue should a proposal not be received by this date. A lack of response for any credit items will prompt HESS Construction to assign a cost value that will be deducted from your contract sum. Note: The RFQ is simply an administrative tracking tool, and in no way represents that additional work, cost or time is acknowledged, authorized, directed, or approved.	<b>Joshua Postadan</b>	Aug 30, 2024, 7:38 AM EDT
changed the <b>watchers</b> to <b>Glenn Feldstein</b> (George Moehrle Masonry), <b>HESS PROJECT TEAM, Canyon Contracting, Inc., George Moehrle Masonry</b>	<b>Joshua Postadan</b>	Aug 29, 2024, 8:04 AM EDT
changed the <b>watchers</b> to <b>Glenn Feldstein</b> (George Moehrle Masonry), <b>HESS PROJECT TEAM, Canyon Contracting, Inc.</b>	<b>Joshua Postadan</b>	Aug 29, 2024, 8:00 AM EDT
changed the <b>due date</b> to Jul 16, 2024	<b>Joshua Postadan</b>	Jul 16, 2024, 10:00 AM EDT
<b>Patrick Byrne</b> added a reference to a File <b>#009.1 - Exterior Base of Wall Details Response 2024-07-11.pdf</b>	<b>Patrick Byrne</b>	Jul 11, 2024, 12:28 PM EDT
Joshua, Detail A7/A427 shows the waterproofing extending on the horizontal surface of the footing. See below. Thanks, Patrick	<b>Patrick Byrne</b>	Jul 8, 2024, 2:48 PM EDT
<b>Joshua Postadan</b> changed the status from  <b>Closed</b> to  <b>Open</b> Answered set Ball in court to <b>Joshua Postadan</b> (HESS Construction Co., LLC) changed the <b>ID</b> to 009.1	<b>Joshua Postadan</b>	Jul 8, 2024, 2:37 PM EDT
Patrick, 07 11 13 Section 3.3 B calls for the dampproofing to extend over top of footing and down a minimum of 6 inches, whereas Detail A7/A427 shows the dampproofing terminating at the top of footing. Please advise whether the dampproofing should be applied per the detail or the specification and please revise the detail/specification accordingly.	<b>Joshua Postadan</b>	Jul 8, 2024, 2:37 PM EDT
<b>Joshua Postadan</b> changed the status from  <b>Open</b> Answered to  <b>Closed</b> <b>Official response:</b> Patrick Byrne (Grimm and Parker): See attached RFI response. set Ball in court to <b>Glenn Feldstein</b> (George Moehrle Masonry)	<b>Joshua Postadan</b>	Jul 8, 2024, 9:57 AM EDT



Received from Grimm + Parker on 7/2/24: "G+P Response: Install the waterproofing as shown on the detail A7/A427 on the outer wythe of the CMU wall. Install damp proofing as described in Part 3 of the damp proofing specification section 071113, 3.3B. Patrick Byrne 7.2.24" Please review the response to RFI #009. Provide notification of any cost implications immediately. If a proposal has cost impacts, please request an RFQ from HESS. Send a proposal no later than the close of business within 7 days of receipt of this RFI response. HESS will consider this as a no cost change and close this issue should a proposal not be received by this date. A lack of response for any credit items will prompt HESS Construction to assign a cost value that will be deducted from your contract sum. Note: The RFQ is simply an administrative tracking tool, and in no way represents that additional work, cost or time is acknowledged, authorized, directed, or approved. Thank you,

**Joshua Postadan**



Jul 8, 2024, 9:57 AM EDT

**Patrick Byrne** added a reference to a File **#009 - Exterior Base of Wall Details Response.pdf**

**Patrick Byrne**

Jul 2, 2024, 5:58 PM EDT

**Patrick Byrne**

changed the status from  **Open** In Review to  **Open** Answered set Ball in court to **Joshua Postadan** (HESS Construction Co., LLC)

**Patrick Byrne**



Jul 2, 2024, 5:58 PM EDT

**Patrick Byrne** added a response: See attached RFI response.

**Patrick Byrne**

Jul 2, 2024, 5:58 PM EDT

**Joshua Postadan**

changed the status from  **Open** Waiting for Submission to  **Open** In Review changed the **due date** to Jul 7, 2024 set Ball in court to **Patrick Byrne** (Grimm and Parker)

**Joshua Postadan**

Jul 2, 2024, 7:00 AM EDT

changed the **cost impact** to *Unknown*

**Joshua Postadan**

Jul 2, 2024, 7:00 AM EDT

changed the **schedule impact** to *No*

**Joshua Postadan**

Jul 2, 2024, 7:00 AM EDT

**Joshua Postadan** added a reference to a File **RFI 009 - A427 Markup.pdf**

**Joshua Postadan**

Jul 2, 2024, 6:59 AM EDT

changed the **Posted to Drawings/Specifications** to *NO*

**Joshua Postadan**

Jul 2, 2024, 6:58 AM EDT

changed the **location details** to *Typical foundation detail w/ CMU*

**Joshua Postadan**

Jul 2, 2024, 6:58 AM EDT

changed the **due date** to Jul 8, 2024

**Joshua Postadan**

Jul 2, 2024, 6:52 AM EDT

changed the **due date** to Jul 7, 2024


**Joshua Postadan**

Jul 2, 2024, 6:52 AM EDT

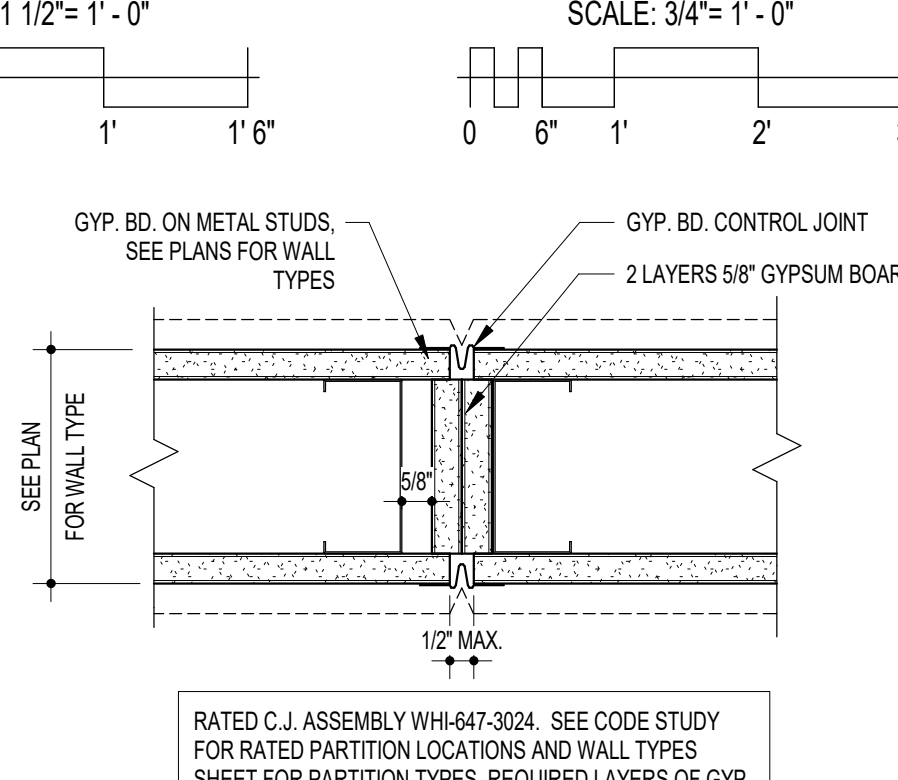
changed the **ID** to *009*

**Joshua Postadan**

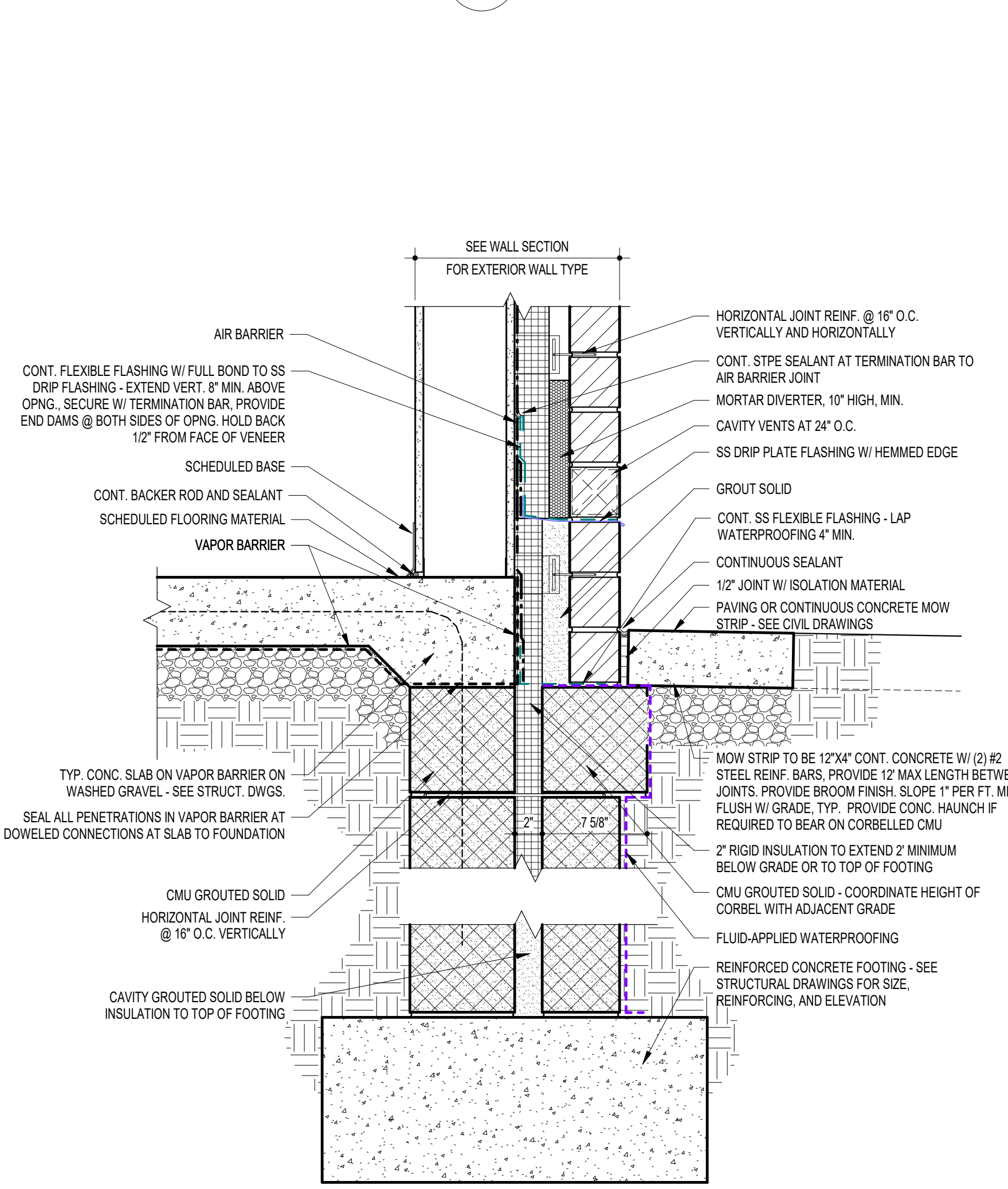
Jul 2, 2024, 6:52 AM EDT

changed the <b>watchers</b> to <b>Glenn Feldstein</b> (George Moehrle Masonry), <b>HESS PROJECT TEAM</b>	<b>Joshua Postadan</b>	Jul 1, 2024, 2:55 PM EDT
<b>Glenn Feldstein</b> added a reference to a File <b>Proposed Base of Wall Detail.png</b>	<b>Glenn Feldstein</b>	Jun 27, 2024, 2:39 PM EDT
<b>Glenn Feldstein</b> (George Moehrle Masonry) created this RFI in  <b>Open</b> Waiting for Submission status and set Ball in court to <b>Joshua Postadan</b> (HESS Construction Co., LLC).	<b>Glenn Feldstein</b>	Jun 27, 2024, 2:39 PM EDT

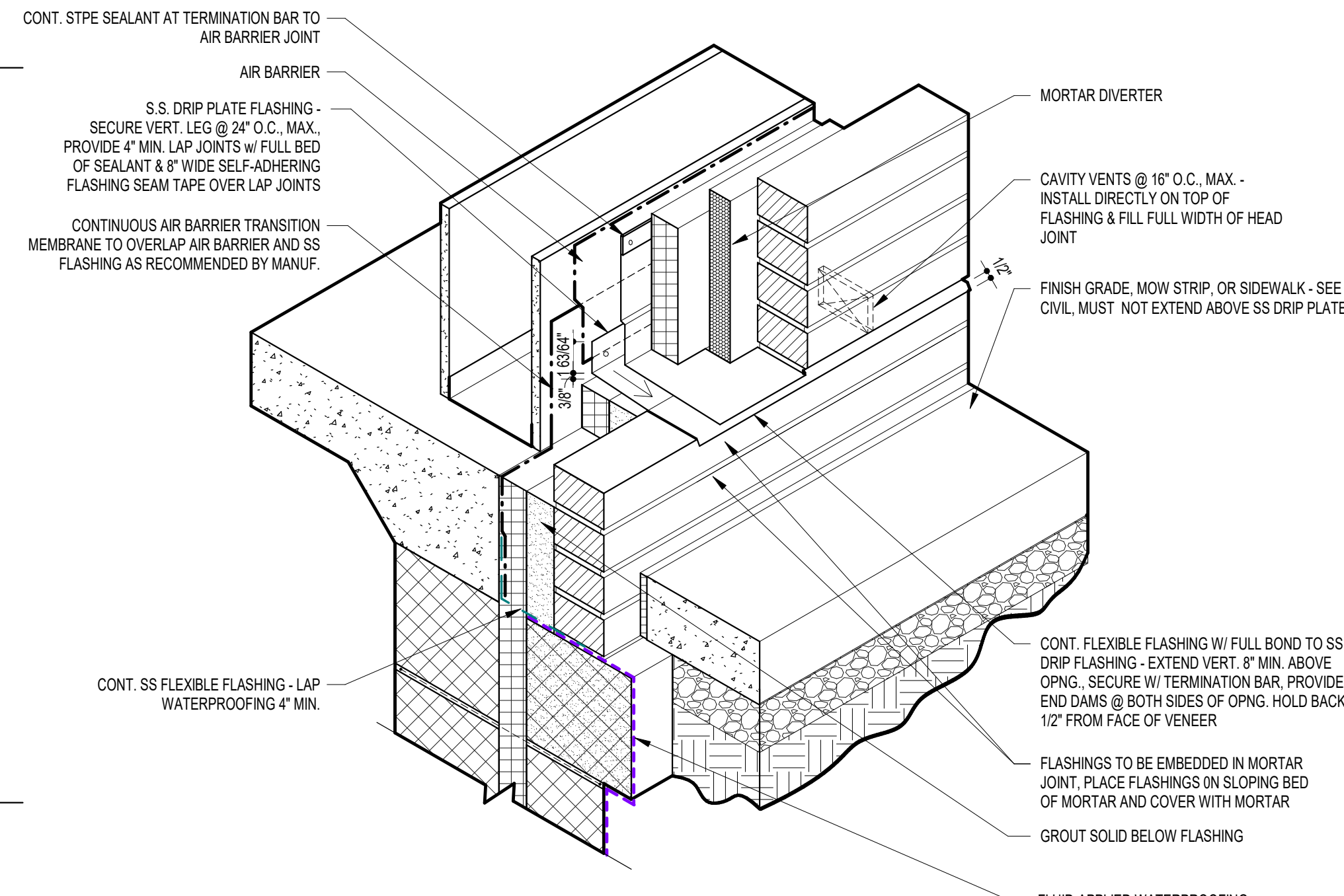




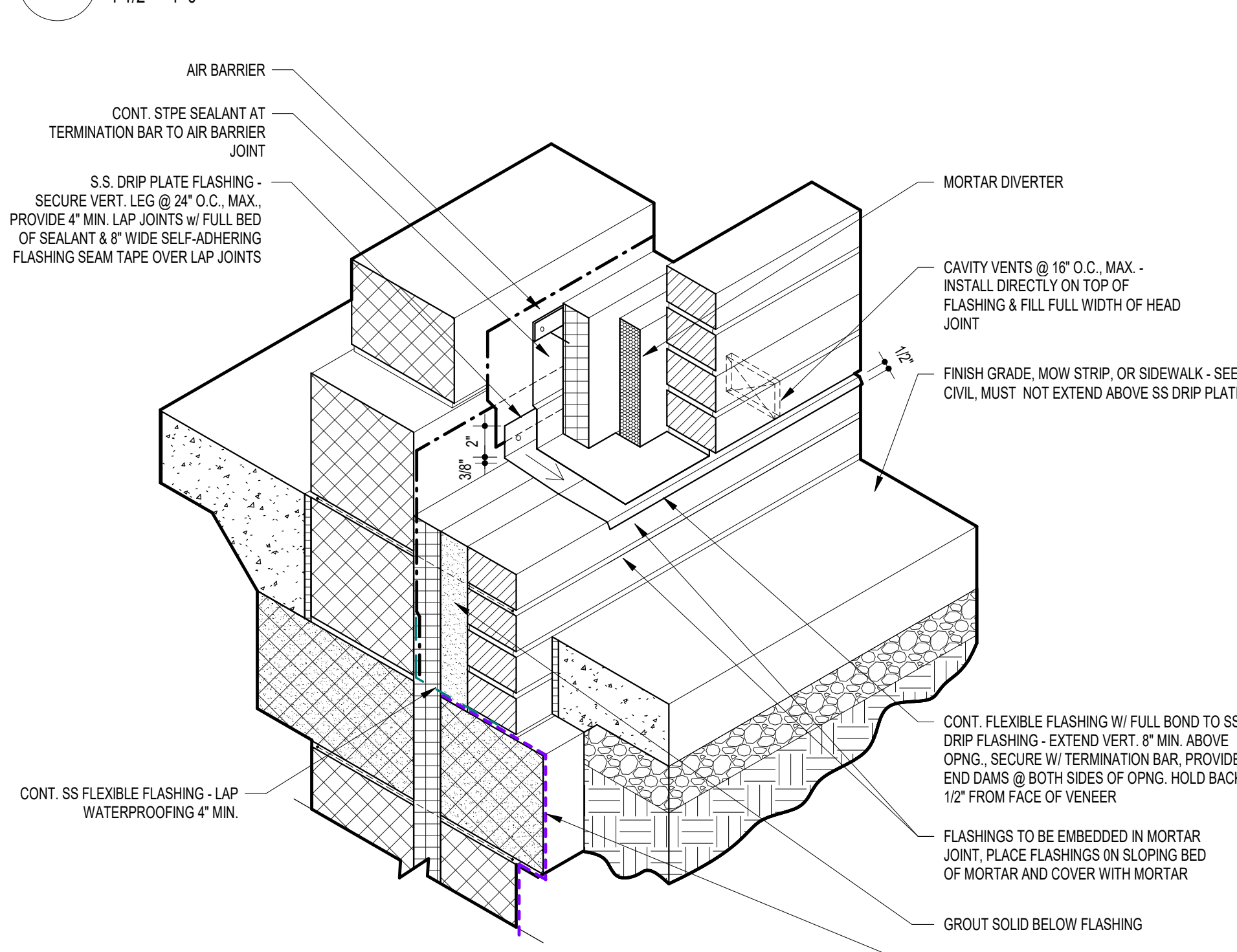
K6 RATED GYP. BD. CONTROL JOINT



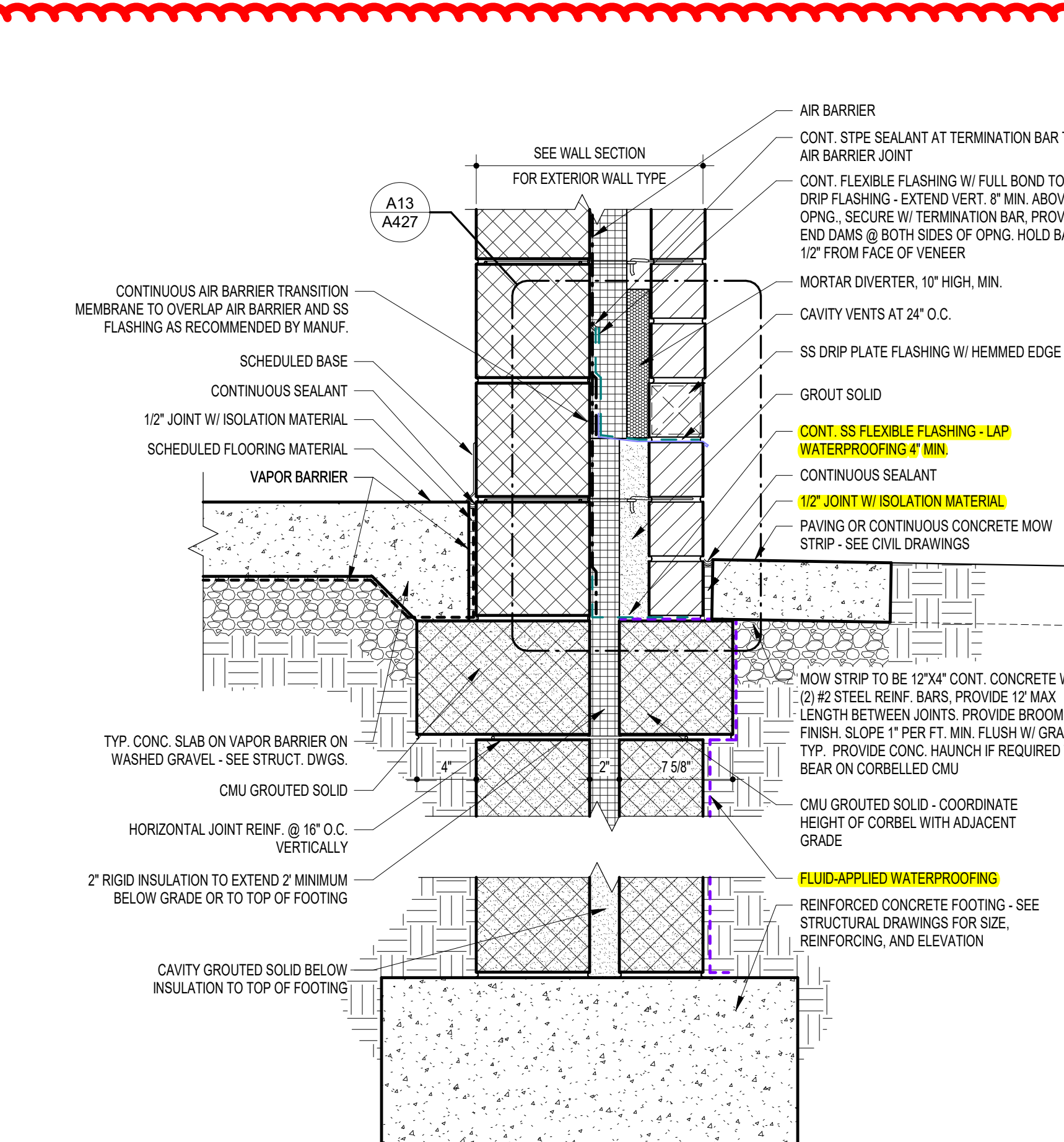
E8 TYP. FOUNDATION DETAIL W. METAL STUD BACK-UP  
1 1/2" = 1'-0"



D13 TYP. BASE OF WALL FLASHING DETAIL - MTL STUD

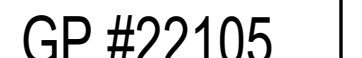


**A13** TYP. BASE OF WALL FLASHING DETAIL  
1 1/2" = 1'-0"



A7 TYP. FOUNDATION DETAIL W. CMU BACK-UP  
11'-2" = 1'-0"

A2 GYP. BD. CONTROL JOINT




**A427**  
12/22/2023  
BID SET



## RFI detail

## #009 Exterior Base of Wall Details



Status	 <b>Open</b> In Review
Created on	Jun 27, 2024 by <b>Glenn Feldstein</b> (George Moehrle Masonry)
RFI type	Default RFI workflow
Ball in court	<b>Patrick Byrne</b> (Grimm and Parker)
Due date	Jul 8, 2024

### Question

Typical foundation detail (A7/A427) shows the damp proofing starting on the outer wythe of CMU, crossing horizontally through the block and insulation with a flexible stainless steel transition, then continuing up on the inner wythe. Due to the inefficiency of grouting/waiting for the grout to cure before crossing through the CMU and the irregular surfaces between CMU and insulation along with the excavation typically being about as wide as the concrete footing (no space to stand on the footing outside the foundation to apply damp proofing), we propose damp proofing the inner wythe of CMU as shown on the attached detail. Please note this same revised detail was approved by G+P at Clarksburg ES.

Additionally, spec 071113 3.3 B requires damp proofing to extend down the face of concrete footings a minimum of 6", but the wall section details do not show this. Please confirm damp proofing is not required to extend down face of footing.

### ~~Suggested answer~~

~~Included detail is approved for use. Damp proofing to be installed per section details and is not required to extend down face of footings.~~

### References

#### Files (2)

- [Proposed Base of Wall Detail.png](#)
- [RFI 009 - A427 Markup.pdf](#)

### Impact

Cost impact	Unknown
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<b>Schedule impact</b>	No
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## Other attributes

<b>Priority</b>	Normal
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<b>Discipline</b>	Masonry
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<b>Category</b>	Constructability, Design Coordination
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<b>Location</b>	-
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<b>Location details</b>	Typical foundation detail w/ CMU
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<b>External id</b>	-
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<b>Co-reviewer(s)</b>	
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<b>Posted to Drawings/ Specifications</b>	NO
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<b>Trade's RFI No.</b>	-
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### G+P Response:

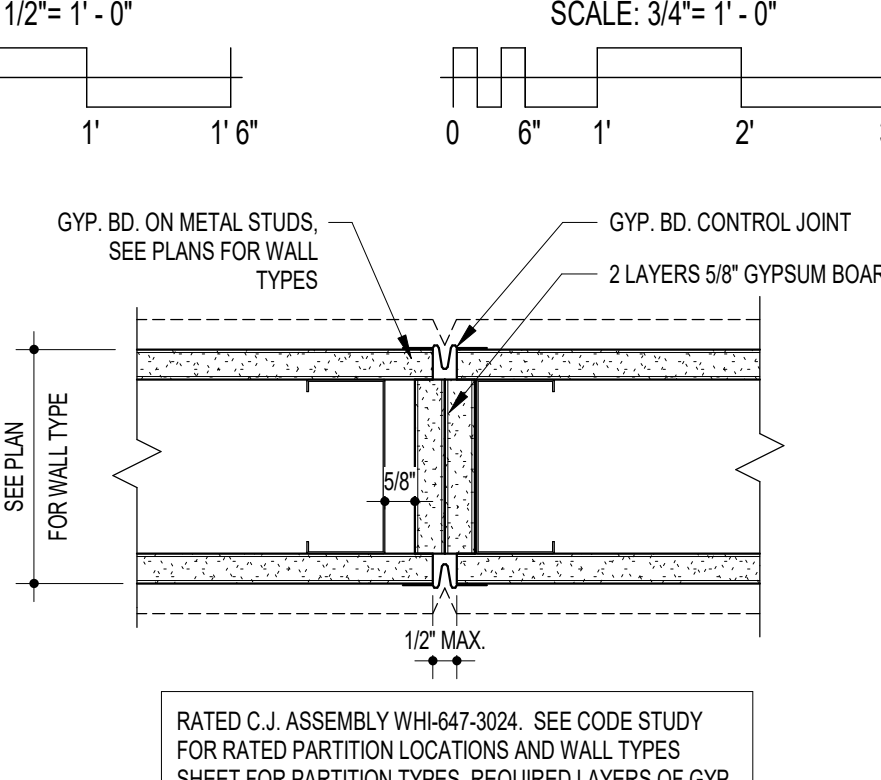
Install the waterproofing as shown on the detail A7/A427 on the outer wythe of the CMU wall.

Install damp proofing as described in Part 3 of the damp proofing specification section 071113, 3.3.B.

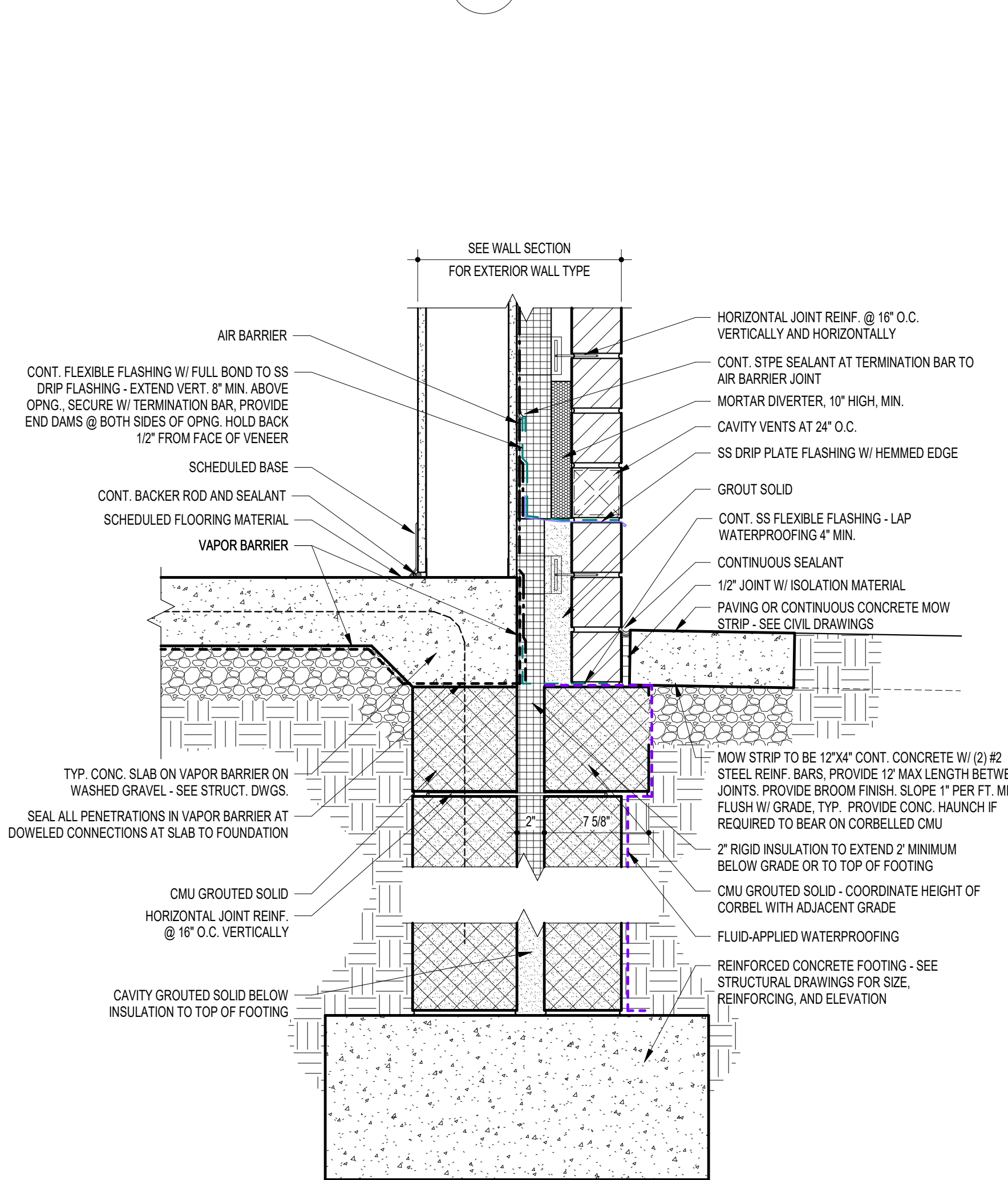
Patrick Byrne 7.2.2024

Activities	By	At
<b>Joshua Postadan</b> changed the status from  <b>Open</b> Waiting for Submission to  <b>Open</b> In Review changed the <b>due date</b> to Jul 7, 2024 set Ball in court to <b>Patrick Byrne</b> (Grimm and Parker)	<b>Joshua Postadan</b>	Jul 2, 2024, 7:00 AM EDT
changed the <b>cost impact</b> to <i>Unknown</i>	<b>Joshua Postadan</b>	Jul 2, 2024, 7:00 AM EDT
changed the <b>schedule impact</b> to <i>No</i>	<b>Joshua Postadan</b>	Jul 2, 2024, 7:00 AM EDT
<b>Joshua Postadan</b> added a reference to a file <b>RFI 009 - A427 Markup.pdf</b>	<b>Joshua Postadan</b>	Jul 2, 2024, 6:59 AM EDT
changed the <b>Posted to Drawings/Specifications</b> to <i>NO</i>	<b>Joshua Postadan</b>	Jul 2, 2024, 6:58 AM EDT
changed the <b>location details</b> to <i>Typical foundation detail w/ CMU</i>	<b>Joshua Postadan</b>	Jul 2, 2024, 6:58 AM EDT
changed the <b>due date</b> to Jul 8, 2024	<b>Joshua Postadan</b>	Jul 2, 2024, 6:52 AM EDT
changed the <b>due date</b> to Jul 7, 2024	<b>Joshua Postadan</b>	Jul 2, 2024, 6:52 AM EDT
changed the <b>ID</b> to <i>009</i>	<b>Joshua Postadan</b>	Jul 2, 2024, 6:52 AM EDT
changed the <b>watchers</b> to <b>Glenn Feldstein</b> (George Moehrle Masonry), <b>HESS PROJECT TEAM</b>	<b>Joshua Postadan</b>	Jul 1, 2024, 2:55 PM EDT
<b>Glenn Feldstein</b> added a reference to a file <b>Proposed Base of Wall Detail.png</b>	<b>Glenn Feldstein</b>	Jun 27, 2024, 2:39 PM EDT
<b>Glenn Feldstein</b> (George Moehrle Masonry) created this RFI in  <b>Open</b> Waiting for Submission status and set Ball in court to <b>Joshua Postadan</b> (HESS Construction Co., LLC).	<b>Glenn Feldstein</b>	Jun 27, 2024, 2:39 PM EDT

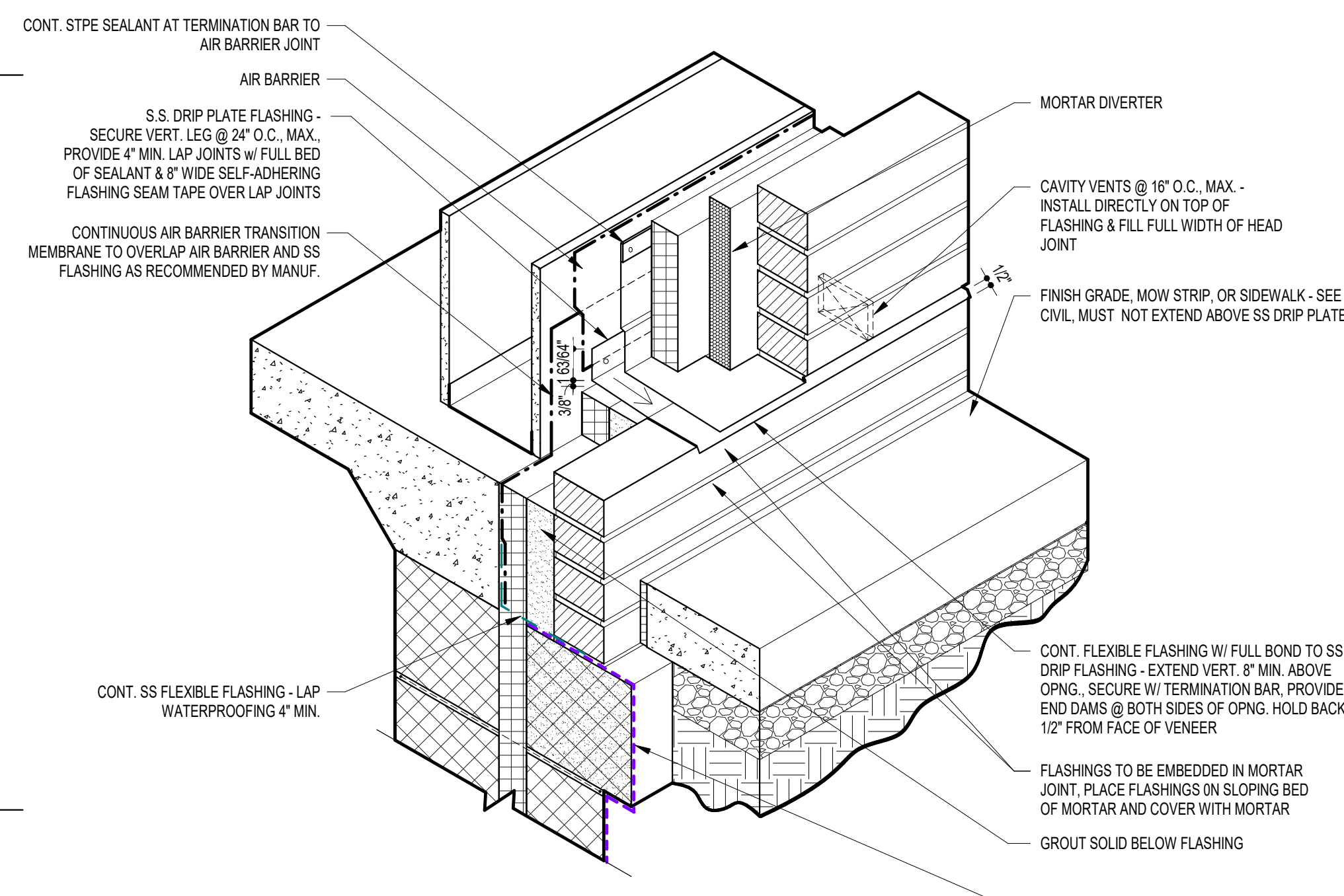




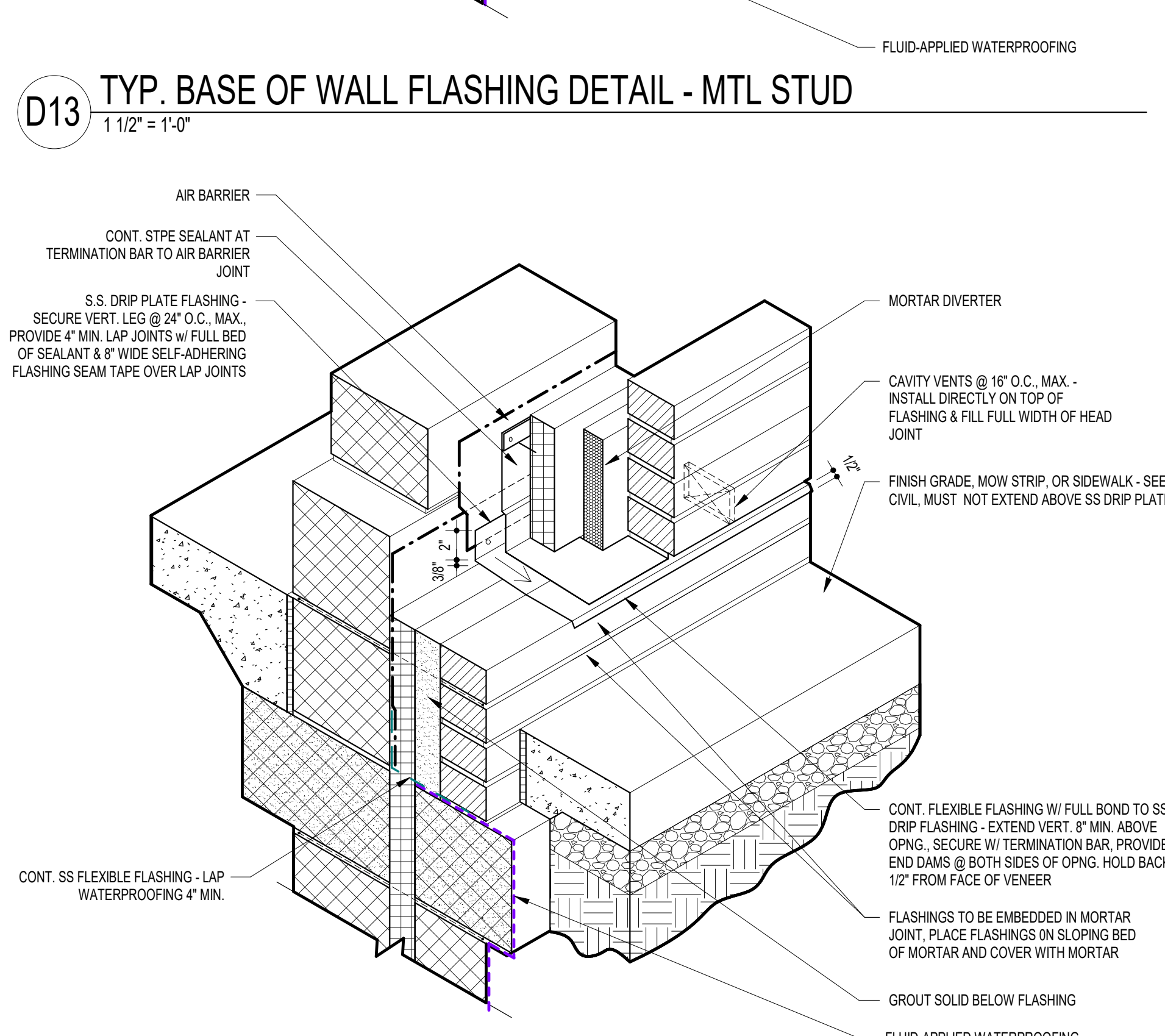
K6 RATED GYP. BD. CONTROL JOINT



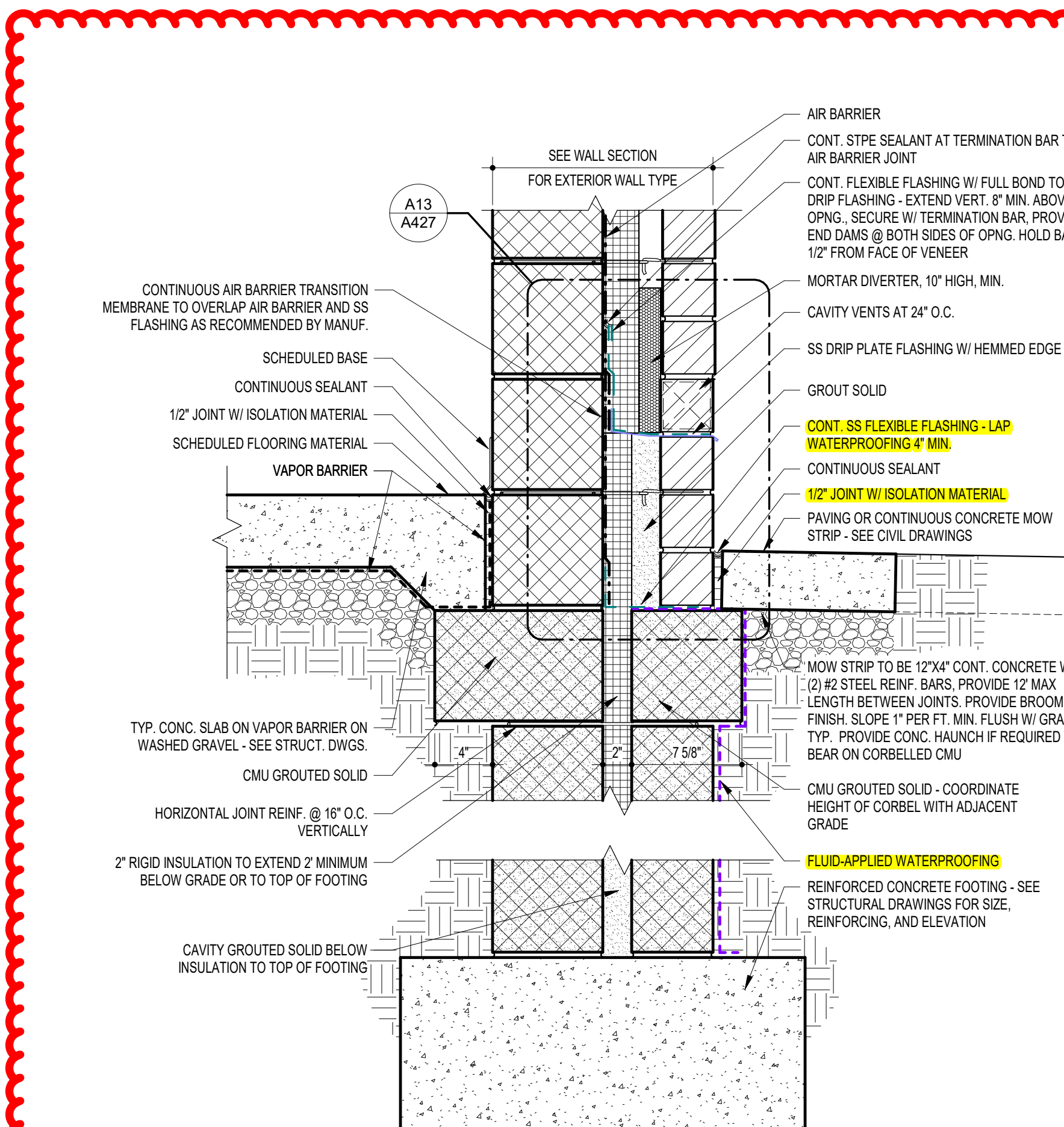
E8 TYP. FOUNDATION DETAIL W. METAL STUD BACK-UP  
1' 4 1/2" = 4' 0"



E8 TYP. FOUNDATION DETAIL W. METAL STUD BACK-UP  
1' 4 1/2" = 4' 0"



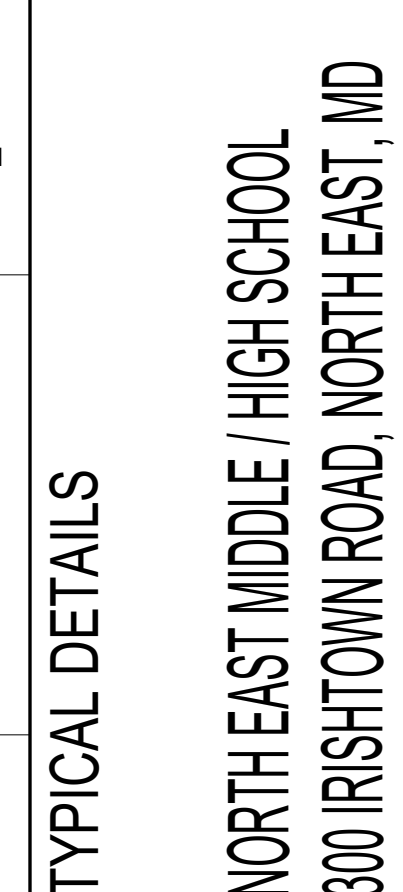
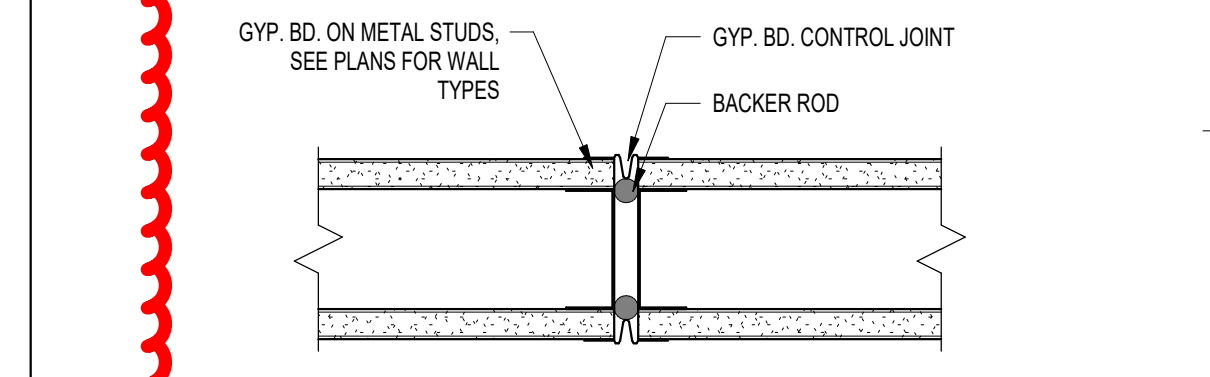
A7 TYP. FOUNDATION DETAIL W. CMU BACK-UP  
1 1/2" = 1'-0"



A7 TYP. FOUNDATION DETAIL W. CMU BACK-UP  
1 1/2" = 1'-0"

GYP. BD. CONTROL JOINT

- B3** CONTROL JOINT @ INT. MASONRY WALL  
1 1/2" = 1'-0"



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RFI detail

#009.1 Exterior Base of Wall Details



Status	<div><div></div>Open</div> Answered
Created on	Jun 27, 2024 by <b>Glenn Feldstein</b> (George Moehrle Masonry)
RFI type	Default RFI workflow
Ball in court	<b>Joshua Postadan</b> (HESS Construction Co., LLC)
Answered	Jul 2, 2024 by <b>Patrick Byrne</b> (Grimm and Parker)

Question

Typical foundation detail (A7/A427) shows the damp proofing starting on the outer wythe of CMU, crossing horizontally through the block and insulation with a flexible stainless steel transition, then continuing up on the inner wythe. Due to the inefficiency of grouting/waiting for the grout to cure before crossing through the CMU and the irregular surfaces between CMU and insulation along with the excavation typically being about as wide as the concrete footing (no space to stand on the footing outside the foundation to apply damp proofing), we propose damp proofing the inner wythe of CMU as shown on the attached detail. Please note this same revised detail was approved by G+P at Clarksburg ES.

Additionally, spec 071113 3.3 B requires damp proofing to extend down the face of concrete footings a minimum of 6", but the wall section details do not show this. Please confirm damp proofing is not required to extend down face of footing.

Suggested answer

Included detail is approved for use. Damp proofing to be installed per section details and is not required to extend down face of footings.

Official response

Patrick Byrne (Grimm and Parker): See attached RFI response.

By **Patrick Byrne** (Grimm and Parker) - Jul 2, 2024, 5:58 PM EDT

References

Files (3)

- [#009 - Exterior Base of Wall Details Response.pdf](#)
- [Proposed Base of Wall Detail.png](#)



- [RFI 009 - A427 Markup.pdf](#)

## Impact

Cost impact	Unknown
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Schedule impact	No
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## Other attributes

Priority	Normal
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Discipline	Masonry
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Category	Constructability, Design Coordination
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Location	-
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Location details	Typical foundation detail w/ CMU
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External id	-
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Co-reviewer(s)	
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Posted to Drawings/ Specifications	NO
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Trade's RFI No.	-
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### G+P Response:

Detail A7/A427 is a detail for the foundation waterproofing system. The referenced specification section in the RFI is for damp-proofing. Please be aware that these are different systems.

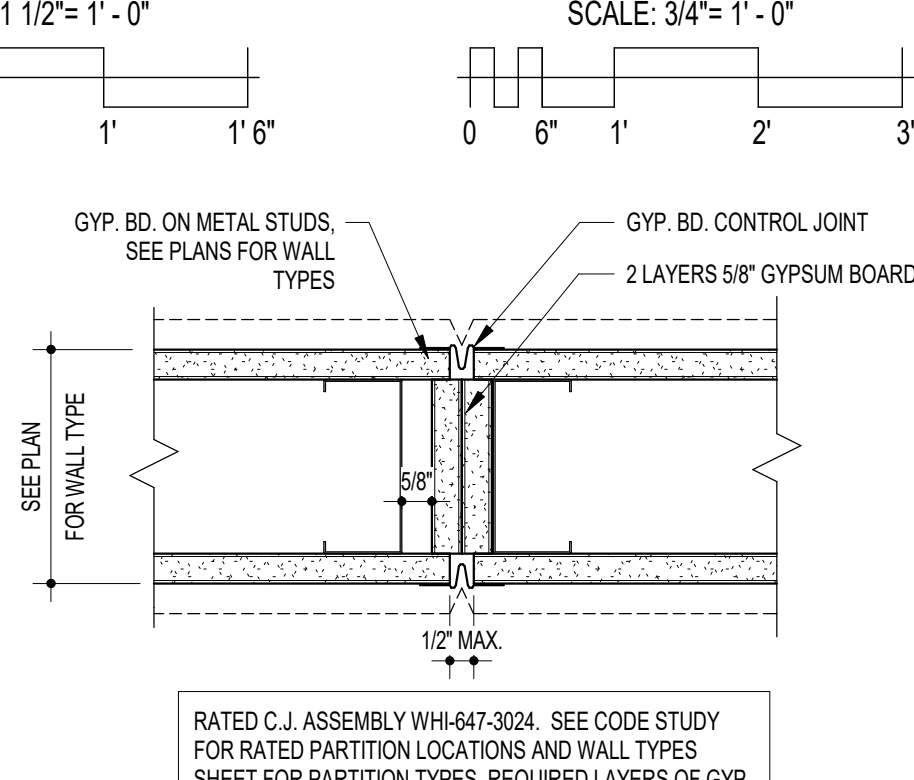
The dampproofing does not need to wrap the vertical face of the concrete footing unless the manufacturer details require it be installed in that manner. Please bear in mind that the dampproofing should only be utilized in a few landscape retaining walls where drainage board is required and the back side of the loading dock wall. All other areas have sheet waterproofing or cold fluid-applied waterproofing applied to the vertical surfaces.

Patrick Byrne 7.11.2024.

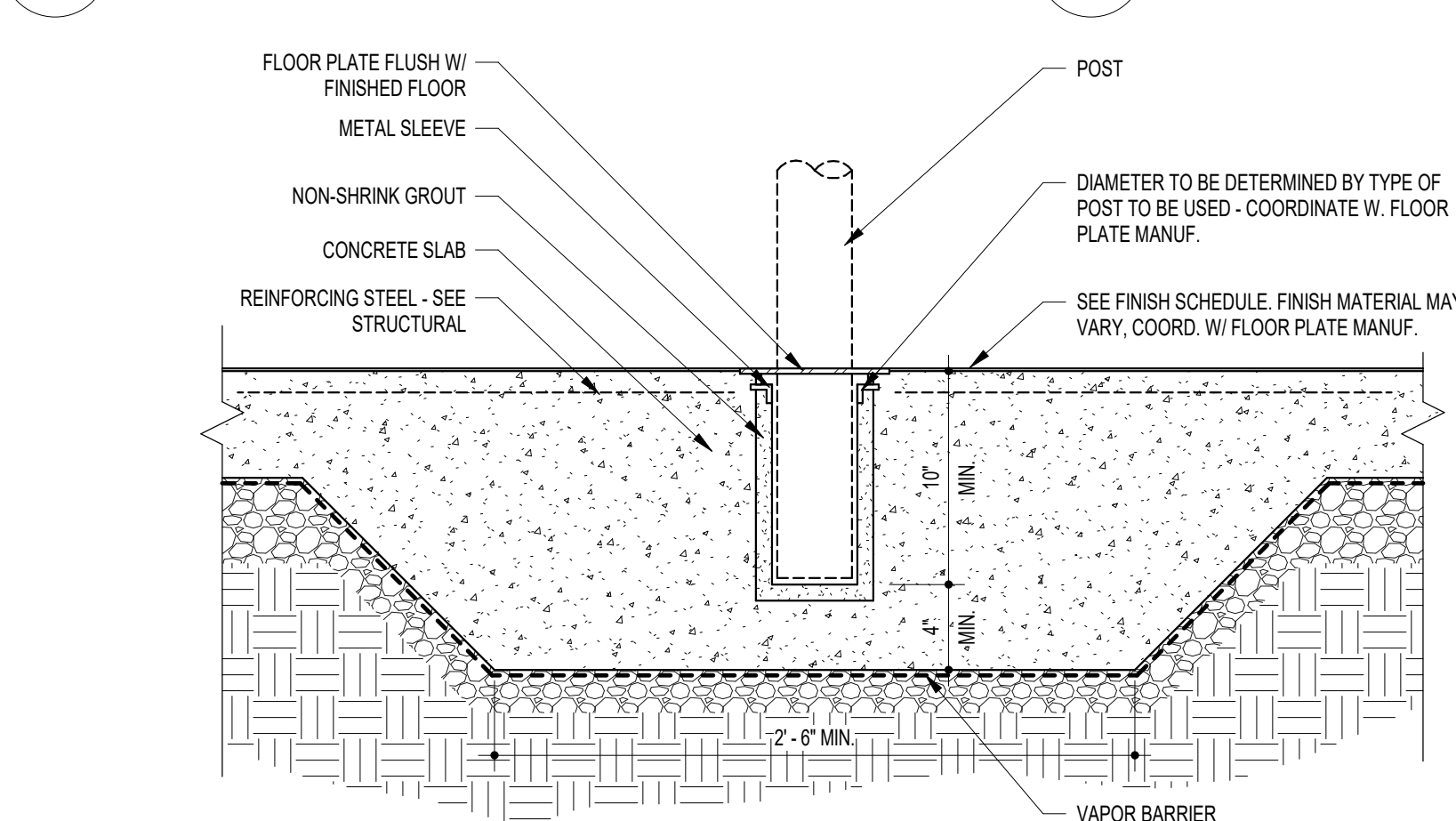
Activities	By	At
Joshua, Detail A7/A427 shows the waterproofing extending on the horizontal surface of the footing. See below. Thanks, Patrick	Patrick Byrne	Jul 8, 2024, 2:48 PM EDT
<b>Joshua Postadan</b> changed the status from  <b>Closed</b> to  <b>Open</b> Answered set Ball in court to <b>Joshua Postadan</b> (HESS Construction Co., LLC) changed the <b>ID</b> to <b>009.1</b>	Joshua Postadan	Jul 8, 2024, 2:37 PM EDT
Patrick, 07 11 13 Section 3.3 B calls for the dampproofing to extend over top of footing and down a minimum of 6 inches, whereas Detail A7/A427 shows the dampproofing terminating at the top of footing. Please advise whether the dampproofing should be applied per the detail or the specification and please revise the detail/specification accordingly.	Joshua Postadan	Jul 8, 2024, 2:37 PM EDT
<b>Joshua Postadan</b> changed the status from  <b>Open</b> Answered to  <b>Closed</b> <b>Official response:</b> Patrick Byrne (Grimm and Parker): See attached RFI response. set Ball in court to <b>Glenn Feldstein</b> (George Moehrle Masonry)	Joshua Postadan	Jul 8, 2024, 9:57 AM EDT
Received from Grimm + Parker on 7/2/24: "G+P Response: Install the waterproofing as shown on the detail A7/A427 on the outer wythe of the CMU wall. Install damp proofing as described in Part 3 of the damp proofing specification section 071113, 3.3B. Patrick Byrne 7.2.24" Please review the response to RFI #009. Provide notification of any cost implications immediately. If a proposal has cost impacts, please request an RFQ from HESS. Send a proposal no later than the close of business within 7 days of receipt of this RFI response. HESS will consider this as a no cost change and close this issue should a proposal not be received by this date. A lack of response for any credit items will prompt HESS Construction to assign a cost value that will be deducted from your contract sum. Note: The RFQ is simply an administrative tracking tool, and in no way represents that additional work, cost or time is acknowledged, authorized, directed, or approved. Thank you,	Joshua Postadan	Jul 8, 2024, 9:57 AM EDT
<b>Patrick Byrne</b> added a reference to a file <b>#009 - Exterior Base of Wall Details Response.pdf</b>	Patrick Byrne	Jul 2, 2024, 5:58 PM EDT
<b>Patrick Byrne</b> changed the status from  <b>Open</b> In Review to  <b>Open</b> Answered set Ball in court to <b>Joshua Postadan</b> (HESS Construction Co., LLC)	Patrick Byrne	Jul 2, 2024, 5:58 PM EDT
<b>Patrick Byrne</b> added a response: See attached RFI response.	Patrick Byrne	Jul 2, 2024, 5:58 PM EDT
<b>Joshua Postadan</b> changed the status from  <b>Open</b> Waiting for Submission to  <b>Open</b> In Review changed the <b>due date</b> to Jul 7, 2024	Joshua Postadan	Jul 2, 2024, 7:00 AM EDT

set Ball in court to <b>Patrick Byrne</b> (Grimm and Parker)		
changed the <b>cost impact</b> to <i>Unknown</i>	<b>Joshua Postadan</b>	Jul 2, 2024, 7:00 AM EDT
changed the <b>schedule impact</b> to <i>No</i>	<b>Joshua Postadan</b>	Jul 2, 2024, 7:00 AM EDT
<b>Joshua Postadan</b> added a reference to a file <b>RFI 009 - A427 Markup.pdf</b>	<b>Joshua Postadan</b>	Jul 2, 2024, 6:59 AM EDT
changed the <b>Posted to Drawings/Specifications</b> to <i>NO</i>	<b>Joshua Postadan</b>	Jul 2, 2024, 6:58 AM EDT
changed the <b>location details</b> to <i>Typical foundation detail w/ CMU</i>	<b>Joshua Postadan</b>	Jul 2, 2024, 6:58 AM EDT
changed the <b>due date</b> to Jul 8, 2024	<b>Joshua Postadan</b>	Jul 2, 2024, 6:52 AM EDT
changed the <b>due date</b> to Jul 7, 2024	<b>Joshua Postadan</b>	Jul 2, 2024, 6:52 AM EDT
changed the <b>ID</b> to <i>009</i>	<b>Joshua Postadan</b>	Jul 2, 2024, 6:52 AM EDT
changed the <b>watchers</b> to <b>Glenn Feldstein</b> (George Moehrle Masonry), <b>HESS PROJECT TEAM</b>	<b>Joshua Postadan</b>	Jul 1, 2024, 2:55 PM EDT
<b>Glenn Feldstein</b> added a reference to a file <b>Proposed Base of Wall Detail.png</b>	<b>Glenn Feldstein</b>	Jun 27, 2024, 2:39 PM EDT
<b>Glenn Feldstein</b> (George Moehrle Masonry) created this RFI in <b>Open</b> Waiting for Submission status and set Ball in court to <b>Joshua Postadan</b> (HESS Construction Co., LLC).	<b>Glenn Feldstein</b>	Jun 27, 2024, 2:39 PM EDT

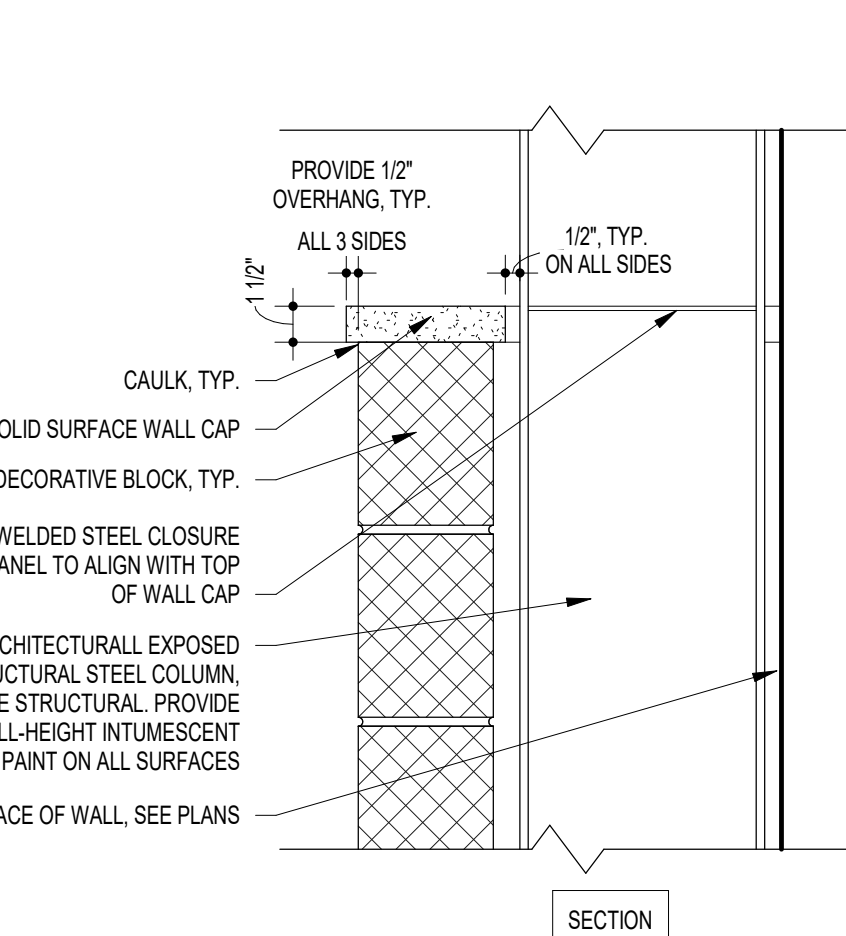




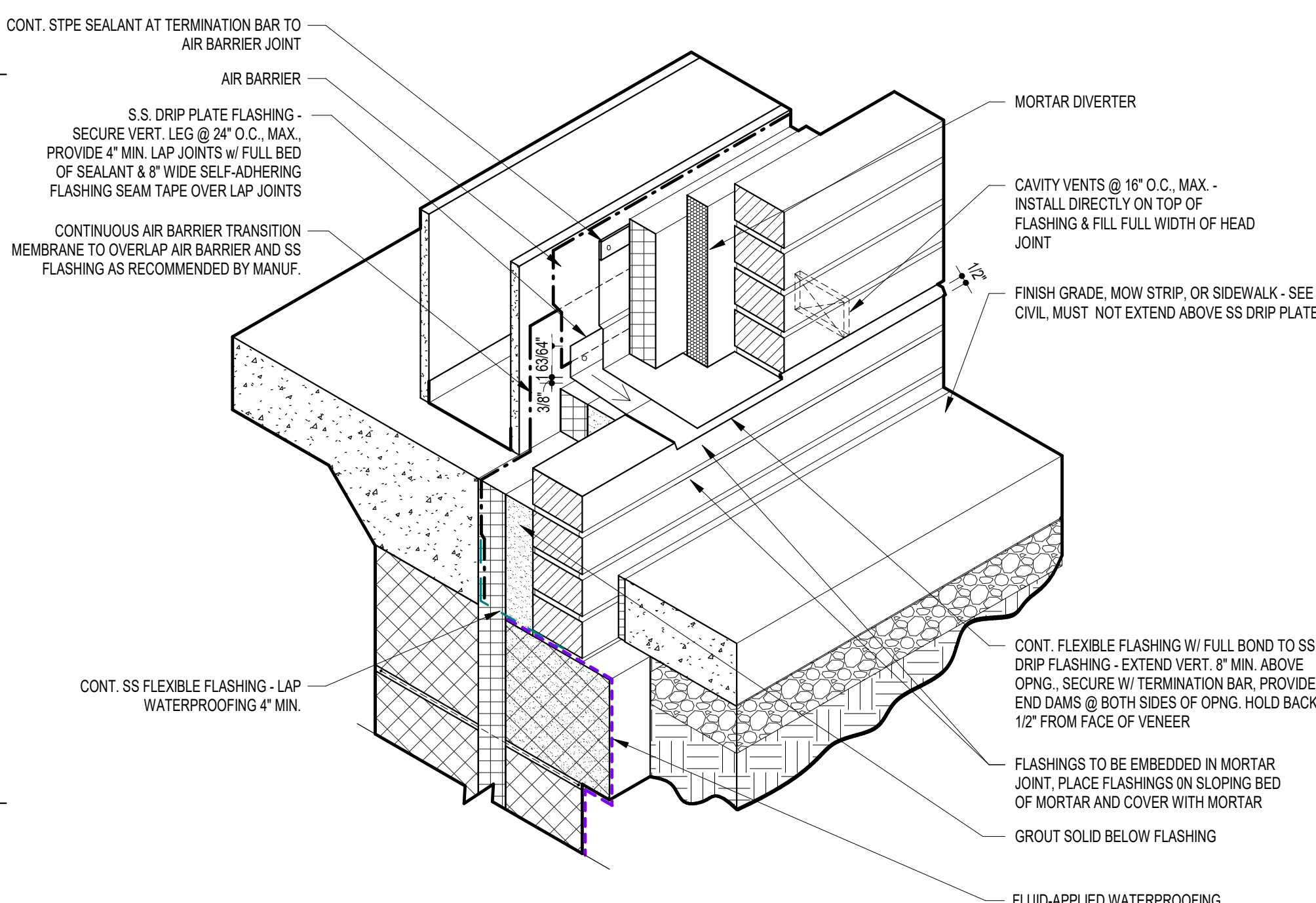
K6 RATED GYP. BD. CONTROL JOINT



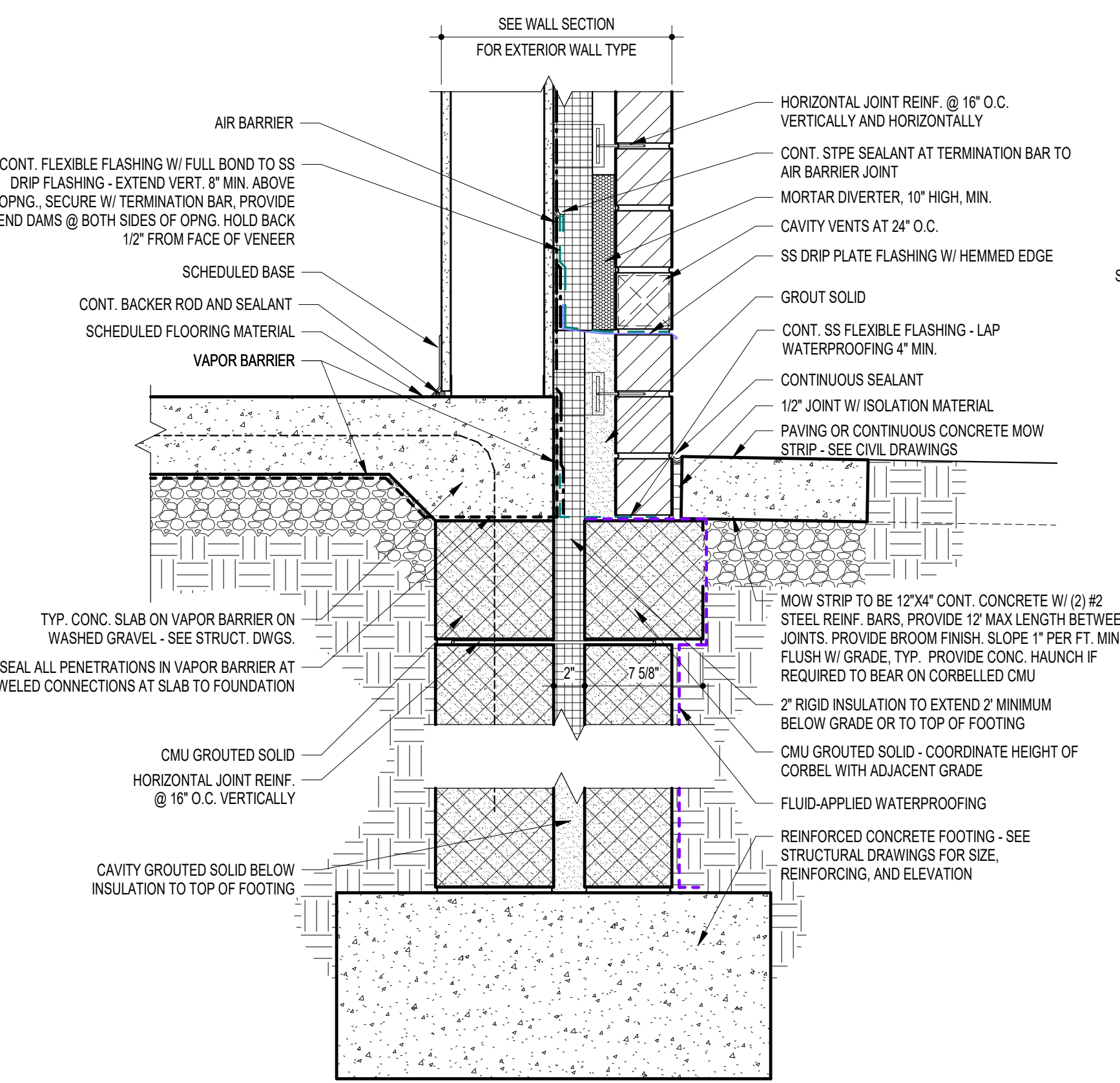
**H12 FLOOR SLEEVE DETAIL**  
1 1/2" = 1'-0"



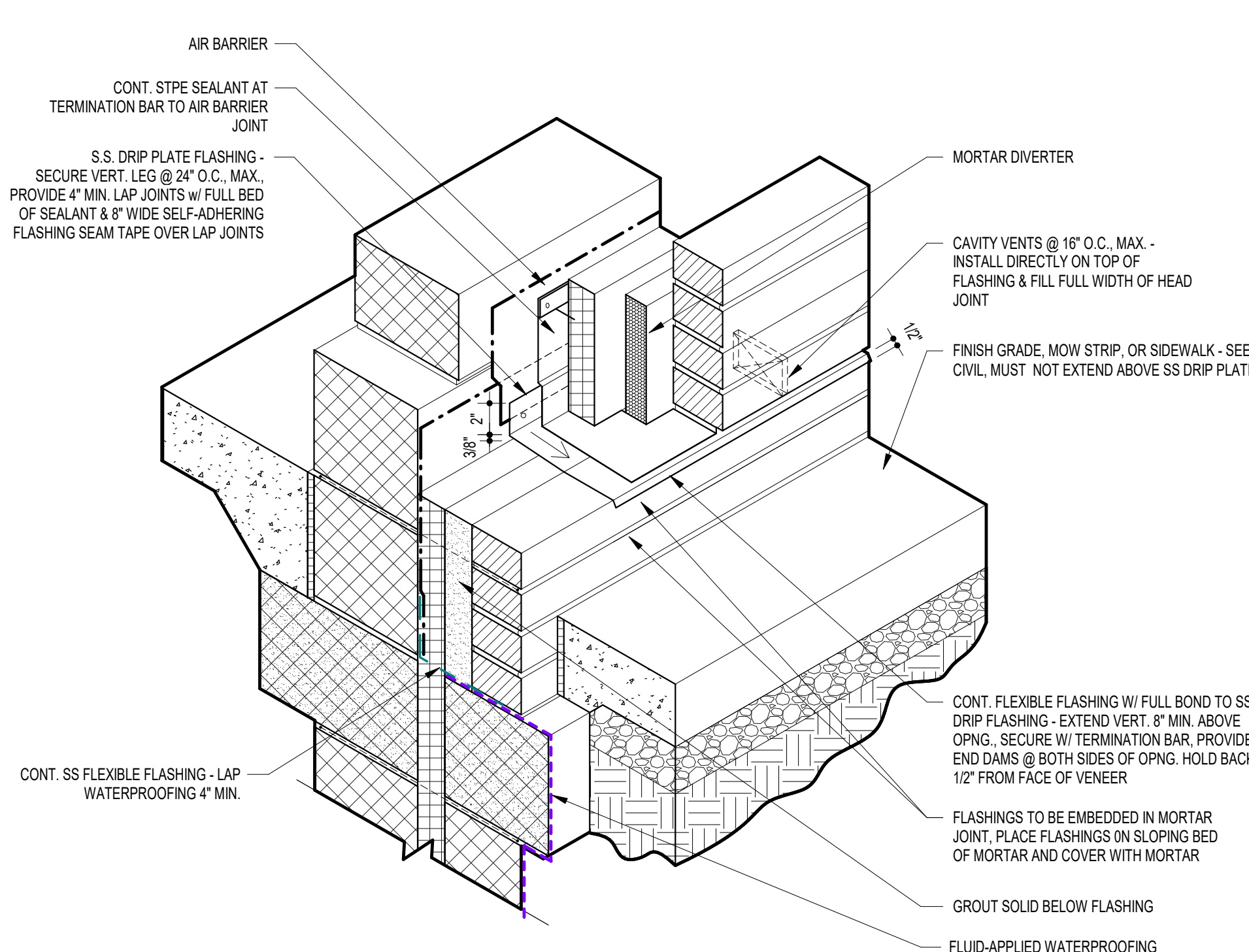
**E18** SOLID SURFACE CAP DETAIL AT COLUMN ENCLOSURES  
1 1/2" = 1'-0"



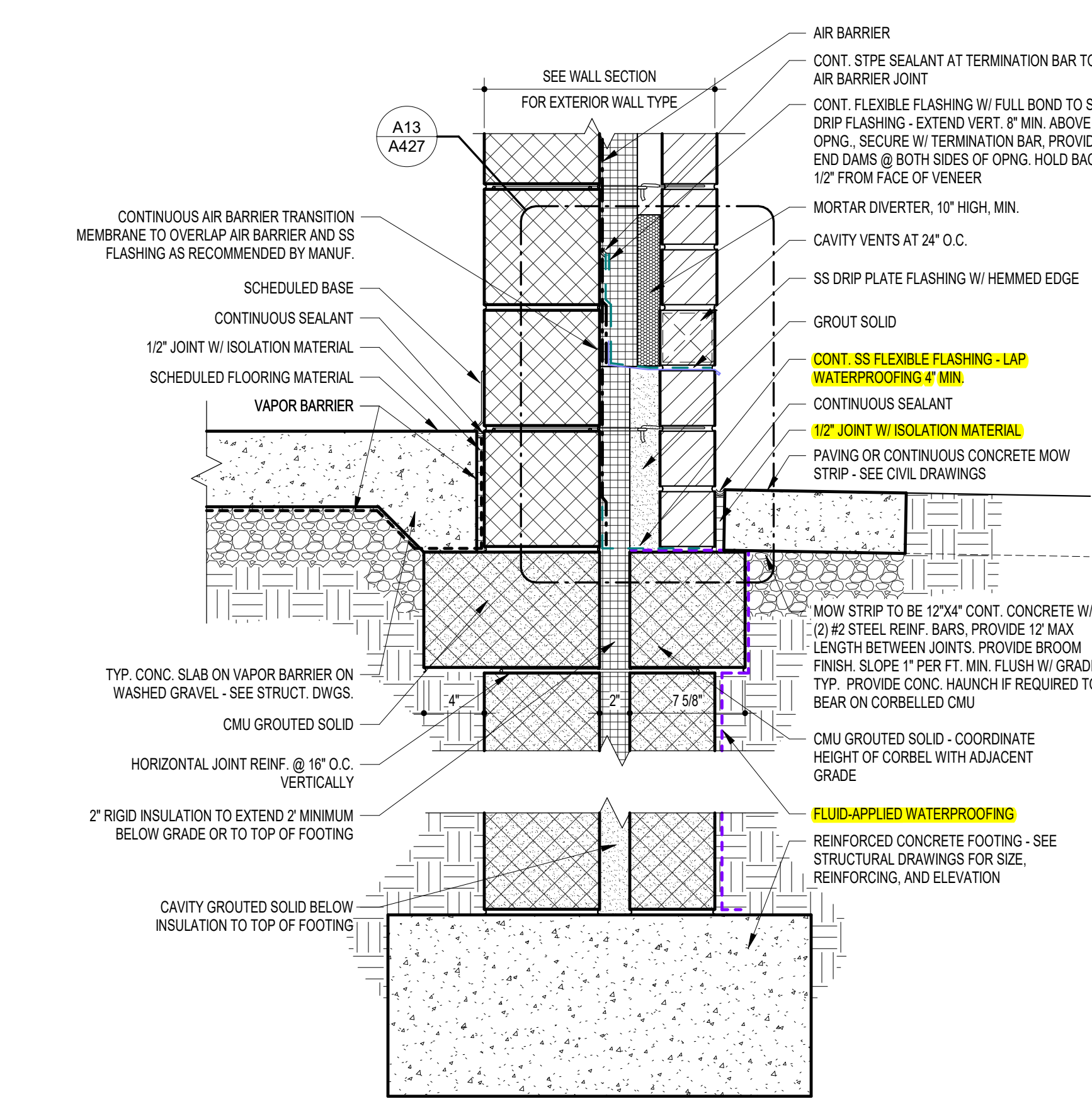
E8 TYP. FOUNDATION DETAIL W. METAL STUD BACK-UP  
1 1/2" = 1'-0"



D13 TYP. BASE OF WALL FLASHING DETAIL - MTL STUD  
1 1/2" = 1'-0"

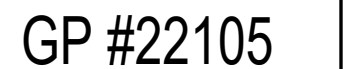


**A13** TYP. BASE OF WALL FLASHING DETAIL  
1 1/2" = 1'-0"



A7 TYP. FOUNDATION DETAIL W. CMU BACK-UP  
1 1/2" = 1'-0"

A3 GYP. BD. CONTROL JOINT



DATE	DESCRIPTION

# A427


12/22/2023  
BID SET



## RFI detail

## #009 Exterior Base of Wall Details



Status	 <b>Open</b> In Review
Created on	Jun 27, 2024 by <b>Glenn Feldstein</b> (George Moehrle Masonry)
RFI type	Default RFI workflow
Ball in court	<b>Patrick Byrne</b> (Grimm and Parker)
Due date	Jul 8, 2024

### Question

Typical foundation detail (A7/A427) shows the damp proofing starting on the outer wythe of CMU, crossing horizontally through the block and insulation with a flexible stainless steel transition, then continuing up on the inner wythe. Due to the inefficiency of grouting/waiting for the grout to cure before crossing through the CMU and the irregular surfaces between CMU and insulation along with the excavation typically being about as wide as the concrete footing (no space to stand on the footing outside the foundation to apply damp proofing), we propose damp proofing the inner wythe of CMU as shown on the attached detail. Please note this same revised detail was approved by G+P at Clarksburg ES.

Additionally, spec 071113 3.3 B requires damp proofing to extend down the face of concrete footings a minimum of 6", but the wall section details do not show this. Please confirm damp proofing is not required to extend down face of footing.

### ~~Suggested answer~~

~~Included detail is approved for use. Damp proofing to be installed per section details and is not required to extend down face of footings.~~

### References

#### Files (2)

- [Proposed Base of Wall Detail.png](#)
- [RFI 009 - A427 Markup.pdf](#)

### Impact

Cost impact	Unknown
-------------	---------

Schedule impact	No
-----------------	----

## Other attributes

Priority	Normal
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Discipline	Masonry
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Category	Constructability, Design Coordination
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Location	-
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Location details	Typical foundation detail w/ CMU
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External id	-
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Co-reviewer(s)	
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Posted to Drawings/ Specifications	NO
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Trade's RFI No.	-
-----------------	---

### G+P Response:

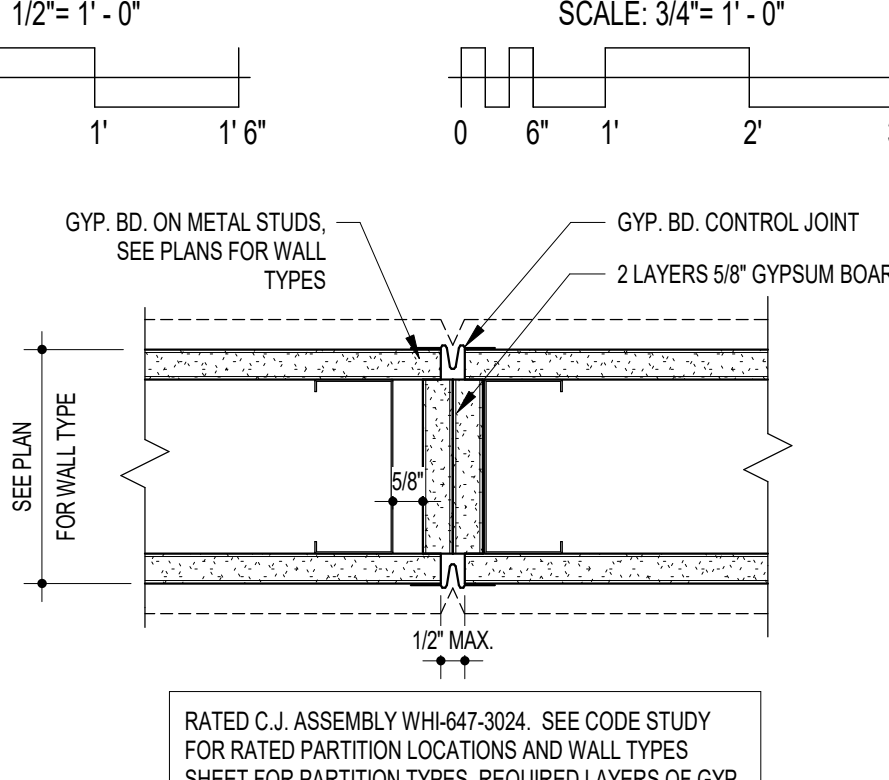
Install the waterproofing as shown on the detail A7/A427 on the outer wythe of the CMU wall.

Install damp proofing as described in Part 3 of the damp proofing specification section 071113, 3.3.B.

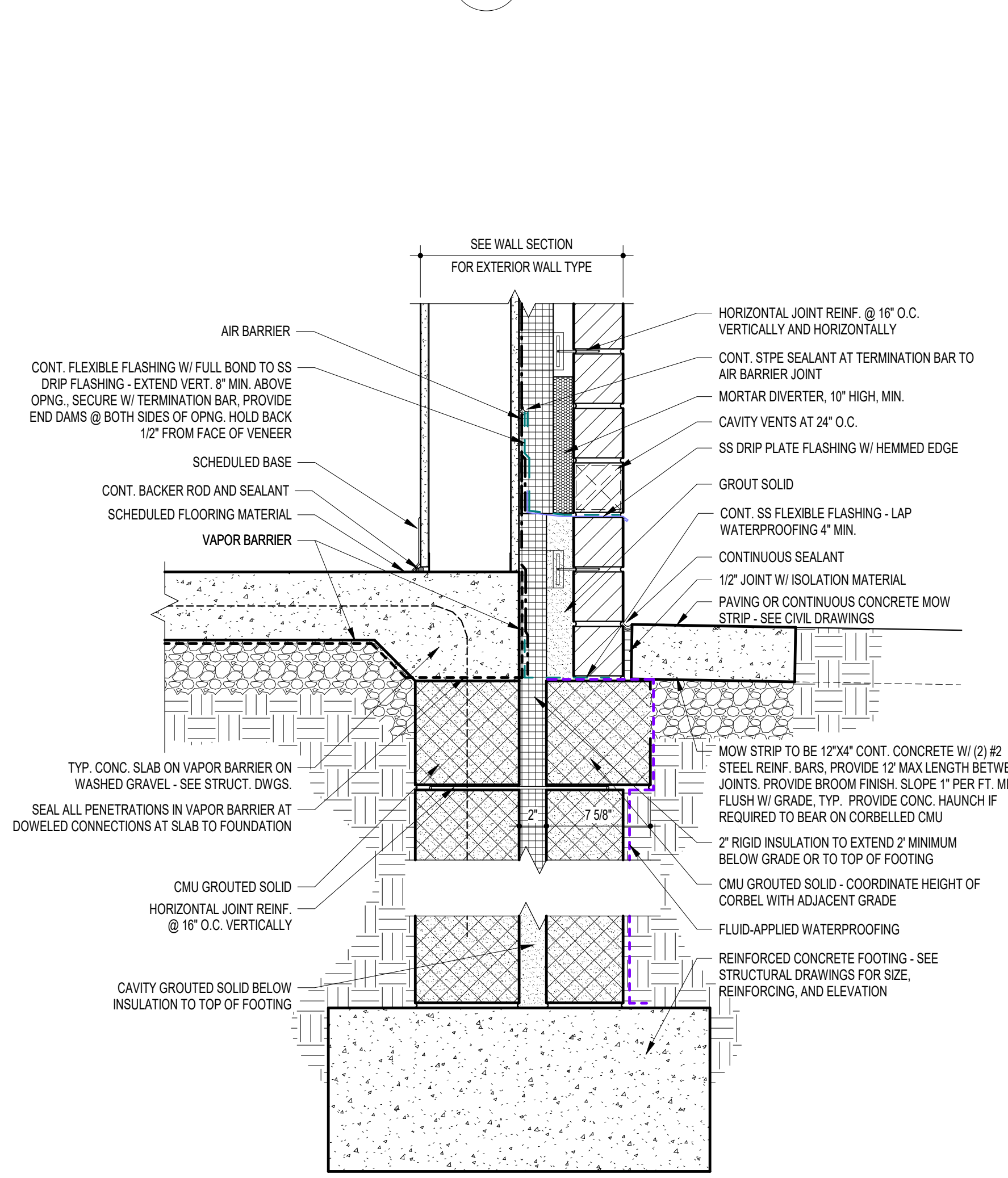
Patrick Byrne 7.2.2024

Activities	By	At
<b>Joshua Postadan</b> changed the status from  <b>Open</b> Waiting for Submission to  <b>Open</b> In Review changed the <b>due date</b> to Jul 7, 2024 set Ball in court to <b>Patrick Byrne</b> (Grimm and Parker)	<b>Joshua Postadan</b>	Jul 2, 2024, 7:00 AM EDT
changed the <b>cost impact</b> to <i>Unknown</i>	<b>Joshua Postadan</b>	Jul 2, 2024, 7:00 AM EDT
changed the <b>schedule impact</b> to <i>No</i>	<b>Joshua Postadan</b>	Jul 2, 2024, 7:00 AM EDT
<b>Joshua Postadan</b> added a reference to a file <b>RFI 009 - A427 Markup.pdf</b>	<b>Joshua Postadan</b>	Jul 2, 2024, 6:59 AM EDT
changed the <b>Posted to Drawings/Specifications</b> to <i>NO</i>	<b>Joshua Postadan</b>	Jul 2, 2024, 6:58 AM EDT
changed the <b>location details</b> to <i>Typical foundation detail w/ CMU</i>	<b>Joshua Postadan</b>	Jul 2, 2024, 6:58 AM EDT
changed the <b>due date</b> to Jul 8, 2024	<b>Joshua Postadan</b>	Jul 2, 2024, 6:52 AM EDT
changed the <b>due date</b> to Jul 7, 2024	<b>Joshua Postadan</b>	Jul 2, 2024, 6:52 AM EDT
changed the <b>ID</b> to <i>009</i>	<b>Joshua Postadan</b>	Jul 2, 2024, 6:52 AM EDT
changed the <b>watchers</b> to <b>Glenn Feldstein</b> (George Moehrle Masonry), <b>HESS PROJECT TEAM</b>	<b>Joshua Postadan</b>	Jul 1, 2024, 2:55 PM EDT
<b>Glenn Feldstein</b> added a reference to a file <b>Proposed Base of Wall Detail.png</b>	<b>Glenn Feldstein</b>	Jun 27, 2024, 2:39 PM EDT
<b>Glenn Feldstein</b> (George Moehrle Masonry) created this RFI in  <b>Open</b> Waiting for Submission status and set Ball in court to <b>Joshua Postadan</b> (HESS Construction Co., LLC).	<b>Glenn Feldstein</b>	Jun 27, 2024, 2:39 PM EDT

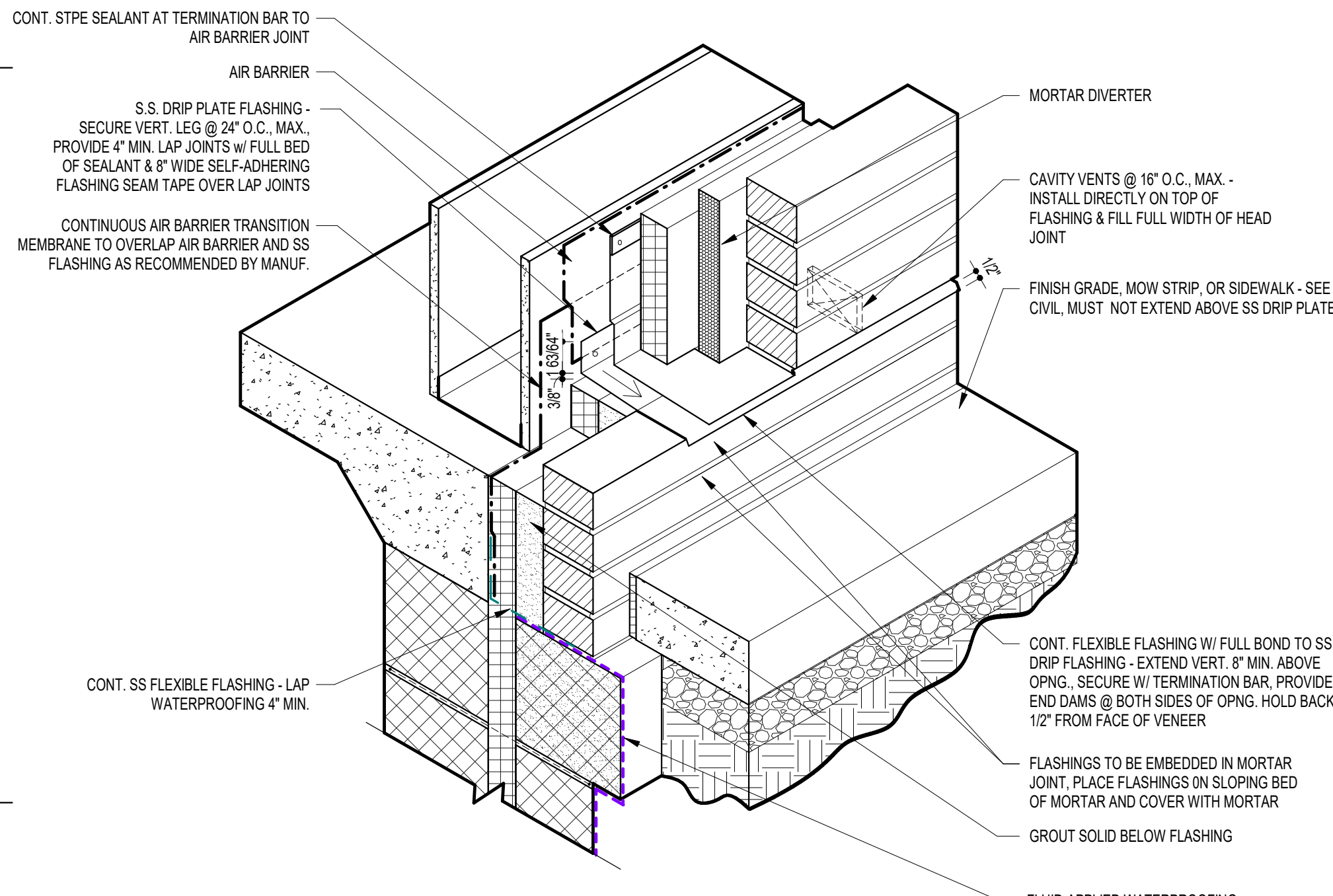




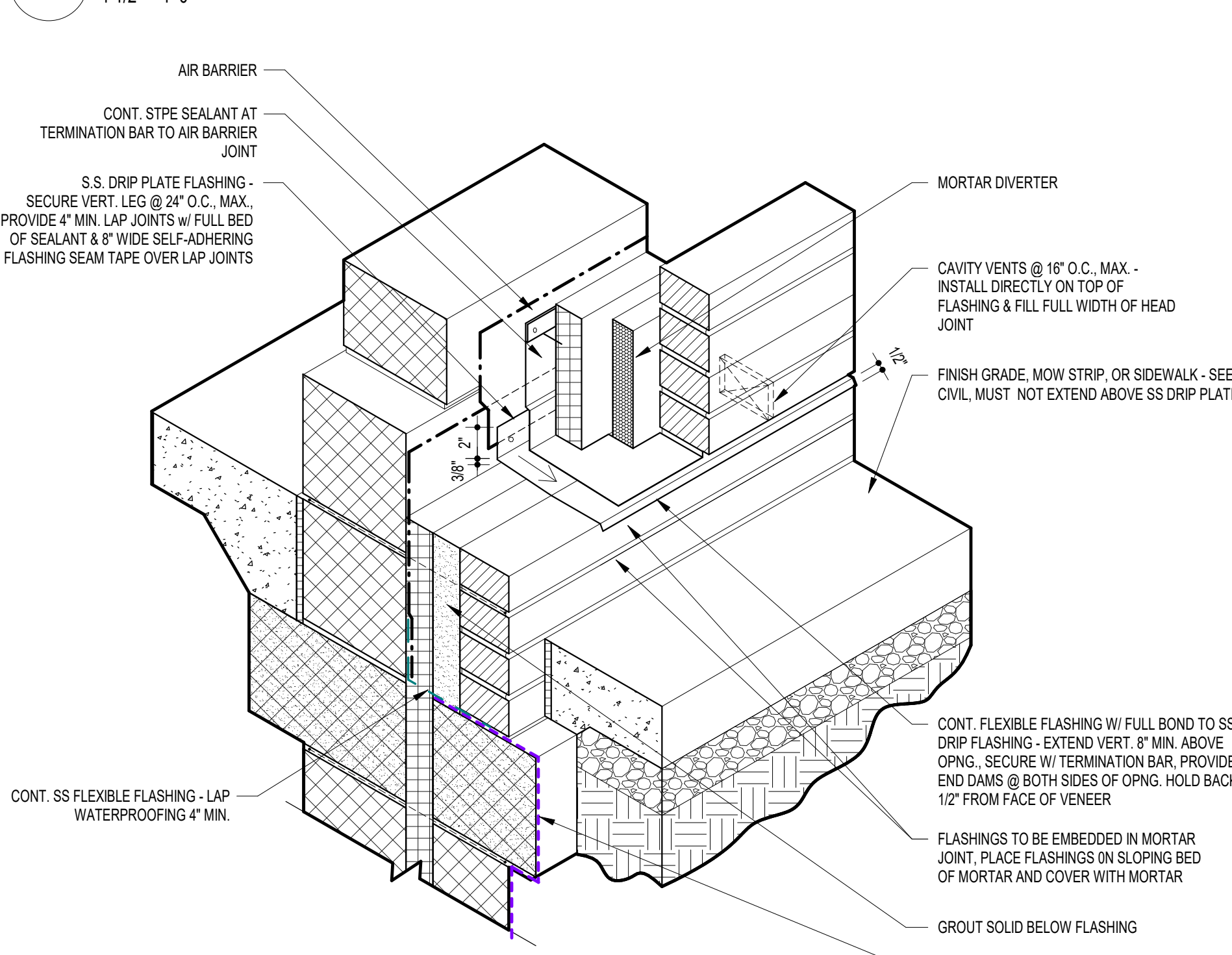
K6 RATED GYP. BD. CONTROL JOINT



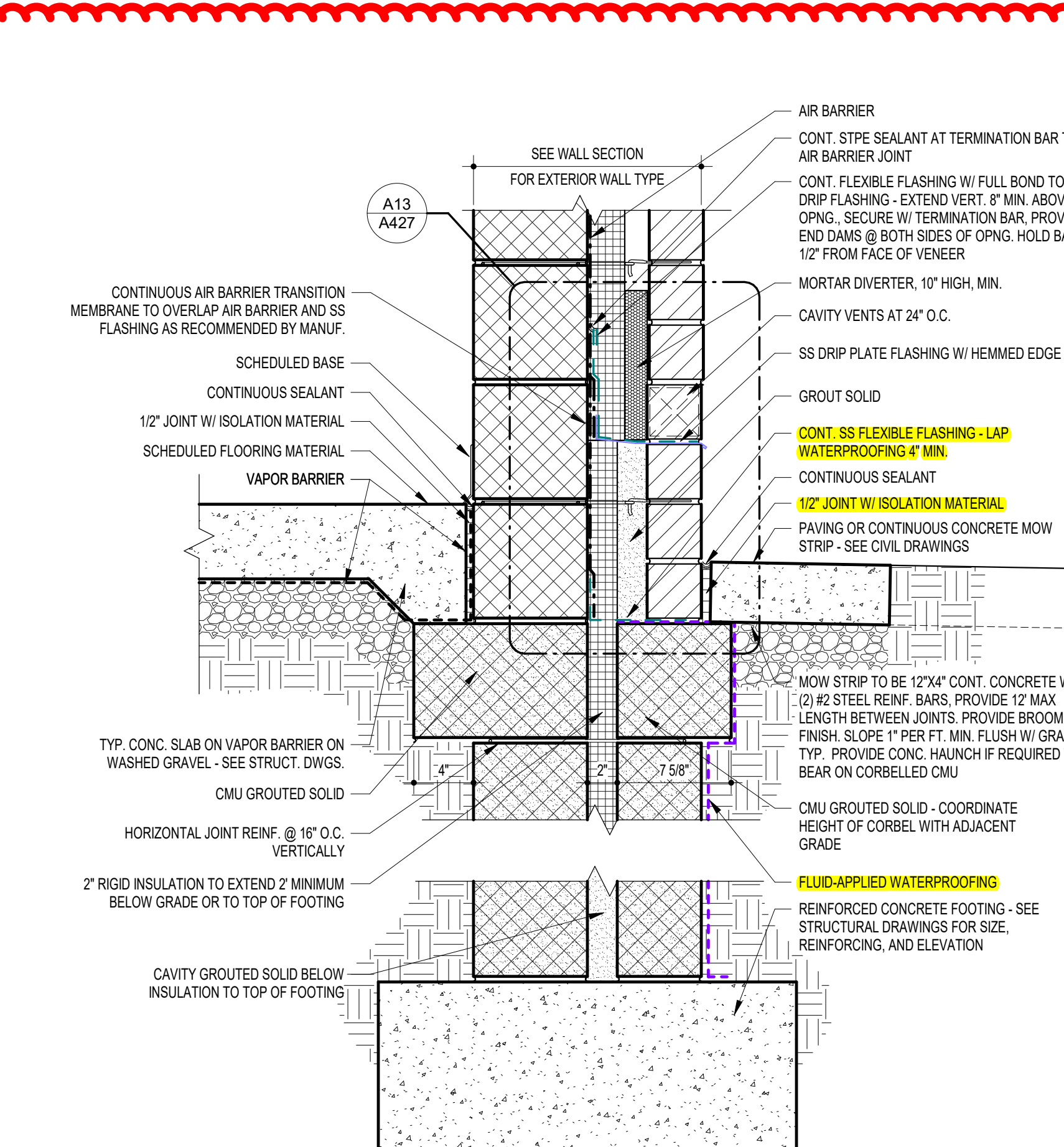
E8 TYP. FOUNDATION DETAIL W. METAL STUD BACK-UP  
1 1/2" = 1'-0"



E8 TYP. FOUNDATION DETAIL W. METAL STUD BACK-UP  
1 1/2" = 1'-0"



**A13** TYP. BASE OF WALL FLASHING DETAIL  
1'-1/2" = 1'-0"



**A7** TYP. FOUNDATION DETAIL W. CMU BACK-UP  
1' 1/2" = 1'-0"

12 GYP. BD. CONTROL JOINT





RFI detail

#010 CAD Files Containing Phase LODs



Status	<div><div></div>Closed</div>
Created on	Jul 10, 2024 by <b>Austin Roberts</b> (Horst Excavating Company)
RFI type	Civil RFI REV
Ball in court	<b>Austin Roberts</b> (Horst Excavating Company)
Answered	Jul 11, 2024 by <b>Patrick Byrne</b> (Grimm and Parker)

Question

When preparing the LOD stake layout via AutoCAD, it has been found that the AutoCAD files provided do not include each phase of construction's appropriate LOD. The drawings in reference are F-ESD-03 to F-ESD-16. Can you please provide us with all the appropriate CAD files so we can properly lay out each phase's LOD?

Official response

Patrick Byrne (Grimm and Parker): See attached RFI response and enclosed CAD file.  
*By **Patrick Byrne** (Grimm and Parker) - Jul 11, 2024, 12:37 PM EDT*

References and Attachments

Files (2)

- #010 - CAD Files Containing Phase LODs.pdf
- 071124 - ACAD-D3210047 - Civil Progress.dwg







Impact


Cost impact	No
Schedule impact	No

Other attributes

Priority	Normal
----------	--------

Discipline	Civil/Site
Category	Design Coordination
Location	Site
Location details	LOD
External id	-
Co-reviewer(s)	
Posted to Drawings/ Specifications	NO
Trade's RFI No.	-

Activities	By	At
<b>Joshua Postadan</b> changed the status from  <b>Open</b> Answered to  <b>Closed</b> <b>Official response:</b> Patrick Byrne (Grimm and Parker): See attached RFI response and enclosed CAD file. set Ball in court to <b>Austin Roberts</b> (Horst Excavating Company)	<b>Joshua Postadan</b>	Jul 11, 2024, 1:15 PM EDT
G+P response received 7/11/24: "See enclosed CAD file from McCrone as requested. Patrick Byrne 7.11.2024" Please review the response to RFI #010. Provide notification of any cost implications immediately. If a proposal has cost impacts, please request an RFQ from HESS. Send a proposal no later than the close of business within 7 days of receipt of this RFI response. HESS will consider this as a no cost change and close this issue should a proposal not be received by this date. A lack of response for any credit items will prompt HESS Construction to assign a cost value that will be deducted from your contract sum. Note: The RFQ is simply an administrative tracking tool, and in no way represents that additional work, cost or time is acknowledged, authorized, directed, or approved.	<b>Joshua Postadan</b>	Jul 11, 2024, 1:15 PM EDT
<b>Patrick Byrne</b> added a reference to a File <b>#010 - CAD Files Containing Phase LODs.pdf</b>	<b>Patrick Byrne</b>	Jul 11, 2024, 12:37 PM EDT
<b>Patrick Byrne</b> changed the status from  <b>Open</b> In Review to  <b>Open</b> Answered set Ball in court to <b>Joshua Postadan</b> (HESS Construction Co., LLC)	<b>Patrick Byrne</b>	Jul 11, 2024, 12:37 PM EDT
<b>Patrick Byrne</b> added a response: See attached RFI response and enclosed CAD file.	<b>Patrick Byrne</b>	Jul 11, 2024, 12:37 PM EDT
<b>Alexander Whallon</b> added a response: I've uploaded an updated CAD file that has the LOD linework for each phase.	<b>Alexander Whallon</b>	Jul 11, 2024, 12:10 PM EDT
<b>Alexander Whallon</b> added a reference to a File <b>071124 - ACAD-D3210047 - Civil Progress.dwg</b>	<b>Alexander Whallon</b>	Jul 11, 2024, 12:09 PM EDT
set Ball in court to <b>Patrick Byrne</b> (Grimm and Parker), <b>Dan Speakman</b> (McCrone), <b>Alexander Whallon</b> (McCrone)	<b>Joshua Postadan</b>	Jul 11, 2024, 10:48 AM EDT
<b>Dan Speakman</b> added a response: ACC 360 Template Joshua, please send all RFI's directly to Alex Whallon, who is cc'd on this email. *From:*	<b>Dan Speakman</b>	Jul 11, 2024, 10:09 AM EDT
<b>Joshua Postadan</b> changed the status from  <b>Open</b> Waiting for Submission to  <b>Open</b> In Review set Ball in court to <b>Patrick Byrne</b> (Grimm and Parker), <b>Dan Speakman</b> (McCrone) changed the <b>ID</b> to <b>010</b>	<b>Joshua Postadan</b>	Jul 11, 2024, 9:44 AM EDT

changed the <b>watchers</b> to <b>Austin Roberts</b> (Horst Excavating Company), <b>jhess jhess</b> (Horst Excavating Company), <b>routman routman</b> (Horst Excavating Company), <b>mhigh mhigh</b> (Horst Excavating Company), <b>HESS PROJECT TEAM</b>	<b>Joshua Postadan</b>	Jul 11, 2024, 8:26 AM EDT
changed the <b>watchers</b> to <b>Austin Roberts</b> (Horst Excavating Company), <b>jhess jhess</b> (Horst Excavating Company), <b>HESS PROJECT TEAM</b>	<b>Joshua Postadan</b>	Jul 11, 2024, 8:26 AM EDT
changed the <b>watchers</b> to <b>Austin Roberts</b> (Horst Excavating Company), <b>jhess jhess</b> (Horst Excavating Company), <b>HESS PROJECT TEAM</b> , <b>Horst Excavating Company</b>	<b>Joshua Postadan</b>	Jul 11, 2024, 8:26 AM EDT
changed the <b>due date</b> to Jul 17, 2024	<b>Joshua Postadan</b>	Jul 11, 2024, 8:25 AM EDT
changed the <b>location details</b> to <i>LOD</i>	<b>Joshua Postadan</b>	Jul 11, 2024, 8:25 AM EDT
<b>Austin Roberts</b> (Horst Excavating Company) created this RFI in  <b>Open</b> Waiting for Submission status and set Ball in court to <b>Joshua Postadan</b> (HESS Construction Co., LLC).	<b>Austin Roberts</b>	Jul 10, 2024, 3:10 PM EDT



## RFI detail

## #010 CAD Files Containing Phase LODs



Status	<span style="color: orange;">■</span> <b>Open</b> In Review
Created on	Jul 10, 2024 by <b>Austin Roberts</b> (Horst Excavating Company)
RFI type	Civil RFI REV
Ball in court	<b>Patrick Byrne</b> (Grimm and Parker) <b>Dan Speakman</b> (McCrone) <b>Alexander Whallon</b> (McCrone)
Due date	Jul 18, 2024

### Question

When preparing the LOD stake layout via AutoCAD, it has been found that the AutoCAD files provided do not include each phase of construction's appropriate LOD. The drawings in reference are F-ESD-03 to F-ESD-16. Can you please provide us with all the appropriate CAD files so we can properly lay out each phase's LOD?

### References

#### Files (1)

- [071124 - ACAD-D3210047 - Civil Progress.dwg](#)

### Impact

Cost impact	No
Schedule impact	No




### Other attributes

Priority	Normal
Discipline	Civil/Site
Category	Design Coordination

<b>Location</b>	Site
<b>Location details</b>	LOD
<b>External id</b>	-
<b>Co-reviewer(s)</b>	
<b>Posted to Drawings/ Specifications</b>	NO
<b>Trade's RFI No.</b>	-

**G+P Response:**  
See enclosed CAD file from McCrone as requested.

Patrick Byrne 7.11.2024

Activities	By	At
<b>Alexander Whallon</b> added a response: I've uploaded an updated CAD file that has the LOD linework for each phase.	<b>Alexander Whallon</b>	Jul 11, 2024, 12:10 PM EDT
<b>Alexander Whallon</b> added a reference to a file <b>071124 - ACAD-D3210047 - Civil Progress.dwg</b>	<b>Alexander Whallon</b>	Jul 11, 2024, 12:09 PM EDT
set Ball in court to <b>Patrick Byrne</b> (Grimm and Parker), <b>Dan Speakman</b> (McCrone), <b>Alexander Whallon</b> (McCrone)	<b>Joshua Postadan</b>	Jul 11, 2024, 10:48 AM EDT
<b>Dan Speakman</b> added a response: ACC 360 Template Joshua, please send all RFI's directly to Alex Whallon, who is cc'd on this email. *From:*	<b>Dan Speakman</b>	Jul 11, 2024, 10:09 AM EDT
<b>Joshua Postadan</b> changed the status from  <b>Open</b> Waiting for Submission to  <b>Open</b> In Review set Ball in court to <b>Patrick Byrne</b> (Grimm and Parker), <b>Dan Speakman</b> (McCrone) changed the <b>ID</b> to <i>010</i>	<b>Joshua Postadan</b>	Jul 11, 2024, 9:44 AM EDT
changed the <b>watchers</b> to <b>Austin Roberts</b> (Horst Excavating Company), <b>jhess jhess</b> (Horst Excavating Company), <b>routman routman</b> (Horst Excavating Company), <b>mhigh mhigh</b> (Horst Excavating Company), <b>HESS PROJECT TEAM</b>	<b>Joshua Postadan</b>	Jul 11, 2024, 8:26 AM EDT
changed the <b>watchers</b> to <b>Austin Roberts</b> (Horst Excavating Company), <b>jhess jhess</b> (Horst Excavating Company), <b>HESS PROJECT TEAM</b>	<b>Joshua Postadan</b>	Jul 11, 2024, 8:26 AM EDT
changed the <b>watchers</b> to <b>Austin Roberts</b> (Horst Excavating Company), <b>jhess jhess</b> (Horst Excavating Company), <b>HESS PROJECT TEAM</b> , <b>Horst Excavating Company</b>	<b>Joshua Postadan</b>	Jul 11, 2024, 8:26 AM EDT
changed the <b>due date</b> to Jul 17, 2024	<b>Joshua Postadan</b>	Jul 11, 2024, 8:25 AM EDT
changed the <b>location details</b> to <i>LOD</i>	<b>Joshua Postadan</b>	Jul 11, 2024, 8:25 AM EDT
<b>Austin Roberts</b> (Horst Excavating Company) created this RFI in  <b>Open</b> Waiting for Submission status and set Ball in court to <b>Joshua Postadan</b> (HESS Construction Co., LLC).	<b>Austin Roberts</b>	Jul 10, 2024, 3:10 PM EDT

## RFI detail

## #011 SSMH-8 &amp; SSMH-9 Inverts



Status	<div><div></div>Closed</div>
Created on	Jul 11, 2024 by <b>Austin Roberts</b> (Horst Excavating Company)
RFI type	Civil RFI REV
Ball in court	<b>Austin Roberts</b> (Horst Excavating Company)
Answered	Jul 16, 2024 by <b>Alexander Whallon</b> (McCrone), <b>Patrick Byrne</b> (Grimm and Parker)

## Question

On SS-5 where it depicts SSMH-11 to SSMH-7, SSMH-9 and SSMH-8 may have their INV OUT depths switched around. SSMH-9 has an INV IN of 82.00 and an INV OUT of 77.62, and SSMH-8 has an INV IN of 77.77 and an INV OUT of 78.42. Please review the inverts for SSMH-8 and SSMH-9 and clarify what the appropriate INV OUT depths should be?

## Suggested answer

According to the profile of SSMH-8 to proposed concession building, it notes on SSMH-8 that pipe # S-8, which is the pipe going from SSMH-8 to SSMH-7, has an INV IN of 76.72. This INV IN of 76.72 should also be the appropriate INV OUT of SSMH-8 in the profile of the run mentioned above. However, the 76.72 is depicted as SSMH-9's INV OUT instead of SSMH-8's. Therefore, the INV OUT for SSMH-8 and SSMH-9 may have been mislabeled.

## Official response

Alexander Whallon (McCrone): Revised sheet SS-5 has been uploaded with the changes requested.

Patrick Byrne (Grimm and Parker): See revised sheet from McCrone.

By **Alexander Whallon** (McCrone), **Patrick Byrne** (Grimm and Parker) - Jul 16, 2024, 3:46 PM EDT

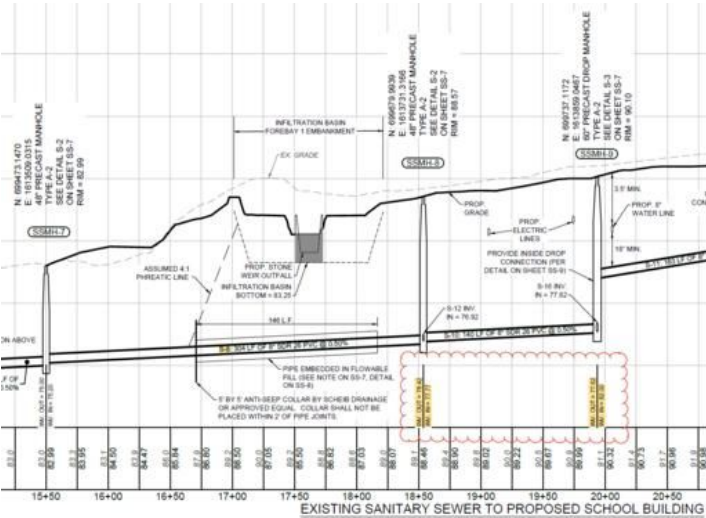
## References and Attachments

## Files (3)

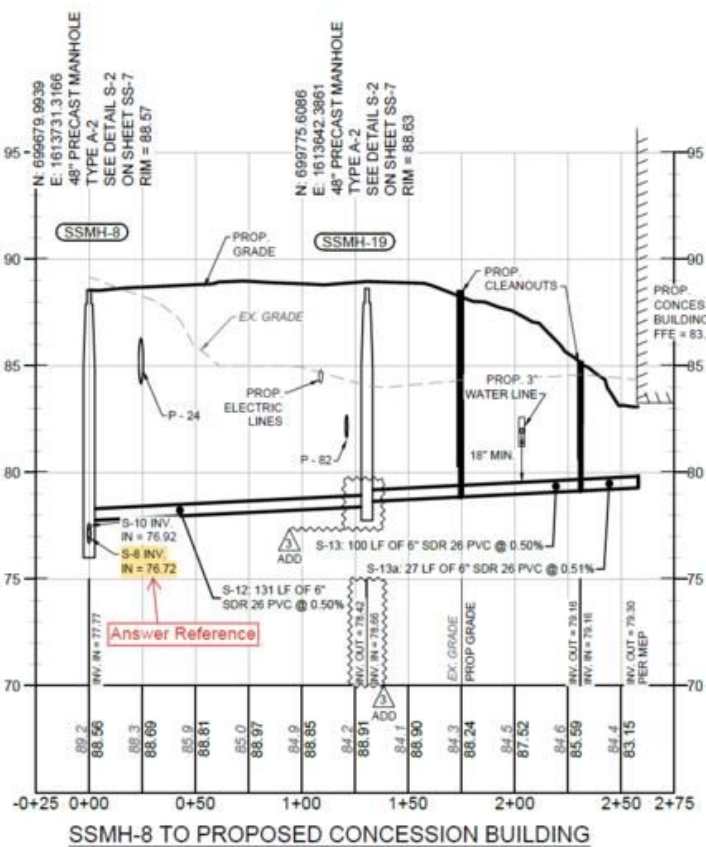
- [#011 - SSMH-8 & SSMH-9 Inverts Response.pdf](#)
- [D3210047 - S.S-SS-5 Revised.pdf](#)
- [Screenshot 2024-07-11 143047.png](#)



Photos (2)



RFI SSMH-8  
Added on Jul 11, 2024, 11:22 AM EDT  
Added by Austin Roberts



RFI SSMH-8 Answer Reference  
Added on Jul 11, 2024, 11:22 AM EDT  
Added by Austin Roberts

Impact

Cost impact No

Schedule impact No

Other attributes

Priority Normal







Discipline Civil/Site





Category Field condition, Design Coordination

Location Site


Location details SSMH-9 and SSMH-8 run through the parking lot between the football field and the new building.

External id	-
Co-reviewer(s)	
Posted to Drawings/ Specifications	YES
Trade's RFI No.	2

Activities	By	At
<b>Joshua Postadan</b> changed the status from  <b>Open</b> Answered to  <b>Closed</b> <b>Official response:</b> Alexander Whallon (McCrone): Revised sheet SS-5 has been uploaded with the changes requested. Patrick Byrne (Grimm and Parker): See revised sheet from McCrone. set Ball in court to <b>Austin Roberts</b> (Horst Excavating Company)	<b>Joshua Postadan</b>	Jul 17, 2024, 9:11 AM EDT
McCrone response received 7/16/24: "Revised sheet SS-5 has been uploaded with the changes requested" Please review response to RFI 011. Provide notification of any cost implications immediately. If a proposal has cost impacts, please request an RFQ from HESS. Send a proposal no later than the close of business within 7 days of receipt of this RFI response. HESS will consider this as a no cost change and close this issue should a proposal not be received by this date. A lack of response for any credit items will prompt HESS Construction to assign a cost value that will be deducted from your contract sum. Note: The RFQ is simply an administrative tracking tool, and in no way represents that additional work, cost or time is acknowledged, authorized, directed, or approved.	<b>Joshua Postadan</b>	Jul 17, 2024, 9:11 AM EDT
<b>Patrick Byrne</b> changed the status from  <b>Open</b> In Review to  <b>Open</b> Answered set Ball in court to <b>Joshua Postadan</b> (HESS Construction Co., LLC)	<b>Patrick Byrne</b>	Jul 16, 2024, 3:46 PM EDT
<b>Patrick Byrne</b> added a response: See revised sheet from McCrone.	<b>Patrick Byrne</b>	Jul 16, 2024, 3:46 PM EDT
<b>Alexander Whallon</b> added a reference to a File <b>D3210047 - S.S-SS-5 Revised.pdf</b>	<b>Alexander Whallon</b>	Jul 16, 2024, 11:40 AM EDT
<b>Alexander Whallon</b> removed a reference to a File	<b>Alexander Whallon</b>	Jul 16, 2024, 11:40 AM EDT
<b>Alexander Whallon</b> added a response: Revised sheet SS-5 has been uploaded with the changes requested.	<b>Alexander Whallon</b>	Jul 16, 2024, 10:49 AM EDT
<b>Alexander Whallon</b> added a reference to a File <b>D3210047 - S.S-SS-5 Revised.pdf</b>	<b>Alexander Whallon</b>	Jul 16, 2024, 10:48 AM EDT
<b>Joshua Postadan</b> changed the status from  <b>Open</b> Answered to  <b>Open</b> In Review set Ball in court to <b>Patrick Byrne</b> (Grimm and Parker), <b>Alexander Whallon</b> (McCrone)	<b>Joshua Postadan</b>	Jul 16, 2024, 9:52 AM EDT
Please provide a revised copy of SS-5 indicating the changes shown in the screenshots provided by McCrone.	<b>Joshua Postadan</b>	Jul 16, 2024, 9:52 AM EDT
<b>Patrick Byrne</b> added a reference to a File <b>#011 - SSMH-8 &amp; SSMH-9 Inverts Response.pdf</b>	<b>Patrick Byrne</b>	Jul 11, 2024, 2:59 PM EDT

<b>Patrick Byrne</b> changed the status from  <b>Open</b> In Review to  <b>Open</b> Answered set Ball in court to <b>Joshua Postadan</b> (HESS Construction Co., LLC)	<b>Patrick Byrne</b>	Jul 11, 2024, 2:59 PM EDT
<b>Patrick Byrne</b> added a response: See attached RFI response and information from McCrone.	<b>Patrick Byrne</b>	Jul 11, 2024, 2:59 PM EDT
<b>Alexander Whallon</b> added a response: Thank you for catching this error. The inverts for pipe S-12 were showing up on SSMH-8 overwriting the correct invert in/out of pipes S-10/S-8. This has been corrected. Additionally, the label for S-12 invert in to SSMH-8 has been revised and is now correctly shown as 77.77. I've attached a screenshot showing the revised area. Hopefully this clears up any confusion.	<b>Alexander Whallon</b>	Jul 11, 2024, 2:47 PM EDT
<b>Alexander Whallon</b> added a reference to a File <b>Screenshot 2024-07-11 143047.png</b>	<b>Alexander Whallon</b>	Jul 11, 2024, 2:46 PM EDT
<b>Joshua Postadan</b> changed the status from  <b>Open</b> Waiting for Submission to  <b>Open</b> In Review changed the <b>due date</b> to Jul 16, 2024 set Ball in court to <b>Patrick Byrne</b> (Grimm and Parker), <b>Alexander Whallon</b> (McCrone) changed the <b>ID</b> to 011	<b>Joshua Postadan</b>	Jul 11, 2024, 1:34 PM EDT
changed the <b>suggested answer</b> to <i>According to the profile of SSMH-8 to proposed concession building, it notes on SSMH-8 that pipe # S-8, which is the pipe going from SSMH-8 to SSMH-7, has an INV IN of 76.72. This INV IN of 76.72 should also be the appropriate INV OUT of SSMH-8 in the profile of the run mentioned above. However, the 76.72 is depicted as SSMH-9's INV OUT instead of SSMH-8's. Therefore, the INV OUT for SSMH-8 and SSMH-9 may have been mislabeled.</i>	<b>Joshua Postadan</b>	Jul 11, 2024, 1:33 PM EDT
changed the <b>question</b> to <i>On SS-5 where it depicts SSMH-11 to SSMH-7, SSMH-9 and SSMH-8 may have their INV OUT depths switched around. SSMH-9 has an INV IN of 82.00 and an INV OUT of 77.62, and SSMH-8 has an INV IN of 77.77 and an INV OUT of 78.42. Please review the inverts for SSMH-8 and SSMH-9 and clarify what the appropriate INV OUT depths should be?</i>	<b>Joshua Postadan</b>	Jul 11, 2024, 1:32 PM EDT
changed the <b>question</b> to <i>On SS-5 where it depicts SSMH-11 to SSMH-7, SSMH-9 and SSMH-8 may have their INV OUT depths switched around. SSMH-9 has an INV IN of 82.00 and an INV OUT of 77.62, and SSMH-8 has an INV IN of 77.77 and an INV OUT of 78.42. Can you please review the inverts for SSMH-8 and SSMH-9 and relay back to us what the appropriate INV OUT depths should be?</i>	<b>Joshua Postadan</b>	Jul 11, 2024, 1:32 PM EDT
changed the <b>watchers</b> to <b>jhess jhess</b> (Horst Excavating Company), <b>Austin Roberts</b> (Horst Excavating Company), <b>mhigh mhigh</b> (Horst Excavating Company), <b>routman routman</b> (Horst Excavating Company), <b>HESS PROJECT TEAM</b>	<b>Joshua Postadan</b>	Jul 11, 2024, 1:17 PM EDT



<b>Austin Roberts</b> added a reference to a Photo <b>RFI SSMH-8 Answer Reference</b>	<b>Austin Roberts</b>	Jul 11, 2024, 11:24 AM EDT
<b>Austin Roberts</b> added a reference to a Photo <b>RFI SSMH-8</b>	<b>Austin Roberts</b>	Jul 11, 2024, 11:24 AM EDT
<b>Austin Roberts</b> (Horst Excavating Company) created this RFI in  <b>Open</b> Waiting for Submission status and set Ball in court to <b>Joshua Postadan</b> (HESS Construction Co., LLC).	<b>Austin Roberts</b>	Jul 11, 2024, 11:24 AM EDT

RFI detail

#011 SSMH-8 & SSMH-9 Inverts



Status	<div><div></div>Open</div> In Review
Created on	Jul 11, 2024 by <b>Austin Roberts</b> (Horst Excavating Company)
RFI type	Civil RFI REV
Ball in court	<b>Patrick Byrne</b> (Grimm and Parker) <b>Alexander Whallon</b> (McCrone)
Due date	Jul 17, 2024

Question

On SS-5 where it depicts SSMH-11 to SSMH-7, SSMH-9 and SSMH-8 may have their INV OUT depths switched around. SSMH-9 has an INV IN of 82.00 and an INV OUT of 77.62, and SSMH-8 has an INV IN of 77.77 and an INV OUT of 78.42. Please review the inverts for SSMH-8 and SSMH-9 and clarify what the appropriate INV OUT depths should be?

Suggested answer

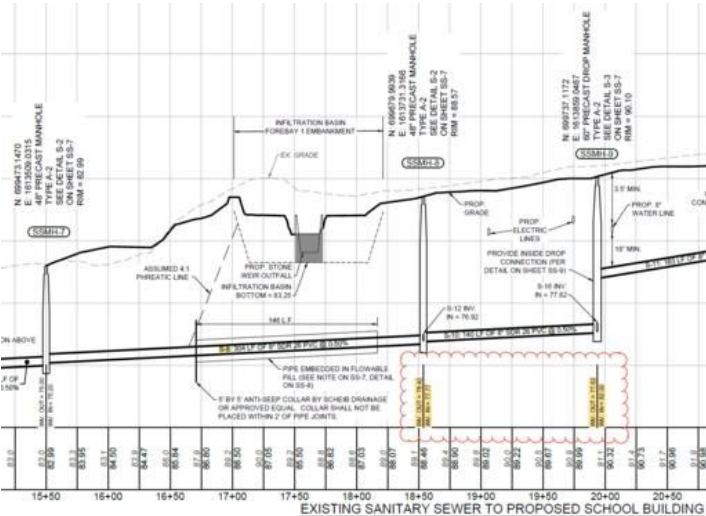
According to the profile of SSMH-8 to proposed concession building, it notes on SSMH-8 that pipe # S-8, which is the pipe going from SSMH-8 to SSMH-7, has an INV IN of 76.72. This INV IN of 76.72 should also be the appropriate INV OUT of SSMH-8 in the profile of the run mentioned above. However, the 76.72 is depicted as SSMH-9's INV OUT instead of SSMH-8's. Therefore, the INV OUT for SSMH-8 and SSMH-9 may have been mislabeled.

References

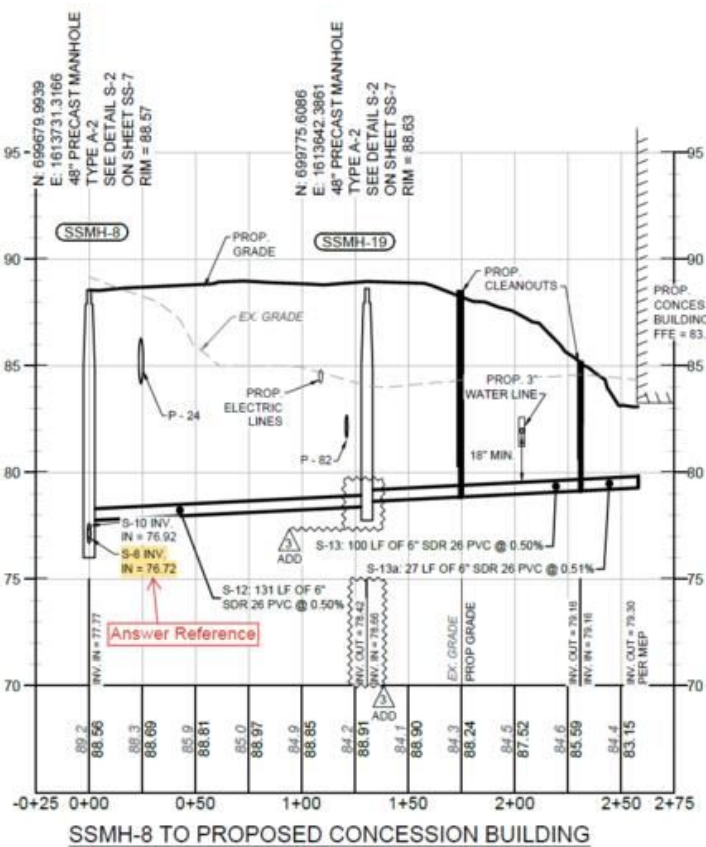
Files (1)

- [Screenshot 2024-07-11 143047.png](#)

Photos (2)



RFI SSMH-8  
Added on Jul 11, 2024, 11:22 AM EDT  
Added by Austin Roberts



RFI SSMH-8 Answer Reference  
Added on Jul 11, 2024, 11:22 AM EDT  
Added by Austin Roberts

Impact

Cost impact No

Schedule impact No

Other attributes

Priority Normal

Discipline Civil/Site

Category Field condition, Design Coordination

Location Site

Location details SSMH-9 and SSMH-8 run through the parking lot between the football field and the new building.

External id	-
Co-reviewer(s)	
Posted to Drawings/ Specifications	YES
Trade's RFI No.	2

G+P: See attached screen shot from McCrone for revised invert elevations.

Patrick Byrne 7.11.2024

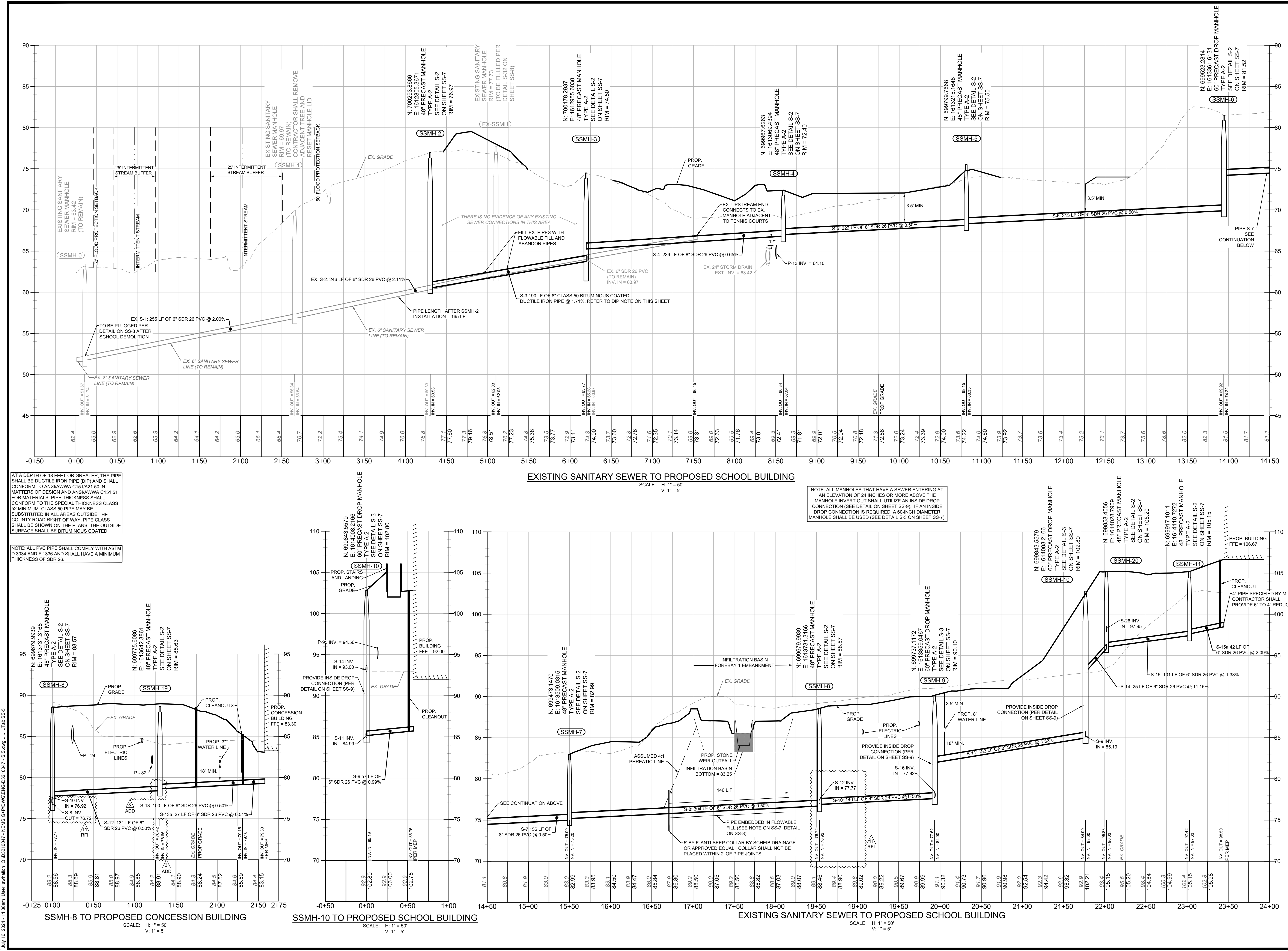


Activities	By	At
<b>Alexander Whallon</b> added a response: Thank you for catching this error. The inverts for pipe S-12 were showing up on SSMH-8 overwriting the correct invert in/out of pipes S-10/S-8. This has been corrected. Additionally, the label for S-12 invert in to SSMH-8 has been revised and is now correctly shown as 77.77. I've attached a screenshot showing the revised area. Hopefully this clears up any confusion.	<b>Alexander Whallon</b>	Jul 11, 2024, 2:47 PM EDT
<b>Alexander Whallon</b> added a reference to a file <b>Screenshot 2024-07-11 143047.png</b>	<b>Alexander Whallon</b>	Jul 11, 2024, 2:46 PM EDT
<b>Joshua Postadan</b> changed the status from <b>Open</b> Waiting for Submission to <b>Open</b> In Review changed the <b>due date</b> to Jul 16, 2024 set Ball in court to <b>Patrick Byrne</b> (Grimm and Parker), <b>Alexander Whallon</b> (McCrone) changed the <b>ID</b> to 011	<b>Joshua Postadan</b>	Jul 11, 2024, 1:34 PM EDT
changed the <b>suggested answer</b> to <i>According to the profile of SSMH-8 to proposed concession building, it notes on SSMH-8 that pipe # S-8, which is the pipe going from SSMH-8 to SSMH-7, has an INV IN of 76.72. This INV IN of 76.72 should also be the appropriate INV OUT of SSMH-8 in the profile of the run mentioned above. However, the 76.72 is depicted as SSMH-9's INV OUT instead of SSMH-8's. Therefore, the INV OUT for SSMH-8 and SSMH-9 may have been mislabeled.</i>	<b>Joshua Postadan</b>	Jul 11, 2024, 1:33 PM EDT
changed the <b>question</b> to <i>On SS-5 where it depicts SSMH-11 to SSMH-7, SSMH-9 and SSMH-8 may have their INV OUT depths switched around. SSMH-9 has an INV IN of 82.00 and an INV OUT of 77.62, and SSMH-8 has an INV IN of 77.77 and an INV OUT of 78.42. Please review the inverts for SSMH-8 and SSMH-9 and clarify what the appropriate INV OUT depths should be?</i>	<b>Joshua Postadan</b>	Jul 11, 2024, 1:32 PM EDT
changed the <b>question</b> to <i>On SS-5 where it depicts SSMH-11 to SSMH-7, SSMH-9 and SSMH-8 may have their INV OUT depths switched around. SSMH-9 has an INV IN of 82.00 and an INV OUT of 77.62, and SSMH-8 has an INV IN of 77.77 and an INV OUT of 78.42. Can you please review the inverts for SSMH-8 and SSMH-9 and relay back to us what the appropriate INV OUT depths should be?</i>	<b>Joshua Postadan</b>	Jul 11, 2024, 1:32 PM EDT
changed the <b>watchers</b> to <b>jhess jhess</b> (Horst Excavating Company), <b>Austin Roberts</b> (Horst Excavating Company), <b>mhigh mhigh</b> (Horst Excavating Company), <b>routman routman</b> (Horst Excavating Company), <b>HESS PROJECT TEAM</b>	<b>Joshua Postadan</b>	Jul 11, 2024, 1:17 PM EDT
<b>Austin Roberts</b> added a reference to a photo <b>RFI SSMH-8 Answer Reference</b>	<b>Austin Roberts</b>	Jul 11, 2024, 11:24 AM EDT
<b>Austin Roberts</b> added a reference to a photo <b>RFI SSMH-8</b>	<b>Austin Roberts</b>	Jul 11, 2024, 11:24 AM EDT

**Austin  
Roberts**

Jul 11, 2024, 11:24 AM  
EDT





Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed Professional Engineer under the laws of the State of Maryland, License No. 14002, Expiration Date: 1-16-2025

DATE: 6/19/2024

REVISIONS	
REV. #	DESCRIPTION
1	ADDRESSED CECL COUNTY COMMENTS DATED 4/19/23
2	ADDRESSED CECL COUNTY COMMENTS DATED 10/23

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UPPER MERIDIAN, MARYLAND 21078  
410.298.1550  
www.mccrone-engineers.com

DATE	NOV 2022
ASB NUMBER	D221047
SCALE	AS SHOWN
DRAWN BY	AJW
DESIGNED BY	AJW
APPROVED BY	DBS
FOLDER REFERENCE	26898

SANITARY SEWER PROFILES

300 IRISHTOWN ROAD, NORTH EAST, MD 21901  
TAX MAP 31, GRID 17, PARCEL 857, ADC MAP 11, GRID Q-13

**NORTH EAST MIDDLE AND HIGH SCHOOLS**

FIFTH ELECTION DISTRICT, CECL COUNTY, MARYLAND  
PREPARED FOR: CECL COUNTY PUBLIC SCHOOLS

DATE	DESCRIPTION
3/25/2024	ADDENDUM 3
7/16/2024	RFI 11

SHEET NO.: SS-5

## RFI detail

## #012 Missing CAD Files for Entrances and Silt Fence



Status	<div><div></div>Closed</div>
Created on	Jul 19, 2024 by <b>Austin Roberts</b> (Horst Excavating Company)
RFI type	Civil RFI REV
Ball in court	<b>Austin Roberts</b> (Horst Excavating Company)
Answered	Jul 19, 2024 by <b>Alexander Whallon</b> (McCrone), <b>Patrick Byrne</b> (Grimm and Parker)

## Question

While using AutoCAD to construct the stake layout, the surveyor discovered that the CAD file received from McCrone does not have the construction entrances nor the layout for the silt and super silt fences. Please provide the appropriate CAD files indicating the layout for the construction entrances and all silt fences.

## Official response

Alexander Whallon (McCrone): The CAD file has been updated with the information requested. We have included plan view sheets with spot elevations. While preparing these, we noticed that that some of the spots on sheet C-23 had never been updated. Revised sheet C-23 has been included in this submittal to be re-issued.

Patrick Byrne (Grimm and Parker): See attached CAD file and revised Civil sheet from McCrone Engineering.

