

# ADDENDUM NO. 2

**February 9, 2026**

Perry Township Schools:

Southport High School Addition & Renovation Phase 1 (Activity Center Addition & Wrestling/Center Plant Renovation)

971 E. Banta Road

Indianapolis, IN 46227

## **TO: ALL BIDDERS OF RECORD**

This Addendum forms a part of and modifies the Bidding Requirements, Contract Forms, Contract Conditions, the Specifications, and the Drawings dated January 6, 2026, by Lancer Associates Architecture. Acknowledge receipt of the Addendum in the space provided on the Bid Form. Failure to do so may subject the Bidder to disqualification.

This Addendum consists of Pages ADD 2-1 through ADD 2-3, Specification Section 00 02 00 – Notice To Qualified Bidders, and Lancer Associates Architecture Addendum No. 2, dated February 6, 2026, consisting of nine (9) pages, and Specification Section, 08 71 00, 08 71 00A, 12 32 16, 27 05 28, and Addendum 2 Drawings: S001, S011, S114R, S114S, S200, S524 A121Q, A201, A202, A203, A611, A731, A752 P-501, P-601, PF 102, PP 102, PR 101 ES 101, EP101, EP103, E-601, E-701.

### **A. SPECIFICATION SECTION 00 02 00 – NOTICE TO QUALIFIED BIDDERS**

**ATTENTION: Bids are DUE and will be OPENED at Perry Township Academic Center.**

1. Replace Sheet – Change of Bid Receipt and Opening Location  
**Perry Township Academic Center  
2115 E. Southport Road  
Indianapolis, IN 46227**

**B. SPECIFICATION SECTION 01 12 00 MULTIPLE CONTRACT SUMMARY**

1. Paragraph 3.03 Bid Categories

**B. Bid Category No. 2 – General Trades**

Add the following Specification Sections:

12 32 16 Plastic Laminate Cabinets

Remove the following Specification Section:

12 24 00 Sun Shades

06 10 53 Rough Carpentry

Add the following Clarifications:

16. All investigative excavations shown within the documents are the responsibility of this contractor.

17. All demo required for new openings is the responsibility of this contractor.

**D. Bid Category No. 4 – Masonry**

Add the following Clarification:

10. All Heckman and channel slot anchors that interface with masonry are to be supplied and installed by the mason.

**F. Bid Category No. 6 – Structural Steel**

Add the following Clarification:

5. Include 3 mobilizations.

6. All Heckman and channel slot anchors that interface with masonry are to be supplied and installed by the mason

**H. Bid Category No. 8 – Glass and Glazing**

Add the following Specification Section:

12 24 00 Sunshades

**I. Bid Category No. 9 – Metal Studs, Drywall & Ceilings**

Add the following Specification Section:

06 10 53 Rough Carpentry

**O. Bid Category No. 16 – Electrical & Technology**

Add the following Clarification:

6. Responsible for providing two (2) 4" PVC conduits for medium voltage raceway from ground box outside MVMDS-1 to new (TF-5) transformer location. Include a 3/0 copper grounding conductor in this trench per Note 2 on Sheet ES101. See ES101 for conduit route.

## **SECTION 00 02 00 - NOTICE TO PRE-QUALIFIED BIDDERS**

### **NOTICE TO PRE-QUALIFIED TIER 1 BIDDERS**

Notice is hereby given that sealed bids will be received for a Public CMc Project under IC 5-32:

By: The Skillman Corporation

For: Perry Township Schools - Southport High School  
Addition & Renovation Phase 1 (Activity Center Addition & Wrestling/Center  
Plant Renovation)

At: *Perry Township Academic Center*  
*2115 E Southport Road*  
*Indianapolis, IN 46227*

Until: February 19, 2026 at 2:00 PM (local time)

Bid Opening: Bids will be publicly opened and read aloud at 2:00 PM (local time) at  
Perry Township Academic Center, 2115 E Southport Road, Indianapolis, IN 46227

All work for the complete construction of the Project will be under one or more sub-contracts with the Construction Manager based on bids received from pre-qualified tier 1 bidders and on combinations awarded. Award of contracts will be in accordance with Indiana Public Bidding Laws. The Construction Manager will not self-perform any of the work on this project.

Construction shall be in full accordance with the Bidding Documents which are on file with the Owner and Construction Manager and may be examined by prospective bidders at the following locations:

Office of the Construction Manager  
The Skillman Corporation  
3834 S. Emerson Avenue, Building A  
Indianapolis, IN 46203

The Skillman Plan Room  
[www.skillmanplanroom.com](http://www.skillmanplanroom.com)

Office of the Owner  
Perry Township Schools  
6548 Orinoco Ave.  
Indianapolis, IN 46227

Pre-Qualified Bidders, sub-subcontractors and material suppliers must place an order on [www.skillmanplanroom.com](http://www.skillmanplanroom.com) to be able to download documents electronically or request printed documents. There is no cost for downloading the bidding documents. Bidders desiring printed documents shall pay for the cost of printing, shipping and handling. Reprographic Services are provided by:

**Eastern Engineering 9901 Allisonville Road, Fishers, IN 46038, Phone 317-598-0661.**

**A Pre-Bid Conference will be held on January 29, 2026, 3:00 PM local time**, at Southport High School, 971 E. Banta Road, Indianapolis, IN 46227. Check in will be required after entering building. Attendance by bidders is optional, but recommended, to clarify or answer questions concerning the Drawings and Project Manual for the Project.

Bid security in the amount of ten percent (10%) of the Bid must accompany each Bid in accordance with the Instructions to Bidders.

The successful Bidders will be required to furnish Dual Oblige Performance and Payment Bonds for one hundred percent (100%) of their Contract amount prior to execution of Contracts.

Subcontractors submitting bids for the performance of Work as specified in this building Project should make such Bids to **The Skillman Corporation**. Contractors shall enter into a sub-contract with The Skillman Corporation as the Construction Manager CMc for the Owner.

The Owner and the Construction Manager reserve their rights to accept or reject any Bid (or combination of Bids) and to waive any irregularities in bidding. All Bids may be held for a period not to exceed **60** days before awarding contracts.

## **THE SKILLMAN CORPORATION**

END OF SECTION 00 02 00

**ADDENDUM NO. TWO**

**PROJECT:** Perry Twp Schools: Southport High School,  
Phase 1

**PROJECT NUMBER:** 24173S

**DATE OF ADDENDUM:** February 6, 2026



**THIS ADDENDUM FORMS A PART OF THE CONTRACT DOCUMENTS AND IS ISSUED IN ACCORDANCE WITH THE INSTRUCTIONS TO BIDDERS. ACKNOWLEDGE RECEIPT OF THIS ADDENDUM BY SIGNING THE ADDENDUM ACKNOWLEDGMENT SECTION OF THE BID FORM.**

**QUESTIONS & ANSWERS:**

Design Team Responses in **Red** for the following:

1. Please see the response from AES. I'm going to need some clarification of scope. The drawings make multiple references to AES, as it sits, AES does not have a part of this project.

**Option 1.** *This would be in my area. I recall the school was wanting to go away from a primary metered service. They were needing a transformer to refeed the schools gear and a new utility transformer north of the baseball field. All primary cable, conduit, and transformers will be provided by AES. The cost will depend on the schools estimated 30 mo. revenue.*

**Option 2.** *If the school is staying on a primary metered service, the school will be responsible for all work and equipment.*

Option 1 is the current path forward. Need to confirm with AES the ownership of the new primary to T-5. Currently that feed is from the owners MV gear. In the next project issuing later this month, the MV gear goes away and the utility primary is routed into that box and up to a new utility transformer replacing the (3) currently there. That transformer and the new T-5 would have individual meters.

2. Sheet ES101 Note 1 and 2 calls for a utility primary from the MV switchboard to the new utility XFMR. It is my understanding that we would need to install the raceway, cable, terminations, etc, if this is all customer owned. If customer owned, we need an updated one line as AES would not have involvement.

Needs to be clarified with AES per the above. Intention on ES101 is to intercept the existing feed in this project to route around the new SAC, then in the next project the existing feed into the owners MV gear is demolished and the utility primary comes right into the intercept box.

3. Sheet ES101 Note B, calls for us to include ALL utility fees in bid. We have no way of knowing the cost of these fees. I would request that utility fees shall be covered by others.

Design Team seeking clarity on fees. Include any costs for MV feeders that belong to the owner. All required utility items to be installed by the EC should be covered. Transformer pad, bollards, etc. Additional clarification to follow in addendum 03 due to the receipt of this question to the design team.

4. Sheet ES101 Note 3 calls for new utility XFMR per AES requirements. Please confirm if this XFMR is to be from utility or by contractor, who is to install and test? If by utility, confirm metering requirements.

Transformer Pad, bollards, etc. to be covered by EC. Metering at transformer T-5 anticipated. To be confirmed with AES and clarified in Addendum 03..

5. Sheet ES101 Note 4 calls for service disconnects. Please confirm the need for these disconnects if the XFMR feeding them is by utility. Also confirm locations as there really should be more clearance from the XFMR.

Service disconnects needed due to there being (2) services, one of which will have conduits running open in the vault.

AES goldbook transformer clearance of 5' was used to determine the location. Confirm requirements with AES and will clarify in next addendum.

6. Sheet ED100 Confirm we are handling the demo of all MV demo.

No MV equipment within the building will be demolished in this project.

7. Confirm the reuse of XFMR T-7, if I'm not mistaken, this is the one in the vault that was dismantled and burnt up?

Transformer T-7 was replaced at some point and was placed directly above 1LDP5 in the football equipment storage room, likely because of the weight and clearance issues getting into the vault.

Most transformers, including T-7 were replaced in 2022-23 so it should be re-used. A door and hoist beam were added to the new stairwell in to the vault to allow equipment removal/replacement.

8. Sheet E601 calls for the Utility XFMR to be fed from an AES riser pole, this conflicts ES101.

Correct, this will happen in the next project, unless directed otherwise by AES. This will be clarified in the upcoming addendum.

9. Regarding Section 03 45 00 – Precast Reglets

- i. 2.6, L says reglets are to be cast into the precast walls
- ii. Detail 2/A503 says reglets are to be saw-cut into precast panels
- iii. Please clarify the reglet intent

Response: Cast reglets into the precast panels.

10. Windows at precast panels.

- i. 2.6, J requires window units to be cast into the precast
  - 1. Please indicate where this is required and provide a detail of how this is to be accomplished

Response: The opening (void) need to be formed in in the panel to allow for the field installation of the door or window.

11. No landscaping information is included in the bid documents.

- a. Please confirm no landscaping is required for this project

Response: No landscape plans or specifications provided. Allowance to be carried for landscape to complete landscape scope/efforts. Design team will coordinate allowance with Skillman.



**ADDITIONAL APPROVED MANUFACTURERS:**

1. Section 03 45 00 Precast
  - a. Manufacturer: Add Fabcon Precast as an acceptable manufacturer to paragraph 2.1.A of section 03 45 00.
2. Section 07 2726
  - a. Manufacturer: Add Tremco, ExoAir 230, as an acceptable manufacturer to paragraph 2.1 of section 07 27 26.
3. Section 08 4523 Fiberglass-Sandwich Panel Assembly.
  - a. Manufacturer: Add Kingspan, UniGrid Fiberglass Translucent Panels as an acceptable manufacturer to paragraph 2.1 of section 08 45 23.
4. Section 10 51 26
  - a. Manufacturer: Add Scranton 'Tufftect and Durlift' Lockers to paragraph 2.1.B of section 10 51 26.
5. Section 10 51 26
  - a. Manufacturer: Add Lockers MFG (Manufacturing) to paragraph 2.1.B of section 10 51 26

**SPECIFICATIONS:**

1. Spec Section: 08 71 00  
Spec Title: Door Hardware  
  
Change trade responsibility of door contacts.
2. Spec Section: 08 71 00A  
Spec Title: Door Schedule.  
  
Change: Door Hardware set assignments at door R122.1, R122.2, R122.3 and R122.4.
3. Spec Section: 27 05 28  
Spec Title: PATHWAYS FOR COMMUNICATIONS SYSTEMS  
  
Change: Revised subsection verbiage
  - 3.10.E.2.e.2
  - 3.10.E.3.a.2

**DRAWINGS:**

1. Drawing Sheet Number: S001  
Drawing Sheet Title: GENERAL NOTES & ABBREVIATIONS  
  
Change: Updated Codes and Design Criteria.
  - Updated precast bearing wall system lateral design requirements.
2. Drawing Sheet Number: S011  
Drawing Sheet Title: LOAD MAPS  
  
Change: Added note at steel bearing 3.
  - Added note regarding roof trusses bracing precast panel.
3. Drawing Sheet Number: S114R  
Drawing Sheet Title: UNIT R ROOF FRAMING PLAN  
  
Change: Updated plan dims.
  - Updated top of precast wall panel elevation.
4. Drawing Sheet Number: S114S  
Drawing Sheet Title: UNIT S ROOF FRAMING PLAN  
  
Change: Updated plan dims.
  - Updated top of precast wall panel elevation.
5. Drawing Sheet Number: S200  
Drawing Sheet Title: FRAMING ELEVATIONS  
  
Change: Updated 1/S200.
  - Added precast bracing notes for roof truss.
6. Drawing Sheet Number: S524  
Drawing Sheet Title: FRAMING SCHEDULES, SECTIONS, & DETAILS  
  
Change: Updated details, 3, 5, & 6.
  - Changed roof truss bearing from bottom bearing to top bearing to 3/S524.
  - Provided axial loading to roof truss to 5/S524.
  - Changed roof truss bearing from bottom bearing to top bearing and added axial loading to the roof truss to 6/S524.
  - Added thickened slab.

7. Drawing Sheet Number: A121Q

Drawing Sheet Title: REFLECTED CEILING PLAN – FIRST FLOOR –  
UNIT Q

Change:

- Added callout for section 10/A731

8. Drawing Sheet Number: A201

Drawing Sheet Title: EXTERIOR ELEVATIONS

Change:

- Modify elevation notes 2 and 3.

9. Drawing Sheet Number: A202

Drawing Sheet Title: EXTERIOR ELEVATIONS

Change:

- Modify elevation notes 2 and 3.

10. Drawing Sheet Number: A203

Drawing Sheet Title: EXTERIOR ELEVATIONS

Change:

- Modify elevation notes 2 and 3.

11. Drawing Sheet Number: A611

Drawing Sheet Title: WINDOW SCHEDULE.

Change:

- Add glazing schedule to sheets
- Identified glazing types at each window elevation.

12. Drawing Sheet Number: A731

Drawing Sheet Title: INTERIOR DETAILS

Change:

- Added section detail 10 – SECTION – FIELDHOUSE ENTRANCE  
WALLS

13. Drawing Sheet Number: A752

Drawing Sheet Title: INTERIOR ELEVATIONS

Change:

- Added section callouts for section 10/A731

14. Drawing Sheet Number: P-501  
Drawing Sheet Title: PLUMBING DETAILS

Change: MODIFY Drawing P-501.

“See Detail 4 for Fire Protection revision”

15. Drawing Sheet Number: P-601  
Drawing Sheet Title: PLUMBING SCHEDULES

Change: MODIFY Drawing P-601.

“See REVISED MIXING, METERING AND PRESURE REDUCING  
VALVES SCHEDULE ”

16. Drawing Sheet Number: PF102  
Drawing Sheet Title: PLUMBING FOUNDATION PLAN – UNIT R

Change: “See Fire Protection water line revision in Water Room R118”

17. Drawing Sheet Number: PP102  
Drawing Sheet Title: PLUMBING FIRST FLOOR PLAN – UNIT R

Change: “See Fire Protection water line revision in Water Room R118”

18. Drawing Sheet Number: PR101  
Drawing Sheet Title: PLUMBING ROOF PLAN

Change: DELETE AND REPLACE Drawing PR101 in its entirety.

“See Gas piping revisions at RTU-Q3 and RTU-R1”

19. Drawing Sheet Number: E-601  
Drawing Sheet Title: ELECTRICAL SCHEDULES

Change: Changed disconnect designation from DISC-PSB to DISC-PDP.

20. Drawing Sheet Number: E-701  
Drawing Sheet Title: ELECTRICAL ONE-LINE DIAGRAMS

Change: Changed switchboard 1LDP5 to a distribution panelboard.

Change: Changed pool switchboard to a distribution panelboard and changed designation to PDP.  
Change: Changed disconnect designation from DISC-PSB to DISC-PDP.  
Change: Changed distribution panel PDP to NEMA 4X.  
Change: Changed demolition and new utility primary work to match site plans. Updated demo and new plan notes 1.

21. Drawing Sheet Number: EP101

Drawing Sheet Title: ELECTRICAL POWER BASEMENT PLAN

Change: Changed pool switchboard to a distribution panelboard and changed designation to PDP.  
Change: Added power distribution panelboards to plan note 10.  
Change: Changed switchboard 1HDS1 to a 2 section switchboard on plan

22. Drawing Sheet Number: EP103

Drawing Sheet Title: ELECTRICAL POWER FIRST FLOOR PLAN –  
UNIT R

Change: Changed disconnect designation from DISC-PSB to DISC-PDP.

23. Drawing Sheet Number: ES101

Drawing Sheet Title: ELECTRICAL SITE PLAN

Change: Changed pool switchboard to a distribution panelboard and changed designation to PDP.  
Change: Changed disconnect designation from DISC-PSB to DISC-PDP.

**Attachments:**

(Specs) 08 71 00, 08 71 00A, 12 32 16, 27 05 28

(Drawings)

S001, S011, S114R, S114S, S200, S524

A121Q, A201, A202, A203, A611, A731, A752

P-501, P-601, PF 102, PP 102, PR 101

ES 101, EP101, EP103, E-601, E-701

END OF ADDENDUM NO. TWO

## SECTION 087100 - DOOR HARDWARE

## PART 1 - GENERAL

## 1.01 SUMMARY

## A. Section includes:

1. Mechanical and electrified door hardware
2. Electronic access control system components

## B. Section excludes:

1. Windows
2. Cabinets (casework), including locks in cabinets
3. Signage
4. Toilet accessories
5. Overhead doors

## C. Related Sections:

1. Division 01 "General Requirements" sections for Allowances, Alternates, Owner Furnished Contractor Installed, Project Management and Coordination.
2. Division 06 Section "Rough Carpentry"
3. Division 06 Section "Finish Carpentry"
4. Division 07 Section "Joint Sealants" for sealant requirements applicable to threshold installation specified in this section.
5. Division 08 Sections:
  - a. "Metal Doors and Frames"
  - b. "Flush Wood Doors"
  - c. "Aluminum-Framed Entrances and Storefronts"
6. Division 26 "Electrical" sections for connections to electrical power system and for low-voltage wiring.
7. Division 28 "Electronic Safety and Security" sections for coordination with other components of electronic access control system and fire alarm system.

## 1.02 REFERENCES

## A. UL LLC

1. UL 10B - Fire Test of Door Assemblies
2. UL 10C - Positive Pressure Test of Fire Door Assemblies
3. UL 1784 - Air Leakage Tests of Door Assemblies
4. UL 305 - Panic Hardware

## B. DHI - Door and Hardware Institute

1. Sequence and Format for the Hardware Schedule
2. Recommended Locations for Builders Hardware
3. Keying Systems and Nomenclature
4. Installation Guide for Doors and Hardware

## C. NFPA – National Fire Protection Association

1. NFPA 70 – National Electric Code
2. NFPA 80 – 2016 Edition – Standard for Fire Doors and Other Opening Protectives
3. NFPA 101 – Life Safety Code
4. NFPA 105 – Smoke and Draft Control Door Assemblies
5. NFPA 252 – Fire Tests of Door Assemblies

## D. ANSI - American National Standards Institute

1. ANSI A117.1 – 2017 Edition – Accessible and Usable Buildings and Facilities
2. ANSI/BHMA A156.1 - A156.29, and ANSI/BHMA A156.31 - Standards for Hardware and Specialties
3. ANSI/BHMA A156.28 - Recommended Practices for Keying Systems
4. ANSI/WDMA I.S. 1A - Interior Architectural Wood Flush Doors
5. ANSI/SDI A250.8 - Standard Steel Doors and Frames

## 1.03 SUBMITTALS

## A. General:

1. Submit in accordance with Conditions of Contract and Division 01 Submittal Procedures.
2. Prior to forwarding submittal:
  - a. Review drawings and Sections from related trades to verify compatibility with specified hardware.
  - b. Highlight, encircle, or otherwise specifically identify on submittals: deviations from Contract Documents, issues of incompatibility or other issues which may detrimentally affect the Work.

## B. Action Submittals:

1. Product Data: Submit technical product data for each item of door hardware, installation instructions, maintenance of operating parts and finish, and other information necessary to show compliance with requirements.
2. Riser and Wiring Diagrams: After final approval of hardware schedule, submit details of electrified door hardware, indicating:
  - a. Wiring Diagrams: For power, signal, and control wiring and including:
    - 1) Details of interface of electrified door hardware and building safety and security systems.
    - 2) Schematic diagram of systems that interface with electrified door hardware.
    - 3) Point-to-point wiring.
    - 4) Risers.
3. Samples for Verification: If requested by Architect, submit production sample of requested door hardware unit in finish indicated and tagged with full description for coordination with schedule.
  - a. Samples will be returned to supplier. Units that are acceptable to Architect may, after final check of operations, be incorporated into Work, within limitations of key coordination requirements.
4. Door Hardware Schedule:



- a. Submit concurrent with submissions of Product Data, Samples, and Shop Drawings. Coordinate submission of door hardware schedule with scheduling requirements of other work to facilitate fabrication of other work critical in Project construction schedule.
  - b. Submit under direct supervision of a Door Hardware Institute (DHI) certified Architectural Hardware Consultant (AHC) or Door Hardware Consultant (DHC) with hardware sets in vertical format as illustrated by Sequence of Format for the Hardware Schedule published by DHI.
  - c. Indicate complete designations of each item required for each opening, include:
    - 1) Door Index: door number, heading number, and Architect's hardware set number.
    - 2) Quantity, type, style, function, size, and finish of each hardware item.
    - 3) Name and manufacturer of each item.
    - 4) Fastenings and other pertinent information.
    - 5) Location of each hardware set cross-referenced to indications on Drawings.
    - 6) Explanation of all abbreviations, symbols, and codes contained in schedule.
    - 7) Mounting locations for hardware.
    - 8) Door and frame sizes and materials.
    - 9) Degree of door swing and handing.
    - 10) Operational Description of openings with electrified hardware covering egress, ingress (access), and fire/smoke alarm connections.
5. Key Schedule:
- a. After Keying Conference, provide keying schedule that includes levels of keying, explanations of key system's function, key symbols used, and door numbers controlled.
  - b. Use ANSI/BHMA A156.28 "Recommended Practices for Keying Systems" as guideline for nomenclature, definitions, and approach for selecting optimal keying system.
  - c. Provide 3 copies of keying schedule for review prepared and detailed in accordance with referenced DHI publication. Include schematic keying diagram and index each key to unique door designations.
  - d. Index keying schedule by door number, keyset, hardware heading number, cross keying instructions, and special key stamping instructions.
  - e. Provide one complete bitting list of key cuts and one key system schematic illustrating system usage and expansion. Forward bitting list, key cuts and key system schematic directly to Owner, by means as directed by Owner.
  - f. Prepare key schedule by or under supervision of supplier, detailing Owner's final keying instructions for locks.
- C. Informational Submittals:
1. Provide Qualification Data for Supplier, Installer and Architectural Hardware Consultant.
  2. Provide Product Data:
    - a. Certify that door hardware approved for use on types and sizes of labeled fire-rated doors complies with listed fire-rated door assemblies.
    - b. Include warranties for specified door hardware.
- D. Closeout Submittals:
1. Operations and Maintenance Data: Provide in accordance with Division 01 and include:
    - a. Complete information on care, maintenance, and adjustment; data on repair and replacement parts, and information on preservation of finishes.
    - b. Catalog pages for each product.
    - c. Final approved hardware schedule edited to reflect conditions as installed.
    - d. Final keying schedule

- e. Copy of warranties including appropriate reference numbers for manufacturers to identify project.
- f. As-installed wiring diagrams for each opening connected to power, both low voltage and 110 volts.

E. Inspection and Testing:

- 1. Submit written reports to the Owner and Authority Having Jurisdiction (AHJ) of the results of functional testing and inspection for:
  - a. Fire door assemblies, in compliance with NFPA 80.
  - b. Required egress door assemblies, in compliance with NFPA 101.

1.04 QUALITY ASSURANCE

A. Qualifications and Responsibilities:

- 1. Supplier: Recognized architectural hardware supplier with a minimum of 5 years documented experience supplying both mechanical and electromechanical door hardware similar in quantity, type, and quality to that indicated for this Project. Supplier to be recognized as a factory direct distributor by the manufacturer of the primary materials with a warehousing facility in the Project's vicinity. Supplier to have on staff, a certified Architectural Hardware Consultant (AHC) or Door Hardware Consultant (DHC) available to Owner, Architect, and Contractor, at reasonable times during the Work for consultation.
- 2. Installer: Qualified tradesperson skilled in the application of commercial grade hardware with experience installing door hardware similar in quantity, type, and quality as indicated for this Project.
- 3. Architectural Hardware Consultant: Person who is experienced in providing consulting services for door hardware installations that are comparable in material, design, and extent to that indicated for this Project and meets these requirements:
  - a. For door hardware: DHI certified AHC or DHC.
  - b. Can provide installation and technical data to Architect and other related subcontractors.
  - c. Can inspect and verify components are in working order upon completion of installation.
  - d. Capable of producing wiring diagram and coordinating installation of electrified hardware with Architect and electrical engineers.
- 4. Single Source Responsibility: Obtain each type of door hardware from single manufacturer.

B. Certifications:

- 1. Fire-Rated Door Openings:
  - a. Provide door hardware for fire-rated openings that complies with NFPA 80 and requirements of authorities having jurisdiction.
  - b. Provide only items of door hardware that are listed products tested by UL LLC, Intertek Testing Services, or other testing and inspecting organizations acceptable to authorities having jurisdiction for use on types and sizes of doors indicated, based on testing at positive pressure and according to NFPA 252 or UL 10C and in compliance with requirements of fire-rated door and door frame labels.
- 2. Smoke and Draft Control Door Assemblies:
  - a. Provide door hardware that meets requirements of assemblies tested according to UL 1784 and installed in compliance with NFPA 105

- b. Comply with the maximum air leakage of 0.3 cfm/sq. ft. (3 cu. m per minute/sq. m) at tested pressure differential of 0.3-inch wg (75 Pa) of water.
  - 3. Electrified Door Hardware
    - a. Listed and labeled as defined in NFPA 70, Article 100, by testing agency acceptable to authorities having jurisdiction.
  - 4. Accessibility Requirements:
    - a. Comply with governing accessibility regulations cited in "REFERENCES" article 087100, 1.02.D3 herein for door hardware on doors in an accessible route. This project must comply with all Federal Americans with Disability Act regulations and all Local Accessibility Regulations.
- C. Pre-Installation Meetings
- 1. Keying Conference
    - a. Incorporate keying conference decisions into final keying schedule after reviewing door hardware keying system including:
      - 1) Function of building, flow of traffic, purpose of each area, degree of security required, and plans for future expansion.
      - 2) Preliminary key system schematic diagram.
      - 3) Requirements for key control system.
      - 4) Requirements for access control.
      - 5) Address for delivery of keys.
  - 2. Pre-installation Conference
    - a. Review and finalize construction schedule and verify availability of materials, Installer's personnel, equipment, and facilities needed to make progress and avoid delays.
    - b. Inspect and discuss preparatory work performed by other trades.
    - c. Inspect and discuss electrical roughing-in for electrified door hardware.
    - d. Review sequence of operation for each type of electrified door hardware.
    - e. Review required testing, inspecting, and certifying procedures.
    - f. Review questions or concerns related to proper installation and adjustment of door hardware.
  - 3. Electrified Hardware Coordination Conference:
    - a. Prior to ordering electrified hardware, schedule and hold meeting to coordinate door hardware with security, electrical, doors and frames, and other related suppliers.

#### 1.05 DELIVERY, STORAGE, AND HANDLING

- A. Inventory door hardware on receipt and provide secure lock-up for hardware delivered to Project site. Promptly replace products damaged during shipping
- B. Tag each item or package separately with identification coordinated with final door hardware schedule, and include installation instructions, templates, and necessary fasteners with each item or package. Deliver each article of hardware in manufacturer's original packaging.
- C. Maintain manufacturer-recommended environmental conditions throughout storage and installation periods.
- D. Provide secure lock-up for door hardware delivered to Project. Control handling and installation of hardware items so that completion of Work will not be delayed by hardware losses both before and after installation.

- E. Handle hardware in manner to avoid damage, marring, or scratching. Correct, replace or repair products damaged during Work. Protect products against malfunction due to paint, solvent, cleanser, or any chemical agent.
- F. Deliver keys to manufacturer of key control system for subsequent delivery to Owner.

#### 1.06 COORDINATION

- A. Coordinate layout and installation of floor-recessed door hardware with floor construction. Cast anchoring inserts into concrete.
- B. Installation Templates: Distribute for doors, frames, and other work specified to be factory or shop prepared. Check Shop Drawings of other work to confirm that adequate provisions are made for locating and installing door hardware to comply with indicated requirements.
- C. Security: Coordinate installation of door hardware, keying, and access control with Owner's security consultant.
- D. Electrical System Roughing-In: Coordinate layout and installation of electrified door hardware with connections to power supplies and building safety and security systems.

#### 1.07 WARRANTY

- A. Manufacturer's standard form in which manufacturer agrees to repair or replace components of door hardware that fail in materials or workmanship within published warranty period.
  - 1. Warranty does not cover damage or faulty operation due to improper installation, improper use or abuse.
  - 2. Warranty Period: Beginning from date of Substantial Completion, for durations indicated in manufacturer's published listings.
    - a. Mechanical Warranty
      - 1) Locks: 10 Years
      - 2) Exit Devices: 10 Years
      - 3) Closers: 30 Years
    - b. Electrical Warranty
      - 1) Exit Devices: 3 Years
      - 2) Automatic Operators: 2 Years

#### 1.08 MAINTENANCE

- A. Furnish complete set of special tools required for maintenance and adjustment of hardware, including changing of cylinders.
- B. Turn over unused materials to Owner for maintenance purposes.

### PART 2 - PRODUCTS

#### 2.01 MANUFACTURERS

- A. The Owner requires use of certain products for their unique characteristics and project suitability to ensure continuity of existing and future performance and maintenance standards. After investigating available product offerings, the Awarding Authority has elected to prepare proprietary specifications. These products are specified with the notation: "No Substitute."
  - 1. Where "No Substitute" is noted, submittals and substitution requests for other products will not be considered.
- B. Approval of alternate manufacturers and/or products other than those listed as "Scheduled Manufacturer" or "Acceptable Manufacturers" in the individual article for the product category are only to be considered by official substitution request in accordance with section 01 25 00.
- C. Approval of products from manufacturers indicated in "Acceptable Manufacturers" is contingent upon those products providing all functions and features and meeting all requirements of scheduled manufacturer's product.
- D. Where specified hardware is not adaptable to finished shape or size of members requiring hardware, furnish suitable types having same operation and quality as type specified, subject to Architect's approval.

## 2.02 MATERIALS

- A. Fabrication
  - 1. Provide door hardware manufactured to comply with published templates generally prepared for machine, wood, and sheet metal screws. provide screws according to manufacturer's recognized installation standards for application intended.
  - 2. Finish exposed screws to match hardware finish, or, if exposed in surfaces of other work, to match finish of this other work including prepared for paint surfaces to receive painted finish.
  - 3. Provide concealed fasteners wherever possible for hardware units exposed when door is closed. Coordinate with "Metal Doors and Frames", "Flush Wood Doors", "Stile and Rail Wood Doors" to ensure proper reinforcements. Advise the Architect where visible fasteners, such as thru bolts, are required.
- B. Provide screws, bolts, expansion shields, drop plates and other devices necessary for hardware installation.
  - 1. Where fasteners are exposed to view: Finish to match adjacent door hardware material.
- C. Cable and Connectors:
  - 1. Where scheduled in the hardware sets, provide each item of electrified hardware and wire harnesses with number and gage of wires enough to accommodate electric function of specified hardware.
  - 2. Provide Molex connectors that plug directly into connectors from harnesses, electric locking and power transfer devices.
  - 3. Provide through-door wire harness for each electrified locking device installed in a door and wire harness for each electrified hinge, electrified continuous hinge, electrified pivot, and electric power transfer for connection to power supplies.

## 2.03 HINGES

## A. Manufacturers and Products:

1. Scheduled Manufacturer and Product:
  - a. Ives 5BB series
2. Acceptable Manufacturers and Products:
  - a. Hager BB series
  - b. McKinney TB series
  - c. Stanley (Best/Dormakaba) FBB series

## B. Requirements:

1. Provide hinges conforming to ANSI/BHMA A156.1.
2. Provide five knuckle, ball bearing hinges.
3. Hinge Height:
  - a. 1-3/4 inch (44 mm) thick doors, up to and including 36 inches (914 mm) wide: 4-1/2 inches (114 mm) high
  - b. 1-3/4 inch (44 mm) thick doors over 36 inches (914 mm) wide: 5 inches (127 mm) high
  - c. 2 inches or thicker doors: 5 inches (127 mm) high, regardless of door width
4. Hinge Width: 4-1/2 inches (114 mm) wide typical. Adjust hinge width for door, frame, and wall conditions to allow proper degree of opening.
5. Hinge quantity: Provide three hinges per door leaf for doors 90 inches (2286 mm) or less in height, and one additional hinge for each 30 inches (762 mm) of additional door height.
6. Hinge Pins: Except as otherwise indicated, provide hinge pins as follows:
  - a. Steel Hinges: Steel pins
  - b. Non-Ferrous Hinges: Stainless steel pins
  - c. Out-Swinging Exterior Doors: Non-removable pins
  - d. Out-Swinging Interior Lockable Doors: Non-removable pins
  - e. Interior Non-lockable Doors: Non-rising pins
7. Provide hinges with electrified options as scheduled in the hardware sets. Provide with number and gage of wires enough to accommodate electric function of specified hardware. Locate electric hinge at second hinge from bottom or nearest to electrified locking component. Provide mortar guard for each electrified hinge specified.

## 2.04 CONTINUOUS HINGES

## A. Manufacturers:

1. Scheduled Manufacturer:
  - a. Ives
2. Acceptable Manufacturers:
  - a. Select
  - b. Pemko

## B. Requirements:

1. Provide aluminum geared continuous hinges conforming to ANSI/BHMA A156.26, Grade 1.
2. Provide aluminum geared continuous hinges, where specified in the hardware sets, fabricated from 6063-T6 aluminum.

3. Provide split nylon bearings at each hinge knuckle for quiet, smooth, self-lubricating operation.
4. Provide hinges capable of supporting door weights up to 450 pounds, and successfully tested for 1,500,000 cycles.
5. On fire-rated doors, provide aluminum geared continuous hinges classified for use on rated doors by testing agency acceptable to authority having jurisdiction.
6. Provide aluminum geared continuous hinges with electrified option scheduled in the hardware sets. Provide with number and gage of wires enough to accommodate electric function of specified hardware.
7. Provide hinges 1 inch (25 mm) shorter in length than nominal height of door, unless otherwise noted or door details require shorter length and with symmetrical hole pattern.
8. Adjust hinge model/width as required for door thickness or construction.

## 2.05 ELECTRIC POWER TRANSFER

### A. Manufacturers:

1. Scheduled Manufacturer and Product:
  - a. Von Duprin EPT-10
2. Acceptable Manufacturers and Products:
  - a. No Substitute

### B. Requirements:

1. Provide power transfer with electrified options as scheduled in the hardware sets. Provide with number and gage of wires enough to accommodate electric function of specified hardware.
2. Locate electric power transfer per manufacturer's template and UL requirements, unless interference with operation of door or other hardware items.

## 2.06 FLUSH BOLTS

### A. Manufacturers:

1. Scheduled Manufacturer:
  - a. Ives
2. Acceptable Manufacturers:
  - a. Rockwood
  - b. Trimco

### B. Requirements:

1. Provide automatic, constant latching, and manual flush bolts with forged bronze or stainless-steel face plates, extruded brass levers, and with wrought brass guides and strikes. Provide 12 inch (305 mm) steel or brass rods at doors up to 90 inches (2286 mm) in height. For doors over 90 inches (2286 mm) in height increase top rods by 6 inches (152 mm) for each additional 6 inches (152 mm) of door height. Provide dust-proof strikes at each bottom flush bolt.

## 2.07 COORDINATORS

## A. Manufacturers:

1. Scheduled Manufacturer:
  - a. Ives
2. Acceptable Manufacturers:
  - a. Trimco
  - b. Rockwood

## B. Requirements:

1. Where pairs of doors are equipped with automatic flush bolts, an astragal, or other hardware that requires synchronized closing of the doors, provide bar-type coordinating device, surface applied to underside of stop at frame head.
2. Provide filler bar of correct length for unit to span entire width of opening, and appropriate brackets for parallel arm door closers, surface vertical rod exit device strikes, or other stop mounted hardware. Factory-prepared coordinators for vertical rod devices as specified.

## 2.08 MORTISE LOCKS

## A. Manufacturers and Products:

1. Scheduled Manufacturer and Product:
  - a. Schlage L9000 series
2. Acceptable Manufacturers and Products:
  - a. No Substitute

## B. Requirements:

1. Provide mortise locks conforming to ANSI/BHMA A156.13 Series 1000, Grade 1, and UL Listed for 3-hour fire doors.
2. Indicators: Where specified, provide indicator window measuring a minimum 2-inch x 1/2 inch with 180-degree visibility. Provide messages color-coded with full text and/or symbols, as scheduled, for easy visibility.
3. Provide locks manufactured from heavy gauge steel, containing components of steel with a zinc dichromate plating for corrosion resistance.
4. Provide lock case that is multi-function and field reversible for handing without opening case. Cylinders: Refer to "KEYING" article, herein.
5. Provide locks with standard 2-3/4 inches (70 mm) backset with full 3/4 inch (19 mm) throw stainless steel mechanical anti-friction latchbolt. Provide deadbolt with full 1-inch (25 mm) throw, constructed of stainless steel.
6. Provide standard ASA strikes unless extended lip strikes are necessary to protect trim.
7. Provide electrified options as scheduled in the hardware sets. Where scheduled, provide switches and sensors integrated into the locks and latches. Provide motor based electrified and motor based latch retraction locksets that comply with the following requirements:
  - a. Universal input voltage – single chassis accepts 12 or 24VDC to allow for changes in the field without changing lock chassis.
  - b. Fail Safe/Fail Secure – changing mode between electrically locked (fail safe) and electrically unlocked (fail secure) is field selectable without opening the lock case
  - c. Low maximum current draw – maximum 0.4 amps (Lever control) and maximum 2.0 amps (Latch retraction) to allow for multiple locks on a single power supply.



- d. Low holding current (Lever control or latch retraction) – maximum 0.01 amps to produce minimal heat, eliminate “hot levers” in electrically locked applications and motorized latch retraction applications, and to provide reliable operation in wood doors that provide minimal ventilation and air flow.
  - e. Connections – provide quick-connect Molex system standard.
8. Lever Trim: Solid brass, bronze, or stainless steel, cast or forged in design specified, with wrought roses and external lever spring cages. Provide thru-bolted levers with 2-piece spindles.
- a. Lever Design: Schlage 06A.

## 2.09 EXIT DEVICES

### A. Manufacturers and Products:

- 1. Scheduled Manufacturer and Product:
  - a. Von Duprin 98/35A series
- 2. Acceptable Manufacturers and Products:
  - a. No Substitute

### B. Requirements:

- 1. Provide exit devices tested to ANSI/BHMA A156.3 Grade 1 and UL listed for Panic Exit or Fire Exit Hardware.
- 2. Cylinders: Refer to "KEYING" article, herein.
- 3. Provide smooth touchpad type exit devices, fabricated of brass, bronze, stainless steel, or aluminum, plated to standard architectural finishes to match balance of door hardware.
- 4. Touchpad must extend a minimum of one half of door width. No plastic inserts are allowed in touchpads.
- 5. Provide exit devices with deadlatching feature for security and for future addition of alarm kits and/or other electrified requirements.
- 6. Provide exit devices with weather resistant components that can withstand harsh conditions of various climates and corrosive cleaners used in outdoor pool environments.
- 7. Provide flush end caps for exit devices.
- 8. Provide exit devices with manufacturer's approved strikes.
- 9. Provide exit devices cut to door width and height. Install exit devices at height recommended by exit device manufacturer, allowable by governing building codes, and approved by Architect.
- 10. Mount mechanism case flush on face of doors or provide spacers to fill gaps behind devices. Where glass trim or molding projects off face of door, provide glass bead kits.
- 11. Provide cylinder or hex-key dogging as specified at non fire-rated openings.
- 12. Removable Mullions: 2 inches (51 mm) x 3 inches (76 mm) steel tube. Where scheduled as keyed removable mullion, provide type that can be removed by use of a keyed cylinder, which is self-locking when re-installed.
- 13. Provide factory drilled weep holes for exit devices used in full exterior application, highly corrosive areas, and where noted in hardware sets.
- 14. Provide electrified options as scheduled.
- 15. Top latch mounting: double- or single-tab mount for steel doors, face mount for aluminum doors eliminating requirement of tabs, and double tab mount for wood doors.
- 16. Provide exit devices with optional trim designs to match other lever and pull designs used on the project.

## 2.10 POWER SUPPLIES

### A. Manufacturers and Products:

1. Scheduled Manufacturer and Product:
  - a. Schlage/Von Duprin PS900 Series
2. Acceptable Manufacturers and Products:
  - a. No Substitute

### B. Requirements:

1. Provide power supplies approved by manufacturer of supplied electrified hardware.
2. Provide appropriate quantity of power supplies necessary for proper operation of electrified locking components as recommended by manufacturer of electrified locking components with consideration for each electrified component using power supply, location of power supply, and approved wiring diagrams. Locate power supplies as directed by Architect.
3. Provide regulated and filtered 24 VDC power supply, and UL class 2 listed.
4. Provide power supplies with the following features:
  - a. 12/24 VDC Output, field selectable.
  - b. Class 2 Rated power limited output.
  - c. Universal 120-240 VAC input.
  - d. Low voltage DC, regulated and filtered.
  - e. Polarized connector for distribution boards.
  - f. Fused primary input.
  - g. AC input and DC output monitoring circuit w/LED indicators.
  - h. Cover mounted AC Input indication.
  - i. Tested and certified to meet UL294.
  - j. NEMA 1 enclosure.
  - k. Hinged cover w/lock down screws.
  - l. High voltage protective cover.

## 2.11 CYLINDERS

### A. Manufacturers:

1. Scheduled Manufacturer and Product:
  - a. Schlage
2. Acceptable Manufacturers and Products:
  - a. No Substitute

### B. Requirements:

1. Provide cylinders/cores to match Owner's existing key system, compliant with ANSI/BHMA A156.5; latest revision; cylinder face finished to match lockset, manufacturer's series as indicated. Refer to "KEYING" article, herein.
2. Provide cylinders in the below-listed configuration(s), distributed throughout the Project as indicated.
  - a. Match owner's existing system.
  - b. Cylinder/Core Type:
    - 1) Full Size Interchangeable Core (FSIC)
3. Replaceable Construction Cores.

- a. Provide temporary construction cores replaceable by permanent cores, furnished in accordance with the following requirements.
  - 1) 3 construction control keys
  - 2) 12 construction change (day) keys.
4. Verify with Owner where permanent cores are to be shipped to.

## 2.12 KEYING

- A. Provide a factory registered keying system, complying with guidelines in ANSI/BHMA A156.28, incorporating decisions made at keying conference.
- B. Requirements:
  1. Provide keying system capable of multiplex masterkeying.
  2. Provide permanent cylinders/cores keyed by the manufacturer according to the following key system.
    - a. Master Keying system as directed by the Owner.
    - b. Match Owner's existing system.
    - c. (Great)Grand Master Key System: Cylinders/cores operated by change(day) keys and subsequent masters (including grand/great grand) keys.
  3. Forward bitting list and keys separately from cylinders, by means as directed by Owner. Failure to comply with forwarding requirements will be cause for replacement of cylinders/cores involved at no additional cost to Owner.
  4. Provide keys with the following features:
    - a. Material: Nickel silver; minimum thickness of .107-inch (2.3mm)
    - b. Keyway Security Type:
      - 1) Schlage PRIMUS High Security
  5. Identification:
    - a. Mark permanent cylinders/cores and keys with applicable blind code for identification. Do not provide blind code marks with actual key cuts.
    - b. Identification stamping provisions must be approved by the Architect and Owner.
    - c. Stamp cylinders/cores and keys with Owner's unique key system facility code as established by the manufacturer; key symbol and embossed or stamped with "DO NOT DUPLICATE" along with the "PATENTED" or patent number to enforce the patent protection.
    - d. Forward permanent cylinders/cores to Owner, separately from keys, by means as directed by Owner.
  6. Quantity: Furnish in the following quantities.
    - a. Change (Day) Keys: 3 per cylinder/core.
    - b. Permanent Control Keys: 3 (only applicable to interchangeable core).
    - c. Master Keys: 6/ea (per master).
    - d. Unused balance of key blanks shall be provided to Owner with cut keys.
  7. Verify with Owner where permanent keys are to be shipped to.

## 2.13 KEY CONTROL SYSTEM

- A. Manufacturers:
  1. Scheduled Manufacturer:

- a. Telkee
- 2. Acceptable Manufacturers:
  - a. No Substitute
  - b. HPC
  - c. Lund
- B. Requirements:
  - 1. Provide key control system, including envelopes, labels, tags with self-locking key clips, receipt forms, 3-way visible card index, temporary markers, permanent markers, and standard metal cabinet, all as recommended by system manufacturer, with capacity for 150% of number of locks required for Project.
    - a. Provide complete cross index system set up by hardware supplier, and place keys on markers and hooks in cabinet as determined by final key schedule.
    - b. Provide hinged-panel type cabinet for wall mounting.

## 2.14 DOOR CLOSERS

- A. Manufacturers and Products:
  - 1. Scheduled Manufacturer and Product:
    - a. LCN 4040XP series
  - 2. Acceptable Manufacturers and Products:
    - a. No Substitute
- B. Requirements:
  - 1. Provide door closers conforming to ANSI/BHMA A156.4 Grade 1 requirements by BHMA certified independent testing laboratory. ISO 9000 certify closers. Stamp units with date of manufacture code.
  - 2. Provide door closers with fully hydraulic, full rack and pinion action with high strength cast iron cylinder, and full complement bearings at shaft.
  - 3. Cylinder Body: 1-1/2-inch (38 mm) diameter piston with 5/8-inch (16 mm) diameter double heat-treated pinion journal. QR code with a direct link to maintenance instructions.
  - 4. Hydraulic Fluid: Fireproof, passing requirements of UL10C, and requiring no seasonal closer adjustment for temperatures ranging from 120 degrees F to -30 degrees F.
  - 5. Spring Power: Continuously adjustable over full range of closer sizes, and providing reduced opening force as required by accessibility codes and standards. Provide snap-on cover clip, with plastic covers, that secures cover to spring tube.
  - 6. Hydraulic Regulation: By tamper-proof, non-critical valves, with separate adjustment for latch speed, general speed, and backcheck. Provide graphically labelled instructions on the closer body adjacent to each adjustment valve. Provide positive stop on reg valve that prevents reg screw from being backed out.
  - 7. Provide closers with solid forged steel main arms and factory assembled heavy-duty forged forearms for parallel arm closers.
  - 8. Pressure Relief Valve (PRV) Technology: Not permitted.
  - 9. Finish for Closer Cylinders, Arms, Adapter Plates, and Metal Covers: Powder coating finish which has been certified to exceed 100 hours salt spray testing as described in ANSI Standard A156.4 and ASTM B117, or has special rust inhibitor (SRI).
  - 10. Provide special templates, drop plates, mounting brackets, or adapters for arms as required for details, overhead stops, and other door hardware items interfering with closer mounting.

11. Closers shall be capable of being upgraded by adding modular mechanical or electronic components in the field.

## 2.15 ELECTRO-HYDRAULIC AUTOMATIC OPERATORS

### A. Manufacturers and Products:

1. Scheduled Manufacturer and Product:
  - a. LCN 4600 series
2. Acceptable Manufacturers and Products:
  - a. No Substitute

### B. Requirements:

1. Provide low energy automatic operator units with hydraulic closer complying with ANSI/BHMA A156.19.
2. Hydraulic Fluid: Fireproof, passing requirements of UL10C, and requiring no seasonal closer adjustment for temperatures ranging from 120 degrees F to -30 degrees F.
3. Provide units with conventional door closer opening and closing forces unless power operator motor is activated. Provide door closer assembly with adjustable spring size, back-check, and opening and closing speed adjustment valves to control door
4. Provide units with on/off switch for manual operation, motor start up delay, vestibule interface delay, electric lock delay, and door hold open delay.
5. Provide drop plates, brackets, and adapters for arms as required for details.
6. Provide actuator switches and receivers for operation as specified.
7. Provide weather-resistant actuators at exterior applications.
8. Provide key switches with LED's, recommended and approved by manufacturer of automatic operator as required for function described in operation description of hardware group below. Cylinders: Refer to "KEYING" article, herein.
9. Provide complete assemblies of controls, switches, power supplies, relays, and parts/material recommended and approved by manufacturer of automatic operator for each individual leaf. Actuators control both doors simultaneously at pairs. Sequence operation of exterior and vestibule doors with automatic operators to allow ingress or egress through both sets of openings as directed by Architect. Locate actuators, key switches, and other controls as directed by Architect.
10. Provide units with vestibule inputs that allow sequencing operation of two units, and SPDT relay for interfacing with latching or locking devices.

## 2.16 DOOR TRIM

### A. Manufacturers:

1. Scheduled Manufacturer:
  - a. Ives
2. Acceptable Manufacturers:
  - a. Trimco
  - b. Rockwood

### B. Requirements:

1. Provide push plates, push bars, pull plates, pulls, and hands-free reversible door pulls with diameter and length as scheduled.

## 2.17 PROTECTION PLATES

## A. Manufacturers:

1. Scheduled Manufacturer:
  - a. Ives
2. Acceptable Manufacturers:
  - a. Trimco
  - b. Rockwood

## B. Requirements:

1. Provide protection plates with a minimum of 0.050 inch (1 mm) thick, beveled four edges as scheduled. Furnish with sheet metal or wood screws, finished to match plates.
2. Size plates 2 inches (51 mm) less width of door on single doors, pairs of doors with a mullion, and doors with edge guards. Size plates 1 inch (25 mm) less width of door on pairs without a mullion or edge guards.
3. At fire rated doors, provide protection plates over 16 inches high with UL label.

## 2.18 OVERHEAD STOPS AND OVERHEAD STOP/HOLDERS

## A. Manufacturers:

1. Scheduled Manufacturers:
  - a. Glynn-Johnson
2. Acceptable Manufacturers:
  - a. No Substitute

## B. Requirements:

1. Provide overhead stop at any door where conditions do not allow for a wall stop or floor stop presents tripping hazard.

## 2.19 DOOR STOPS AND HOLDERS

## A. Manufacturers:

1. Scheduled Manufacturer:
  - a. Ives
2. Acceptable Manufacturers:
  - a. Trimco
  - b. Rockwood

## B. Provide door stops at each door leaf:

1. Provide wall stops wherever possible. Provide concave type where lockset has a push button of thumbturn.
2. Where a wall stop cannot be used, provide universal floor stops.
3. Where wall or floor stop cannot be used, provide overhead stop.
4. Provide roller bumper where doors open into each other and overhead stop cannot be used.

## 2.20 SILENCERS

## A. Manufacturers:

1. Scheduled Manufacturer:
  - a. Ives
2. Acceptable Manufacturers:
  - a. Rockwood
  - b. Trimco

## B. Requirements:

1. Provide "push-in" type silencers for hollow metal or wood frames.
2. Provide one silencer per 30 inches (762 mm) of height on each single frame, and two for each pair frame.
3. Omit where gasketing is specified.

## 2.21 THRESHOLDS, SEALS, DOOR SWEEPS, AUTOMATIC DOOR BOTTOMS, AND GASKETING

## A. Manufacturers:

## B. Scheduled Manufacturer:

1. Zero International

## C. Acceptable Manufacturers:

1. No Substitute
2. National Guard
3. Reese
4. Pemko

## D. Seals and Gasketing: Provide continuous gasketing on exterior openings, to the head and jambs, forming a continuous seal between the door and the frame. Provide smoke, light, or sound gasketing on interior doors where indicated.

1. Provide self-tapping fasteners for aluminum extruded gasketing being applied to hollow metal frames.
  - a. Provide non-corrosive fasteners for all exterior applications.
  - b. Provide security fasteners where indicated.
2. Provide neoprene, EPDM, silicone, or nylon brush inserts as specified in hardware sets. Provide non brush inserts of solid or sponge cell, as specified in hardware sets. Vinyl inserts are not allowed except where specified in hardware sets.

## E. Smoke Labeled Gasketing: At all smoke labeled openings, provide smoke listed perimeter gasketing assemblies complying with NFPA 105 listed and labeled by a testing and inspecting agency acceptable to authorities having jurisdiction for smoke control ratings indicated based on testing according to UL 1784.

## F. Fire Listed Gasketing: Assemblies complying with NFPA 80 that are listed by a testing and inspecting agency acceptable to authorities having jurisdiction for fire ratings indicated based on testing according to UL-10C.

1. Where frame-applied intumescent seals are required by the manufacturer, provide gaskets that comply with UL10C Standard for Positive Pressure Fire Tests of Door Assemblies and UBC 7-2, Fire Tests of Door Assemblies.
- G. Sound-Rated Gasketing: Provide acoustic gasketing to meet Sound Transmission Class (STC) rating required.
- H. Meeting-Stile Gasketing: Provide meeting-stile gasketing that fastens to the meeting stiles forming a continuous seal when doors are closed.
- I. Door Sweeps or Shoes: Apply to the bottom of the door to close the gap between the door bottom and finished floor or saddle threshold.
1. Provide solid neoprene, EPDM, silicone, or nylon brush type of seal as specified in hardware sets. Vinyl inserts are not allowed except where specified in hardware sets.
- J. Automatic Door Bottoms:
1. Provide closed cell sponge, bulb neoprene, or EPDM type of seal as specified in hardware sets.
  2. Door bottom to be mortised, semi mortised, or surface mount as with a minimum thickness as specified in hardware sets.
- K. Rain Drips:
1. Provide overhead rain drips for out-swinging hollow metal doors that are not covered against 45 degree blowing rain. Aluminum extrusion to be a minimum of .088 inches thick and extend 2.50 inches from the face of the frame, in anodized finish to match door.
  2. Door sweeps or shoes with integral rain drip must meet ADA requirements
- L. Thresholds: Provide threshold units not less than 4 inches wide, formed to accommodate change in floor elevation where indicated, and fabricated to accommodate door hardware and fit door frames.
1. Threshold extrusion to be a minimum thickness as specified in hardware sets.

## 2.22 FINISHES

- A. Finishes as shown in the hardware sets.

## PART 3 - EXECUTION

### 3.01 EXAMINATION

- A. Prior to installation of hardware, examine doors and frames, with Installer present, for compliance with requirements for installation tolerances, labeled fire-rated door assembly construction, wall and floor construction, and other conditions affecting performance. Verify doors, frames, and walls have been properly reinforced for hardware installation.
- B. Examine roughing-in for electrical power systems to verify actual locations of wiring connections before electrified door hardware installation.



- C. Submit a list of deficiencies in writing and proceed with installation only after unsatisfactory conditions have been corrected.

### 3.02 INSTALLATION

- A. Mount door hardware units at heights to comply with the following, unless otherwise indicated or required to comply with governing regulations.
  - 1. Standard Steel Doors and Frames: ANSI/SDI A250.8.
  - 2. Custom Steel Doors and Frames: HMMA 831.
  - 3. Interior Architectural Wood Flush Doors: ANSI/WDMA I.S. 1A
  - 4. Installation Guide for Doors and Hardware: DHI TDH-007-20
- B. Install door hardware in accordance with NFPA 80, NFPA 101 and provide post-install inspection, testing as specified in section 1.03.E unless otherwise required to comply with governing regulations.
- C. Install each hardware item in compliance with manufacturer's instructions and recommendations, using only fasteners provided by manufacturer.
- D. Do not install surface mounted items until finishes have been completed on substrate. Protect all installed hardware during painting.
- E. Set units level, plumb and true to line and location. Adjust and reinforce attachment substrate as necessary for proper installation and operation.
- F. Drill and countersink units that are not factory prepared for anchorage fasteners. Space fasteners and anchors according to industry standards.
- G. Install operating parts so they move freely and smoothly without binding, sticking, or excessive clearance.
- H. Hinges: Install types and in quantities indicated in door hardware schedule but not fewer than quantity recommended by manufacturer for application indicated.
- I. Lock Cylinders:
  - 1. Install construction cores to secure building and areas during construction period.
  - 2. Replace construction cores with permanent cores as indicated in keying section.
  - 3. Furnish permanent cores to Owner for installation.
- J. Wiring: Coordinate with Division 26, ELECTRICAL and Division 28 ELECTRONIC SAFETY AND SECURITY sections for:
  - 1. Conduit, junction boxes and wire pulls.
  - 2. Connections to and from power supplies to electrified hardware.
  - 3. Connections to fire/smoke alarm system and smoke evacuation system.
  - 4. Connection of wire to door position switches and wire runs to central room or area, as directed by Architect.
  - 5. Connections to panel interface modules, controllers, and gateways.
  - 6. Testing and labeling wires with Architect's opening number.
- K. Key Control System: Tag keys and place them on markers and hooks in key control system cabinet, as determined by final keying schedule.

- L. Continuous Hinges: Re-locate the door and frame fire rating labels where they will remain visible so that the hinge does not cover the label once installed.
- M. Door Closers & Auto Operators: Mount closers/operators on room side of corridor doors, inside of exterior doors, and stair side of stairway doors from corridors. Mount closers/operators so they are not visible in corridors, lobbies and other public spaces unless approved by Architect.
- N. Overhead Stops/Holders: Mount overhead stops/holders on room side of corridor doors, inside of exterior doors, and stair side of stairway doors.
- O. Power Supplies: Locate power supplies as indicated or, if not indicated, above accessible ceilings or in equipment room, or alternate location as directed by Architect.
- P. Thresholds:
  - 1. Set thresholds in full bed of sealant complying with requirements specified in Division 07 Section "Joint Sealants."
  - 2. Aluminum thresholds to be cut-in, and scribed around mullions, frame members, and stops. Do not butt to thresholds. Provide a continuous surface across full width of opening from jamb to jamb.
  - 3. Where aluminum panic-type (rabbeted) thresholds with neoprene inserts are specified, undercut doors as required to properly mate with seal in threshold.
- Q. Stops: Provide floor stops for doors unless wall or other type stops are indicated in door hardware schedule. Do not mount floor stops where they may impede traffic or present tripping hazard.
- R. Perimeter Gasketing:
  - 1. Apply to head and jamb, forming seal between door and frame.
  - 2. Install gasketing in a manner eliminating need to cut any seal to install surface mounted hardware. Install compatible mounting bracket for surface mounted hardware unless minimum 1/4 inch thick solid aluminum seals are provided for mounting of surface applied hardware.
- S. Meeting Stile Gasketing: Fasten to meeting stiles, forming seal when doors are closed.
- T. Door Bottoms and Sweeps: Apply to bottom of door, forming seal with threshold when door is closed.

### 3.03 ADJUSTING

- A. Initial Adjustment: Adjust and check each operating item of door hardware and each door to ensure proper operation or function of every unit. Replace units that cannot be adjusted to operate as intended. Adjust door control devices to compensate for final operation of heating and ventilating equipment and to comply with referenced accessibility requirements.
  - 1. Door Closers: Adjust sweep period to comply with accessibility requirements and requirements of authorities having jurisdiction.
- B. Occupancy Adjustment: Approximately three to six months after date of Substantial Completion, examine and readjust each item of door hardware, including adjusting operating forces, as necessary to ensure function of doors and door hardware.

## 3.04 CLEANING AND PROTECTION

- A. Clean adjacent surfaces soiled by door hardware installation.
- B. Clean operating items per manufacturer's instructions to restore proper function and finish.
- C. Provide final protection and maintain conditions that ensure door hardware is without damage or deterioration at time of Substantial Completion.

## 3.05 DOOR HARDWARE SCHEDULE

- A. The intent of the hardware specification is to specify the hardware for interior and exterior doors, and to establish a type, continuity, and standard of quality. However, it is the door hardware supplier's responsibility to thoroughly review existing conditions, schedules, specifications, drawings, and other Contract Documents to verify the suitability of the hardware specified.
- B. Discrepancies, conflicting hardware, and missing items are to be brought to the attention of the architect with corrections made prior to the bidding process. Omitted items not included in a hardware set should be scheduled with the appropriate additional hardware required for proper application.
- C. Hardware items are referenced in the following hardware schedule. Refer to the above specifications for special features, options, cylinders/keying, and other requirements.
- D. Hardware Sets:

144431 OPT0463753 Version 3

## HARDWARE GROUP NO. 01

For use on Door #(s):  
Q125.2

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 SIZE, QTY, NRP AS REQ'D (SEE SPECS)	651	IVE
1	EA	PASSAGE SET	L9010 06A	625	SCH
1	EA	SURFACE CLOSER (W/ DEAD STOP)	4040XP CUSH MC	MTLPC	LCN
1	EA	KICK PLATE	8400 10"H X WIDTH AS REQ'D B- CS	630	IVE
1	EA	GASKETING	488SBK PSA	BK	ZER

## HARDWARE GROUP NO. 02

For use on Door #(s):  
Q001

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
6	EA	HINGE	5BB1 SIZE, QTY, NRP AS REQ'D (SEE SPECS)	651	IVE
1	EA	AUTO FLUSH BOLT	FB31T/FB41T (AS REQ'D)	629	IVE
1	EA	PASSAGE SET	L9010 06A	625	SCH
1	EA	COORDINATOR	COR X FL (MB AS REQ'D)	628	IVE
2	EA	SURFACE CLOSER (W/ DEAD STOP)	4040XP CUSH MC	MTLPC	LCN
2	EA	KICK PLATE	8400 10"H X WIDTH AS REQ'D B- CS	630	IVE
2	EA	SILENCER	SR64	GRY	IVE

## HARDWARE GROUP NO. 03

For use on Door #(s):  
Q107.4 R122.3

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
2	EA	CONT. HINGE	112XY	628	IVE
2	EA	DUMMY PUSH BAR X PULL TRIM	350 X 990DT	625	VON
1	EA	OH STOP	90S (@ AO LEAF)	629	GLY
1	EA	SURFACE CLOSER (W/ SPRING STOP)	4040XP SCUSH MC	MTLPC	LCN
1	EA	SURF. AUTO OPERATOR	4642 WMS 120 VAC (FLUSH CEILING MOUNT)	MTLPC	LCN
1	EA	MOUNTING PLATE	4040XP-18PA	MTLPC	LCN
1	EA	CUSH SHOE SUPPORT	4040XP-30	MTLPC	LCN
1	EA	BLADE STOP SPACER	4040XP-61	MTLPC	LCN
1	EA	ACTUATOR	8310-853T	630	LCN
1	EA	MOUNT BOX	8310-867S		LCN
1	EA	ACTUATOR	SHARED WITH ADJACENT OPENING		

BOTH AUTO OPERATOR ACTUATORS ENABLED AT ALL TIMES. PUSHING EITHER ACTUATOR SIGNALS AUTO OPERATOR TO OPEN DOOR. FREE EGRESS AT ALL TIMES.

## HARDWARE GROUP NO. 04

For use on Door #(s):

Q107.3          R122.4

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
2	EA	CONT. HINGE	112XY	628	IVE
2	EA	DUMMY PUSH BAR X PULL TRIM	350 X 990DT	625	VON
2	EA	SURFACE CLOSER (W/ SPRING STOP)	4040XP SCUSH MC	MTLPC	LCN
2	EA	MOUNTING PLATE	4040XP-18PA	MTLPC	LCN
2	EA	CUSH SHOE SUPPORT	4040XP-30	MTLPC	LCN
2	EA	BLADE STOP SPACER	4040XP-61	MTLPC	LCN

## HARDWARE GROUP NO. 05

For use on Door #(s):

Q111          Q119          R101.1          R102

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1HW SIZE, QTY, NRP AS REQ'D (SEE SPECS)	651	IVE
1	EA	DEADLOCK, CYL X C/R TT	L463J XB11-720	625	SCH
1	EA	PERMANENT CORE, PRIMUS (FSIC)	20-740 - MATCH EXISTING SYSTEM	626	SCH
1	EA	PUSH PLATE	8200 4" X 16" (CFC/CFTT AS REQ'D)	625	IVE
1	EA	PULL PLATE	8303 10" 4" X 16" (CFC/CFTT AS REQ'D)	625	IVE
1	EA	KICK PLATE	8400 10"H X WIDTH AS REQ'D B-CS	630	IVE
1	EA	MOP PLATE	8400 4"H X WIDTH AS REQ'D B-CS	630	IVE
1	EA	WALL STOP	WS406/407CVX	630	IVE
3	EA	SILENCER	SR64	GRY	IVE

## HARDWARE GROUP NO. 06

For use on Door #(s):  
Q117

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1HW SIZE, QTY, NRP AS REQ'D (SEE SPECS)	651	IVE
1	EA	DBL CYL DEAD LOCK	L462J	625	SCH
2	EA	PERMANENT CORE, PRIMUS (FSIC)	20-740 - MATCH EXISTING SYSTEM	626	SCH
1	EA	PUSH PLATE	8200 4" X 16" (CFC/CFTT AS REQ'D)	625	IVE
1	EA	PULL PLATE	8303 10" 4" X 16" (CFC/CFTT AS REQ'D)	625	IVE
1	EA	KICK PLATE	8400 10"H X WIDTH AS REQ'D B-CS	630	IVE
1	EA	MOP PLATE	8400 4"H X WIDTH AS REQ'D B-CS	630	IVE
1	EA	WALL STOP/HOLDER	WS20/WS20X	626	IVE
3	EA	SILENCER	SR64	GRY	IVE

## HARDWARE GROUP NO. 07

For use on Door #(s):  
Q116

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 SIZE, QTY, NRP AS REQ'D (SEE SPECS)	651	IVE
1	EA	PRIVACY LOCK W/ OUTSIDE INDICATOR	L9040 L583-363 OS-OCC 06A	625	SCH
1	EA	WALL STOP	WS33/WS33X	626	IVE
3	EA	SILENCER	SR64	GRY	IVE

## HARDWARE GROUP NO. 08

For use on Door #(s):  
Q112

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 SIZE, QTY, NRP AS REQ'D (SEE SPECS)	651	IVE
1	EA	PRIVACY LOCK W/ OUTSIDE INDICATOR	L9040 L583-363 OS-OCC 06A	625	SCH
1	EA	WALL STOP	WS406/407CVX	630	IVE
3	EA	SILENCER	SR64	GRY	IVE

## HARDWARE GROUP NO. 09

For use on Door #(s):

Q113                      Q117.1

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 SIZE, QTY, NRP AS REQ'D (SEE SPECS)	651	IVE
1	EA	OFFICE/ENTRY LOCK	L9050J L583-363 06A	625	SCH
1	EA	PERMANENT CORE, PRIMUS (FSIC)	20-740 - MATCH EXISTING SYSTEM	626	SCH
1	EA	WALL STOP	WS406/407CVX	630	IVE
3	EA	SILENCER	SR64	GRY	IVE

## HARDWARE GROUP NO. 10

For use on Door #(s):

R104

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1HW SIZE, QTY, NRP AS REQ'D (SEE SPECS)	651	IVE
1	EA	OFFICE W/SIM RETRACT W/ OUTSIDE INDICATOR	L9056J L583-363 OS-LOC 06A	625	SCH
1	EA	PERMANENT CORE, PRIMUS (FSIC)	20-740 - MATCH EXISTING SYSTEM	626	SCH
1	EA	SURFACE CLOSER	4040XP REG MC	MTLPC	LCN
1	EA	KICK PLATE	8400 10"H X WIDTH AS REQ'D B- CS	630	IVE
1	EA	MOP PLATE	8400 4"H X WIDTH AS REQ'D B-CS	630	IVE
1	EA	WALL STOP	WS406/407CVX	630	IVE
3	EA	SILENCER	SR64	GRY	IVE

## HARDWARE GROUP NO. 11

For use on Door #(s):

S105

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
1	EA	CONT. HINGE	224XY	628	IVE
1	EA	STOREROOM LOCK	L9080J 06A	625	SCH
1	EA	PERMANENT CORE, PRIMUS (FSIC)	20-740 - MATCH EXISTING SYSTEM	626	SCH
1	EA	ARMOR PLATE	8400 34"H X WIDTH AS REQ'D B- CS	630	IVE
1	EA	WALL STOP	WS406/407CVX	630	IVE
3	EA	SILENCER	SR64	GRY	IVE

## HARDWARE GROUP NO. 12

For use on Door #(s):

R117                      S104

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 SIZE, QTY, NRP AS REQ'D (SEE SPECS)	651	IVE
1	EA	STOREROOM LOCK	L9080J 06A	625	SCH
1	EA	PERMANENT CORE, PRIMUS (FSIC)	20-740 - MATCH EXISTING SYSTEM	626	SCH
1	EA	SURFACE CLOSER (W/ DEAD STOP)	4040XP CUSH MC	MTLPC	LCN
1	EA	KICK PLATE	8400 10"H X WIDTH AS REQ'D B- CS	630	IVE
3	EA	SILENCER	SR64	GRY	IVE

## HARDWARE GROUP NO. 13

For use on Door #(s):

R105                      R118

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 SIZE, QTY, NRP AS REQ'D (SEE SPECS)	651	IVE
1	EA	STOREROOM LOCK	L9080J 06A	625	SCH
1	EA	PERMANENT CORE, PRIMUS (FSIC)	20-740 - MATCH EXISTING SYSTEM	626	SCH
1	EA	SURFACE CLOSER	4040XP REG MC	MTLPC	LCN
1	EA	KICK PLATE	8400 10"H X WIDTH AS REQ'D B- CS	630	IVE
1	EA	WALL STOP	WS406/407CVX	630	IVE
3	EA	SILENCER	SR64	GRY	IVE



## HARDWARE GROUP NO. 14

For use on Door #(s):  
R101.2

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 SIZE, QTY, NRP AS REQ'D (SEE SPECS)	651	IVE
1	EA	STOREROOM LOCK	L9080J 06A	625	SCH
1	EA	PERMANENT CORE, PRIMUS (FSIC)	20-740 - MATCH EXISTING SYSTEM	626	SCH
1	EA	SURFACE CLOSER	4040XP EDA MC	MTLPC	LCN
1	EA	KICK PLATE	8400 10"H X WIDTH AS REQ'D B- CS	630	IVE
1	EA	WALL STOP	WS406/407CVX	630	IVE
3	EA	SILENCER	SR64	GRY	IVE

## HARDWARE GROUP NO. 15

For use on Door #(s):  
Q125.1                      Q125.3

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 SIZE, QTY, NRP AS REQ'D (SEE SPECS)	651	IVE
1	EA	STOREROOM LOCK	L9080J 06A	625	SCH
1	EA	PERMANENT CORE, PRIMUS (FSIC)	20-740 - MATCH EXISTING SYSTEM	626	SCH
1	EA	SURFACE CLOSER (W/ DEAD STOP)	4040XP CUSH MC	MTLPC	LCN
1	EA	KICK PLATE	8400 10"H X WIDTH AS REQ'D B- CS	630	IVE
1	EA	GASKETING	488SBK PSA	BK	ZER

## HARDWARE GROUP NO. 16

For use on Door #(s):

Q109                      Q114                      Q122                      Q123                      R116

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
2	EA	CONT. HINGE	224XY	628	IVE
1	EA	CONST LATCHING BOLT	FB51T/FB61T (AS REQ'D)	629	IVE
1	EA	STOREROOM LOCK	L9080J 06A	625	SCH
1	EA	PERMANENT CORE, PRIMUS (FSIC)	20-740 - MATCH EXISTING SYSTEM	626	SCH
2	EA	ARMOR PLATE	8400 34"H X WIDTH AS REQ'D B- CS	630	IVE
2	EA	WALL STOP	WS406/407CVX	630	IVE
2	EA	SILENCER	SR64	GRY	IVE

## HARDWARE GROUP NO. 17

For use on Door #(s):

R108                      R120.3

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
6	EA	HINGE	5BB1 SIZE, QTY, NRP AS REQ'D (SEE SPECS)	651	IVE
1	EA	AUTO FLUSH BOLT	FB31T/FB41T (AS REQ'D)	629	IVE
1	EA	STOREROOM LOCK	L9080J 06A	625	SCH
1	EA	PERMANENT CORE, PRIMUS (FSIC)	20-740 - MATCH EXISTING SYSTEM	626	SCH
1	EA	COORDINATOR	COR X FL (MB AS REQ'D)	628	IVE
2	EA	SURFACE CLOSER (W/ DEAD STOP)	4040XP CUSH MC	MTLPC	LCN
2	EA	KICK PLATE	8400 10"H X WIDTH AS REQ'D B- CS	630	IVE
2	EA	SILENCER	SR64	GRY	IVE

## HARDWARE GROUP NO. 18

For use on Door #(s):

H103                      Q124.2                      R112.3

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
1	EA	CONT. HINGE	224XY	628	IVE
1	EA	PANIC HARDWARE	LD-98-NL	625	VON
1	EA	RIM CYL HOUSING (FSIC)	20-079 ICX	625	SCH
1	EA	SURFACE CLOSER (W/ SPRING STOP)	4040XP SCUSH MC	MTLPC	LCN
1	EA	KICK PLATE	8400 10"H X WIDTH AS REQ'D B- CS	630	IVE
1	EA	RAIN DRIP	142AA	AA	ZER
1	SET	WEATHERSTRIPPING	429AA-S	AA	ZER
1	EA	DOOR SWEEP, BRUSH W/ DRIP	8198AA	AA	ZER
1	EA	THRESHOLD, 1/2"	655A	A	ZER
1	EA	RX SENSOR	BY ACCESS CONTROL INTEGRATOR		B/O
1	EA	DOOR CONTACT	BY ACCESS CONTROL INTEGRATOR		B/O

## HARDWARE GROUP NO. 19

For use on Door #(s):

Q107.2 R122.1

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
2	EA	CONT. HINGE	112XY EPT	628	IVE
2	EA	POWER TRANSFER	EPT10	689	VON
1	EA	REMOVABLE MULLION	KR4954 STAB	689	VON
1	EA	ELEC PANIC HARDWARE	LX-QEL-98-NL 24 VDC	625	VON
1	EA	ELEC PANIC HARDWARE	QEL-98-DT 24 VDC	625	VON
1	EA	RIM CYL HOUSING (FSIC)	20-079 ICX	625	SCH
1	EA	MORTISE CYL HOUSING (FSIC)	26-094	625	SCH
2	EA	PERMANENT CORE, PRIMUS (FSIC)	20-740 - MATCH EXISTING SYSTEM	626	SCH
1	EA	OH STOP	90S (@ AO LEAF)	629	GLY
1	EA	SURFACE CLOSER (W/ SPRING STOP)	4040XP SCUSH MC	MTLPC	LCN
1	EA	SURF. AUTO OPERATOR	4642 WMS 120 VAC (FLUSH CEILING MOUNT)	MTLPC	LCN
1	EA	MOUNTING PLATE	4040XP-18PA	MTLPC	LCN
1	EA	CUSH SHOE SUPPORT	4040XP-30	MTLPC	LCN
1	EA	BLADE STOP SPACER	4040XP-61	MTLPC	LCN
1	EA	WEATHER RING	8310-801		LCN
1	EA	ACTUATOR	8310-853T (EXTERIOR, WALL MOUNT)	630	LCN
1	EA	DUAL ACTUATOR	8310-855 (VESTIBULE, WALL MOUNT)	630	LCN
2	EA	MOUNT BOX	8310-867S		LCN
1	EA	MULLION SEAL	8780NBK PSA	BK	ZER
1	EA	WEATHERSTRIPPING	BY DOOR/FRAME MANUFACTURER		B/O
2	EA	DOOR SWEEP, BRUSH W/ DRIP	8198AA	AA	ZER
1	EA	THRESHOLD, 1/2"	655A	A	ZER
1	EA	CREDENTIAL READER	MT SERIES - BY ACCESS CONTROL INTEGRATOR (COORDINATE W/ HEAD END AND CREDENTIAL TYPE)	BLK	SCE
1	EA	RX SENSOR	BY ACCESS CONTROL INTEGRATOR		B/O
2	EA	DOOR CONTACT	BY ACCESS CONTROL INTEGRATOR		B/O
1	EA	POWER SUPPLY	PS902 900-4RL 120/240 VAC	LGR	SCE

DOOR(S) NORMALLY CLOSED AND LOCKED AND EXTERIOR ACTUATOR DISABLED. PRESENTING VALID CREDENTIAL TO READER RETRACTS EXIT DEVICE LATCH AND ENABLES EXTERIOR ACTUATOR. PUSHING ENABLED EXTERIOR ACTUATOR SIGNALS AUTOMATIC OPERATOR TO OPEN DOOR. INTERIOR ACTUATOR ENABLED AT ALL TIMES. PUSHING INTERIOR ACTUATOR RETRACTS LATCH AND SIGNALS AUTOMATIC OPERATOR TO OPEN DOOR. EXIT DEVICE LATCH ALSO CAPABLE OF BEING ELECTRONICALLY DOGGED DOWN (I.E. PUSH/PULL MODE) AS DESIGNATED BY ACCESS CONTROL SYSTEM SCHEDULE. EXIT DEVICE LATCHES AND LOCKS WITH LOSS OF POWER. FREE EGRESS AT ALL TIMES.

## HARDWARE GROUP NO. 20

For use on Door #(s):

Q107.1 R122.2

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
2	EA	CONT. HINGE	112XY EPT	628	IVE
2	EA	POWER TRANSFER	EPT10	689	VON
1	EA	REMOVABLE MULLION	KR4954 STAB	689	VON
2	EA	ELEC PANIC HARDWARE	QEL-98-DT 24 VDC	625	VON
1	EA	MORTISE CYL HOUSING (FSIC)	26-094	625	SCH
1	EA	PERMANENT CORE, PRIMUS (FSIC)	20-740 - MATCH EXISTING SYSTEM	626	SCH
2	EA	SURFACE CLOSER (W/ SPRING STOP)	4040XP SCUSH MC	MTLPC	LCN
2	EA	MOUNTING PLATE	4040XP-18PA	MTLPC	LCN
2	EA	CUSH SHOE SUPPORT	4040XP-30	MTLPC	LCN
2	EA	BLADE STOP SPACER	4040XP-61	MTLPC	LCN
1	EA	MULLION SEAL	8780NBK PSA	BK	ZER
1	EA	WEATHERSTRIPPING	BY DOOR/FRAME MANUFACTURER		B/O
2	EA	DOOR SWEEP, BRUSH W/ DRIP	8198AA	AA	ZER
1	EA	THRESHOLD, 1/2"	655A	A	ZER
1	EA	RX SENSOR	BY ACCESS CONTROL INTEGRATOR		B/O
2	EA	DOOR CONTACT	BY ACCESS CONTROL INTEGRATOR		B/O
1	EA	POWER SUPPLY	PS902 900-2RS 120/240 VAC		VON

EXIT DEVICE(S) CAPABLE OF BEING ELECTRONICALLY DOGGED DOWN (I.E. PUSH/PULL MODE) AS DESIGNATED BY ACCESS CONTROL SYSTEM SCHEDULE. EXIT DEVICE(S) LATCH AND LOCK WITH LOSS OF POWER. FREE EGRESS AT ALL TIMES.

## HARDWARE GROUP NO. 21

For use on Door #(s):

Q124.1

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
2	EA	CONT. HINGE	224XY	628	IVE
1	EA	REMOVABLE MULLION	KR4954	689	VON
1	EA	PANIC HARDWARE	CD-98-DT	625	VON
1	EA	PANIC HARDWARE	CD-98-NL	625	VON
1	EA	RIM CYL HOUSING (FSIC)	20-079 ICX	625	SCH
1	EA	MORTISE CYL HOUSING (FSIC)	26-094	625	SCH
2	EA	MORTISE CYL HOUSING (FSIC)	26-094 XQ11-948	625	SCH
4	EA	PERMANENT CORE, PRIMUS (FSIC)	20-740 - MATCH EXISTING SYSTEM	626	SCH
2	EA	SURFACE CLOSER	4040XP EDA MC X 180 DEG	MTLPC	LCN
2	EA	KICK PLATE	8400 10"H X WIDTH AS REQ'D B-CS	630	IVE
2	EA	WALL STOP/HOLDER	WS45/WS45X	625	IVE
1	EA	MULLION SEAL	8780NBK PSA	BK	ZER
2	EA	SILENCER	SR64	GRY	IVE

## HARDWARE GROUP NO. 22

For use on Door #(s):

Q105.2      Q105.3      Q105.4      Q105.5

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
2	EA	CONT. HINGE	224XY	628	IVE
1	EA	REMOVABLE MULLION	KR4954	689	VON
2	EA	PANIC HARDWARE	CD-98-DT	625	VON
1	EA	MORTISE CYL HOUSING (FSIC)	26-094	625	SCH
2	EA	MORTISE CYL HOUSING (FSIC)	26-094 XQ11-948	625	SCH
3	EA	PERMANENT CORE, PRIMUS (FSIC)	20-740 - MATCH EXISTING SYSTEM	626	SCH
2	EA	SURFACE CLOSER (W/ DEAD STOP & HO)	4040XP HCUSH MC	MTLPC	LCN
2	EA	KICK PLATE	8400 10"H X WIDTH AS REQ'D B- CS	630	IVE
1	SET	SOUND SEAL	328AA-S	AA	ZER
1	EA	MULLION SEAL	8780NBK PSA	BK	ZER
2	EA	AUTO DOOR BOTTOM	364AA	AA	ZER
2	EA	ASTRAGAL, MEETING STILE, SOUND	55AA X 155AA	AA	ZER
2	EA	SOUND SEAL MTG BRACKET	328SPB		ZER

## HARDWARE GROUP NO. 23

For use on Door #(s):

Q105.1          Q105.6

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
2	EA	CONT. HINGE	224XY	628	IVE
1	EA	REMOVABLE MULLION	KR4954	689	VON
1	EA	PANIC HARDWARE	CD-98-DT	625	VON
1	EA	PANIC HARDWARE	CD-98-NL	625	VON
1	EA	RIM CYL HOUSING (FSIC)	20-079 ICX	625	SCH
1	EA	MORTISE CYL HOUSING (FSIC)	26-094	625	SCH
2	EA	MORTISE CYL HOUSING (FSIC)	26-094 XQ11-948	625	SCH
4	EA	PERMANENT CORE, PRIMUS (FSIC)	20-740 - MATCH EXISTING SYSTEM	626	SCH
2	EA	SURFACE CLOSER (W/ DEAD STOP & HO)	4040XP HCUSH MC	MTLPC	LCN
2	EA	KICK PLATE	8400 10"H X WIDTH AS REQ'D B-CS	630	IVE
1	SET	SOUND SEAL	328AA-S	AA	ZER
1	EA	MULLION SEAL	8780NBK PSA	BK	ZER
2	EA	AUTO DOOR BOTTOM	364AA	AA	ZER
2	EA	ASTRAGAL, MEETING STILE, SOUND	55AA X 155AA	AA	ZER
2	EA	SOUND SEAL MTG BRACKET	328SPB		ZER

NOTE: RIM CYL AT RHR LEAF OF Q105.1 AND LHR LEAF OF Q105.6



## HARDWARE GROUP NO. 24

For use on Door #(s):

Q102.1      Q102.2      Q103.1      Q103.2      R110.2      R110.3

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
2	EA	CONT. HINGE	112XY	628	IVE
1	EA	REMOVABLE MULLION	KR4954	689	VON
2	EA	PANIC HARDWARE	CD-98-DT	625	VON
1	EA	MORTISE CYL HOUSING (FSIC)	26-094	625	SCH
2	EA	MORTISE CYL HOUSING (FSIC)	26-094 XQ11-948	625	SCH
3	EA	PERMANENT CORE, PRIMUS (FSIC)	20-740 - MATCH EXISTING SYSTEM	626	SCH
2	EA	SURFACE CLOSER (W/ DEAD STOP & HO)	4040XP HCUSH MC	MTLPC	LCN
2	EA	CUSH SHOE SUPPORT	4040XP-30	MTLPC	LCN
2	EA	BLADE STOP SPACER	4040XP-61	MTLPC	LCN
1	EA	MULLION SEAL	8780NBK PSA	BK	ZER

## HARDWARE GROUP NO. 25

For use on Door #(s):

Q102.3      Q103.3      R110.1      R110.4

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
2	EA	CONT. HINGE	112XY	628	IVE
1	EA	REMOVABLE MULLION	KR4954	689	VON
1	EA	PANIC HARDWARE	CD-98-DT	625	VON
1	EA	PANIC HARDWARE	CD-98-NL	625	VON
1	EA	RIM CYL HOUSING (FSIC)	20-079 ICX	625	SCH
1	EA	MORTISE CYL HOUSING (FSIC)	26-094	625	SCH
2	EA	MORTISE CYL HOUSING (FSIC)	26-094 XQ11-948	625	SCH
4	EA	PERMANENT CORE, PRIMUS (FSIC)	20-740 - MATCH EXISTING SYSTEM	626	SCH
2	EA	SURFACE CLOSER (W/ DEAD STOP & HO)	4040XP HCUSH MC	MTLPC	LCN
1	EA	CUSH SHOE SUPPORT	4040XP-30	MTLPC	LCN
1	EA	BLADE STOP SPACER	4040XP-61	MTLPC	LCN
1	EA	MULLION SEAL	8780NBK PSA	BK	ZER

## HARDWARE GROUP NO. 26

For use on Door #(s):  
S101.4

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
2	EA	CONT. HINGE	224XY	628	IVE
1	EA	REMOVABLE MULLION	KR4954	689	VON
2	EA	PANIC HARDWARE	LD-98-DT	625	VON
1	EA	MORTISE CYL HOUSING (FSIC)	26-094	625	SCH
1	EA	PERMANENT CORE, PRIMUS (FSIC)	20-740 - MATCH EXISTING SYSTEM	626	SCH
2	EA	SURFACE CLOSER (W/ SPRING STOP)	4040XP SCUSH MC	MTLPC	LCN
2	EA	KICK PLATE	8400 10"H X WIDTH AS REQ'D B- CS	630	IVE
1	EA	RAIN DRIP	142AA	AA	ZER
1	SET	WEATHERSTRIPPING	429AA-S	AA	ZER
1	EA	MULLION SEAL	8780NBK PSA	BK	ZER
2	EA	ASTRAGAL, MEETING STILE	8195AA	AA	ZER
2	EA	DOOR SWEEP, BRUSH W/ DRIP	8198AA	AA	ZER
1	EA	THRESHOLD, 1/2"	655A	A	ZER
1	EA	RX SENSOR	BY ACCESS CONTROL INTEGRATOR		B/O
2	EA	DOOR CONTACT	BY ACCESS CONTROL INTEGRATOR		B/O

## HARDWARE GROUP NO. 27

For use on Door #(s):

Q125.19      S101.3      S101.5

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
2	EA	CONT. HINGE	224XY	628	IVE
1	EA	REMOVABLE MULLION	KR4954	689	VON
1	EA	PANIC HARDWARE	LD-98-DT	625	VON
1	EA	PANIC HARDWARE	LD-98-NL	625	VON
1	EA	RIM CYL HOUSING (FSIC)	20-079 ICX	625	SCH
1	EA	MORTISE CYL HOUSING (FSIC)	26-094	625	SCH
2	EA	PERMANENT CORE, PRIMUS (FSIC)	20-740 - MATCH EXISTING SYSTEM	626	SCH
2	EA	SURFACE CLOSER (W/ SPRING STOP)	4040XP SCUSH MC	MTLPC	LCN
2	EA	KICK PLATE	8400 10"H X WIDTH AS REQ'D B-CS	630	IVE
1	EA	RAIN DRIP	142AA	AA	ZER
1	SET	WEATHERSTRIPPING	429AA-S	AA	ZER
1	EA	MULLION SEAL	8780NBK PSA	BK	ZER
2	EA	ASTRAGAL, MEETING STILE	8195AA	AA	ZER
2	EA	DOOR SWEEP, BRUSH W/ DRIP	8198AA	AA	ZER
1	EA	THRESHOLD, 1/2"	655A	A	ZER
1	EA	RX SENSOR	BY ACCESS CONTROL INTEGRATOR		B/O
2	EA	DOOR CONTACT	BY ACCESS CONTROL INTEGRATOR		B/O

## HARDWARE GROUP NO. 28

For use on Door #(s):

Q013      R112      R112.4      S101.6

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
1	EA	MORTISE CYL HOUSING (FSIC)	26-094	625	SCH
1	EA	PERMANENT CORE, PRIMUS (FSIC)	20-740 - MATCH EXISTING SYSTEM	626	SCH
1	EA	DOOR CONTACT	BY ACCESS CONTROL INTEGRATOR		B/O

VERIFY EXACT CYLINDER TYPE REQUIRED. BALANCE OF HARDWARE BY DOOR MANUFACTURER.

END OF SECTION

DOOR HARDWARE

087100-37  
01/06/2026

Southport High School - Phase 1

<u>DOOR#</u>	<u>HWSET#</u>	<u>INFORMATION</u>
H103	18	DPS/RX ONLY
Q001	02	
Q013	28	
Q102.1	24	
Q102.2	24	
Q102.3	25	
Q103.1	24	
Q103.2	24	
Q103.3	25	
Q105.1	23	
Q105.2	22	
Q105.3	22	
Q105.4	22	
Q105.5	22	
Q105.6	23	
Q107.1	20	CONTROLLED
Q107.2	19	CR, AO
Q107.3	04	
Q107.4	03	AO
Q109	16	
Q111	05	
Q112	08	
Q113	09	
Q114	16	
Q116	07	
Q117	06	
Q117.1	09	
Q119	05	
Q122	16	
Q123	16	
Q124.1	21	
Q124.2	18	DPS/RX ONLY
Q125.1	15	
Q125.2	01	
Q125.3	15	
Q125.19	27	DPS/RX ONLY
R101.1	05	
R101.2	14	
R102	05	
R104	10	
R105	13	
R108	17	
R110.1	25	
R110.2	24	
R110.3	24	
R110.4	25	

<u>DOOR#</u>	<u>HWSET#</u>	<u>INFORMATION</u>
R112	28	
R112.3	18	DPS/RX ONLY
R112.4	28	
R116	16	
R117	12	
R118	13	
R120.3	17	
R122.1	20	CONTROLLED
R122.2	19	CR,AO
R122.3	04	
R122.4	03	AO
S101.3	27	DPS/RX ONLY
S101.4	26	DPS/RX ONLY
S101.5	27	DPS/RX ONLY
S101.6	28	DPS ONLY
S104	12	
S105	11	

## SECTION 12 3216 - PLASTIC LAMINATE CASEWORK

## PART 1 - GENERAL

## 1.1 SECTION INCLUDES

- A. Cabinets and countertops.
- B. Casework hardware.

## 1.2 REFERENCES

- A. Countertop Standard: ANSI A161.2
- B. Catalog Standards: Manufacturer's catalog numbers may be shown on drawings or in equipment schedule for convenience in identifying certain cabinet work. Unless modified by notation on drawings or otherwise specified, catalog description for indicated number constitutes requirements for each such cabinet.

## 1.3 SUBMITTALS

- A. Submit under provisions of Division 01.
- B. Shop Drawings: Indicate casework locations, large scale plans, elevations, rough-in and anchor placement dimensions and tolerances, clearances required.
- C. Product Data: Provide component dimensions, configurations, construction details and joint details.
- D. Samples: Submit two samples, minimum size 3 x 6 inches (75 x 150 mm) of each color of finish.

## 1.4 QUALITY ASSURANCE

- A. Perform Work in accordance with ANSI 161.1.

## 1.5 QUALIFICATIONS

- A. Manufacturer: Company specializing in manufacturing the Products specified in this section with minimum three years documented experience.

## 1.6 FIELD MEASUREMENTS

- A. Verify that field measurements are as indicated on shop drawings.

## PART 2 - PRODUCTS

## 2.1 MANUFACTURERS

- A. Stevens.
- B. LSI
- C. Case Systems.
- D. Advanced Cabinet Systems
- E. Custom fabricated per enclosed specifications.

## 2.2 BASIC MATERIALS

- A. Particleboard: ANSI A208.1 mat-formed particleboard, Grade 1-M-2 with minimum density of 40 lbs. per cu. ft., internal bond of 60 psi; and minimum screw holding capacity of 225 lbs. on faces and 200 lbs. on edges.
- B. Plastic Laminate: NEMA LD-3, of thickness, type and grade designation indicated; in colors or patterns and finishes indicated or, if not indicated, as selected by Architect from manufacturer's standard range.
- C. Exposed Surfacing Material of Doors, Drawer Fronts, Fixed Panels, Toeboards and Ends: High pressure decorative laminate, 0.028" thick, General Purpose Type (GP-28).
- D. Semi-Exposed Surfacing Material and Doors: High pressure plastic laminate, 0.020" thick, Cabinet Liner Type (CL-20), in color or pattern and finish matching interior of cabinets, unless otherwise indicated.
- E. Remaining Semi-Exposed Materials: Decorative boards, General Purpose Type, conforming to NEMA LQ-1 with decorative faces in patterns or colors and finish indicated or, if not indicated, as selected by Architect from manufacturer's standard range.
- F. Concealed Materials: Any sound, dry solid lumber, plywood or particleboard or combination thereof; without defects affecting strength, utility or stability. On concealed surfaces of portions constructed of decorative boards, provide decorative or cabinet liner laminate backing (Light-Duty Type).
- G. Core Material for Plastic Laminates: Industrial Grade Particleboard conforming to ANSI A20B.1, Grade 1-M-2.
- H. Treatment of Exposed and Semi-Exposed Edges: Edges of doors and drawer fronts shall have 3mm PVC of a coordinating color.
- I. Cabinet Construction
  - 1. Sides, dividers, tops, bottoms, shelves and stretchers: Not less than 1/2" thick. Provide stretchers at top of base cabinet.
  - 2. Backs: Not less than 3/8" thick for unexposed backs. Exposed backs are to

- be 3/4" thick panels of balanced construction tenoned into cabinet ends.
3. Drawers
    - a. Sides, subfronts and backs: not less than 1/2" thick.
    - b. bottoms: not less than 1/4" thick particleboard or provide solid wood sides and back.
    - c. Provide box type construction with front, bottom and back rabbeted in sides.
    - d. All joints secured with glue and mechanical fasteners.
    - e. All drawers must be suspended on extension drawer slides.
  4. Joinery
    - a. Rabbet backs flush into end panels and secure with concealed mechanical fasteners.
    - b. Connect wall cabinet tops and bottoms and base cabinet bottoms and stretchers to ends and dividers by means of mechanical fasteners.
    - c. Rabbet tops, bottoms and backs into end panels or cabinetry corner joints to incorporate fluted dowel pin construction.
  5. Subbase: Not less than 3/4" thick, of height and relationship to cabinet fronts and exposed ends as indicated. Rubber base furnished and applied continuously per Section 09650.
  6. Toe Board: Not less than 3/4" thick, attached to subbase with concealed fasteners.

## 2.3 COUNTERTOPS

- A. Solid Surface Material.
- B. Countertop Configuration: Provide self-edge countertops with continuous 4" backsplash.
- C. Countertop Thickness: As indicated or, if not indicated, not less than 1" thick at edges.

## 2.4 CABINET AND CASEWORK HARDWARE AND ACCESSORIES

- A. General: Provide manufacturer's standard hardware and accessory units of type, size and finish indicated, complying with ANSI A156.9 or, if not indicated, as selected by Architect from manufacturer's standard range.
- B. Hinge: Institutional type, 5 knuckle with 270 degree swing. Provide one pair for doors less than 4 ft. high and 1-1/2 pair for doors over 4 ft.
- C. Pulls: Selected from manufacturer's standard. Provide 2 pulls for drawers over 24" wide.
- D. Door Catches: Nylon roller spring catch or dual self-aligning permanent magnet type. Provide 2 catches on doors over 4 ft. high.

- E. Drawer Slides: Steel slides with ballbearing nylon rollers. 100# rating. File drawers shall have full extension drawer slides for full access to drawer.
- F. Drawer and Cupboard Locks: Provide locks for all casework doors and drawers. Half-mortise type, 5-disc tumbler and dead bolt, round cylinder only exposed, die cast with plated finish.
  - 1. Key each cabinet in room alike.
  - 2. Key each room differently.
  - 3. Provide one master key.
  - 4. Provide two keys each.
- G. Sliding Glass Door Hardware Sets: Manufacturer's standard to suit type and size of sliding door units.
- H. Shelf Support Clips: One-piece molded nylon.
- I. Sinks and Faucets: As specified in Division 22.
- J. Finish: Unless otherwise indicated, provide hardware units with manufacturer's standard, satin finish.

## 2.5 FABRICATION

- A. Shop assemble casework for delivery to site in units easily handled and to permit passage through building openings.
- B. Fabricate corners and joints without gaps or inaccessible spaces or areas where dirt or moisture could accumulate.
- C. Fabricate each unit rigid, not dependent on building structure adjacent units for rigidity.
- D. Apply laminate backing sheet to reverse side of plastic laminate finished surfaces.
- E. Form edges smooth. Form material for counter tops, facing, shelves, and linings from continuous sheets.
- F. Provide cutouts for plumbing fixtures, appliances, fixtures and fittings. Prime paint contact surfaces of cut edges.
- G. When necessary to cut and fit on site, provide materials with ample allowance for cutting. Provide trim for scribing and site cutting.

## 2.6 FINISHES

- A. Exposed To View Surfaces: Plastic Laminate of color and pattern as selected.



- B. Interior Surfaces Not Exposed to View: Standard white melamine.

## PART 3 - EXECUTION

### 3.1 EXAMINATION

- A. Verify existing conditions.
- B. Verify adequacy of support framing.

### 3.2 INSTALLATION

- A. Install casework, components and accessories in accordance with manufacturer's instructions.
- B. Use anchoring devices to suit conditions and substrate materials encountered.
- C. Set casework items plumb and square, securely anchored to building structure.
- D. Carefully scribe casework abutting other components, with maximum gaps of 1/32 inch (1 mm). Use filler strips not additional overlay trim for this purpose.
- E. Close ends of units, back splashes, shelves and bases.
- F. Sequence installation to ensure utility connections are achieved in an orderly and expeditious manner.

### 3.3 ADJUSTING

- A. Adjust work under provisions of Division 01.
- B. Adjust doors, drawers, hardware, fixtures, and other moving or operating parts to function smoothly.

### 3.4 CLEANING

- A. Clean work under provisions of Division 01.
- B. Clean casework, counters, shelves and hardware.

### 3.5 PROTECTION OF FINISHED WORK

- A. Protect finished Work under provisions of Division 01.
- B. Do not permit finished casework to be exposed to continued construction activity.

### 3.6 SCHEDULES

- A. See Plans and Details.

END OF SECTION 12 3216



GENERAL NOTES		
As used in these General Notes: "Drawings" means the latest structural design drawings, uno. "Specifications" means the latest project specifications, uno. "Contract Documents" is defined as the design drawings and the specifications. "SER" is defined as the structural engineer of record for the structure in its final condition. "Design Professionals" is defined as the owner's architect. "MEP" includes, but is not limited to Mechanical, Electrical, Plumbing, Fire Protection. "Contractor" is defined to include any of the following: General Contractor and their Subcontractors, Construction Manager and their Subcontractors, Structural Steel Fabricator or Structural Steel Erector. "Base Building Structure" is defined as the structural frame designed by JQOL Global LLC. "Structure in its final condition" means all structural elements shown on the structural contract documents are installed and completely connected and inspected with no outstanding non-compliance issues.  The Contractor is solely responsible for the stability of the structure until the construction of the structure reaches its final condition.  The Contractor is responsible for coordination of the Structural work with the Architectural, Civil, MEP contract documents, as well as any other applicable trades. The architectural, mechanical, electrical and plumbing aspects are not in the scope of these drawings. Therefore, all required materials and work may not be indicated. Refer to architectural drawings for all dimensions not shown on these drawings. Locations, sizes and numbers of all openings may not be completely indicated in the structural drawings. The respective contractor shall verify their work with all other disciplines.  The contractor is solely responsible for the design, installation, and removal of temporary bracing and construction supports, for new and existing structures, as necessary to complete the project. No portion of the project while under construction is intended to be stable in the absence of the contractor's temporary supports and bracing. Contractor shall retain a structural engineer licensed in the state in which the project is located to design temporary bracing and construction supports.  The contract documents represent the structure only. They do not indicate the method of construction. The contractor shall provide all measures necessary to protect the structure during construction. Such measures shall include, but not be limited to, bracing, shoring, underpinning, etc. The Engineer of Record is not responsible for the contractor's means, methods, techniques, sequences or safety procedures during construction.  The specifications are an integral part of the contract documents and shall be used in conjunction with the structural drawings.  The contractor shall verify all existing dimensions and conditions and coordinate with the structural drawings, architectural drawings, drawings from other consultants, project shop drawings and field conditions.  Apply details, sections, and notes on the drawings where conditions are similar to those indicated by detail, detail title or note.  Only use dimensions indicated on the drawings. Do not scale drawings.  Assume equal spacing between established dimensions, if not indicated on drawings.  Centerlines of columns and foundations coincide with grid line intersections, uno.  Centerlines of grade beams and walls coincide with centerlines of foundations, uno.  Centerlines of framing members coincide with column centerlines, uno.  The contractor shall verify that construction loads do not exceed the capacity of the structure at the time the load is applied.  Reactions and forces indicated are unfactored, Allowable Strength Design (ASD) loads.  If Drawings and specifications are in conflict, the most stringent restrictions and requirements shall govern.  Notes and details shall take precedence over general applicable notes. Where no details or sections are shown, construction shall conform to similar work on the project. Typical sections and details may not be cut on the plans, but apply unless noted otherwise.  Verify all existing conditions prior to any construction or fabrication. If different than shown, notify engineer/architect immediately for modification of drawings.  Provisions for future expansion: Horizontal:   None Vertical:     None		

CODES AND DESIGN CRITERIA		
CODES	2012 International Building Code	
Building Code:	Indiana Building Code 2014	
Local Building Code:	ASCE 7-10	
Code Standard:	ASCE 350-10 ASD	
Steel Standard:	AISC 360-10 ASD	
Steel Seismic Standard:	AISC 341-10 ASD	
Concrete Standard:	ACI 318-11	
Masonry Standard:	TMS 402/602-11	
Wood Standard:	AITC/APANDS Current Ed.	
Risk Category:	III	
Exposure Category:	C	
ROOF LOADS	SEE LOAD MAPS	
FLOOR LOADS	SEE LOAD MAPS	
SOILS	A&W Project No. 25IN0492	
Soils Report:	10.08.2025	
Report Date:	Street	Wall
Allowable Bearing Pressure, q <sub>a</sub> :	2500 psf	2000 psf
Soil Density, γ <sub>t</sub> :	120 pcf	
Minimum Foundation Bearing Depth:	36 in	
SLAB ON GRADE	6 in	
Compacted Fill Thickness	95% Modified Proctor D-1557	
Compaction Specification:		
SNOW DESIGN CRITERIA		
Ground Snow Load, P <sub>g</sub> :	20 psf	
Flat Roof Snow Load, P <sub>f</sub> :	15.4 psf	
Minimum Snow, P <sub>m</sub> :	22 psf	
Importance Factor, I <sub>s</sub> :	1.1	Partially
Exposure Factor, C <sub>e</sub> :	1.0	Heated
Thermal Factor, C <sub>t</sub> :	1.0	
Warm Slope Factor, C <sub>s</sub> :	1.0	
WIND DESIGN CRITERIA		
Ultimate Wind Speed, V <sub>ult</sub> :	120 mph	
Design Wind Speed, V <sub>des</sub> :	80 mph	
Enclosure Class:	0.18	
Internal Pressure Coefficient, GC <sub>p</sub> :		
Roof Net Uplift:	See S-010 Loading Sheet	
SEISMIC DESIGN CRITERIA		
Importance Factor, I <sub>e</sub> :	1.25	
S <sub>e</sub> :	0.163	
S <sub>1</sub> :	0.087	
SDS:	0.174	
SDI:	0.138	
Site Class:	D	
Seismic Design Category:	C	
Analysis Procedure:	ELFA	
Design Seismic Modification Coeff., R:	3	
Design Overstrength Factor, Omega:	3	
Design Deflection Amplification Factor, Cd:	3	
Seismic Response Coefficient, C <sub>s</sub> :	0.073	
Response Modification Coeff., R:	3	
Unfactored Design Base Shear, V:	7.3k + W	
Basic Seismic-Force-Resisting System:	(1) Student Activity Center A-B - Bearing Wall Systems Intermediate Precast Shear Walls R=4, C=2.5, Cd=4, Ca=0.055 (2) Cafeteria A-B - Bearing Wall Systems Intermediate Reinforced Masonry Shear Walls R=3.5, C=2.5, Cd=2.25, Ca=0.062 (3) (At Existing Building Faces) H - Steel Systems Not Specifically Designed for Seismic Resistance R=3, C=3, Cd=3, Ca=0.073	

010002 EXISTING STRUCTURE NOTES	
The actual existing structure configuration, member sizes, etc. has not been field verified.	
All existing structure indicated is for reference only.	
Field verify existing structure. If existing structure varies from configuration, sizes, etc. from drawings, notify engineer of record immediately.	
Existing structural information has been obtained from drawings prepared by TISLOW HUNTER & BERGEN ASSOCIATED, dated 10.25.1983 & by THE MCGUIRE & SHOOK CORPORATION, dated 01.28.1988	

## 014000 DELEGATED DESIGN

### DELEGATED DESIGN REQUIREMENTS

A Specialty Structural Engineer (SSE), registered in the state of the project, shall be responsible for the structural design of the following products and systems complying with specific performance and design criteria indicated:

1. Steel Joists, joist girders, bridging and accessories.
2. Structural Steel Connections, except as shown on drawings.
  - AISC Option 2 (Detailer): Simple shear connections.
  - AISC Option 3 (SSE): All other connections not shown.
3. Cold-Formed Steel CFS wall studs, CFS roof joists and accessories.
4. Stairs, ladders, and railings.
5. Precast Prestressed Concrete elements and accessories.
6. Sprinkler supports and required loading.

The contractor is to review each submittal prior to forwarding to architect and structural engineer. The contractor is to stamp each submittal verifying that the following is addressed:

1. The shop drawing is requested.
2. The shop drawing is based on the latest design.
3. The architect's and structural engineer's comments from any previous submittals are addressed.
4. The work is coordinated among all construction trades.
5. Revisions from previous submittals are clearly marked by circling or clouds.
6. Submittal is complete.
7. Submittal does not include substitution request
8. Submittal shall include a stamp indicating project name and location, submittal number, specification section number.

The structural engineer shall return, without comment, submittals which the contractor has not stamped or which do not meet the above requirements. The structural engineer's review of submittals shall be for general conformance with the design intent. No work shall be started without such review.

The structural engineer will return the shop drawing items within ten working days after having received the reproducible shop drawing.

SHOP DRAWINGS SUBMITTAL	
The Contractor shall prepare detailed shop drawings to enable all parts of the work to be fabricated and constructed in accordance with the drawings and specifications. These shop drawings will be reviewed for general compliance with the design intent only. The contractor is responsible for all dimensions, accuracy and fit of the work.	
All shop drawings shall be reviewed by the contracted prior to submittal to the structural engineer. Drawings without the contractor's review will be returned without review.	
Work requiring submittals for structural engineer review shall not be started by the contractor without appropriate reviewed submittals. Work performed by the contractor prior to receiving appropriate submittals shall be subject to removal and replacement as deemed necessary by the structural engineer, at the contractor's expense, and with no cost to the owner	
Submittal shop drawings for each of the following items:	
1. CONCRETE MIX DESIGNS 2. STRUCTURAL STEEL 3. REINFORCING STEEL - FOUNDATIONS 4. REINFORCING STEEL - CONCRETE MASONRY UNITS (SUBMITTAL SHALL INCLUDE PLAN VIEW, WALL ELEVATIONS AND WALL SECTIONS) 5. EMBEDDED ITEMS 6. METAL DECK 7. STEEL JOISTS 8. PRECAST HOLLOW CORE WALLS 9. PRECAST STAIRS 10. COLD-FORMED STEEL 11. CONCRETE MASONRY UNITS	

017900 DEMOLITION NOTES	
All shoring shall be in place before demolition begins.	
It is the Contractor's responsibility to select the appropriate shoring system for the loads and work indicated.	
Reactions and forces indicated for shoring are actual, working loads.	
If Drawings and specifications are in conflict, the most stringent restrictions and requirements shall govern. Contractor shall bring all discrepancies to the attention of the engineer immediately.	
Verify all existing conditions prior to any demolition, construction or fabrication. If different than shown, notify engineer/architect immediately for modification of drawings.	
All contractors are required to coordinate their work with all disciplines to avoid conflicts. The architectural, mechanical, electrical and plumbing aspects are not in the scope of these drawings. Therefore, all required materials and work may not be indicated. It is the contractor's responsibility to coordinate these drawings with all other construction documents. Refer to architectural drawings for all dimensions not shown on these drawings. Locations, sizes and numbers of all openings may not be completely indicated in the structural drawings, the respective contractor shall verify their work with all other disciplines.	
The contract documents represent the structure only. They do not indicate the method of demolition, shoring or construction. The contractor shall provide all measures necessary to protect the structure during demolition and construction. The Engineer of Record is not responsible for the contractor's means, methods, techniques, sequences or safety procedures during construction.	