*By **Alexander Whallon** (McCrone), **Patrick Byrne** (Grimm and Parker) - Jul 19, 2024, 1:14 PM EDT*

## References and Attachments

## Files (2)

- [ACAD-D3210047 - ENG.dwg](#)
- [D3210047 - ENG-C-23 Revised.pdf](#)





## Impact

Cost impact	No
Schedule impact	No



**Other attributes**

<b>Priority</b>	Normal
<b>Discipline</b>	Civil/Site
<b>Category</b>	Design Coordination, Field condition
<b>Location</b>	Site
<b>Location details</b>	3 construction entrances and silt fence locations
<b>External id</b>	-
<b>Co-reviewer(s)</b>	
<b>Posted to Drawings/ Specifications</b>	NO
<b>Trade's RFI No.</b>	-

Activities	By	At
<b>Joshua Postadan</b> changed the status from  <b>Open</b> Answered to  <b>Closed</b> <b>Official response:</b> Alexander Whallon (McCrone): The CAD file has been updated with the information requested. We have included plan view sheets with spot elevations. While preparing these, we noticed that that some of the spots on sheet C-23 had never been updated. Revised sheet C-23 has been included in this submittal to be re-issued. Patrick Byrne (Grimm and Parker): See attached CAD file and revised Civil sheet from McCrone Engineering. set Ball in court to <b>Austin Roberts</b> (Horst Excavating Company)	<b>Joshua Postadan</b>	Jul 22, 2024, 3:00 PM EDT
McCrone response received 7/19/24 - "The CAD file has been updated with the information requested. We have included plan view sheets with spot elevations. While preparing these, we noticed that that some of the spots on sheet C-23 had never been updated. Revised sheet C-23 has been included in this submittal to be re-issued" Grimm + Parker response received 7/19/24 - "See attached CAD file and revised Civil sheet from McCrone Engineering" lease review the response to RFI #012. Provide notification of any cost implications immediately. If a proposal has cost impacts, please request an RFQ from HESS. Send a proposal no later than the close of business within 7 days of receipt of this RFI response. HESS will consider this as a no cost change and close this issue should a proposal not be received by this date. A lack of response for any credit items will prompt HESS Construction to assign a cost value that will be deducted from your contract sum. Note: The RFQ is simply an administrative tracking tool, and in no way represents that additional work, cost or time is acknowledged, authorized, directed, or approved	<b>Joshua Postadan</b>	Jul 22, 2024, 3:00 PM EDT
<b>Patrick Byrne</b> changed the status from  <b>Open</b> In Review to  <b>Open</b> Answered set Ball in court to <b>Joshua Postadan</b> (HESS Construction Co., LLC)	<b>Patrick Byrne</b>	Jul 19, 2024, 1:14 PM EDT
<b>Patrick Byrne</b> added a response: See attached CAD file and revised Civil sheet from McCrone Engineering.	<b>Patrick Byrne</b>	Jul 19, 2024, 1:14 PM EDT
<b>Alexander Whallon</b> added a response: The CAD file has been updated with the information requested. We have included plan view sheets with spot elevations. While preparing these, we noticed that that some of the spots on sheet C-23 had never been updated. Revised sheet C-23 has been included in this submittal to be re-issued.	<b>Alexander Whallon</b>	Jul 19, 2024, 12:26 PM EDT
<b>Alexander Whallon</b> added a reference to a File <b>ACAD-D3210047 - ENG.dwg</b>	<b>Alexander Whallon</b>	Jul 19, 2024, 12:25 PM EDT
<b>Alexander Whallon</b> added a reference to a File <b>D3210047 - ENG-C-23 Revised.pdf</b>	<b>Alexander Whallon</b>	Jul 19, 2024, 12:25 PM EDT

**Joshua Postadan**

changed the status from  **Open** Waiting for Submission to  **Open** In Review

changed the **due date** to Jul 24, 2024

set Ball in court to **Patrick Byrne** (Grimm and Parker), **Alexander**

**Whallon** (McCrone)

changed the **ID** to 012

changed the **watchers** to **Russ Outman** (Horst Excavating Company), **Austin Roberts** (Horst Excavating Company), **jhess jhess** (Horst Excavating Company), **mhigh mhigh** (Horst Excavating Company), **Dan Speakman** (McCrone), **HESS PROJECT TEAM**

**Joshua Postadan**

Jul 19, 2024, 8:26 AM EDT

changed the **cost impact** to *No*

**Joshua Postadan**

Jul 19, 2024, 8:25 AM EDT

changed the **question** to *While using AutoCAD to construct the stake layout, the surveyor discovered that the CAD file received from McCrone does not have the construction entrances nor the layout for the silt and super silt fences. Please provide the appropriate CAD files indicating the layout for the construction entrances and all silt fences.*

**Joshua Postadan**

Jul 19, 2024, 8:25 AM EDT

changed the **question** to *When using AutoCAD to construct the stake layout for the jobsite, the surveyor noticed that they do not have a CAD file containing the construction entrances as well as he's missing a file containing the layout for the silt and super silt fence. Please provide us with the appropriate CAD files that contain the layout for the construction fence and all silt fences.*

**Joshua Postadan**

Jul 19, 2024, 8:24 AM EDT

changed the **watchers** to **Russ Outman** (Horst Excavating Company), **Austin Roberts** (Horst Excavating Company), **jhess jhess** (Horst Excavating Company), **mhigh mhigh** (Horst Excavating Company), **HESS PROJECT TEAM**

**Joshua Postadan**

Jul 19, 2024, 8:23 AM EDT

changed the **location details** to *3 construction entrances and silt fence locations*

**Joshua Postadan**

Jul 19, 2024, 8:23 AM EDT

changed the **question** to *When using AutoCAD to construct the stake layout for the jobsite, the surveyor noticed that he does not have a CAD file containing the construction entrances as well as he's missing a file containing the layout for the silt and super silt fence. Please provide us with the appropriate CAD files that contain the layout for the construction fence and all silt fences.*


**Joshua Postadan**

Jul 19, 2024, 8:22 AM EDT

**Joshua Postadan** cleared **suggested answer**

**Joshua Postadan**

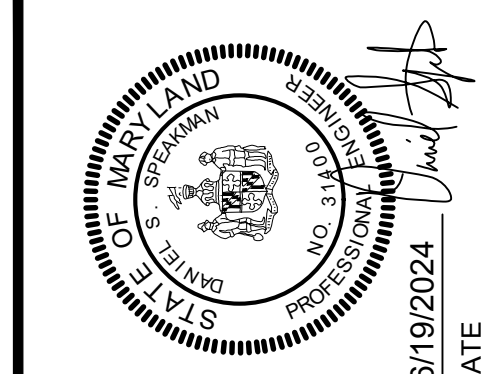
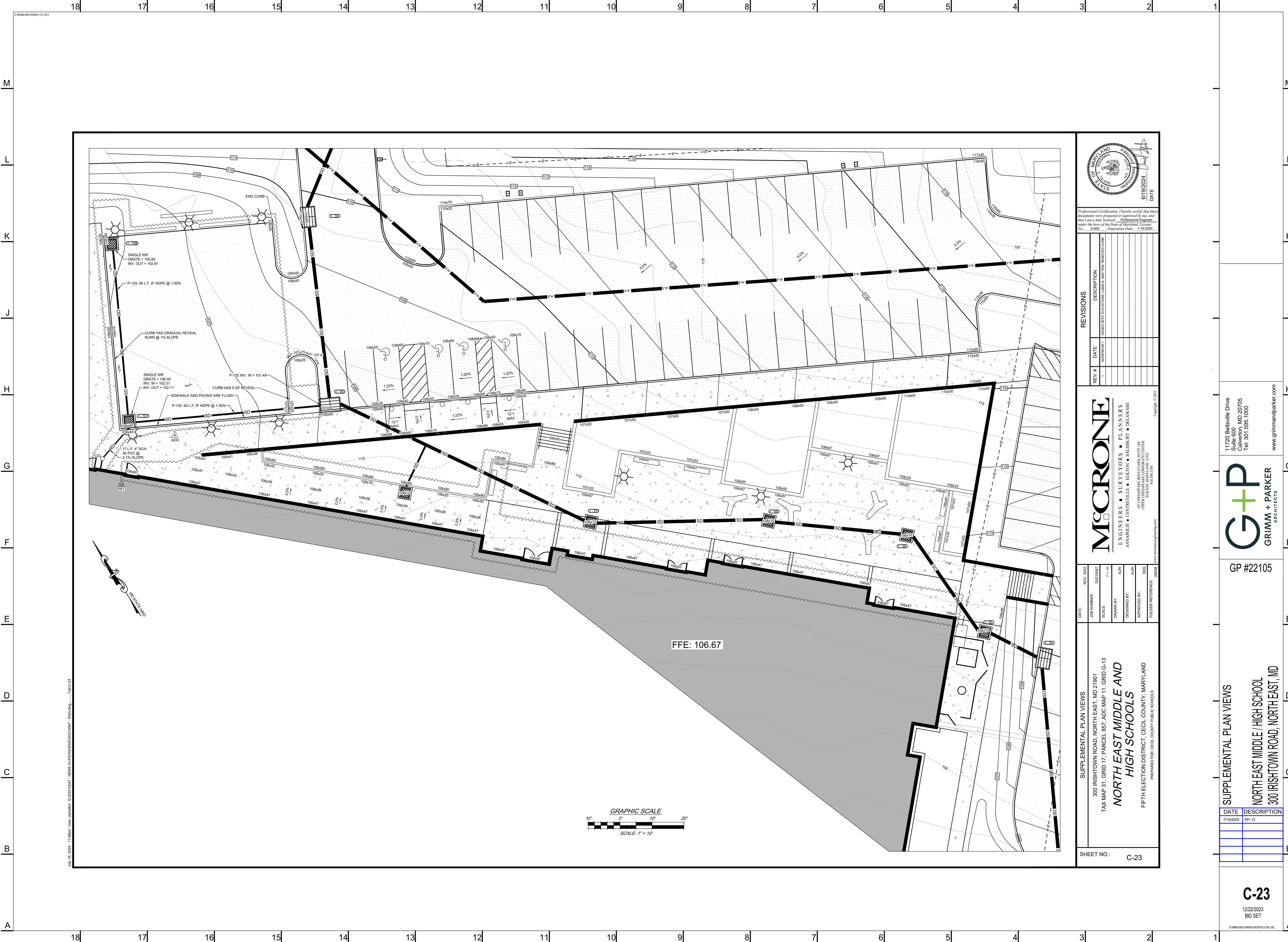
Jul 19, 2024, 8:22 AM EDT

**Austin Roberts** (Horst Excavating Company) created this RFI in  **Open** Waiting for Submission status and set Ball in court to **Joshua Postadan** (HESS Construction Co., LLC).

**Austin Roberts**

Jul 19, 2024, 8:16 AM EDT





Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed Professional Engineer under the laws of the State of Maryland. License No. 31405, Expiration Date: 1-16-2025

REVISIONS		DESCRIPTION	
REV. #	DATE	DESCRIPTION	DATE
1	ADDENDUM 1	ADDED SPOT ELEVATIONS, LABELS, AND TRIM REMOVED CURB	

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UPPER MERIDEN, MARYLAND 21081  
410.296.1550  
www.mccrone-engineering.com

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DATE	NOV 2022
DES. NUMBER	D0210047
SCALE	1" = 10'
DRAWN BY:	AJK
DESIGNED BY:	AJK
APPROVED BY:	DSS
FOLDER REFERENCE	26093

SUPPLEMENTAL PLAN VIEWS  
300 IRISHTOWN ROAD, NORTH EAST, MD 21901  
TAX MAP 31, GRID 17, PARCEL 857, ADC MAP 11, GRID G-13  
**NORTH EAST MIDDLE AND HIGH SCHOOLS**  
FIFTH ELECTION DISTRICT, CECL COUNTY, MARYLAND  
PREPARED FOR: CECL COUNTY PUBLIC SCHOOLS

SHEET NO.: C-23

SUPPLEMENTAL PLAN VIEWS  
NORTH EAST MIDDLE / HIGH SCHOOL  
300 IRISHTOWN ROAD, NORTH EAST, MD

DATE	DESCRIPTION
7/19/2024	RFI 12

**C-23**  
12/22/2023  
BID SET



## RFI detail

## #013 31A Sitework Submittal Clarification



Status	<div><div></div>Closed</div>
Created on	Jul 24, 2024 by <b>Joshua Postadan</b> (HESS Construction Co., LLC)
RFI type	Architectural RFI REVs
Ball in court	<b>Joshua Postadan</b> (HESS Construction Co., LLC)
Answered	Jul 24, 2024 by <b>Patrick Byrne</b> (Grimm and Parker)

### Question

Specification Section 33 05 00 - Common Work Results for Utilities requires a product data submittal for dielectric fittings, identification devices, piping joining materials, sleeves, grout, etc. However, these product data submittals are also required in 33 10 00 - Water Utilities, 33 30 00 - Sanitary Sewer System, 33 41 00 - Storm Drainage Utilities, and 33 46 00 - Subdrainage.

Please confirm that this product data submittal from 33 05 00 - Common Work Results for Utilities can be voided as a duplicate since these products will be submitted under other specification sections.

### Official response

Patrick Byrne (Grimm and Parker): Confirmed. Please submit all relevant product data under the individual specification sections in which they will be used.

*By **Patrick Byrne** (Grimm and Parker) - Jul 24, 2024, 10:01 AM EDT*






### Impact

Cost impact	No
Schedule impact	No

### Other attributes

Priority	Normal
Discipline	Civil/Site

Category	Documentation Conflict
Location	Site
Location details	-
External id	-
Co-reviewer(s)	
Posted to Drawings/ Specifications	NO
Trade's RFI No.	-

Activities	By	At
<b>Joshua Postadan</b> changed the status from  <b>Open</b> Answered to  <b>Closed</b> <b>Official response:</b> Patrick Byrne (Grimm and Parker): Confirmed. Please submit all relevant product data under the individual specification sections in which they will be used.	<b>Joshua Postadan</b>	Jul 24, 2024, 11:15 AM EDT
Grimm + Parker response received 7/24/24: "Confirmed. Please submit all relevant product data under the individual specification sections in which they will be used." Please review the response to RFI #013. Provide notification of any cost implications immediately. If a proposal has cost impacts, please request an RFQ from HESS. Send a proposal no later than the close of business within 7 days of receipt of this RFI response. HESS will consider this as a no cost change and close this issue should a proposal not be received by this date. A lack of response for any credit items will prompt HESS Construction to assign a cost value that will be deducted from your contract sum. Note: The RFQ is simply an administrative tracking tool, and in no way represents that additional work, cost or time is acknowledged, authorized, directed, or approved.	<b>Joshua Postadan</b>	Jul 24, 2024, 11:15 AM EDT
<b>Patrick Byrne</b> changed the status from  <b>Open</b> In Review to  <b>Open</b> Answered set Ball in court to <b>Joshua Postadan</b> (HESS Construction Co., LLC)	<b>Patrick Byrne</b>	Jul 24, 2024, 10:01 AM EDT
<b>Patrick Byrne</b> added a response: Confirmed. Please submit all relevant product data under the individual specification sections in which they will be used.	<b>Patrick Byrne</b>	Jul 24, 2024, 10:01 AM EDT
changed the <b>question</b> to <i>Specification Section 33 05 00 - Common Work Results for Utilities requires a product data submittal for dielectric fittings, identification devices, piping joining materials, sleeves, grout, etc. However, these product data submittals are also required in 33 10 00 - Water Utilities, 33 30 00 - Sanitary Sewer System, 33 41 00 - Storm Drainage Utilities, and 33 46 00 - Subdrainage. Please confirm that this product data submittal from 33 05 00 - Common Work Results for Utilities can be voided as a duplicate since these products will be submitted under other specification sections.</i>	<b>Joshua Postadan</b>	Jul 24, 2024, 7:55 AM EDT
<b>Joshua Postadan</b> (HESS Construction Co., LLC) created this RFI in  <b>Open</b> In Review status and set Ball in court to <b>Patrick Byrne</b> (Grimm and Parker).	<b>Joshua Postadan</b>	Jul 24, 2024, 7:55 AM EDT

## RFI detail

## #014 Member Load Request



Status	<div><div></div>Closed</div>
Created on	Aug 6, 2024 by <b>Lucas Bradley</b> (Kinsley Steel Inc)
RFI type	Structural RFI REV
Ball in court	<b>Lucas Bradley</b> (Kinsley Steel Inc)
Answered	Aug 8, 2024 by <b>Patrick Byrne</b> (Grimm and Parker), <b>Cesar Flores</b> (Columbia Engineering)

## Question

- (1) Please provide the end reactions for the yellow highlighted composite beams in the attached reference (RFI 001\_KSI - Member Load Request.pdf)
- (2) Structural steel Note 2 on S001 notes that for non-composite beams, the 1/2 UDL load capacity of the beam should be considered per AISC manual if loads are not provided in the drawing. AISC specification indicates this as uneconomical and unsafe method. Please refer to the attached AISC literature pages. Please provide the shear loads for the green highlighted short span Non composite beams shown in the attached.

## Official response

Patrick Byrne (Grimm and Parker): See attached RFI Response.

Cesar Flores (Columbia Engineering): Please see attached file for requested beam reactions.

By **Patrick Byrne** (Grimm and Parker), **Cesar Flores** (Columbia Engineering) - Aug 8, 2024, 12:55 PM EDT

## References and Attachments

## Files (3)







- [RFI #014 - Member Load Request-Response.pdf](#)
- [RFI 001\\_KSI - Member Load Request- CEI.pdf](#)
- [RFI 001\\_KSI - Member Load Request.pdf](#)

## Impact

Cost impact	Unknown
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Schedule impact	No
Other attributes	
Priority	Normal
Discipline	Structural
Category	Design Coordination
Location	Area A, Area B, Area C, Area F, Area D, Area E, Area G, Roof
Location details	See "References" section
External id	-
Co-reviewer(s)	
Posted to Drawings/ Specifications	YES
Trade's RFI No.	1

Activities	By	At
<b>Joshua Postadan</b> changed the status from  <b>Open</b> Answered to  <b>Closed</b> <b>Official response:</b> Patrick Byrne (Grimm and Parker): See attached RFI Response. Cesar Flores (Columbia Engineering): Please see attached file for requested beam reactions. set Ball in court to <b>Lucas Bradley</b> (Kinsley Steel Inc)	<b>Joshua Postadan</b>	Aug 19, 2024, 12:37 PM EDT
Please review the response to RFI #014. Provide notification of any cost implications immediately. If a proposal has cost impacts, please request an RFQ from HESS. Send a proposal no later than the close of business within 7 days of receipt of this RFI response. HESS will consider this as a no cost change and close this issue should a proposal not be received by this date. A lack of response for any credit items will prompt HESS Construction to assign a cost value that will be deducted from your contract sum. Note: The RFQ is simply an administrative tracking tool, and in no way represents that additional work, cost or time is acknowledged, authorized, directed, or approved.	<b>Joshua Postadan</b>	Aug 19, 2024, 12:37 PM EDT
changed the <b>watchers</b> to <b>Lucas Bradley</b> (Kinsley Steel Inc), <b>Michael Staub</b> (Kinsley Steel Inc), <b>HESS PROJECT TEAM, Kinsley Steel Inc, Canyon Contracting, Inc.</b>	<b>Joshua Postadan</b>	Aug 19, 2024, 12:37 PM EDT
<b>Patrick Byrne</b> added a reference to a File <b>RFI #014 - Member Load Request-Response.pdf</b>	<b>Patrick Byrne</b>	Aug 8, 2024, 12:56 PM EDT
<b>Patrick Byrne</b> changed the status from  <b>Open</b> In Review to  <b>Open</b> Answered set Ball in court to <b>Joshua Postadan</b> (HESS Construction Co., LLC)	<b>Patrick Byrne</b>	Aug 8, 2024, 12:55 PM EDT
<b>Patrick Byrne</b> added a response: See attached RFI Response.	<b>Patrick Byrne</b>	Aug 8, 2024, 12:55 PM EDT
<b>Cesar Flores</b> added a response: Please see attached file for requested beam reactions.	<b>Cesar Flores</b>	Aug 7, 2024, 1:29 PM EDT
<b>Cesar Flores</b> added a reference to a File <b>RFI 001_KSI - Member Load Request- CEI.pdf</b>	<b>Cesar Flores</b>	Aug 7, 2024, 1:28 PM EDT
<b>Joshua Postadan</b> changed the status from  <b>Open</b> Waiting for Submission to  <b>Open</b> In Review changed the <b>due date</b> to Aug 18, 2024 set Ball in court to <b>Patrick Byrne</b> (Grimm and Parker), <b>Cesar Flores</b> (Columbia Engineering) changed the <b>ID</b> to 014	<b>Joshua Postadan</b>	Aug 6, 2024, 2:25 PM EDT
changed the <b>Posted to Drawings/Specifications</b> to YES	<b>Joshua Postadan</b>	Aug 6, 2024, 2:24 PM EDT

changed the <b>location details</b> to See "References" section	<b>Joshua Postadan</b>	Aug 6, 2024, 2:24 PM EDT
changed the <b>question</b> to (1) Please provide the end reactions for the yellow highlighted composite beams in the attached reference (RFI 001_KSI - Member Load Request.pdf) (2) Structural steel Note 2 on S001 notes that for non-composite beams, the 1/2 UDL load capacity of the beam should be considered per AISC manual if loads are not provided in the drawing. AISC specification indicates this as uneconomical and unsafe method. Please refer to the attached AISC literature pages. Please provide the shear loads for the green highlighted short span Non composite beams shown in the attached.	<b>Joshua Postadan</b>	Aug 6, 2024, 2:23 PM EDT
changed the <b>location details</b> to See	<b>Joshua Postadan</b>	Aug 6, 2024, 2:22 PM EDT
changed the <b>watchers</b> to <b>Ibradley Bradley</b> (Kinsley Steel Inc), <b>Michael Staub</b> (Kinsley Steel Inc), <b>HESS PROJECT TEAM</b> , <b>Kinsley Steel Inc</b>	<b>Joshua Postadan</b>	Aug 6, 2024, 2:22 PM EDT
<b>Joshua Postadan</b> changed title to: <i>Member Load Request</i>	<b>Joshua Postadan</b>	Aug 6, 2024, 2:21 PM EDT
changed the <b>question</b> to (1) Please provide the end reactions for the yellow highlighted composite beams in the attached "TRC RFI 001" reference. (2) Structural steel Note 2 on S001 notes that for non-composite beams, the 1/2 UDL load capacity of the beam should be considered per AISC manual if loads are not provided in the drawing. AISC specification indicates this as uneconomical and unsafe method. Please refer to the attached AISC literature pages. Please provide the shear loads for the green highlighted short span Non composite beams shown in the attached.	<b>Joshua Postadan</b>	Aug 6, 2024, 2:20 PM EDT
changed the <b>question</b> to (1) Please provide the end reactions for the yellow highlighted composite beams in the attached "TRC RFI 001" reference. (2) As per Structural steel Note-2 of Dwg S001, for non-composite beams 1/2 UDL load capacity of beam should be considered per AISC manual if loads are not provided in the drawing. AISC specification indicates this as uneconomical and unsafe method. Please refer to the attached AISC literature pages. Please provide the shear loads for the green highlighted short span Non composite beams shown in the attached.	<b>Joshua Postadan</b>	Aug 6, 2024, 2:18 PM EDT
changed the <b>question</b> to (1) Please provide the end reactions for the yellow highlighted composite beams in the attached "TRC RFI 001" reference. (2) As per Structural steel Note-2 of Dwg S001, for Non-Composite beams 1/2 UDL load capacity of beam should be considered per AISC manual if loads are not provided in the drawing. AISC specification indicates this as uneconomical and unsafe method. Please refer to the attached AISC literature pages. Please provide the shear loads for the green highlighted short span Non composite beams shown in the attached.	<b>Joshua Postadan</b>	Aug 6, 2024, 2:18 PM EDT

changed the **question** to (1) Please provide the end reactions for the yellow highlighted composite beams in the attached "TRC RFI 001" reference. (2) As per Structural steel Note-2 of Dwg S001, for Non-Composite beams 1/2 UDL load capacity of beam should be considered per AISC manual if loads are not provided in the drawing. AISC specification indicates this as uneconomical and unsafe method. Please refer to the attached AISC literature pages. Please provide the shear loads for the green highlighted short span Non composite beams.

**Joshua Postadan**

Aug 6, 2024, 2:17 PM EDT

changed the **question** to 1. Please provide the end reactions for the yellow highlighted composite beams in the attached "TRC RFI 001" reference. 2. As per Structural steel Note-2 of Dwg S001, for Non-Composite beams 1/2 UDL load capacity of beam should be considered per AISC manual if loads are not provided in the drawing. AISC specification indicates this as uneconomical and unsafe method. Please refer to the attached AISC literature pages. Please provide the shear loads for the green highlighted short span Non composite beams.

**Joshua Postadan**

Aug 6, 2024, 2:16 PM EDT

changed the **question** to 1. Please provide the end reactions for the yellow highlighted composite beams in the attached "TRC RFI 001" reference. 2. As per Structural steel Note-2 of Dwg S001, for Non-Composite beams 1/2 UDL load capacity of beam should be considered per AISC manual if loads are not provided in the drawing. AISC specification indicates this as uneconomical and unsafe method. Please refer to the attached AISC literature pages. Please provide the shear loads for the green highlighted short span Non composite beams.

**Joshua Postadan**

Aug 6, 2024, 2:16 PM EDT

changed the **question** to 1. Please provide the end reactions for the yellow highlighted composite beams. 2. As per Structural steel Note-2 of Dwg S001, for Non-Composite beams 1/2 UDL load capacity of beam should be considered per AISC manual if loads are not provided in the drawing. AISC specification indicates this as uneconomical and unsafe method. Please refer to the attached AISC literature pages. Please provide the shear loads for the green highlighted short span Non composite beams. Please refer to attached TRC RFI 001 for attachments.


**Joshua Postadan**

Aug 6, 2024, 1:56 PM EDT

**Ibradley Bradley** added a reference to a File **RFI 001\_KSI - Member Load Request.pdf**

**Ibradley Bradley**

Aug 6, 2024, 10:29 AM EDT

**Ibradley Bradley** (Kinsley Steel Inc) created this RFI in  **Open** Waiting for Submission status and set Ball in court to **Joshua Postadan** (HESS Construction Co., LLC).

**Ibradley Bradley**

Aug 6, 2024, 10:29 AM EDT





## *Request for Information*

---

**Date:** 08/06/2024

**Request No:** KSI 001

**Project:** North East Middle & High School  
**KCI No.:** 242612

**To:** Hess Construction  
**Attn.:** Joshua Postadan  
**Email:** [jpostadan@hessconstruction.com](mailto:jpostadan@hessconstruction.com)

**From:** Mike Staub  
**Phone:** 717-434-6248  
**Email:** [mstaub@kinsleysteel.com](mailto:mstaub@kinsleysteel.com)

---

### **RE: Member Load Request**

#### ***Request***

1. Please provide the end reactions for the yellow highlighted composite beams.
2. As per Structural steel Note-2 of Dwg S001, for Non-Composite beams 1/2 UDL load capacity of beam should be considered per AISC manual if loads are not provided in the drawing. AISC specification indicates this as uneconomical and unsafe method. Please refer to the attached AISC literature pages. Please provide the shear loads for the green highlighted short span Non composite beams.

Please refer to attached TRC RFI 001 for attachments.

---

***Date Response Requested: ASAP***



217 Ward Circle Brentwood, TN 37027, Phone: 615-661-7979 Fax: 615-661-0644

## REQUEST FOR INFORMATION NORTH EAST MIDDLE / HIGH SCHOOL

JOB #24-880

To:	<b>Michael E.</b> <a href="mailto:Staubmstaub@kinsleysteel.com">Staubmstaub@kinsleysteel.com</a>	CLIENT RFI#
Company:	KINSLEY, INC	GC RFI#
		TRC RFI-ENG# 01
cc:		RESPONSE 08-09-2024 NEEDED BY

### SUBJECT: Member Load request

Please refer to the attached files for the Engineering questions.

Q1.1: Please provide the end reactions for the yellow highlighted composite beams.

Q1.2: As per Structural steel Note-2 of Dwg S001, for Non-Composite beams 1/2 UDL load capacity of beam should be considered per AISC manual if loads are not provided in the drawing. AISC specification indicates this as uneconomical and unsafe method. Please refer to the attached AISC literature pages. Please provide the shear loads for the green highlighted short span Non composite beams.

By:	<b>Ruben Flores</b>	Date:	<b>08-06-2024</b>
-----	---------------------	-------	-------------------

### Response:

By:		Date:	
-----	--	-------	--

PLEASE SEND RESPONSE TO: Ruben Flores

Phone: 325-320-0719

**THE RAMANNA COMPANIES**

**CONSULTING ENGINEERS**

provisions is that the fabricator is required to provide representative examples of connection design documentation early in the process, and the owner's designated representative for design is obliged to review these submittals for conformity with the requirements of the contract documents. These early submittals are required in an attempt to avoid additional costs and/or delays as the approval process proceeds through subsequent shop drawings with connections developed from the original representative samples.

Methods one and two have the advantage that the fabricator's standard connections normally can be used, which often leads to project economy. However, the loads or other

Q1.2

As per Structural steel Note-2 of Dwg S001, for Non Composite beams 1/2 UDL load capacity of beam should be considered per AISC manual if loads are not provided in the drawing. AISC specification indicates this as uneconomical and unsafe method. Please refer to the attached AISC literature pages. Please provide the shear loads for the green highlighted short span Non composite beams.

gs. Design loads design drawings must be indicated

submitted to the ated in the AISC n drawings con-

stitutes "confirmation that the fabricator has correctly interpreted the contract documents" and that the reviewer has "reviewed and approved the connection details shown in the approval documents." Following is additional guidance for the communication of connection criteria to the connection designer.

### ***Simple Shear Connections***

The full force envelope should be given for each simple shear connection. Because of the potential for overestimation and underestimation inherent in approximate methods (Thornton, 1995), actual beam end reactions should be indicated on the design drawings. The most effective method to communicate this information is to place a numeric value at each end of each span in the framing plans.

In the past, beam end reactions were sometimes specified as a percentage of the uniform load tabulated in Part 3. This practice can result in either over- or under-specification of connection reactions and should not be used. The inappropriateness of this practice is illustrated in the following examples.

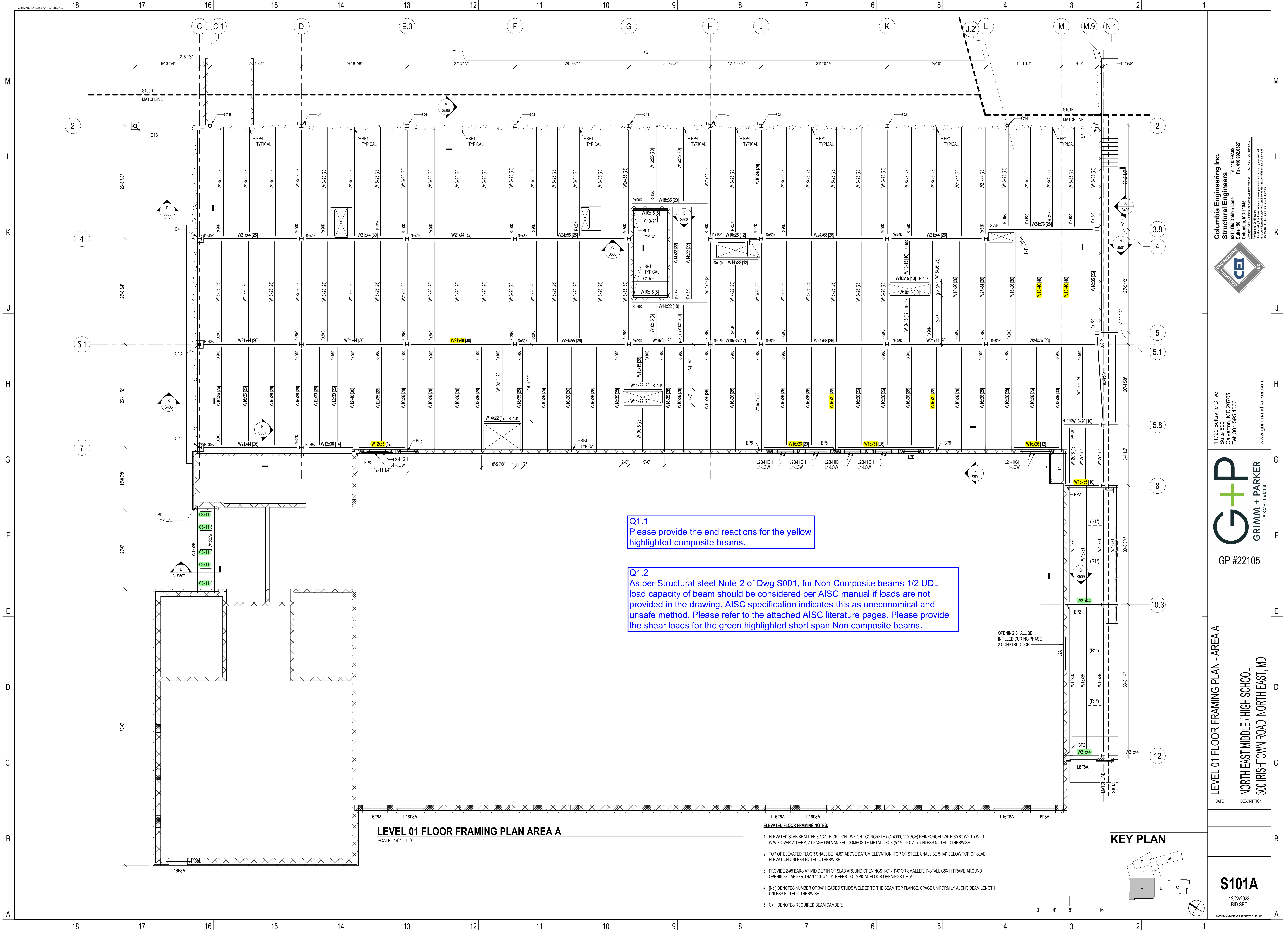
#### **Overestimation:**

1. When beams are selected for serviceability considerations or for shape repetition, the uniform load tables will often result in heavier connections than would be required by the actual design loads.
2. When beams have relatively short spans, the uniform load tables will often result in heavier connections than would be required by the actual design loads. If not addressed with the accurate load, many times the heavier connections will require extension of the connection below the bottom flange of the supported member, requiring that the flange on one or both sides of the web to be cut and chipped, a costly process.

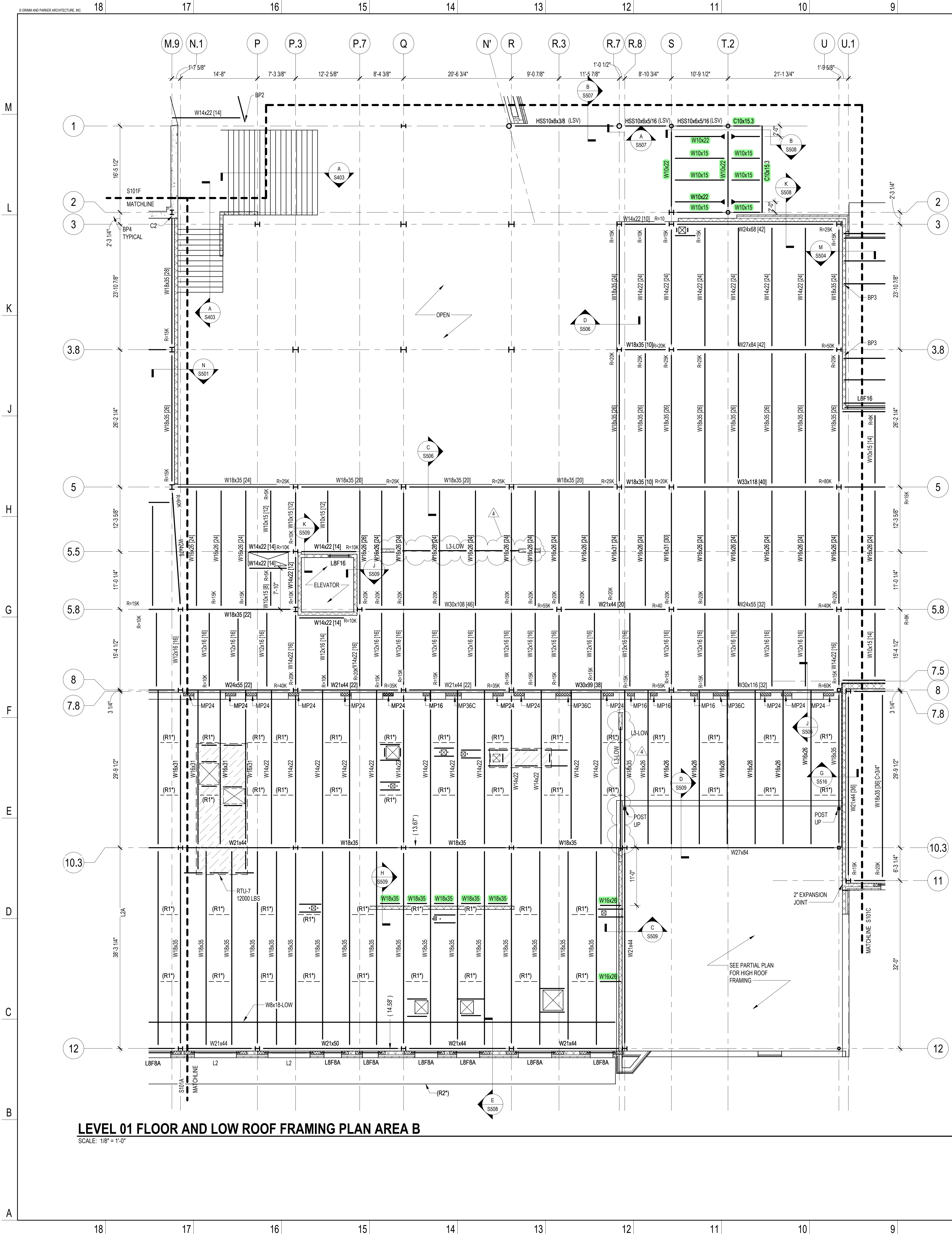
#### **Underestimation:**

1. When beams support other framing beams or other concentrated loads occur on girders supporting beams, the end reactions can be higher than 50% of the total uniform load.
2. For composite beams, the end reactions can be higher than 50% of the total uniform load. The percentage requirement can be increased for this condition, but the resulting approach is still subject to the above considerations.



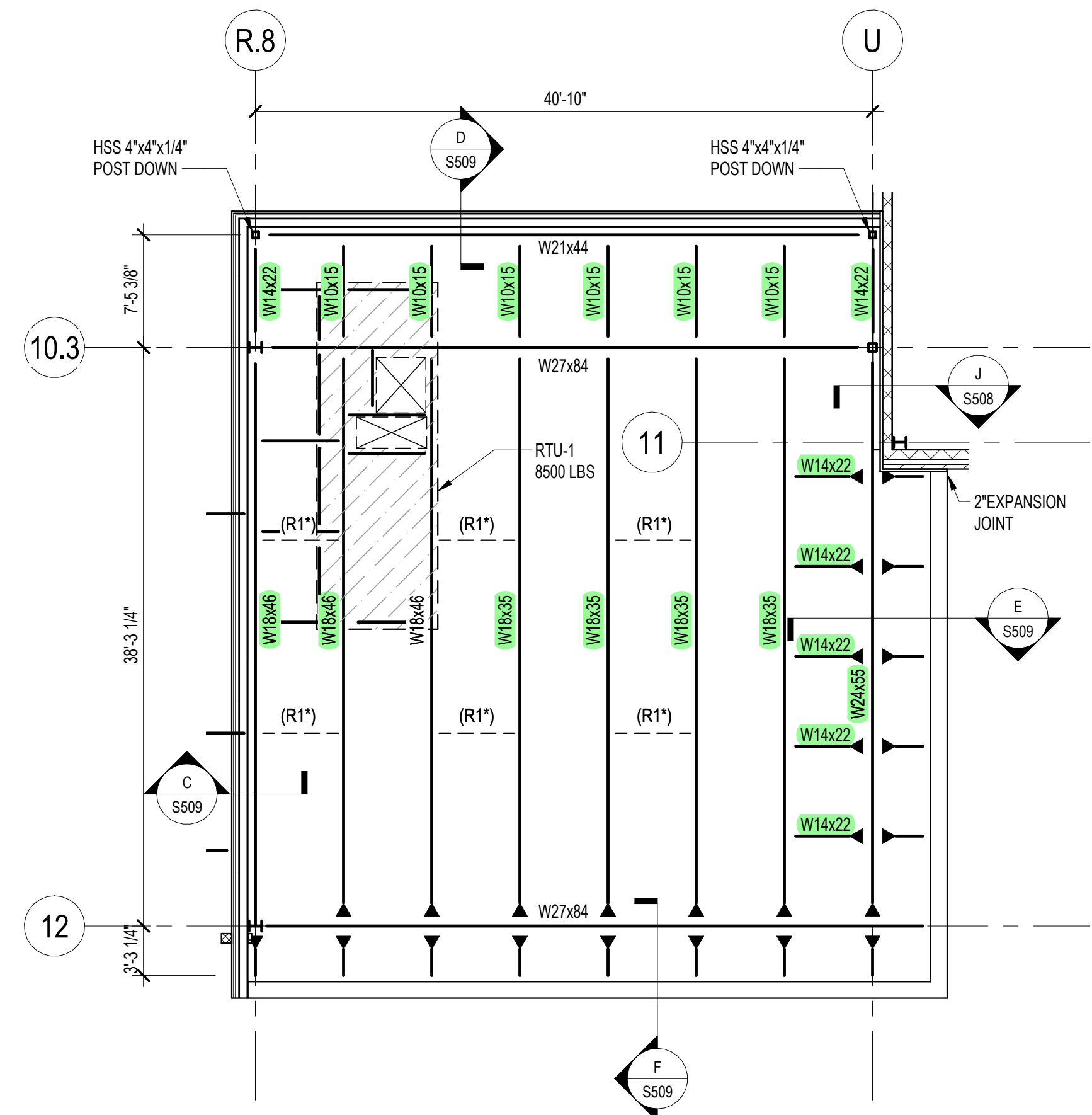




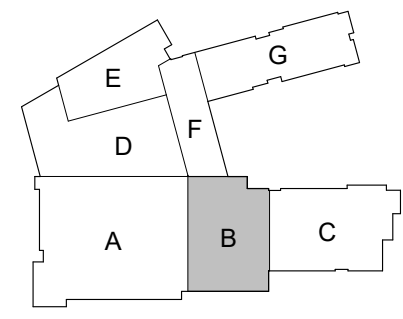


**Q1.2**  
As per Structural steel Note-2 of Dwg S001, for Non Composite beams 1/2 UDL load capacity of beam should be considered per AISC manual if loads are not provided in the drawing. AISC specification indicates this as uneconomical and unsafe method. Please refer to the attached AISC literature pages. Please provide the shear loads for the green highlighted short span Non composite beams.

- ELEVATED FLOOR FRAMING NOTES:**
- ELEVATED SLAB SHALL BE 3 1/4" THICK LIGHT WEIGHT CONCRETE (f<sub>c</sub>'=4000, 110 PCF) REINFORCED WITH 6"x6", W2.1 x W2.1 W/W/F OVER 2" DEEP, 20 GAGE GALVANIZED COMPOSITE METAL DECK (5 1/4" TOTAL), UNLESS NOTED OTHERWISE.
  - TOP OF ELEVATED FLOOR SHALL BE 14.67' ABOVE DATUM ELEVATION. TOP OF STEEL SHALL BE 5 1/4" BELOW TOP OF SLAB ELEVATION UNLESS NOTED OTHERWISE.
  - PROVIDE 2#5 BARS AT MID DEPTH OF SLAB AROUND OPENINGS 1'-0" x 1'-0" OR SMALLER. INSTALL C8X11 FRAME AROUND OPENINGS LARGER THAN 1'-0" x 1'-0". REFER TO TYPICAL FLOOR OPENINGS DETAIL.
  - (N) DENOTES NUMBER OF 3/4" HEADED STUDS WELDED TO THE BEAM TOP FLANGE. SPACE UNIFORMLY ALONG BEAM LENGTH UNLESS NOTED OTHERWISE.
  - C... DENOTES REQUIRED BEAM CAMBER.
- ROOF FRAMING NOTES:**
- ROOF DECK SHALL BE AS NOTED ON ROOF DECK PLAN ON S003.
  - TOP OF STEEL ELEVATION (BOTTOM OF DECK) NOTED ON PLAN THUS (... ) IS MEASURED FROM DATUM ELEVATION (0.00'). BEAMS SUPPORTING K SERIES JOIST SHALL BE 3 1/2" BELOW TOP OF STEEL UNLESS NOTED OTHERWISE.
  - ALL K-SERIES JOIST SHALL HAVE 3 1/2" JOIST SEATS UNLESS NOTED OTHERWISE. ALL LH-SERIES JOIST SHALL HAVE 5" JOIST SEATS UNLESS NOTED OTHERWISE.
  - JOIST SHALL BE DESIGNED FOR A NET UPLIFT OF 15 PSF UNLESS NOTED OTHERWISE.
  - INSTALL ANGLE FRAME AROUND ALL ROOF OPENINGS WITH ONE SIDE LARGER THAN 1'-0". REFER TO TYPICAL ROOF OPENING DETAIL D/S003.
  - ROOFTOP MECHANICAL UNITS OVER ROOF DECK SHALL BE SUPPORTED BY 6"x6"x3/8" ANGLE FRAME (LLV) FOR ANGLE SPANS UP TO 6'-0". SUPPORT AT JOIST OR BEAM WITH 6"x6"x1/2"x8" LONG ANGLE SEAT UNLESS NOTED OTHERWISE.
- ROOF FRAMING KEYED NOTES:**
- (R1') DENOTES 3"x3"x1/4" ANGLE CROSS BRACING. ATTACH TO EACH BEAM WITH 5/16" CONNECTION PLATE. IF ADJACENT MEMBER IS OPEN-WEB STEEL JOIST, INSTALL SINGLE 3"x3"x1/4" ANGLE KICKER FROM BOTTOM OF BEAM TO TOP CHORD PANEL POINT.
- (R2') DENOTES PREFABRICATED CANOPY. CANOPY REQUIRES DELEGATED DESIGN. CONTRACTOR SHALL SUBMIT SIGNED AND SEALED SHOP DRAWINGS AND CALCULATIONS TO A/E FOR REVIEW AND APPROVAL. REFER TO ARCHITECTURAL DOCUMENTS FOR DETAILS.



**KEY PLAN**



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LEVEL 01 FLOOR AND LOW ROOF FRAMING PLAN - AREA B  
GP #22105  
NORTH EAST MIDDLE / HIGH SCHOOL  
300 IRISTOWN ROAD, NORTH EAST, MD

DATE	DESCRIPTION
04/01/2024	ADDENDUM 5

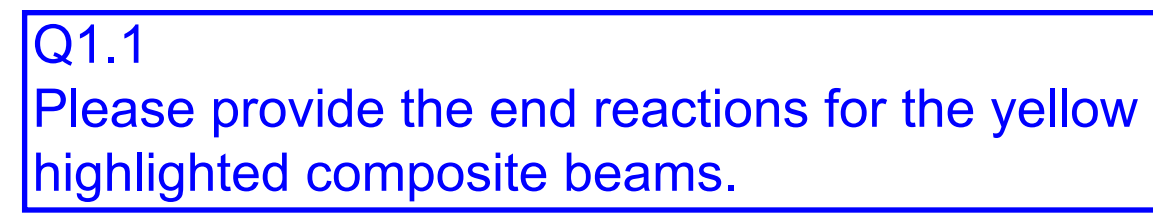
**S101B**  
12/22/2023  
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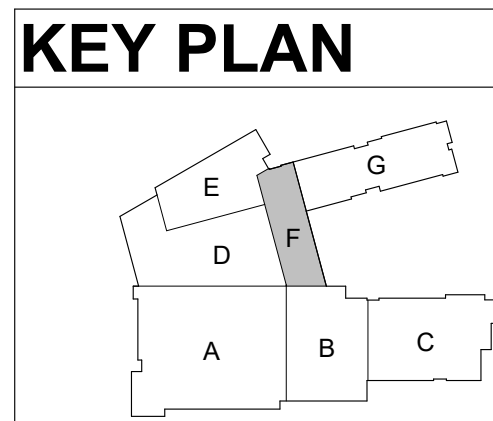






1. ELEVATED SLAB SHALL BE 3 1/4" THICK LIGHT WEIGHT CONCRETE (f'c=4000, 10 PCF) REINFORCED WITH 6"x6", W2 x1 W2 x1 W/2 OVER 2 DEEP, 20 GAGE GALVANIZED COMPOSITE METAL DECK (5 1/4" TOTAL), UNLESS NOTED OTHERWISE.
2. TOP OF ELEVATED FLOOR SHALL BE 14'6" ABOVE DATUM ELEVATION. TOP OF STEEL SHALL BE 5 1/4" BELOW TOP OF SLAB ELEVATION UNLESS NOTED OTHERWISE.
3. PROVIDE 2-#5 BARS AT MID SPAN OF SLAB AROUND OPENINGS 1/4" OR SMALLER. INSTALL C8X11 FRAME AROUND OPENINGS LARGER THAN 1'0" x 1'0". REFER TO TYPICAL FLOOR OPENINGS DETAIL.
4. [N<sub>6</sub>] DENOTES NUMBER OF 3/4" DIA STUDS WELDED TO THE BEAM TOP FLANGE. SPACE UNIFORMLY ALONG BEAM LENGTH UNLESS NOTED OTHERWISE.
5. C=... DENOTES REQUIRED BEAM CAMBER.

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



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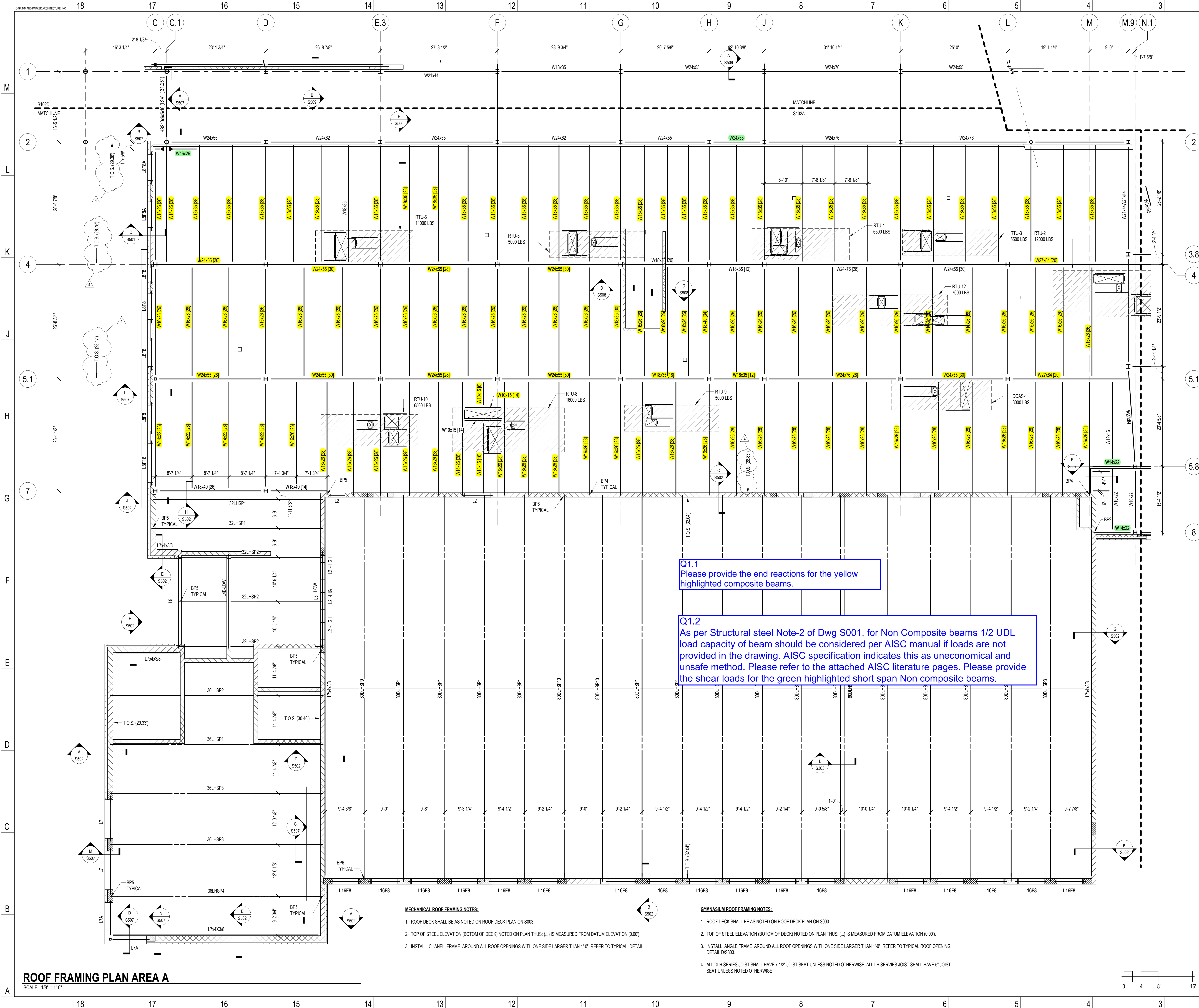
GP #22105

LEVEL 01 FLOOR FRAMING PLAN - AREA F

NORTHEAST MIDDLE / HIGH SCHOOL  
300 IRISTOWN ROAD, NORTHEAST, MD

DATE	DESCRIPTION
1/2024	ADDENDUM 5



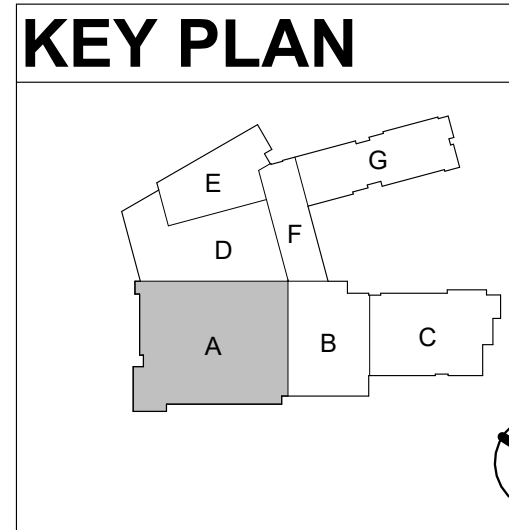


**MECHANICAL ROOF FRAMING NOTES:**

1. ROOF DECK SHALL BE AS NOTED ON ROOF DECK PLAN ON S003.
2. TOP OF STEEL ELEVATION (BOTTOM OF DECK) NOTED ON PLAN THUS: (...) IS MEASURED FROM DATUM ELEVATION (0.00').
3. INSTALL CHANNEL FRAME AROUND ALL ROOF OPENINGS WITH ONE SIDE LARGER THAN 1'-0". REFER TO TYPICAL DETAIL.

**GYMNASIUM ROOF FRAMING NOTES:**

1. ROOF DECK SHALL BE AS NOTED ON ROOF DECK PLAN ON S003.
2. TOP OF STEEL ELEVATION (BOTTOM OF DECK) NOTED ON PLAN THUS: (...) IS MEASURED FROM DATUM ELEVATION (0.00').
3. INSTALL ANGLE FRAME AROUND ALL ROOF OPENINGS WITH ONE SIDE LARGER THAN 1'-0". REFER TO TYPICAL ROOF OPENING DETAIL D/S03.
4. ALL DLH SERIES JOIST SHALL HAVE 7 1/2" JOIST SEAT UNLESS NOTED OTHERWISE. ALL LH SERVICES JOIST SHALL HAVE 5" JOIST SEAT UNLESS NOTED OTHERWISE.



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GP #22105

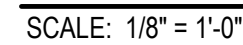
**ROOF FRAMING PLAN - AREA A**  
NORTH EAST MIDDLE / HIGH SCHOOL  
300 IRISHTOWN ROAD, NORTH EAST, MD

DATE	DESCRIPTION
04/01/2024	ADDENDUM 5

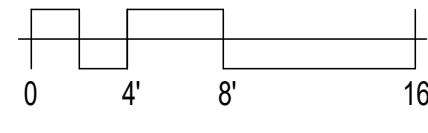
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12/22/2023  
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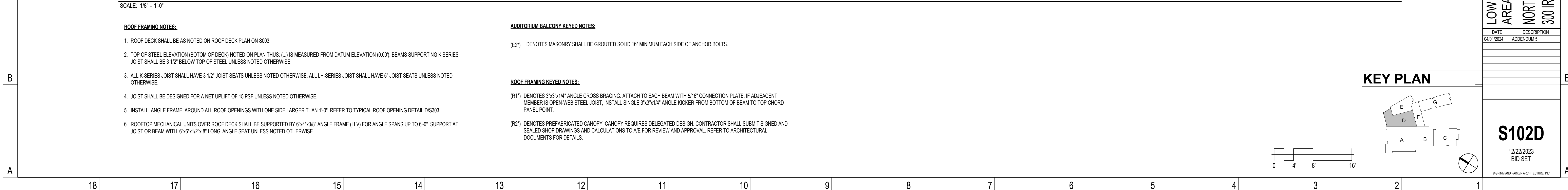


Q1.2  
As per Structural steel Note-2 of Dwg S001, for Non Composite beams 1/2 UDL load capacity of beam should be considered per AISC manual if loads are not provided in the drawing. AISC specification indicates this as uneconomical and unsafe method. Please refer to the attached AISC literature pages. Please provide the shear loads for the green highlighted short span Non composite beams.



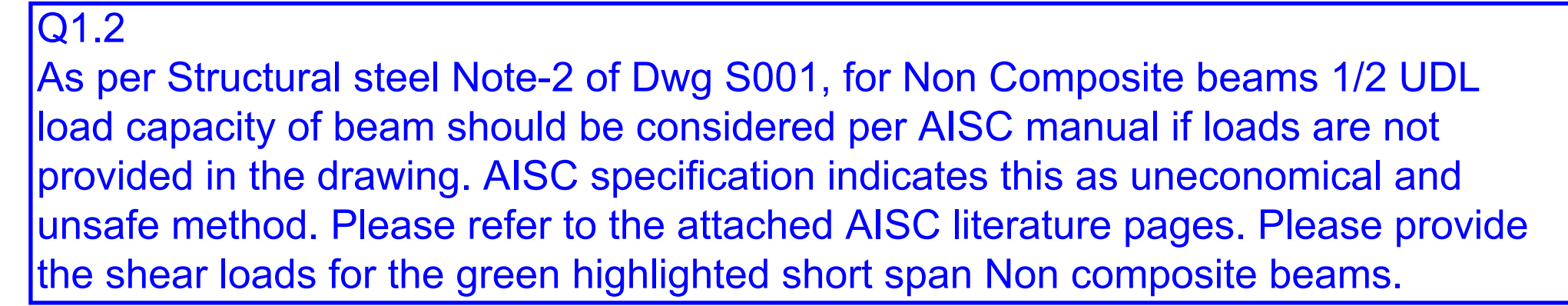
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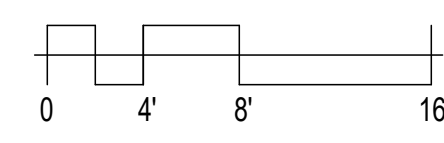
POLYMER AND ORDER IN NATURE 3





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CEIN-21-561 Rev. 2020



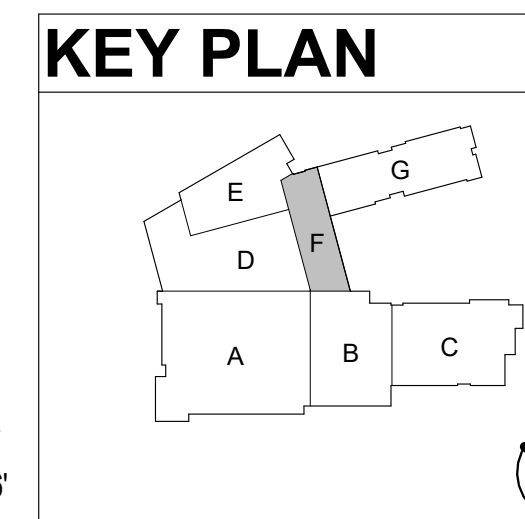


Q1.2  
As per Structural steel Note-2 of Dwg S001, for Non Composite beams 1/2 UDL load capacity of beam should be considered per AISC manual if loads are not provided in the drawing. AISC specification indicates this as uneconomical and unsafe method. Please refer to the attached AISC literature pages. Please provide the shear loads for the green highlighted short span Non composite beams.

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

1. ROOF DECK SHALL BE AS NOTED ON ROOF DECK PLAN ON S003.
2. TOP OF STEEL ELEVATION (BOTTOM OF DECK) NOTED ON PLAN THUS: (...) IS MEASURED FROM DATUM ELEVATION (0.00). BEAMS SUPPORTING K SERIES JOIST SHALL BE 3 1/2" BELOW TOP OF STEEL UNLESS NOTED OTHERWISE.
3. ALL K SERIES JOIST SHALL HAVE 3 1/2" JOIST SEATS UNLESS NOTED OTHERWISE. ALL LH-SERIES JOIST SHALL HAVE 5" JOIST SEATS UNLESS NOTED OTHERWISE.
4. JOIST SHALL BE DESIGNED FOR A NET UPLIFT OF 15 PSF UNLESS NOTED OTHERWISE.
5. INSTALL ANGLE FRAME AROUND ALL ROOF OPENINGS WITH ONE SIDE LARGER THAN 1'-0". REFER TO TYPICAL ROOF OPENING DETAIL D1303.
6. ROOF TOP MECHANICAL UNITS OVER ROOF DECK SHALL BE SUPPORTED BY 6"x4"x8" ANGLE FRAME (LLV) FOR ANGLE SPANS UP TO 6'-0". SUPPORT AT JOIST OR BEAM WITH 6"x6"x1/2" x 8" LONG ANGLE SEAT UNLESS NOTED OTHERWISE.

1. ELEVATED SLAB SHALL BE 3 1/4" THICK LIGHT WEIGHT CONCRETE (fc=4000, 101 PCF) REINFORCED WITH 6#6, W2.1 X W2.1 W/F OVER 2" DEEP, 20% GAGE GALVANIZED COMPOSITE METAL DECK (5 1/4" TOTAL), UNLESS NOTED OTHERWISE.
2. TOP OF ELEVATED FLOOR SHALL BE 29.33' ABOVE DATUM ELEVATION. TOP OF STEEL SHALL BE 5 1/4" BELOW TOP OF SLAB ELEVATION UNLESS NOTED OTHERWISE.
3. PROVIDE 2 #5 BARS AT MID DEPTH OF SLAB AROUND OPENINGS 1'-0" X 1'-0" OR SMALLER. INSTALL C8X11 FRAME AROUND OPENINGS LARGER THAN 1'-0" X 1'-0". REFER TO TYPICAL FLOOR OPENINGS DETAIL C/S303.
4. [N4] DENOTES NUMBER OF 3/4" HEADED STUDS WELDED TO THE BEAM TOP FLANGE. SCALE UNIFORMLY ALONG BEAM LENGTH UNLESS NOTED OTHERWISE.
5. C#... DENOTES REQUIRED BEAM CAMBER.



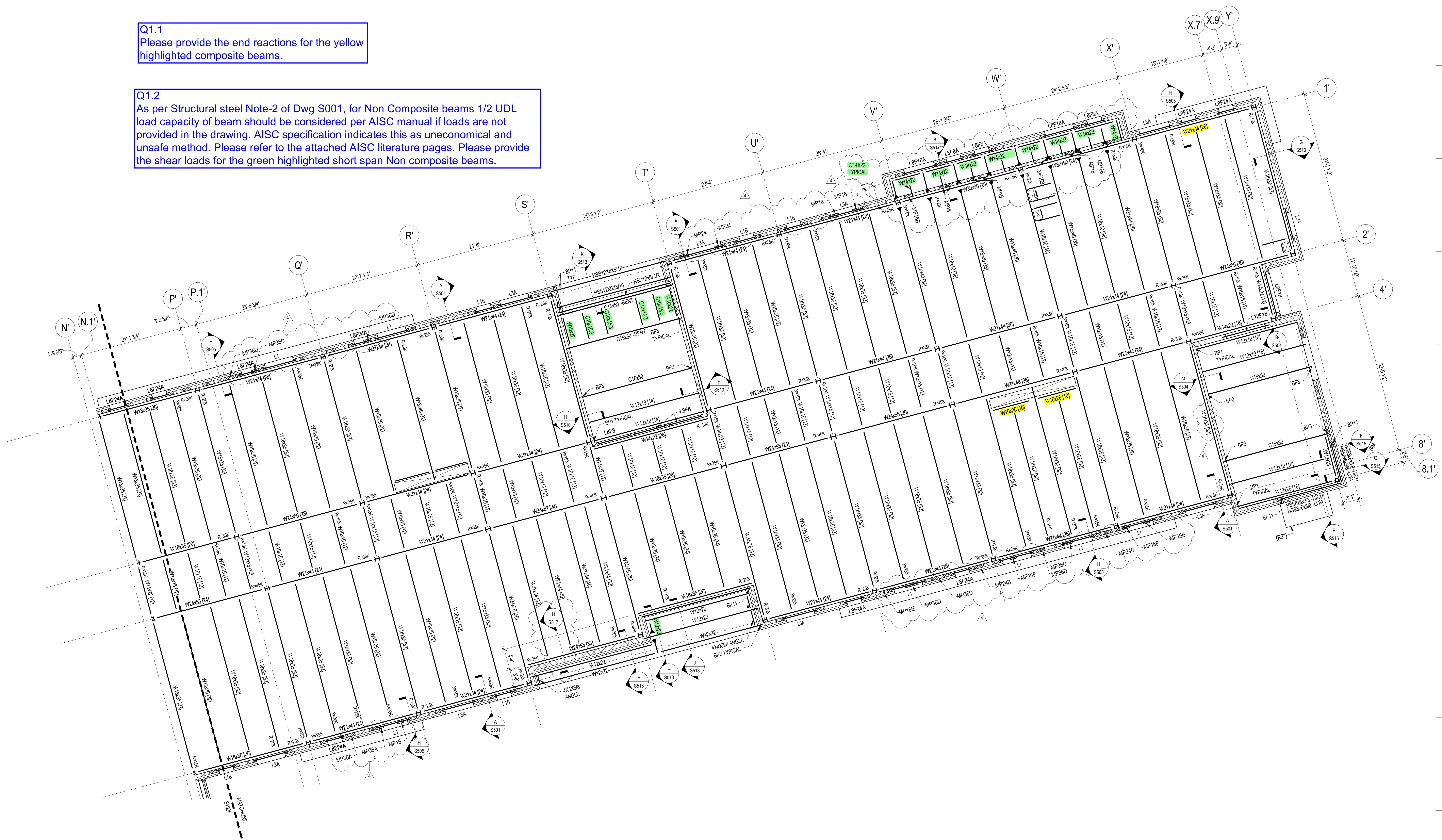
LEVEL 02 FLOOR AND LOW ROOF FLOOR  
NORTH EAST MIDDLE / HIGH SCHOOL  
300 RISHTOWN ROAD NORTH EAST MD

DATE	DESCRIPTION
03/25/2024	ADDENDUM 3
04/01/2024	ADDENDUM 5

**S102F**  
12/22/2023  
BID SET



Q1.2  
As per Structural steel Note-2 of Dwg S001, for Non Composite beams 1/2 UDL load capacity of beam should be considered per AISC manual if loads are not provided in the drawing. AISC specification indicates this as uneconomical and unsafe method. Please refer to the attached AISC literature pages. Please provide the shear loads for the green highlighted short span Non composite beams.



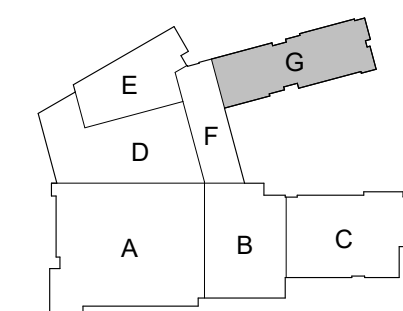
**ELEVATED FLOOR FRAMING NOTES:**

1. ELEVATED SLAB SHALL BE 3" THICK LIGHT WEIGHT CONCRETE (fc=4000, 101 PCF) REINFORCED WITH #6x, W2 x 12 I W.W/F OVER 2" DEEP, 20 GAUGE GALVANIZED COMPOSITE METAL DECK (5.14" TOTAL), UNLESS NOTED OTHERWISE.
2. TOP OF ELEVATED FLOOR SHALL BE 29.33' ABOVE DATUM ELEVATION. TOP OF STEEL SHALL BE 5.14" BELOW TOP OF SLAB ELEVATION UNLESS NOTED OTHERWISE.
3. PROVIDE 2-#5 BARS AT MID DEPTH OF SLAB AROUND OPENINGS 1'-0" x 1'-0" OR SMALLER. INSTALL C8X11 FRAME AROUND OPENINGS LARGER THAN 1'-0" x 1'-0". REFER TO TYPICAL FLOOR OPENINGS DETAIL C3533
4. [No] DENOTES NUMBER OF 3/4" HEATED STUDS WELDED TO THE BEAM TOP FLANGE. SPACE UNIFORMLY ALONG BEAM LENGTH UNLESS NOTED OTHERWISE.
5. C=...DENOTES REQUIRED BEAM CAMBER.

**ROOF FRAMING KEYED NOTES:**

- (R1\*) DENOTES 3"x3"x1/4" ANGLE CROSS BRACING. ATTACH TO EACH BEAM WITH 5/16" CONNECTION PLATE. IF ADJACENT MEMBER IS OPEN-WEB STEEL JOIST, INSTALL SINGLE 3"x3"x1/4" ANGLE KICKER FROM BOTTOM OF BEAM TO TOP CHORD PANEL POINT.
- (R2\*) DENOTES PREFABRICATED CANOPY. CANOPY REQUIRES DELEGATED DESIGN. CONTRACTOR SHALL SUBMIT SIGNED AND SEALED SHOP DRAWINGS AND CALCULATIONS TO A/E FOR REVIEW AND APPROVAL. REFER TO ARCHITECTURAL DOCUMENTS FOR DETAILS.

## KEY PLAN



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Fax 410.992...



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Suite 600  
Calverton, MD 20705  
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GP #22105

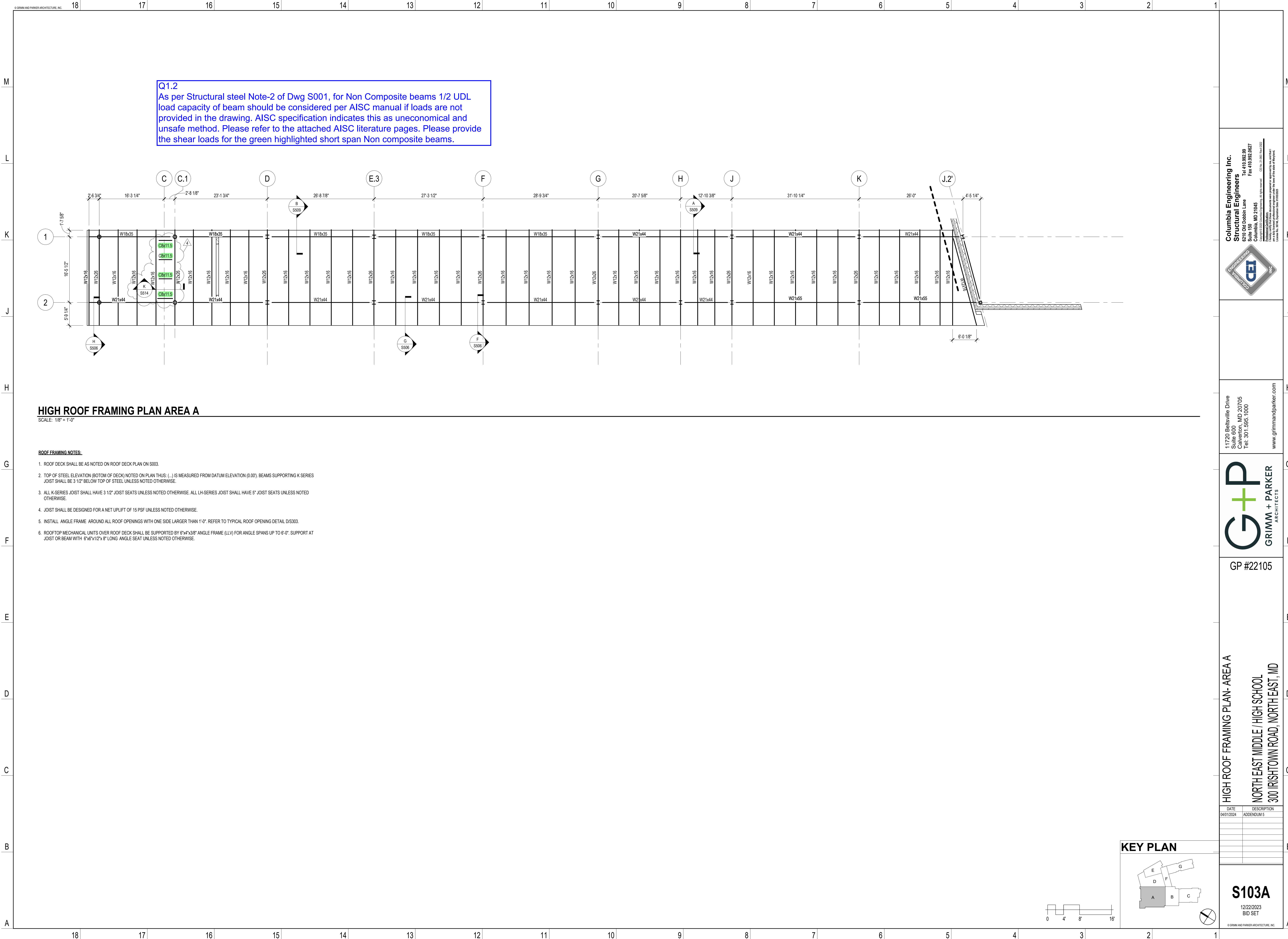
LEVEL 02 FLOOR FRAMING PLAN - AREA G

NORTH EAST MIDDLE / HIGH SCHOOL  
3300 IRISHTOWN ROAD, NORTH EAST, MD

DATE	DESCRIPTION
03/25/2024	ADDENDUM 3
04/01/2024	ADDENDUM 5

**S102G**  
12/22/2023  
BID SET



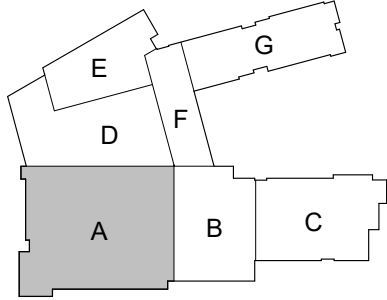


HIGH ROOF FRAMING PLAN AREA A

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

- ROOF FRAMING NOTES:
- 1. ROOF DECK SHALL BE AS NOTED ON ROOF DECK PLAN ON S003.
  - 2. TOP OF STEEL ELEVATION (BOTTOM OF DECK) NOTED ON PLAN THUS (..) IS MEASURED FROM DATUM ELEVATION (0.00'). BEAMS SUPPORTING K SERIES JOIST SHALL BE 3 1/2" BELOW TOP OF STEEL UNLESS NOTED OTHERWISE.
  - 3. ALL K-SERIES JOIST SHALL HAVE 3 1/2" JOIST SEATS UNLESS NOTED OTHERWISE. ALL LH-SERIES JOIST SHALL HAVE 5" JOIST SEATS UNLESS NOTED OTHERWISE.
  - 4. JOIST SHALL BE DESIGNED FOR A NET UPLIFT OF 15 PSF UNLESS NOTED OTHERWISE.
  - 5. INSTALL ANGLE FRAME AROUND ALL ROOF OPENINGS WITH ONE SIDE LARGER THAN 1'-0". REFER TO TYPICAL ROOF OPENING DETAIL D/S303.
  - 6. ROOFTOP MECHANICAL UNITS OVER ROOF DECK SHALL BE SUPPORTED BY 6"x4"x3/8" ANGLE FRAME (LLV) FOR ANGLE SPANS UP TO 6'-0". SUPPORT AT JOIST OR BEAM WITH 6"x6"x1/2"x 8" LONG ANGLE SEAT UNLESS NOTED OTHERWISE.

KEY PLAN



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GP #22105

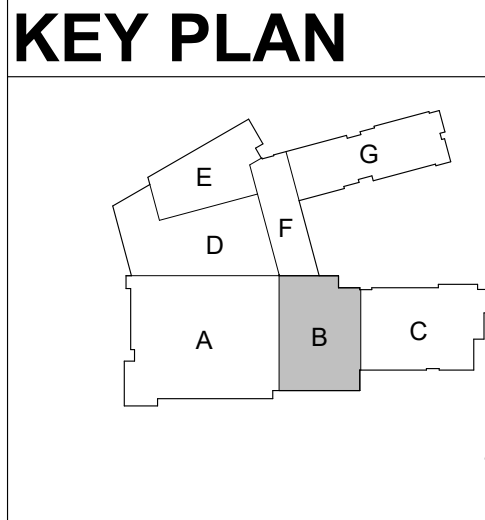
HIGH ROOF FRAMING PLAN- AREA A  
NORTH EAST MIDDLE / HIGH SCHOOL  
300 IRISHTOWN ROAD, NORTH EAST, MD

DATE	DESCRIPTION
04/01/2024	ADDENDUM 5

S103A  
12/22/2023  
BID SET

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

1. ELEVATED SLAB SHALL BE 3 1/4" THICK LIGHT WEIGHT CONCRETE (120-140, 110 PCF) REINFORCED WITH 5#6, W2.1 X W2.1 W.W.F OVER 2" DEEP, 20 GAGE GALVANIZED COMPOSITE METAL DECK (5 1/4" THICK), UNLESS NOTED OTHERWISE.
2. TOP OF ELEVATED FLOOR SHALL BE 44.00' ABOVE DATUM ELEVATION. TOP OF STEEL SHALL BE 5 1/4" BELOW TOP OF SLAB ELEVATION UNLESS NOTED OTHERWISE.
3. PROVIDE 2x5 #4S AT MID DEPTH OF SLAB ABOVE OPENINGS 1'-0" x 1'-0" OR SMALLER. INSTALL C8X11 FRAME AROUND OPENINGS LARGER THAN 1'-0" x 1'-0". REFER TO TYPICAL FLOOR OPENINGS DETAIL C8303.
4. [No.] DENOTES NUMBER OF 3/4" HEADED STUDS WELDED TO THE BEAM TOP FLANGE. SPACE UNIFORMLY ALONG BEAM LENGTH UNLESS NOTED OTHERWISE.
5. C=\_\_\_\_\_ DENOTES REQUIRED BEAM CAPACITOR



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GP #22105

ROOF FRAMING PLAN - AREA B

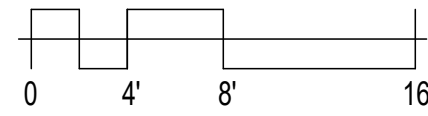
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**S103B**  
12/22/2023  
BID SET









Q1.2  
As per Structural steel Note-2 of Dwg S001, for Non Composite beams 1/2 UDL load capacity of beam should be considered per AISC manual if loads are not provided in the drawing. AISC specification indicates this as uneconomical and unsafe method. Please refer to the attached AISC literature pages. Please provide the shear loads for the green highlighted short span Non composite beams.

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

1. ROOF DECK SHALL BE AS NOTED ON ROOF DECK PLAN ON 5003.
2. TOP OF STEEL ELEVATION (BOTTOM OF DECK) NOTED ON PLAN THIS ( ) IS MEASURED FROM DATUM ELEVATION (0.00'). BEAMS SUPPORTING K SERIES JOIST SHALL BE 1/2" BELOW TOP OF STEEL, UNLESS NOTED OTHERWISE.
3. ALL K-SERIES JOIST SHALL HAVE 3 1/2" JOIST SEATS UNLESS NOTED OTHERWISE. ALL LH-SERIES JOIST SHALL HAVE 5" JOIST SEATS UNLESS NOTED OTHERWISE.
4. JOIST SHALL BE DESIGNED FOR A NET UPLIFT OF 15 PSF UNLESS NOTED OTHERWISE.
5. INSTALL ANGLE FRAME AROUND ALL ROOF OPENINGS WITH ONE SIDE LARGER THAN 1'-0". REFER TO TYPICAL ROOF OPENING DETAIL D3033.
6. ROOFTOP MECHANICAL UNITS OVER ROOF DECK SHALL BE SUPPORTED BY 6"x4"x8" ANGLE FRAME (LLV) FOR ANGLE SPANS UP TO 6'-0". SUPPORT AT JOIST OR BEAM WITH 6"x6"x8" LONG ANGLE SEAT UNLESS NOTED OTHERWISE.

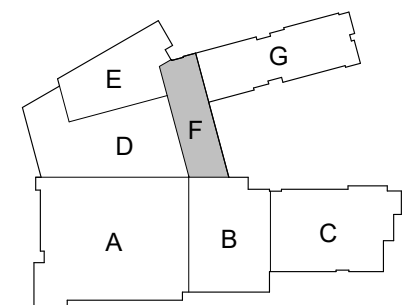
(R1\*) DENOTES 3"x3"x1/4" ANGLE CROSS BRACING. ATTACH TO EACH BEAM WITH 5/16" CONNECTION PLATE. IF ADJACENT MEMBER IS OPEN-WEB STEEL JOIST, INSTALL SINGLE 3"x3"x1/4" ANGLE KICKER FROM BOTTOM OF BEAM TO TOP CHORD PANEL POINT.

(R2\*) DENOTES PREFABRICATED CANOPY. CANOPY REQUIRES DELEGATED DESIGN. CONTRACTOR SHALL SUBMIT SIGNED AND SEALED SHOP DRAWINGS AND CALCULATIONS TO A/E FOR REVIEW AND APPROVAL. REFER TO ARCHITECTURAL DOCUMENTS FOR DETAILS.

1. ELEVATED SLAB SHALL BE 3" THICK LIGHT WEIGHT CONCRETE (f'c=4000, 101 PCF) REINFORCED WITH #6; W2, W2 X 12 W1 W/F OVER 2" DEEP, 20 GAUGE GALVANIZED COMPOSITE METAL DECK (5 1/4" TOTAL), UNLESS NOTED OTHERWISE.
2. TOP OF ELEVATED FLOOR SHALL BE 44.00' ABOVE DATUM ELEVATION. TOP OF STEEL SHALL BE 5 1/4" BELOW TOP OF SLAB ELEVATION UNLESS NOTED OTHERWISE.
3. PROVIDE 2-#5 BARS AT MID DEPTH OF SLAB AROUND OPENINGS 1'-0" X 1'-0" OR SMALLER. INSTALL C8X11 FRAME AROUND OPENINGS LARGER THAN 1'-0" X 1'-0". REFER TO TYPICAL FLOOR OPENINGS DETAIL C1503
4. [N<sub>1</sub>] DENOTES NUMBER OF 3/4" HEADED STUDS WELDED TO THE TOP OF SLAB FLANGE. SPACE UNIFORMLY ALONG BEAM LENGTH UNLESS NOTED OTHERWISE.
5. C<sub>n</sub> = DENOTES REQUIRED BEAM CAMBER.

(E1\*) ELEVATED SLAB WITHIN HATCHED PERIMETER SHALL BE 4 1/2" THICK NORMAL WEIGHT CONCRETE (fc=4000, 145 PCF) REINFORCED WITH 6"x6", W2.1 x W2.1 W/W F OVER 2" DEEP, 18 GAGE GALVANIZED COMPOSITE METAL DECK (6 1/2" TOTAL). UNLESS NOTED OTHERWISE.

(E2\*) WITHIN HATCHED PERIMETER, TOP OF ELEVATED FLOOR SHALL BE 44.00' ABOVE DATUM ELEVATION. TOP OF STEEL SHALL BE 6 1/2" BELOW TOP OF SLAB ELEVATION UNLESS NOTED OTHERWISE.

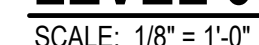


LEVEL 03 FLOOR AND ROOF FRAMING PLAN - AREA F

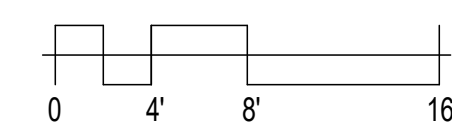
**S103F**  
12/22/2023  
BID SET



**Q1.2**  
As per Structural steel Note-2 of Dwg S001, for Non Composite beams 1/2 UDL load capacity of beam should be considered per AISC manual if loads are not provided in the drawing. AISC specification indicates this as uneconomical and unsafe method. Please refer to the attached AISC literature pages. Please provide the shear loads for the green highlighted short span Non composite beams.

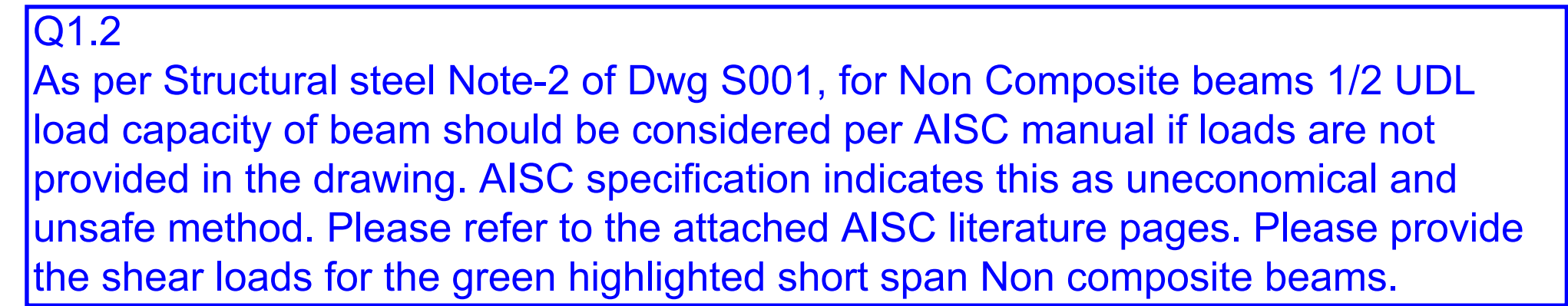


1. ELEVATED SLAB SHALL BE 3" GATE LIGHT WEIGHT CONCRETE (FC=4000, 10 PCF) REINFORCED WITH 6"x6" W2 x 12 I W.W/F OVER 2" DEEP, 20 GAGE GALVANIZED COMPOSITE METAL DECK (5 L" TOTAL). UNLESS NOTED OTHERWISE.
2. TOP OF ELEVATED FLOOR SHALL BE 44.00' ABOVE DATUM ELEVATION. TOP OF STEEL SHALL BE 5 1/4" BELOW TOP OF SLAB ELEVATION UNLESS NOTED OTHERWISE.
3. PROVIDE 2-#5 BARS AT MID DEPTH OF SLAB AROUND OPENINGS 1'-0" x 1'-0" OR SMALLER. INSTALL C8X11 FRAME AROUND OPENINGS LARGER THAN 1'-0" x 1'-0". REFER TO TYPICAL FLOOR OPENINGS DETAIL C5353
4. [N4] DENOTES NUMBER OF 3/4" HEADED STUDS WELDED TO THE DECK TOP FLANGE. SPACE UNIFORMLY ALONG BEAM LENGTH UNLESS NOTED OTHERWISE.
5. C= . . . DENOTES REQUIRED BEAM CAMBER.



BID SET





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

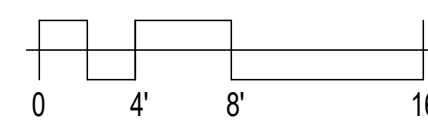
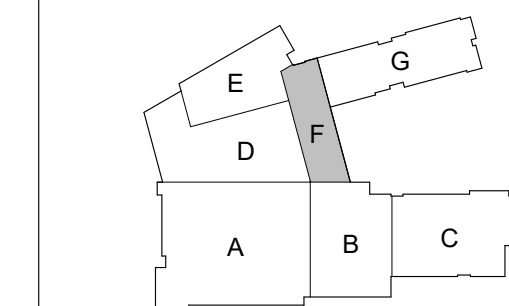
**ROOF FRAMING NOTES:**

1. ROOF DECK SHALL BE AS NOTED ON ROOF DECK PLAN ON S003.
2. TOP OF STEEL ELEVATION (BOTTOM OF DECK NOTED ON PLAN THUS: (...)) IS MEASURED FROM DATUM ELEVATION (0.00'). BEAMS SUPPORTING K SERIES JOIST SHALL BE 3 1/2" BELOW TOP OF STEEL UNLESS NOTED OTHERWISE.
3. ALL K SERIES JOIST SHALL HAVE 3 1/2" JOIST SEATS UNLESS NOTED OTHERWISE. ALL LH SERIES JOIST SHALL HAVE 5" JOIST SEATS UNLESS NOTED OTHERWISE.
4. JOIST SHALL BE DESIGNED FOR A NET UPLIFT OF 15 PSF UNLESS NOTED OTHERWISE.
5. INSTALL ANGLE FRAME AROUND ALL ROOF OPENINGS WITH ONE SIDE LARGER THAN 1'-0". REFER TO TYPICAL ROOF OPENING DETAIL D1303.
6. ROOFTOP MECHANICAL UNITS OVER ROOF DECK SHALL BE SUPPORTED BY 6"x4"x8" ANGLE FRAME (LLV) FOR ANGLE SPANS UP TO 6'-0". SUPPORT AT JOIST OR BEAM WITH 5/8"x6"x2"x8" LONG ANGLE SEAT UNLESS NOTED OTHERWISE.

**ROOF FRAMING KEYED NOTES:**

(R1\*) DENOTES 3"x3"x1/4" ANGLE CROSS BRACING. ATTACH TO EACH BEAM WITH 5/16" CONNECTION PLATE. IF ADJACENT MEMBER IS OPEN-WEB STEEL JOIST, INSTALL SINGLE 3"x3"x1/4" ANGLE KICKER FROM BOTTOM OF BEAM TO TOP CHORD PANEL POINT.

(R2\*) DENOTES PREFABRICATED CANOPY. CANOPY REQUIRES DELEGATED DESIGN. CONTRACTOR SHALL SUBMIT SIGNED AND SEALED SHOP DRAWINGS AND CALCULATIONS TO A/E FOR REVIEW AND APPROVAL. REFER TO ARCHITECTURAL DOCUMENTS FOR DETAILS.



**G + P**  
**GRIMM + PARKER**

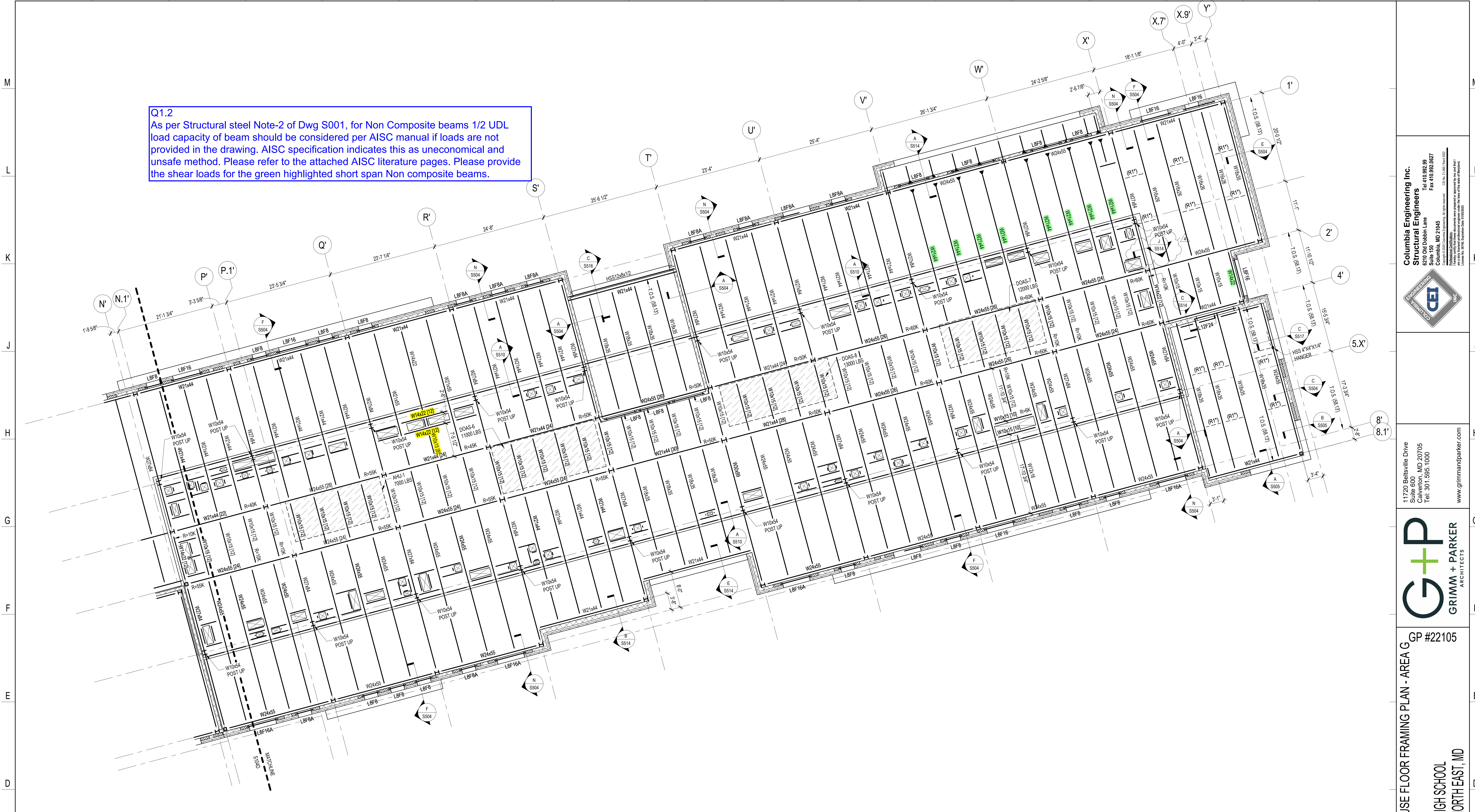
ROOF FRAMING PLAN - AREA F

DATE	DESCRIPTION
04/01/2024	ADDENDUM 5

12/22/202  
BID SET



**Q1.2**  
As per Structural steel Note-2 of Dwg S001, for Non Composite beams 1/2 UDL load capacity of beam should be considered per AISC manual if loads are not provided in the drawing. AISC specification indicates this as uneconomical and unsafe method. Please refer to the attached AISC literature pages. Please provide the shear loads for the green highlighted short span Non composite beams.

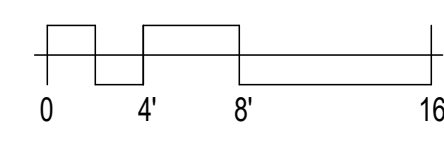
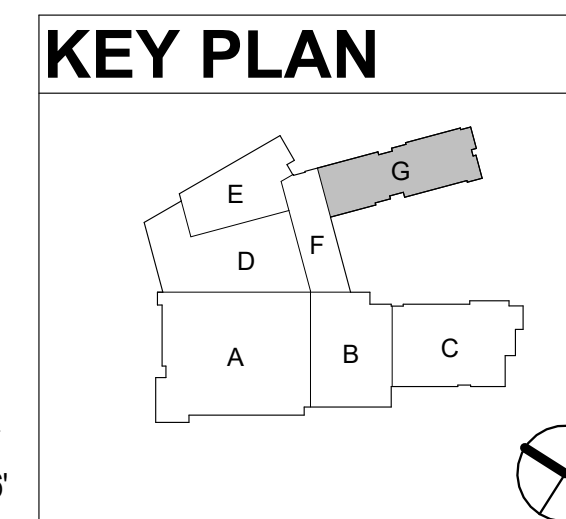


**PENTHOUSE FLOOR AND ROOF FRAMING PLAN AREA G**  
SCALE: 1/8" = 1'-0"

- ROOF FRAMING NOTES:**
1. ROOF DECK SHALL BE AS NOTED ON ROOF DECK PLAN ON S003.
  2. TOP OF STEEL ELEVATION (BOTTOM OF DECK) NOTED ON PLAN THUS: ( ) IS MEASURED FROM DATUM ELEVATION (0.00'). BEAMS SUPPORTING K SERIES JOIST SHALL BE 3 1/2" BELOW TOP OF STEEL UNLESS NOTED OTHERWISE.
  3. ALL K-SERIES JOIST SHALL HAVE 3 1/2" JOIST SEATS UNLESS NOTED OTHERWISE. ALL LH-SERIES JOIST SHALL HAVE 5" JOIST SEATS UNLESS NOTED OTHERWISE.
  4. JOIST SHALL BE DESIGNED FOR A NET UPLIFT OF 15 PSF UNLESS NOTED OTHERWISE.
  5. INSTALL ANGLE FRAME AROUND ALL ROOF OPENINGS WITH ONE SIDE LARGER THAN 1'-0". REFER TO TYPICAL ROOF OPENING DETAIL D/S303.
  6. ROOFTOP MECHANICAL UNITS OVER ROOF DECK SHALL BE SUPPORTED BY 6"x4"x3/8" ANGLE FRAME (LLV) FOR ANGLE SPANS UP TO 6'-0". SUPPORT AT JOIST OR BEAM WITH 6"x6"x12"x 8" LONG ANGLE SEAT UNLESS NOTED OTHERWISE.

- ROOF FRAMING KEYED NOTES:**
- (R1') DENOTES 3"x3"x1/4" ANGLE CROSS BRACING. ATTACH TO EACH BEAM WITH 5/16" CONNECTION PLATE. IF ADJACENT MEMBER IS OPEN-WEB STEEL JOIST, INSTALL SINGLE 3"x3"x1/4" ANGLE KICKER FROM BOTTOM OF BEAM TO TOP CHORD PANEL POINT.
- (R2') DENOTES PREFABRICATED CANOPY. CANOPY REQUIRES DELEGATED DESIGN. CONTRACTOR SHALL SUBMIT SIGNED AND SEALED SHOP DRAWINGS AND CALCULATIONS TO A/E FOR REVIEW AND APPROVAL. REFER TO ARCHITECTURAL DOCUMENTS FOR DETAILS.

- PENTHOUSE FLOOR FRAMING NOTES:**
1. ELEVATED SLAB SHALL BE 4 1/2" THICK NORMAL WEIGHT CONCRETE (FC=4000, 145 PCF) REINFORCED WITH 6"x6", W2.1 x W2.1 W.W.F OVER 2" DEEP, 18 GAGE GALVANIZED COMPOSITE METAL DECK (6 1/2" TOTAL), UNLESS NOTED OTHERWISE.
  2. TOP OF ELEVATED FLOOR SHALL BE 58.67' ABOVE DATUM ELEVATION. TOP OF STEEL SHALL BE 6 1/2" BELOW TOP OF SLAB ELEVATION UNLESS NOTED OTHERWISE.
  3. PROVIDE 2-#5 BARS AT MID DEPTH OF SLAB AROUND OPENINGS 1'-0" x 1'-0" OR SMALLER. INSTALL C8X11 FRAME AROUND OPENINGS LARGER THAN 1'-0" x 1'-0". REFER TO TYPICAL FLOOR OPENINGS DETAIL C/S303.
  4. (N) DENOTES NUMBER OF 3/4" HEADED STUDS WELDED TO THE BEAM TOP FLANGE. SPACE UNIFORMLY ALONG BEAM LENGTH UNLESS NOTED OTHERWISE.
  5. C=... DENOTES REQUIRED BEAM CAMBER.



**Columbia Engineering Inc.**  
Structural Engineers  
6210 Old Dobbin Lane  
Columbia, MD 21045  
Tel: 410.862.29  
Fax: 410.862.627  
C.E. No. 31-081 (Jan 2022)  
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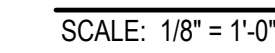
GP #22105

ROOF AND PENTHOUSE FLOOR FRAMING PLAN - AREA G  
NORTH EAST MIDDLE / HIGH SCHOOL  
300 IRISHTOWN ROAD, NORTH EAST, MD

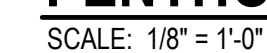
DATE	DESCRIPTION
03/25/2024	ADDENDUM 3
04/01/2024	ADDENDUM 5


**S104G**  
12/22/2023  
BID SET  
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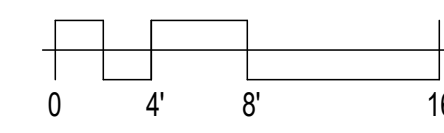
As per Structural steel Note-2 of Dwg S001, for Non Composite beams 1/2 UDL load capacity of beam should be considered per AISC manual if loads are not provided in the drawing. AISC specification indicates this as uneconomical and unsafe method. Please refer to the attached AISC literature pages. Please provide the shear loads for the green highlighted short span Non composite beams.



1. ROOF DECK SHALL BE AS NOTED ON ROOF DECK PLAN ON S003.
2. TOP OF STEEL ELEVATION (BOTTOM OF DECK) NOTED ON PLAN THUS: (...) IS MEASURED FROM DATUM ELEVATION (0.00). BEAMS SUPPORTING K SERIES JOIST SHALL BE 3 1/2" BELOW TOP OF STEEL UNLESS NOTED OTHERWISE.
3. ALL K-SERIES JOIST SHALL HAVE 3 1/2" JOIST SEATS UNLESS NOTED OTHERWISE. ALL LH-SERIES JOIST SHALL HAVE 5" JOIST SEATS UNLESS NOTED OTHERWISE.
4. JOIST SHALL BE DESIGNED FOR A NET UPLIFT OF 15 PSF UNLESS NOTED OTHERWISE.
5. INSTALL ANGLE FRAME AROUND ALL ROOF OPENINGS WITH ONE SIDE LARGER THAN 1'-0". REFER TO TYPICAL ROOF OPENING DETAIL D/S303.
6. ROOFTOP MECHANICAL UNITS OVER ROOF DECK SHALL BE SUPPORTED BY 6"x6"x8" ANGLE FRAME (LLV) FOR ANGLE SPANS UP TO 6'-0". SUPPORT AT JOIST OR BEAM WITH 6"x6"x12"x8" LONG ANGLE SEAT UNLESS NOTED OTHERWISE.

(R1\*) DENOTES 3"x3"x1/4" ANGLE CROSS BRACING. ATTACH TO EACH BEAM WITH 5/16" CONNECTION PLATE. IF ADJACENT MEMBER IS OPEN-WEB STEEL JOIST, INSTALL SINGLE 3"x3"x1/4" ANGLE KICKER FROM BOTTOM OF BEAM TO TOP CHORD PANEL POINT.

(R2\*) DENOTES PREFABRICATED CANOPY. CANOPY REQUIRES DELEGATED DESIGN. CONTRACTOR SHALL SUBMIT SIGNED AND SEALED SHOP DRAWINGS AND CALCULATIONS TO A/E FOR REVIEW AND APPROVAL. REFER TO ARCHITECTURAL DOCUMENTS FOR DETAILS.



GRAMM AND PARKER ARCHITECTURE, INC.



## *Request for Information*

---

**Date:** 08/06/2024

**Request No:** KSI 001

**Project:** North East Middle & High School  
**KCI No.:** 242612

**To:** Hess Construction  
**Attn.:** Joshua Postadan  
**Email:** jpostadan@hessconstruction.com

**From:** Mike Staub  
**Phone:** 717-434-6248  
**Email:** [mstaub@kinsleysteel.com](mailto:mstaub@kinsleysteel.com)

---

### **RE: Member Load Request**

#### ***Request***

1. Please provide the end reactions for the yellow highlighted composite beams.
2. As per Structural steel Note-2 of Dwg S001, for Non-Composite beams 1/2 UDL load capacity of beam should be considered per AISC manual if loads are not provided in the drawing. AISC specification indicates this as uneconomical and unsafe method. Please refer to the attached AISC literature pages. Please provide the shear loads for the green highlighted short span Non composite beams.

Please refer to attached TRC RFI 001 for attachments.

---

***Date Response Requested: ASAP***

CEI: See attached for requested reactions.  
-Ensure connection dimension and requirements shown on A/S304 are provided at all conditions.

Cesar Flores  
08/07/2024



217 Ward Circle Brentwood, TN 37027, Phone: 615-661-7979 Fax: 615-661-0644

## REQUEST FOR INFORMATION NORTH EAST MIDDLE / HIGH SCHOOL

JOB #24-880

To:	<b>Michael E.</b> <a href="mailto:Staubmstaub@kinsleysteel.com">Staubmstaub@kinsleysteel.com</a>	CLIENT RFI#
Company:	KINSLEY, INC	GC RFI#
		TRC RFI-ENG# 01
cc:		RESPONSE 08-09-2024 NEEDED BY

### SUBJECT: Member Load request

Please refer to the attached files for the Engineering questions.

Q1.1: Please provide the end reactions for the yellow highlighted composite beams.

Q1.2: As per Structural steel Note-2 of Dwg S001, for Non-Composite beams 1/2 UDL load capacity of beam should be considered per AISC manual if loads are not provided in the drawing. AISC specification indicates this as uneconomical and unsafe method. Please refer to the attached AISC literature pages. Please provide the shear loads for the green highlighted short span Non composite beams.

By:	<b>Ruben Flores</b>	Date:	<b>08-06-2024</b>
-----	---------------------	-------	-------------------

### Response:

CEI: See attached for requested reactions.  
-Ensure connection dimension and requirements shown on A/S304 are provided at all conditions.

Cesar Flores  
08/07/2024

By:		Date:	
-----	--	-------	--

PLEASE SEND RESPONSE TO: Ruben Flores

Phone: 325-320-0719

**THE RAMANNA COMPANIES**

**CONSULTING ENGINEERS**



provisions is that the fabricator is required to provide representative examples of connection design documentation early in the process, and the owner's designated representative for design is obliged to review these submittals for conformity with the requirements of the contract documents. These early submittals are required in an attempt to avoid additional costs and/or delays as the approval process proceeds through subsequent shop drawings with connections developed from the original representative samples.

Methods one and two have the advantage that the fabricator's standard connections normally can be used, which often leads to project economy. However, the loads or other

### Q1.2

As per Structural steel Note-2 of Dwg S001, for Non Composite beams 1/2 UDL load capacity of beam should be considered per AISC manual if loads are not provided in the drawing. AISC specification indicates this as uneconomical and unsafe method. Please refer to the attached AISC literature pages. Please provide the shear loads for the green highlighted short span Non composite beams.

Design loads must be indicated on design drawings submitted to the fabricator. Design loads must be indicated in the AISC shop drawings constituting confirmation that the fabricator has correctly interpreted the contract documents" and that the reviewer has "reviewed and approved the connection details shown in the approval documents." Following is additional guidance for the communication of connection criteria to the connection designer.

CEI: see following sheets for requested reactions. Some connections may be limited by geometry of beams (ie. minimum length of connections) regardless of actual reactions. refer to A/S304

## Simple Shear Connections

The full force envelope should be given for each simple shear connection. Because of the potential for overestimation and underestimation inherent in approximate methods (Thornton, 1995), actual beam end reactions should be indicated on the design drawings. The most effective method to communicate this information is to place a numeric value at each end of each span in the framing plans.

In the past, beam end reactions were sometimes specified as a percentage of the uniform load tabulated in Part 3. This practice can result in either over- or under-specification of connection reactions and should not be used. The inappropriateness of this practice is illustrated in the following examples.

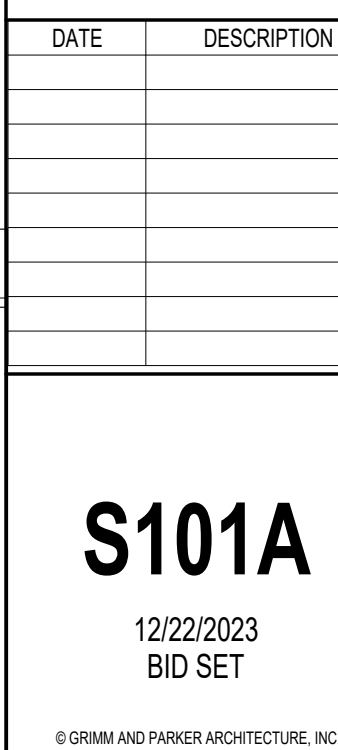
### Overestimation:

1. When beams are selected for serviceability considerations or for shape repetition, the uniform load tables will often result in heavier connections than would be required by the actual design loads.
2. When beams have relatively short spans, the uniform load tables will often result in heavier connections than would be required by the actual design loads. If not addressed with the accurate load, many times the heavier connections will require extension of the connection below the bottom flange of the supported member, requiring that the flange on one or both sides of the web to be cut and chipped, a costly process.

### Underestimation:

1. When beams support other framing beams or other concentrated loads occur on girders supporting beams, the end reactions can be higher than 50% of the total uniform load.
2. For composite beams, the end reactions can be higher than 50% of the total uniform load. The percentage requirement can be increased for this condition, but the resulting approach is still subject to the above considerations.





DATE	DESCRIPTION

# S101A

12/22/2023  
BID SET

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DATE	DESCRIPTION

# S101A

12/22/2023  
BID SET

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LEVEL 01 FLOOR AND LOW ROOF FRAMING PLAN AREA B

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

**Q1.2**  
As per Structural steel Note-2 of Dwg S001, for Non Composite beams 1/2 UDL load capacity of beam should be considered per AISC manual if loads are not provided in the drawing. AISC specification indicates this as uneconomical and unsafe method. Please refer to the attached AISC literature pages. Please provide the shear loads for the green highlighted short span Non composite beams.

**ELEVATED FLOOR FRAMING NOTES:**

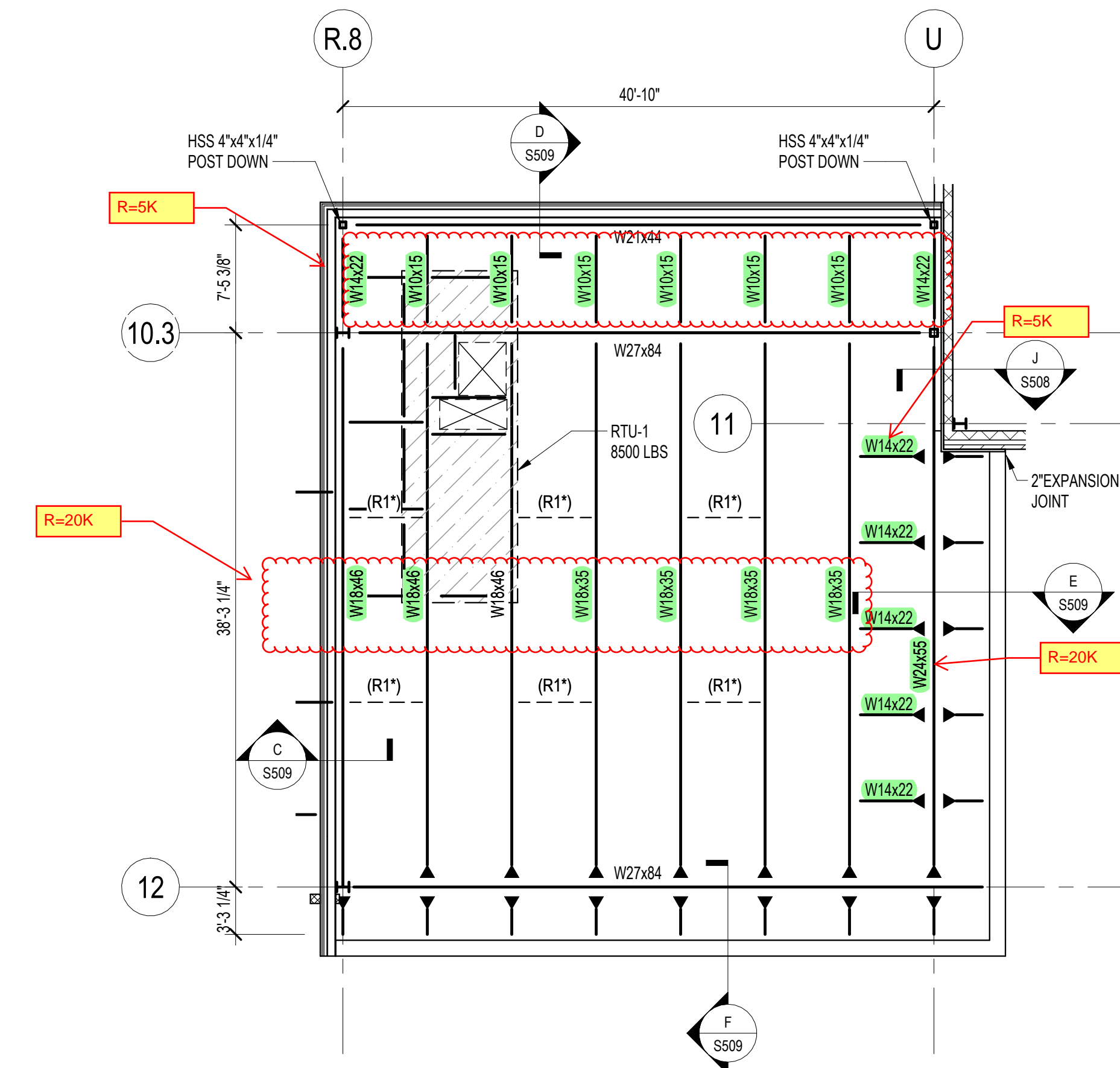
1. ELEVATED SLAB SHALL BE 3 1/4" THICK LIGHT WEIGHT CONCRETE ( $\rho_c=4000$ , 110 PCF) REINFORCED WITH 6"x6", W2.1 x W2.1 W/W/F OVER 2" DEEP, 20 GAGE GALVANIZED COMPOSITE METAL DECK (5 1/4" TOTAL), UNLESS NOTED OTHERWISE.
2. TOP OF ELEVATED FLOOR SHALL BE 14.67' ABOVE DATUM ELEVATION. TOP OF STEEL SHALL BE 5 1/4" BELOW TOP OF SLAB ELEVATION UNLESS NOTED OTHERWISE.
3. PROVIDE 2#5 BARS AT MID DEPTH OF SLAB AROUND OPENINGS 1'-0" x 1'-0" OR SMALLER. INSTALL C8X11 FRAME AROUND OPENINGS LARGER THAN 1'-0" x 1'-0". REFER TO TYPICAL FLOOR OPENINGS DETAIL.
4. (N) DENOTES NUMBER OF 3/4" HEADED STUDS WELDED TO THE BEAM TOP FLANGE. SPACE UNIFORMLY ALONG BEAM LENGTH UNLESS NOTED OTHERWISE.
5. C=... DENOTES REQUIRED BEAM CAMBER.

**ROOF FRAMING NOTES:**

1. ROOF DECK SHALL BE AS NOTED ON ROOF DECK PLAN ON S003.
2. TOP OF STEEL ELEVATION (BOTTOM OF DECK) NOTED ON PLAN THUS, (...) IS MEASURED FROM DATUM ELEVATION (0.00). BEAMS SUPPORTING K SERIES JOIST SHALL BE 3 1/2" BELOW TOP OF STEEL UNLESS NOTED OTHERWISE.
3. ALL K-SERIES JOIST SHALL HAVE 3 1/2" JOIST SEATS UNLESS NOTED OTHERWISE. ALL LH-SERIES JOIST SHALL HAVE 5" JOIST SEATS UNLESS NOTED OTHERWISE.
4. JOIST SHALL BE DESIGNED FOR A NET UPLIFT OF 15 PSF UNLESS NOTED OTHERWISE.
5. INSTALL ANGLE FRAME AROUND ALL ROOF OPENINGS WITH ONE SIDE LARGER THAN 1'-0". REFER TO TYPICAL ROOF OPENING DETAIL D/S003.
6. ROOFTOP MECHANICAL UNITS OVER ROOF DECK SHALL BE SUPPORTED BY 6"x6"x3/8" ANGLE FRAME (LLV) FOR ANGLE SPANS UP TO 6'-0". SUPPORT AT JOIST OR BEAM WITH 6"x6"x1/2"x8" LONG ANGLE SEAT UNLESS NOTED OTHERWISE.

**ROOF FRAMING KEYED NOTES:**

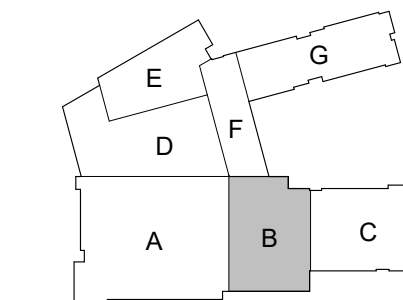
- (R1) DENOTES 3"x3"x1/4" ANGLE CROSS BRACING. ATTACH TO EACH BEAM WITH 5/16" CONNECTION PLATE. IF ADJACENT MEMBER IS OPEN-WEB STEEL JOIST, INSTALL SINGLE 3"x3"x1/4" ANGLE KICKER FROM BOTTOM OF BEAM TO TOP CHORD PANEL POINT.
- (R2) DENOTES PREFABRICATED CANOPY. CANOPY REQUIRES DELEGATED DESIGN. CONTRACTOR SHALL SUBMIT SIGNED AND SEALED SHOP DRAWINGS AND CALCULATIONS TO A/E FOR REVIEW AND APPROVAL. REFER TO ARCHITECTURAL DOCUMENTS FOR DETAILS.



HIGH ROOF FRAMING PARTIAL PLAN AREA B

NOT TO SCALE

**KEY PLAN**



Columbia Engineering Inc.  
Structural Engineers

620 Old Dobbin Lane  
Calverton, MD 20705  
Tel: 410.862.89  
Fax: 410.862.867

CEI No. 21-001 (Rev. 03/2021)  
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www.grimmandparker.com



GP #22105

LEVEL 01 FLOOR AND LOW ROOF FRAMING PLAN - AREA B  
NORTH EAST MIDDLE / HIGH SCHOOL  
300 IRISTOWN ROAD, NORTH EAST, MD

DATE	DESCRIPTION
04/01/2024	ADDENDUM 5

**S101B**  
12/22/2023  
BID SET

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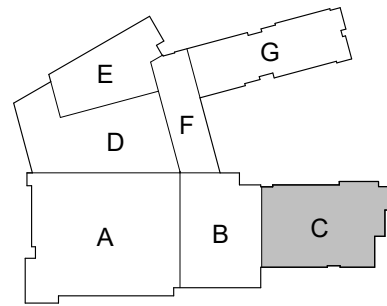


SCALE: 1/8" = 1'-0"

1. ELEVATED SLAB SHALL BE 3'14" THICK LIGHT WEIGHT CONCRETE (FC=4000, 100 PCP REINFORCED WITH 6"x6", W21 x W21 W/W OF 2" DEEP, 20 GAUGE GALVANIZED COMPOSITE METAL DECK (5'4" TOTAL), UNLESS NOTED OTHERWISE.
2. TOP OF ELEVATED FLOOR SLAB BE 14'6" ABOVE DATUM ELEVATION. TOP OF STEEL SHALL BE 5'14" BELOW TOP OF SLAB ELEVATION UNLESS NOTED OTHERWISE.
3. PROVIDE 2#5 BARS AT MID DEPTH OF SLAB AROUND OPENINGS 1'-0" x 1'-0" OR SMALLER. INSTALL C8X11 FRAME AROUND OPENINGS LARGER THAN 1'-0" x 1'-0". REFER TO TYPICAL FLOOR OPENINGS DETAIL.
4. [No] DENOTES NUMBER OF 3/4" HEADED STUDS WELDED TO THE BEAM TOP FLANGE. SPACE UNIFORMLY ALONG BEAM LE UNLESS NOTED OTHERWISE.
5. C= DENOTES REQUIRED BEAM CAMBER

(R1) DENOTES 3"x3"x1/4" ANGLE CROSS BRACING. ATTACH TO EACH BEAM WITH 5/16" CONNECTION PLATE. IF ADJACENT MEMBER IS OPEN-WEB STEEL JOIST, INSTALL SINGLE 3"x3"x1/4" ANGLE KICKER FROM BOTTOM OF BEAM TO TOP CHORD PANEL POINT.

(R2) DENOTES PREFABRICATED CANOPY. CANOPY REQUIRES DELEGATED DESIGN. CONTRACTOR SHALL SUBMIT SIGNED AND SEALED SHOP DRAWINGS AND CALCULATIONS TO A/E FOR REVIEW AND APPROVAL. REFER TO ARCHITECTURAL DOCUMENTS FOR DETAILS.



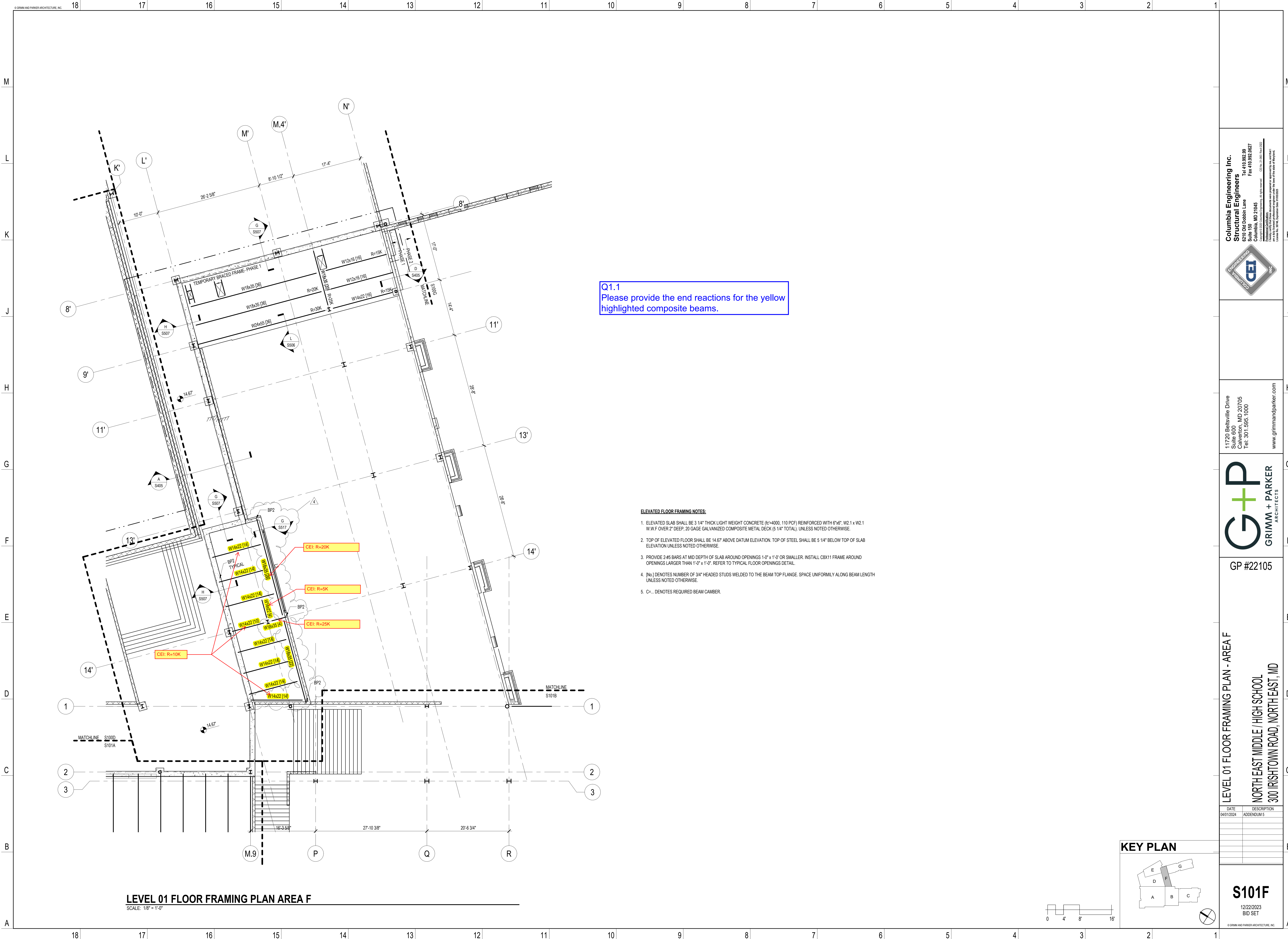
NORTH EAST MIDDLE / HIGH SCHOOL  
3300 IRISHTOWN ROAD NORTH EAST MD

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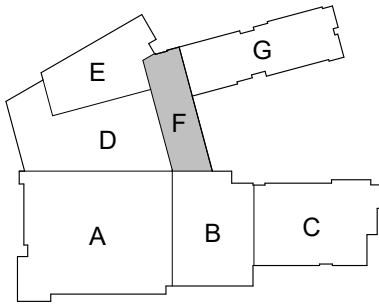




Q1.1  
Please provide the end reactions for the yellow highlighted composite beams.

- ELEVATED FLOOR FRAMING NOTES:**
- ELEVATED SLAB SHALL BE 3 1/4" THICK LIGHT WEIGHT CONCRETE (fc=4000, 110 PCF) REINFORCED WITH 6"x6", W2.1 x W2.1 W.W.F OVER 2" DEEP, 20 GAGE GALVANIZED COMPOSITE METAL DECK (5 1/4" TOTAL), UNLESS NOTED OTHERWISE.
  - TOP OF ELEVATED FLOOR SHALL BE 14.67' ABOVE DATUM ELEVATION. TOP OF STEEL SHALL BE 5 1/4" BELOW TOP OF SLAB ELEVATION UNLESS NOTED OTHERWISE.
  - PROVIDE 2-#5 BARS AT MID DEPTH OF SLAB AROUND OPENINGS 1'-0" x 1'-0" OR SMALLER. INSTALL C8X11 FRAME AROUND OPENINGS LARGER THAN 1'-0" x 1'-0". REFER TO TYPICAL FLOOR OPENINGS DETAIL.
  - [No.] DENOTES NUMBER OF 3/4" HEADED STUDS WELDED TO THE BEAM TOP FLANGE. SPACE UNIFORMLY ALONG BEAM LENGTH UNLESS NOTED OTHERWISE.
  - C=... DENOTES REQUIRED BEAM CAMBER.

KEY PLAN



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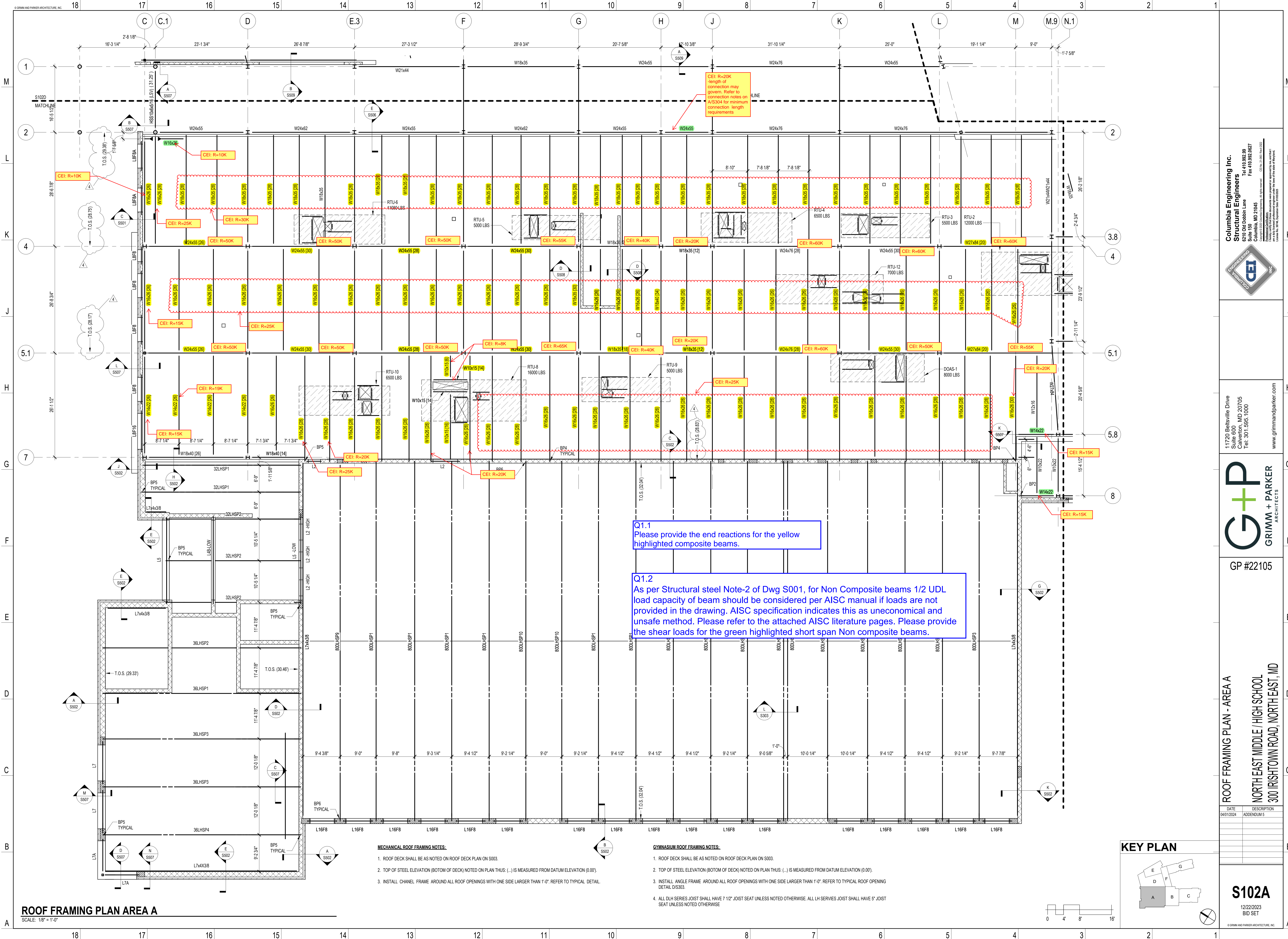
LEVEL 01 FLOOR FRAMING PLAN - AREA F  
NORTH EAST MIDDLE / HIGH SCHOOL  
300 IRISHTOWN ROAD, NORTH EAST, MD

DATE	DESCRIPTION
04/01/2024	ADDENDUM 5

**S101F**  
12/22/2023  
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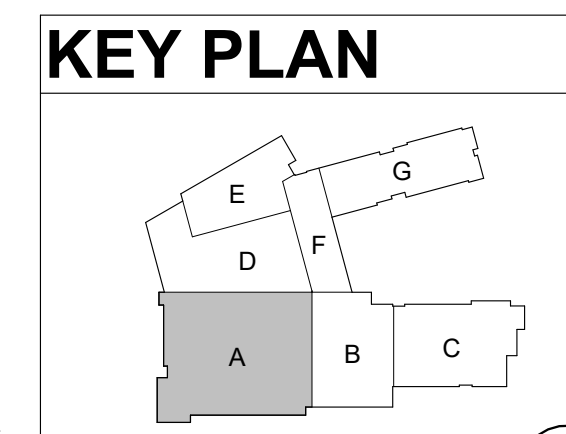


**MECHANICAL ROOF FRAMING NOTES:**

1. ROOF DECK SHALL BE AS NOTED ON ROOF DECK PLAN ON S003.
2. TOP OF STEEL ELEVATION (BOTTOM OF DECK) NOTED ON PLAN THUS: (...) IS MEASURED FROM DATUM ELEVATION (0.00').
3. INSTALL CHANNEL FRAME AROUND ALL ROOF OPENINGS WITH ONE SIDE LARGER THAN 1'-0". REFER TO TYPICAL DETAIL.

**GYMNASIUM ROOF FRAMING NOTES:**

1. ROOF DECK SHALL BE AS NOTED ON ROOF DECK PLAN ON S003.
2. TOP OF STEEL ELEVATION (BOTTOM OF DECK) NOTED ON PLAN THUS: (...) IS MEASURED FROM DATUM ELEVATION (0.00').
3. INSTALL ANGLE FRAME AROUND ALL ROOF OPENINGS WITH ONE SIDE LARGER THAN 1'-0". REFER TO TYPICAL ROOF OPENING DETAIL D/S03.
4. ALL DLH SERIES JOIST SHALL HAVE 7 1/2" JOIST SEAT UNLESS NOTED OTHERWISE. ALL LH SERVICES JOIST SHALL HAVE 5" JOIST SEAT UNLESS NOTED OTHERWISE.



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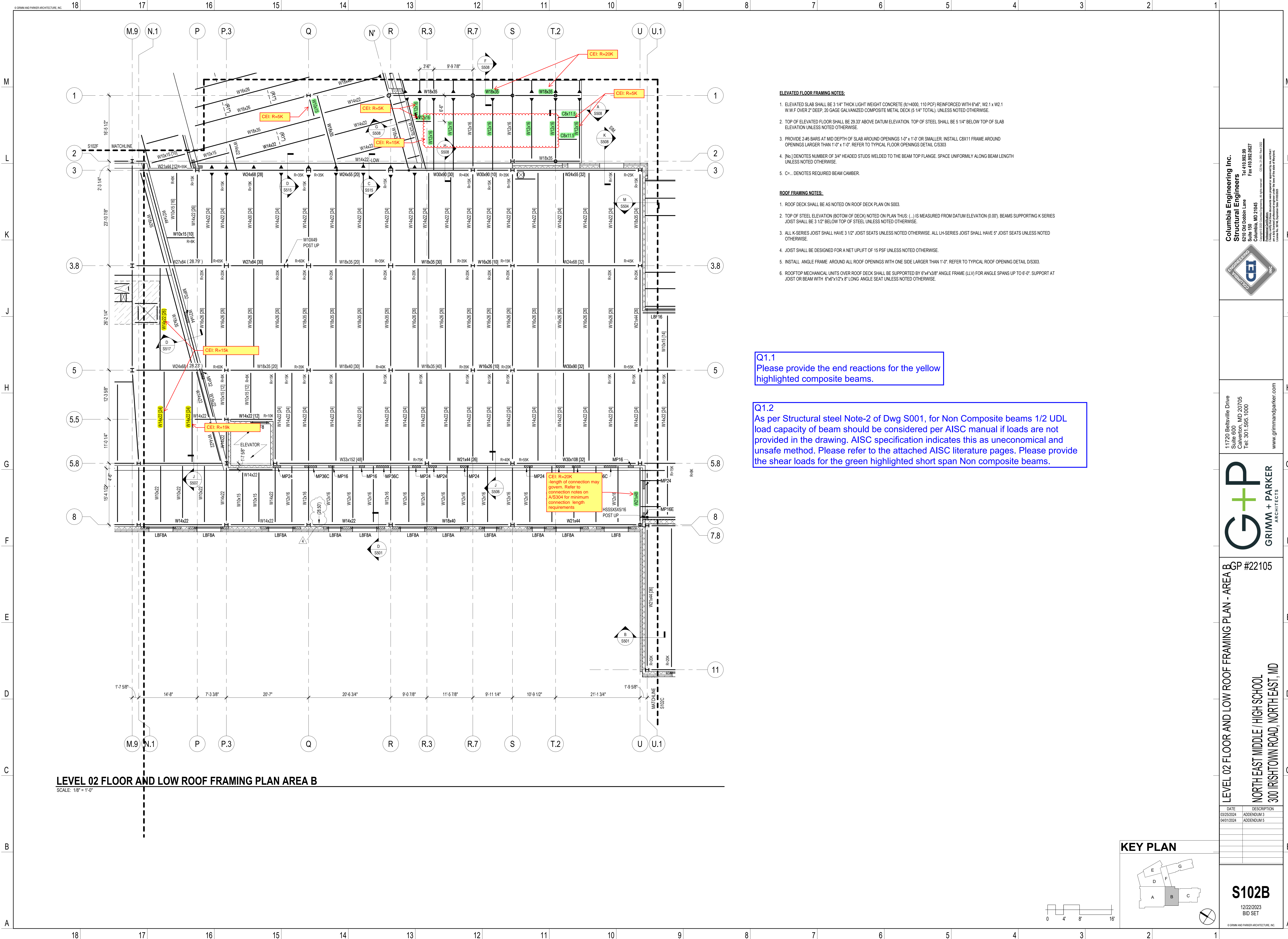
**ROOF FRAMING PLAN - AREA A**  
**NORTH EAST MIDDLE / HIGH SCHOOL**  
**300 IRISHTOWN ROAD, NORTH EAST, MD**

DATE	DESCRIPTION
04/01/2024	ADDENDUM 5

**S102A**  
12/22/2023  
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LEVEL 02 FLOOR AND LOW ROOF FRAMING PLAN AREA B

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

ELEVATED FLOOR FRAMING NOTES:

1. ELEVATED SLAB SHALL BE 3 1/4" THICK LIGHT WEIGHT CONCRETE (16"=4000, 110 PCF) REINFORCED WITH 6"x6", W2.1 x W2.1 W.W.F OVER 2" DEEP, 20 GAGE GALVANIZED COMPOSITE METAL DECK (5 1/4" TOTAL), UNLESS NOTED OTHERWISE.
2. TOP OF ELEVATED FLOOR SHALL BE 29.33' ABOVE DATUM ELEVATION. TOP OF STEEL SHALL BE 5 1/4" BELOW TOP OF SLAB ELEVATION UNLESS NOTED OTHERWISE.
3. PROVIDE 2-#5 BARS AT MID DEPTH OF SLAB AROUND OPENINGS 1'-0" x 1'-0" OR SMALLER. INSTALL C8X11 FRAME AROUND OPENINGS LARGER THAN 1'-0" x 1'-0". REFER TO TYPICAL FLOOR OPENINGS DETAIL C1S303
4. [N<sub>6</sub>] DENOTES NUMBER OF 3/4" HEADED STUDS WELDED TO THE BEAM TOP FLANGE. SPACE UNIFORMLY ALONG BEAM LENGTH UNLESS NOTED OTHERWISE.
5. C... DENOTES REQUIRED BEAM CAMBER.

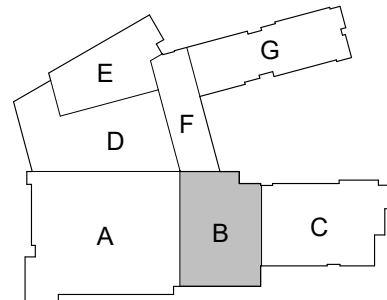
ROOF FRAMING NOTES:

1. ROOF DECK SHALL BE AS NOTED ON ROOF DECK PLAN ON S003.
2. TOP OF STEEL ELEVATION (BOTTOM OF DECK) NOTED ON PLAN THUS (L...) IS MEASURED FROM DATUM ELEVATION (0.00'). BEAMS SUPPORTING K SERIES JOIST SHALL BE 3 1/2" BELOW TOP OF STEEL UNLESS NOTED OTHERWISE.
3. ALL K-SERIES JOIST SHALL HAVE 3 1/2" JOIST SEATS UNLESS NOTED OTHERWISE. ALL LH-SERIES JOIST SHALL HAVE 5" JOIST SEATS UNLESS NOTED OTHERWISE.
4. JOIST SHALL BE DESIGNED FOR A NET UPLIFT OF 15 PSF UNLESS NOTED OTHERWISE.
5. INSTALL ANGLE FRAME AROUND ALL ROOF OPENINGS WITH ONE SIDE LARGER THAN 1'-0". REFER TO TYPICAL ROOF OPENING DETAIL D1S303.
6. ROOFTOP MECHANICAL UNITS OVER ROOF DECK SHALL BE SUPPORTED BY 6"x4"x3/8" ANGLE FRAME (LV) FOR ANGLE SPANS UP TO 6'-0". SUPPORT AT JOIST OR BEAM WITH 6"x6"x1/2"x8" LONG ANGLE SEAT UNLESS NOTED OTHERWISE.

Q1.1  
Please provide the end reactions for the yellow highlighted composite beams.

Q1.2  
As per Structural steel Note-2 of Dwg S001, for Non Composite beams 1/2 UDL load capacity of beam should be considered per AISC manual if loads are not provided in the drawing. AISC specification indicates this as uneconomical and unsafe method. Please refer to the attached AISC literature pages. Please provide the shear loads for the green highlighted short span Non composite beams.