020000 SHALLOW FOUNDATION AND SLAB ON GRADE NOTES	
Soil to be stripped, compacted and tested in accordance with the recommendations of the soils engineer and project specifications.	
Footings shall be placed on firm, undisturbed soil or on engineered fill. Engineered Fill: Naturally or artificially graded mixture of natural or crushed gravel, crushed stone, and natural or crushed sand; ASTM D 2940, with at least 90 percent passing a 1-1/2-inch sieve and not more than 12 percent passing a No. 200 sieve.	
Slabs shall be placed on 6" compacted, free-draining, frost-free drainage course. Drainage Course: Narrowly graded mixture of washed crushed stone, or crushed or uncushed gravel; ASTM D 448; coarse-aggregate grading Size 57; with 100 percent passing a 1-1/2-inch sieve and 0 to 5 percent passing a No. 8 sieve. All fill shall be compacted to a minimum dry density of 95% of the Modified Proctor maximum dry density (ASTM D698), placed in 6" to 8" lifts. Pea gravel may not be used as fill. Utility trenches and excavations under the foundations or slabs shall meet the same requirements. See soils investigation report for further recommendations.	
Undercutting of the soil for foundation and/or slab placement may be required. These drawings do not indicate the entire scope of undercutting, fill or bad soil removal that may be required to attain the design soil bearing pressures. It is the responsibility of the contractor to obtain a soils investigation report, before bidding, to assess the extent of excavation and compaction that may be required to meet the design criteria. The contractor shall retain the services of a soils engineer to monitor all backfilling operations and to inspect footing bearing material. A report certified by the soils engineer shall be furnished to the architect/engineer verifying that all foundations were placed on a material capable of sustaining the design bearing pressures.	
If dewatering is required, sumps shall not be placed within the foundation excavation.	
Maintain a maximum slope between adjacent footing bearing elevations of 2 horizontal to 1 vertical. Maintain a 2 horizontal to 1 vertical slope next to existing foundations to avoid undermining foundations.	
No horizontal joints are permitted in any foundation. Vertical joints are permitted only in wall footings.	
Shallow foundations may be earth-formed where the excavation permits. If earth-forming is used, add 2" to the width and length of all foundations.	
The bottom of all foundations shall be a minimum of 36" depth below final grade.	

033000 CAST IN PLACE CONCRETE NOTES (Foundations, Slabs, & Walls)	
See concrete mix schedule for mix design requirements.	
All reinforcing shall conform to the following concrete cover:	
COVER	LOCATION
3"	Foundations & Footings: All surfaces; Exterior Slabs: Bottom; Grade Beams & Trench Footings: All surfaces; All concrete cast against soil.
2"	Exterior Walls, All Piers & All Pilasters: All surfaces; Exterior Slabs: Top; All exterior concrete.
1 1/2"	Interior beams & columns: All surfaces; All concrete not exposed to weather or in contact with ground.
3/4"	Interior slabs, Walls & Joists
Welded Wire Reinforcement (WWR) for slabs and fill for metal deck shall be placed in the upper-third of the slab or fill. See details.	
All reinforcing steel shall be detailed, supplied and placed in accordance with ACI 315, ACI 318 and CRSI MSP-1.	
All reinforcing steel shall be hot fabricated and, where applicable, shall be wired together and conform to ASTM A-615, Grade 60.	
Chamfer edges of exposed concrete 3/4", unless noted otherwise.	
Contractor shall make four, 6"x12" test cylinders for each 50 cubic yards of concrete poured for each days operation. Break 1 at 7 days, 2 at 28 days and retain spare.	
All welded wire fabric shall conform to ASTM A1064, Fy(min) of 65 ksi. All welded wire fabric laps shall be 8".	
All finished concrete, concrete formwork and falsework shall be in accordance with ACI 301. Contractor is solely responsible for the design and construction of all formwork, falsework and shoring.	
Provide sleeves for all openings in grade beams or walls to totally separate pipe from concrete.	
Foundations may be earth-formed where the excavation permits. If earth-forming is used, add 2" to the width, length & thickness of all foundations.	
Plastic Vapor Retarder: ASTM E 1745, Class A, not less than 10 mils (0.25 mm) thick, see specifications. Include manufacturer's recommended adhesive or pressure-sensitive joint tape.	
Adhesive Anchors and Adhesives Used for Reinforcing Anchorage: 1. The adhesive anchor system used for post-installed anchorage to concrete shall conform to the requirements of the most recently published ACI 308.4. 2. Adhesive anchors indicated are the Basis-of-Design. Approved equal meeting ACI 308.4 is permitted. 3. Bulk-mixed adhesives are not permitted. 4. Adhesive anchors shall be installed by qualified personnel trained to install adhesive anchors. 5. Adhesive anchors shall be installed by qualified personnel trained to install adhesive anchors. 6. Installation of adhesive anchors horizontally or upwardly inclined shall be performed by personnel certified by the ACI/CRSI Adhesive Anchor Installer Certification program. 7. Adhesive anchors installed in horizontal or upwardly inclined orientations shall be continuously inspected during installation by an inspector specially approved for that purpose.	
Bonding agent for bonding fresh concrete to hardened concrete: ASTM C 1059/C 1059M, Type II, nonredispersible, acrylic emulsion or styrene butadiene.	

034010 PRECAST PRESTRESSED CONCRETE ELEMENTS NOTES	
Delegated Design: A Specialty Structural Engineer (SSE), registered in the state of the project, shall be responsible for the structural design of all precast concrete design, products and systems complying with specific performance and design criteria indicated.	
The minimum 28 day compressive strength of all precast elements shall be 5000 psi.	
All shoring shall be in place before demolition begins.	
See architectural drawings for all architectural finishes, textures, reveals, etc. All embeds may not be indicated on structural drawings. See other trade drawings for required embeds.	
Coordinate with Architectural, Mechanical, Electrical, Plumbing, Civil plans for openings and penetrations to be cast into pre-cast elements.	
The layout and arrangement of all precast elements is schematic in nature and is intended to show the scope of the precast system. The precast manufacturer is responsible for the final layout, size, spacing etc. of all precast elements and connections.	
Precast connections shown are schematic in nature. Final detail and design is the responsibility of the precast manufacturer.	
The precast manufacturer or erector is responsible for all temporary bracing that may be required until the lateral load resisting systems for the building are complete and has attained their design capacity.	
All precast elements shall be capable of supporting their own weight as well as specified loadings and reactions indicated.	
If applicable, camber all beam elements per PCI standards.	

042000 MASONRY AND REINFORCED MASONRY NOTES	
Minimum 28 day compressive strength of concrete masonry units shall be 2000 p.s.i. based on net area of the unit. Specified design compressive strength of masonry shall be F <sub>m</sub> = 2000 p.s.i. All units for exterior walls, load-bearing walls and shear walls shall be normal weight block.	
All mortar shall be Type S. No admixtures may used unless approved by structural engineer. Mortar shall not be used for grouting cores or filling bond beams.	
Lay masonry units in running bond uno with units designed to align with webs on each course.	
Course grout shall be used where grouting is required. Slump shall be 8" +/- 1". Minimum grout compressive strength shall be 2000 p.s.i.	
All reinforcing shall be ASTM A615 Grade 60 (F <sub>y</sub> =60 ksi). Lap all reinforcing a minimum of 48 bar diameters.	
Center vertical reinforcing in block cores, unless noted otherwise.	
See architectural and specifications for all control joint locations. Reinforcing in bond beams shall be discontinuous at control joints.	
Provide ladder type horizontal joint reinforcement at 16" o.c. typical and 8" o.c. for parapets and below ground floor elevation. Side rods and cross rods shall be #9 wire, galvanized, see specifications. Cut joint reinforcement at control joints.	
Provide "L" bars at all bond beam corners as required.	
Fill cores of block solid with grout two full courses below the bearing of all beams or lintels supported on masonry.	
All attachments to block shall be made with Hill HLC 1/2" diameter x 3" sleeve anchors, unless noted otherwise. Anchors shall be installed per manufacturer's recommendations.	
See typical schedules for masonry and steel lintels not indicated on plans.	
Grout solid cores with reinforcement. Grout solid cells in below grade construction where masonry is in contact with soil.	
Provide ties to all structural steel.	
All interior, non-load bearing masonry walls over 12'-0" high, shall be supported on thickened slab as per typical detail. Wall vertical reinforcing shall be #5 @ 48" OC full height. Unless noted otherwise.	
Place grout by low-lift method. Maximum grout pour shall be 5 feet.	

051200 STRUCTURAL STEEL NOTES	
All structural steel shall conform to the following: W Shapes: ASTM A992, Grade 50. Angles, Channels, Plates, Bars: ASTM A36 (F <sub>y</sub> =36 ksi) HSS Tubes: ASTM A500, Grade C (F <sub>y</sub> =50 ksi) HSS Rounds: ASTM A500, Grade C (F <sub>y</sub> =46 ksi) Anchor Rods: ASTM F1554, Grade 36	
All steel shall be detailed, fabricated and erected in accordance with: • AISC 360 "Specification for Structural Steel Buildings", Allowable Strength Design (ASD) • AISC 303 "Code of Standard Practice"	
Submit connections not specifically detailed on the drawings to the SER for review prior to review of shop drawings. Where no shear is indicated on drawings design connection for minimum 10 k reaction and where no moment is indicated on drawings provide full moment capacity of member per ASD Design Requirements.	
All bolted connections shall be made with 3/4" diameter, A325 bolts with nuts and washers, unless otherwise noted. All connections shall be shear bearing connections tightened to snug-tight condition, unless otherwise noted.	
All shop and field welds shall be made using E70 electrodes or equivalent.	
Splices shall be allowed only at locations specifically indicated on the structural drawings unless approved otherwise by the SER in writing.	
For steel members and embeddings exposed to weather, provide hot-dipped galvanized finish, uno.	
Provide holes in all steel as required to prevent any accumulation of water. All penetrations through main members shall not exceed 1 1/8" dia. and shall be ground smooth. These drains must be kept clean and open.	
Field modification of structural steel is prohibited without prior approval of the architect and structural engineer.	
Steel fabricator shall obtain the size and location of all openings for grilles, louvers, etc. before proceeding with the fabrication and erection of any required frames.	
Provide Heckman #129 and #130 channel slot anchors and channel slot at all columns that abut masonry walls, uno.	
Provide temporary bracing of the structure until all permanent lateral support is in place.	
Structure Stability: The entire roof and/or floor decking materials must be fully erected and connected to the supporting steel before temporary, erection bracing is removed.	
RD = Roof Drain location. Provide steel frame for drains. See other drawings for actual drain type, number, size, etc. Coordinate with drain contractor.	
Remove erection bolts and fill holes in all exposed braces.	

052100 STEEL JOIST NOTES	
Provide all joists, bridging and accessories for the complete erection of joists in accordance with the current Steel Joist Institute "STANDARD SPECIFICATIONS AND LOAD TABLES FOR OPEN WEB STEEL JOISTS AND JOIST GIRDERS" and Underwriters Laboratories "STANDARD, FIRE TESTS OF BUILDING CONSTRUCTION AND MATERIALS".	
Bridging shall be completely erected and joists aligned before any construction loads are placed on joists.	
Do not weld bottom chord of joists to columns unless noted on drawings.	
Install erection bolts at all joist girder to column and joist to column connections.	
Where ballasted roofing is not shown on architectural drawings, provide uplift bridging at all joists as per "STANDARD SPECIFICATIONS AND LOAD TABLES FOR OPEN WEB STEEL JOISTS AND JOIST GIRDERS" for a net uplift load of 20 psf, unless noted or shown otherwise.	

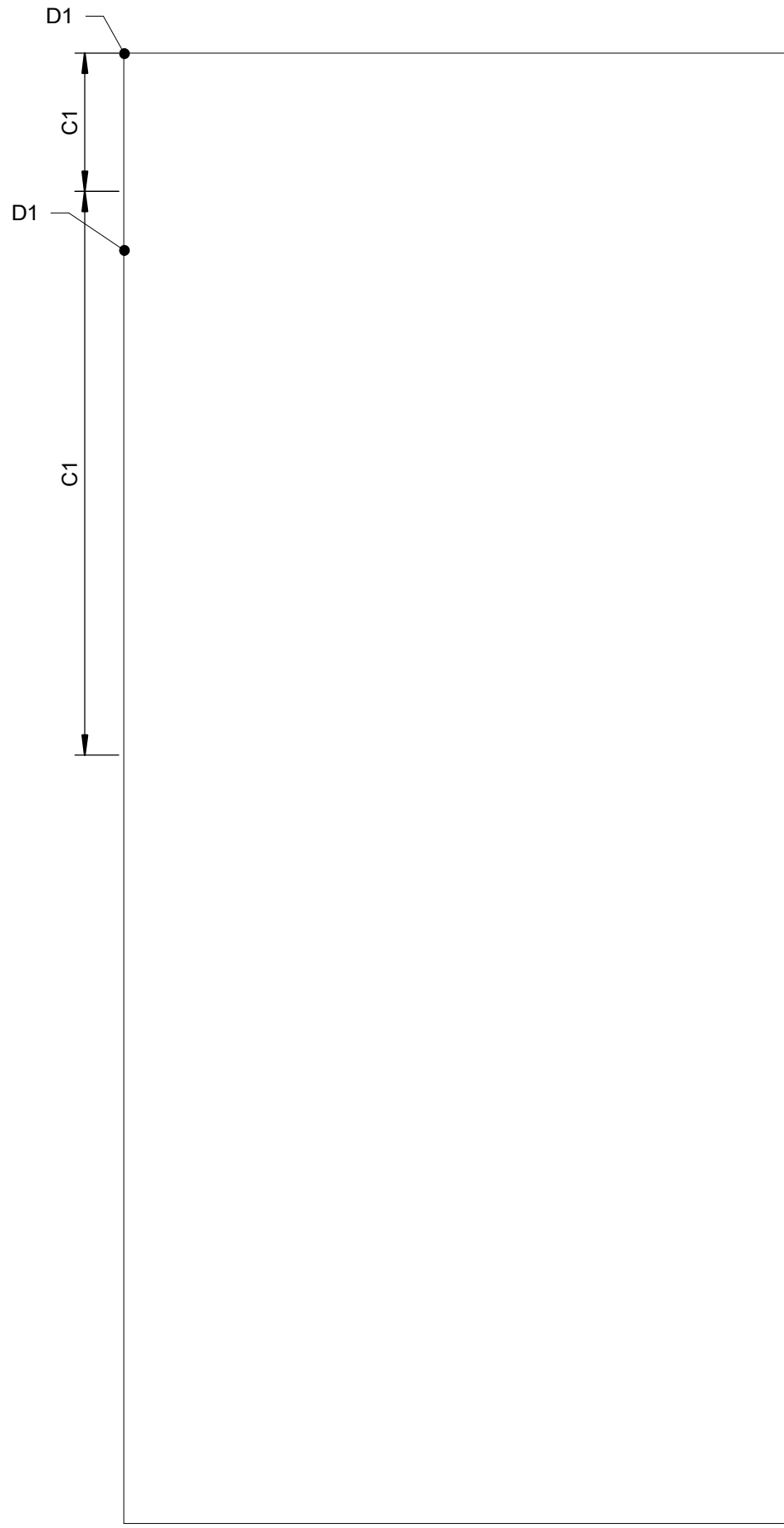
053100 STEEL DECK NOTES	
All metal deck material, fabrication and installation shall conform to Steel Deck Institute "SDI SPECIFICATIONS AND COMMENTARY" and "CODE OF RECOMMENDED STANDARD PRACTICE", Current edition, unless noted.	
FASTENING DECK 1. Roof deck shall be welded using 5/8" diameter puddle welds, 36/4 pattern with (1) #10 TEK side-lap fastener unless otherwise shown in typical detail or indicated on drawings. 2. Floor deck shall be welded using 3/4" diameter puddle welds, 36/4 pattern unless otherwise shown in typical detail or indicated on drawings.	
Provide TS 2 1/2x2 1/2x 1/8 deck support, field welded to joist or beam at all deck span changes.	
Provide L3x3x1/4 deck support at all columns where required, unless noted.	
Provide 20 gauge cover plate at all roof deck span changes.	
Provide L3x3x1/4 at all unsupported edges of deck and around roof perimeter, unless otherwise noted.	
All deck shall be provided in a minimum of 3-span lengths where possible.	

054000 COLD FORMED STEEL FRAMING NOTES	
All light gage, cold formed steel (CFS) members shall conform to the following unless otherwise indicated on drawings, and AISI S100 current edition:	
TYPE	SIZE      SPACING      GRADE
Exterior Wall Studs	800 S 162-54    16" oc, u.n.o.    ST33H (33 ksi)
Interior Load-Bearing Studs	800 S 162-54    16" oc, u.n.o.    ST33H (33 ksi)
All sheet steel shall comply with ASTM A1003. Coating shall be G90 galvanizing.	
Provide steel tracks complying with ASTM C955, thickness to match studs, 2" flange width.	
Provide 1/2" ASTM F1554, Grade 36 hooked anchor bolts at all steel tracks, u.n.o. Anchor bolt spacing = 48" OC, u.n.o. Provide anchor bolt at 8" from the ends of all walls, uno.	
All cold formed steel members shall comply with the requirements of the latest AISI Specification.	
Field welding is not permitted. Provide screwed connections.	
For all non-load bearing studs, provide deflection clips isolating the stud from the primary structure.	
Provide 5/8" plywood sheathing on outside face of all exterior wall studs.	

316217 HELICAL PILE-ANCHOR NOTES	
All piles/anchors shall meet or exceed the following minimum criteria, unless noted. Capacities shown are ASD (working): Soils report by:    Al & Wilzig Engineering, Inc. No. 25IN0492 Compressor:      50 k Tension:            25 k Base bid length:    25 ft below existing ground surface	
All Helical piles and anchors shall have galvanized steel shafts.	
All piles shall be designed and installed by a specialty engineer to provide the resistance indicated on the pile layout plan, or, as indicated above. Submit calculations for review to the architect and structural engineer.	
Contractor shall have a soils engineer on site to keep placement logs and verify pile capacities. All logs and reports shall be certified by the soils engineer and copies provided to the architect and structural engineer.	
Extend helical piles and anchors into bottom of caps, grade beams, as shown in typical details. Provide manufacturers standard pile head suitable to transfer reactions. Notify EOR immediately if dimensions vary from size indicated.	
Basis of Design Product: Pile spacing and anchorage based on the following: Manufacturer:    A.B. Chance Shaft:              SS-200 Bolts and Welds    Match capacity of shaft and cap	
All bolted connections field modified to field welded connections: See specifications for requirements.	

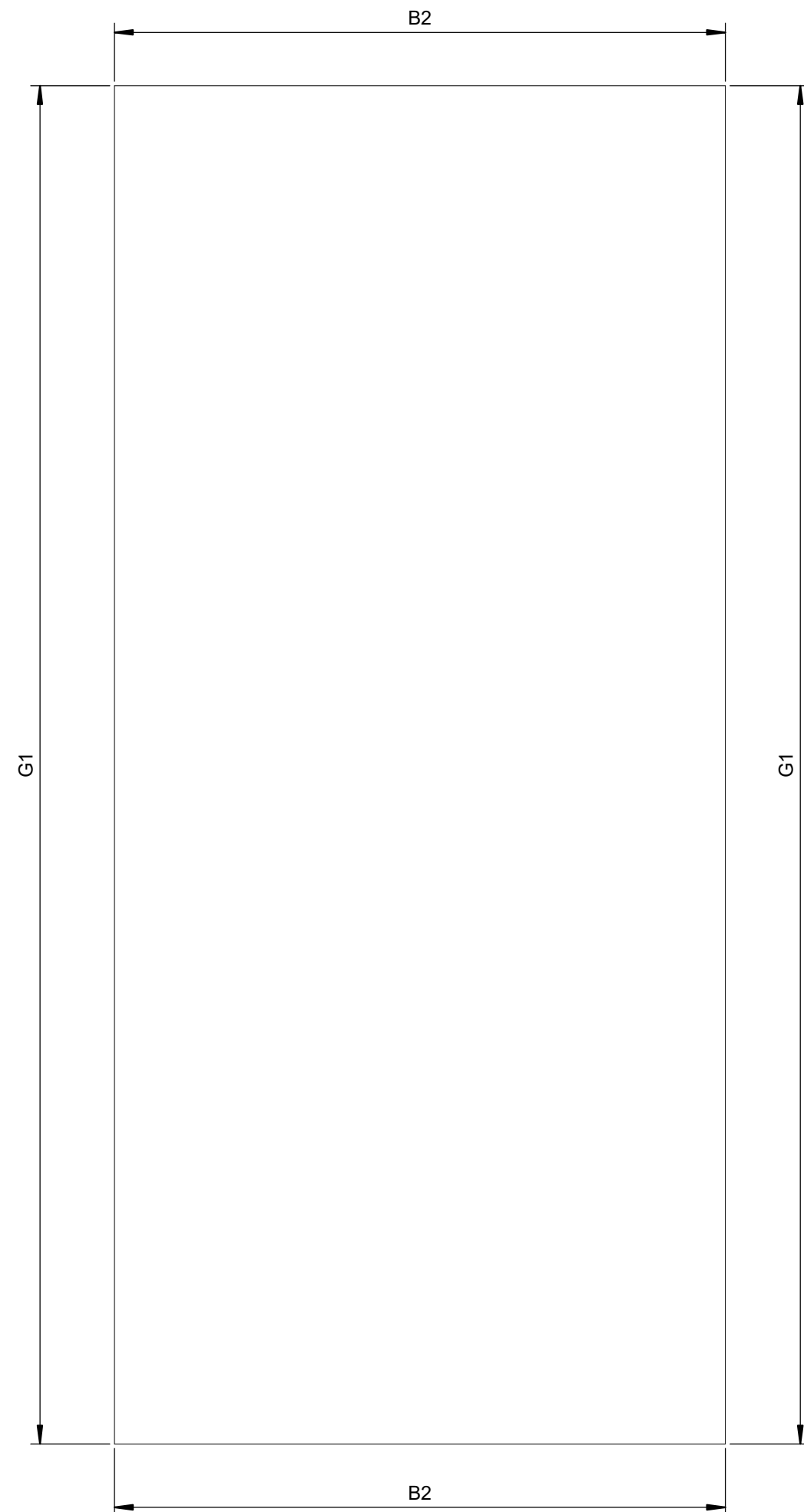
ABBREVIATIONS LIST			
AR	ANCHOR RODS	O/O	OUT TO OUT
ABV	ABOVE	OA	OVERALL
ACI	AMERICAN CONCRETE INSTITUTE	OC	ON CENTER
ADDL	ADDITIONAL	OD	OUTSIDE DIAMETER
ADH	ADHESIVE	OF	OUTSIDE FACE
ADJ	ADJACENT	OH	OVER HEAD
AESS	ARCHITECTUALLY EXPOSED	OPNG	OPENING
AF	STRUCTURAL STEEL	OPP	OPPOSITE
AGGR	AGGREGATE	OPND	OPPOSITE HAND
AHU	AIR HANDLING UNIT	OSL	OUTSTANDING LEG
OVS	AMERICAN INSTITUTE OF	OVS	OVERSIZE HOLE
AISI	STEEL CONSTRUCTION	PAF	POWDER ACTUATED FASTENER
ALUM	AMERICAN IRON AND	PC	PRECAST
ALUM	STEEL INSTITUTE	PL	PLATE
ALT	ALUMINUM	PLF	POUNDS PER LINEAR FOOT
APPROX	ALTERNATE	PLYWD	PLYWOOD
ASMT	APPROXIMATE	PNL	PANEL
ARCHL	ARCHITECTURAL	PROJ	PROJECTION
ASTM	AMERICAN SOCIETY OF	PSF	POUNDS PER SQUARE FOOT
AWMS	AMERICAN WELDING SOCIETY	PSI	POUNDS PER SQUARE INCH
BAL	ANGLE	PSL	PARALLEL STRAM LUMBER
BOL	BALANCE	PTN	PARTITION
BND	BOND BEAM	R	RADIUS
B/B	BACK TO BACK	RO	ROOF DRAIN
CHORD	BEAM OR CHORD	REF	REFERENCE
BD	BOARD	REINF	REINFORCED (I) (ING) (MENT)
BLDG	BUILDING	REQD	REQUIRED
BLK	BLOCK	REV	REVISION/REVISED
BLW	BELOW	RO	ROUGH OPENING
BM	BEAM	R/RD	ROOF RELIEF DRAIN
BOTT	BOTTOM	RTN	RETURN
BP	BEARING PLATE	RTU	ROOF TOP UNIT
BRDG	BRIDGING	RW	RETAINING WALL
BRG	BEARING	SCHED	SCHEDULE
BRK	BRIK	SECT	SECTION
BS	BOTH SIDES	SHT	SHEET
BSMT	BASEMENT	SIM	SIMILAR
BTWN	BETWEEN	SJ	SAWCUT JOIST
C/C	BUILT UP COLUMN	SJL	STEEL JOIST INSTITUTE
CANT	CANTILEVER	SL	SLOPED
CAN	CAMBER	SPACE(S)	SPACES(S)
CFS	COLD FORMED STEEL	SPCS	SPECIFICATIONS
CF	CONTROL AND/OR	SQ	SQUARE
CL	CONSTRUCTION JOINT	SS	STAINLESS STEEL
CL	CENTERLINE	SSL	SHORT SLOTTED HOLES
CLR	CLEAR	STD	STANDARD
CMR	CONCRETE MASONRY UNIT	STIFF	STIFFENERS
COL	COLUMN	STL	STEEL
COORD	COORDINATE	STRUCT	STRUCTURAL
CP	COMPACTED	SYM	SYMMETRICAL
CONC	CONCRETE	T&B	TOP AND BOTTOM
CONN	CONNECTION	T&G	TONGUE AND GROOVE
CONST	CONTINUOUS	TE	THE BEAM
CONTR	CONTRACTOR	TC	TOP CHORD
CTR	CENTER	TCX	TOP CHORD EXTENSION
CTRD	CENTERED	TEMP	TEMPERATURE
DIA	DIAMETER	TF	TRENCH FOOTING
DIA	DIAGONAL	THK	THICK
DIM	DIMENSION	THKS	THICKENED SLAB
DL	DEAD LOAD	THRD	THREADED
DLT	DEEP LEG TRACK	TL	TOTAL LOAD
DOT	DITTO	TOPG	TOPPING
DOWN	DOWN	TRANS	TRANSVERSE
DTL	DETAIL	TPY	TYPICAL
DWG	DRAWING	UND	UNLESS NOTED OTHERWISE
DWL	DOWEL	VF	VERIFY IN FIELD
E	EACH	W	WITH
EE	EACH END	WD	WOOD
EF	EACH FACE	WO	WINDOW OPENING (MASONRY)
EF	EXPANSION JOINT	WP	WORKING POINT
ENG	ENGINEER	WT	WEIGHT
ELEV	ELEVATION	WWF	WELDED WIRE FABRIC
ELECT	ELECTRICAL		
EOD	EDGE OF DECK	ELEVATION TOP AND BOTTOM OF LIST	
EOS	EDGE OF SLAB	T/	"ELEVATION TOP OF"
EQUIV	EQUIVALENT	B/	"ELEVATION BOTTOM OF"
EW	EACH WAY	JBRG	JOIST BEARING ELEVATION
EXIST	EXISTING	T/B	TOP OF BOND BEAM
EXP	EXPANSION	T/BM	TOP OF BEAM
EXT	EXTERIOR	T/CONC	TOP OF CONCRETE
FDN	FOUNDATION	T/F	TOP OF FOOTING
FIN	FINISH	T/LDG	TOP OF LEDGE
FLG	FLOOR	T/MAS	TOP OF MASONRY
FTG	FORSIDE	T/P	TOP OF PIER
GA	GAUGE	T/SLAB	TOP OF SLAB
GALV	GALVANIZED	T/STL	TOP OF STEEL
GB	GRADE BEAM	T/W	TOP OF WALL
GC	GENERAL CONTRACTOR	T/GB	TOP OF GRADE BEAM
GL	GLULAM	T/CAIS	TOP OF CAISSON
GR	GRADE	B/P	BOTTOM OF PLATE
HC	HOLLOW CORE	B/F	BOTTOM OF FOOTING
H	HOLD DOWN		
HGT	HEIGHT	SPECIAL CHARACTERS	
HI	HIGH	°	DEGREE
HK	HOOK	±	PLUS OR MINUS
HORIZ	HORIZONTAL	±	ELEVATION
HP	HIGH POINT	Ø	DIAMETER
H/S	HEADED STUD		
H	HOLLOW STRUCTURAL SECTION		
I	INSIDE DIAMETER		
I	INSIDE FACE		
INFO	INFORMATION		
INT	INTERIOR		
INV	INVERT		
JST	JOIST		
J	JOINT		
K	KIP		
K	KNOCK OUT		
L	LONG		
LDG	LEDGE		
LL	LIVE LOAD		
LLH	LONG LEG HORIZONTAL		
LLV	LONG LEG VERTICAL		
L	LINTEL		
LSL	LONG SLOTTED HOLES		
LONG	LONGITUDINAL		
LP	LOW POINT		
LVL	LAMINATED VENEER LUMBER		
M	MASONRY		
MATL	MATERIAL		
MAX	MAXIMUM		
MBM	METAL BUILDING MFR		
MCJ	MASONRY CONTROL JT		
MECH	MECHANICAL		
MEZ	MEZZANINE		
MFR	MANUFACTURER		
MIN	MINIMUM		
MISC	MISCELLANEOUS		
MO	MASONRY OPENING		
MOM	MOMENT		
MOM	MASONRY SHEAR WALL		
MSL	MEAN SEA LEVEL		
MTL	METAL		
NO	NUMBER		
N	NEAR SIDE		
NTS	NOT TO SCALE		





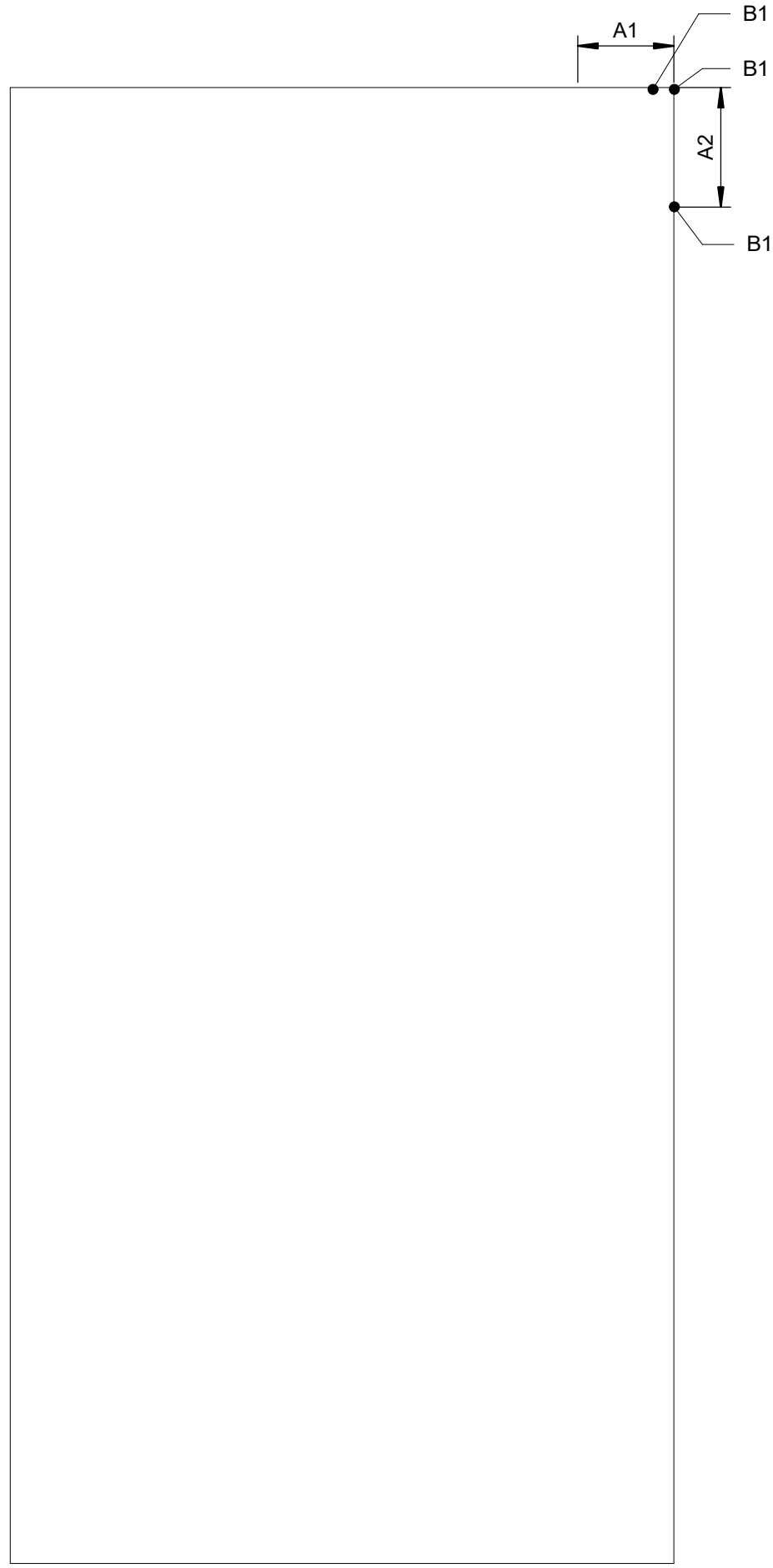
PRECAST LOAD MAP - STEEL BEARING 2

SCALE: 1" = 30'-0"



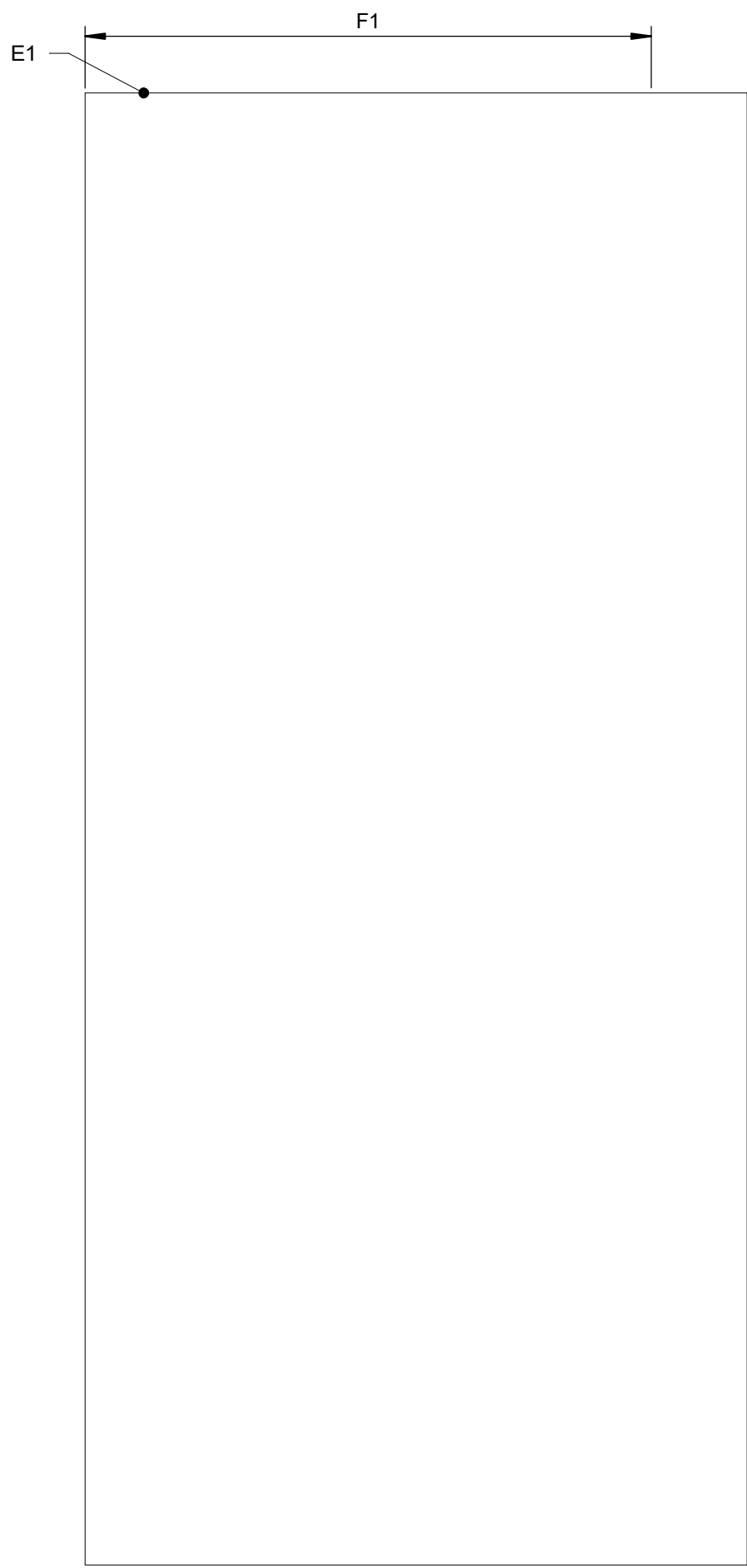
PRECAST LOAD MAP - STEEL BEARING 4

SCALE: 1" = 30'-0"



PRECAST LOAD MAP - STEEL BEARING 1

SCALE: 1" = 30'-0"



PRECAST LOAD MAP - STEEL BEARING 3

SCALE: 1" = 30'-0"

NOTE:  
TRUSSES TO BRACE PRECAST PANELS.  
SEE 1/S200 FOR DETAIL.

PRECAST POINT LOADS								
Loading Tag	Vertical Loads (kips)			Out-Of-Plane Loads (kips)		In-Plane Loads (kips)		Typical Detail Reference
	D	S	W	E	W	E	W	
A1	1	3	+/- 2	+/- -	+/- -	+/- -	+/- -	SEE 3/S530
B1	3	8	+/- 2	+/- -	+/- -	+/- -	+/- -	SEE 3/S530
C1	6	11	+/- 8	+/- -	+/- -	+/- -	+/- -	SEE 1/S530
D1	6	8	+/- 2	+/- -	+/- -	+/- -	+/- -	SEE 3/S530
E1	2	3	+/- 3	+/- -	+/- -	+/- -	+/- -	SEE 3/S530
F1	1	4	+/- 2	+/- -	+/- -	+/- -	+/- -	SEE 1/S530
G1	16	13	+/- 24	+/- 5	+/- 3	+/- 3	+/- 1	SEE 5/S542 SEE 6/S542

PRECAST LINE LOADS								
Loading Tag	Vertical Loads (plf)			Out-Of-Plane Loads (klf)		In-Plane Loads (klf)		Typical Detail Reference
	D	S	W	E	W	E	W	
A2	23	213	+/- 66	+/- -	+/- -	+/- -	+/- -	SEE 2/S530
B2	90	99	+/- 189	+/- 2	+/- 1	+/- 1	+/- 1	SEE 2/S530

- LOADING NOTES:
- ALL LOADING INDICATED IN TABLES IS BY LOAD CASE.
  - POSITIVE VERTICAL LOAD IS DOWNWARD, NEGATIVE (-) VERTICAL LOAD IS UPWARD.
  - +/- INDICATES LOAD CAN BE APPLIED IN EITHER DIRECTION.
  - ALL WIND LOADING IS MWFRS LOADING. PRECASTER TO DESIGN FOR C&C LOADING PER ASCE 7.
  - LIVE LOAD NOT INCLUDED AS SNOW LOAD ACTS AS THE CONTROLLING LOADCASE.

PERRY TOWNSHIP SCHOOLS

SOUTHPORT HIGH SCHOOL ADDITION AND RENOVATION

971 EAST BANTA ROAD, INDIANAPOLIS, IN 46227



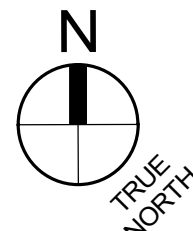
Erica Kay Barlow

REVISIONS:	#	Date	Desc:
	1	02/08/2026	Addendum #02

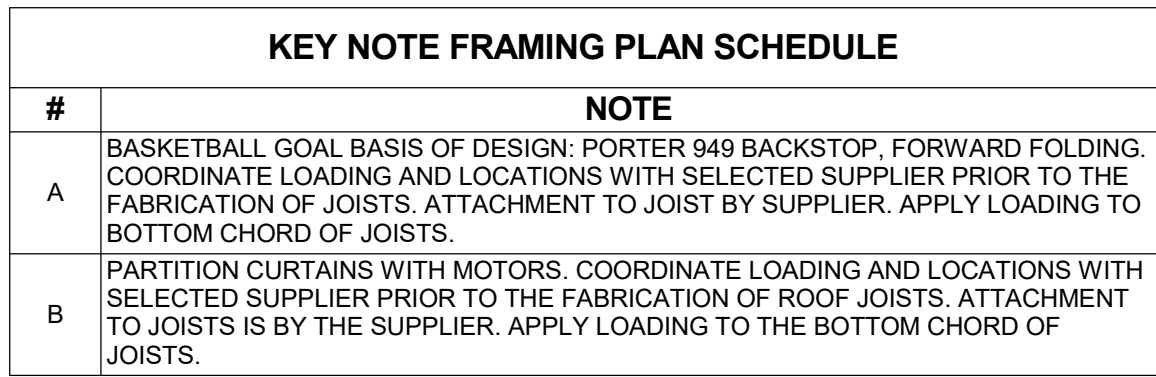
100% CONSTRUCTION DOCUMENTS

PROJECT: #241735  
DATE: 01/08/2026  
DRAWN BY: DWM/GMM

LOAD MAPS

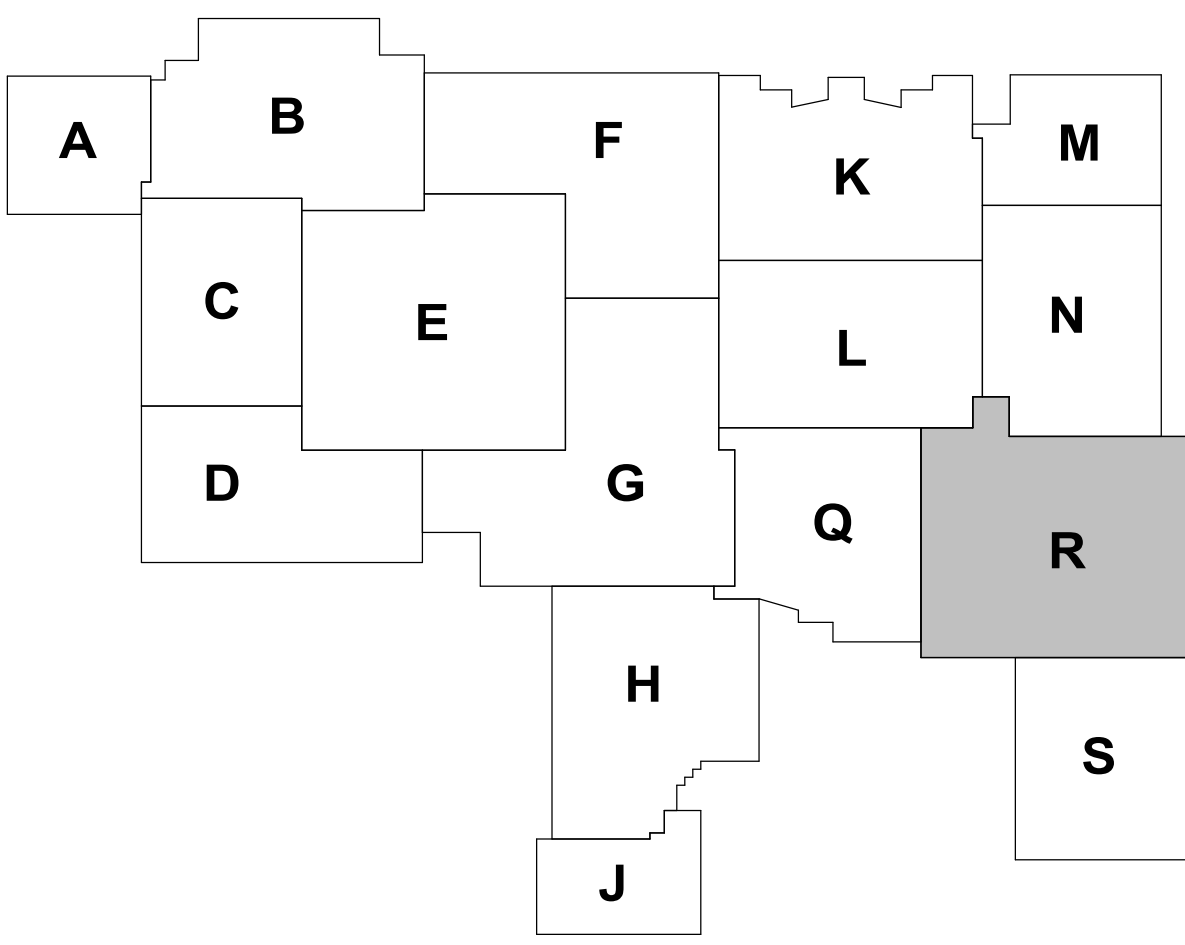


S011



**FRAMING PLAN NOTES:**

1. REFERENCED ELEVATIONS ARE FROM "UNIT H, FIRST FLOOR (0'-0"). SEE CIVIL DRAWINGS.
2. TYPICAL FIRST FLOOR ELEV "3'-10 3/16" (UNIT G/1R FIRST FLOOR).
3. ALL DIMENSIONS ARE TO FACE UNLESS NOTED OTHERWISE. CONTRACTOR SHALL VERIFY ALL DIMENSIONS PRIOR TO CONSTRUCTION AND NOTIFY ARCHITECT/ENGINEER OF ANY DISCREPANCIES IMMEDIATELY.
4. ALL DECK AND SLAB OPENINGS - EXACT SIZE AND LOCATION, WITH MECHANICAL AND PLUMBING CONTRACTOR DRAWINGS AND EQUIPMENT SUPPLIER.
5. VERIFY EQUIPMENT SIZE, WEIGHT, AND LOCATION WITH MECHANICAL CONTRACTOR.
6. ALL BEARING JOISTS SHALL HAVE A MINIMUM OF 10'-0" SPACING.
7. GC TO COORDINATE BOTTOM BEARING JOISTS WITH PRECASTER.

LANCER ASSOCIATES  
ARCHITECTURE

145 NORTH EAST STREET  
INDIANAPOLIS, IN 46204



PERRY TOWNSHIP SCHOOLS  
SOUTHPORT HIGH SCHOOL ADDITION AND  
RENOVATION  
971 EAST BANTA ROAD, INDIANAPOLIS, IN 46227



Jerica Kay Barlow

#	Date	Desc.
2	02/06/2026	Addendum #02

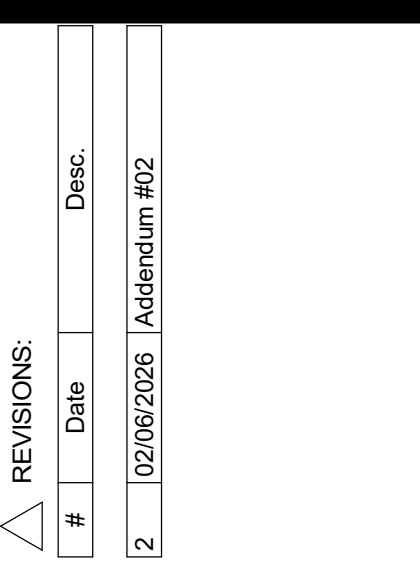
**100% CONSTRUCTION  
DOCUMENTS**

PROJECT: #24173S  
DATE: 01/06/2026  
DRAWN BY: DWM/CMM

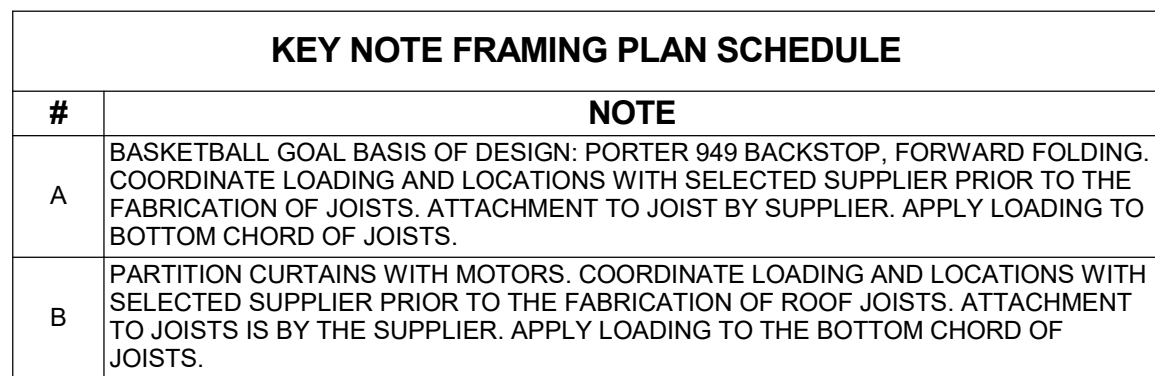
## UNIT R ROOF FRAMING PLAN

S114R

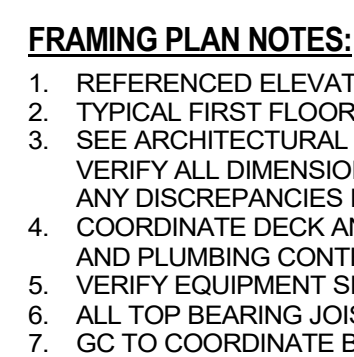




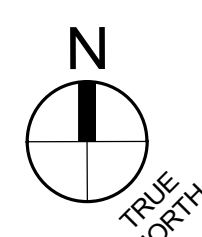
S114S



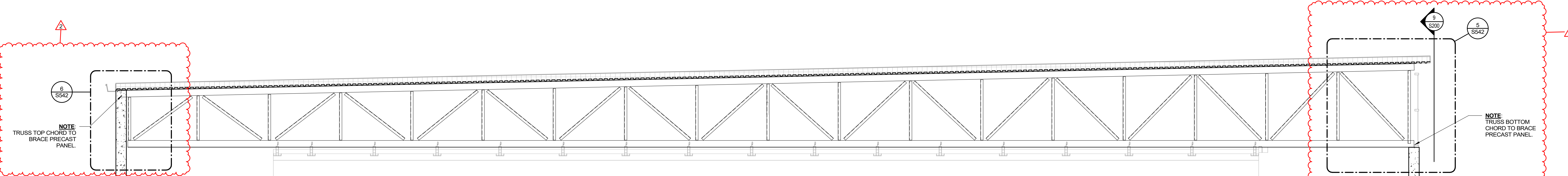
SCALE: 1/8" = 1'-0"



- FRAMING PLAN NOTES:**
1. REFERENCED ELEVATIONS ARE FROM "UNIT H, FIRST FLOOR (0'-0") SEE CIVIL DRAWINGS.
  2. TYPICAL FIRST FLOOR ELEV +3'-10 1/8" (1" QIRIS FIRST FLOOR).
  3. ALL ARCHITECTURAL DRAWINGS SHALL HAVE ALL DIMENSIONS NOT SHOWN CONTRACTOR SHALL VERIFY ALL DIMENSIONS PRIOR TO CONSTRUCTION AND NOTIFY ARCHITECT/ENGINEER OF ANY DISCREPANCIES IMMEDIATELY.
  4. COORDINATE DECK AND SLAB OPENINGS - EXACT SIZE AND LOCATION, WITH MECHANICAL AND PLUMBING CONTRACTOR DRAWINGS AND EQUIPMENT SUPPLIER.
  5. ALL EQUIPMENT, WEIGHT, AND LOCATION WITH MECHANICAL CONTRACTOR.
  6. ALL TOP BEARING JOISTS SHALL HAVE A MINIMUM JOIST SEAT OF 5".
  7. GC TO COORDINATE BOTTOM BEARING JOISTS WITH PRECASTER.





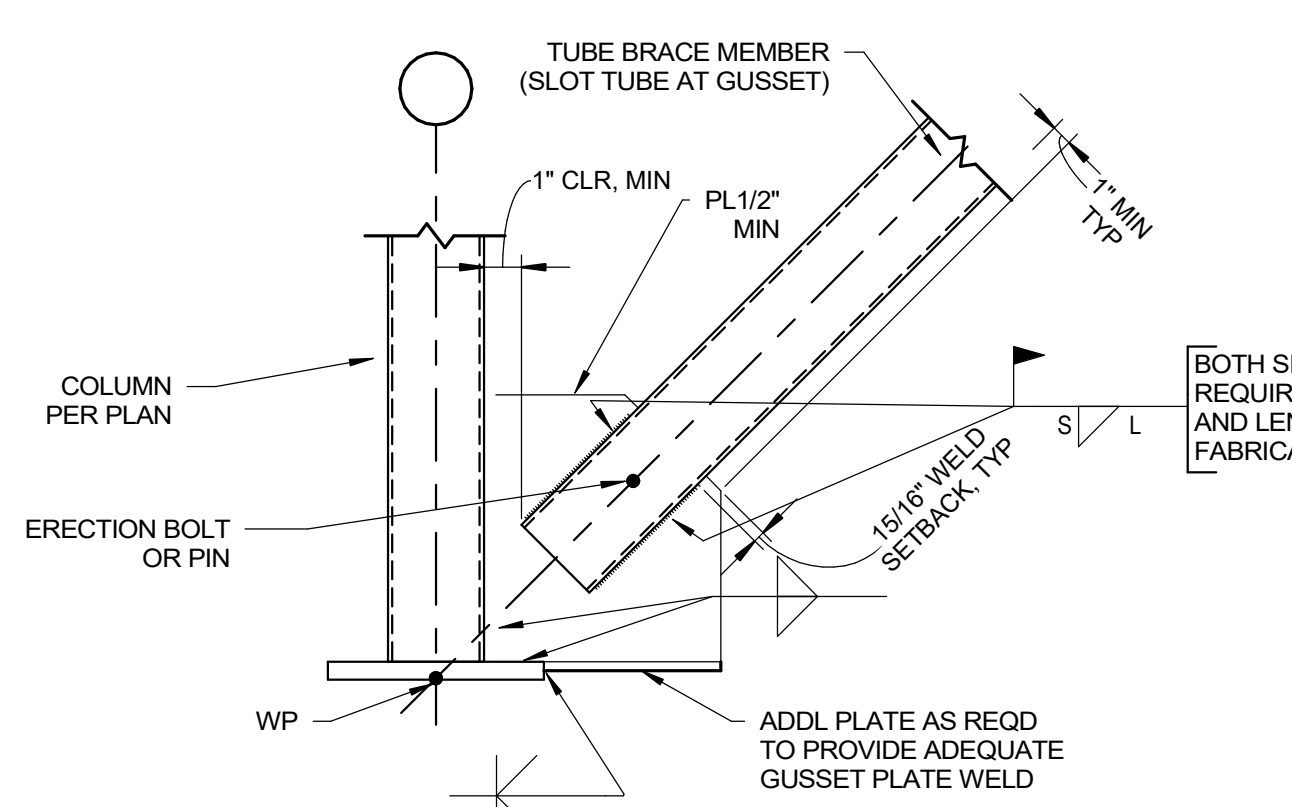


ELEVATION - FIELD HOUSE DLH  
JOIST

1  
S200

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

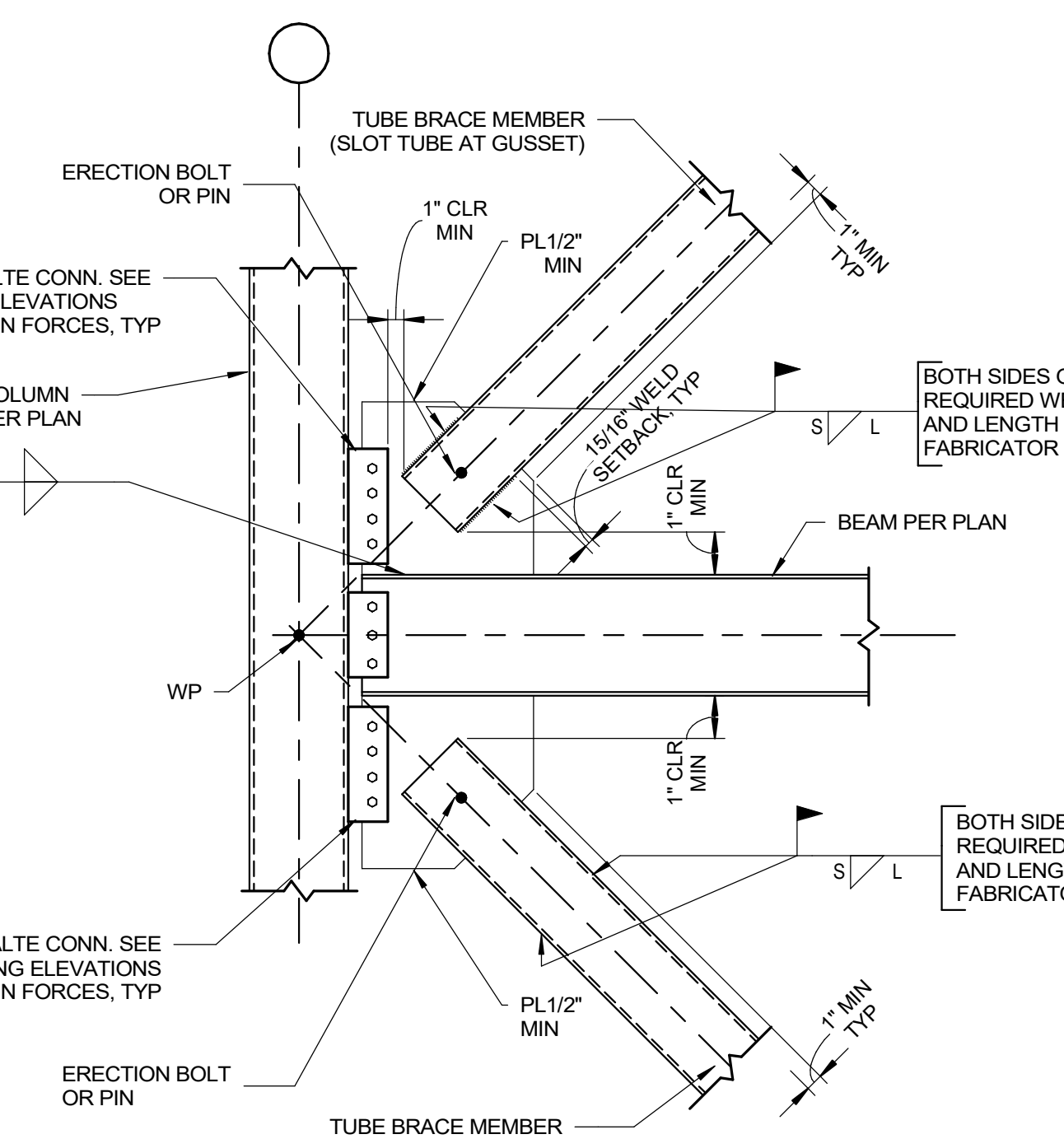
ELEVATION NOTES:  
1. REFERENCED ELEVATIONS ± ARE FROM "UNIT H, FIRST FLOOR (55.05)". SEE CIVIL DRAWINGS.  
2. SEE ARCHITECTURAL DRAWINGS FOR ALL DIMENSIONS NOT SHOWN. CONTRACTOR SHALL VERIFY ALL DIMENSIONS PRIOR TO CONSTRUCTION AND NOTIFY ARCHITECT/ENGINEER OF ANY DISCREPANCIES IMMEDIATELY.



COLUMN BASE BRACE DETAIL  
(GUSSET TO FLANGE CONNECTION)

5  
S200

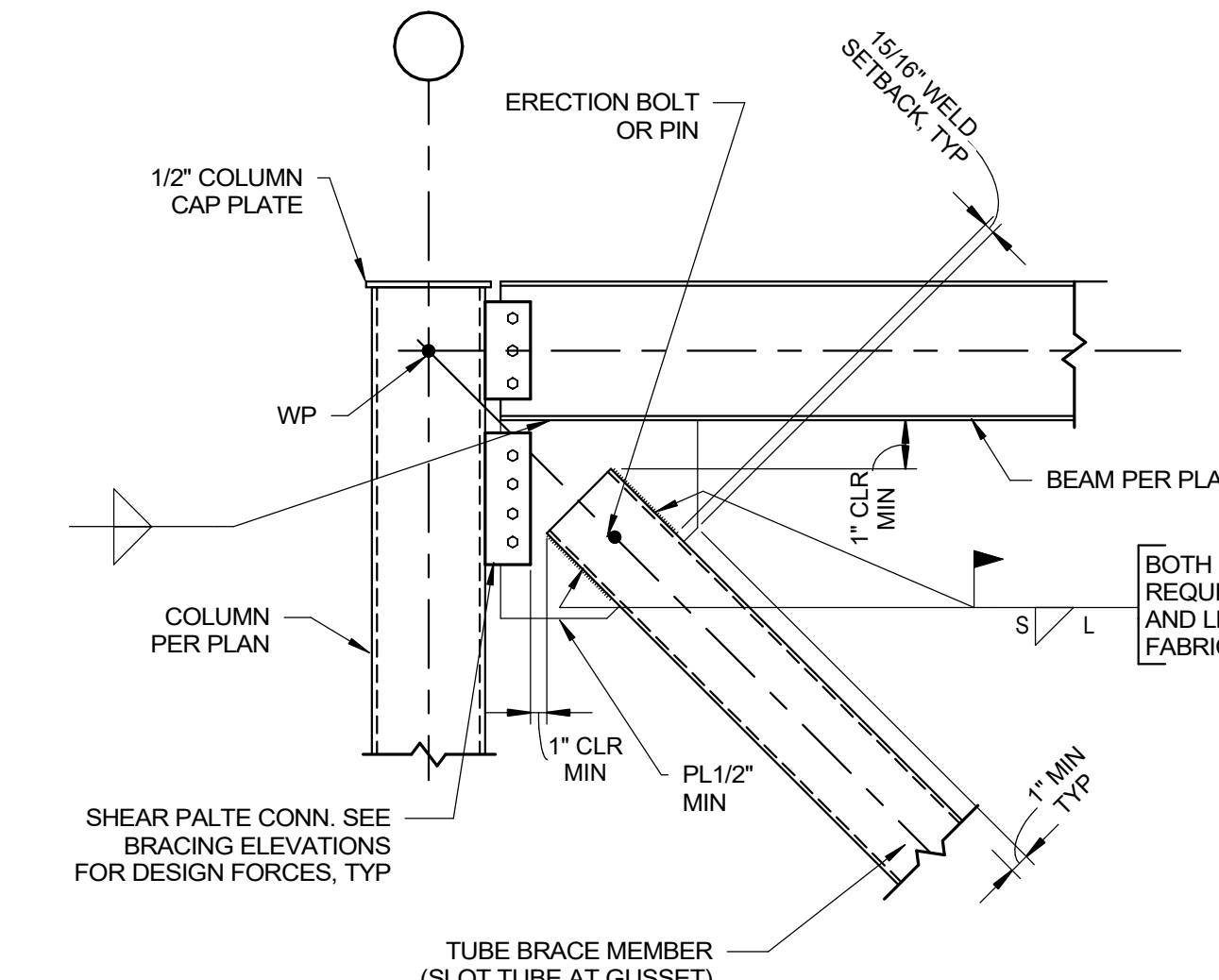
SCALE: 3/4" = 1'-0"



MID-HEIGHT COLUMN BRACE HIGH  
DETAIL  
(GUSSET TO HSS TUBE WALL CONN)

7  
S200

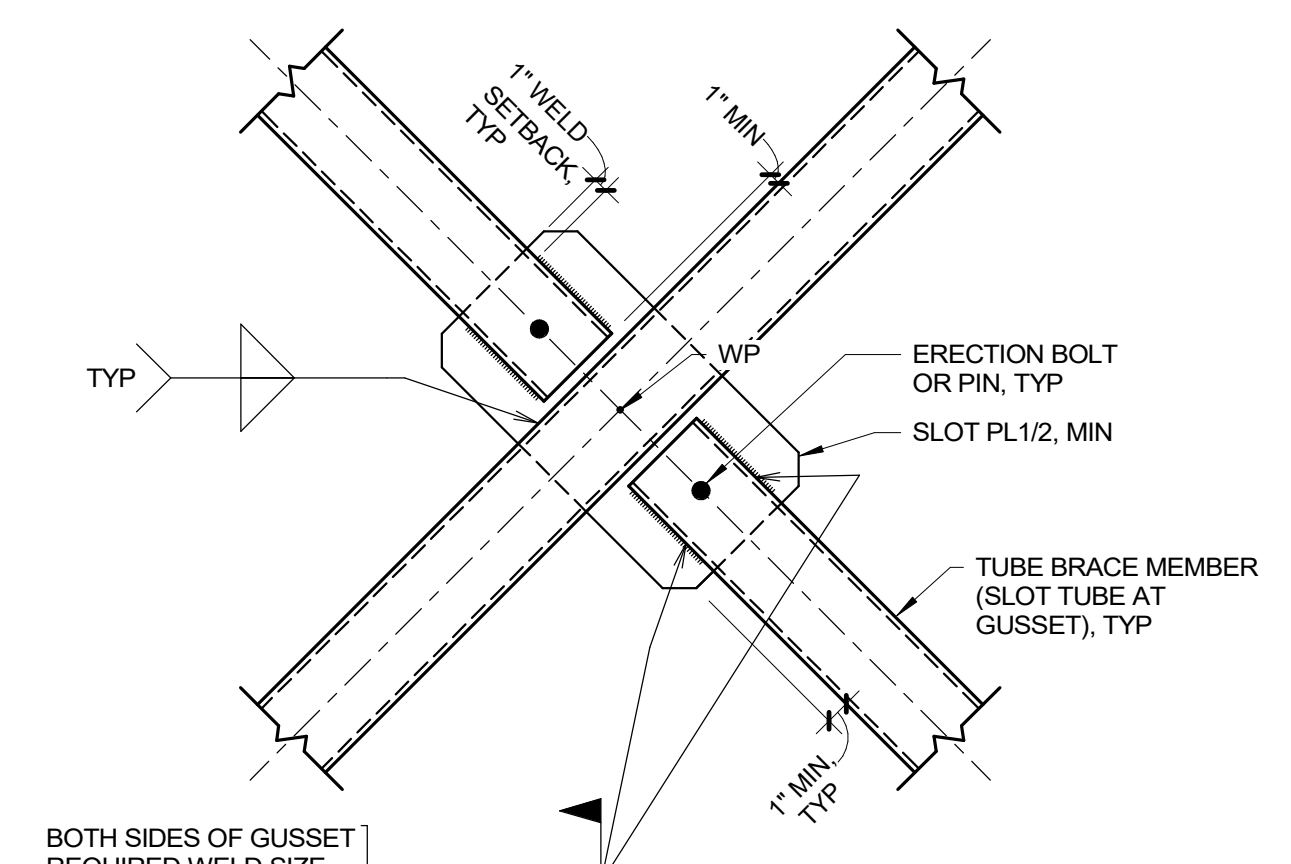
SCALE: 3/4" = 1'-0"



TOP OF COLUMN BRACE DETAIL  
(GUSSET TO HSS TUBE WALL CONN)

4  
S200

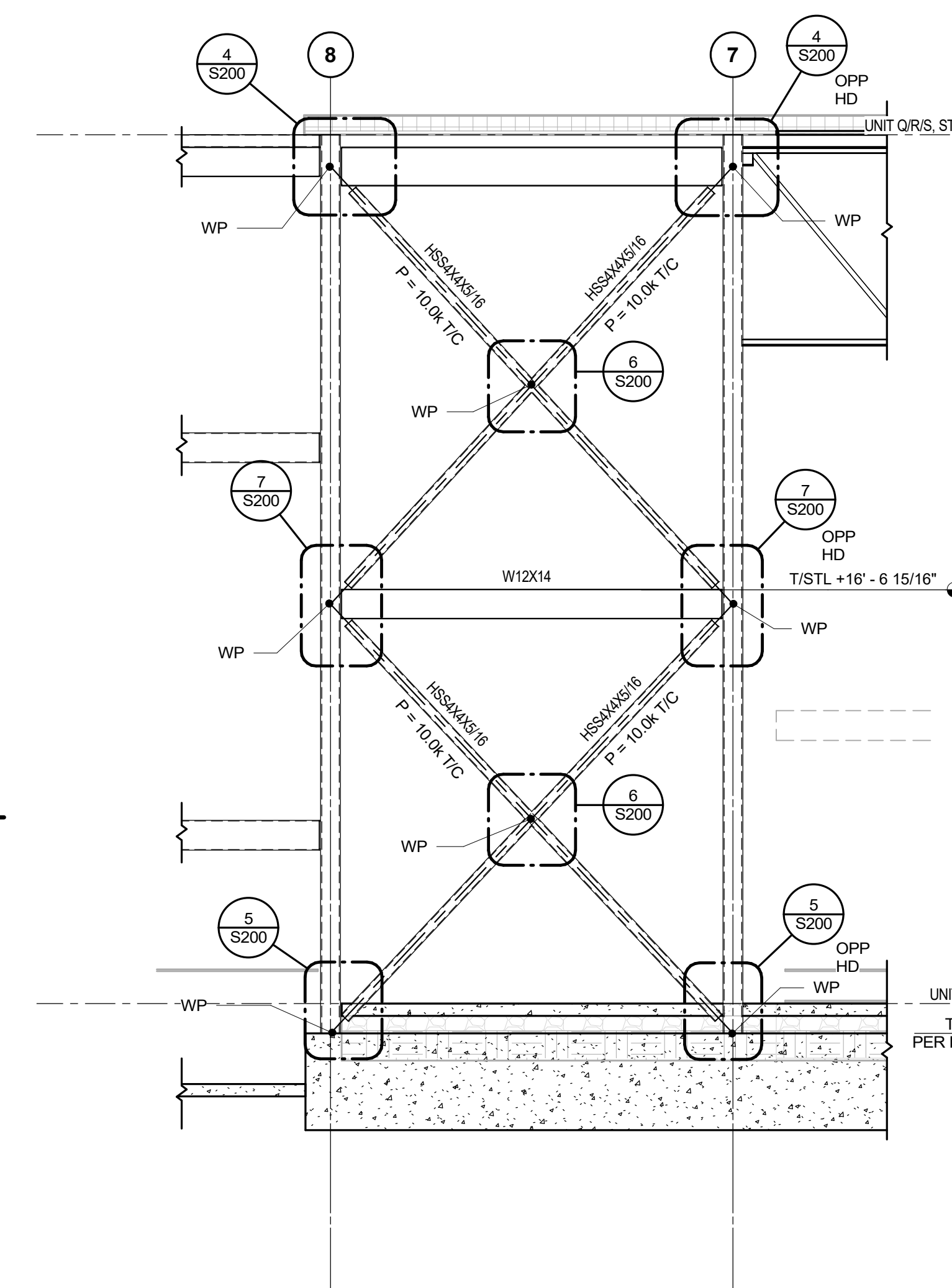
SCALE: 3/4" = 1'-0"



BRACE AT INTERMEDIATE  
CONNECTION

6  
S200

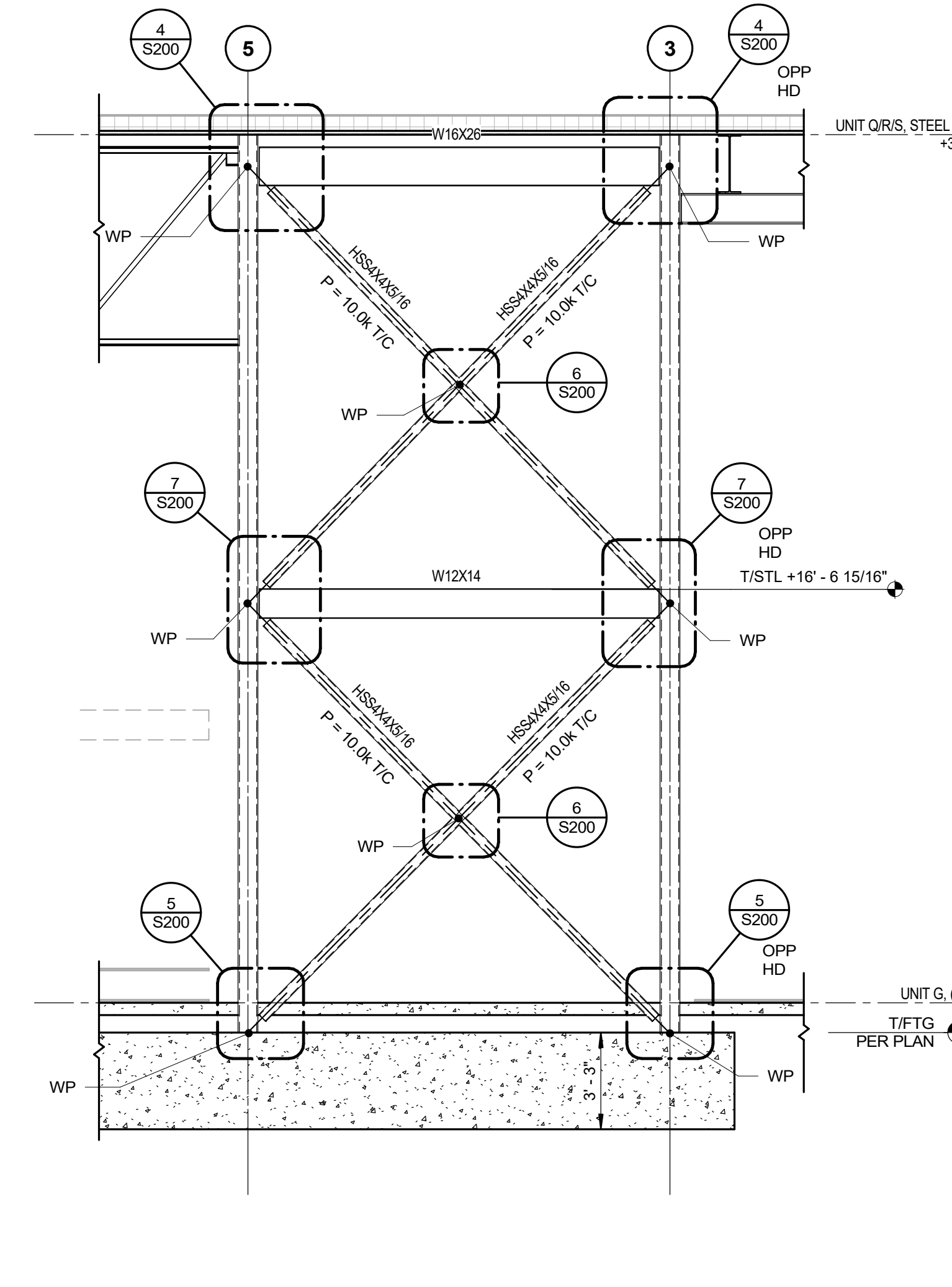
SCALE: 3/4" = 1'-0"



SOUTHWEST BRACE FRAME

3  
S200

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



NORTHWEST BRACE FRAME

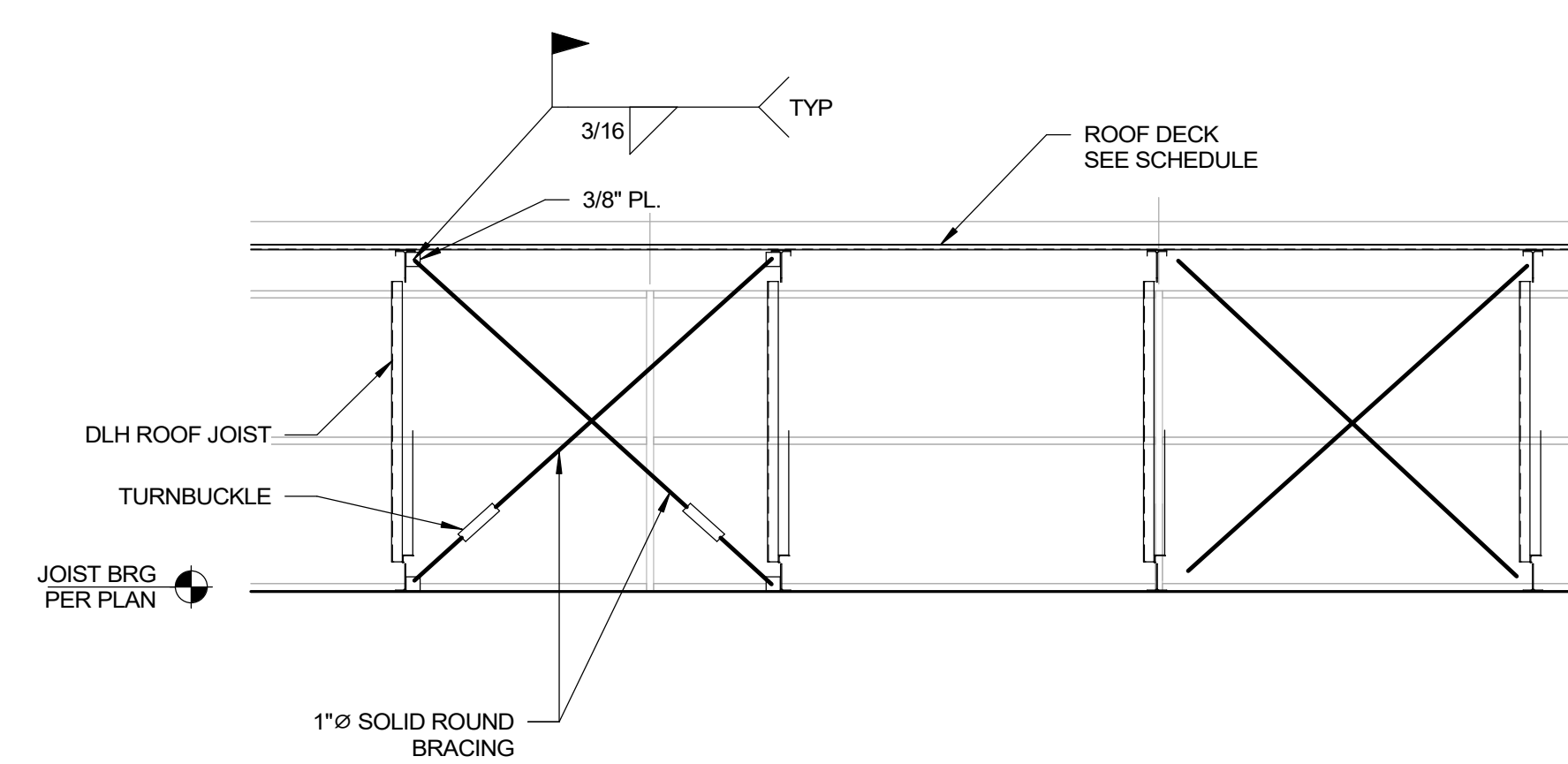
2  
S200

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

BRACING GENERAL NOTES

- FORCES SHOWN ARE THE MORE CRITICAL OF ALL APPLICABLE BUILDING CODE ASD LOAD COMBINATIONS.
- CONNECTIONS SHALL BE DESIGNED FOR BRACE FORCE INDICATED ON ELEVATION ACTING CONCURRENTLY WITH BEAM REACTION AND ANY INDICATED TRANSFER FORCES. ECCENTRICITY SHALL BE CONSIDERED IN DESIGN OF CONNECTION.
- EACH MEMBER'S CONNECTION SHALL BE SYMMETRIC ABOUT THE CENTER OF GRAVITY OF THAT MEMBER.
- ALL BOLTED CONNECTIONS SHALL HAVE FULLY TENSIONED HIGH STRENGTH BOLTS WITH CLASS A FAYING SURFACES.
- SLOT IN BRACE AT GUSSET NO LARGER THAN GUSSET THICKNESS + 1/16"
- ABBREVIATIONS:  
T = TENSION  
C = COMPRESSION

GENERAL:  
ALL BRACING CONNECTIONS SHALL BE DESIGNED BY THE STEEL FABRICATOR. UNO. BRACE DETAILS INDICATED ON THE STRUCTURAL DRAWINGS ARE PROVIDED TO SHOW CONNECTION CONCEPT ONLY AND ARE NOT TO BE CONSIDERED A FINAL DESIGN. FABRICATOR'S REGISTERED PROFESSIONAL ENGINEER SHALL DESIGN AND DETAIL ALL FINAL CONNECTIONS AS REQUIRED TO SAFELY TRANSFER THE DESIGN FORCES AND ALLOW FOR FIELD FIT-UP AND ERECTION TOLERANCES.

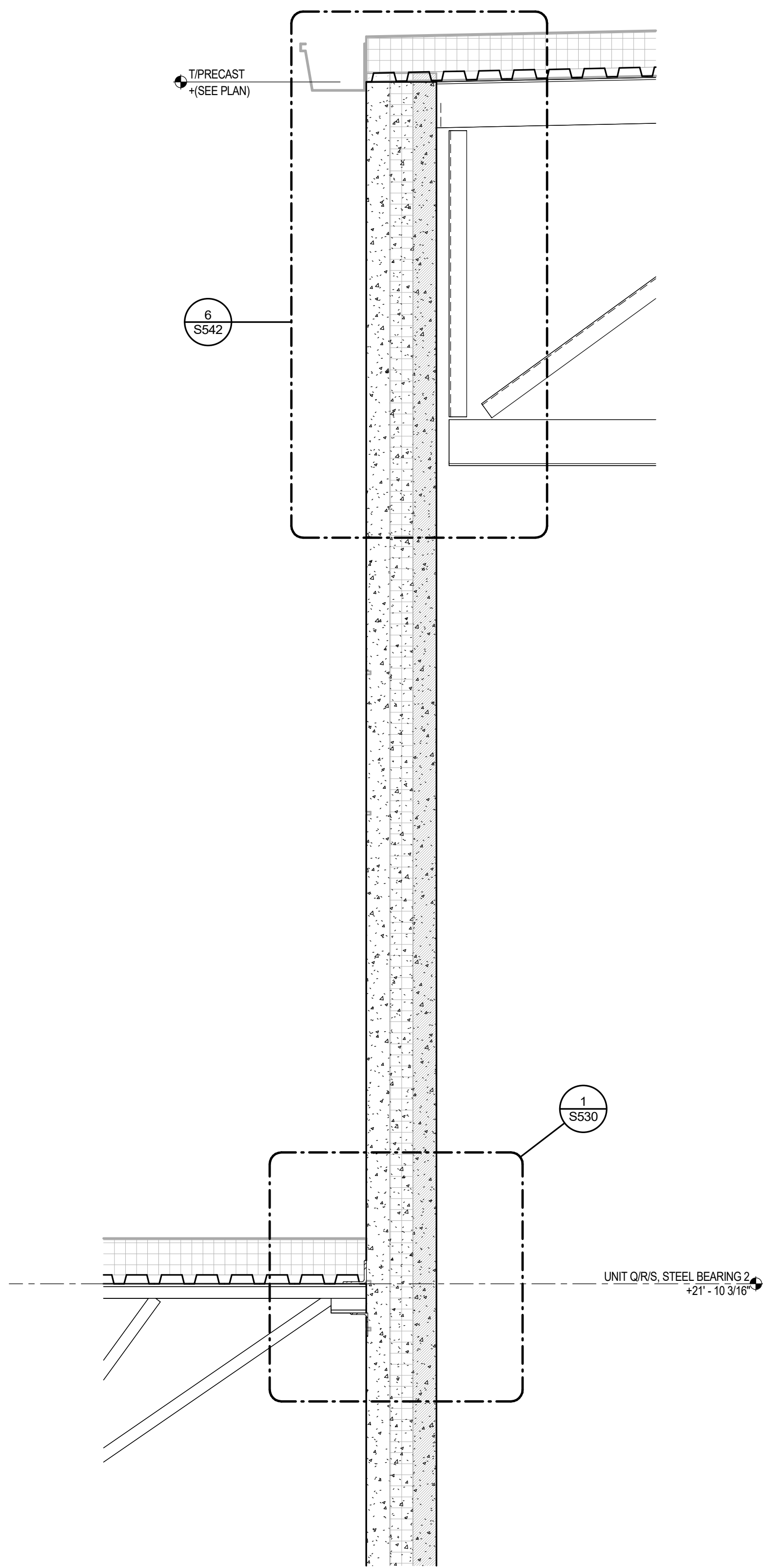


DLH BRACING AT HIGH END

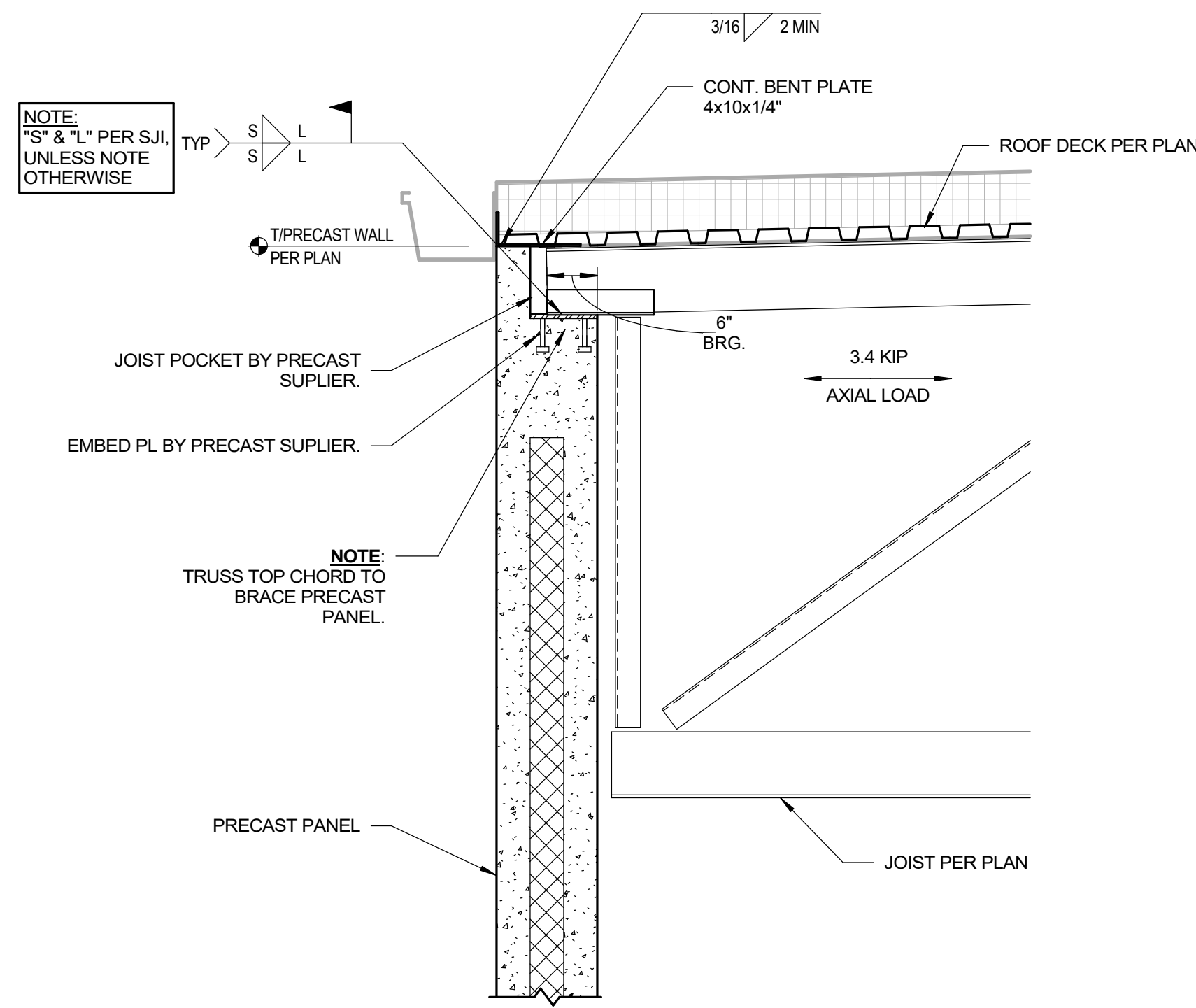
9  
S200

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

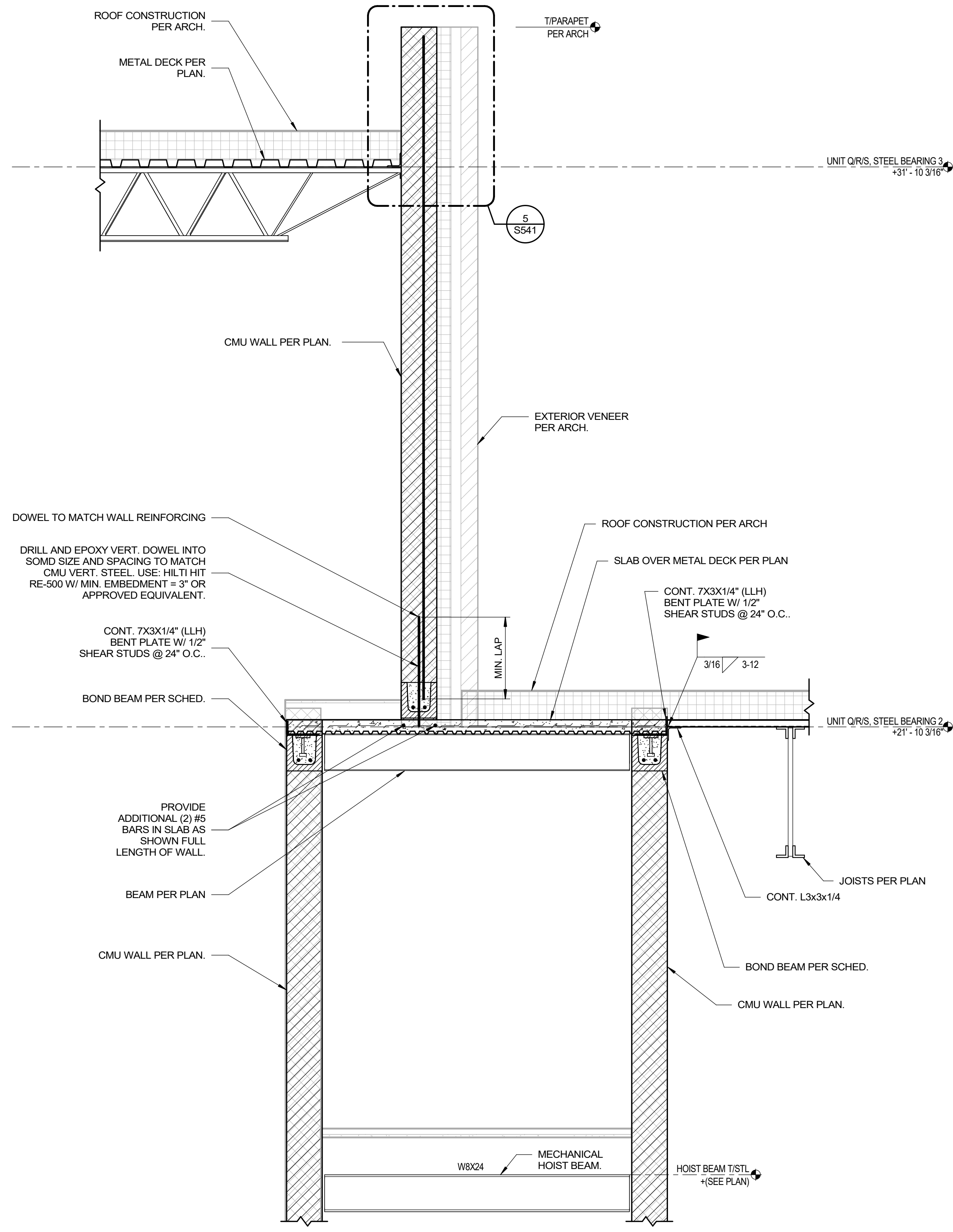




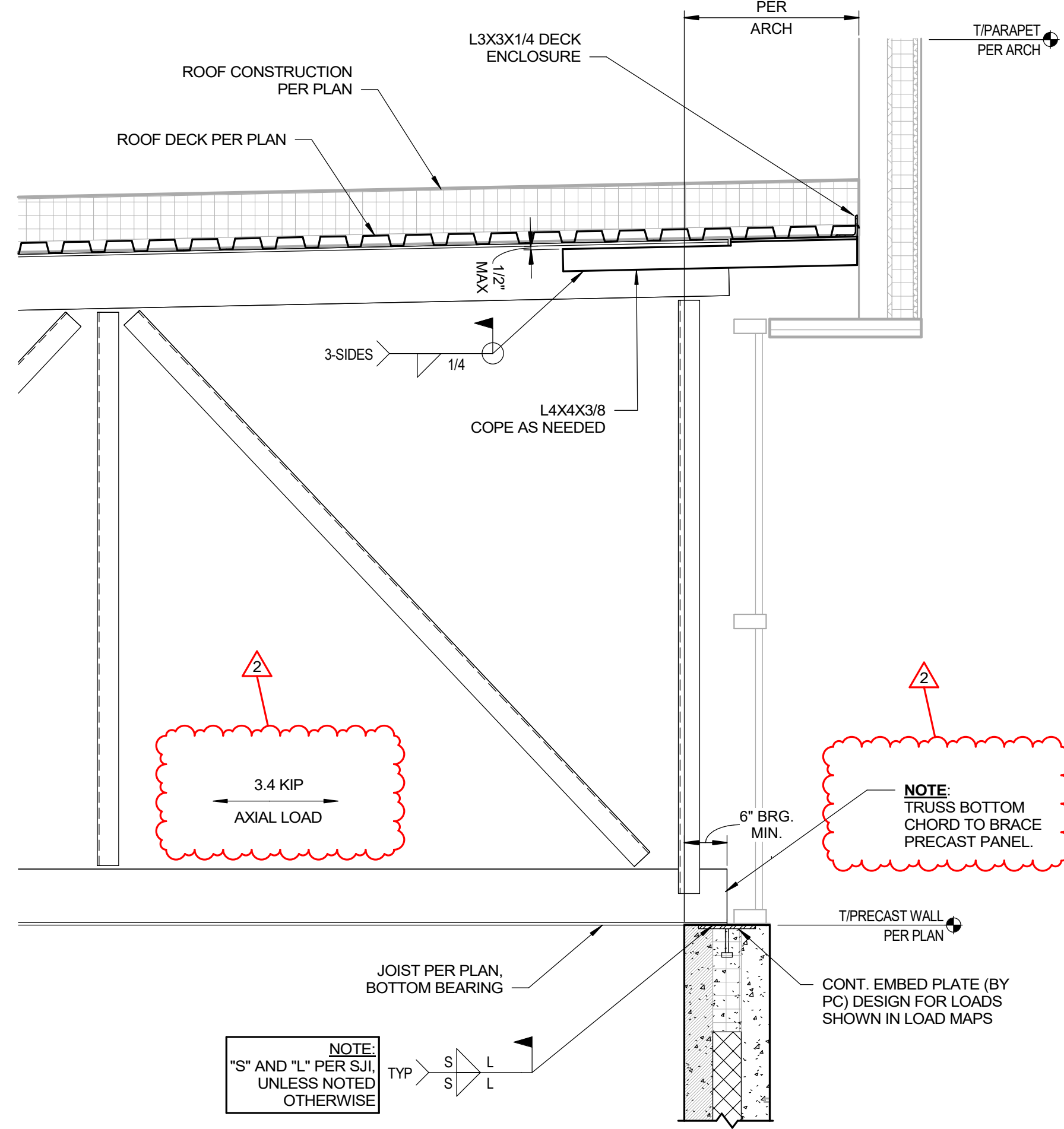
**3 FIELD HOUSE TO TIER 2 ROOF**  
SCALE: 3/4" = 1'-0"



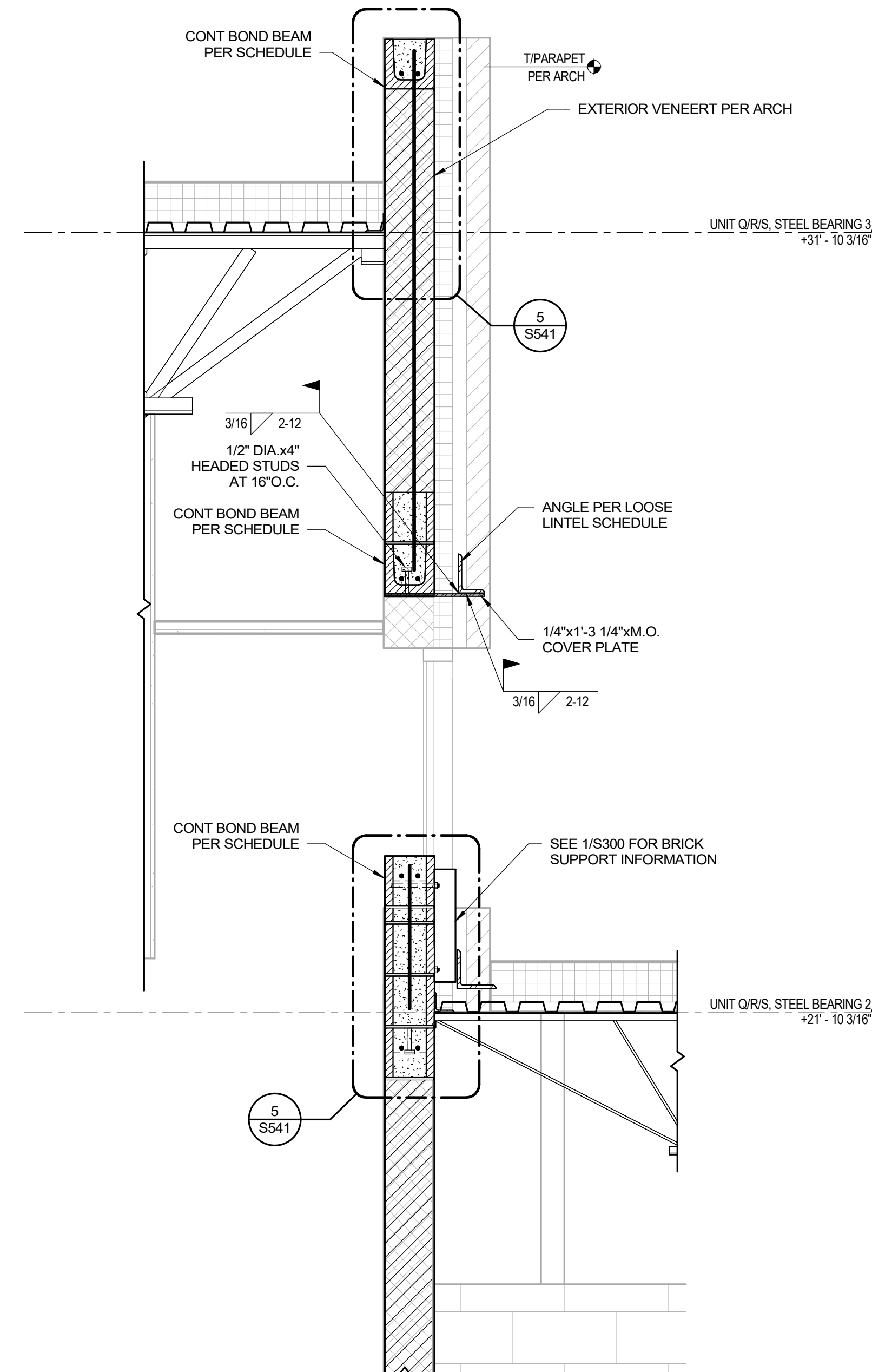
**6 FIELD HOUSE TRUSS WALL TOP BRG**  
SCALE: 3/4" = 1'-0"



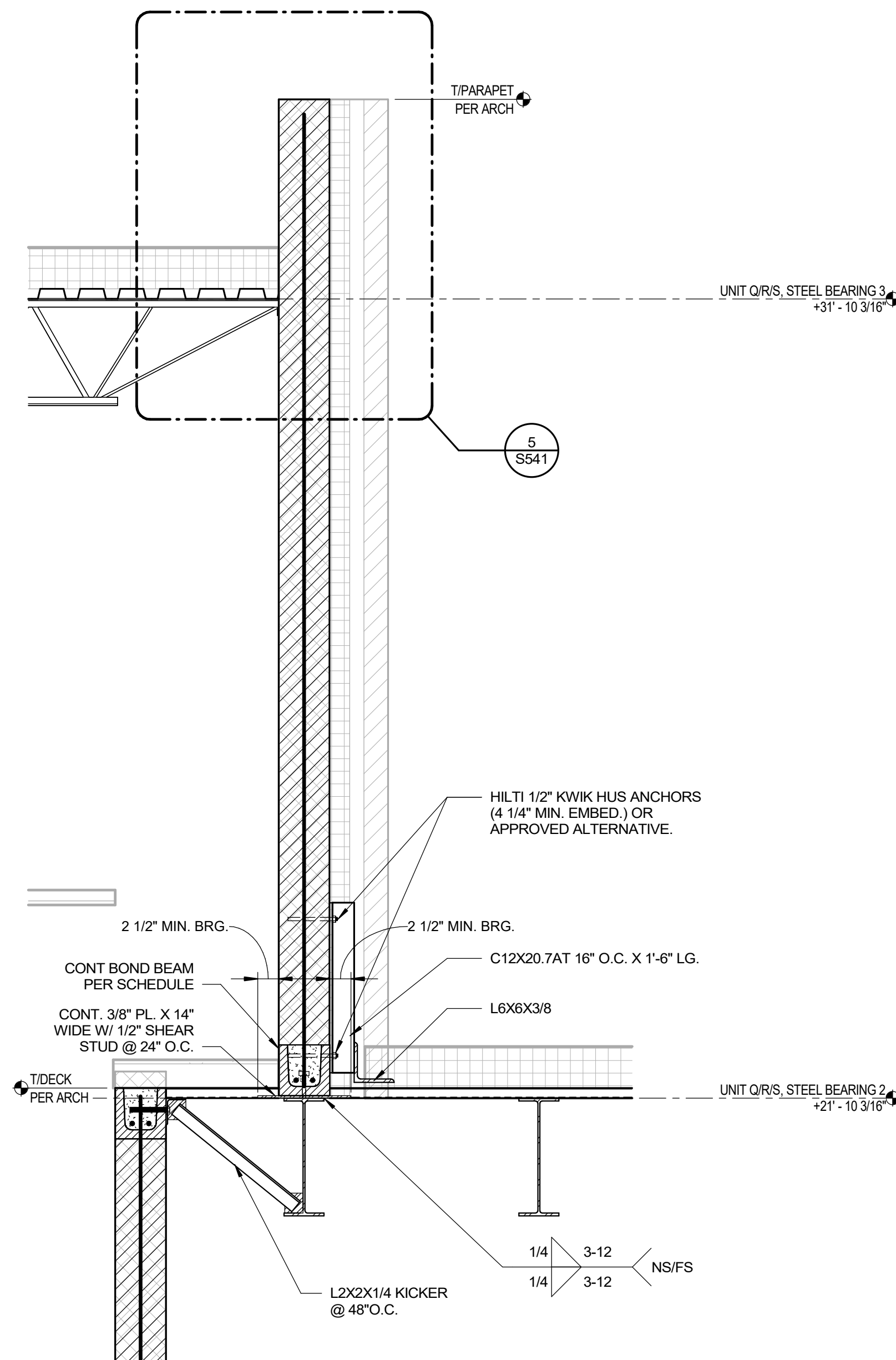
**2 CORRIDOR TIER 3 TO TIER 2 ROOF**  
SCALE: 3/4" = 1'-0"



**5 FIELD HOUSE TRUSS BEARING AT PARAPET**  
SCALE: 3/4" = 1'-0"



**1 AUD LOBBY TIER 3 TO TIER 2 ROOF**  
SCALE: 3/4" = 1'-0"



**4 CORRIDOR TIER 2 TO TIER 3 ROOF**  
SCALE: 3/4" = 1'-0"

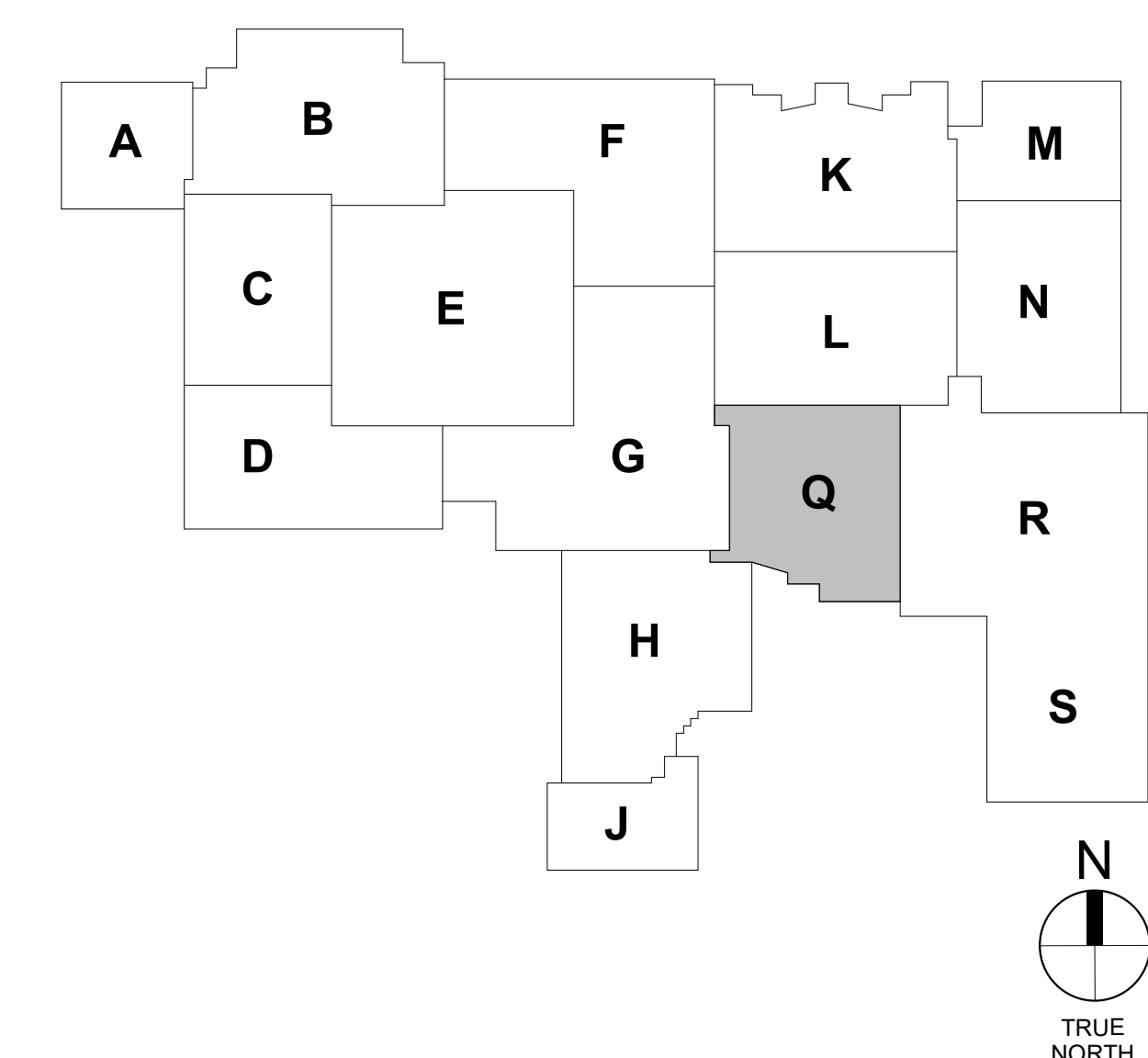




1. ALL INTERIOR CEILINGS AT 9'-4" UNLESS NOTED OTHERWISE.

- |  |   |
|--|---|
|  | 2x2 ACOUSTICAL CEILING TILE TYPE A (APC-A)                    |
|  | 2x2 ACOUSTICAL CEILING TILE TYPE B (APC-B)                    |
|  | 2x4 ACOUSTICAL CEILING TILE TYPE C (APC-C)                    |
|  | WOOD CEILING (WCP-1)  |
|  | GYPSUM BOARD CEILING  |
|  | METAL SOFFIT (MS-1)   |
|  | EXPOSED STRUCTURE, PAINT EXPOSED<br>STRUCTURE WHERE INDICATED |
|  | OUT OF SCOPE  |

- 1 TOP ROLL GYM DIVIDER CURTAIN
- 2 ROOF STRUCTURE MOUNTED FORWARD-FOLDING MOTORIZED BASKETBALL HOOP SYSTEM WITH HEIGHT ADJUSTER
- 3 ROOF STRUCTURE MOUNTED BATTING CAGES
- 4 ACOUSTICAL DECK, SEE STRUCTURAL SERIES DRAWINGS.
- 5 ROOF STRUCTURE MOUNTED WRESTLING MAT HOIST, 3 MAT CAPACITY.
- 6 WALL MOUNTED ELECTRONIC SCOREBOARD, 6'-0" W x 10'-0" H x 6" D. FONT SIZE: 14-18 POINTS
- 7 GYPSUM BULKHEAD
- 8 PROVIDE LID TO ROOM WITH 3/4" DECKING ON 6" COLD FORMED METAL FRAMING. PAINT DECKING.
- 9 LINE OF WALL ABOVE, SEE SECTION.
- 10 PAINT EXPOSED DECK, STRUCTURAL AND MECHANICAL ELEMENTS PT-3. REFER TO FINISH LEGEND.
- 11 CEILING APC-A, ABOVE NOTED CEILING, SEE SECTION
- 12 SUSPENDED WOOD SLAT CEILING PANELS, WCP-1. REFER TO FINISH LEGEND
- 13 PAINT EXPOSED DECK AND MECHANICAL ELEMENTS PT-1. PAINT EXPOSED STRUCTURE PT-2, REFER TO FINISH LEGEND.
- 14 PAINT EXPOSED DECK, STRUCTURAL AND MECHANICAL ELEMENTS PT-1. REFER TO FINISH LEGEND.



# PERRY TOWNSHIP SCHOOLS SOUTHPORT HIGH SCHOOL A RENOVATION

PERRY TOWNSHIP SCHOOLS  
SOUTHPORT HIGH SCHOOL ADDITION AND  
RENOVATION  
971 EAST BANTA ROAD, INDIANAPOLIS, IN 46227

LANCER ASSOCIATES  
ARCHITECTURE

145 NORTH EAST STREET  
INDIANAPOLIS, IN 46204



REVISIONS:

#

Date

Desc.