KEY PLAN



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GP #22105

LEVEL 02 FLOOR AND LOW ROOF FRAMING PLAN - AREA B  
NORTH EAST MIDDLE / HIGH SCHOOL  
300 IRISHTOWN ROAD, NORTH EAST, MD

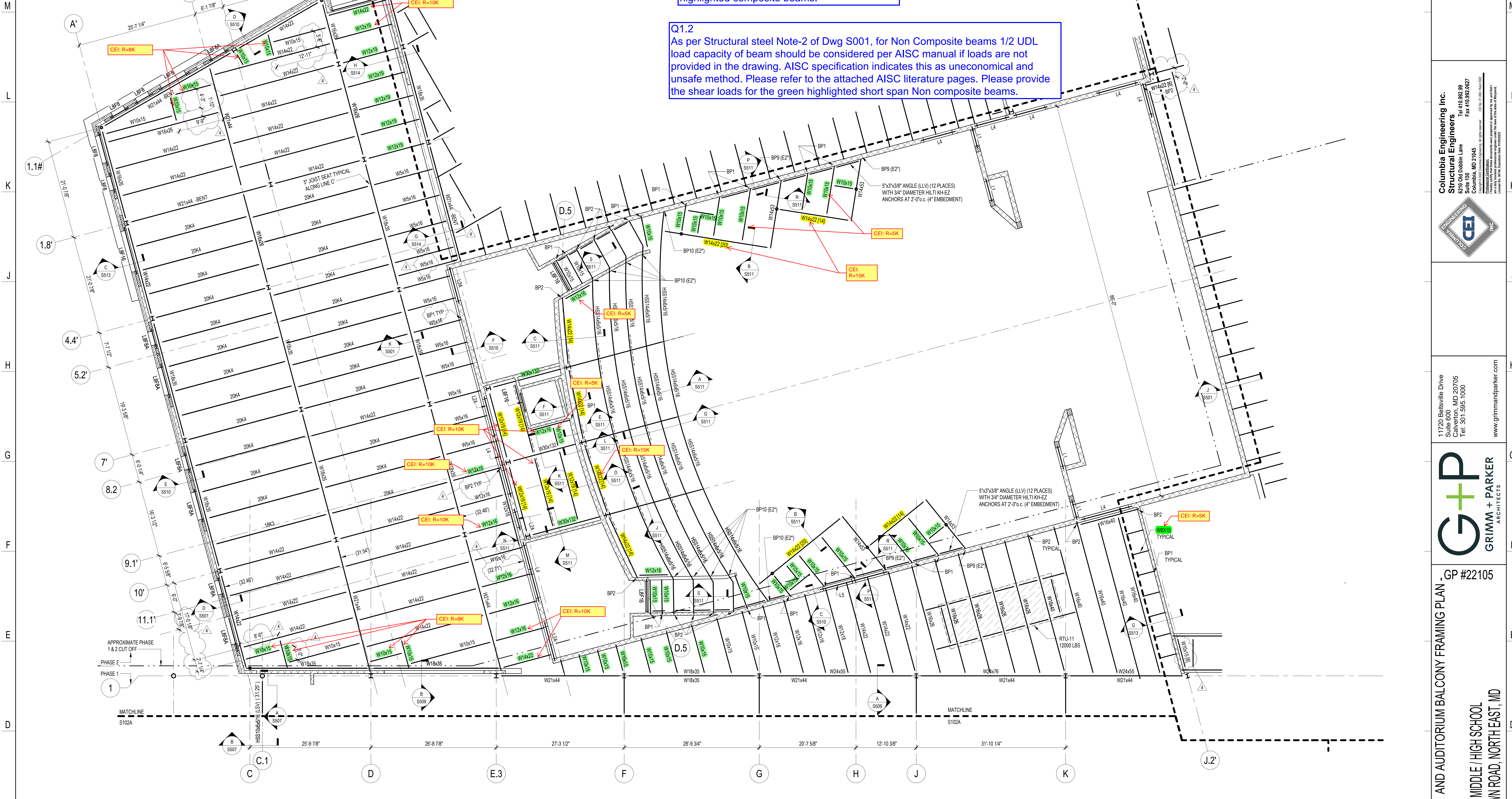
DATE	DESCRIPTION
03/25/2024	ADDENDUM 3
04/01/2024	ADDENDUM 5

S102B

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# ROOF FRAMING PLAN AREA E

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

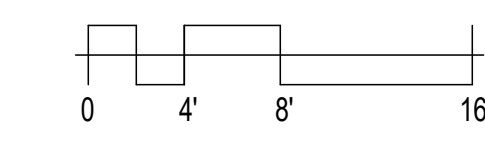
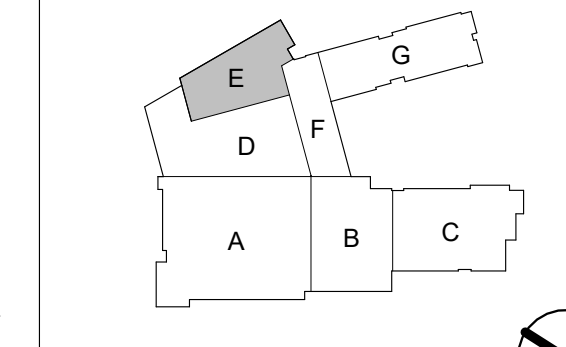
## ROOF FRAMING NOTES:

1. ROOF DECK SHALL BE AS NOTED ON ROOF DECK PLAN ON S003.
2. TOP OF STEEL ELEVATION (BOTTOM OF DECK) NOTED ON PLAN THUS: (...) IS MEASURED FROM DATUM ELEVATION (0.00'). BEAMS SUPPORTING K SERIES JOIST SHALL BE 3 1/2" BELOW TOP OF STEEL UNLESS NOTED OTHERWISE.
3. ALL K-SERIES JOIST SHALL HAVE 3 1/2" JOIST SEATS UNLESS NOTED OTHERWISE. ALL LH-SERIES JOIST SHALL HAVE 5" JOIST SEATS UNLESS NOTED OTHERWISE.
4. JOIST SHALL BE DESIGNED FOR A NET UPLIFT OF 15 PSF UNLESS NOTED OTHERWISE.
5. INSTALL ANGLE FRAME AROUND ALL ROOF OPENINGS WITH ONE SIDE LARGER THAN 1'-0". REFER TO TYPICAL ROOF OPENING DETAIL DS303.
6. ROOFTOP MECHANICAL UNITS OVER ROOF DECK SHALL BE SUPPORTED BY 6"x4"x3/8" ANGLE FRAME (LLV) FOR ANGLE SPANS UP TO 6'-0". SUPPORT AT JOIST OR BEAM WITH 6"x6"x1/2"x 8" LONG ANGLE SEAT UNLESS NOTED OTHERWISE.

## ROOF FRAMING KEYED NOTES:

- (R1") DENOTES 3"x3"x1/4" ANGLE CROSS BRACING. ATTACH TO EACH BEAM WITH 5/16" CONNECTION PLATE. IF ADJACENT MEMBER IS OPEN-WEB STEEL JOIST, INSTALL SINGLE 3"x3"x1/4" ANGLE KICKER FROM BOTTOM OF BEAM TO TOP CHORD PANEL POINT.
- (R2") DENOTES PREFABRICATED CANOPY. CANOPY REQUIRES DELEGATED DESIGN. CONTRACTOR SHALL SUBMIT SIGNED AND SEALED SHOP DRAWINGS AND CALCULATIONS TO A/E FOR REVIEW AND APPROVAL. REFER TO ARCHITECTURAL DOCUMENTS FOR DETAILS.

## KEY PLAN



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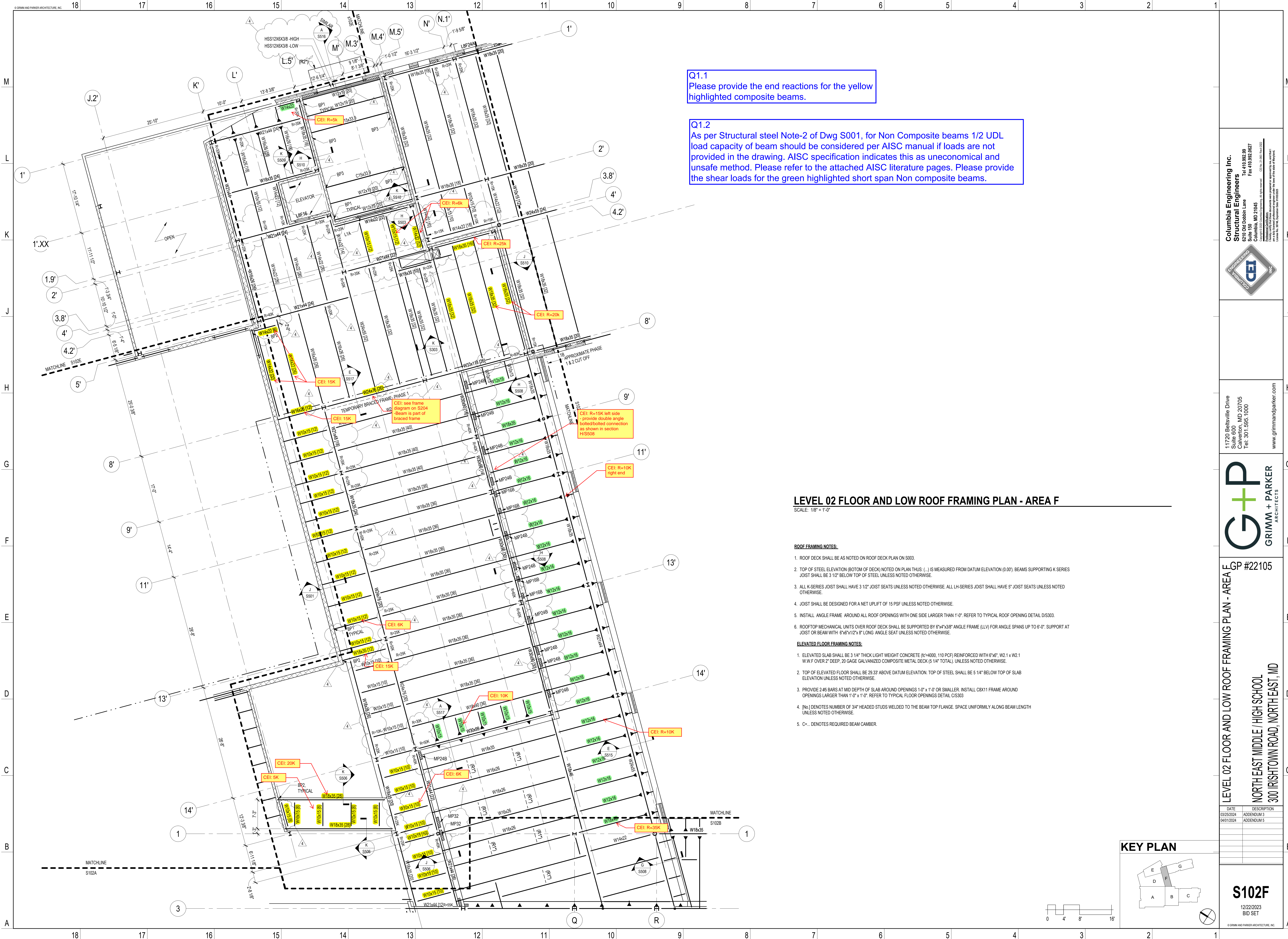
GP #22105

ROOF FRAMING PLAN - AREA E  
NORTH EAST MIDDLE / HIGH SCHOOL  
300 IRISHTOWN ROAD, NORTH EAST, MD

DATE	DESCRIPTION
04/01/2024	ADDENDUM 5

**S102E**  
12/22/2023  
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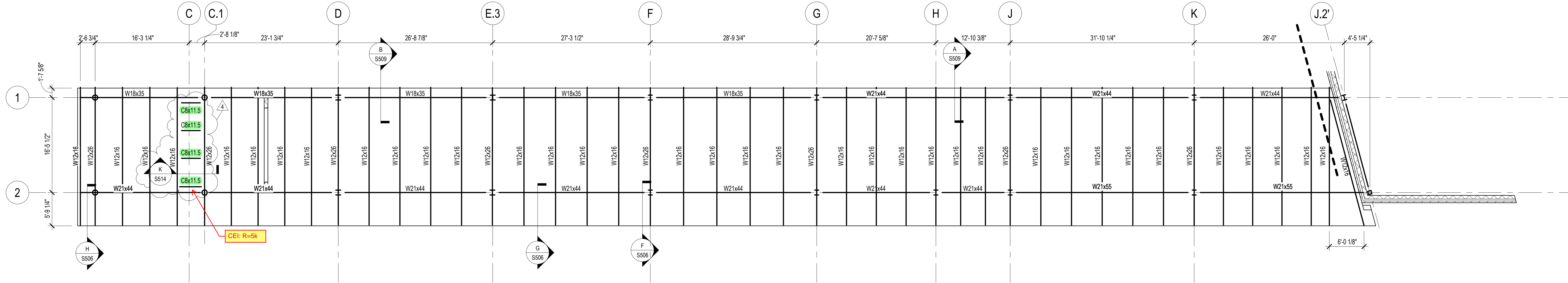




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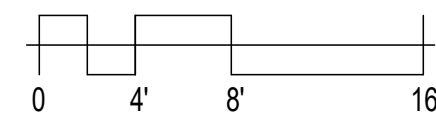
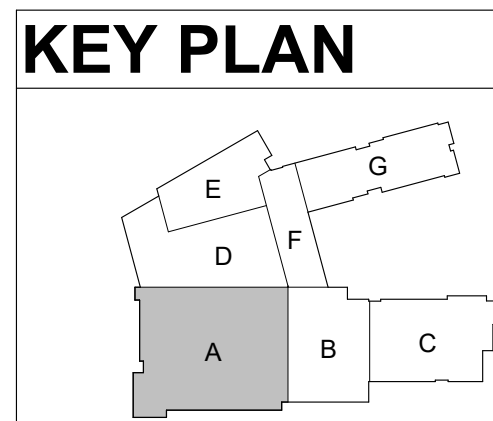


As per Structural steel Note-2 of Dwg S001, for Non Composite beams 1/2 UDL load capacity of beam should be considered per AISC manual if loads are not provided in the drawing. AISC specification indicates this as uneconomical and unsafe method. Please refer to the attached AISC literature pages. Please provide the shear loads for the green highlighted short span Non composite beams.



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

1. ROOF DECK SHALL BE AS NOTED ON ROOF DECK PLAN ON 3003.
2. TOP OF STEEL ELEVATION (BOTTOM OF DECK) NOTED ON PLAN THUS: (..) IS MEASURED FROM DATUM ELEVATION (0.00'). BEAMS SUPPORTING K SERIES JOIST SHALL BE 3 1/2" BELOW TOP OF STEEL UNLESS NOTED OTHERWISE.
3. ALL K-SERIES JOIST SHALL HAVE 3 1/2" JOIST SEATS UNLESS NOTED OTHERWISE. ALL LH-SERIES JOIST SHALL HAVE 5" JOIST SEATS UNLESS NOTED OTHERWISE.
4. JOIST SHALL BE DESIGNED FOR A NET UPLIFT OF 15 PSF UNLESS NOTED OTHERWISE.
5. INSTALL ANGLE FRAME AROUND ALL ROOF OPENINGS WITH ONE SIDE LARGER THAN 1'-0". REFER TO TYPICAL ROOF OPENING DETAIL DIS303.
6. ROOFTOP MECHANICAL UNITS OVER ROOF DECK SHALL BE SUPPORTED BY 6"x4"x3/8" ANGLE FRAME (LLV) FOR ANGLE SPANS UP TO 6'-0". SUPPORT AT JOIST OR BEAM WITH 6"x6"x1/2"x 8' LONG ANGLE SEAT UNLESS NOTED OTHERWISE.



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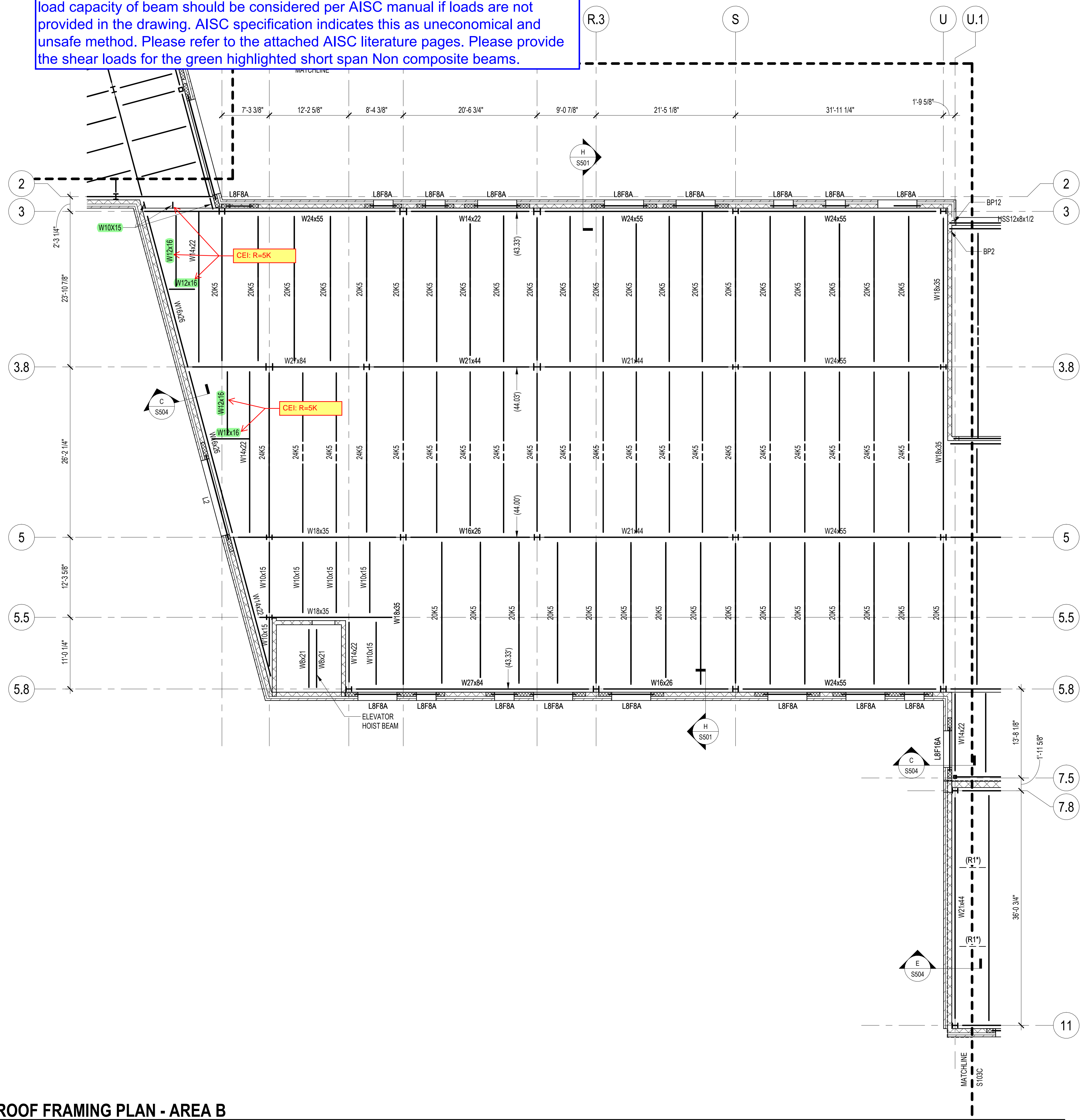
HIGH ROOF FRAMING PLAN- AREA A

DATE	DESCRIPTION
04/01/2024	ADDENDUM 5

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As per Structural steel Note-2 of Dwg S001, for Non Composite beams 1/2 UDL load capacity of beam should be considered per AISC manual if loads are not provided in the drawing. AISC specification indicates this as uneconomical and unsafe method. Please refer to the attached AISC literature pages. Please provide the shear loads for the green highlighted short span Non composite beams.

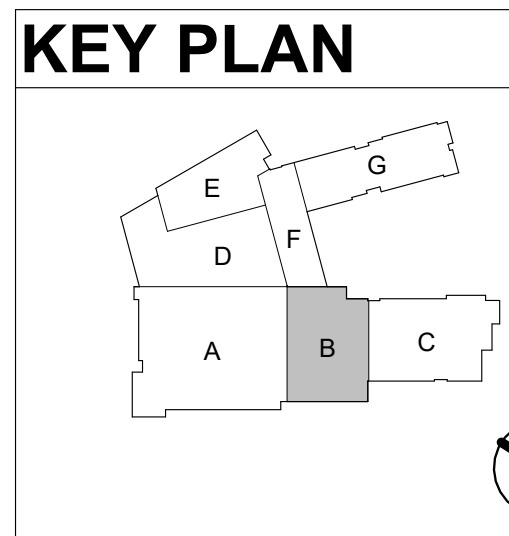


### ROOF FRAMING PLAN - AREA B

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

**ELEVATED FLOOR FRAMING NOTES:**

1. ELEVATED SLAB SHALL BE 3" THICK LIGHT WEIGHT CONCRETE (fc=4000, 110 PCF) REINFORCED WITH 6"x6", W2 x 12 I.W.F. OVER 2' DEEP, 20 GAUGE GALVANIZED COMPOSITE METAL DECK (5 1/4" TOTAL). UNLESS NOTED OTHERWISE.
2. TOP OF ELEVATED FLOOR SHALL BE 44" ABOVE DATUM ELEVATION. TOP OF STEEL SHALL BE 5 1/4" BELOW TOP OF SLAB ELEVATION UNLESS NOTED OTHERWISE.
3. PROVIDE 2#5 BARS AT MID DEPTH OF SLAB AROUND OPENINGS 1'-0" x 1'-0" OR SMALLER. INSTALL C8X11 FRAME AROUND OPENINGS LARGER THAN 1'-0" x 1'-0". REFER TO TYPICAL FLOOR OPENINGS DETAIL C3303
4. [N6] DENOTES NUMBER OF 3/4" THREADED STUDS WELDED TO THE BEAM TOP FLANGE. SPACE UNIFORMLY ALONG BEAM LENGTH UNLESS NOTED OTHERWISE.
5. C#... DENOTES REQUIRED BEAM CAMBER.



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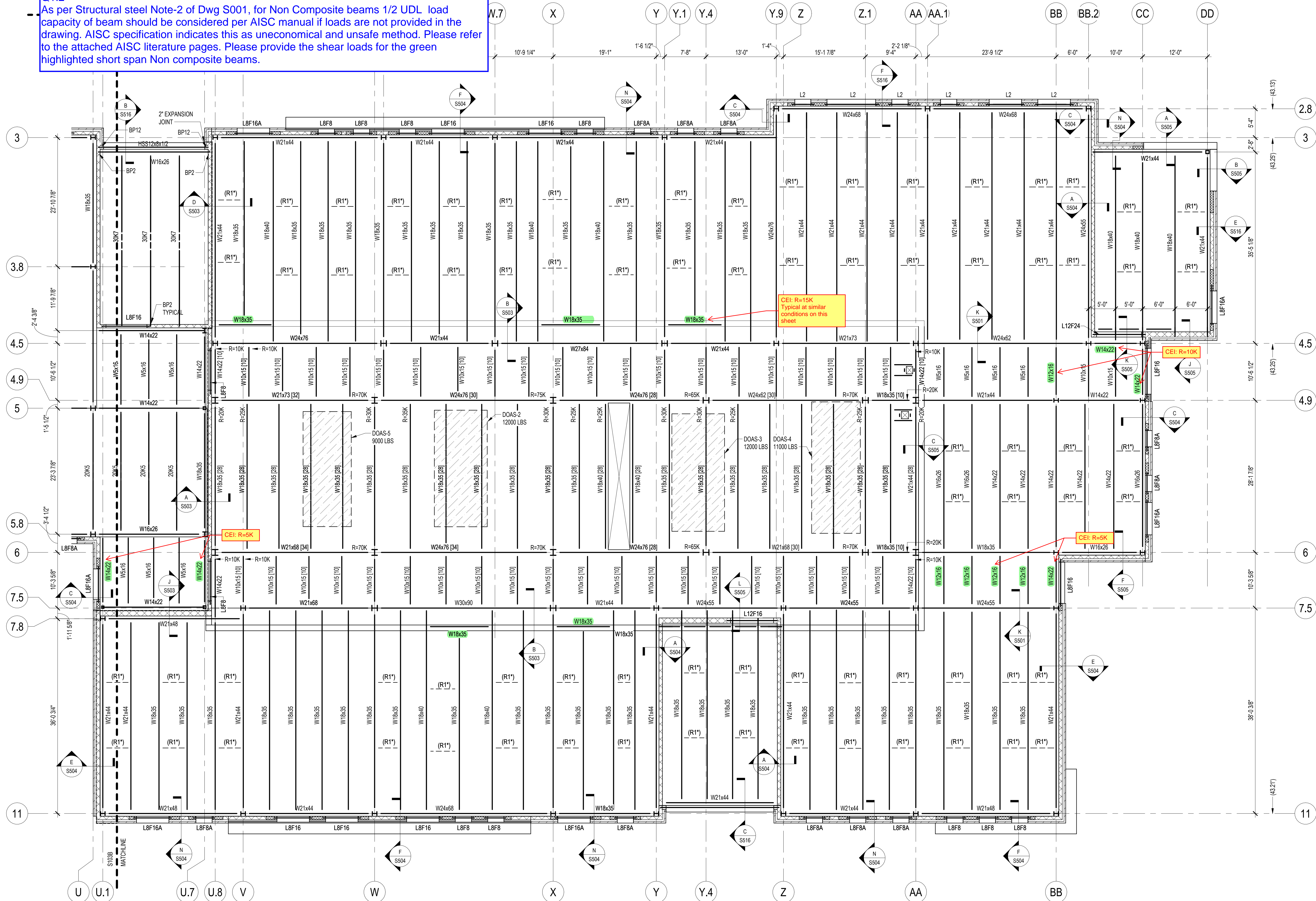
ROOF FRAMING PLAN - AREA B  
NORTH EAST MIDDLE / HIGH SCHOOL  
300 IRISHTOWN ROAD, NORTH EAST, MD

DATE	DESCRIPTION

**S103B**  
12/22/2023  
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Q1.2  
As per Structural steel Note-2 of Dwg S001, for Non Composite beams 1/2 UDL load capacity of beam should be considered per AISC manual if loads are not provided in the drawing. AISC specification indicates this as uneconomical and unsafe method. Please refer to the attached AISC literature pages. Please provide the shear loads for the green highlighted short span Non composite beams.



ROOF AND PENTHOUSE FLOOR FRAMING PLAN - AREA C

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

ROOF FRAMING NOTES:

1. ROOF DECK SHALL BE AS NOTED ON ROOF DECK PLAN ON S003.
2. TOP OF STEEL ELEVATION (BOTTOM OF DECK) NOTED ON PLAN THUS: (..) IS MEASURED FROM DATUM ELEVATION (0.00). BEAMS SUPPORTING K SERIES JOIST SHALL BE 3 1/2" BELOW TOP OF STEEL UNLESS NOTED OTHERWISE.
3. ALL K-SERIES JOIST SHALL HAVE 3 1/2" JOIST SEATS UNLESS NOTED OTHERWISE. ALL LH-SERIES JOIST SHALL HAVE 5" JOIST SEATS UNLESS NOTED OTHERWISE.
4. JOIST SHALL BE DESIGNED FOR A NET UPLIFT OF 15 PSF UNLESS NOTED OTHERWISE.
5. INSTALL ANGLE FRAME AROUND ALL ROOF OPENINGS WITH ONE SIDE LARGER THAN 1'-0". REFER TO TYPICAL ROOF OPENING DETAIL D/S303.
6. ROOFTOP MECHANICAL UNITS OVER ROOF DECK SHALL BE SUPPORTED BY 6"x4"x3/8" ANGLE FRAME (LLV) FOR ANGLE SPANS UP TO 6'-0". SUPPORT AT JOIST OR BEAM WITH 6"x6"x1/2"x 8" LONG ANGLE SEAT UNLESS NOTED OTHERWISE.

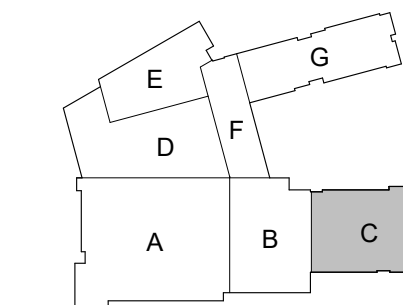
ROOF FRAMING KEYED NOTES:

- (R1') DENOTES 3"x3"x1/4" ANGLE CROSS BRACING. ATTACH TO EACH BEAM WITH 5/16" CONNECTION PLATE. IF ADJACENT MEMBER IS OPEN-WEB STEEL JOIST, INSTALL SINGLE 3"x3"x1/4" ANGLE KICKER FROM BOTTOM OF BEAM TO TOP CHORD PANEL POINT.
- (R2') DENOTES PREFABRICATED CANOPY. CANOPY REQUIRES DELEGATED DESIGN. CONTRACTOR SHALL SUBMIT SIGNED AND SEALED SHOP DRAWINGS AND CALCULATIONS TO A/E FOR REVIEW AND APPROVAL. REFER TO ARCHITECTURAL DOCUMENTS FOR DETAILS.

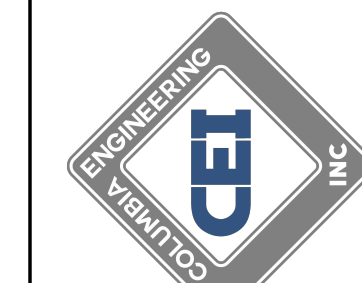
PENTHOUSE FLOOR FRAMING NOTES:

1. ELEVATED SLAB SHALL BE 4 1/2" THICK NORMAL WEIGHT CONCRETE (fc=4000, 145 PCF) REINFORCED WITH 6"x6" W2.1 x W2.1 W.W.F OVER 2" DEEP, 18 GAGE GALVANIZED COMPOSITE METAL DECK (6 1/2" TOTAL), UNLESS NOTED OTHERWISE.
2. TOP OF ELEVATED FLOOR SHALL BE 44.0' ABOVE DATUM ELEVATION. TOP OF STEEL SHALL BE 6 1/2" BELOW TOP OF SLAB ELEVATION UNLESS NOTED OTHERWISE.
3. PROVIDE 2#5 BARS AT MID DEPTH OF SLAB AROUND OPENINGS 1'-0" x 1'-0" OR SMALLER. INSTALL C8X11 FRAME AROUND OPENINGS LARGER THAN 1'-0" x 1'-0". REFER TO TYPICAL FLOOR OPENINGS DETAIL C/S303.
4. [No.] DENOTES NUMBER OF 3/4" HEADED STUDS WELDED TO THE BEAM TOP FLANGE. SPACE UNIFORMLY ALONG BEAM LENGTH UNLESS NOTED OTHERWISE.
5. C+.. DENOTES REQUIRED BEAM CAMBER.

KEY PLAN



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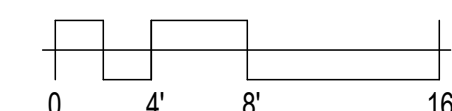
GP #22105

ROOF AND PENTHOUSE FLOOR FRAMING PLAN - AREA C  
NORTH EAST MIDDLE / HIGH SCHOOL  
300 IRISTOWN ROAD, NORTH EAST, MD

DATE	DESCRIPTION

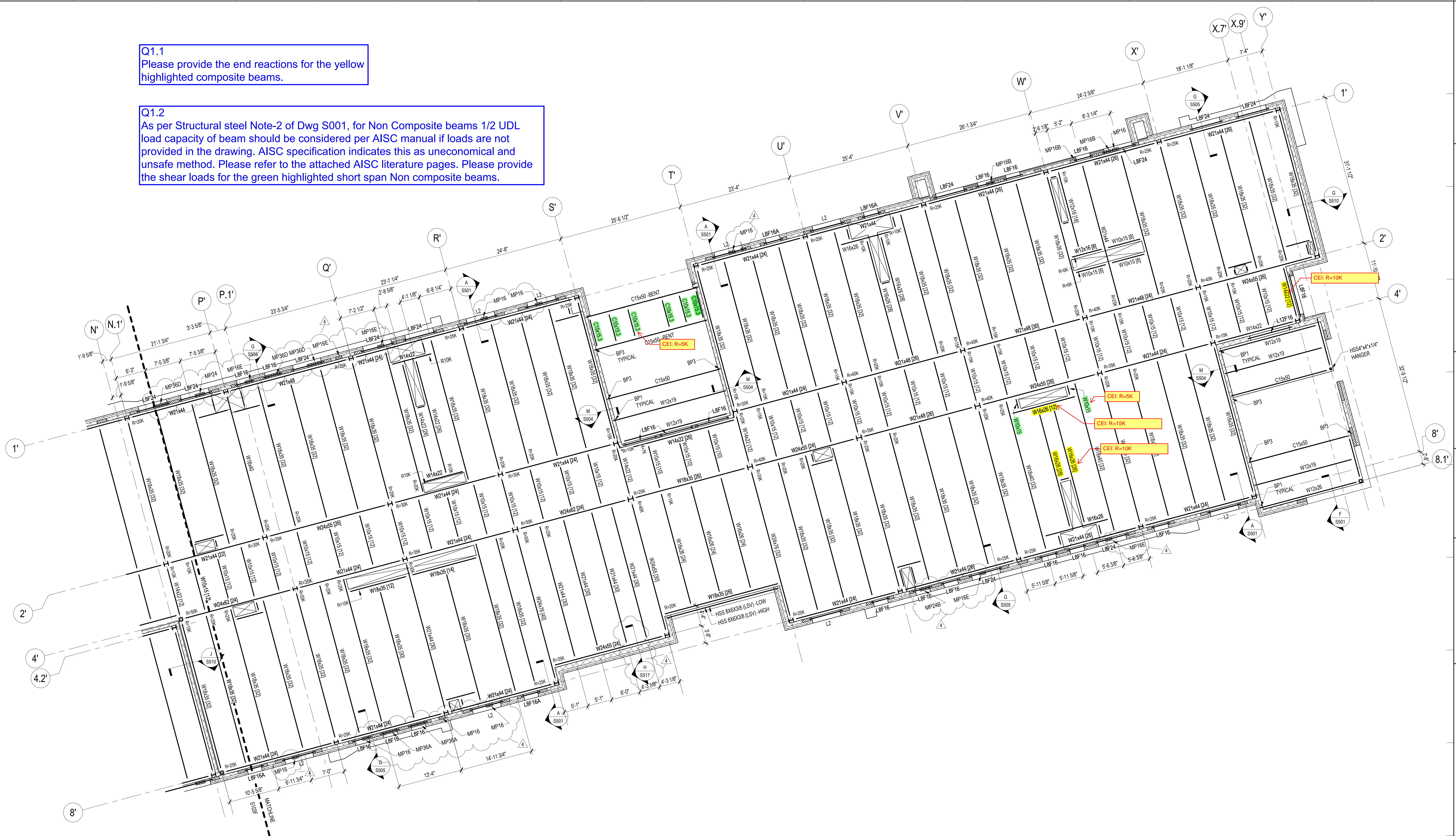
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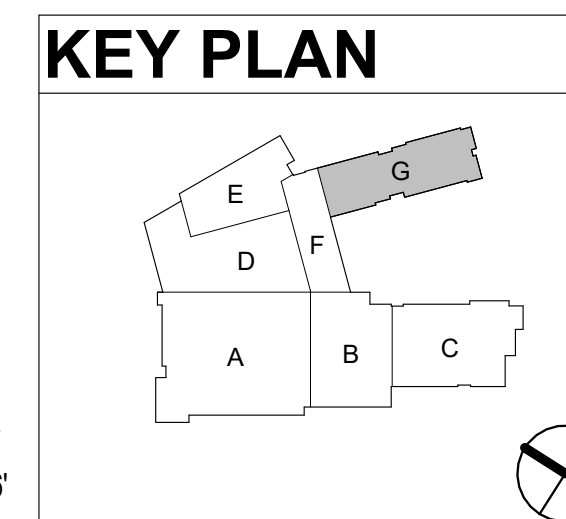


**Q1.2**  
As per Structural steel Note-2 of Dwg S001, for Non Composite beams 1/2 UDL load capacity of beam should be considered per AISC manual if loads are not provided in the drawing. AISC specification indicates this as uneconomical and unsafe method. Please refer to the attached AISC literature pages. Please provide the shear loads for the green highlighted short span Non composite beams.



**ELEVATED FLOOR FRAMING NOTES:**

1. ELEVATED SLAB SHALL BE 3 1/4" THICK LIGHT WEIGHT CONCRETE (f'c=4000, 110 PCF) REINFORCED WITH 6"x6", W2.1" x W2.1" W/F OVER 2" DEEP, 20 GAUGE GALVANIZED COMPOSITE METAL DECK (5 1/4" TOTAL), UNLESS NOTED OTHERWISE.
2. TOP OF ELEVATED FLOOR SHALL BE 44.00' ABOVE DATUM ELEVATION. TOP OF STEEL SHALL BE 5 1/4" BELOW TOP OF SLAB ELEVATION UNLESS NOTED OTHERWISE.
3. PROVIDE 2#5 BARS AT MID DEPTH OF SLAB ABOVE OPENINGS 1'-0" x 1'-0" OR SMALLER. INSTALL C8X11 FRAME AROUND OPENINGS LARGER THAN 1'-0" x 1'-0". REFER TO TYPICAL FLOOR OPENINGS DETAIL CS303
4. [No.] DENOTES NUMBER OF 3/4" HEADED STUDS WELDED TO THE BEAM TOP FLANGE. SPACE UNIFORMLY ALONG BEAM LENGTH UNLESS NOTED OTHERWISE.
5. C=... DENOTES REQUIRED BEAM CAMBER.







## ROOF FRAMING PARTIAL PLAN - AREA E

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

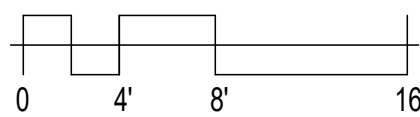
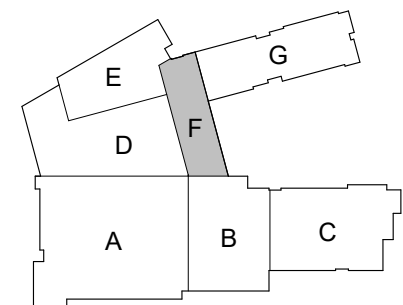
### ROOF FRAMING NOTES:

1. ROOF DECK SHALL BE AS NOTED ON ROOF DECK PLAN ON S003.
2. TOP OF STEEL ELEVATION (BOTTOM OF DECK) NOTED ON PLAN THUS: (..) IS MEASURED FROM DATUM ELEVATION (0.00). BEAMS SUPPORTING K SERIES JOIST SHALL BE 3 1/2" BELOW TOP OF STEEL UNLESS NOTED OTHERWISE.
3. ALL K-SERIES JOIST SHALL HAVE 3 1/2" JOIST SEATS UNLESS NOTED OTHERWISE. ALL LH-SERIES JOIST SHALL HAVE 5" JOIST SEATS UNLESS NOTED OTHERWISE.
4. JOIST SHALL BE DESIGNED FOR A NET UPLIFT OF 15 PSF UNLESS NOTED OTHERWISE.
5. INSTALL ANGLE FRAME AROUND ALL ROOF OPENINGS WITH ONE SIDE LARGER THAN 1'-0". REFER TO TYPICAL ROOF OPENING DETAIL D/S303.
6. ROOFTOP MECHANICAL UNITS OVER ROOF DECK SHALL BE SUPPORTED BY 6"x4"x3/8" ANGLE FRAME (LLV) FOR ANGLE SPANS UP TO 6'-0". SUPPORT AT JOIST OR BEAM WITH 6"x6"x1/2"x 8" LONG ANGLE SEAT UNLESS NOTED OTHERWISE.

### ROOF FRAMING KEYED NOTES:

- (R1) DENOTES 3"x3"x1/4" ANGLE CROSS BRACING. ATTACH TO EACH BEAM WITH 5/16" CONNECTION PLATE. IF ADJACENT MEMBER IS OPEN-WEB STEEL JOIST, INSTALL SINGLE 3"x3"x1/4" ANGLE KICKER FROM BOTTOM OF BEAM TO TOP CHORD PANEL POINT.
- (R2) DENOTES PREFABRICATED CANOPY. CANOPY REQUIRES DELEGATED DESIGN. CONTRACTOR SHALL SUBMIT SIGNED AND SEALED SHOP DRAWINGS AND CALCULATIONS TO A/E FOR REVIEW AND APPROVAL. REFER TO ARCHITECTURAL DOCUMENTS FOR DETAILS.

## KEY PLAN



Columbia Engineering Inc.  
Structural Engineers

6270 Old Dobbin Lane  
Columbia, MD 21045  
Tel: 410.862.89  
Fax: 410.862.867

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Suite 600  
Calverton, MD 20705  
Tel: 301.595.1000

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GP #22105

ROOF FRAMING PLAN - AREA F  
NORTH EAST MIDDLE / HIGH SCHOOL  
300 IRISTOWN ROAD, NORTH EAST, MD

DATE	DESCRIPTION
04/01/2024	ADDENDUM 5

**S104F**

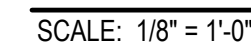
12/22/2023  
BID SET

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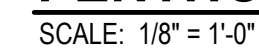


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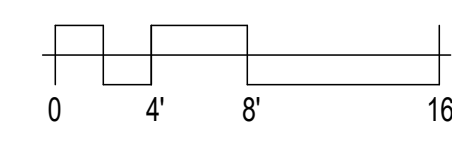
As per Structural steel Note-2 of Dwg S001, for Non Composite beams 1/2 UDL load capacity of beam should be considered per AISC manual if loads are not provided in the drawing. AISC specification indicates this as uneconomical and unsafe method. Please refer to the attached AISC literature pages. Please provide the shear loads for the green highlighted short span Non composite beams.



1. ROOF DECK SHALL BE AS NOTED ON ROOF DECK PLAN ON S003.
2. TOP OF STEEL ELEVATION (BOTTOM OF DECK) NOTED ON PLAN THUS: (..) IS MEASURED FROM DATUM ELEVATION (0.00'). BEAMS SUPPORTING K SERIES JOIST SHALL BE 3 1/2" BELOW TOP OF DECK UNLESS NOTED OTHERWISE.
3. ALL K-SERIES JOIST SHALL HAVE 3 1/2" JOIST SEATS UNLESS NOTED OTHERWISE. ALL LH-SERIES JOIST SHALL HAVE 5" JOIST SEATS UNLESS NOTED OTHERWISE.
4. JOIST SHALL BE DESIGNED FOR A NET UPLIFT OF 15 PSF UNLESS NOTED OTHERWISE.
5. INSTALL ANGLE FRAME AROUND ALL ROOF OPENINGS WITH ONE SIDE LARGER THAN 1'-0". REFER TO TYPICAL ROOF OPENING DETAIL D303.
6. ROOF/TO MECHANICAL UNITS OVER ROOF DECK SHALL BE SUPPORTED BY 6"x4"x3/8" ANGLE FRAME (LLV) FOR ANGLE SPANS UP TO 6'-0". SUPPORT AT JOIST OR BEAM WITH 5/8"x12"x8" LONG ANGLE SEAT UNLESS NOTED OTHERWISE.

(R1\*) DENOTES 3"x3"x1/4" ANGLE CROSS BRACING. ATTACH TO EACH BEAM WITH 5/16" CONNECTION PLATE. IF ADJACENT MEMBER IS OPEN-WEB STEEL JOIST, INSTALL SINGLE 3"x3"x1/4" ANGLE KICKER FROM BOTTOM OF BEAM TO TOP CHORD PANEL POINT.

(R2\*) DENOTES PREFABRICATED CANOPY. CANOPY REQUIRES DELEGATED DESIGN. CONTRACTOR SHALL SUBMIT SIGNED AND SEALED SHOP DRAWINGS AND CALCULATIONS TO A/E FOR REVIEW AND APPROVAL. REFER TO ARCHITECTURAL DOCUMENTS FOR DETAILS.



## RFI detail

## #014 Member Load Request



Status	<span style="color: orange;">■</span> <b>Open</b> In Review
Created on	Aug 6, 2024 by <b>Lucas Bradley</b> (Kinsley Steel Inc)
RFI type	Structural RFI REV
Ball in court	<b>Patrick Byrne</b> (Grimm and Parker) <b>Cesar Flores</b> (Columbia Engineering)
Due date	Aug 19, 2024

### Question

- (1) Please provide the end reactions for the yellow highlighted composite beams in the attached reference (RFI 001\_KSI - Member Load Request.pdf)
- (2) Structural steel Note 2 on S001 notes that for non-composite beams, the 1/2 UDL load capacity of the beam should be considered per AISC manual if loads are not provided in the drawing. AISC specification indicates this as uneconomical and unsafe method. Please refer to the attached AISC literature pages. Please provide the shear loads for the green highlighted short span Non composite beams shown in the attached.

### References and Attachments

#### Files (2)

- [RFI 001\\_KSI - Member Load Request- CEI.pdf](#)
- [RFI 001\\_KSI - Member Load Request.pdf](#)

### Impact

Cost impact	Unknown
Schedule impact	No

### Other attributes

Priority	Normal
----------	--------



<b>Discipline</b>	Structural
<b>Category</b>	Design Coordination
<b>Location</b>	Area A, Area B, Area C, Area F, Area D, Area E, Area G, Roof
<b>Location details</b>	See "References" section
<b>External id</b>	-
<b>Co-reviewer(s)</b>	
<b>Posted to Drawings/ Specifications</b>	YES
<b>Trade's RFI No.</b>	1

**G+P Response:**

See attached responses from CEI.

Patrick Byrne 8.8.2024



Activities	By	At
<b>Cesar Flores</b> added a response: Please see attached file for requested beam reactions.	<b>Cesar Flores</b>	Aug 7, 2024, 1:29 PM EDT
<b>Cesar Flores</b> added a reference to a file <b>RFI 001_KSI - Member Load Request- CEI.pdf</b>	<b>Cesar Flores</b>	Aug 7, 2024, 1:28 PM EDT
<b>Joshua Postadan</b> changed the status from  <b>Open</b> Waiting for Submission to  <b>Open</b> In Review changed the <b>due date</b> to Aug 18, 2024 set Ball in court to <b>Patrick Byrne</b> (Grimm and Parker), <b>Cesar Flores</b> (Columbia Engineering) changed the <b>ID</b> to 014	<b>Joshua Postadan</b>	Aug 6, 2024, 2:25 PM EDT
changed the <b>Posted to Drawings/Specifications</b> to YES	<b>Joshua Postadan</b>	Aug 6, 2024, 2:24 PM EDT
changed the <b>location details</b> to See "References" section	<b>Joshua Postadan</b>	Aug 6, 2024, 2:24 PM EDT
changed the <b>question</b> to (1) Please provide the end reactions for the yellow highlighted composite beams in the attached reference (RFI 001_KSI - Member Load Request.pdf) (2) Structural steel Note 2 on S001 notes that for non-composite beams, the 1/2 UDL load capacity of the beam should be considered per AISC manual if loads are not provided in the drawing. AISC specification indicates this as uneconomical and unsafe method. Please refer to the attached AISC literature pages. Please provide the shear loads for the green highlighted short span Non composite beams shown in the attached.	<b>Joshua Postadan</b>	Aug 6, 2024, 2:23 PM EDT
changed the <b>location details</b> to See	<b>Joshua Postadan</b>	Aug 6, 2024, 2:22 PM EDT
changed the <b>watchers</b> to <b>lbradley Bradley</b> (Kinsley Steel Inc), <b>Michael Staub</b> (Kinsley Steel Inc), <b>HESS PROJECT TEAM</b> , <b>Kinsley Steel Inc</b>	<b>Joshua Postadan</b>	Aug 6, 2024, 2:22 PM EDT
<b>Joshua Postadan</b> changed title to: <i>Member Load Request</i>	<b>Joshua Postadan</b>	Aug 6, 2024, 2:21 PM EDT
changed the <b>question</b> to (1) Please provide the end reactions for the yellow highlighted composite beams in the attached "TRC RFI 001" reference. (2) Structural steel Note 2 on S001 notes that for non-composite beams, the 1/2 UDL load capacity of the beam should be considered per AISC manual if loads are not provided in the drawing. AISC specification indicates this as uneconomical and unsafe method. Please refer to the attached AISC literature pages. Please provide the shear loads for the green highlighted short span Non composite beams shown in the attached.	<b>Joshua Postadan</b>	Aug 6, 2024, 2:20 PM EDT

changed the **question** to (1) Please provide the end reactions for the yellow highlighted composite beams in the attached "TRC RFI 001" reference. (2) As per Structural steel Note-2 of Dwg S001, for non-composite beams 1/2 UDL load capacity of beam should be considered per AISC manual if loads are not provided in the drawing. AISC specification indicates this as uneconomical and unsafe method. Please refer to the attached AISC literature pages. Please provide the shear loads for the green highlighted short span Non composite beams shown in the attached.

**Joshua  
Postadan**

Aug 6, 2024, 2:18 PM  
EDT

changed the **question** to (1) Please provide the end reactions for the yellow highlighted composite beams in the attached "TRC RFI 001" reference. (2) As per Structural steel Note-2 of Dwg S001, for Non-Composite beams 1/2 UDL load capacity of beam should be considered per AISC manual if loads are not provided in the drawing. AISC specification indicates this as uneconomical and unsafe method. Please refer to the attached AISC literature pages. Please provide the shear loads for the green highlighted short span Non composite beams shown in the attached.

**Joshua  
Postadan**

Aug 6, 2024, 2:18 PM  
EDT

changed the **question** to (1) Please provide the end reactions for the yellow highlighted composite beams in the attached "TRC RFI 001" reference. (2) As per Structural steel Note-2 of Dwg S001, for Non-Composite beams 1/2 UDL load capacity of beam should be considered per AISC manual if loads are not provided in the drawing. AISC specification indicates this as uneconomical and unsafe method. Please refer to the attached AISC literature pages. Please provide the shear loads for the green highlighted short span Non composite beams.

**Joshua  
Postadan**

Aug 6, 2024, 2:17 PM  
EDT

changed the **question** to 1. Please provide the end reactions for the yellow highlighted composite beams in the attached "TRC RFI 001" reference. 2. As per Structural steel Note-2 of Dwg S001, for Non-Composite beams 1/2 UDL load capacity of beam should be considered per AISC manual if loads are not provided in the drawing. AISC specification indicates this as uneconomical and unsafe method. Please refer to the attached AISC literature pages. Please provide the shear loads for the green highlighted short span Non composite beams.

**Joshua  
Postadan**

Aug 6, 2024, 2:16 PM  
EDT

changed the **question** to 1. Please provide the end reactions for the yellow highlighted composite beams in the attached "TRC RFI 001" reference. 2. As per Structural steel Note-2 of Dwg S001, for Non-Composite beams 1/2 UDL load capacity of beam should be considered per AISC manual if loads are not provided in the drawing. AISC specification indicates this as uneconomical and unsafe method. Please refer to the attached AISC literature pages. Please provide the shear loads for the green highlighted short span Non composite beams.

**Joshua  
Postadan**

Aug 6, 2024, 2:16 PM  
EDT

changed the **question** to 1. Please provide the end reactions for the yellow highlighted composite beams. 2. As per Structural steel Note-2 of Dwg S001, for Non-Composite beams 1/2 UDL load capacity of beam should be considered per AISC manual if loads are not provided in the drawing. AISC specification indicates this as uneconomical and unsafe method. Please refer to the attached AISC literature pages. Please provide the shear loads for the green highlighted short span Non composite beams. Please refer to attached TRC RFI 001 for attachments.


**Joshua Postadan**

Aug 6, 2024, 1:56 PM EDT

**Ibradley Bradley** added a reference to a file **RFI 001\_KSI - Member Load Request.pdf**

**Ibradley Bradley**

Aug 6, 2024, 10:29 AM EDT

**Ibradley Bradley** (Kinsley Steel Inc) created this RFI in  **Open** Waiting for Submission status and set Ball in court to **Joshua Postadan** (HESS Construction Co., LLC).

**Ibradley Bradley**

Aug 6, 2024, 10:29 AM EDT





## *Request for Information*

---

**Date:** 08/06/2024

**Request No:** KSI 001

**Project:** North East Middle & High School  
**KCI No.:** 242612

**To:** Hess Construction  
**Attn.:** Joshua Postadan  
**Email:** jpostadan@hessconstruction.com

**From:** Mike Staub  
**Phone:** 717-434-6248  
**Email:** [mstaub@kinsleysteel.com](mailto:mstaub@kinsleysteel.com)

---

### **RE: Member Load Request**

#### ***Request***

1. Please provide the end reactions for the yellow highlighted composite beams.
2. As per Structural steel Note-2 of Dwg S001, for Non-Composite beams 1/2 UDL load capacity of beam should be considered per AISC manual if loads are not provided in the drawing. AISC specification indicates this as uneconomical and unsafe method. Please refer to the attached AISC literature pages. Please provide the shear loads for the green highlighted short span Non composite beams.

Please refer to attached TRC RFI 001 for attachments.

---

***Date Response Requested: ASAP***

CEI: See attached for requested reactions.  
-Ensure connection dimension and requirements shown on A/S304 are provided at all conditions.

Cesar Flores  
08/07/2024



217 Ward Circle Brentwood, TN 37027, Phone: 615-661-7979 Fax: 615-661-0644

## REQUEST FOR INFORMATION NORTH EAST MIDDLE / HIGH SCHOOL

JOB #24-880

To:	<b>Michael E.</b> <a href="mailto:Staubmstaub@kinsleysteel.com">Staubmstaub@kinsleysteel.com</a>	CLIENT RFI#
Company:	KINSLEY, INC	GC RFI#
		TRC RFI-ENG# 01
cc:		RESPONSE 08-09-2024 NEEDED BY

### SUBJECT: Member Load request

Please refer to the attached files for the Engineering questions.

Q1.1: Please provide the end reactions for the yellow highlighted composite beams.

Q1.2: As per Structural steel Note-2 of Dwg S001, for Non-Composite beams 1/2 UDL load capacity of beam should be considered per AISC manual if loads are not provided in the drawing. AISC specification indicates this as uneconomical and unsafe method. Please refer to the attached AISC literature pages. Please provide the shear loads for the green highlighted short span Non composite beams.

By:	<b>Ruben Flores</b>	Date:	<b>08-06-2024</b>
-----	---------------------	-------	-------------------

### Response:

CEI: See attached for requested reactions.  
-Ensure connection dimension and requirements shown on A/S304 are provided at all conditions.

Cesar Flores  
08/07/2024

By:		Date:	
-----	--	-------	--

PLEASE SEND RESPONSE TO: Ruben Flores

Phone: 325-320-0719

**THE RAMANNA COMPANIES**

**CONSULTING ENGINEERS**

provisions is that the fabricator is required to provide representative examples of connection design documentation early in the process, and the owner's designated representative for design is obliged to review these submittals for conformity with the requirements of the contract documents. These early submittals are required in an attempt to avoid additional costs and/or delays as the approval process proceeds through subsequent shop drawings with connections developed from the original representative samples.

Methods one and two have the advantage that the fabricator's standard connections normally can be used, which often leads to project economy. However, the loads or other

### Q1.2

As per Structural steel Note-2 of Dwg S001, for Non Composite beams 1/2 UDL load capacity of beam should be considered per AISC manual if loads are not provided in the drawing. AISC specification indicates this as uneconomical and unsafe method. Please refer to the attached AISC literature pages. Please provide the shear loads for the green highlighted short span Non composite beams.

Design loads must be indicated on design drawings submitted to the fabricator. The AISC specification requires that the fabricator's standard connections be used in drawings constituting confirmation that the fabricator has correctly interpreted the contract documents" and that the reviewer has "reviewed and approved the connection details shown in the approval documents." Following is additional guidance for the communication of connection criteria to the connection designer.

CEI: see following sheets for requested reactions. Some connections may be limited by geometry of beams (ie. minimum length of connections) regardless of actual reactions. refer to A/S304

## Simple Shear Connections

The full force envelope should be given for each simple shear connection. Because of the potential for overestimation and underestimation inherent in approximate methods (Thornton, 1995), actual beam end reactions should be indicated on the design drawings. The most effective method to communicate this information is to place a numeric value at each end of each span in the framing plans.

In the past, beam end reactions were sometimes specified as a percentage of the uniform load tabulated in Part 3. This practice can result in either over- or under-specification of connection reactions and should not be used. The inappropriateness of this practice is illustrated in the following examples.

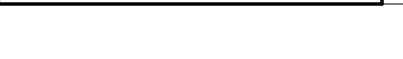
### Overestimation:

1. When beams are selected for serviceability considerations or for shape repetition, the uniform load tables will often result in heavier connections than would be required by the actual design loads.
2. When beams have relatively short spans, the uniform load tables will often result in heavier connections than would be required by the actual design loads. If not addressed with the accurate load, many times the heavier connections will require extension of the connection below the bottom flange of the supported member, requiring that the flange on one or both sides of the web to be cut and chipped, a costly process.

### Underestimation:

1. When beams support other framing beams or other concentrated loads occur on girders supporting beams, the end reactions can be higher than 50% of the total uniform load.
2. For composite beams, the end reactions can be higher than 50% of the total uniform load. The percentage requirement can be increased for this condition, but the resulting approach is still subject to the above considerations.

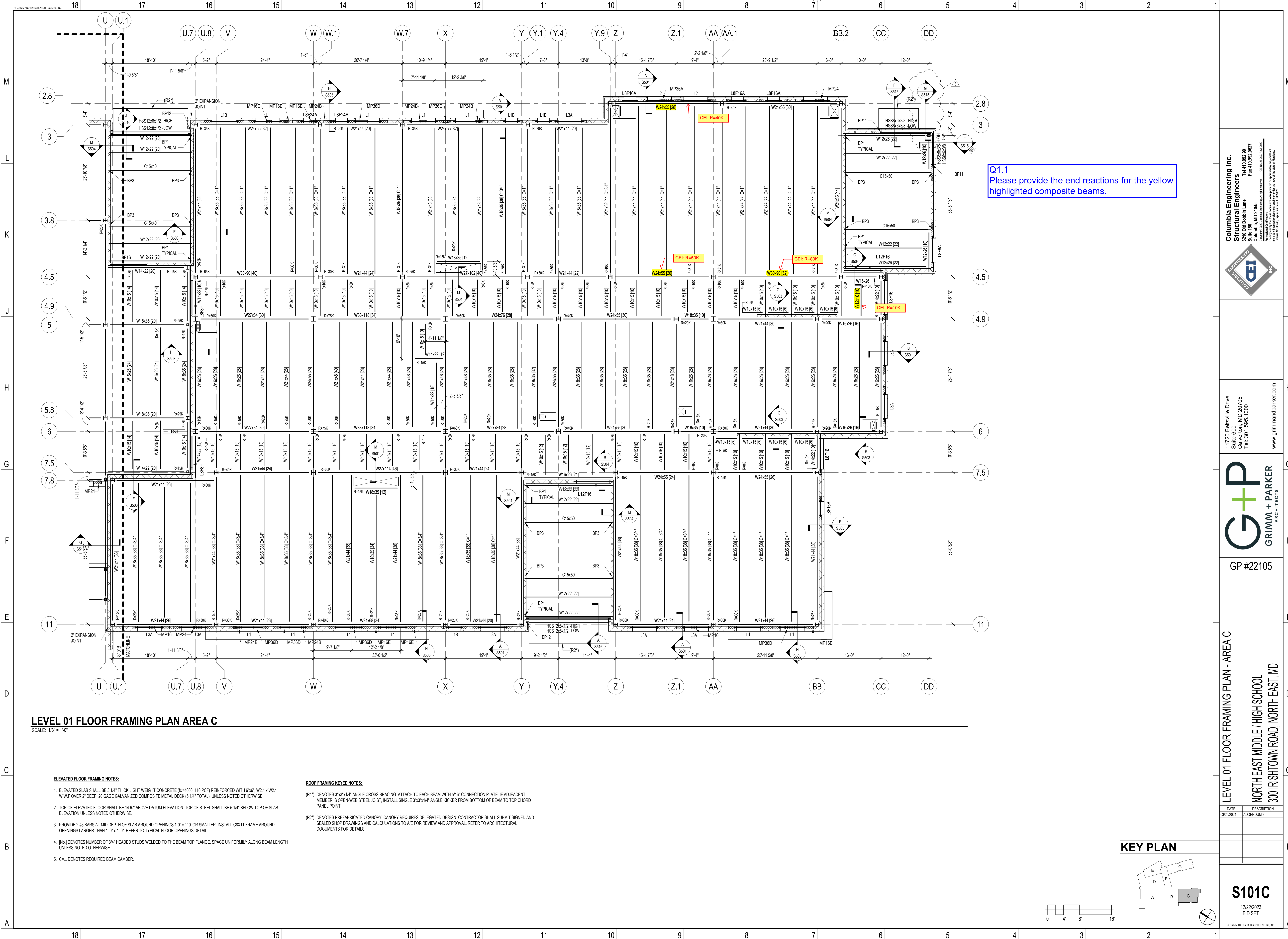












LEVEL 01 FLOOR FRAMING PLAN AREA C

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

ELEVATED FLOOR FRAMING NOTES:

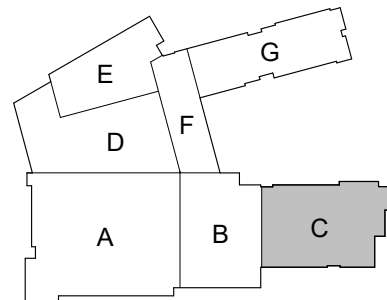
- 1. ELEVATED SLAB SHALL BE 3 1/4" THICK LIGHT WEIGHT CONCRETE (FC=4000, 110 POF) REINFORCED WITH 6"x6", W2.1 x W2.1 W.W.F OVER 2" DEEP, 20 GAUGE GALVANIZED COMPOSITE METAL DECK (S 1/4" TOTAL), UNLESS NOTED OTHERWISE.
- 2. TOP OF ELEVATED FLOOR SHALL BE 14.67' ABOVE DATUM ELEVATION. TOP OF STEEL SHALL BE 5 1/4" BELOW TOP OF SLAB ELEVATION UNLESS NOTED OTHERWISE.
- 3. PROVIDE 2-#5 BARS AT MID DEPTH OF SLAB AROUND OPENINGS 1'-0" x 1'-0" OR SMALLER. INSTALL C8X11 FRAME AROUND OPENINGS LARGER THAN 1'-0" x 1'-0". REFER TO TYPICAL FLOOR OPENINGS DETAIL.
- 4. [n6] DENOTES NUMBER OF 3/4" HEADED STUDS WELDED TO THE BEAM TOP FLANGE. SPACE UNIFORMLY ALONG BEAM LENGTH UNLESS NOTED OTHERWISE.
- 5. C=... DENOTES REQUIRED BEAM CAMBER.

ROOF FRAMING KEYED NOTES:

- (R11) DENOTES 3"x3"x1/4" ANGLE CROSS BRACING. ATTACH TO EACH BEAM WITH 5/16" CONNECTION PLATE. IF ADJACENT MEMBER IS OPEN WEB STEEL JOIST, INSTALL SINGLE 3"x3"x1/4" ANGLE KICKER FROM BOTTOM OF BEAM TO TOP CHORD PANEL POINT.
- (R27) DENOTES PREFABRICATED CANOPY. CANOPY REQUIRES DELEGATED DESIGN. CONTRACTOR SHALL SUBMIT SIGNED AND SEALED SHOP DRAWINGS AND CALCULATIONS TO A/E FOR REVIEW AND APPROVAL. REFER TO ARCHITECTURAL DOCUMENTS FOR DETAILS.

Q1.1  
Please provide the end reactions for the yellow highlighted composite beams.

KEY PLAN



Columbia Engineering Inc.



11720 Beltsville Drive  
Suite 600  
Calverton, MD 20705  
Tel: 301.595.1000



GP #22105

LEVEL 01 FLOOR FRAMING PLAN - AREA C

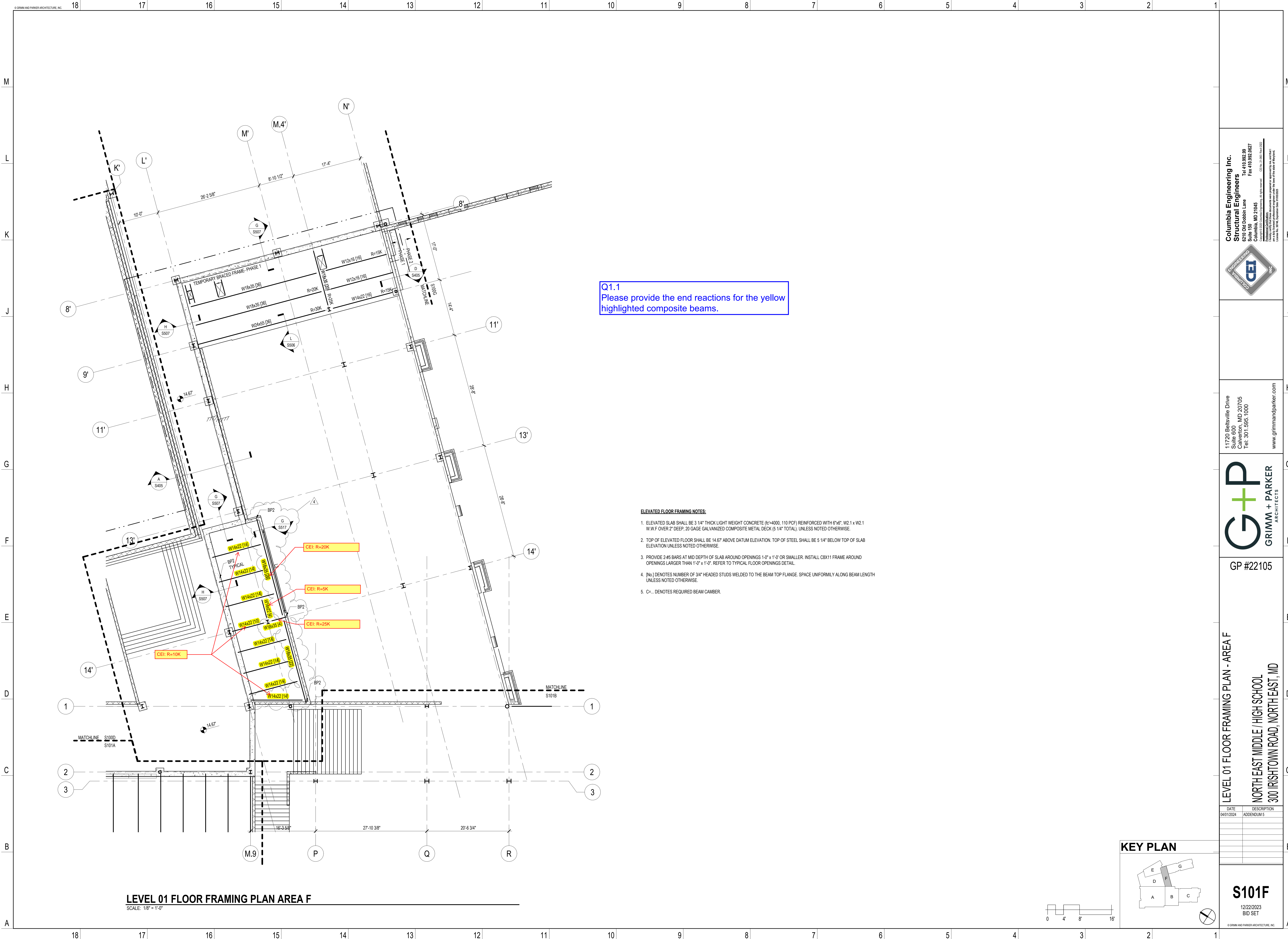
NORTH EAST MIDDLE / HIGH SCHOOL  
300 IRISHTOWN ROAD, NORTH EAST, MD

DATE	DESCRIPTION
03/25/2024	ADDENDUM 3

S101C  
12/22/2023  
BID SET

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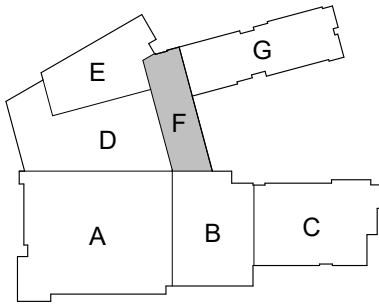




Q1.1  
Please provide the end reactions for the yellow highlighted composite beams.

- ELEVATED FLOOR FRAMING NOTES:**
- ELEVATED SLAB SHALL BE 3 1/4" THICK LIGHT WEIGHT CONCRETE (fc=4000, 110 PCF) REINFORCED WITH 6"x6", W2.1 x W2.1 W.W.F OVER 2" DEEP, 20 GAGE GALVANIZED COMPOSITE METAL DECK (5 1/4" TOTAL), UNLESS NOTED OTHERWISE.
  - TOP OF ELEVATED FLOOR SHALL BE 14.67' ABOVE DATUM ELEVATION. TOP OF STEEL SHALL BE 5 1/4" BELOW TOP OF SLAB ELEVATION UNLESS NOTED OTHERWISE.
  - PROVIDE 2-#5 BARS AT MID DEPTH OF SLAB AROUND OPENINGS 1'-0" x 1'-0" OR SMALLER. INSTALL C8X11 FRAME AROUND OPENINGS LARGER THAN 1'-0" x 1'-0". REFER TO TYPICAL FLOOR OPENINGS DETAIL.
  - [No.] DENOTES NUMBER OF 3/4" HEADED STUDS WELDED TO THE BEAM TOP FLANGE. SPACE UNIFORMLY ALONG BEAM LENGTH UNLESS NOTED OTHERWISE.
  - C=... DENOTES REQUIRED BEAM CAMBER.

KEY PLAN



**Columbia Engineering Inc.**  
**Structural Engineers**  
6210 Old Dobbin Lane  
Columbia, MD 21045  
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Fax: 410.862.867  
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Tel: 301.595.1000  
www.grimmandparker.com



GP #22105

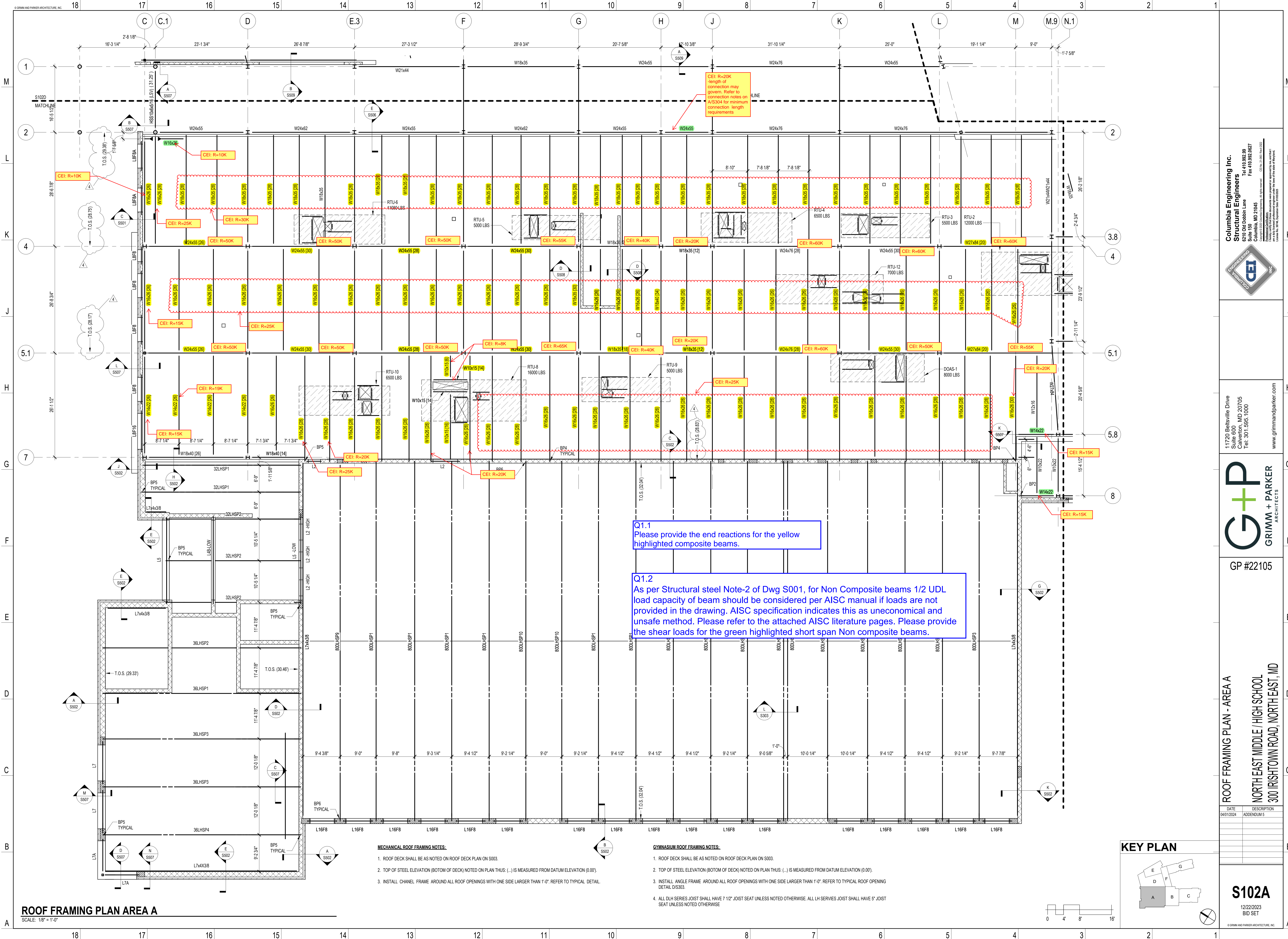
LEVEL 01 FLOOR FRAMING PLAN - AREA F  
NORTH EAST MIDDLE / HIGH SCHOOL  
300 IRISHTOWN ROAD, NORTH EAST, MD

DATE	DESCRIPTION
04/01/2024	ADDENDUM 5

**S101F**  
12/22/2023  
BID SET

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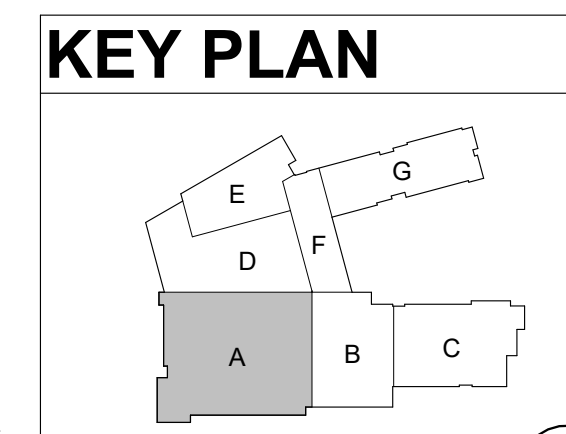


**MECHANICAL ROOF FRAMING NOTES:**

1. ROOF DECK SHALL BE AS NOTED ON ROOF DECK PLAN ON S003.
2. TOP OF STEEL ELEVATION (BOTTOM OF DECK) NOTED ON PLAN THUS: (...) IS MEASURED FROM DATUM ELEVATION (0.00').
3. INSTALL CHANNEL FRAME AROUND ALL ROOF OPENINGS WITH ONE SIDE LARGER THAN 1'-0". REFER TO TYPICAL DETAIL.

**GYMNASIUM ROOF FRAMING NOTES:**

1. ROOF DECK SHALL BE AS NOTED ON ROOF DECK PLAN ON S003.
2. TOP OF STEEL ELEVATION (BOTTOM OF DECK) NOTED ON PLAN THUS: (...) IS MEASURED FROM DATUM ELEVATION (0.00').
3. INSTALL ANGLE FRAME AROUND ALL ROOF OPENINGS WITH ONE SIDE LARGER THAN 1'-0". REFER TO TYPICAL ROOF OPENING DETAIL D/S03.
4. ALL DLH SERIES JOIST SHALL HAVE 7 1/2" JOIST SEAT UNLESS NOTED OTHERWISE. ALL LH SERVICES JOIST SHALL HAVE 5" JOIST SEAT UNLESS NOTED OTHERWISE.



**Columbia Engineering Inc.**  
Structural Engineers  
620 Old Dobson Lane  
Columbia, MD 21045  
Tel: 410.852.29  
Fax: 410.852.627  
CEI No. 21-001 (Jan 2021)  
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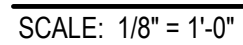
ROOF FRAMING PLAN - AREA A  
NORTH EAST MIDDLE / HIGH SCHOOL  
300 IRISHTOWN ROAD, NORTH EAST, MD

DATE	DESCRIPTION
04/01/2024	ADDENDUM 5

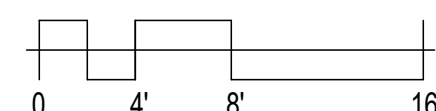
**S102A**  
12/22/2023  
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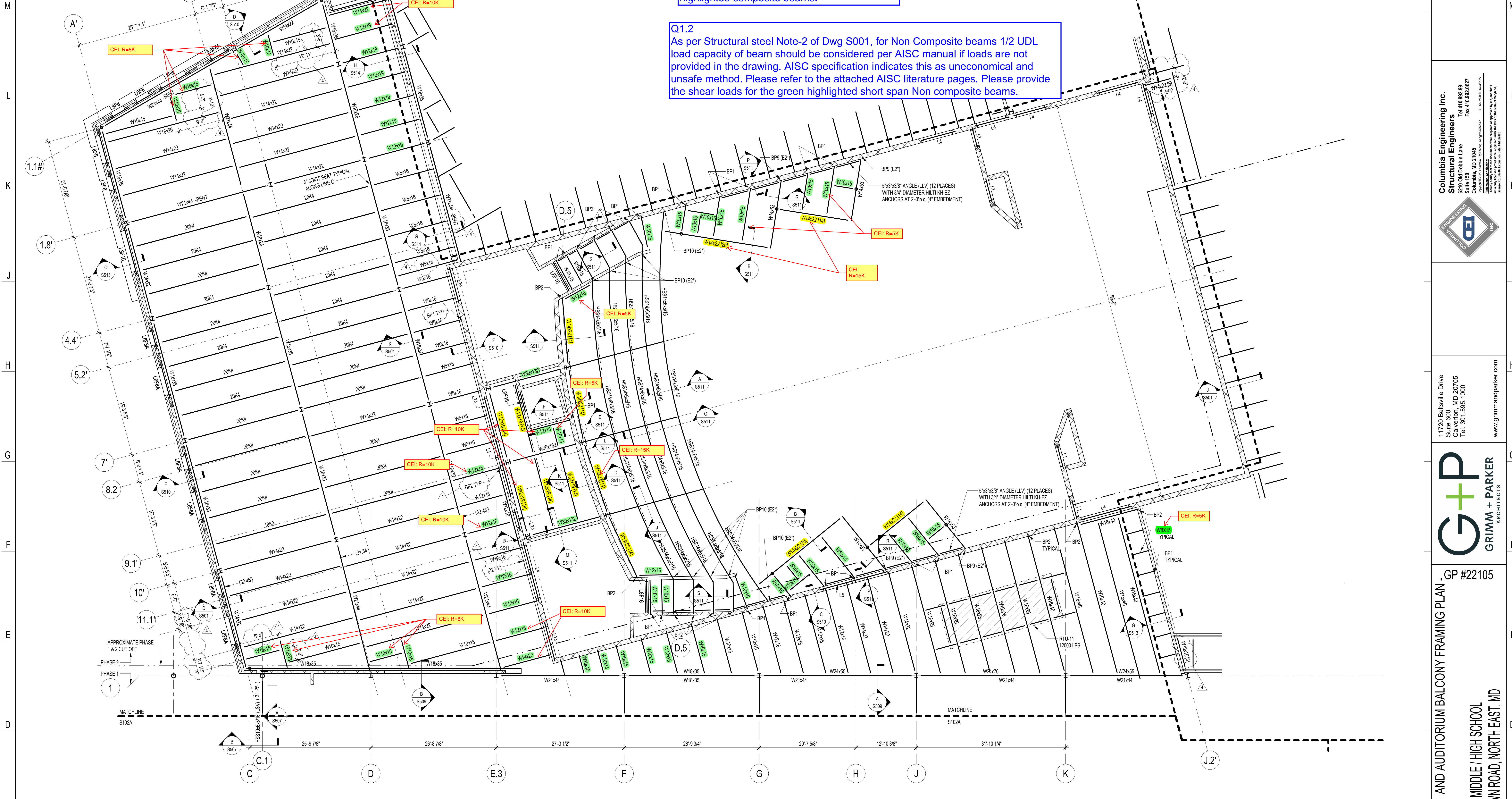




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**Q1.2**  
As per Structural steel Note-2 of Dwg S001, for Non Composite beams 1/2 UDL load capacity of beam should be considered per AISC manual if loads are not provided in the drawing. AISC specification indicates this as uneconomical and unsafe method. Please refer to the attached AISC literature pages. Please provide the shear loads for the green highlighted short span Non composite beams.

## ROOF FRAMING PLAN AREA E

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

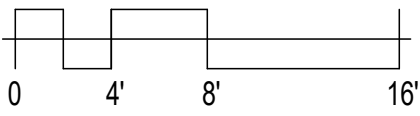
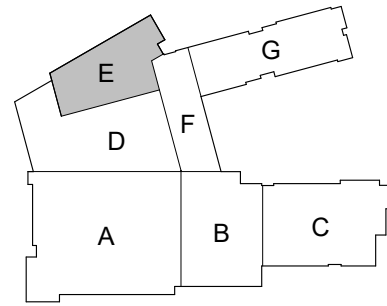
### ROOF FRAMING NOTES:

1. ROOF DECK SHALL BE AS NOTED ON ROOF DECK PLAN ON S003.
2. TOP OF STEEL ELEVATION (BOTTOM OF DECK) NOTED ON PLAN THUS: (...) IS MEASURED FROM DATUM ELEVATION (0.00'). BEAMS SUPPORTING K SERIES JOIST SHALL BE 3 1/2" BELOW TOP OF STEEL UNLESS NOTED OTHERWISE.
3. ALL K-SERIES JOIST SHALL HAVE 3 1/2" JOIST SEATS UNLESS NOTED OTHERWISE. ALL LH-SERIES JOIST SHALL HAVE 5" JOIST SEATS UNLESS NOTED OTHERWISE.
4. JOIST SHALL BE DESIGNED FOR A NET UPLIFT OF 15 PSF UNLESS NOTED OTHERWISE.
5. INSTALL ANGLE FRAME AROUND ALL ROOF OPENINGS WITH ONE SIDE LARGER THAN 1'-0". REFER TO TYPICAL ROOF OPENING DETAIL DS303.
6. ROOFTOP MECHANICAL UNITS OVER ROOF DECK SHALL BE SUPPORTED BY 6"x4"x3/8" ANGLE FRAME (LLV) FOR ANGLE SPANS UP TO 6'-0". SUPPORT AT JOIST OR BEAM WITH 6"x6"x1/2"x 8" LONG ANGLE SEAT UNLESS NOTED OTHERWISE.

### ROOF FRAMING KEYED NOTES:

- (R1") DENOTES 3"x3"x1/4" ANGLE CROSS BRACING. ATTACH TO EACH BEAM WITH 5/16" CONNECTION PLATE. IF ADJACENT MEMBER IS OPEN-WEB STEEL JOIST, INSTALL SINGLE 3"x3"x1/4" ANGLE KICKER FROM BOTTOM OF BEAM TO TOP CHORD PANEL POINT.
- (R2") DENOTES PREFABRICATED CANOPY. CANOPY REQUIRES DELEGATED DESIGN. CONTRACTOR SHALL SUBMIT SIGNED AND SEALED SHOP DRAWINGS AND CALCULATIONS TO A/E FOR REVIEW AND APPROVAL. REFER TO ARCHITECTURAL DOCUMENTS FOR DETAILS.

### KEY PLAN



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GP #22105

ROOF FRAMING PLAN - AREA E  
NORTH EAST MIDDLE / HIGH SCHOOL  
300 IRISHTOWN ROAD, NORTH EAST, MD

DATE	DESCRIPTION
04/01/2024	ADDENDUM 5

**S102E**

12/22/2023  
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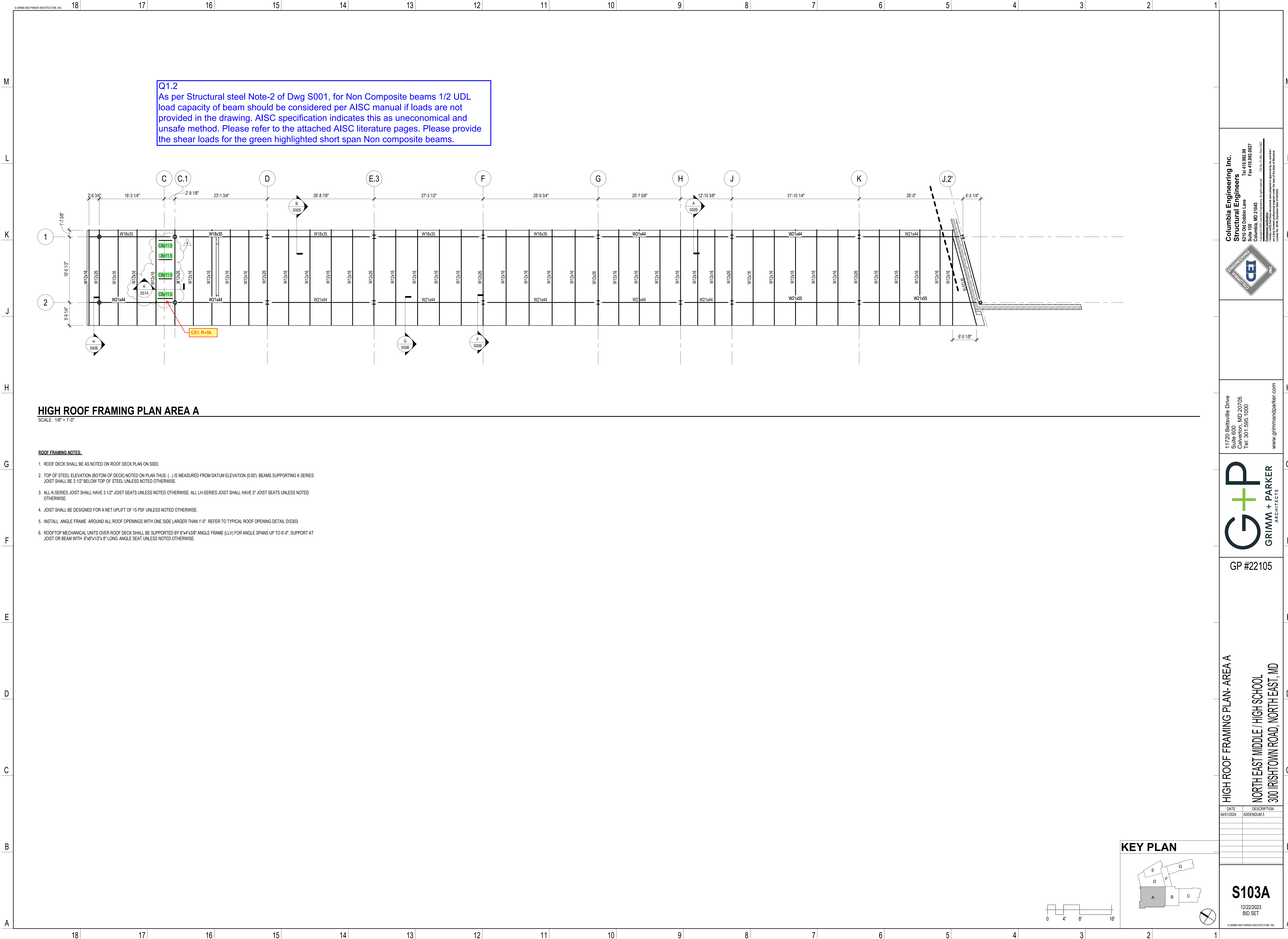












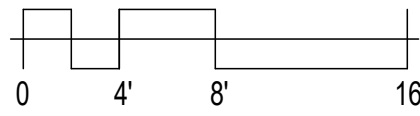
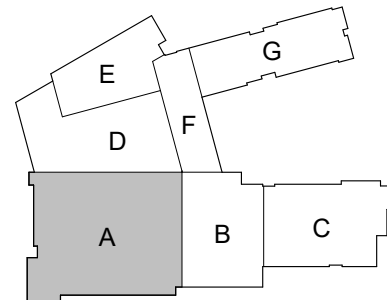
HIGH ROOF FRAMING PLAN AREA A

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

ROOF FRAMING NOTES:

- 1. ROOF DECK SHALL BE AS NOTED ON ROOF DECK PLAN ON S003.
- 2. TOP OF STEEL ELEVATION (BOTTOM OF DECK) NOTED ON PLAN THUS (..) IS MEASURED FROM DATUM ELEVATION (0.00'). BEAMS SUPPORTING K SERIES JOIST SHALL BE 3 1/2" BELOW TOP OF STEEL UNLESS NOTED OTHERWISE.
- 3. ALL K-SERIES JOIST SHALL HAVE 3 1/2" JOIST SEATS UNLESS NOTED OTHERWISE. ALL LH-SERIES JOIST SHALL HAVE 5" JOIST SEATS UNLESS NOTED OTHERWISE.
- 4. JOIST SHALL BE DESIGNED FOR A NET UPLIFT OF 15 PSF UNLESS NOTED OTHERWISE.
- 5. INSTALL ANGLE FRAME AROUND ALL ROOF OPENINGS WITH ONE SIDE LARGER THAN 1'-0". REFER TO TYPICAL ROOF OPENING DETAIL D/S303.
- 6. ROOFTOP MECHANICAL UNITS OVER ROOF DECK SHALL BE SUPPORTED BY 6"x4"x3/8" ANGLE FRAME (LLV) FOR ANGLE SPANS UP TO 6'-0". SUPPORT AT JOIST OR BEAM WITH 6"x6"x1/2"x 8" LONG ANGLE SEAT UNLESS NOTED OTHERWISE.

KEY PLAN



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Copyright © 2023 Columbia Engineering, Inc. All rights reserved.  
This drawing was prepared by me, and I am a duly Licensed Professional Engineer in the State of Maryland, License No. 19176, Expiration Date 06/30/2025.



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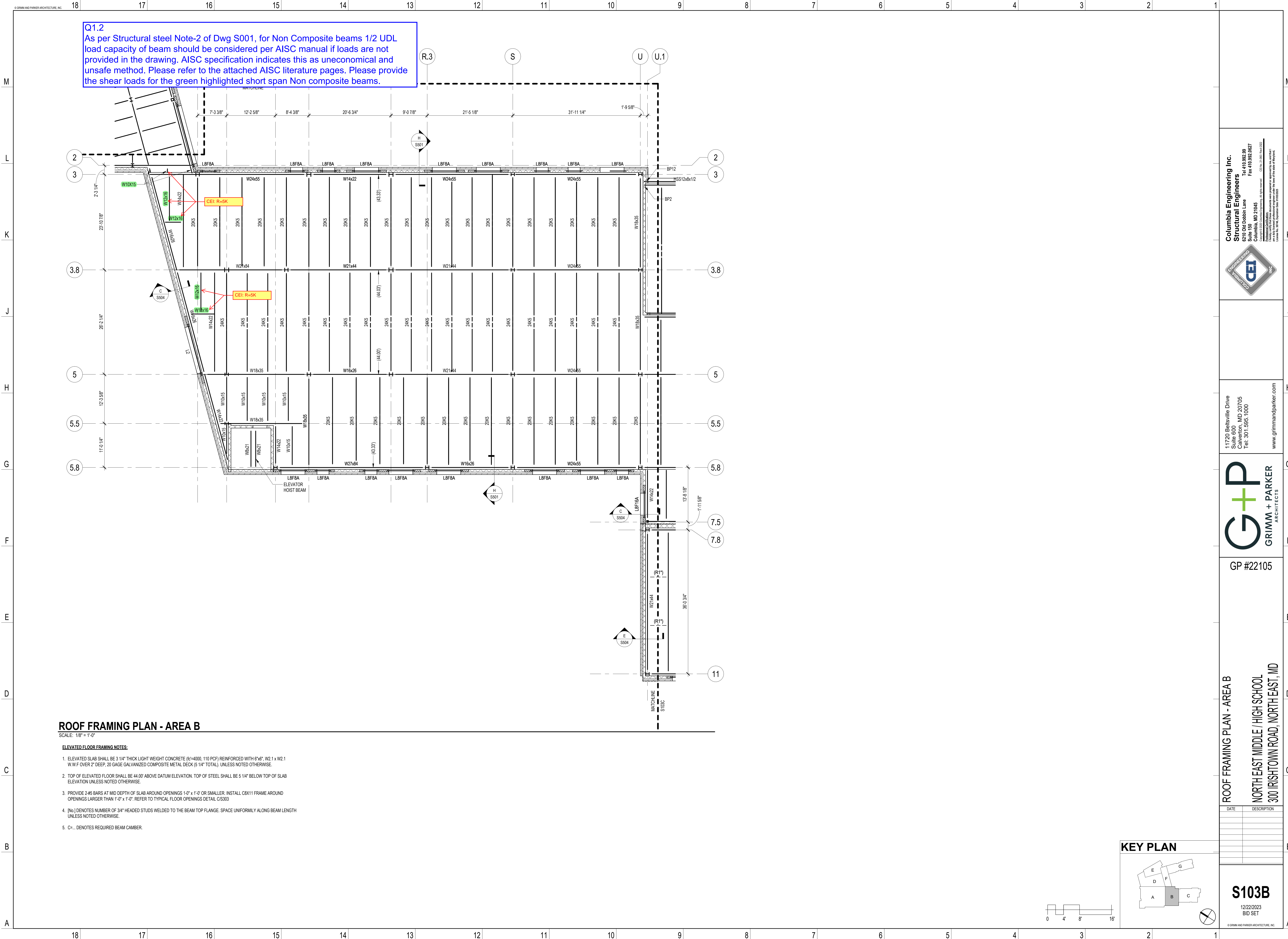


GP #22105

HIGH ROOF FRAMING PLAN- AREA A  
NORTH EAST MIDDLE / HIGH SCHOOL  
300 IRISHTOWN ROAD, NORTH EAST, MD

DATE	DESCRIPTION
04/01/2024	ADDENDUM 5

S103A  
12/22/2023  
BID SET



**Q1.2**  
As per Structural steel Note-2 of Dwg S001, for Non Composite beams 1/2 UDL load capacity of beam should be considered per AISC manual if loads are not provided in the drawing. AISC specification indicates this as uneconomical and unsafe method. Please refer to the attached AISC literature pages. Please provide the shear loads for the green highlighted short span Non composite beams.

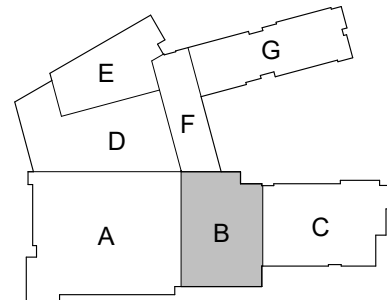
**ROOF FRAMING PLAN - AREA B**

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

**ELEVATED FLOOR FRAMING NOTES:**

1. ELEVATED SLAB SHALL BE 3 1/4" THICK LIGHT WEIGHT CONCRETE (f<sub>c</sub>=4000, 110 PCF) REINFORCED WITH 6"x6", W2.1 x W2.1 W.W.F OVER 2" DEEP, 20 GAGE GALVANIZED COMPOSITE METAL DECK (5 1/4" TOTAL), UNLESS NOTED OTHERWISE.
2. TOP OF ELEVATED FLOOR SHALL BE 44.00' ABOVE DATUM ELEVATION. TOP OF STEEL SHALL BE 5 1/4" BELOW TOP OF SLAB ELEVATION UNLESS NOTED OTHERWISE.
3. PROVIDE 2#5 BARS AT MID DEPTH OF SLAB AROUND OPENINGS 1'-0" x 1'-0" OR SMALLER. INSTALL C8X11 FRAME AROUND OPENINGS LARGER THAN 1'-0" x 1'-0". REFER TO TYPICAL FLOOR OPENINGS DETAIL C/S303
4. [N6] DENOTES NUMBER OF 3/4" HEADED STUDS WELDED TO THE BEAM TOP FLANGE. SPACE UNIFORMLY ALONG BEAM LENGTH UNLESS NOTED OTHERWISE.
5. C=... DENOTES REQUIRED BEAM CAMBER.

**KEY PLAN**



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GP #22105

**ROOF FRAMING PLAN - AREA B**  
NORTH EAST MIDDLE / HIGH SCHOOL  
300 IRISHTOWN ROAD, NORTH EAST, MD

DATE	DESCRIPTION

**S103B**

12/22/2023  
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SCALE: 1/8" = 1'-0"

1. ROOF DECK SHALL BE AS NOTED ON ROOF DECK PLAN ON S303.
2. TOP OF STEEL ELEVATION (BOTTOM OF DECK) NOTED ON PLAN THUS: (..) IS MEASURED FROM DATUM ELEVATION (0.00). BEAMS SUPPORTING K SERIES JOIST SHALL BE 3 1/2" BELOW TOP OF STEEL UNLESS NOTED OTHERWISE.
3. ALL K-SERIES JOIST SHALL HAVE 3 1/2" JOIST SEATS UNLESS NOTED OTHERWISE. ALL LH-SERIES JOIST SHALL HAVE 5" JOIST SEATS UNLESS NOTED OTHERWISE.
4. JOIST SHALL BE DESIGNED FOR A NET UPLIFT OF 15 PSF UNLESS NOTED OTHERWISE.
5. INSTALL ANGLE FRAME AROUND ALL ROOF OPENINGS WITH ONE SIDE LARGER THAN 1'-0". REFER TO TYPICAL ROOF OPENING DETAIL D3303.
6. ROOFTOP MECHANICAL UNITS OVER ROOF DECK SHALL BE SUPPORTED BY 6"x4"x3/8" ANGLE FRAME (LLV) FOR ANGLE SPANS UP TO 6'-0". SUPPORT AT JOIST OR BEAM WITH 6"x6"x1/2"x 8' LONG ANGLE SEAT UNLESS NOTED OTHERWISE.

(R1\*) DENOTES 3"x3"x1/4" ANGLE CROSS BRACING. ATTACH TO EACH BEAM WITH 5/16" CONNECTION PLATE. IF ADJACENT MEMBER IS OPEN-WEB STEEL JOIST, INSTALL SINGLE 3"x3"x1/4" ANGLE KICKER FROM BOTTOM OF BEAM TO TOP CHORD PANEL POINT.

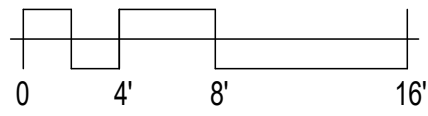
(R2\*) DENOTES PREFABRICATED CANOPY. CANOPY REQUIRES DELEGATED DESIGN. CONTRACTOR SHALL SUBMIT SIGNED AND SEALED SHOP DRAWINGS AND CALCULATIONS TO A/E FOR REVIEW AND APPROVAL. REFER TO ARCHITECTURAL DOCUMENTS FOR DETAILS.

1. ELEVATED SLAB SHALL BE 4" THICK NORMAL WEIGHT CONCRETE (K=4000, 145 PCF) REINFORCED WITH 5"Ø, W2.1 X W2.1 W.W.F OF DEEP. 16 GAGE GALVANIZED POSITIVE MESH DETAIL BEAM (6 IN) TOTAL UNLESS NOTED OTHERWISE.
2. TOP OF ELEVATED FLOOR SHALL BE 4" ABOVE DATUM ELEVATION. TOP OF STEEL SHALL BE 6 1/2" BELOW TOP OF SLAB ELEVATION UNLESS NOTED OTHERWISE.
3. PROVIDE 2-BARS AT MID DEPTH OF SLAB AROUND OPENINGS 1'-0" X 1'-0" OR SMALLER. INSTALL C8X11 FRAME AROUND OPENINGS LARGER THAN 1'-0" X 1'-0". REFER TO TYPICAL FLOOR OPENINGS DETAIL C/3303.
4. [No.] DENOTES NUMBER OF 3/4" HEADED STUDS WELDED TO THE BEAM TOP FLANGE. SPACE UNIFORMLY ALONG BEAM LENGTH UNLESS NOTED OTHERWISE.
5. C=... DENOTES REQUIRED BEAM CAMBER.

NORTH EAST MIDDLE / HIGH SCHOOL  
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Q1.2  
As per Structural steel Note-2 of Dwg S001, for Non Composite beams 1/2 UDL load capacity of beam should be considered per AISC manual if loads are not provided in the drawing. AISC specification indicates this as uneconomical and unsafe method. Please refer to the attached AISC literature pages. Please provide the shear loads for the green highlighted short span Non composite beams.

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

ROOF FRAMING NOTES:

1. ROOF DECK SHALL BE AS NOTED ON ROOF DECK PLAN ON S003.
2. TOP OF STEEL ELEVATION (BOTTOM OF DECK) NOTED ON PLAN THUS (...) IS MEASURED FROM DATUM ELEVATION (0.00'). BEAMS SUPPORTING K SERIES JOIST SHALL BE 3 1/2" BELOW TOP OF STEEL UNLESS NOTED OTHERWISE.
3. ALL K SERIES JOIST SHALL HAVE 3 1/2" JOIST SEATS UNLESS NOTED OTHERWISE. ALL LH SERIES JOIST SHALL HAVE 5" JOIST SEATS UNLESS NOTED OTHERWISE.
4. JOIST SHALL BE DESIGNED FOR A NET UPLIFT OF 15 PSF UNLESS NOTED OTHERWISE.
5. INSTALL ANGLE FRAME AROUND ALL ROOF OPENINGS WITH ONE SIDE LARGER THAN 1'-0". REFER TO TYPICAL ROOF OPENING DETAIL D1303.
6. ROOFTOP MECHANICAL UNITS OVER ROOF DECK SHALL BE SUPPORTED BY 6"x4"x3/8" ANGLE FRAME (LVL) FOR ANGLE SPANS UP TO 6'-0". SUPPORT AT JOIST OR BEAM WITH 6"x6"x1/2"x 8' LONG ANGLE SEAT UNLESS NOTED OTHERWISE.

ROOF FRAMING KEYED NOTES:

(R1\*) DENOTES 3"x3"x1/4" ANGLE CROSS BRACING. ATTACH TO EACH BEAM WITH 5/16" CONNECTION PLATE. IF ADJACENT MEMBER IS OPEN-WEB STEEL JOIST, INSTALL SINGLE 3"x3"x1/4" ANGLE KICKER FROM BOTTOM OF BEAM TO TOP CHORD PANEL POINT.

(R2\*) DENOTES PREFABRICATED CANOPY. CANOPY REQUIRES DELEGATED DESIGN. CONTRACTOR SHALL SUBMIT SIGNED AND SEALED SHOP DRAWINGS AND CALCULATIONS TO A/E FOR REVIEW AND APPROVAL. REFER TO ARCHITECTURAL DOCUMENTS FOR DETAILS.

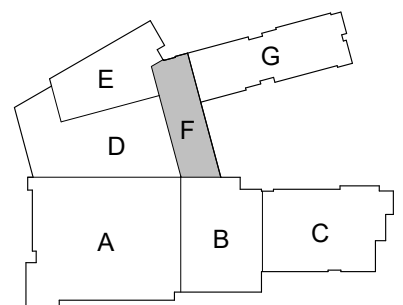
**ELEVATED FLOOR FRAMING NOTES:**

1. ELEVATED SLAB SHALL BE 3" GATE LIGHT WEIGHT CONCRETE (FC=4000, 101 PCF) REINFORCED WITH #6"x2' Wx2'1/2" W/W OF DEEP, 20 GAGE GALVANIZED COMPOSITE METAL DECK (5 1/4" TOTAL). UNLESS NOTED OTHERWISE.
2. TOP OF ELEVATED FLOOR SHALL BE 44.00 ABOVE DATUM ELEVATION. TOP OF STEEL SHALL BE 5 1/4" BELOW TOP OF SLAB ELEVATION UNLESS NOTED OTHERWISE.
3. PROVIDE 2-#5 BARS AT MID DEPTH OF SLAB AROUND OPENINGS 1'-0" X 1'-0" OR SMALLER. INSTALL C8X11 FRAME AROUND OPENINGS LARGER THAN 1'-0" X 1'-0". REFER TO TYPICAL FLOOR OPENINGS DETAIL C5303
4. [N<sub>6</sub>] DENOTES NUMBER OF 3/4" HEADED STUDS WELDED TO THE BEAM TOP FLANGE. SPACE UNIFORMLY ALONG BEAM LENGTH UNLESS NOTED OTHERWISE.
5. C<sub>6</sub> = DENOTES REQUIRED BEAM CAMBER.

**ELEVATED FLOOR FRAMING KEYED NOTES:**

(E1\*) ELEVATED SLAB WITHIN HATCHED PERIMETER SHALL BE 4 1/2" THICK NORMAL WEIGHT CONCRETE (f'c=4000, 145 PCF) REINFORCED WITH 6"x6", W2.1 x W2.1 W/W F OVER 2" DEEP, 18 GAGE GALVANIZED COMPOSITE METAL DECK (6 1/2" TOTAL). UNLESS NOTED OTHERWISE.

(E2\*) WITHIN HATCHED PERIMETER, TOP OF ELEVATED FLOR SHALL BE 44.00' ABOVE DATUM ELEVATION. TOP OF STEEL SHALL BE 6 1/2" BELOW TOP OF SLAB ELEVATION UNLESS NOTED OTHERWISE.



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GP #22105

NORTH EAST MIDDLE / HIGH SCHOOL  
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[illegible]

**S103F**

12/22/2023  
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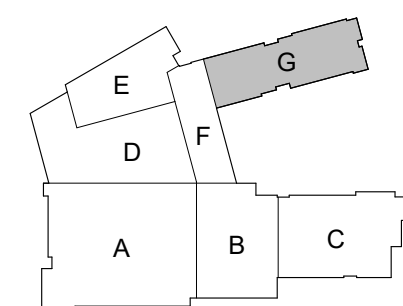


**Q1.2**  
As per Structural steel Note-2 of Dwg S001, for Non Composite beams 1/2 UDL load capacity of beam should be considered per AISC manual if loads are not provided in the drawing. AISC specification indicates this as uneconomical and unsafe method. Please refer to the attached AISC literature pages. Please provide the shear loads for the green highlighted short span Non composite beams.



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

1. ELEVATED SLAB SHALL BE 3" GATE LIGHT WEIGHT CONCRETE (FC=4000, 10 PCF) REINFORCED WITH 6"x6", W2 X W2.1 W.W.F OVER 2" DEEP, 20 GAGE GALVANIZED COMPOSITE METAL DECK (5 1/4" TOTAL), UNLESS NOTED OTHERWISE.
2. TOP OF ELEVATED FLOOR SHALL BE 44.00 ABOVE DATUM ELEVATION. TOP OF STEEL SHALL BE 5 1/4" BELOW TOP OF SLAB ELEVATION UNLESS NOTED OTHERWISE.
3. PROVIDE 2 #5 BARS AT MID DEPTH OF SLAB AROUND OPENINGS 1'-0" X 1'-0" OR SMALLER. INSTALL C8X11 FRAME AROUND OPENINGS LARGER THAN 1'-0" X 1'-0". REFER TO TYPICAL FLOOR OPENINGS DETAIL C3303
4. [No] DENOTES NUMBER OF 3/4" HEADED STUDS WELDED TO THE BEAM TOP FLANGE. SPACE UNIFORMLY ALONG BEAM LENGTH UNLESS NOTED OTHERWISE.
5. C=... DENOTES REQUIRED BEAM CAMBER.

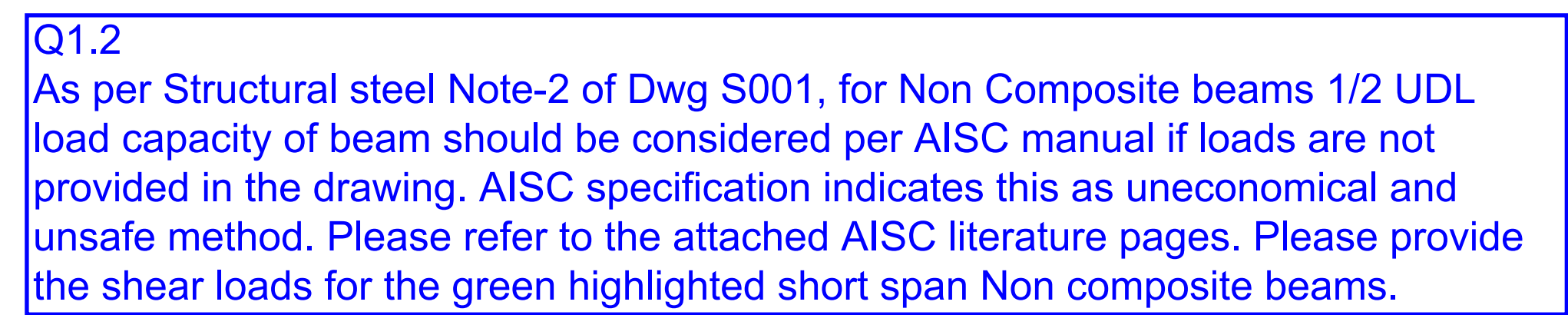


LEVEL 03 FLOOR FRAMING PLAN - AREA G

DATE	DESCRIPTION
03/25/2024	ADDENDUM 3
04/01/2024	ADDENDUM 5

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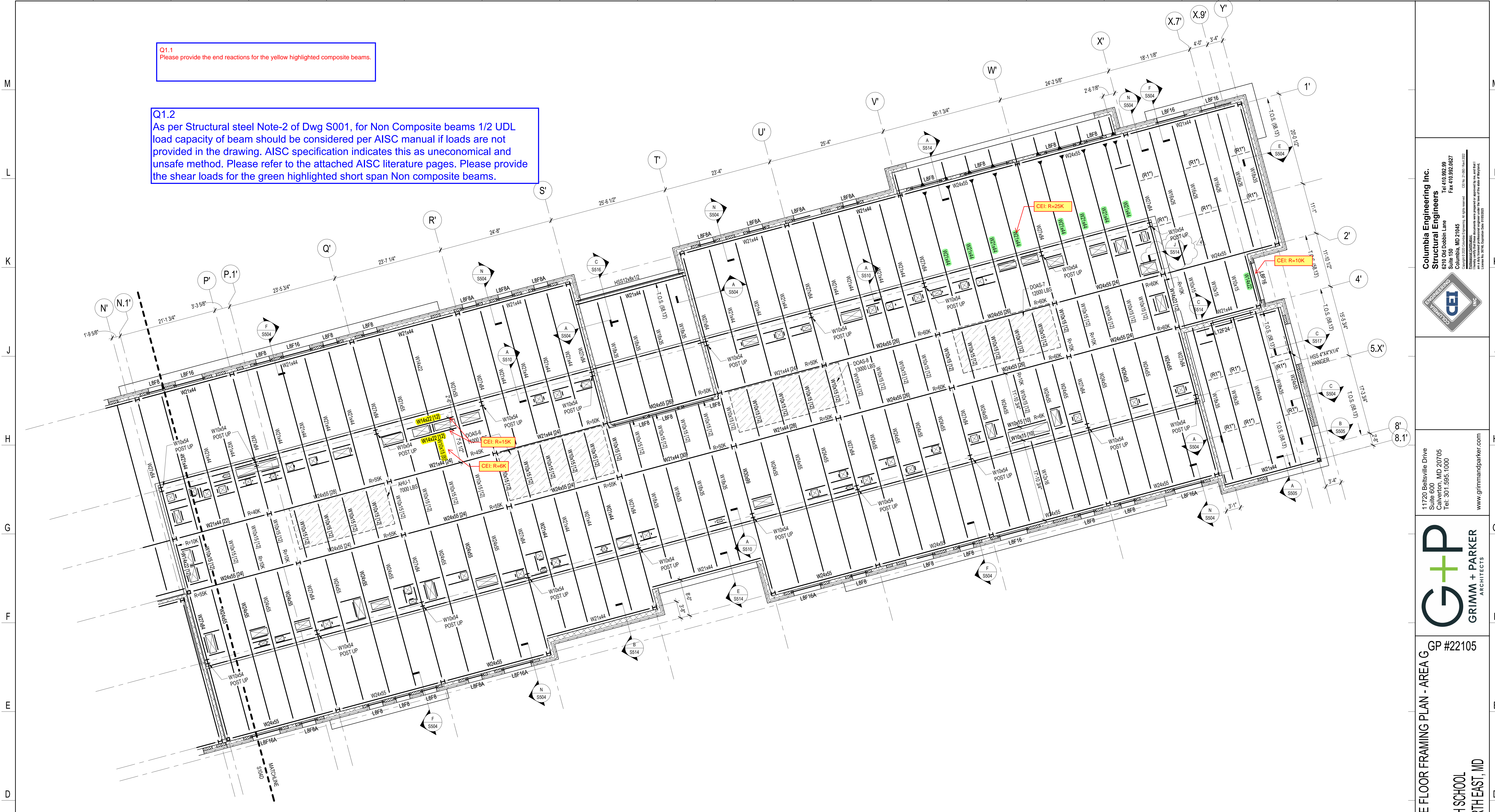


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Q1.1  
Please provide the end reactions for the yellow highlighted composite beams.

Q1.2  
As per Structural steel Note-2 of Dwg S001, for Non Composite beams 1/2 UDL load capacity of beam should be considered per AISC manual if loads are not provided in the drawing. AISC specification indicates this as uneconomical and unsafe method. Please refer to the attached AISC literature pages. Please provide the shear loads for the green highlighted short span Non composite beams.



### PENTHOUSE FLOOR AND ROOF FRAMING PLAN AREA G

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

#### ROOF FRAMING NOTES:

- ROOF DECK SHALL BE AS NOTED ON ROOF DECK PLAN ON S003.
- TOP OF STEEL ELEVATION (BOTTOM OF DECK) NOTED ON PLAN THUS: ( ) IS MEASURED FROM DATUM ELEVATION (0.00'). BEAMS SUPPORTING K SERIES JOIST SHALL BE 3 1/2" BELOW TOP OF STEEL UNLESS NOTED OTHERWISE.
- ALL K-SERIES JOIST SHALL HAVE 3 1/2" JOIST SEATS UNLESS NOTED OTHERWISE. ALL LH-SERIES JOIST SHALL HAVE 5" JOIST SEATS UNLESS NOTED OTHERWISE.
- JOIST SHALL BE DESIGNED FOR A NET UPLIFT OF 15 PSF UNLESS NOTED OTHERWISE.
- INSTALL ANGLE FRAME AROUND ALL ROOF OPENINGS WITH ONE SIDE LARGER THAN 1'-0". REFER TO TYPICAL ROOF OPENING DETAIL D/S303.
- ROOFTOP MECHANICAL UNITS OVER ROOF DECK SHALL BE SUPPORTED BY 6"x4"x3/8" ANGLE FRAME (LLV) FOR ANGLE SPANS UP TO 6'-0". SUPPORT AT JOIST OR BEAM WITH 6"x6"x12"x 8" LONG ANGLE SEAT UNLESS NOTED OTHERWISE.

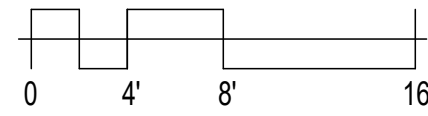
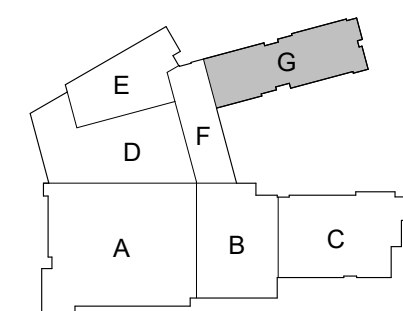
#### ROOF FRAMING KEYED NOTES:

- (R1') DENOTES 3"x3"x1/4" ANGLE CROSS BRACING. ATTACH TO EACH BEAM WITH 5/16" CONNECTION PLATE. IF ADJACENT MEMBER IS OPEN-WEB STEEL JOIST, INSTALL SINGLE 3"x3"x1/4" ANGLE KICKER FROM BOTTOM OF BEAM TO TOP CHORD PANEL POINT.
- (R2') DENOTES PREFABRICATED CANOPY. CANOPY REQUIRES DELEGATED DESIGN. CONTRACTOR SHALL SUBMIT SIGNED AND SEALED SHOP DRAWINGS AND CALCULATIONS TO A/E FOR REVIEW AND APPROVAL. REFER TO ARCHITECTURAL DOCUMENTS FOR DETAILS.

#### PENTHOUSE FLOOR FRAMING NOTES:

- ELEVATED SLAB SHALL BE 4 1/2" THICK NORMAL WEIGHT CONCRETE (FC=4000, 145 PCF) REINFORCED WITH 6"x6", W2.1 x W2.1 W.W.F OVER 2" DEEP, 18 GAGE GALVANIZED COMPOSITE METAL DECK (6 1/2" TOTAL), UNLESS NOTED OTHERWISE.
- TOP OF ELEVATED FLOOR SHALL BE 58.67' ABOVE DATUM ELEVATION. TOP OF STEEL SHALL BE 6 1/2" BELOW TOP OF SLAB ELEVATION UNLESS NOTED OTHERWISE.
- PROVIDE 2-#5 BARS AT MID DEPTH OF SLAB AROUND OPENINGS 1'-0" x 1'-0" OR SMALLER. INSTALL C8X11 FRAME AROUND OPENINGS LARGER THAN 1'-0" x 1'-0". REFER TO TYPICAL FLOOR OPENINGS DETAIL C/S303.
- (N6) DENOTES NUMBER OF 3/4" HEADED STUDS WELDED TO THE BEAM TOP FLANGE. SPACE UNIFORMLY ALONG BEAM LENGTH UNLESS NOTED OTHERWISE.
- C=... DENOTES REQUIRED BEAM CAMBER.

#### KEY PLAN



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Structural Engineers



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GP #22105

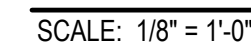
ROOF AND PENTHOUSE FLOOR FRAMING PLAN - AREA G

NORTH EAST MIDDLE / HIGH SCHOOL  
300 IRISHTOWN ROAD, NORTH EAST, MD

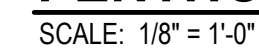
DATE	DESCRIPTION
03/25/2024	ADDENDUM 3
04/01/2024	ADDENDUM 5


**S104G**  
12/22/2023  
BID SET





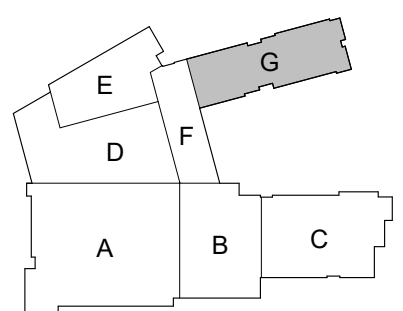
As per Structural steel Note-2 of Dwg S001, for Non Composite beams 1/2 UDL load capacity of beam should be considered per AISC manual if loads are not provided in the drawing. AISC specification indicates this as uneconomical and unsafe method. Please refer to the attached AISC literature pages. Please provide the shear loads for the green highlighted short span Non composite beams.



1. ROOF DECK SHALL BE AS NOTED ON ROOF DECK PLAN ON 5003.
2. TOP OF STEEL ELEVATION (BOTTOM OF DECK) SHALL NOT ON PLAN THUS: (..) IS MEASURED FROM DATUM ELEVATION (0.00'). BEAMS SUPPORTING K SERIES JOIST SHALL BE 3 1/2" BELOW TOP OF STEEL UNLESS NOTED OTHERWISE.
3. ALL K-SERIES JOIST SHALL HAVE 3 1/2" JOIST SEATS UNLESS NOTED OTHERWISE. ALL LH-SERIES JOIST SHALL HAVE 5" JOIST SEATS UNLESS NOTED OTHERWISE.
4. JOIST SHALL BE DESIGNED FOR A NET UPLIFT OF 15 PSF UNLESS NOTED OTHERWISE.
5. INSTALL ANGLE FRAME AROUND ALL ROOF OPENINGS WITH ONE SIDE LARGER THAN 1'-0". REFER TO TYPICAL ROOF OPENING DETAIL D303.
6. ROOF TOP MECHANICAL UNITS OVER ROOF DECK SHALL BE SUPPORTED BY 6"x4"x3/8" ANGLE FRAME (LLV) FOR ANGLE SPANS UP TO 6'-0". SUPPORT AT JOIST OR BEAM WITH 6"x6"x1/2"x8" LONG ANGLE SEAT UNLESS NOTED OTHERWISE.

(R1\*) DENOTES 3"x3"x1/4" ANGLE CROSS BRACING. ATTACH TO EACH BEAM WITH 5/16" CONNECTION PLATE. IF ADJACENT MEMBER IS OPEN-WEB STEEL JOIST, INSTALL SINGLE 3"x3"x1/4" ANGLE KICKER FROM BOTTOM OF BEAM TO TOP CHORD PANEL POINT.

(R2\*) DENOTES PREFABRICATED CANOPY. CANOPY REQUIRES DELEGATED DESIGN. CONTRACTOR SHALL SUBMIT SIGNED AND SEALED SHOP DRAWINGS AND CALCULATIONS TO A/E FOR REVIEW AND APPROVAL. REFER TO ARCHITECTURAL DOCUMENTS FOR DETAILS.



NORTH EAST MIDDLE / HIGH SCHOOL  
3300 RISHTOWN ROAD, NORTH EAST, MD

TE	DESCRIPTION
024	ADDENDUM 5

**S105**  
12/22/2023  
BID SET



## RFI detail

## #015 Connection Clarification



Status	<div><div></div>Closed</div>
Created on	Aug 7, 2024 by <b>Lucas Bradley</b> (Kinsley Steel Inc)
RFI type	Structural RFI REV
Ball in court	<b>Lucas Bradley</b> (Kinsley Steel Inc)
Answered	Aug 19, 2024 by <b>Patrick Byrne</b> (Grimm and Parker)

## Question

Please review the attached reference file from Kinsley Steel for the following questions as well as their drawing locations:

- Q3.1: Please confirm the column splice weld.
- Q3.2: Please confirm the connection type.
- Q3.3: Please confirm the hole size in connection angle.
- Q3.4: Please confirm the connection type at CMU wall locations.

## Official response

Patrick Byrne (Grimm and Parker): See attached RFI response.

By **Patrick Byrne** (Grimm and Parker) - Aug 19, 2024, 10:14 AM EDT

## References and Attachments







## Files (4)

- [RFI 003\\_KSI - Connection Clarification- CEI.pdf](#)
- [RFI 003\\_KSI - Connection Clarification.pdf](#)
- [RFI 015 Connection Clarification Response - CEI-GP-HESS.pdf](#)
- [RFI 015 Connection Clarification Response.pdf](#)

## Impact

Cost impact	Unknown
-------------	---------

Schedule impact	No
Other attributes	
Priority	Normal
Discipline	Structural
Category	Design Coordination
Location	Area C
Location details	See reference titled "RFI 003_KSI..." for further location details
External id	-
Co-reviewer(s)	
Posted to Drawings/ Specifications	NO
Trade's RFI No.	3

Activities	By	At
<b>Joshua Postadan</b> changed the status from  <b>Open</b> Answered to  <b>Closed</b> <b>Official response:</b> Patrick Byrne (Grimm and Parker): See attached RFI response. set Ball in court to <b>Lucas Bradley</b> (Kinsley Steel Inc) changed the <b>watchers</b> to <b>Lucas Bradley</b> (Kinsley Steel Inc), <b>Michael Staub</b> (Kinsley Steel Inc), <b>Glenn Feldstein</b> (George Moehrle Masonry), <b>HESS PROJECT TEAM, Kinsley Steel Inc, George Moehrle Masonry</b>	<b>Joshua Postadan</b>	Aug 19, 2024, 2:41 PM EDT
Please review the response to RFI #015. Provide notification of any cost implications immediately. If a proposal has cost impacts, please request an RFQ from HESS. Send a proposal no later than the close of business within 7 days of receipt of this RFI response. HESS will consider this as a no cost change and close this issue should a proposal not be received by this date. A lack of response for any credit items will prompt HESS Construction to assign a cost value that will be deducted from your contract sum. Note: The RFQ is simply an administrative tracking tool, and in no way represents that additional work, cost or time is acknowledged, authorized, directed, or approved.	<b>Joshua Postadan</b>	Aug 19, 2024, 2:41 PM EDT
Please see "RFI 015 Connection Clarification Response - CEI-GP-HESS" for HESS' comments to address the latest response from Grimm + Parker. For item Q3.4 in the RFI, HESS has confirmed that the steel will be erected prior to the construction of the CMU wall	<b>Joshua Postadan</b>	Aug 19, 2024, 2:39 PM EDT
<b>Joshua Postadan</b> added a reference to a File <b>RFI 015 Connection Clarification Response - CEI-GP-HESS.pdf</b>	<b>Joshua Postadan</b>	Aug 19, 2024, 2:38 PM EDT
<b>Patrick Byrne</b> added a reference to a File <b>RFI 015 Connection Clarification Response.pdf</b>	<b>Patrick Byrne</b>	Aug 19, 2024, 10:14 AM EDT
<b>Patrick Byrne</b> changed the status from  <b>Open</b> In Review to  <b>Open</b> Answered set Ball in court to <b>Joshua Postadan</b> (HESS Construction Co., LLC)	<b>Patrick Byrne</b>	Aug 19, 2024, 10:14 AM EDT
<b>Patrick Byrne</b> added a response: See attached RFI response.	<b>Patrick Byrne</b>	Aug 19, 2024, 10:14 AM EDT
<b>Cesar Flores</b> added a response: Please see attached file for responses.	<b>Cesar Flores</b>	Aug 19, 2024, 8:35 AM EDT
<b>Cesar Flores</b> added a reference to a File <b>RFI 003_KSI - Connection Clarification- CEI.pdf</b>	<b>Cesar Flores</b>	Aug 19, 2024, 8:35 AM EDT
<b>Joshua Postadan</b> changed the status from  <b>Open</b> Waiting for Submission to  <b>Open</b> In Review changed the <b>due date</b> to Aug 19, 2024 set Ball in court to <b>Patrick Byrne</b> (Grimm and Parker), <b>Cesar Flores</b> (Columbia Engineering)	<b>Joshua Postadan</b>	Aug 8, 2024, 7:58 AM EDT



changed the **ID** to 015

changed the **question** to *Please review the attached reference file from Kinsley Steel for the following questions as well as their drawing locations: Q3.1: Please confirm the column splice weld. Q3.2: Please confirm the connection type. Q3.3: Please confirm the hole size in connection angle. Q3.4: Please confirm the connection type at CMU wall locations.*

**Joshua Postadan**

Aug 8, 2024, 7:57 AM EDT

changed the **location details** to *See reference titled "RFI 003\_KSI..." for further location details*

**Joshua Postadan**

Aug 8, 2024, 7:56 AM EDT

changed the **schedule impact** to *No*

**Joshua Postadan**

Aug 8, 2024, 7:55 AM EDT

changed the **cost impact** to *Unknown*

**Joshua Postadan**

Aug 8, 2024, 7:55 AM EDT

changed the **watchers** to **Lucas Bradley** (Kinsley Steel Inc), **Michael Staub** (Kinsley Steel Inc), **HESS PROJECT TEAM**, **Kinsley Steel Inc**

**Joshua Postadan**

Aug 8, 2024, 7:55 AM EDT

changed the **question** to *Please review the attached reference from Kinsley Steel for the following questions' drawing locations: Q3.1: Please confirm the column splice weld. Q3.2: Please confirm the connection type. Q3.3: Please confirm the hole size in connection angle. Q3.4: Please confirm the connection type at CMU wall locations.*

**Joshua Postadan**

Aug 8, 2024, 7:54 AM EDT

changed the **question** to *Please review the attached reference from Kinsley Steel for the following questions' drawing locations. Q3.1: Please confirm the column splice weld. Q3.2: Please confirm the connection type. Q3.3: Please confirm the hole size in connection angle. Q3.4: Please confirm the connection type at CMU wall locations.*

**Joshua Postadan**

Aug 8, 2024, 7:54 AM EDT

changed the **question** to *Please review the attached reference from Kinsley Steel for the following questions' drawing locations. Q3.1: Please confirm the column splice weld. Q3.2: Please confirm the connection type. Q3.3: Please confirm the hole size in connection angle. Q3.4: Please confirm the connection type at CMU wall locations.*

**Joshua Postadan**

Aug 8, 2024, 7:54 AM EDT

changed the **question** to *Please review the attached reference from Kinsley Steel for the following questions' locations on the drawings. Q3.1: Please confirm the column splice weld. Q3.2: Please confirm the connection type. Q3.3: Please confirm the hole size in connection angle. Q3.4: Please confirm the connection type at CMU wall locations.*

**Joshua Postadan**



Aug 8, 2024, 7:54 AM EDT

changed the **question** to *Please refer to the attached TRC RFI 003 for the question locations on the drawings. Q3.1: Please confirm the column splice weld. Q3.2: Please confirm the connection type. Q3.3: Please confirm the hole size in connection angle. Q3.4: Please confirm the connection type at CMU wall locations.*

**Joshua Postadan**




Aug 8, 2024, 7:36 AM EDT

**Lucas Bradley**

changed the status from  **Draft** to  **Open** Waiting for Submission set Ball in court to **Joshua Postadan** (HESS Construction Co., LLC)

**Lucas Bradley**

Aug 7, 2024, 3:39 PM EDT

<b>Lucas Bradley</b> changed the status from  <b>Open</b> Waiting for Submission to  <b>Draft</b> set Ball in court to <b>Lucas Bradley</b> (Kinsley Steel Inc)	<b>Lucas Bradley</b>	Aug 7, 2024, 1:26 PM EDT
<b>Lucas Bradley</b> added a reference to a File <b>RFI 003_KSI - Connection Clarification.pdf</b>	<b>Lucas Bradley</b>	Aug 7, 2024, 1:26 PM EDT
<b>Lucas Bradley</b> (Kinsley Steel Inc) created this RFI in  <b>Open</b> Waiting for Submission status and set Ball in court to <b>Joshua Postadan</b> (HESS Construction Co., LLC).	<b>Lucas Bradley</b>	Aug 7, 2024, 1:26 PM EDT



## *Request for Information*

---

**Date:** 08/07/2024

**Request No:** KSI 003

**Project:** North East Middle & High School  
**KCI No.:** 242612

**To:** Hess Construction  
**Attn.:** Joshua Postadan  
**Email:** jpostadan@hessconstruction.com

**From:** Mike Staub  
**Phone:** 717-434-6248  
**Email:** [mstaub@kinsleysteel.com](mailto:mstaub@kinsleysteel.com)

---

### **RE: Connection Clarification**

#### ***Request***

Please refer to the attached TRC RFI 003 for the question locations on the drawings.

Q3.1: Please confirm the column splice weld.

Q3.2: Please confirm the connection type.

Q3.3: Please confirm the hole size in connection angle.

Q3.4: Please confirm the connection type at CMU wall locations.

---

#### ***Date Response Requested: ASAP***

CEI: Please see responses on following sheets.  
Cesar Flores  
08/19/2024





217 Ward Circle Brentwood, TN 37027, Phone: 615-661-7979 Fax: 615-661-0644

# REQUEST FOR INFORMATION

## NORTH EAST MIDDLE / HIGH SCHOOL

JOB #24-880

To:	<b>Michael E.</b> <a href="mailto:Staubmstaub@kinsleysteel.com">Staubmstaub@kinsleysteel.com</a>	CLIENT RFI#
Company:	KINSLEY, INC	GC RFI#
		TRC RFI-ENG# 03
cc:		RESPONSE 08-09-2024 NEEDED BY

### SUBJECT: Connection clarification

Please refer to the attached files for the questions.

Q3.1: Please confirm the column splice weld.

Q3.2: Please confirm the connection type.

Q3.3: Please confirm the hole size in connection angle.

Q3.4: Please confirm the connection type at CMU wall locations.

By:	<b>Ruben Flores</b>	Date:	<b>08-07-2024</b>
-----	---------------------	-------	-------------------

### Response:

By:		Date:	
-----	--	-------	--

PLEASE SEND RESPONSE TO: Ruben Flores  
Phone: **325-320-0719**

**THE RAMANNA COMPANIES**

**CONSULTING ENGINEERS**

COLUMN SCHEDULE																									
ELEVATION																									
PH ROOF	SEE ROOF PLAN FOR ELEVATION																								
LEVEL 3	44.00'	W10x33	W12x40	W12x40	W10x33	W10x33	W12x40	W12x40	W12x40	W10x33	W12x40	W12x40	W12x40		W10x33	W12x40	W12x40	W12x40	W10x33	W10x33	W12x40	W12x40	W10x33	W12x40	W10x33
LEVEL 2	29.33'																								
LEVEL 1	14.67'																								
LEVEL 0	0.00'	W10x49	W12x46	W12x46	W10x54	W10x54	W12x46	W12x46	W12x45	W10x54	W12x45	W12x46	W12x46	W12x45	W10x49	W12x45	W12x46	W12x46	W10x54	W10x49	W12x46	W12x46	W10x60	W12x46	W12x46
MARK		U 8 - 4.5	U 8 - 4.9	U 8 - 6	V - 7.5	V X - 4.5	W - 4.9	W - 6	W - 7.5	W 1 - 4.5	W 7 - 4.5	X - 4.9	X - 6	X - 7.5	Y - 7.5	Y 1 - 4.5	Y 4 - 4.9	Y 4 - 6	Y 9 - 4.5	Z - 7.5	Z 1 - 4.9	Z X - 6	AA - 4.5	AA - 4.9	AA - 6
⊕ SPLICE TYPE		TYPE - 1	TYPE - 2	TYPE - 2	TYPE - 1	TYPE - 1	TYPE - 2	TYPE - 2	TYPE - 1	TYPE - 1	TYPE - 1	TYPE - 2	TYPE - 2	TYPE - 1	TYPE - 1	TYPE - 1	TYPE - 2	TYPE - 2	TYPE - 1	TYPE - 1	TYPE - 2	TYPE - 2	TYPE - 1	TYPE - 2	TYPE - 1

COLUMN FOOTING SCHEDULE CONTINUED									
ELEVATION									
HS PH ROOF									
LEVEL 4		W10x33	W10x33	W10x33	W10x33	W10x33	W10x33	W10x33	W10x33
LEVEL 3									
LEVEL 2									
LEVEL 1		W10x49	W10x60	W10x60	W10x54	W10x54	W10x54	W10x60	W10x60
MARK		N 1' - 2'	P - 2'	Q' - 2'	R' - 2'	S - 2'	T' - 2'	U' - 2'	V' - 2'
⊕ SPLICE TYPE		TYPE - 2	TYPE - 2	TYPE - 2	TYPE - 2	TYPE - 2	TYPE - 2	TYPE - 2	TYPE - 2

NOTE: 4  
WELDS SHALL BE MADE WITH E70XX LOW HYDROGEN ELECTRODES.

NOTE: 5  
ALL CONNECTIONS, UNLESS OTHERWISE NOTED, SHALL BE DOUBLE ANGLE, SINGLE ANGLE, SINGLE PLATE, OR THRU PLATE CONNECTIONS PER THE TYPICAL DETAILS OF THE CONTRACT DOCUMENTS. CONNECTIONS SHALL BE SELECTED BY THE STEEL DETAILER BASED ON THE CONNECTION TABLES PROVIDED IN THE TYPICAL DETAILS. LOADS SHOWN IN THE DRAWINGS ARE ASD LOADS UNLESS OTHERWISE NOTED.

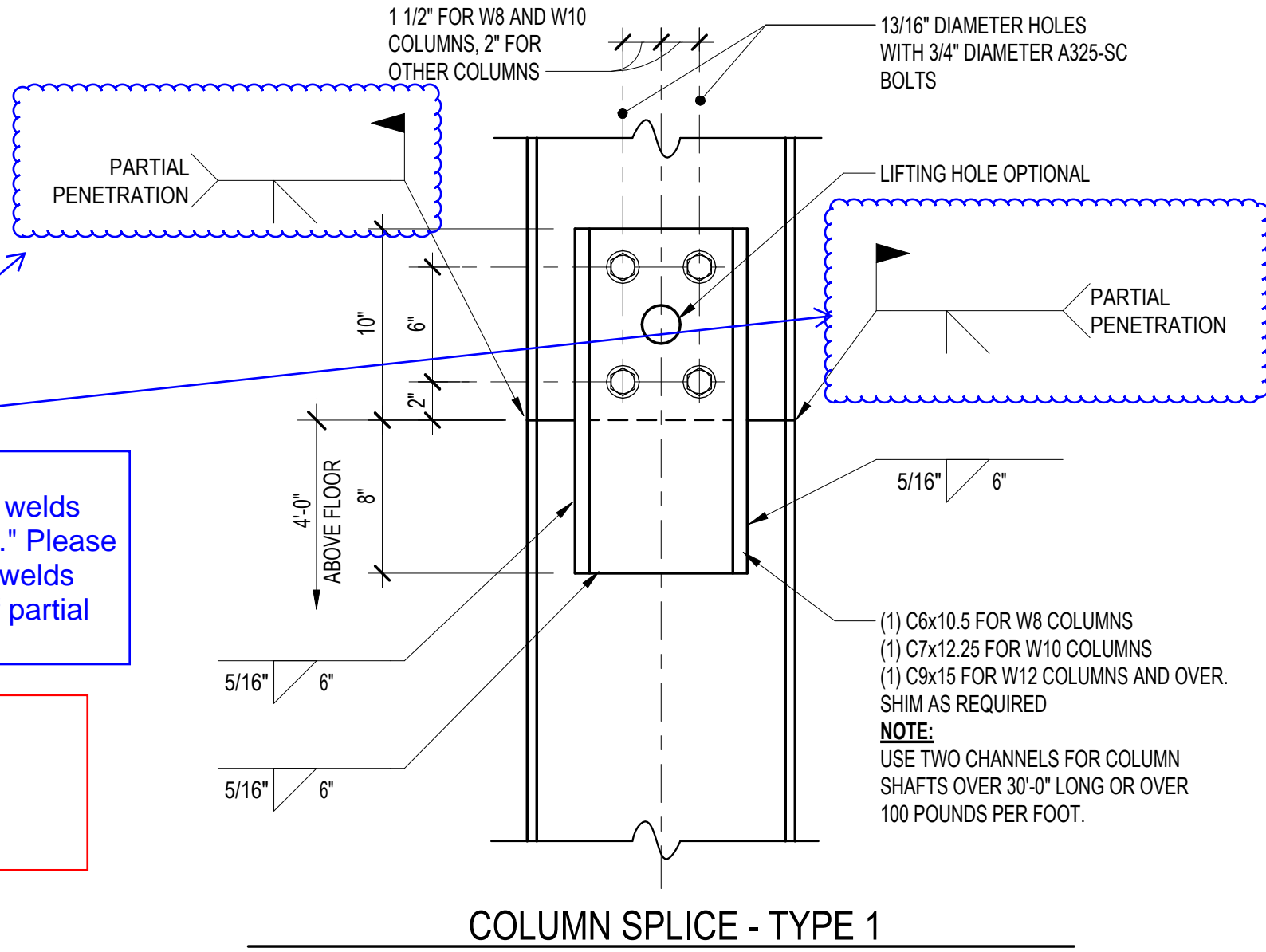
NOTE: 6  
ALL GROOVE WELDS SHALL BE FULL PENETRATION GROOVE WELDS IN ACCORDANCE WITH ANSI/AWS D1.1, "STRUCTURAL WELDING CODE" (LATEST LOCAL APPROVED EDITION). THESE WELDS SHALL BE MADE ONLY BY OPERATORS QUALIFIED BY PRESCRIBED TESTS IN THE "STRUCTURAL WELDING CODE." ACCEPTANCE SHALL BE SUBJECT TO THE INSPECTION AND REVIEW OF AN INDEPENDENT INSPECTION AGENCY. ALL FULL PENETRATION WELDS SHALL BE ULTRASONICALLY TESTED.

NOTE: 7  
HOLES AND OPENINGS REQUIRED IN STRUCTURAL STEEL MEMBERS FOR THE WORK OF OTHER TRADES SHALL BE SHOWN ON THE SHOP DRAWINGS SUBMITTED FOR REVIEW.