1	01/20/2026	Addendum #01
2	02/06/2026	Addendum #02

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PROJECT: #24173S

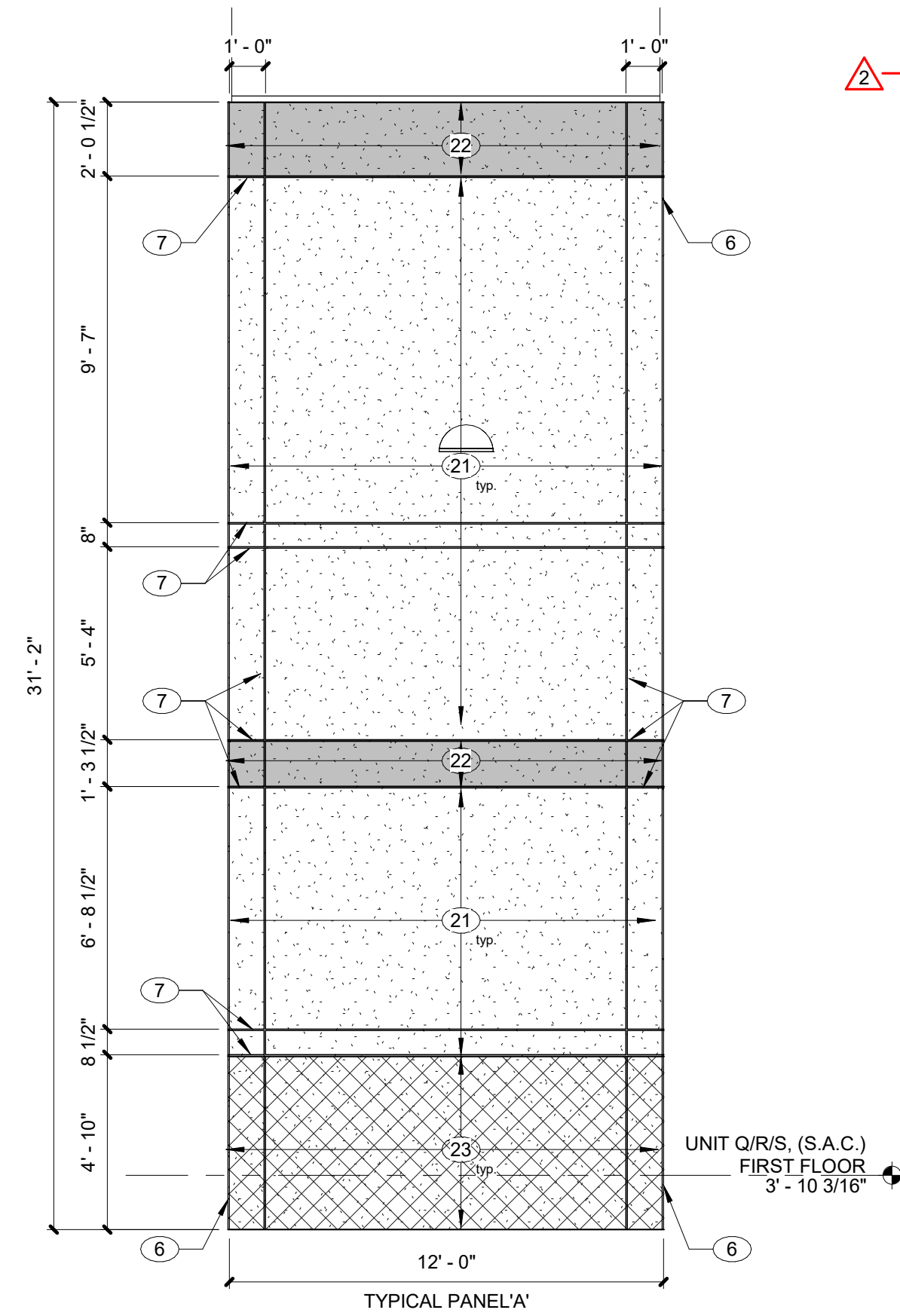
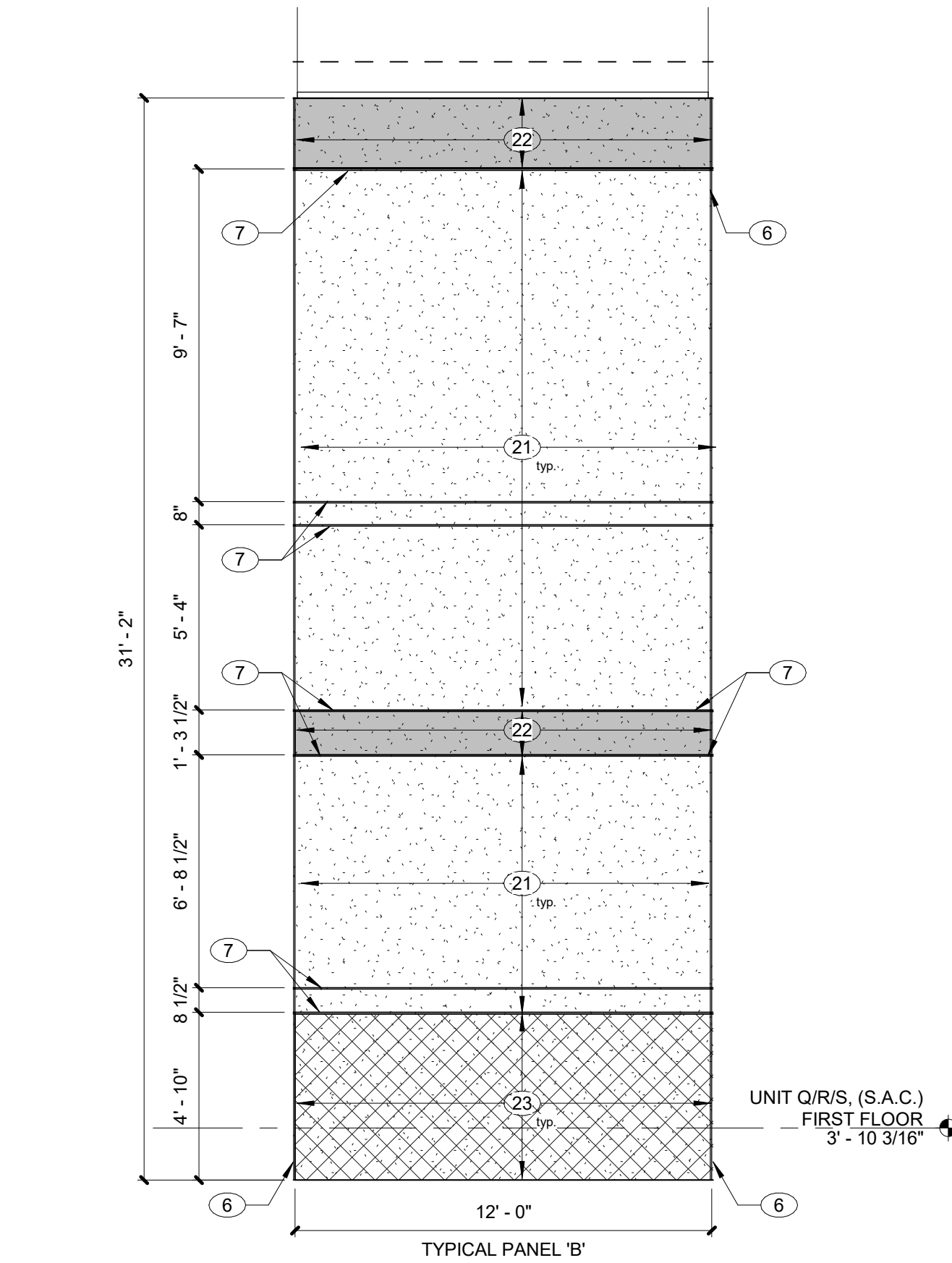
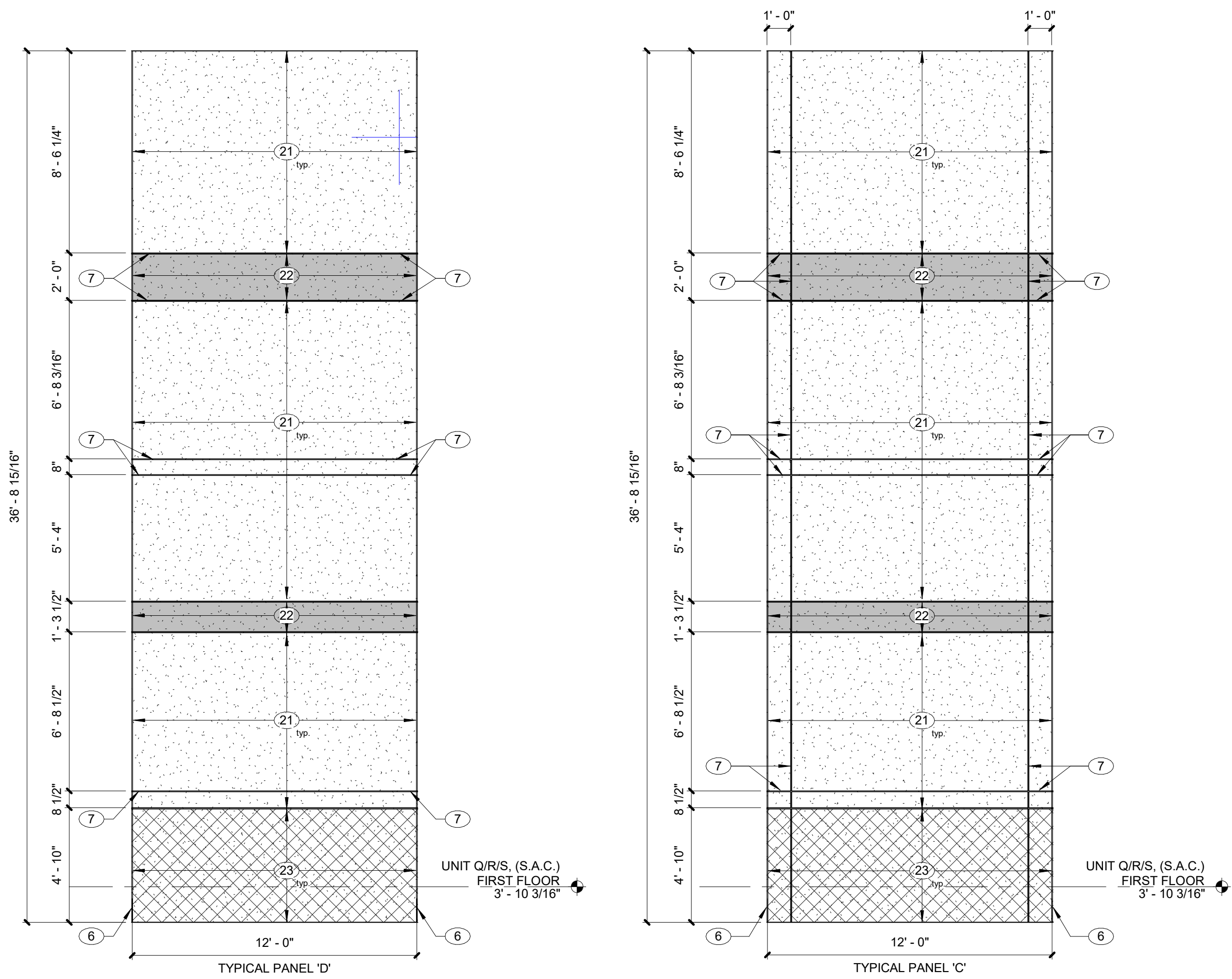
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DRAWN BY: AD, B.J.Z

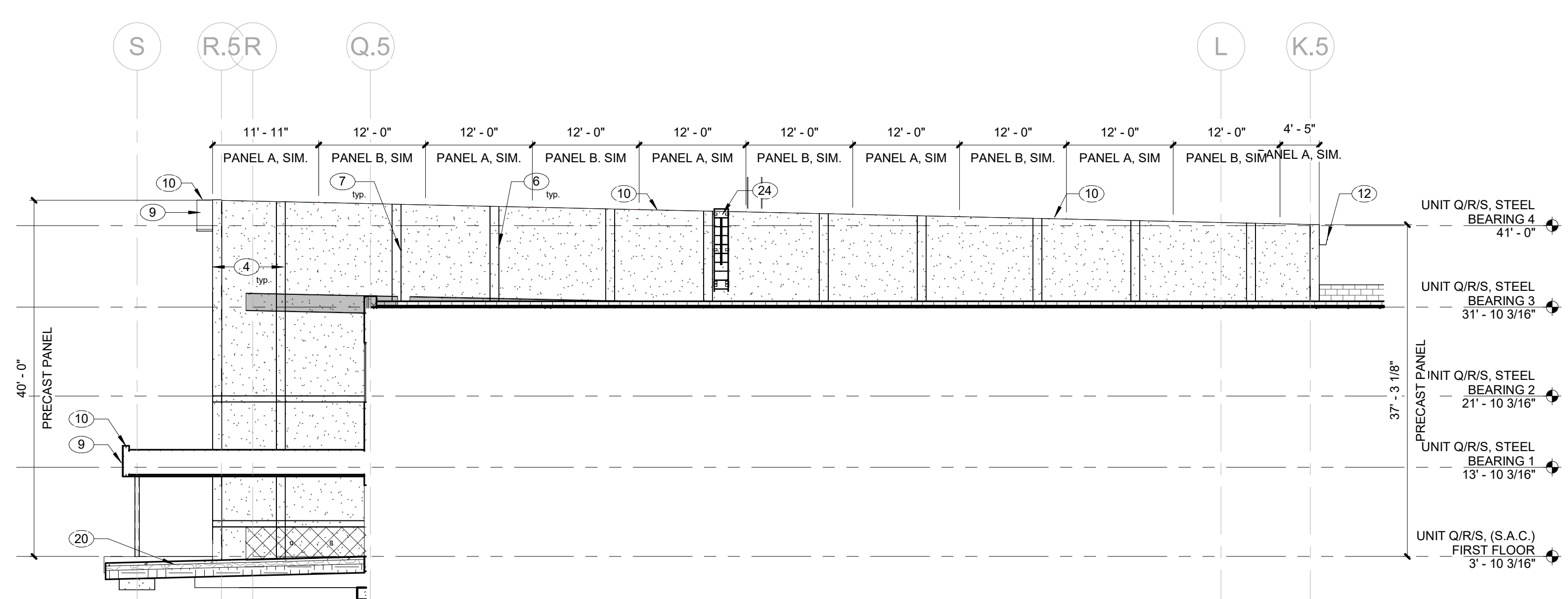
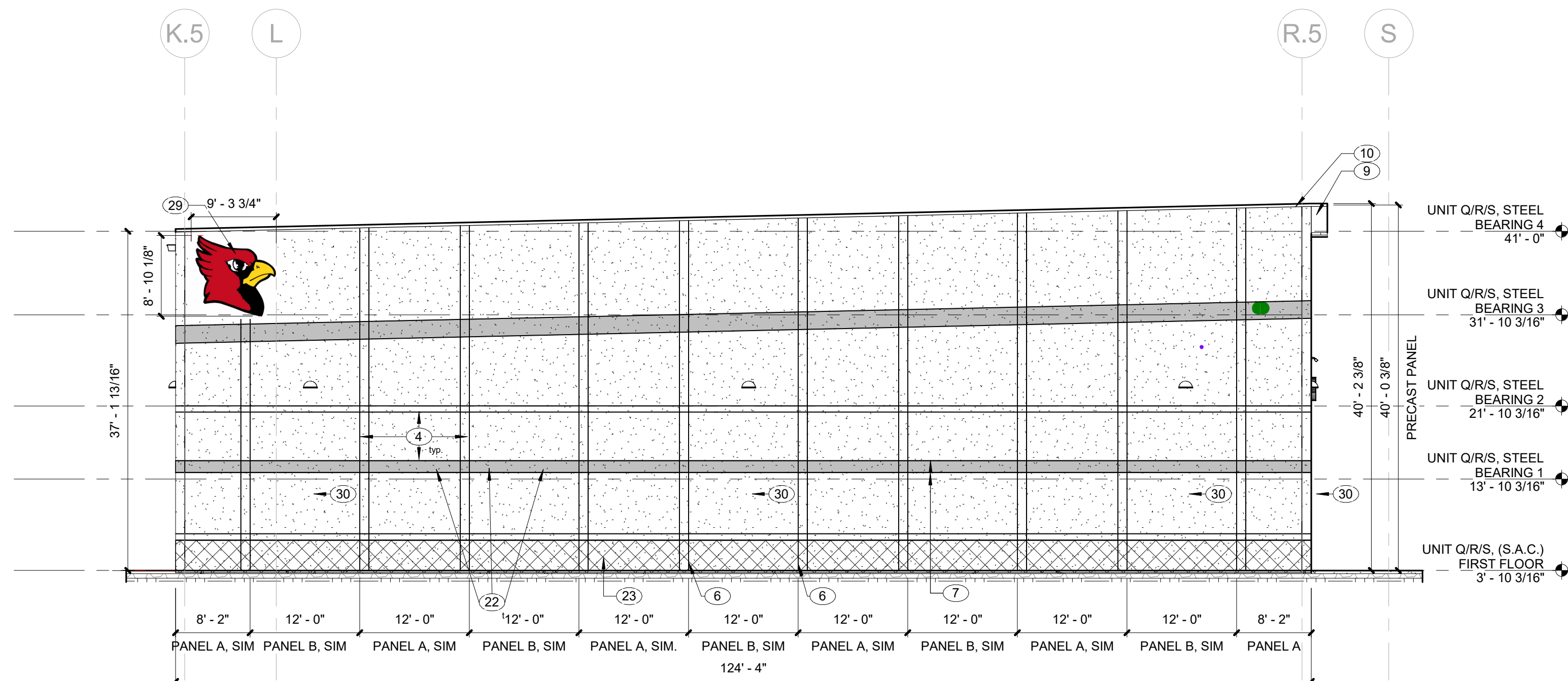
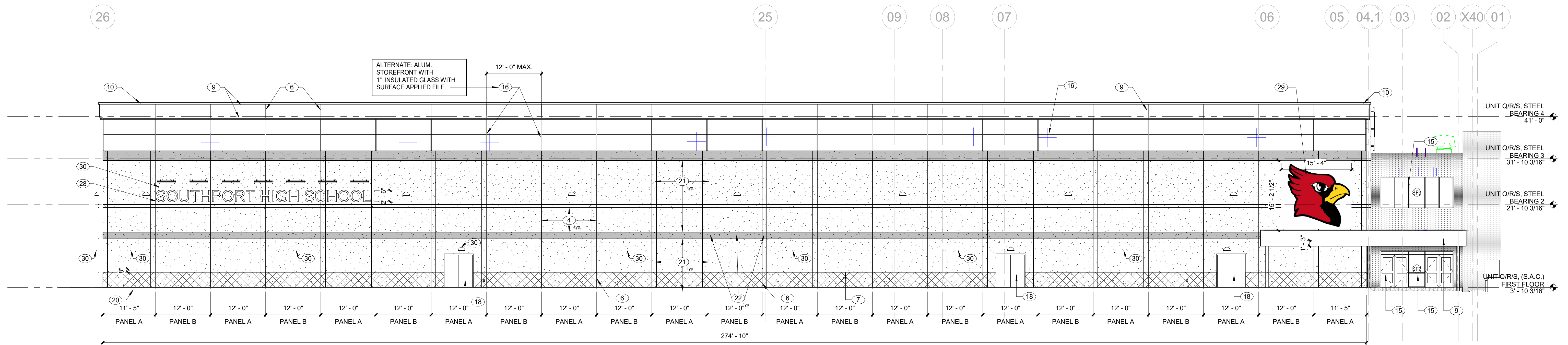
REFLECTED  
CEILING PLAN -  
FIRST FLOOR -  
UNIT Q

A121Q





ELEVATION NOTES - EXTERIOR	
1	MODULAR FACE BRICK TO MATCH OR COMPLEMENT EXISTING
2	INDIANA LIMESTONE TRIM PROFILE B AND B1. SMOOTH CUT FULL RANGE. PROFILE B AT WINDOW SILLS. PROFILE B1 UNDER BRICK VENEER.
3	INDIANA LIMESTONE TRIM PROFILE A. SMOOTH CUT FULL RANGE. SEE ENLARGED ELEVATIONS FOR DETAIL.
4	12" THICK INSULATED CONCRETE PANEL. PANEL WIDTH AS NOTED.
5	BRICK CONTROL JOINT
6	1/2" PRECAST PANEL JOINT. CAULK TO MATCH ADJACENT PAINT COLOR.
7	3/4"x 3/4" DEEP PANEL REVEAL.
8	NOT USED
9	PREFINISHED METAL PANEL
10	METAL ROOF EDGE
11	PREFINISHED METAL DOWNSPOUT
12	PREFINISHED ALUM. GUTTER
13	PREFINISHED METAL SCUPPER HEAD
14	DUCTWORK BLOCK OUT IN PRECAST PANEL. SEE MECHANICAL
15	PREFINISHED ALUM. STOREFRONT WITH 1" INSULATED GLAZING UNIT.
16	TRANSLUCENT WALL PANEL SYSTEM. BASIS OF DESIGN "KALWALL".
17	8'-0" X 10'-0" COILING OVERHEAD DOOR
18	INSULATED HOLLOW METAL DOOR AND FRAME. PAINTED
19	PREFINISHED ALUM. SUN SHADE DEVICE. 18" DEPTH. SECURED WITH SCHEDULED OPENING WITH OUTRIGGERS.
20	FINISHED GRADE. SEE CIVIL
21	PAINT PANEL COLOR 'A'. FLOATED FINISH
22	PAINT PANEL COLOR 'B'
23	PAINT PANEL COLOR 'C'
24	WALL MOUNTED ROOF ACCESS LADDER
25	RETAINING WALL. SEE STRUCTURAL
26	STEEL HANDRAIL WITH VERTICAL POST AT MAX 4'-0". SHOP PRIMED AND FIELD PAINTED.
27	STEEL HANDRAIL WITH VERTICAL POST AT MAX 4'-0". SHOP PRIMED AND FIELD PAINTED.
28	PREFINISHED METAL LETTERS 30" TALL. ARIAL FONT. SECURE TO FACE OF BUILDING
29	HIGH SCHOOL LOGO PAINTED ON FACE OF WALL. SIZE AS INDICATED.
30	LIGHT FIXTURE. SEE ELECTRICAL
31	PAINTED STEEL COLUMN



PERRY TOWNSHIP SCHOOLS  
SOUTHPORT HIGH SCHOOL ADDITION AND RENOVATION  
971 EAST BANTA ROAD, INDIANAPOLIS, IN 46227



REVISIONS:		Date	Desc.
#			
2		10/26/2026	Addendum #02

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PROJECT: #24173S  
DATE: 01-06-2026  
DRAWN BY: BLZ

EXTERIOR ELEVATIONS

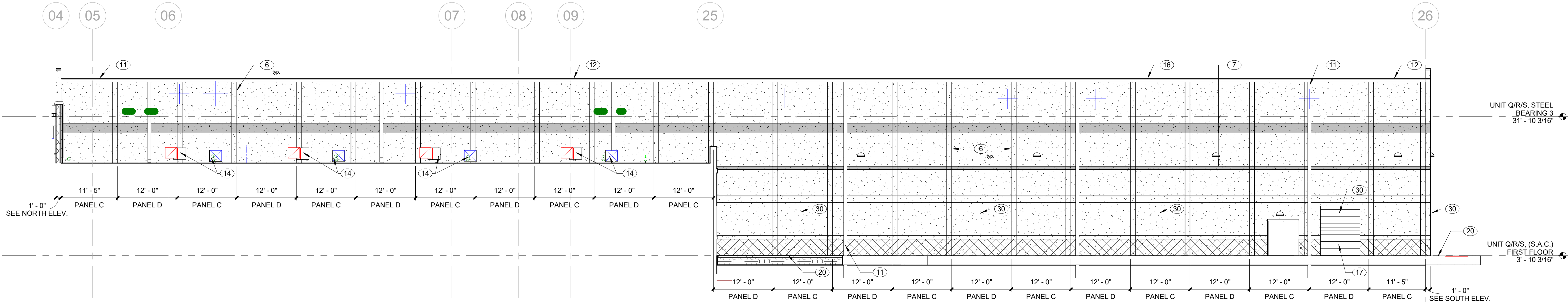
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LANCER ASSOCIATES  
ARCHITECTURE  
145 NORTH EAST STREET  
INDIANAPOLIS, IN 46204

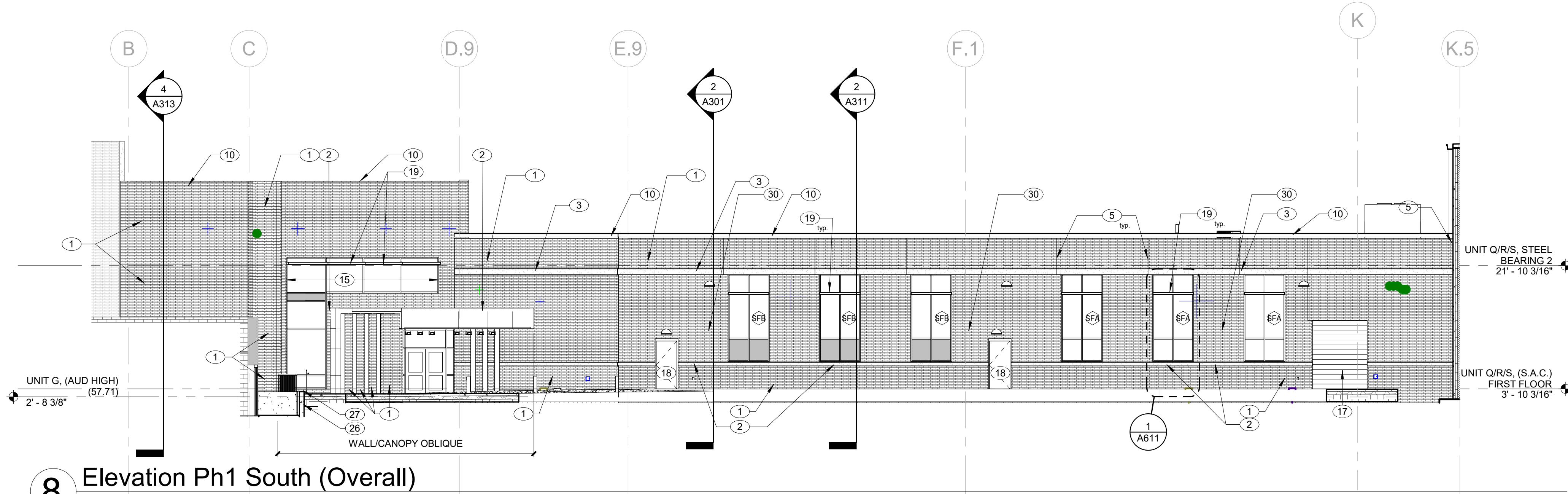


ELEVATION NOTES - EXTERIOR

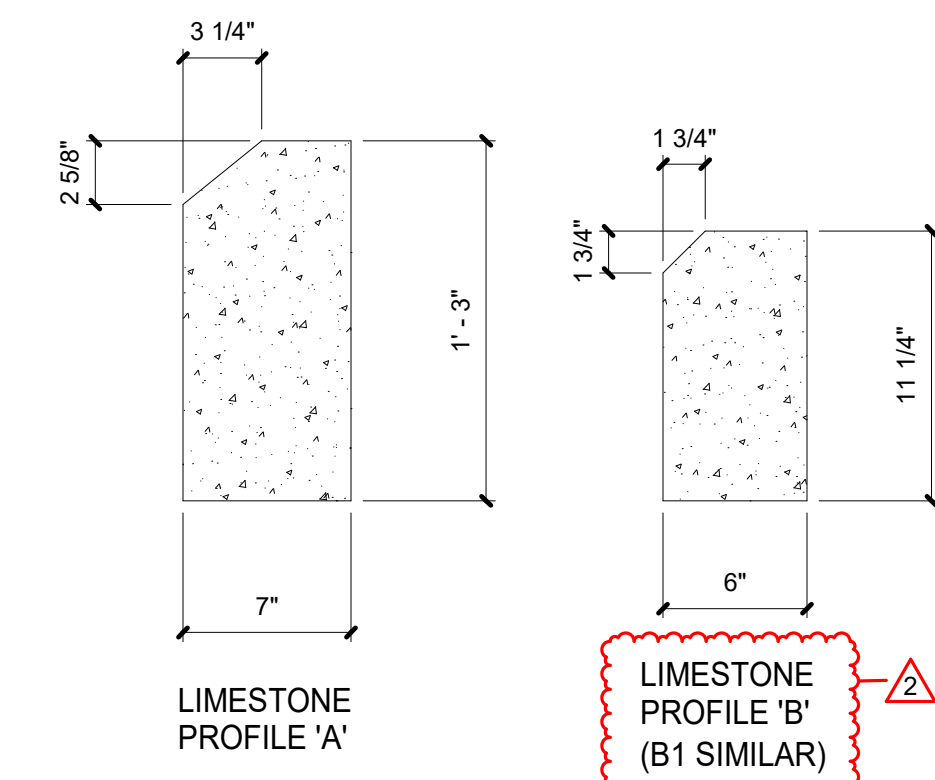
- MODULAR FACE BRICK TO MATCH OR COMPLEMENT EXISTING.
- INDIANA LIMESTONE TRIM PROFILE B AND B1. SMOOTH CUT FULL RANGE. PROFILE B AT WINDOW SILLS. PROFILE B1 UNDER BRICK VENEER.
- INDIANA LIMESTONE TRIM PROFILE A. SMOOTH CUT FULL RANGE.
- 12" THICK INSULATED CONCRETE PANEL. PANEL WIDTH AS NOTED. SEE ENLARGED ELEVATIONS FOR DETAIL.
- BRICK CONTROL JOINT.
- 12" PRECAST PANEL JOINT. CAULK TO MATCH ADJACENT PAINT COLOR.
- 3/4" X 3/4" DEEP PANEL REVEAL.
- NOT USED.
- PREFINISHED METAL PANEL.
- METAL ROOF EDGE.
- PREFINISHED METAL DOWNSPOUT.
- PREFINISHED ALUM. GUTTER.
- PREFINISHED METAL SCUPPER HEAD.
- DUCTWORK BLOCK OUT IN PRECAST PANEL. SEE MECHANICAL.
- PREFINISHED ALUM. STOREFRONT WITH 1" INSULATED GLAZING UNIT.
- TRANSLUCENT WALL PANEL SYSTEM. BASIS OF DESIGN: 'KALWALL'.
- 6'-0" X 10'-0" COILING OVERHEAD DOOR.
- INSULATED HOLLOW METAL DOOR AND FRAME, PAINTED.
- PREFINISHED ALUM. SUN SHADE DEVICE. 18" DEPTH. SECURED WITH SCHEDULED OPENING WITH OUTTRIGGERS.
- FINISHED GRADE. SEE CIVIL.
- PAINT PANEL COLOR 'A'. FLOATED FINISH.
- PAINT PANEL COLOR 'B'.
- PAINT PANEL COLOR 'C'.
- WALL MOUNTED ROOF ACCESS LADDER.
- RETAINING WALL. SEE STRUCTURAL.
- STEEL HANDRAIL WITH VERTICAL POST AT MAX 4'-0". SHOP PRIMED AND FIELD PAINTED.
- PREFINISHED METAL LETTERS 3/8" TALL. ARIAL FONT. SECURE TO FACE OF BUILDING.
- HIGH SCHOOL LOGO PAINTED ON FACE OF WALL. SIZE AS INDICATED.
- LIGHT FIXTURE. SEE ELECTRICAL.
- PAINTED STEEL COLUMN.



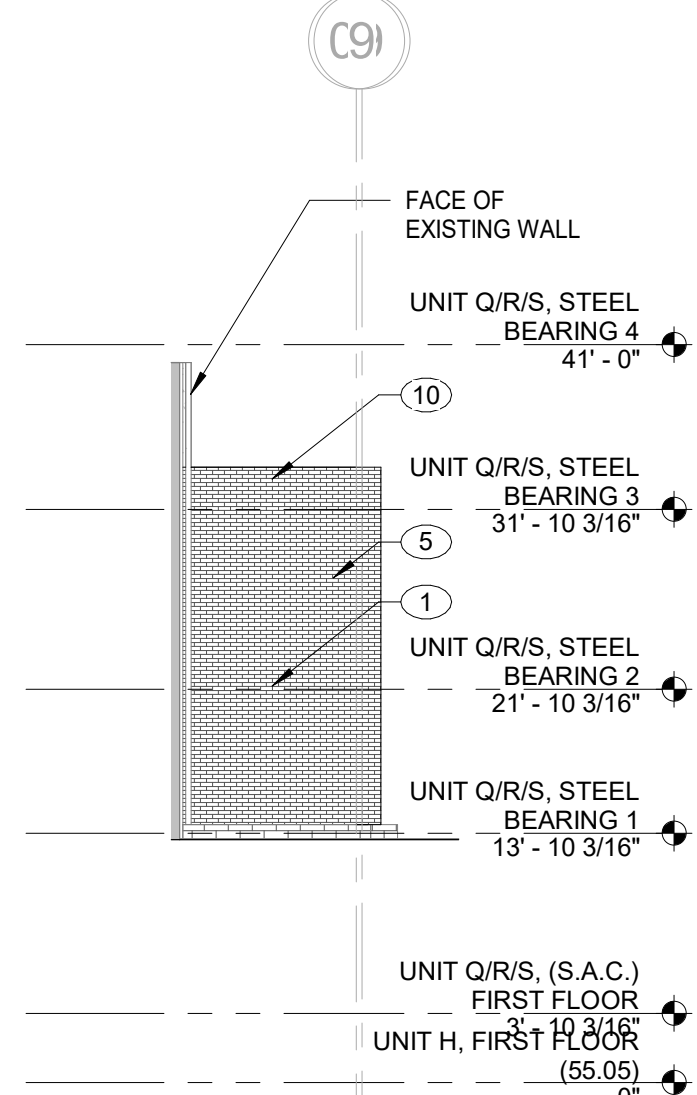
9 Elevation Ph1 West (Fieldhouse)  
SCALE: 3/32" = 1'-0" REF. 1 / A101R



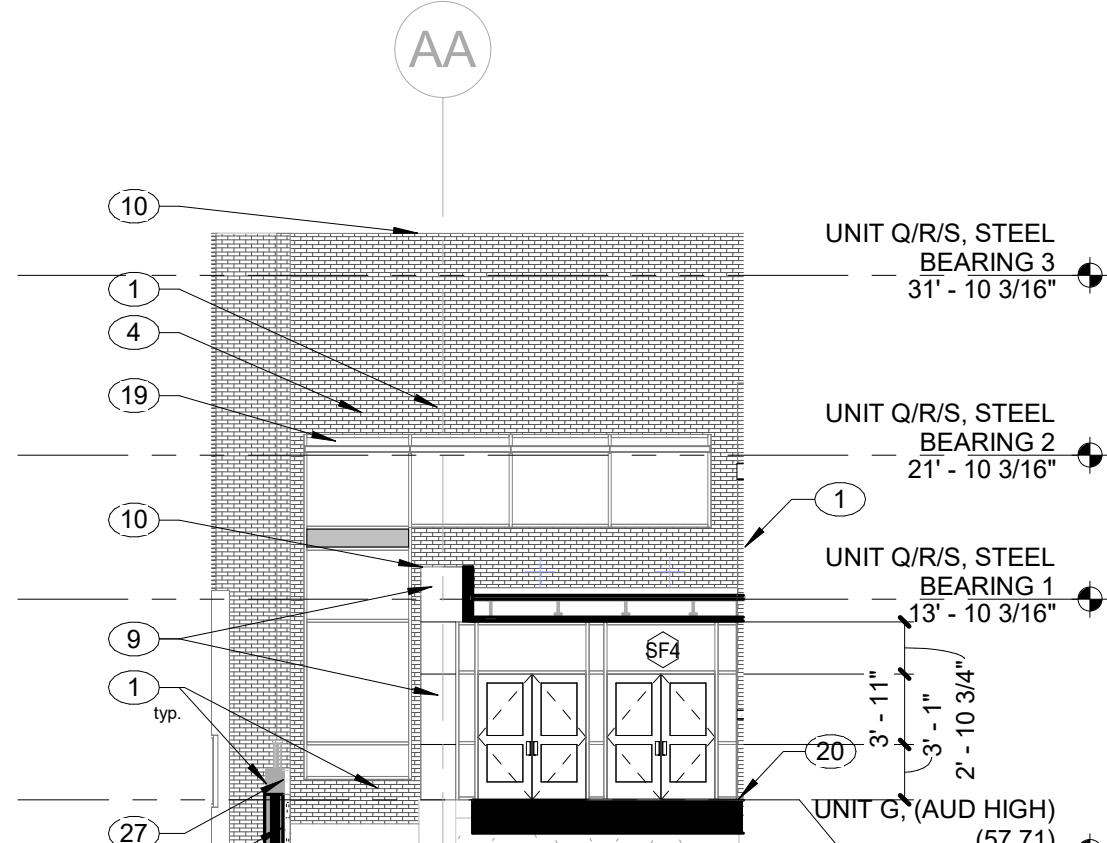
8 Elevation Ph1 South (Overall)  
SCALE: 3/32" = 1'-0" REF. 1 / A101Q



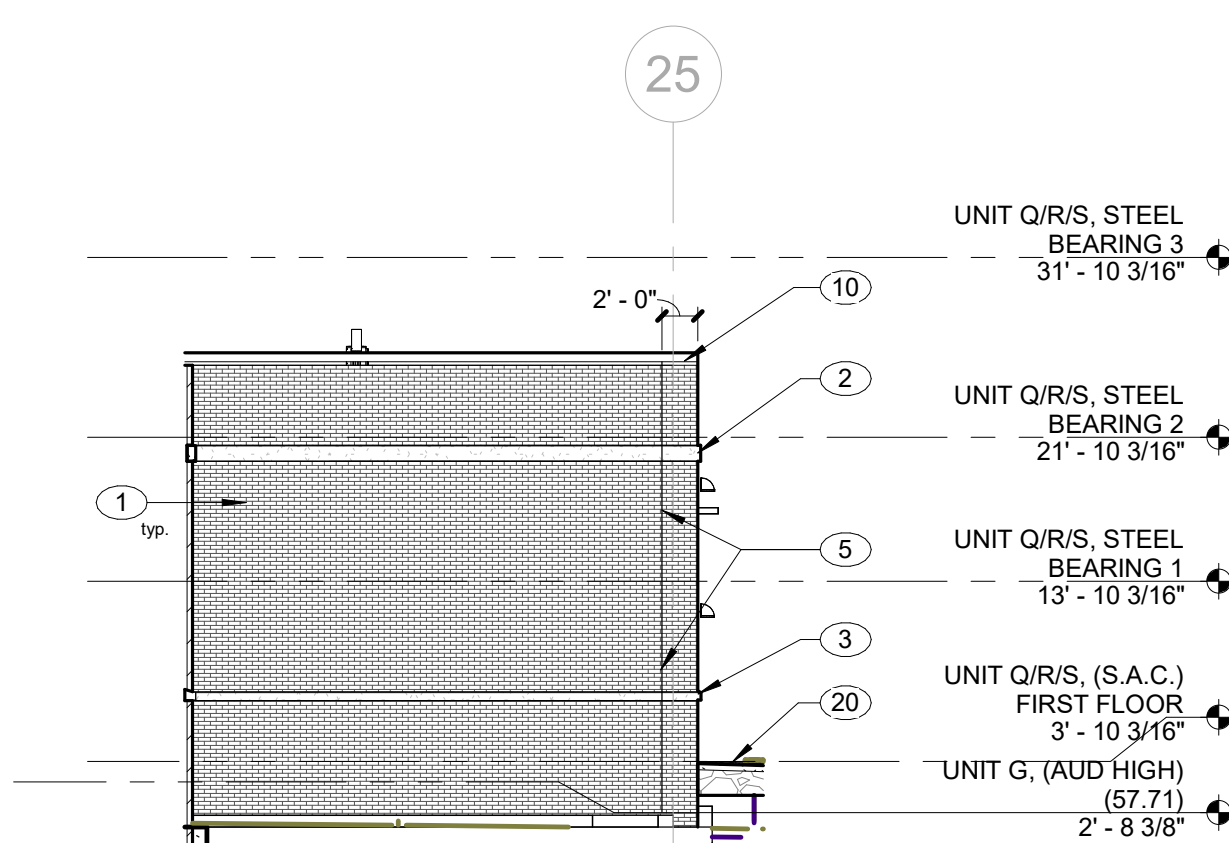
7 LIMESTONE PROFILES.  
SCALE: 1 1/2" = 1'-0"



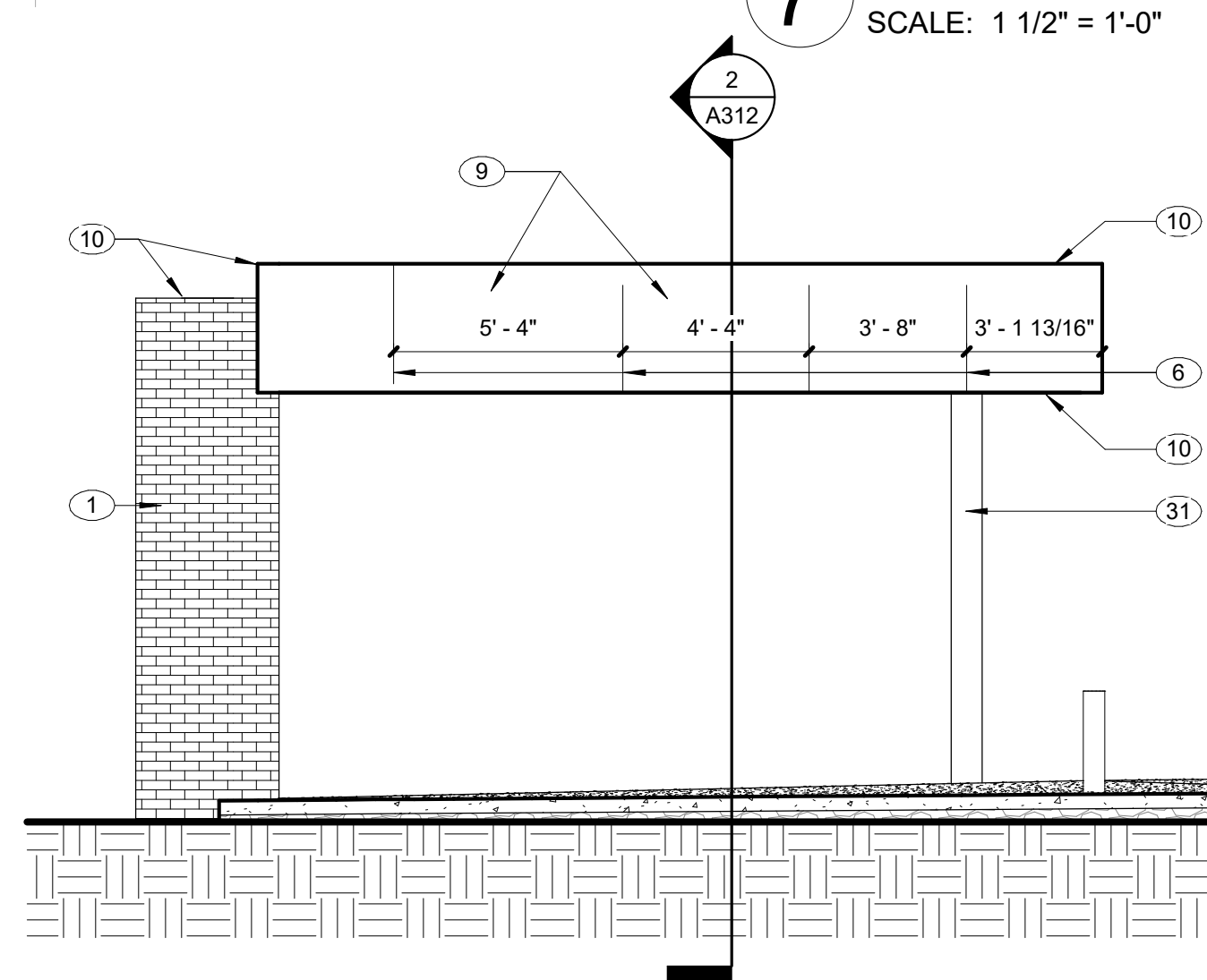
6 Elevation Ph1 West Connection  
SCALE: 3/32" = 1'-0" REF. 1 / A101Q



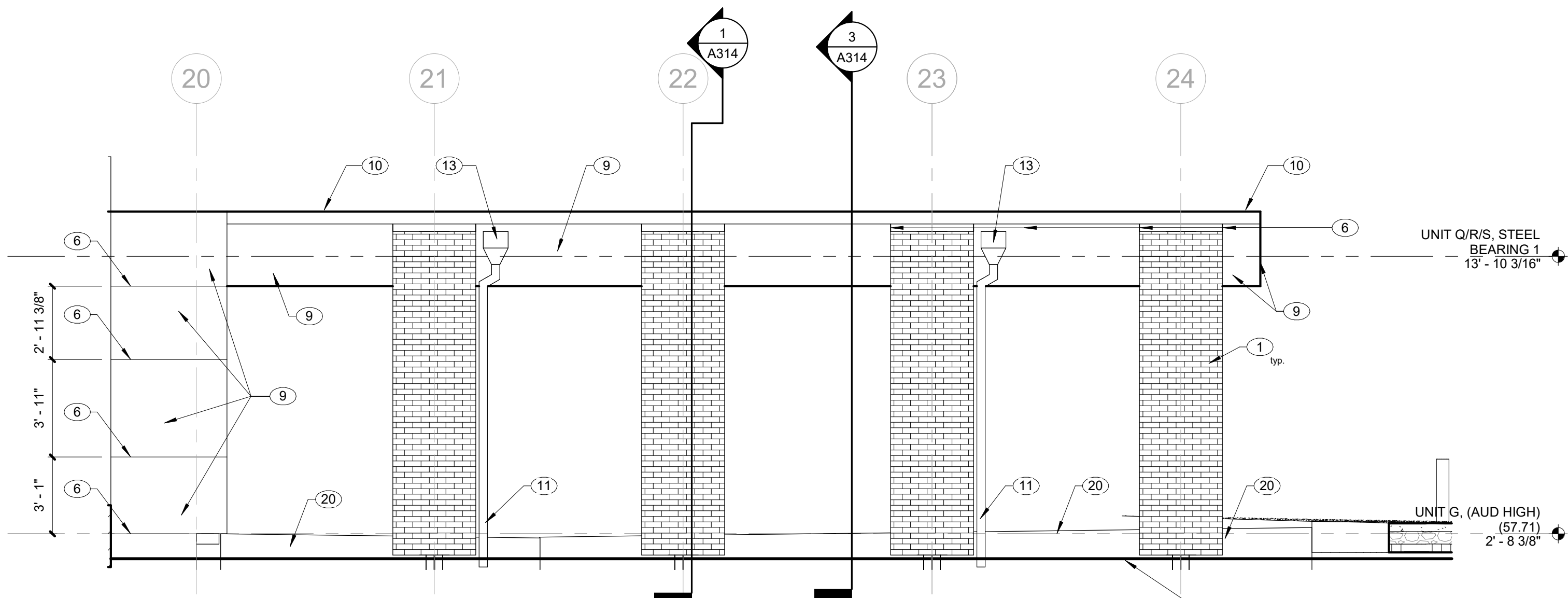
5 Elevation Ph1 South Canopy+Entrance  
SCALE: 3/32" = 1'-0" REF. 1 / A101Q



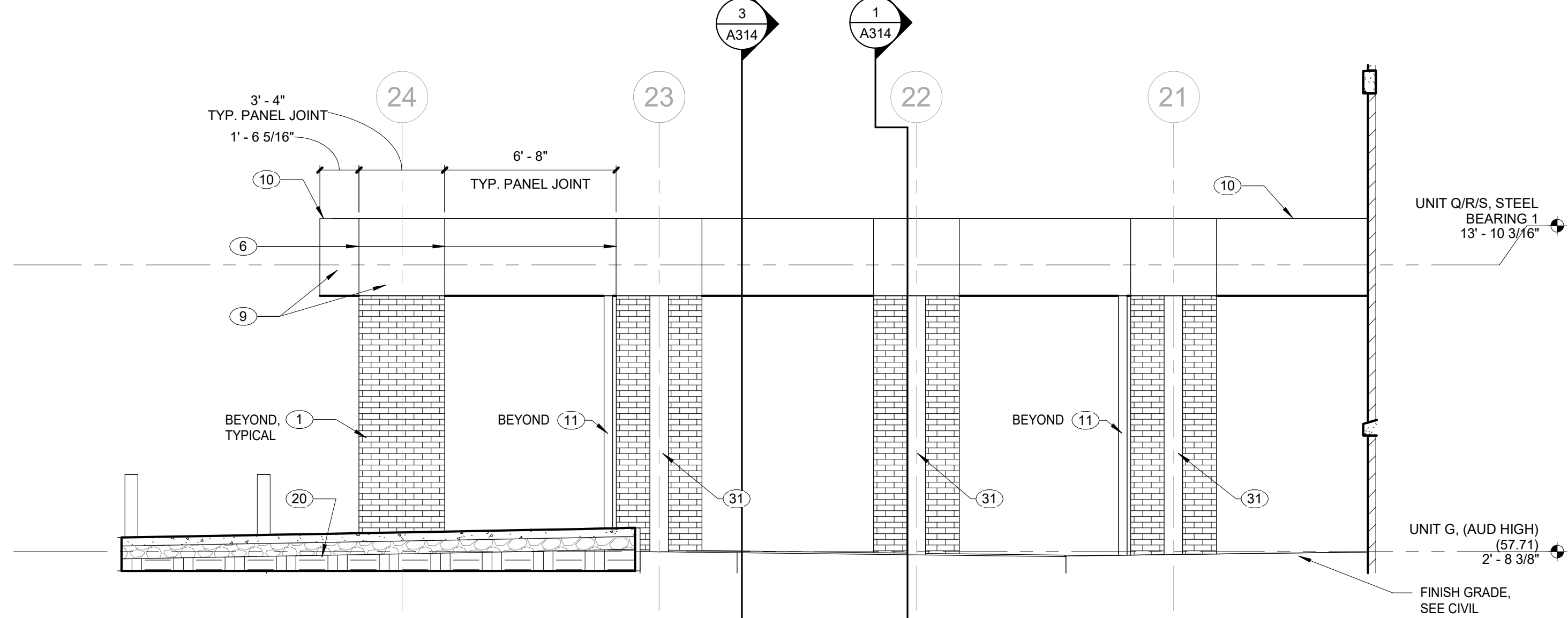
4 Elevation Ph1 West  
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3 Elevation Ph1 SouthCanopy-South  
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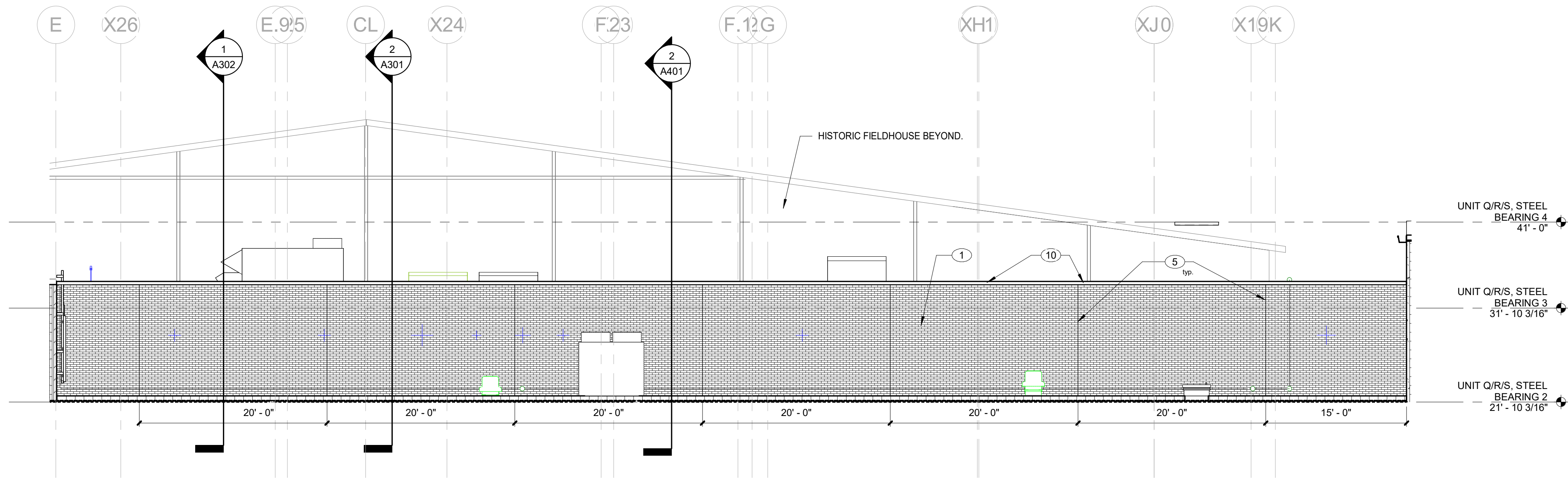
2 Elevation Ph1 SouthCanopy-West  
SCALE: 1/4" = 1'-0" REF. 1 / A101Q



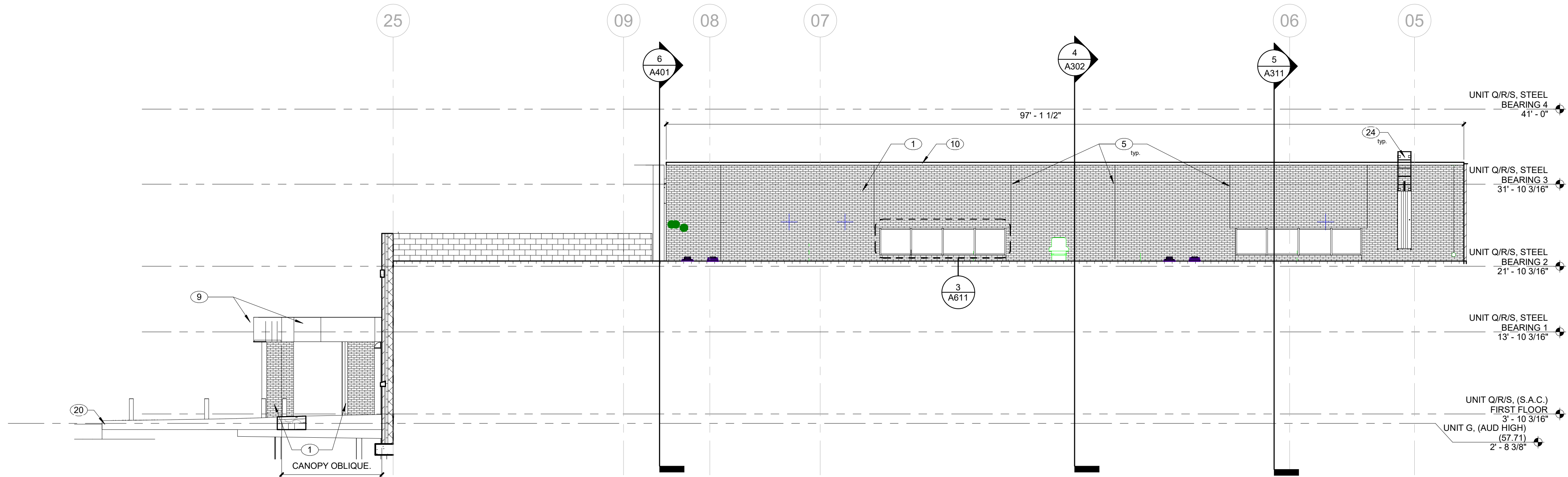
1 Elevation Ph1 SouthCanopy-East  
SCALE: 1/4" = 1'-0" REF. 1 / A101Q



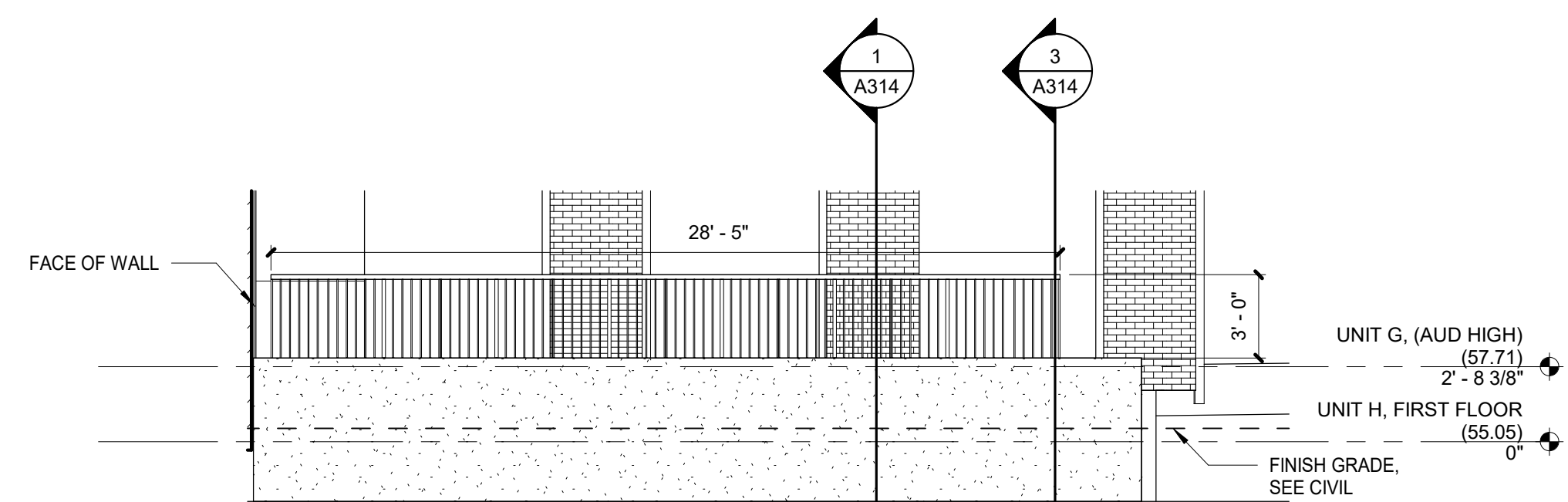
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3 Elevation Ph1 South (Clerestory)  
SCALE: 1/8" = 1'-0"



2 Elevation Ph 1 East (Clerestory)  
SCALE: 1/8" = 1'-0" REF. 1 / A101Q



1 ELEVATION - SOUTH RETAINING WALL  
SCALE: 3/16" = 1'-0" REF. 1 / A101Q

## ELEVATION NOTES - EXTERIOR

1	MODULAR FACE BRICK TO MATCH OR COMPLEMENT EXISTING.
2	INDIANA LIMESTONE TRIM PROFILE B AT WINDOW SILLS. PROFILE B1 UNDER BRICK VENEER.
3	INDIANA LIMESTONE TRIM PROFILE A. SMOOTH OUT FULL RANGE.
4	1/2" THICK INSULATED CONCRETE PANEL. PANEL WIDTH AS NOTED. SEE ENLARGED ELEVATIONS FOR DETAIL.
5	BRICK CONTROL JOINT.
6	1/2" PRECAST PANEL JOINT. CAULK TO MATCH ADJACENT PAINT COLOR.
7	3/4"x 3/4" DEEP PANEL REVEAL.
8	NOT USED.
9	PREFINISHED METAL PANEL.
10	METAL ROOF EDGE.
11	PREFINISHED METAL DOWNSPOUT.
12	PREFINISHED ALUM. GUTTER.
13	PREFINISHED METAL SCUPPER HEAD.
14	DUCTWORK BLOCK OUT IN PRECAST PANEL. SEE MECHANICAL.
15	PREFINISHED ALUM. STOREFRONT WITH 1" INSULATED GLAZING UNIT.
16	TRANSLUCENT WALL PANEL SYSTEM. BASIS OF DESIGN: 'KALWALL'.
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18	INSULATED HOLLOW METAL DOOR AND FRAME. PAINTED.
19	PREFINISHED ALUM. SUN SHADE DEVICE. 18" DEPTH. SECURED WITH SCHEDULED OPENING WITH OUTRIGGERS.
20	FINISHED GRADE. SEE CIVIL.
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25	RETAINING WALL. SEE STRUCTURAL.
26	STEEL HANDRAIL WITH VERTICAL POST AT MAX 4'-0". SHOP PRIMED AND FIELD PAINTED.
27	PREFINISHED METAL LETTERS 30" TALL. ARIAL FONT. SECURE TO FACE OF BUILDING.
28	PREFINISHED METAL LETTERS 30" TALL. ARIAL FONT. SECURE TO FACE OF BUILDING.
29	HIGH SCHOOL LOGO PAINTED ON FACE OF WALL. SIZE AS INDICATED.
30	LIGHT FIXTURE. SEE ELECTRICAL.
31	PAINTED STEEL COLUMN.

PERRY TOWNSHIP SCHOOLS

SOUTHPORT HIGH SCHOOL ADDITION AND RENOVATION

971 EAST BANTA ROAD, INDIANAPOLIS, IN 46227

LANCER ASSOCIATES  
ARCHITECTURE

145 NORTH EAST STREET  
INDIANAPOLIS, IN 46204



REVISIONS:

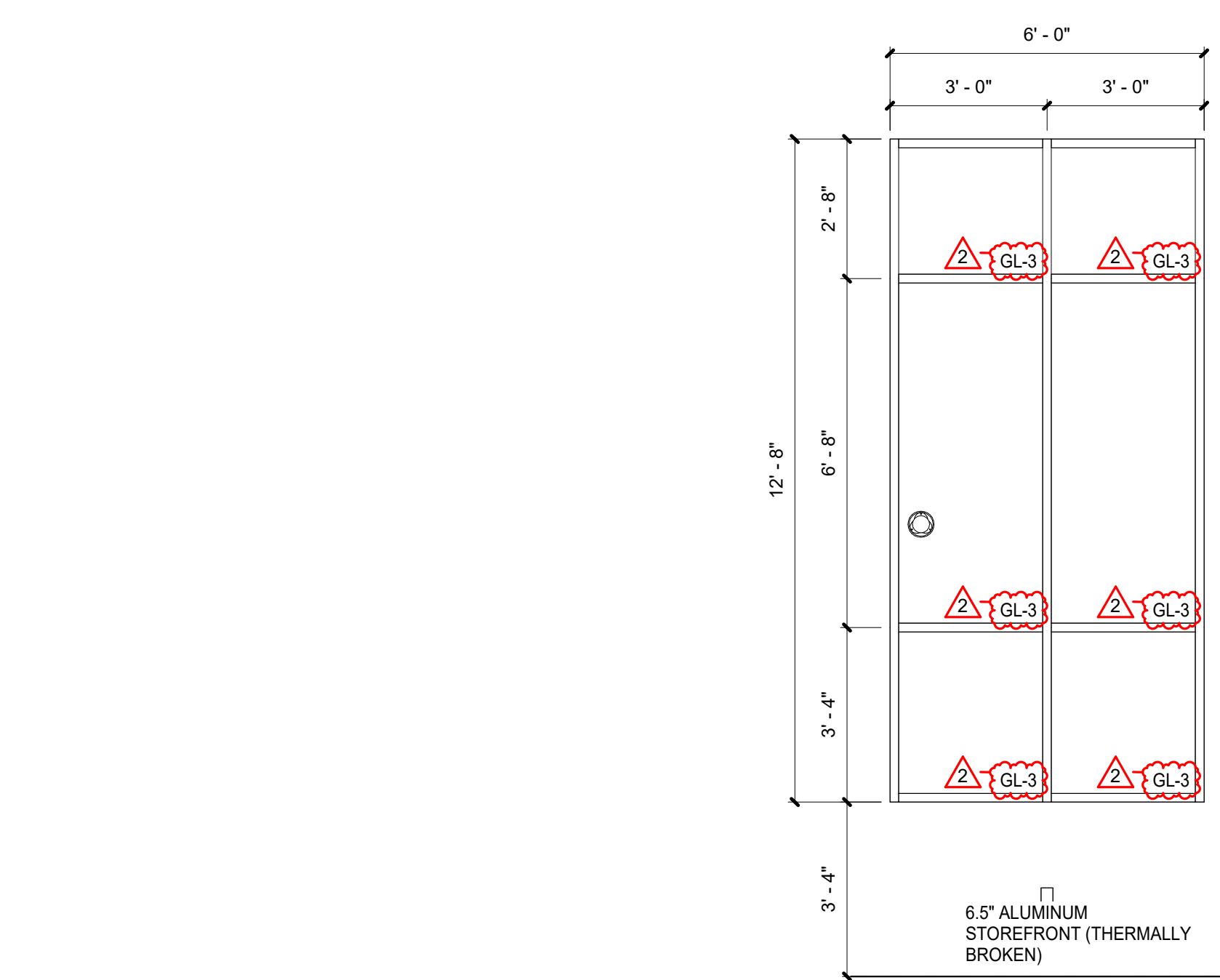
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1	01/28/2026	Addendum #01
2	02/09/2026	Addendum #02

100% CONSTRUCTION DOCUMENTS

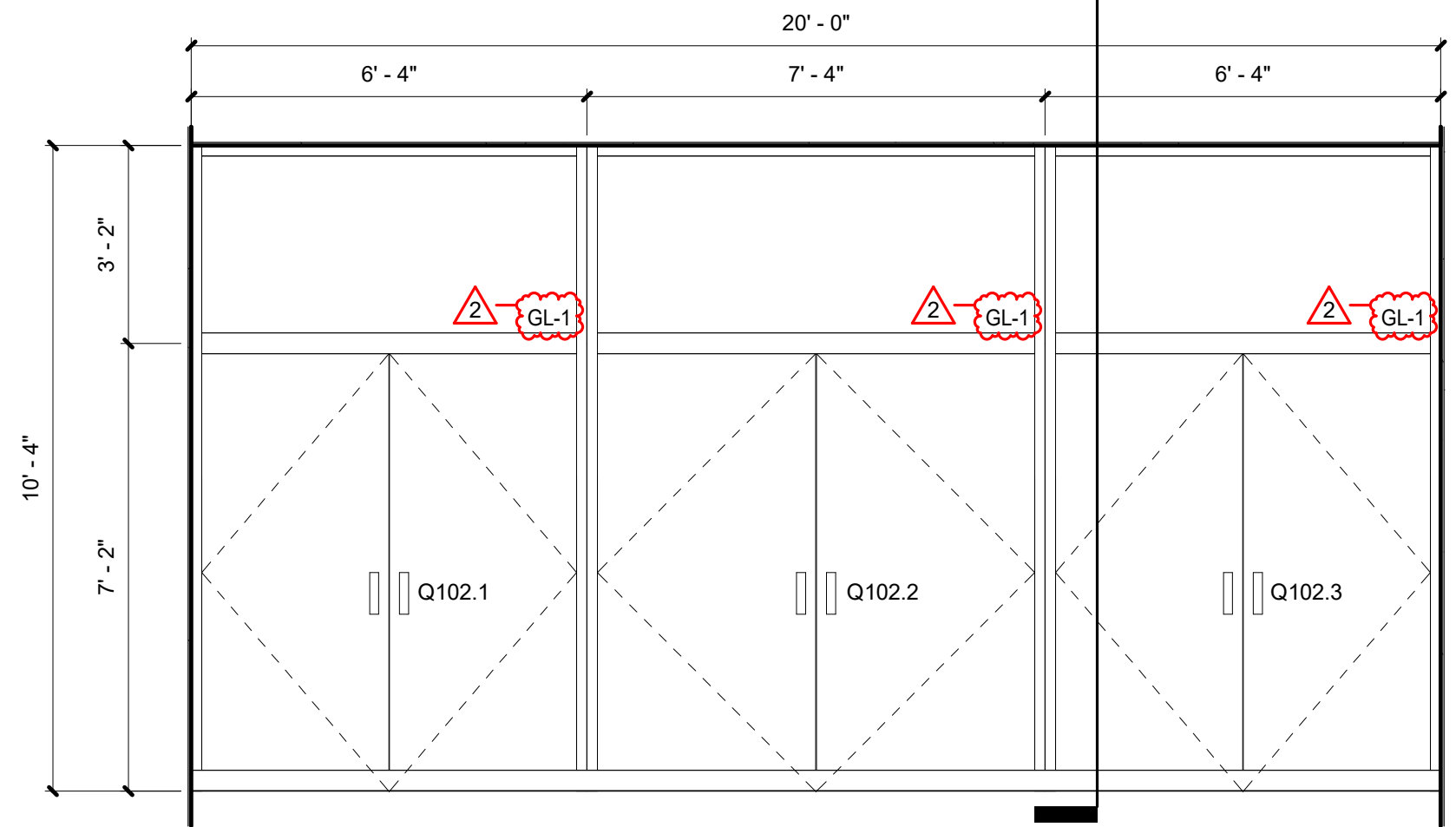
PROJECT: #24173S  
DATE: 01-08-2026  
DRAWN BY: BLJ

EXTERIOR ELEVATIONS

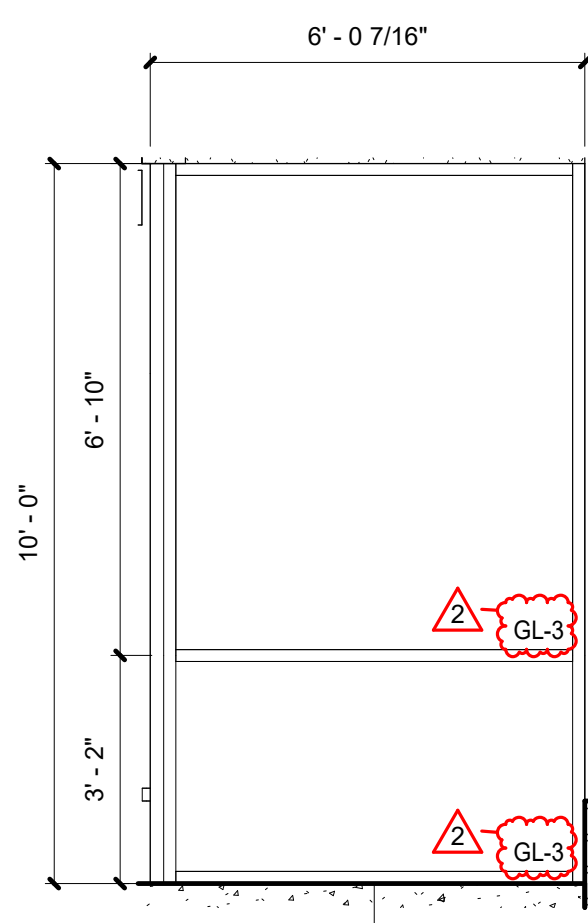
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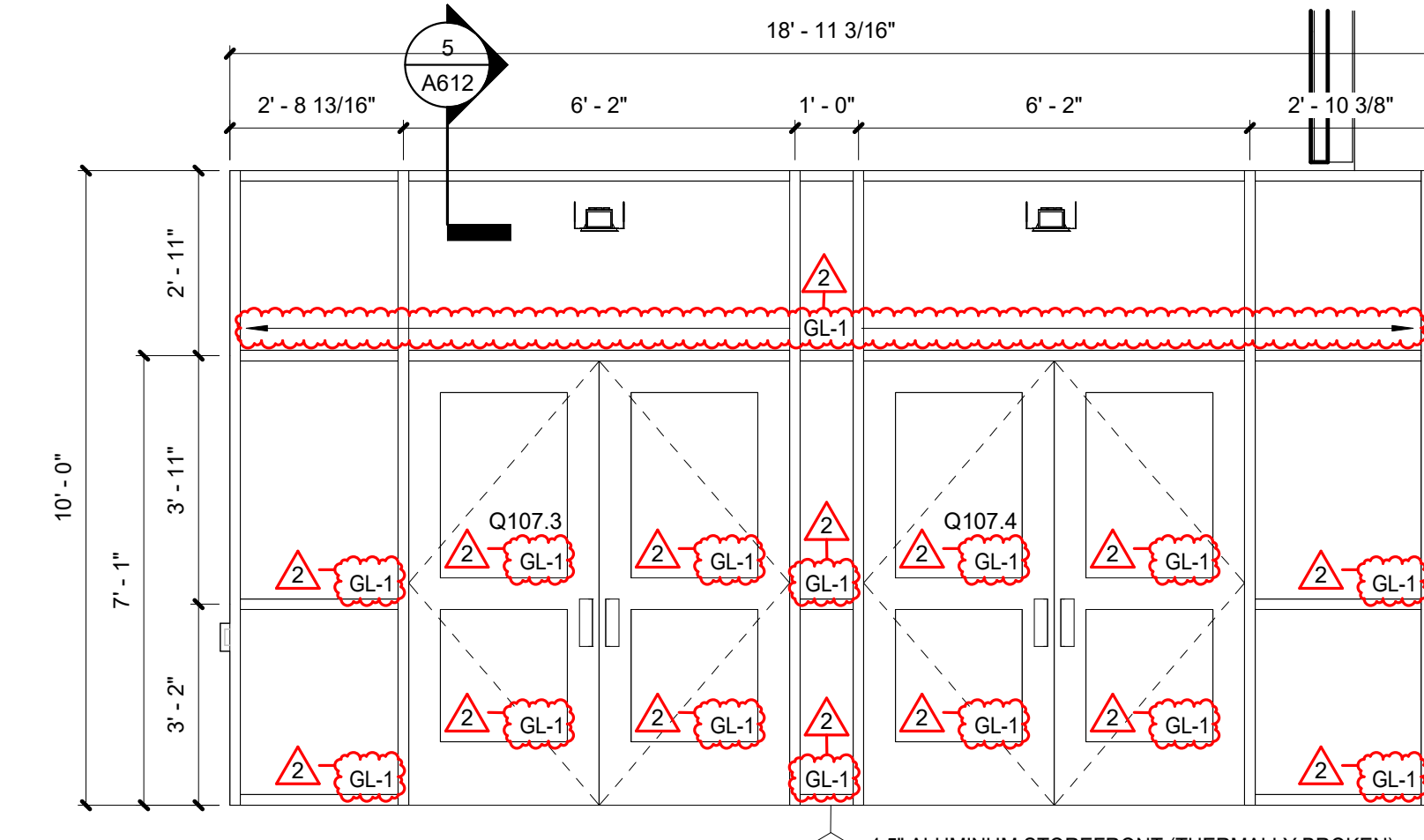
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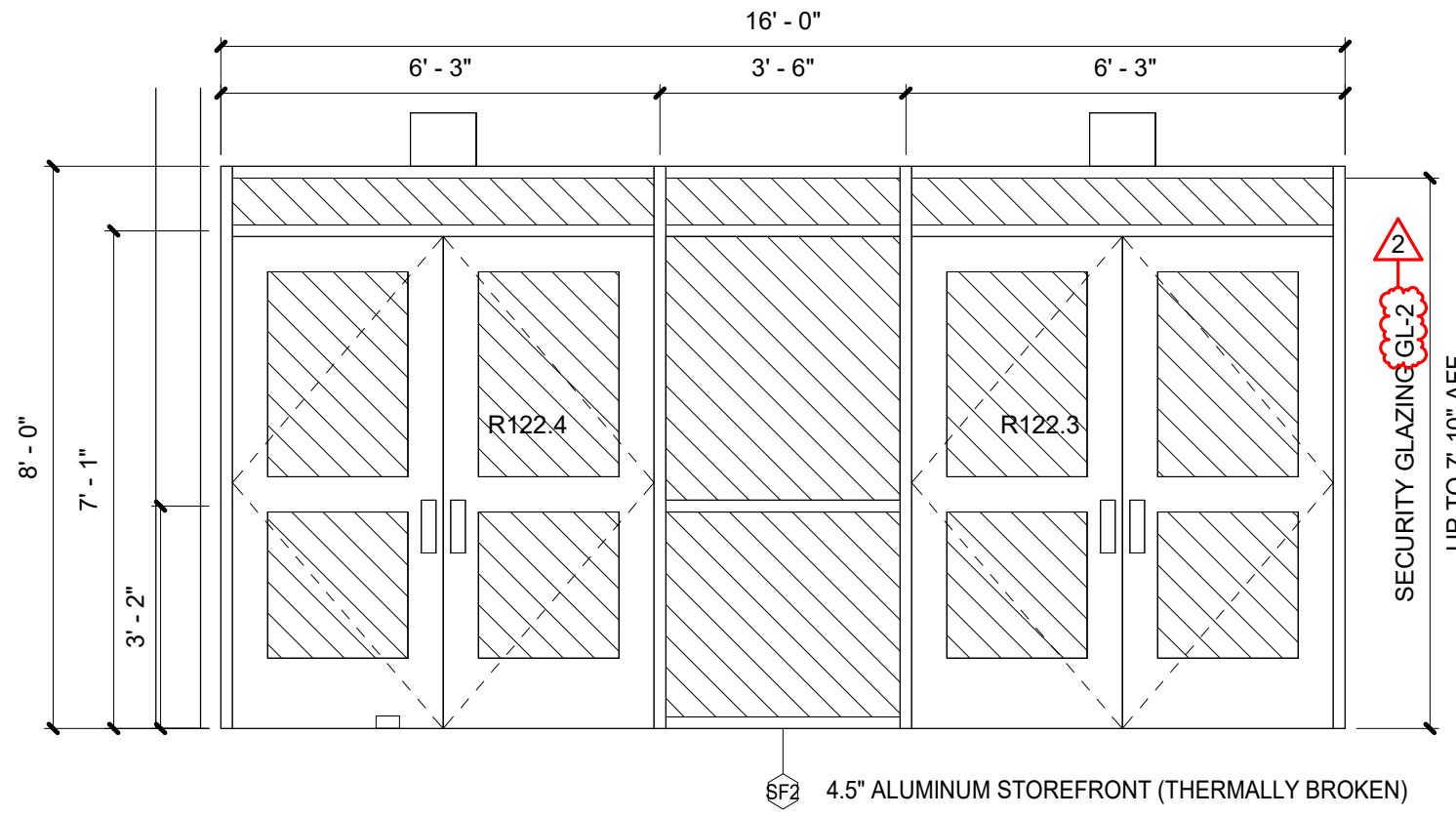
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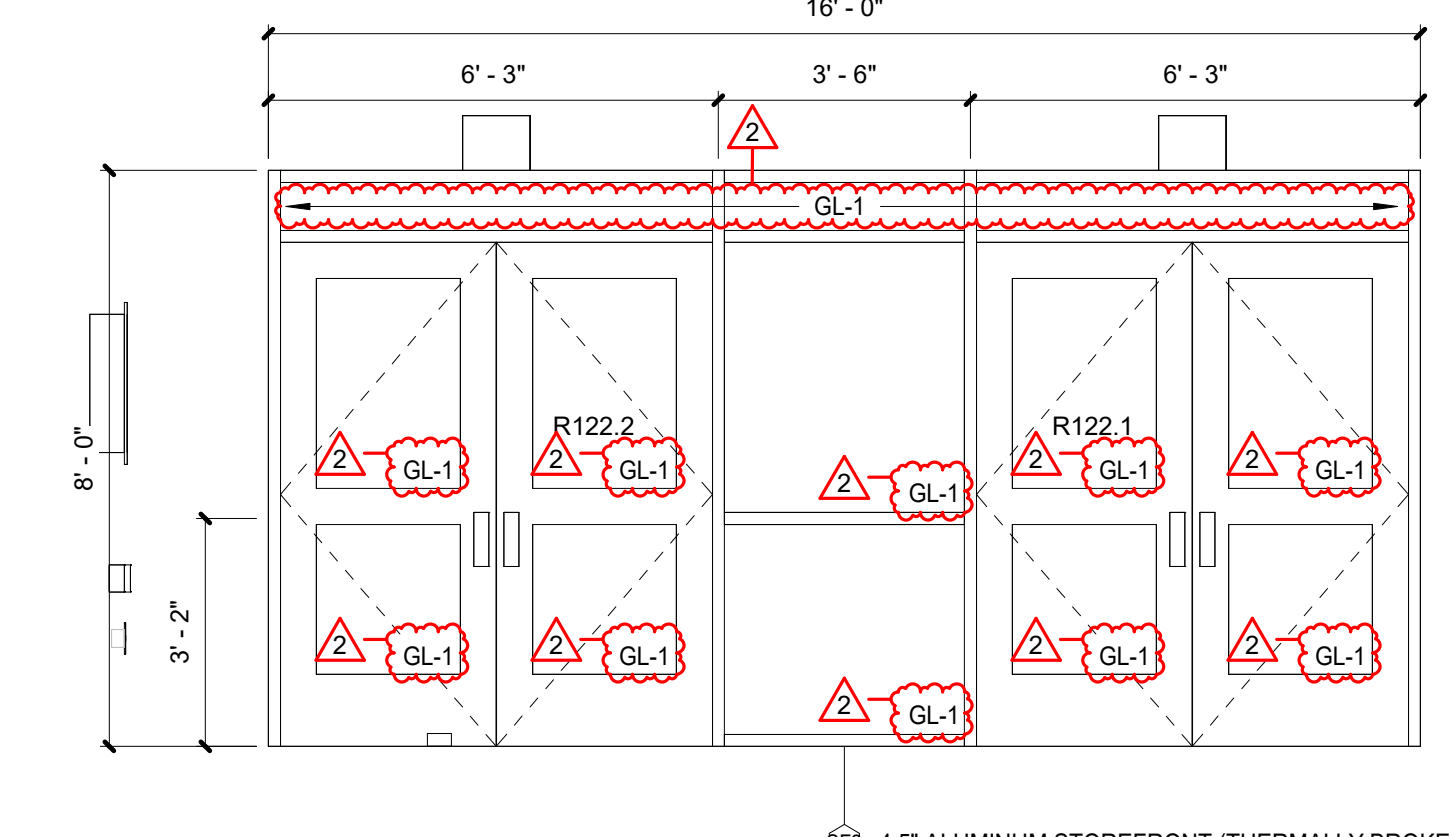
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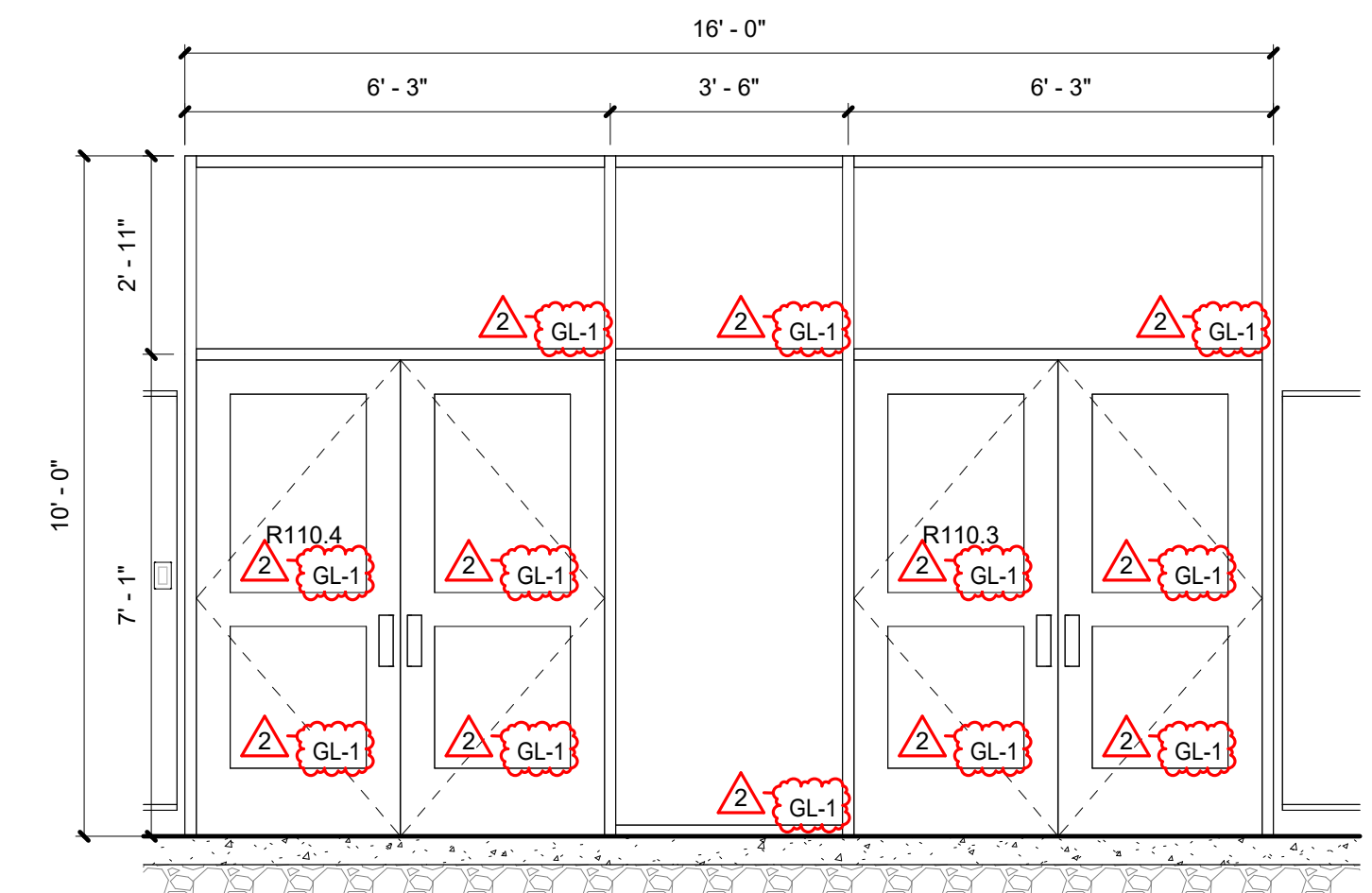
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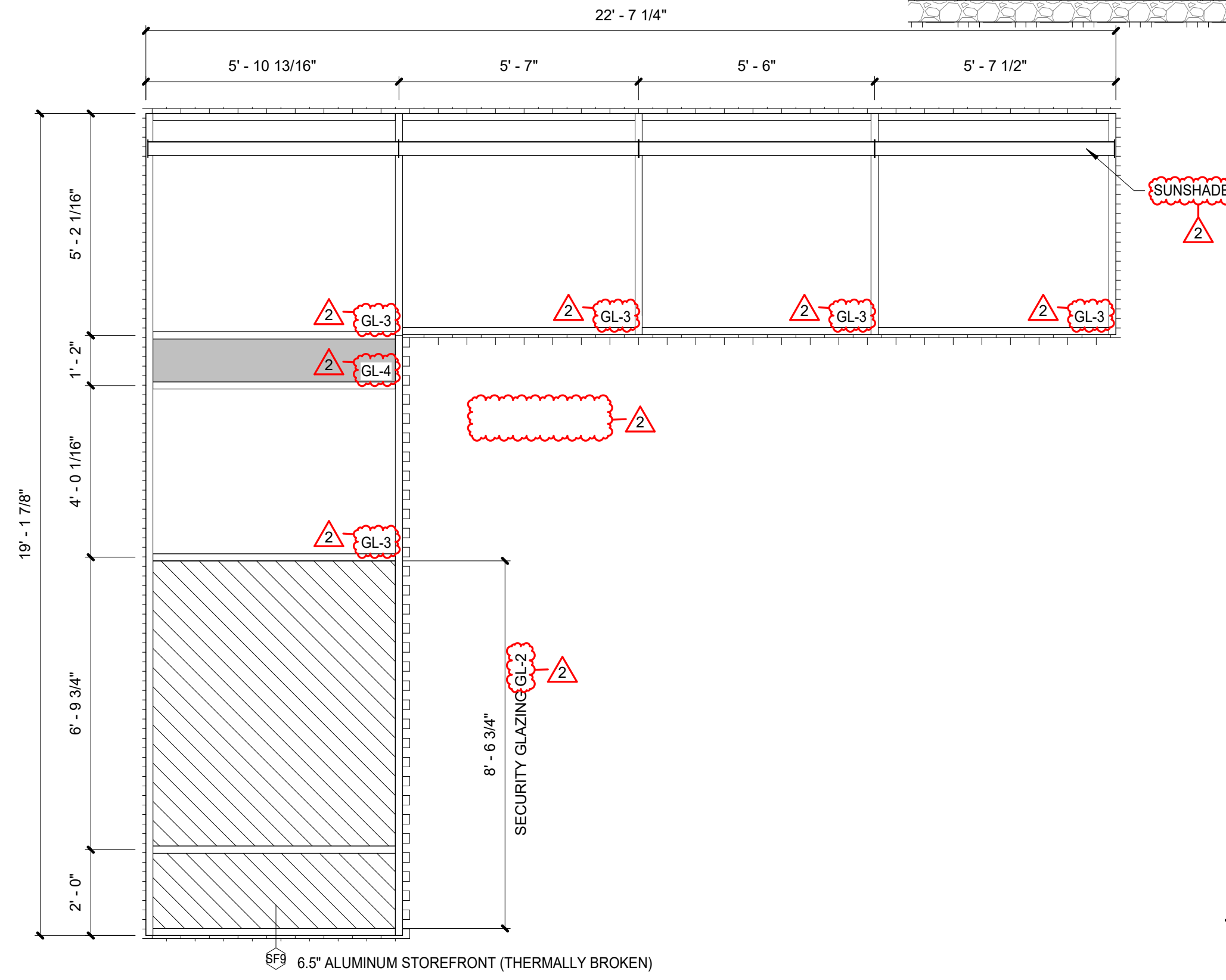
5 SF02  
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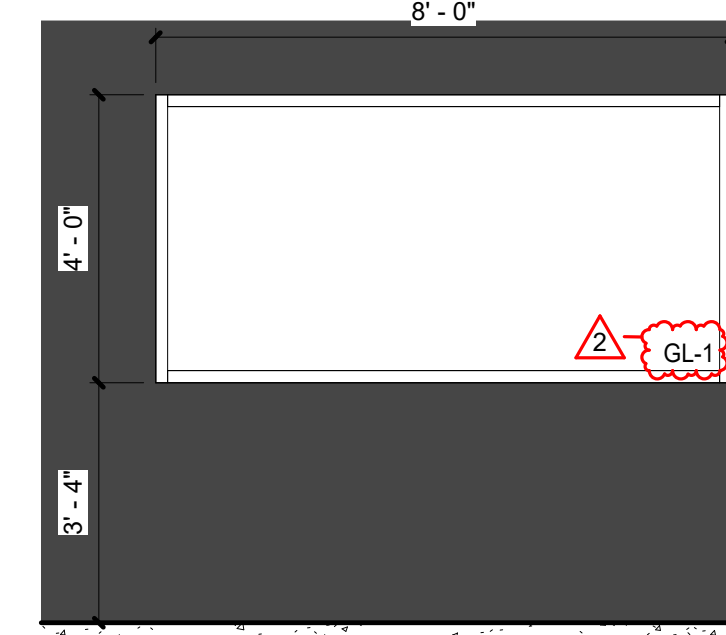
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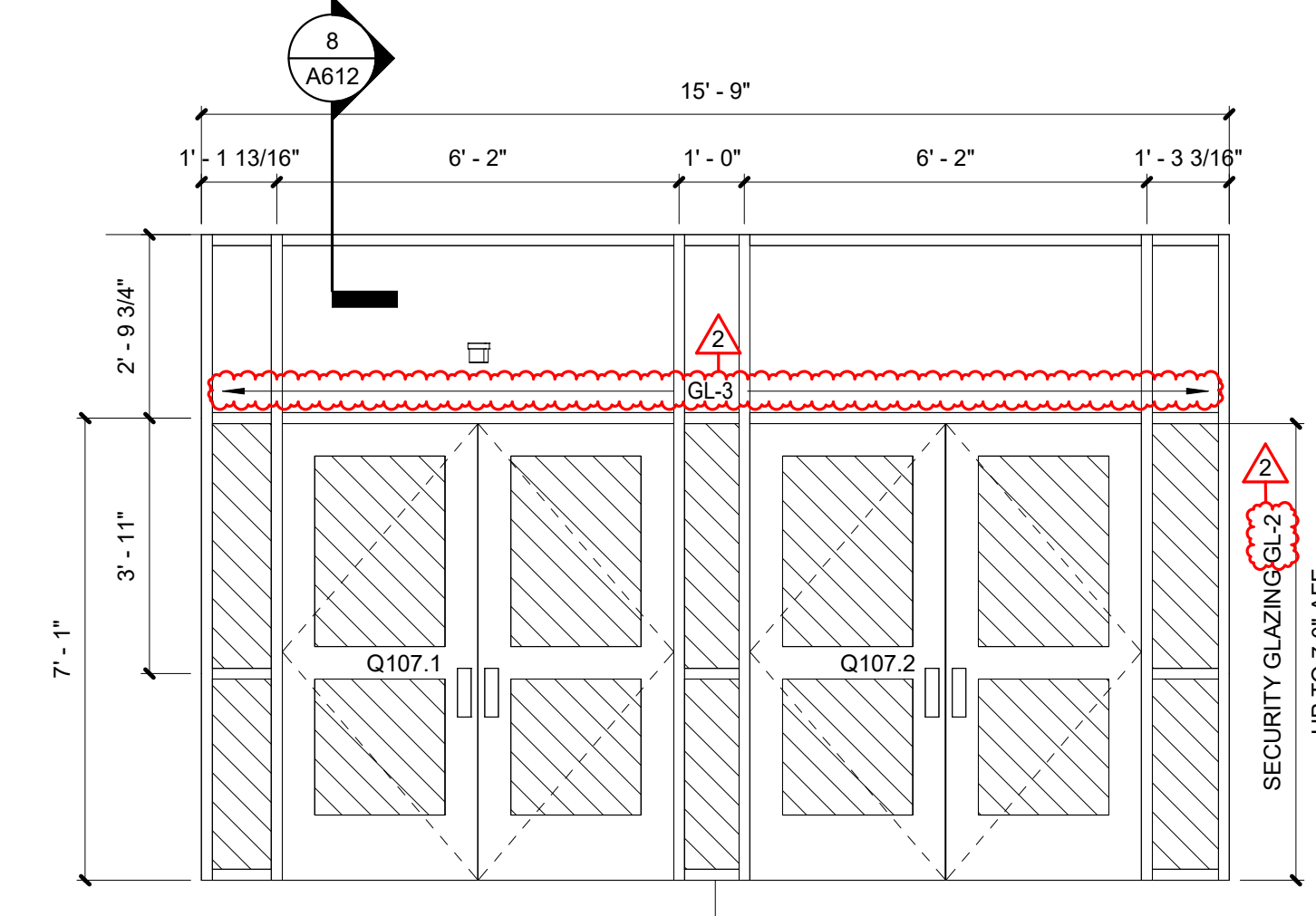
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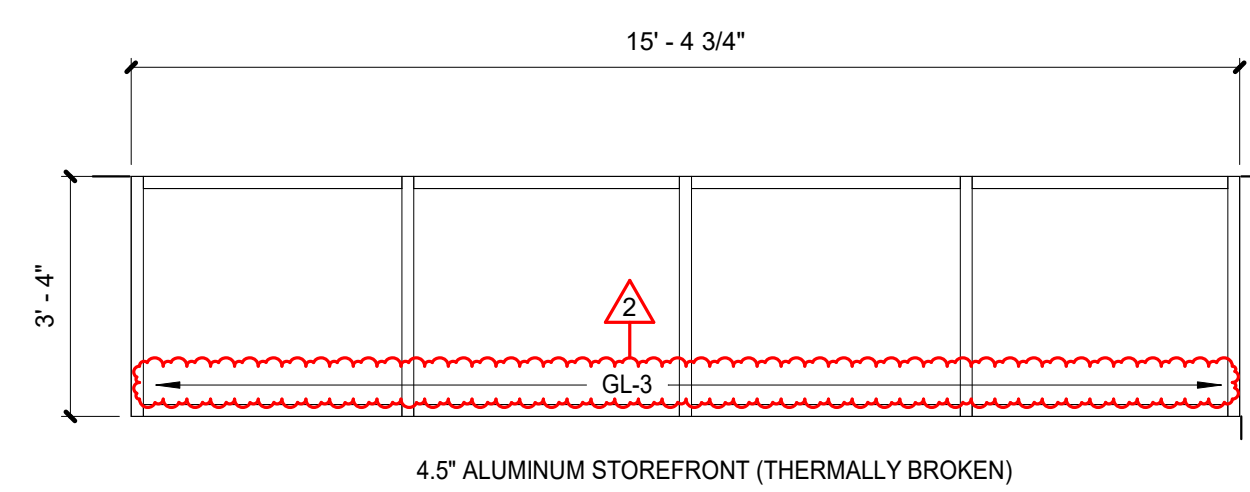
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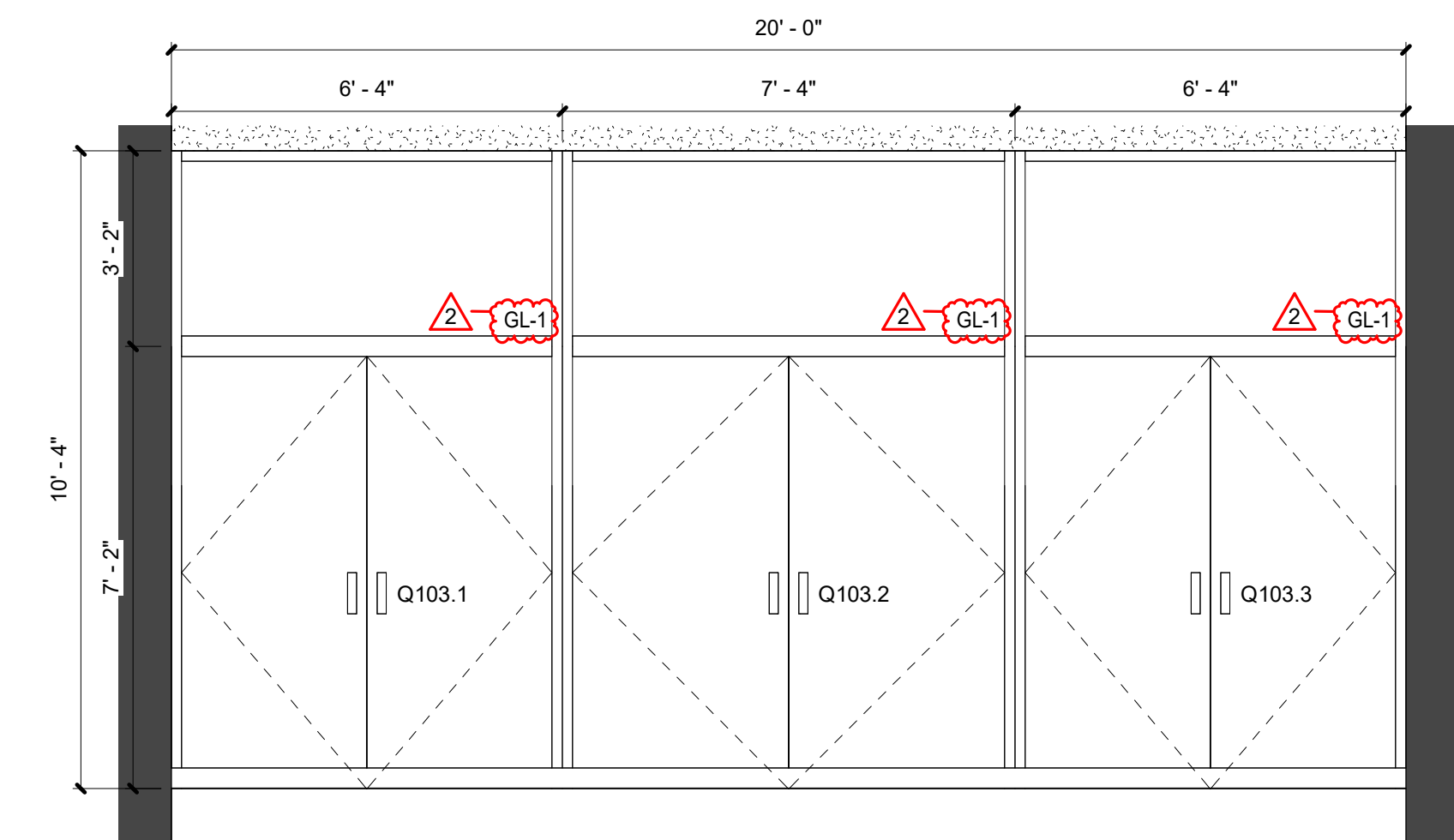
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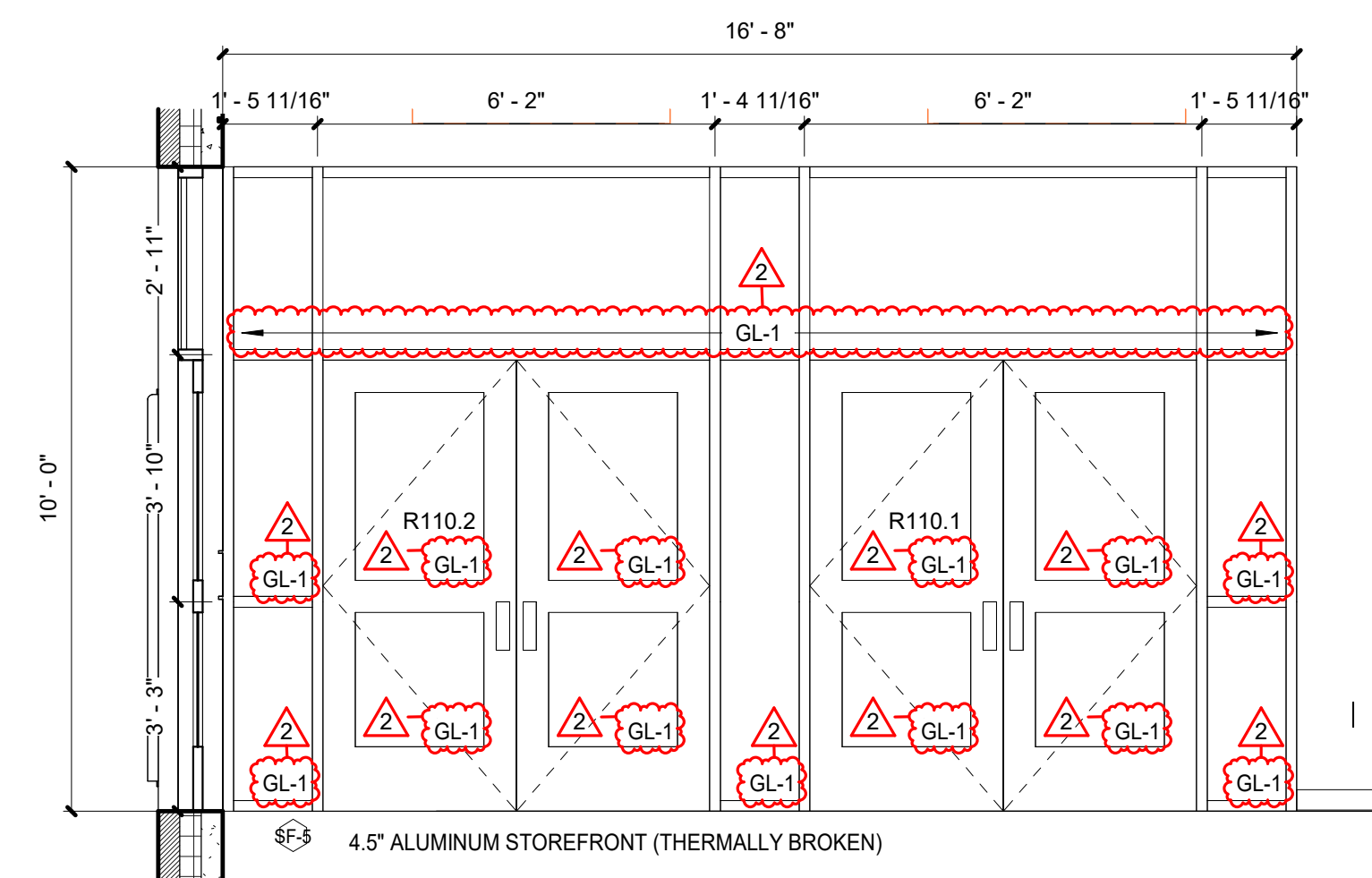
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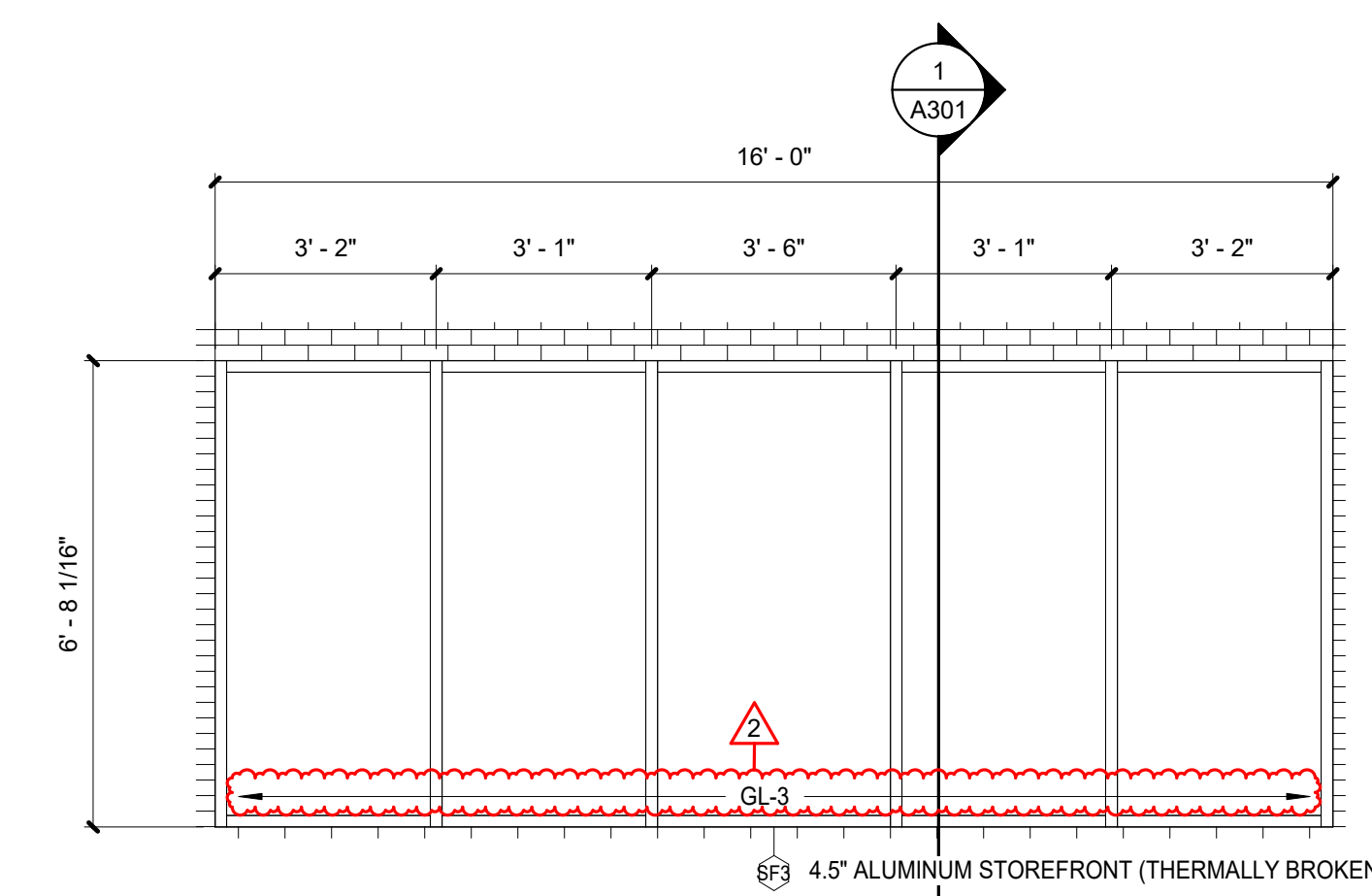
3 WINDOW C  
SCALE: 3/8" = 1'-0"



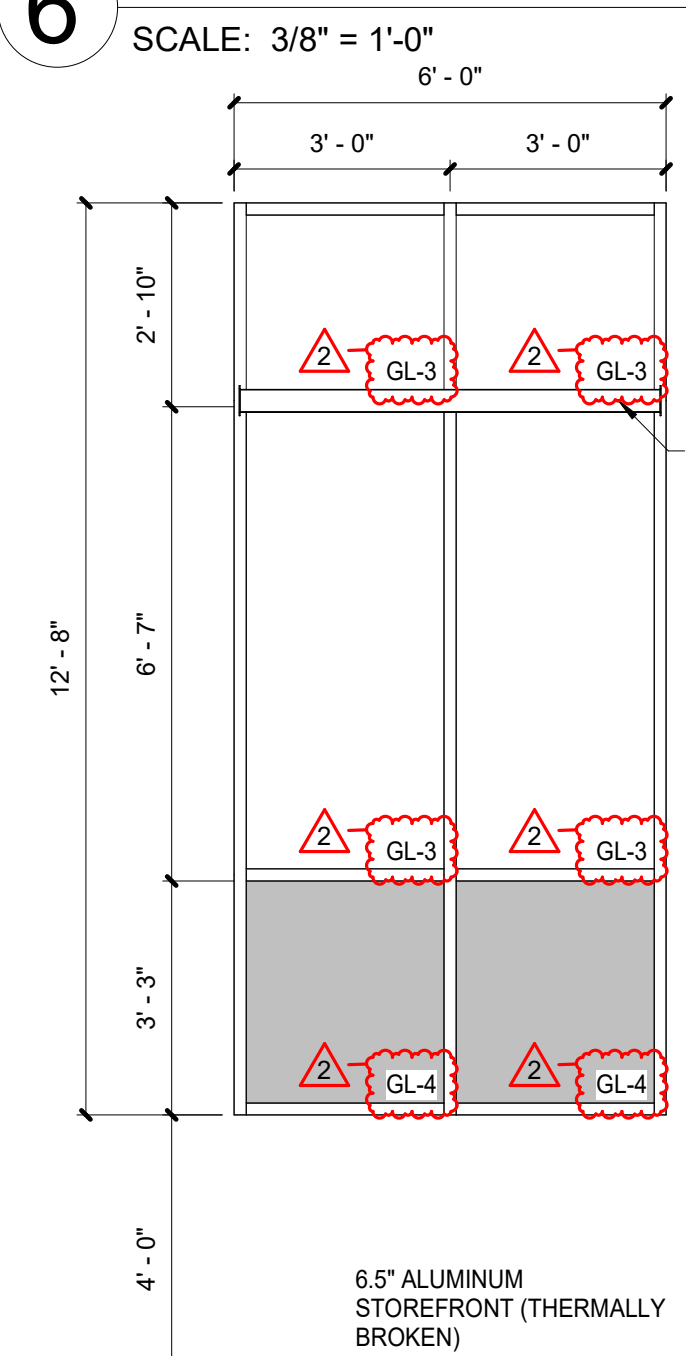
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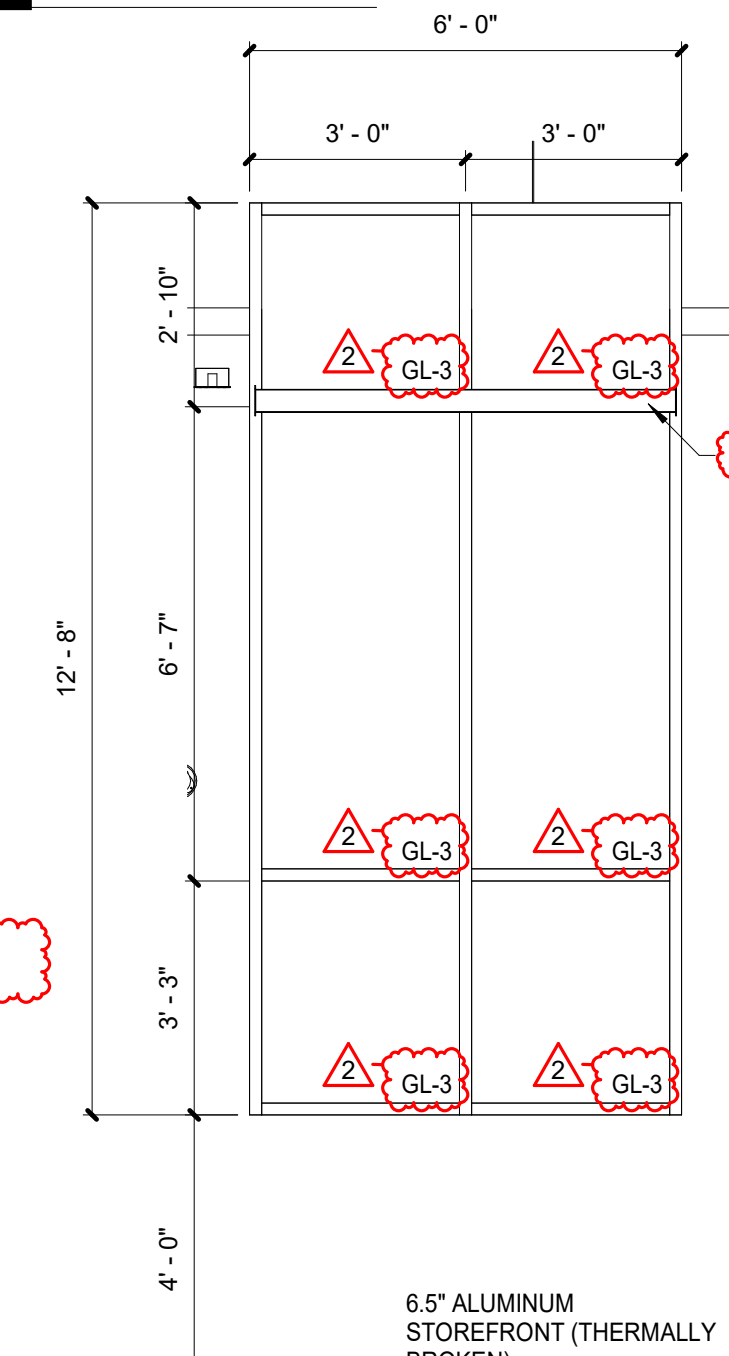
10 SF07 (SAC)  
SCALE: 3/8" = 1'-0"