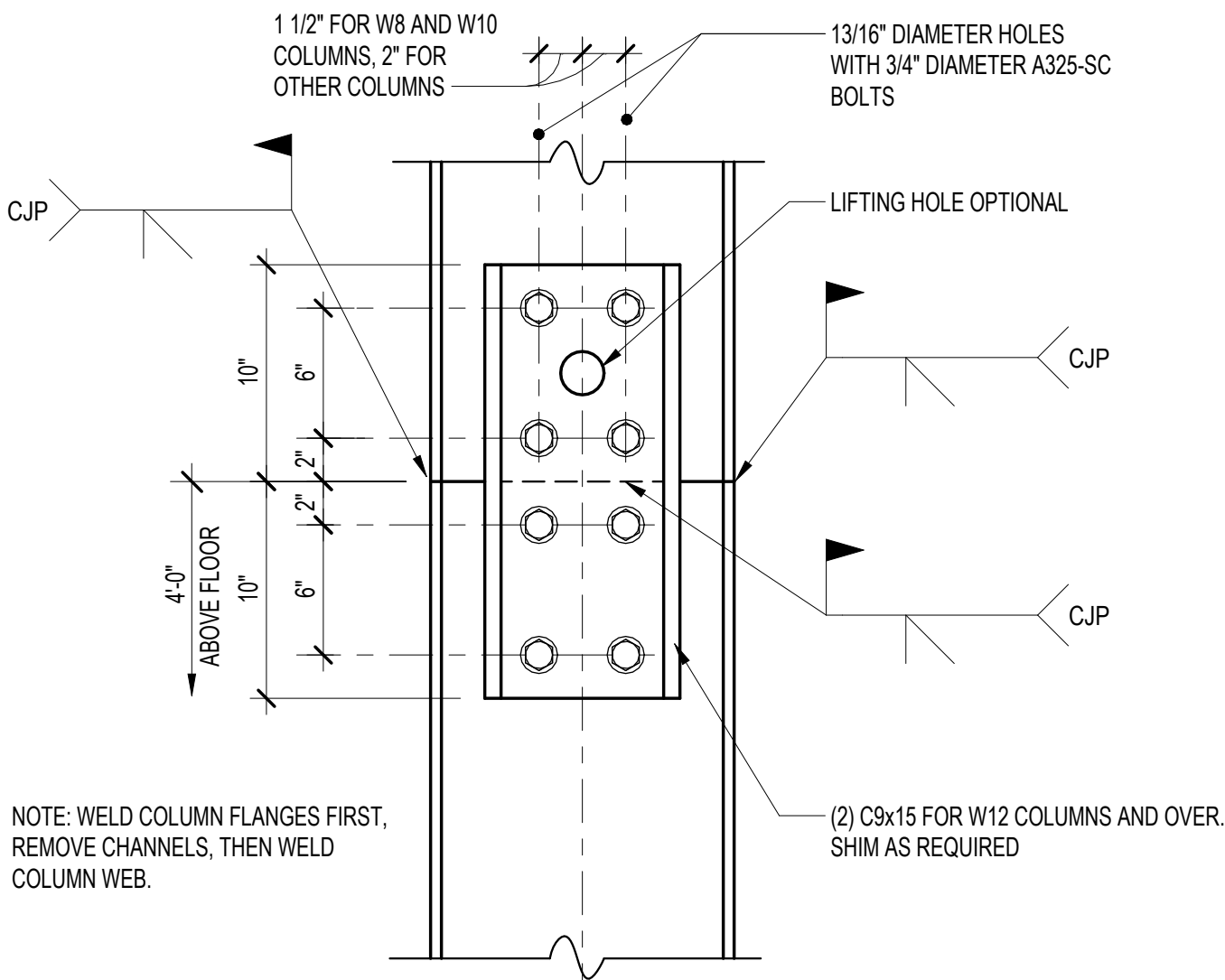
Part copy of S001

Q3.1  
Steel note 6 of S001 says "all groove welds shall be full penetration groove welds." Please confirm whether these column splice welds should be changed to CJP welds or if partial penetration can follow per A/S201.

CEI: Partial penetration welds permitted at type 1 column splices.



A TYPICAL DETAIL  
S201 NOT TO SCALE



B TYPICAL DETAIL  
S201 NOT TO SCALE

Columbia Engineering Inc.  
Structural Engineers  
620 Old Dobbin Lane  
Columbia, MD 21045  
Tel: 410.852.89  
Fax: 410.852.867  
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Suite 600  
Calverton, MD 20705  
Tel: 301.595.1000  
www.grimmandparker.com



GP #22105

COLUMN SCHEDULE  
NORTH EAST MIDDLE / HIGH SCHOOL  
300 IRISHTOWN ROAD, NORTH EAST, MD

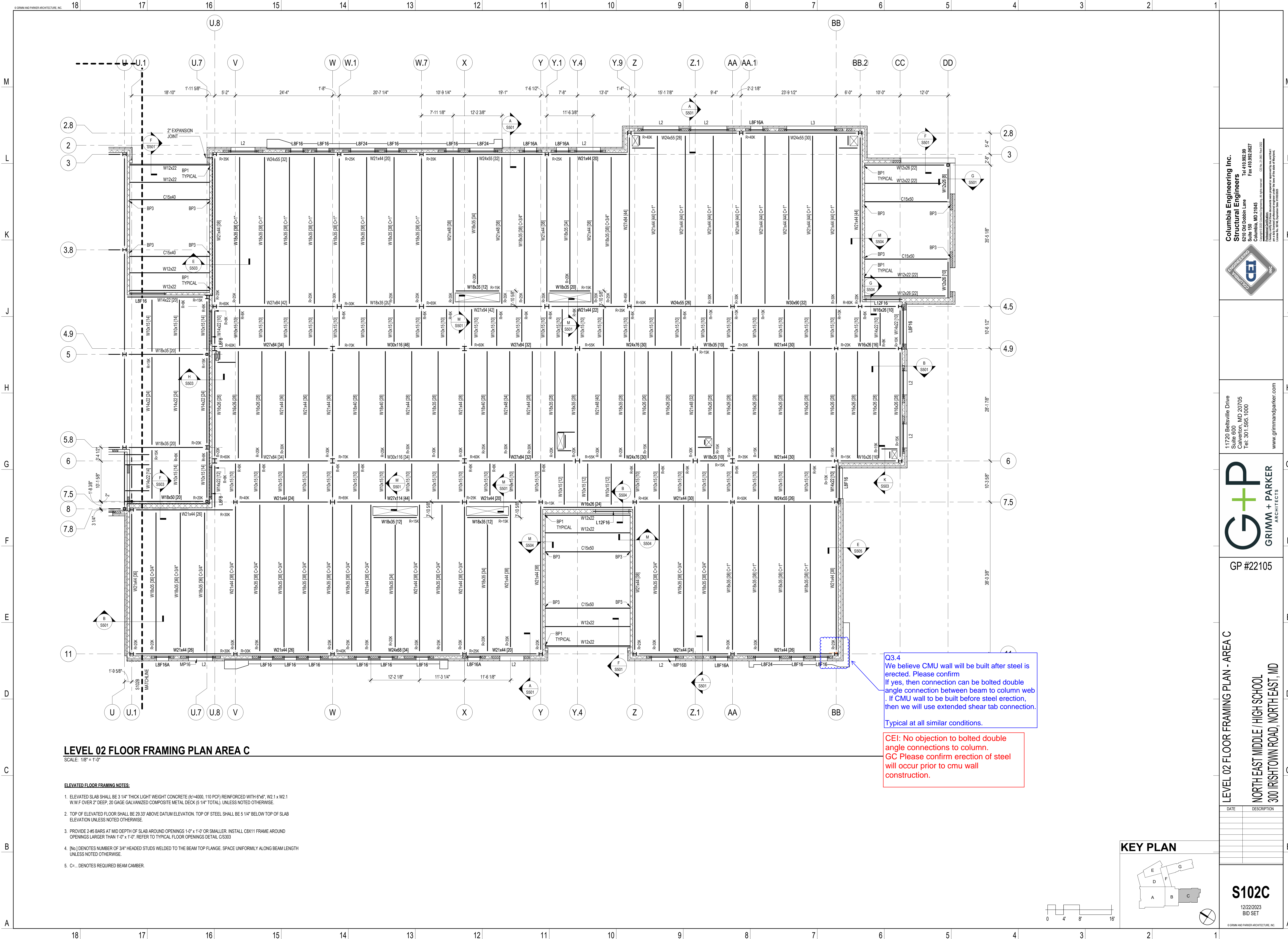
DATE	DESCRIPTION

S201  
12/22/2023  
BID SET



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Columbia Engineering Inc.  
Structural Engineers  
620 Old Dobbin Lane  
Columbia, MD 21045  
Tel: 410.862.89  
Fax: 410.862.867  
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11720 Beltsville Drive  
Suite 600  
Calverton, MD 20705  
Tel: 301.595.1000  
www.grimmandparker.com



GP #22105

LEVEL 02 FLOOR FRAMING PLAN - AREA C  
NORTH EAST MIDDLE / HIGH SCHOOL  
300 IRISHTOWN ROAD, NORTH EAST, MD

DATE	DESCRIPTION

**S102C**  
12/22/2023  
BID SET

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## *Request for Information*

---

**Date:** 08/07/2024

**Request No:** KSI 003

**Project:** North East Middle & High School  
**KCI No.:** 242612

**To:** Hess Construction  
**Attn.:** Joshua Postadan  
**Email:** jpostadan@hessconstruction.com

**From:** Mike Staub  
**Phone:** 717-434-6248  
**Email:** [mstaub@kinsleysteel.com](mailto:mstaub@kinsleysteel.com)

---

### **RE: Connection Clarification**

#### ***Request***

Please refer to the attached TRC RFI 003 for the question locations on the drawings.

Q3.1: Please confirm the column splice weld.

Q3.2: Please confirm the connection type.

Q3.3: Please confirm the hole size in connection angle.

Q3.4: Please confirm the connection type at CMU wall locations.

---

#### ***Date Response Requested: ASAP***

CEI: Please see responses on following sheets.  
Cesar Flores  
08/19/2024



217 Ward Circle Brentwood, TN 37027, Phone: 615-661-7979 Fax: 615-661-0644

# REQUEST FOR INFORMATION

## NORTH EAST MIDDLE / HIGH SCHOOL

JOB #24-880

To:	<b>Michael E.</b> <a href="mailto:Staubmstaub@kinsleysteel.com">Staubmstaub@kinsleysteel.com</a>	CLIENT RFI#
Company:	KINSLEY, INC	GC RFI#
		TRC RFI-ENG# 03
cc:		RESPONSE 08-09-2024 NEEDED BY

### SUBJECT: Connection clarification

Please refer to the attached files for the questions.

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Q3.4: Please confirm the connection type at CMU wall locations.

By:	<b>Ruben Flores</b>	Date:	<b>08-07-2024</b>
-----	---------------------	-------	-------------------

### Response:

By:		Date:	
-----	--	-------	--

PLEASE SEND RESPONSE TO: Ruben Flores  
Phone: **325-320-0719**

**THE RAMANNA COMPANIES**

**CONSULTING ENGINEERS**



COLUMN SCHEDULE																											
ELEVATION																											
PH ROOF	SEE ROOF PLAN FOR ELEVATION																										
LEVEL 3	44.00'	W10x33	W12x40	W12x40	W10x33	W10x33	W12x40	W12x40	W12x40	W10x33	W12x40	W12x40	W12x40	W12x40		W10x33	W12x40	W12x40	W12x40	W10x33	W10x33	W12x40	W12x40	W12x40	W10x33		
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MARK		U 8 - 4.5	U 8 - 4.9	U 8 - 6	V - 7.5	V X - 4.5	W - 4.9	W - 6	W - 7.5	W 1 - 4.5	W 7 - 4.5	X - 4.9	X - 6	X - 7.5		Y - 7.5	Y 1 - 4.5	Y 4 - 4.9	Y 4 - 6	Y 9 - 4.5	Z - 7.5	Z 1 - 4.9	Z X - 6	AA - 4.5	AA - 4.9	AA - 6	AA - 7.5
⊕ SPLICE TYPE		TYPE - 1	TYPE - 2	TYPE - 2	TYPE - 1	TYPE - 1	TYPE - 2	TYPE - 2	TYPE - 1	TYPE - 1	TYPE - 1	TYPE - 2	TYPE - 2	TYPE - 1		TYPE - 1	TYPE - 1	TYPE - 2	TYPE - 2	TYPE - 1	TYPE - 1	TYPE - 2	TYPE - 2	TYPE - 1	TYPE - 2	TYPE - 2	TYPE - 1

COLUMN FOOTING SCHEDULE CONTINUED																									
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HS PH ROOF																									
LEVEL 4		W10x33	W10x33	W10x33	W10x33	W10x33	W10x33	W10x33	W10x33	W10x33															
LEVEL 3																									
LEVEL 2																									
LEVEL 1		W10x49	W10x60	W10x60	W10x54	W10x54	W10x54	W10x60	W10x60	W10x60	W10x60	W10x60	W10x60	W10x60	W10x60	W10x60	W10x60	W10x60	W10x60	W10x60	W10x60	W10x60	W10x60	W10x60	W10x60
MARK		N 1' - 2'	P - 2'	Q' - 2'	R' - 2'	S - 2'	T' - 2'	U' - 2'	V' - 2'	W - 2'	X - 2'														
⊕ SPLICE TYPE		TYPE - 2	TYPE - 2	TYPE - 2	TYPE - 2	TYPE - 2	TYPE - 2	TYPE - 2	TYPE - 2	TYPE - 2	TYPE - 2														

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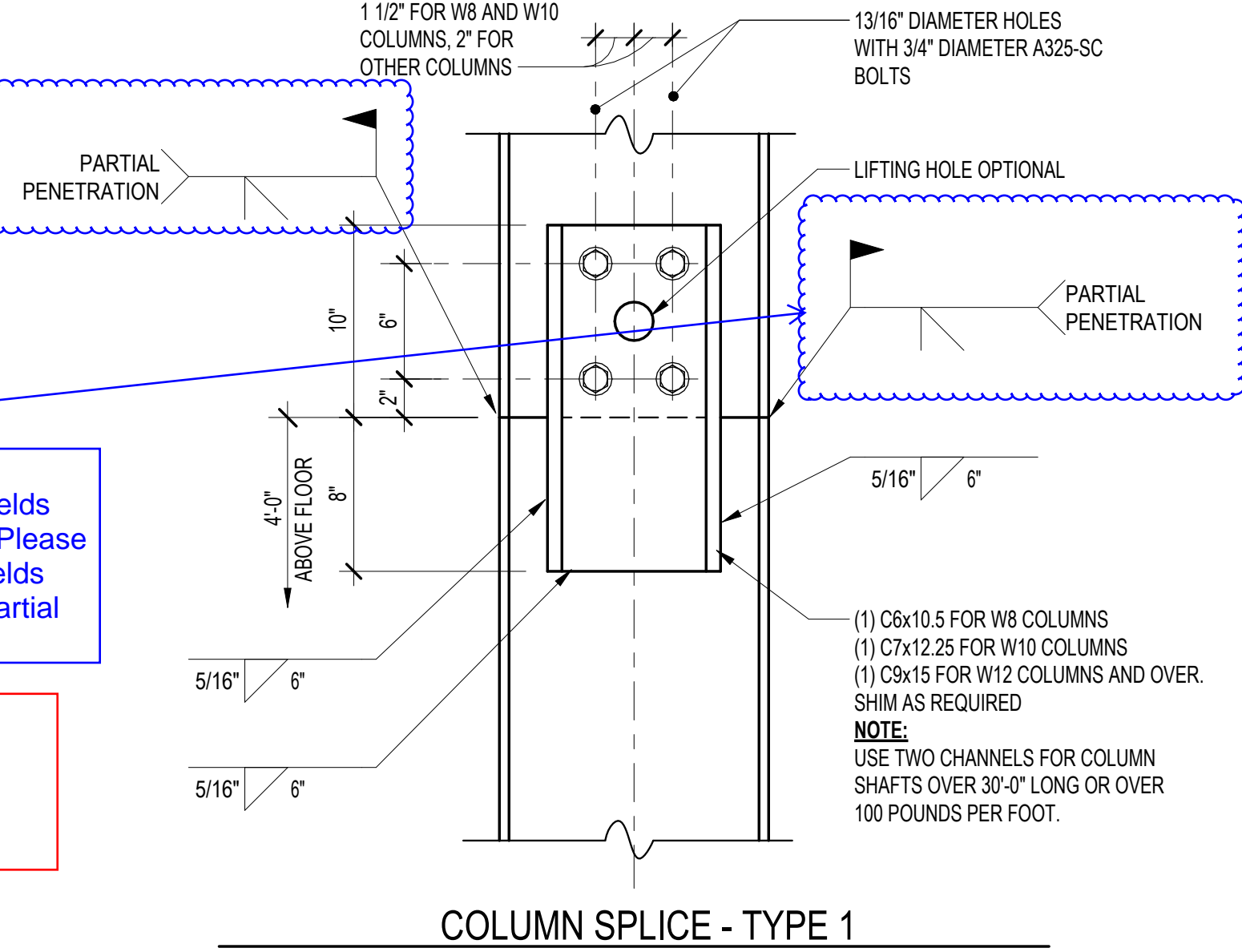
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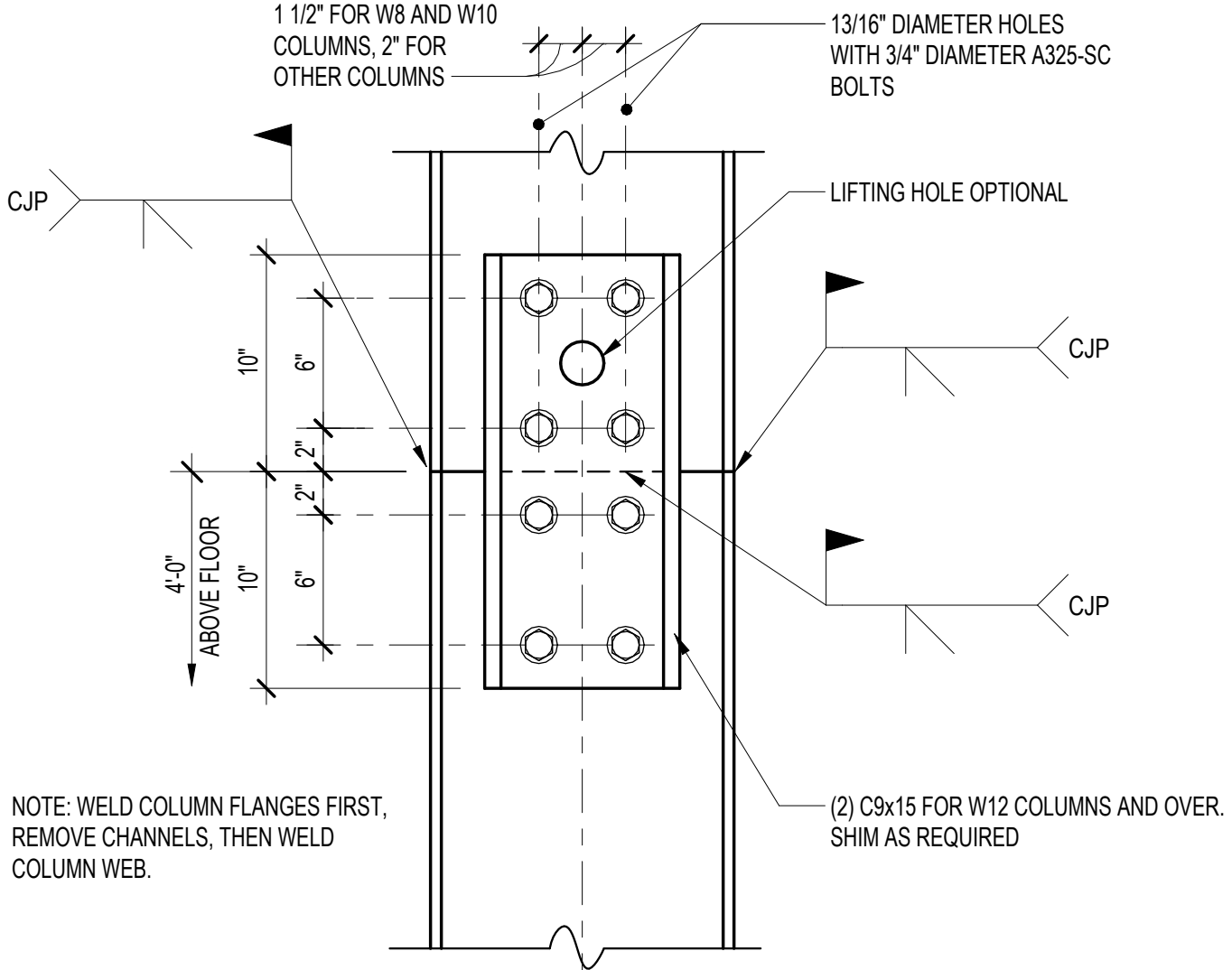
Part copy of S001

Q3.1  
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CEI: Partial penetration welds permitted at type 1 column splices.



A TYPICAL DETAIL  
S201 NOT TO SCALE



B TYPICAL DETAIL  
S201 NOT TO SCALE

Columbia Engineering Inc.  
Structural Engineers  
820 Old Dobbin Lane  
Columbia, MD 21045  
Tel: 410.852.89  
Fax: 410.852.867  
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Suite 600  
Calverton, MD 20705  
Tel: 301.595.1000  
www.grimmandparker.com



GP #22105

COLUMN SCHEDULE  
NORTH EAST MIDDLE / HIGH SCHOOL  
300 IRISHTOWN ROAD, NORTH EAST, MD

DATE	DESCRIPTION

S201  
12/22/2023  
BID SET



3" MAXIMUM  
2" MINIMUM

CENTERLINE OF A325-N BOLTS

1 1/2" MINIMUM FOR 3/4" DIAMETER BOLTS  
2" MINIMUM FOR 1" DIAMETER BOLTS

5/16"

1/4"

3" TYPICAL

1/4"

3/8" THICK PLATE FOR 3/4" DIAMETER BOLTS  
1/2" THICK PLATE FOR 1" DIAMETER BOLTS

TUBE OR PIPE COLUMN, SEE PLAN

**NOTES:**

1. USE THIS CONNECTION ONLY WHEN BEAM REACTION IS GREATER THAN SINGLE PLATE CONNECTION CAPACITY.
2. FOR 3" DIAMETER A325-N BOLTS AND BEAM WEB LESS THAN 0.21", REDUCE ABOVE CAPACITY BY  $T_{web}/0.21$ .
3. FOR 3/4" DIAMETER A325-N BOLTS AND BEAM WEB LESS THAN 0.22", REDUCE ABOVE CAPACITY BY  $T_{web}/0.22$ .
4. SHORT SLOTTED HOLES SHALL BE USED.
5. WELD CAPACITY SHALL BE DETERMINED BASED ON WELDS CREATING A COUPLE TO RESIST THE 3" BOLT ECCENTRICITY. EQUIVALENT WELD SIZE SHALL BE  $5/16"$  MINUS 12 THE DIFFERENCE BETWEEN THE PLATE THICKNESS AND COLUMN SLOT WIDTH.

## BOLTED / BOLTED SINGLE ANGLE CONNECTION

Technical drawing of a butt joint weld. The drawing shows two plates, each 3/16" thick, being joined by a weld. The top plate has a width of 4"x3 1/2"x5/16" MINIMUM ANGLE EACH SIDE FOR 3/4" DIAMETER BOLTS. The bottom plate has a width of 4"x3 1/2"x1/2" MINIMUM ANGLE EACH SIDE FOR 1" DIAMETER BOLTS. The weld is labeled with a note: "WELD CAPACITY SHALL EXCEED BOLT CAPACITY". The distance from the edge of the plate to the centerline of the weld is 1 1/4". The distance from the centerline of the weld to the edge of the plate is 1 1/4". The drawing is labeled with a note: "NOTE: No objection. Either of the standard connections on A/S304 are permitted to be used as long as all noted conditions/geometry are followed".

WELD CAPACITY SHALL EXCEED BOLT CAPACITY

4"x3 1/2"x5/16" MINIMUM ANGLE EACH SIDE FOR 3/4" DIAMETER BOLTS.

4"x3 1/2"x1/2" MINIMUM ANGLE EACH SIDE FOR 1" DIAMETER BOLTS. INCREASE BOLT LEG WIDTH AS NEEDED FOR BOLT GAGE

1 1/4"

1 1/4"

NOTE: No objection. Either of the standard connections on A/S304 are permitted to be used as long as all noted conditions/geometry are followed

**TYPICAL CONNECTION NOTES:**

**NOTE: 1**  
MINIMUM LENGTH OF CONNECTION SHALL BE ONE-HALF THE T-DIMENSION OF THE SUPPORTED MEMBER.

**NOTE: 2**  
CONNECTION TABLES ALSO APPLY FOR BEAM TO COLUMN CONNECTIONS.

**NOTE: 3**  
STEEL SHOP DRAWINGS THAT HAVE CONNECTIONS WHICH DO NOT CONFORM TO THE CONNECTIONS SHOWN IN THIS DETAIL WILL BE REJECTED.

DOUBLE ANGLE CONNECTION

CEI: No objection. either standard or slotted is permitted.

MINIMUM 3/4" CAP PLATE. THE THICKNESS OF THE CAP SHALL NOT BE LESS THAN ONE HALF THE THICKNESS OF THE BEAM FLANGE NOR LESS THAN THE WIDTH OF THE BEAM FLANGE DIVIDED BY 16

5/16"

BEAM AT COLUMN WEB NOT SHOWN FOR CLARITY

MINIMUM 3/8" STIFFENER PLATE. THE THICKNESS OF THE STIFFENER SHALL NOT BE LESS THAN ONE HALF THE THICKNESS OF THE BEAM FLANGE NOR LESS THAN THE WIDTH OF THE BEAM FLANGE DIVIDED BY 16

5/16"

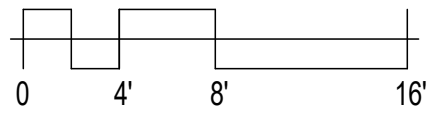
## GIRDER TO COLUMN AT ROOF

## MOMENT CONNECTIONS

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© GRIMM AND PARKER ARCHITECTURE, INC.

NORTHEAST MIDDLE / HIGH SCHOOL  
300 IRISHTOWN ROAD NORTHEAST MD

[illegible]

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## *Request for Information*

---

**Date:** 08/07/2024

**Request No:** KSI 003

**Project:** North East Middle & High School  
**KCI No.:** 242612

**To:** Hess Construction  
**Attn.:** Joshua Postadan  
**Email:** jpostadan@hessconstruction.com

**From:** Mike Staub  
**Phone:** 717-434-6248  
**Email:** [mstaub@kinsleysteel.com](mailto:mstaub@kinsleysteel.com)

---

### **RE: Connection Clarification**

#### ***Request***

Please refer to the attached TRC RFI 003 for the question locations on the drawings.

Q3.1: Please confirm the column splice weld.

Q3.2: Please confirm the connection type.

Q3.3: Please confirm the hole size in connection angle.

Q3.4: Please confirm the connection type at CMU wall locations.

---

#### ***Date Response Requested: ASAP***

CEI: Please see responses on following sheets.  
Cesar Flores  
08/19/2024

G+P: See attached responses from CEI and  
G+P. Coordinate installation sequences  
with HESS.

Patrick Byrne 8.19.2024



217 Ward Circle Brentwood, TN 37027, Phone: 615-661-7979 Fax: 615-661-0644

# REQUEST FOR INFORMATION

## NORTH EAST MIDDLE / HIGH SCHOOL

JOB #24-880

To:	<b>Michael E.</b> <a href="mailto:Staubmstaub@kinsleysteel.com">Staubmstaub@kinsleysteel.com</a>	CLIENT RFI#
Company:	KINSLEY, INC	GC RFI#
		TRC RFI-ENG# 03
cc:		RESPONSE 08-09-2024 NEEDED BY

### SUBJECT: Connection clarification

Please refer to the attached files for the questions.

Q3.1: Please confirm the column splice weld.

Q3.2: Please confirm the connection type.

Q3.3: Please confirm the hole size in connection angle.

Q3.4: Please confirm the connection type at CMU wall locations.

By:	<b>Ruben Flores</b>	Date:	<b>08-07-2024</b>
-----	---------------------	-------	-------------------

### Response:

By:		Date:	
-----	--	-------	--

PLEASE SEND RESPONSE TO: Ruben Flores  
Phone: **325-320-0719**

**THE RAMANNA COMPANIES**

**CONSULTING ENGINEERS**

COLUMN SCHEDULE																											
ELEVATION																											
PH ROOF	SEE ROOF PLAN FOR ELEVATION																										
LEVEL 3	44.00'	W10x33	W12x40	W12x40	W10x33	W10x33	W12x40	W12x40	W12x40	W10x33	W12x40	W12x40	W12x40	W12x40		W10x33	W12x40	W12x40	W12x40	W10x33	W10x33	W12x40	W12x40	W10x33	W12x40	W10x33	
LEVEL 2	29.33'																										
LEVEL 1	14.67'																										
LEVEL 0	0.00'	W10x49	W12x56	W12x56	W10x54	W10x54	W12x56	W12x56	W12x55	W10x54	W12x55	W12x56	W12x56	W12x55		W10x49	W12x55	W12x56	W12x56	W10x54	W10x49	W12x56	W12x56	W10x60	W12x56	W10x54	
MARK		U 8 - 4.5	U 8 - 4.9	U 8 - 6	V - 7.5	VX - 4.5	W - 4.9	W - 6	W - 7.5	W1 - 4.5	W7 - 4.5	X - 4.9	X - 6	X - 7.5		Y - 7.5	Y1 - 4.5	Y4 - 4.9	Y4 - 6	Y9 - 4.5	Z - 7.5	Z1 - 4.9	ZX - 6	AA - 4.5	AA - 4.9	AA - 6	AA - 7.5
⊕ SPLICE TYPE		TYPE - 1	TYPE - 2	TYPE - 2	TYPE - 1	TYPE - 1	TYPE - 2	TYPE - 2	TYPE - 1	TYPE - 1	TYPE - 1	TYPE - 2	TYPE - 2	TYPE - 1		TYPE - 1	TYPE - 1	TYPE - 2	TYPE - 2	TYPE - 1	TYPE - 1	TYPE - 2	TYPE - 2	TYPE - 1	TYPE - 2	TYPE - 2	TYPE - 1
																							</				

COLUMN FOOTING SCHEDULE CONTINUED										
ELEVATION										
HS PH ROOF										
LEVEL 4										
LEVEL 3										
LEVEL 2										
LEVEL 1										
MARK	N 1' - 2'	P - 2'	Q - 2'	R - 2'	S - 2'	T - 2'	U - 2'	V - 2'	W - 2'	X - 2'
SPLICE TYPE	TYPE - 2	TYPE - 2	TYPE - 2	TYPE - 2	TYPE - 2	TYPE - 2	TYPE - 2	TYPE - 2	TYPE - 2	TYPE - 2

**NOTE: 5**  
ALL CONNECTIONS TO BE MADE AT AN ANGLE, SINCE THE COLUMN IS A PART OF THE CONCRETE STEEL DETAIL. SEE DETAILS FOR NOTES.

**NOTE: 6**  
ALL GROOVES TO BE MADE ACCORDANCE WITH THE APPROVED DESIGN. QUALIFIED PERSONNEL TO ACCEPTANCE. INDEPENDENT ULTRASONIC TESTING REQUIRED.

**NOTE: 7**  
HOLES AND NOTCHES TO BE THE WORK OF THE CONTRACTOR FOR REVIEW.

**NOTE: 4**  
WELDS SHALL BE MADE WITH E70XX LOW HYDROGEN ELECTRODES.

**NOTE: 5**  
ALL CONNECTIONS, UNLESS OTHERWISE NOTED, SHALL BE DOUBLE ANGLE, SINGLE ANGLE, SINGLE PLATE, OR THRU PLATE CONNECTIONS PER THE TYPICAL DETAILS OF THE CONTRACT DOCUMENTS. CONNECTIONS SHALL BE SELECTED BY THE STEEL DETAILER BASED ON THE CONNECTION TABLES PROVIDED IN THE TYPICAL DETAILS. LOADS SHOWN IN THE DRAWINGS ARE ASD LOADS UNLESS OTHERWISE NOTED.

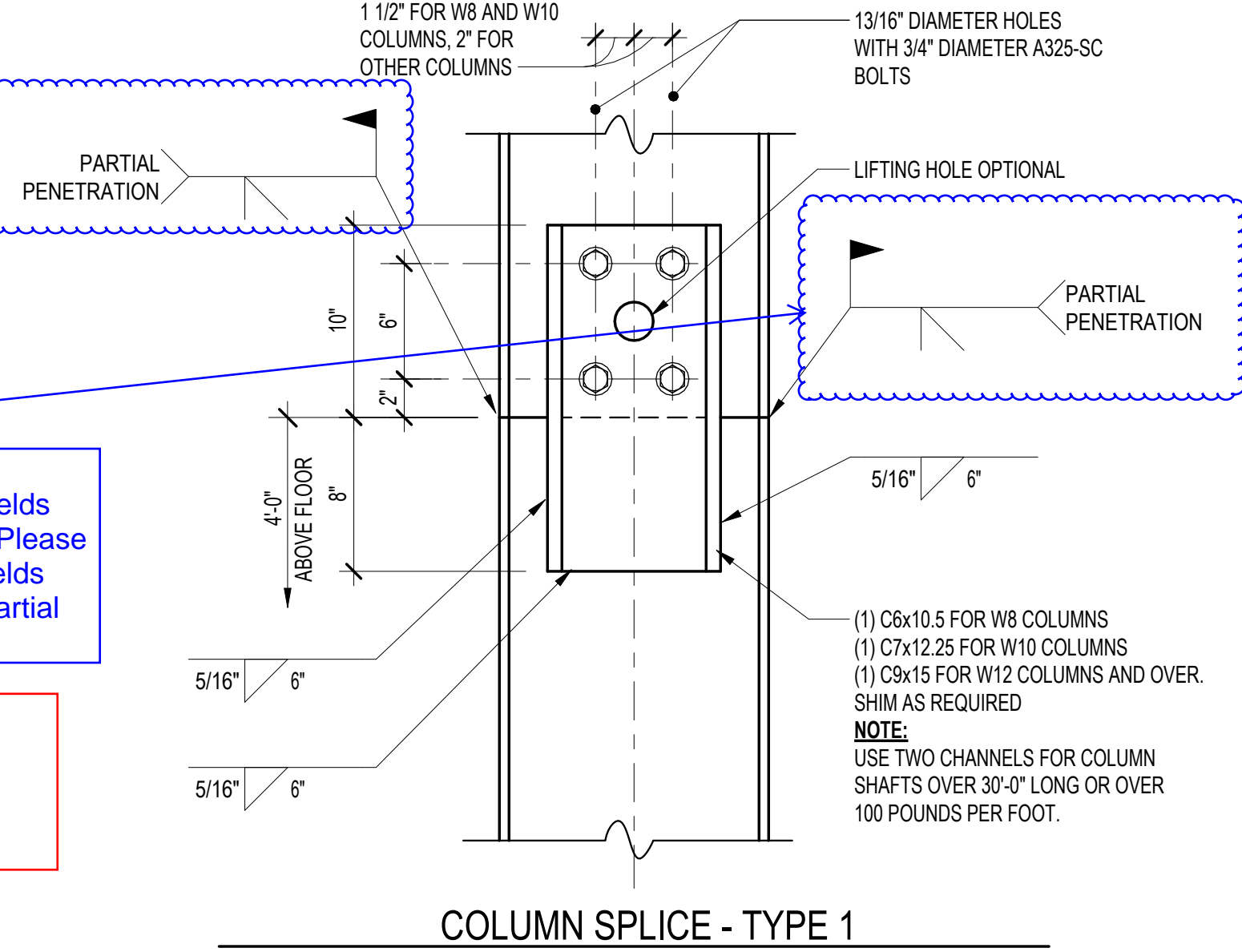
**NOTE: 6**  
ALL GROOVE WELDS SHALL BE FULL PENETRATION GROOVE WELDS IN ACCORDANCE WITH ANSI/AWS D1.1, "STRUCTURAL WELDING CODE" (LATEST LOCAL APPROVED EDITION). THESE WELDS SHALL BE MADE ONLY BY OPERATORS QUALIFIED BY PRESCRIBED TESTS IN THE "STRUCTURAL WELDING CODE." ACCEPTANCE SHALL BE SUBJECT TO THE INSPECTION AND REVIEW OF AN INDEPENDENT INSPECTION AGENCY. ALL FULL PENETRATION WELDS SHALL BE ULTRASONICALLY TESTED.

**NOTE: 7**  
HOLES AND OPENINGS REQUIRED IN STRUCTURAL STEEL MEMBERS FOR THE WORK OF OTHER TRADES SHALL BE SHOWN ON THE SHOP DRAWINGS SUBMITTED FOR REVIEW.

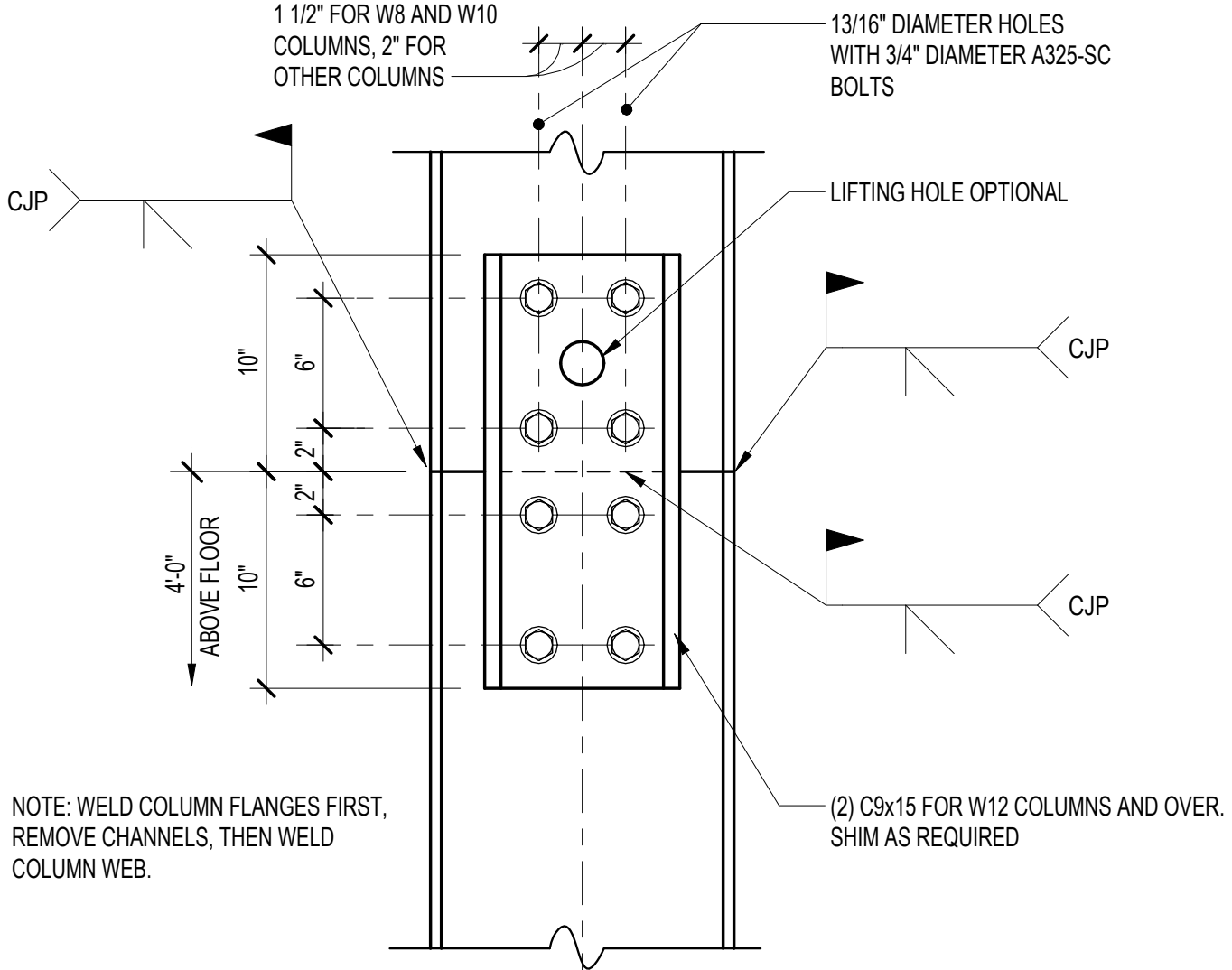
Part copy of S001

Q3.1 Steel note 6 of S001 says "all groove welds shall be full penetration groove welds." Please confirm whether these column splice welds should be changed to CJP welds or if partial penetration can follow per A/S201.

CEI: Partial penetration welds permitted at type 1 column splices.



**A** TYPICAL DETAIL  
S201 NOT TO SCALE



**B** TYPICAL DETAIL  
S201 NOT TO SCALE

**Columbia Engineering Inc.**  
**Structural Engineers**  
620 Old Dobbin Lane  
Columbia, MD 21045  
Tel: 410.852.89  
Fax: 410.852.867  
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11720 Beltsville Drive  
Suite 600  
Calverton, MD 20705  
Tel: 301.595.1000  
www.grimmandparker.com



GP #22105

**COLUMN SCHEDULE**  
**NORTH EAST MIDDLE / HIGH SCHOOL**  
**300 IRISTOWN ROAD, NORTH EAST, MD**

DATE	DESCRIPTION

**S201**  
12/22/2023  
BID SET  
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3" MAXIMUM  
2" MINIMUM

CENTERLINE OF A325-N BOLTS

1 1/2" MINIMUM FOR 3/4" DIAMETER BOLTS  
2" MINIMUM FOR 1" DIAMETER BOLTS

5/16"

1/4"

3" TYPICAL

1/4"

3/8" THICK PLATE FOR 3/4" DIAMETER BOLTS  
1/2" THICK PLATE FOR 1" DIAMETER BOLTS

TUBE OR PIPE COLUMN, SEE PLAN

**NOTES:**

1. USE THIS CONNECTION ONLY WHEN BEAM REACTION IS GREATER THAN SINGLE PLATE CONNECTION CAPACITY.
2. FOR 3/4" DIAMETER A325-N BOLTS AND BEAM WEB LESS THAN 0.21": REDUCE ABOVE CAPACITY BY Tweb/0.21.
3. FOR 1" DIAMETER A325-N BOLTS AND BEAM WEB LESS THAN 0.22": REDUCE ABOVE CAPACITY BY Tweb/0.22.
4. SHORT SLOTTED HOLES SHALL BE USED.
5. WELD CAPACITY SHALL BE DETERMINED BASED ON WELDS CREATING A COUPLE TO RESIST THE 3" BOLT ECCENTRICITY. EQUIVALENT WELD SIZE SHALL BE 5/16" MINUS 1/2 THE DIFFERENCE BETWEEN THE PLATE THICKNESS AND COLUMN SLOT WIDTH.

## BOLTED / BOLTED SINGLE ANGLE CONNECTION

Technical drawing of a bolted connection. The drawing shows a side view of a plate with a 3/16" thick flange and a 1/2" thick web. A 4"x12"x5/16" minimum angle is attached to the flange. The angle is welded to the flange with a 3/16" weld. The angle is also welded to the web with a 3/16" weld. The drawing includes dimensions for the angle size, plate thickness, and weld size. A note specifies: "WELD CAPACITY SHALL EXCEED BOLT CAPACITY".

CEI: No objection. Either of the standard connections on A/S304 are permitted to be used as long as all noted conditions/geometry are followed.

Any connection deviating from CEI standard connections per A/S304 will need to be signed and sealed by a PE, Typical.

**NOTES:**

1. REDUCE 3/16" WELD CAPACITY BY Tweb/0.28 FOR BEAM WEB LESS THAN 0.28". REDUCE 1/4" WELD CAPACITY BY Tweb/0.37 FOR BEAM WEB LESS THAN 0.37". REDUCE 5/16" WELD CAPACITY BY Tweb/0.47 FOR BEAM WEB LESS THAN 0.47".
2. IF BEAMS FRAME TO SUPPORTING MEMBER FROM BOTH SIDES, REDUCE THE 3/4" DIAMET BOLT CAPACITY BY Tweb/0.39 FOR SUPPORTING MEMBER WEB LESS THAN 0.39" AND THE 1" DIAMET BOLT CAPACITY BY Tweb/0.44 FOR SUPPORTING MEMBER WEB LESS THAN 0.44".
3. STANDARD
4. IF LENGTH

Q3.3

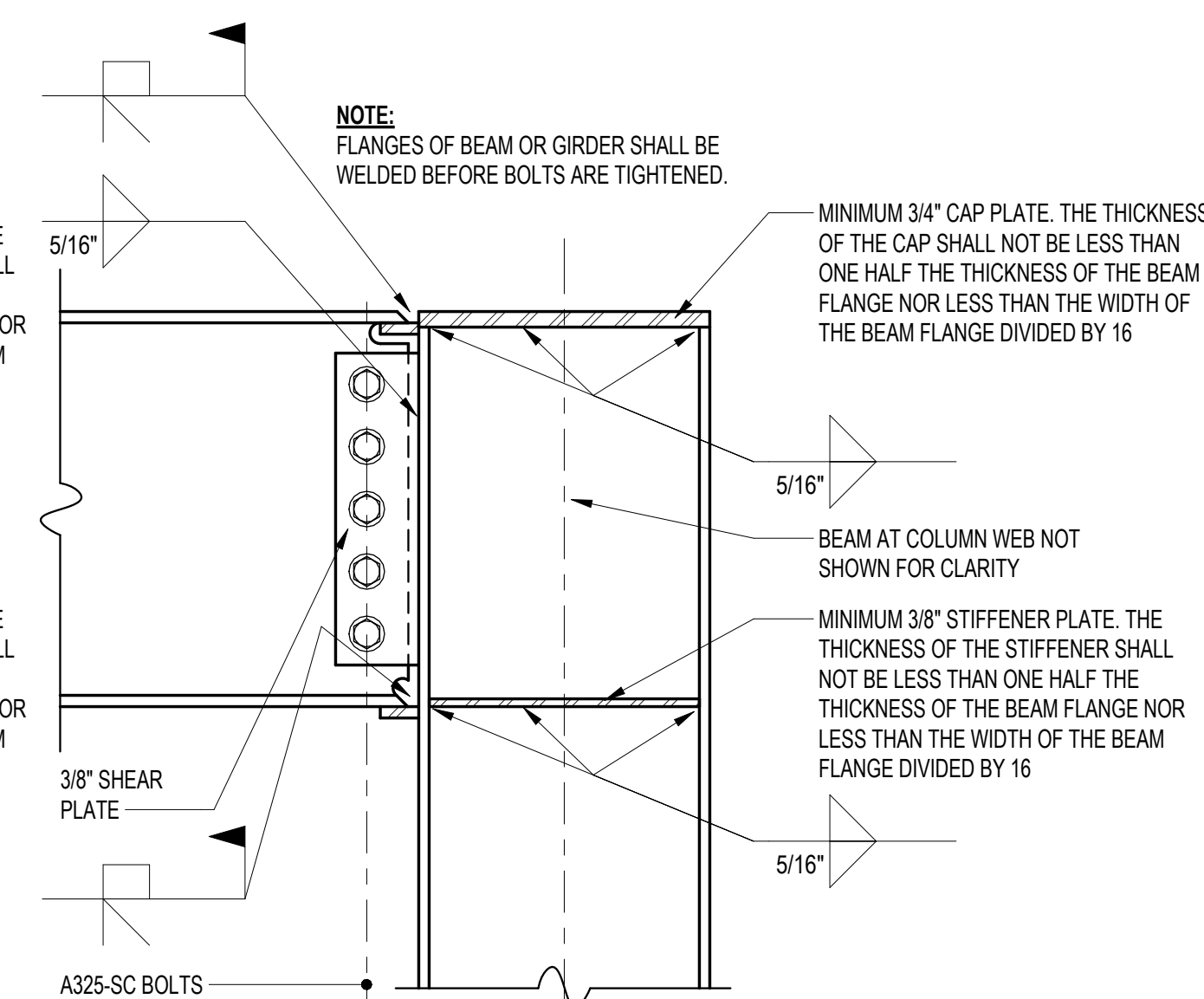
EDGE DISTANCE, L<sub>eh</sub>.  
T<sub>y</sub> SHALL BE CHECKED.

**NOTE: 3**  
STEEL SHOP DRAWINGS THAT HAVE CONNECTIONS WHICH DO NOT CONFORM TO THE CONNECTIONS SHOWN IN THIS  
DETAIL WILL BE REJECTED.

DOUBLE ANGLE CONNECTION

## CONNECTION DETAILS

CEI: No objection. either standard or slotted is permitted.

GIRDER TO COLUMN AT ROOF

## MOMENT CONNECTIONS

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Suite 600  
Calverton, MD 20705  
Tel: 301.595.1000

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**G+p**  
GRIMM + PARKER

GP #22105

TYPICAL DETAILS

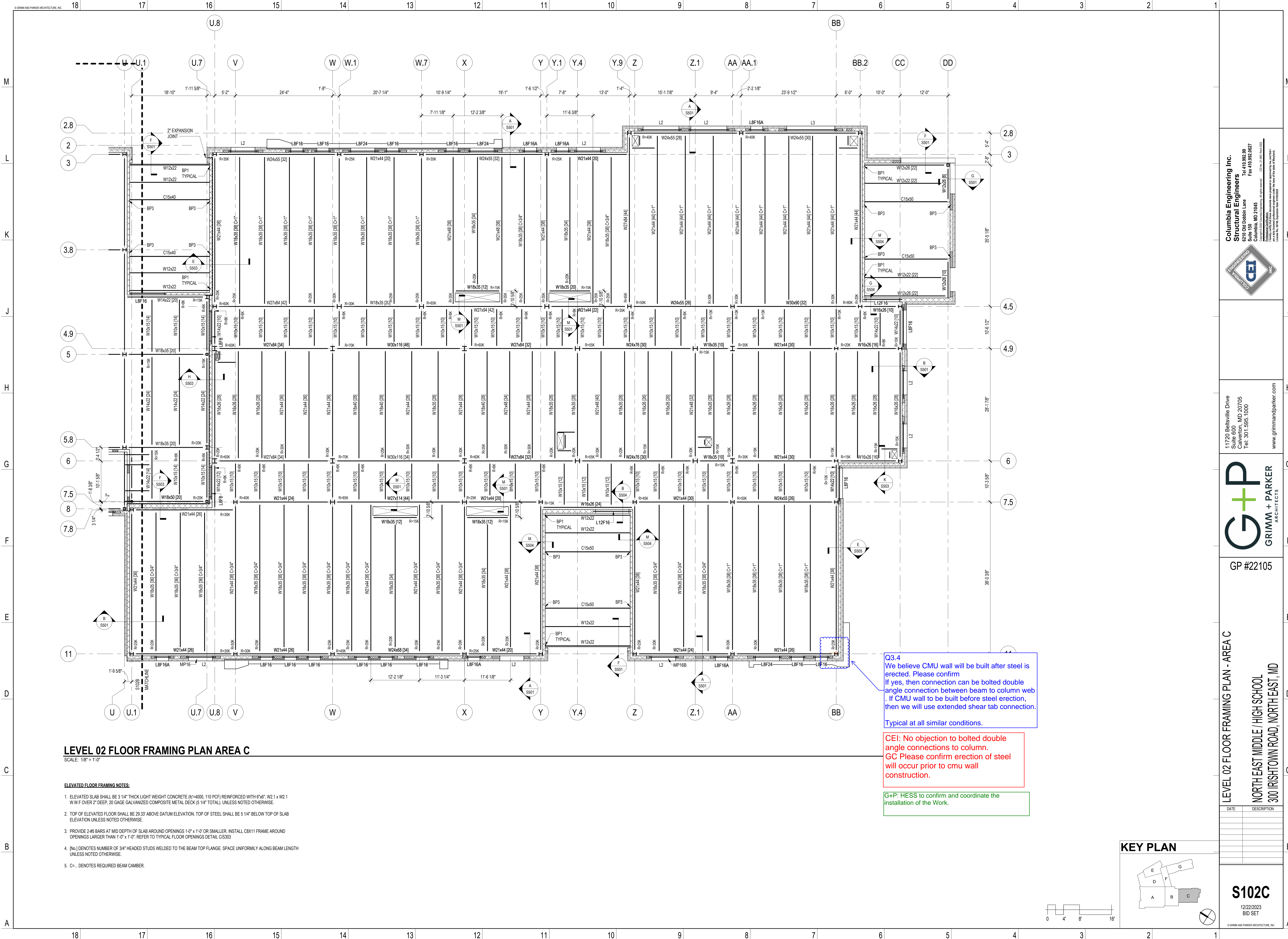
NORTH EAST MIDDLE / HIGH SCHOOL

300 IRISHTOWN ROAD NORTH EAST MD

**S304**

12/22/2023  
BID SET





Columbia Engineering Inc.  
Structural Engineers  
620 Old Dobbin Lane  
Columbia, MD 21045  
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Fax: 410.862.867  
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GP #22105

LEVEL 02 FLOOR FRAMING PLAN - AREA C  
NORTH EAST MIDDLE / HIGH SCHOOL  
300 IRISTOWN ROAD, NORTH EAST, MD

DATE	DESCRIPTION

**S102C**  
12/22/2023  
BID SET

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## *Request for Information*

---

**Date:** 08/07/2024

**Request No:** KSI 003

**Project:** North East Middle & High School  
**KCI No.:** 242612

**To:** Hess Construction  
**Attn.:** Joshua Postadan  
**Email:** jpostadan@hessconstruction.com

**From:** Mike Staub  
**Phone:** 717-434-6248  
**Email:** [mstaub@kinsleysteel.com](mailto:mstaub@kinsleysteel.com)

---

### **RE: Connection Clarification**

#### ***Request***

Please refer to the attached TRC RFI 003 for the question locations on the drawings.

Q3.1: Please confirm the column splice weld.

Q3.2: Please confirm the connection type.

Q3.3: Please confirm the hole size in connection angle.

Q3.4: Please confirm the connection type at CMU wall locations.

---

#### ***Date Response Requested: ASAP***

CEI: Please see responses on following sheets.  
Cesar Flores  
08/19/2024

G+P: See attached responses from CEI and  
G+P. Coordinate installation sequences  
with HESS.

Patrick Byrne 8.19.2024





217 Ward Circle Brentwood, TN 37027, Phone: 615-661-7979 Fax: 615-661-0644

# REQUEST FOR INFORMATION

## NORTH EAST MIDDLE / HIGH SCHOOL

JOB #24-880

To:	<b>Michael E.</b> <a href="mailto:Staubmstaub@kinsleysteel.com">Staubmstaub@kinsleysteel.com</a>	CLIENT RFI#
Company:	KINSLEY, INC	GC RFI#
		TRC RFI-ENG# 03
cc:		RESPONSE 08-09-2024 NEEDED BY

### SUBJECT: Connection clarification

Please refer to the attached files for the questions.

Q3.1: Please confirm the column splice weld.

Q3.2: Please confirm the connection type.

Q3.3: Please confirm the hole size in connection angle.

Q3.4: Please confirm the connection type at CMU wall locations.

By:	<b>Ruben Flores</b>	Date:	<b>08-07-2024</b>
-----	---------------------	-------	-------------------

### Response:

By:		Date:	
-----	--	-------	--

PLEASE SEND RESPONSE TO: Ruben Flores  
Phone: **325-320-0719**

**THE RAMANNA COMPANIES**

**CONSULTING ENGINEERS**

COLUMN SCHEDULE																											
ELEVATION																											
PH ROOF	SEE ROOF PLAN FOR ELEVATION																										
LEVEL 3	44.00'	W10x33	W12x40	W12x40	W10x33	W10x33	W12x40	W12x40	W12x40	W10x33	W12x40	W12x40	W12x40	W12x40		W10x33	W12x40	W12x40	W12x40	W10x33	W10x33	W12x40	W12x40	W12x40	W10x33		
LEVEL 2	29.33'																										
LEVEL 1	14.67'																										
LEVEL 0	0.00'	W10x49	W12x66	W12x66	W10x54	W10x54	W12x66	W12x66	W12x65	W10x54	W12x65	W12x66	W12x66	W12x65		W10x49	W12x65	W12x66	W12x66	W10x54	W10x49	W12x66	W12x66	W10x60	W12x66	W10x54	
MARK		U 8 - 4.5	U 8 - 4.9	U 8 - 6	V - 7.5	V X - 4.5	W - 4.9	W - 6	W - 7.5	W 1 - 4.5	W 7 - 4.5	X - 4.9	X - 6	X - 7.5		Y - 7.5	Y 1 - 4.5	Y 4 - 4.9	Y 4 - 6	Y 9 - 4.5	Z - 7.5	Z 1 - 4.9	Z X - 6	AA - 4.5	AA - 4.9	AA - 6	AA - 7.5
⊕ SPLICE TYPE		TYPE - 1	TYPE - 2	TYPE - 2	TYPE - 1	TYPE - 1	TYPE - 2	TYPE - 2	TYPE - 1	TYPE - 1	TYPE - 1	TYPE - 2	TYPE - 2	TYPE - 1		TYPE - 1	TYPE - 1	TYPE - 2	TYPE - 2	TYPE - 1	TYPE - 1	TYPE - 2	TYPE - 2	TYPE - 1	TYPE - 2	TYPE - 2	TYPE - 1

NOTE: 4

WELDS SHALL BE MADE WITH E70XX LOW HYDROGEN ELECTRODES.

COLUMN FOOTING SCHEDULE CONTINUED																									
ELEVATION																									
HS PH ROOF																									
LEVEL 4		W10x33	W10x33	W10x33	W10x33	W10x33	W10x33	W10x33	W10x33	W10x33															
LEVEL 3																									
LEVEL 2																									
LEVEL 1		W10x49	W10x60	W10x60	W10x54	W10x54	W10x54	W10x60	W10x60	W10x60	W10x60	W10x60	W10x60	W10x60	W10x60	W10x60	W10x60	W10x60	W10x60	W10x60	W10x60	W10x60	W10x60	W10x60	W10x60
MARK		N 1' - 2'	P - 2'	Q' - 2'	R' - 2'	S - 2'	T' - 2'	U' - 2'	V' - 2'	W' - 2'	X' - 2'														
⊕ SPLICE TYPE		TYPE - 2	TYPE - 2	TYPE - 2	TYPE - 2	TYPE - 2	TYPE - 2	TYPE - 2	TYPE - 2	TYPE - 2	TYPE - 2	TYPE - 2	TYPE - 2	TYPE - 2	TYPE - 2	TYPE - 2	TYPE - 2	TYPE - 2	TYPE - 2	TYPE - 2	TYPE - 2	TYPE - 2	TYPE - 2	TYPE - 2	TYPE - 2

NOTE: 4  
WELDS SHALL BE MADE WITH E70XX LOW HYDROGEN ELECTRODES.

NOTE: 5  
ALL CONNECTIONS, UNLESS OTHERWISE NOTED, SHALL BE DOUBLE ANGLE, SINGLE ANGLE, SINGLE PLATE, OR THRU PLATE CONNECTIONS PER THE TYPICAL DETAILS OF THE CONTRACT DOCUMENTS. CONNECTIONS SHALL BE SELECTED BY THE STEEL DETAILER BASED ON THE CONNECTION TABLES PROVIDED IN THE TYPICAL DETAILS. LOADS SHOWN IN THE DRAWINGS ARE ASD LOADS UNLESS OTHERWISE NOTED.

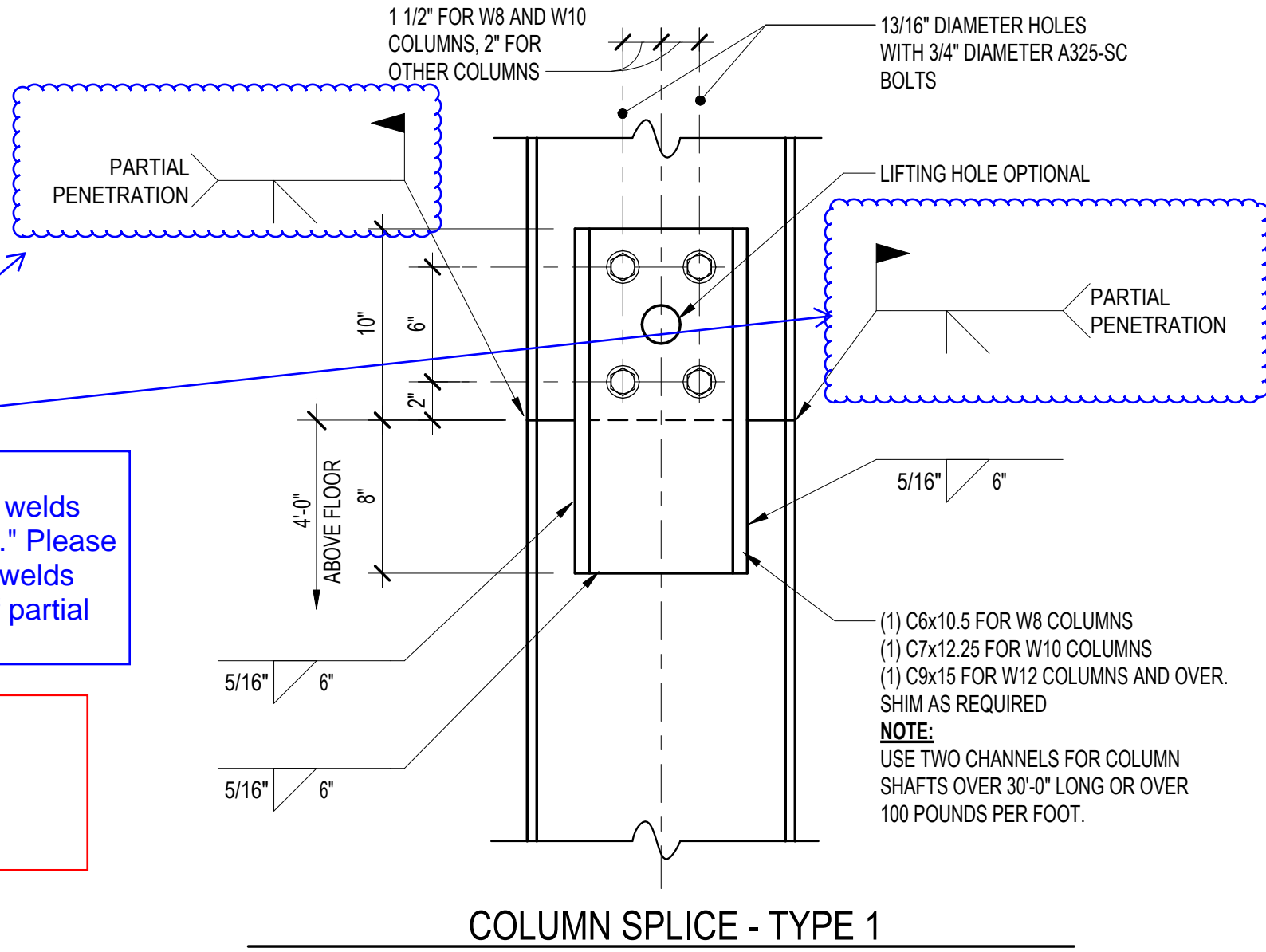
NOTE: 6  
ALL GROOVE WELDS SHALL BE FULL PENETRATION GROOVE WELDS IN ACCORDANCE WITH ANSI/AWS D1.1, "STRUCTURAL WELDING CODE" (LATEST LOCAL APPROVED EDITION). THESE WELDS SHALL BE MADE ONLY BY OPERATORS QUALIFIED BY PRESCRIBED TESTS IN THE "STRUCTURAL WELDING CODE." ACCEPTANCE SHALL BE SUBJECT TO THE INSPECTION AND REVIEW OF AN INDEPENDENT INSPECTION AGENCY. ALL FULL PENETRATION WELDS SHALL BE ULTRASONICALLY TESTED.

NOTE: 7  
HOLES AND OPENINGS REQUIRED IN STRUCTURAL STEEL MEMBERS FOR THE WORK OF OTHER TRADES SHALL BE SHOWN ON THE SHOP DRAWINGS SUBMITTED FOR REVIEW.

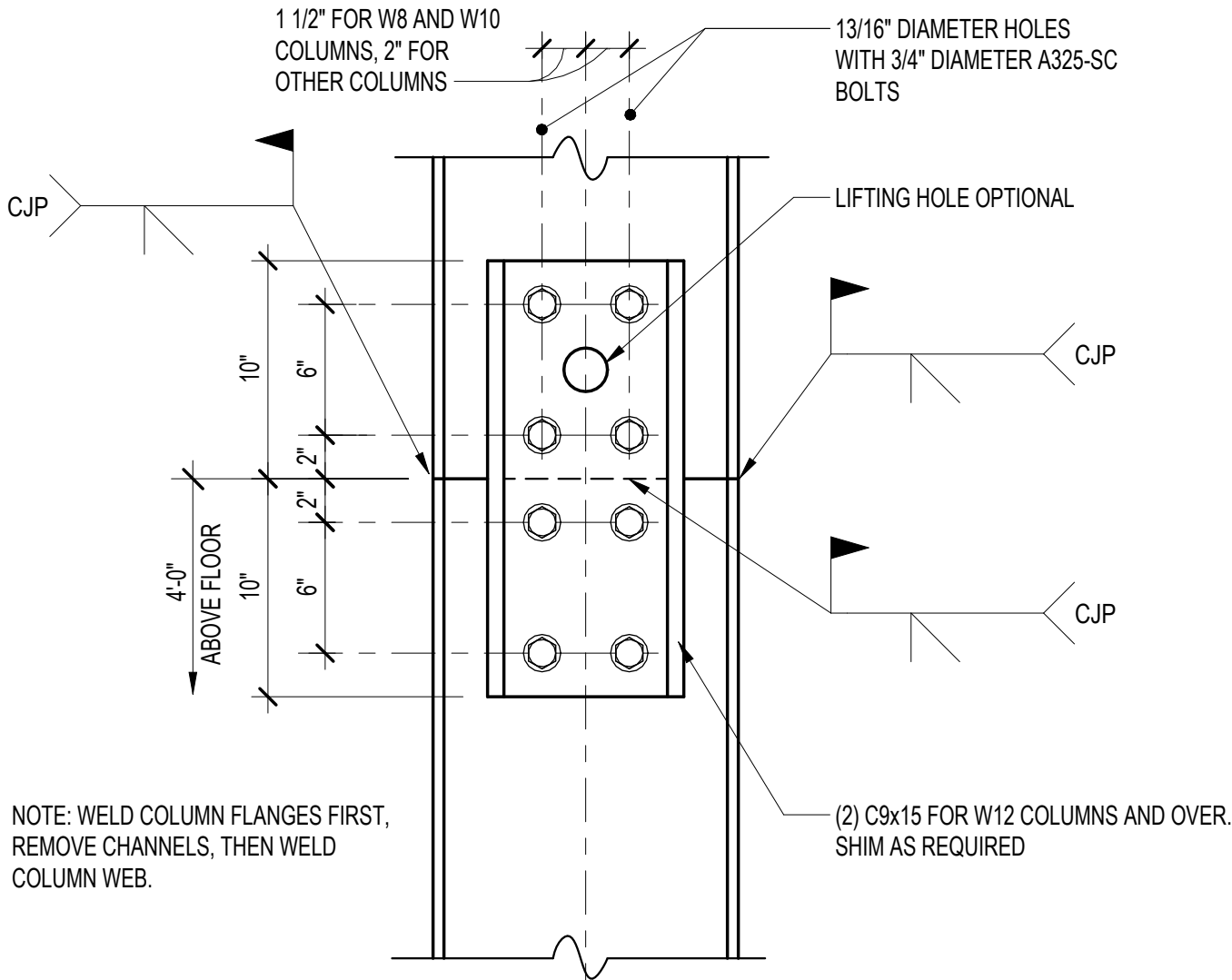
Part copy of S001

Q3.1  
Steel note 6 of S001 says "all groove welds shall be full penetration groove welds." Please confirm whether these column splice welds should be changed to CJP welds or if partial penetration can follow per A/S201.

CEI: Partial penetration welds permitted at type 1 column splices.



A TYPICAL DETAIL  
S201 NOT TO SCALE



B TYPICAL DETAIL  
S201 NOT TO SCALE

Columbia Engineering Inc.  
Structural Engineers  
820 Old Dobbin Lane  
Columbia, MD 21045  
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Fax: 410.852.867  
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GP #22105

COLUMN SCHEDULE  
NORTH EAST MIDDLE / HIGH SCHOOL  
300 IRISHTOWN ROAD, NORTH EAST, MD

DATE	DESCRIPTION

S201  
12/22/2023  
BID SET



M

L

K

J

H

G

F

E

D

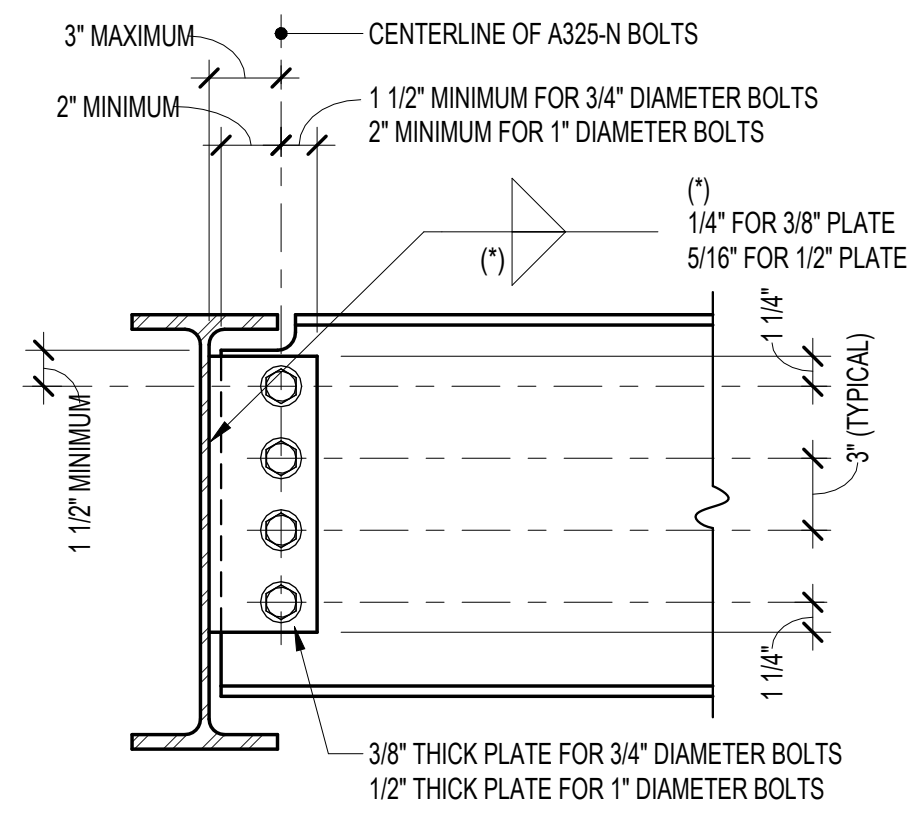
C

B

A

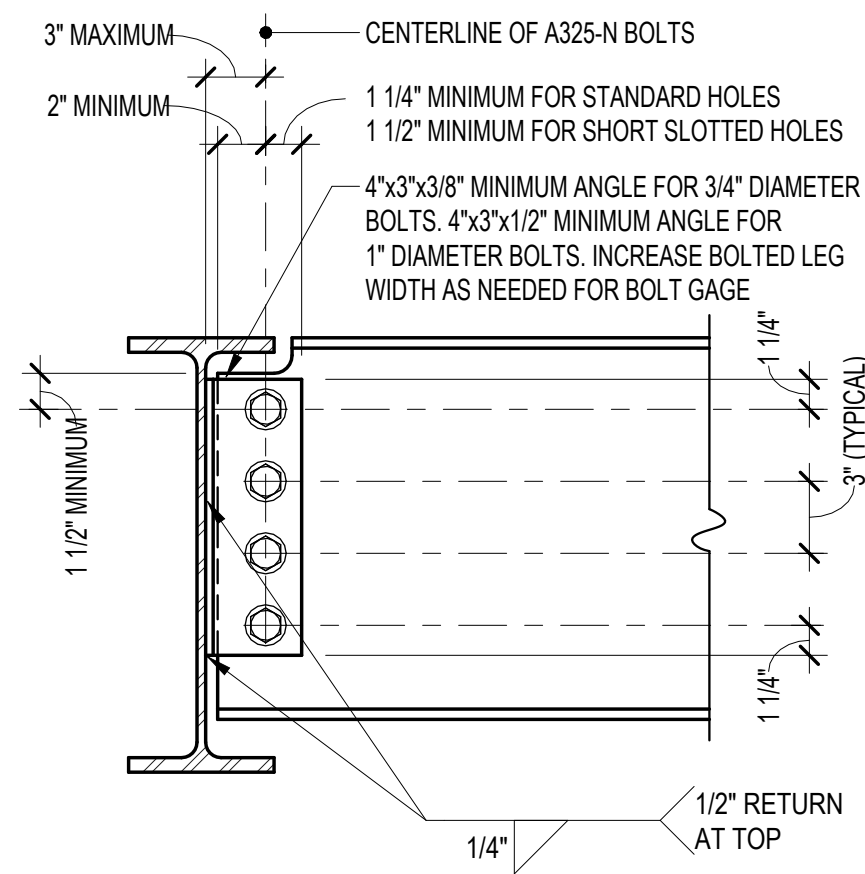
ALLOWABLE CONNECTION CAPACITY (KIPS)		
NUMBER OF BOLTS	3/4" DIAMETER A325-N	1" DIAMETER A325-N
2	9.7	11.0
3	19.3	21.9
4	30.9	35.1
5	42.9	48.8
6	54.8	62.3
7	66.7	75.8
8	78.4	89.0
9	90.0	102
10	101	115
11	112	128
12	124	141

- NOTES:
- FOR 3/4" DIAMETER A325-N BOLTS AND BEAM WEB LESS THAN 0.26", REDUCE ABOVE CAPACITY BY Tweb0.26.
  - FOR 1" DIAMETER A325-N BOLTS AND BEAM WEB LESS THAN 0.34", REDUCE ABOVE CAPACITY BY Tweb0.34.
  - SHORT SLOTTED HOLES SHALL BE USED.



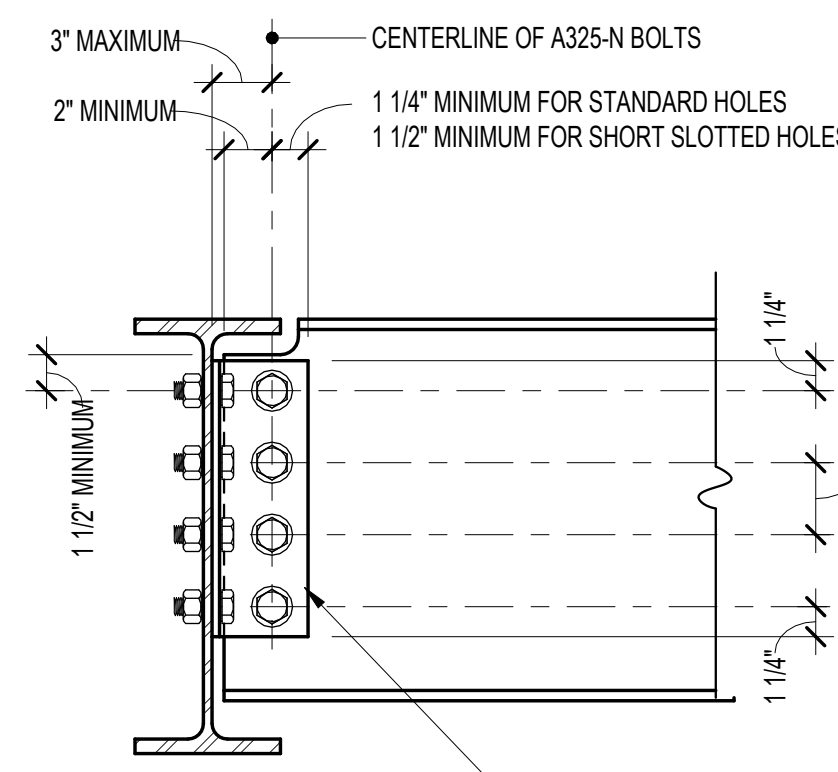
ALLOWABLE CONNECTION CAPACITY (KIPS)			
NUMBER OF BOLTS	3/4" DIAMETER A325-N	1" DIAMETER A325-N	WELD
2	9.7	11.0	22.0
3	19.3	21.9	38.1
4	30.9	35.1	51.5
5	42.9	48.8	64.1
6	54.8	62.3	76.3
7	66.7	75.8	87.7
8	78.4	89.0	98.7
9	90.0	102	110
10	101	115	120
11	112	128	131
12	124	141	143

- NOTES:
- FOR 3/4" DIAMETER A325-N BOLTS AND BEAM WEB LESS THAN 0.26", REDUCE ABOVE CAPACITY BY Tweb0.26.
  - FOR 1" DIAMETER A325-N BOLTS AND BEAM WEB LESS THAN 0.34", REDUCE ABOVE CAPACITY BY Tweb0.34.
  - IF BEAMS FRAME TO SUPPORTING MEMBER FROM BOTH SIDES AND THE CONNECTION ANGLES ARE LOCATED BACK TO BACK, REDUCE THE WELD CAPACITY BY Tweb0.38 FOR SUPPORTING MEMBER WEBS LESS THAN 0.38".
  - STANDARD OR SHORT SLOTTED HOLES SHALL BE USED.



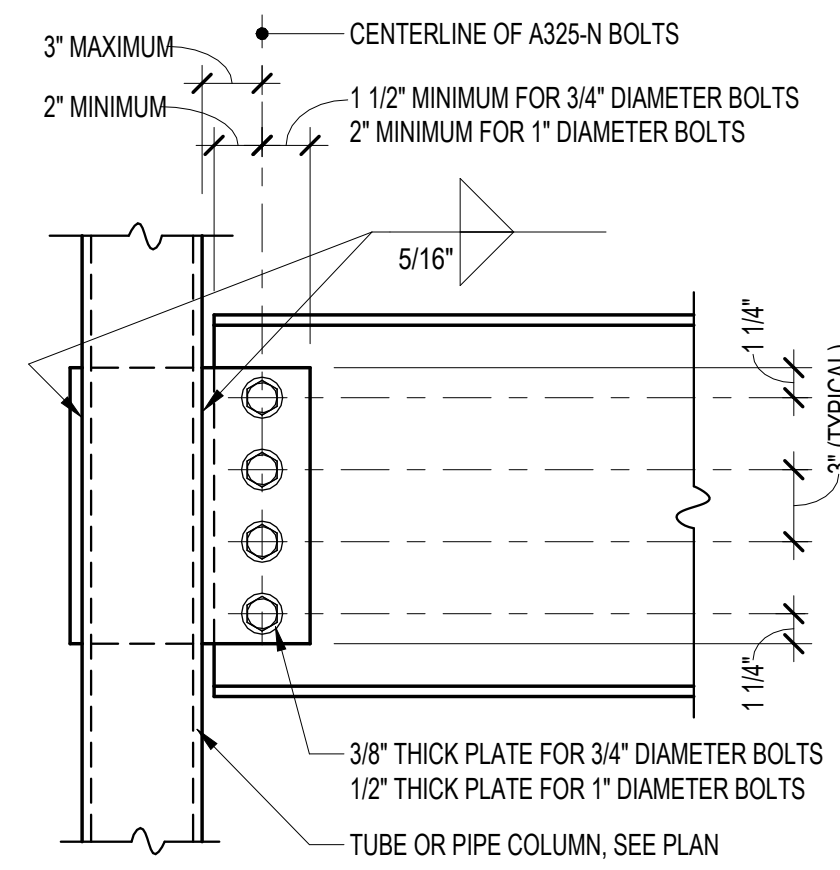
ALLOWABLE CONNECTION CAPACITY (KIPS)		
NUMBER OF BOLTS	3/4" DIAMETER A325-N	1" DIAMETER A325-N
2	9.7	11.0
3	19.3	21.9
4	30.9	35.1
5	42.9	48.8
6	54.8	62.3
7	66.7	75.8
8	78.4	89.0
9	90.0	102
10	101	115
11	112	128
12	124	141

- NOTES:
- FOR 3/4" DIAMETER A325-N BOLTS AND BEAM WEB LESS THAN 0.26", REDUCE ABOVE CAPACITY BY Tweb0.26.
  - FOR 1" DIAMETER A325-N BOLTS AND BEAM WEB LESS THAN 0.34", REDUCE ABOVE CAPACITY BY Tweb0.34.
  - IF BEAMS FRAME TO SUPPORTING MEMBER FROM BOTH SIDES AND THE CONNECTION ANGLES ARE LOCATED BACK TO BACK, REDUCE THE 3/4" DIAMETER BOLT CAPACITY BY Tweb0.38 FOR SUPPORTING MEMBER WEBS LESS THAN 0.38" AND THE 1" DIAMETER BOLT CAPACITY BY Tweb0.34 FOR SUPPORTING MEMBER WEBS LESS THAN 0.34".
  - STANDARD OR SHORT SLOTTED HOLES SHALL BE USED IN ANGLE LEG CONNECTED TO SUPPORTED MEMBER.
  - STANDARD HOLES SHALL BE USED IN ANGLE LEG CONNECTED TO SUPPORTING MEMBER. MAINTAIN 1 1/4" MINIMUM HORIZONTAL EDGE DISTANCE, LeH.
  - DISTANCE FROM HEEL OF ANGLE TO LINE OF BOLTS SHALL NOT EXCEED 3" FOR BOTH LEGS.



ALLOWABLE CONNECTION CAPACITY (KIPS)		
NUMBER OF BOLTS	3/4" DIAMETER A325-N	1" DIAMETER A325-N
2	20.4	27.2
3	34.8	44.6
4	46.7	60.9
5	58.6	77.2
6	70.5	93.5
7	82.4	110
8	94.3	126
9	106	142
10	118	159
11	130	175
12	142	191

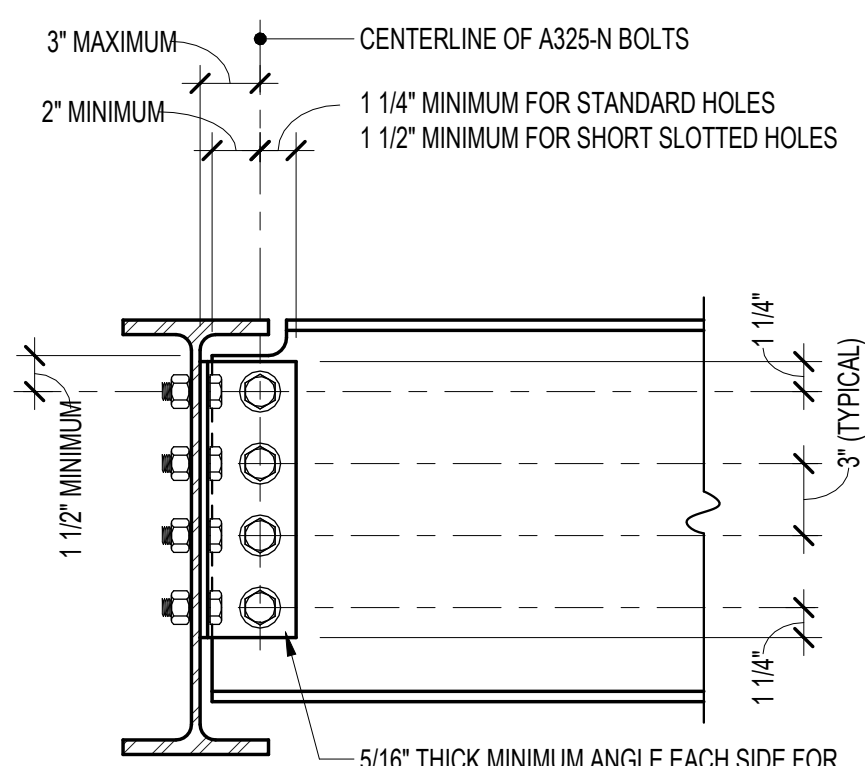
- NOTES:
- USE THIS CONNECTION ONLY WHEN BEAM REACTION IS GREATER THAN SINGLE PLATE CONNECTION CAPACITY.
  - FOR 3/4" DIAMETER A325-N BOLTS AND BEAM WEB LESS THAN 0.21", REDUCE ABOVE CAPACITY BY Tweb0.21.
  - FOR 1" DIAMETER A325-N BOLTS AND BEAM WEB LESS THAN 0.22", REDUCE ABOVE CAPACITY BY Tweb0.22.
  - SHORT SLOTTED HOLES SHALL BE USED.
  - WELD CAPACITY SHALL BE DETERMINED BASED ON WELDS CREATING A COUPLE TO RESIST THE 3" BOLT ECCENTRICITY. EQUIVALENT WELD SIZE SHALL BE 5/16" MINUS 1/2 THE DIFFERENCE BETWEEN THE PLATE THICKNESS AND COLUMN SLOT WIDTH.



SINGLE PLATE CONNECTION

ALLOWABLE CONNECTION CAPACITY (KIPS)				
NUMBER OF BOLTS	3/4" DIAMETER A325-N AT SUPPORTING MEMBER	3/4" DIAMETER A325-N AT SUPPORTING MEMBER	1" DIAMETER A325-N AT SUPPORTING MEMBER	1" DIAMETER A325-N AT SUPPORTING MEMBER
2	16.1	40.8	22.0	56.6
3	32.1	63.7	43.8	89.2
4	51.6	83.9	70.3	122
5	71.6	104	97.5	154
6	91.4	124	125	187
7	111	145	152	220
8	131	165	178	252
9	150	185	204	285
10	169	205	230	318
11	187	226	255	350
12	207	246	283	383

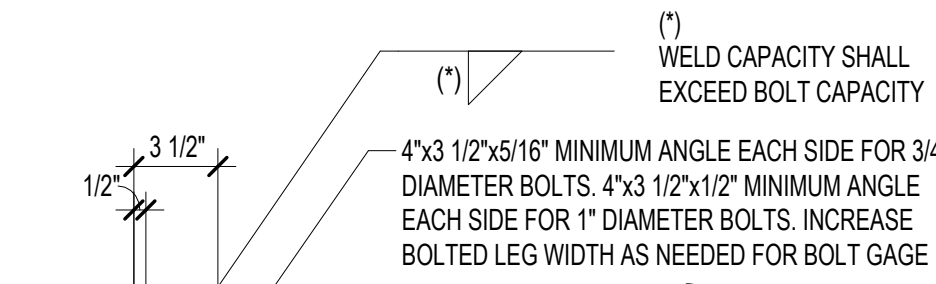
- NOTES:
- FOR 3/4" DIAMETER A325-N BOLTS AT SUPPORTED MEMBER WITH WEB LESS THAN 0.44", REDUCE ABOVE CAPACITY BY Tweb0.44".
  - FOR 1" DIAMETER A325-N BOLTS AT SUPPORTED MEMBER WITH WEB LESS THAN 0.67", REDUCE ABOVE CAPACITY BY Tweb0.67".
  - IF BEAMS FRAME TO SUPPORTING MEMBER FROM BOTH SIDES, REDUCE THE 3/4" DIAMETER SUPPORTING MEMBER BOLT CAPACITY BY Tweb0.39 FOR SUPPORTING MEMBER WEBS LESS THAN 0.39" AND THE 1" DIAMETER SUPPORTING MEMBER BOLT CAPACITY BY Tweb0.44" FOR SUPPORTING MEMBER WEBS LESS THAN 0.44".
  - STANDARD OR SHORT SLOTTED HOLES SHALL BE USED AT ANGLE LEG CONNECTED TO SUPPORTED MEMBER.
  - STANDARD HOLES SHALL BE USED AT ANGLE LEG CONNECTED TO SUPPORTING MEMBER. MAINTAIN 1 1/4" HORIZONTAL EDGE DISTANCE, LeH.



BOLTED/WELDED SINGLE ANGLE CONNECTION

ALLOWABLE CONNECTION CAPACITY (KIPS)					
NUMBER OF BOLTS	3/4" DIAMETER A325-N	1" DIAMETER A325-N	3/16" WELD	1/4" WELD	5/16" WELD
2	40.8	56.6	46.7	62.3	77.8
3	63.7	89.2	68.6	91.5	114
4					
5					
6					
7					
8					
9					
10					
11					
12	246	383	228	304	380

- NOTES:
- REDUCE 3/16" WELD CAPACITY BY Tweb0.28 FOR BEAM WEB LESS THAN 0.28". REDUCE 1/4" WELD CAPACITY BY Tweb0.37 FOR BEAM WEB LESS THAN 0.37". REDUCE 5/16" WELD CAPACITY BY Tweb0.47 FOR BEAM WEB LESS THAN 0.47".
  - IF BEAMS FRAME TO SUPPORTING MEMBER FROM BOTH SIDES, REDUCE THE 3/4" DIAMETER BOLT CAPACITY BY Tweb0.39 FOR SUPPORTING MEMBER WEBS LESS THAN 0.39" AND THE 1" DIAMETER BOLT CAPACITY BY Tweb0.44" FOR SUPPORTING MEMBER WEB LESS THAN 0.44".
  - STANDARD HOLES SHALL BE USED AT ANGLE LEG CONNECTED TO SUPPORTING MEMBER. MAINTAIN 1 1/4" HORIZONTAL EDGE DISTANCE, LeH.
  - IF LENGTH OF ANGLE IS LESS THAN 12", THE WELD CAPACITY SHALL EXCEED BOLT CAPACITY.



TYPICAL CONNECTION NOTES:

- NOTE: 1  
MINIMUM LENGTH OF CONNECTION SHALL BE ONE-HALF THE T-DIMENSION OF THE SUPPORTED MEMBER.
- NOTE: 2  
CONNECTION TABLES ALSO APPLY FOR BEAM TO COLUMN CONNECTIONS.
- NOTE: 3  
STEEL SHOP DRAWINGS THAT HAVE CONNECTIONS WHICH DO NOT CONFORM TO THE CONNECTIONS SHOWN IN THIS DETAIL WILL BE REJECTED.

BOLTED / BOLTED DOUBLE ANGLE CONNECTION

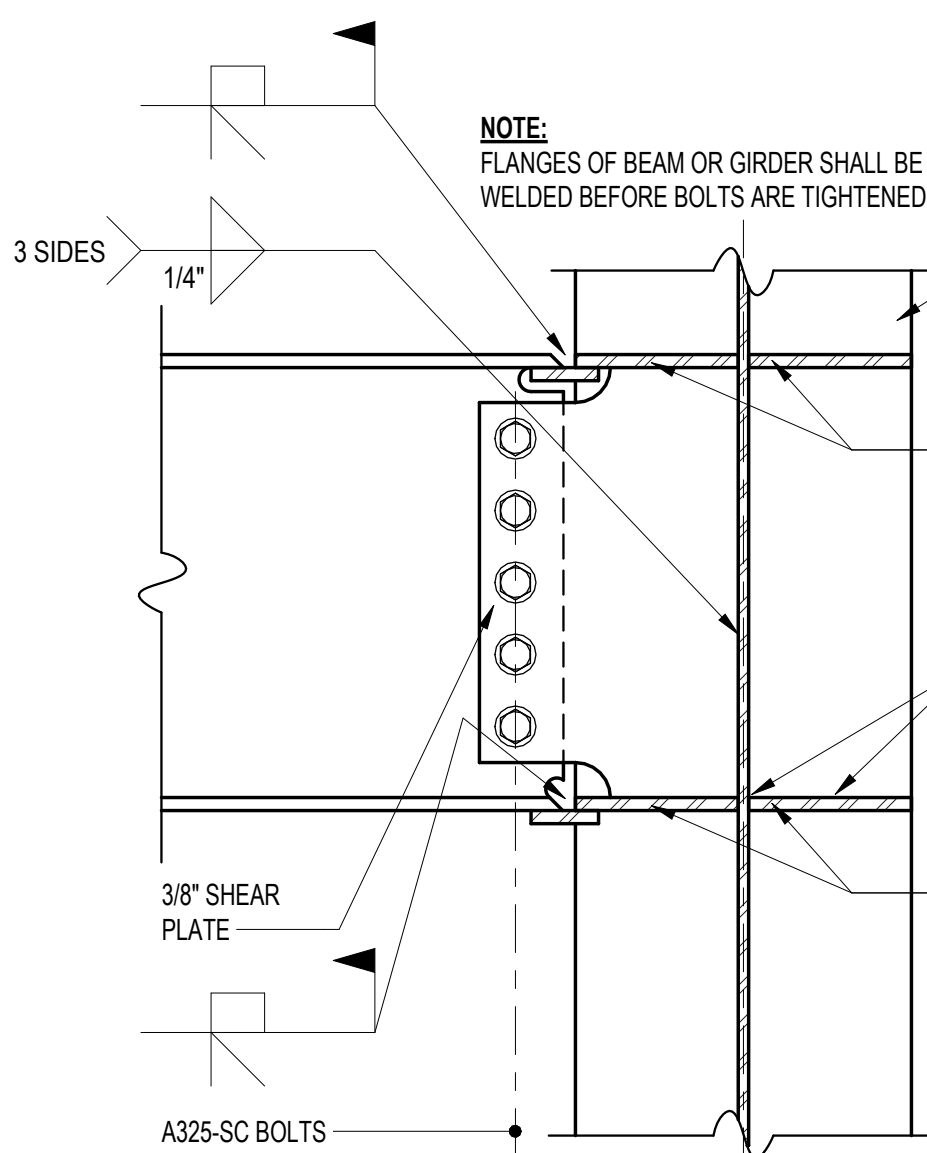
A TYPICAL DETAIL  
S304 NOT TO SCALE

Q3.2  
Since majority of posted loads are matching to bolted/bolted double angle connection, shall we consider this as first option and then will go for welded/bolted double angle connection if load not satisfied. Please confirm

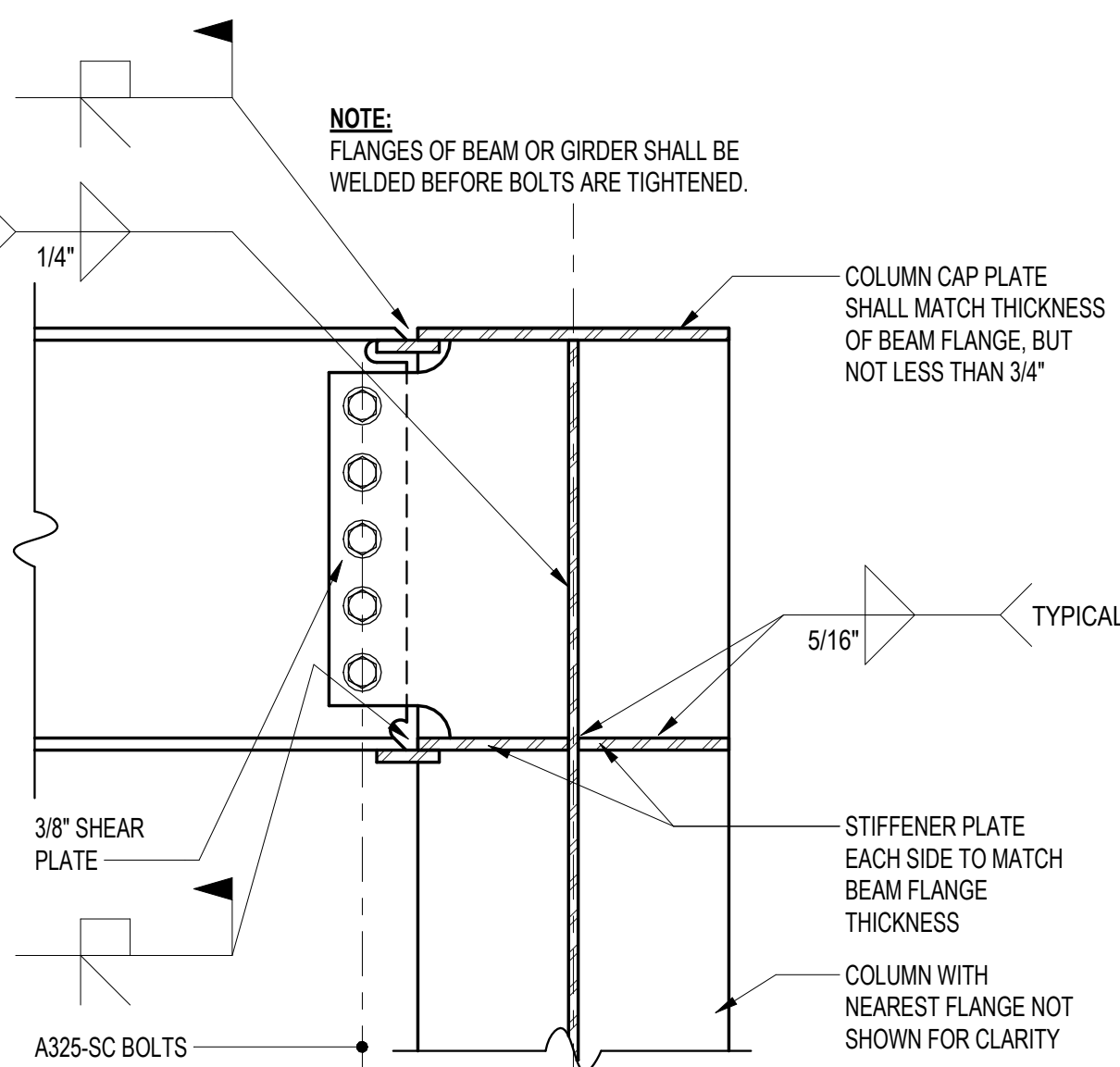
Q3.3  
We will follow standard holes for angle leg connected to supported member. Please confirm

CEI: No objection. either standard or slotted is permitted.

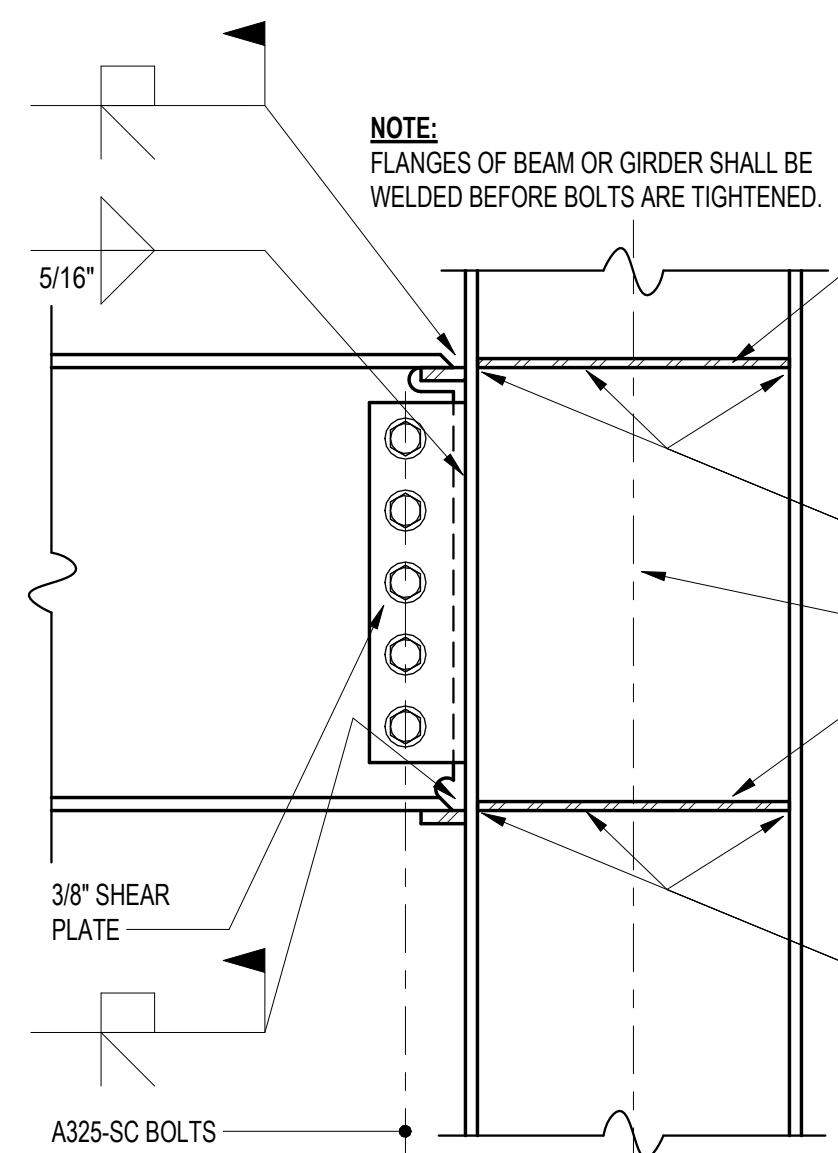
CONNECTION DETAILS



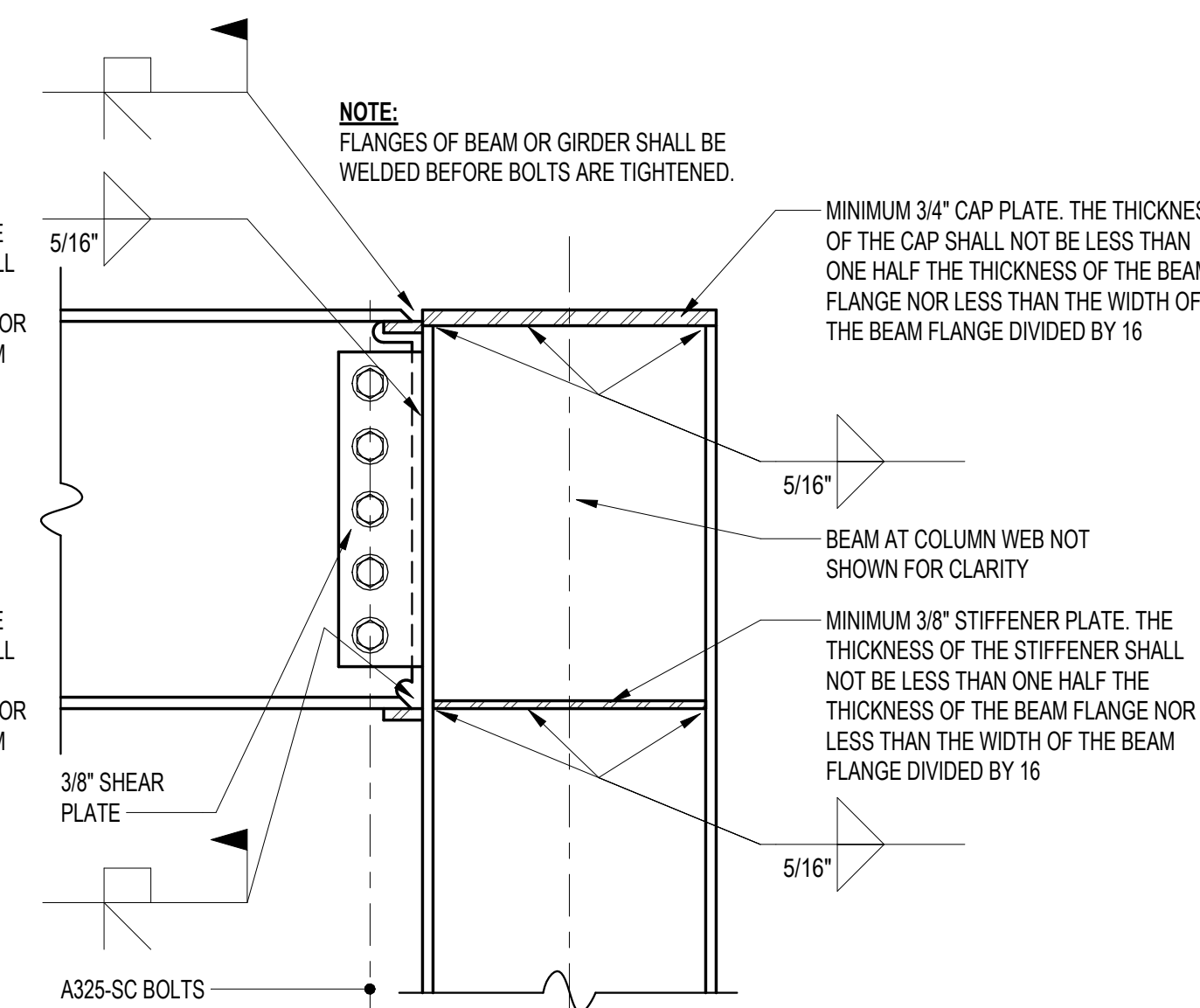
BEAM TO COLUMN WEB



BEAM TO COLUMN WEB AT ROOF



GIRDER TO COLUMN

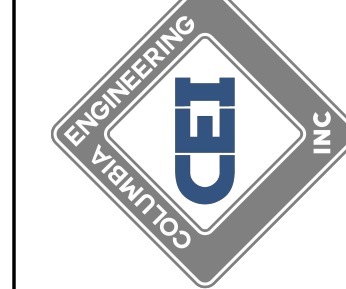


GIRDER TO COLUMN AT ROOF

MOMENT CONNECTIONS

B TYPICAL DETAIL  
S304 NOT TO SCALE

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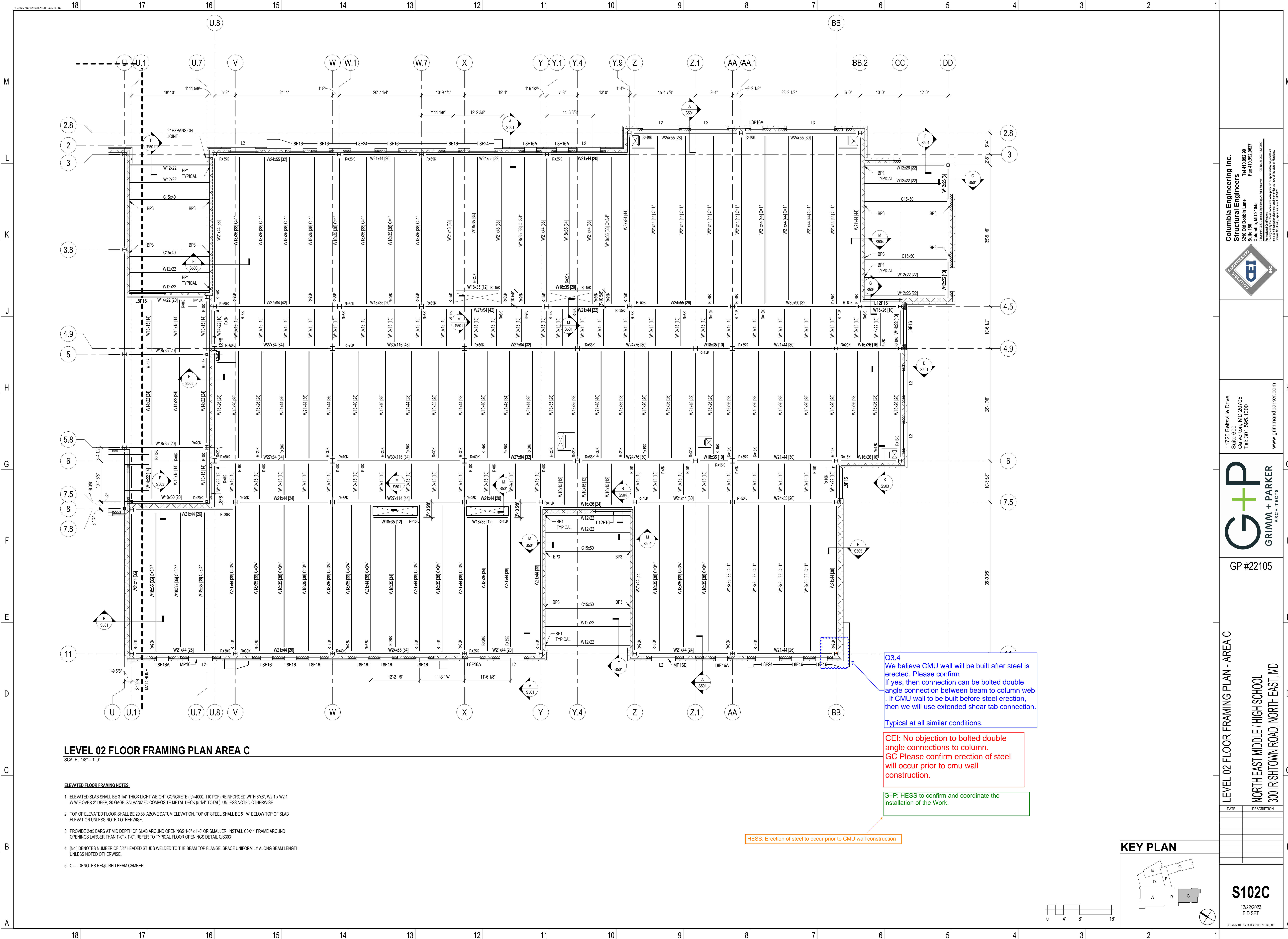
GP #22105

TYPICAL DETAILS  
NORTH EAST MIDDLE / HIGH SCHOOL  
300 IRISTOWN ROAD, NORTH EAST, MD

DATE	DESCRIPTION

S304  
12/22/2023  
BID SET





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**Structural Engineers**  
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 Fax: 410.862.867  
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**GRIMM + PARKER**  
 ARCHITECTS

GP #22105

LEVEL 02 FLOOR FRAMING PLAN - AREA C  
 NORTH EAST MIDDLE / HIGH SCHOOL  
 300 IRISTOWN ROAD, NORTH EAST, MD

DATE	DESCRIPTION

**S102C**  
 12/22/2023  
 BID SET

RFI detail

#016 Grid Label Discrepancy & Dimension



Status	<div><div></div>Closed</div>
Created on	Aug 7, 2024 by <b>Lucas Bradley</b> (Kinsley Steel Inc)
RFI type	Structural RFI REV
Ball in court	<b>Lucas Bradley</b> (Kinsley Steel Inc)
Answered	Aug 18, 2024 by <b>Patrick Byrne</b> (Grimm and Parker)

Question

Please refer to the attached reference file from Kinsley Steel for details on each question and it's associated drawing location:

- Q2.1: Please advise on grid label.
- Q2.2: Please advise on grid label.
- Q2.3: Please provide the radius for the grid D.5 line

Official response

Patrick Byrne (Grimm and Parker): See RFI response and revised drawings.  
*By **Patrick Byrne** (Grimm and Parker) - Aug 18, 2024, 3:03 PM EDT*

References and Attachments

Files (40)

• 2024 08 16- NEMHS- Structural RFI-016.pdf

• A014 - OVERALL LEVEL 01 PLAN.pdf

• A015 - OVERALL LEVEL 02 PLAN.pdf

• A016 - OVERALL LEVEL 03 PLAN.pdf

• A100A - LEVEL 00 AREA A PARTIAL FLOOR PLAN.pdf

• A100B - LEVEL 00 AREA B PARTIAL FLOOR PLAN.pdf

• A100C - LEVEL 00 AREA C PARTIAL FLOOR PLAN.pdf

• A101A - LEVEL 01 AREA A PARTIAL FLOOR PLAN.pdf

• A101B - LEVEL 01 AREA B PARTIAL FLOOR PLAN.pdf

• A101C - LEVEL 01 AREA C PARTIAL FLOOR PLAN.pdf

• A101D - LEVEL 01 AREA D PARTIAL FLOOR PLAN.pdf

- [A102A - LEVEL 02 AREA A PARTIAL FLOOR PLAN.pdf](#)
- [A102B - LEVEL 02 AREA B PARTIAL FLOOR PLAN.pdf](#)
- [A102C - LEVEL 02 AREA C PARTIAL FLOOR PLAN.pdf](#)
- [A201 - BUILDING ELEVATIONS.pdf](#)
- [A207 - BUILDING ELEVATIONS.pdf](#)
- [A402 - BUILDING SECTIONS.pdf](#)
- [A418 - WALL SECTIONS.pdf](#)
- [M100C.pdf](#)
- [M101C.pdf](#)
- [M102C.pdf](#)
- [M200A.pdf](#)
- [M200B.pdf](#)
- [M200C.pdf](#)
- [M201B.pdf](#)
- [M201C.pdf](#)
- [M202C.pdf](#)
- [P002A.pdf](#)
- [P002B.pdf](#)
- [P002C.pdf](#)
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- [P100B.pdf](#)
- [P100C.pdf](#)
- [P101A.pdf](#)
- [P101B.pdf](#)
- [P101C.pdf](#)
- [P102B.pdf](#)
- [P102C.pdf](#)
- [RFI 002\\_KSI - Grid Label Discrepancy & Dimension.pdf](#)
- [RFI 016 Grid Label Discrepancy & Dimension Response.pdf](#)

## Impact



Cost impact	Unknown
Schedule impact	No

## Other attributes

Priority	Normal
Discipline	Structural
Category	Design Coordination
Location	Area A, Area B, Area D
Location details	See the attached file titled "RFI 002_KSI..." for further location details
External id	-








Co-reviewer(s)	
Posted to Drawings/ Specifications	NO
Trade's RFI No.	2

Activities	By	At
<b>Joshua Postadan</b> changed the status from  <b>Open</b> Answered to  <b>Closed</b> <b>Official response:</b> Patrick Byrne (Grimm and Parker): See RFI response and revised drawings. set Ball in court to <b>Lucas Bradley</b> (Kinsley Steel Inc) changed the <b>watchers</b> to <b>Lucas Bradley</b> (Kinsley Steel Inc), <b>Michael Staub</b> (Kinsley Steel Inc), <b>HESS PROJECT TEAM</b> , <b>Kinsley Steel Inc</b> , <b>Canyon Contracting, Inc.</b> , <b>George Moehrle Masonry</b> , <b>Anchor Mechanical, LLC</b> , <b>Horst Excavating Company</b>	<b>Joshua Postadan</b>	Aug 29, 2024, 8:50 AM EDT
Please review the response to RFI #016. Provide notification of any cost implications immediately. If a proposal has cost impacts, please request an RFQ from HESS. Send a proposal no later than the close of business within 7 days of receipt of this RFI response. HESS will consider this as a no cost change and close this issue should a proposal not be received by this date. A lack of response for any credit items will prompt HESS Construction to assign a cost value that will be deducted from your contract sum. Note: The RFQ is simply an administrative tracking tool, and in no way represents that additional work, cost or time is acknowledged, authorized, directed, or approved.	<b>Joshua Postadan</b>	Aug 29, 2024, 8:50 AM EDT
<b>Patrick Byrne</b> added a reference to a File <b>A101D - LEVEL 01 AREA D PARTIAL FLOOR PLAN.pdf</b>	<b>Patrick Byrne</b>	Aug 22, 2024, 4:02 PM EDT
<b>Patrick Byrne</b> added a reference to a File <b>P102C.pdf</b>	<b>Patrick Byrne</b>	Aug 18, 2024, 3:04 PM EDT
<b>Patrick Byrne</b> added a reference to a File <b>A102C - LEVEL 02 AREA C PARTIAL FLOOR PLAN.pdf</b>	<b>Patrick Byrne</b>	Aug 18, 2024, 3:04 PM EDT
<b>Patrick Byrne</b> added a reference to a File <b>RFI 016 Grid Label Discrepancy &amp; Dimension Response.pdf</b>	<b>Patrick Byrne</b>	Aug 18, 2024, 3:04 PM EDT
<b>Patrick Byrne</b> added a reference to a File <b>2024 08 16- NEMHS-Structural RFI-016.pdf</b>	<b>Patrick Byrne</b>	Aug 18, 2024, 3:04 PM EDT
<b>Patrick Byrne</b> added a reference to a File <b>P102B.pdf</b>	<b>Patrick Byrne</b>	Aug 18, 2024, 3:04 PM EDT
<b>Patrick Byrne</b> added a reference to a File <b>P101B.pdf</b>	<b>Patrick Byrne</b>	Aug 18, 2024, 3:04 PM EDT
<b>Patrick Byrne</b> added a reference to a File <b>P101C.pdf</b>	<b>Patrick Byrne</b>	Aug 18, 2024, 3:04 PM EDT
<b>Patrick Byrne</b> added a reference to a File <b>P101A.pdf</b>	<b>Patrick Byrne</b>	Aug 18, 2024, 3:04 PM EDT
<b>Patrick Byrne</b> added a reference to a File <b>P100C.pdf</b>	<b>Patrick Byrne</b>	Aug 18, 2024, 3:04 PM EDT

<b>Patrick Byrne</b> added a reference to a File <b>P100A.pdf</b>	<b>Patrick Byrne</b>	Aug 18, 2024, 3:04 PM EDT
<b>Patrick Byrne</b> added a reference to a File <b>P100B.pdf</b>	<b>Patrick Byrne</b>	Aug 18, 2024, 3:04 PM EDT
<b>Patrick Byrne</b> added a reference to a File <b>P002B.pdf</b>	<b>Patrick Byrne</b>	Aug 18, 2024, 3:04 PM EDT
<b>Patrick Byrne</b> added a reference to a File <b>P002C.pdf</b>	<b>Patrick Byrne</b>	Aug 18, 2024, 3:04 PM EDT
<b>Patrick Byrne</b> added a reference to a File <b>P002A.pdf</b>	<b>Patrick Byrne</b>	Aug 18, 2024, 3:04 PM EDT
<b>Patrick Byrne</b> added a reference to a File <b>M202C.pdf</b>	<b>Patrick Byrne</b>	Aug 18, 2024, 3:04 PM EDT
<b>Patrick Byrne</b> added a reference to a File <b>M201B.pdf</b>	<b>Patrick Byrne</b>	Aug 18, 2024, 3:04 PM EDT
<b>Patrick Byrne</b> added a reference to a File <b>M201C.pdf</b>	<b>Patrick Byrne</b>	Aug 18, 2024, 3:04 PM EDT
<b>Patrick Byrne</b> added a reference to a File <b>M200C.pdf</b>	<b>Patrick Byrne</b>	Aug 18, 2024, 3:04 PM EDT
<b>Patrick Byrne</b> added a reference to a File <b>M200A.pdf</b>	<b>Patrick Byrne</b>	Aug 18, 2024, 3:04 PM EDT
<b>Patrick Byrne</b> added a reference to a File <b>M200B.pdf</b>	<b>Patrick Byrne</b>	Aug 18, 2024, 3:04 PM EDT
<b>Patrick Byrne</b> added a reference to a File <b>A402 - BUILDING SECTIONS.pdf</b>	<b>Patrick Byrne</b>	Aug 18, 2024, 3:04 PM EDT
<b>Patrick Byrne</b> added a reference to a File <b>M102C.pdf</b>	<b>Patrick Byrne</b>	Aug 18, 2024, 3:04 PM EDT
<b>Patrick Byrne</b> added a reference to a File <b>A418 - WALL SECTIONS.pdf</b>	<b>Patrick Byrne</b>	Aug 18, 2024, 3:04 PM EDT
<b>Patrick Byrne</b> added a reference to a File <b>M101C.pdf</b>	<b>Patrick Byrne</b>	Aug 18, 2024, 3:04 PM EDT
<b>Patrick Byrne</b> added a reference to a File <b>A207 - BUILDING ELEVATIONS.pdf</b>	<b>Patrick Byrne</b>	Aug 18, 2024, 3:04 PM EDT
<b>Patrick Byrne</b> added a reference to a File <b>M100C.pdf</b>	<b>Patrick Byrne</b>	Aug 18, 2024, 3:04 PM EDT
<b>Patrick Byrne</b> added a reference to a File <b>A201 - BUILDING ELEVATIONS.pdf</b>	<b>Patrick Byrne</b>	Aug 18, 2024, 3:04 PM EDT



Patrick Byrne added a reference to a File <b>A102A - LEVEL 02 AREA A PARTIAL FLOOR PLAN.pdf</b>	Patrick Byrne	Aug 18, 2024, 3:04 PM EDT
Patrick Byrne added a reference to a File <b>A101A - LEVEL 01 AREA A PARTIAL FLOOR PLAN.pdf</b>	Patrick Byrne	Aug 18, 2024, 3:04 PM EDT
Patrick Byrne added a reference to a File <b>A101B - LEVEL 01 AREA B PARTIAL FLOOR PLAN.pdf</b>	Patrick Byrne	Aug 18, 2024, 3:04 PM EDT
Patrick Byrne added a reference to a File <b>A102B - LEVEL 02 AREA B PARTIAL FLOOR PLAN.pdf</b>	Patrick Byrne	Aug 18, 2024, 3:04 PM EDT
Patrick Byrne added a reference to a File <b>A101C - LEVEL 01 AREA C PARTIAL FLOOR PLAN.pdf</b>	Patrick Byrne	Aug 18, 2024, 3:04 PM EDT
Patrick Byrne added a reference to a File <b>A016 - OVERALL LEVEL 03 PLAN.pdf</b>	Patrick Byrne	Aug 18, 2024, 3:04 PM EDT
Patrick Byrne added a reference to a File <b>A015 - OVERALL LEVEL 02 PLAN.pdf</b>	Patrick Byrne	Aug 18, 2024, 3:04 PM EDT
Patrick Byrne added a reference to a File <b>A100A - LEVEL 00 AREA A PARTIAL FLOOR PLAN.pdf</b>	Patrick Byrne	Aug 18, 2024, 3:04 PM EDT
Patrick Byrne added a reference to a File <b>A014 - OVERALL LEVEL 01 PLAN.pdf</b>	Patrick Byrne	Aug 18, 2024, 3:04 PM EDT
Patrick Byrne added a reference to a File <b>A100C - LEVEL 00 AREA C PARTIAL FLOOR PLAN.pdf</b>	Patrick Byrne	Aug 18, 2024, 3:04 PM EDT
Patrick Byrne added a reference to a File <b>A100B - LEVEL 00 AREA B PARTIAL FLOOR PLAN.pdf</b>	Patrick Byrne	Aug 18, 2024, 3:04 PM EDT
Patrick Byrne changed the status from  <b>Open</b> In Review to  <b>Open</b> Answered set Ball in court to <b>Joshua Postadan</b> (HESS Construction Co., LLC)	Patrick Byrne	Aug 18, 2024, 3:03 PM EDT
Patrick Byrne added a response: See RFI response and revised drawings.	Patrick Byrne	Aug 18, 2024, 3:03 PM EDT
set Ball in court to <b>Patrick Byrne</b> (Grimm and Parker)	Patrick Byrne	Aug 18, 2024, 3:03 PM EDT
Joshua Postadan changed the status from  <b>Open</b> Waiting for Submission to  <b>Open</b> In Review changed the <b>due date</b> to Aug 19, 2024 set Ball in court to <b>Patrick Byrne</b> (Grimm and Parker), <b>Cesar Flores</b> (Columbia Engineering) changed the <b>ID</b> to 016	Joshua Postadan	Aug 8, 2024, 8:29 AM EDT
changed the <b>watchers</b> to <b>Lucas Bradley</b> (Kinsley Steel Inc), <b>Michael Staub</b> (Kinsley Steel Inc), <b>HESS PROJECT TEAM</b> , <b>Kinsley Steel Inc</b>	Joshua Postadan	Aug 8, 2024, 8:09 AM EDT

changed the <b>schedule impact</b> to <i>No</i>	<b>Joshua Postadan</b>	Aug 8, 2024, 8:09 AM EDT
changed the <b>cost impact</b> to <i>Unknown</i>	<b>Joshua Postadan</b>	Aug 8, 2024, 8:09 AM EDT
changed the <b>location details</b> to <i>See the attached file titled "RFI 002_KSI..." for further location details</i>	<b>Joshua Postadan</b>	Aug 8, 2024, 8:09 AM EDT
changed the <b>question</b> to <i>Please refer to the attached reference file from Kinsley Steel for details on each question and it's associated drawing location: Q2.1: Please advise on grid label. Q2.2: Please advise on grid label. Q2.3: Please provide the radius for the grid D.5 line</i>	<b>Joshua Postadan</b>	Aug 8, 2024, 8:08 AM EDT
changed the <b>question</b> to <i>Please refer to the attached reference file from Kinsley Steel for details on each question and it's associated drawing location: Q2.1: Please advise on grid label. Q2.2: Please advise on grid label. Q2.3: Please provide the radius for the grid D.5 line</i>	<b>Joshua Postadan</b>	Aug 8, 2024, 8:08 AM EDT
<b>Lucas Bradley</b> changed the status from  <b>Draft</b> to  <b>Open</b> Waiting for Submission set Ball in court to <b>Joshua Postadan</b> (HESS Construction Co., LLC)	<b>Lucas Bradley</b>	Aug 7, 2024, 3:38 PM EDT
<b>Lucas Bradley</b> changed the status from  <b>Open</b> Waiting for Submission to  <b>Draft</b> set Ball in court to <b>Lucas Bradley</b> (Kinsley Steel Inc)	<b>Lucas Bradley</b>	Aug 7, 2024, 1:23 PM EDT
<b>Lucas Bradley</b> added a reference to a File <b>RFI 002_KSI - Grid Label Discrepancy &amp; Dimension.pdf</b>	<b>Lucas Bradley</b>	Aug 7, 2024, 1:23 PM EDT
<b>Lucas Bradley</b> (Kinsley Steel Inc) created this RFI in  <b>Open</b> Waiting for Submission status and set Ball in court to <b>Joshua Postadan</b> (HESS Construction Co., LLC).	<b>Lucas Bradley</b>	Aug 7, 2024, 1:23 PM EDT

RFI detail

#017 Anchor Bolt Clarification



Status	<div><div></div>Closed</div>
Created on	Aug 9, 2024 by <b>Lucas Bradley</b> (Kinsley Steel Inc)
RFI type	Structural RFI REV
Ball in court	<b>Lucas Bradley</b> (Kinsley Steel Inc)
Answered	Aug 19, 2024 by <b>Patrick Byrne</b> (Grimm and Parker)

Question

Please refer to the attached "RFI 004\_KSI - AB Clarification" in the references section for the question locations on the drawings.

- [Q4.1] Please confirm base plate details followed for C9 column mark.
- [Q4.2] Please confirm on anchor bolt embedment in both pier and footing.
- [Q4.3] Please advise on concrete wall pocket or advise on alternate base plate detail.
- [Q4.4] Please advise on concrete wall pocket or advise on alternate.
- [Q4.5] Please advise on concrete wall pocket or advise on alternate base plate detail.

Official response

Patrick Byrne (Grimm and Parker): See attached RFI response.  
*By **Patrick Byrne** (Grimm and Parker) - Aug 19, 2024, 10:30 AM EDT*

References and Attachments

Files (3)





RFI 004\_KSI - AB Clarification- CEI.pdf

RFI 004\_KSI - AB Clarification.pdf

RFI 017 - Anchor Bolt Clarification Response.pdf



Impact	
Cost impact	-
Schedule impact	-
Other attributes	
Priority	Normal
Discipline	Structural
Category	Design Coordination
Location	Area A, Area B, Area G
Location details	-
External id	-
Co-reviewer(s)	
Posted to Drawings/ Specifications	YES
Trade's RFI No.	4



Activities	By	At
<b>Joshua Postadan</b> changed the status from  <b>Open</b> Answered to  <b>Closed</b> <b>Official response:</b> Patrick Byrne (Grimm and Parker): See attached RFI response. set Ball in court to <b>Lucas Bradley</b> (Kinsley Steel Inc) changed the <b>watchers</b> to <b>Lucas Bradley</b> (Kinsley Steel Inc), <b>Michael Staub</b> (Kinsley Steel Inc), <b>Glenn Feldstein</b> (George Moehrle Masonry), <b>Mmantua None</b> (George Moehrle Masonry), <b>David Lichliter</b> (Canyon Contracting, Inc.), <b>Adam Moxley</b> (Canyon Contracting, Inc.), <b>Mandi Kirk</b> (Canyon Contracting, Inc.), <b>Ken Thompson</b> (HESS Construction Co., LLC), <b>Cameron MacKenzie</b> (HESS Construction Co., LLC), <b>Joshua Postadan</b> (HESS Construction Co., LLC), <b>HESS PROJECT TEAM</b> , <b>Kinsley Steel Inc</b> , <b>George Moehrle Masonry</b> , <b>Canyon Contracting, Inc.</b>	<b>Joshua Postadan</b>	Aug 22, 2024, 10:24 AM EDT
Please refer to the attached RFI response in the reference section ("RFI 017 - Anchor Bolt Clarification Response.pdf"). Please provide notification of any cost implications immediately. If a proposal has cost impacts, please request an RFQ from HESS. Send a proposal no later than the close of business within 7 days of receipt of this RFI response. HESS will consider this as a no cost change and close this issue should a proposal not be received by this date. A lack of response for any credit items will prompt HESS Construction to assign a cost value that will be deducted from your contract sum. Note: The RFQ is simply an administrative tracking tool, and in no way represents that additional work, cost or time is acknowledged, authorized, directed, or approved.	<b>Joshua Postadan</b>	Aug 22, 2024, 10:24 AM EDT
<b>Patrick Byrne</b> changed the status from  <b>Open</b> In Review to  <b>Open</b> Answered set Ball in court to <b>Joshua Postadan</b> (HESS Construction Co., LLC)	<b>Patrick Byrne</b>	Aug 19, 2024, 10:30 AM EDT
<b>Patrick Byrne</b> added a response: See attached RFI response.	<b>Patrick Byrne</b>	Aug 19, 2024, 10:30 AM EDT
<b>Patrick Byrne</b> added a reference to a File <b>RFI 017 - Anchor Bolt Clarification Response.pdf</b>	<b>Patrick Byrne</b>	Aug 19, 2024, 10:30 AM EDT
<b>Cesar Flores</b> added a response: Please see attached file for responses.	<b>Cesar Flores</b>	Aug 19, 2024, 10:06 AM EDT
<b>Cesar Flores</b> added a reference to a File <b>RFI 004_KSI - AB Clarification-CEI.pdf</b>	<b>Cesar Flores</b>	Aug 19, 2024, 10:06 AM EDT
changed the <b>Posted to Drawings/Specifications</b> to <b>YES</b>	<b>Joshua Postadan</b>	Aug 14, 2024, 11:47 AM EDT

changed the **question** to *Please refer to the attached "RFI 004\_KSI - AB Clarification" in the references section for the question locations on the drawings. [Q4.1] Please confirm base plate details followed for C9 column mark. [Q4.2] Please confirm on anchor bolt embedment in both pier and footing. [Q4.3] Please advise on concrete wall pocket or advise on alternate base plate detail. [Q4.4] Please advise on concrete wall pocket or advise on alternate. [Q4.5] Please advise on concrete wall pocket or advise on alternate base plate detail.*

**Joshua Postadan**

Aug 14, 2024, 10:40 AM EDT

#### Joshua Postadan

changed the status from  **Open** Waiting for Submission to  **Open** In Review  
changed the **due date** to Aug 19, 2024  
set Ball in court to **Patrick Byrne** (Grimm and Parker), **Cesar Flores** (Columbia Engineering)  
changed the **ID** to 017

**Joshua Postadan**

Aug 14, 2024, 10:38 AM EDT

**Joshua Postadan** changed title to: *Anchor Bolt Clarification*

**Joshua Postadan**

Aug 14, 2024, 10:38 AM EDT

changed the **watchers** to **Lucas Bradley** (Kinsley Steel Inc), **Michael Staub** (Kinsley Steel Inc), **HESS PROJECT TEAM**, **Kinsley Steel Inc**

**Joshua Postadan**



Aug 14, 2024, 10:37 AM EDT

changed the **question** to *Please refer to the attached "RFI 004\_KSI - AB Clarification" in the references section for the question locations on the drawings. [Q4.1] Please confirm base plate details followed for C9 column mark. [Q4.2] Please confirm on anchor bolt embedment in both pier and footing. [Q4.3] Please advise on conc. wall pocket or advise on alternate base plate detail. [Q4.4] Please advise on conc. wall pocket or advise on alternate. [Q4.5] Please advise on conc. wall pocket or advise on alternate base plate detail.*

**Joshua Postadan**

Aug 14, 2024, 10:37 AM EDT

#### Lucas Bradley

changed the status from  **Draft** to  **Open** Waiting for Submission  
changed the **due date** to Aug 20, 2024  
set Ball in court to **Joshua Postadan** (HESS Construction Co., LLC)

**Lucas Bradley**



Aug 14, 2024, 8:13 AM EDT

Questions revised, see most recent RFI 004\_KSI file.

**Lucas Bradley**

Aug 14, 2024, 8:13 AM EDT

#### Lucas Bradley

changed the status from  **Open** Waiting for Submission to  **Draft**  
set Ball in court to **Lucas Bradley** (Kinsley Steel Inc)

**Lucas Bradley**

Aug 14, 2024, 8:12 AM EDT

changed the **question** to *Please refer to the attached "RFI 004\_KSI - AB Clarification" in the references section for the question locations on the drawings. Q4.1: Please confirm base plate details followed for C9 column mark. Q4.2: Please confirm on anchor bolt embedment in both pier and footing. Q4.3: Please advise on conc. wall pocket or advise on alternate base plate detail. Q4.4: Please advise on conc. wall pocket or advise on alternate. Q4.5: Please advise on conc. wall pocket or advise on alternate base plate detail.*

**Joshua Postadan**

Aug 13, 2024, 9:48 AM EDT



changed the **question** to *Please refer to the attached "RFI 004\_KSI - AB Clarification" in the references for the question locations on the drawings.*  
*Q4.1: Please confirm base plate details followed for C9 column mark. Q4.2: Please confirm on anchor bolt embedment in both pier and footing. Q4.3: Please advise on conc. wall pocket or advise on alternate base plate detail. Q4.4: Please advise on conc. wall pocket or advise on alternate. Q4.5: Please advise on conc. wall pocket or advise on alternate base plate detail.*


**Joshua Postadan**

Aug 13, 2024, 9:48 AM EDT

**Lucas Bradley** added a reference to a File **RFI 004\_KSI - AB Clarification.pdf**

**Lucas Bradley**

Aug 9, 2024, 9:57 AM EDT

**Lucas Bradley** (Kinsley Steel Inc) created this RFI in  **Open** Waiting for Submission status and set Ball in court to **Joshua Postadan** (HESS Construction Co., LLC).

**Lucas Bradley**

Aug 9, 2024, 9:57 AM EDT



## *Request for Information*

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**Date:** 08/14/2024

**Request No:** KSI 004

**Project:** North East Middle & High School  
**KCI No.:** 242612

**To:** Hess Construction  
**Attn.:** Joshua Postadan  
**Email:** [jpostadan@hessconstruction.com](mailto:jpostadan@hessconstruction.com)

**From:** Mike Staub  
**Phone:** 717-434-6248  
**Email:** [mstaub@kinsleysteel.com](mailto:mstaub@kinsleysteel.com)

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### **RE: AB Clarification**

#### ***Request***

Please refer to the attached TRC RFI 004 for the question locations on the drawings.

Q4.1: Please confirm base plate details followed for C9 column mark.

Q4.2: P24 pier depth shown as (-1.33ft). Provide new F80 footing depth to accommodate ABs.

Q4.3: Base plate conflict with concrete wall.

Q4.4: Column and base plate conflict with concrete wall.

Q4.5: Base plate conflict with CMU wall.

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***Date Response Requested: ASAP***



217 Ward Circle Brentwood, TN 37027, Phone: 615-661-7979 Fax: 615-661-0644

# REQUEST FOR INFORMATION

## NORTH EAST MIDDLE / HIGH SCHOOL

JOB #24-880

To:	<b>Michael E.</b> <a href="mailto:Staubmstaub@kinsleysteel.com">Staubmstaub@kinsleysteel.com</a>	CLIENT RFI#
Company:	KINSLEY, INC	GC RFI#
		TRC RFI# 04
cc:		RESPONSE 08-13-2024 NEEDED BY

### SUBJECT: AB clarification

Please refer to the attached files for the questions.

Q4.1: Please confirm base plate details followed for C9 column mark.

Q4.2: P24 pier depth shown as (-1.33ft). Provide new F80 footing depth to accommodate ABs.

Q4.3: Base plate conflict with concrete wall.

Q4.4: Column and base plate conflict with concrete wall.

Q4.5: Base plate conflict with CMU wall.

By:	<b>Ruben Flores</b>	Date:	<b>08-09-2024</b>
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### Response:

By:		Date:	
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PLEASE SEND RESPONSE TO: Ruben Flores

Phone: **325-320-0719**

**THE RAMANNA COMPANIES**

**CONSULTING ENGINEERS**



INSPECTION TABLES

STATEMENT OF SPECIAL INSPECTIONS:	
NOTE 1: INSPECTION OR TESTING SHALL BE PROVIDED FOR ALL MATERIAL, COMPONENTS AND WORK LISTED IN THE TABLES BELOW.	
NOTE 2: DEFINITIONS: a. CONTINUOUS INSPECTION: INDICATES SPECIAL INSPECTOR SHALL BE PRESENT DURING CONTRACTOR PERFORMANCE OF THE TASK. b. PERIODIC INSPECTION: INDICATES SPECIAL INSPECTOR SHALL PROVIDE INSPECTION OR TESTING OF ALL WORK INDICATED, BUT THAT SPECIAL INSPECTOR IS NOT REQUIRED TO BE PRESENT DURING CONTRACTOR PERFORMANCE OF THE TASK. PERIODIC INSPECTION DOES NOT MEAN RANDOM INSPECTION IS ALLOWED. c. RANDOM INSPECTION: INDICATES SPECIAL INSPECTOR SHALL PROVIDE INSPECTION OR TESTING, AS NEEDED, TO INSURE PROPER PERFORMANCE OF THE TASK BY THE CONTRACTOR.	