6 SF03  
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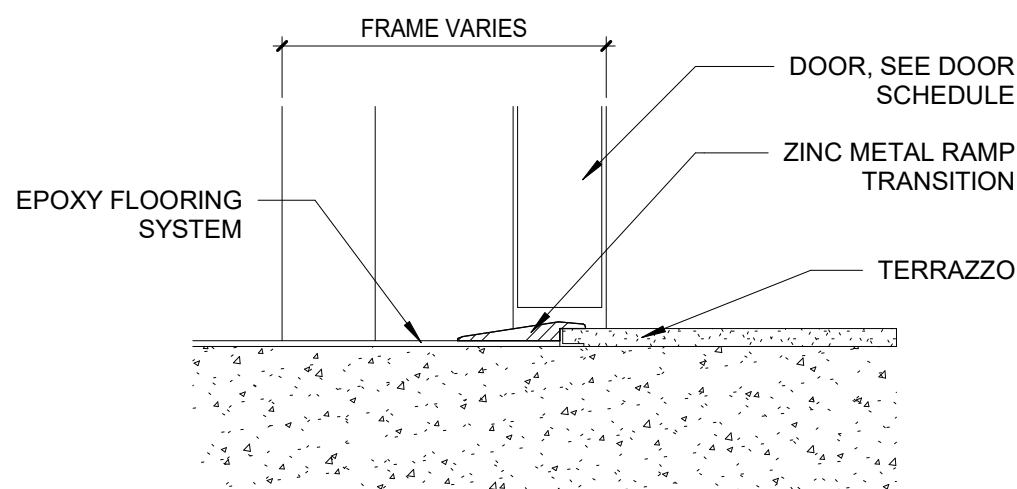
2 WINDOW B  
SCALE: 3/8" = 1'-0"



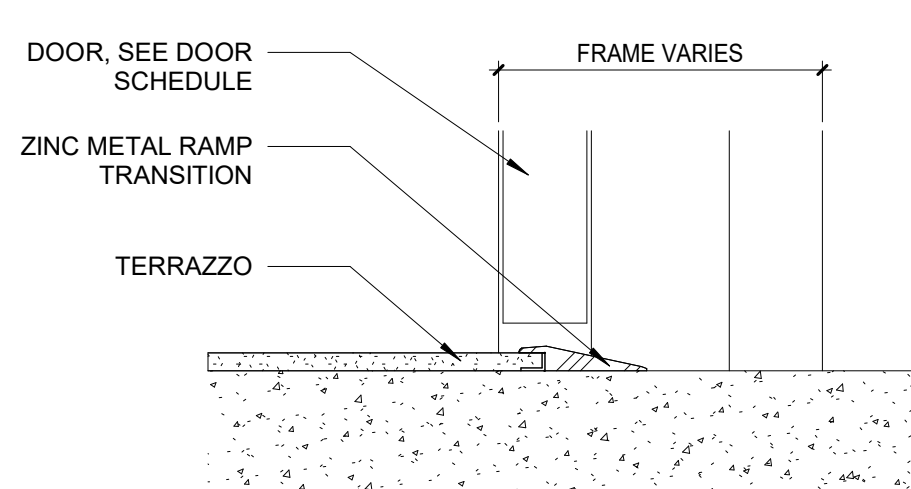
1 WINDOW A  
SCALE: 3/8" = 1'-0"



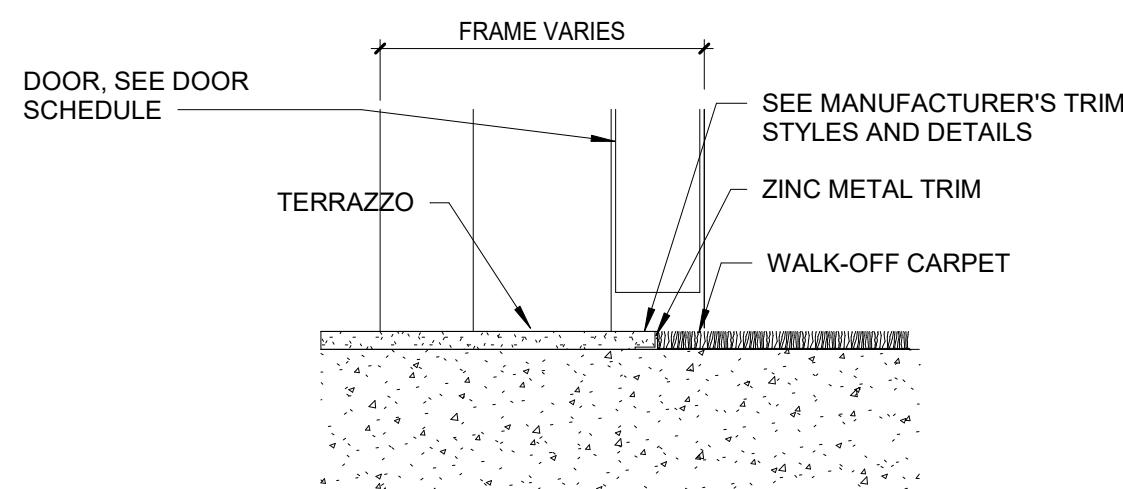
PLT DATE/TIME: 2/20/2025 2:17:59 PM



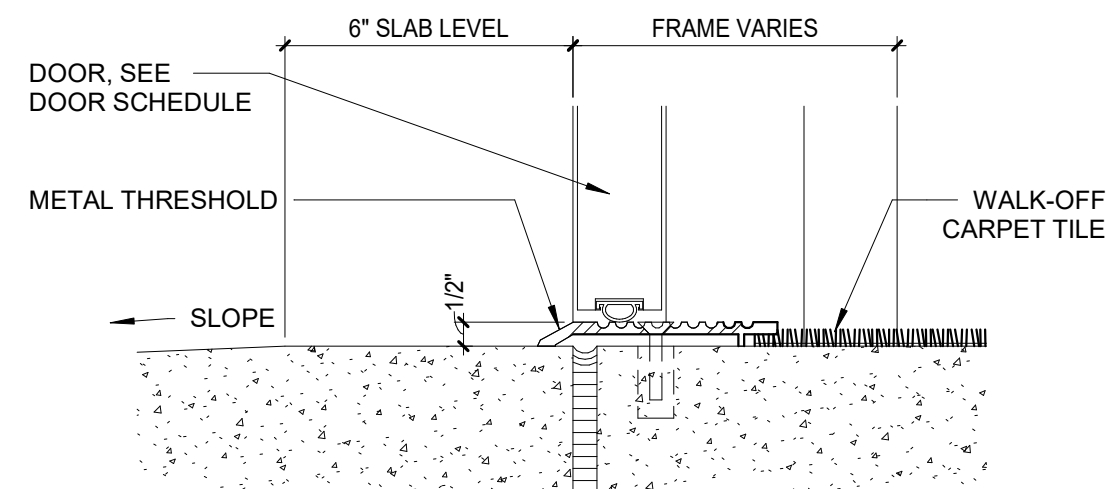
**5** EPOXY TO TERRAZZO  
SCALE: 3" = 1'-0"



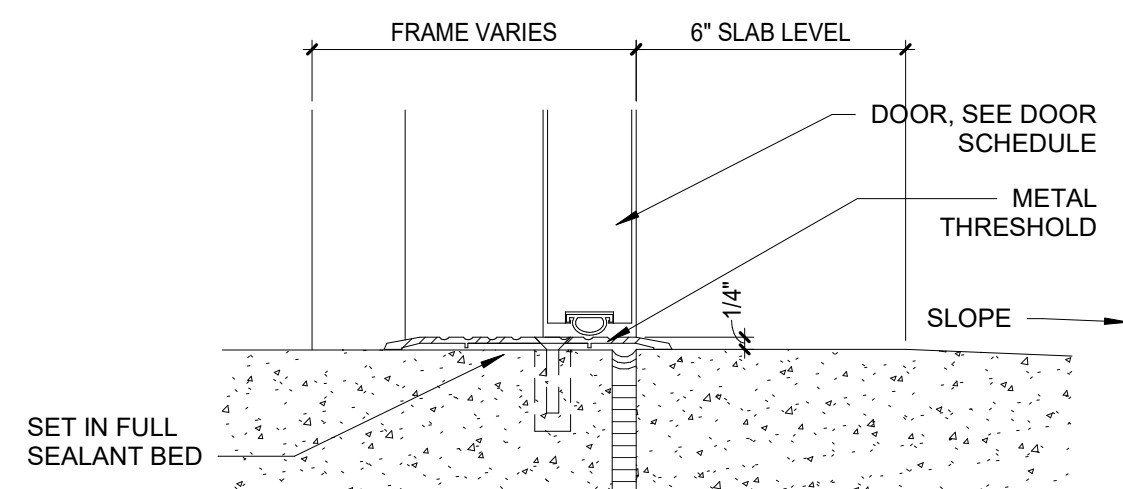
**4** DETAIL-TERRAZZO TO CONCRETE  
SCALE: 3" = 1'-0"



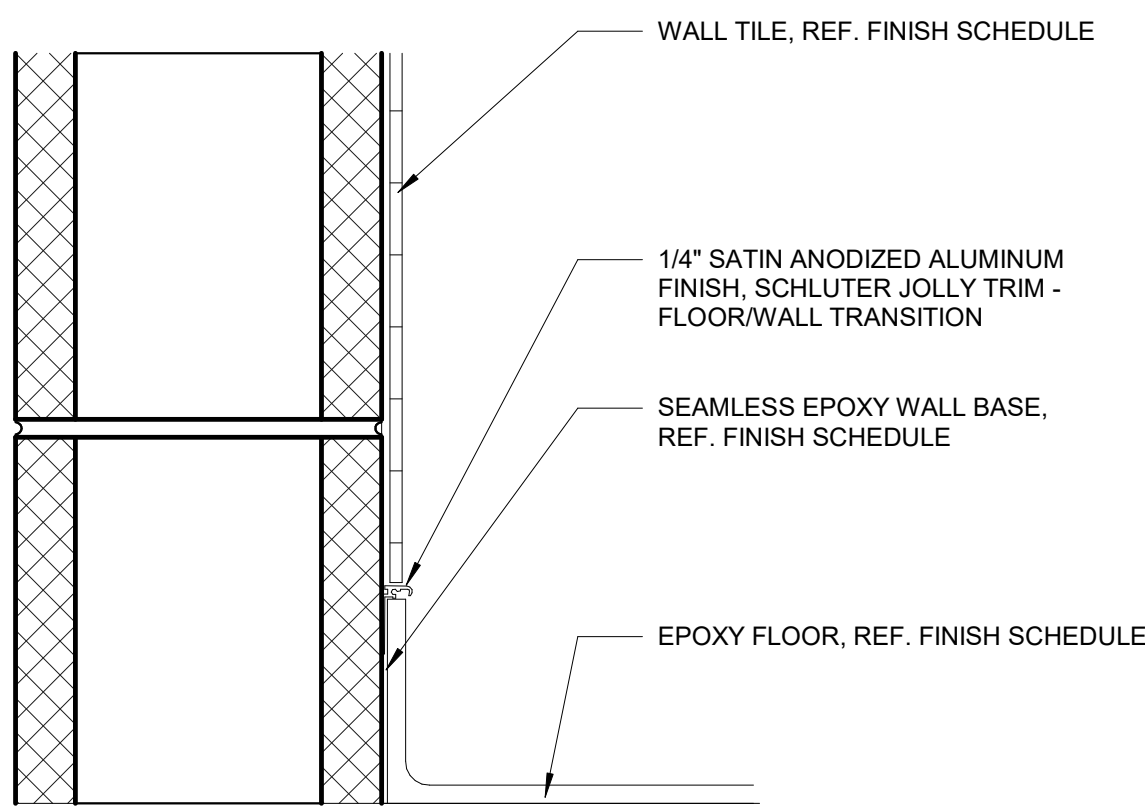
**3** TERRAZZO TO WALK OFF  
SCALE: 3" = 1'-0"



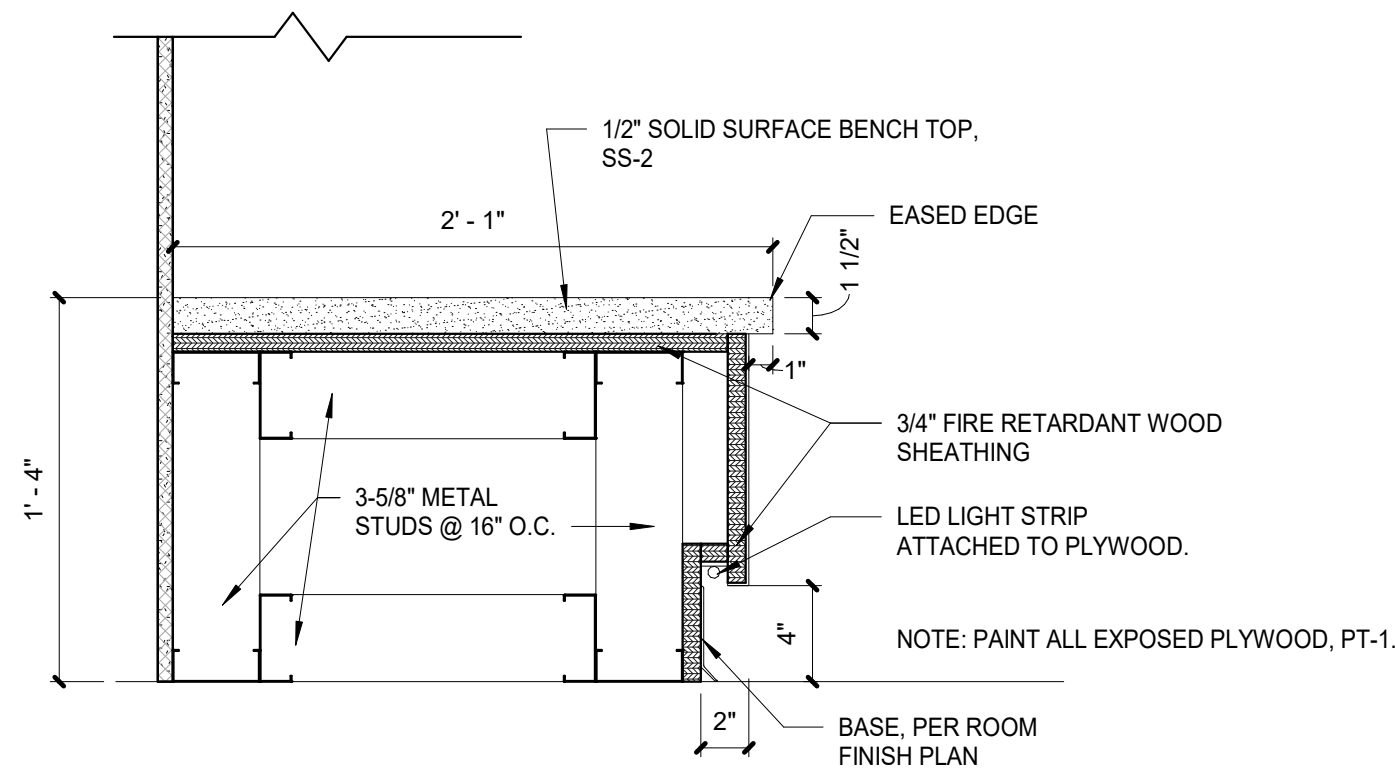
**2** EXT. CONCRETE TO WALK-OFF  
SCALE: 3" = 1'-0"



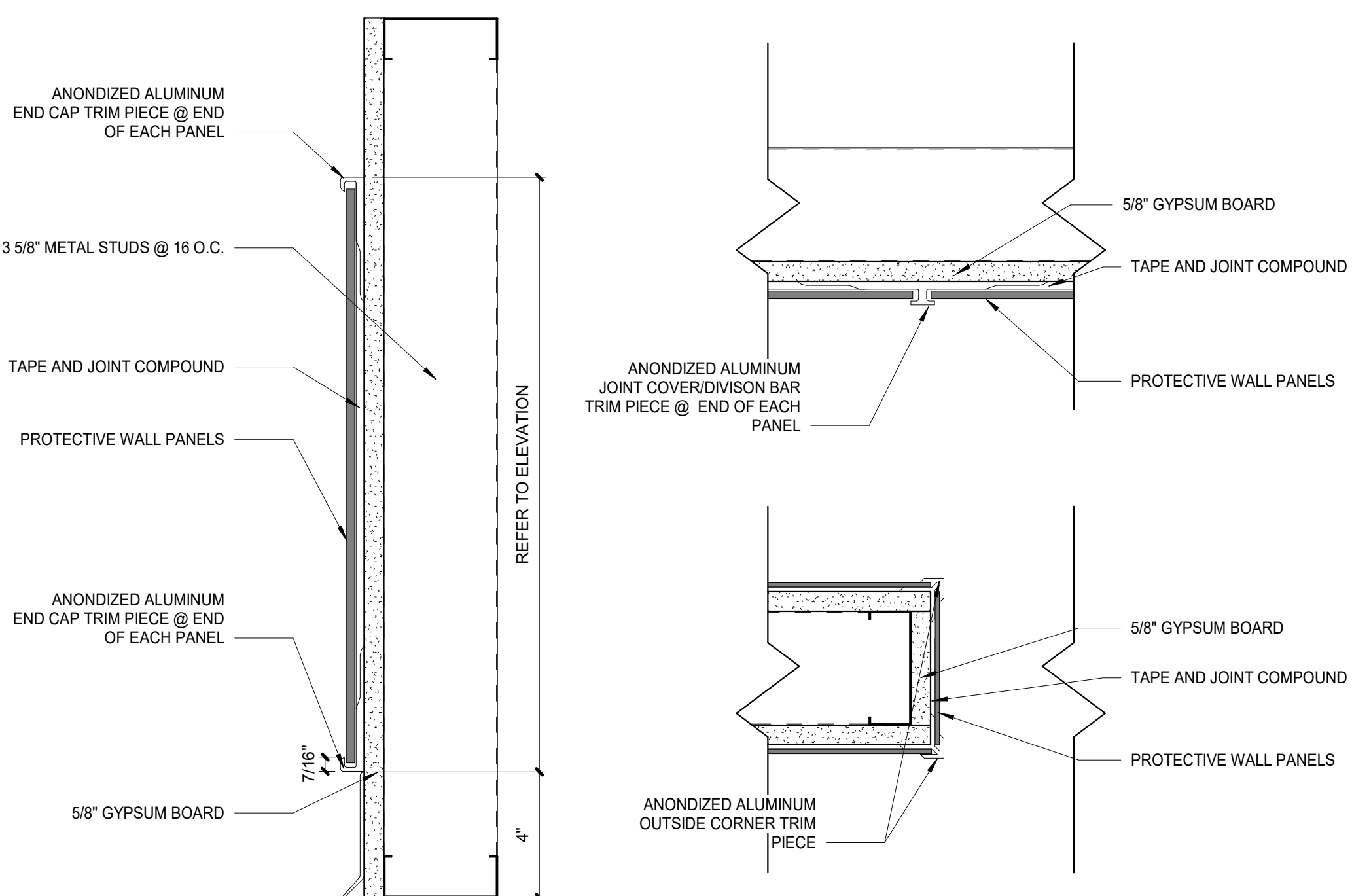
**1** EXT. CONCRETE TO CONCRETE  
SCALE: 3" = 1'-0"



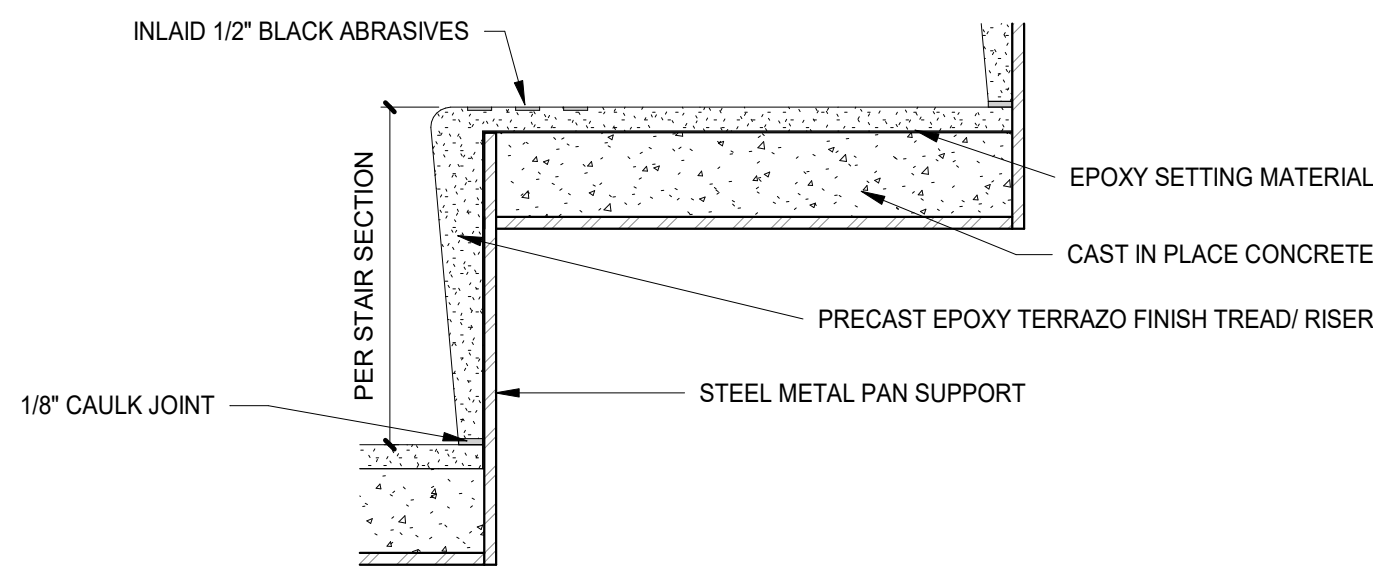
**9** DETAIL - EPOXY BASE TO WALL TILE  
SCALE: 3" = 1'-0"



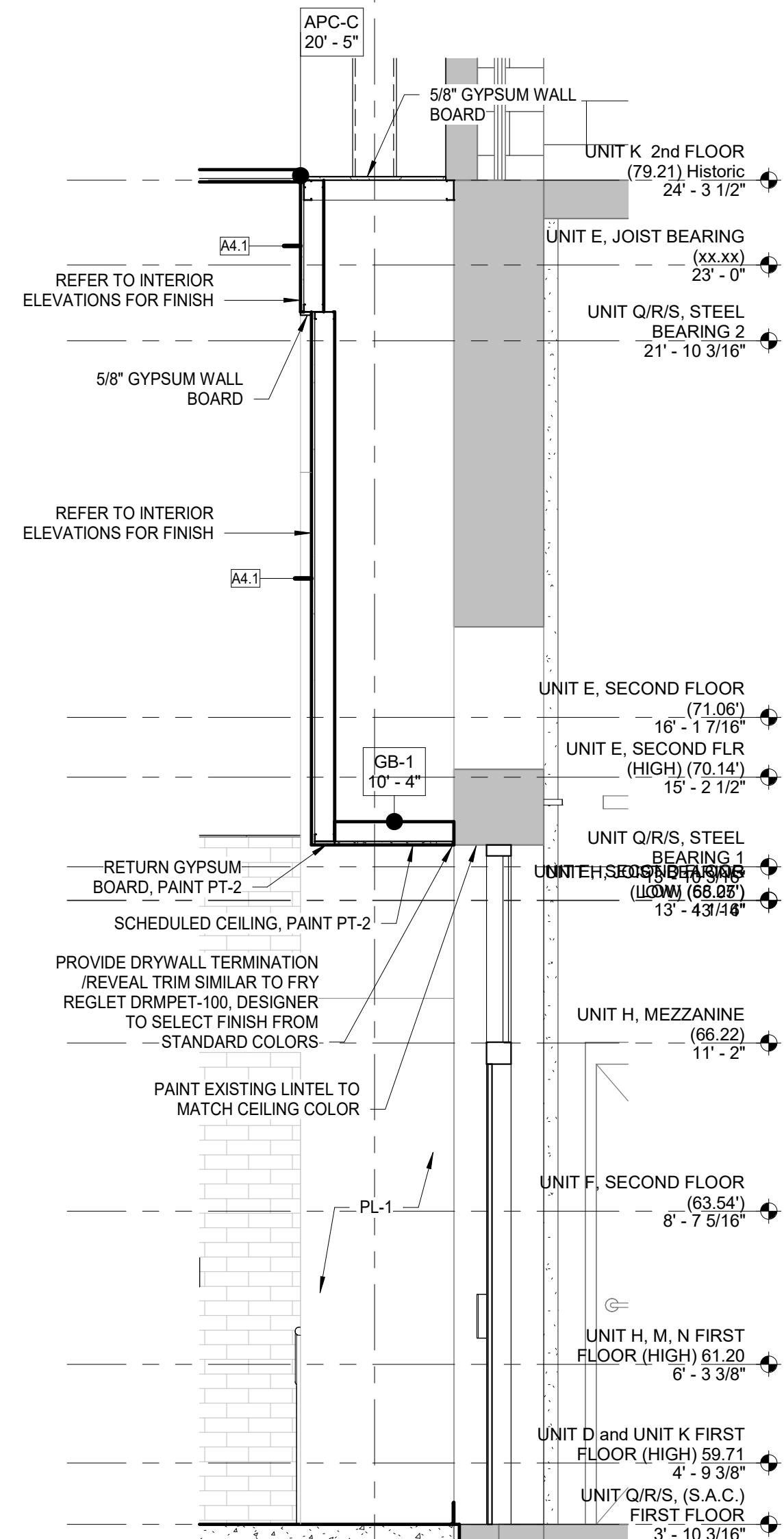
**8** INTERIOR BENCH DETAIL  
SCALE: 1 1/2" = 1'-0"



**12** INTERIOR WALL PANEL TRIM  
SCALE: 3" = 1'-0"



**11** PRECAST TERRAZZO STAIR TREADS  
SCALE: 3" = 1'-0"



**10** SECTION - FIELDHOUSE ENTRANCE WALLS  
SCALE: 1/2" = 1'-0" REF. 1 / A101Q



REVISIONS:

#	Date	Desc.
2	10/26/2025	Addendum #02

100% CONSTRUCTION DOCUMENTS

PROJECT: #241735  
DATE: 01-08-2025  
DRAWN BY: Author

INTERIOR DETAILS

A731

PERRY TOWNSHIP SCHOOLS  
SOUTHPORT HIGH SCHOOL ADDITION AND RENOVATION  
971 EAST BANTA ROAD, INDIANAPOLIS, IN 46227

LANCER ASSOCIATES  
ARCHITECTURE  
145 NORTH EAST STREET  
INDIANAPOLIS, IN 46204

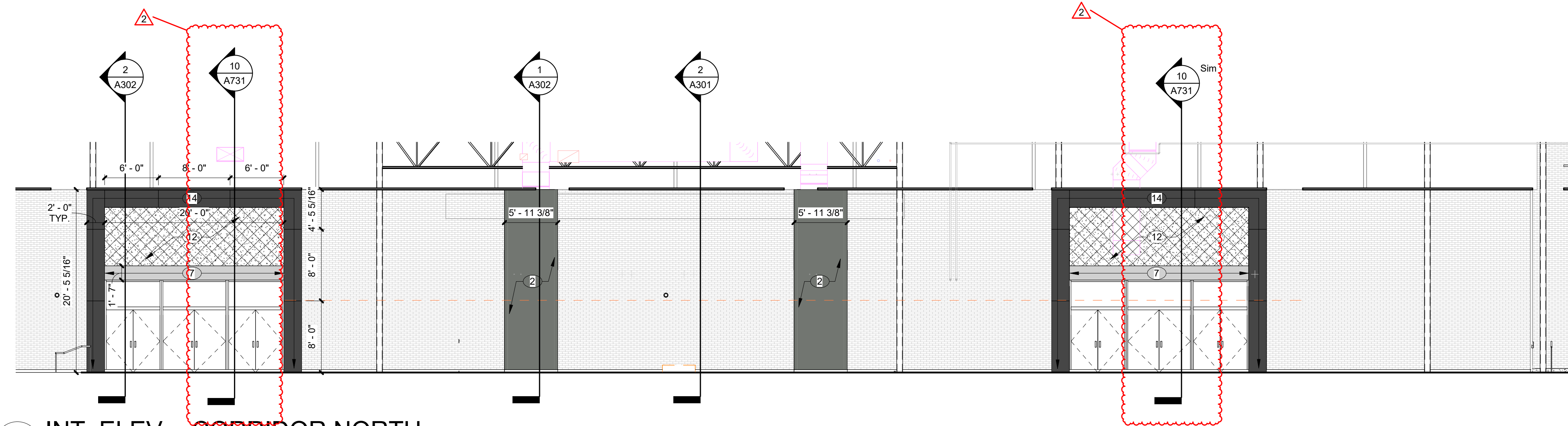


GENERAL NOTES

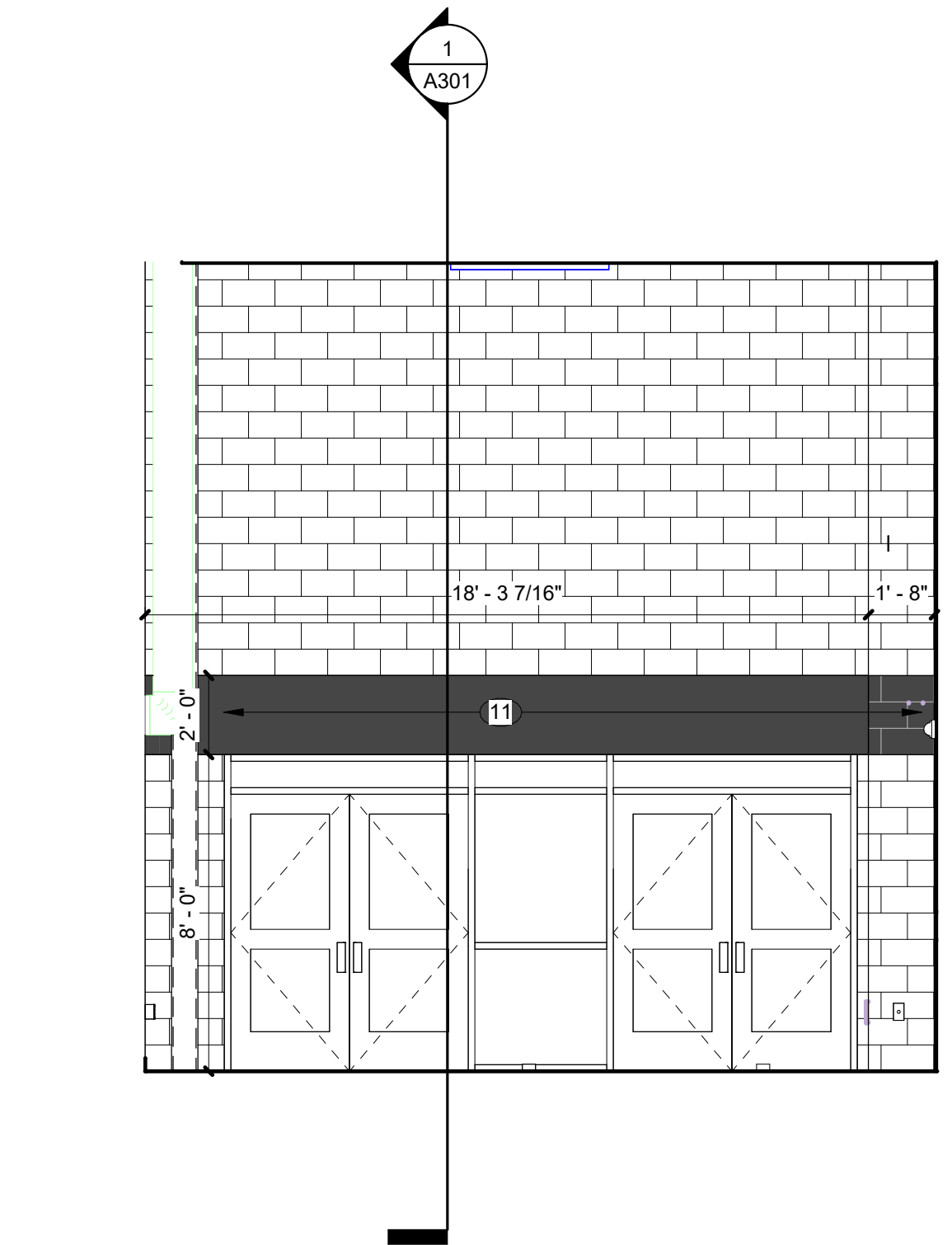
- A. CONTRACTOR TO PROVIDE SCHLUTER EDGE WHERE TILE MEETS DISSIMILAR MATERIALS. REFER TO FINISH MATERIAL LEGEND AND INTERIOR ELEVATIONS FOR FURTHER DETAILS. LS
- B. DO NOT INSTALL GYPSUM BOARD BEHIND TILE BACKER BOARD LOCATIONS.
- C. CONTRACTOR TO PROVIDE DRYWALL REVEAL JOINT WHERE DRYWALL MEETS DISSIMILAR MATERIALS.
- E. IF ONLY PAINT IS INDICATED AS THE FINISH, REFER TO ARCHITECTURAL FLOOR PLANS FOR SUBSTRATE INFORMATION.
- F. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION OF DIMENSIONS AND JOB CONDITIONS. ANY DEVIATION FROM WHAT IS INDICATED ON THE FINISH PLANS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECTS AND DESIGNERS.
- G. ALL DIMENSIONS SHOWN ARE TO FACE OF FINISH MATERIAL, UNLESS INDICATED OTHERWISE ON PLANS.
- H. ALL EXPOSED METAL SURFACES, SUCH AS GRILLES, FIRE EXTINGUISHER CABINETS, ETC., THAT ARE NOTED TO BE PAINTED ARE TO BE PAINTED MATCH WALL COLOR.
- I. ALL WALLS TO BE PAINTED PT-1, UNLESS NOTED OTHERWISE.

ELEVATION NOTES - INTERIOR

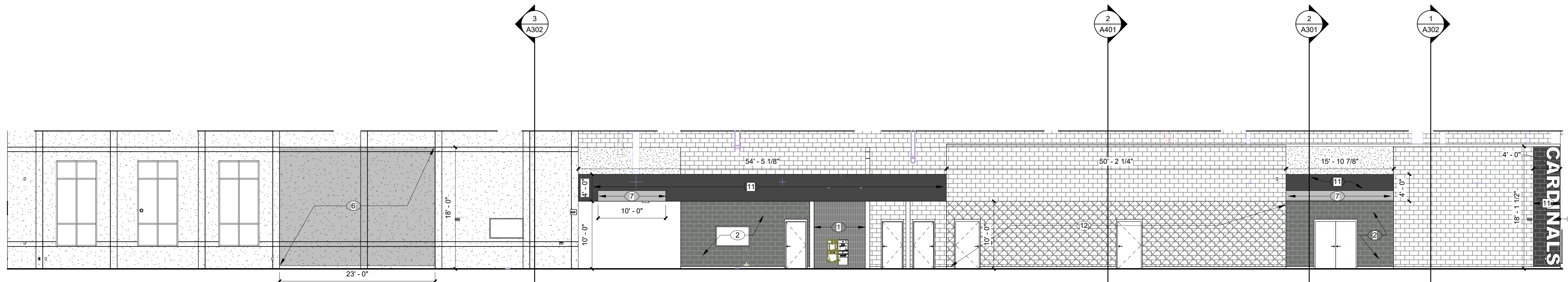
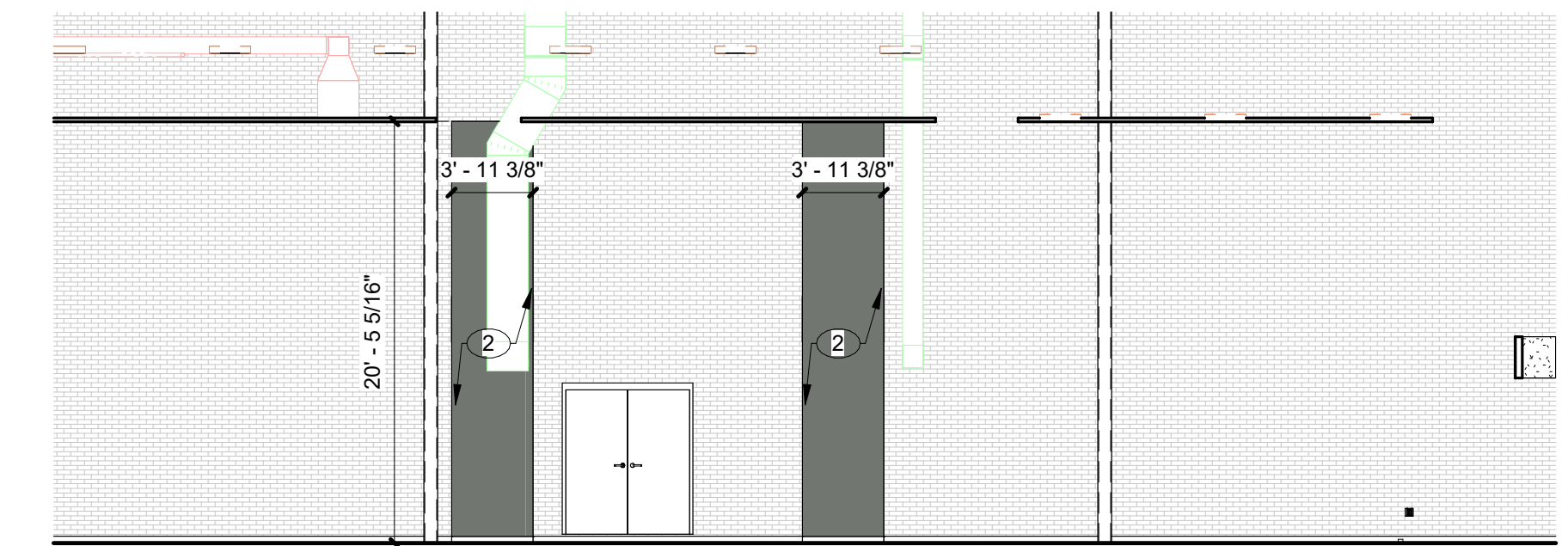
1. WALL TILE, WT-1 AT THIS LOCATION. REFER TO FINISH LEGEND.
2. ACCENT PAINT, PT-3 AT THIS LOCATION. REFER TO FINISH LEGEND.
3. WOOD SLAT PANELS SYSTEM WCP-1 (CEILING), WWP-1 (WALL)
4. OWNER PROVIDED TV MONITOR
5. SOLID SURFACE SS-1. REFER TO FINISH LEGEND.
6. CUSTOM PAINTED GRAPHIC ON PRECAST PANEL ASSUME TWO COLORS.
7. 18" HIGH X 1" DEEP 3D ACRYLIC LETTERING - TITLE TO BE DETERMINED BY OWNER
8. ACOUSTICAL WALL PANELS AWP-1 (TYP.)
9. PAINTED GRAPHIC - ASSUME UP TO 4 COLORS. DESIGN TO BE DETERMINED AND APPROVED BY OWNER VIA SHOP DRAWING PRIOR TO INSTALLATION
10. PLASTIC LAMINATE PL-2 ON BENCH FACE
11. ACCENT PAINT, PT-2 AT THIS LOCATION. REFER TO FINISH LEGEND.
12. CUSTOM VINYL GRAPHIC ON CMU, WC-1. REFER TO FINISH LEGEND.
13. 22" HIGH X 1/2" DEEP PVC LETTERS TO SPELL 'CARDINALS'
14. HIGH PRESSURE PLASTIC LAMINATE, PL-1 FABRICATED PANELS. USE MANF. TRIM. REFER TO INTERIOR DETAIL 11A131.
15. CUSTOM PAINTED GRAPHIC ON CMU. FINAL DESIGN, FONT, AND HEIGHT TO BE COORDINATED WITH OWNER.
16. WALL PADDING, WP-2. INCLUDE CUSTOM GRAPHIC. OWNER TO COORDINATE/APPROVE GRAPHIC DIRECTLY WITH VENDOR PRIOR TO MANUFACTURING
17. WALL PADDING WP-1 (TYP.)
18. ACCENT PAINT PT-4 AT THIS LOCATION. REFER TO FINISH LEGEND.
19. PLASTIC LAMINATE PL-3. REFER TO FINISH LEGEND.
20. PAINT STRUCTURE PT-2 (TYP.)



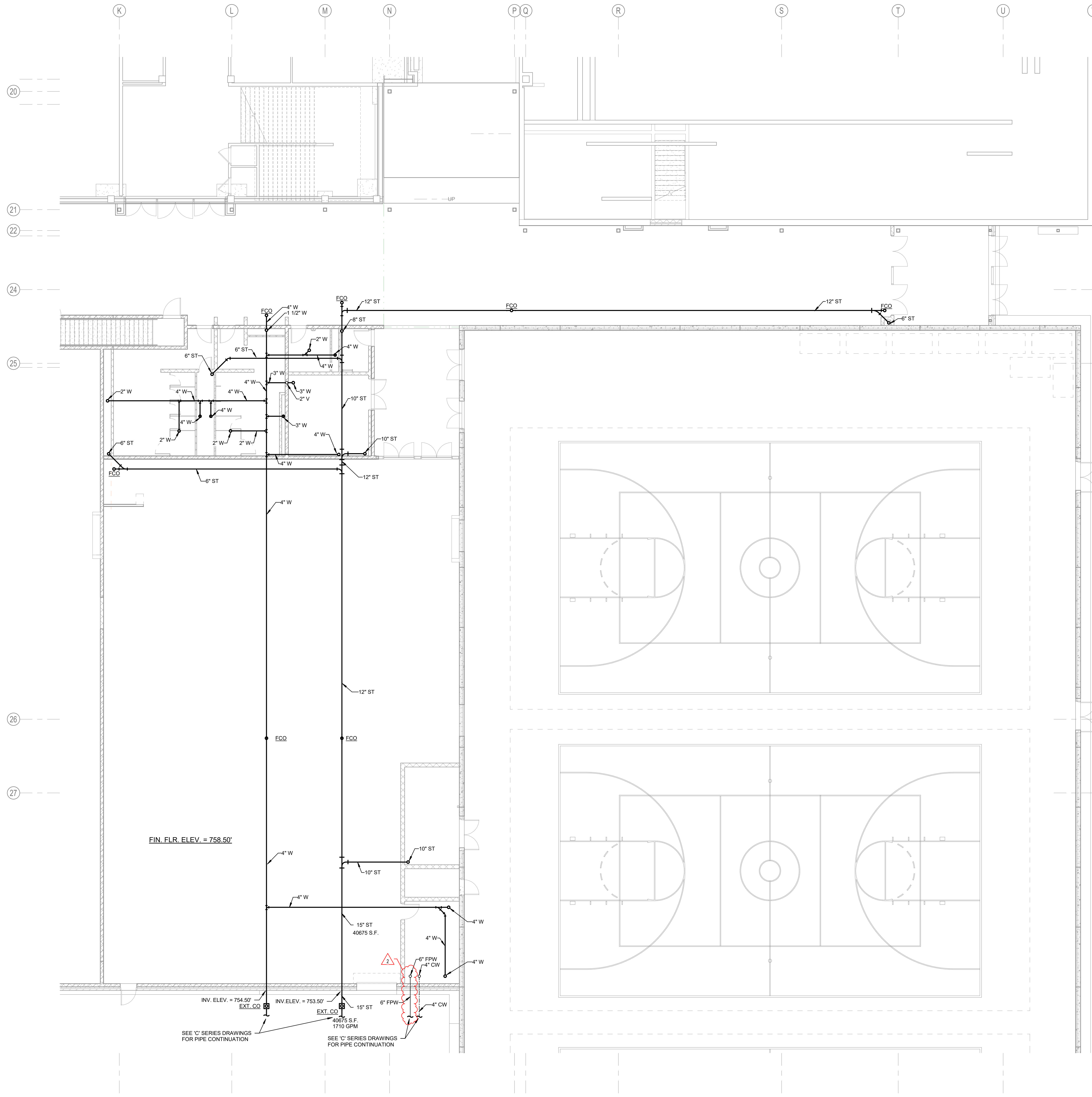
2 INT. ELEV. - CORRIDOR NORTH  
SCALE: 1/8" = 1'-0" REF. 1 / A101Q



3 INT. ELEV. - CORRIDOR EAST  
SCALE: 1/4" = 1'-0" REF. 1 / A101R



1 INT. ELEV. - CORRIDOR SOUTH  
SCALE: 1/8" = 1'-0" REF. 1 / A101Q



- PLUMBING PLAN NOTES**
1. INSTALL DUPLEX SEWAGE EJECTOR PUMP AND CONNECT TO EXISTING PIPING COMPLETE.
  2. 2-1/2" (5 PSIG) LINE FROM NEW GAS METER. CONTACT JERRY GENTRY AT CITIZENS ENERGY 317-370-6792 FOR NEW METER AND SERVICE LINE. TOTAL CONNECTED LOAD OF 3500 CFH.
  3. SAWCUT FLOOR SLAB AS REQUIRED TO INSTALL A NEW 4" WASTE LINE ALL THE WAY TO THE EXISTING SUMP BASIN.
  4. ROUTE NEW DOMESTIC WATER PIPING TIGHT TO WALL DOWN TO FLOOR BELOW AND CONNECT TO DOMESTIC WATER PIPING COMPLETE.