INSPECTION TASK	TYPE OF INSPECTION
1. VERIFY MATERIALS BELOW SHALLOW FOUNDATIONS ARE ADEQUATE TO ACHIEVE THE DESIGN BEARING CAPACITY.	PERIODIC
2. VERIFY EXCAVATIONS ARE EXTENDED TO PROPER DEPTH AND HAVE REACHED PROPER MATERIAL.	PERIODIC
3. PERFORM CLASSIFICATION AND TESTING OF COMPACTED FILL MATERIALS.	PERIODIC
4. VERIFY USE OF PROPER MATERIALS, DENSITIES AND LIFT THICKNESSES DURING PLACEMENT AND COMPACTION OF COMPACTED FILL.	CONTINUOUS
5. PRIOR TO PLACEMENT OF COMPACTED FILL, OBSERVE SUBGRADE AND VERIFY THAT SITE HAS BEEN PREPARED PROPERLY.	PERIODIC

INSPECTION TASK	TYPE OF INSPECTION
1. INSPECTION OF REINFORCING STEEL FOR SIZE, QUANTITY AND PLACEMENT.	PERIODIC
2. INSPECTION OF ANCHORS CAST IN CONCRETE.	PERIODIC
3. INSPECTION OF ANCHORS POST-INSTALLED IN HARDENED CONCRETE MEMBERS (FOLLOW MANUFACTURERS WRITTEN INSTALLATION REQUIREMENTS). a. ADHESIVE ANCHORS INSTALLED IN HORIZONTAL OR UPWARDLY INCLINED ORIENTATIONS b. ALL OTHER CONDITIONS	a. CONTINUOUS b. PERIODIC
4. VERIFY USE OF REQUIRED DESIGN MIX.	PERIODIC
5. AT THE TIME FRESH CONCRETE IS SAMPLED TO FABRICATE SPECIMENS FOR STRENGTH TESTS, PERFORM SLUMP AND AIR CONTENT TESTS, AND DETERMINE THE TEMPERATURE OF THE CONCRETE. FOR LIGHTWEIGHT CONCRETE, PERFORM UNIT WEIGHT TESTS.	CONTINUOUS
6. INSPECTION OF CONCRETE PLACEMENT.	CONTINUOUS
7. INSPECTION FOR MAINTENANCE OF SPECIFIED CURING TEMPERATURE AND TECHNIQUES.	PERIODIC
8. VERIFICATION OF IN-SITU CONCRETE STRENGTH, PRIOR TO REMOVAL OF SHORES AND FORMS FROM BEAMS AND STRUCTURAL SLABS.	PERIODIC
9. INSPECT FORMWORK FOR SHAPE, LOCATION AND DIMENSIONS OF THE CONCRETE MEMBER BEING FORMED AND FOR CONFORMANCE WITH FORMWORK DESIGN.	PERIODIC
10. MEASURE F (F) AND F (L) TOLERANCE FOR FLOORS.	PERIODIC

INSPECTION TASK	TYPE OF INSPECTION BY QUALITY ASSURANCE LEVEL	
	LEVEL 2	LEVEL 3
1. VERIFY COMPLIANCE WITH THE APPROVED SUBMITTALS	PERIODIC	PERIODIC
2. VERIFICATION OF f' <sub>c</sub> a. PRIOR TO CONSTRUCTION b. DURING CONSTRUCTION EVERY 5,000 SQUARE FEET	a. PERIODIC b. N/A	a. PERIODIC b. PERIODIC
3. AS MASONRY CONSTRUCTION BEGINS, VERIFY THE FOLLOWING ARE IN COMPLIANCE: a. PROPORTIONS OF SITE PREPARED MORTAR b. GRADE, TYPE AND SIZE OF REINFORCEMENT, CONNECTORS AND ANCHOR BOLTS c. SAMPLE PANEL CONSTRUCTION	a. PERIODIC b. PERIODIC c. PERIODIC	a. PERIODIC b. PERIODIC c. CONTINUOUS
4. PRIOR TO GROUTING, VERIFY THAT THE FOLLOWING ARE IN COMPLIANCE: a. GROUT SPACE b. PLACEMENT OF REINFORCEMENT, CONNECTORS AND ANCHOR BOLTS c. PROPORTIONS OF SITE PREPARED GROUT	a. PERIODIC b. PERIODIC c. PERIODIC	a. CONTINUOUS b. CONTINUOUS c. PERIODIC
5. VERIFY COMPLIANCE DURING CONSTRUCTION: a. PLACEMENT OF MASONRY UNITS AND MORTAR JOINT CONSTRUCTION b. SIZE AND LOCATION OF STRUCTURAL MEMBERS c. TYPE, SIZE, AND LOCATION OF ANCHORS, INCLUDING OTHER DETAILS OF ANCHORAGE OF MASONRY TO STRUCTURAL MEMBERS, FRAMES, OR OTHER CONSTRUCTION d. PREPARATION, CONSTRUCTION, AND PROTECTION OF MASONRY DURING COLD WEATHER (TEMPERATURE BELOW 40°F) OR HOT WEATHER (TEMPERATURE ABOVE 90°F) e. PLACEMENT OF GROUT f. SLUMP FLOW AND VISUAL STABILITY INDEX (VSI) WHEN SELF-CONSOLIDATING GROUT IS DELIVERED TO PROJECT SITE g. PROPORTIONS OF MATERIALS AS DELIVERED TO THE PROJECT SITE FOR PREMIXED OR PREBLENDED MORTAR AND GROUT OTHER THAN SELF-CONSOLIDATING GROUT.	a. PERIODIC b. PERIODIC c. PERIODIC d. PERIODIC e. CONTINUOUS f. PERIODIC g. N/A	a. PERIODIC b. PERIODIC c. CONTINUOUS d. PERIODIC e. CONTINUOUS f. PERIODIC g. PERIODIC
6. OBSERVE PREPARATION OF GROUT SPECIMENS, MORTAR SPECIMENS, AND/OR PRISMS	PERIODIC	CONTINUOUS
7. INSTALLATION OF POST INSTALLED ANCHORS.	CONTINUOUS	CONTINUOUS

INSPECTION TASK	TYPE OF INSPECTION
1. VERIFY SIZE AND GAGE OF FRAMING.	PERIODIC
2. VERIFY PLUMBNESS, ALIGNMENT AND PROPER BEARING OF ELEMENTS	PERIODIC
3. VERIFY COLD-FORMED FRAMING IS PROPERLY FASTENED TOGETHER	PERIODIC
4. VERIFY CONNECTIONS TO STRUCTURAL FRAME	PERIODIC
5. VERIFY TOUCH-UP GALVANIZATION IS APPLIED TO WELDS	PERIODIC

INSPECTION TASK	TYPE OF INSPECTION
1. MATERIAL VERIFICATION: a. IDENTIFICATION MARKINGS TO CONFORM TO ASTM STANDARDS SPECIFIED IN THE APPROVED CONSTRUCTION DOCUMENTS. b. MANUFACTURERS CERTIFIED TEST REPORTS	PERIODIC
2. VERIFY WELDING CONSUMABLES AND FASTENERS TO BE USED.	PERIODIC
3. VERIFY DECK ALIGNMENT AND SUPPORT	PERIODIC
4. VERIFY FLOOR AND ROOF DECK ATTACHMENT: a. WELDS TO SUPPORTING MEMBERS b. SIDE LAP SCREWS AND WELDS	PERIODIC
5. VERIFY TOUCH-UP GALVANIZATION APPLIED TO WELDS.	PERIODIC

INSPECTION TASK	TYPE OF INSPECTION	
	QC	SI
1. WELDING PROCEDURE SPECIFICATIONS (WPSs) AVAILABLE	PERIODIC	PERIODIC
2. MANUFACTURER CERTIFICATIONS FOR WELDING CONSUMABLES AVAILABLE	PERIODIC	PERIODIC
3. MATERIAL IDENTIFICATION (TYPE/GRADE)	RANDOM	RANDOM
4. WELDER IDENTIFICATION SYSTEM	RANDOM	RANDOM
5. FIT-UP OF GROOVE WELDS (INCLUDING JOINT GEOMETRY) • JOINT PREPARATION • DIMENSIONS (ALIGNMENT, ROOT OPENING, ROOF FACE, BEVEL) • CLEANLINESS (CONDITION OF STEEL SURFACES) • TACKING (TACK WELD QUALITY AND LOCATION) • BACKING TYPE AND FIT (IF APPLICABLE)	RANDOM	PERIODIC
6. CONFIGURATION AND FINISH OF ACCESS HOLES	RANDOM	PERIODIC
7. FIT-UP OF FILLET WELDS • DIMENSIONS (ALIGNMENT, GAPS AT ROOT) • CLEANLINESS (CONDITION OF STEEL SURFACES) • TACKING (TACK WELD QUALITY AND LOCATION)	RANDOM	RANDOM
8. CHECK WELDING EQUIPMENT	RANDOM	NONE

INSPECTION TASK	TYPE OF INSPECTION	
	QC	SI
1. USE OF QUALIFIED WELDERS	RANDOM	RANDOM
2. CONTROL AND HANDLING OF WELDING CONSUMABLES • PACKAGING • EXPOSURE CONTROL	RANDOM	RANDOM
3. NO WELDING OVER CRACKED TACK WELDS	RANDOM	RANDOM
4. ENVIRONMENTAL CONDITIONS • WIND SPEED WITH LIMITS • PRECIPITATION AND TEMPERATURE	RANDOM	RANDOM
5. WPS FOLLOWED FOR GROOVE WELDS AND MULTI-PASS FILLET WELDS • SETTINGS ON WELDING EQUIPMENT • TRAVEL SPEED • SELECTED WELDING MATERIALS • SHIELDING GAS TYP/FLOW RATE • PREHEAT APPLIED • INTERPASS TEMPERATURE MAINTAINED (MINIMUM/MAXIMUM) • PROPER POSITION (F/V/H/OH)	RANDOM	CONTINUOUS
6. WPS FOLLOWED FOR SINGLE - PASS FILLET WELDS • SETTINGS ON WELDING EQUIPMENT • TRAVEL SPEED • SELECTED WELDING MATERIALS • SHIELDING GAS TYP/FLOW RATE • PREHEAT APPLIED • INTERPASS TEMPERATURE MAINTAINED (MINIMUM/MAXIMUM) • PROPER POSITION (F/V/H/OH)	RANDOM	RANDOM
7. WELDING TECHNIQUES FOR GROOVE WELDS AND MULTI-PASS FILLET WELDS • INTERPASS AND FINAL CLEANING • EACH PASS WITHIN PROFILE LIMITATIONS • EACH PASS MEETS QUALITY REQUIREMENTS	RANDOM	CONTINUOUS
8. WELDING TECHNIQUES FOR SINGLE-PASS FILLET WELDS • INTERPASS AND FINAL CLEANING • EACH PASS WITHIN PROFILE LIMITATIONS • EACH PASS MEETS QUALITY REQUIREMENTS	RANDOM	RANDOM

INSPECTION TASK	TYPE OF INSPECTION	
	QC	SI
1. WELDS CLEANED	PERIODIC	PERIODIC
2. SIZE, LENGTH AND LOCATION OF WELDS	PERIODIC	PERIODIC
3. WELDS MEET VISUAL ACCEPTANCE CRITERIA • CRACK PROHIBITION • WELD BASE/METAL FUSION • CRATER CROSS SECTION • WELD PROFILES • WELD SIZE • UNDERCUT • POROSITY	PERIODIC	PERIODIC
4. ULTRASONICALLY TEST FULL PENETRATION GROOVE WELDS	PERIODIC	PERIODIC
5. ARC STRIKES	PERIODIC	PERIODIC
6. K - AREA (1*)	PERIODIC	PERIODIC
7. BACKING REMOVED AND WELD TABS REMOVED (IF REQUIRED)	PERIODIC	PERIODIC
8. REPAIR ACTIVITIES	PERIODIC	PERIODIC
9. DOCUMENT ACCEPTANCE OR REJECTION OF WELDED JOINT OR MEMBER	PERIODIC	PERIODIC

INSPECTION TASK	TYPE OF INSPECTION	
	QC	SI
1. SETTING OF BEARING PLATES	PERIODIC	
2. ALIGNMENT OF JOISTS	PERIODIC	
3. INSTALLATION OF BRIDGING	PERIODIC	
4. SIZE, LENGTH AND LOCATION OF WELDS	PERIODIC	
5. ULTRASONICALLY TEST FULL PENETRATION WELDS	PERIODIC	
6. HIGH-STRENGTH BOLTS INSTALLED	PERIODIC	

INSPECTION TASK	TYPE OF INSPECTION	
	QC	SI
1. PLACEMENT AND INSTALLATION OF STEEL DECK	PERIODIC	PERIODIC
2. PLACEMENT AND INSTALLATION OF STEEL HEADED STUD ANCHORS	PERIODIC	PERIODIC
3. DOCUMENT ACCEPTANCE OR REJECTION OF STEEL ELEMENTS	PERIODIC	PERIODIC

NOTES:  
QC - DENOTES QUALITY CONTROL PERSONNEL  
SI - DENOTES SPECIAL INSPECTOR

INSPECTION TASK	TYPE OF INSPECTION	
	QC	SI
1. MANUFACTURER'S CERTIFICATIONS AVAILABLE FOR FASTENER MATERIALS	RANDOM	PERIODIC
2. FASTENERS MARKED IN ACCORDANCE WITH ASTM REQUIREMENTS	RANDOM	RANDOM
3. PROPER FASTENERS SELECTED FOR THE JOINT DETAIL (GRADE, TYPE, BOLT LENGTH IF THREADS ARE TO BE EXCLUDED FROM SHEAR PLANE)	RANDOM	RANDOM
4. PROPER BOLTING PROCEDURE SELECTED FOR JOINT DETAIL	RANDOM	RANDOM
5. CONNECTING ELEMENTS, INCLUDING THE APPROPRIATE FAYING SURFACE CONDITION AND HOLE PREPARATION, IF SPECIFIED, MEET APPLICABLE REQUIREMENTS	RANDOM	RANDOM
6. PRE-INSTALLATION VERIFICATION TESTING BY INSTALLATION PERSONNEL OBSERVED AND DOCUMENTED FOR FASTENER ASSEMBLIES AND METHODS USED	CONTINUOUS	RANDOM
7. PROPER STORAGE PROVIDED FOR BOLTS, NUTS, WASHERS AND OTHER FASTENER COMPONENTS	RANDOM	RANDOM

INSPECTION TASK	TYPE OF INSPECTION	
	QC	SI
1. FASTENER ASSEMBLIES, OF SUITABLE CONDITION, PLACED IN ALL HOLES AND WASHERS (IF REQUIRED) ARE POSITIONED AS REQUIRED.	PERIODIC	PERIODIC
2. JOINT BROUGHT TO THE SNUG-TIGHT CONDITION PRIOR TO THE PRETENSIONING OPERATION	RANDOM	RANDOM
3. PRETENSIONED AND SLIP-CRITICAL JOINTS INSTALLED USING ONE OF THE FOLLOWING METHODS: • DIRECT-TENSION INDICATOR WASHER METHOD • TWIST-OFF TYPE TENSION CONTROL BOLT METHOD	PERIODIC	PERIODIC
4. FASTENERS COMPONENT NOT TURNED BY THE WRENCH PREVENTED FROM ROTATING	RANDOM	RANDOM
5. FASTENERS ARE PRETENSIONED IN ACCORDANCE WITH THE RCSC SPECIFICATION, PROGRESSING SYSTEMATICALLY FROM THE MOST RIGID POINT TOWARD THE FREE EDGES	RANDOM	RANDOM

INSPECTION TASK	TYPE OF INSPECTION	
	QC	SI
1. DOCUMENT ACCEPTANCE OR REJECTION OF BOLTED CONNECTIONS	PERIODIC	PERIODIC

INSPECTION TASK	TYPE OF INSPECTION	
	QC	SI
1. COMPLIANCE OF THE FABRICATED STEEL WITH THE SHOP DRAWINGS	PERIODIC	NONE
2. SETTING OF ANCHOR BOLTS, BEARING PLATES AND EMBEDDED ITEMS PRIOR TO PLACEMENT OF CONCRETE	RANDOM	PERIODIC
3. STRUCTURAL MEMBERS FOR PLUMBNESS, ELEVATION AND ALIGNMENT	RANDOM	PERIODIC
4. COMPLIANCE OF THE ERECTED STEEL FRAME WITH ERECTION DRAWINGS FOR ITEMS SUCH AS BRACES, MEMBER LOCATIONS AND CONNECTION DETAILS	PERIODIC	NONE
5. COMPLIANCE OF THE ERECTED STEEL FRAME WITH CONTRACT DOCUMENTS FOR ITEMS SUCH AS BRACES, MEMBER LOCATIONS AND CONNECTION DETAILS	NONE	PERIODIC

INSPECTION TASK	TYPE OF INSPECTION	
	QC	SI
1. WELDS CLEANED	PERIODIC	PERIODIC
2. SIZE, LENGTH AND LOCATION OF WELDS	PERIODIC	PERIODIC
3. WELDS MEET VISUAL ACCEPTANCE CRITERIA • CRACK PROHIBITION • WELD BASE/METAL FUSION • CRATER CROSS SECTION • WELD PROFILES • WELD SIZE • UNDERCUT • POROSITY	PERIODIC	PERIODIC
4. ULTRASONICALLY TEST FULL PENETRATION GROOVE WELDS	PERIODIC	PERIODIC
5. ARC STRIKES	PERIODIC	PERIODIC
6. K - AREA (1*)	PERIODIC	PERIODIC
7. BACKING REMOVED AND WELD TABS REMOVED (IF REQUIRED)	PERIODIC	PERIODIC
8. REPAIR ACTIVITIES	PERIODIC	PERIODIC
9. DOCUMENT ACCEPTANCE OR REJECTION OF WELDED JOINT OR MEMBER	PERIODIC	PERIODIC

INSPECTION TASK	TYPE OF INSPECTION	
	QC	SI
1. SETTING OF BEARING PLATES	PERIODIC	
2. ALIGNMENT OF JOISTS	PERIODIC	
3. INSTALLATION OF BRIDGING	PERIODIC	
4. SIZE, LENGTH AND LOCATION OF WELDS	PERIODIC	
5. ULTRASONICALLY TEST FULL PENETRATION WELDS	PERIODIC	
6. HIGH-STRENGTH BOLTS INSTALLED	PERIODIC	

INSPECTION TASK	TYPE OF INSPECTION	
	QC	SI
1. PLACEMENT AND INSTALLATION OF STEEL DECK	PERIODIC	PERIODIC
2. PLACEMENT AND INSTALLATION OF STEEL HEADED STUD ANCHORS	PERIODIC	PERIODIC
3. DOCUMENT ACCEPTANCE OR REJECTION OF STEEL ELEMENTS	PERIODIC	PERIODIC

NOTES:  
QC - DENOTES QUALITY CONTROL PERSONNEL  
SI - DENOTES SPECIAL INSPECTOR

COLUMN SCHEDULE

MARK	SIZE	BASE PLATE	ANCHOR BOLTS
C1	W10x33	18"x18"x1"	(4) 3/4" DIAMETER ASTM F1554
C2	W10x39	18"x18"x1 1/4"	(4) 3/4" DIAMETER ASTM F1554
C3	W10x45	18"x18"x1 1/2"	(4) 3/4" DIAMETER ASTM F1554
C4	W10x49	18"x18"x1 1/2"	(4) 3/4" DIAMETER ASTM F1554
C5	W10x54	18"x18"x1 3/4"	(4) 3/4" DIAMETER ASTM F1554
C6	W10x60	18"x18"x1 3/4"	(4) 3/4" DIAMETER ASTM F1554
C7	W12x65	20"x20"x1 3/4"	(4) 3/4" DIAMETER ASTM F1554
C8	W12x79	20"x20"x1 3/4"	(4) 3/4" DIAMETER ASTM F1554
C9	SEE GRAPHICAL COLUMN SCHEDULE ON S201		
C10	HSS5x5x5/16	14"x14"x3/4"	(4) 3/4" DIAMETER ASTM F1554
C11	W10x60	18"x18"x1 3/4"	(4) 1" DIAMETER ASTM F1554 (2"-0" EMBEDMENT)
C12	6" DIAMETER STD PIPE	14"x14"x1"	(4) 3/4" DIAMETER ASTM F1554
C13	HSS6x6x1/2	14"x14"x1"	(4) 3/4" DIAMETER ASTM F1554
C14	HSS7x7x1/2	16"x16"x1 1/4"	(4) 3/4" DIAMETER ASTM F1554
C15	HSS10x8x5/8	18"x18"x1 1/4"	(4) 3/4" DIAMETER ASTM F1554
C16	HSS6x6x3/8	14"x14"x3/4"	(4) 3/4" DIAMETER ASTM F1554
C17	HSS8.75X8.500	18"x18"x1 1/4"	(4) 3/4" DIAMETER ASTM F1554
C18	HSS10.75X10.500	20"x20"x1 1/4"	(4) 3/4" DIAMETER ASTM F1554
C19	HSS8x8x5/8	16"x16"x1 1/2"	(4) 3/4" DIAMETER ASTM F1554

NOTES:  
1. ALL HSS AND STANDARD PIPE COLUMNS SHALL RECEIVE A 5/8" THICK CAP PLATE UNLESS NOTED OTHERWISE.  
2. PROVIDE 3"x3"x1/2" PLATE WASHER AT 1" DIAMETER ANCHOR BOLTS.

CONCRETE PIER SCHEDULE

MARK	SIZE	VERTICAL REINFORCEMENT	REMARKS
P20	20"x20"	8-#5	
P22	22"x22"	8-#5	
P24	24"x24"	8-#6	
P24A	24"x24"	12-#6	PROVIDE CLASS B LAP WITH DOWEL AND STANDARD HOOK AT TOP
P26	26"x26"	8-#6	
P28	28"x28"	8-#7	
P42	42"x24"	12-#6	
P46	46"x24"	12-#7	
P46A	46"x28"	12-#7	
P46B	46"x40"	16-#8	
P46C	46"x44"	16-#8	

THE PATTERNS:

NOTES:  
1. ALTERNATE THE 180 DEGREE HOOKED END OF ALL SINGLE-LEG TIES.  
2. ALL TIES SHALL BE PLACED WITH 1 1/2" CONCRETE COVER UNLESS NOTED OTHERWISE.

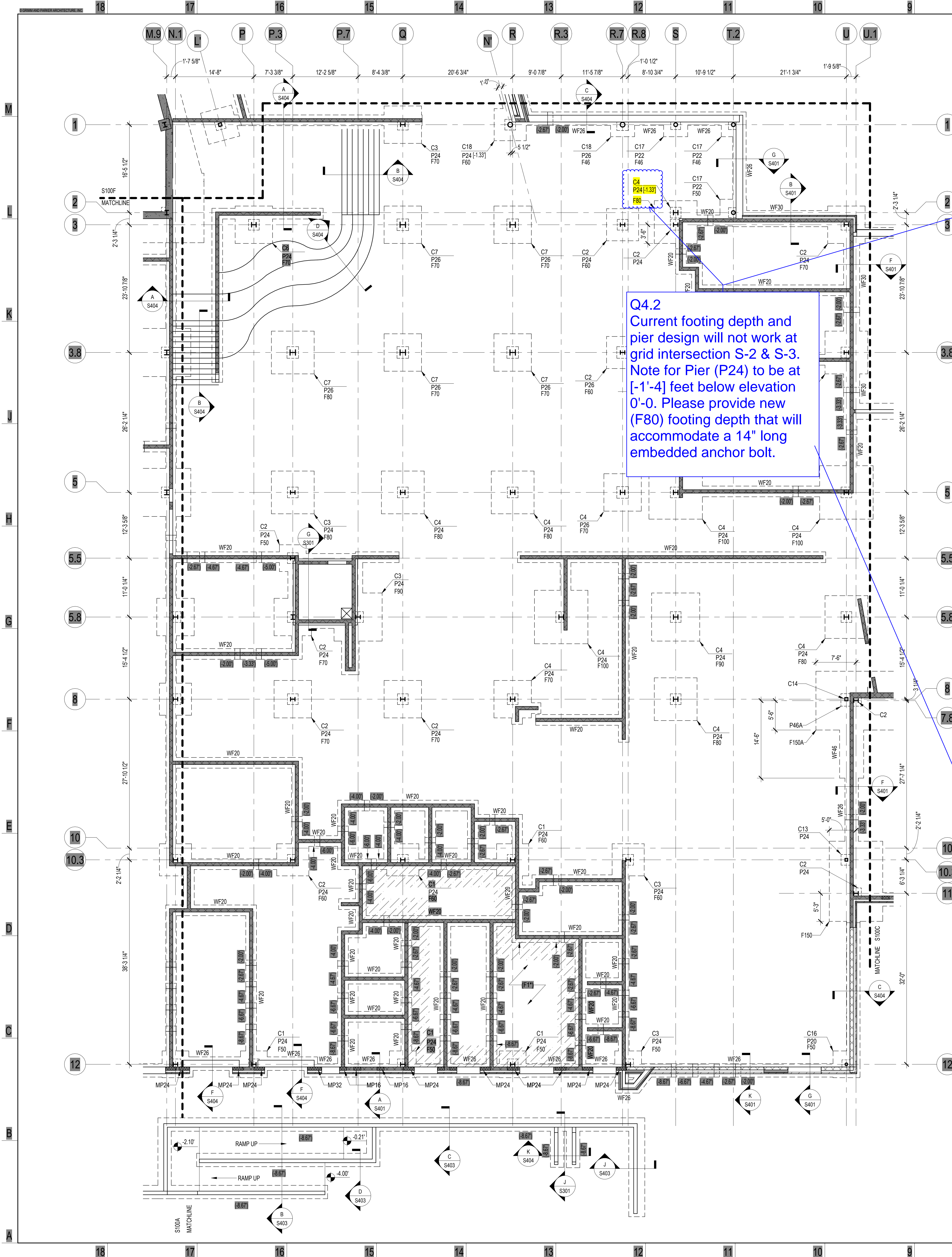
WALL FOOTING SCHEDULE

MARK	SIZE	THICKNESS	REINFORCEMENT
WF20	2'-0" CONTINUOUS	1'-0"	2-#5 CONTINUOUS TOP AND BOTTOM
WF26	2'-6" CONTINUOUS	1'-0"	3-#5 CONTINUOUS TOP AND BOTTOM
WF30	3'-0" CONTINUOUS	1'-4"	3-#5 CONTINUOUS TOP AND BOTTOM
WF30A	3'-0" CONTINUOUS	1'-0"	3-#5 CONTINUOUS TOP AND BOTTOM
WF36	3'-6" CONTINUOUS	1'-6"	4-#6 CONTINUOUS TOP AND BOTTOM
WF40	4'-0" CONTINUOUS	1'-6"	4-#6 CONTINUOUS TOP AND BOTTOM
WF46	4'-6" CONTINUOUS	1'-6"	4-#6 CONTINUOUS TOP AND BOTTOM, #4 AT 12" o.c. TRANSVERSE TOP AND BOTTOM
WF50	5'-0" CONTINUOUS	1'-8"	5-#6 CONTINUOUS TOP AND BOTTOM, #4 AT 10" o.c. TRANSVERSE TOP AND BOTTOM
WF50A	5'-0" CONTINUOUS	1'-2"	5-#5 CONTINUOUS TOP AND BOTTOM

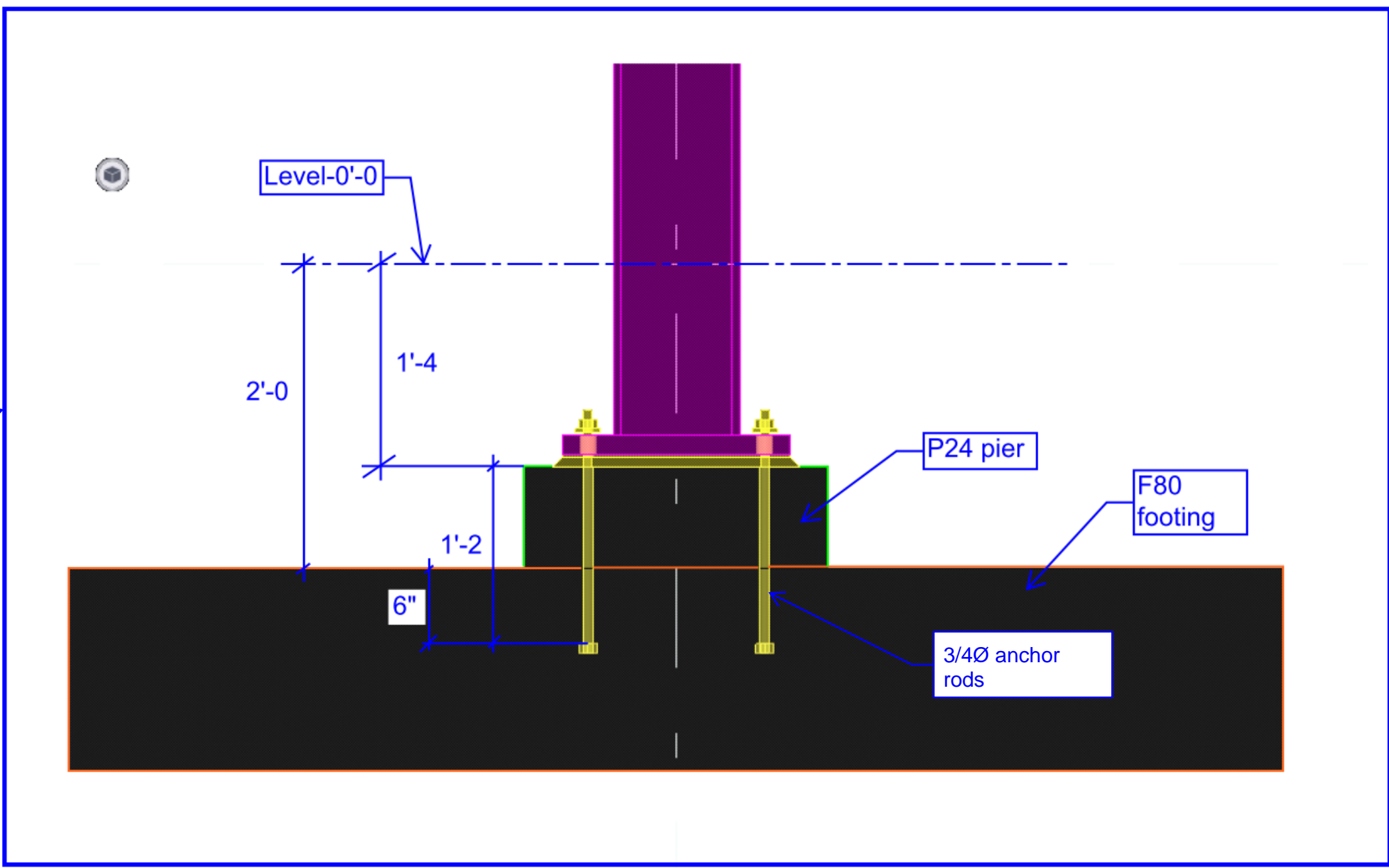
PRECAST 'U' LINTEL SCHEDULE

MARK	SIZE	ADDED REINFORCEMENT	REMARKS
L8F8	8F8	1-#5 TOP	8" COMPOSITE PRECAST CONCRETE 'U' LINTEL
L8F8A	8F8	1-#5 TOP	8" COMPOSITE PRECAST CONCRETE 'U' LINTEL LOOSE ANGLE
</			





**Q4.2**  
Current footing depth and pier design will not work at grid intersection S-2 & S-3. Note for Pier (P24) to be at [-1'-4"] feet below elevation 0'-0. Please provide new (F80) footing depth that will accommodate a 14" long embedded anchor bolt.



**FOUNDATION AND SLAB ON GRADE PLAN- AREA B**

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

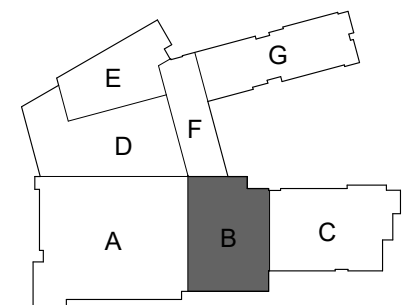
**FOUNDATION AND SLAB ON GRADE NOTES:**

1. SLAB ON GRADE SHALL BE 4" THICK NORMAL WEIGHT CONCRETE (fc=4000 PSI) REINFORCED WITH 6"x6", W2.1X W2.1 W.W.F. ON 15 MIL VAPOR BARRIER OVER 6" THICK LAYER OF WASHED GRAVEL.
2. TOP OF SLAB ELEVATION SHALL BE 92.00' (DATUM 0.00') UNLESS NOTED OTHERWISE.
3. TOP OF CONCRETE PIER ELEVATION SHALL BE 8" BELOW DATUM ELEVATION UNLESS NOTED OTHERWISE THUS [...].
4. TOP OF FOOTING ELEVATION SHALL BE 2'-0" BELOW DATUM ELEVATION UNLESS NOTED OTHERWISE THUS [...]. FOOTING ELEVATIONS ARE FOR BID PURPOSES ONLY AND MAY HAVE TO BE FIELD ADJUSTED. LOWER FOOTING AS REQUIRED BELOW UTILITY LINES AND INSTALL SLEEVES THROUGH CONCRETE AND MASONRY WALLS.
5. SEE ARCHITECTURAL DRAWINGS FOR DEPRESSIONED SLAB AREAS.
6. REFER TO ARCHITECTURAL DRAWINGS FOR ALL NON-LOAD BEARING CMU PARTITIONS.

**FOUNDATION AND SLAB ON GRADE KEYED NOTES:**

(F1\*) SLAB ON GRADE WITHIN HATCHED PERIMETER SHALL BE 6" THICK NORMAL WEIGHT CONCRETE (fc=4000 PSI) REINFORCED WITH 6"x6", W2.3X W2.3 W.W.F. ON 15 MIL VAPOR BARRIER OVER 6" THICK LAYER OF WASHED GRAVEL.

**KEY PLAN**



**Columbia Engineering Inc.**  
Structural Engineers  
620 Old Dobson Lane  
Columbia, MD 21045  
Tel: 410.862.89  
Fax: 410.862.867  
Copyright © 2020 Columbia Engineering, Inc. All rights reserved.  
This drawing was prepared by me, and I warrant that it complies with the requirements of the Professional Engineering Act of 2002.



11720 Beltsville Drive  
Suite 600  
Calverton, MD 20705  
Tel: 301.595.1000  
www.grimmaparker.com



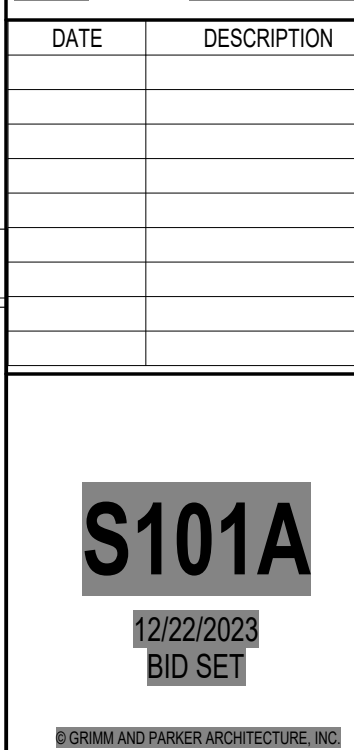
GP #22105

FOUNDATION AND SLAB ON GRADE PLAN- AREA B  
NORTH EAST MIDDLE / HIGH SCHOOL  
300 IRISTOWN ROAD, NORTH EAST, MD

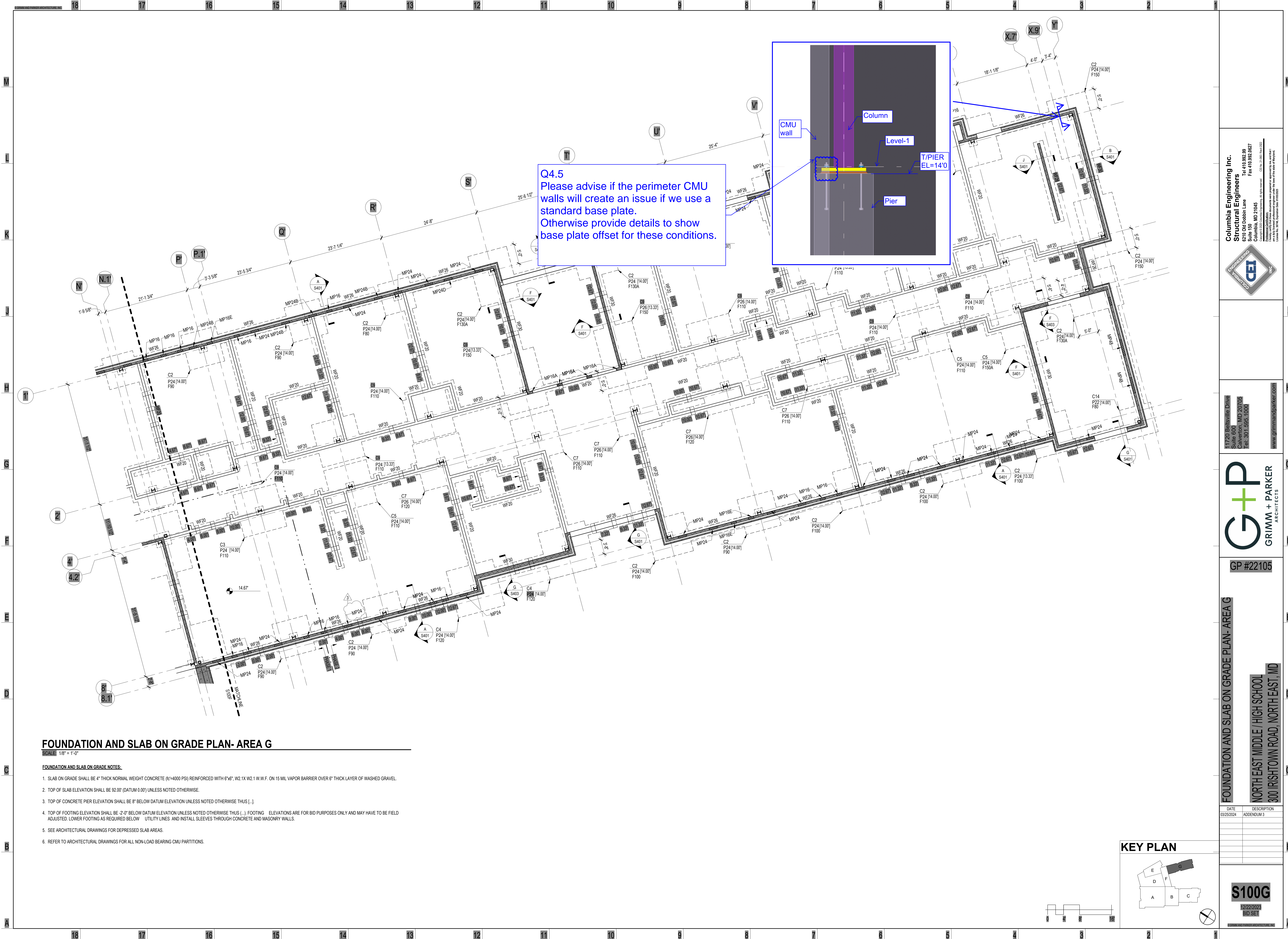
DATE	DESCRIPTION

**S100B**  
12/22/2023  
BID SET

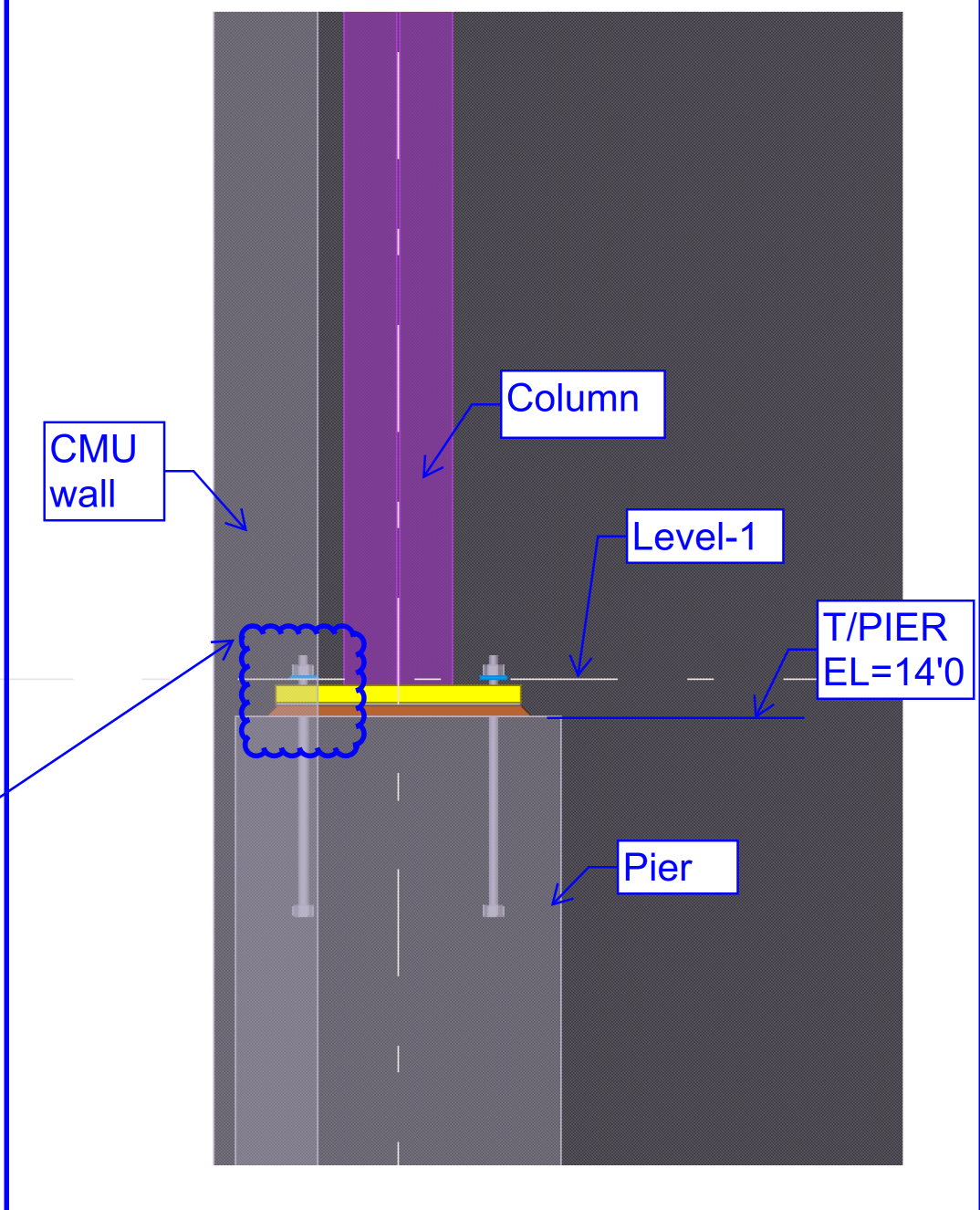








**Q4.5**  
Please advise if the perimeter CMU walls will create an issue if we use a standard base plate. Otherwise provide details to show base plate offset for these conditions.



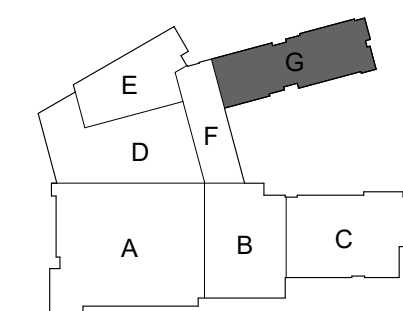
## FOUNDATION AND SLAB ON GRADE PLAN- AREA G

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

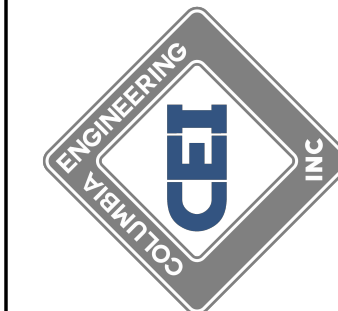
### FOUNDATION AND SLAB ON GRADE NOTES:

1. SLAB ON GRADE SHALL BE 4" THICK NORMAL WEIGHT CONCRETE (fc=4000 PSI) REINFORCED WITH 6"x6", W2.1X W2.1 W.W.F. ON 15 MIL VAPOR BARRIER OVER 6" THICK LAYER OF WASHED GRAVEL.
2. TOP OF SLAB ELEVATION SHALL BE 92.00' (DATUM 0.00') UNLESS NOTED OTHERWISE.
3. TOP OF CONCRETE PIER ELEVATION SHALL BE 8" BELOW DATUM ELEVATION UNLESS NOTED OTHERWISE THUS [...]
4. TOP OF FOOTING ELEVATION SHALL BE -2'-0" BELOW DATUM ELEVATION UNLESS NOTED OTHERWISE THUS [...]. FOOTING ELEVATIONS ARE FOR BID PURPOSES ONLY AND MAY HAVE TO BE FIELD ADJUSTED. LOWER FOOTING AS REQUIRED BELOW UTILITY LINES AND INSTALL SLEEVES THROUGH CONCRETE AND MASONRY WALLS.
5. SEE ARCHITECTURAL DRAWINGS FOR DEPRESSED SLAB AREAS.
6. REFER TO ARCHITECTURAL DRAWINGS FOR ALL NON-LOAD BEARING CMU PARTITIONS.

### KEY PLAN



**Columbia Engineering Inc.**  
Structural Engineers  
6210 Old Dobbin Lane  
Columbia, MD 21045  
Tel: 410.862.89  
Fax: 410.862.867  
CS No. 21-081 (Jan 2022)



11720 Beltsville Drive  
Suite 600  
Calverton, MD 20705  
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GP #22105

FOUNDATION AND SLAB ON GRADE PLAN- AREA G

NORTH EAST MIDDLE / HIGH SCHOOL  
300 IRISTOWN ROAD, NORTH EAST, MD

DATE	DESCRIPTION
03/25/2024	ADDENDUM 3

**S100G**

12/22/2023  
BID SET





## *Request for Information*

---

**Date:** 08/14/2024

**Request No:** KSI 004

**Project:** North East Middle & High School  
**KCI No.:** 242612

**To:** Hess Construction  
**Attn.:** Joshua Postadan  
**Email:** jpostadan@hessconstruction.com

**From:** Mike Staub  
**Phone:** 717-434-6248  
**Email:** [mstaub@kinsleysteel.com](mailto:mstaub@kinsleysteel.com)

### **RE: AB Clarification**

---

#### ***Request***

Please refer to the attached TRC RFI 004 for the question locations on the drawings.

Q4.1: Please confirm base plate details followed for C9 column mark.

Q4.2: P24 pier depth shown as (-1.33ft). Provide new F80 footing depth to accommodate ABs.

Q4.3: Base plate conflict with concrete wall.

Q4.4: Column and base plate conflict with concrete wall.

Q4.5: Base plate conflict with CMU wall.

#### ***Date Response Requested: ASAP***

---

CEI: Please see following sheets for response.

Cesar Flores  
08/19/2024



217 Ward Circle Brentwood, TN 37027, Phone: 615-661-7979 Fax: 615-661-0644

# REQUEST FOR INFORMATION

## NORTH EAST MIDDLE / HIGH SCHOOL

JOB #24-880

To:	<b>Michael E. Staubmstaub</b> <a href="mailto:Staubmstaub@kinsleysteel.com">Staubmstaub@kinsleysteel.com</a>	CLIENT RFI#
Company:	KINSLEY, INC	GC RFI#
		TRC RFI# 04
cc:		RESPONSE 08-13-2024 NEEDED BY

### SUBJECT: AB clarification

Please refer to the attached files for the questions.

Q4.1: Please confirm base plate details followed for C9 column mark.

Q4.2: P24 pier depth shown as (-1.33ft). Provide new F80 footing depth to accommodate ABs.

Q4.3: Base plate conflict with concrete wall.

Q4.4: Column and base plate conflict with concrete wall.

Q4.5: Base plate conflict with CMU wall.

By:	<b>Ruben Flores</b>	Date:	<b>08-09-2024</b>
-----	---------------------	-------	-------------------

### Response:

By:		Date:	
-----	--	-------	--

PLEASE SEND RESPONSE TO: Ruben Flores

Phone: **325-320-0719**

**THE RAMANNA COMPANIES**

**CONSULTING ENGINEERS**



181716151413121110987654321

STATEMENT OF SPECIAL INSPECTIONS:		
<b>NOTE 1:</b> INSPECTION OR TESTING SHALL BE PROVIDED FOR ALL MATERIAL, COMPONENTS AND WORK LISTED IN THE TABLES BELOW.		
<b>NOTE 2:</b> DEFINITIONS: a. CONTINUOUS INSPECTION: INDICATES SPECIAL INSPECTOR SHALL BE PRESENT DURING CONTRACTOR PERFORMANCE OF THE TASK. b. PERIODIC INSPECTION: INDICATES SPECIAL INSPECTOR SHALL PROVIDE INSPECTION OR TESTING OF ALL WORK INDICATED, BUT THAT SPECIAL INSPECTOR IS NOT REQUIRED TO BE PRESENT DURING CONTRACTOR PERFORMANCE OF THE TASK. PERIODIC INSPECTION DOES NOT MEAN RANDOM INSPECTION IS ALLOWED. c. RANDOM INSPECTION: INDICATES SPECIAL INSPECTOR SHALL PROVIDE INSPECTION OR TESTING, AS NEEDED, TO INSURE PROPER PERFORMANCE OF THE TASK BY THE CONTRACTOR.		
SOILS		
INSPECTION TASK	TYPE OF INSPECTION	
	QC	SI
1. VERIFY MATERIALS BELOW SHALLOW FOUNDATIONS ARE ADEQUATE TO ACHIEVE THE DESIGN BEARING CAPACITY.	PERIODIC	
2. VERIFY EXCAVATIONS ARE EXTENDED TO PROPER DEPTH AND HAVE REACHED PROPER MATERIAL.	PERIODIC	
3. PERFORM CLASSIFICATION AND TESTING OF COMPACTED FILL MATERIALS.	PERIODIC	
4. VERIFY USE OF PROPER MATERIALS, DENSITIES AND LIFT THICKNESSES DURING PLACEMENT AND COMPACTION OF COMPACTED FILL.	CONTINUOUS	
5. PRIOR TO PLACEMENT OF COMPACTED FILL, OBSERVE SUBGRADE AND VERIFY THAT SITE HAS BEEN PREPARED PROPERLY.	PERIODIC	

181716151413121110987654321

CONCRETE		
INSPECTION TASK	TYPE OF INSPECTION	
	QC	SI
1. INSPECTION OF REINFORCING STEEL FOR SIZE, QUANTITY AND PLACEMENT.	PERIODIC	
2. INSPECTION OF ANCHORS CAST IN CONCRETE.	PERIODIC	
3. INSPECTION OF ANCHORS POST-INSTALLED IN HARDENED CONCRETE MEMBERS (FOLLOW MANUFACTURERS WRITTEN INSTALLATION REQUIREMENTS). a. ADHESIVE ANCHORS INSTALLED IN HORIZONTAL OR UPWARDLY INCLINED ORIENTATIONS b. ALL OTHER CONDITIONS	a. CONTINUOUS b. PERIODIC	
4. VERIFY USE OF REQUIRED DESIGN MIX.	PERIODIC	
5. AT THE TIME FRESH CONCRETE IS SAMPLED TO FABRICATE SPECIMENS FOR STRENGTH TESTS, PERFORM SLUMP AND AIR CONTENT TESTS, AND DETERMINE THE TEMPERATURE OF THE CONCRETE. FOR LIGHTWEIGHT CONCRETE, PERFORM UNIT WEIGHT TESTS.	CONTINUOUS	
6. INSPECTION OF CONCRETE PLACEMENT.	CONTINUOUS	
7. INSPECTION FOR MAINTENANCE OF SPECIFIED CURING TEMPERATURE AND TECHNIQUES.	PERIODIC	
8. VERIFICATION OF IN-SITU CONCRETE STRENGTH, PRIOR TO REMOVAL OF SHORES AND FORMS FROM BEAMS AND STRUCTURAL SLABS.	PERIODIC	
9. INSPECT FORMWORK FOR SHAPE, LOCATION AND DIMENSIONS OF THE CONCRETE MEMBER BEING FORMED AND FOR CONFORMANCE WITH FORMWORK DESIGN.	PERIODIC	
10. MEASURE F (F) AND F (L) TOLERANCE FOR FLOORS.	PERIODIC	

MASONRY		
INSPECTION TASK	TYPE OF INSPECTION BY QUALITY ASSURANCE LEVEL	
	LEVEL 2	LEVEL 3
1. VERIFY COMPLIANCE WITH THE APPROVED SUBMITTALS	PERIODIC	PERIODIC
2. VERIFICATION OF f <sub>m</sub> a. PRIOR TO CONSTRUCTION b. DURING CONSTRUCTION EVERY 5,000 SQUARE FEET	a. PERIODIC b. N/A	a. PERIODIC b. PERIODIC
3. AS MASONRY CONSTRUCTION BEGINS, VERIFY THE FOLLOWING ARE IN COMPLIANCE: a. PROPORTIONS OF SITE PREPARED MORTAR b. GRADE, TYPE AND SIZE OF REINFORCEMENT, CONNECTORS AND ANCHOR BOLTS c. SAMPLE PANEL CONSTRUCTION	a. PERIODIC b. PERIODIC c. PERIODIC	a. PERIODIC b. PERIODIC c. CONTINUOUS
4. PRIOR TO GROUTING, VERIFY THAT THE FOLLOWING ARE IN COMPLIANCE: a. GROUT SPACE b. PLACEMENT OF REINFORCEMENT, CONNECTORS AND ANCHOR BOLTS c. PROPORTIONS OF SITE PREPARED GROUT	a. PERIODIC b. PERIODIC c. PERIODIC	a. CONTINUOUS b. CONTINUOUS c. PERIODIC
5. VERIFY COMPLIANCE DURING CONSTRUCTION: a. PLACEMENT OF MASONRY UNITS AND MORTAR JOINT CONSTRUCTION b. SIZE AND LOCATION OF STRUCTURAL MEMBERS c. TYPE, SIZE, AND LOCATION OF ANCHORS, INCLUDING OTHER DETAILS OF ANCHORAGE OF MASONRY TO STRUCTURAL MEMBERS, FRAMES, OR OTHER CONSTRUCTION d. PREPARATION, CONSTRUCTION, AND PROTECTION OF MASONRY DURING COLD WEATHER (TEMPERATURE BELOW 40°F) OR HOT WEATHER (TEMPERATURE ABOVE 90°F) e. PLACEMENT OF GROUT f. SLUMP FLOW AND VISUAL STABILITY INDEX (VSI) WHEN SELF-CONSOLIDATING GROUT IS DELIVERED TO PROJECT SITE g. PROPORTIONS OF MATERIALS AS DELIVERED TO THE PROJECT SITE FOR PREMIXED OR PREBLENDED MORTAR AND GROUT OTHER THAN SELF-CONSOLIDATING GROUT.	a. PERIODIC b. PERIODIC c. PERIODIC d. PERIODIC e. CONTINUOUS f. PERIODIC g. N/A	a. PERIODIC b. PERIODIC c. CONTINUOUS d. PERIODIC e. CONTINUOUS f. PERIODIC g. PERIODIC
6. OBSERVE PREPARATION OF GROUT SPECIMENS, MORTAR SPECIMENS, AND/OR PRISMS	PERIODIC	CONTINUOUS
7. INSTALLATION OF POST INSTALLED ANCHORS.	CONTINUOUS	CONTINUOUS

COLD-FORMED STEEL		
INSPECTION TASK	TYPE OF INSPECTION	
	QC	SI
1. VERIFY SIZE AND GAGE OF FRAMING.	PERIODIC	
2. VERIFY PLUMBNESS, ALIGNMENT AND PROPER BEARING OF ELEMENTS	PERIODIC	
3. VERIFY COLD-FORMED FRAMING IS PROPERLY FASTENED TOGETHER	PERIODIC	
4. VERIFY CONNECTIONS TO STRUCTURAL FRAME	PERIODIC	
5. VERIFY TOUCH-UP GALVANIZATION IS APPLIED TO WELDS	PERIODIC	

STEEL DECK		
INSPECTION TASK	TYPE OF INSPECTION	
	QC	SI
1. MATERIAL VERIFICATION: a. IDENTIFICATION MARKINGS TO CONFORM TO ASTM STANDARDS SPECIFIED IN THE APPROVED CONSTRUCTION DOCUMENTS b. MANUFACTURERS CERTIFIED TEST REPORTS	PERIODIC	
2. VERIFY WELDING CONSUMABLES AND FASTENERS TO BE USED.	PERIODIC	
3. VERIFY DECK ALIGNMENT AND SUPPORT	PERIODIC	
4. VERIFY FLOOR AND ROOF DECK ATTACHMENT: a. WELDS TO SUPPORTING MEMBERS b. SIDE LAP SCREWS AND WELDS	PERIODIC	
5. VERIFY TOUCH-UP GALVANIZATION APPLIED TO WELDS.	PERIODIC	

STEEL - PRIOR TO WELDING		
INSPECTION TASK	TYPE OF INSPECTION	
	QC	SI
1. WELDING PROCEDURE SPECIFICATIONS (WPSs) AVAILABLE	PERIODIC	PERIODIC
2. MANUFACTURER CERTIFICATIONS FOR WELDING CONSUMABLES AVAILABLE	PERIODIC	PERIODIC
3. MATERIAL IDENTIFICATION (TYPE/GRADE)	RANDOM	RANDOM
4. WELDER IDENTIFICATION SYSTEM	RANDOM	RANDOM
5. FIT-UP OF GROOVE WELDS (INCLUDING JOINT GEOMETRY) • JOINT PREPARATION • DIMENSIONS (ALIGNMENT, ROOT OPENING, ROOF FACE, BEVEL) • CLEANLINESS (CONDITION OF STEEL SURFACES) • TACKING (TACK WELD QUALITY AND LOCATION) • BACKING TYPE AND FIT (IF APPLICABLE)	RANDOM	PERIODIC
6. CONFIGURATION AND FINISH OF ACCESS HOLES	RANDOM	PERIODIC
7. FIT-UP OF FILLET WELDS • DIMENSIONS (ALIGNMENT, GAPS AT ROOT) • CLEANLINESS (CONDITION OF STEEL SURFACES) • TACKING (TACK WELD QUALITY AND LOCATION)	RANDOM	RANDOM
8. CHECK WELDING EQUIPMENT	RANDOM	NONE
<b>NOTES:</b> QC - DENOTES QUALITY CONTROL PERSONNEL SI - DENOTES SPECIAL INSPECTOR		

STEEL - DURING WELDING		
INSPECTION TASK	TYPE OF INSPECTION	
	QC	SI
1. USE OF QUALIFIED WELDERS	RANDOM	RANDOM
2. CONTROL AND HANDLING OF WELDING CONSUMABLES • PACKAGING • EXPOSURE CONTROL	RANDOM	RANDOM
3. NO WELDING OVER CRACKED TACK WELDS	RANDOM	RANDOM
4. ENVIRONMENTAL CONDITIONS • WIND SPEED WITH LIMITS • PRECIPITATION AND TEMPERATURE	RANDOM	RANDOM
5. WPS FOLLOWED FOR GROOVE WELDS AND MULTI-PASS FILLET WELDS • SETTINGS ON WELDING EQUIPMENT • TRAVEL SPEED • SELECTED WELDING MATERIALS • SHIELDING GAS TYP/FLOW RATE • PREHEAT APPLIED • INTERPASS TEMPERATURE MAINTAINED (MINIMUM/MAXIMUM) • PROPER POSITION (F/V/H/OH)	RANDOM	CONTINUOUS
6. WPS FOLLOWED FOR SINGLE - PASS FILLET WELDS • SETTINGS ON WELDING EQUIPMENT • TRAVEL SPEED • SELECTED WELDING MATERIALS • SHIELDING GAS TYP/FLOW RATE • PREHEAT APPLIED • INTERPASS TEMPERATURE MAINTAINED (MINIMUM/MAXIMUM) • PROPER POSITION (F/V/H/OH)	RANDOM	RANDOM
7. WELDING TECHNIQUES FOR GROOVE WELDS AND MULTI-PASS FILLET WELDS • INTERPASS AND FINAL CLEANING • EACH PASS WITHIN PROFILE LIMITATIONS • EACH PASS MEETS QUALITY REQUIREMENTS	RANDOM	CONTINUOUS
8. WELDING TECHNIQUES FOR SINGLE-PASS FILLET WELDS • INTERPASS AND FINAL CLEANING • EACH PASS WITHIN PROFILE LIMITATIONS • EACH PASS MEETS QUALITY REQUIREMENTS	RANDOM	RANDOM
<b>NOTES:</b> QC - DENOTES QUALITY CONTROL PERSONNEL SI - DENOTES SPECIAL INSPECTOR		

STEEL - AFTER WELDING		
INSPECTION TASK	TYPE OF INSPECTION	
	QC	SI
1. WELDS CLEANED	PERIODIC	PERIODIC
2. SIZE, LENGTH AND LOCATION OF WELDS	PERIODIC	PERIODIC
3. WELDS MEET VISUAL ACCEPTANCE CRITERIA • CRACK PROHIBITION • WELD BASE/METAL FUSION • CRATER CROSS SECTION • WELD PROFILES • WELD SIZE • UNDERCUT • POROSITY	PERIODIC	PERIODIC
4. ULTRASONICALLY TEST FULL PENETRATION GROOVE WELDS	PERIODIC	PERIODIC
5. ARC STRIKES	PERIODIC	PERIODIC
6. K - AREA (1*)	PERIODIC	PERIODIC
7. BACKING REMOVED AND WELD TABS REMOVED (IF REQUIRED)	PERIODIC	PERIODIC
8. REPAIR ACTIVITIES	PERIODIC	PERIODIC
9. DOCUMENT ACCEPTANCE OR REJECTION OF WELDED JOINT OR MEMBER	PERIODIC	PERIODIC
<b>NOTES:</b> QC - DENOTES QUALITY CONTROL PERSONNEL SI - DENOTES SPECIAL INSPECTOR (1*) - DENOTES WHEN WELDING OF DOUBLER PLATES, CONTINUITY PLATES OR STIFFENERS HAS BEEN PERFORMED IN THE K-AREA, VISUALLY INSPECT THE WEB AREA FOR CRACKS WITHIN THREE INCHES OF THE WELD.		

STEEL JOIST		
INSPECTION TASK	TYPE OF INSPECTION	
	QC	SI
1. SETTING OF BEARING PLATES	PERIODIC	
2. ALIGNMENT OF JOISTS	PERIODIC	
3. INSTALLATION OF BRIDGING	PERIODIC	
4. SIZE, LENGTH AND LOCATION OF WELDS	PERIODIC	
5. ULTRASONICALLY TEST FULL PENETRATION WELDS	PERIODIC	
6. HIGH-STRENGTH BOLTS INSTALLED	PERIODIC	

STEEL ELEMENTS OF COMPOSITE CONSTRUCTION PRIOR TO CONCRETE PLACEMENT		
INSPECTION TASK	TYPE OF INSPECTION	
	QC	SI
1. PLACEMENT AND INSTALLATION OF STEEL DECK	PERIODIC	PERIODIC
2. PLACEMENT AND INSTALLATION OF STEEL HEADED STUD ANCHORS	PERIODIC	PERIODIC
3. DOCUMENT ACCEPTANCE OR REJECTION OF STEEL ELEMENTS	PERIODIC	PERIODIC
<b>NOTES:</b> QC - DENOTES QUALITY CONTROL PERSONNEL SI - DENOTES SPECIAL INSPECTOR		

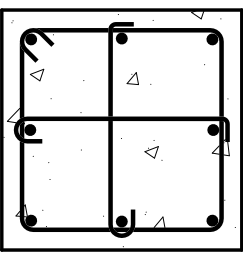
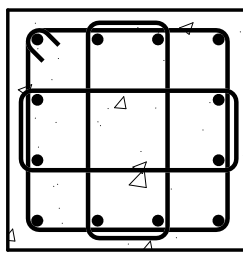
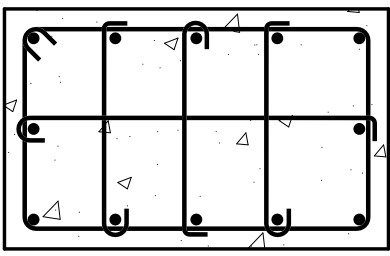
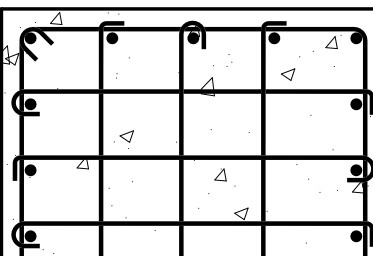
STEEL - PRIOR TO BOLTING		
INSPECTION TASK	TYPE OF INSPECTION	
	QC	SI
1. MANUFACTURER'S CERTIFICATIONS AVAILABLE FOR FASTENER MATERIALS	RANDOM	PERIODIC
2. FASTENERS MARKED IN ACCORDANCE WITH ASTM REQUIREMENTS	RANDOM	RANDOM
3. PROPER FASTENERS SELECTED FOR THE JOINT DETAIL (GRADE, TYPE, BOLT LENGTH IF THREADS ARE TO BE EXCLUDED FROM SHEAR PLANE)	RANDOM	RANDOM
4. PROPER BOLTING PROCEDURE SELECTED FOR JOINT DETAIL	RANDOM	RANDOM
5. CONNECTING ELEMENTS, INCLUDING THE APPROPRIATE FAYING SURFACE CONDITION AND HOLE PREPARATION, IF SPECIFIED, MEET APPLICABLE REQUIREMENTS	RANDOM	RANDOM
6. PRE-INSTALLATION VERIFICATION TESTING BY INSTALLATION PERSONNEL OBSERVED AND DOCUMENTED FOR FASTENER ASSEMBLIES AND METHODS USED	CONTINUOUS	RANDOM
7. PROPER STORAGE PROVIDED FOR BOLTS, NUTS, WASHERS AND OTHER FASTENER COMPONENTS	RANDOM	RANDOM
<b>NOTES:</b> QC - DENOTES QUALITY CONTROL PERSONNEL SI - DENOTES SPECIAL INSPECTOR		

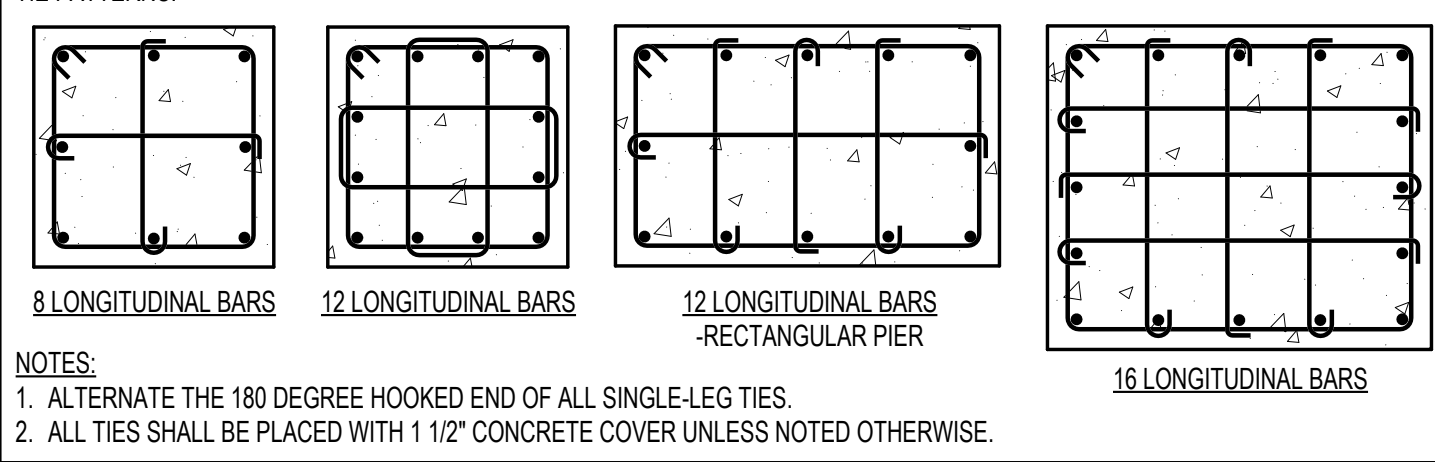
STEEL - DURING BOLTING		
INSPECTION TASK	TYPE OF INSPECTION	
	QC	SI
1. FASTENER ASSEMBLIES, OF SUITABLE CONDITION, PLACED IN ALL HOLES AND WASHERS (IF REQUIRED) ARE POSITIONED AS REQUIRED.	PERIODIC	PERIODIC
2. JOINT BROUGHT TO THE SNUG-TIGHT CONDITION PRIOR TO THE PRETENSIONING OPERATION	RANDOM	RANDOM
3. PRETENSIONED AND SLIP-CRITICAL JOINTS INSTALLED USING ONE OF THE FOLLOWING METHODS: • DIRECT-TENSION INDICATOR WASHER METHOD • TWIST-OFF TYPE TENSION CONTROL BOLT METHOD	PERIODIC	PERIODIC
4. FASTENERS COMPONENT NOT TURNED BY THE WRENCH PREVENTED FROM ROTATING	RANDOM	RANDOM
5. FASTENERS ARE PRETENSIONED IN ACCORDANCE WITH THE RCSC SPECIFICATION, PROGRESSING SYSTEMATICALLY FROM THE MOST RIGID POINT TOWARD THE FREE EDGES	RANDOM	RANDOM
<b>NOTES:</b> QC - DENOTES QUALITY CONTROL PERSONNEL SI - DENOTES SPECIAL INSPECTOR		

STEEL - AFTER BOLTING		
INSPECTION TASK	TYPE OF INSPECTION	
	QC	SI
1. DOCUMENT ACCEPTANCE OR REJECTION OF BOLTED CONNECTIONS	PERIODIC	PERIODIC
<b>NOTES:</b> QC - DENOTES QUALITY CONTROL PERSONNEL SI - DENOTES SPECIAL INSPECTOR		

STEEL - OTHER		
INSPECTION TASK	TYPE OF INSPECTION	
	QC	SI
1. COMPLIANCE OF THE FABRICATED STEEL WITH THE SHOP DRAWINGS	PERIODIC	NONE
2. SETTING OF ANCHOR BOLTS, BEARING PLATES AND EMBEDDED ITEMS PRIOR TO PLACEMENT OF CONCRETE	RANDOM	PERIODIC
3. STRUCTURAL MEMBERS FOR PLUMBNESS, ELEVATION AND ALIGNMENT	RANDOM	PERIODIC
4. COMPLIANCE OF THE ERECTED STEEL FRAME WITH ERECTION DRAWINGS FOR ITEMS SUCH AS BRACES, MEMBER LOCATIONS AND CONNECTION DETAILS	PERIODIC	NONE
5. COMPLIANCE OF THE ERECTED STEEL FRAME WITH CONTRACT DOCUMENTS FOR ITEMS SUCH AS BRACES, MEMBER LOCATIONS AND CONNECTION DETAILS	NONE	PERIODIC
<b>NOTES:</b> QC - DENOTES QUALITY CONTROL PERSONNEL SI - DENOTES SPECIAL INSPECTOR		

COLUMN SCHEDULE			
MARK	SIZE	BASE PLATE	ANCHOR BOLTS
C1	W10x33	18"x18"x1"	(4) 3/4" DIAMETER ASTM F1554
C2	W10x39	18"x18"x1 1/4"	(4) 3/4" DIAMETER ASTM F1554
C3	W10x45	18"x18"x1 1/2"	(4) 3/4" DIAMETER ASTM F1554
C4	W10x49	18"x18"x1 1/2"	(4) 3/4" DIAMETER ASTM F1554
C5	W10x54	18"x18"x1 3/4"	(4) 3/4" DIAMETER ASTM F1554
C6	W10x60	18"x18"x1 3/4"	(4) 3/4" DIAMETER ASTM F1554
C7	W12x65	20"x20"x1 3/4"	(4) 3/4" DIAMETER ASTM F1554
C8	W12x79	20"x20"x1 3/4"	(4) 3/4" DIAMETER ASTM F1554
C9	SEE GRAPHICAL COLUMN SCHEDULE ON S201		
C10	HSS55x55x16	14"x14"x3/4"	(4) 3/4" DIAMETER ASTM F1554
C11	W10x60	18"x18"x1 3/4"	(4) 1" DIAMETER ASTM F1554 (2-0" EMBE
C12	6" DIAMETER STD PIPE	14"x14"x1"	(4) 3/4" DIAMETER ASTM F1554
C13	HSS66x61/2	14"x14"x1"	(4) 3/4" DIAMETER ASTM F1554
C14	HSS77x71/2	16"x16"x1 1/4"	(4) 3/4" DIAMETER ASTM F1554
C15	HSS104x55/8	18"x18"x1 1/4"	(4) 3/4" DIAMETER ASTM F1554
C16	HSS60x60x3/5	14"x14"x3/4"	(4) 3/4" DIAMETER ASTM F1554
C17	HSS875x10.500	18"x18"x1 1/4"	(4) 3/4" DIAMETER ASTM F1554
C18	HSS10750x1.500	20"x20"x1 1/4"	(4) 3/4" DIAMETER ASTM F1554
C19	HSS66x66x3/8	16"x16"x1 1/2"	(4) 3/4" DIAMETER ASTM F1554
<b>NOTES:</b> 1. ALL HSS AND STANDARD PIPE COLUMNS SHALL RECEIVE A 5/8" THICK CAP PLATE UNLESS NOTED OTHERWISE. 2. PROVIDE 3"x3"x1/2" PLATE WASHER AT 1" DIAMETER ANCHOR BOLTS.			

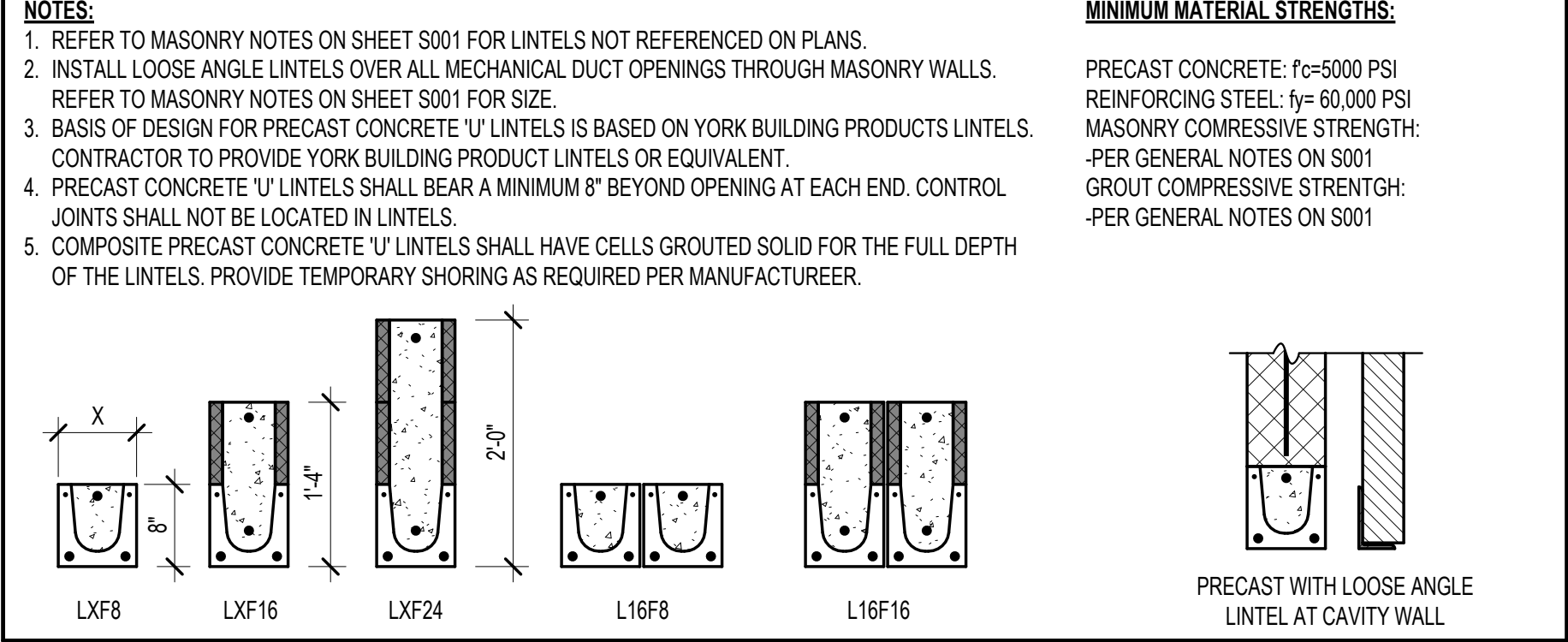
CONCRETE PIER SCHEDULE			
MARK	SIZE	VERTICAL REINFORCEMENT	REMARKS
P20	20"x20"	8-#5	
P22	22"x22"	8-#5	
P24	24"x24"	8-#6	
P24A	24"x24"	12-#6	PROVIDE CLASS B LAP WITH DOWEL AND STANDARD HOOK AT TOP
P26	26"x26"	8-#6	
P28	28"x28"	8-#7	
P42	42"x24"	12-#6	
P46	46"x24"	12-#7	
P46A	46"x28"	12-#7	
P46B	46"x40"	16-#8	
P46C	46"x44"	16-#8	
TIE PATTERNS:  8 LONGITUDINAL BARS  12 LONGITUDINAL BARS  12 LONGITUDINAL BARS - RECTANGULAR PIER  16 LONGITUDINAL BARS			
<b>NOTES:</b> 1. ALTERNATE THE 180 DEGREE HOOKED END OF ALL SINGLE-LEG TIES. 2. ALL TIES SHALL BE PLACED WITH 1 1/2" CONCRETE COVER UNLESS NOTED OTHERWISE.			



WALL FOOTING SCHEDULE			
MARK	SIZE	THICKNESS	REINFORCEMENT
WF20	2'-0" CONTINUOUS	1'-0"	2-#5 CONTINUOUS TOP AND BOTTOM
WF26	2'-6" CONTINUOUS	1'-0"	3-#5 CONTINUOUS TOP AND BOTTOM
WF30	3'-0" CONTINUOUS	1'-4"	3-#5 CONTINUOUS TOP AND BOTTOM
WF30A	3'-0" CONTINUOUS	1'-0"	3-#5 CONTINUOUS TOP AND BOTTOM
WF36	3'-6" CONTINUOUS	1'-6"	4-#6 CONTINUOUS TOP AND BOTTOM
WF40	4'-0" CONTINUOUS	1'-6"	4-#6 CONTINUOUS TOP AND BOTTOM
WF46	4'-6" CONTINUOUS	1'-6"	4-#6 CONTINUOUS TOP AND BOTTOM, #4 AT 12" o.c. TRANSVERSE TOP AND BOTTOM
WF50	5'-0" CONTINUOUS	1'-8"	5-#6 CONTINUOUS TOP AND BOTTOM, #4 AT 10" o.c. TRANSVERSE TOP AND BOTTOM
WF50A	5'-0" CONTINUOUS	1'-2"	5-#5 CONTINUOUS TOP AND BOTTOM

### PRECAST 'U' LINTEL SCHEDULE

MARK	SIZE	ADDED REINFORCEMENT	REMARKS
L8F8	8F8	1-#5 TOP	8" COMPOSITE PRECAST CONCRETE 'U' LINTEL
L8F8A	8F8	1-#5 TOP	8" COMPOSITE PRECAST CONCRETE 'U' LINTEL LOOSE ANGLE
L8F16	8F16	1-#5 TOP AND BOTTOM	8" COMPOSITE PRECAST CONCRETE 'U' LINTEL
L8F16A	8F16	1-#5 TOP AND BOTTOM	8" COMPOSITE PRECAST CONCRETE 'U' LINTEL LOOSE ANGLE
L8F24	8F24	1-#5 TOP AND BOTTOM	8" COMPOSITE PRECAST CONCRETE 'U' LINTEL
L8F24A	8F24	1-#5 TOP AND BOTTOM	8" COMPOSITE PRECAST CONCRETE 'U' LINTEL LOOSE ANGLE
L12F16	12F16	1-#5 TOP AND BOTTOM	12" COMPOSITE PRECAST CONCRETE 'U' LINTEL
L12F24	12F24	1-#5 TOP AND BOTTOM	12" COMPOSITE PRECAST CONCRETE 'U' LINTEL
L16F8	(2)-8F8	1-#5 TOP EACH LINTEL	2x8" COMPOSITE PRECAST CONCRETE 'U' LINTELS, SIDE BY SIDE
L16F8A	(2)-8F8	1-#5 TOP EACH LINTEL	2x8" COMPOSITE PRECAST CONCRETE 'U' LINTELS, SIDE BY SIDE LOOSE ANGLE
L16F16A	(2)-8F16	1-#5 TOP AND BOTTOM EACH LINTEL	2x8" COMPOSITE PRECAST CONCRETE 'U' LINTELS, SIDE BY SIDE LOOSE ANGLE

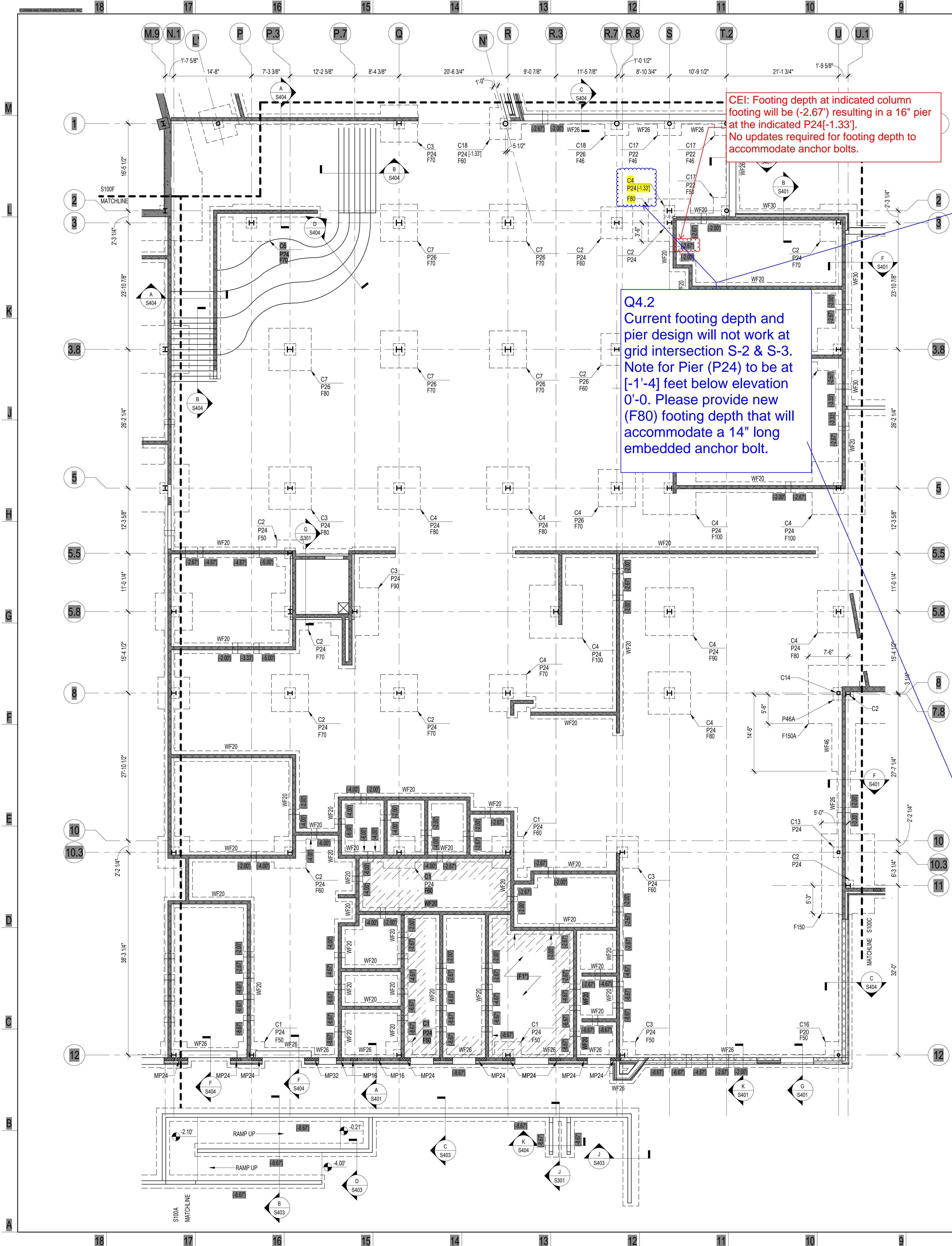


MASONRY PIER SCHEDULE			
MARK	WIDTH	VERTICAL REINFORCEMENT	REMARKS
MP16	16"	1-#5	
MP16A	16"	1-#5 EACH FACE	
MP16B	16"	1-#6	
MP16C	16"	2-#6	
MP16D	16"	1-#5 EACH FACE	
MP16E	16"	2-#5	
MP24	24"	2-#5	
MP24A	24"	2-#5 EACH FACE	
MP24B	24"	2-#6	
MP24C	24"	3-#5 EACH FACE	
MP24D	24"	1-#6	
MP24E	24"	3-#5	
MP24F	24"	3-#6	
MP32	32"	3-#5	
MP32A	32"	3-#5 EACH FACE	
MP32B	32"	3-#6	
MP32C	32"	4-#5 EACH FACE	
MP34	34"	4-#6	
MP36	36"	4-#5 EACH FACE	
MP36A	36"	4-#6	
MP36B	36"	2-#5 EACH FACE	
MP36C	36"	3-#5	
MP36D	36"	3-#6	
MP40	40"	4-#5 EACH FACE	
MP40A	40"	4-#6	
MP42	42"	5-#6	
MP48	48"	5-#5	

**NOTES:**  
1. MASONRY PIERS SHALL BE GROUTED SOLID.  
2. REINFORCEMENT EXTENDS FULL HEIGHT OF THE PIER.  
3. VERTICAL REINFORCEMENT SHALL BE PLACED TO AVOID LINTELS AND BEARING PLATES.  
4. NO MASONRY CONTROL JOINTS ARE PERMITTED IN THE MASONRY PIERS.

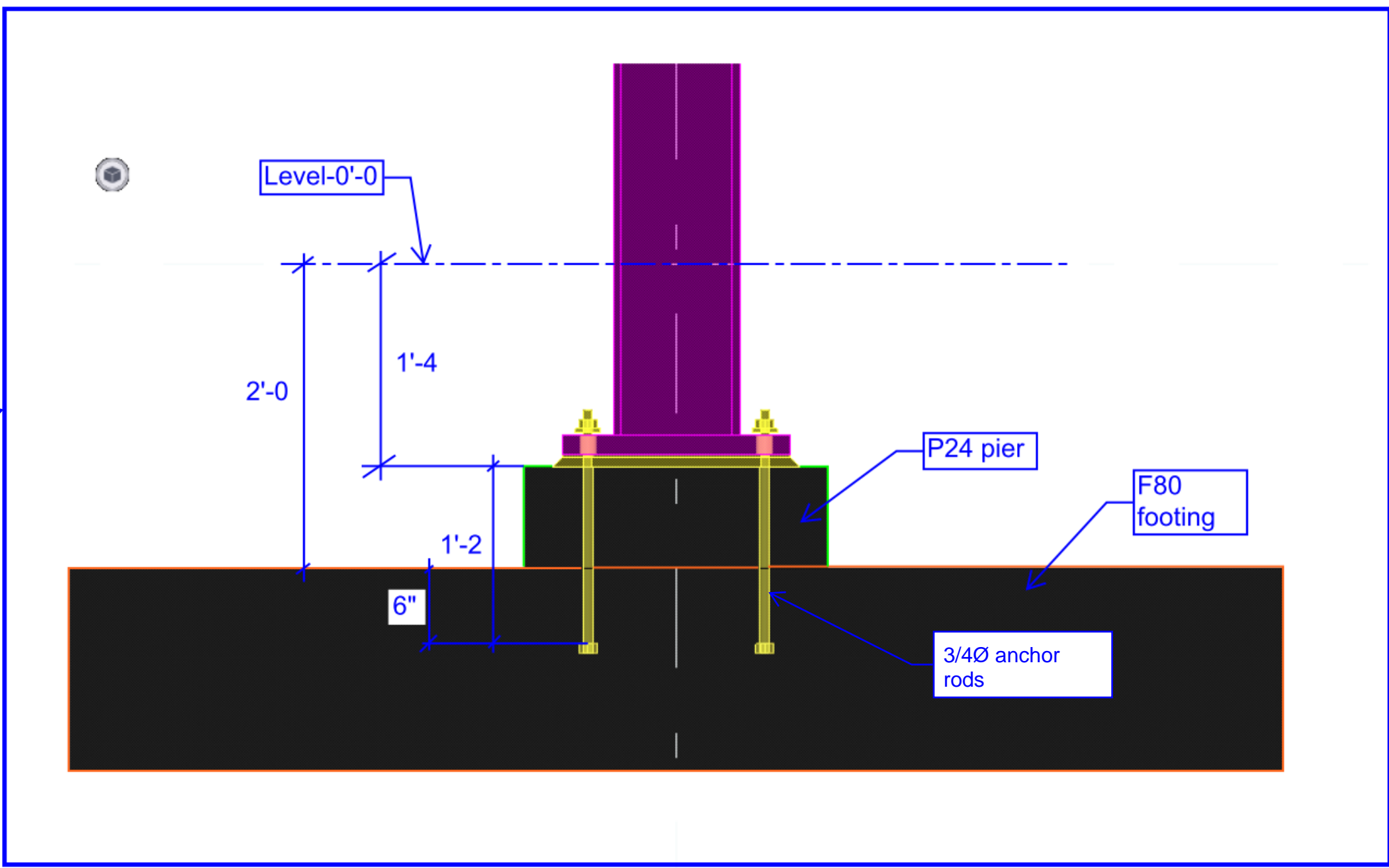
SPREAD FOOTING SCHEDULE			
MARK	SIZE	THICKNESS	REINFORCEMENT
F40	4'-0"x4'-0"	1'-0"	6-#4 EACH WAY BOTTOM WITH HOOKED ENDS
F46	4'-6"x4'-6"	1'-0"	6-#4 EACH WAY BOTTOM WITH HOOKED EN





CEI: Footing depth at indicated column footing will be (-2.67') resulting in a 16" pier at the indicated P24[-1.33'].  
No updates required for footing depth to accommodate anchor bolts.

Q4.2  
Current footing depth and pier design will not work at grid intersection S-2 & S-3.  
Note for Pier (P24) to be at [-1'-4"] feet below elevation 0'-0. Please provide new (F80) footing depth that will accommodate a 14" long embedded anchor bolt.



**FOUNDATION AND SLAB ON GRADE PLAN- AREA B**

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

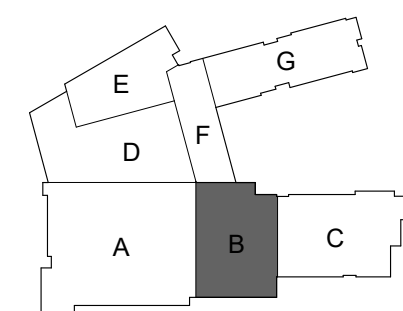
**FOUNDATION AND SLAB ON GRADE NOTES:**

1. SLAB ON GRADE SHALL BE 4" THICK NORMAL WEIGHT CONCRETE (fc=4000 PSI) REINFORCED WITH 6"x6", W2.1X W2.1 W.W.F. ON 15 MIL VAPOR BARRIER OVER 6" THICK LAYER OF WASHED GRAVEL.
2. TOP OF SLAB ELEVATION SHALL BE 92.00' (DATUM 0.00') UNLESS NOTED OTHERWISE.
3. TOP OF CONCRETE PIER ELEVATION SHALL BE 8" BELOW DATUM ELEVATION UNLESS NOTED OTHERWISE THUS [...].
4. TOP OF FOOTING ELEVATION SHALL BE 2'-0" BELOW DATUM ELEVATION UNLESS NOTED OTHERWISE THUS [...]. FOOTING ELEVATIONS ARE FOR BID PURPOSES ONLY AND MAY HAVE TO BE FIELD ADJUSTED. LOWER FOOTING AS REQUIRED BELOW UTILITY LINES AND INSTALL SLEEVES THROUGH CONCRETE AND MASONRY WALLS.
5. SEE ARCHITECTURAL DRAWINGS FOR DEPRESSIONED SLAB AREAS.
6. REFER TO ARCHITECTURAL DRAWINGS FOR ALL NON-LOAD BEARING CMU PARTITIONS.

**FOUNDATION AND SLAB ON GRADE KEYED NOTES:**

(F1\*) SLAB ON GRADE WITHIN HATCHED PERIMETER SHALL BE 6" THICK NORMAL WEIGHT CONCRETE (fc=4000 PSI) REINFORCED WITH 6"x6", W2.3X W2.3 W.W.F. ON 15 MIL VAPOR BARRIER OVER 6" THICK LAYER OF WASHED GRAVEL.

**KEY PLAN**



**Columbia Engineering Inc.**  
Structural Engineers  
6210 Old Dobson Lane  
Columbia, MD 21045  
Tel: 410.862.89  
Fax: 410.862.867



11720 Beltsville Drive  
Suite 600  
Calverton, MD 20705  
Tel: 301.595.1000



GP #22105

FOUNDATION AND SLAB ON GRADE PLAN- AREA B

NORTH EAST MIDDLE / HIGH SCHOOL  
300 IRISTOWN ROAD, NORTH EAST, MD

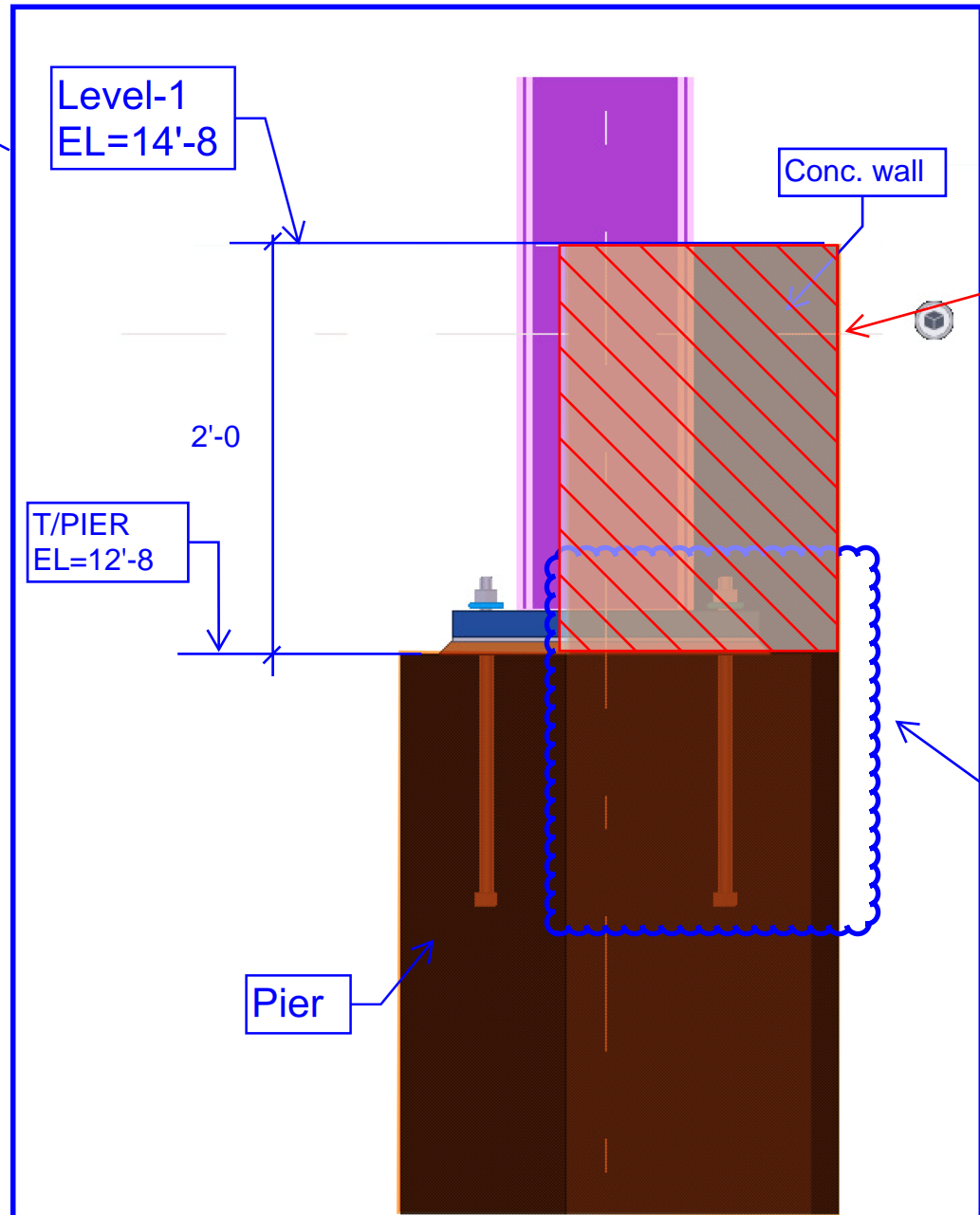
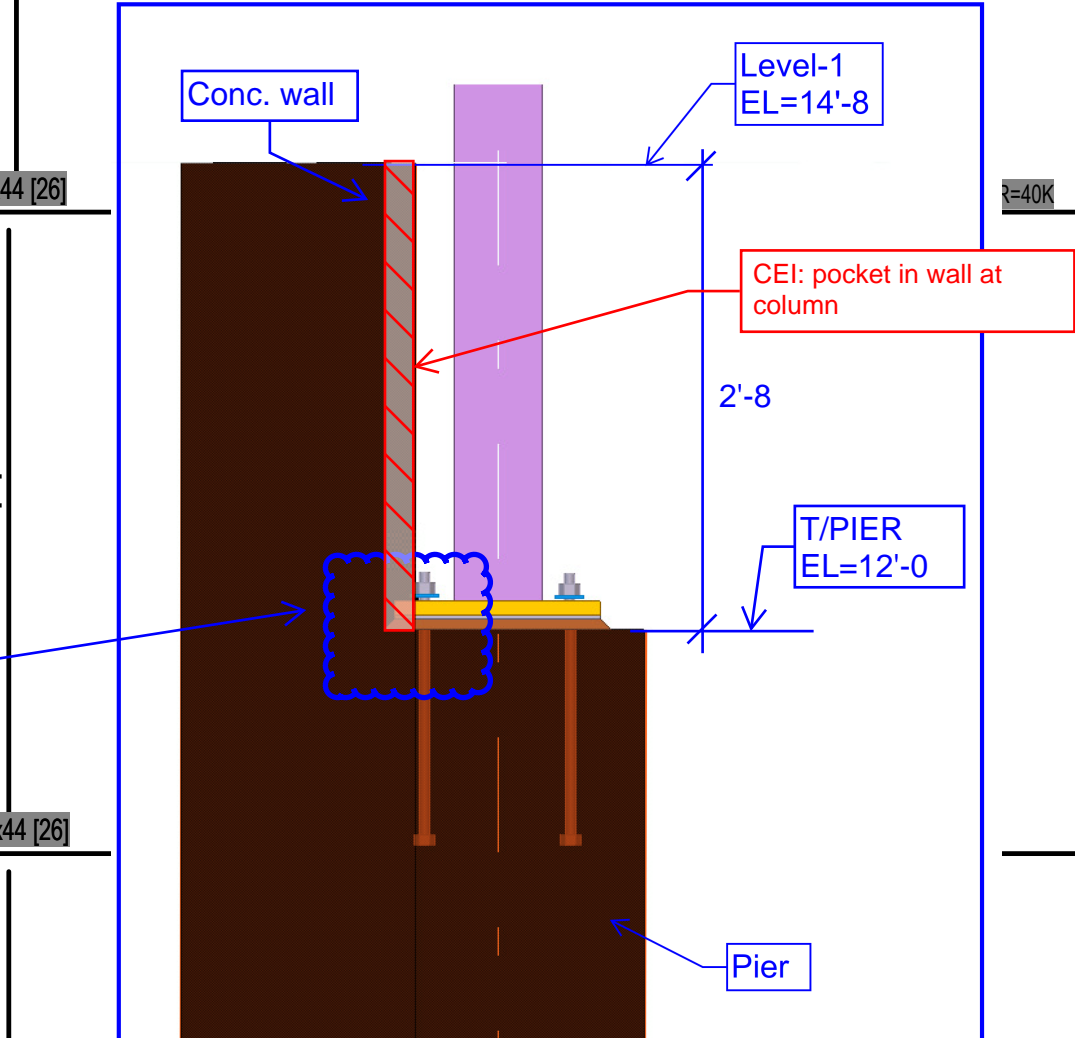
DATE	DESCRIPTION

**S100B**  
12/22/2023  
BID SET



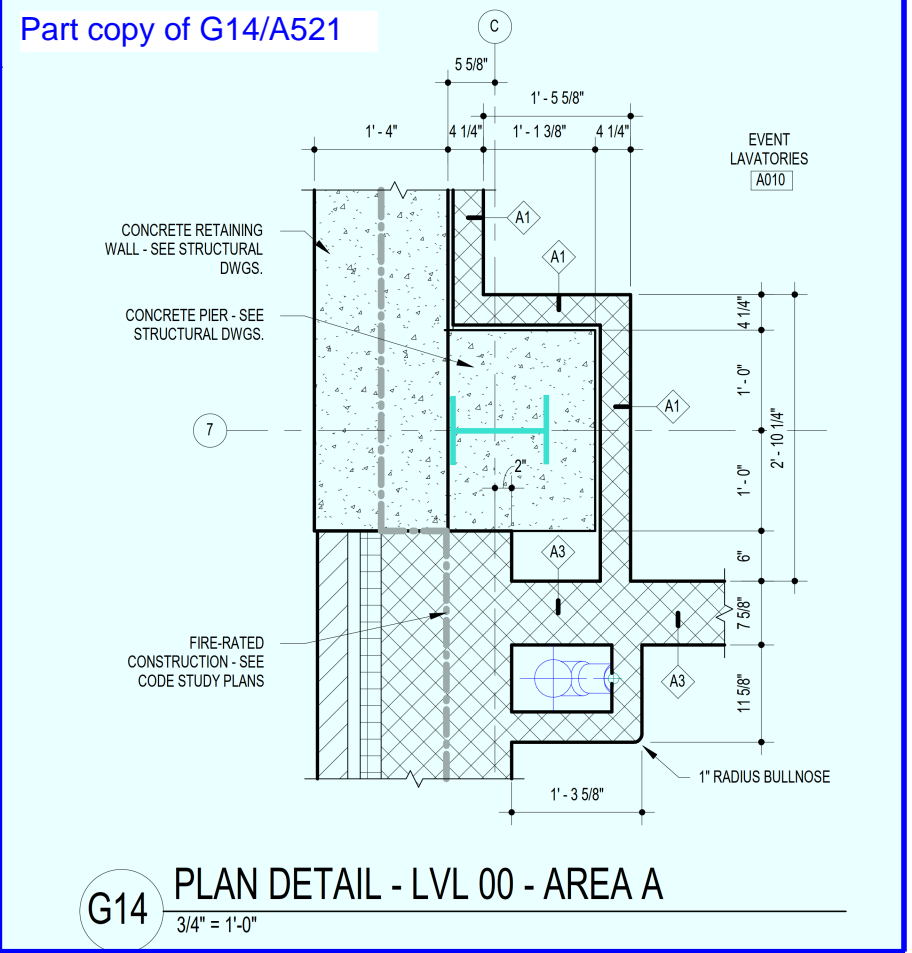
Q4.3  
Along grid line-C standard AB layout clashes with wall.  
Please provide details for base plate offset.

CEI: Concrete wall will have "pocket" for column and column base plate. No modification to baseplate configuration needed.



Q4.4  
Along grid line-2, columns clash with wall. Please provide details for these columns at these conditions.

CEI: Concrete wall will have "pocket" for column and column base plate. No modification to baseplate configuration needed.



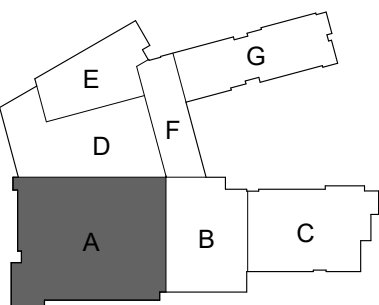
### LEVEL 01 FLOOR FRAMING PLAN AREA A

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

#### ELEVATED FLOOR FRAMING NOTES:

- ELEVATED SLAB SHALL BE 3 1/4" THICK LIGHT WEIGHT CONCRETE (16-4000, 110 PCF) REINFORCED WITH 6"x6", W2.1 x W2.1 W.W.F OVER 2" DEEP, 20 GAGE GALVANIZED COMPOSITE METAL DECK (5 1/4" TOTAL), UNLESS NOTED OTHERWISE.
- TOP OF ELEVATED FLOOR SHALL BE 14.67' ABOVE DATUM ELEVATION. TOP OF STEEL SHALL BE 5 1/4" BELOW TOP OF SLAB ELEVATION UNLESS NOTED OTHERWISE.
- PROVIDE 2-#5 BARS AT MID DEPTH OF SLAB AROUND OPENINGS 1'-0" x 1'-0" OR SMALLER. INSTALL C8X11 FRAME AROUND OPENINGS LARGER THAN 1'-0" x 1'-0". REFER TO TYPICAL FLOOR OPENINGS DETAIL.
- [No.] DENOTES NUMBER OF 3/4" HEADED STUDS WELDED TO THE BEAM TOP FLANGE. SPACE UNIFORMLY ALONG BEAM LENGTH UNLESS NOTED OTHERWISE.
- C=... DENOTES REQUIRED BEAM CAMBER.

#### KEY PLAN



Columbia Engineering Inc.



11720 Beltsville Drive  
Suite 600  
Calverton, MD 20705  
Tel: 301.595.1000



GP #22105

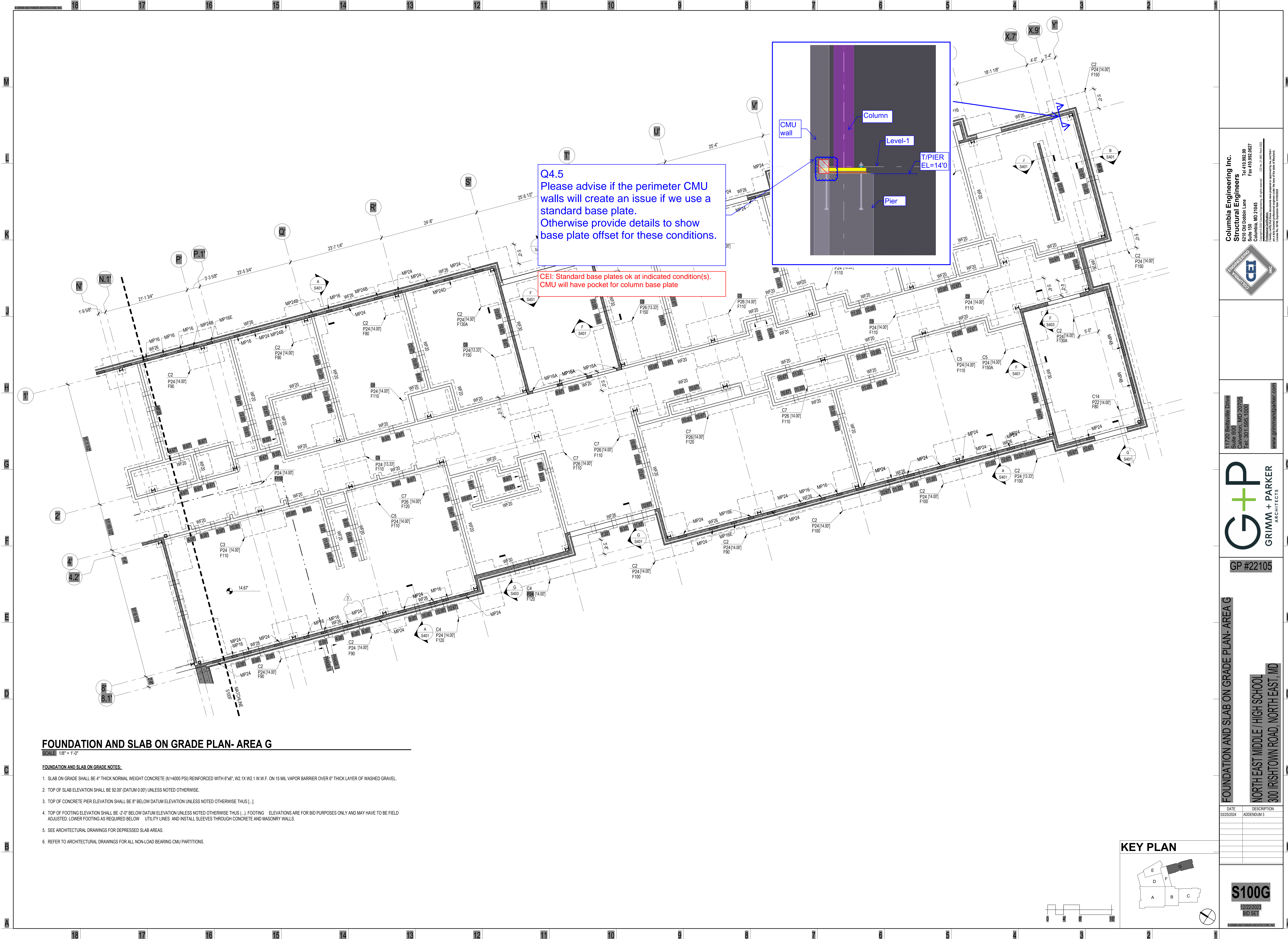
LEVEL 01 FLOOR FRAMING PLAN - AREA A

NORTH EAST MIDDLE / HIGH SCHOOL  
300 IRISTOWN ROAD, NORTH EAST, MD

DATE	DESCRIPTION
12/22/2023	BID SET

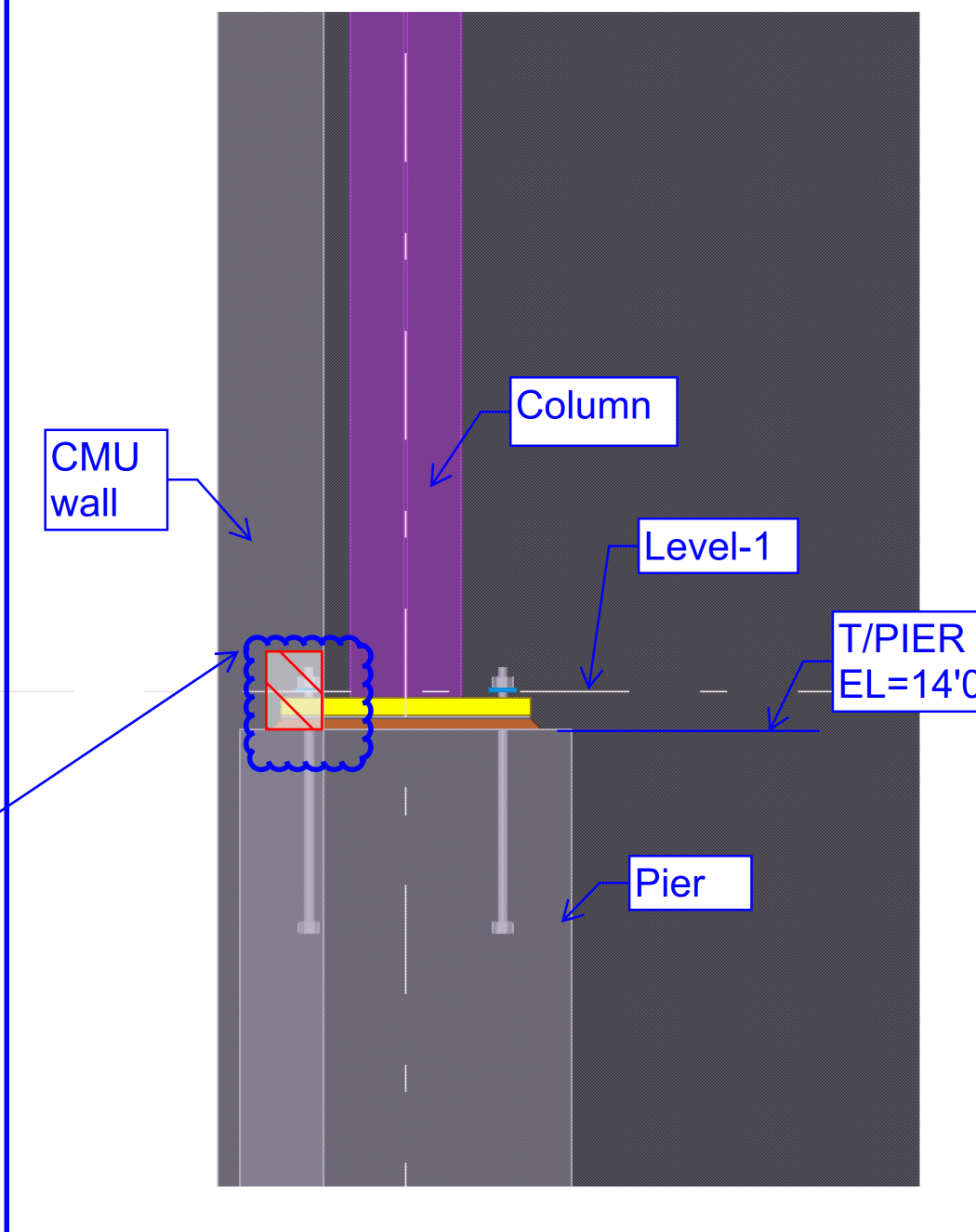
S101A





Q4.5  
Please advise if the perimeter CMU walls will create an issue if we use a standard base plate.  
Otherwise provide details to show base plate offset for these conditions.

CEI: Standard base plates ok at indicated condition(s).  
CMU will have pocket for column base plate



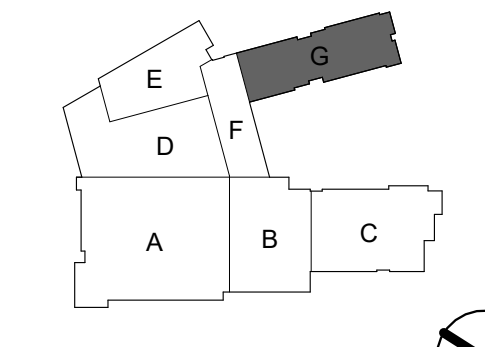
### FOUNDATION AND SLAB ON GRADE PLAN- AREA G

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

#### FOUNDATION AND SLAB ON GRADE NOTES:

1. SLAB ON GRADE SHALL BE 4" THICK NORMAL WEIGHT CONCRETE (fc=4000 PSI) REINFORCED WITH 6"x6", W2.1X W2.1 W.W.F. ON 15 MIL VAPOR BARRIER OVER 6" THICK LAYER OF WASHED GRAVEL.
2. TOP OF SLAB ELEVATION SHALL BE 92.00' (DATUM 0.00') UNLESS NOTED OTHERWISE.
3. TOP OF CONCRETE PIER ELEVATION SHALL BE 8' BELOW DATUM ELEVATION UNLESS NOTED OTHERWISE THUS [...]
4. TOP OF FOOTING ELEVATION SHALL BE -2'-0" BELOW DATUM ELEVATION UNLESS NOTED OTHERWISE THUS [...]. FOOTING ELEVATIONS ARE FOR BID PURPOSES ONLY AND MAY HAVE TO BE FIELD ADJUSTED. LOWER FOOTING AS REQUIRED BELOW UTILITY LINES AND INSTALL SLEEVES THROUGH CONCRETE AND MASONRY WALLS.
5. SEE ARCHITECTURAL DRAWINGS FOR DEPRESSED SLAB AREAS.
6. REFER TO ARCHITECTURAL DRAWINGS FOR ALL NON-LOAD BEARING CMU PARTITIONS.

#### KEY PLAN



**Columbia Engineering Inc.**  
Structural Engineers  
6210 Old Dobbin Lane  
Columbia, MD 21045  
Tel: 410.862.89  
Fax: 410.862.867  
CS No. 21-081 (Jan 2022)  
Professional Engineer  
This document and its contents were prepared or approved by me, and that I am a duly Licensed Professional Engineer in the State of Maryland.  
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**ENGINEERING**  
COLUMBIA

11720 Beltsville Drive  
Suite 600  
Calverton, MD 20705  
Tel: 301.595.1000  
www.grimm+parker.com

**G + P**  
GRIMM + PARKER  
ARCHITECTS

GP #22105

FOUNDATION AND SLAB ON GRADE PLAN- AREA G  
NORTH EAST MIDDLE / HIGH SCHOOL  
300 IRISTOWN ROAD, NORTH EAST, MD

DATE	DESCRIPTION
03/25/2024	ADDENDUM 3

**S100G**  
12/22/2023  
BID SET





## *Request for Information*

---

**Date:** 08/14/2024

**Request No:** KSI 004

**Project:** North East Middle & High School  
**KCI No.:** 242612

**To:** Hess Construction  
**Attn.:** Joshua Postadan  
**Email:** jpostadan@hessconstruction.com

**From:** Mike Staub  
**Phone:** 717-434-6248  
**Email:** [mstaub@kinsleysteel.com](mailto:mstaub@kinsleysteel.com)

---

### **RE: AB Clarification**

#### ***Request***

Please refer to the attached TRC RFI 004 for the question locations on the drawings.

Q4.1: Please confirm base plate details followed for C9 column mark.

Q4.2: P24 pier depth shown as (-1.33ft). Provide new F80 footing depth to accommodate ABs.

Q4.3: Base plate conflict with concrete wall.

Q4.4: Column and base plate conflict with concrete wall.

Q4.5: Base plate conflict with CMU wall.

---

#### ***Date Response Requested: ASAP***

CEI: Please see following sheets for response.

Cesar Flores  
08/19/2024

G+P:

See enclosed responses from CEI. Please coordinate construction requirements with the concrete and masonry contractors.

Patrick Byrne 8.19.2024.



217 Ward Circle Brentwood, TN 37027, Phone: 615-661-7979 Fax: 615-661-0644

# REQUEST FOR INFORMATION

## NORTH EAST MIDDLE / HIGH SCHOOL

JOB #24-880

To:	<b>Michael E.</b> <a href="mailto:Staubmstaub@kinsleysteel.com">Staubmstaub@kinsleysteel.com</a>	CLIENT RFI#
Company:	KINSLEY, INC	GC RFI#
		TRC RFI# 04
cc:		RESPONSE 08-13-2024 NEEDED BY

### SUBJECT: AB clarification

Please refer to the attached files for the questions.

Q4.1: Please confirm base plate details followed for C9 column mark.

Q4.2: P24 pier depth shown as (-1.33ft). Provide new F80 footing depth to accommodate ABs.

Q4.3: Base plate conflict with concrete wall.

Q4.4: Column and base plate conflict with concrete wall.

Q4.5: Base plate conflict with CMU wall.

By:	<b>Ruben Flores</b>	Date:	<b>08-09-2024</b>
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### Response:

By:		Date:	
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PLEASE SEND RESPONSE TO: Ruben Flores

Phone: **325-320-0719**

**THE RAMANNA COMPANIES**

**CONSULTING ENGINEERS**



STATEMENT OF SPECIAL INSPECTIONS:  
  
NOTE 1:  
INSPECTION OR TESTING SHALL BE PROVIDED FOR ALL MATERIAL, COMPONENTS AND WORK LISTED IN THE TABLES BELOW.  
  
NOTE 2:  
DEFINITIONS:  
a. CONTINUOUS INSPECTION: INDICATES SPECIAL INSPECTOR SHALL BE PRESENT DURING CONTRACTOR PERFORMANCE OF THE TASK.  
b. PERIODIC INSPECTION: INDICATES SPECIAL INSPECTOR SHALL PROVIDE INSPECTION OR TESTING OF ALL WORK INDICATED, BUT THAT SPECIAL INSPECTOR IS NOT REQUIRED TO BE PRESENT DURING CONTRACTOR PERFORMANCE OF THE TASK. PERIODIC INSPECTION DOES NOT MEAN RANDOM INSPECTION IS ALLOWED.  
c. RANDOM INSPECTION: INDICATES SPECIAL INSPECTOR SHALL PROVIDE INSPECTION OR TESTING, AS NEEDED, TO INSURE PROPER PERFORMANCE OF THE TASK BY THE CONTRACTOR.

SOILS		
INSPECTION TASK	TYPE OF INSPECTION	
1. VERIFY MATERIALS BELOW SHALLOW FOUNDATIONS ARE ADEQUATE TO ACHIEVE THE DESIGN BEARING CAPACITY.	PERIODIC	
2. VERIFY EXCAVATIONS ARE EXTENDED TO PROPER DEPTH AND HAVE REACHED PROPER MATERIAL.	PERIODIC	
3. PERFORM CLASSIFICATION AND TESTING OF COMPACTED FILL MATERIALS.	PERIODIC	
4. VERIFY USE OF PROPER MATERIALS, DENSITIES AND LIFT THICKNESSES DURING PLACEMENT AND COMPACTION OF COMPACTED FILL.	CONTINUOUS	
5. PRIOR TO PLACEMENT OF COMPACTED FILL, OBSERVE SUBGRADE AND VERIFY THAT SITE HAS BEEN PREPARED PROPERLY.	PERIODIC	

CONCRETE		
INSPECTION TASK	TYPE OF INSPECTION	
1. INSPECTION OF REINFORCING STEEL FOR SIZE, QUANTITY AND PLACEMENT.	PERIODIC	
2. INSPECTION OF ANCHORS CAST IN CONCRETE.	PERIODIC	
3. INSPECTION OF ANCHORS POST-INSTALLED IN HARDENED CONCRETE MEMBERS (FOLLOW MANUFACTURERS WRITTEN INSTALLATION REQUIREMENTS). a. ADHESIVE ANCHORS INSTALLED IN HORIZONTAL OR UPWARDLY INCLINED ORIENTATIONS b. ALL OTHER CONDITIONS	a. CONTINUOUS b. PERIODIC	
4. VERIFY USE OF REQUIRED DESIGN MIX.	PERIODIC	
5. AT THE TIME FRESH CONCRETE IS SAMPLED TO FABRICATE SPECIMENS FOR STRENGTH TESTS, PERFORM SLUMP AND AIR CONTENT TESTS, AND DETERMINE THE TEMPERATURE OF THE CONCRETE. FOR LIGHTWEIGHT CONCRETE, PERFORM UNIT WEIGHT TESTS.	CONTINUOUS	
6. INSPECTION OF CONCRETE PLACEMENT.	CONTINUOUS	
7. INSPECTION FOR MAINTENANCE OF SPECIFIED CURING TEMPERATURE AND TECHNIQUES.	PERIODIC	
8. VERIFICATION OF IN-SITU CONCRETE STRENGTH, PRIOR TO REMOVAL OF SHORES AND FORMS FROM BEAMS AND STRUCTURAL SLABS.	PERIODIC	
9. INSPECT FORMWORK FOR SHAPE, LOCATION AND DIMENSIONS OF THE CONCRETE MEMBER BEING FORMED AND FOR CONFORMANCE WITH FORMWORK DESIGN.	PERIODIC	
10. MEASURE F (F) AND F (L) TOLERANCE FOR FLOORS.	PERIODIC	

MASONRY		
INSPECTION TASK	TYPE OF INSPECTION BY QUALITY ASSURANCE LEVEL	
	LEVEL 2	LEVEL 3
1. VERIFY COMPLIANCE WITH THE APPROVED SUBMITTALS	PERIODIC	PERIODIC
2. VERIFICATION OF f' <sub>c</sub> a. PRIOR TO CONSTRUCTION b. DURING CONSTRUCTION EVERY 5,000 SQUARE FEET	a. PERIODIC b. N/A	a. PERIODIC b. PERIODIC
3. AS MASONRY CONSTRUCTION BEGINS, VERIFY THE FOLLOWING ARE IN COMPLIANCE: a. PROPORTIONS OF SITE-PREPARED MORTAR b. GRADE, TYPE AND SIZE OF REINFORCEMENT, CONNECTORS AND ANCHOR BOLTS c. SAMPLE PANEL CONSTRUCTION	a. PERIODIC b. PERIODIC c. PERIODIC	a. PERIODIC b. PERIODIC c. CONTINUOUS
4. PRIOR TO GROUTING, VERIFY THAT THE FOLLOWING ARE IN COMPLIANCE: a. GROUT SPACE b. PLACEMENT OF REINFORCEMENT, CONNECTORS AND ANCHOR BOLTS c. PROPORTIONS OF SITE-PREPARED GROUT	a. PERIODIC b. PERIODIC c. PERIODIC	a. CONTINUOUS b. CONTINUOUS c. PERIODIC
5. VERIFY COMPLIANCE DURING CONSTRUCTION: a. PLACEMENT OF MASONRY UNITS AND MORTAR JOINT CONSTRUCTION b. SIZE AND LOCATION OF STRUCTURAL MEMBERS c. TYPE, SIZE, AND LOCATION OF ANCHORS, INCLUDING OTHER DETAILS OF ANCHORAGE OF MASONRY TO STRUCTURAL MEMBERS, FRAMES, OR OTHER CONSTRUCTION d. PREPARATION, CONSTRUCTION, AND PROTECTION OF MASONRY DURING COLD WEATHER (TEMPERATURE BELOW 40°F) OR HOT WEATHER (TEMPERATURE ABOVE 90°F) e. PLACEMENT OF GROUT f. SLUMP FLOW AND VISUAL STABILITY INDEX (VSI) WHEN SELF-CONSOLIDATING GROUT IS DELIVERED TO PROJECT SITE g. PROPORTIONS OF MATERIALS AS DELIVERED TO THE PROJECT SITE FOR PREMIXED OR PREBLENDED MORTAR AND GROUT OTHER THAN SELF-CONSOLIDATING GROUT.	a. PERIODIC b. PERIODIC c. PERIODIC d. PERIODIC e. CONTINUOUS f. PERIODIC g. N/A	a. PERIODIC b. PERIODIC c. CONTINUOUS d. PERIODIC e. CONTINUOUS f. PERIODIC g. PERIODIC
6. OBSERVE PREPARATION OF GROUT SPECIMENS, MORTAR SPECIMENS, AND/OR PRISMS	PERIODIC	CONTINUOUS
7. INSTALLATION OF POST INSTALLED ANCHORS.	CONTINUOUS	CONTINUOUS

COLD-FORMED STEEL	
INSPECTION TASK	TYPE OF INSPECTION
1. VERIFY SIZE AND GAGE OF FRAMING.	PERIODIC
2. VERIFY PLUMBNESS, ALIGNMENT AND PROPER BEARING OF ELEMENTS	PERIODIC
3. VERIFY COLD-FORMED FRAMING IS PROPERLY FASTENED TOGETHER	PERIODIC
4. VERIFY CONNECTIONS TO STRUCTURAL FRAME	PERIODIC
5. VERIFY TOUCH-UP GALVANIZATION IS APPLIED TO WELDS	PERIODIC

STEEL DECK	
INSPECTION TASK	TYPE OF INSPECTION
1. MATERIAL VERIFICATION: a. IDENTIFICATION MARKINGS TO CONFORM TO ASTM STANDARDS SPECIFIED IN THE APPROVED CONSTRUCTION DOCUMENTS b. MANUFACTURERS CERTIFIED TEST REPORTS	PERIODIC
2. VERIFY WELDING CONSUMABLES AND FASTENERS TO BE USED.	PERIODIC
3. VERIFY DECK ALIGNMENT AND SUPPORT	PERIODIC
4. VERIFY FLOOR AND ROOF DECK ATTACHMENT: a. WELDS TO SUPPORTING MEMBERS b. SIDE LAP SCREWS AND WELDS	PERIODIC
5. VERIFY TOUCH-UP GALVANIZATION APPLIED TO WELDS.	PERIODIC

STEEL - PRIOR TO WELDING		
INSPECTION TASK	TYPE OF INSPECTION	
	QC	SI
1. WELDING PROCEDURE SPECIFICATIONS (WPSs) AVAILABLE	PERIODIC	PERIODIC
2. MANUFACTURER CERTIFICATIONS FOR WELDING CONSUMABLES AVAILABLE	PERIODIC	PERIODIC
3. MATERIAL IDENTIFICATION (TYPE/GRADE)	RANDOM	RANDOM
4. WELDER IDENTIFICATION SYSTEM	RANDOM	RANDOM
5. FIT-UP OF GROOVE WELDS (INCLUDING JOINT GEOMETRY) • JOINT PREPARATION • DIMENSIONS (ALIGNMENT, ROOT OPENING, ROOF FACE, BEVEL) • CLEANLINESS (CONDITION OF STEEL SURFACES) • TACKING (TACK WELD QUALITY AND LOCATION) • BACKING TYPE AND FIT (IF APPLICABLE)	RANDOM	PERIODIC
6. CONFIGURATION AND FINISH OF ACCESS HOLES	RANDOM	PERIODIC
7. FIT-UP OF FILLET WELDS • DIMENSIONS (ALIGNMENT, GAPS AT ROOT) • CLEANLINESS (CONDITION OF STEEL SURFACES) • TACKING (TACK WELD QUALITY AND LOCATION)	RANDOM	RANDOM
8. CHECK WELDING EQUIPMENT	RANDOM	NONE

**NOTES:**  
QC - DENOTES QUALITY CONTROL PERSONNEL  
SI - DENOTES SPECIAL INSPECTOR

STEEL - DURING WELDING		
INSPECTION TASK	TYPE OF INSPECTION	
	QC	SI
1. USE OF QUALIFIED WELDERS	RANDOM	RANDOM
2. CONTROL AND HANDLING OF WELDING CONSUMABLES • PACKAGING • EXPOSURE CONTROL	RANDOM	RANDOM
3. NO WELDING OVER CRACKED TACK WELDS	RANDOM	RANDOM
4. ENVIRONMENTAL CONDITIONS • WIND SPEED WITH LIMITS • PRECIPITATION AND TEMPERATURE	RANDOM	RANDOM
5. WPS FOLLOWED FOR GROOVE WELDS AND MULTI-PASS FILLET WELDS • SETTINGS ON WELDING EQUIPMENT • TRAVEL SPEED • SELECTED WELDING MATERIALS • SHIELDING GAS TYP/FLOW RATE • PREHEAT APPLIED • INTERPASS TEMPERATURE MAINTAINED (MINIMUM/MAXIMUM) • PROPER POSITION (F/V/H, OH)	RANDOM	CONTINUOUS
6. WPS FOLLOWED FOR SINGLE - PASS FILLET WELDS • SETTINGS ON WELDING EQUIPMENT • TRAVEL SPEED • SELECTED WELDING MATERIALS • SHIELDING GAS TYP/FLOW RATE • PREHEAT APPLIED • INTERPASS TEMPERATURE MAINTAINED (MINIMUM/MAXIMUM) • PROPER POSITION (F/V/H, OH)	RANDOM	RANDOM
7. WELDING TECHNIQUES FOR GROOVE WELDS AND MULTI-PASS FILLET WELDS • INTERPASS AND FINAL CLEANING • EACH PASS WITHIN PROFILE LIMITATIONS • EACH PASS MEETS QUALITY REQUIREMENTS	RANDOM	CONTINUOUS
8. WELDING TECHNIQUES FOR SINGLE-PASS FILLET WELDS • INTERPASS AND FINAL CLEANING • EACH PASS WITHIN PROFILE LIMITATIONS • EACH PASS MEETS QUALITY REQUIREMENTS	RANDOM	RANDOM

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STEEL - AFTER WELDING		
INSPECTION TASK	TYPE OF INSPECTION	
	QC	SI
1. WELDS CLEANED	PERIODIC	PERIODIC
2. SIZE, LENGTH AND LOCATION OF WELDS	PERIODIC	PERIODIC
3. WELDS MEET VISUAL ACCEPTANCE CRITERIA • CRACK PROHIBITION • WELD BASE/METAL FUSION • CRATER CROSS SECTION • WELD PROFILES • WELD SIZE • UNDERCUT • POROSITY	PERIODIC	PERIODIC
4. ULTRASONICALLY TEST FULL PENETRATION GROOVE WELDS	PERIODIC	PERIODIC
5. ARC STRIKES	PERIODIC	PERIODIC
6. K - AREA (1*)	PERIODIC	PERIODIC
7. BACKING REMOVED AND WELD TABS REMOVED (IF REQUIRED)	PERIODIC	PERIODIC
8. REPAIR ACTIVITIES	PERIODIC	PERIODIC
9. DOCUMENT ACCEPTANCE OR REJECTION OF WELDED JOINT OR MEMBER	PERIODIC	PERIODIC

**NOTES:**  
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SI - DENOTES SPECIAL INSPECTOR  
(1\*) - DENOTES WHEN WELDING OF DOUBLER PLATES, CONTINUITY PLATES OR STIFFENERS HAS BEEN PERFORMED IN THE K-AREA, VISUALLY INSPECT THE WEB AREA FOR CRACKS WITHIN THREE INCHES OF THE WELD.

STEEL JOIST	
INSPECTION TASK	TYPE OF INSPECTION
1. SETTING OF BEARING PLATES	PERIODIC
2. ALIGNMENT OF JOISTS	PERIODIC
3. INSTALLATION OF BRIDGING	PERIODIC
4. SIZE, LENGTH AND LOCATION OF WELDS	PERIODIC
5. ULTRASONICALLY TEST FULL PENETRATION WELDS	PERIODIC
6. HIGH-STRENGTH BOLTS INSTALLED	PERIODIC

STEEL ELEMENTS OF COMPOSITE CONSTRUCTION PRIOR TO CONCRETE PLACEMENT		
INSPECTION TASK	TYPE OF INSPECTION	
	QC	SI
1. PLACEMENT AND INSTALLATION OF STEEL DECK	PERIODIC	PERIODIC
2. PLACEMENT AND INSTALLATION OF STEEL HEADED STUD ANCHORS	PERIODIC	PERIODIC
3. DOCUMENT ACCEPTANCE OR REJECTION OF STEEL ELEMENTS	PERIODIC	PERIODIC

**NOTES:**  
QC - DENOTES QUALITY CONTROL PERSONNEL  
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STEEL - PRIOR TO BOLTING			
INSPECTION TASK	TYPE OF INSPECTION		
	QC	SI	
1. MANUFACTURER'S CERTIFICATIONS AVAILABLE FOR FASTENER MATERIALS	RANDOM	PERIODIC	
2. FASTENERS MARKED IN ACCORDANCE WITH ASTM REQUIREMENTS	RANDOM	RANDOM	
3. PROPER FASTENERS SELECTED FOR THE JOINT DETAIL (GRADE, TYPE, BOLT LENGTH IF THREADS ARE TO BE EXCLUDED FROM SHEAR PLANE)	RANDOM	RANDOM	
4. PROPER BOLTING PROCEDURE SELECTED FOR JOINT DETAIL	RANDOM	RANDOM	
5. CONNECTING ELEMENTS, INCLUDING THE APPROPRIATE FAYING SURFACE CONDITION AND HOLE PREPARATION, IF SPECIFIED, MEET APPLICABLE REQUIREMENTS	RANDOM	RANDOM	
6. PRE-INSTALLATION VERIFICATION TESTING BY INSTALLATION PERSONNEL OBSERVED AND DOCUMENTED FOR FASTENER ASSEMBLIES AND METHODS USED	CONTINUOUS	RANDOM	
7. PROPER STORAGE PROVIDED FOR BOLTS, NUTS, WASHERS AND OTHER FASTENER COMPONENTS	RANDOM	RANDOM	

**NOTES:**  
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SI - DENOTES SPECIAL INSPECTOR

STEEL - DURING BOLTING			
INSPECTION TASK	TYPE OF INSPECTION		
	QC	SI	
1. FASTENER ASSEMBLIES, OF SUITABLE CONDITION, PLACED IN ALL HOLES AND WASHERS (IF REQUIRED) ARE POSITIONED AS REQUIRED.	PERIODIC	PERIODIC	
2. JOINT BROUGHT TO THE SNUG-TIGHT CONDITION PRIOR TO THE PRETENSIONING OPERATION	RANDOM	RANDOM	
3. PRETENSIONED AND SLIP-CRITICAL JOINTS INSTALLED USING ONE OF THE FOLLOWING METHODS: • DIRECT-TENSION INDICATOR WASHER METHOD • TWIST-OFF TYPE TENSION CONTROL BOLT METHOD	PERIODIC	PERIODIC	
4. FASTENERS COMPONENT NOT TURNED BY THE WRENCH PREVENTED FROM ROTATING	RANDOM	RANDOM	
5. FASTENERS ARE PRETENSIONED IN ACCORDANCE WITH THE RCSC SPECIFICATION, PROGRESSING SYSTEMATICALLY FROM THE MOST RIGID POINT TOWARD THE FREE EDGES	RANDOM	RANDOM	

**NOTES:**  
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SI - DENOTES SPECIAL INSPECTOR

STEEL - AFTER BOLTING			
INSPECTION TASK	TYPE OF INSPECTION		
	QC	SI	
1. DOCUMENT ACCEPTANCE OR REJECTION OF BOLTED CONNECTIONS	PERIODIC	PERIODIC	

**NOTES:**  
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SI - DENOTES SPECIAL INSPECTOR

STEEL - OTHER			
INSPECTION TASK	TYPE OF INSPECTION		
	QC	SI	
1. COMPLIANCE OF THE FABRICATED STEEL WITH THE SHOP DRAWINGS	PERIODIC	NONE	
2. SETTING OF ANCHOR BOLTS, BEARING PLATES AND EMBEDDED ITEMS PRIOR TO PLACEMENT OF CONCRETE	RANDOM	PERIODIC	
3. STRUCTURAL MEMBERS FOR PLUMBNESS, ELEVATION AND ALIGNMENT	RANDOM	PERIODIC	
4. COMPLIANCE OF THE ERECTED STEEL FRAME WITH ERECTION DRAWINGS FOR ITEMS SUCH AS BRACES, MEMBER LOCATIONS AND CONNECTION DETAILS	PERIODIC	NONE	
5. COMPLIANCE OF THE ERECTED STEEL FRAME WITH CONTRACT DOCUMENTS FOR ITEMS SUCH AS BRACES, MEMBER LOCATIONS AND CONNECTION DETAILS	NONE	PERIODIC	

**NOTES:**  
QC - DENOTES QUALITY CONTROL PERSONNEL  
SI - DENOTES SPECIAL INSPECTOR

8 LONGITUDINAL BARS

12 LONGITUDINAL BARS

12 LONGITUDINAL BARS - RECTANGULAR PIER

16 LONGITUDINAL BARS

NOTE:  
1. ALTERNATE THE 180 DEGREE HOOKED END OF ALL SINGLE-LEG TIES  
2. ALL TIES SHALL BE PLACED WITH 1 1/2" COVER UNLESS NOTED OTHERWISE.

WALL FOOTING SCHEDULE			
MARK	SIZE	THICKNESS	REINFORCEMENT
WF20	2'-0" CONTINUOUS	1'-0"	2-#5 CONTINUOUS TOP AND BOTTOM
WF26	2'-6" CONTINUOUS	1'-0"	3-#5 CONTINUOUS TOP AND BOTTOM
WF30	3'-0" CONTINUOUS	1'-4"	3-#5 CONTINUOUS TOP AND BOTTOM
WF30A	3'-0" CONTINUOUS	1'-0"	3-#5 CONTINUOUS TOP AND BOTTOM
WF36	3'-6" CONTINUOUS	1'-6"	4-#6 CONTINUOUS TOP AND BOTTOM
WF40	4'-0" CONTINUOUS	1'-6"	4-#6 CONTINUOUS TOP AND BOTTOM
WF46	4'-6" CONTINUOUS	1'-6"	4-#6 CONTINUOUS TOP AND BOTTOM, #4 AT 12" o.c. TRANSVERSE TOP AND BOTTOM
WF50	5'-0" CONTINUOUS	1'-8"	5-#6 CONTINUOUS TOP AND BOTTOM, #4 AT 10" o.c. TRANSVERSE TOP AND BOTTOM
WF50A	5'-0" CONTINUOUS	1'-2"	5-#5 CONTINUOUS TOP AND BOTTOM

COLUMN SCHEDULE			
MARK	SIZE	BASE PLATE	ANCHOR BOLTS
C1	W10x33	18"x18"x1"	(4) 3/4" DIAMETER ASTM F1554
C2	W10x39	18"x18"x1 1/4"	(4) 3/4" DIAMETER ASTM F1554
C3	W10x45	18"x18"x1 1/2"	(4) 3/4" DIAMETER ASTM F1554
C4	W10x49	18"x18"x1 1/2"	(4) 3/4" DIAMETER ASTM F1554
C5	W10x54	18"x18"x1 3/4"	(4) 3/4" DIAMETER ASTM F1554
C6	W10x60	18"x18"x1 3/4"	(4) 3/4" DIAMETER ASTM F1554
C7	W12x65	20"x20"x1 3/4"	(4) 3/4" DIAMETER ASTM F1554
C8	W12x79	20"x20"x1 3/4"	(4) 3/4" DIAMETER ASTM F1554
C9	SEE GRAPHICAL COLUMN SCHEDULE ON S201		
C10	HSS5x5x5/16	14"x14"x3/4"	(4) 3/4" DIAMETER ASTM F1554
C11	W10x60	18"x18"x1 3/4"	(4) 1" DIAMETER ASTM F1554 (2-0" EMBE
C12	6" DIAMETER STD PIPE	14"x14"x1"	(4) 3/4" DIAMETER ASTM F1554
C13	HSS6x6x1/2	14"x14"x1"	(4) 3/4" DIAMETER ASTM F1554
C14	HSS7x7x1/2	16"x16"x1 1/4"	(4) 3/4" DIAMETER ASTM F1554
C15	HSS10x8x5/8	18"x18"x1 1/4"	(4) 3/4" DIAMETER ASTM F1554
C16	HSS6.00X0.375	14"x14"x3/4"	(4) 3/4" DIAMETER ASTM F1554
C17	HSS8.75X0.500	18"x18"x1 1/4"	(4) 3/4" DIAMETER ASTM F1554
C18	HSS10.75X0.500	20"x20"x1 1/4"	(4) 3/4" DIAMETER ASTM F1554
C19	HSS6x6x5/8	16"x16"x1 1/2"	(4) 3/4" DIAMETER ASTM F1554

**NOTES:**  
1. ALL HSS AND STANDARD PIPE COLUMNS SHALL RECEIVE A 5/8" THICK CAP PLATE UNLESS NOTED OTHERWISE.  
2. PROVIDE 3"x3"x1/2" PLATE WASHER AT 1" DIAMETER ANCHOR BOLTS.

CEI: For W12x96 columns, please provide: 20"x20"x2" base plate with (4) - 3/4" Diameter anchor bolts

CONCRETE PIER SCHEDULE			
MARK	SIZE	VERTICAL REINFORCEMENT	REMARKS
P20	20"x20"	8-#5	
P22	22"x22"	8-#5	
P24	24"x24"	8-#6	
P24A	24"x24"	12-#6	PROVIDE CLASS B LAP WITH DOWEL AND STANDARD HOOK AT TOP
P26	26"x26"	8-#6	
P28	28"x28"	8-#7	
P42	42"x24"	12-#6	
P46	46"x24"	12-#7	
P46A	46"x28"	12-#7	
P46B	46"x40"	16-#8	
P46C	46"x44"	16-#8	

**THE PATTERNS:**

**NOTES:**  
1. ALTERNATE THE 180 DEGREE HOOKED END OF ALL SINGLE-LEG TIES  
2. ALL TIES SHALL BE PLACED WITH 1 1/2" COVER UNLESS NOTED OTHERWISE.

SPREAD FOOTING SCHEDULE			
MARK	SIZE	THICKNESS	REINFORCEMENT
F40	4'-0"x4'-0"	1'-0"	6-#4 EACH WAY BOTTOM WITH HOOKED ENDS
F46	4'-6"x4'-6"	1'-0"	6-#4 EACH WAY BOTTOM WITH HOOKED ENDS
F50	5'-0"x5'-0"	1'-0"	5-#5 EACH WAY BOTTOM WITH HOOKED ENDS
F50A	5'-0"x5'-0"	1'-6"	7-#5 EACH WAY BOTTOM WITH HOOKED ENDS
F56	5'-6"x5'-6"	1'-0"	5-#5 EACH WAY BOTTOM
F60	6'-0"x6'-0"	1'-0"	6-#5 EACH WAY BOTTOM
F60A	6'-0"x6'-0"	1'-6"	8-#5 EACH WAY BOTTOM
F70	7'-0"x7'-0"	1'-2"	7-#6 EACH WAY BOTTOM
		4"	6-#6 EACH WAY BOTTOM
		0"	8-#7 EACH WAY TOP AND BOTTOM
		6"	9-#7 EACH WAY BOTTOM
		8"	10-#7 EACH WAY BOTTOM
F110	11'-0"x11'-0"	1'-10"	11-#7 EACH WAY BOTTOM
F120	12'-0"x12'-0"	2'-0"	12-#8 EACH WAY BOTTOM
F130	13'-0"x13'-0"	2'-4"	13-#8 EACH WAY BOTTOM
F130A	13'-0"x10'-0"	2'-4"	10-#8 TOP AND BOTTOM LONG BARS 13-#8 TOP AND BOTTOM SHORT BARS
F150	15'-0"x10'-0"	2'-8"	11-#9 TOP AND BOTTOM LONG BARS 15-#8 TOP AND BOTTOM SHORT BARS
F150A	15'-0"x11'-0"	2'-8"	11-#9 TOP AND BOTTOM LONG BARS 15-#8 TOP AND BOTTOM SHORT BARS
F166	16'-6"x10'-6"	3'-0"	11-#9 BOTTOM LONG BARS 16-#8 BOTTOM SHORT BARS
F200	20'-0"x10'-6"	2'-0"	11-#8 TOP AND BOTTOM LONG BARS 20-#8 TOP AND BOTTOM SHORT BARS
F250	25'-0"x14'-0"	2'-6"	14-#9 TOP AND BOTTOM LONG BARS 25-#8 TOP AND BOTTOM SHORT BARS

STEEL BEAM LINTEL SCHEDULE			
MARK	SIZE	BEARING PLATE	REMARKS
L1	W8x21 WITH BOTTOM PLATE	6"x6"x5/8"	
L1A	W8x21 WITH HUNG PLATE	6"x6"x5/8"	
L1B	W8x21 WITH BOTTOM PLATE	6"x6"x5/8"	STIFFENER PLATES SHALL BE SPACED AT 12" o.c.
L2	W8x28 WITH BOTTOM PLATE	7"x7"x3/4"	
L2A	W8x28 WITH HUNG PLATE	7"x7"x3/4"	
L2B	W8x28 WITH HUNG PLATE	6"x6"x3/4"	LONG SIDE OF BEARING PLATE SHALL BE PLACED PERPENDICULAR TO BEAM SPAN
L3	W16x31 WITH BOTTOM PLATE	7"x7"x3/4"	
L3A	W16x31 WITH BOTTOM PLATE	7"x7"x3/4"	STIFFENER PLATES SHALL BE SPACED AT 12" o.c.
L4	W16x40 WITH HUNG PLATE	8"x10"x1"	LONG SIDE OF BEARING PLATE SHALL BE PLACED PERPENDICULAR TO BEAM SPAN
L4A	W16x40 WITH HUNG PLATE	7"x7"x3/4"	STIFFENER PLATES SHALL BE SPACED AT 12" o.c.
L4B	W16x40 WITH BOTTOM PLATE	10"x10"x3/4"	
L5	W24x76 WITH HUNG PLATE	10"x12"x1 1/4"	
L6	HSS8x8x3/8 WITH BOTTOM PLATE	7"x7"x3/4"	
L7	W8x40 WITH HUNG PLATE	9"x9"x3/4"	
L7A	W8x40 WITH HUNG PLATE	9"x9"x3/4"	LINTEL END AT CORNER SUPPORTED ON POST

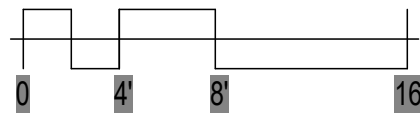
**NOTES:**  
1. REFER TO MASONRY NOTES ON SHEET S001 FOR LINTELS NOT REFERENCED ON PLANS.  
2. INSTALL LOOSE ANGLE LINTELS OVER ALL MECHANICAL DUCT OPENINGS THROUGH MASONRY WALLS. REFER TO MASONRY NOTES ON SHEET S001 FOR SIZE.  
3. BEARING PLATE SIZE APPLIES TO EACH END UNLESS NOTED OTHERWISE.  
4. REFER TO SHEET S302 FOR LINTEL CONFIGURATIONS AND BEAM BEARING DETAILS.  
5. FIRST COURSE OF CMU ABOVE STEEL BEAM SHALL BE GROUTED SOLID.  
6. LINTELS WITH HUNG PLATE SHALL HAVE BOTTOM OF BEAM LOCATED 8" ABOVE OPENING UNLESS NOTED OTHERWISE.  
7. LINTELS WITH CLEAR SPANS GREATER THAN 6'-4" SHALL HAVE 1/2" DIAMETER x 4" LONG HEADED STUDS WELDED TO THE TOP FLANGE AT 24" o.c.  
8. LINTELS SHALL BE POSITIONED AT THE CENTERLINE OF THE CMU WALL UNLESS NOTED OTHERWISE.

BEARING PLATE SCHEDULE			
MARK	SIZE	REMARKS	
BP1	6"x6"x1/2"		
BP2	6"x8"x5/8"		
BP3	7"x7"x5/8"		
BP4	6"x10"x3/4"		
BP5	8"x10"x3/4"		
BP6	8"x16"x1 1/4"		
BP7	10"x16"x1 1/2"		
BP8	8"x10"x1"		
BP9	10"x12"x3/4"	(2) 3/4" DIAMETER HEADED ANCHOR BOLTS (16" EMBEDMENT)	
BP10	6"x14"x1"	(2) 3/4" DIAMETER HEADED ANCHOR BOLTS (16" EMBEDMENT)	
BP11	7"x7"x3/4"	(2) 3/4" DIAMETER HEADED STUDS (8" EMBEDMENT)	
BP12	6"x10"x3/4"	(2) 3/4" DIAMETER HEADED STUDS (8" EMBEDMENT)	

**NOTES:**  
1. REFER TO SHEET S302 FOR BEAM BEARING DETAILS.  
2. FIRST DIMENSION SHALL BE ORIENTED PARALLEL TO BEAM OR JOIST SPAN UNLESS NOTED OTHERWISE.

MASONRY PIER SCHEDULE			
MARK	WIDTH	VERTICAL REINFORCEMENT	REMARKS
MP16	16"	1-#5	
MP16A	16"	1-#5 EACH FACE	
MP16B	16"	1-#6	
MP16C	16"	2-#6	
MP16D	16"	1-#6 EACH FACE	
MP16E	16"	2-#5	
MP24	24"	2-#5	
MP24A	24"	2-#5 EACH FACE	
MP24B	24"	2-#6	
MP24C	24"	3-#5 EACH FACE	
MP24D	24"	1-#6	
MP24E	24"	3-#5	
MP24F	24"	3-#6	
MP32	32"	3-#5	
MP32A	32"	3-#5 EACH FACE	
MP32B	32"	3-#6	
MP32C	32"	4-#5 EACH FACE	
MP34	34"	4-#6	
MP36	36"	4-#6 EACH FACE	
MP36A	36"	4-#6	
MP36B	36"	2-#6 EACH FACE	
MP36C	36"	3-#5	
MP36D	36"	3-#6	
MP40	40"	4-#6 EACH FACE	
MP40A	40"	4-#6	





**Columbia Engineering Inc.**  
**Structural Engineers**  
6210 Old Dobbin Lane  
Suite 150  
Columbia, MD 21045  
Tel 410.992.9191  
Fax 410.992.1000  
Copyright © 2000 Columbia Engineering. All rights reserved. CEN No. 21-5601 (R)



Suite 600  
11720 Beltsville Drive  
Calverton, MD 20705  
Tel: 301.595.1000  
[www.grimmandparker.com](http://www.grimmandparker.com)

www.grimmandparker.com



GP #22105

NORTH EAST MIDDLE / HIGH SCHOOL  
3300 IRISHTOWN ROAD, NORTH EAST, MD

[illegible]

**S100B**  
12/22/2023  
BID SET

© GRIMM AND PARKER ARCHITECTURE, INC.

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

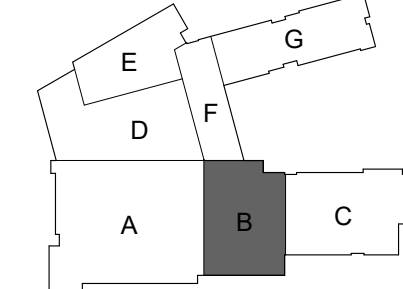
**FOUNDATION AND SLAB ON GRADE NOTES:**

1. SLAB ON GRADE SHALL BE 4" THICK NORMAL WEIGHT CONCRETE (f'c=4000 PSI) REINFORCED WITH #6@' W2.1X W2.1 W.W.F. ON 15 MIL VAPOR BARRIER OVER 8" THICK LAYER OF WASHED GRAVEL.
2. TOP OF SLAB ELEVATION SHALL BE 92.00' (DATUM 0.00') UNLESS NOTED OTHERWISE.
3. TOP OF CONCRETE PIER ELEVATION SHALL BE 8" BELOW DATUM ELEVATION UNLESS NOTED OTHERWISE THUS (-).
4. TOP OF FOOTING ELEVATION SHALL BE -2'-0" BELOW DATUM ELEVATION UNLESS NOTED OTHERWISE THUS (-). FOOTING ELEVATIONS ARE FOR BID PURPOSES ONLY AND MAY HAVE TO BE FIELD ADJUSTED. LOWER FOOTING AS REQUIRED BELOW UTILITY LINES AND INSTALL SLEEVES THROUGH CONCRETE AND MASONRY WALLS.
5. SEE ARCHITECTURAL DRAWINGS FOR DEPRESSED SLAB AREAS.
6. REFER TO ARCHITECTURAL DRAWINGS FOR ALL NON-LOAD BEARING CMU PARTITIONS.

FOUNDATION AND SLAB ON GRADE KEYED NOTES:

(F1\*) SLAB ON GRADE WITHIN HATCHED PERIMETER SHALL BE 6" THICK NORMAL WEIGHT CONCRETE (fc=4000 PSI) REINFORCED WITH 6"x6", W2.9X W2.9 W.W.F. ON 15 MIL VAPOR BARRIER OVER 6" THICK LAYER OF WASHED GRAVEL.

## KEY PLAN











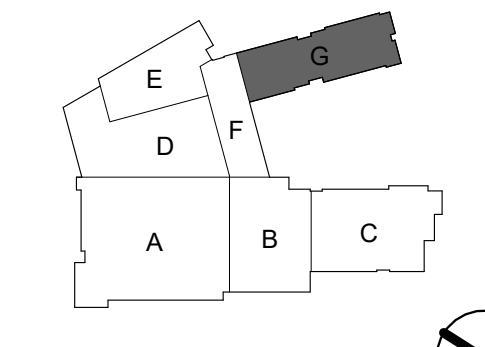
**FOUNDATION AND SLAB ON GRADE PLAN- AREA G**

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

**FOUNDATION AND SLAB ON GRADE NOTES:**

1. SLAB ON GRADE SHALL BE 4" THICK NORMAL WEIGHT CONCRETE (fc=4000 PSI) REINFORCED WITH 6"x6", W2.1X W2.1 W.W.F. ON 15 MIL VAPOR BARRIER OVER 6" THICK LAYER OF WASHED GRAVEL.
2. TOP OF SLAB ELEVATION SHALL BE 92.00' (DATUM 0.00') UNLESS NOTED OTHERWISE.
3. TOP OF CONCRETE PIER ELEVATION SHALL BE 8' BELOW DATUM ELEVATION UNLESS NOTED OTHERWISE THUS [...]
4. TOP OF FOOTING ELEVATION SHALL BE -2'-0" BELOW DATUM ELEVATION UNLESS NOTED OTHERWISE THUS [...]. FOOTING ELEVATIONS ARE FOR BID PURPOSES ONLY AND MAY HAVE TO BE FIELD ADJUSTED. LOWER FOOTING AS REQUIRED BELOW UTILITY LINES AND INSTALL SLEEVES THROUGH CONCRETE AND MASONRY WALLS.
5. SEE ARCHITECTURAL DRAWINGS FOR DEPRESSED SLAB AREAS.
6. REFER TO ARCHITECTURAL DRAWINGS FOR ALL NON-LOAD BEARING CMU PARTITIONS.

**KEY PLAN**



**Columbia Engineering Inc.**  
Structural Engineers  
6210 Old Dobbin Lane  
Columbia, MD 21045  
Tel: 410.862.89  
Fax: 410.862.867  
CS No. 31-081 (Jan 2022)  
Professional Engineer  
This drawing was prepared or approved by me, and I am a duly Licensed Professional Engineer in the State of Maryland.  
Issued for: 12/22/2023, Contract No. 2023-0025



11720 Beltsville Drive  
Suite 600  
Calverton, MD 20705  
Tel: 301.595.1000  
www.grimm+parker.com



GP #22105

FOUNDATION AND SLAB ON GRADE PLAN- AREA G

NORTH EAST MIDDLE / HIGH SCHOOL  
300 IRISTOWN ROAD, NORTH EAST, MD

DATE	DESCRIPTION
03/25/2024	ADDENDUM 3

**S100G**  
12/22/2023  
BID SET

GRIMM + PARKER ARCHITECTS



RFI detail

#018 Date Stone



Status	<div><div></div>Closed</div>
Created on	Aug 13, 2024 by <b>Glenn Feldstein</b> (George Moehrle Masonry)
RFI type	Architectural RFI REVs
Ball in court	<b>Glenn Feldstein</b> (George Moehrle Masonry)
Answered	Aug 14, 2024 by <b>Patrick Byrne</b> (Grimm and Parker)

Question

Please advise what year should be used on the date stone shown on Detail A18/A210

Official response

Patrick Byrne (Grimm and Parker): Please use the year the building is completed.  
*By **Patrick Byrne** (Grimm and Parker) - Aug 14, 2024, 1:16 PM EDT*

References and Attachments

Sheets (1)

- [A210](#)

Impact







Cost impact	No
Schedule impact	No

Other attributes

Priority	Normal
Discipline	Masonry

Category	Documentation Incomplete
Location	Site
Location details	Date stone
External id	-
Co-reviewer(s)	
Posted to Drawings/ Specifications	YES
Trade's RFI No.	-



Activities	By	At
<b>Joshua Postadan</b> changed the status from  <b>Open</b> Answered to  <b>Closed</b> <b>Official response:</b> Patrick Byrne (Grimm and Parker): Please use the year the building is completed. set Ball in court to <b>Glenn Feldstein</b> (George Moehrle Masonry)	<b>Joshua Postadan</b>	Aug 29, 2024, 8:27 AM EDT
Please review the response to RFI #018. Provide notification of any cost implications immediately. If a proposal has cost impacts, please request an RFQ from HESS. Send a proposal no later than the close of business within 7 days of receipt of this RFI response. HESS will consider this as a no cost change and close this issue should a proposal not be received by this date. A lack of response for any credit items will prompt HESS Construction to assign a cost value that will be deducted from your contract sum. Note: The RFQ is simply an administrative tracking tool, and in no way represents that additional work, cost or time is acknowledged, authorized, directed, or approved.	<b>Joshua Postadan</b>	Aug 29, 2024, 8:27 AM EDT
changed the <b>watchers</b> to <b>Glenn Feldstein</b> (George Moehrle Masonry), <b>Ken Thompson</b> (HESS Construction Co., LLC), <b>HESS PROJECT TEAM, Architect Eng., George Moehrle Masonry</b>	<b>Joshua Postadan</b>	Aug 27, 2024, 3:38 PM EDT
<b>Patrick Byrne</b> If the year is to be based on when the building is completed, then the year will be 2027 as that is the current year of substantial completion. Please confirm.	<b>Joshua Postadan</b>	Aug 22, 2024, 2:20 PM EDT
<b>Patrick Byrne</b> changed the status from  <b>Open</b> In Review to  <b>Open</b> Answered set Ball in court to <b>Joshua Postadan</b> (HESS Construction Co., LLC)	<b>Patrick Byrne</b>	Aug 14, 2024, 1:16 PM EDT
<b>Patrick Byrne</b> added a response: Please use the year the building is completed.	<b>Patrick Byrne</b>	Aug 14, 2024, 1:16 PM EDT
changed the <b>Posted to Drawings/Specifications</b> to <b>YES</b>	<b>Joshua Postadan</b>	Aug 14, 2024, 11:47 AM EDT
<b>Joshua Postadan</b> changed the status from  <b>Open</b> Waiting for Submission to  <b>Open</b> In Review changed the <b>due date</b> to Aug 18, 2024 set Ball in court to <b>Patrick Byrne</b> (Grimm and Parker) changed the <b>ID</b> to 018	<b>Joshua Postadan</b>	Aug 14, 2024, 11:04 AM EDT
changed the <b>location details</b> to <i>Date stone</i>	<b>Joshua Postadan</b>	Aug 14, 2024, 11:03 AM EDT
changed the <b>location</b> to <i>Site</i>	<b>Joshua Postadan</b>	Aug 14, 2024, 11:03 AM EDT
changed the <b>schedule impact</b> to <i>No</i>	<b>Joshua Postadan</b>	Aug 14, 2024, 11:03 AM EDT

changed the <b>cost impact</b> to <i>No</i>	<b>Joshua Postadan</b>	Aug 14, 2024, 11:03 AM EDT
changed the <b>watchers</b> to <b>Glenn Feldstein</b> (George Moehrle Masonry), <b>Ken Thompson</b> (HESS Construction Co., LLC), <b>HESS PROJECT TEAM</b> , <b>George Moehrle Masonry</b>	<b>Joshua Postadan</b>	Aug 14, 2024, 11:03 AM EDT
changed the <b>watchers</b> to <b>Glenn Feldstein</b> (George Moehrle Masonry), <b>HESS PROJECT TEAM</b> , <b>George Moehrle Masonry</b>	<b>Joshua Postadan</b>	Aug 14, 2024, 11:03 AM EDT
changed the <b>question</b> to <i>Please advise what year should be used on the date stone shown on Detail A18/A210</i>	<b>Joshua Postadan</b>	Aug 14, 2024, 11:02 AM EDT
<b>Glenn Feldstein</b> added a reference to a Sheet <b>A210</b>	<b>Glenn Feldstein</b>	Aug 13, 2024, 2:00 PM EDT
<b>Glenn Feldstein</b> (George Moehrle Masonry) created this RFI in  <b>Open</b> <i>Waiting for Submission</i> status and set Ball in court to <b>Joshua Postadan</b> (HESS Construction Co., LLC).	<b>Glenn Feldstein</b>	Aug 13, 2024, 2:00 PM EDT

RFI detail

#019 Roof Elevation Clarification



Status	<div><div></div>Closed</div>
Created on	Aug 14, 2024 by <b>Lucas Bradley</b> (Kinsley Steel Inc)
RFI type	Structural RFI REV
Ball in court	<b>Lucas Bradley</b> (Kinsley Steel Inc)
Answered	Aug 27, 2024 by <b>Patrick Byrne</b> (Grimm and Parker)

Question

Please refer to the attached "RFI 009\_KSI - Roof Elevation Clarification" in the references section for the question locations.

- [Q6.1] Please confirm the beam extension.
- [Q6.2] Please provide the top of beam elevation.
- [Q6.3] Please confirm on beam spacing considered.
- [Q6.4] Please furnish the stud wall extent dimension.
- [Q6.5] Please confirm the beam extension.
- [Q6.6] Please confirm the beam splice at column.
- [Q6.7] Please provide the top of beam elevation.
- [Q6.8] Please confirm the top of steel elevation.

Official response

Patrick Byrne (Grimm and Parker): See attached response from CEI and G+P and associated revised drawings.  
By **Patrick Byrne** (Grimm and Parker) - Aug 27, 2024, 5:13 PM EDT



References and Attachments

Files (4)

- [2024 08 23- NEMHS- Structural RFI-019.pdf](#)
- [A105 - ROOF PLAN.pdf](#)
- [RFI 009\\_KSI - Roof Elevation Clarification.pdf](#)
- [RFI 19 Roof Elevation Clarification Response.pdf](#)

Impact

Cost impact -

Schedule impact -

Other attributes

Priority Normal

Discipline Structural

Category Design Coordination

Location Area A, Area D



Location details -

External id -

Co-reviewer(s)

Posted to Drawings/  
Specifications YES

Trade's RFI No. 9

Activities	By	At
changed the <b>watchers</b> to <b>Cameron MacKenzie</b> (HESS Construction Co., LLC), <b>Joshua Postadan</b> (HESS Construction Co., LLC), <b>Ken Thompson</b> (HESS Construction Co., LLC), <b>Lucas Bradley</b> (Kinsley Steel Inc), <b>HESS PROJECT TEAM</b> , <b>HESS Construction Co., LLC</b> , <b>Kinsley Steel Inc</b> , <b>Pro Tech Contractors</b>	<b>Joshua Postadan</b>	Aug 30, 2024, 9:01 AM EDT
<b>Patrick Byrne</b> changed the status from  <b>Open</b> In Review to  <b>Open</b> Answered set Ball in court to <b>Joshua Postadan</b> (HESS Construction Co., LLC)	<b>Patrick Byrne</b>	Aug 27, 2024, 5:13 PM EDT
<b>Cesar Flores</b> (Columbia Engineering) response was submitted by <b>Patrick Byrne</b> : See attached RFI response from CEI and G+P, as well as revised drawings.	<b>Patrick Byrne</b>	Aug 27, 2024, 5:13 PM EDT
<b>Patrick Byrne</b> added a reference to a File <b>RFI 19 Roof Elevation Clarification Response.pdf</b>	<b>Patrick Byrne</b>	Aug 27, 2024, 5:13 PM EDT
<b>Patrick Byrne</b> added a reference to a File <b>2024 08 23- NEMHS- Structural RFI-019.pdf</b>	<b>Patrick Byrne</b>	Aug 27, 2024, 5:13 PM EDT
<b>Patrick Byrne</b> added a reference to a File <b>A105 - ROOF PLAN.pdf</b>	<b>Patrick Byrne</b>	Aug 27, 2024, 5:13 PM EDT
<b>Patrick Byrne</b> added a response: See attached response from CEI and G+P and associated revised drawings.	<b>Patrick Byrne</b>	Aug 27, 2024, 5:12 PM EDT
changed the <b>Posted to Drawings/Specifications</b> to <b>YES</b>	<b>Joshua Postadan</b>	Aug 14, 2024, 11:47 AM EDT
<b>Joshua Postadan</b> changed the status from  <b>Open</b> Waiting for Submission to  <b>Open</b> In Review changed the <b>due date</b> to Aug 19, 2024 set Ball in court to <b>Patrick Byrne</b> (Grimm and Parker), <b>Cesar Flores</b> (Columbia Engineering) changed the <b>ID</b> to 019 changed the <b>watchers</b> to <b>Cameron MacKenzie</b> (HESS Construction Co., LLC), <b>Joshua Postadan</b> (HESS Construction Co., LLC), <b>Ken Thompson</b> (HESS Construction Co., LLC), <b>Lucas Bradley</b> (Kinsley Steel Inc), <b>HESS PROJECT TEAM</b> , <b>HESS Construction Co., LLC</b> , <b>Kinsley Steel Inc</b>	<b>Joshua Postadan</b>	Aug 14, 2024, 11:32 AM EDT
changed the <b>question</b> to <i>Please refer to the attached "RFI 009_KSI - Roof Elevation Clarification" in the references section for the question locations. [Q6.1] Please confirm the beam extension. [Q6.2] Please provide the top of beam elevation. [Q6.3] Please confirm on beam spacing considered. [Q6.4] Please furnish the stud wall extent dimension. [Q6.5] Please confirm the beam extension. [Q6.6] Please confirm the beam splice at column. [Q6.7] Please provide the top of beam elevation. [Q6.8] Please confirm the top of steel elevation.</i>	<b>Joshua Postadan</b>	Aug 14, 2024, 11:32 AM EDT

changed the **question** to *Please refer to the attached "RFI 009\_KSI - Roof Elevation Clarification" in the references section for the question locations. [Q6.1] Please confirm the beam extension. [Q6.2] Please provide the top of beam elevation. [Q6.3] Please confirm on beam spacing considered. [Q6.4] Please furnish the stud wall extent dimension. [Q6.5] Please confirm the beam extension. [Q6.6] Please confirm the beam splice at column. [Q6.7] Please provide the top of beam elevation. [Q6.8] Please confirm on top of steel elevation.*

**Joshua Postadan**

Aug 14, 2024, 11:06 AM EDT

changed the **question** to *Please refer to the attached "RFI009\_KSI - Roof Elevation Clarification" in the references section for the question locations. Q6.1: Please confirm the beam extension. Q6.2: Please provide the top of beam elevation. Q6.3: Please confirm on beam spacing considered. Q6.4: Please furnish the stud wall extent dimension. Q6.5: Please confirm the beam extension. Q6.6: Please confirm the beam splice at column. Q6.7: Please provide the top of beam elevation. Q6.8: Please confirm on top of steel elevation.*


**Joshua Postadan**

Aug 14, 2024, 11:05 AM EDT

**Lucas Bradley** added a reference to a File **RFI 009\_KSI - Roof Elevation Clarification.pdf**

**Lucas Bradley**

Aug 14, 2024, 10:37 AM EDT

**Lucas Bradley** (Kinsley Steel Inc) created this RFI in  **Open** Waiting for Submission status and set Ball in court to **Joshua Postadan** (HESS Construction Co., LLC).

**Lucas Bradley**

Aug 14, 2024, 10:37 AM EDT





## *Request for Information*

---

**Date:** 08/14/2024

**Request No:** KSI 009

**Project:** North East Middle & High School  
**KCI No.:** 242612

**To:** Hess Construction  
**Attn.:** Joshua Postadan  
**Email:** jpostadan@hessconstruction.com

**From:** Mike Staub  
**Phone:** 717-434-6248  
**Email:** [mstaub@kinsleysteel.com](mailto:mstaub@kinsleysteel.com)

### **RE: Roof Elevation Clarification**

---

#### ***Request***

Please refer to the attached TRC RFI 006 for the question locations.

- Q6.1: Please confirm the beam extension.
- Q6.2: Please provide the top of beam elevation.
- Q6.3: Please confirm on beam spacing considered.
- Q6.4: Please furnish the stud wall extent dimension.
- Q6.5: Please confirm the beam extension.
- Q6.6: Please confirm the beam splice at column.
- Q6.7: Please provide the top of beam elevation.
- Q6.8: Please confirm on top of steel elevation.

#### ***Date Response Requested: ASAP***

---

CEI: Please see attached for responses.  
Cesar Flores  
08/23/2024

See attached drawings for RFI responses. See revised drawings  
A105, S102D, S103A, S506, S509, S517.

Patrick Byrne 8.27.2024



217 Ward Circle Brentwood, TN 37027, Phone: 615-661-7979 Fax: 615-661-0644

# REQUEST FOR INFORMATION

## NORTH EAST MIDDLE / HIGH SCHOOL

JOB #24-880

To:	<b>Michael E. Staubmstaub@kinsleysteel.com</b>	CLIENT RFI#
Company:	<b>KINSLEY, INC</b>	GC RFI#
		TRC RFI# <b>006</b>
cc:		RESPONSE <b>08-19-2024</b> NEEDED BY

### SUBJECT: Roof elevation clarification

Please refer to the attached file for the question.

- Q6.1: Please confirm the beam extension.
- Q6.2: Please provide the top of beam elevation.
- Q6.3: Please confirm on beam spacing considered.
- Q6.4: Please furnish the stud wall extent dimension.
- Q6.5: Please confirm the beam extension.
- Q6.6: Please confirm the beam splice at column.
- Q6.7: Please provide the top of beam elevation.
- Q6.8: Please confirm on top of steel elevation.

By:	<b>Ruben Flores</b>	Date:	<b>08-14-2024</b>
-----	---------------------	-------	-------------------

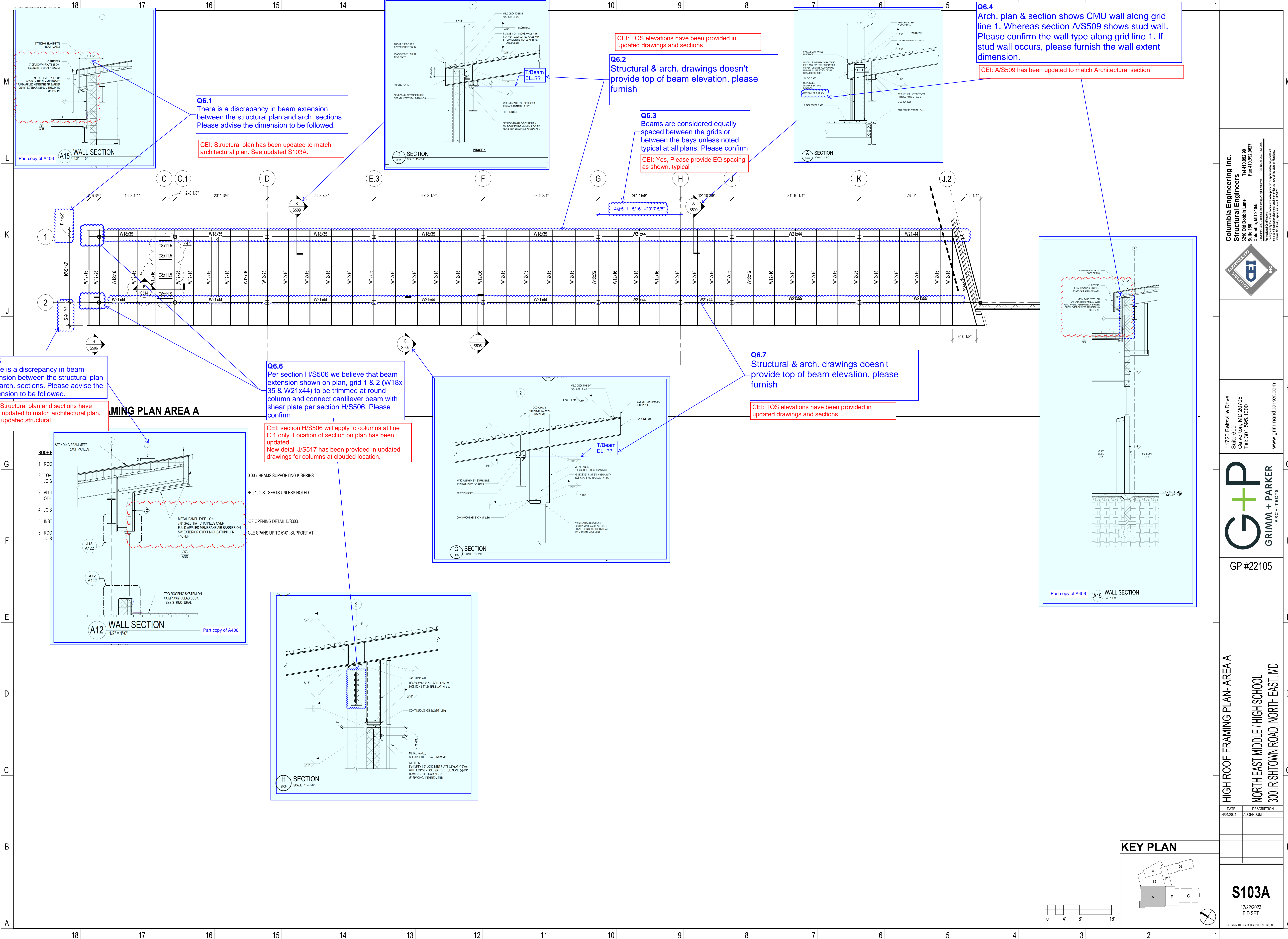
### Response:

By:		Date:	
-----	--	-------	--

PLEASE SEND RESPONSE TO: Ruben Flores  
Phone: **325-320-0719**

**THE RAMANNA COMPANIES**

**CONSULTING ENGINEERS**



**Columbia Engineering Inc.**  
Structural Engineers  
820 Old Dobson Lane  
Columbia, MD 21045  
Tel: 410.862.89  
Fax: 410.862.867  
CEI No. 21-081 (Jan 2022)  
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www.grimmparker.com

**G+P**  
GRIMM + PARKER  
ARCHITECTS

GP #22105

HIGH ROOF FRAMING PLAN- AREA A  
NORTH EAST MIDDLE / HIGH SCHOOL  
300 IRISTOWN ROAD, NORTH EAST, MD

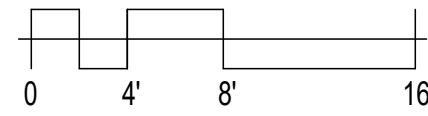
DATE	DESCRIPTION
04/01/2024	ADDENDUM 5

**S103A**  
12/22/2023  
BID SET  
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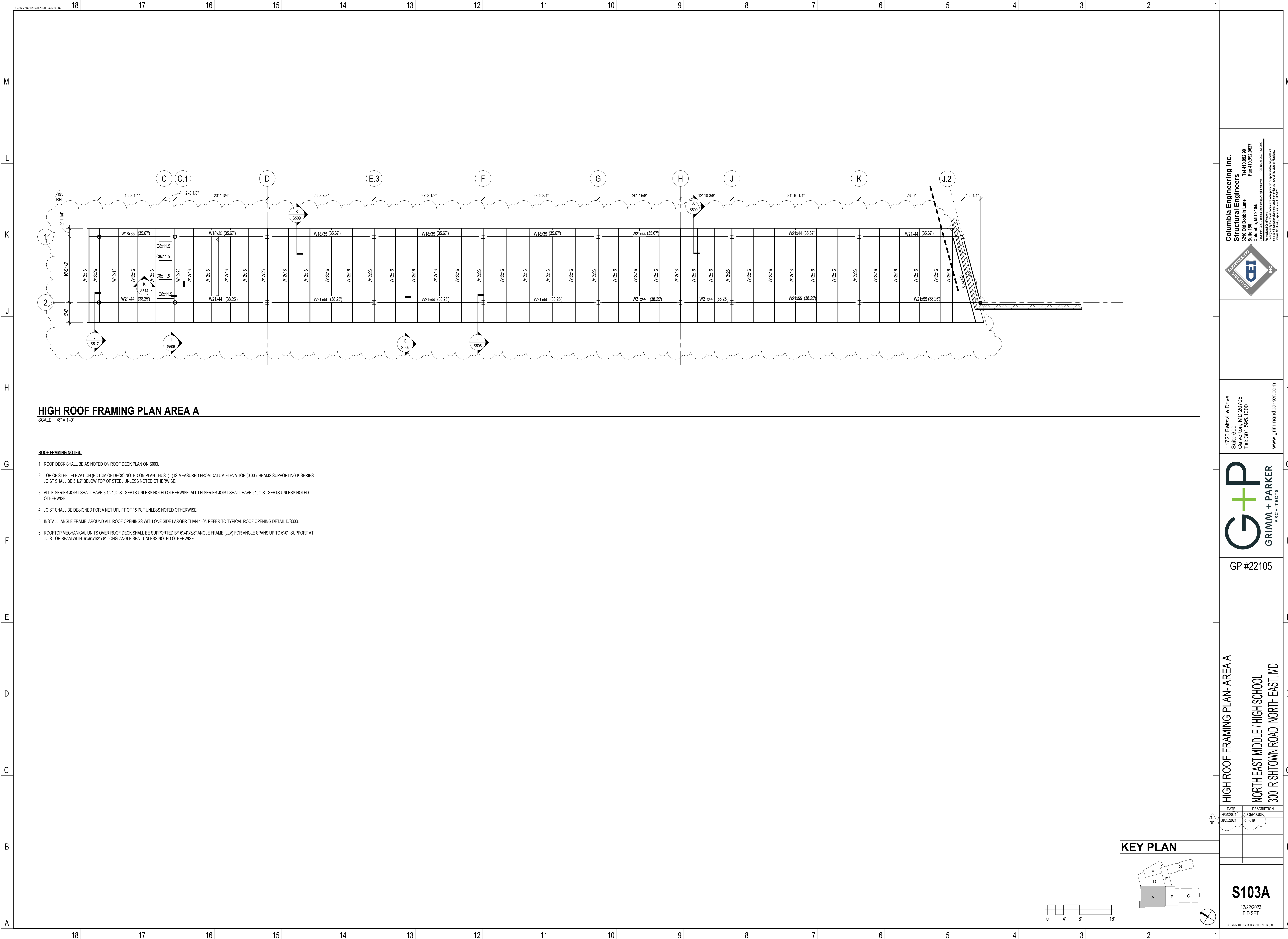






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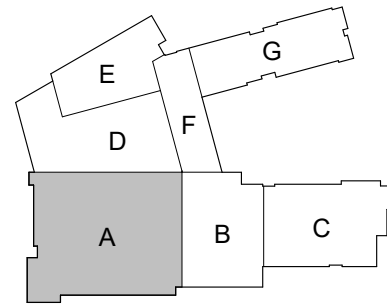
HIGH ROOF FRAMING PLAN AREA A

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

ROOF FRAMING NOTES:

1. ROOF DECK SHALL BE AS NOTED ON ROOF DECK PLAN ON S003.
2. TOP OF STEEL ELEVATION (BOTTOM OF DECK) NOTED ON PLAN THUS (..) IS MEASURED FROM DATUM ELEVATION (0.00). BEAMS SUPPORTING K SERIES JOIST SHALL BE 3 1/2" BELOW TOP OF STEEL UNLESS NOTED OTHERWISE.
3. ALL K-SERIES JOIST SHALL HAVE 3 1/2" JOIST SEATS UNLESS NOTED OTHERWISE. ALL LH-SERIES JOIST SHALL HAVE 5" JOIST SEATS UNLESS NOTED OTHERWISE.
4. JOIST SHALL BE DESIGNED FOR A NET UPLIFT OF 15 PSF UNLESS NOTED OTHERWISE.
5. INSTALL ANGLE FRAME AROUND ALL ROOF OPENINGS WITH ONE SIDE LARGER THAN 1'-0". REFER TO TYPICAL ROOF OPENING DETAIL D/S303.
6. ROOFTOP MECHANICAL UNITS OVER ROOF DECK SHALL BE SUPPORTED BY 6"x4"x3/8" ANGLE FRAME (LLV) FOR ANGLE SPANS UP TO 6'-0". SUPPORT AT JOIST OR BEAM WITH 6"x6"x1/2"x 8" LONG ANGLE SEAT UNLESS NOTED OTHERWISE.

KEY PLAN



DATE	DESCRIPTION
04/01/2024	ADDENDUM 6
08/23/2024	RFI-019

S103A

12/22/2023  
BID SET

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Columbia Engineering Inc.  
Structural Engineers

620 Old Dobson Lane  
Columbia, MD 21045  
Tel: 410.852.89  
Fax: 410.852.897

CS EIT 21-0581 (June 2022)  
Professional Engineer  
The undersigned hereby certifies that the work was prepared or approved by me, and that I am duly licensed to practice in the State of Maryland.  
11/15/2019 to 11/15/2025



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Suite 600  
Calverton, MD 20705  
Tel: 301.595.1000

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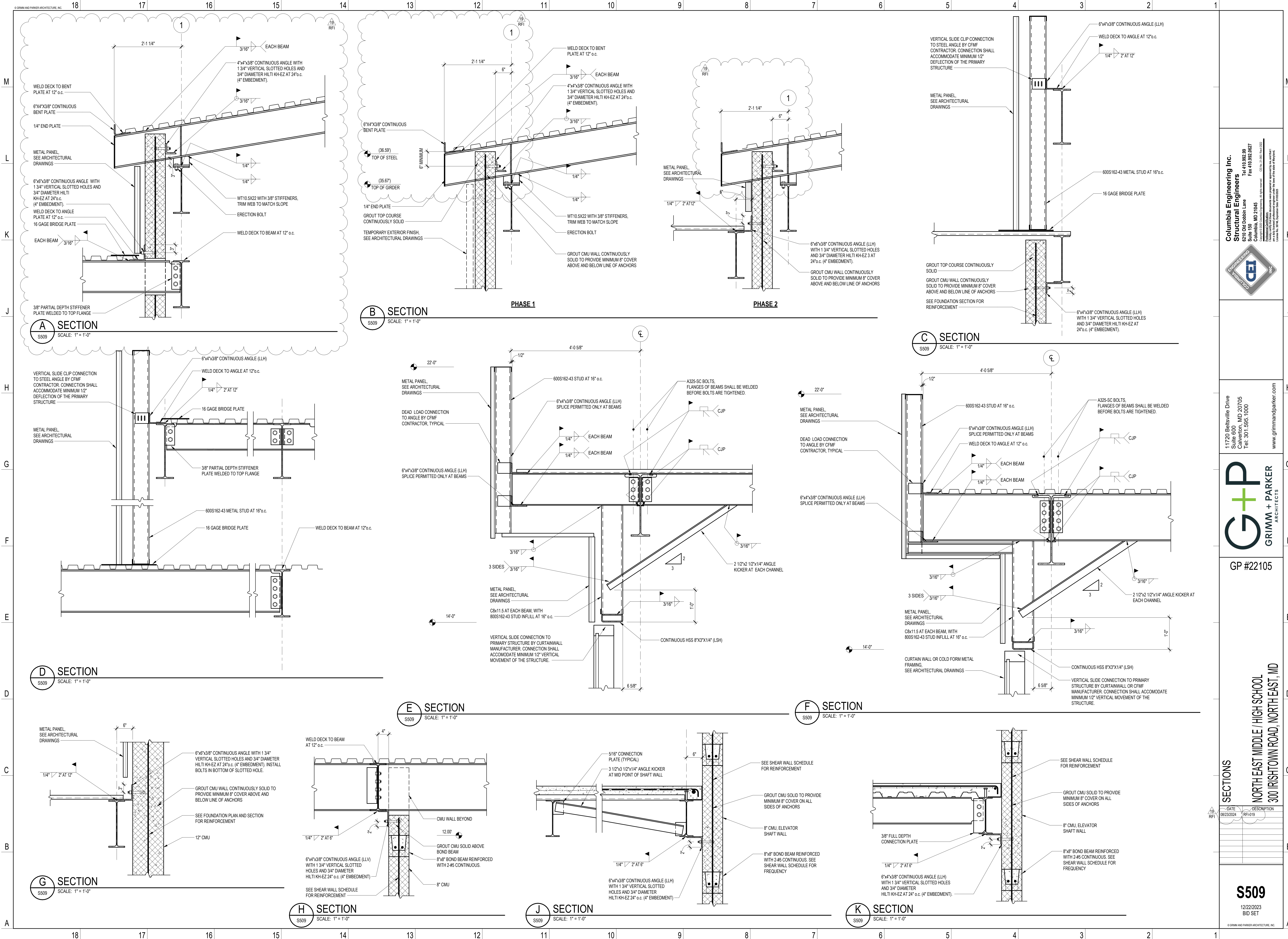
GP #22105

HIGH ROOF FRAMING PLAN- AREA A  
NORTH EAST MIDDLE / HIGH SCHOOL  
300 IRISHTOWN ROAD, NORTH EAST, MD









**Columbia Engineering Inc.**  
Structural Engineers  
620 Old Dobson Lane  
Columbia, MD 21045  
Tel: 410.852.89  
Fax: 410.852.867  
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GP #22105

**SECTIONS**  
NORTH EAST MIDDLE / HIGH SCHOOL  
300 IRISTOWN ROAD, NORTH EAST, MD  
DATE: 08/23/2024  
DESCRIPTION: RF1-019

**S509**  
12/22/2023  
BID SET



M

L

K

J

H

G

F

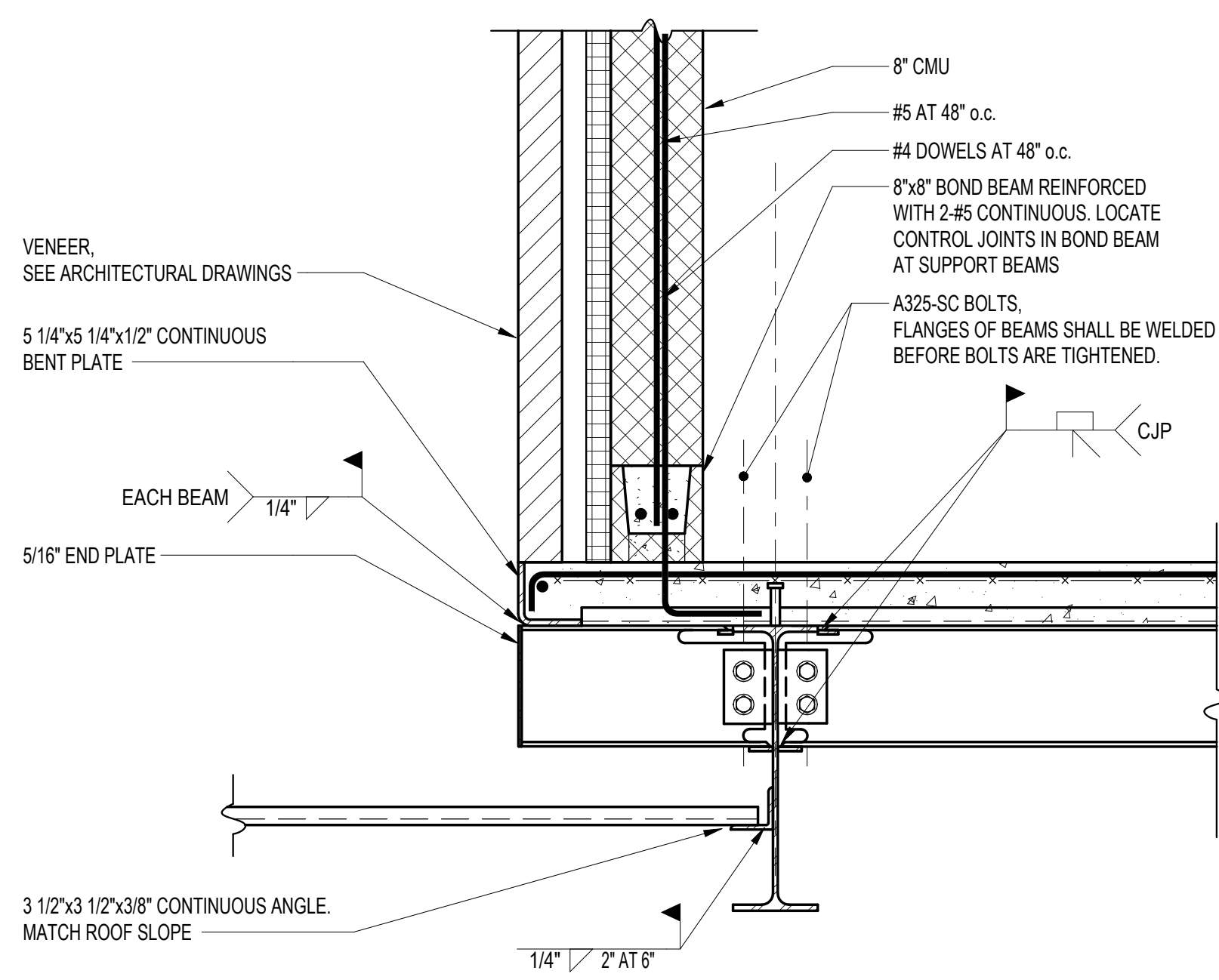
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D

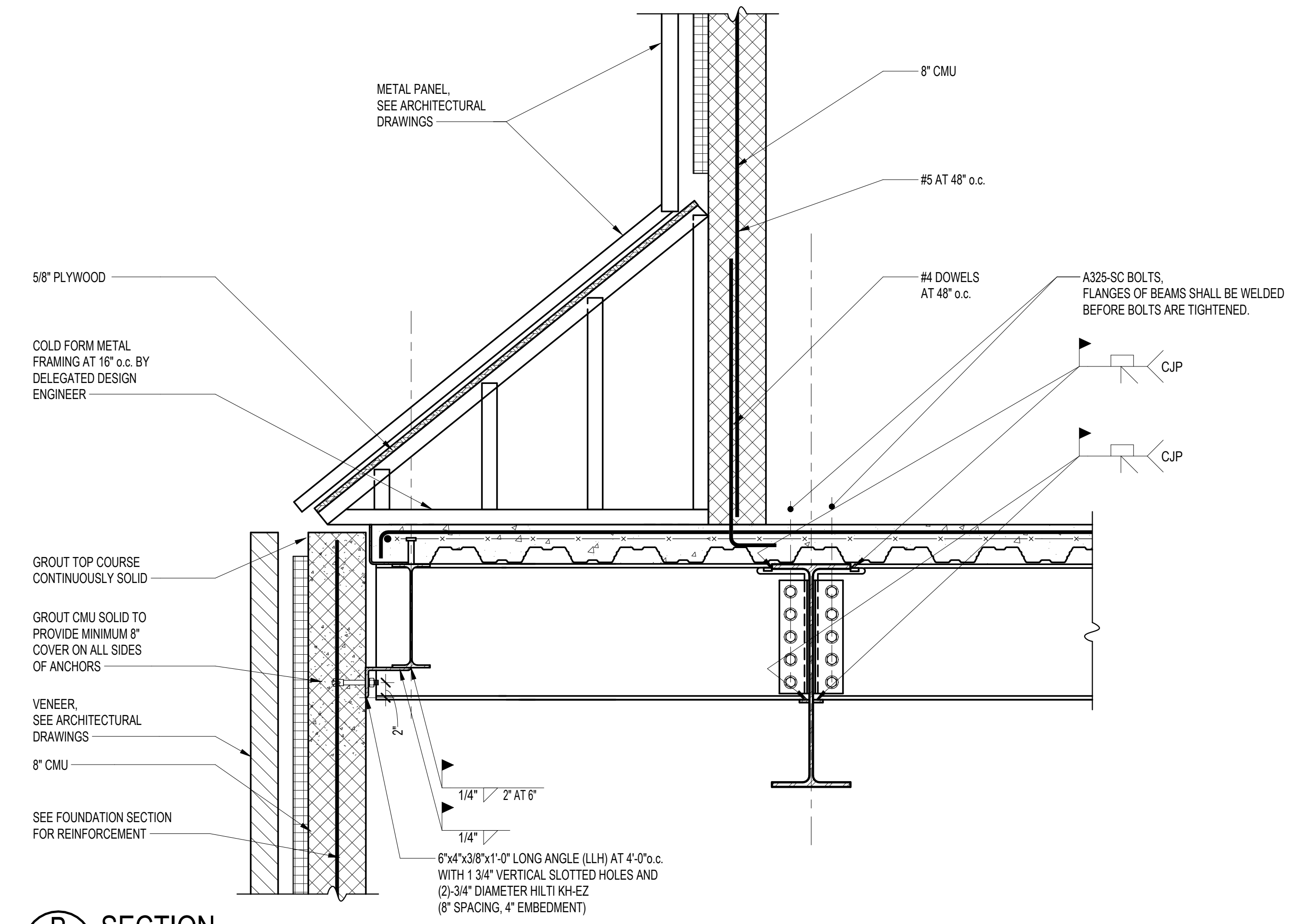
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B

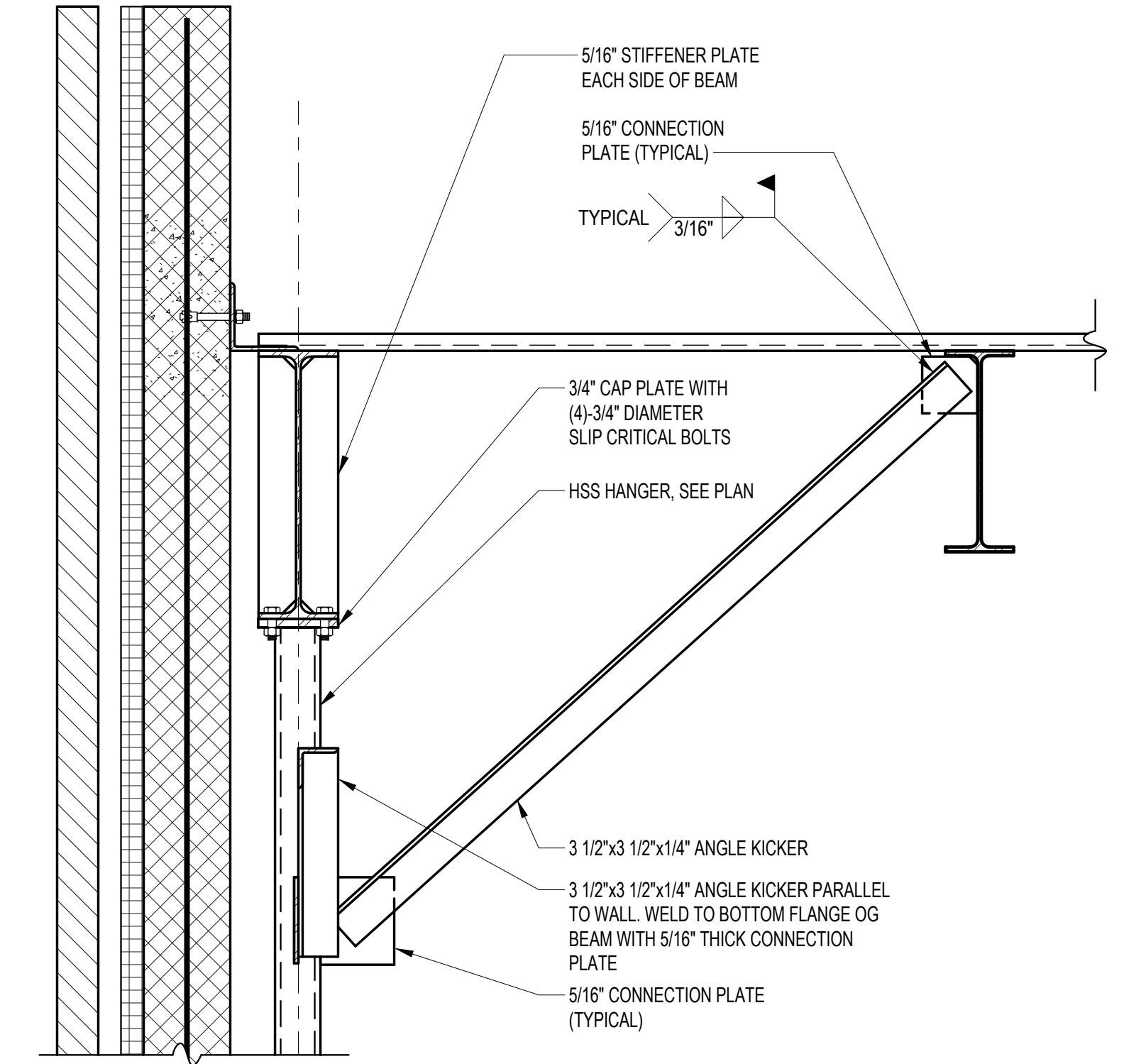
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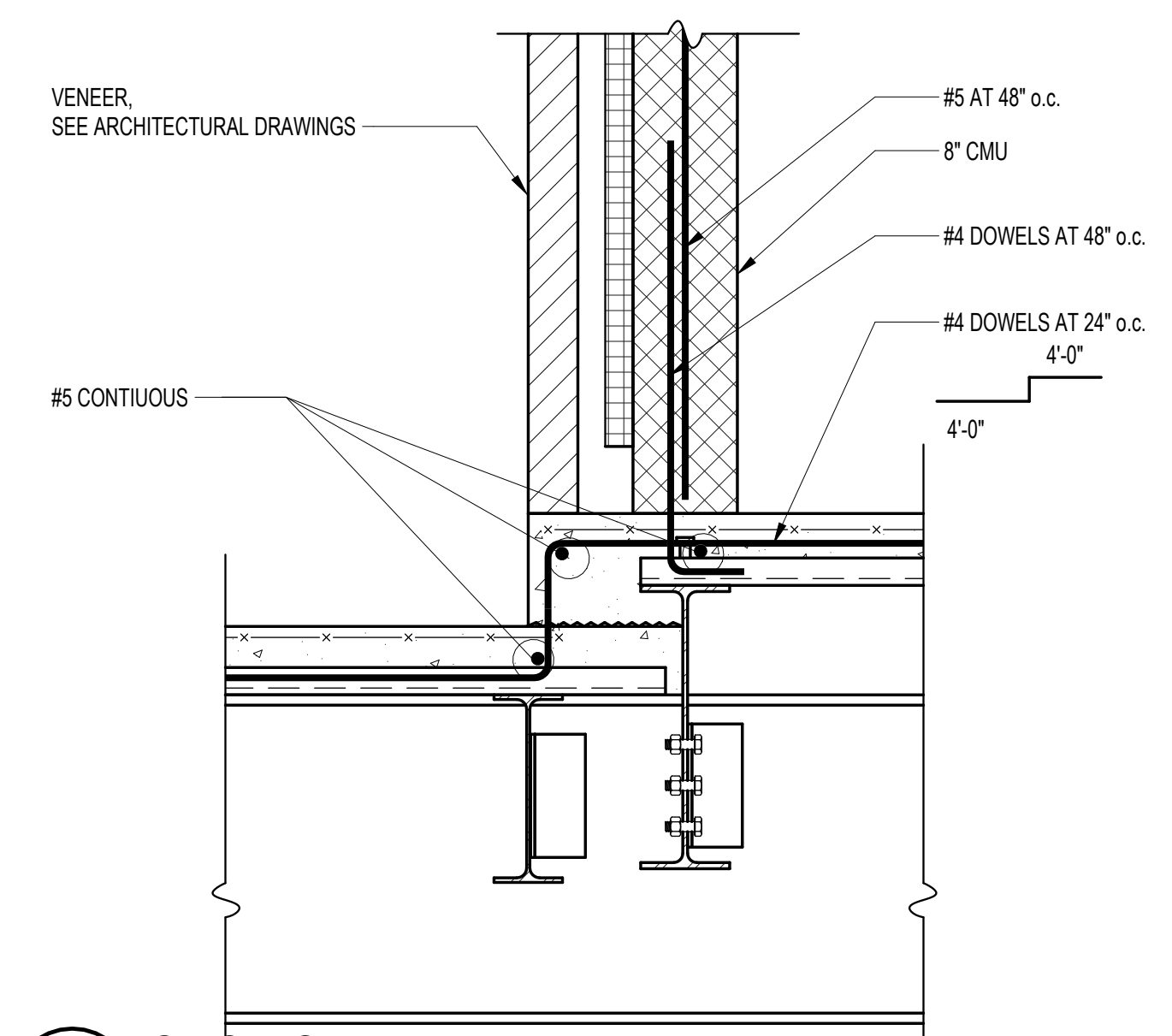
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S517 SCALE: 1" = 1'-0"



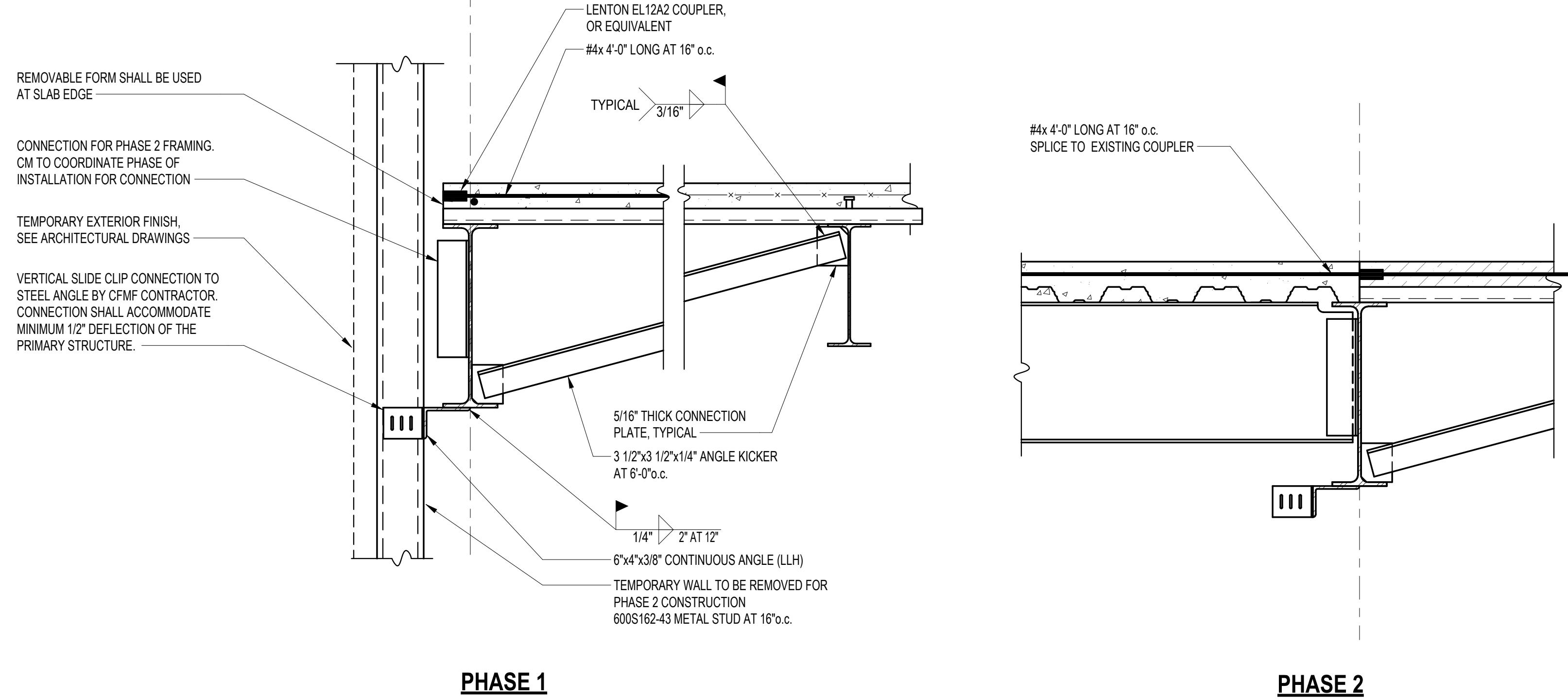
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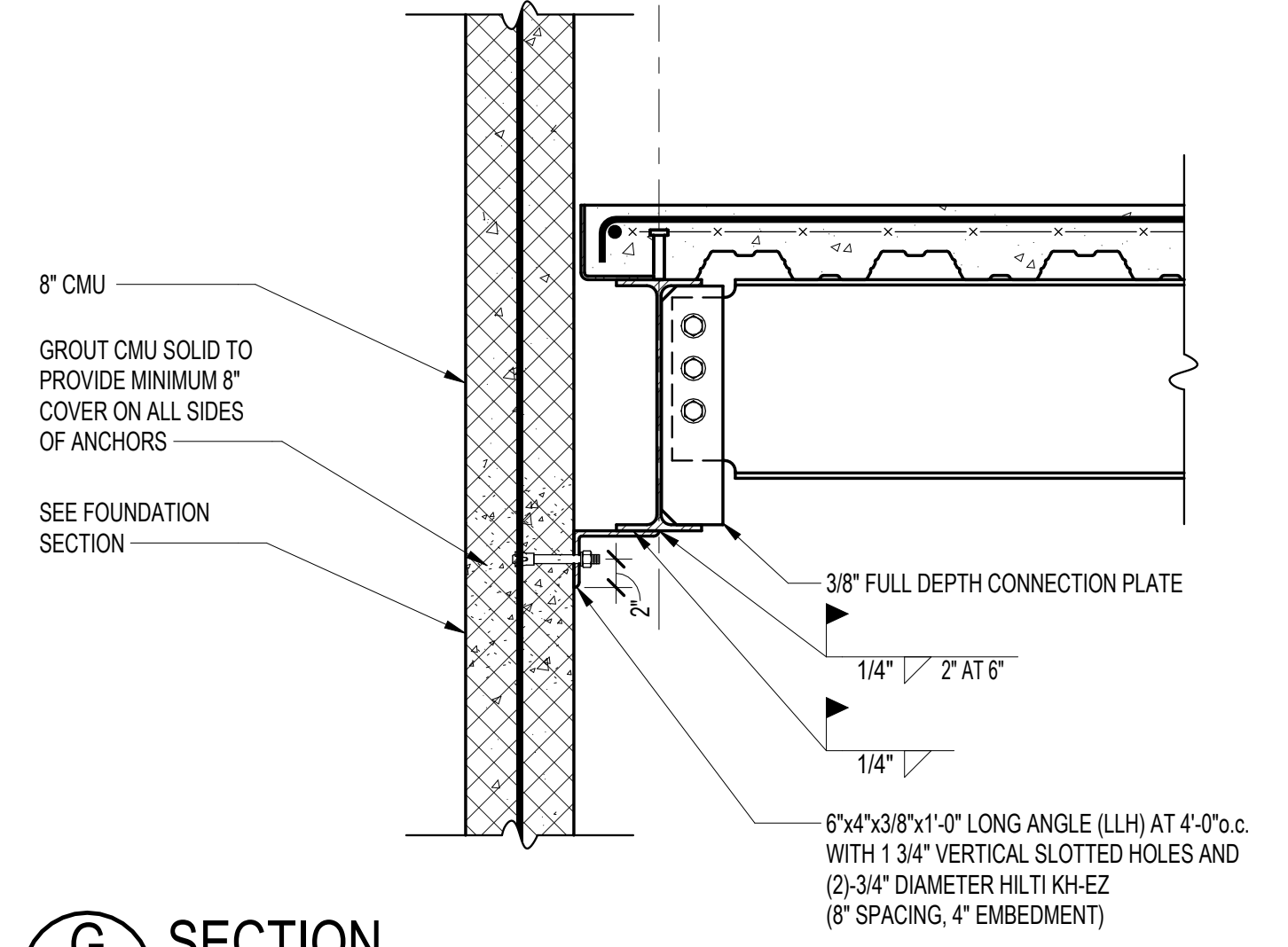
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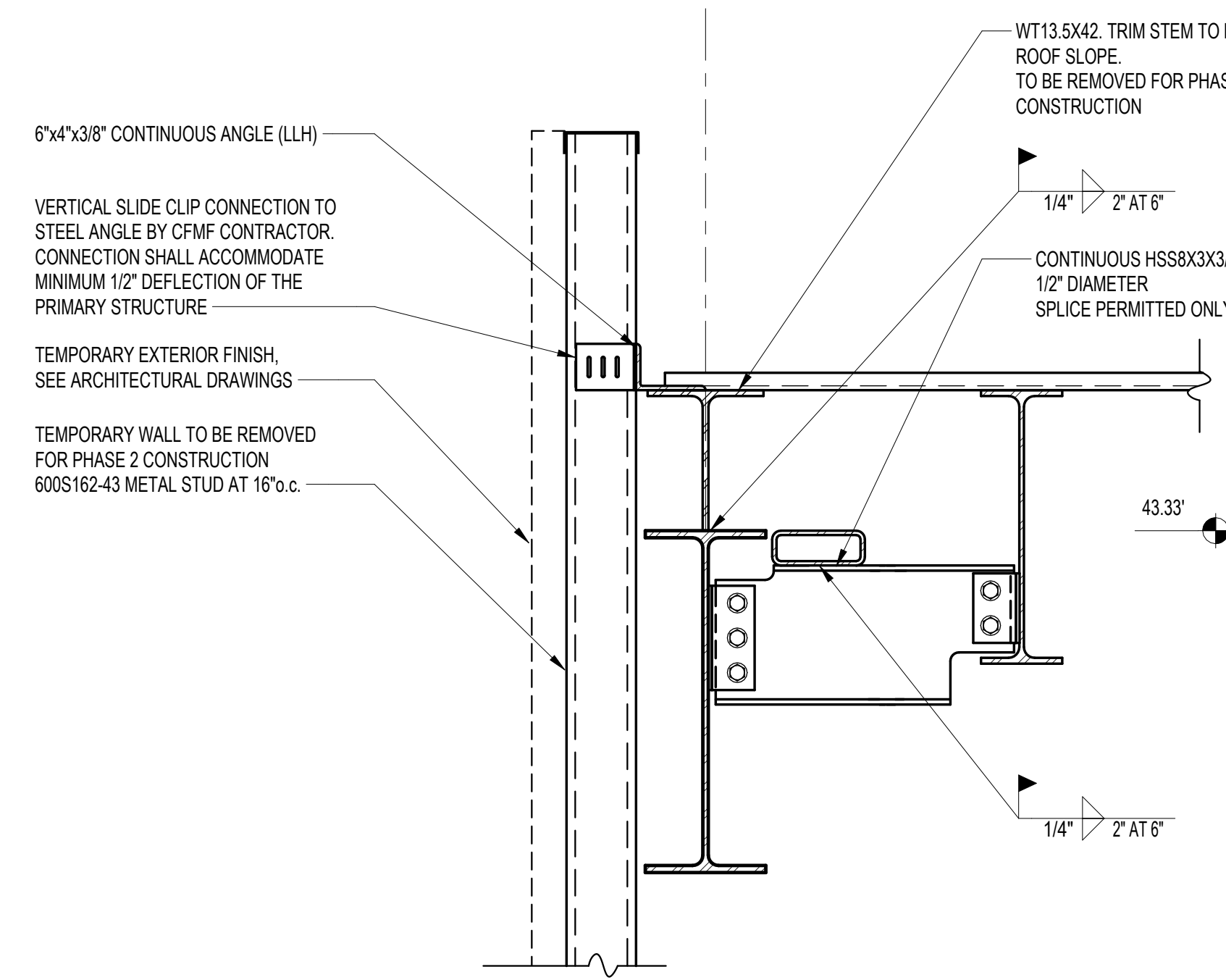
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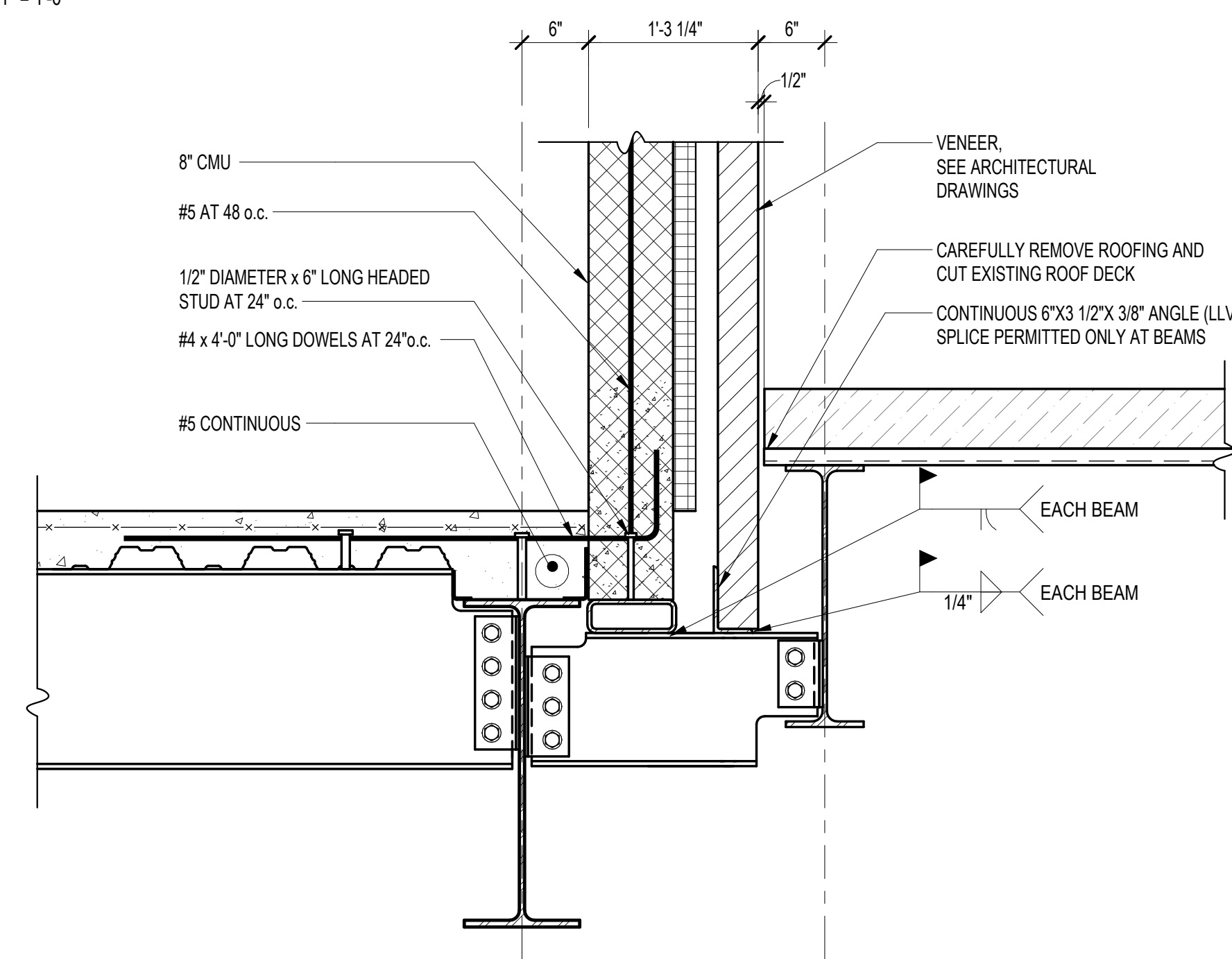
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S517 SCALE: 1" = 1'-0"



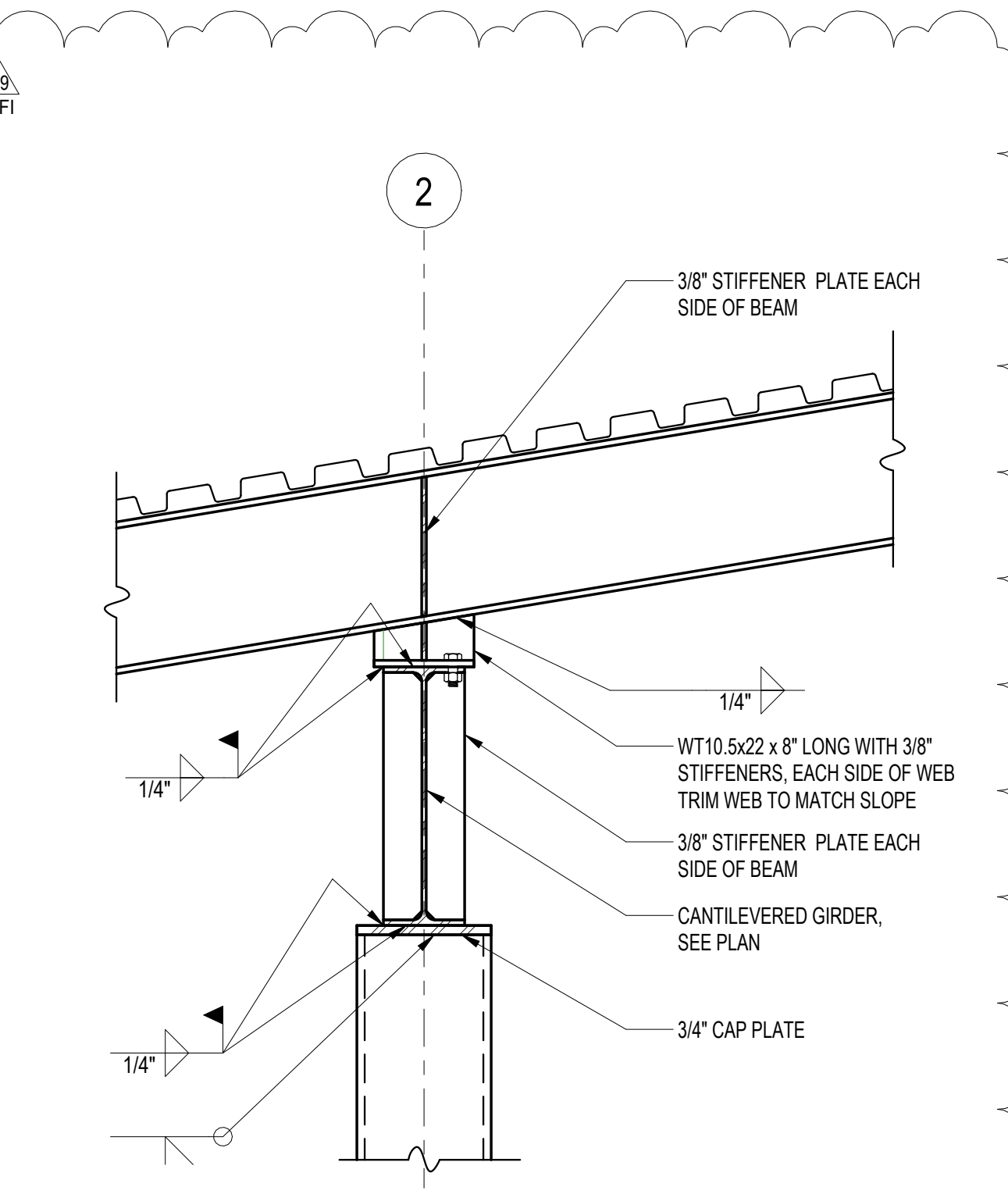
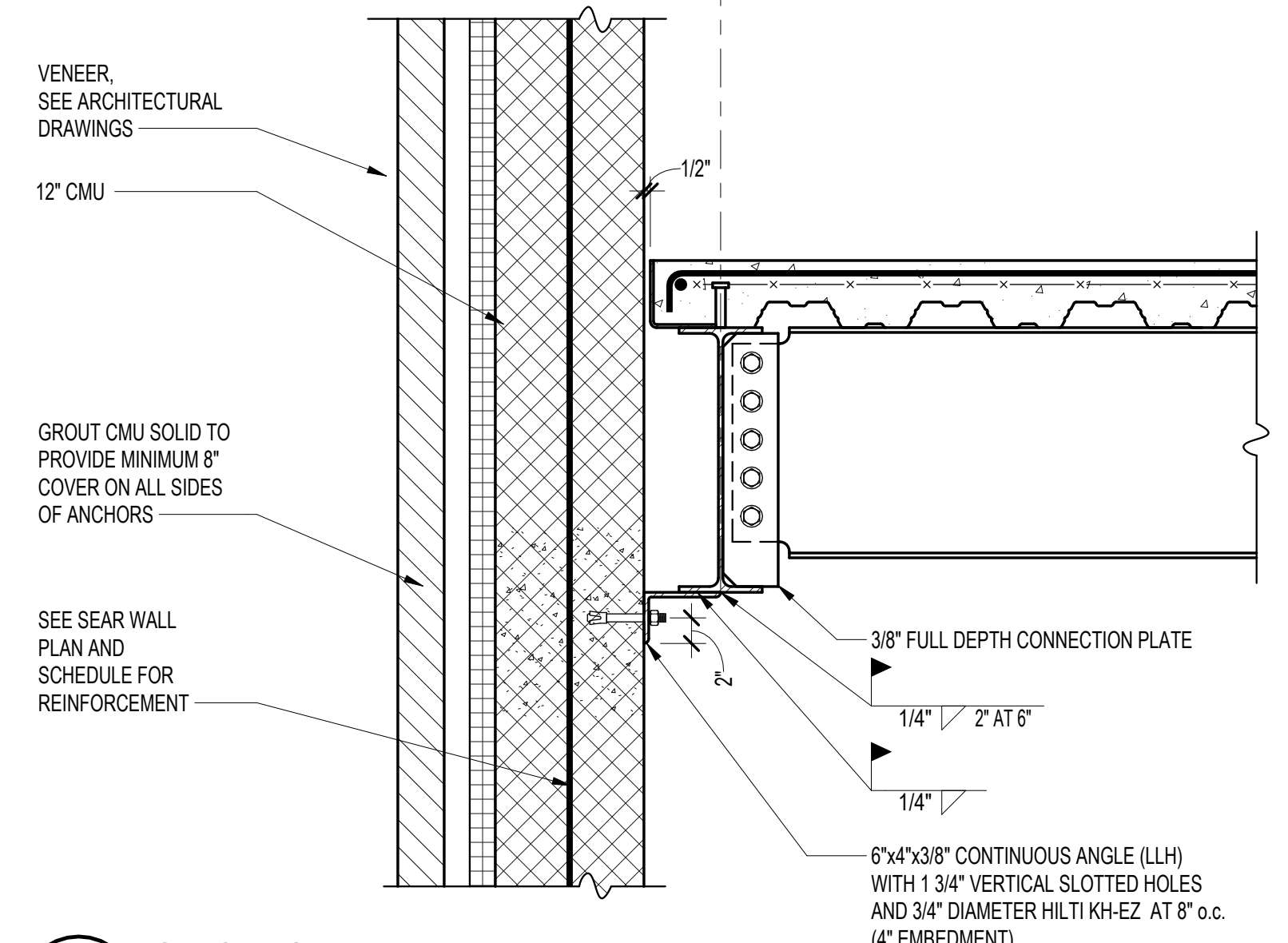
**G** SECTION  
S517 SCALE: 1" = 1'-0"



**F** SECTION  
S517 SCALE: 1" = 1'-0"



**H** SECTION  
S517 SCALE: 1" = 1'-0"



**J** SECTION  
S517 SCALE: 1" = 1'-0"

**Columbia Engineering Inc.**  
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Fax: 410.862.867  
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GP #22105

**SECTIONS**  
NORTH EAST MIDDLE / HIGH SCHOOL  
300 IRISTOWN ROAD, NORTH EAST, MD

DATE	DESCRIPTION
03/25/2024	ADDENDUM 3
04/01/2024	ADDENDUM 5
08/23/2024	RFI-019

**S517**  
03/22/2024  
BID SET





## ***Request for Information***

---

**Date:** 08/14/2024

**Request No:** KSI 009

**Project:** North East Middle & High School  
**KCI No.:** 242612

**To:** Hess Construction  
**Attn.:** Joshua Postadan  
**Email:** [jpostadan@hessconstruction.com](mailto:jpostadan@hessconstruction.com)

**From:** Mike Staub  
**Phone:** 717-434-6248  
**Email:** [mstaub@kinsleysteel.com](mailto:mstaub@kinsleysteel.com)

### **RE: Roof Elevation Clarification**

---

#### ***Request***

Please refer to the attached TRC RFI 006 for the question locations.

- Q6.1: Please confirm the beam extension.
- Q6.2: Please provide the top of beam elevation.
- Q6.3: Please confirm on beam spacing considered.
- Q6.4: Please furnish the stud wall extent dimension.
- Q6.5: Please confirm the beam extension.
- Q6.6: Please confirm the beam splice at column.
- Q6.7: Please provide the top of beam elevation.
- Q6.8: Please confirm on top of steel elevation.

***Date Response Requested: ASAP***

---



217 Ward Circle Brentwood, TN 37027, Phone: 615-661-7979 Fax: 615-661-0644

# REQUEST FOR INFORMATION

## NORTH EAST MIDDLE / HIGH SCHOOL

JOB #24-880

To:	<b>Michael E. Staubmstaub@kinsleysteel.com</b>	CLIENT RFI#
Company:	<b>KINSLEY, INC</b>	GC RFI#
		TRC RFI# <b>006</b>
cc:		RESPONSE <b>08-19-2024</b> NEEDED BY

### SUBJECT: Roof elevation clarification

Please refer to the attached file for the question.

- Q6.1: Please confirm the beam extension.
- Q6.2: Please provide the top of beam elevation.
- Q6.3: Please confirm on beam spacing considered.
- Q6.4: Please furnish the stud wall extent dimension.
- Q6.5: Please confirm the beam extension.
- Q6.6: Please confirm the beam splice at column.
- Q6.7: Please provide the top of beam elevation.
- Q6.8: Please confirm on top of steel elevation.

By:	<b>Ruben Flores</b>	Date:	<b>08-14-2024</b>
-----	---------------------	-------	-------------------

### Response:

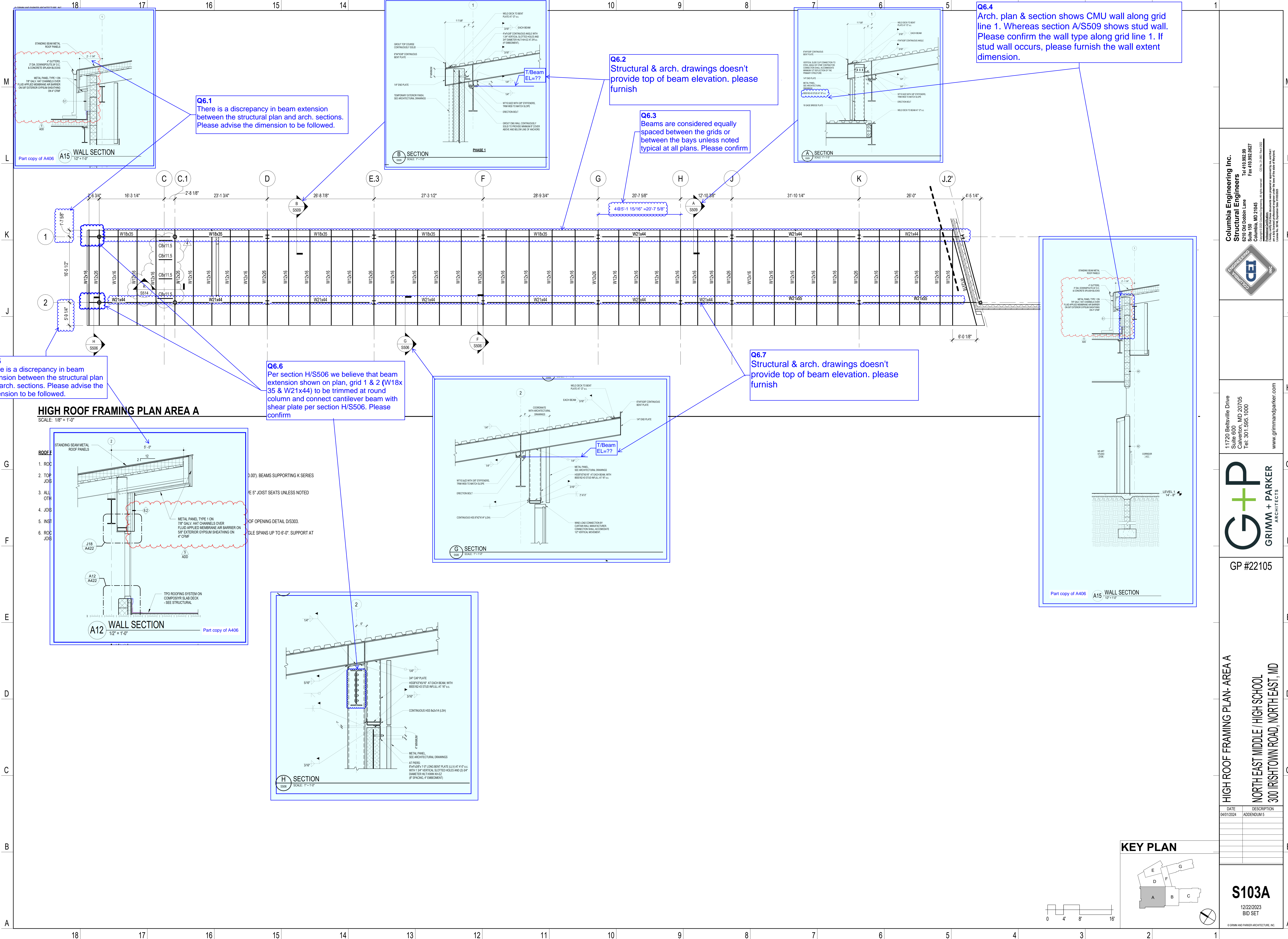
By:		Date:	
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PLEASE SEND RESPONSE TO: Ruben Flores  
Phone: **325-320-0719**

**THE RAMANNA COMPANIES**

**CONSULTING ENGINEERS**





**Columbia Engineering Inc.**  
Structural Engineers  
620 Old Dobson Lane  
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Tel: 410.862.89  
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CEN No. 21-080 (June 2022)  
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**G + P**  
**GRIMM + PARKER**  
ARCHITECTS

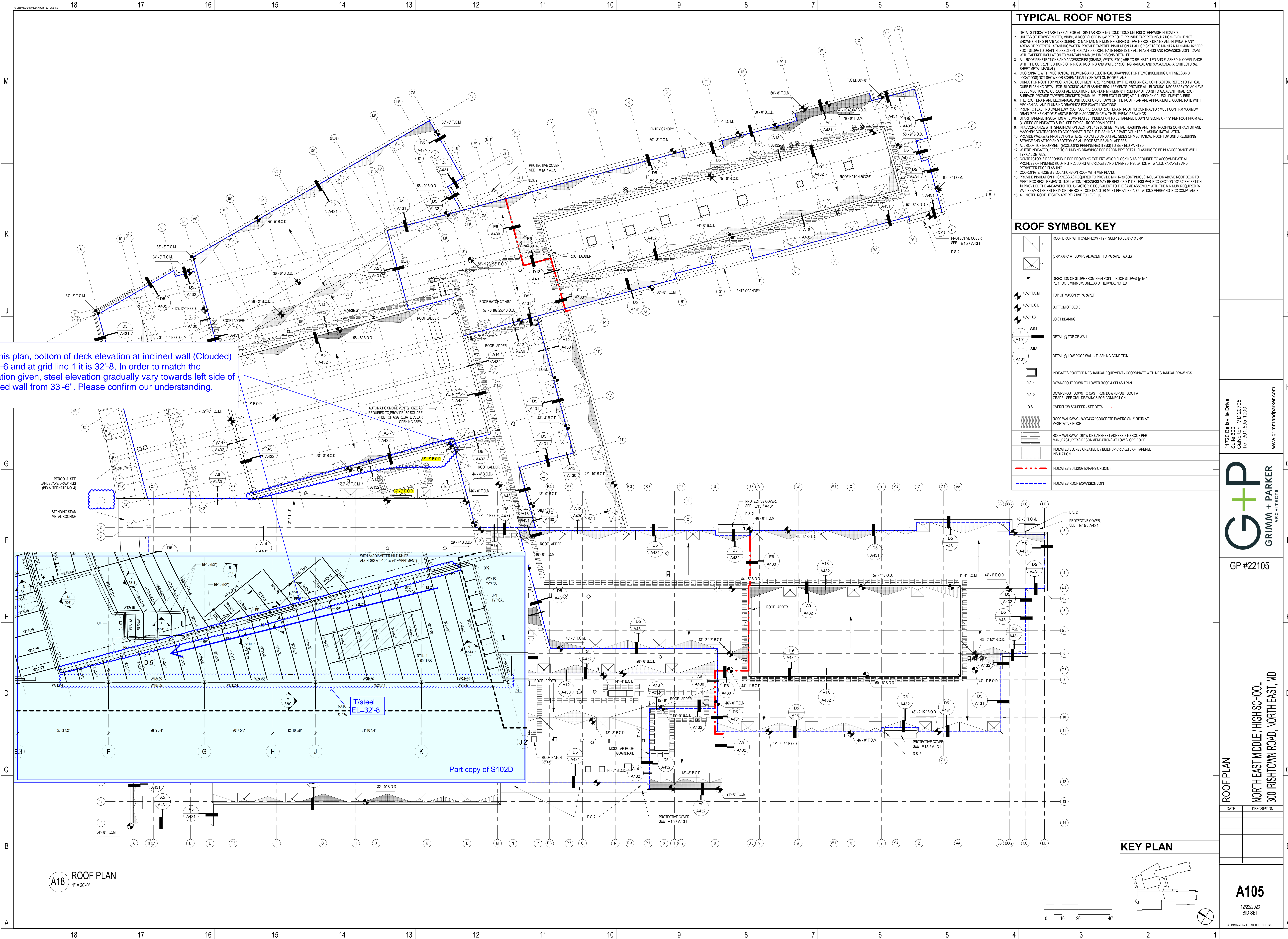
GP #22105

HIGH ROOF FRAMING PLAN- AREA A  
NORTH EAST MIDDLE / HIGH SCHOOL  
300 IRISTOWN ROAD, NORTH EAST, MD

DATE	DESCRIPTION
04/01/2024	ADDENDUM 5

**S103A**  
12/22/2023  
BID SET  
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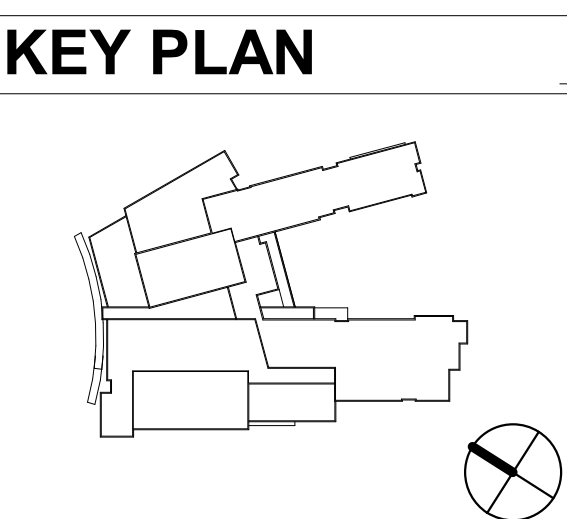
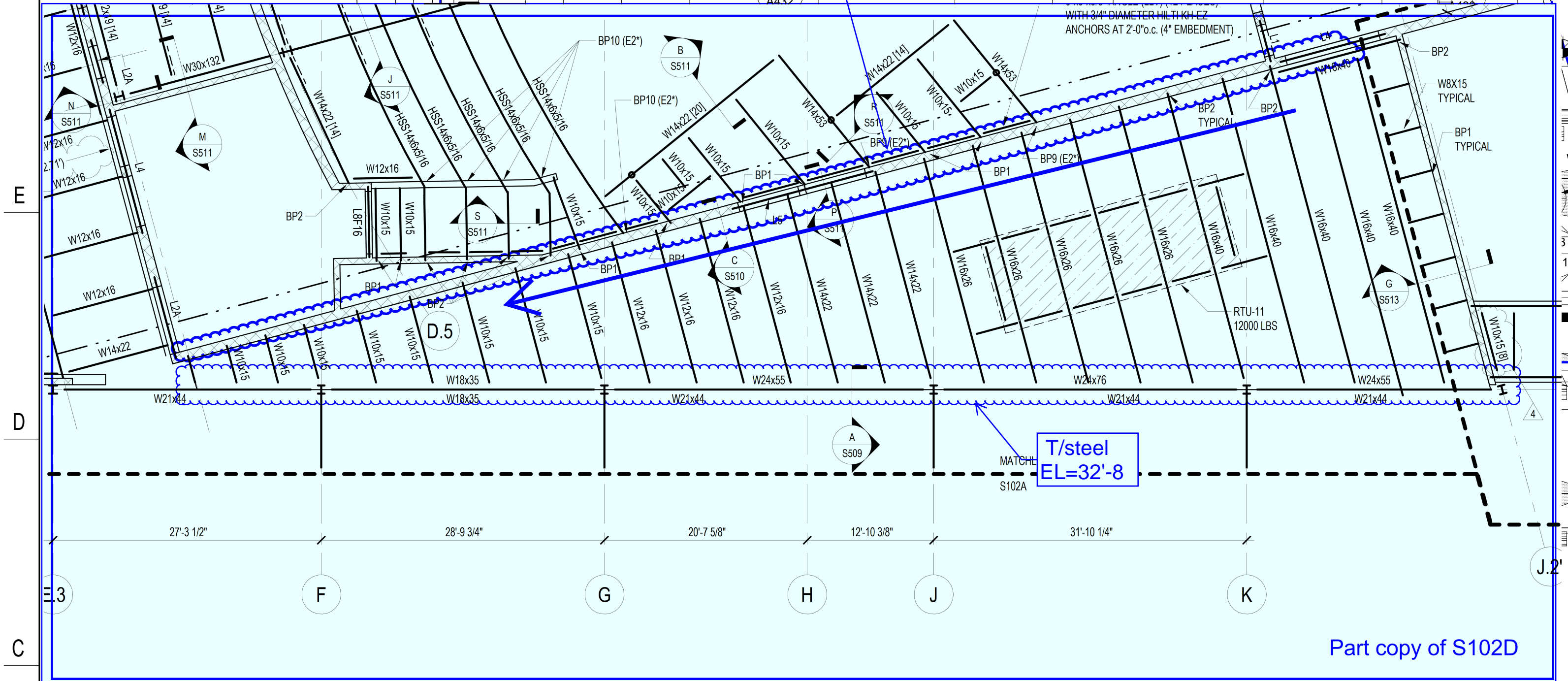


- ### TYPICAL ROOF NOTES
- DETAILS INDICATED ARE TYPICAL FOR ALL SIMILAR ROOFING CONDITIONS UNLESS OTHERWISE INDICATED.
  - UNLESS OTHERWISE NOTED, MINIMUM ROOF SLOPE IS 1/4" PER FOOT. PROVIDE TAPERED INSULATION (EVEN IF NOT SHOWN ON THIS PLAN) AS REQUIRED TO MAINTAIN MINIMUM REQUIRED SLOPE TO ROOF DRAINS AND ELIMINATE ANY AREAS OF POTENTIAL STANDING WATER. PROVIDE TAPERED INSULATION AT ALL CROCKETS TO MAINTAIN MINIMUM 1/2" PER FOOT SLOPE TO DRAIN IN DIRECTION INDICATED. COORDINATE HEIGHTS OF ALL FLASHINGS AND EXPANSION JOINT CAPS WITH TAPERED INSULATION TO MAINTAIN MINIMUM DIMENSIONS DETAILED.
  - ALL ROOF PENETRATIONS AND ACCESSORIES (DRAINS, VENTS, ETC.) ARE TO BE INSTALLED AND FLASHED IN COMPLIANCE WITH THE CURRENT EDITIONS OF N.R.C.A. ROOFING AND WATERPROOFING MANUAL AND S.M.A.C.N.A. (ARCHITECTURAL SHEET METAL MANUAL).
  - COORDINATE WITH MECHANICAL, PLUMBING AND ELECTRICAL DRAWINGS FOR ITEMS INCLUDING UNIT SIZES AND LOCATIONS NOT SHOWN OR SCHEMATICALLY SHOWN ON ROOF PLANS.
  - CURBS FOR ROOF TOP MECHANICAL EQUIPMENT ARE PROVIDED BY THE MECHANICAL CONTRACTOR. REFER TO TYPICAL CURB FLASHING DETAIL FOR BLOCKING AND FLASHING REQUIREMENTS. PROVIDE ALL BLOCKING NECESSARY TO ACHIEVE LEVEL MECHANICAL CURBS AT ALL LOCATIONS. MAINTAIN MINIMUM 6" FROM TOP OF CURB TO ADJACENT FINAL ROOF SURFACE. PROVIDE TAPERED CROCKETS (MINIMUM 1/2" PER FOOT SLOPE) AT ALL MECHANICAL EQUIPMENT CURBS.
  - THE ROOF DRAIN AND MECHANICAL UNIT LOCATIONS SHOWN ON THE ROOF PLAN ARE APPROXIMATE. COORDINATE WITH MECHANICAL AND PLUMBING DRAWINGS FOR EXACT LOCATIONS.
  - PRIOR TO FLASHING OVERFLOW ROOF SCUPPERS AND ROOF DRAIN, ROOFING CONTRACTOR MUST CONFIRM MAXIMUM DRAIN PIPE HEIGHT OF 7' ABOVE ROOF IN ACCORDANCE WITH PLUMBING DRAWINGS.
  - START TAPERED INSULATION AT SUMP PLATES. INSULATION TO BE TAPERED DOWN AT SLOPE OF 1/2" PER FOOT FROM ALL SIDES OF INDICATED SUMP. SEE TYPICAL ROOF DRAIN DETAIL.
  - IN ACCORDANCE WITH SPECIFICATION SECTION 07 52 00 SHEET METAL FLASHING AND TRIM, ROOFING CONTRACTOR AND MASONRY CONTRACTOR TO COORDINATE FLEXIBLE FLASHING & 2 PART COUNTER FLASHING INSTALLATION.
  - PROVIDE WALKWAY PROTECTION WHERE INDICATED, AND AT ALL SIDES OF MECHANICAL ROOF TOP UNITS REQUIRING SERVICE AT TOP AND BOTTOM OF ALL ROOF STAIRS AND LADDERS.
  - ALL ROOF TOP EQUIPMENT (EXCLUDING PREFINISHED ITEMS) TO BE FIELD PAINTED.
  - WHERE INDICATED, REFER TO FLASHING DRAWINGS FOR RADON PIPE DETAIL. FLASHING TO BE IN ACCORDANCE WITH TYPICAL DETAILS.
  - CONTRACTOR IS RESPONSIBLE FOR PROVIDING EXT. FRT WOOD BLOCKING AS REQUIRED TO ACCOMMODATE ALL PROFILES OF FINISHED ROOFING INCLUDING AT CROCKETS AND TAPERED INSULATION AT WALLS, PARAPETS AND PERIMETER EDGE FLASHING.
  - COORDINATE ROSE SH locations ON ROOF WITH MEP PLANS.
  - PROVIDE INSULATION THICKNESS AS REQUIRED TO PROVIDE MIN. R-30 CONTINUOUS INSULATION ABOVE ROOF DECK TO MEET IECC REQUIREMENTS. INSULATION THICKNESS MAY BE REDUCED 1" OR LESS PER IECC SECTION 402.2.2 EXCEPTION IF PROVIDED THE AREA UNDER THE REDUCED INSULATION IS EQUIVALENT TO THE SAME ASSEMBLY WITH THE MINIMUM REQUIRED R-VALUE OVER THE ENTIRETY OF THE ROOF. CONTRACTOR MUST PROVIDE CALCULATIONS VERIFYING IECC COMPLIANCE.
  - ALL NOTED ROOF HEIGHTS ARE RELATIVE TO LEVEL 0.

### ROOF SYMBOL KEY

	ROOF DRAIN WITH OVERFLOW - TYP. SUMP TO BE 6'-0" X 8'-0"
	(6'-0" X 6'-0" AT SUMPS ADJACENT TO PARAPET WALL)
	DIRECTION OF SLOPE FROM HIGH POINT - ROOF SLOPES @ 1/4" PER FOOT, MINIMUM, UNLESS OTHERWISE NOTED
	TOP OF MASONRY PARAPET
	BOTTOM OF DECK
	JOIST BEARING
	DETAIL @ TOP OF WALL
	DETAIL @ LOW ROOF WALL - FLASHING CONDITION
	INDICATES ROOFTOP MECHANICAL EQUIPMENT - COORDINATE WITH MECHANICAL DRAWINGS
	D.S. 1 DOWNSPOUT DOWN TO LOWER ROOF & SPLASH PAN
	D.S. 2 DOWNSPOUT DOWN TO CAST IRON DOWNSPOUT BOOT AT GRADE - SEE CIVIL DRAWINGS FOR CONNECTION
	O.S. OVERFLOW SCUPPER - SEE DETAIL
	ROOF WALKWAY - 24"x24"x2" CONCRETE PAVERS ON 2" RIGID AT VEGETATIVE ROOF
	ROOF WALKWAY - 3/8" WIDE CARPHEET ADHERED TO ROOF PER MANUFACTURER'S RECOMMENDATIONS AT LOW SLOPE ROOF
	INDICATES SLOPES CREATED BY BUILT-UP CROCKETS OF TAPERED INSULATION
	INDICATES BUILDING EXPANSION JOINT
	INDICATES ROOF EXPANSION JOINT

**Q6.8**  
Per this plan, bottom of deck elevation at inclined wall (Clouded) is 33'-6" and at grid line 1 it is 32'-8". In order to match the elevation given, steel elevation gradually vary towards left side of inclined wall from 33'-6". Please confirm our understanding.



**A18** ROOF PLAN  
1" = 20'-0"

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Suite 600  
Calverton, MD 20705  
Tel: 301.595.1000

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GP #22105

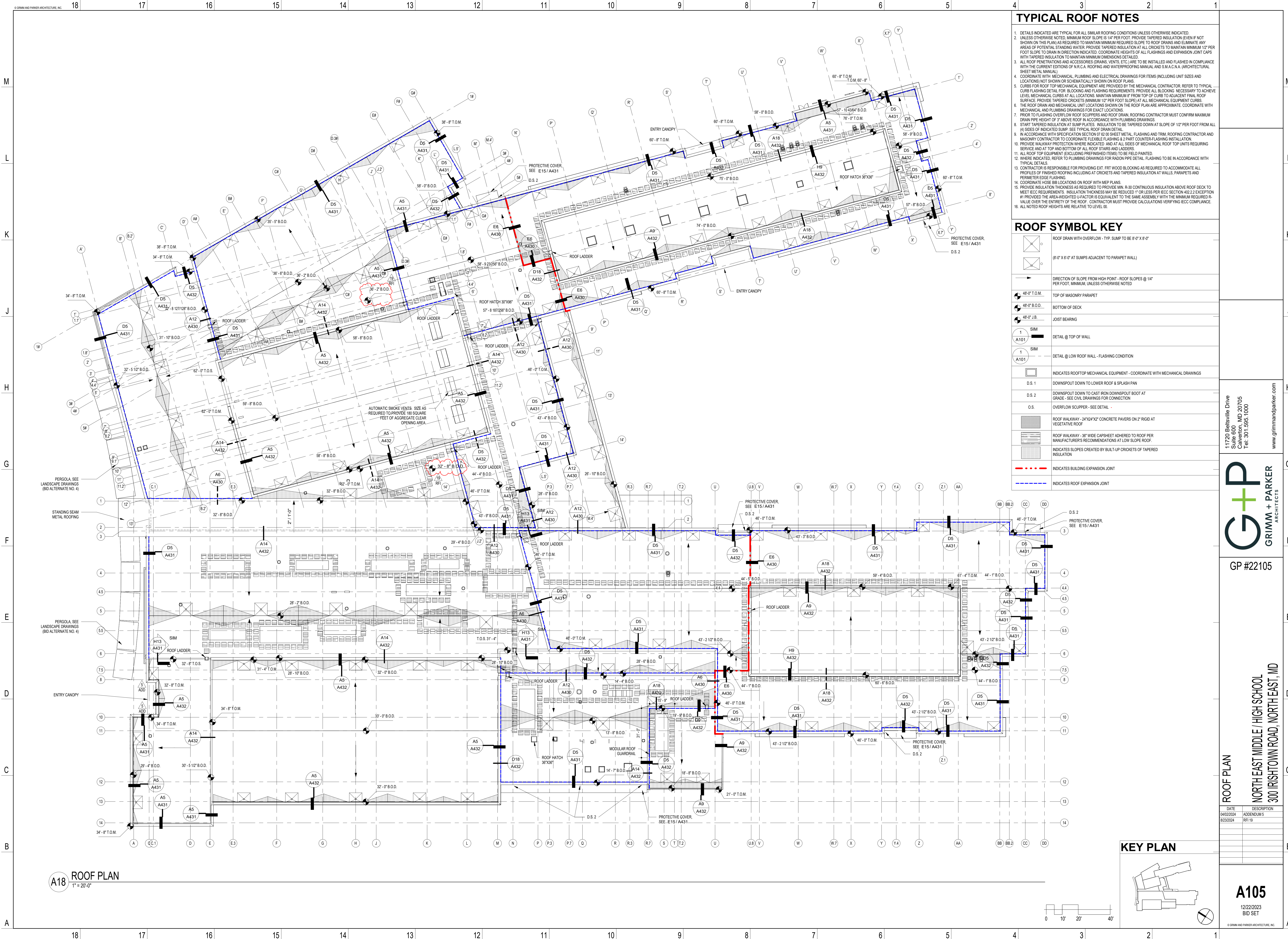
ROOF PLAN

NORTH EAST MIDDLE HIGH SCHOOL  
300 IRISTOWN ROAD, NORTH EAST, MD

DATE	DESCRIPTION

**A105**  
12/22/2023  
BID SET



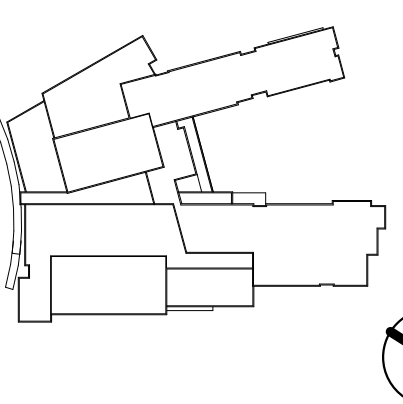


- ### TYPICAL ROOF NOTES
1. DETAILS INDICATED ARE TYPICAL FOR ALL SIMILAR ROOFING CONDITIONS UNLESS OTHERWISE INDICATED.
  2. UNLESS OTHERWISE NOTED, MINIMUM ROOF SLOPE IS 1/4" PER FOOT. PROVIDE TAPERED INSULATION (EVEN IF NOT SHOWN ON THIS PLAN) AS REQUIRED TO MAINTAIN MINIMUM REQUIRED SLOPE TO ROOF DRAINS AND ELIMINATE ANY AREAS OF POTENTIAL STANDING WATER. PROVIDE TAPERED INSULATION AT ALL CRICKETS TO MAINTAIN MINIMUM 1/2" PER FOOT SLOPE TO DRAIN IN DIRECTION INDICATED. COORDINATE HEIGHTS OF ALL FLASHINGS AND EXPANSION JOINT CAPS WITH TAPERED INSULATION TO MAINTAIN MINIMUM DIMENSIONS DETAIL.
  3. ALL ROOF PENETRATIONS AND ACCESSORIES (DRAINS, VENTS, ETC.) ARE TO BE INSTALLED AND FLASHED IN COMPLIANCE WITH THE CURRENT EDITIONS OF N.R.C.A. ROOFING AND WATERPROOFING MANUAL AND S.M.A.C.N.A. (ARCHITECTURAL SHEET METAL MANUAL).
  4. COORDINATE WITH MECHANICAL, PLUMBING AND ELECTRICAL DRAWINGS FOR ITEMS (INCLUDING UNIT SIZES AND LOCATIONS) NOT SHOWN OR SCHEMATICALLY SHOWN ON ROOF PLANS.
  5. CURBS FOR ROOF TOP MECHANICAL EQUIPMENT ARE PROVIDED BY THE MECHANICAL CONTRACTOR. REFER TO TYPICAL CURB FLASHING DETAIL FOR BLOCKING AND FLASHING REQUIREMENTS. PROVIDE ALL BLOCKING NECESSARY TO ACHIEVE LEVEL MECHANICAL CURBS AT ALL LOCATIONS. MAINTAIN MINIMUM 8" FROM TOP OF CURB TO ADJACENT FINAL ROOF SURFACE. PROVIDE TAPERED CRICKETS (MINIMUM 1/2" PER FOOT SLOPE) AT ALL MECHANICAL EQUIPMENT CURBS.
  6. THE ROOF DRAIN AND MECHANICAL UNIT LOCATIONS SHOWN ON THE ROOF PLAN ARE APPROXIMATE. COORDINATE WITH MECHANICAL AND PLUMBING DRAWINGS FOR EXACT LOCATIONS.
  7. PRIOR TO FLASHING OVERFLOW ROOF SCUPPERS AND ROOF DRAIN, ROOFING CONTRACTOR MUST CONFIRM MAXIMUM DRAIN PIPE HEIGHT OF 2' ABOVE ROOF FINISH ACCORDANCE WITH PLUMBING DRAWINGS.
  8. START TAPERED INSULATION AT SUMP PLATES. INSULATION TO BE TAPERED DOWN AT SLOPE OF 1/2" PER FOOT FROM ALL (A) SIDES OF INDICATED SUMP. SEE TYPICAL ROOF DRAIN DETAIL.
  9. IN ACCORDANCE WITH SPECIFICATION SECTION 05 05 00 SHEET METAL FLASHING AND TRIM, ROOFING CONTRACTOR AND MASONRY CONTRACTOR TO COORDINATE FLEXIBLE FLASHING & 2 PART COUNTER FLASHING INSTALLATION.
  10. PROVIDE WALKWAY PROTECTION WHERE INDICATED AND AT ALL SIDES OF MECHANICAL ROOF TOP UNITS REQUIRING SERVICE AND AT TOP AND BOTTOM OF ALL ROOF STAIRS AND LADDERS.
  11. ALL ROOF TOP EQUIPMENT (EXCLUDING PREFINISHED ITEMS) TO BE FIELD PAINTED.
  12. WHERE INDICATED, REFER TO PLUMBING DRAWINGS FOR RADON PIPE DETAIL. FLASHING TO BE IN ACCORDANCE WITH TYPICAL DETAILS.
  13. CONTRACTOR IS RESPONSIBLE FOR PROVIDING EXT. FRP WOOD BLOCKING AS REQUIRED TO ACCOMMODATE ALL PROFILES OF FINISHED ROOFING INCLUDING AT CRICKETS AND TAPERED INSULATION AT WALLS, PARAPETS AND PERIMETER EDGE FLASHING.
  14. COORDINATE HOSE BB LOCATIONS ON ROOF WITH MEP PLANS.
  15. PROVIDE INSULATION THICKNESS AS REQUIRED TO PROVIDE MIN. R-30 CONTINUOUS INSULATION ABOVE ROOF DECK TO MEET IECC REQUIREMENTS. INSULATION THICKNESS MAY BE REDUCED 1" OR LESS PER IECC SECTION R02.2.2 EXCEPTION #1 PROVIDED THE AREA-WEIGHTED U-FACTOR IS EQUIVALENT TO THE SAME ASSEMBLY WITH THE MINIMUM REQUIRED R-VALUE OVER THE ENTIRETY OF THE ROOF. CONTRACTOR MUST PROVIDE CALCULATIONS VERIFYING IECC COMPLIANCE.
  16. ALL NOTED ROOF HEIGHTS ARE RELATIVE TO LEVEL 00.

### ROOF SYMBOL KEY

	ROOF DRAIN WITH OVERFLOW - TYP. SUMP TO BE 8'-0" X 8'-0"
	(8'-0" X 8'-0" AT SUMPS ADJACENT TO PARAPET WALL)
	DIRECTION OF SLOPE FROM HIGH POINT - ROOF SLOPES @ 1/4" PER FOOT, MINIMUM, UNLESS OTHERWISE NOTED
	TOP OF MASONRY PARAPET
	BOTTOM OF DECK
	JOIST BEARING
	DETAIL @ TOP OF WALL
	DETAIL @ LOW ROOF WALL - FLASHING CONDITION
	INDICATES ROOFTOP MECHANICAL EQUIPMENT - COORDINATE WITH MECHANICAL DRAWINGS
	D.S. 1 DOWNSPOUT DOWN TO LOWER ROOF & SPLASH PAN
	D.S. 2 DOWNSPOUT DOWN TO CAST IRON DOWNSPOUT BOOT AT GRADE - SEE CIVIL DRAWINGS FOR CONNECTION
	O.S. OVERFLOW SCUPPER - SEE DETAIL
	ROOF WALKWAY - 24"x24"x2" CONCRETE PAVERS ON 2" RIGID AT VEGETATIVE ROOF
	ROOF WALKWAY - 38" WIDE CAP SHEET ADHERED TO ROOF PER MANUFACTURER'S RECOMMENDATIONS AT LOW SLOPE ROOF
	INDICATES SLOPES CREATED BY BUILT-UP CRICKETS OF TAPERED INSULATION
	INDICATES BUILDING EXPANSION JOINT
	INDICATES ROOF EXPANSION JOINT

### KEY PLAN



**A18 ROOF PLAN**  
1" = 20'-0"

11720 Beltsville Drive  
Suite 600  
Calverton, MD 20705  
Tel. 301.595.1000



GP #22105

**ROOF PLAN**  
NORTH EAST MIDDLE / HIGH SCHOOL  
300 IRISTOWN ROAD, NORTH EAST, MD

DATE	DESCRIPTION
04/02/2024	ADDENDUM 5
02/23/2024	RFI 19

**A105**

12/22/2023  
BID SET



RFI detail

#020 RTU Support Beam Size Clarification



Status	<div><div></div>Closed</div>
Created on	Aug 14, 2024 by <b>Lucas Bradley</b> (Kinsley Steel Inc)
RFI type	Structural RFI REV
Ball in court	<b>Lucas Bradley</b> (Kinsley Steel Inc)
Answered	Aug 19, 2024 by <b>Patrick Byrne</b> (Grimm and Parker)

Question

Please refer to the attached "RFI 010\_KSI - RTU Support Beam Size Clarification" in the references section for the question location.

[Q7.1] Please provide the RTU support beam sizes based on the respective RTU weight.

Official response

Patrick Byrne (Grimm and Parker): See attached RFI response.

By **Patrick Byrne** (Grimm and Parker) - Aug 19, 2024, 10:33 AM EDT

References and Attachments

Files (3)







- RFI 010\_KSI - RTU Support Beam Size Clarification-CEI.pdf
- RFI 010\_KSI - RTU Support Beam Size Clarification.pdf
- RFI 020 RTU Support Beam Size Clarification Response.pdf

Impact


Cost impact	Unknown
Schedule impact	No



Other attributes	
Priority	Normal
Discipline	Structural
Category	-
Location	Area D, Roof
Location details	RTU @ low roof
External id	-
Co-reviewer(s)	
Posted to Drawings/ Specifications	YES
Trade's RFI No.	10

Activities	By	At
<b>Joshua Postadan</b> changed the status from  <b>Open</b> Answered to  <b>Closed</b> <b>Official response:</b> Patrick Byrne (Grimm and Parker): See attached RFI response. set Ball in court to <b>Lucas Bradley</b> (Kinsley Steel Inc)	<b>Joshua Postadan</b>	Aug 22, 2024, 11:10 AM EDT
Please refer to the attached RFI response in the reference section ("RFI 020 RTU Support Beam Size Clarification Response.pdf") Please review the response to RFI #020 Provide notification of any cost implications immediately. If a proposal has cost impacts, please request an RFQ from HESS. Send a proposal no later than the close of business within 7 days of receipt of this RFI response. HESS will consider this as a no cost change and close this issue should a proposal not be received by this date. A lack of response for any credit items will prompt HESS Construction to assign a cost value that will be deducted from your contract sum. Note: The RFQ is simply an administrative tracking tool, and in no way represents that additional work, cost or time is acknowledged, authorized, directed, or approved.	<b>Joshua Postadan</b>	Aug 22, 2024, 11:10 AM EDT
<b>Patrick Byrne</b> changed the status from  <b>Open</b> In Review to  <b>Open</b> Answered set Ball in court to <b>Joshua Postadan</b> (HESS Construction Co., LLC)	<b>Patrick Byrne</b>	Aug 19, 2024, 10:33 AM EDT
<b>Patrick Byrne</b> added a response: See attached RFI response.	<b>Patrick Byrne</b>	Aug 19, 2024, 10:33 AM EDT
<b>Patrick Byrne</b> added a reference to a File <b>RFI 020 RTU Support Beam Size Clarification Response.pdf</b>	<b>Patrick Byrne</b>	Aug 19, 2024, 10:33 AM EDT
<b>Cesar Flores</b> added a response: Please see attached file for response.	<b>Cesar Flores</b>	Aug 19, 2024, 8:48 AM EDT
<b>Cesar Flores</b> added a reference to a File <b>RFI 010_KSI - RTU Support Beam Size Clarification-CEI.pdf</b>	<b>Cesar Flores</b>	Aug 19, 2024, 8:48 AM EDT
changed the <b>Posted to Drawings/Specifications</b> to <b>YES</b>	<b>Joshua Postadan</b>	Aug 14, 2024, 11:47 AM EDT
<b>Joshua Postadan</b> changed the status from  <b>Open</b> Waiting for Submission to  <b>Open</b> In Review changed the <b>due date</b> to Aug 19, 2024 set Ball in court to <b>Patrick Byrne</b> (Grimm and Parker), <b>Cesar Flores</b> (Columbia Engineering) changed the <b>ID</b> to 020	<b>Joshua Postadan</b>	Aug 14, 2024, 11:46 AM EDT
changed the <b>location details</b> to <i>RTU @ low roof</i>	<b>Joshua Postadan</b>	Aug 14, 2024, 11:46 AM EDT
changed the <b>location</b> to <i>Area D, Roof</i>	<b>Joshua Postadan</b>	Aug 14, 2024, 11:45 AM EDT



changed the <b>watchers</b> to <b>Cameron MacKenzie</b> (HESS Construction Co., LLC), <b>Ken Thompson</b> (HESS Construction Co., LLC), <b>Joshua Postadan</b> (HESS Construction Co., LLC), <b>Lucas Bradley</b> (Kinsley Steel Inc), <b>Michael Staub</b> (Kinsley Steel Inc), <b>HESS PROJECT TEAM</b> , <b>Kinsley Steel Inc</b>	<b>Joshua Postadan</b>	Aug 14, 2024, 11:45 AM EDT
changed the <b>watchers</b> to <b>Cameron MacKenzie</b> (HESS Construction Co., LLC), <b>Ken Thompson</b> (HESS Construction Co., LLC), <b>Joshua Postadan</b> (HESS Construction Co., LLC), <b>Lucas Bradley</b> (Kinsley Steel Inc), <b>Michael Staub</b> (Kinsley Steel Inc), <b>HESS PROJECT TEAM</b>	<b>Joshua Postadan</b>	Aug 14, 2024, 11:44 AM EDT
changed the <b>cost impact</b> to <i>Unknown</i>	<b>Joshua Postadan</b>	Aug 14, 2024, 11:44 AM EDT
changed the <b>schedule impact</b> to <i>No</i>	<b>Joshua Postadan</b>	Aug 14, 2024, 11:44 AM EDT
changed the <b>cost impact</b> to <i>No</i>	<b>Joshua Postadan</b>	Aug 14, 2024, 11:44 AM EDT
changed the <b>question</b> to <i>Please refer to the attached "RFI 010_KSI - RTU Support Beam Size Clarification" in the references section for the question location. [Q7.1] Please provide the RTU support beam sizes based on the respective RTU weight.</i>	<b>Joshua Postadan</b>	Aug 14, 2024, 11:44 AM EDT
changed the <b>question</b> to <i>Please refer to the attached "RFI 010_KSI - RTU Support Beam Size Clarification" in the references section for the question location. Q7.1: Please provide the RTU support beam sizes based on the respective RTU weight.</i>	<b>Joshua Postadan</b>	Aug 14, 2024, 11:44 AM EDT
changed the <b>question</b> to <i>Please refer to the attached TRC RFI 007 for the question location. Q7.1: Please provide the RTU support beam sizes based on the respective RTU weight.</i>	<b>Joshua Postadan</b>	Aug 14, 2024, 11:37 AM EDT
<b>Lucas Bradley</b> added a reference to a File <b>RFI 010_KSI - RTU Support Beam Size Clarification.pdf</b>	<b>Lucas Bradley</b>	Aug 14, 2024, 10:39 AM EDT
<b>Lucas Bradley</b> (Kinsley Steel Inc) created this RFI in  <b>Open</b> Waiting for Submission status and set Ball in court to <b>Joshua Postadan</b> (HESS Construction Co., LLC).	<b>Lucas Bradley</b>	Aug 14, 2024, 10:39 AM EDT



## ***Request for Information***

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**Date:** 08/14/2024

**Request No:** KSI 010

**Project:** North East Middle & High School  
**KCI No.:** 242612

**To:** Hess Construction  
**Attn.:** Joshua Postadan  
**Email:** [jpostadan@hessconstruction.com](mailto:jpostadan@hessconstruction.com)

**From:** Mike Staub  
**Phone:** 717-434-6248  
**Email:** [mstaub@kinsleysteel.com](mailto:mstaub@kinsleysteel.com)

---

### **RE: RTU Support Beam Size Clarification**

#### ***Request***

Please refer to the attached TRC RFI 007 for the question location.

Q7.1: Please provide the RTU support beam sizes based on the respective RTU weight.

---

***Date Response Requested: ASAP***





217 Ward Circle Brentwood, TN 37027, Phone: 615-661-7979 Fax: 615-661-0644

# REQUEST FOR INFORMATION

## NORTH EAST MIDDLE / HIGH SCHOOL

JOB #24-880

To:	<b>Michael E.</b> <a href="mailto:Staubmstaub@kinsleysteel.com">Staubmstaub@kinsleysteel.com</a>	CLIENT RFI#
Company:	KINSLEY, INC	GC RFI#
		TRC RFI# 007
cc:		RESPONSE 08-19-2024 NEEDED BY

### SUBJECT: RTU support beam size clarification

Please refer to the attached file for the question.

Q7.1: Please provide the RTU support beam sizes based on the respective RTU weight.

By:	<b>Ruben Flores</b>	Date:	<b>08-14-2024</b>
-----	---------------------	-------	-------------------

### Response:

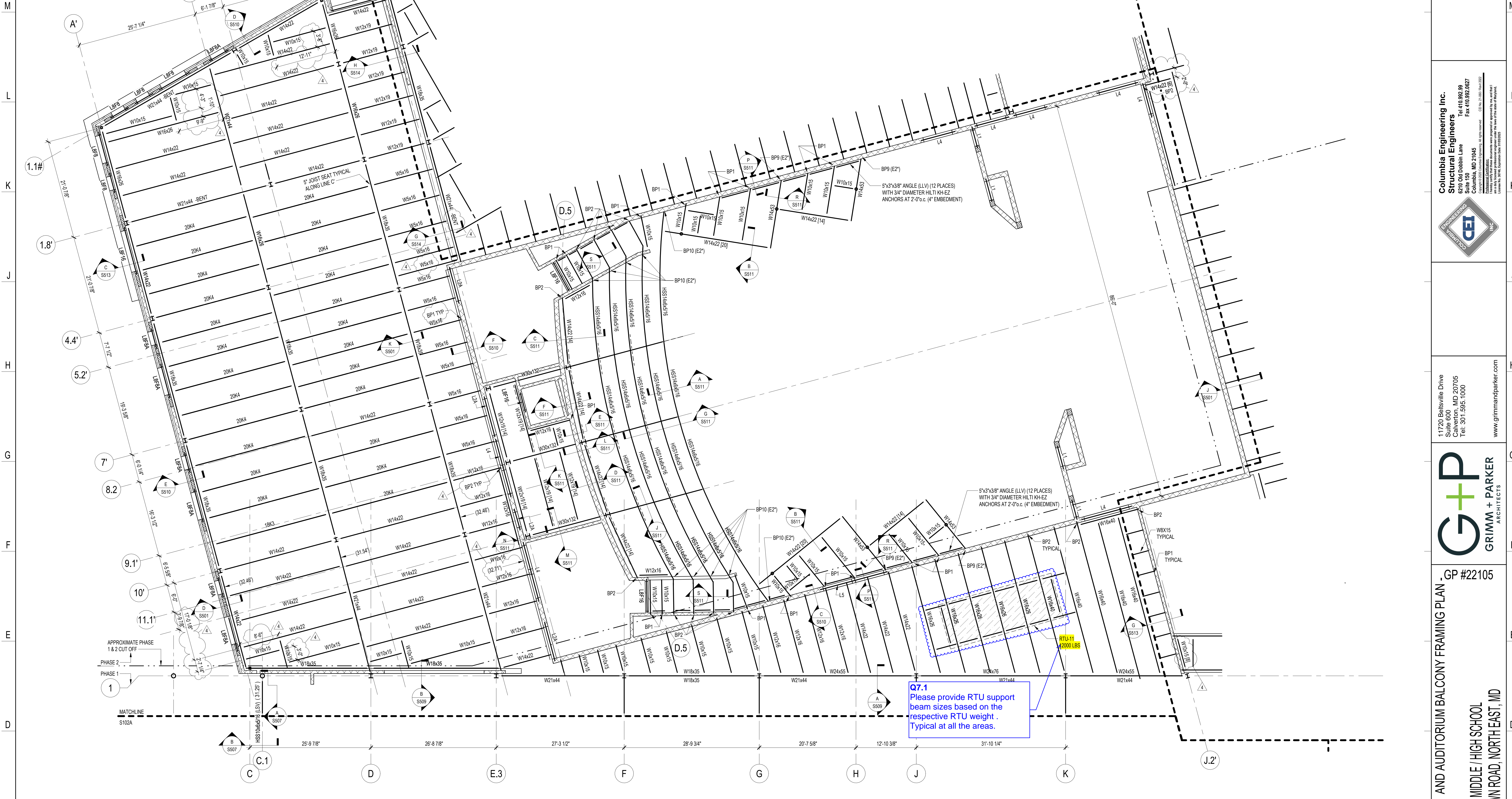
By:		Date:	
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PLEASE SEND RESPONSE TO: Ruben Flores  
Phone: **325-320-0719**

**THE RAMANNA COMPANIES**

**CONSULTING ENGINEERS**









## *Request for Information*

---

**Date:** 08/14/2024

**Request No:** KSI 010

**Project:** North East Middle & High School  
**KCI No.:** 242612

**To:** Hess Construction  
**Attn.:** Joshua Postadan  
**Email:** jpostadan@hessconstruction.com

**From:** Mike Staub  
**Phone:** 717-434-6248  
**Email:** [mstaub@kinsleysteel.com](mailto:mstaub@kinsleysteel.com)

### **RE: RTU Support Beam Size Clarification**

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#### ***Request***

Please refer to the attached TRC RFI 007 for the question location.

Q7.1: Please provide the RTU support beam sizes based on the respective RTU weight.

#### ***Date Response Requested: ASAP***

---

CEI: Please see following sheet for response.

Cesar Flores  
08/19/2024



217 Ward Circle Brentwood, TN 37027, Phone: 615-661-7979 Fax: 615-661-0644

# REQUEST FOR INFORMATION

## NORTH EAST MIDDLE / HIGH SCHOOL

JOB #24-880

To:	<b>Michael E.</b> <a href="mailto:Staubmstaub@kinsleysteel.com">Staubmstaub@kinsleysteel.com</a>	CLIENT RFI#
Company:	KINSLEY, INC	GC RFI#
		TRC RFI# 007
cc:		RESPONSE 08-19-2024 NEEDED BY

### SUBJECT: RTU support beam size clarification

Please refer to the attached file for the question.

Q7.1: Please provide the RTU support beam sizes based on the respective RTU weight.

By:	<b>Ruben Flores</b>	Date:	<b>08-14-2024</b>
-----	---------------------	-------	-------------------

### Response:

By:		Date:	
-----	--	-------	--

PLEASE SEND RESPONSE TO: Ruben Flores  
Phone: **325-320-0719**

**THE RAMANNA COMPANIES**

**CONSULTING ENGINEERS**









## *Request for Information*

---

**Date:** 08/14/2024

**Request No:** KSI 010

**Project:** North East Middle & High School  
**KCI No.:** 242612

**To:** Hess Construction  
**Attn.:** Joshua Postadan  
**Email:** jpostadan@hessconstruction.com

**From:** Mike Staub  
**Phone:** 717-434-6248  
**Email:** [mstaub@kinsleysteel.com](mailto:mstaub@kinsleysteel.com)

---

### **RE: RTU Support Beam Size Clarification**

#### ***Request***

Please refer to the attached TRC RFI 007 for the question location.

Q7.1: Please provide the RTU support beam sizes based on the respective RTU weight.

---

#### ***Date Response Requested: ASAP***

CEI: Please see following sheet for response.

Cesar Flores  
08/19/2024

G+P: See response from CEI.

Patrick Byrne 8.19.2024





217 Ward Circle Brentwood, TN 37027, Phone: 615-661-7979 Fax: 615-661-0644

# REQUEST FOR INFORMATION

## NORTH EAST MIDDLE / HIGH SCHOOL

JOB #24-880

To:	<b>Michael E. Staubmstaub@kinsleysteel.com</b>	CLIENT RFI#
Company:	<b>KINSLEY, INC</b>	GC RFI#
		TRC RFI# <b>007</b>
cc:		RESPONSE <b>08-19-2024</b> NEEDED BY

### SUBJECT: RTU support beam size clarification

Please refer to the attached file for the question.

Q7.1: Please provide the RTU support beam sizes based on the respective RTU weight.

By:	<b>Ruben Flores</b>	Date:	<b>08-14-2024</b>
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### Response:

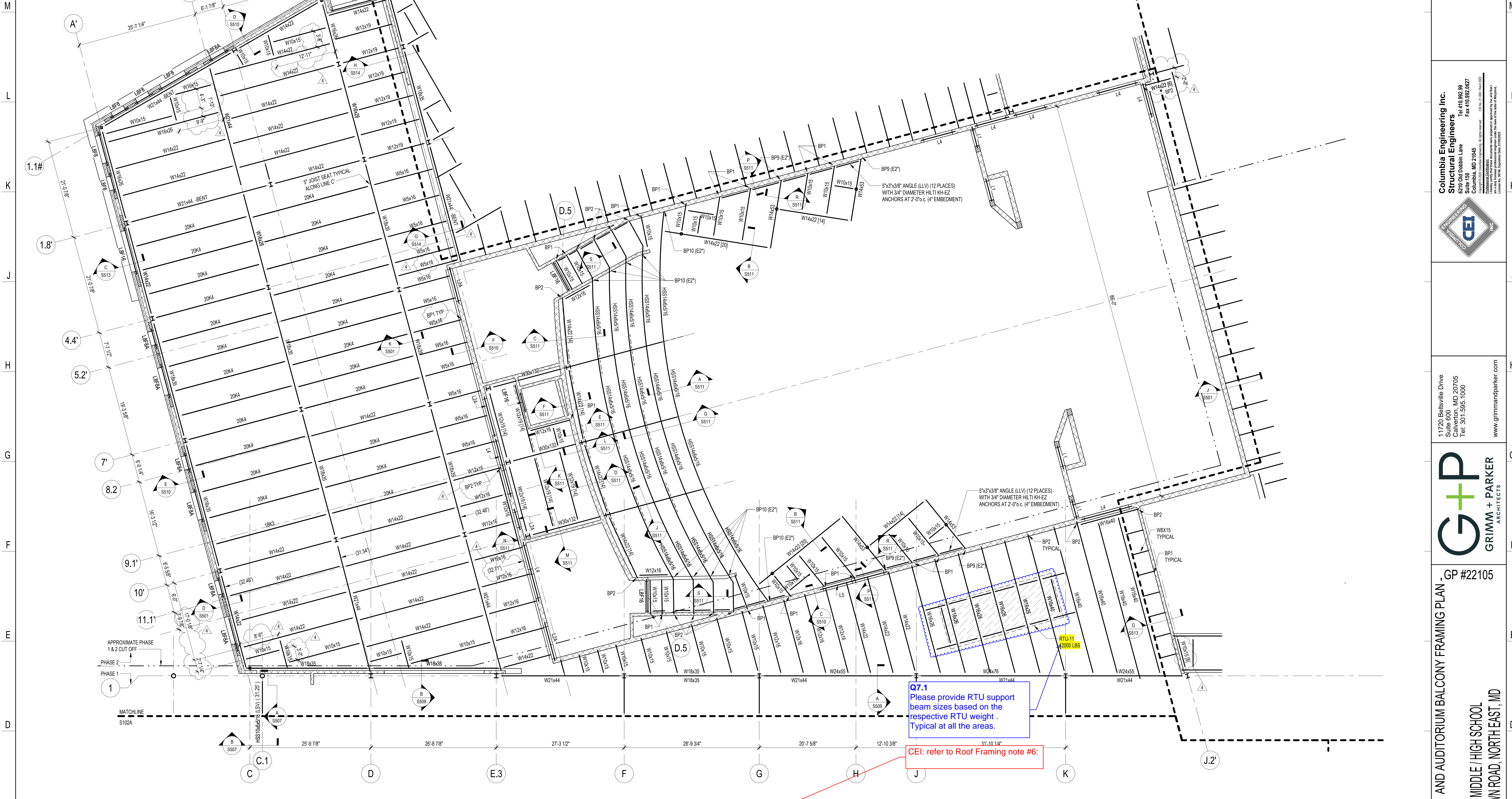
By:		Date:	
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PLEASE SEND RESPONSE TO: Ruben Flores  
Phone: **325-320-0719**

**THE RAMANNA COMPANIES**

**CONSULTING ENGINEERS**







RFI detail

#021 Bearing Plate Embed Clarification



Status	<div><div></div>Closed</div>
Created on	Aug 9, 2024 by <b>Lucas Bradley</b> (Kinsley Steel Inc)
RFI type	Structural RFI REV
Ball in court	<b>Lucas Bradley</b> (Kinsley Steel Inc)
Answered	Aug 19, 2024 by <b>Patrick Byrne</b> (Grimm and Parker)

Question

Please provide the stud size, quantity, and required embedment for Bearing Plates BP5, BP6, and BP7.

Official response

Patrick Byrne (Grimm and Parker): See attached RFI response.  
*By **Patrick Byrne** (Grimm and Parker) - Aug 19, 2024, 10:36 AM EDT*

References and Attachments

Files (3)

RFI 005\_KSI - Embed Clarification- CEI.pdf

RFI 005\_KSI - Embed Clarification.pdf

RFI 021 Embed Clarification Response.pdf

Impact







Cost impact	Unknown
Schedule impact	No



Other attributes

Priority	Normal
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Discipline	Structural
Category	Design Coordination
Location	-
Location details	-
External id	-
Co-reviewer(s)	
Posted to Drawings/ Specifications	YES
Trade's RFI No.	5



Activities	By	At
<b>Joshua Postadan</b> changed the status from  <b>Open</b> Answered to  <b>Closed</b> <b>Official response:</b> Patrick Byrne (Grimm and Parker): See attached RFI response. set Ball in court to <b>Lucas Bradley</b> (Kinsley Steel Inc) changed the <b>watchers</b> to <b>Lucas Bradley</b> (Kinsley Steel Inc), <b>Michael Staub</b> (Kinsley Steel Inc), <b>Ken Thompson</b> (HESS Construction Co., LLC), <b>Cameron MacKenzie</b> (HESS Construction Co., LLC), <b>Joshua Postadan</b> (HESS Construction Co., LLC), <b>Glenn Feldstein</b> (George Moehrle Masonry), <b>Adam Moxley</b> (Canyon Contracting, Inc.), <b>David Lichliter</b> (Canyon Contracting, Inc.), <b>Mandi Kirk</b> (Canyon Contracting, Inc.), <b>HESS PROJECT TEAM</b> , <b>Kinsley Steel Inc</b> , <b>George Moehrle Masonry</b> , <b>Canyon Contracting, Inc.</b>	<b>Joshua Postadan</b>	Aug 22, 2024, 11:01 AM EDT
Please refer to the attached RFI response included in the reference section ("RFI 021 Embed Clarification Response.pdf"). Please review the response to RFI #021. Provide notification of any cost implications immediately. If a proposal has cost impacts, please request an RFQ from HESS. Send a proposal no later than the close of business within 7 days of receipt of this RFI response. HESS will consider this as a no cost change and close this issue should a proposal not be received by this date. A lack of response for any credit items will prompt HESS Construction to assign a cost value that will be deducted from your contract sum. Note: The RFQ is simply an administrative tracking tool, and in no way represents that additional work, cost or time is acknowledged, authorized, directed, or approved.	<b>Joshua Postadan</b>	Aug 22, 2024, 11:01 AM EDT
<b>Patrick Byrne</b> changed the status from  <b>Open</b> In Review to  <b>Open</b> Answered set Ball in court to <b>Joshua Postadan</b> (HESS Construction Co., LLC)	<b>Patrick Byrne</b>	Aug 19, 2024, 10:36 AM EDT
<b>Patrick Byrne</b> added a response: See attached RFI response.	<b>Patrick Byrne</b>	Aug 19, 2024, 10:36 AM EDT
<b>Patrick Byrne</b> added a reference to a File <b>RFI 021 Embed Clarification Response.pdf</b>	<b>Patrick Byrne</b>	Aug 19, 2024, 10:36 AM EDT
<b>Cesar Flores</b> added a response: Please see attached file for response.	<b>Cesar Flores</b>	Aug 19, 2024, 9:13 AM EDT
<b>Cesar Flores</b> added a reference to a File <b>RFI 005_KSI - Embed Clarification- CEI.pdf</b>	<b>Cesar Flores</b>	Aug 19, 2024, 9:12 AM EDT
<b>Joshua Postadan</b> changed the status from  <b>Open</b> Waiting for Submission to  <b>Open</b> In Review changed the <b>due date</b> to Aug 19, 2024 set Ball in court to <b>Patrick Byrne</b> (Grimm and Parker), <b>Cesar Flores</b> (Columbia Engineering) changed the <b>ID</b> to 021	<b>Joshua Postadan</b>	Aug 15, 2024, 9:37 AM EDT

<b>Joshua Postadan</b> changed title to: <i>Bearing Plate Embed Clarification</i>	<b>Joshua Postadan</b>	Aug 15, 2024, 9:36 AM EDT
changed the <b>Posted to Drawings/Specifications</b> to <i>YES</i>	<b>Joshua Postadan</b>	Aug 15, 2024, 9:34 AM EDT
changed the <b>cost impact</b> to <i>Unknown</i>	<b>Joshua Postadan</b>	Aug 15, 2024, 9:34 AM EDT
changed the <b>schedule impact</b> to <i>No</i>	<b>Joshua Postadan</b>	Aug 15, 2024, 9:34 AM EDT
changed the <b>cost impact</b> to <i>No</i>	<b>Joshua Postadan</b>	Aug 15, 2024, 9:34 AM EDT
<b>Joshua Postadan</b> changed title to: <i>Bearing Plate Clarification</i>	<b>Joshua Postadan</b>	Aug 15, 2024, 9:34 AM EDT
changed the <b>watchers</b> to <b>Lucas Bradley</b> (Kinsley Steel Inc), <b>Michael Staub</b> (Kinsley Steel Inc), <b>Ken Thompson</b> (HESS Construction Co., LLC), <b>Cameron MacKenzie</b> (HESS Construction Co., LLC), <b>Joshua Postadan</b> (HESS Construction Co., LLC), <b>HESS PROJECT TEAM</b> , <b>Kinsley Steel Inc</b>	<b>Joshua Postadan</b>	Aug 15, 2024, 9:33 AM EDT
changed the <b>watchers</b> to <b>Lucas Bradley</b> (Kinsley Steel Inc), <b>Michael Staub</b> (Kinsley Steel Inc), <b>Ken Thompson</b> (HESS Construction Co., LLC), <b>Cameron MacKenzie</b> (HESS Construction Co., LLC), <b>HESS PROJECT TEAM</b> , <b>Kinsley Steel Inc</b>	<b>Joshua Postadan</b>	Aug 15, 2024, 9:33 AM EDT
changed the <b>watchers</b> to <b>Lucas Bradley</b> (Kinsley Steel Inc), <b>Michael Staub</b> (Kinsley Steel Inc), <b>HESS PROJECT TEAM</b> , <b>Kinsley Steel Inc</b>	<b>Joshua Postadan</b>	Aug 15, 2024, 9:33 AM EDT
changed the <b>question</b> to <i>Please provide the stud size, quantity, and required embedment for Bearing Plates BP5, BP6, and BP7.</i>	<b>Joshua Postadan</b>	Aug 15, 2024, 9:32 AM EDT
changed the <b>question</b> to <i>Please</i>	<b>Joshua Postadan</b>	Aug 15, 2024, 9:32 AM EDT
changed the <b>question</b> to <i>Please refer to the attached TRC RFI 005 for the question on the drawings and please confirm the stud length or furnish new stud size for joist bearing connection.</i>	<b>Joshua Postadan</b>	Aug 15, 2024, 9:21 AM EDT
<b>Lucas Bradley</b> changed the status from  <b>Draft</b> to  <b>Open</b> Waiting for Submission changed the <b>due date</b> to Aug 20, 2024 set Ball in court to <b>Joshua Postadan</b> (HESS Construction Co., LLC)	<b>Lucas Bradley</b>	Aug 14, 2024, 1:11 PM EDT
Question revised, see new attachment.	<b>Lucas Bradley</b>	Aug 14, 2024, 1:11 PM EDT
<b>Lucas Bradley</b> added a reference to a File <b>RFI 005_KSI - Embed Clarification.pdf</b>	<b>Lucas Bradley</b>	Aug 14, 2024, 1:11 PM EDT



<b>Lucas Bradley</b> removed a reference to a File	<b>Lucas Bradley</b>	Aug 14, 2024, 1:10 PM EDT
<b>Joshua Postadan</b> changed the status from  <b>Open</b> Waiting for Submission to  <b>Draft</b> set Ball in court to <b>Lucas Bradley</b> (Kinsley Steel Inc)	<b>Joshua Postadan</b>	Aug 14, 2024, 10:44 AM EDT
Please have TRC revise their question. Grammar errors are making the question/context unclear. Please ensure all RFI questions make specific reference to drawing #s.	<b>Joshua Postadan</b>	Aug 14, 2024, 10:44 AM EDT
<b>Lucas Bradley</b> added a reference to a File <b>RFI 005_KSI - Embed Clarification.pdf</b>	<b>Lucas Bradley</b>	Aug 9, 2024, 10:00 AM EDT
<b>Lucas Bradley</b> (Kinsley Steel Inc) created this RFI in  <b>Open</b> Waiting for Submission status and set Ball in court to <b>Joshua Postadan</b> (HESS Construction Co., LLC).	<b>Lucas Bradley</b>	Aug 9, 2024, 10:00 AM EDT



## *Request for Information*

---

**Date:** 08/14/2024

**Request No:** KSI 005

**Project:** North East Middle & High School  
**KCI No.:** 242612

**To:** Hess Construction  
**Attn.:** Joshua Postadan  
**Email:** [jpostadan@hessconstruction.com](mailto:jpostadan@hessconstruction.com)

**From:** Mike Staub  
**Phone:** 717-434-6248  
**Email:** [mstaub@kinsleysteel.com](mailto:mstaub@kinsleysteel.com)

---

### **RE: Embed Clarification**

#### ***Request***

Please refer to the attached TRC RFI 005 for the question.

Please confirm the stud length or furnish new stud size for joist bearing connection.

---

***Date Response Requested: ASAP***





217 Ward Circle Brentwood, TN 37027, Phone: 615-661-7979 Fax: 615-661-0644

# REQUEST FOR INFORMATION

## NORTH EAST MIDDLE / HIGH SCHOOL

JOB #24-880

To:	<b>Michael E.</b> <a href="mailto:Staubmstaub@kinsleysteel.com">Staubmstaub@kinsleysteel.com</a>	CLIENT RFI#
Company:	KINSLEY, INC	GC RFI#
		TRC RFI# 005
cc:		RESPONSE 08-13-2024 NEEDED BY

### SUBJECT: Embed clarification

Please refer to the attached file for the question.

Please provide stud size, quantity and required embedment for BP5,BP6, & BP7.

By:	<b>Ruben Flores</b>	Date:	<b>08-09-2024</b>
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### Response:

By:		Date:	
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PLEASE SEND RESPONSE TO: Ruben Flores  
Phone: **325-320-0719**

**THE RAMANNA COMPANIES**

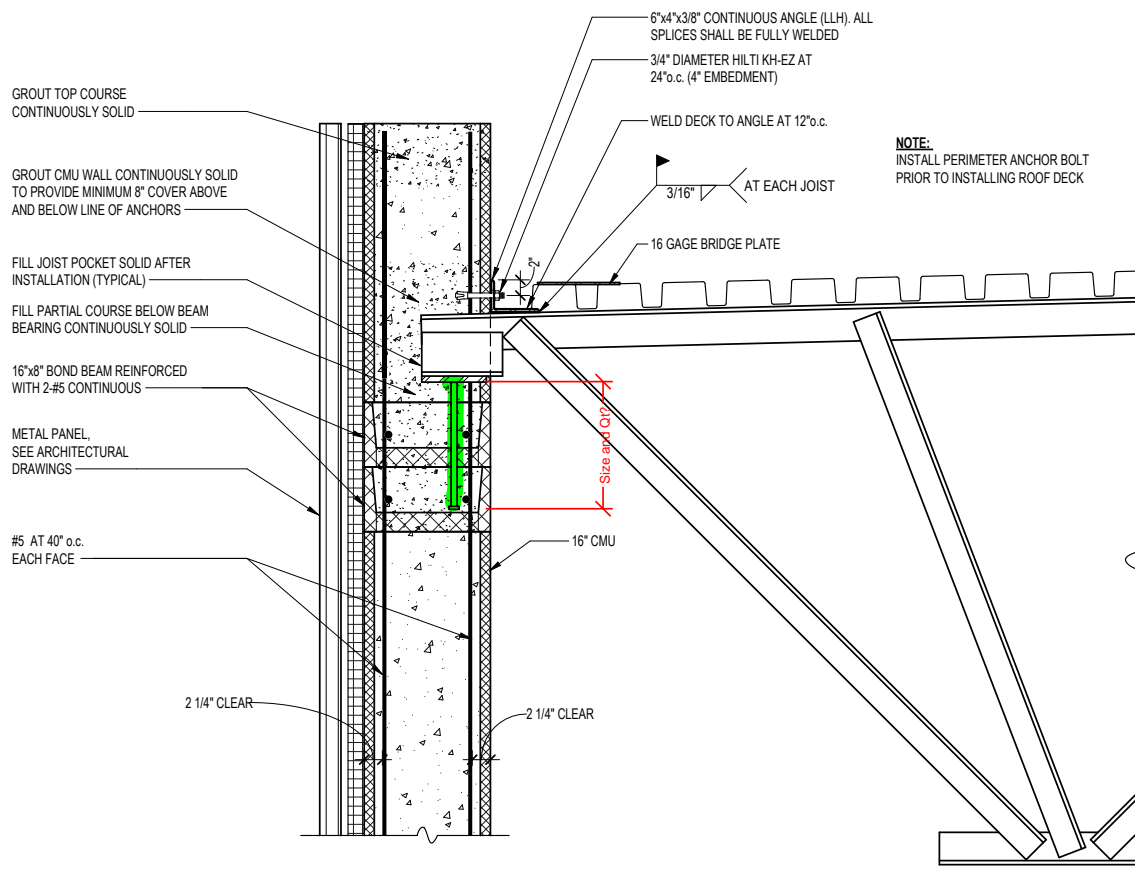
**CONSULTING ENGINEERS**

# BEARING PLATE SCHEDULE

MARK	SIZE	REMARKS
BP1	6"x6"x1/2"	
BP2	6"x8"x5/8"	
BP3	7"x7"x5/8"	
BP4	6"x10"x3/4"	
BP5	8"x10"x3/4"	
BP6	8"x16"x1 1/4"	
BP7	10"x16"x1 1/2"	
BP8	8"x10"x1"	
BP9	10"x12"x3/4"	(2) 3/4" DIAMETER HEADED ANCHOR BOLTS (16" EMBEDMENT)
BP10	6"x14"x1"	(2) 3/4" DIAMETER HEADED ANCHOR BOLTS (16" EMBEDMENT)
BP11	7"x7"x3/4"	(2) 3/4" DIAMETER HEADED STUDS (8" EMBEDMENT)
BP12	6"x10"x3/4"	(2) 3/4" DIAMETER HEADED STUDS (8" EMBEDMENT)

## NOTES:

- REFER TO SHEET S302 FOR BEAM BEARING DETAILS.
- FIRST DIMENSION SHALL BE ORIENTED PARALLEL TO BEAM OR JOIST SPAN UNLESS NOTED OTHERWISE.







## ***Request for Information***

---

**Date:** 08/14/2024

**Request No:** KSI 005

**Project:** North East Middle & High School  
**KCI No.:** 242612

**To:** Hess Construction  
**Attn.:** Joshua Postadan  
**Email:** [jpostadan@hessconstruction.com](mailto:jpostadan@hessconstruction.com)

**From:** Mike Staub  
**Phone:** 717-434-6248  
**Email:** [mstaub@kinsleysteel.com](mailto:mstaub@kinsleysteel.com)

---

### **RE: Embed Clarification**

#### ***Request***

Please refer to the attached TRC RFI 005 for the question.

Please confirm the stud length or furnish new stud size for joist bearing connection.

---

***Date Response Requested: ASAP***

CEI: see following sheets for response.  
Cesar Flores  
08/19/2024



217 Ward Circle Brentwood, TN 37027, Phone: 615-661-7979 Fax: 615-661-0644

# REQUEST FOR INFORMATION

## NORTH EAST MIDDLE / HIGH SCHOOL

JOB #24-880

To:	<b>Michael E.</b> <a href="mailto:Staubmstaub@kinsleysteel.com">Staubmstaub@kinsleysteel.com</a>	CLIENT RFI#
Company:	KINSLEY, INC	GC RFI#
		TRC RFI# 005
cc:		RESPONSE 08-13-2024 NEEDED BY

### SUBJECT: Embed clarification

Please refer to the attached file for the question.

Please provide stud size, quantity and required embedment for BP5,BP6, & BP7.

By:	<b>Ruben Flores</b>	Date:	<b>08-09-2024</b>
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### Response:

By:		Date:	
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PLEASE SEND RESPONSE TO: Ruben Flores  
Phone: **325-320-0719**

**THE RAMANNA COMPANIES**

**CONSULTING ENGINEERS**

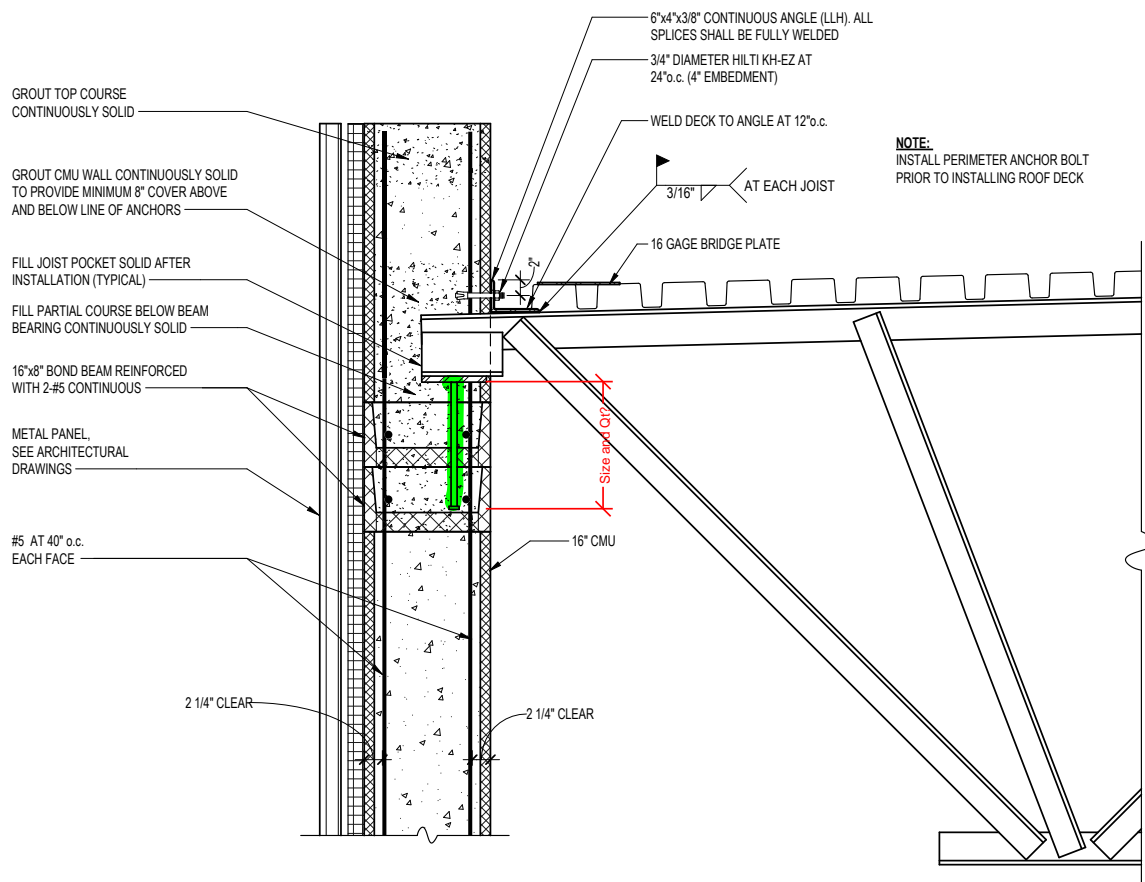


# BEARING PLATE SCHEDULE

MARK	SIZE	REMARKS
BP1	6"x6"x1/2"	
BP2	6"x8"x5/8"	
BP3	7"x7"x5/8"	
BP4	6"x10"x3/4"	
BP5	8"x10"x3/4"	CEI: standard per C/S302
BP6	8"x16"x1 1/4"	CEI: (2) 3/4" Diameter headed anchor bolt (16" embedment)
BP7	10"x16"x1 1/2"	CEI: (2) 3/4" Diameter headed anchor bolt (16" embedment)
BP8	8"x10"x1"	
BP9	10"x12"x3/4"	(2) 3/4" DIAMETER HEADED ANCHOR BOLTS (16" EMBEDMENT)
BP10	6"x14"x1"	(2) 3/4" DIAMETER HEADED ANCHOR BOLTS (16" EMBEDMENT)
BP11	7"x7"x3/4"	(2) 3/4" DIAMETER HEADED STUDS (8" EMBEDMENT)
BP12	6"x10"x3/4"	(2) 3/4" DIAMETER HEADED STUDS (8" EMBEDMENT)

## NOTES:

- REFER TO SHEET S302 FOR BEAM BEARING DETAILS.
- FIRST DIMENSION SHALL BE ORIENTED PARALLEL TO BEAM OR JOIST SPAN UNLESS NOTED OTHERWISE.





## *Request for Information*

---

**Date:** 08/14/2024

**Request No:** KSI 005

**Project:** North East Middle & High School  
**KCI No.:** 242612

**To:** Hess Construction  
**Attn.:** Joshua Postadan  
**Email:** jpostadan@hessconstruction.com

**From:** Mike Staub  
**Phone:** 717-434-6248  
**Email:** [mstaub@kinsleysteel.com](mailto:mstaub@kinsleysteel.com)

**RE: Embed Clarification**

---

### ***Request***

Please refer to the attached TRC RFI 005 for the question.

Please confirm the stud length or furnish new stud size for joist bearing connection.

***Date Response Requested: ASAP***

---

CEI: see following sheets for response.  
Cesar Flores  
08/19/2024

G+P: See response from CEI.

Patrick Byrne 8.19.2024.





217 Ward Circle Brentwood, TN 37027, Phone: 615-661-7979 Fax: 615-661-0644

# REQUEST FOR INFORMATION

## NORTH EAST MIDDLE / HIGH SCHOOL

JOB #24-880

To:	<b>Michael E.</b> <a href="mailto:Staubmstaub@kinsleysteel.com">Staubmstaub@kinsleysteel.com</a>	CLIENT RFI#
Company:	KINSLEY, INC	GC RFI#
		TRC RFI# 005
cc:		RESPONSE 08-13-2024 NEEDED BY

### SUBJECT: Embed clarification

Please refer to the attached file for the question.

Please provide stud size, quantity and required embedment for BP5,BP6, & BP7.

By:	<b>Ruben Flores</b>	Date:	<b>08-09-2024</b>
-----	---------------------	-------	-------------------

### Response:

By:		Date:	
-----	--	-------	--

PLEASE SEND RESPONSE TO: Ruben Flores  
Phone: **325-320-0719**

**THE RAMANNA COMPANIES**

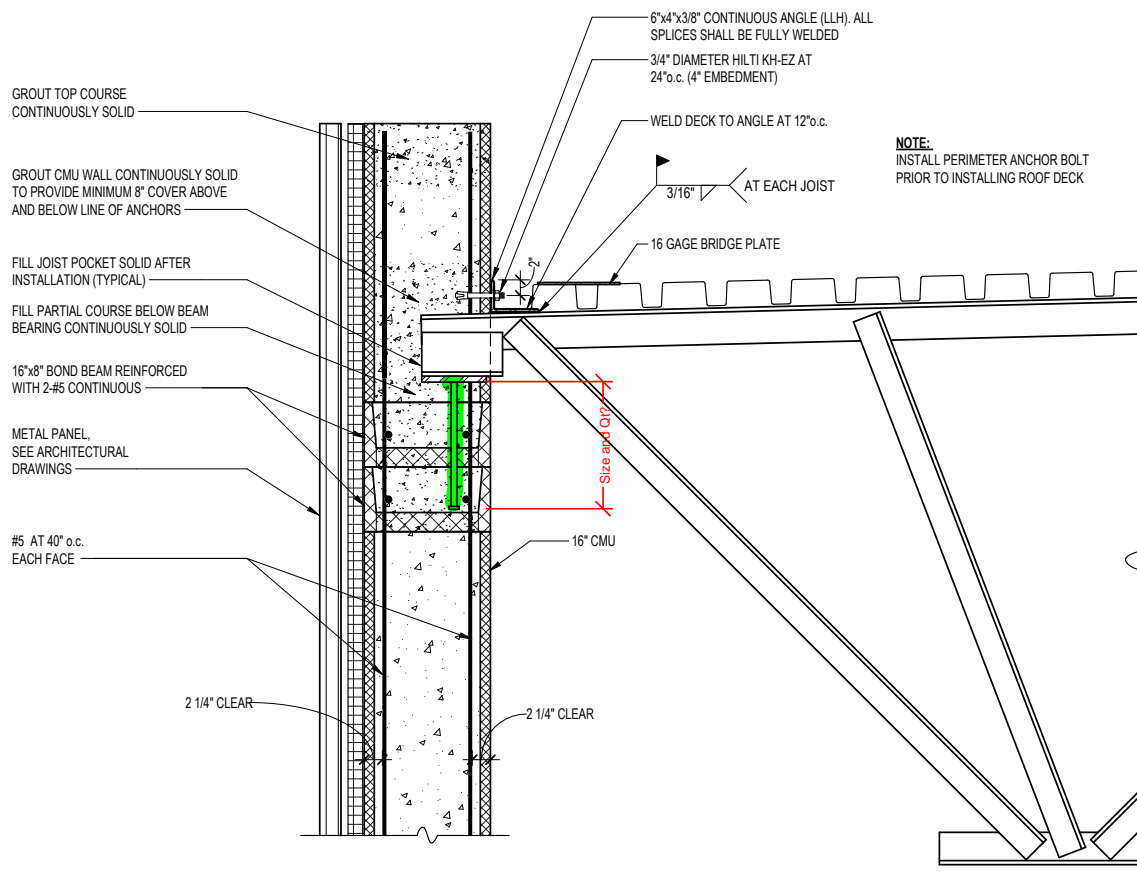
**CONSULTING ENGINEERS**

# BEARING PLATE SCHEDULE

MARK	SIZE	REMARKS
BP1	6"x6"x1/2"	
BP2	6"x8"x5/8"	
BP3	7"x7"x5/8"	
BP4	6"x10"x3/4"	
BP5	8"x10"x3/4"	CEI: standard per C/S302
BP6	8"x16"x1 1/4"	CEI: (2) 3/4" Diameter headed anchor bolt (16" embedment)
BP7	10"x16"x1 1/2"	CEI: (2) 3/4" Diameter headed anchor bolt (16" embedment)
BP8	8"x10"x1"	
BP9	10"x12"x3/4"	(2) 3/4" DIAMETER HEADED ANCHOR BOLTS (16" EMBEDMENT)
BP10	6"x14"x1"	(2) 3/4" DIAMETER HEADED ANCHOR BOLTS (16" EMBEDMENT)
BP11	7"x7"x3/4"	(2) 3/4" DIAMETER HEADED STUDS (8" EMBEDMENT)
BP12	6"x10"x3/4"	(2) 3/4" DIAMETER HEADED STUDS (8" EMBEDMENT)

## NOTES:

- REFER TO SHEET S302 FOR BEAM BEARING DETAILS.
- FIRST DIMENSION SHALL BE ORIENTED PARALLEL TO BEAM OR JOIST SPAN UNLESS NOTED OTHERWISE.





RFI detail

#022 Column Size Clarification



Status	<div><div></div>Closed</div>
Created on	Aug 20, 2024 by <b>Lucas Bradley</b> (Kinsley Steel Inc)
RFI type	Structural RFI REV
Ball in court	<b>Lucas Bradley</b> (Kinsley Steel Inc)
Answered	Aug 28, 2024 by <b>Patrick Byrne</b> (Grimm and Parker)

Question

Please refer to the attachment titled "RFI 012\_KSI..." for the question locations:

- [Q1] Please verify the column sizes on S100C.
- [Q2] Please provide the missing column sizes on S101F.
- [Q3] Please provide correct grid label on S201.
- [Q4] Please verify the grid label on S201.

Official response

Patrick Byrne (Grimm and Parker): See attached RFI response from CEI.  
By **Patrick Byrne** (Grimm and Parker) - Aug 28, 2024, 9:30 PM EDT

References and Attachments

Files (3)

2024 08 28- NEMHS- Structural RFI-022.pdf

RFI 012\_KSI - Column Size Clarification.pdf





RFI 22 Column Size Clarification Response.pdf


Impact

Cost impact	No
-------------	----

Schedule impact	No
Other attributes	
Priority	Normal
Discipline	Structural
Category	-
Location	Area C, Area F
Location details	-
External id	-
Co-reviewer(s)	
Posted to Drawings/ Specifications	YES
Trade's RFI No.	12



Activities	By	At
<b>Patrick Byrne</b> added a reference to a File <b>2024 08 28- NEMHS-Structural RFI-022.pdf</b>	<b>Patrick Byrne</b>	Aug 28, 2024, 9:30 PM EDT
<b>Patrick Byrne</b> added a reference to a File <b>RFI 22 Column Size Clarification Response.pdf</b>	<b>Patrick Byrne</b>	Aug 28, 2024, 9:30 PM EDT
<b>Patrick Byrne</b> changed the status from  <b>Open</b> In Review to  <b>Open</b> Answered set Ball in court to <b>Joshua Postadan</b> (HESS Construction Co., LLC)	<b>Patrick Byrne</b>	Aug 28, 2024, 9:30 PM EDT
<b>Patrick Byrne</b> added a response: See attached RFI response from CEI.	<b>Patrick Byrne</b>	Aug 28, 2024, 9:30 PM EDT
<b>Cesar Flores</b> (Columbia Engineering) response was submitted by <b>Patrick Byrne</b> : See attached RFI response.	<b>Patrick Byrne</b>	Aug 28, 2024, 9:30 PM EDT
changed the <b>due date</b> to Aug 28, 2024	<b>Patrick Byrne</b>	Aug 27, 2024, 10:40 PM EDT
<b>Joshua Postadan</b> please revise due date to 8/29/2024.	<b>Patrick Byrne</b>	Aug 22, 2024, 4:14 PM EDT
<b>Joshua Postadan</b> changed the status from  <b>Open</b> Waiting for Submission to  <b>Open</b> In Review changed the <b>due date</b> to Aug 25, 2024 set Ball in court to <b>Patrick Byrne</b> (Grimm and Parker), <b>Cesar Flores</b> (Columbia Engineering) changed the <b>ID</b> to 022	<b>Joshua Postadan</b>	Aug 22, 2024, 2:55 PM EDT
changed the <b>schedule impact</b> to <i>No</i>	<b>Joshua Postadan</b>	Aug 22, 2024, 2:55 PM EDT
changed the <b>cost impact</b> to <i>No</i>	<b>Joshua Postadan</b>	Aug 22, 2024, 2:55 PM EDT
<b>Joshua Postadan</b> added a reference to a File <b>RFI 012_KSI - Column Size Clarification.pdf</b>	<b>Joshua Postadan</b>	Aug 22, 2024, 2:55 PM EDT
<b>Joshua Postadan</b> removed a reference to a File	<b>Joshua Postadan</b>	Aug 22, 2024, 2:55 PM EDT
<b>Joshua Postadan</b> added a reference to a File <b>RFI 012_KSI - Column Size Clarification.pdf</b>	<b>Joshua Postadan</b>	Aug 22, 2024, 2:50 PM EDT
<b>Lucas Bradley</b> removed a reference to a File	<b>Lucas Bradley</b>	Aug 22, 2024, 2:50 PM EDT
changed the <b>Posted to Drawings/Specifications</b> to <i>YES</i>	<b>Joshua Postadan</b>	Aug 22, 2024, 2:38 PM EDT

changed the <b>watchers</b> to <b>HESS PROJECT TEAM, Kinsley Steel Inc</b>	<b>Joshua Postadan</b>	Aug 22, 2024, 2:27 PM EDT
changed the <b>question</b> to <i>Please refer to the attachment titled "RFI 012_KSI..." for the question locations: [Q1] Please verify the column sizes on S100C. [Q2] Please provide the missing column sizes on S101F. [Q3] Please provide correct grid label on S201. [Q4] Please verify the grid label on S201.</i>	<b>Joshua Postadan</b>	Aug 22, 2024, 2:26 PM EDT
changed the <b>question</b> to <i>Please refer to the attachment titled "RFI 012_KSI..." for the question locations. Q1: Please verify the column sizes on S100C. Q2: Please provide the missing column sizes on S101F. Q3: Please provide correct grid label on S201. Q4: Please verify the grid label on S201.</i>	<b>Joshua Postadan</b>	Aug 22, 2024, 2:22 PM EDT
<b>Lucas Bradley</b> added a reference to a File <b>RFI 012_KSI - Column Size Clarification.pdf</b>	<b>Lucas Bradley</b>	Aug 20, 2024, 4:25 PM EDT
<b>Lucas Bradley</b> (Kinsley Steel Inc) created this RFI in  <b>Open</b> Waiting for Submission status and set Ball in court to <b>Joshua Postadan</b> (HESS Construction Co., LLC).	<b>Lucas Bradley</b>	Aug 20, 2024, 4:25 PM EDT





## *Request for Information*

---

**Date:** 08/20/2024

**Request No:** KSI 012

**Project:** North East Middle & High School  
**KCI No.:** 242612

**To:** Hess Construction  
**Attn.:** Joshua Postadan  
**Email:** jpostadan@hessconstruction.com

**From:** Mike Staub  
**Phone:** 717-434-6248  
**Email:** [mstaub@kinsleysteel.com](mailto:mstaub@kinsleysteel.com)

---

### **RE: Column Size Clarification**

#### ***Request***

Please refer to the attached TRC RFI 009 for the question locations.

Q1: Please verify the column sizes on S100C.

Q2: Please provide the missing column sizes on S101F.

Q3: Please provide correct grid label on S201.

Q4: Please verify the grid label on S201.

---

#### ***Date Response Requested: ASAP***

CEI: See responses on following sheets.  
See attached updated Structural drawings: S100C, S101F, S201

Cesar Flores  
08/28/2024

G+P:  
See responses from CEI.

Patrick Byrne 8.28.2024



217 Ward Circle Brentwood, TN 37027, Phone: 615-661-7979 Fax: 615-661-0644

# REQUEST FOR INFORMATION

## NORTH EAST MIDDLE / HIGH SCHOOL

JOB #24-880

To:	<b>Michael E. Staubmstaub@kinsleysteel.com</b>	CLIENT RFI#
Company:	<b>KINSLEY, INC</b>	GC RFI#
		TRC RFI# <b>009</b>
cc:		RESPONSE <b>08-22-2024</b> NEEDED BY

### SUBJECT: Column size clarification

Please refer to the attached files for the question.

- Q9.1: Please verify the column size.  
Q9.2: Please provide the missing column sizes.  
Q9.3: Please provide correct grid label.  
Q9.4: Please verify the grid label.

By:	<b>Ruben Flores</b>	Date:	<b>08-20-2024</b>
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### Response:

CEI: See responses on following sheets.  
See attached updated Structural drawings: S100C, S101F, S201

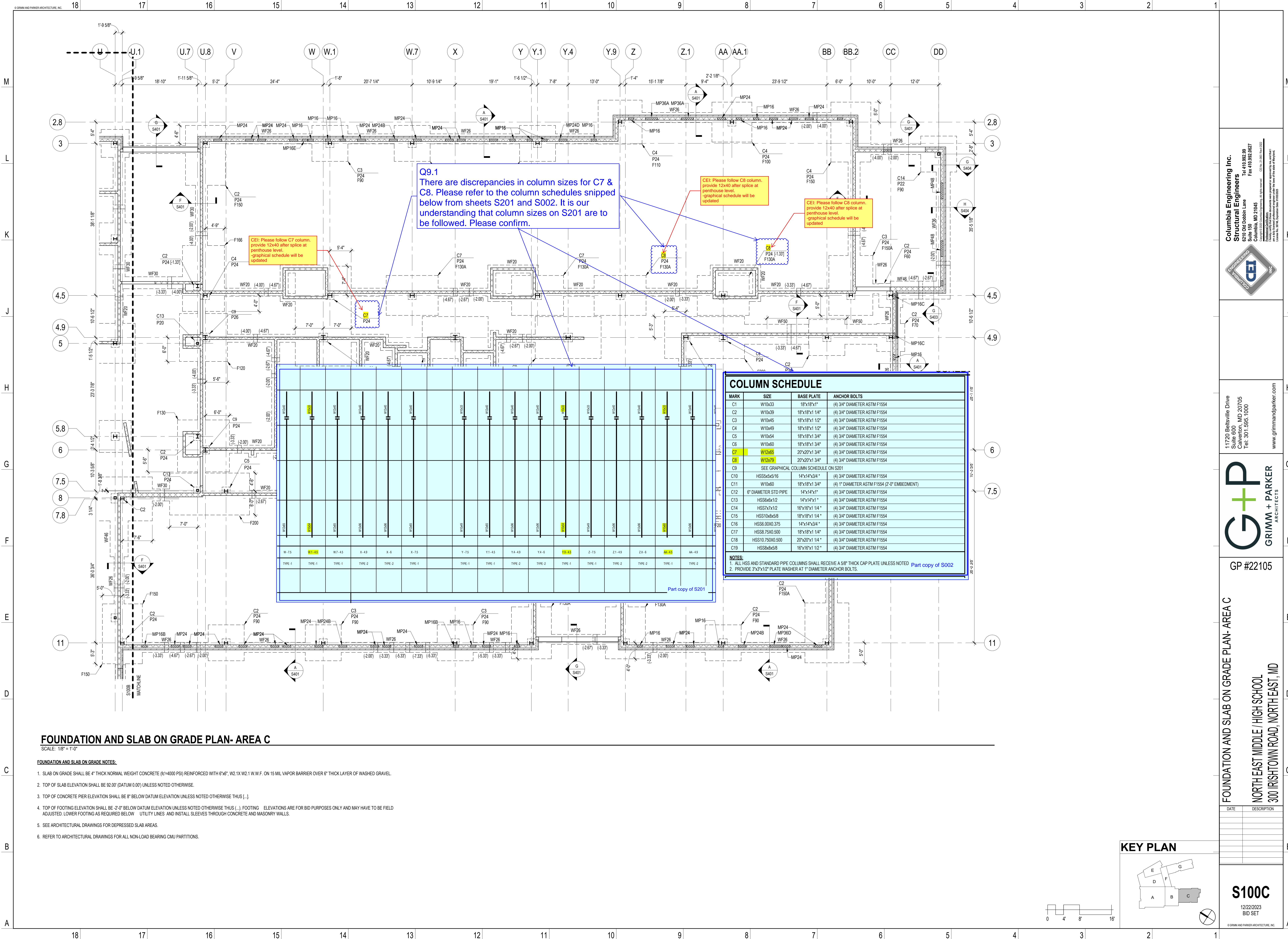
Cesar Flores  
08/28/2024

By:		Date:	
-----	--	-------	--

PLEASE SEND RESPONSE TO: Ruben Flores  
Phone: **325-320-0719**

**THE RAMANNA COMPANIES**

**CONSULTING ENGINEERS**



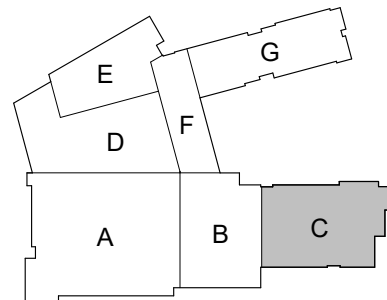
FOUNDATION AND SLAB ON GRADE PLAN- AREA C

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

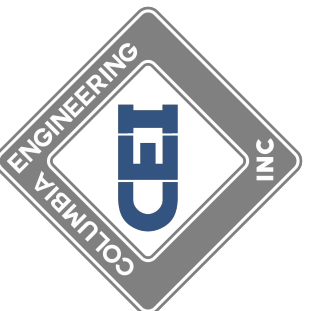
FOUNDATION AND SLAB ON GRADE NOTES:

- 1. SLAB ON GRADE SHALL BE 4" THICK NORMAL WEIGHT CONCRETE (fc=4000 PSI) REINFORCED WITH 6"x6", W2.1X W2.1 W.W.F. ON 15 MIL VAPOR BARRIER OVER 6" THICK LAYER OF WASHED GRAVEL.
- 2. TOP OF SLAB ELEVATION SHALL BE 92.00' (DATUM 0.00') UNLESS NOTED OTHERWISE.
- 3. TOP OF CONCRETE PIER ELEVATION SHALL BE 8" BELOW DATUM ELEVATION UNLESS NOTED OTHERWISE THUS [...].
- 4. TOP OF FOOTING ELEVATION SHALL BE 2'-0" BELOW DATUM ELEVATION UNLESS NOTED OTHERWISE THUS [...]. FOOTING ELEVATIONS ARE FOR BID PURPOSES ONLY AND MAY HAVE TO BE FIELD ADJUSTED. LOWER FOOTING AS REQUIRED BELOW UTILITY LINES AND INSTALL SLEEVES THROUGH CONCRETE AND MASONRY WALLS.
- 5. SEE ARCHITECTURAL DRAWINGS FOR DEPRESSED SLAB AREAS.
- 6. REFER TO ARCHITECTURAL DRAWINGS FOR ALL NON-LOAD BEARING CMU PARTITIONS.

KEY PLAN



Columbia Engineering Inc.



11720 Beltsville Drive  
Suite 600  
Calverton, MD 20705  
Tel: 301.595.1000



GP #22105

FOUNDATION AND SLAB ON GRADE PLAN- AREA C

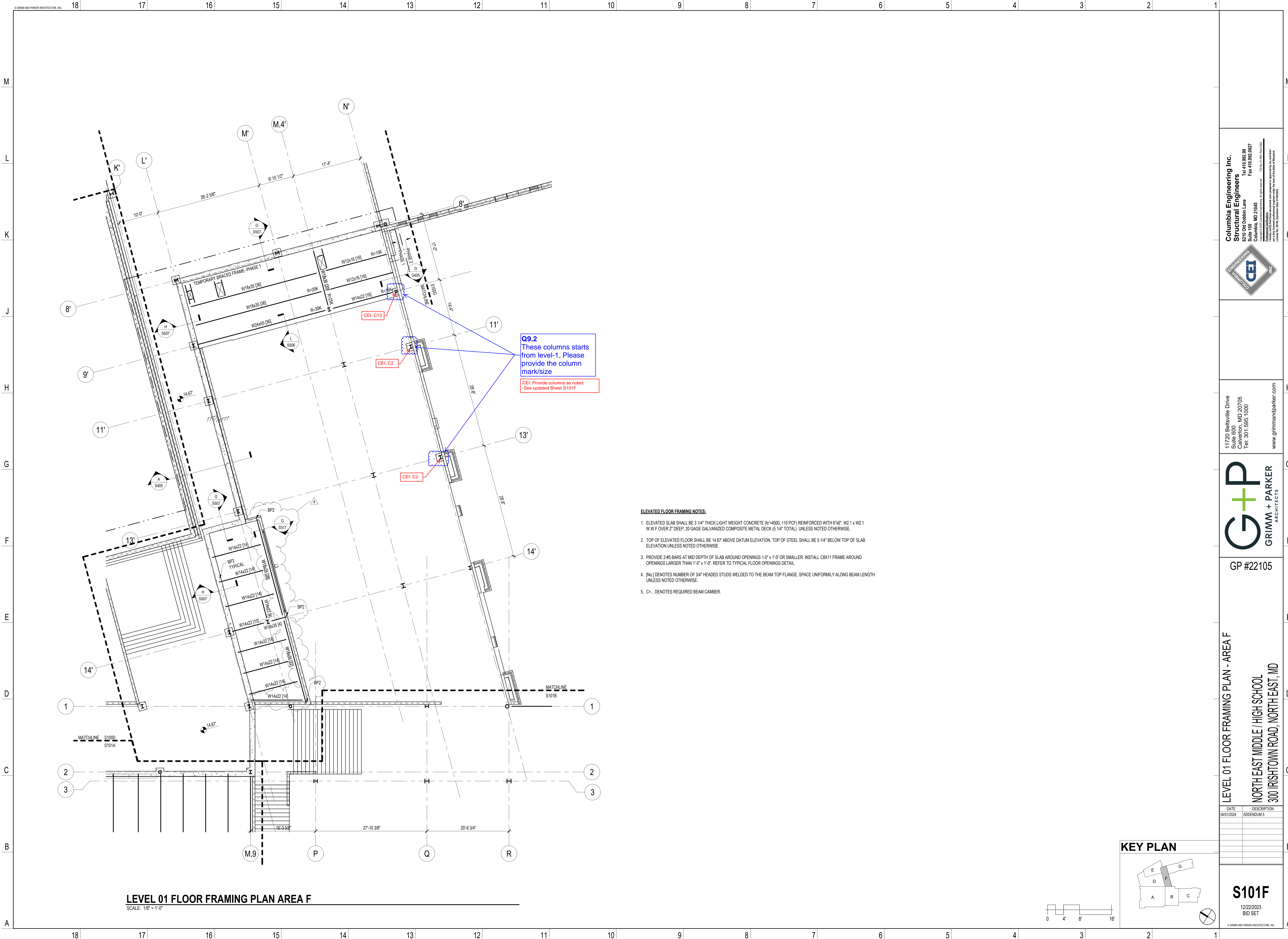
NORTH EAST MIDDLE / HIGH SCHOOL  
300 IRISTOWN ROAD, NORTH EAST, MD

DATE	DESCRIPTION

S100C  
12/22/2023  
BID SET

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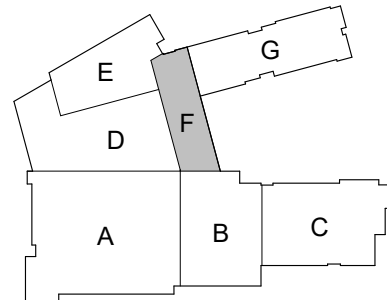
LEVEL 01 FLOOR FRAMING PLAN AREA F

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

ELEVATED FLOOR FRAMING NOTES:

1. ELEVATED SLAB SHALL BE 3 1/4" THICK LIGHT WEIGHT CONCRETE (fc=4000, 110 PCF) REINFORCED WITH 6"x6", W2.1 x W2.1 W.W.F OVER 2" DEEP, 20 GAGE GALVANIZED COMPOSITE METAL DECK (5 1/4" TOTAL), UNLESS NOTED OTHERWISE.
2. TOP OF ELEVATED FLOOR SHALL BE 14.67' ABOVE DATUM ELEVATION. TOP OF STEEL SHALL BE 5 1/4" BELOW TOP OF SLAB ELEVATION UNLESS NOTED OTHERWISE.
3. PROVIDE 2-#5 BARS AT MID DEPTH OF SLAB AROUND OPENINGS 1'-0" x 1'-0" OR SMALLER. INSTALL C8X11 FRAME AROUND OPENINGS LARGER THAN 1'-0" x 1'-0". REFER TO TYPICAL FLOOR OPENINGS DETAIL.
4. [No.] DENOTES NUMBER OF 3/4" HEADED STUDS WELDED TO THE BEAM TOP FLANGE. SPACE UNIFORMLY ALONG BEAM LENGTH UNLESS NOTED OTHERWISE.
5. C=... DENOTES REQUIRED BEAM CAMBER.

KEY PLAN



Columbia Engineering Inc.



11720 Beltsville Drive  
Suite 600  
Calverton, MD 20705  
Tel: 301.595.1000



GP #22105

LEVEL 01 FLOOR FRAMING PLAN - AREA F  
NORTH EAST MIDDLE / HIGH SCHOOL  
300 IRISHTOWN ROAD, NORTH EAST, MD

DATE	DESCRIPTION
04/01/2024	ADDENDUM 5

S101F

12/22/2023  
BID SET

© GRIMM AND PARKER ARCHITECTURE, INC.

COLUMN SCHEDULE																										
ELEVATION																										
PH ROOF	SEE ROOF PLAN FOR ELEVATION																									
LEVEL 3	44.00'	W10x33	W12x40	W12x40	W10x33	W10x33	W12x40	W12x40	W12x40	W10x33	W12x40	W12x40	W12x40		W10x33	W12x40	W12x40	W12x40	W10x33	W10x33	W12x40	W12x40	W12x40	W10x33		
LEVEL 2	29.33'																									
LEVEL 1	14.67'																									
LEVEL 0	0.00'	W10x49	W12x46	W12x46	W10x54	W10x54	W12x46	W12x46	W12x46	W10x54	W12x46	W12x46	W12x46		W10x49	W12x46	W12x46	W12x46	W10x54	W10x49	W12x46	W12x46	W12x46	W10x60	W12x46	W10x54
MARK		U-8-4.5	U-8-4.9	U-8-6	V-7.5	VX-4.5	W-4.9	W-6	W-7.5	W-1-4.5	W-7-4.5	X-4.9	X-6	X-7.5	Y-7.5	Y-1-4.5	Y-4-4.9	Y-4-6	Y-9-4.5	Z-7.5	Z-1-4.9	ZX-6	AA-4.5	AA-4.9	AA-6	AA-7.5
⊕ SPLICE TYPE		TYPE-1	TYPE-2	TYPE-2	TYPE-1	TYPE-1	TYPE-2	TYPE-2	TYPE-1	TYPE-1	TYPE-1	TYPE-2	TYPE-2	TYPE-1	TYPE-1	TYPE-1	TYPE-2	TYPE-2	TYPE-1	TYPE-1	TYPE-2	TYPE-2	TYPE-1	TYPE-2	TYPE-2	TYPE-1

CEI: no longer used  
-Removed from schedule  
-see updated S201

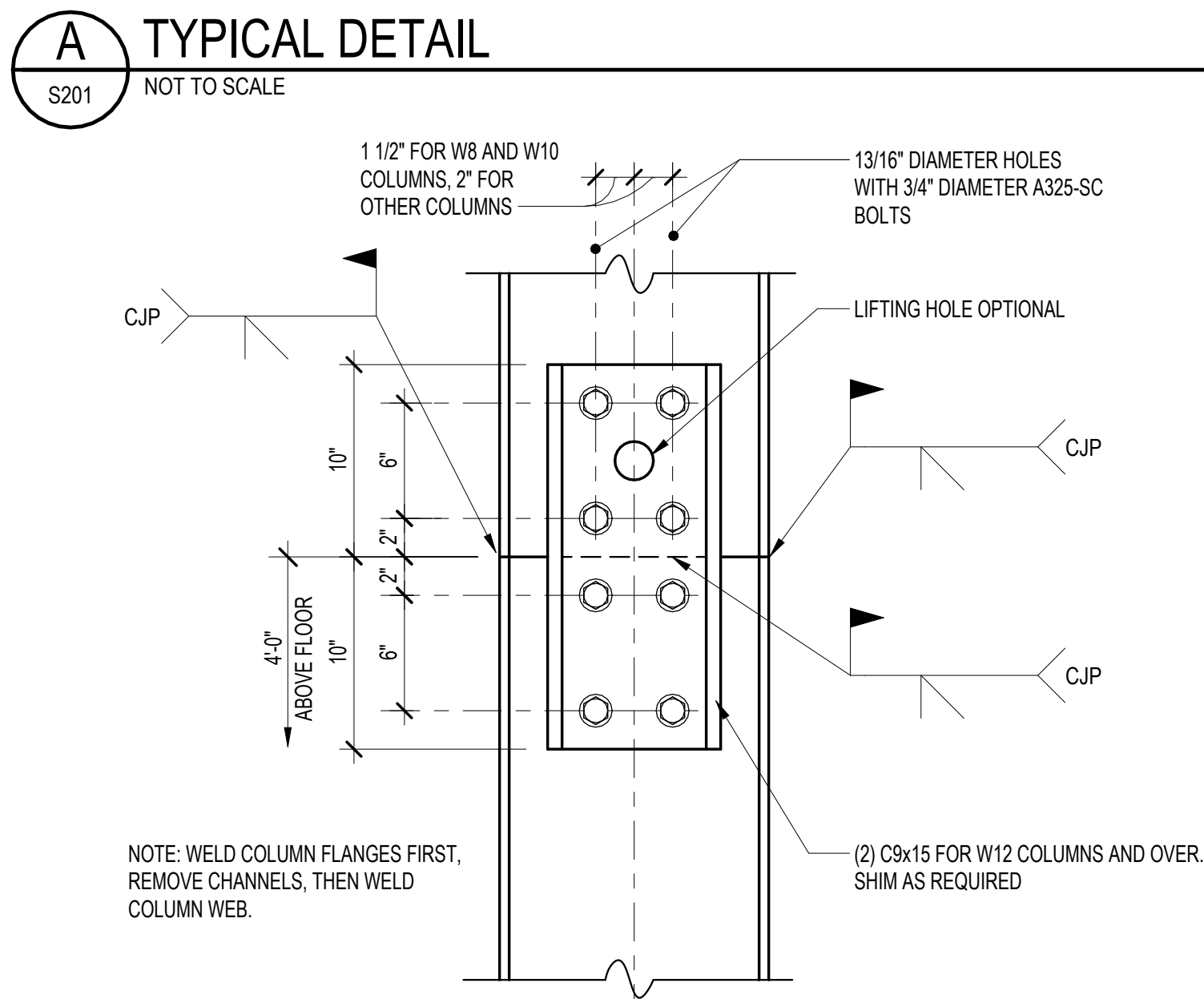
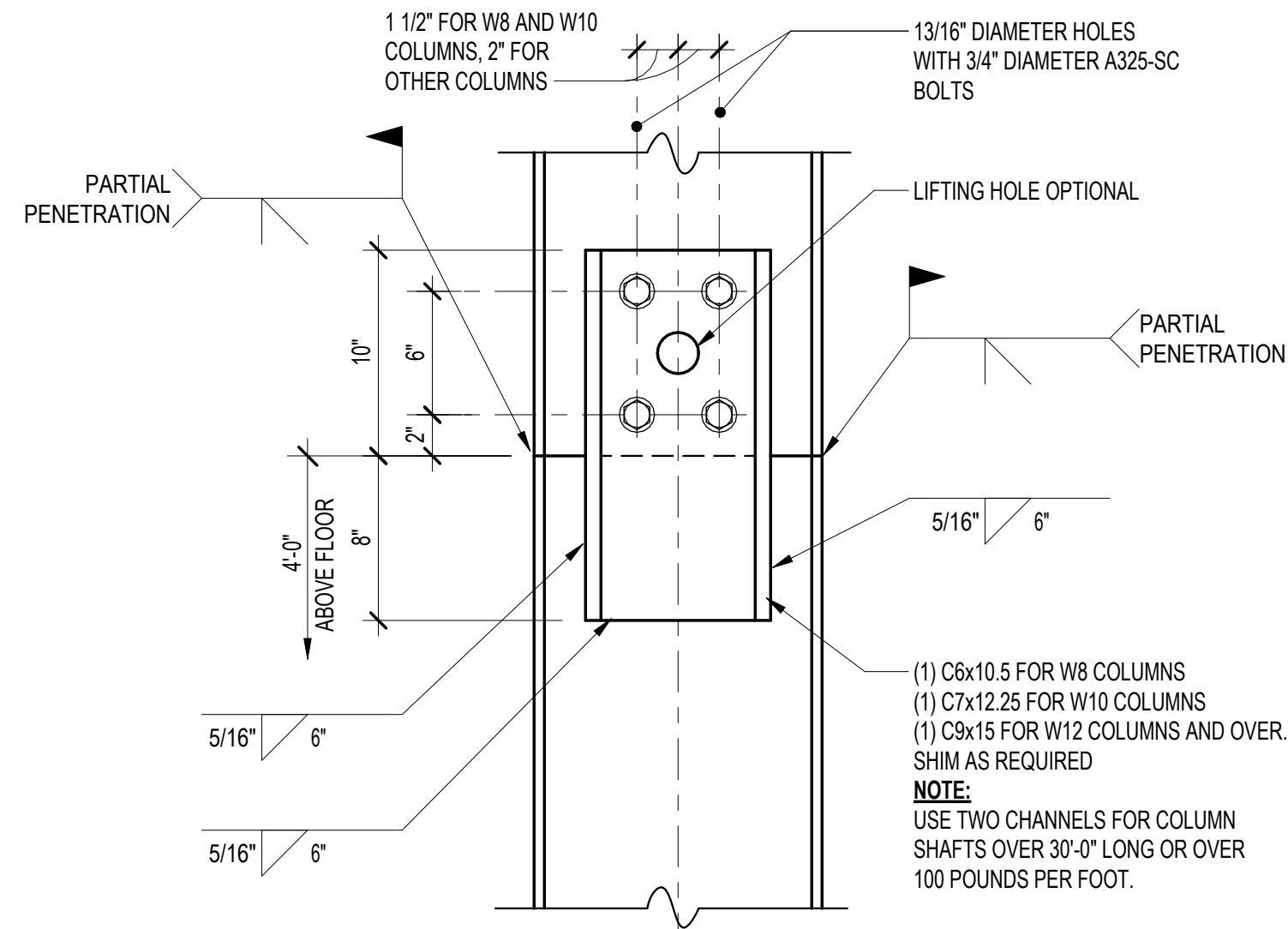
CEI: Z-1-6  
-see updated S201

Q9.3  
We have not found V.X grid in neither  
the structural nor the arch. drawings.  
Please provide the correct grid label.

Q9.4  
We have not found Z.X grid in neither  
structural nor the arch. drawings. We  
believe it should be labeled  
'Z.1'.Please confirm.

COLUMN FOOTING SCHEDULE CONTINUED

ELEVATION																										
HS PH ROOF																										
LEVEL 4		W10x33	W10x33	W10x33	W10x33	W10x33	W10x33	W10x33	W10x33	W10x33																
LEVEL 3																										
LEVEL 2																										
LEVEL 1		W10x49	W10x60	W10x60	W10x54	W10x54	W10x54	W10x60	W10x60	W10x60																
MARK		N-1'-2"	P'-2"	Q'-2"	R'-2"	S'-2"	T'-2"	U'-2"	V'-2"	W'-2"	X'-2"															
⊕ SPLICE TYPE		TYPE-2	TYPE-2	TYPE-2	TYPE-2	TYPE-2	TYPE-2	TYPE-2	TYPE-2	TYPE-2																



Columbia Engineering Inc.  
Structural Engineers  
820 Old Dobbin Lane  
Columbia, MD 21045  
Tel: 410.852.89  
Fax: 410.852.867  
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Tel: 301.595.1000  
www.grimmandparker.com



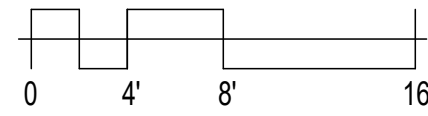
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COLUMN SCHEDULE  
NORTH EAST MIDDLE / HIGH SCHOOL  
300 IRISHTOWN ROAD, NORTH EAST, MD

DATE	DESCRIPTION

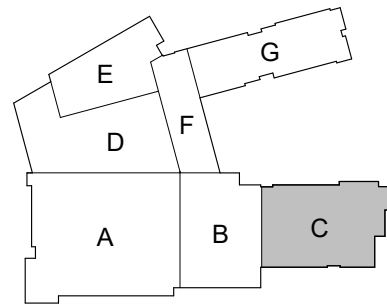
S201  
12/22/2023  
BID SET  
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SCALE: 1/8" = 1'-0"

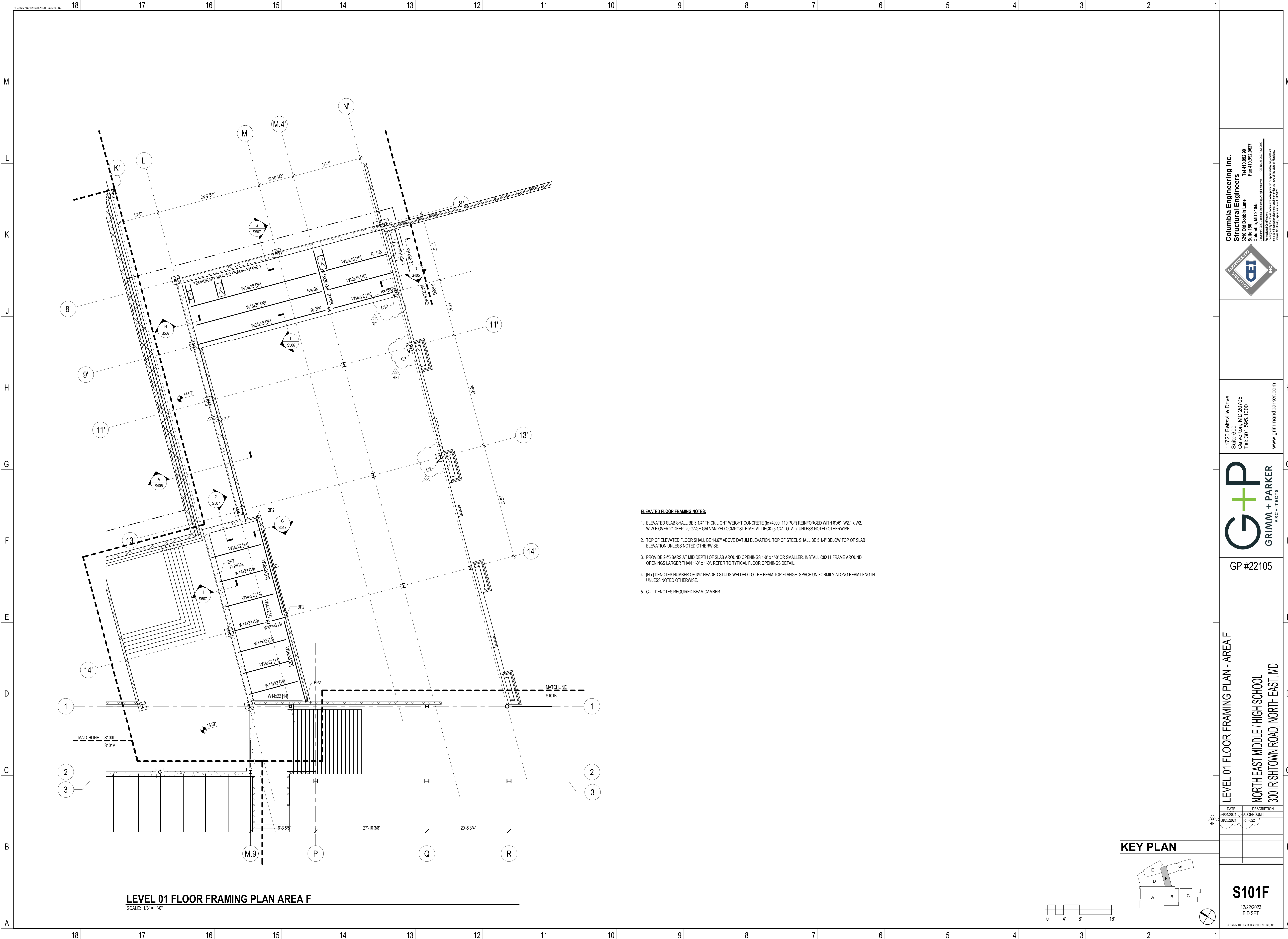
1. SLAB ON GRADE SHALL BE 4" THICK NORMAL WEIGHT CONCRETE (fc=4000 PSI) REINFORCED WITH #6@. W2 1X12 W.W.F. ON 15 MIL VAPOR BARRIER OVER 6" THICK LAYER OF WASHED GRAVEL.
2. TOP OF SLAB ELEVATION SHALL BE 92.00' (DATUM 0.00') UNLESS NOTED OTHERWISE.
3. TOP OF CONCRETE PIER ELEVATION SHALL BE 6" BELOW DATUM ELEVATION UNLESS NOTED OTHERWISE THUS [ \_ ].
4. TOP OF FOOTING ELEVATION SHALL BE 2'-0" BELOW DATUM ELEVATION UNLESS NOTED OTHERWISE THUS ( \_ ). FOOTING ELEVATIONS ARE FOR BID PURPOSES ONLY AND MAY HAVE TO BE FIELD ADJUSTED. LOWER FOOTING AS REQUIRED BELOW UTILITY LINES AND INSTALL SLEEVES THROUGH CONCRETE AND MASONRY WALLS.
5. SEE ARCHITECTURAL DRAWINGS FOR DEPRESSED SLAB AREAS.
6. REFER TO ARCHITECTURAL DRAWINGS FOR ALL NON-LOAD BEARING CMU PARTITIONS.



NORTHEAST MIDDLE / HIGH SCHOOL  
300 IRISHTOWN ROAD, NORTHEAST, MD

**S100C**  
12/22/2023  
BID SET





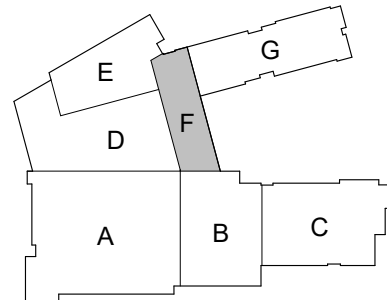
LEVEL 01 FLOOR FRAMING PLAN AREA F

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

ELEVATED FLOOR FRAMING NOTES:

- ELEVATED SLAB SHALL BE 3 1/4" THICK LIGHT WEIGHT CONCRETE (fc=4000, 110 PCF) REINFORCED WITH 6"x6", W2.1 x W2.1 W.W.F OVER 2" DEEP, 20 GAGE GALVANIZED COMPOSITE METAL DECK (5 1/4" TOTAL), UNLESS NOTED OTHERWISE.
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- PROVIDE 2-#5 BARS AT MID DEPTH OF SLAB AROUND OPENINGS 1'-0" x 1'-0" OR SMALLER. INSTALL C8X11 FRAME AROUND OPENINGS LARGER THAN 1'-0" x 1'-0". REFER TO TYPICAL FLOOR OPENINGS DETAIL.
- [No.] DENOTES NUMBER OF 3/4" HEADED STUDS WELDED TO THE BEAM TOP FLANGE. SPACE UNIFORMLY ALONG BEAM LENGTH UNLESS NOTED OTHERWISE.
- C=... DENOTES REQUIRED BEAM CAMBER.

KEY PLAN



DATE	DESCRIPTION
04/01/2024	ADDENDUM 5
08/28/2024	RFI-022

S101F

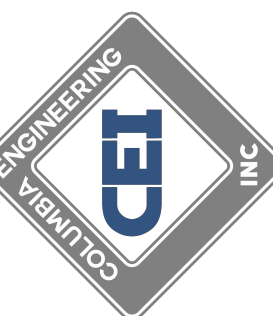
12/22/2023  
BID SET

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Columbia Engineering Inc.

Structural Engineers  
6210 Old Dobbin Lane  
Columbia, MD 21045

Tel: 410.862.89  
Fax: 410.862.867  
C.S. No. 21-081 (Jan 2022)



11720 Beltsville Drive  
Suite 600  
Calverton, MD 20705  
Tel: 301.595.1000

www.grimmandparker.com



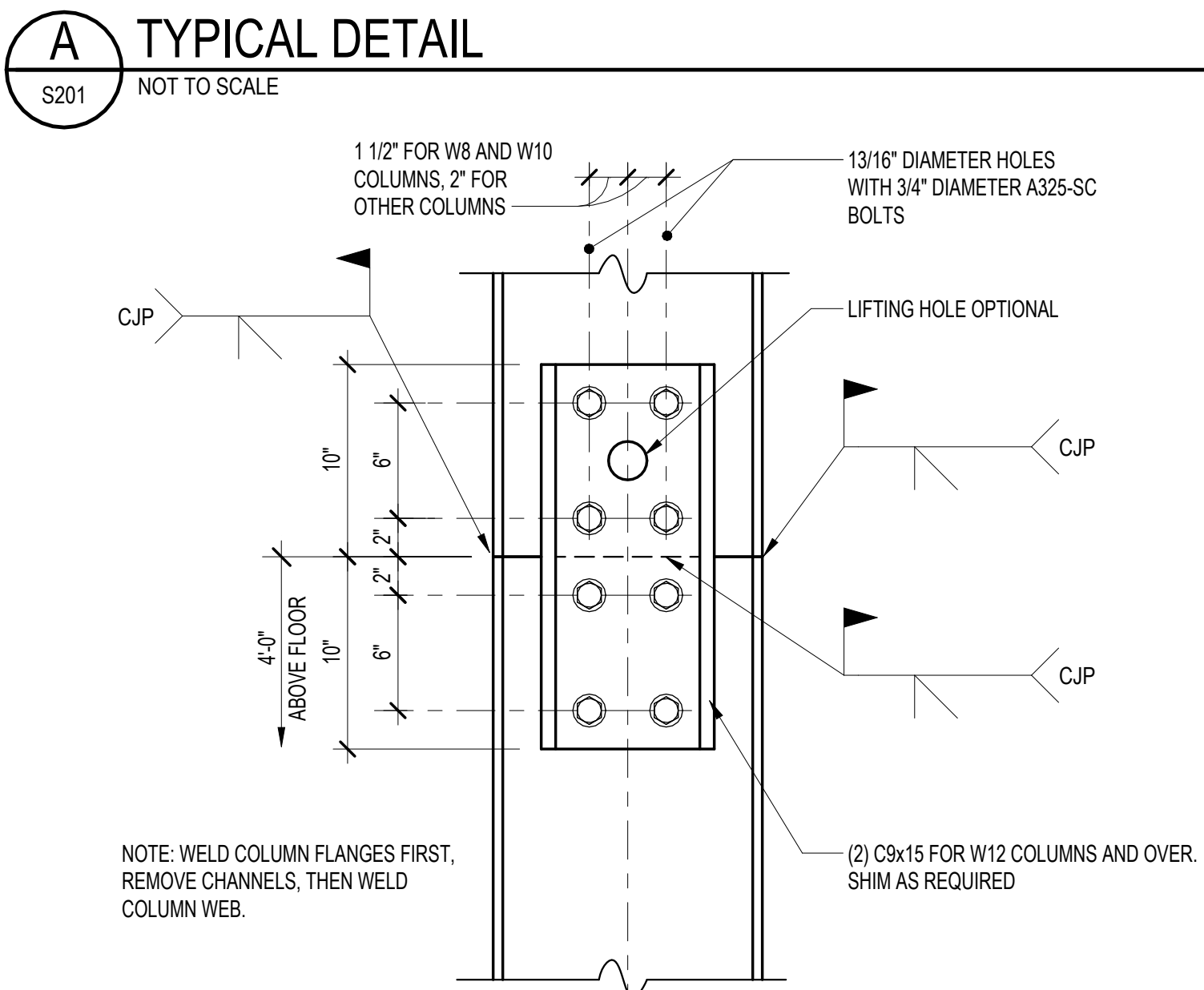
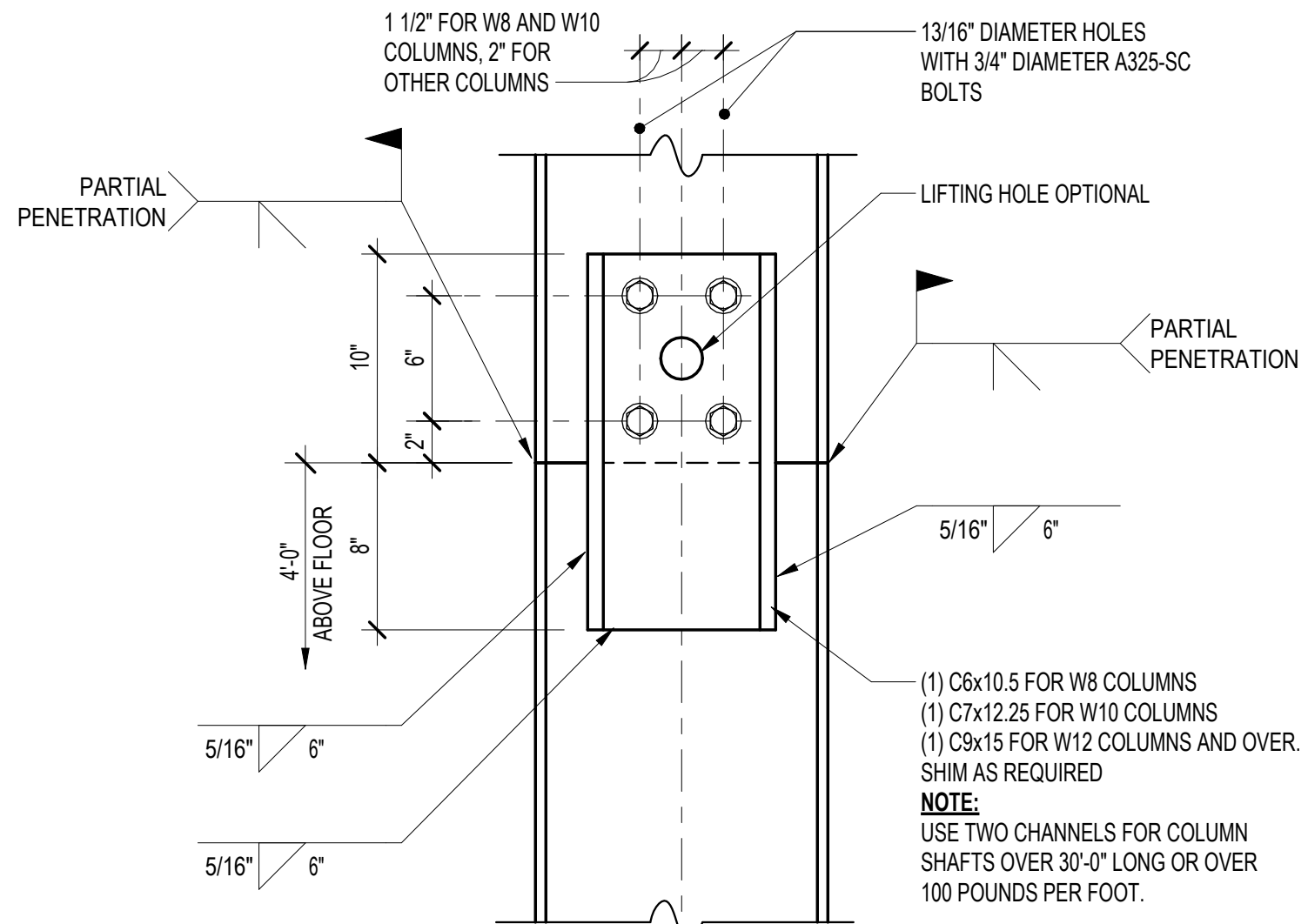
GP #22105

LEVEL 01 FLOOR FRAMING PLAN - AREA F

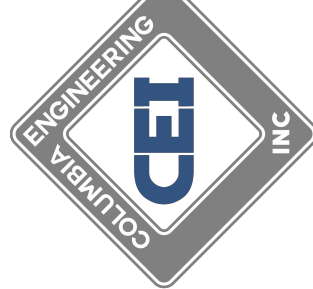
NORTH EAST MIDDLE / HIGH SCHOOL  
300 IRISHTOWN ROAD, NORTH EAST, MD

COLUMN SCHEDULE																										
ELEVATION																										
PH ROOF	SEE ROOF PLAN FOR ELEVATION																									
LEVEL 3	44.00'	W10x33	W12x40	W12x40	W10x33		W12x40	W12x40	W12x40	W12x40	W12x40	W12x40	W12x40	W10x33	W12x40	W12x40	W12x40	W12x40	W12x40	W10x33	W12x40	W12x40	W12x40	W12x40	W10x33	
LEVEL 2	29.33'																									
LEVEL 1	14.67'																									
LEVEL 0	0.00'	W10x49	W12x65	W12x65	W10x54		W12x65	W12x65	W12x65	W12x65	W12x65	W12x65	W12x65	W10x49	W12x65	W12x65	W12x65	W12x65	W12x65	W10x49	W12x65	W12x65	W12x65	W12x65	W10x54	
MARK		U-8-4.5	U-8-4.9	U-8-6	V-7.5		W-4.9	W-6	W-7.5	W1-4.5	W7-4.5	X-4.9	X-6	X-7.5	Y-7.5	Y1-4.5	Y4-4.9	Y4-6	Y9-4.5	Z-7.5	Z1-4.9	Z1-6	AA-4.5	AA-4.9	AA-6	AA-7.5
⚡ SPLICE TYPE		TYPE-1	TYPE-2	TYPE-2	TYPE-1		TYPE-2	TYPE-2	TYPE-1	TYPE-1	TYPE-1	TYPE-2	TYPE-2	TYPE-1	TYPE-1	TYPE-1	TYPE-2	TYPE-2	TYPE-1	TYPE-1	TYPE-2	TYPE-2	TYPE-1	TYPE-2	TYPE-2	TYPE-1

COLUMN FOOTING SCHEDULE CONTINUED												
ELEVATION												
HS PH ROOF												
LEVEL 4		W10x33	W10x33	W10x33	W10x33	W10x33	W10x33	W10x33	W10x33	W10x33	W10x33	W10x33
LEVEL 3												
LEVEL 2												
LEVEL 1		W10x49	W10x60	W10x60	W10x54	W10x54	W10x60	W10x60	W10x60	W10x60	W10x60	W10x60
MARK		N1'-2"	P'-2"	Q'-2"	R'-2"	S'-2"	T'-2"	U'-2"	V'-2"	W'-2"	X'-2"	
⚡ SPLICE TYPE		TYPE-2	TYPE-2	TYPE-2	TYPE-2	TYPE-2	TYPE-2	TYPE-2	TYPE-2	TYPE-2	TYPE-2	



Columbia Engineering Inc.  
Structural Engineers  
820 Old Dobbin Lane  
Columbia, MD 21045  
Tel: 410.862.89  
Fax: 410.862.867  
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GP #22105

COLUMN SCHEDULE  
NORTH EAST MIDDLE / HIGH SCHOOL  
300 IRISHTOWN ROAD, NORTH EAST, MD

DATE	DESCRIPTION
08/28/2024	RFI-022

S201

12/22/2023  
BID SET





## *Request for Information*

---

**Date:** 08/20/2024

**Request No:** KSI 012

**Project:** North East Middle & High School  
**KCI No.:** 242612

**To:** Hess Construction  
**Attn.:** Joshua Postadan  
**Email:** jpostadan@hessconstruction.com

**From:** Mike Staub  
**Phone:** 717-434-6248  
**Email:** [mstaub@kinsleysteel.com](mailto:mstaub@kinsleysteel.com)

---

### **RE: Column Size Clarification**

#### ***Request***

Please refer to the attached TRC RFI 009 for the question locations.

Q1: Please verify the column sizes on S100C.

Q2: Please provide the missing column sizes on S101F.

Q3: Please provide correct grid label on S201.

Q4: Please verify the grid label on S201.

---

#### ***Date Response Requested: ASAP***

CEI: See responses on following sheets.  
See attached updated Structural drawings: S100C, S101F, S201

Cesar Flores  
08/28/2024





217 Ward Circle Brentwood, TN 37027, Phone: 615-661-7979 Fax: 615-661-0644

# REQUEST FOR INFORMATION

## NORTH EAST MIDDLE / HIGH SCHOOL

JOB #24-880

To:	<b>Michael E. Staubmstaub@kinsleysteel.com</b>	CLIENT RFI#
Company:	<b>KINSLEY, INC</b>	GC RFI#
		TRC RFI# <b>009</b>
cc:		RESPONSE <b>08-22-2024</b> NEEDED BY

### SUBJECT: Column size clarification

Please refer to the attached files for the question.

- Q9.1: Please verify the column size.  
Q9.2: Please provide the missing column sizes.  
Q9.3: Please provide correct grid label.  
Q9.4: Please verify the grid label.

By:	<b>Ruben Flores</b>	Date:	<b>08-20-2024</b>
-----	---------------------	-------	-------------------

### Response:

CEI: See responses on following sheets.  
See attached updated Structural drawings: S100C, S101F, S201

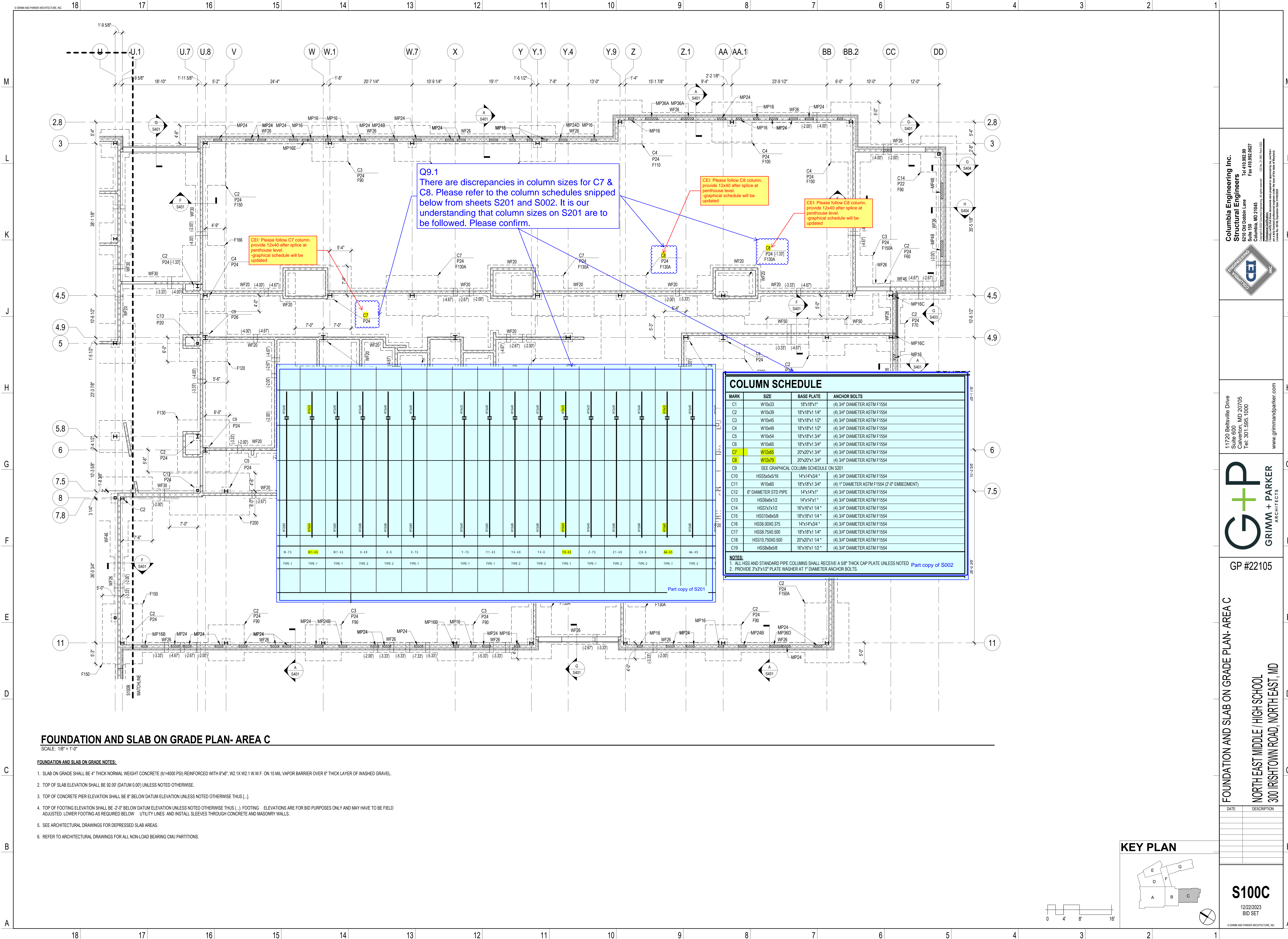
Cesar Flores  
08/28/2024

By:		Date:	
-----	--	-------	--

PLEASE SEND RESPONSE TO: Ruben Flores  
Phone: **325-320-0719**

**THE RAMANNA COMPANIES**

**CONSULTING ENGINEERS**



FOUNDATION AND SLAB ON GRADE PLAN- AREA C

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

FOUNDATION AND SLAB ON GRADE NOTES:

- 1. SLAB ON GRADE SHALL BE 4" THICK NORMAL WEIGHT CONCRETE (fc=4000 PSI) REINFORCED WITH 6"x6", W2.1X W2.1 W.W.F. ON 15 MIL VAPOR BARRIER OVER 6" THICK LAYER OF WASHED GRAVEL.
- 2. TOP OF SLAB ELEVATION SHALL BE 92.00' (DATUM 0.00') UNLESS NOTED OTHERWISE.
- 3. TOP OF CONCRETE PIER ELEVATION SHALL BE 8" BELOW DATUM ELEVATION UNLESS NOTED OTHERWISE THUS [...].
- 4. TOP OF FOOTING ELEVATION SHALL BE 2'-0" BELOW DATUM ELEVATION UNLESS NOTED OTHERWISE THUS [...]. FOOTING ELEVATIONS ARE FOR BID PURPOSES ONLY AND MAY HAVE TO BE FIELD ADJUSTED. LOWER FOOTING AS REQUIRED BELOW UTILITY LINES AND INSTALL SLEEVES THROUGH CONCRETE AND MASONRY WALLS.
- 5. SEE ARCHITECTURAL DRAWINGS FOR DEPRESSED SLAB AREAS.
- 6. REFER TO ARCHITECTURAL DRAWINGS FOR ALL NON-LOAD BEARING CMU PARTITIONS.

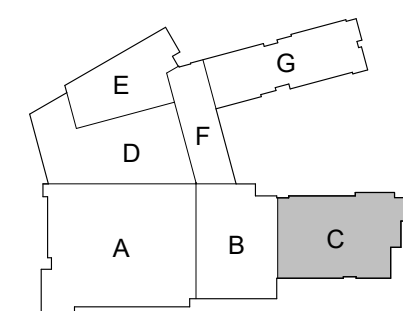
Q9.1  
There are discrepancies in column sizes for C7 & C8. Please refer to the column schedules snipped below from sheets S201 and S002. It is our understanding that column sizes on S201 are to be followed. Please confirm.

MARK	SIZE	BASE PLATE	ANCHOR BOLTS
C1	W10x33	18"x18"x1"	(4) 3/4" DIAMETER ASTM F1554
C2	W10x39	18"x18"x1 1/4"	(4) 3/4" DIAMETER ASTM F1554
C3	W10x45	18"x18"x1 1/2"	(4) 3/4" DIAMETER ASTM F1554
C4	W10x49	18"x18"x1 1/2"	(4) 3/4" DIAMETER ASTM F1554
C5	W10x54	18"x18"x1 3/4"	(4) 3/4" DIAMETER ASTM F1554
C6	W10x60	18"x18"x1 3/4"	(4) 3/4" DIAMETER ASTM F1554
C7	W12x65	20"x20"x1 3/4"	(4) 3/4" DIAMETER ASTM F1554
C8	W12x79	20"x20"x1 3/4"	(4) 3/4" DIAMETER ASTM F1554
C9	SEE GRAPHICAL COLUMN SCHEDULE ON S201		
C10	HSS6x5x5/16	14"x14"x3/4"	(4) 3/4" DIAMETER ASTM F1554
C11	W10x60	18"x18"x1 3/4"	(4) 1" DIAMETER ASTM F1554 (2'-0" EMBEDMENT)
C12	6" DIAMETER STD PIPE	14"x14"x1"	(4) 3/4" DIAMETER ASTM F1554
C13	HSS6x6x1/2	14"x14"x1"	(4) 3/4" DIAMETER ASTM F1554
C14	HSS7x7x1/2	16"x16"x1 1/4"	(4) 3/4" DIAMETER ASTM F1554
C15	HSS10x8x5/8	18"x18"x1 1/4"	(4) 3/4" DIAMETER ASTM F1554
C16	HSS6.00X0.375	14"x14"x3/4"	(4) 3/4" DIAMETER ASTM F1554
C17	HSS8.75X0.500	18"x18"x1 1/4"	(4) 3/4" DIAMETER ASTM F1554
C18	HSS10.75X0.500	20"x20"x1 1/4"	(4) 3/4" DIAMETER ASTM F1554
C19	HSS8x8x5/8	16"x16"x1 1/2"	(4) 3/4" DIAMETER ASTM F1554

MARK	SIZE	BASE PLATE	ANCHOR BOLTS
C1	W10x33	18"x18"x1"	(4) 3/4" DIAMETER ASTM F1554
C2	W10x39	18"x18"x1 1/4"	(4) 3/4" DIAMETER ASTM F1554
C3	W10x45	18"x18"x1 1/2"	(4) 3/4" DIAMETER ASTM F1554
C4	W10x49	18"x18"x1 1/2"	(4) 3/4" DIAMETER ASTM F1554
C5	W10x54	18"x18"x1 3/4"	(4) 3/4" DIAMETER ASTM F1554
C6	W10x60	18"x18"x1 3/4"	(4) 3/4" DIAMETER ASTM F1554
C7	W12x65	20"x20"x1 3/4"	(4) 3/4" DIAMETER ASTM F1554
C8	W12x79	20"x20"x1 3/4"	(4) 3/4" DIAMETER ASTM F1554
C9	SEE GRAPHICAL COLUMN SCHEDULE ON S201		
C10	HSS6x5x5/16	14"x14"x3/4"	(4) 3/4" DIAMETER ASTM F1554
C11	W10x60	18"x18"x1 3/4"	(4) 1" DIAMETER ASTM F1554 (2'-0" EMBEDMENT)
C12	6" DIAMETER STD PIPE	14"x14"x1"	(4) 3/4" DIAMETER ASTM F1554
C13	HSS6x6x1/2	14"x14"x1"	(4) 3/4" DIAMETER ASTM F1554
C14	HSS7x7x1/2	16"x16"x1 1/4"	(4) 3/4" DIAMETER ASTM F1554
C15	HSS10x8x5/8	18"x18"x1 1/4"	(4) 3/4" DIAMETER ASTM F1554
C16	HSS6.00X0.375	14"x14"x3/4"	(4) 3/4" DIAMETER ASTM F1554
C17	HSS8.75X0.500	18"x18"x1 1/4"	(4) 3/4" DIAMETER ASTM F1554
C18	HSS10.75X0.500	20"x20"x1 1/4"	(4) 3/4" DIAMETER ASTM F1554
C19	HSS8x8x5/8	16"x16"x1 1/2"	(4) 3/4" DIAMETER ASTM F1554

NOTES:  
1. ALL HSS AND STANDARD PIPE COLUMNS SHALL RECEIVE A 5/8" THICK CAP PLATE UNLESS NOTED  
2. PROVIDE 3"x3"x1/2" PLATE WASHER AT 1" DIAMETER ANCHOR BOLTS.

KEY PLAN



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Structural Engineers  
620 Old Dobbin Lane  
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This drawing was prepared by me, and I am a duly Licensed Professional Engineer in the State of Maryland.  
I hereby certify that this drawing was prepared by me, and I am a duly Licensed Professional Engineer in the State of Maryland.



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Calverton, MD 20705  
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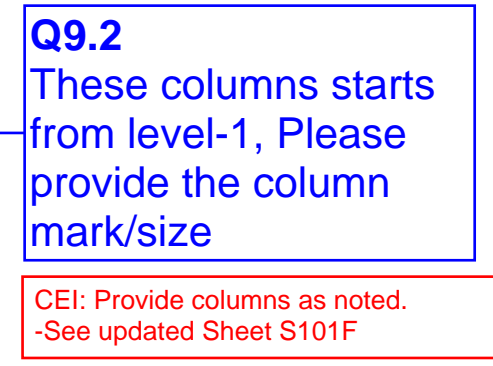
GP #22105

FOUNDATION AND SLAB ON GRADE PLAN- AREA C  
NORTH EAST MIDDLE / HIGH SCHOOL  
300 IRISTOWN ROAD, NORTH EAST, MD

DATE	DESCRIPTION

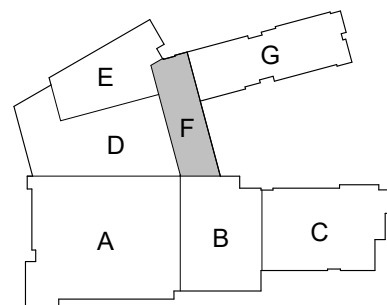
S100C  
12/22/2023  
BID SET



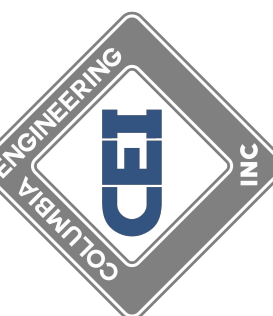


SCALE: 1/8" = 1'-0"

1. ELEVATED SLAB SHALL BE 3" THICK LIGHT WEIGHT CONCRETE (fc=4000, 101 PCF) REINFORCED WITH 6"x6", W2 1"x W2 1" W/V OF DEEP. DO GAGE GALVANIZED COMPOSITE METAL DECK (5 1/4" TOTAL), UNLESS NOTED OTHERWISE.
2. TOP OF ELEVATED FLOOR SHALL BE 16 6/8' ABOVE DATUM ELEVATION. TOP OF STEEL SHALL BE 5 1/4" BELOW TOP OF SLAB ELEVATION UNLESS NOTED OTHERWISE.
3. PROVIDE 2#5 BARS AT MID DEPTH OF SLAB AROUND OPENINGS 1'-0" x 1'-0" OR SMALLER. INSTALL C&I1 FRAME AROUND OPENINGS LARGER THAN 1'-0" x 1'-0". REFER TO TYPICAL FLOOR OPENINGS DETAIL.
4. [n6] DENOTES NUMBER OF 3/4" HEADED STUDS WELDED TO THE BEAM TOP FLANGE. SPACE UNIFORMLY ALONG BEAM LENGTH UNLESS NOTED OTHERWISE.
5. C=... DENOTES REQUIRED BEAM CAMBER.



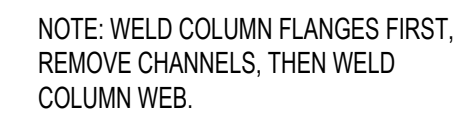
12/22/2023  
BID SET



DATE	DESCRIPTION
2024	ADDENDUM 5



Q9.4  
We have not found Z.X grid in neither structural nor the arch. drawings. We believe it should be labeled "Z.1".Please confirm.



## RFI detail

## #023 Penthouse Roof Bracing Clarification



---

Status	<div><div></div>Closed</div>
--------	------------------------------

---

Created on	Aug 21, 2024 by <b>Lucas Bradley</b> (Kinsley Steel Inc)
------------	--

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RFI type	Structural RFI REV
----------	--------------------

---

Ball in court	<b>Lucas Bradley</b> (Kinsley Steel Inc)
---------------	--

---

Answered	Aug 28, 2024 by <b>Patrick Byrne</b> (Grimm and Parker)
----------	---

---

### Question

On S105, please confirm if (R1\*) roof frames are to be bolted or welded to the attached beams to ensure accuracy with detailing.

---

### Official response

Patrick Byrne (Grimm and Parker): See attached response from CEI.

*By **Patrick Byrne** (Grimm and Parker) - Aug 28, 2024, 10:16 AM EDT*

---

### References and Attachments

#### Files (2)

- [RFI 013\\_KSI - Penthouse Roof Bracing Clarification.pdf](#)
- [RFI 23 Penthouse Roof Bracing Clarification Response.pdf](#)

### Impact

---

Cost impact	-
-------------	---

---

Schedule impact	-
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---

### Other attributes







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Priority	Normal
----------	--------

---

Discipline	Structural
Category	-
Location	Area G, Area C
Location details	Penthouse roof framing
External id	-
Co-reviewer(s)	
Posted to Drawings/ Specifications	YES
Trade's RFI No.	13



Activities	By	At
<b>Joshua Postadan</b> changed the status from  <b>Open</b> Answered to  <b>Closed</b> <b>Official response:</b> Patrick Byrne (Grimm and Parker): See attached response from CEI. set Ball in court to <b>Lucas Bradley</b> (Kinsley Steel Inc)	<b>Joshua Postadan</b>	Aug 30, 2024, 9:15 AM EDT
Please review the response to RFI #023. Provide notification of any cost implications immediately. If a proposal has cost impacts, please request an RFQ from HESS. Send a proposal no later than the close of business within 7 days of receipt of this RFI response. HESS will consider this as a no cost change and close this issue should a proposal not be received by this date. A lack of response for any credit items will prompt HESS Construction to assign a cost value that will be deducted from your contract sum. Note: The RFQ is simply an administrative tracking tool, and in no way represents that additional work, cost or time is acknowledged, authorized, directed, or approved.	<b>Joshua Postadan</b>	Aug 30, 2024, 9:15 AM EDT
<b>Patrick Byrne</b> added a reference to a File <b>RFI 23 Penthouse Roof Bracing Clarification Response.pdf</b>	<b>Patrick Byrne</b>	Aug 28, 2024, 10:16 AM EDT
<b>Patrick Byrne</b> changed the status from  <b>Open</b> In Review to  <b>Open</b> Answered set Ball in court to <b>Joshua Postadan</b> (HESS Construction Co., LLC)	<b>Patrick Byrne</b>	Aug 28, 2024, 10:16 AM EDT
<b>Patrick Byrne</b> added a response: See attached response from CEI.	<b>Patrick Byrne</b>	Aug 28, 2024, 10:16 AM EDT
<b>Cesar Flores</b> added a response: Please see attached file for response.	<b>Cesar Flores</b>	Aug 28, 2024, 8:07 AM EDT
changed the <b>due date</b> to Aug 28, 2024	<b>Patrick Byrne</b>	Aug 27, 2024, 10:40 PM EDT
<b>Joshua Postadan</b> please revise due date to 8/29/2024.	<b>Patrick Byrne</b>	Aug 22, 2024, 4:14 PM EDT
<b>Joshua Postadan</b> changed the status from  <b>Open</b> Waiting for Submission to  <b>Open</b> In Review changed the <b>due date</b> to Aug 26, 2024 set Ball in court to <b>Patrick Byrne</b> (Grimm and Parker), <b>Cesar Flores</b> (Columbia Engineering) changed the <b>ID</b> to 023	<b>Joshua Postadan</b>	Aug 22, 2024, 3:07 PM EDT
changed the <b>Posted to Drawings/Specifications</b> to YES	<b>Joshua Postadan</b>	Aug 22, 2024, 3:07 PM EDT
changed the <b>watchers</b> to <b>HESS PROJECT TEAM, Kinsley Steel Inc</b>	<b>Joshua Postadan</b>	Aug 22, 2024, 3:06 PM EDT

changed the <b>question</b> to <i>On S105, please confirm if (R1*) roof frames are to be bolted or welded to the attached beams to ensure accuracy with detailing.</i>	<b>Joshua Postadan</b>	Aug 22, 2024, 3:06 PM EDT
<b>Lucas Bradley</b> added a reference to a File <b>RFI 013_KSI - Penthouse Roof Bracing Clarification.pdf</b>	<b>Lucas Bradley</b>	Aug 21, 2024, 2:40 PM EDT
<b>Lucas Bradley</b> (Kinsley Steel Inc) created this RFI in  <b>Open</b> Waiting for Submission status and set Ball in court to <b>Joshua Postadan</b> (HESS Construction Co., LLC).	<b>Lucas Bradley</b>	Aug 21, 2024, 2:40 PM EDT



## *Request for Information*

---

**Date:** 08/21/2024

**Request No:** KSI 013

**Project:** North East Middle & High School  
**KCI No.:** 242612

**To:** Hess Construction  
**Attn.:** Joshua Postadan  
**Email:** jpostadan@hessconstruction.com

**From:** Mike Staub  
**Phone:** 717-434-6248  
**Email:** [mstaub@kinsleysteel.com](mailto:mstaub@kinsleysteel.com)

### **RE: Penthouse Roof Bracing Clarification**

---

#### ***Request***

1. On S105, please confirm if (R1\*) roof frames are to be bolted or welded to the attached beams to ensure accuracy with detailing.

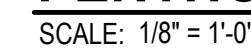
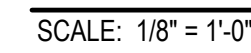
***Date Response Requested: ASAP***

---

CEI: Angle cross bracing shall be welded to connection plates. Connection plates shall be welded to beams.

Cesar Flores  
08/28/2024





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## *Request for Information*

---

**Date:** 08/21/2024

**Request No:** KSI 013

**Project:** North East Middle & High School  
**KCI No.:** 242612

**To:** Hess Construction  
**Attn.:** Joshua Postadan  
**Email:** jpostadan@hessconstruction.com

**From:** Mike Staub  
**Phone:** 717-434-6248  
**Email:** [mstaub@kinsleysteel.com](mailto:mstaub@kinsleysteel.com)

---

### **RE: Penthouse Roof Bracing Clarification**

#### ***Request***

1. On S105, please confirm if (R1\*) roof frames are to be bolted or welded to the attached beams to ensure accuracy with detailing.

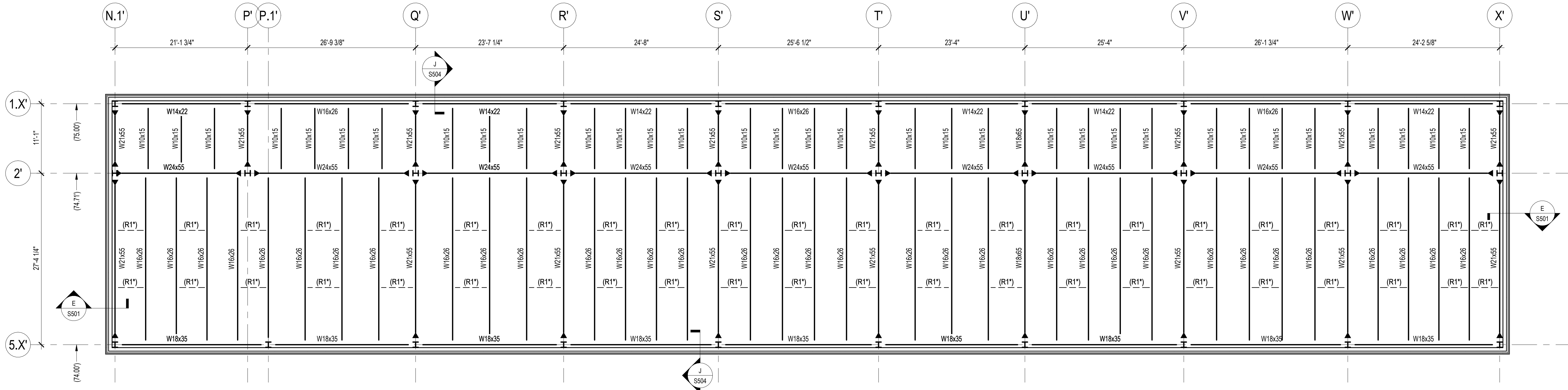
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***Date Response Requested: ASAP***

CEI: Angle cross bracing shall be welded to connection plates. Connection plates shall be welded to beams.

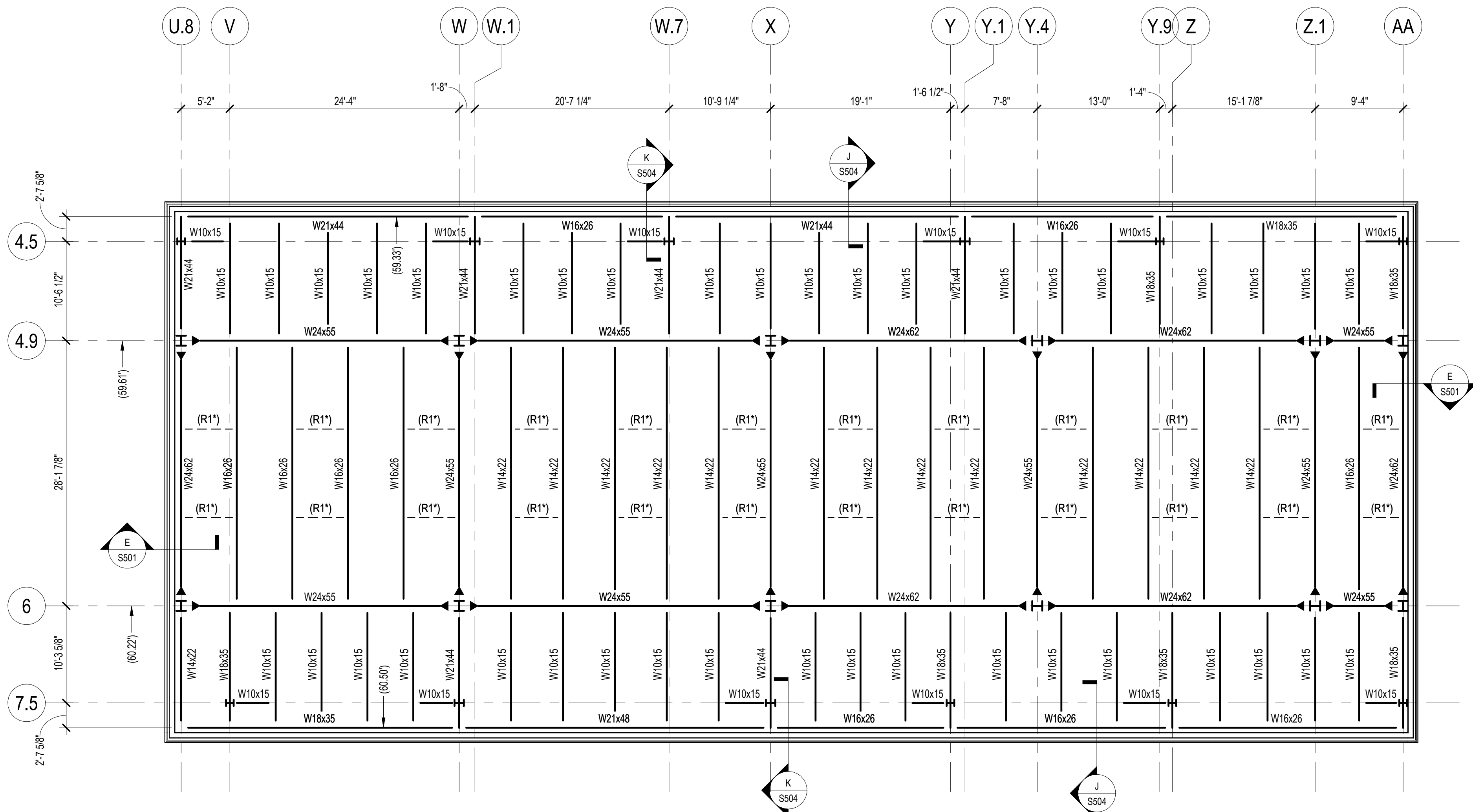
Cesar Flores  
08/28/2024

G+P:  
See response from CEI.  
Patrick Byrne 8.28.2024



PENTHOUSE ROOF FRAMING PLAN - AREA G

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



PENTHOUSE ROOF FRAMING PLAN - AREA C

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

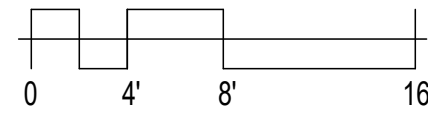
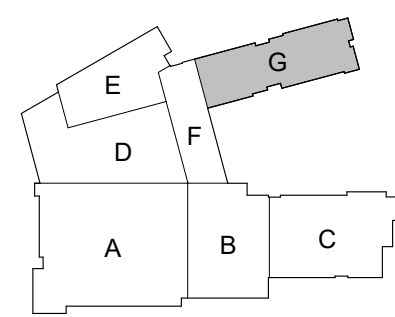
ROOF FRAMING NOTES:

- ROOF DECK SHALL BE AS NOTED ON ROOF DECK PLAN ON S003.
- TOP OF STEEL ELEVATION (BOTTOM OF DECK) NOTED ON PLAN THUS (..) IS MEASURED FROM DATUM ELEVATION (0.00'). BEAMS SUPPORTING K SERIES JOIST SHALL BE 3 1/2" BELOW TOP OF STEEL UNLESS NOTED OTHERWISE.
- ALL K SERIES JOIST SHALL HAVE 3 1/2" JOIST SEATS UNLESS NOTED OTHERWISE. ALL LH-SERIES JOIST SHALL HAVE 5" JOIST SEATS UNLESS NOTED OTHERWISE.
- JOIST SHALL BE DESIGNED FOR A NET UPLIFT OF 15 PSF UNLESS NOTED OTHERWISE.
- INSTALL ANGLE FRAME AROUND ALL ROOF OPENINGS WITH ONE SIDE LARGER THAN 1'-0". REFER TO TYPICAL ROOF OPENING DETAIL D/S303.
- ROOFTOP MECHANICAL UNITS OVER ROOF DECK SHALL BE SUPPORTED BY 6"x4"x3/8" ANGLE FRAME (LLV) FOR ANGLE SPANS UP TO 6'-0". SUPPORT AT JOIST OR BEAM WITH 6"x6"x1/2"x 8" LONG ANGLE SEAT UNLESS NOTED OTHERWISE.

ROOF FRAMING KEYED NOTES:

- (R1') DENOTES 3"x3"x1/4" ANGLE CROSS BRACING. ATTACH TO EACH BEAM WITH 5/16" CONNECTION PLATE. IF ADJACENT MEMBER IS OPEN-WEB STEEL JOIST, INSTALL SINGLE 3"x3"x1/4" ANGLE KICKER FROM BOTTOM OF BEAM TO TOP CHORD PANEL POINT.
- (R2') DENOTES PREFABRICATED CANOPY. CANOPY REQUIRES DELEGATED DESIGN. CONTRACTOR SHALL SUBMIT SIGNED AND SEALED SHOP DRAWINGS AND CALCULATIONS TO A/E FOR REVIEW AND APPROVAL. REFER TO ARCHITECTURAL DOCUMENTS FOR DETAILS.

KEY PLAN



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Structural Engineers  
620 Old Dobson Lane  
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Tel: 410.852.29  
Fax: 410.852.1827  
Copyright © 2020 Columbia Engineering, Inc. All rights reserved.  
This drawing was prepared by me, and I am a duly Licensed Professional Engineer in the State of Maryland.  
I hereby certify that this drawing was prepared by me or under my direct supervision and I am a duly Licensed Professional Engineer in the State of Maryland.



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Suite 600  
Calverton, MD 20705  
Tel: 301.595.1000  
www.grimmandparker.com



GP #22105

PENTHOUSE ROOF FRAMING PLANS - AREA C & G

NORTH EAST MIDDLE / HIGH SCHOOL  
300 IRISTOWN ROAD, NORTH EAST, MD

DATE	DESCRIPTION

S105

12/22/2023  
BID SET



RFI detail

#024 Wall Sections on Elevations



Status	<div><div></div>Closed</div>
Created on	Aug 30, 2024 by <b>Joshua Postadan</b> (HESS Construction Co., LLC)
RFI type	North East MS/HS RFI WF
Ball in court	<b>Joshua Postadan</b> (HESS Construction Co., LLC)
Answered	Aug 30, 2024 by <b>Patrick Byrne</b> (Grimm and Parker)

Question

Please provide wall section callouts on elevation sheets to aid in construction.

Official response

The wall section call outs shown on the floor plans are sufficient for the construction of the building.  
*By **Patrick Byrne** (Grimm and Parker) - Aug 30, 2024, 4:44 PM EDT*

Impact

Cost impact	No
Schedule impact	No








Other attributes

Priority	Normal
Discipline	-
Category	-
Location	-
Location details	-
External id	-

Co-reviewer(s)

Posted to Drawings/ Specifications -

Trade's RFI No. -

Activities	By	At
<b>Joshua Postadan</b> changed the status from  <b>Open</b> Answered to  <b>Closed</b>	<b>Joshua Postadan</b>	Sep 3, 2024, 9:30 AM EDT
Please review the response to RFI #024. Provide notification of any cost implications immediately. If a proposal has cost impacts, please request an RFQ from HESS. Send a proposal no later than the close of business within 7 days of receipt of this RFI response. HESS will consider this as a no cost change and close this issue should a proposal not be received by this date. A lack of response for any credit items will prompt HESS Construction to assign a cost value that will be deducted from your contract sum. Note: The RFQ is simply an administrative tracking tool, and in no way represents that additional work, cost or time is acknowledged, authorized, directed, or approved.	<b>Joshua Postadan</b>	Sep 3, 2024, 9:30 AM EDT
<b>Patrick Byrne</b> changed the status from  <b>Open</b> In Review to  <b>Open</b> Answered <b>Official response:</b> The wall section call outs shown on the floor plans are sufficient for the construction of the building. set Ball in court to <b>Joshua Postadan</b> (HESS Construction Co., LLC)	<b>Patrick Byrne</b>	Aug 30, 2024, 4:44 PM EDT
<b>Joshua Postadan</b> changed the status from  <b>Draft</b> to  <b>Open</b> In Review set Ball in court to <b>Patrick Byrne</b> (Grimm and Parker) changed the <b>ID</b> to 024	<b>Joshua Postadan</b>	Aug 30, 2024, 8:52 AM EDT
<b>Joshua Postadan</b> (HESS Construction Co., LLC) created this RFI in  <b>Draft</b> status and set Ball in court to <b>Joshua Postadan</b> (HESS Construction Co., LLC).	<b>Joshua Postadan</b>	Aug 30, 2024, 8:44 AM EDT

## RFI detail

## #025 MEP Coordination



Status	<div><div></div>Closed</div>
Created on	Aug 13, 2024 by <b>Lucas Bradley</b> (Kinsley Steel Inc)
RFI type	Structural RFI REV
Ball in court	<b>Lucas Bradley</b> (Kinsley Steel Inc)
Answered	Aug 30, 2024 by <b>Joshua Postadan</b> (HESS Construction Co., LLC)

## Question

1. Please supply product data for all mechanical units, fans, roof drains.
2. Please provide dimensions from center of opening to column lines in the X and Y directions.
3. All information needs to be provided by BFA date for each shop drawings in order to provide drop-in frames per the bid.
4. If information is not received by BFA date, Kinsley will be forced to proceed without this information.
5. Without this information to produce drop-in frames, Kinsley will be forced to install drop-in frames from underneath as stick built. Kinsley will provide a deduct for the drop-in frames and a unit price of \$2,500 to install a four-sided frame from underneath.
  - a. One frame consists of two headers and two intermediates.

## Official response

Mechanical contractor has not been award yet and no mechanical submittals have been received to date. Approved product data submittals from the mechanical contractor will be provided to Kinsley for coordination. Coordination of rough-openings and mechanical units, fans, roof drains, etc. will occur through the BIM process.

*By **Joshua Postadan** (HESS Construction Co., LLC) - Aug 30, 2024, 10:39 AM EDT*

## References and Attachments

## Files (1)








- [RFI 007\\_KSI - MEP Coordination.pdf](#)

## Impact

Cost impact	-
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Schedule impact	-
Other attributes	
Priority	Normal
Discipline	Structural
Category	Design Coordination
Location	-
Location details	-
External id	-
Co-reviewer(s)	
Posted to Drawings/ Specifications	-
Trade's RFI No.	7

Activities	By	At
<b>Joshua Postadan</b> changed the status from  <b>Open</b> Waiting for Submission to  <b>Closed</b> set Ball in court to <b>Lucas Bradley</b> (Kinsley Steel Inc)	<b>Joshua Postadan</b>	Aug 30, 2024, 10:39 AM EDT
changed the <b>ID</b> to 025	<b>Joshua Postadan</b>	Aug 30, 2024, 10:39 AM EDT
<b>Joshua Postadan</b> changed the status from  <b>Closed</b> to  <b>Open</b> Waiting for Submission set Ball in court to <b>Joshua Postadan</b> (HESS Construction Co., LLC)	<b>Joshua Postadan</b>	Aug 30, 2024, 10:38 AM EDT
Re-opened to edit RFI #	<b>Joshua Postadan</b>	Aug 30, 2024, 10:38 AM EDT
<b>Joshua Postadan</b> changed the status from  <b>Open</b> Waiting for Submission to  <b>Closed</b> <b>Official response:</b> Mechanical contractor has not been award yet and no mechanical submittals have been received to date. Approved product data submittals from the mechanical contractor will be provided to Kinsley for coordination. Coordination of rough-openings and mechanical units, fans, roof drains, etc. will occur through the BIM process. set Ball in court to <b>Lucas Bradley</b> (Kinsley Steel Inc) changed the <b>watchers</b> to <b>HESS PROJECT TEAM, Kinsley Steel Inc</b>	<b>Joshua Postadan</b>	Aug 30, 2024, 10:38 AM EDT
changed the <b>question</b> to <i>1. Please supply product data for all mechanical units, fans, roof drains. 2. Please provide dimensions from center of opening to column lines in the X and Y directions. 3. All information needs to be provided by BFA date for each shop drawings in order to provide drop-in frames per the bid. 4. If information is not received by BFA date, Kinsley will be forced to proceed without this information. 5. Without this information to produce drop-in frames, Kinsley will be forced to install drop-in frames from underneath as stick built. Kinsley will provide a deduct for the drop-in frames and a unit price of \$2,500 to install a four-sided frame from underneath. a. One frame consists of two headers and two intermediates.</i>	<b>Joshua Postadan</b>	Aug 14, 2024, 10:26 AM EDT
<b>Lucas Bradley</b> added a reference to a File <b>RFI 007_KSI - MEP Coordination.pdf</b>	<b>Lucas Bradley</b>	Aug 13, 2024, 9:02 AM EDT
<b>Lucas Bradley</b> (Kinsley Steel Inc) created this RFI in  <b>Open</b> Waiting for Submission status and set Ball in court to <b>Joshua Postadan</b> (HESS Construction Co., LLC).	<b>Lucas Bradley</b>	Aug 13, 2024, 9:02 AM EDT



## *Request for Information*

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**Date:** 08/13/2024

**Request No:** KSI 007

**Project:** North East Middle & High School  
**KCI No.:** 242612

**To:** Hess Construction  
**Attn.:** Joshua Postadan  
**Email:** [jpostadan@hessconstruction.com](mailto:jpostadan@hessconstruction.com)

**From:** Mike Staub  
**Phone:** 717-434-6248  
**Email:** [mstaub@kinsleysteel.com](mailto:mstaub@kinsleysteel.com)

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### **RE: MEP Coordination**

#### ***Request***

1. Please supply product data for all mechanical units, fans, roof drains.
2. Please provide dimensions from center of opening to column lines in the X and Y directions.
3. All information needs to be provided by BFA date for each shop drawings in order to provide drop-in frames per the bid.
4. If information is not received by BFA date, Kinsley will be forced to proceed without this information.
5. Without this information to produce drop-in frames, Kinsley will be forced to install drop-in frames from underneath as stick built. Kinsley will provide a deduct for the drop-in frames and a unit price of \$2,500 to install a four-sided frame from underneath.
  - a. One frame consists of two headers and two intermediates.

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***Date Response Requested: ASAP***

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RFI detail

#026 Fireproofing Requirements



Status	<div><div></div>Closed</div>
Created on	Aug 13, 2024 by <b>Lucas Bradley</b> (Kinsley Steel Inc)
RFI type	Structural RFI REV
Ball in court	<b>Lucas Bradley</b> (Kinsley Steel Inc)
Answered	Aug 30, 2024 by <b>Joshua Postadan</b> (HESS Construction Co., LLC)

Question

We are trying to determine which areas require fireproofing. Please markup structural drawings with locations where spray fireproofing occurs. Kinsley is willing to have a meeting to coordinate this information.

Official response

Spray fireproofing is part of the 06A package, which has not been awarded to a contractor yet. Please refer to the following in the contract documents for spray fireproofing requirements. A future coordination meeting will be held between Kinsley and the 06A contractor to determine the extent of spray fireproofing. 06A contractor is required to provide shop drawing submittal indicating all spray fireproofing locations, which will be provided to Kinsley for coordination.

1. Please refer to the UL Assemblies Note on A001-A011 for spray fireproofing requirements on exposed columns
2. Please refer to sheet A303 for details on spray fireproofing at beams, joists, and metal deck
3. Please refer to sheets A519-A523 for spray fireproofing requirements on columns

Detail A18/A004 indicates "spray fireproofing for roof structure and deck are not required if entirety of roof structure and deck are higher than 20'-0" above their immediate floor area".




*By **Joshua Postadan** (HESS Construction Co., LLC) - Aug 30, 2024, 10:46 AM EDT*

References and Attachments

Files (1)

RFI 006\_KSI - Fireproofing Requirements.docx

Impact	
Cost impact	-
Schedule impact	-
Other attributes	
Priority	Normal
Discipline	Structural
Category	Design Coordination
Location	-
Location details	-
External id	-
Co-reviewer(s)	
Posted to Drawings/ Specifications	-
Trade's RFI No.	6

Activities	By	At
<b>Joshua Postadan</b> changed the status from  <b>Open</b> Waiting for Submission to  <b>Closed</b> <b>Official response:</b> Spray fireproofing is part of the 06A package, which has not been awarded to a contractor yet. Please refer to the following in the contract documents for spray fireproofing requirements. A future coordination meeting will be held between Kinsley and the 06A contractor to determine the extent of spray fireproofing. 06A contractor is required to provide shop drawing submittal indicating all spray fireproofing locations, which will be provided to Kinsley for coordination. 1. Please refer to the UL Assemblies Note on A001-A011 for spray fireproofing requirements on exposed columns 2. Please refer to sheet A303 for details on spray fireproofing at beams, joists, and metal deck 3. Please refer to sheets A519-A523 for spray fireproofing requirements on columns Detail A18/A004 indicates "spray fireproofing for roof structure and deck are not required if entirety of roof structure and deck are higher than 20'-0" above their immediate floor area." set Ball in court to <b>Lucas Bradley</b> (Kinsley Steel Inc) changed the <b>watchers</b> to <b>HESS PROJECT TEAM, Kinsley Steel Inc</b>	<b>Joshua Postadan</b>	Aug 30, 2024, 10:46 AM EDT
changed the <b>ID</b> to 026	<b>Joshua Postadan</b>	Aug 30, 2024, 10:39 AM EDT
changed the <b>question</b> to <i>We are trying to determine which areas require fireproofing. Please markup structural drawings with locations where spray fireproofing occurs. Kinsley is willing to have a meeting to coordinate this information.</i>	<b>Joshua Postadan</b>	Aug 14, 2024, 10:45 AM EDT
<b>Lucas Bradley</b> added a reference to a File <b>RFI 006_KSI - Fireproofing Requirements.docx</b>	<b>Lucas Bradley</b>	Aug 13, 2024, 9:01 AM EDT
<b>Lucas Bradley</b> (Kinsley Steel Inc) created this RFI in  <b>Open</b> Waiting for Submission status and set Ball in court to <b>Joshua Postadan</b> (HESS Construction Co., LLC).	<b>Lucas Bradley</b>	Aug 13, 2024, 9:00 AM EDT



RFI detail

#027 Stud Wall Clarification



Status	<div><div></div>Closed</div>
Created on	Aug 29, 2024 by <b>Lucas Bradley</b> (Kinsley Steel Inc)
RFI type	North East MS/HS RFI WF
Ball in court	<b>Lucas Bradley</b> (Kinsley Steel Inc)
Answered	Sep 16, 2024 by <b>Patrick Byrne</b> (Grimm and Parker)

Question

Please refer to the attachment titled "RFI 015\_KSI - Stud Wall Clarification.pdf" in the References section for the question locations.

- [Q1] Please advise on the stud wall size.
- [Q2] Please confirm whether 2 vertical channels required.

Official response

See combined RFI response from CEI and G+P and revised drawings.  
*By **Patrick Byrne** (Grimm and Parker) - Sep 16, 2024, 9:22 PM EDT*

Official response attachments

- [RFI 015\\_KSI - STUD WALL CLARIFICATION.PDF](#), Sep 16, 2024, 9:22 PM EDT
- [2024-09-13 NEMHS- RFI027 SHEET S508.PDF](#), Sep 16, 2024, 9:22 PM EDT
- [A431 - ROOF DETAILS.PDF](#), Sep 16, 2024, 9:22 PM EDT

References and Attachments

Files (3)

- [2024-09-13 NEMHS- RFI027 sheet S508.pdf](#)
- [A431 - ROOF DETAILS.pdf](#)
- [RFI 015\\_KSI - Stud Wall Clarification.pdf](#)







CE (1)		
 Draft	CE #004	RFI 27 - Stud Wall Clarification

Impact






Cost impact	Unknown
Schedule impact	No

Other attributes

Priority	Normal
Discipline	Structural
Category	Design Coordination
Location	Area B
Location details	See attachment "RFI 015_KSI - Stud Wall Clarification.pdf"
External id	-
Co-reviewer(s)	
Posted to Drawings/ Specifications	-
Trade's RFI No.	15

Activities	By	At
<b>Joshua Postadan</b> added a reference to a PCO <b>RFI 27 - Stud Wall Clarification</b>	<b>Joshua Postadan</b>	Sep 17, 2024, 9:16 AM EDT
<b>Joshua Postadan</b> changed the status from  <b>Open</b> Answered to  <b>Closed</b> set Ball in court to <b>Lucas Bradley</b> (Kinsley Steel Inc) changed the <b>watchers</b> to <b>HESS PROJECT TEAM, Architect Eng., Kinsley Steel Inc, Pro Tech Contractors, Glass Industries,LLC</b>	<b>Joshua Postadan</b>	Sep 17, 2024, 7:51 AM EDT
Please review the response to RFI #027. Provide notification of any cost implications immediately. If a proposal has cost impacts, please request an RFQ from HESS. Send a proposal no later than the close of business within 7 days of receipt of this RFI response. HESS will consider this as a no cost change and close this issue should a proposal not be received by this date. A lack of response for any credit items will prompt HESS Construction to assign a cost value that will be deducted from your contract sum. Note: The RFQ is simply an administrative tracking tool, and in no way represents that additional work, cost or time is acknowledged, authorized, directed, or approved.	<b>Joshua Postadan</b>	Sep 17, 2024, 7:51 AM EDT
<b>Patrick Byrne</b> changed the status from  <b>Open</b> Answered to  <b>Open</b> Answered <b>Official response:</b> See combined RFI response from CEI and G+P and revised drawings. changed the <b>official response attachment</b> to: <a href="#">RFI 015_KSI - STUD WALL CLARIFICATION.PDF</a> , <a href="#">2024-09-13 NEMHS- RFI027 SHEET S508.PDF</a> , <a href="#">A431 - ROOF DETAILS.PDF</a> . set Ball in court to <b>Joshua Postadan</b> (HESS Construction Co., LLC)	<b>Patrick Byrne</b>	Sep 16, 2024, 9:22 PM EDT
<b>Patrick Byrne</b> added a reference to a File <b>2024-09-13 NEMHS- RFI027 sheet S508.pdf</b>	<b>Patrick Byrne</b>	Sep 16, 2024, 9:20 PM EDT
<b>Patrick Byrne</b> added a reference to a File <b>A431 - ROOF DETAILS.pdf</b>	<b>Patrick Byrne</b>	Sep 16, 2024, 9:20 PM EDT
<b>Patrick Byrne</b> changed the status from  <b>Open</b> In Review to  <b>Open</b> Answered set Ball in court to <b>Patrick Byrne</b> (Grimm and Parker)	<b>Patrick Byrne</b>	Sep 16, 2024, 9:20 PM EDT
<b>Patrick Byrne</b> added a response: See combined response and associated revised drawings from G+P and CEI.	<b>Patrick Byrne</b>	Sep 16, 2024, 9:20 PM EDT
<b>Cesar Flores</b> (Columbia Engineering) response was submitted by <b>Patrick Byrne</b> : See attached RFI response.	<b>Patrick Byrne</b>	Sep 16, 2024, 9:20 PM EDT
set Ball in court to <b>Cesar Flores</b> (Columbia Engineering), <b>Patrick Byrne</b> (Grimm and Parker)	<b>Patrick Byrne</b>	Sep 16, 2024, 9:19 PM EDT



<b>Patrick Byrne</b> changed the status from  <b>Open</b> In Review to  <b>Open</b> In Review set Ball in court to <b>Cesar Flores</b> (Columbia Engineering)	<b>Patrick Byrne</b>	Sep 6, 2024, 10:31 AM EDT
changed the <b>watchers</b> to <b>HESS PROJECT TEAM, Architect Eng., Kinsley Steel Inc, Pro Tech Contractors</b>	<b>Joshua Postadan</b>	Sep 4, 2024, 1:32 PM EDT
<b>Joshua Postadan</b> changed the status from  <b>Open</b> Waiting for Submission to  <b>Open</b> In Review set Ball in court to <b>Patrick Byrne</b> (Grimm and Parker) changed the <b>watchers</b> to <b>HESS PROJECT TEAM, Architect Eng., Kinsley Steel Inc</b>	<b>Joshua Postadan</b>	Aug 30, 2024, 11:03 AM EDT
changed the <b>ID</b> to 027	<b>Joshua Postadan</b>	Aug 30, 2024, 11:03 AM EDT
changed the <b>watchers</b> to <b>HESS PROJECT TEAM, Kinsley Steel Inc</b>	<b>Joshua Postadan</b>	Aug 30, 2024, 10:58 AM EDT
changed the <b>location details</b> to <i>See attachment "RFI 015_KSI - Stud Wall Clarification.pdf"</i>	<b>Joshua Postadan</b>	Aug 30, 2024, 10:58 AM EDT
changed the <b>due date</b> to Sep 12, 2024	<b>Joshua Postadan</b>	Aug 30, 2024, 10:58 AM EDT
changed the <b>location</b> to <i>Area B</i>	<b>Joshua Postadan</b>	Aug 30, 2024, 10:57 AM EDT
changed the <b>question</b> to <i>Please refer to the attachment titled "RFI 015_KSI - Stud Wall Clarification.pdf" in the References section for the question locations. [Q1] Please advise on the stud wall size. [Q2] Please confirm whether 2 vertical channels required.</i>	<b>Joshua Postadan</b>	Aug 30, 2024, 10:56 AM EDT
changed the <b>question</b> to <i>Please refer to the attachment titled "RFI 015_KSI - Stud Wall Clarification.pdf" in the References section for the question locations. Q1: Please advise on the stud wall size. Q2: Please confirm whether 2 vertical channels required.</i>	<b>Joshua Postadan</b>	Aug 30, 2024, 10:56 AM EDT
changed the <b>schedule impact</b> to <i>No</i>	<b>Joshua Postadan</b>	Aug 30, 2024, 10:55 AM EDT
changed the <b>cost impact</b> to <i>Unknown</i>	<b>Joshua Postadan</b>	Aug 30, 2024, 10:55 AM EDT
<b>Lucas Bradley</b> added a reference to a File <b>RFI 015_KSI - Stud Wall Clarification.pdf</b>	<b>Lucas Bradley</b>	Aug 29, 2024, 9:07 AM EDT
<b>Lucas Bradley</b> (Kinsley Steel Inc) created this RFI in  <b>Open</b> Waiting for Submission status and set Ball in court to <b>Joshua Postadan</b> (HESS Construction Co., LLC).	<b>Lucas Bradley</b>	Aug 29, 2024, 9:07 AM EDT



## *Request for Information*

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**Date:** 08/29/2024

**Request No:** KSI 015

**Project:** North East Middle & High School  
**KCI No.:** 242612

**To:** Hess Construction  
**Attn.:** Joshua Postadan  
**Email:** jpostadan@hessconstruction.com

**From:** Mike Staub  
**Phone:** 717-434-6248  
**Email:** [mstaub@kinsleysteel.com](mailto:mstaub@kinsleysteel.com)

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### **RE: Stud Wall Clarification**

#### ***Request***

Please refer to the attached TRC RFI 011 for the question locations.

Q1: Please advise on the stud wall size.

Q2: Please confirm whether 2 vertical channels required.

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#### ***Date Response Requested: ASAP***

CEI: Please following sheets for responses.  
Updated details attached to response.  
Cesar Flores  
09-13-2024

**G+P:**

See revised architectural and structural details and comments on RFI response sketch.

Patrick Byrne 9.16.2024



217 Ward Circle Brentwood, TN 37027, Phone: 615-661-7979 Fax: 615-661-0644

# REQUEST FOR INFORMATION

## NORTH EAST MIDDLE / HIGH SCHOOL

JOB #24-880

To:	<b>Michael E.</b> <a href="mailto:Staubmstaub@kinsleysteel.com">Staubmstaub@kinsleysteel.com</a>	CLIENT RFI#
Company:	KINSLEY, INC	GC RFI#
		TRC RFI# 011
cc:		RESPONSE 09-05-2024 NEEDED BY

### SUBJECT: Stud wall Clarification

Please refer to the attached file A416 & A105 for the questions.

Q11.1: Please advise on the stud wall size.

Q11.2: Please confirm whether 2 vertical channels required

By:	<b>Ruben Flores</b>	Date:	<b>08-29-2024</b>
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### Response:

By:		Date:	
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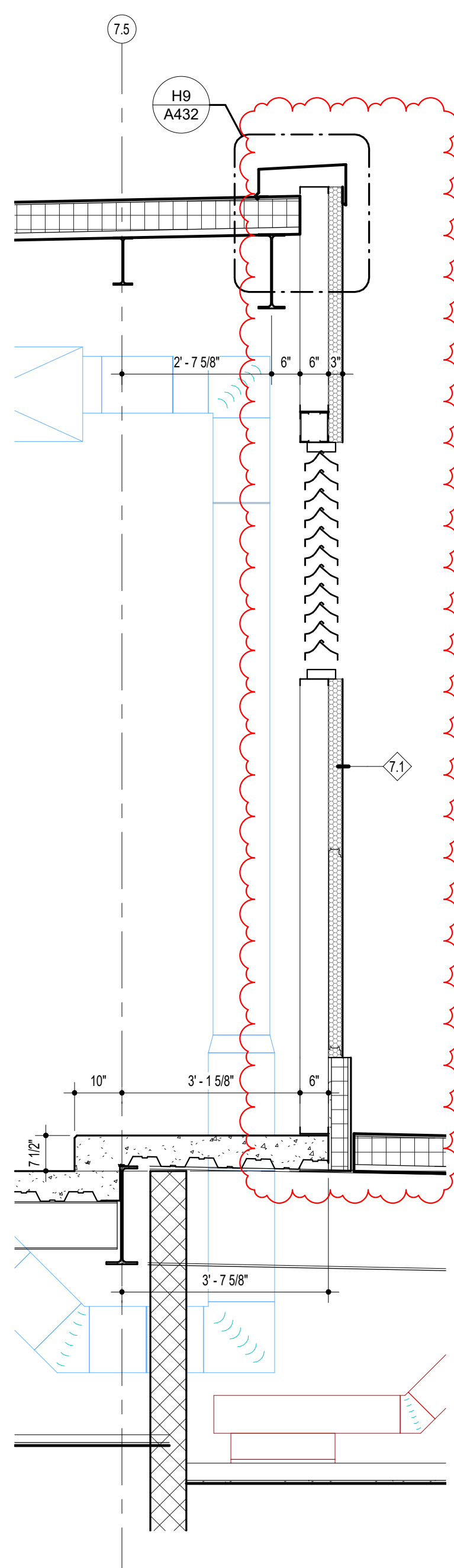
PLEASE SEND RESPONSE TO: Ruben Flores

Phone: 325-320-0719

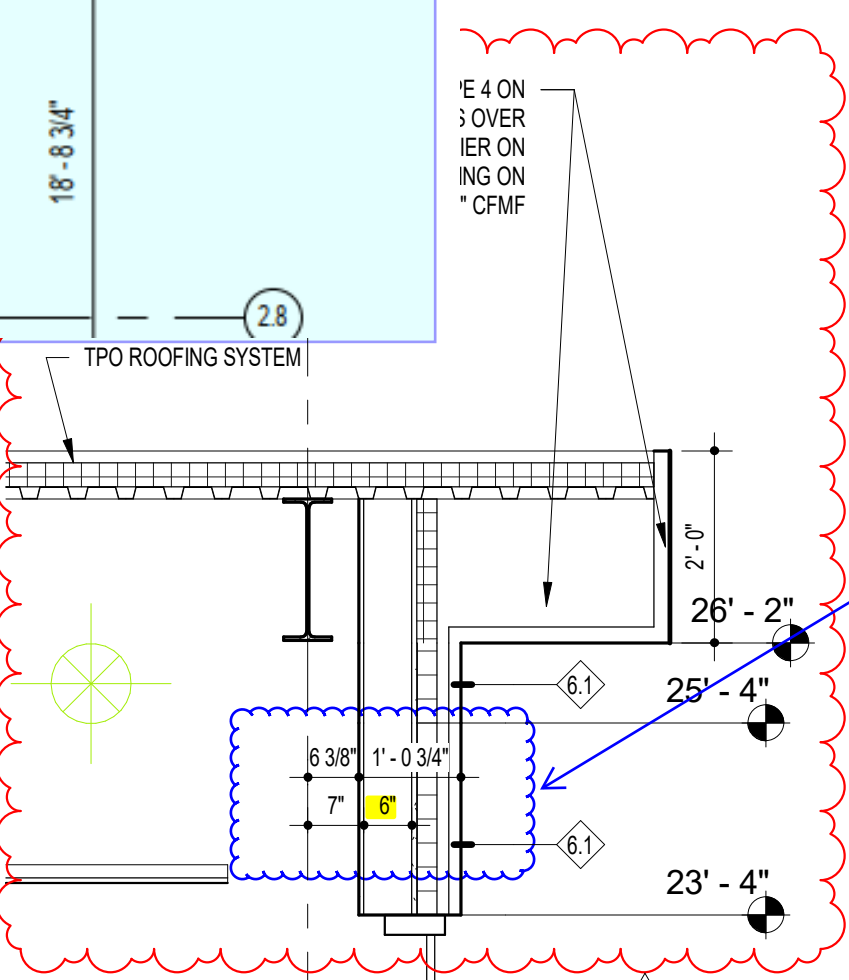
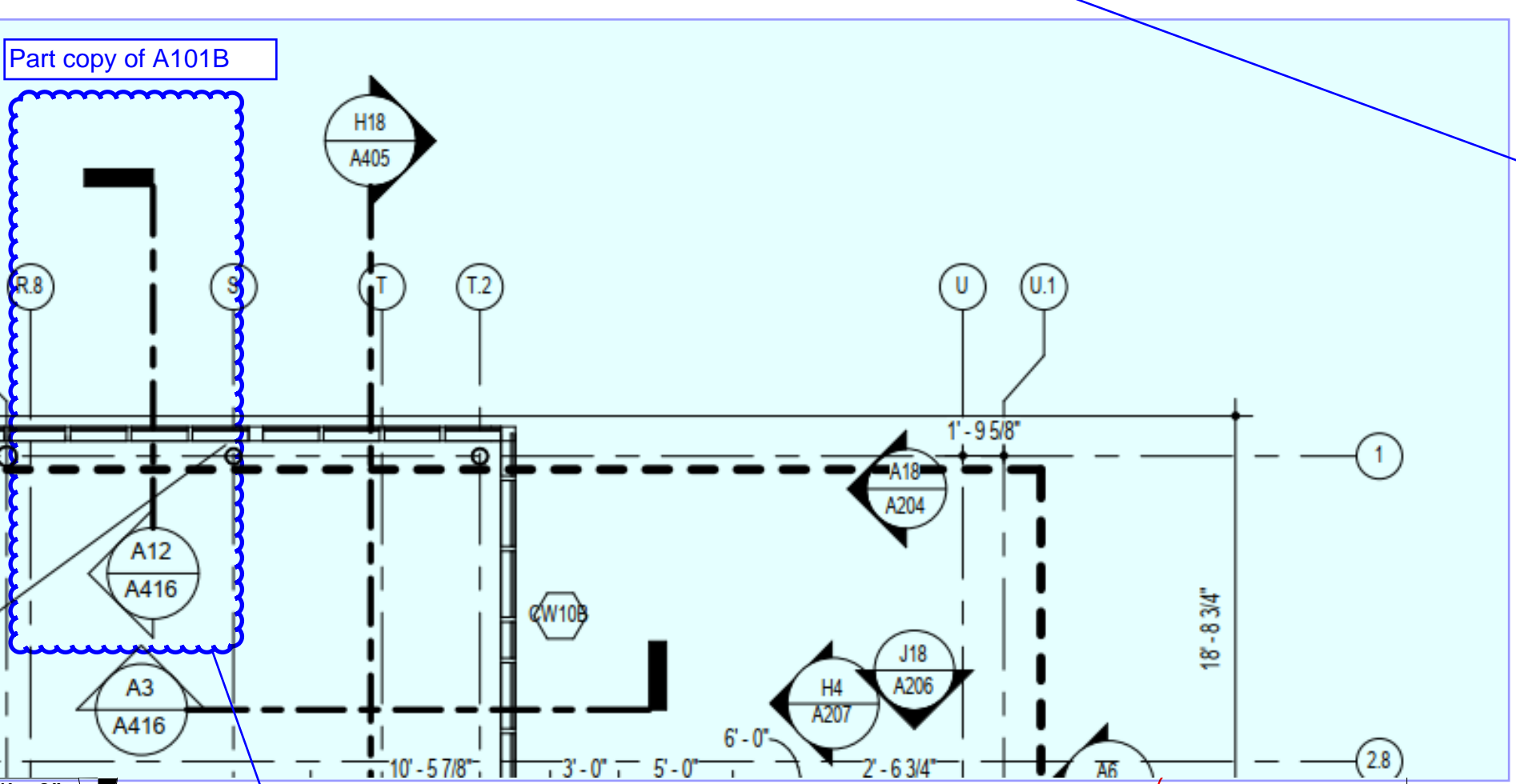
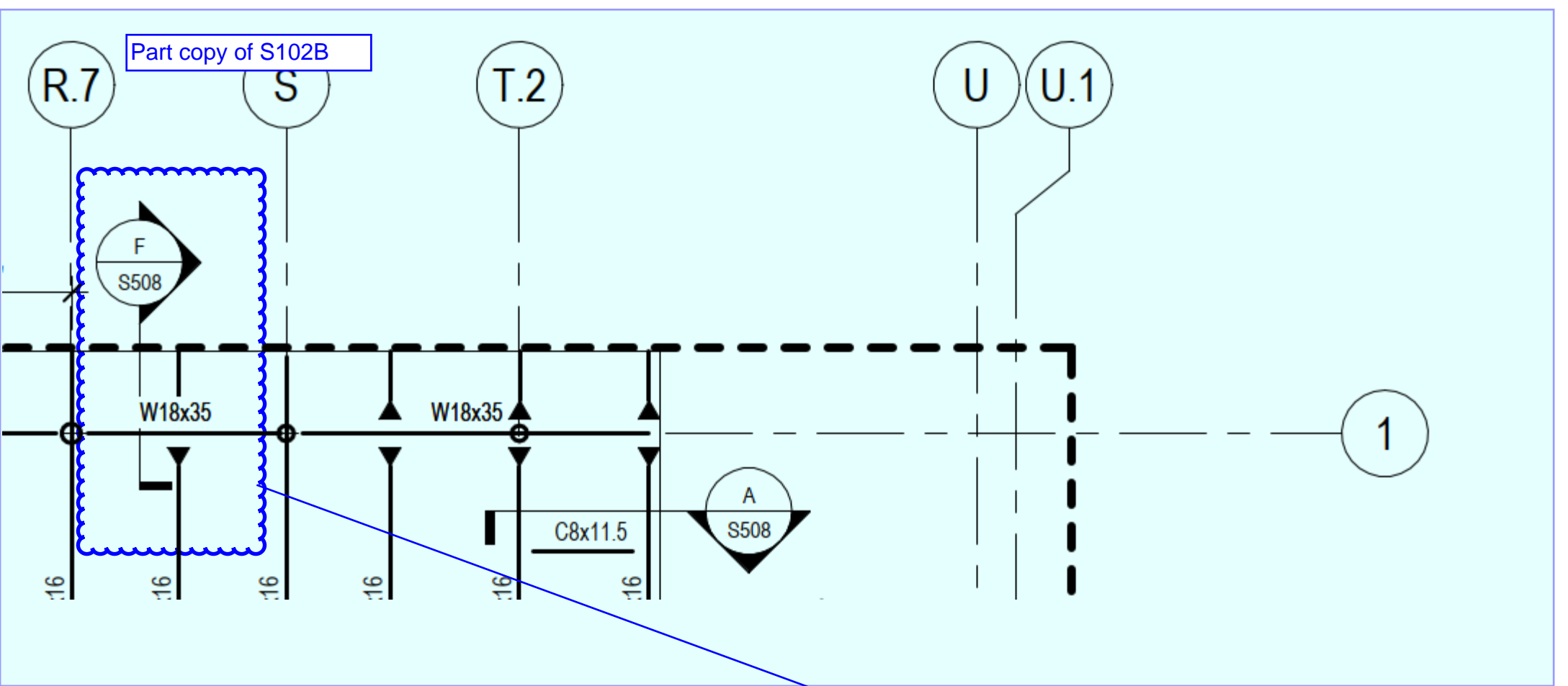
**THE RAMANNA COMPANIES**

**CONSULTING ENGINEERS**

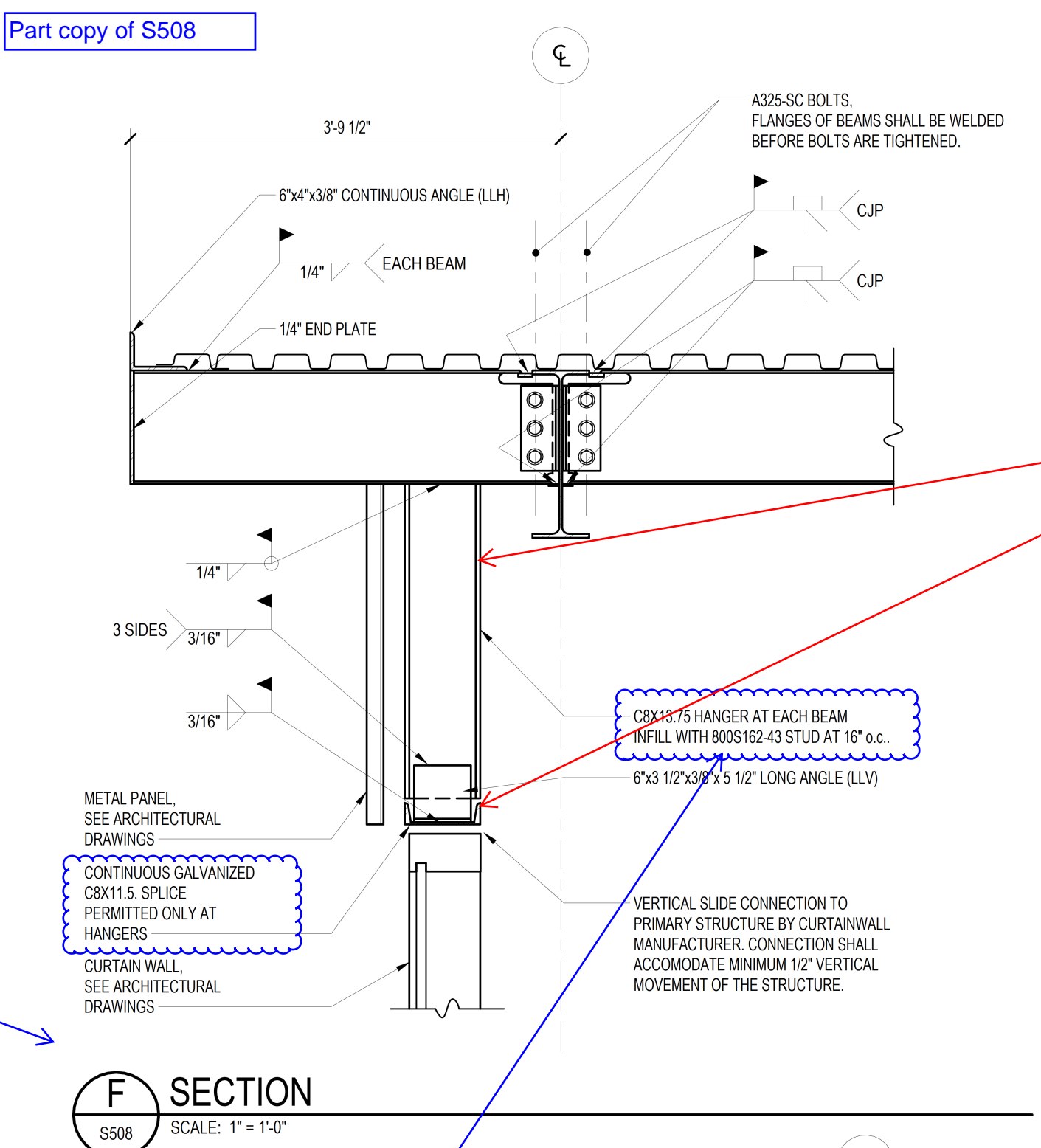




F18 WALL SECTION  
1/2" = 1'-0"



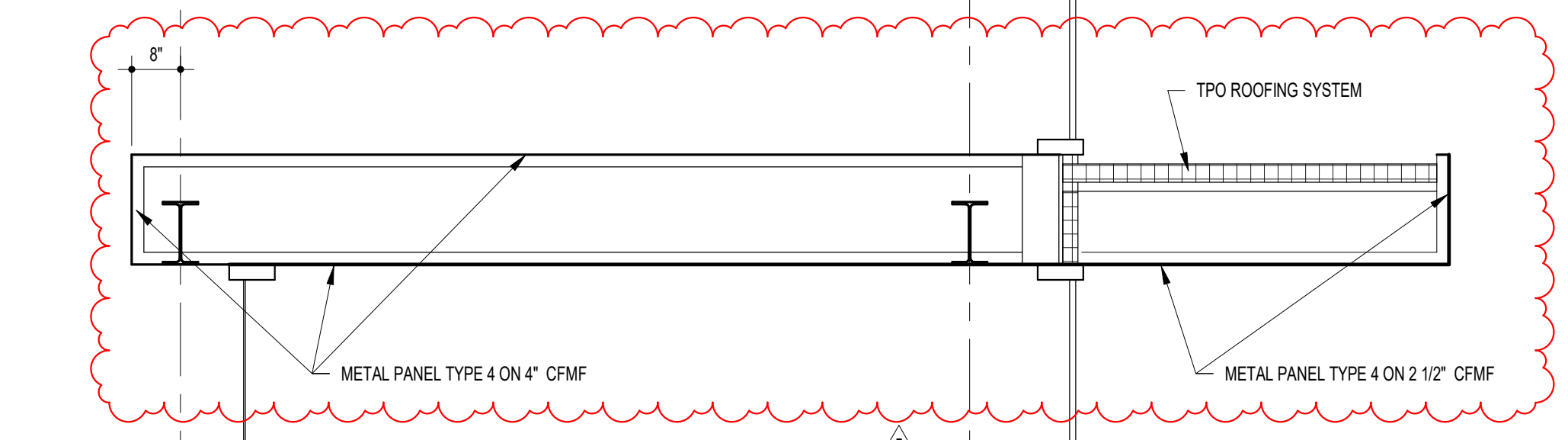
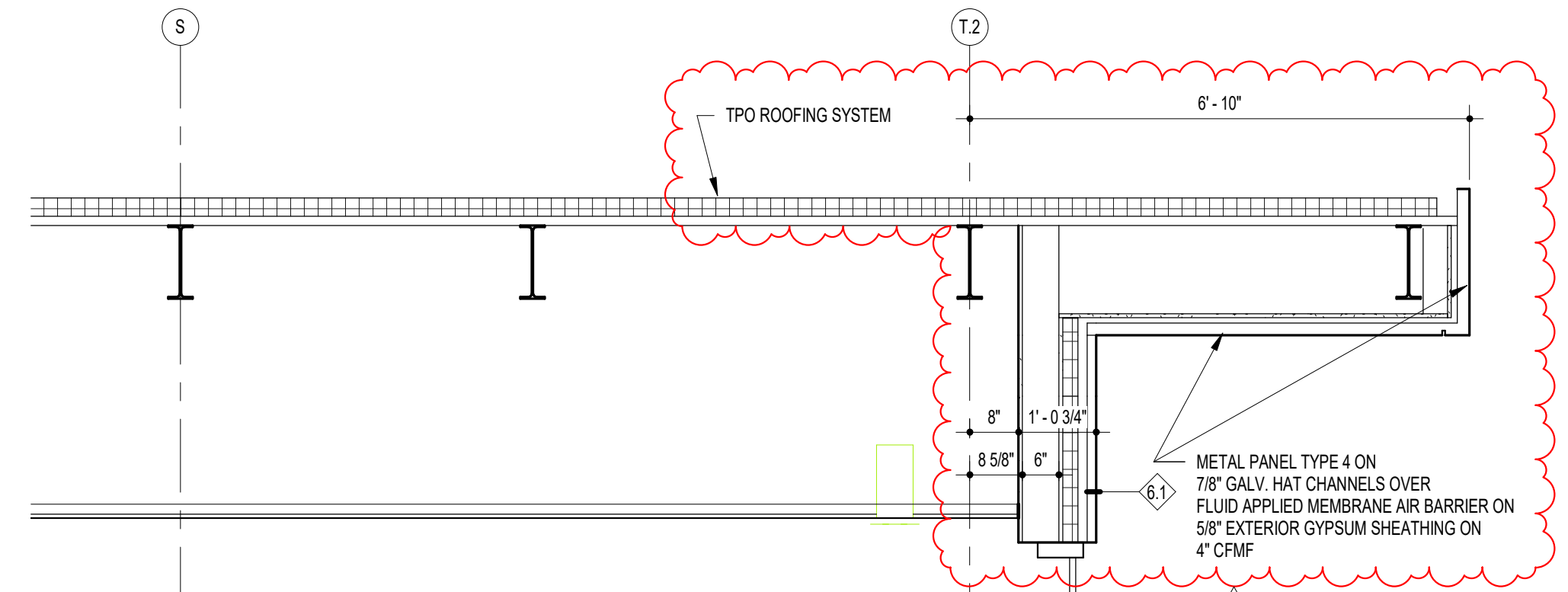
A12 WALL SECTION  
1/2" = 1'-0"



F SECTION  
S508  
SCALE: 1" = 1'-0"

Q11.1  
Section in this sheet A12/A416 shows a 6" stud wall, whereas the structural section F/S508 for the same location shows a C8x13.75 hanger. These channels will not fit within the 6" stud wall. Please advise how to proceed here.

CEI:  
-Please see updated sections F/S508 and A/S508 with 6" wide steel.



A3 WALL SECTION  
1/2" = 1'-0"

11720 Beltsville Drive  
Suite 600  
Calverton, MD 20705  
Tel. 301.595.1000  
www.grimmandparker.com



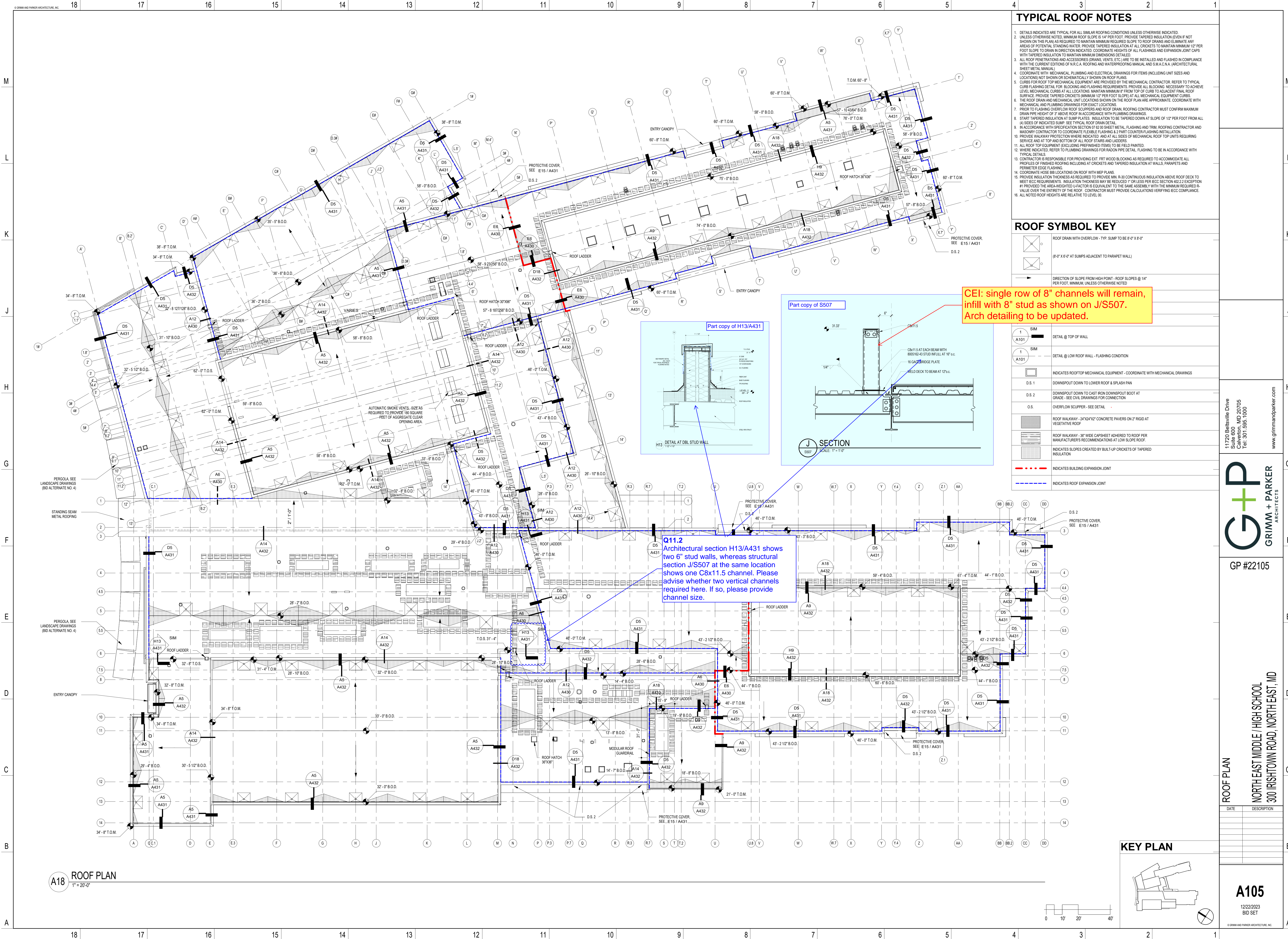
GP #22105

WALL SECTIONS  
NORTH EAST MIDDLE / HIGH SCHOOL  
300 IRISHTOWN ROAD, NORTH EAST, MD

DATE	DESCRIPTION
04/02/2024	ADDENDUM 5

A416  
12/22/2023  
BID SET  
© GRIMM AND PARKER ARCHITECTURE, INC.





- ### TYPICAL ROOF NOTES
- DETAILS INDICATED ARE TYPICAL FOR ALL SIMILAR ROOFING CONDITIONS UNLESS OTHERWISE INDICATED.
  - UNLESS OTHERWISE NOTED, MINIMUM ROOF SLOPE IS 1/4" PER FOOT. PROVIDE TAPERED INSULATION (EVEN IF NOT SHOWN ON THIS PLAN) AS REQUIRED TO MAINTAIN MINIMUM REQUIRED SLOPE TO ROOF DRAINS AND ELIMINATE ANY AREAS OF POTENTIAL STANDING WATER. PROVIDE TAPERED INSULATION AT ALL CROCKETS TO MAINTAIN MINIMUM 1/2" PER FOOT SLOPE TO DRAIN IN DIRECTION INDICATED. COORDINATE HEIGHTS OF ALL FLASHINGS AND EXPANSION JOINT CAPS WITH TAPERED INSULATION TO MAINTAIN MINIMUM DIMENSIONS DETAILED.
  - ALL ROOF PENETRATIONS AND ACCESSORIES (DRAINS, VENTS, ETC.) ARE TO BE INSTALLED AND FLASHED IN COMPLIANCE WITH THE CURRENT EDITIONS OF N.R.C.A. ROOFING AND WATERPROOFING MANUAL AND S.M.A.C.N.A. (ARCHITECTURAL SHEET METAL MANUAL).
  - COORDINATE WITH MECHANICAL, PLUMBING AND ELECTRICAL DRAWINGS FOR ITEMS INCLUDING UNIT SIZES AND LOCATIONS NOT SHOWN OR SCHEMATICALLY SHOWN ON ROOF PLANS.
  - CURBS FOR ROOF TOP MECHANICAL EQUIPMENT ARE PROVIDED BY THE MECHANICAL CONTRACTOR. REFER TO TYPICAL CURB FLASHING DETAIL FOR BLOCKING AND FLASHING REQUIREMENTS. PROVIDE ALL BLOCKING NECESSARY TO ACHIEVE LEVEL MECHANICAL CURBS AT ALL LOCATIONS. MAINTAIN MINIMUM 6" FROM TOP OF CURB TO ADJACENT FINAL ROOF SURFACE. PROVIDE TAPERED CROCKETS (MINIMUM 1/2" PER FOOT SLOPE) AT ALL MECHANICAL EQUIPMENT CURBS.
  - THE ROOF DRAIN AND MECHANICAL UNIT LOCATIONS SHOWN ON THE ROOF PLAN ARE APPROXIMATE. COORDINATE WITH MECHANICAL AND PLUMBING DRAWINGS FOR EXACT LOCATIONS.
  - PRIOR TO FLASHING OVERFLOW ROOF SCUPPERS AND ROOF DRAIN, ROOFING CONTRACTOR MUST CONFIRM MAXIMUM DRAIN PIPE HEIGHT OF 9' ABOVE ROOF IN ACCORDANCE WITH PLUMBING DRAWINGS.
  - START TAPERED INSULATION AT SUMP PLATES. INSULATION TO BE TAPERED DOWN AT SLOPE OF 1/2" PER FOOT FROM ALL (4) SIDES OF INDICATED SUMP. SEE TYPICAL ROOF DRAIN DETAIL.
  - IN ACCORDANCE WITH SPECIFICATION SECTION 07 55 00 SHEET METAL FLASHING AND TRIM, ROOFING CONTRACTOR AND MASONRY CONTRACTOR TO COORDINATE FLEXIBLE FLASHING & 2 PART COUNTER FLASHING INSTALLATION.
  - PROVIDE WALKWAY PROTECTION WHERE INDICATED, AND AT ALL SIDES OF MECHANICAL ROOF TOP UNITS REQUIRING SERVICE AT TOP AND BOTTOM OF ALL ROOF STAIRS AND LADDERS.
  - ALL ROOF TOP EQUIPMENT (EXCLUDING PREFINISHED ITEMS) TO BE FIELD PAINTED.
  - WHERE INDICATED, REFER TO PLUMBING DRAWINGS FOR RADON PIPE DETAIL. FLASHING TO BE IN ACCORDANCE WITH TYPICAL DETAILS.
  - CONTRACTOR IS RESPONSIBLE FOR PROVIDING EXT. FRT WOOD BLOCKING AS REQUIRED TO ACCOMMODATE ALL PROFILES OF FINISHED ROOFING INCLUDING AT CROCKETS AND TAPERED INSULATION AT WALLS, PARAPETS AND PERIMETER EDGE FLASHING.
  - COORDINATE ROSE SH locations ON ROOF WITH MEP PLANS.
  - PROVIDE INSULATION THICKNESS AS REQUIRED TO PROVIDE MIN. R-30 CONTINUOUS INSULATION ABOVE ROOF DECK TO MEET IECC REQUIREMENTS. INSULATION THICKNESS MAY BE REDUCED 1" OR LESS PER IECC SECTION 402.2.2 EXCEPTION IF PROVIDED THE AREA WEIGHTED U-FACTOR IS EQUIVALENT TO THE SAME ASSEMBLY WITH THE MINIMUM REQUIRED R-VALUE OVER THE ENTIRETY OF THE ROOF. CONTRACTOR MUST PROVIDE CALCULATIONS VERIFYING IECC COMPLIANCE.
  - ALL NOTED ROOF HEIGHTS ARE RELATIVE TO LEVEL 10.

### ROOF SYMBOL KEY

	ROOF DRAIN WITH OVERFLOW - TYP. SUMP TO BE 6'-0" X 8'-0"
	(8'-0" X 6'-0" AT SUMPS ADJACENT TO PARAPET WALL)
	DIRECTION OF SLOPE FROM HIGH POINT - ROOF SLOPES @ 1/4" PER FOOT, MINIMUM, UNLESS OTHERWISE NOTED
	DETAIL @ TOP OF WALL
	DETAIL @ LOW ROOF WALL - FLASHING CONDITION
	INDICATES ROOF TOP MECHANICAL EQUIPMENT - COORDINATE WITH MECHANICAL DRAWINGS
	D.S. 1 DOWNSPOUT DOWN TO LOWER ROOF & SPLASH PAN
	D.S. 2 DOWNSPOUT DOWN TO CAST IRON DOWNSPOUT BOOT AT GRADE - SEE CIVIL DRAWINGS FOR CONNECTION
	O.S. OVERFLOW SCUPPER - SEE DETAIL
	ROOF WALKWAY - 24"x24"x2" CONCRETE PAVERS ON 2" RIGID AT VEGETATIVE ROOF
	ROOF WALKWAY - 36" WIDE CAR SHEET ADHERED TO ROOF PER MANUFACTURER'S RECOMMENDATIONS AT LOW SLOPE ROOF
	INDICATES SLOPES CREATED BY BUILT-UP CROCKETS OR TAPERED INSULATION
	INDICATES BUILDING EXPANSION JOINT
	INDICATES ROOF EXPANSION JOINT

CEI: single row of 8" channels will remain, infill with 8" stud as shown on J/S507. Arch detailing to be updated.

Q11.2 Architectural section H13/A431 shows two 6" stud walls, whereas structural section J/S507 at the same location shows one C8x11.5 channel. Please advise whether two vertical channels required here. If so, please provide channel size.

11720 Beltsville Drive  
Suite 600  
Calverton, MD 20705  
Tel: 301.595.1000  
www.grimmparker.com



GP #22105

ROOF PLAN  
NORTH EAST MIDDLE HIGH SCHOOL  
300 IRISTOWN ROAD, NORTH EAST, MD

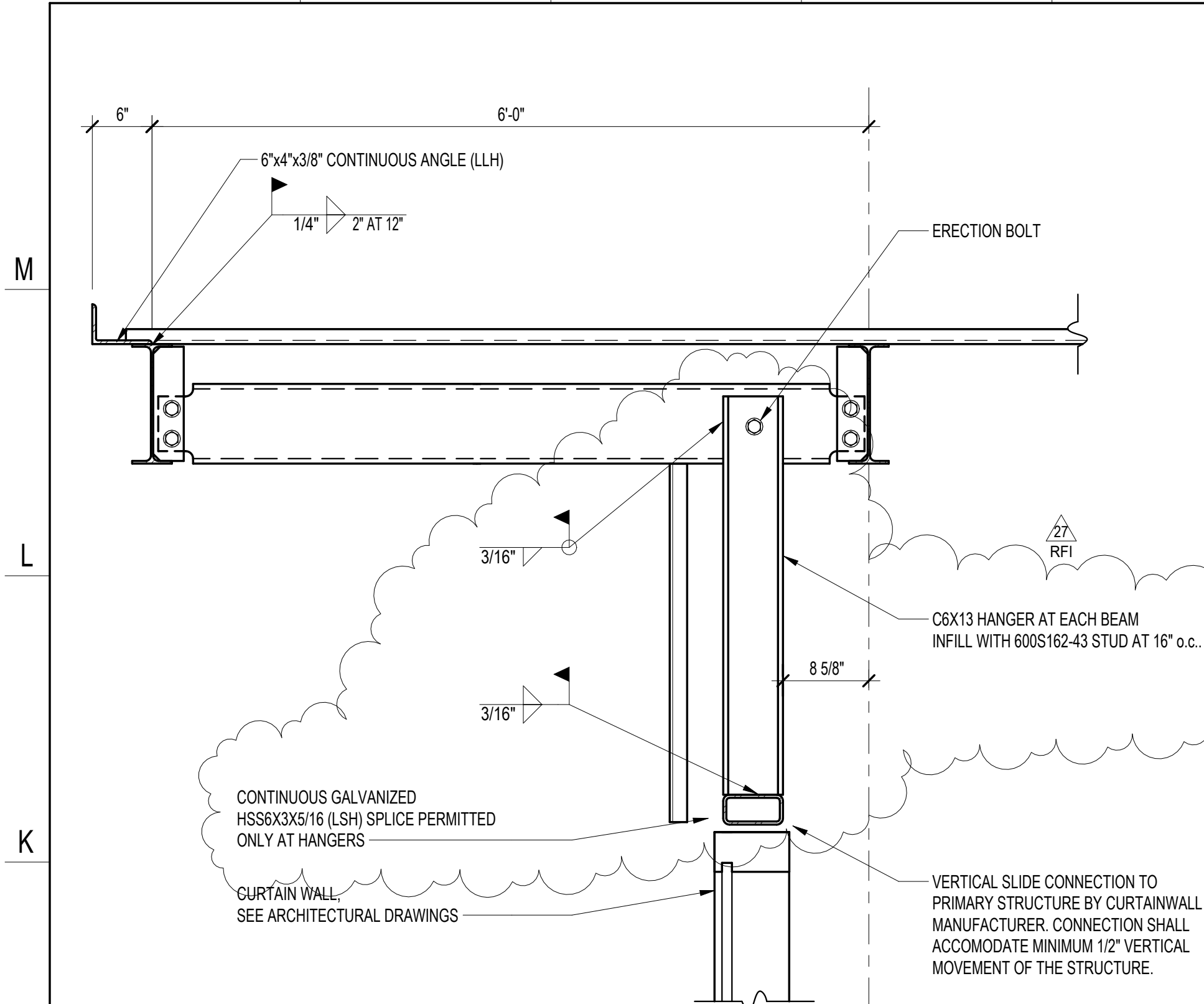
DATE	DESCRIPTION

A105

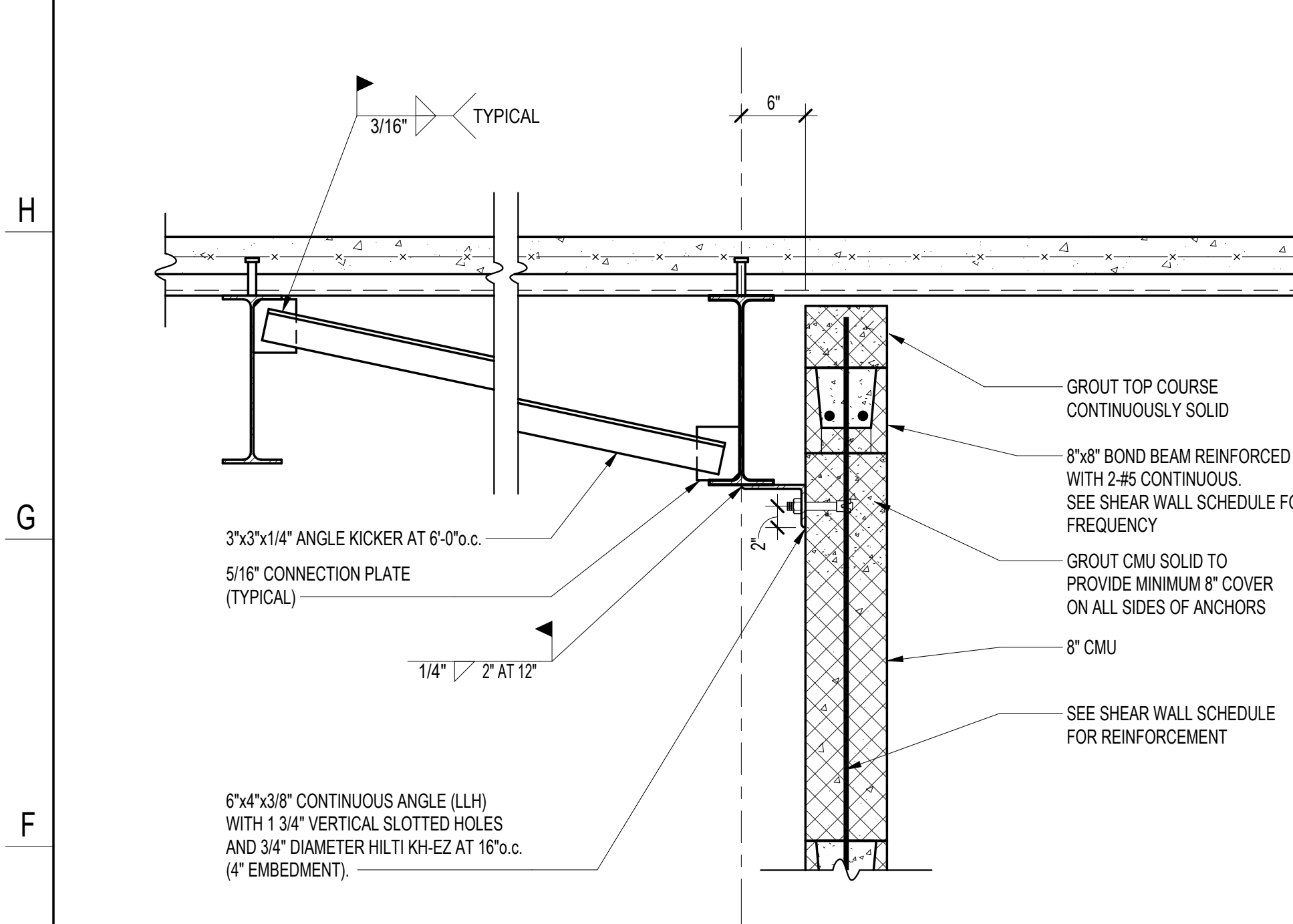
12/22/2023  
BID SET

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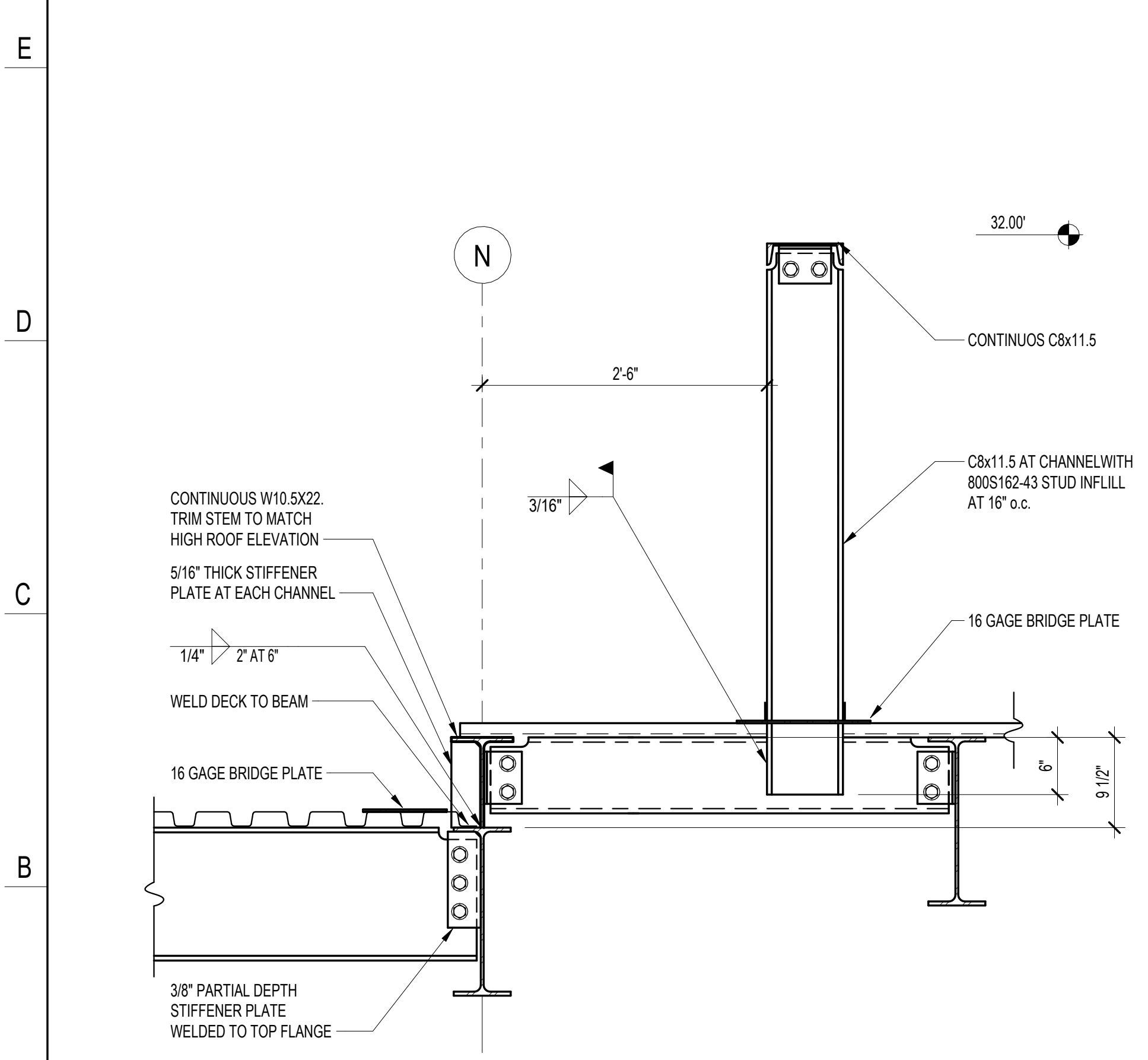




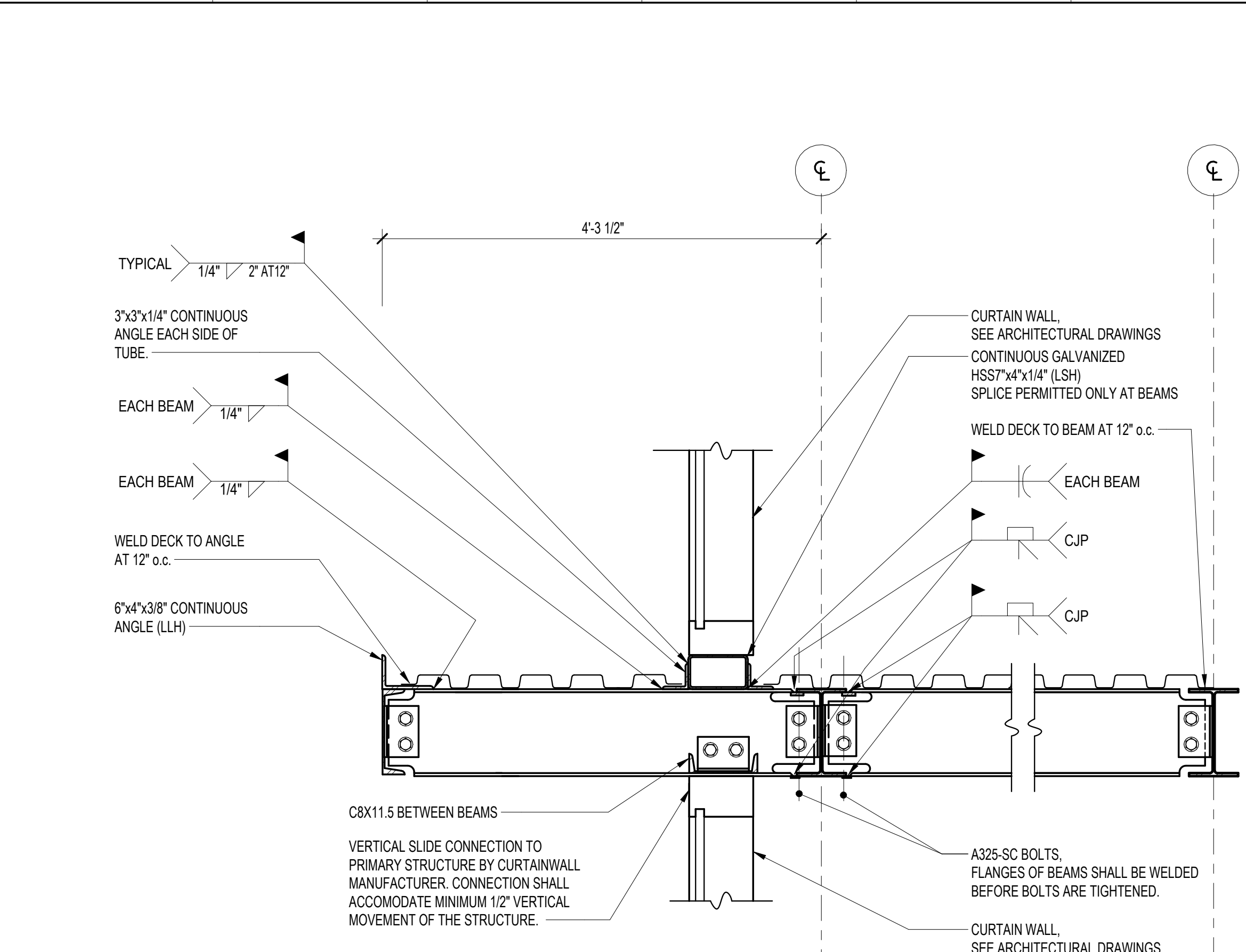
**A SECTION**  
S508 SCALE: 1" = 1'-0"



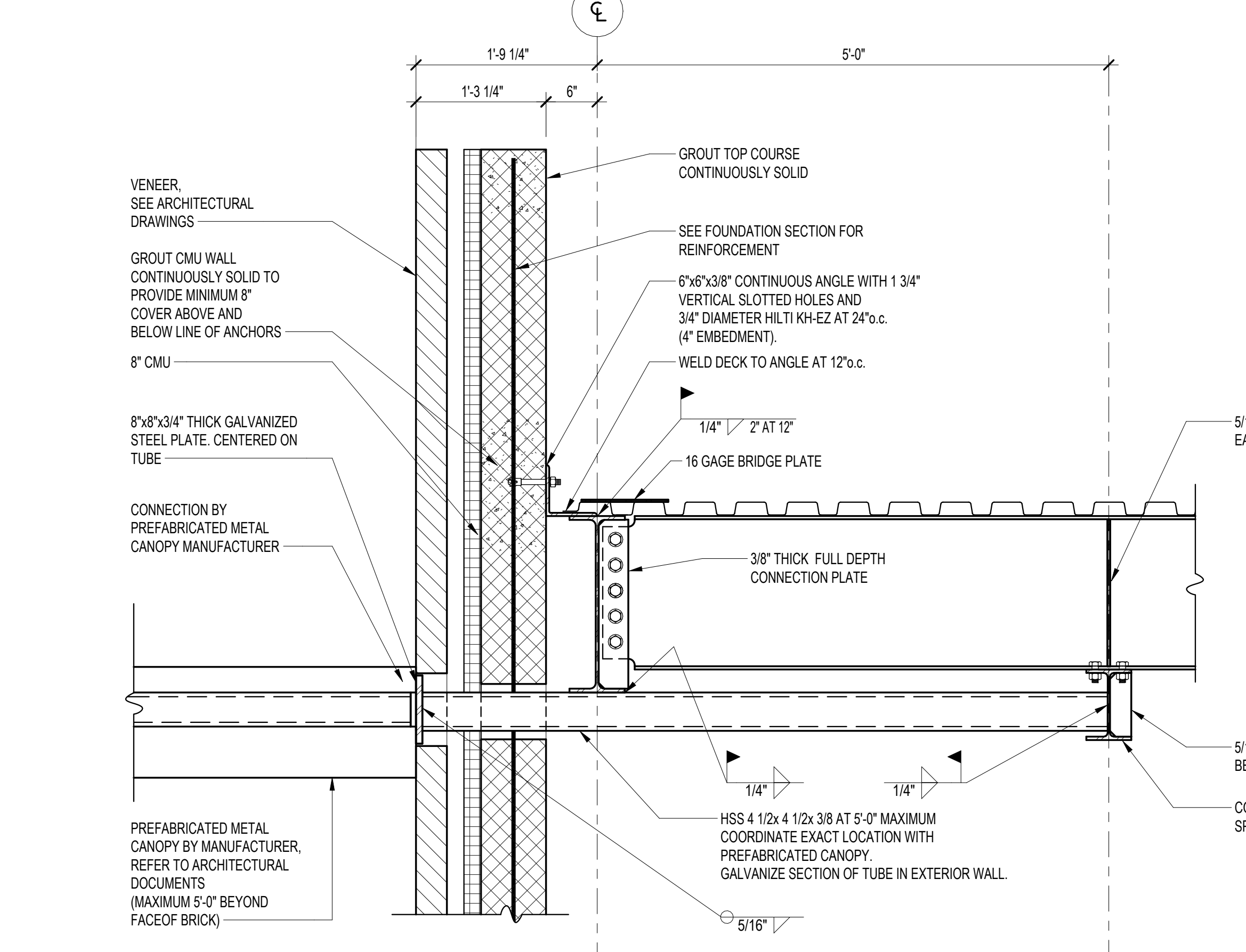
**D SECTION**  
S508 SCALE: 1" = 1'-0"



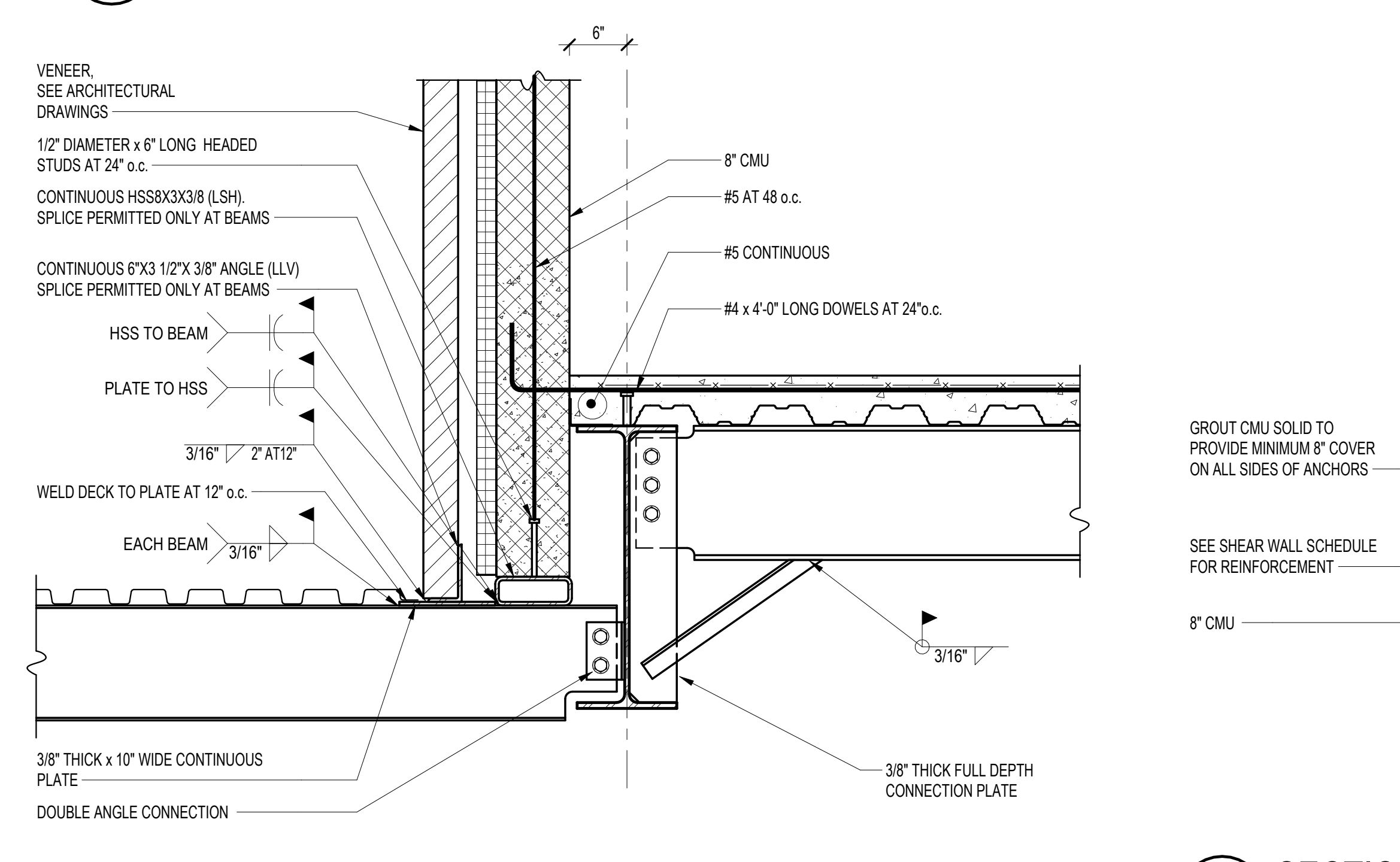
**G SECTION**  
S508 SCALE: 1" = 1'-0"



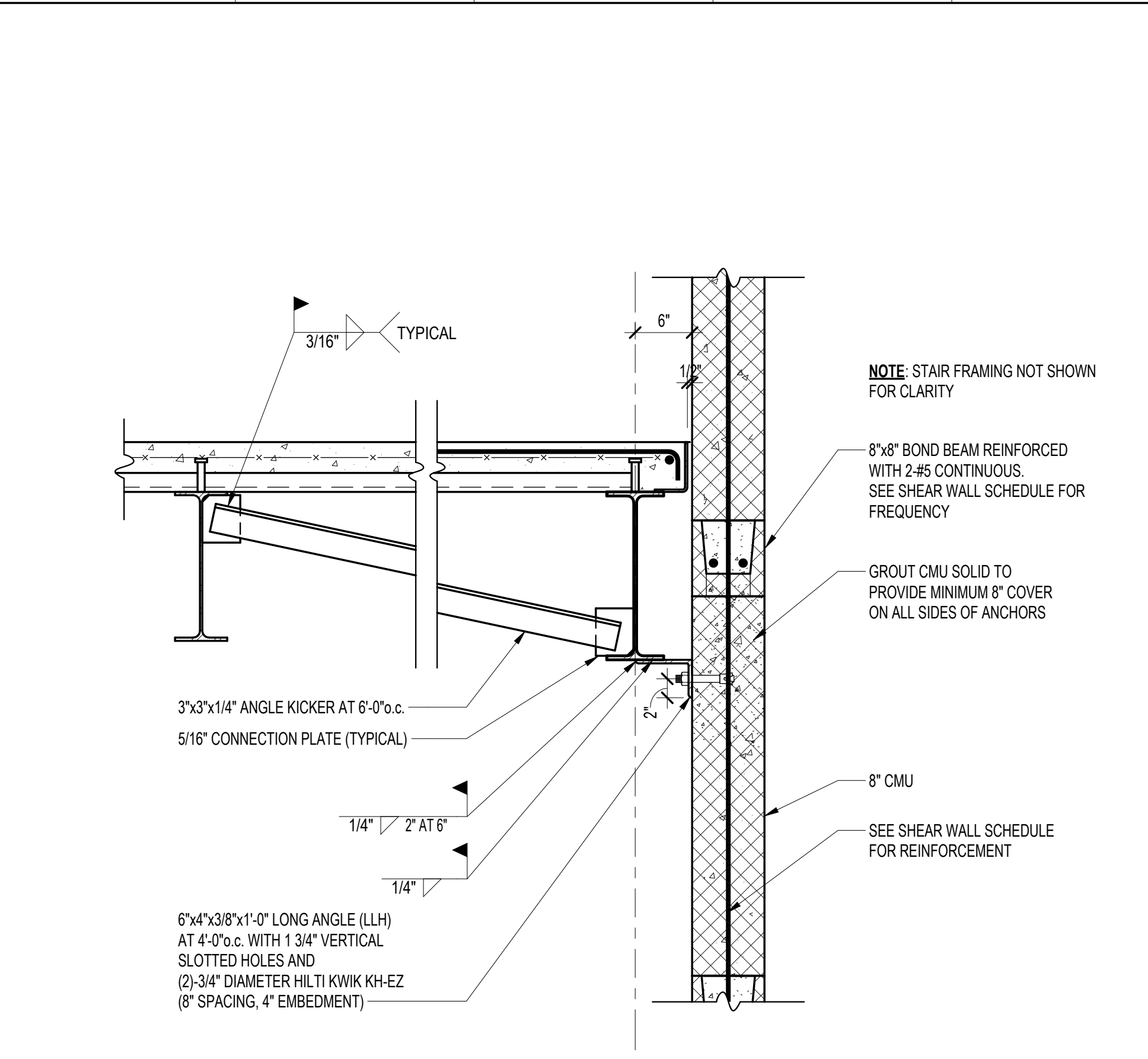
**B SECTION**  
S508 SCALE: 1" = 1'-0"



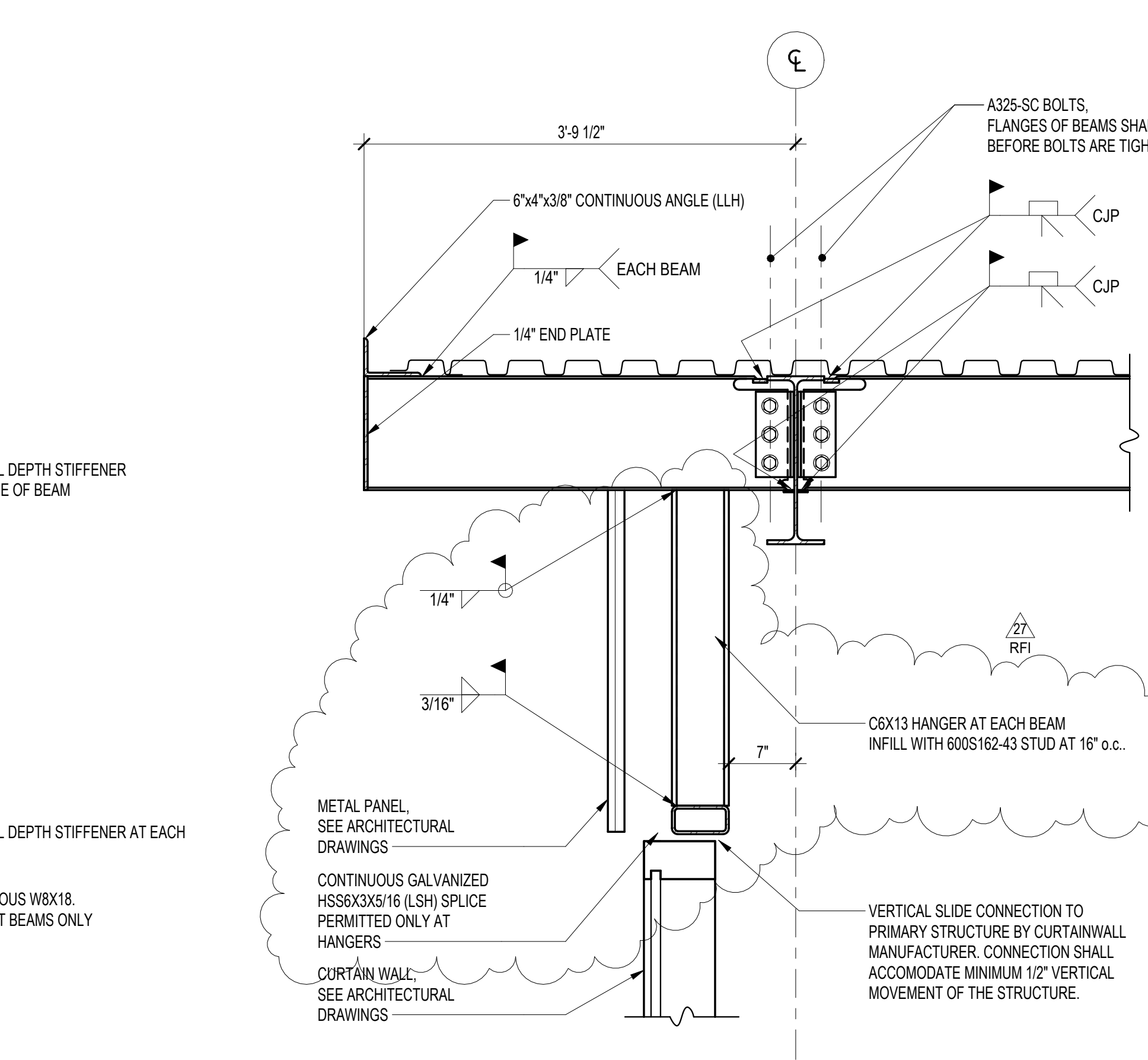
**E SECTION**  
S508 SCALE: 1" = 1'-0"



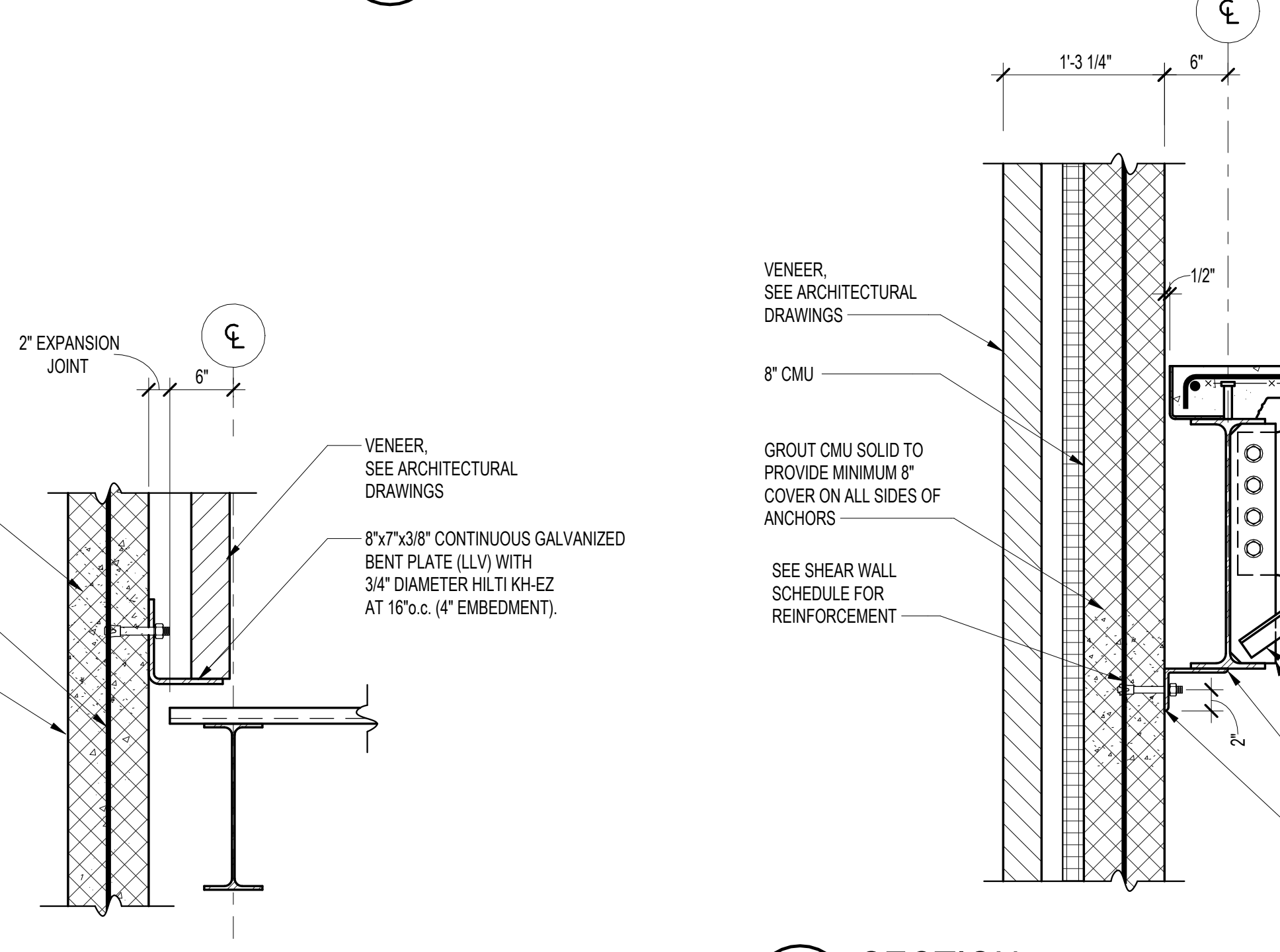
**H SECTION**  
S508 SCALE: 1" = 1'-0"



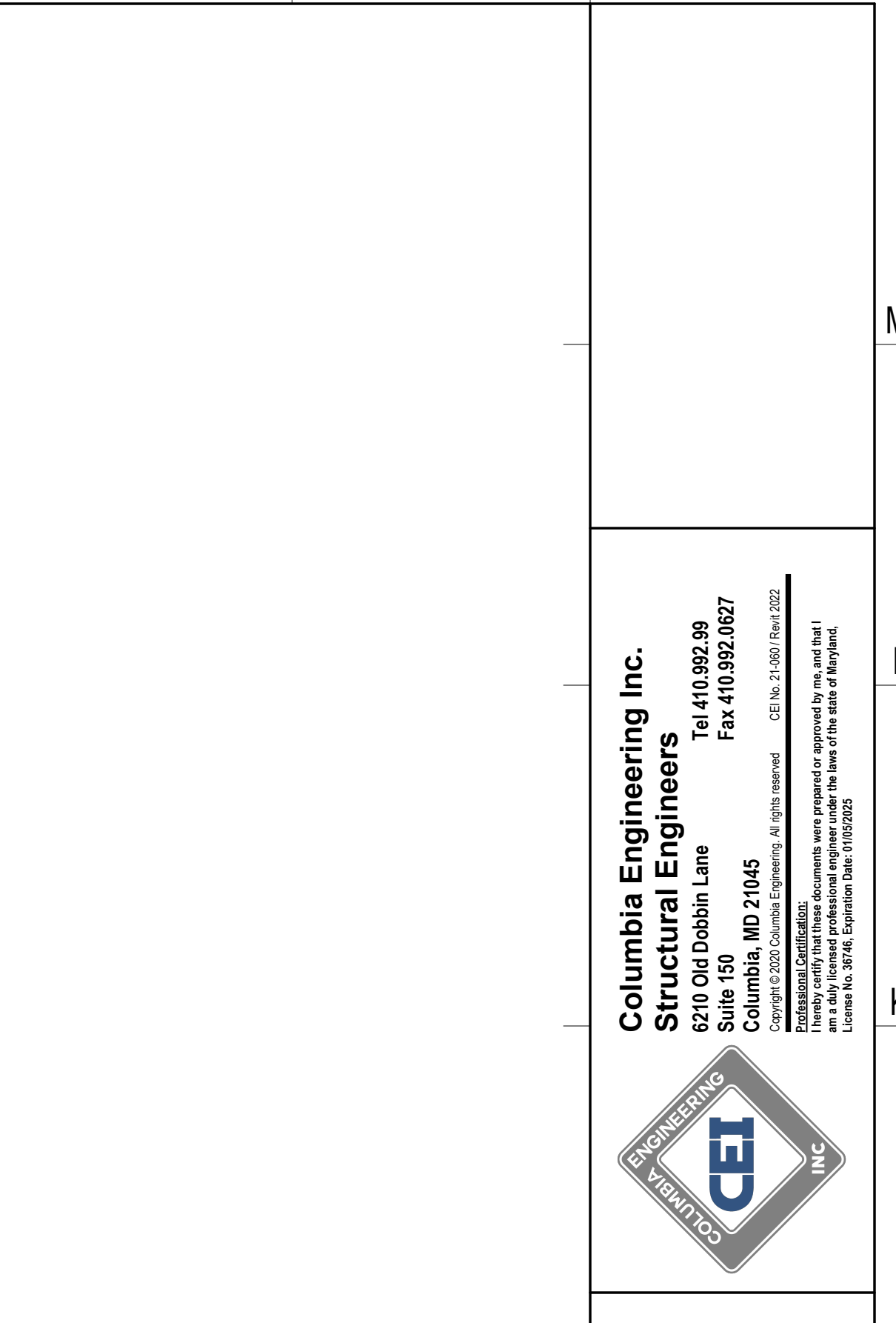
**C SECTION**  
S508 SCALE: 1" = 1'-0"



**F SECTION**  
S508 SCALE: 1" = 1'-0"

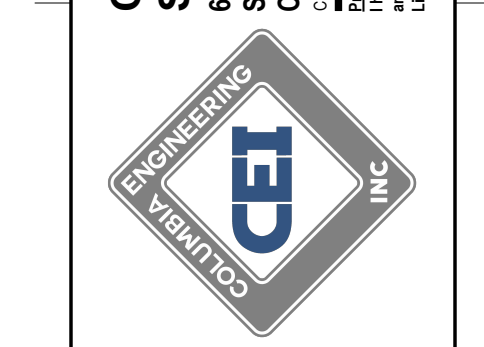


**J SECTION**  
S508 SCALE: 1" = 1'-0"



**K SECTION**  
S508 SCALE: 1" = 1'-0"

**Columbia Engineering Inc.**  
Structural Engineers  
620 Old Dobson Lane  
Columbia, MD 21045  
Tel: 410.862.8239  
Fax: 410.862.8287  
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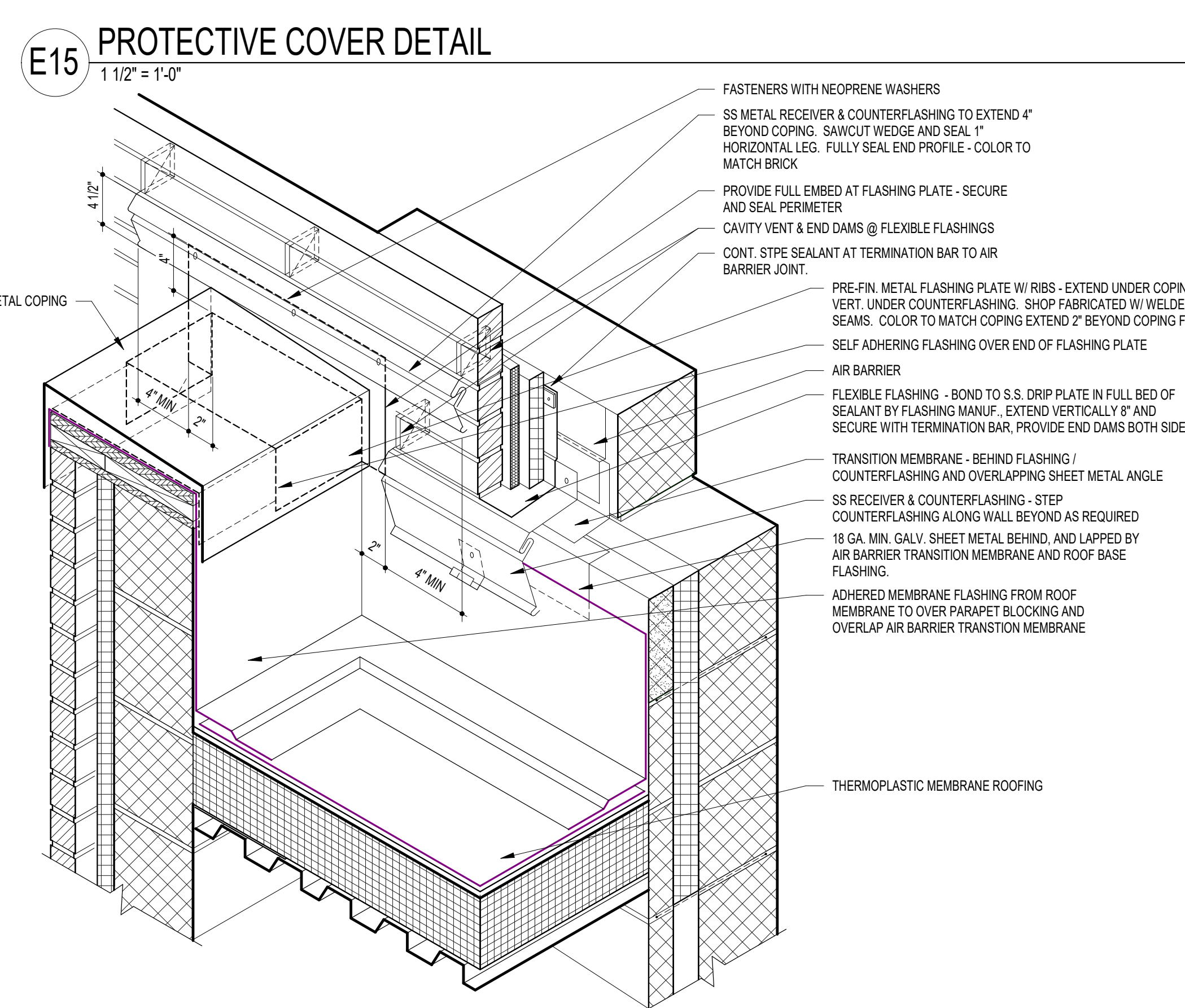
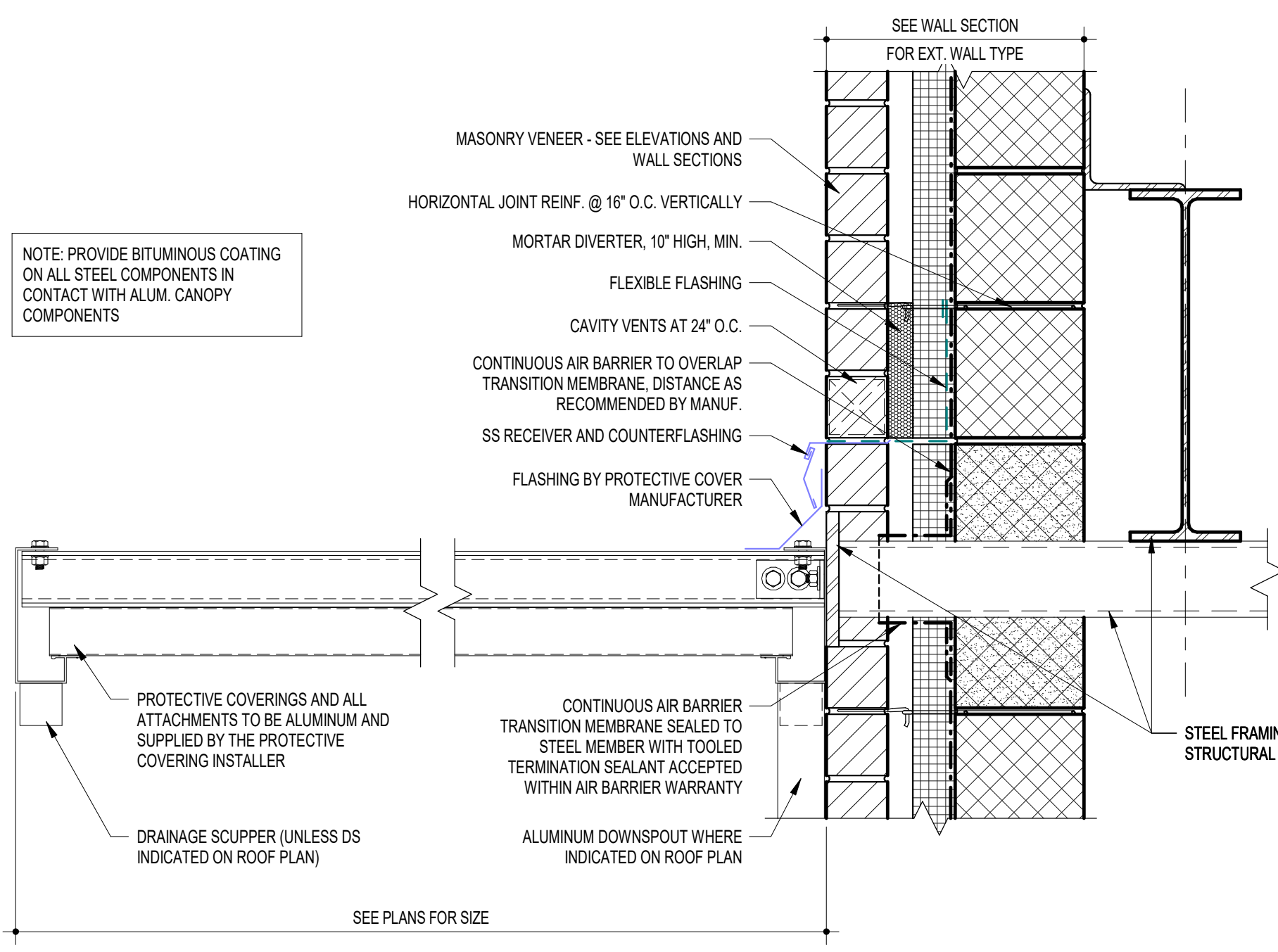
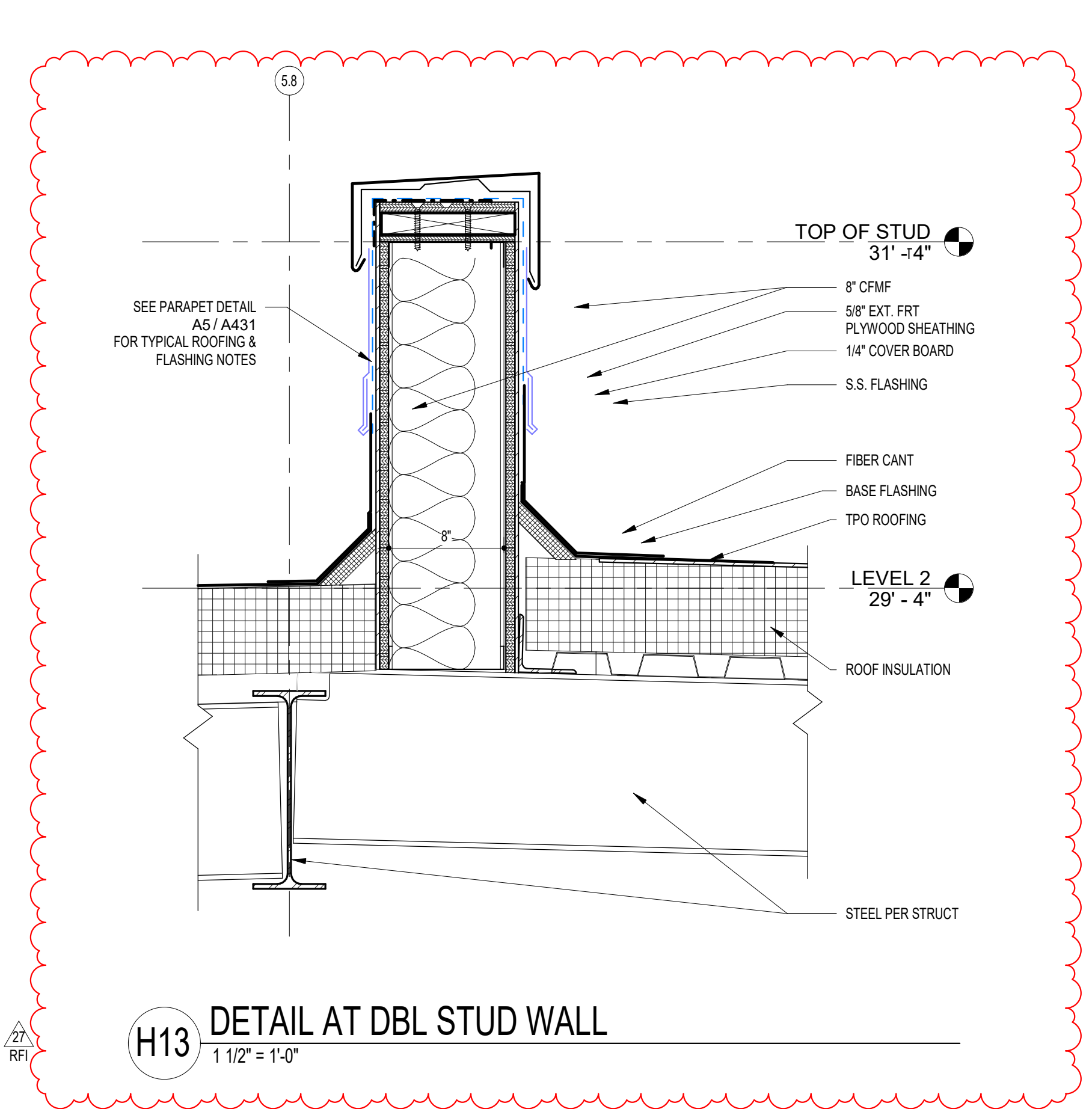


GP #22105

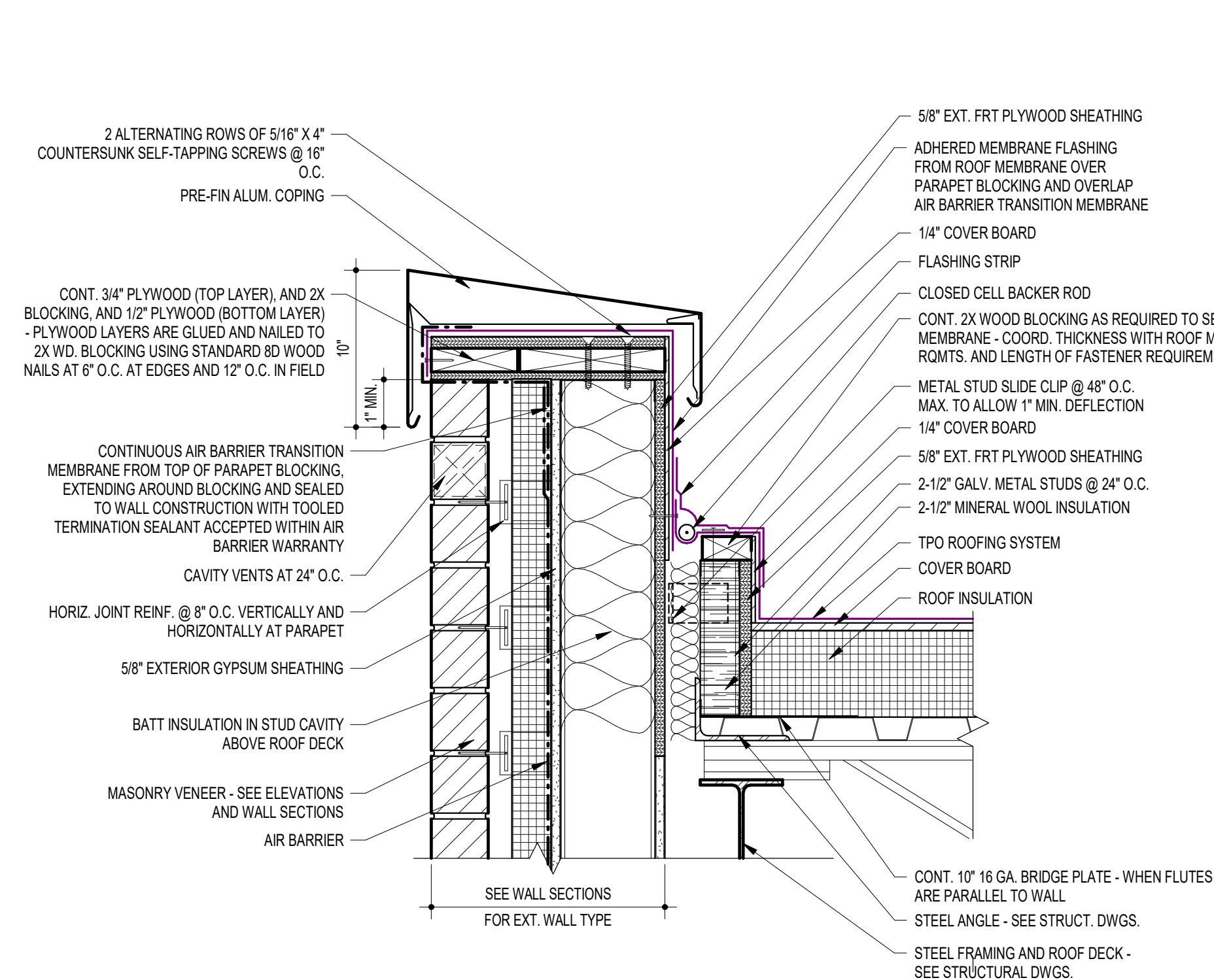
SECTIONS	
DATE	DESCRIPTION
09/25/2024	ADDENDUM 3
09/13/2024	RFI-027

**S508**  
12/22/2023  
BID SET  
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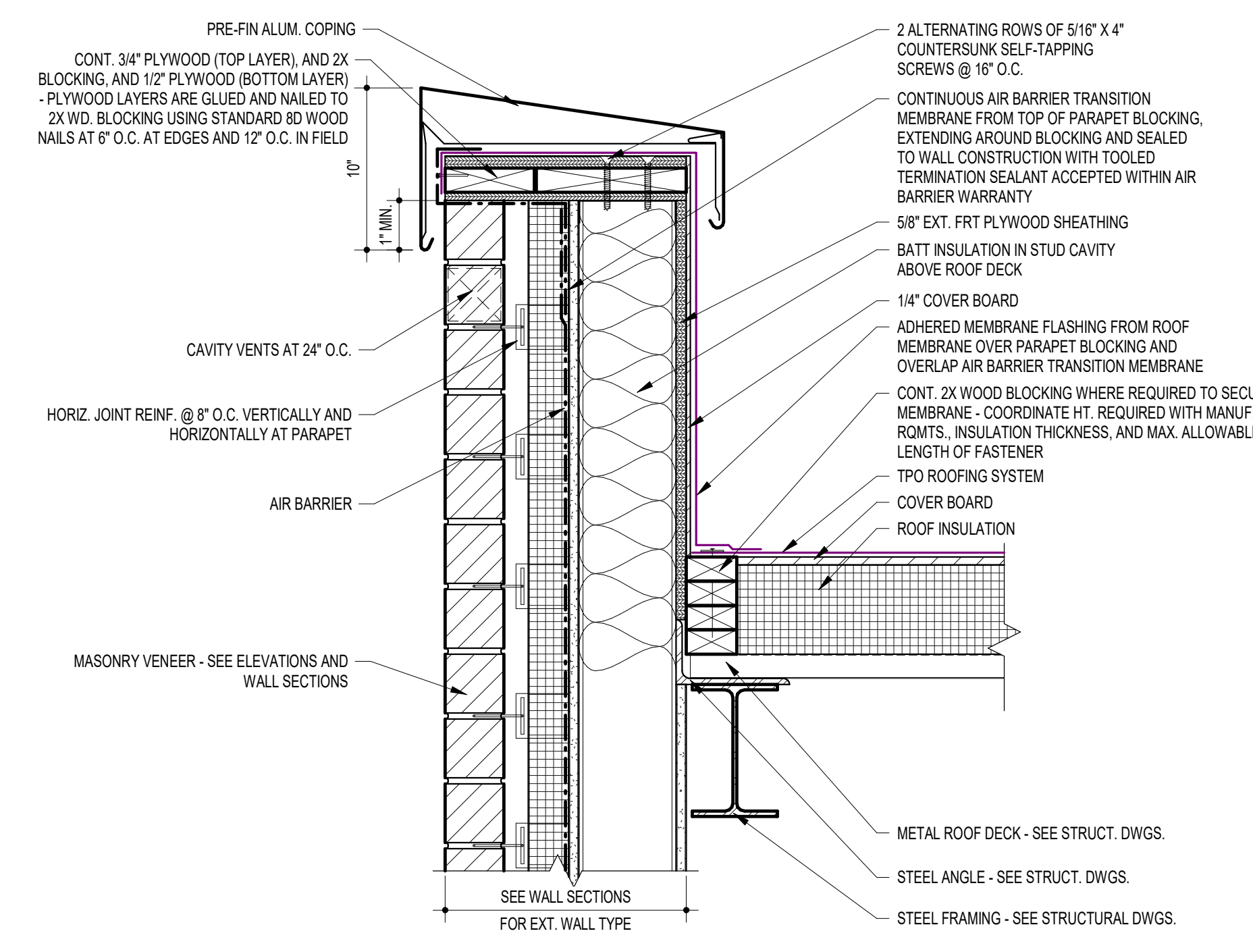




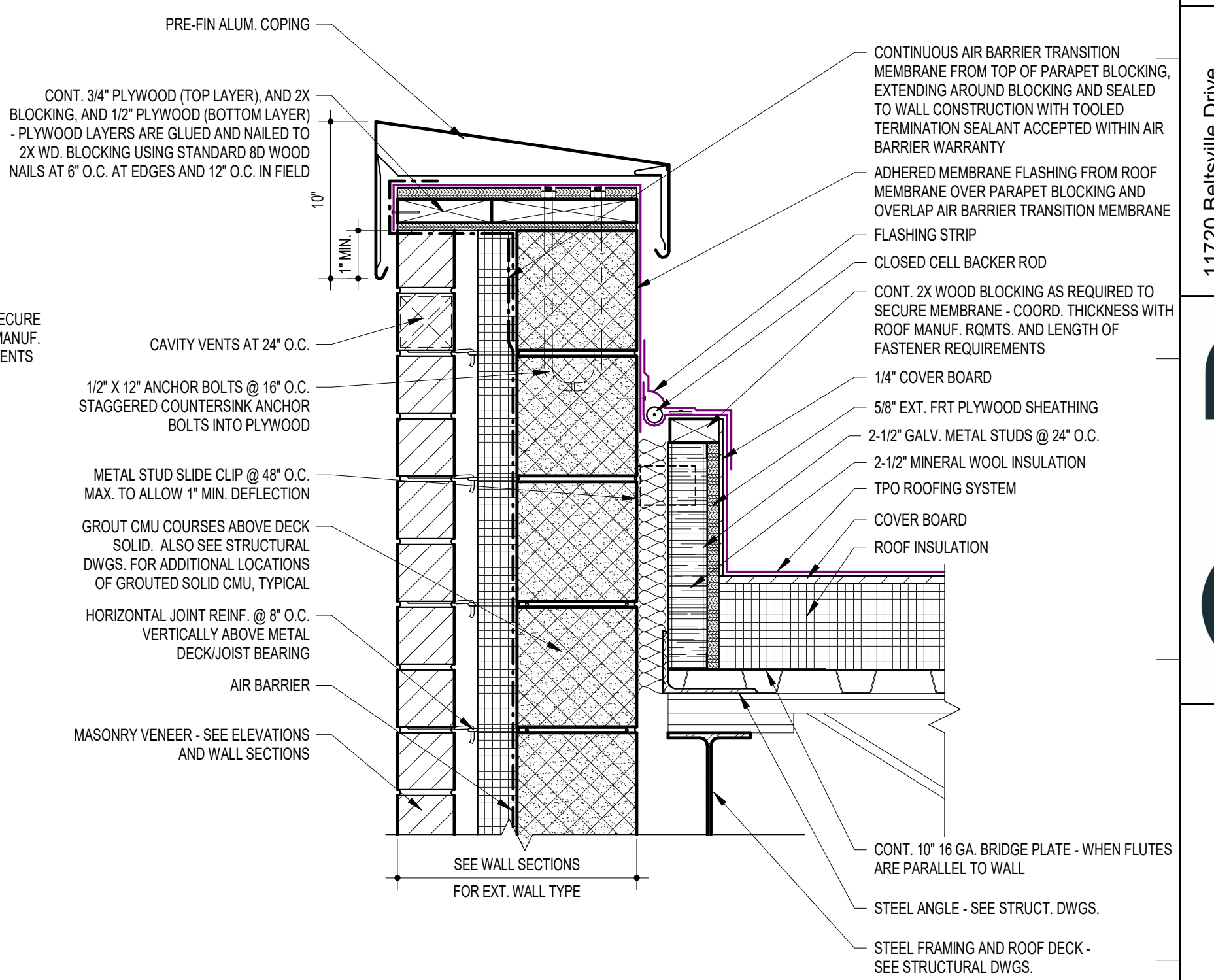
A15 TYPICAL COPING TO WALL  
1 1/2" = 1'-0"



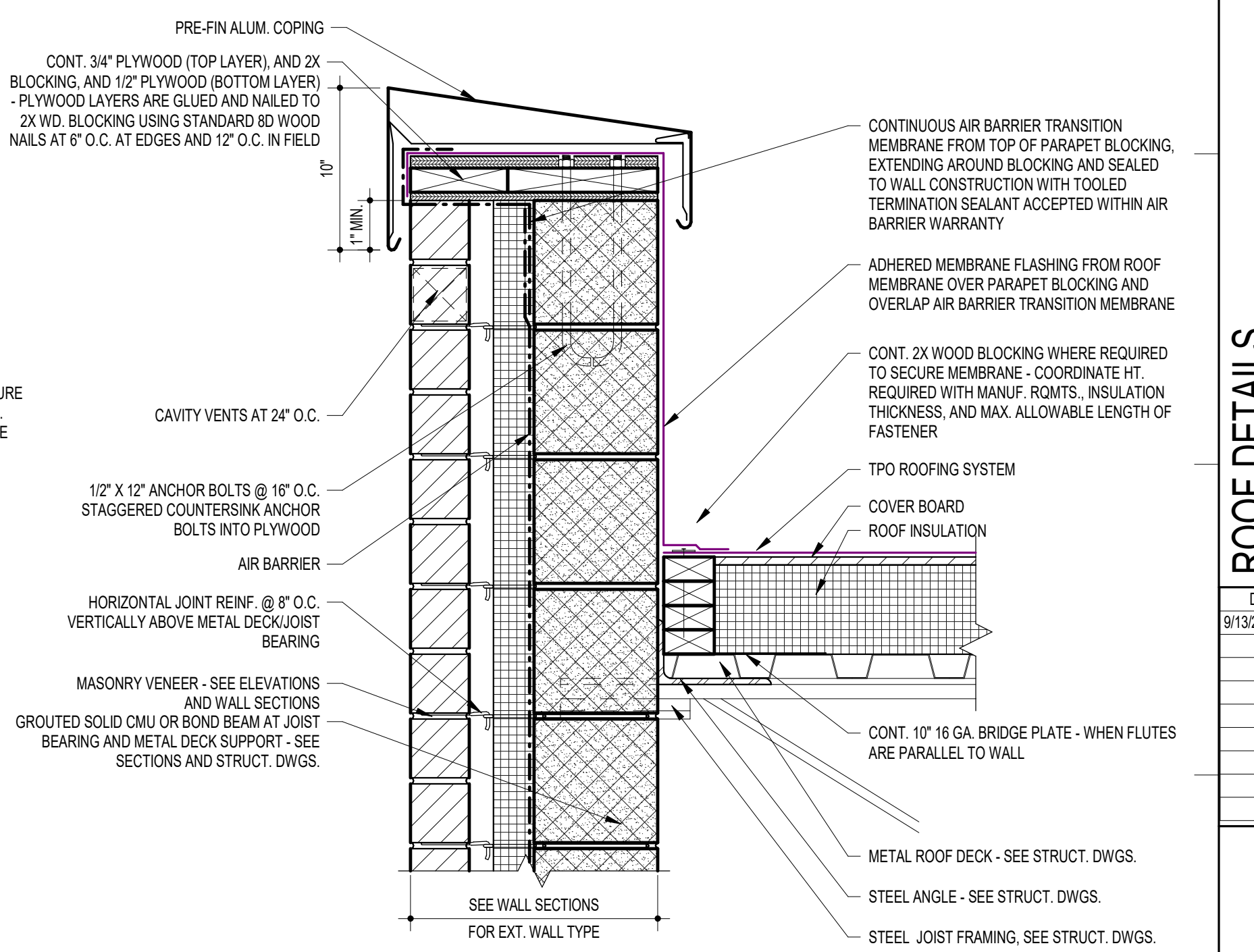
D9 TYP. PARAPET @ STUD BACK-UP W/ ROOF EJ  
1 1/2" = 1'-0"



A9 TYP. PARAPET @ STUD BACK-UP  
1 1/2" = 1'-0"



D5 TYP. PARAPET @ CMU BACK-UP W/ ROOF EJ  
1 1/2" = 1'-0"



A5 TYP. PARAPET @ CMU BACK-UP  
1 1/2" = 1'-0"

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

11720 Beltsville Drive  
Suite 600  
Calverton, MD 20705  
Tel. 301.595.1000  
www.grimmandparker.com

**GP #22105**

**ROOF DETAILS**  
NORTH EAST MIDDLE / HIGH SCHOOL  
300 IRISTOWN ROAD, NORTH EAST, MD

DATE	DESCRIPTION
9/13/2024	RFI 27

**A431**  
12/22/2023  
BID SET

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## *Request for Information*

---

**Date:** 08/29/2024

**Request No:** KSI 015

**Project:** North East Middle & High School  
**KCI No.:** 242612

**To:** Hess Construction  
**Attn.:** Joshua Postadan  
**Email:** jpostadan@hessconstruction.com

**From:** Mike Staub  
**Phone:** 717-434-6248  
**Email:** [mstaub@kinsleysteel.com](mailto:mstaub@kinsleysteel.com)

---

### **RE: Stud Wall Clarification**

#### ***Request***

Please refer to the attached TRC RFI 011 for the question locations.

Q1: Please advise on the stud wall size.

Q2: Please confirm whether 2 vertical channels required.

---

#### ***Date Response Requested: ASAP***

CEI: Please following sheets for responses.  
Updated details attached to response.  
Cesar Flores  
09-13-2024

**G+P:**

See revised architectural and structural details and comments on RFI response sketch.

Patrick Byrne 9.16.2024



217 Ward Circle Brentwood, TN 37027, Phone: 615-661-7979 Fax: 615-661-0644

# REQUEST FOR INFORMATION

## NORTH EAST MIDDLE / HIGH SCHOOL

JOB #24-880

To:	<b>Michael E.</b> <a href="mailto:Staubmstaub@kinsleysteel.com">Staubmstaub@kinsleysteel.com</a>	CLIENT RFI#
Company:	KINSLEY, INC	GC RFI#
		TRC RFI# 011
cc:		RESPONSE 09-05-2024 NEEDED BY

### SUBJECT: Stud wall Clarification

Please refer to the attached file A416 & A105 for the questions.

Q11.1: Please advise on the stud wall size.

Q11.2: Please confirm whether 2 vertical channels required

By:	<b>Ruben Flores</b>	Date:	<b>08-29-2024</b>
-----	---------------------	-------	-------------------

### Response:

By:		Date:	
-----	--	-------	--

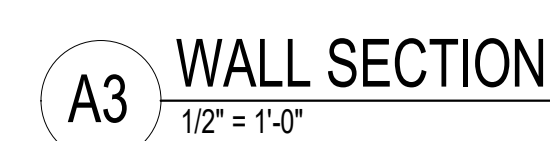
PLEASE SEND RESPONSE TO: Ruben Flores

Phone: 325-320-0719

**THE RAMANNA COMPANIES**

**CONSULTING ENGINEERS**





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**K** SECTION  
S508 SCALE: 1" = 1'-0"

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RFI detail

#029 Cavity Insulation R Value



Status	<div><div></div>Closed</div>
Created on	Aug 30, 2024 by <b>Glenn Feldstein</b> (George Moehrle Masonry)
RFI type	North East MS/HS RFI WF
Ball in court	<b>Glenn Feldstein</b> (George Moehrle Masonry)
Answered	Sep 3, 2024 by <b>Patrick Byrne</b> (Grimm and Parker)

Question

Neither specification 072100 nor the exterior wall types on sheet A301 contain specific requirements for the R-value of insulation in masonry cavity walls. Please provide the desired R-values of the insulation.

Official response

See attached RFI response.  
By **Patrick Byrne** (Grimm and Parker) - Sep 3, 2024, 9:47 AM EDT

Official response attachments

[#029 - CAVITY INSULATION R VALUE RESPONSE.PDF](#), Sep 3, 2024, 9:47 AM EDT

References and Attachments

Sheets (1)








A301

Impact

Cost impact	Unknown
Schedule impact	No

Other attributes	
Priority	Normal
Discipline	Masonry
Category	Documentation Incomplete
Location	-
Location details	-
External id	-
Co-reviewer(s)	
Posted to Drawings/ Specifications	-
Trade's RFI No.	-



Activities	By	At
<b>Joshua Postadan</b> changed the status from  <b>Open</b> Answered to  <b>Closed</b> set Ball in court to <b>Glenn Feldstein</b> (George Moehrle Masonry)	<b>Joshua Postadan</b>	Sep 11, 2024, 9:13 AM EDT
Please review the response to RFI #029. Provide notification of any cost implications immediately. If a proposal has cost impacts, please request an RFQ from HESS. Send a proposal no later than the close of business within 7 days of receipt of this RFI response. HESS will consider this as a no cost change and close this issue should a proposal not be received by this date. A lack of response for any credit items will prompt HESS Construction to assign a cost value that will be deducted from your contract sum. Note: The RFQ is simply an administrative tracking tool, and in no way represents that additional work, cost or time is acknowledged, authorized, directed, or approved.	<b>Joshua Postadan</b>	Sep 11, 2024, 9:13 AM EDT
<b>Patrick Byrne</b> changed the status from  <b>Open</b> In Review to  <b>Open</b> Answered <b>Official response:</b> See attached RFI response. changed the <b>official response attachment</b> to: <a href="#">#029 - CAVITY INSULATION R VALUE RESPONSE.PDF</a> . set Ball in court to <b>Joshua Postadan</b> (HESS Construction Co., LLC)	<b>Patrick Byrne</b>	Sep 3, 2024, 9:47 AM EDT
<b>Joshua Postadan</b> changed the status from  <b>Open</b> Waiting for Submission to  <b>Open</b> In Review changed the <b>due date</b> to Sep 11, 2024 set Ball in court to <b>Patrick Byrne</b> (Grimm and Parker) changed the <b>ID</b> to 029	<b>Joshua Postadan</b>	Sep 3, 2024, 9:35 AM EDT
<b>Joshua Postadan</b> added a reference to a Sheet <b>A301</b>	<b>Joshua Postadan</b>	Sep 3, 2024, 9:34 AM EDT
changed the <b>schedule impact</b> to <i>No</i>	<b>Joshua Postadan</b>	Sep 3, 2024, 9:32 AM EDT
changed the <b>watchers</b> to <b>Glenn Feldstein</b> (George Moehrle Masonry), <b>Architect Eng., HESS PROJECT TEAM, George Moehrle Masonry</b>	<b>Joshua Postadan</b>	Sep 3, 2024, 9:32 AM EDT
changed the <b>watchers</b> to <b>Glenn Feldstein</b> (George Moehrle Masonry), <b>Architect Eng., HESS PROJECT TEAM</b>	<b>Joshua Postadan</b>	Sep 3, 2024, 9:32 AM EDT
<b>Glenn Feldstein</b> (George Moehrle Masonry) created this RFI in  <b>Open</b> Waiting for Submission status and set Ball in court to <b>Joshua Postadan</b> (HESS Construction Co., LLC).	<b>Glenn Feldstein</b>	Aug 30, 2024, 11:49 AM EDT

RFI detail

#029 Cavity Insulation R Value



Status	<div><div></div>Open</div> In Review
Created on	Aug 30, 2024 by <b>Glenn Feldstein</b> (George Moehrle Masonry)
RFI type	North East MS/HS RFI WF
Ball in court	<b>Patrick Byrne</b> (Grimm and Parker)
Due date	Sep 12, 2024

Question

Neither specification 072100 nor the exterior wall types on sheet A301 contain specific requirements for the R-value of insulation in masonry cavity walls. Please provide the desired R-values of the insulation.

References and Attachments

Sheets (1)

- [A301](#)

Impact

Cost impact	Unknown
Schedule impact	No

Other attributes




Priority	Normal
Discipline	Masonry
Category	Documentation Incomplete
Location	-
Location details	-

External id -

Co-reviewer(s)

Posted to Drawings/  
Specifications -

Trade's RFI No. -

Activities	By	At
<b>Joshua Postadan</b> changed the status from  <b>Open</b> Waiting for Submission to  <b>Open</b> In Review changed the <b>due date</b> to Sep 11, 2024 set Ball in court to <b>Patrick Byrne</b> (Grimm and Parker) changed the <b>ID</b> to 029	<b>Joshua Postadan</b>	Sep 3, 2024, 9:35 AM EDT
<b>Joshua Postadan</b> added a reference to a Sheet <b>A301</b>	<b>Joshua Postadan</b>	Sep 3, 2024, 9:34 AM EDT
changed the <b>schedule impact</b> to <i>No</i>	<b>Joshua Postadan</b>	Sep 3, 2024, 9:32 AM EDT
changed the <b>watchers</b> to <b>Glenn Feldstein</b> (George Moehrle Masonry), <b>Architect Eng., HESS PROJECT TEAM, George Moehrle Masonry</b>	<b>Joshua Postadan</b>	Sep 3, 2024, 9:32 AM EDT
changed the <b>watchers</b> to <b>Glenn Feldstein</b> (George Moehrle Masonry), <b>Architect Eng., HESS PROJECT TEAM</b>	<b>Joshua Postadan</b>	Sep 3, 2024, 9:32 AM EDT
<b>Glenn Feldstein</b> (George Moehrle Masonry) created this RFI in  <b>Open</b> Waiting for Submission status and set Ball in court to <b>Joshua Postadan</b> (HESS Construction Co., LLC).	<b>Glenn Feldstein</b>	Aug 30, 2024, 11:49 AM EDT

Please provide a rigid insulation product that meets ASTM C12890, Type II, Class 2 for the proper R-value required to achieve the R-value of the wall assemblies shown on sheet A301 of the contract documents. Each of the specified manufacturers should only have one available product that meets the requirements of the specifications.

Patrick Byrne 9.3.3024.



RFI detail

#030 Masonry Cavity Wall Insulation Type



Status	<div><div></div>Closed</div>
Created on	Aug 30, 2024 by <b>Glenn Feldstein</b> (George Moehrle Masonry)
RFI type	North East MS/HS RFI WF
Ball in court	<b>Glenn Feldstein</b> (George Moehrle Masonry)
Answered	Sep 16, 2024 by <b>Patrick Byrne</b> (Grimm and Parker)

Question

Specification 072100 2.2 C calls for "glass-fiber-mat faced, Type II, Class 2" polyisocyanurate insulation. Glass-fiber-mat faced is typically used when the insulation is part of the air barrier system, which is not the case on this project.

We can provide a higher R rating (17 vs 15.3) at the same cost, with reduced lead time, using foil-faced polyisocyanurate insulation instead of glass-fiber-mat faced. This facing changes the "Class" from type II to type I, but all ASTM and NFPA standards in the spec can be met using foil-faced insulation. Please advise if it would be acceptable to use foil-faced polyisocyanurate insulation at masonry cavities instead of glass-fiber-mat faced. Please see attached substitution request form for reference.

Official response

See attached RFI response.

9.16.2024. No updated response required. Provide one of the specified insulation manufacturers.  
*By **Patrick Byrne** (Grimm and Parker) - Sep 16, 2024, 8:51 PM EDT*

Official response attachments

[#030 - MASONRY CAVITY WALL INSULATION TYPE RESPONSE.PDF](#), Sep 11, 2024, 3:31 PM EDT

References and Attachments

Files (1)

- [24-004 Hunter XCI Foil Substitution Form SIGNED 2024-09-03.pdf](#)

Impact

Cost impactNo

Schedule impact-

Other attributes

PriorityNormal

DisciplineMasonry

Category-

Location-











Location details-

External id-

Co-reviewer(s)

Posted to Drawings/  
Specifications-



Trade's RFI No.-

Activities	By	At
<b>Patrick Byrne</b> changed the status from  <b>Open</b> In Review to  <b>Open</b> Answered <b>Official response:</b> See attached RFI response.	<b>Patrick Byrne</b>	Sep 16, 2024, 8:51 PM EDT
9.16.2024. No updated response required. Provide one of the specified insulation manufacturers. set Ball in court to <b>Joshua Postadan</b> (HESS Construction Co., LLC)		
<b>Joshua Postadan</b> changed the status from  <b>Open</b> Answered to  <b>Open</b> In Review changed the <b>due date</b> to Sep 19, 2024 set Ball in court to <b>Patrick Byrne</b> (Grimm and Parker)	<b>Joshua Postadan</b>	Sep 16, 2024, 10:34 AM EDT
Is the intent to keep water away from the backup (CMU or stud) or allow water near it? Not sure they're looking for a more- or less-hygroscopic insulation product. Please advise which	<b>Joshua Postadan</b>	Sep 16, 2024, 10:34 AM EDT
<b>Joshua Postadan</b> changed the status from  <b>Closed</b> to  <b>Open</b> Answered set Ball in court to <b>Joshua Postadan</b> (HESS Construction Co., LLC)	<b>Joshua Postadan</b>	Sep 16, 2024, 10:33 AM EDT
Moerhle: Is the intent to keep water away from the backup (CMU or stud) or allow water near it? Not sure they're looking for a more- or less-hygroscopic insulation product. Please advise which.	<b>Joshua Postadan</b>	Sep 16, 2024, 10:33 AM EDT
Per email to hess 9/12- I'm not understanding G+P's response. Is the intent to keep water away from the backup (CMU or stud) or allow water near it? Not sure they're looking for a more- or less-hygroscopic insulation product. Please advise which.	<b>Glenn Feldstein</b>	Sep 16, 2024, 10:30 AM EDT
<b>Joshua Postadan</b> changed the status from  <b>Open</b> Answered to  <b>Closed</b> set Ball in court to <b>Glenn Feldstein</b> (George Moehrle Masonry)	<b>Joshua Postadan</b>	Sep 16, 2024, 10:08 AM EDT
Please review the response to RFI #030. Provide notification of any cost implications immediately. If a proposal has cost impacts, please request an RFQ from HESS. Send a proposal no later than the close of business within 7 days of receipt of this RFI response. HESS will consider this as a no cost change and close this issue should a proposal not be received by this date. A lack of response for any credit items will prompt HESS Construction to assign a cost value that will be deducted from your contract sum. Note: The RFQ is simply an administrative tracking tool, and in no way represents that additional work, cost or time is acknowledged, authorized, directed, or approved.	<b>Joshua Postadan</b>	Sep 16, 2024, 10:08 AM EDT
<b>Patrick Byrne</b> changed the status from  <b>Open</b> In Review to  <b>Open</b> Answered <b>Official response:</b> See attached RFI response.	<b>Patrick Byrne</b>	Sep 11, 2024, 3:31 PM EDT



changed the **official response attachment** to:  
[#030 - MASONRY CAVITY WALL INSULATION TYPE RESPONSE.PDF](#).  
 set Ball in court to **Joshua Postadan** (HESS Construction Co., LLC)

#### Joshua Postadan

changed the status from  **Open** Waiting for Submission to  **Open** In Review **Joshua Postadan** Sep 11, 2024, 9:12 AM EDT  
 changed the **due date** to Sep 10, 2024  
 set Ball in court to **Patrick Byrne** (Grimm and Parker)  
 changed the **ID** to 030



changed the **question** to *Specification 072100 2.2 C calls for "glass-fiber-mat faced, Type II, Class 2" polyisocyanurate insulation. Glass-fiber-mat faced is typically used when the insulation is part of the air barrier system, which is not the case on this project. We can provide a higher R rating (17 vs 15.3) at the same cost, with reduced lead time, using foil-faced polyisocyanurate insulation instead of glass-fiber-mat faced. This facing changes the "Class" from type II to type I, but all ASTM and NFPA standards in the spec can be met using foil-faced insulation. Please advise if it would be acceptable to use foil-faced polyisocyanurate insulation at masonry cavities instead of glass-fiber-mat faced. Please see attached substitution request form for reference.*

**Joshua Postadan** Sep 11, 2024, 9:12 AM EDT

changed the **question** to *Specification 072100 2.2 C calls for "glass-fiber-mat faced, Type II, Class 2" polyisocyanurate insulation. Glass-fiber-mat faced is typically used when the insulation is part of the air barrier system, which is not the case on this project. We can provide a higher R rating (17 vs 15.3) at the same cost, with reduced lead time, using foil-faced polyisocyanurate insulation instead of glass-fiber-mat faced. This facing changes the "Class" from type II to type I, but all ASTM and NFPA standards in the spec can be met using foil-faced insulation. Please advise if it would be acceptable to use foil-faced polyisocyanurate insulation at masonry cavities instead of glass-fiber-mat faced. Please see attached substitution request form*

**Joshua Postadan** Sep 11, 2024, 9:11 AM EDT



#### Glenn Feldstein

changed the status from  **Draft** to  **Open** Waiting for Submission **Glenn Feldstein** Sep 3, 2024, 4:01 PM EDT  
 changed the **due date** to Sep 11, 2024  
 set Ball in court to **Joshua Postadan** (HESS Construction Co., LLC)

**Glenn Feldstein** added a reference to a File **24-004 Hunter XCI Foil Substitution Form SIGNED 2024-09-03.pdf**

**Glenn Feldstein** Sep 3, 2024, 4:01 PM EDT

#### Joshua Postadan

changed the status from  **Open** Waiting for Submission to  **Draft** **Joshua Postadan** Sep 3, 2024, 10:08 AM EDT  
 set Ball in court to **Glenn Feldstein** (George Moehrle Masonry)

Please complete the Substitution Request Form provided in spec section 01 25 00

**Joshua Postadan** Sep 3, 2024, 10:08 AM EDT

changed the **watchers** to **Architect Eng., HESS PROJECT TEAM, George Moehrle Masonry**

**Joshua Postadan** Sep 3, 2024, 10:07 AM EDT

changed the **question** to *Specification 072100 2.2 C calls for "glass-fiber-mat faced, Type II, Class 2" polyisocyanurate insulation. Glass-fiber-mat faced is typically used when the insulation is part of the air barrier system, which is not the case on this project. We can provide a higher R rating (17 vs 15.3) at the same cost, with reduced lead time, using foil-faced polyisocyanurate insulation instead of glass-fiber-mat faced. This facing changes the "Class" from type II to type I, but all ASTM and NFPA standards in the spec can be met using foil-faced insulation. Please advise if it would be acceptable to use foil-faced polyisocyanurate insulation at masonry cavities instead of glass-fiber-mat faced.*


Joshua Postadan

Sep 3, 2024, 10:06 AM EDT

changed the **question** to *Specification 072100 2.2 C calls for "glass-fiber-mat faced, Type II, Class 2" polyisocyanurate insulation. Glass-fiber-mat faced is typically used when the insulation is part of the air barrier system, which is not the case on this project. We can provide a higher R rating (17 vs 15.3) at the same cost, with reduced lead time, using foil-faced polyisocyanurate insulation instead of glass-fiber-mat faced. This facing changes the "Class" from type II to type I, but all ASTM and NFPA standards in the spec can be met using foil-faced insulation. Please advise if it would be acceptable to use foil-faced polyisocyanurate insulation at masonry cavities. instead of glass-fiber-mat faced.*

Joshua Postadan

Sep 3, 2024, 10:01 AM EDT

**Glenn Feldstein** (George Moehrle Masonry) created this RFI in  **Open** Waiting for Submission status and set Ball in court to **Joshua Postadan** (HESS Construction Co., LLC).


Glenn Feldstein

Aug 30, 2024, 12:36 PM EDT

## RFI detail

## #030 Masonry Cavity Wall Insulation Type



Status	 <b>Open</b> In Review
Created on	Aug 30, 2024 by <b>Glenn Feldstein</b> (George Moehrle Masonry)
RFI type	North East MS/HS RFI WF
Ball in court	<b>Patrick Byrne</b> (Grimm and Parker)
Due date	Sep 11, 2024 (1 day late)

### Question

Specification 072100 2.2 C calls for "glass-fiber-mat faced, Type II, Class 2" polyisocyanurate insulation. Glass-fiber-mat faced is typically used when the insulation is part of the air barrier system, which is not the case on this project.

We can provide a higher R rating (17 vs 15.3) at the same cost, with reduced lead time, using foil-faced polyisocyanurate insulation instead of glass-fiber-mat faced. This facing changes the "Class" from type II to type I, but all ASTM and NFPA standards in the spec can be met using foil-faced insulation. Please advise if it would be acceptable to use foil-faced polyisocyanurate insulation at masonry cavities instead of glass-fiber-mat faced. Please see attached substitution request form for reference.

### Impact

Cost impact	No
Schedule impact	-

### Other attributes

Priority	Normal
Discipline	Masonry
Category	-
Location	-
Location details	-



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External id	-
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Co-reviewer(s)
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Posted to Drawings/ Specifications	-
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Trade's RFI No.	-
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The use of a foil-faced insulation product as a semi-impermeable vapor retarder over CMU walls might be deemed by some as acceptable due to the hygric buffer inherent in CMU, but the same product can not be used in a stud wall application. Please proceed with one of the specified products listed in the contract documents.

Patrick Byrne 9.11.2024.

## Substitution Request Form

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### IDENTIFICATION:

Contractor/CM: George Moehrle Masonry, Inc.

Project Name: North East Middle School High School

Date: 09/03/2024

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### REFERENCE:

Specification Title: Thermal Insulation

Specification No.: 072100 Page: 2 Article/ Paragraph: 2.2

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### DESCRIPTION:

Proposed Substitution: XCI Foil

Manufacturer: Hunter Panels

History: ☐ New Product ☐ 2-5 years old ☐ 5-10 years old ☒ More than 10 years old

Reason for requesting substitution: ☐ Cause ☒ Convenience

Explain: Specified product (glass-fiber-mat faced) is designed to be used as part of the air barrier system. This building is designed with a separate air barrier system and a foil-faced polyiso insulation can provide a higher R value for the same cost.

Differences between proposed substitution and specified item: Foil faced instead of glass-fiber-mat faced.

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*(Use attachment for additional space, if required.)*

Proposed substitution affects other parts of Work or applicable Code requirements as follows: No

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*(Use attachment for additional space, if required.)*

Post-Bid Savings to Owner for accepting substitution: (N/A Pre-Bid) No

Change to Contract Time due to accepting substitution: N/A (reduces lead time for material)

LEED Contribution (if applicable to Project) - Explain effects to LEED Action Plan: N/C

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*(Use attachment for additional space, if required.)*

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Will undersigned pay any costs caused by the substitution necessitating changes to the building design, construction, engineering and detailing, including additional Architect, inspection and testing fees? ☐ Yes ☐ No **N/A**

Does the undersigned waive rights to additional payment or time that may subsequently become necessary because of failure of proposed substitution to produce indicated results? ☒ Yes ☐ No

Submitted by: Glenn Feldstein, Sr. Project Manager

(Contractor or CM Only)

Signed by: GLENN FELDSTEIN

Firm: George Moehrle Masonry, Inc.

Address: 5101A Mounville Road

Frederick, MD 21703

Telephone: 301-662-7584

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#### SUPPORTING DATA ATTACHED:

☐ Point-by-Point Comparative Data Attached (Required)

☐ Drawings ☒ Product Data ☐ Samples ☐ Tests ☐ Reports ☐ \_\_\_\_\_

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#### CERTIFICATION:

The Undersigned certifies:

- Proposed substitution has been investigated and determined that it meets or exceeds the quality level of the specified product.
- Same warranty will be furnished for proposed substitution as for specified product; **provide attachment if different.**
- Same maintenance service and source of replacement parts, as applicable, is available.
- Proposed substitution will have no adverse effect on other trades and will not affect or delay progress schedule.
- Cost data as stated above is complete. Claims for additional costs related to accepted substitution which may subsequently become apparent are to be waived.
- Proposed substitution does not affect dimensions and functional clearances; **provide attachment if otherwise.**
- Payment will be made for changes to building design, including A/E design, detailing, and construction costs caused by the substitution.
- Coordination, installation, and changes in the Work as necessary for accepted substitution will be complete in all respects.
- Neither the Owner and Architect will be liable for license fees or royalties.



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**A/E's REVIEW AND ACTION:**

- ☐ Substitution approved - Make submittals in accordance with Specification Section 01 60 00.
- ☐ Substitution approved as noted - Make submittals in accordance with Specification Section 01 60 00.
- ☐ Substitution rejected - Use specified materials.
- ☐ Substitution Request received too late - Use specified materials.

Signed by: \_\_\_\_\_

Date: \_\_\_\_\_

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**ADDITIONAL COMMENTS:**

Contractor:

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Architect:

Approvals are based upon the opinion, knowledge, information, and belief of Architect at time of decision and reliance upon data submitted. Approvals are therefore interim and subject to reconsideration as additional data, materials, workmanship and coordination with other Work are observed and reviewed. In proposing items, Contractor assumes risks, costs and responsibilities for items integration into Work and performance.

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END OF FORM

*Xci Foil is an energy efficient rigid insulation panel composed of a closed cell polyisocyanurate foam core manufactured on-line to an impermeable foil facing material. It is designed for use in commercial and residential wall applications to provide continuous insulation within the building envelope.*

### APPLICATIONS

- Provides continuous insulation (ci) for standard wood frame, FRT wood frame, steel stud, CMU and concrete exterior wall constructions
- Suitable for external ductwork
- Suitable for masonry cavity wall applications
- Can be applied to the exterior or interior of exterior walls, when separated from the interior by a 15-minute thermal barrier. Please contact Hunter Panels for more information regarding interior applications that require NFPA 285 compliance.

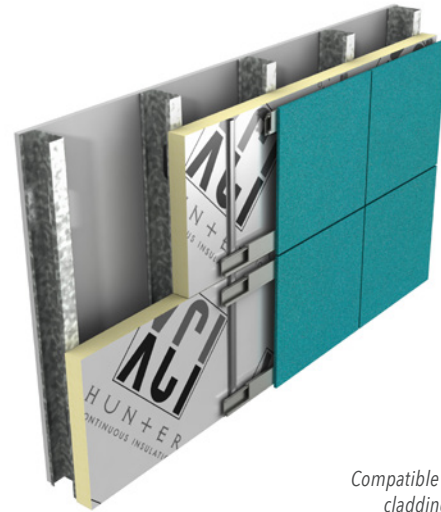
### PANEL CHARACTERISTICS

- Manufactured with NexGen Chemistry: Zero Ozone Depleting Potential (ODP); Contains no CFCs, HCFCs or HFCs; Virtually zero Global Warming Potential (GWP). Use of Xci products helps reduce the carbon footprint of buildings.
- Lightweight yet durable, easy to handle. Cuts with a knife or saw.
- Polyiso offers increased R-value per inch vs mineral fiber, XPS or EPS options
- ASTM C 1289 Type I, Class 1 and Class 2 Grade 2 (20 PSI) or Grade 3 (25 PSI)
- Available in 4' x 8' (1220mm x 2440mm) panels in thickness of 1" (25mm) – 4" (102mm)
- Other widths/lengths are available upon special request

### XCI FOIL THERMAL VALUES

Thermal values as per ASTM C 518 in accordance with ASTM C 1289

Thickness		R-Value
(inches)	(mm)	
1.00	25	6.5
1.50	38	10.0
2.00	51	13.3
2.50	64	17.0
3.00	76	20.3
3.50	89	24.0
4.00	102	27.0



*Compatible with numerous claddings and finishes.*

### LEED POTENTIAL CREDITS FOR POLYISO USE

#### Energy and Atmosphere

- Optimize Energy Performance

#### Materials & Resources

- Building Life-Cycle Impact Reduction
- Environment Product Declaration
- Material Reuse
- Pre-consumer Recycled Content
- Construction and Demolition Waste Management

#### Indoor Environmental Quality

- Thermal Comfort

### INSTALLATION

Install Xci Foil between the concrete block wall and the exterior masonry. Attach insulation panels against the inner wall using construction grade adhesive or mechanical attachment. Xci Foil may also be applied directly to oil based waterproofing adhesives.

### POST-INSTALLATION EXPOSURE

During the time frame between installation of Xci Foil and the application of the finished exterior cladding, it is recommended that a building wrap be applied to the Xci Foil. If a building wrap has not been specified, ALL UNFACED FOAM EXPOSED TO DIRECT DAYLIGHT (i.e. corners, window and door openings) should be taped with a compatible waterproof tape. Xci Foil is not intended to be left exposed for extended periods of time (i.e. in excess of 60 days) without adequate protection. Please contact Hunter Panels for details.

## TYPICAL PHYSICAL PROPERTY DATA

Physical Property	Test Method	Value
Compressive Strength	ASTM D 1621	20 psi* minimum (138 kPa, Grade 2)
Dimensional Stability	ASTM D 2126	1.5% max. linear change (7 days)
Moisture Vapor Permeance	ASTM E 96	<0.05 perm (2.875ng/(Pa•s•m <sup>2</sup> ))
Water Absorption	ASTM C 209	< 0.05% volume
Service Temperature		-100° to 250° F (-73°C to 122°C)
Flame Spread Index (foam core)	ASTM E 84	<75
Smoke Developed (foam core)	ASTM E 84	<450
Recycled Content		9% pre-consumer

\*Also available in Grade 3 (25 psi)

## CODES AND COMPLIANCES

- Designed for use in continuous insulation to assist in meeting the most current ASHRAE 90.1, IECC, IBC and IRC standards
- ASTM C 1289
- IBC Chapter 26 and IRC Section R316
- Numerous NFPA 285 compliant assemblies
- Numerous UL 263 hourly designs
- DRJ Technical Evaluation Report 1402-02
- Miami Dade County Product Control Approved
- California Code of Regulations, Title 24, Insulation Quality Standard License #TI-1420
- California Bureau of Household Goods and Services
- CCMC 13460-L; Type 2, Class 1
- UL Classified for use in Canada – Refer to UL Director of Products Certified for Canada for more details
- CAN/ULC S-704 Type 1, Class 1

## R-VALUE CALCULATION

Cavity Wall Systems Comparison

	2" Polyiso	2.5" Polyiso	2" XPS
Inside Air Film	.68	.68	.68
8" Concrete Block	1.11	1.11	1.11
Insulation	13.30	17.00	10.00
4" Face Brick	.44	.44	.44
Outside Air Film	.17	.17	.17
<b>Total Design R-Value</b>	<b>15.70</b>	<b>19.40</b>	<b>12.40</b>

## WEATHER RESISTANT BARRIER

The incorporation of Weather Resistant Barriers (air, vapor and moisture) is a critical element of a wall assembly. A design professional familiar with local code requirements should specify the selection and placement of any WRB. Furthermore, it is recommended that a hygrothermal analysis of the proposed assembly be conducted to determine the type and locations of a proposed WRB.

Note: The NFPA 285 fire test is an assembly test. The performance of the WRB must also be considered. Please consult Hunter Panels for details and specifications.

## JOB-SITE STORAGE

Good construction practice dictates that all insulations should be protected from moisture and direct sunlight during job-site storage. Pallets of Hunter Panels Xci Foil are double packaged in a UV resistant polyethylene bag. This moisture resistant package is designed for protection from the elements during flat bed shipment from our factories to the job-site. Outdoor storage for extended periods of time requires waterproof tarpaulins and elevated storage above ground level a minimum of 2". Additionally, we recommend slitting the bundle packaging vertically down the center of the two short sides to prevent moisture accumulation within the package.

## WARNINGS AND LIMITATIONS

Insulation must be protected from open flame. Hunter Panels will not be responsible for specific building design by others, for deficiencies in construction or workmanship, for dangerous conditions on the job site or for improper storage and handling. Technical specifications shown in this literature are intended to be used as general guidelines only and are subject to change without notice. Call Hunter Panels for more specific details.



CONTINUOUS INSULATION

15 Franklin Street ■ Portland, Maine 04101 ■ 888.746.1114 ■ info@hpanels.com ■ www.hunterpanels.com



## RFI detail

## #031 Testing Requirements Clarification



Status	<div><div></div>Closed</div>
Created on	Sep 5, 2024 by <b>Lucas Bradley</b> (Kinsley Steel Inc)
RFI type	North East MS/HS RFI WF
Ball in court	<b>Lucas Bradley</b> (Kinsley Steel Inc)
Answered	Sep 13, 2024 by <b>Patrick Byrne</b> (Grimm and Parker)

## Question

In the specs section 051200 1.5F (structural steel, source quality control reports), Kinsley is an AISC Fabricator and has CWI's on staff to provide review of our fabrication process to ensure we are following the Contract Documents. Kinsley will be hiring a third-party inspector for all full pens as they required UT testing 100%. Please advise if this is acceptable.

## Official response

See attached response from CEI.

By **Patrick Byrne** (Grimm and Parker) - Sep 13, 2024, 4:36 PM EDT

## Official response attachments

[#031 - TESTING REQUIREMENTS CLARIFICATION RESPONSE.PDF](#), Sep 13, 2024, 4:36 PM EDT

## References and Attachments









## Files (1)

- [RFI 016\\_KSI - Specs Clarification.pdf](#)


## Impact

Cost impact	Unknown
Schedule impact	No

Other attributes	
Priority	Normal
Discipline	Structural
Category	Design Coordination
Location	-
Location details	N/A
External id	-
Co-reviewer(s)	
Posted to Drawings/ Specifications	-
Trade's RFI No.	16

Activities	By	At
<b>Patrick Byrne</b> changed the status from  <b>Open</b> Answered to  <b>Open</b> Answered <b>Official response:</b> See attached response from CEI. changed the <b>official response attachment</b> to: <a href="#">#031 - TESTING REQUIREMENTS CLARIFICATION RESPONSE.PDF</a> . set Ball in court to <b>Joshua Postadan</b> (HESS Construction Co., LLC)	<b>Patrick Byrne</b>	Sep 13, 2024, 4:36 PM EDT
<b>Cesar Flores</b> changed the status from  <b>Open</b> In Review to  <b>Open</b> Answered set Ball in court to <b>Patrick Byrne</b> (Grimm and Parker)	<b>Cesar Flores</b>	Sep 13, 2024, 3:13 PM EDT
<b>Cesar Flores</b> added a response: Please see attached for response.	<b>Cesar Flores</b>	Sep 13, 2024, 3:13 PM EDT
<b>Patrick Byrne</b> changed the status from  <b>Open</b> In Review to  <b>Open</b> In Review set Ball in court to <b>Cesar Flores</b> (Columbia Engineering)	<b>Patrick Byrne</b>	Sep 11, 2024, 9:45 AM EDT
<b>Joshua Postadan</b> changed the status from  <b>Open</b> Waiting for Submission to  <b>Open</b> In Review changed the <b>due date</b> to Sep 24, 2024 set Ball in court to <b>Patrick Byrne</b> (Grimm and Parker) changed the <b>ID</b> to 031 changed the <b>watchers</b> to <b>HESS PROJECT TEAM, Architect Eng., Kinsley Steel Inc</b>	<b>Joshua Postadan</b>	Sep 11, 2024, 9:15 AM EDT
<b>Joshua Postadan</b> changed title to: <i>Testing Requirements Clarification</i>	<b>Joshua Postadan</b>	Sep 11, 2024, 9:15 AM EDT
changed the <b>location details</b> to <i>N/A</i>	<b>Joshua Postadan</b>	Sep 11, 2024, 9:15 AM EDT
changed the <b>schedule impact</b> to <i>No</i>	<b>Joshua Postadan</b>	Sep 11, 2024, 9:14 AM EDT
changed the <b>cost impact</b> to <i>Unknown</i>	<b>Joshua Postadan</b>	Sep 11, 2024, 9:14 AM EDT
changed the <b>cost impact</b> to <i>No</i>	<b>Joshua Postadan</b>	Sep 11, 2024, 9:14 AM EDT
changed the <b>watchers</b> to <b>HESS PROJECT TEAM, Kinsley Steel Inc</b>	<b>Joshua Postadan</b>	Sep 11, 2024, 9:14 AM EDT
changed the <b>question</b> to <i>In the specs section 051200 1.5F (structural steel, source quality control reports), Kinsley is an AISC Fabricator and has CWI's on staff to provide review of our fabrication process to ensure we are following the Contract Documents. Kinsley will be hiring a third-party inspector for all full pens as they required UT testing 100%. Please advise if this is acceptable.</i>	<b>Joshua Postadan</b>	Sep 11, 2024, 9:14 AM EDT




Lucas Bradley added a reference to a File <b>RFI 016_KSI - Specs Clarification.pdf</b>	Lucas Bradley	Sep 5, 2024, 10:42 AM EDT
Lucas Bradley (Kinsley Steel Inc) created this RFI in  <b>Open</b> Waiting for Submission status and set Ball in court to <b>Joshua Postadan</b> (HESS Construction Co., LLC).	Lucas Bradley	Sep 5, 2024, 10:42 AM EDT

## RFI detail

## #031 Testing Requirements Clarification



Status	 <b>Open</b> Answered
Created on	Sep 5, 2024 by <b>Lucas Bradley</b> (Kinsley Steel Inc)
RFI type	North East MS/HS RFI WF
Ball in court	<b>Patrick Byrne</b> (Grimm and Parker)
Due date	Sep 25, 2024

### Question

In the specs section 051200 1.5F (structural steel, source quality control reports), Kinsley is an AISC Fabricator and has CWI's on staff to provide review of our fabrication process to ensure we are following the Contract Documents. Kinsley will be hiring a third-party inspector for all full pens as they required UT testing 100%.  
Please advise if this is acceptable.

### References and Attachments

#### Files (1)

- [RFI 016\\_KSI - Specs Clarification.pdf](#)

### Impact

Cost impact	Unknown
Schedule impact	No

### Other attributes

Priority	Normal
Discipline	Structural
Category	Design Coordination

<b>Location</b>	-
<b>Location details</b>	N/A
<b>External id</b>	-
<b>Co-reviewer(s)</b>	
<b>Posted to Drawings/ Specifications</b>	-
<b>Trade's RFI No.</b>	16

See RFI response from CEI.

Patrick Byrne 9.13.2024





## *Request for Information*

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**Date:** 09/05/2024

**Request No:** KSI 016

**Project:** North East Middle & High School  
**KCI No.:** 242612

**To:** Hess Construction  
**Attn.:** Joshua Postadan  
**Email:** jpostadan@hessconstruction.com

**From:** Mike Staub  
**Phone:** 717-434-6248  
**Email:** [mstaub@kinsleysteel.com](mailto:mstaub@kinsleysteel.com)

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### **RE: Specs Clarification**

#### ***Request***

In the specs section 051200 1.5F (structural steel, source quality control reports), Kinsley is an AISC Fabricator and has CWI's on staff to provide review of our fabrication process to ensure we are following the Contract Documents. Kinsley will be hiring a third-party inspector for all full pens as they required UT testing 100%.

Is this acceptable?

---

***Date Response Requested: ASAP***

CEI: Please refer to inspection tables on S002 for additional inspection and quality control requirements. In general QC refers to quality control personnel by the contractor and SI refers to Third party special inspectors.  
Refer to IBC section 1704 for additional information regarding inspectors and quality control.

Cesar Flores  
09/13/2024

- F. **Quality control test reports for shop and field including ultrasonic test results.**
  - 1. Submit certification by a Professional Engineer registered in the State of Maryland that all joint preparation for complete joint penetration welds meet AISC requirements and that all welding procedure specification requirements have been met.
- G. Sustainability Submittals: Submit a completed Green Building Materials Certification Form that lists permanently installed products and indicates material costs. Attach letter from manufacturer(s) describing product(s) contribution to LEED v4, including, but not limited to, the following:
  - 1. MR credit 2: Environmental Product Declarations (EPDs): Submit an Environmental Product Declaration.
  - 2. MR credit 3: Sourcing of Raw Materials: Indicate percentage by weight of pre-consumer and post-consumer recycled content. Indicate location of extraction and manufacture.
- H. Embodied Carbon Data: Informational.
  - 1. Bill of sale and/or total tonnage (per mill source).
  - 2. Environmental Product Declaration (EPD):
    - a. Includes global warming potential (GWP)
    - b. Independently verified as defined by ISO 14025
    - c. Mill-specific, for each material/shape source.
      - 1) If not available, submit industry-wide EPD, of matching production method (electric arc furnace, blast furnace, etc.), for each material/shape source.

#### 1.6 QUALITY ASSURANCE

- A. Structural steel shall be domestic origin, produced and supplied from the United States of America only. Refer to the federal "Buy American Act" and the "Buy American Steel Act, Sections 17-301 to 17-306 of the Finance and Procurement Article of the Annotated Code of Maryland.
- B. Fabricate structural steel members in accordance with AISC "Steel Construction Manual" and AISC "Code of Standard Practice for Steel Buildings and Bridges".
- C. Comply with Section 10 of AISC "Code of Standard Practice for Steel Buildings and Bridges" for architecturally exposed structural steel.
- D. Welding: Comply with AWS D1.1, "Structural Welding Code-Steel" for procedures, tolerances, appearance and quality.
- E. Fabricator: Engage a firm experienced in fabricating structural steel similar to that indicated for this project and within 15 percent this project size, with a record of successful in-service performance, as well as sufficient production capacity to fabricate structural steel without delaying the Work.
  - 1. Provide documentation that fabricator has provided material for and erected at least 3 projects within 15 percent of project size and complexity, in the last six years.
  - 2. Allow the Owner's representative to visit the fabrication plant as required to inspect in place quality control procedures and structural steel fabrication.
  - 3. Fabricators who are not an AISC Certified Building Fabricator (BU), shall meet the following additional requirements:
    - a. Demonstrate that the fabricator has in place a quality control program for meeting IBC requirements and compliance with AISC recommendations and standards.
    - b. At no additional cost to the Owner, provide an independent shop inspection for compliance with IBC, AISC and AWS recommendations and standards. The independent inspection agency shall be different than the testing agency engaged by the Owner.
    - c. Shop inspection tasks required by AISC 360 to be performed by the fabricator's quality control personnel, shall be overseen by the independent inspector hired by the fabricator.
    - d. At completion of fabrication, and prior to erecting steel, submit a certificate of compliance signed and sealed by the third party inspector, stating that the steel fabrication complies with the requirements of the construction documents.



## *Request for Information*

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**Date:** 09/05/2024

**Request No:** KSI 016

**Project:** North East Middle & High School  
**KCI No.:** 242612

**To:** Hess Construction  
**Attn.:** Joshua Postadan  
**Email:** jpostadan@hessconstruction.com

**From:** Mike Staub  
**Phone:** 717-434-6248  
**Email:** [mstaub@kinsleysteel.com](mailto:mstaub@kinsleysteel.com)

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### **RE: Specs Clarification**

#### ***Request***

In the specs section 051200 1.5F (structural steel, source quality control reports), Kinsley is an AISC Fabricator and has CWI's on staff to provide review of our fabrication process to ensure we are following the Contract Documents. Kinsley will be hiring a third-party inspector for all full pens as they required UT testing 100%.

Is this acceptable?

---

***Date Response Requested: ASAP***

CEI: Please refer to inspection tables on S002 for additional inspection and quality control requirements. In general QC refers to quality control personnel by the contractor and SI refers to Third party special inspectors.

Refer to IBC section 1704 for additional information regarding inspectors and quality control.

Cesar Flores  
09/13/2024



- F. **Quality control test reports for shop and field including ultrasonic test results.**
  - 1. Submit certification by a Professional Engineer registered in the State of Maryland that all joint preparation for complete joint penetration welds meet AISC requirements and that all welding procedure specification requirements have been met.
- G. Sustainability Submittals: Submit a completed Green Building Materials Certification Form that lists permanently installed products and indicates material costs. Attach letter from manufacturer(s) describing product(s) contribution to LEED v4, including, but not limited to, the following:
  - 1. MR credit 2: Environmental Product Declarations (EPDs): Submit an Environmental Product Declaration.
  - 2. MR credit 3: Sourcing of Raw Materials: Indicate percentage by weight of pre-consumer and post-consumer recycled content. Indicate location of extraction and manufacture.
- H. Embodied Carbon Data: Informational.
  - 1. Bill of sale and/or total tonnage (per mill source).
  - 2. Environmental Product Declaration (EPD):
    - a. Includes global warming potential (GWP)
    - b. Independently verified as defined by ISO 14025
    - c. Mill-specific, for each material/shape source.
      - 1) If not available, submit industry-wide EPD, of matching production method (electric arc furnace, blast furnace, etc.), for each material/shape source.

#### 1.6 QUALITY ASSURANCE

- A. Structural steel shall be domestic origin, produced and supplied from the United States of America only. Refer to the federal "Buy American Act" and the "Buy American Steel Act, Sections 17-301 to 17-306 of the Finance and Procurement Article of the Annotated Code of Maryland.
- B. Fabricate structural steel members in accordance with AISC "Steel Construction Manual" and AISC "Code of Standard Practice for Steel Buildings and Bridges".
- C. Comply with Section 10 of AISC "Code of Standard Practice for Steel Buildings and Bridges" for architecturally exposed structural steel.
- D. Welding: Comply with AWS D1.1, "Structural Welding Code-Steel" for procedures, tolerances, appearance and quality.
- E. Fabricator: Engage a firm experienced in fabricating structural steel similar to that indicated for this project and within 15 percent this project size, with a record of successful in-service performance, as well as sufficient production capacity to fabricate structural steel without delaying the Work.
  - 1. Provide documentation that fabricator has provided material for and erected at least 3 projects within 15 percent of project size and complexity, in the last six years.
  - 2. Allow the Owner's representative to visit the fabrication plant as required to inspect in place quality control procedures and structural steel fabrication.
  - 3. Fabricators who are not an AISC Certified Building Fabricator (BU), shall meet the following additional requirements:
    - a. Demonstrate that the fabricator has in place a quality control program for meeting IBC requirements and compliance with AISC recommendations and standards.
    - b. At no additional cost to the Owner, provide an independent shop inspection for compliance with IBC, AISC and AWS recommendations and standards. The independent inspection agency shall be different than the testing agency engaged by the Owner.
    - c. Shop inspection tasks required by AISC 360 to be performed by the fabricator's quality control personnel, shall be overseen by the independent inspector hired by the fabricator.
    - d. At completion of fabrication, and prior to erecting steel, submit a certificate of compliance signed and sealed by the third party inspector, stating that the steel fabrication complies with the requirements of the construction documents.

RFI detail

#034 Submittal #042000-007 Wall Cavity Size



Status	<div><div></div>Closed</div>
Created on	Sep 12, 2024 by <b>Glenn Feldstein</b> (George Moehrle Masonry)
RFI type	Architectural RFI REVs
Ball in court	<b>Glenn Feldstein</b> (George Moehrle Masonry)
Answered	Sep 16, 2024 by <b>Patrick Byrne</b> (Grimm and Parker)

Question

In reference to comments on Submittal #042000-007 (Rev 1) "Masonry Ties and Reinforcement - Delegated-Design Submittal", Wall Type 3.1 is used at only a few locations (sections A3/A412 and A3, A6, A9/A418) and the only difference is a 1" wider cavity. Can we reduce the air space from 2-1/2" to 1-1/2"? The R-value is identical

Suggested answer

Air space in Wall Type 3.1 reduced to 1-1/2"

Official response

Patrick Byrne (Grimm and Parker): See attached RFI response.

By **Patrick Byrne** (Grimm and Parker) - Sep 16, 2024, 8:51 PM EDT

References and Attachments

Files (1)

- [RFI #034 Wall Cavity Size Response.pdf](#)

Submittals (1)






<div><div></div>Required</div> <div>Waiting for Submission</div>	<a href="#">#042000-007 - Masonry Ties and Reinforcement - Delegated-Design Submittal</a>	Sep 16, 2024 (1 day late)
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Impact

Cost impact	No
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Schedule impact	No
Other attributes	
Priority	Normal
Discipline	Masonry
Category	-
Location	-
Location details	-
External id	-
Co-reviewer(s)	
Posted to Drawings/ Specifications	-
Trade's RFI No.	-



Activities	By	At
<b>Patrick Byrne</b> added a reference to a File <b>RFI #034 Wall Cavity Size Response.pdf</b>	<b>Patrick Byrne</b>	Sep 16, 2024, 8:51 PM EDT
<b>Patrick Byrne</b> changed the status from  <b>Open</b> In Review to  <b>Open</b> Answered set Ball in court to <b>Joshua Postadan</b> (HESS Construction Co., LLC)	<b>Patrick Byrne</b>	Sep 16, 2024, 8:51 PM EDT
<b>Patrick Byrne</b> added a response: See attached RFI response.	<b>Patrick Byrne</b>	Sep 16, 2024, 8:51 PM EDT
<b>Joshua Postadan</b> changed the status from  <b>Open</b> Waiting for Submission to  <b>Open</b> In Review changed the <b>due date</b> to Sep 29, 2024 set Ball in court to <b>Patrick Byrne</b> (Grimm and Parker) changed the <b>ID</b> to 034 changed the <b>watchers</b> to <b>Architect Eng., HESS PROJECT TEAM, George Moehrle Masonry</b>	<b>Joshua Postadan</b>	Sep 16, 2024, 10:22 AM EDT
changed the <b>suggested answer</b> to <i>Air space in Wall Type 3.1 reduced to 1-1/2"</i>	<b>Joshua Postadan</b>	Sep 16, 2024, 10:16 AM EDT
changed the <b>question</b> to <i>In reference to comments on Submittal #042000-007 (Rev 1) "Masonry Ties and Reinforcement - Delegated-Design Submittal", Wall Type 3.1 is used at only a few locations (sections A3/A412 and A3, A6, A9/A418) and the only difference is a 1" wider cavity. Can we reduce the air space from 2-1/2" to 1-1/2"? The R-value is identical</i>	<b>Joshua Postadan</b>	Sep 16, 2024, 10:15 AM EDT
<b>Joshua Postadan</b> added a reference to a Submittal <b>Masonry Ties and Reinforcement - Delegated-Design Submittal</b>	<b>Joshua Postadan</b>	Sep 16, 2024, 10:15 AM EDT
changed the <b>question</b> to <i>In reference to Submittal #042000-007 (Rev 1) "Masonry Ties and Reinforcement - Delegated-Design Submittal", Wall Type 3.1 is used at only a few locations (sections A3/A412 and A3, A6, A9/A418) and the only difference is a 1" wider cavity. Can we reduce the air space from 2-1/2" to 1-1/2"? The R-value is identical</i>	<b>Joshua Postadan</b>	Sep 16, 2024, 10:13 AM EDT
changed the <b>question</b> to <i>Wall Type 3.1 is used at only a few locations (sections A3/A412 and A3, A6, A9/A418) and the only difference is a 1" wider cavity. Can we reduce the air space from 2-1/2" to 1-1/2"? The R-value is identical</i>	<b>Joshua Postadan</b>	Sep 16, 2024, 10:12 AM EDT
<b>Glenn Feldstein</b> (George Moehrle Masonry) created this RFI in  <b>Open</b> Waiting for Submission status and set Ball in court to <b>Joshua Postadan</b> (HESS Construction Co., LLC).	<b>Glenn Feldstein</b>	Sep 12, 2024, 4:21 PM EDT

RFI detail

#034 Submittal #042000-007 Wall Cavity Size



Status	<div><div></div>Open</div> In Review
Created on	Sep 12, 2024 by <b>Glenn Feldstein</b> (George Moehrle Masonry)
RFI type	Architectural RFI REVs
Ball in court	<b>Patrick Byrne</b> (Grimm and Parker)
Due date	Sep 30, 2024

Question

In reference to comments on Submittal #042000-007 (Rev 1) "Masonry Ties and Reinforcement - Delegated-Design Submittal", Wall Type 3.1 is used at only a few locations (sections A3/A412 and A3, A6, A9/A418) and the only difference is a 1" wider cavity. Can we reduce the air space from 2-1/2" to 1-1/2"? The R-value is identical

Suggested answer

Air space in Wall Type 3.1 reduced to 1-1/2"

References and Attachments

Submittals (1)			
<div><div></div>Required</div> <div>Waiting for Submission</div>	<a href="#">#042000-007 - Masonry Ties and Reinforcement - Delegated-Design Submittal</a>		Sep 16, 2024 (1 day late)

Impact

Cost impact	No
Schedule impact	No

Other attributes




Priority	Normal
Discipline	Masonry

Category	-
Location	-
Location details	-
External id	-
Co-reviewer(s)	
Posted to Drawings/ Specifications	-
Trade's RFI No.	-

A reduction of the wall cavity is not desired. Please construction the wall type 3.1 as designed and provide required engineering analysis of masonry ties.

Patrick Byrne 9.16.2024.



Activities	By	At
<b>Joshua Postadan</b> changed the status from  <b>Open</b> Waiting for Submission to  <b>Open</b> In Review changed the <b>due date</b> to Sep 29, 2024 set Ball in court to <b>Patrick Byrne</b> (Grimm and Parker) changed the <b>ID</b> to 034 changed the <b>watchers</b> to <b>Architect Eng., HESS PROJECT TEAM, George Moehrle Masonry</b>	<b>Joshua Postadan</b>	Sep 16, 2024, 10:22 AM EDT
changed the <b>suggested answer</b> to <i>Air space in Wall Type 3.1 reduced to 1-1/2"</i>	<b>Joshua Postadan</b>	Sep 16, 2024, 10:16 AM EDT
changed the <b>question</b> to <i>In reference to comments on Submittal #042000-007 (Rev 1) "Masonry Ties and Reinforcement - Delegated-Design Submittal", Wall Type 3.1 is used at only a few locations (sections A3/A412 and A3, A6, A9/A418) and the only difference is a 1" wider cavity. Can we reduce the air space from 2-1/2" to 1-1/2"? The R-value is identical</i>	<b>Joshua Postadan</b>	Sep 16, 2024, 10:15 AM EDT
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<b>Glenn Feldstein</b> (George Moehrle Masonry) created this RFI in  <b>Open</b> Waiting for Submission status and set Ball in court to <b>Joshua Postadan</b> (HESS Construction Co., LLC).	<b>Glenn Feldstein</b>	Sep 12, 2024, 4:21 PM EDT