**LANCER ASSOCIATES**  
ARCHITECTURE

145 NORTH EAST STREET  
INDIANAPOLIS, IN 46204

**creative engineering solutions**  
mechanical-electrical-plumbing  
402 N. Capitol Ave., Suite 200  
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www.creative-engineering.com

PERRY TOWNSHIP SCHOOLS  
SOUTHPORT HIGH SCHOOL ADDITION AND  
RENOVATION  
971 EAST BANTA ROAD, INDIANAPOLIS, IN 46227

**GABRIEL S. CURTIS**  
REGISTERED  
NO. PE10808972  
STATE OF INDIANA  
PROFESSIONAL ENGINEER

REVISIONS:

#	Date	Desc.
1	02/06/2026	Addendum #02

100% CONSTRUCTION DOCUMENTS

PROJECT: #241735  
DATE: 01-06-2026  
DRAWN BY: LLP / IOP

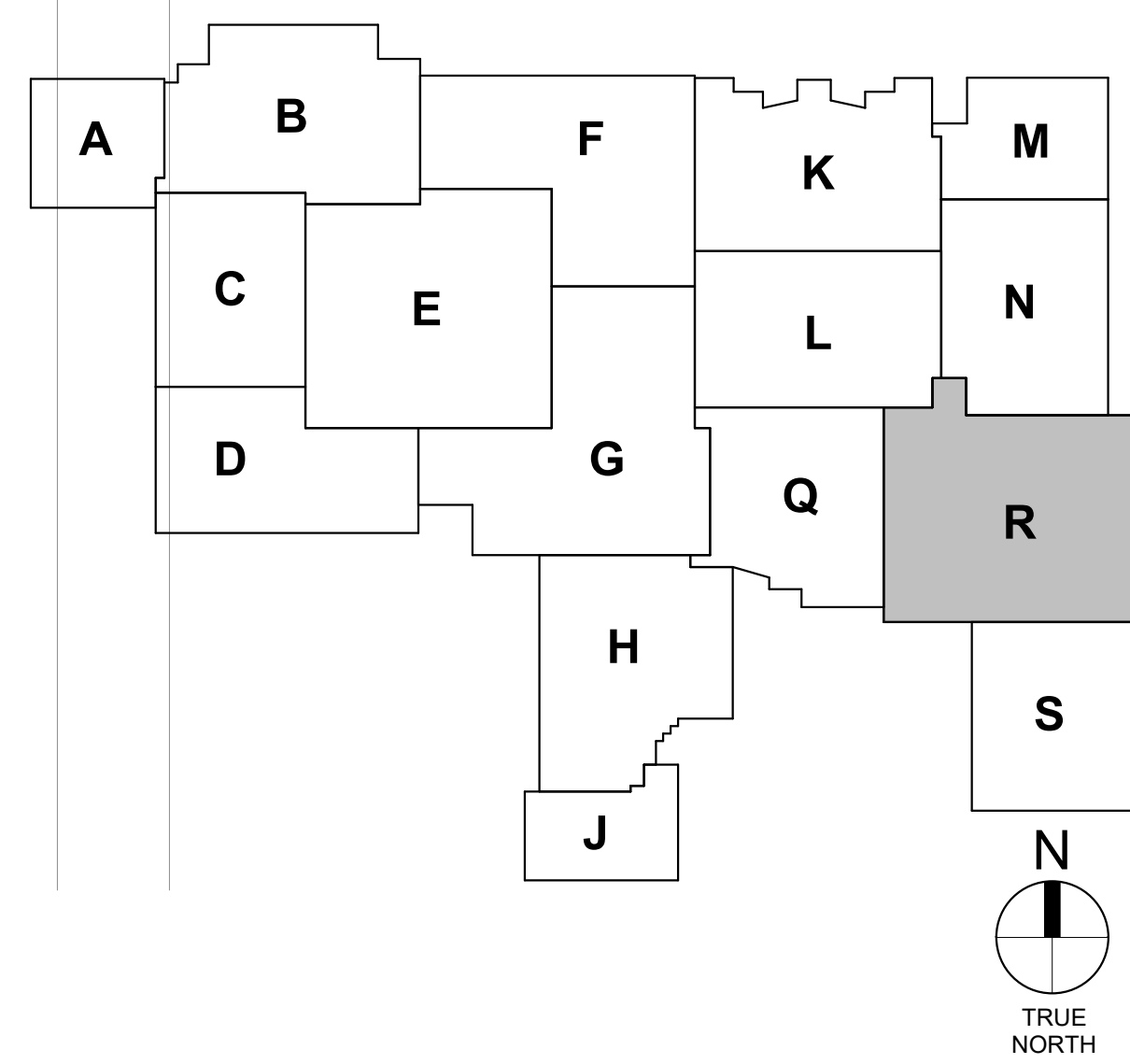
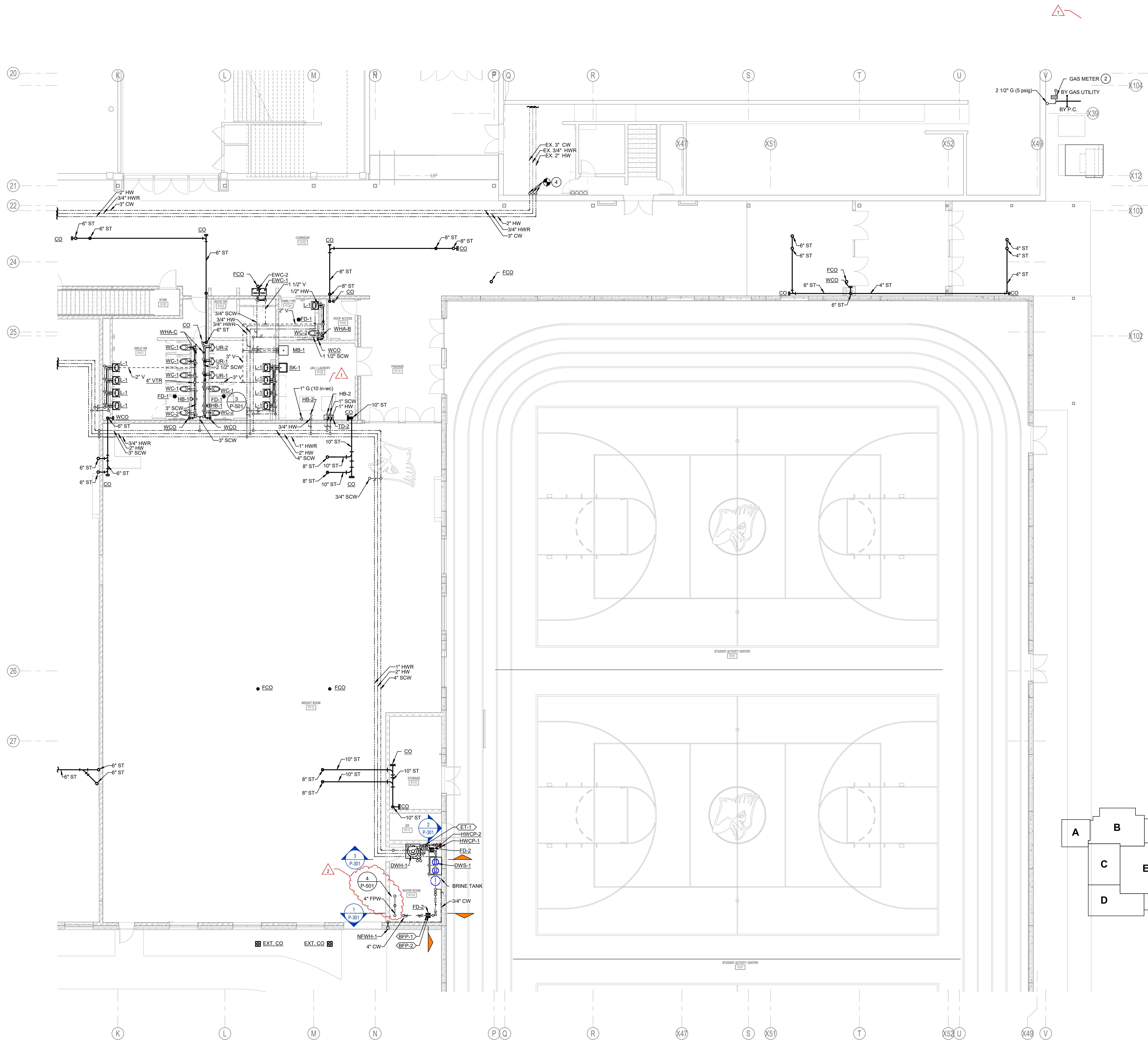
PLUMBING FOUNDATION PLAN - UNIT R

PF102

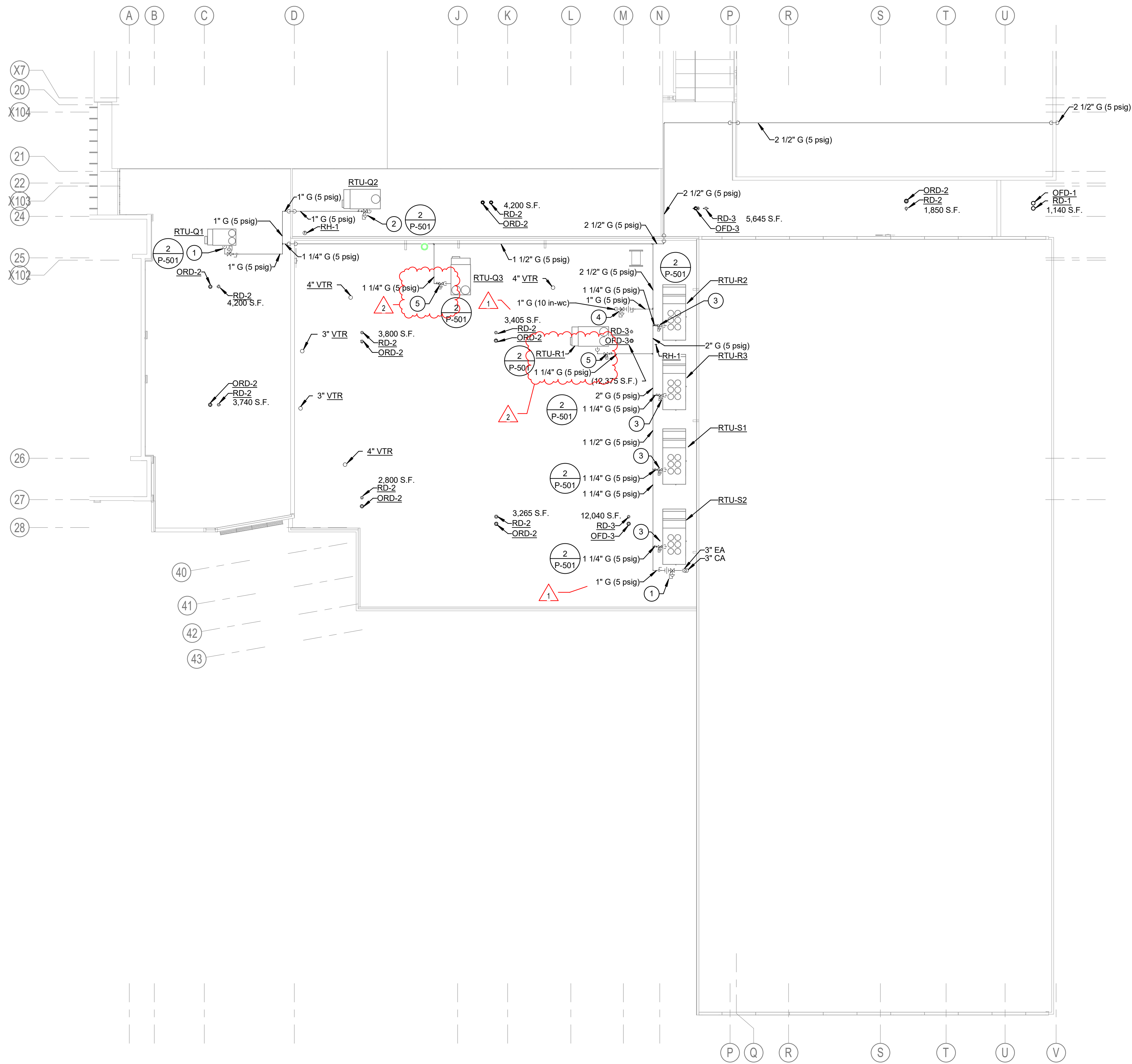
TRUE NORTH

**1 PLUMBING FOUNDATION PLAN - UNIT R**  
1/8" = 1'-0"

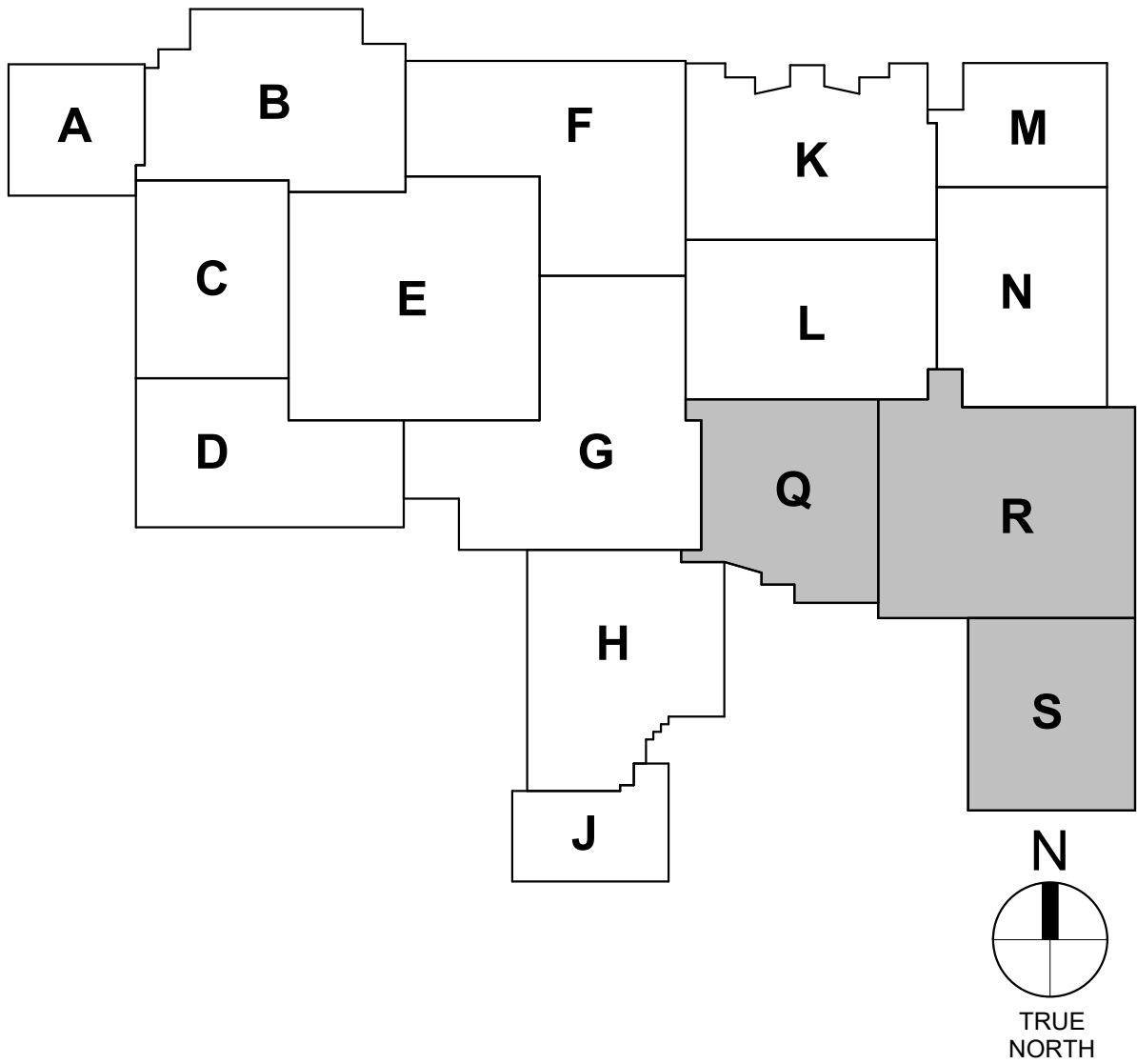




REVISONS:	#	Date	Desc.
	1	01/03/2026	Issued for RFI
	2	02/09/2026	Issued for RFI



1 PLUMBING ROOF PLAN  
3/64" = 1'-0"



- ROOF PLUMBING PLAN NOTES**
1. PROVIDE A GAS PRESSURE REGULATOR TO ACCEPT (5 PSI) SERVICE PRESSURE AND REGULATE DOWN TO 10" W.C. SUPPLYING 200 CFH.
  2. PROVIDE A GAS PRESSURE REGULATOR TO ACCEPT (5 PSI) SERVICE PRESSURE AND REGULATE DOWN TO 10" W.C. SUPPLYING 250 CFH.
  3. PROVIDE A GAS PRESSURE REGULATOR TO ACCEPT (5 PSI) SERVICE PRESSURE AND REGULATE DOWN TO 10" W.C. SUPPLYING 400 CFH.
  4. PROVIDE A GAS PRESSURE REGULATOR TO ACCEPT (5 PSI) SERVICE PRESSURE AND REGULATE DOWN TO 10" W.C. SUPPLYING 165 CFH.
  5. PROVIDE A GAS PRESSURE REGULATOR TO ACCEPT (5 PSI) SERVICE PRESSURE AND REGULATE DOWN TO 10" W.C. SUPPLYING 600 CFH.



REVISONS:	#	Date	Desc:
	1	01/28/2026	Issued for #01
	2	02/09/2026	Issued for #02

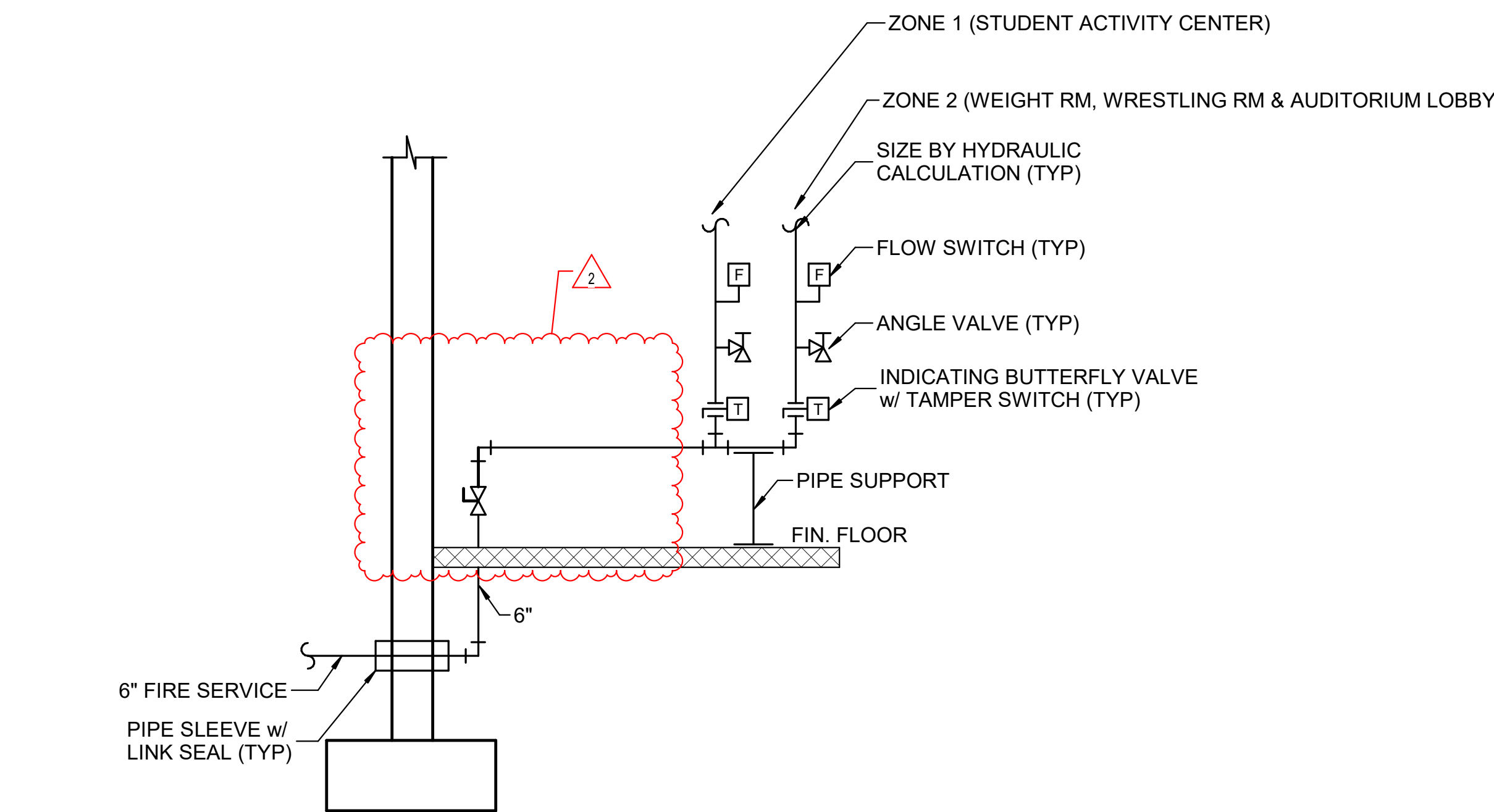
100% CONSTRUCTION  
DOCUMENTS

PROJECT: #241735  
DATE: 01-08-2026  
DRAWN BY: LLP / IOP

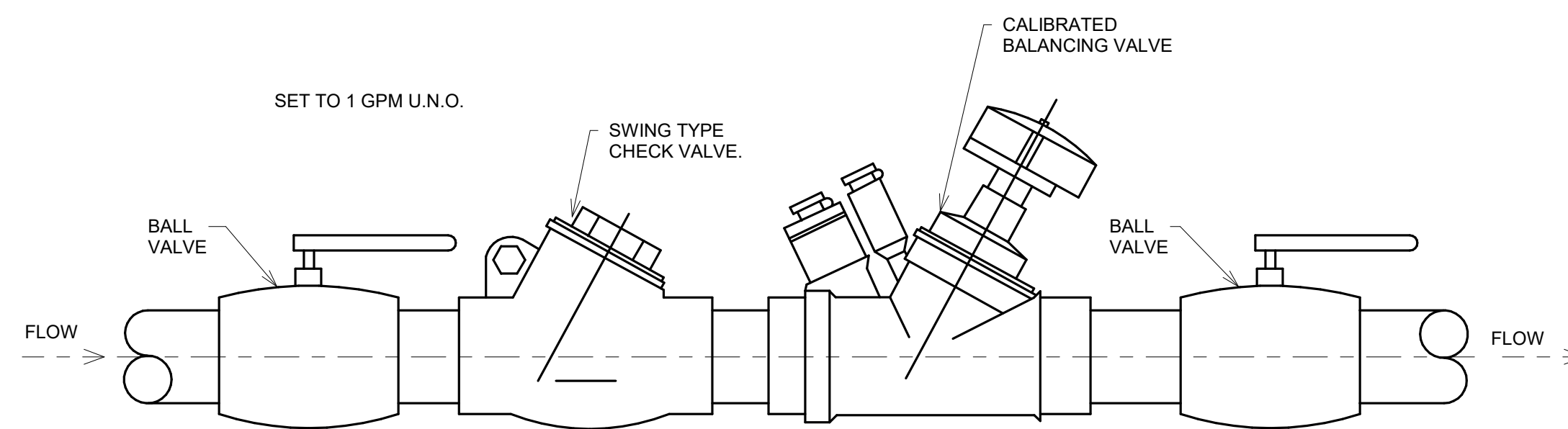
PLUMBING  
ROOF PLAN



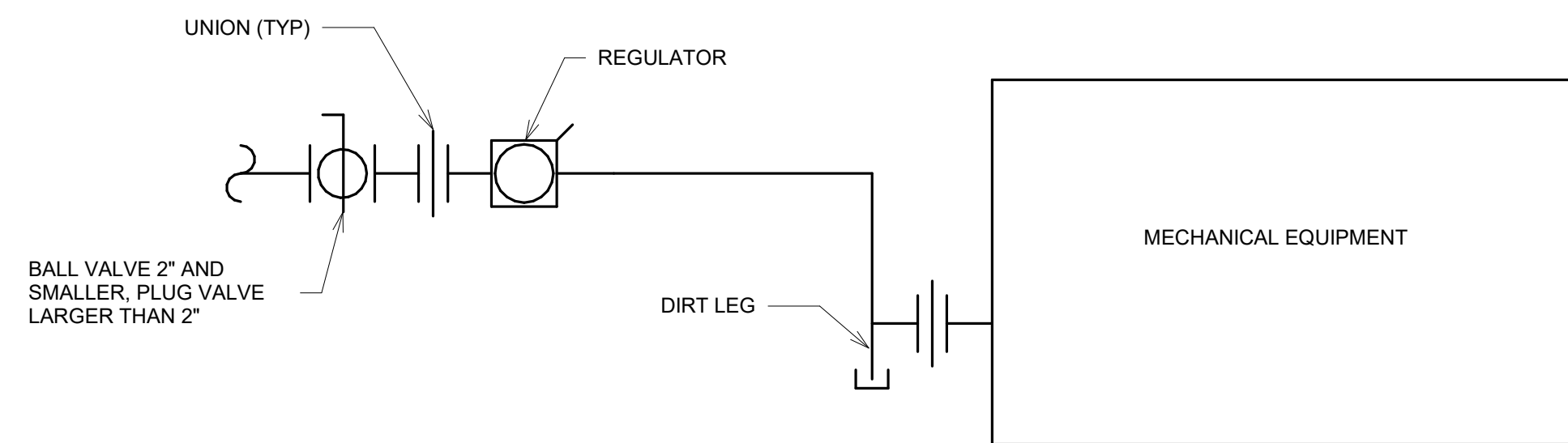
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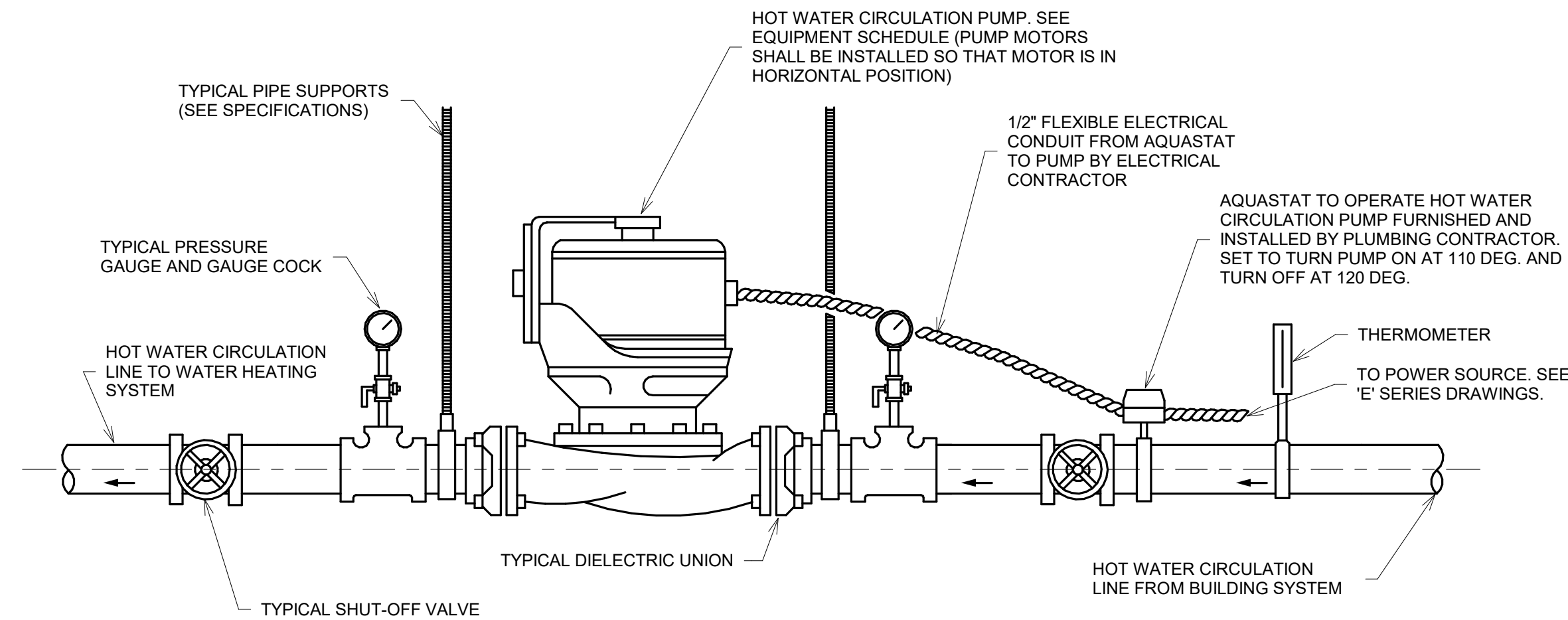
**4 FIRE RISER DETAIL**  
NOT TO SCALE



**3 BALANCING STATION**  
NOT TO SCALE



**2 GAS CONNECTION TO MECHANICAL EQUIPMENT DETAIL**  
NOT TO SCALE



**1 HOT WATER CIRCULATION PUMP DETAIL**  
NOT TO SCALE

PERRY TOWNSHIP SCHOOLS  
SOUTHPORT HIGH SCHOOL ADDITION AND  
RENOVATION  
971 EAST BANTA ROAD, INDIANAPOLIS, IN 46227



REVISIONS:		
#	Date	Desc.
1	02/06/2025	Addendum #02

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PROJECT: #241735  
DATE: 01-06-2025  
DRAWN BY: LLP / IOP

PLUMBING  
DETAILS



FUEL-FIRED, DOMESTIC WATER HEATERS											NOTES
IDENTITY DATA				NATURAL GAS		ELECTRICAL					
MARK	MANUFACTURER	MODEL	DESCRIPTION		GPH RECOVERY RATE	INPUT (BTU/H)	VOLTAGE	PHASE	AMPS		
DWH-1	A.O. SMITH	#BTH-199(A)	COMMERCIAL TANK TYPE GAS FIRED DOMESTIC WATER HEATER, 100 GALLON STORAGE CAPACITY.		235	139,900	120	1	5.0	ROUTE T AND P VALVE TO NEAREST FLOOR DRAIN.	

PLUMBING EQUIPMENT SCHEDULE				
IDENTITY DATA				
MARK	MANUFACTURER	MODEL	DESCRIPTION	CAPACITY
ET-1	AMTROL	#ST-12-C-DD	DOMESTIC HOT WATER EXPANSION TANK	6.4 GALLON TANK VOLUME; 0.50 GALLON MAX. ACCEPT. VOLUME

CIRCULATION AND SUMP PUMPS						PLUMBING		ELECTRICAL			
IDENTITY DATA						FLOW RATE (GPM)	PUMP HEAD (TDH)	VOLTAGE	PHASE	RPM	HP
HWCP-1	BELL AND GOSSETT	#NBF-45	140" DOMESTIC HOT WATER CIRCULATION PUMP, ALL BRONZE			5	25	115	1	1725	1/12
HWCP-2	BELL AND GOSSETT	#NBF-45	140" DOMESTIC HOT WATER CIRCULATION PUMP, ALL BRONZE			5	25	115	1	1725	1/12
SEP-1	ZOELLER	(2) #J81222/20V/3PH/3" HORIZONTAL/2.0 HP/ 25' CORDS	DUPLEX SEWAGE EJECTOR PUMP			230	18	208	3	1750	2

DOMESTIC WATER SOFTENERS (223100)						CONTINUOUS (EACH)		PEAK (EACH)		ELECTRICAL	
SOFTENER			DESCRIPTION	BRINE TANK	FLOW RATE	PRESSURE DROP		PRESSURE DROP		VOLTAGE	PHASE
MARK	MANUFACTURER	MODEL				FLOW RATE	PRESSURE DROP	FLOW RATE	PRESSURE DROP		
DWS-1	FRANKLIN WATER TREATMENT	(2) #FWT2-150	PARALLEL DOMESTIC WATER SOFTENER SYSTEM WITH BRINE TANK	24" X 50", 730 LBS SALT STORAGE	53 GPM	15.00 psi	69 GPM	25.00 psi	120	1	

MIXING, METERING, AND PRESSURE REDUCING VALVES (221119)					
IDENTITY DATA					
MARK	MANUFACTURER	MODEL	DESCRIPTION		PRESSURE DROP
BFP-1	ZURN WILKINS	#975XL52 - 2"	REDUCED PRESSURE BACKFLOW PREVENTER		160 GPM
BFP-2	ZURN WILKINS	#976XL52 - 2"	REDUCED PRESSURE BACKFLOW PREVENTER		160 GPM
PRV-1	Zurn Water, LLC	800XL3	Water Pressure Reducing Valve		150 GPM
MIX-1	3M/BRONKS	#1-550	TEMPERATURE-ACTIVATED WATER MIXING VALVE		22 GPM

COMMERCIAL WATER CLOSET SCHEDULE (224213.13)											
FIXTURE			DESCRIPTION	MANUFACTURER	FLUSHOMETER			TOILET SEAT			NOTES
MARK	MANUFACTURER	MODEL			MODEL	OPERATION	TOILET SEAT	CW	W	V	
WC-1	AMERICAN STANDARD	#2257.101	WALL-MOUNTED, TOP SPUD WATER CLOSET	SLOAN	REGAL #1111-1.6	MANUAL	CLOSED BACK, OPEN FRONT	1"	2"	15"	No
WC-2	AMERICAN STANDARD	#2257.101	WALL-MOUNTED, TOP SPUD, ACCESSIBLE WATER CLOSET	SLOAN	REGAL #1111-1.6	MANUAL	CLOSED BACK, OPEN FRONT	1"	4"	2"	Yes

COMMERCIAL URINAL SCHEDULE (224213.16)											
FIXTURE			DESCRIPTION	MANUFACTURER	FLUSHOMETER			FIXTURE CONNECTION			NOTES
MARK	MANUFACTURER	MODEL			MODEL	OPERATION	TOILET SEAT	CW	W	V	
UR-1	AMERICAN STANDARD	#6590.001	WALL-HUNG, BACK OUTLET, WASHOUT, ACCESSIBLE	SLOAN	REGAL #186.1.0	MANUAL	CLOSED BACK, OPEN FRONT	3/4"	2"	1 1/2"	No
UR-2	AMERICAN STANDARD	#6590.001	WALL-HUNG, BACK OUTLET, WASHOUT, ACCESSIBLE	SLOAN	REGAL #186.1.0	MANUAL	CLOSED BACK, OPEN FRONT	3/4"	2"	1 1/2"	Yes

COMMERCIAL LAVATORY SCHEDULE (224216.13)											
FIXTURE			DESCRIPTION	MANUFACTURER	FAUCET			FIXTURE CONNECTION			NOTES
MARK	MANUFACTURER	MODEL			MODEL	OPERATION	TOILET SEAT	CW	HW	V	
L-1	AMERICAN STANDARD	LUCERNE #0355.012	VITREOUS CHINA, WALL MOUNTED, WITH BACK	CHICAGO FAUCET	#802-VE66ABCP	MANUAL	CLOSED BACK, OPEN FRONT	1/2"	1/2"	1 1/2"	Yes

DOMESTIC WATER PIPING SPECIALTIES SCHEDULE (221119)											
IDENTITY DATA						FIXTURE CONNECTION				MOUNTING (FLOOR TO OUTLET)	NOTES
MARK	MANUFACTURER	MODEL	DESCRIPTION			CW	HW	W	V		
HB-1	ZURN	#Z1330-XL	HOSE BIB WITH RECESSED BOX			3/4"				18" A.F.F.	
HB-2	ZURN	#Z1341	HOSE BIB			3/4"				12" A.F.F.	
NFWH-1	ZURN	#Z1320-C	NONFREEZE WALL HYDRANT WITH RECESSED BOX			3/4"	0"			18" A.F.F.	
RH-1	J.R. SMITH	#5903	NON-FREEZE ROOF HYDRANT			3/4"					

SANITARY WASTE PIPING SPECIALTIES SCHEDULE (221319)									
IDENTITY DATA					W CONNECTION		NOTES		
MARK	MANUFACTURER	MODEL	DESCRIPTION						
FD-1	ZURN	#Z415B-ZB	DUCO CAST IRON BODY WITH FLASHING COLLAR, ADJUSTABLE ROUND STRAINER HEAD, POLISHED BRONZE STRAINER		2"	TRAPGUARD BY PROSET, NO SUBSTITUTIONS			
FD-2	ZURN	#Z662-DG	DUCO CAST IRON BODY WITH FLASHING COLLAR AND CAST IRON GRATE, SQUARE GRATE AND SEDIMENT BUCKET		4"				
FD-3	ZURN	#Z415B-ZB	DUCO CAST IRON BODY WITH FLASHING COLLAR, ADJUSTABLE ROUND STRAINER HEAD, POLISHED BRONZE STRAINER		4"	TRAPGUARD BY PROSET, NO SUBSTITUTIONS			
TD-1	ZURN	#Z5880-36	36" STAINLESS STEEL LINEAR SHOWER DRAIN, TYPE 304 SIS, COMPLETE WITH VERTICAL ADJUSTABLE ANCHORING SUPPORT		2"				
TD-2	DURA TRENCH	#DTPF10-HDGS15ZSA	POLYMER TRENCH DRAIN, HEAVY DUTY GRATE #12BF24GSD WITH GALVANIZED LINT TRAP		4"				

STORM DRAINAGE PIPING SPECIALTIES SCHEDULE (221423)										
IDENTITY DATA						W CONNECTION		NOTES		
MARK	MANUFACTURER	MODEL	DESCRIPTION							
OFD-3	ZURN	#ZC100-89-C-EA-R-89	DUCO CAST IRON BODY, FLASHING CLAMP AND GRAVEL STOP WITH CAST IRON DOME, CAST IRON WATER DAM				8"			
ORD-1	ZURN	#ZC100-89-C-EA-R-89	DUCO CAST IRON BODY, FLASHING CLAMP AND GRAVEL STOP WITH CAST IRON DOME, CAST IRON WATER DAM				4"			
ORD-2	ZURN	#ZC100-89-C-EA-R-89	DUCO CAST IRON BODY, FLASHING CLAMP AND GRAVEL STOP WITH CAST IRON DOME, CAST IRON WATER DAM				6"			
RD-1	ZURN	#ZC100-C-EA-R	DUCO CAST IRON BODY WITH FLASHING CLAMP AND STAINLESS STEEL PERFORATED GRAVEL STOP, CAST IRON DOME				4"			
RD-2	ZURN	#ZC100-C-EA-R	DUCO CAST IRON BODY WITH FLASHING CLAMP AND STAINLESS STEEL PERFORATED GRAVEL STOP, CAST IRON DOME				6"			
RD-3	ZURN	#ZC100-C-EA-R	DUCO CAST IRON BODY WITH FLASHING CLAMP AND STAINLESS STEEL PERFORATED GRAVEL STOP, CAST IRON DOME				8"			

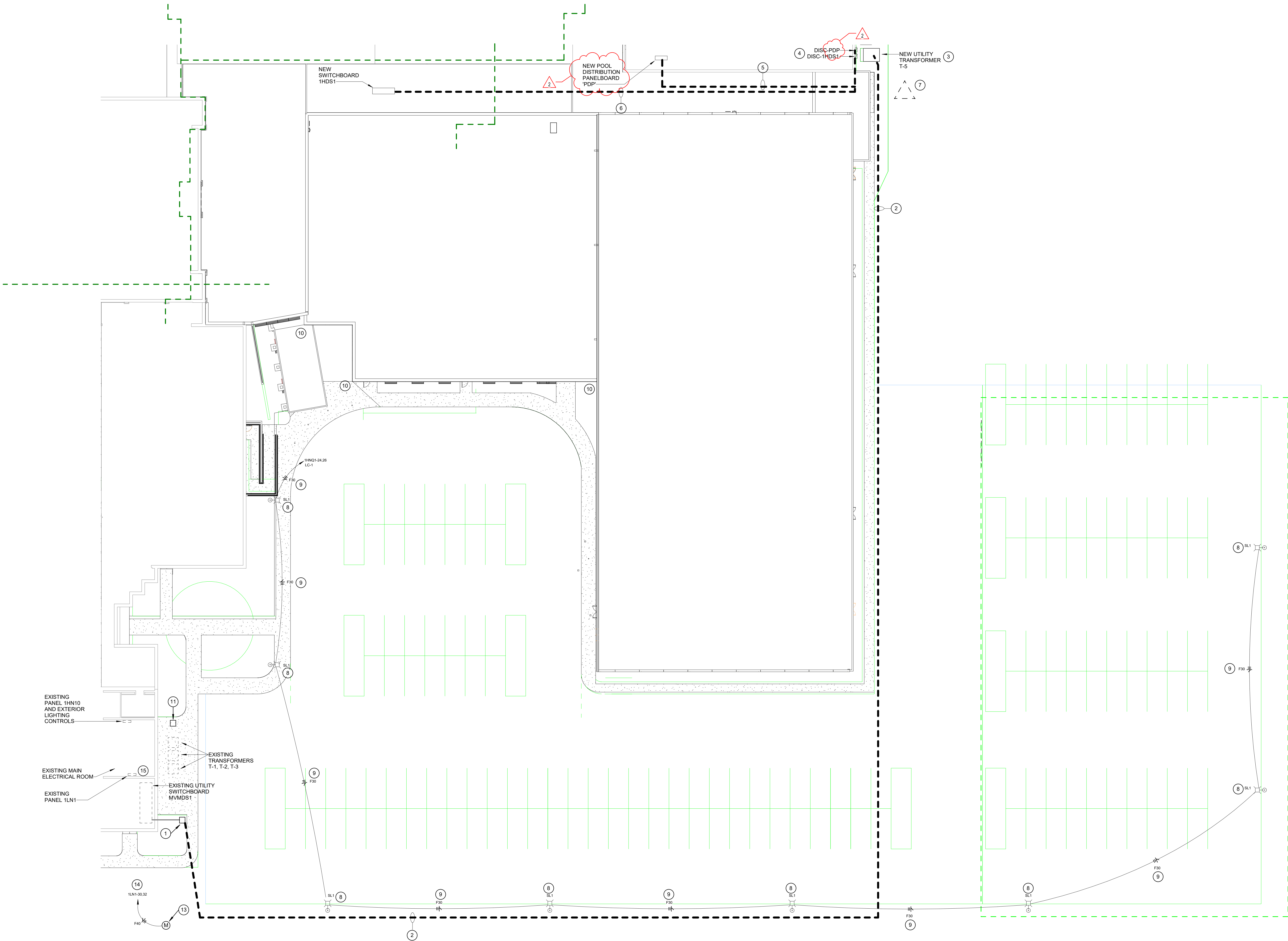
COMMERCIAL SINK SCHEDULE (224216.16)											
FIXTURE			DESCRIPTION	MANUFACTURER	FAUCET			FIXTURE CONNECTION			NOTES
MARK	MANUFACTURER	MODEL			MODEL	OPERATION	TOILET SEAT	CW	HW	V	
MB-1	ZURN	#Z1996-24	MOLDED STONE, FLOOR MOUNTED (RECESSED) MOP BASIN	CHICAGO FAUCET	#897-ABRCF			3/4"	3/4"	3"	FLOOR MOUNTED
SK-1	E.L. MUSTEE	#18F	MOLDED STONE FLOOR MOUNTED SERVICE SINK	E.L. MUSTEE	#95.600			3/4"	3/4"	1 1/2"	FLOOR MOUNTED

PRESSURE WATER COOLER SCHEDULE (224716)											
IDENTITY DATA						FIXTURE CONNECTION				MOUNTING (FLOOR TO BUBBLER HEAD)	NOTES
MARK	MANUFACTURER	MODEL	DESCRIPTION			CW	W	V			
EW-C-1	ELKAY	#LVRGCRNBVSK	ELECTRIC WATER COOLER/BOTTLE FILLER: SATIN FINISHED STAINLESS STEEL BOWL AND CABINET, BOTTLE FILLING UNIT INCLUDES AN ELECTRONIC SENSOR FOR NO-TOUCH ACTIVATION, FILTERED, TRIM: ADJUSTABLE P-TRAP WITH CLEANOUT, 1/2" ANGLE STOP WITH LOOSE KEY HANDLE, 1/2" O.D. CHROME PLATED SUPPLY.			3/4"	1 1/2"	1 1/2"		41" A.F.F.	No
EW-C-2	ELKAY	#LVRGCRNBVSK	ELECTRIC WATER COOLER/BOTTLE FILLER: SATIN FINISHED STAINLESS STEEL BOWL AND CABINET, BOTTLE FILLING UNIT INCLUDES AN ELECTRONIC SENSOR FOR NO-TOUCH ACTIVATION, FILTERED, TRIM: ADJUSTABLE P-TRAP WITH CLEANOUT, 1/2" ANGLE STOP WITH LOOSE KEY HANDLE, 1/2" O.D. CHROME PLATED SUPPLY.			3/4"	1 1/2"	1 1/2"		38" A.F.F.	Yes

SHOWER SCHEDULE (224223)											
IDENTITY DATA						FIXTURE CONNECTION				MOUNTING	NOTES
MARK	MANUFACTURER	MODEL	DESCRIPTION			CW	HW	W	V		
SH-1	BRADLEY	#WS-1WCA-EF-ES-ST-RSD-VS	SURFACE MOUNTED SHOWER VALVE AND HEAD			3/4"	3/4"			80" TO FIXED SHOWER HEAD	No
SH-2	BRADLEY	#WS-1X-HN-EF-ST-S20-RSD-SLVS	SURFACE MOUNTED SHOWER VALVE AND HEAD WITH HAND HELD SHOWER AND TRIM			3/4"	3/4"			38" MIN. - 48" MAX. TO THE CONTROLS, 80" TO FIXED SHOWER HEAD.	Yes

WATER HAMMER ARRESTER (221119)						ZURN NO.		REMARKS
MARK	IPS	F.U. RATING	J.R. SMITH NO.	WADE NO.				
A	3/4"	1-11	5005	W-5		100		P.D.I. CERTIFIED
B	1"	12-32	5010	W-10		200		P.D.I. CERTIFIED
C	1"	33-60	5020	W-20		300		P.D.I. CERTIFIED
D	1"	61-113	5030	W-30		400		P.D.I. CERTIFIED
E	1"	114-164	5040	W-35		500		P.D.I. CERTIFIED





1 ELECTRICAL SITE PLAN  
1" = 20'-0"

GENERAL SITE NOTES

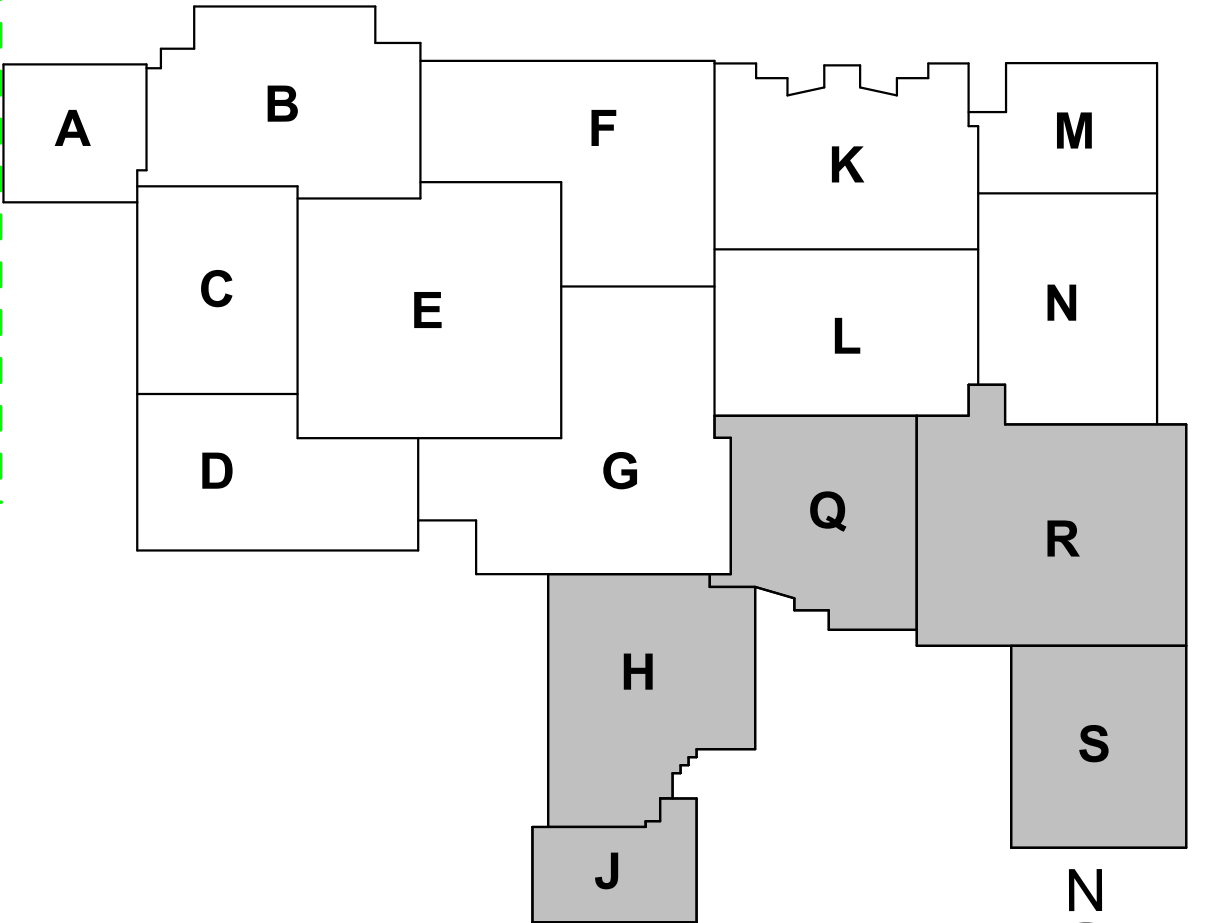
- A REFER TO ELECTRICAL SYMBOLS AND ABBREVIATIONS SHEET E-001 FOR ADDITIONAL INFORMATION.
- B REFER TO LOCAL UTILITIES GUIDE FOR DETAILS AND REQUIREMENTS, INCLUDING, BUT NOT LIMITED TO, SERVICE REQUIREMENTS FOR UNDERGROUND PRIMARY, PROTECTIVE POLES FOR PAD-MOUNTED EQUIPMENT, UTILITY TRANSFORMER CONCRETE PAD DETAIL, ETC. INCLUDE ALL UTILITY FEES REQUIRED IN BID.
- C PROVIDE LABELS ON ALL EQUIPMENT MODIFIED BY THIS PROJECT. PROVIDE LABELS ON ALL JUNCTION BOXES AND CONDUITS MODIFIED OR PROVIDED BY THIS PROJECT. PROVIDE UPDATED PANELBOARD DIRECTORIES ON ALL PANELBOARDS MODIFIED BY THIS PROJECT.

SITE PLAN NOTES

- 1 PROVIDE NEW UTILITY PRIMARY FROM SWITCHBOARD MVMD51 TO NEW UTILITY TRANSFORMER T-5. CONNECT TO UTILITY PRIMARY MAINTAINED OUTSIDE THE BUILDING DURING DEMOLITION. PROVIDE AN IN-GRADE BOX AT THIS LOCATION SIZED FOR FUTURE INCOMING AND OUTGOING UTILITY PRIMARY. COORDINATE REQUIREMENTS WITH AES INDIANA.
- 2 PROVIDE NEW UTILITY PRIMARY FROM SWITCHBOARD MVMD51 TO NEW UTILITY TRANSFORMER T-5. COORDINATE REQUIREMENTS WITH AES INDIANA. PROVIDE A #30 GROUNDING CONDUCTOR IN TRENCH FROM THE MAIN SERVICE GROUNDING IN MVMD51 AND CONNECT TO THE NEW SERVICE DISCONNECTS. ALL SERVICES GROUNDING ARE TO BE CONNECTED PER THE NEC.
- 3 INSTALL TO NEW UTILITY TRANSFORMER T-5, PAD, AND BOLLARDS PER AES INDIANA REQUIREMENTS.
- 4 MOUNT DISCONNECTS ON STRUT ON THE EXISTING EXTERIOR WALL. CONNECT TO TRANSFORMER T-5 PER ONE-LINE DIAGRAM.
- 5 CONNECT SWITCHBOARD 'PSB' TO DISCONNECT 'DISC-PSB' PER ONE-LINE DIAGRAM. ROUTE FEEDER BELOW NEW SLAB AND STUB INTO BASEMENT WITHIN SWITCHBOARD 'PSB'.
- 6 CONNECT SWITCHBOARD 'HDS1' TO DISCONNECT 'DISC-1HDS1' PER ONE-LINE DIAGRAM. ROUTE FEEDER BELOW NEW SLAB AND STUB INTO BASEMENT WITHIN SWITCHBOARD 'PSB'.
- 7 PROVIDE GROUNDING TRIANGLE BELOW PAVEMENT AND CONNECT TO SERVICE DISCONNECTS PER ONE-LINE DIAGRAM. REFER TO DETAIL 1/E-503.
- 8 REFER TO DETAILS 8 AND 9 ON SHEET E-502 FOR POLE BASE AND POLE INSTALLATION REQUIREMENTS.
- 9 PROVIDE SITE LIGHTING CIRCUIT IN 1" CONDUIT.
- 10 GROUND BUILDING STEEL PER DETAIL 6 ON SHEET E-503.
- 11 EXTEND EXISTING SITE POLE CIRCUITS MAINTAINED DURING DEMOLITION TO EXISTING SITE LIGHT POLES. CIRCUITS CONSIST OF 12#4 PLUS GROUND IN 3" CONDUITS.
- 12 EXTEND EXISTING SITE POLE CIRCUITS MAINTAINED DURING DEMOLITION FROM THIS EXISTING POLE TO THE EXISTING BREAKERS AND CONTROLS IN THE MAIN ELECTRICAL ROOM.
- 13 PROVIDE CIRCUIT FOR SANITARY LIFT STATION APPROXIMATELY 500' TO THE SOUTH. REFER TO SHEET CS-5 FOR EXACT LOCATION. PROVIDE ALL DISCONNECTS, CONVENIENCE RECEPTACLES, AND EQUIPMENT REQUIRED BY MANUFACTURER.
- 14 PROVIDE NEW 2-POLE 20A BREAKER IN PANEL AT THIS LOCATION.
- 15 INSTALL 208/240V SINGLE PHASE BOOST TRANSFORMER PROVIDED WITH LIFT STATION PUMP. CONNECT TRANSFORMER IN CIRCUIT TO PROVIDE 240V TO THE LIFT STATION.

BEFORE YOU DIG

THE CONTRACTOR AND ALL SUBCONTRACTORS SHALL CONTACT 811 TO OBTAIN UNDERGROUND UTILITY LOCATIONS AND AN AUTHORIZATION NUMBER PRIOR TO ANY CONSTRUCTION.

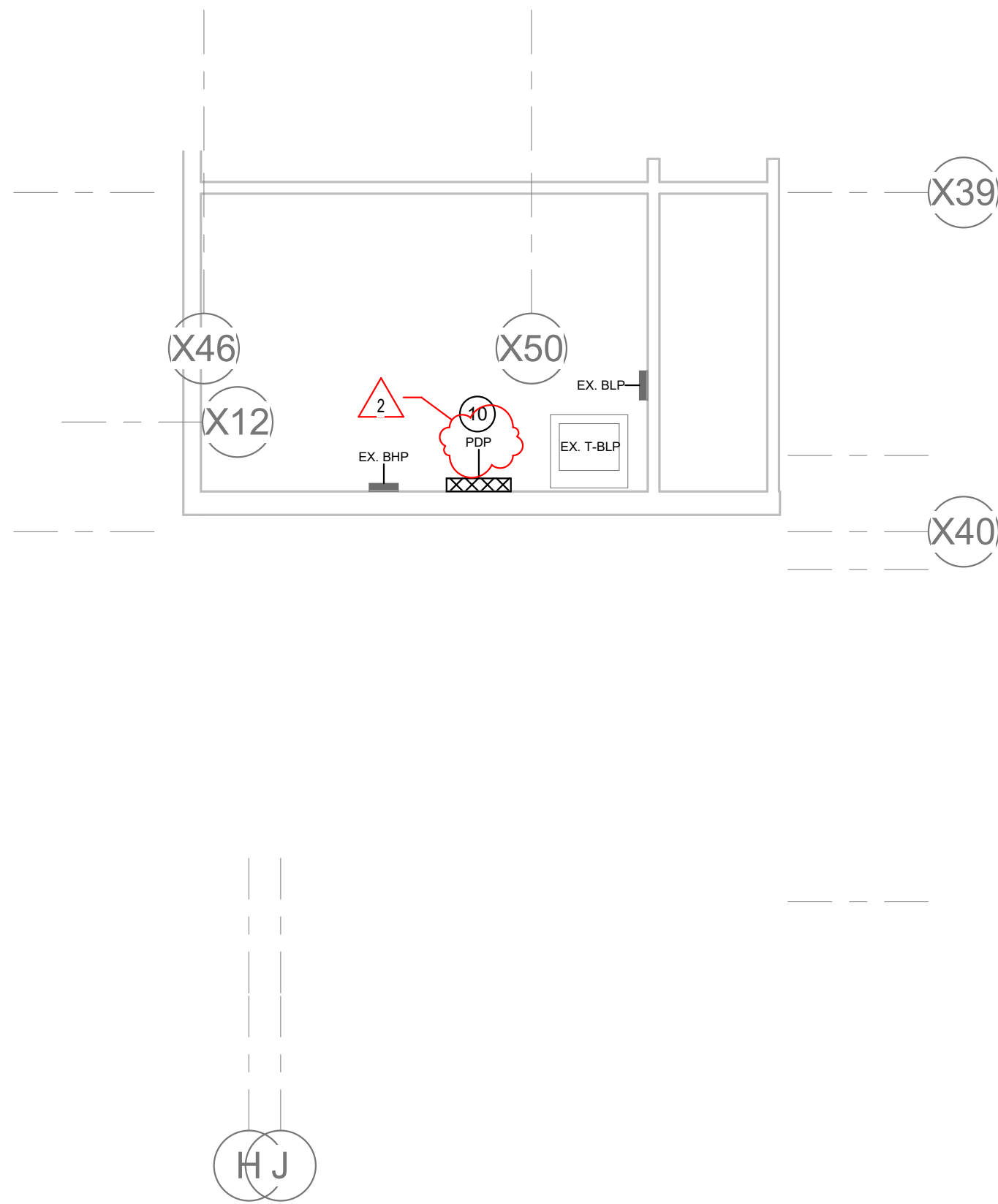
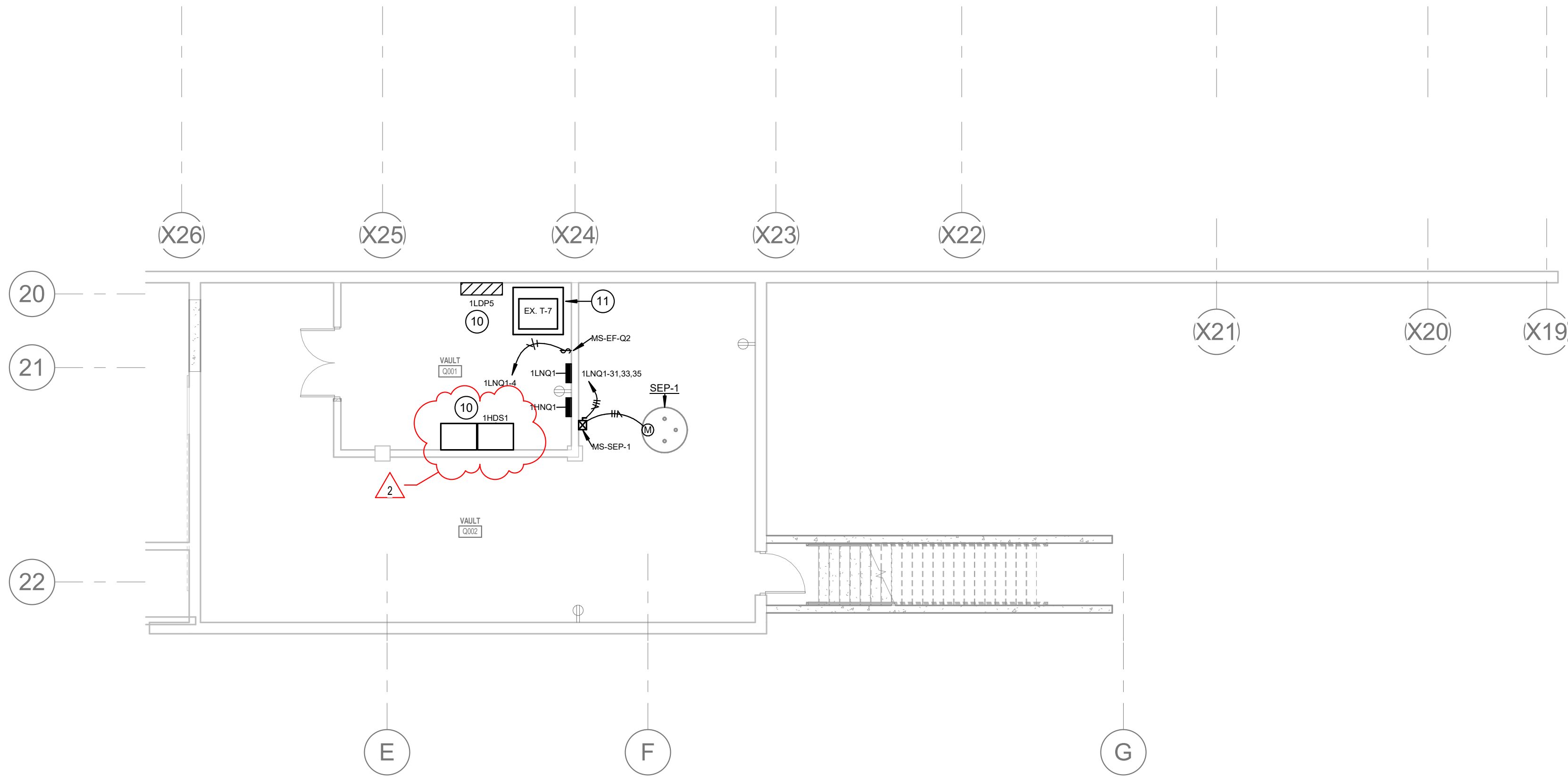


REVISONS:	#	Date	Desc.
1	01/15/2026	Adendum #01	
2	02/06/2026	Adendum #02	

100% CONSTRUCTION DOCUMENTS  
PROJECT: #241735  
DATE: 01-08-2026  
DRAWN BY: AMN

ELECTRICAL SITE PLAN

ES101



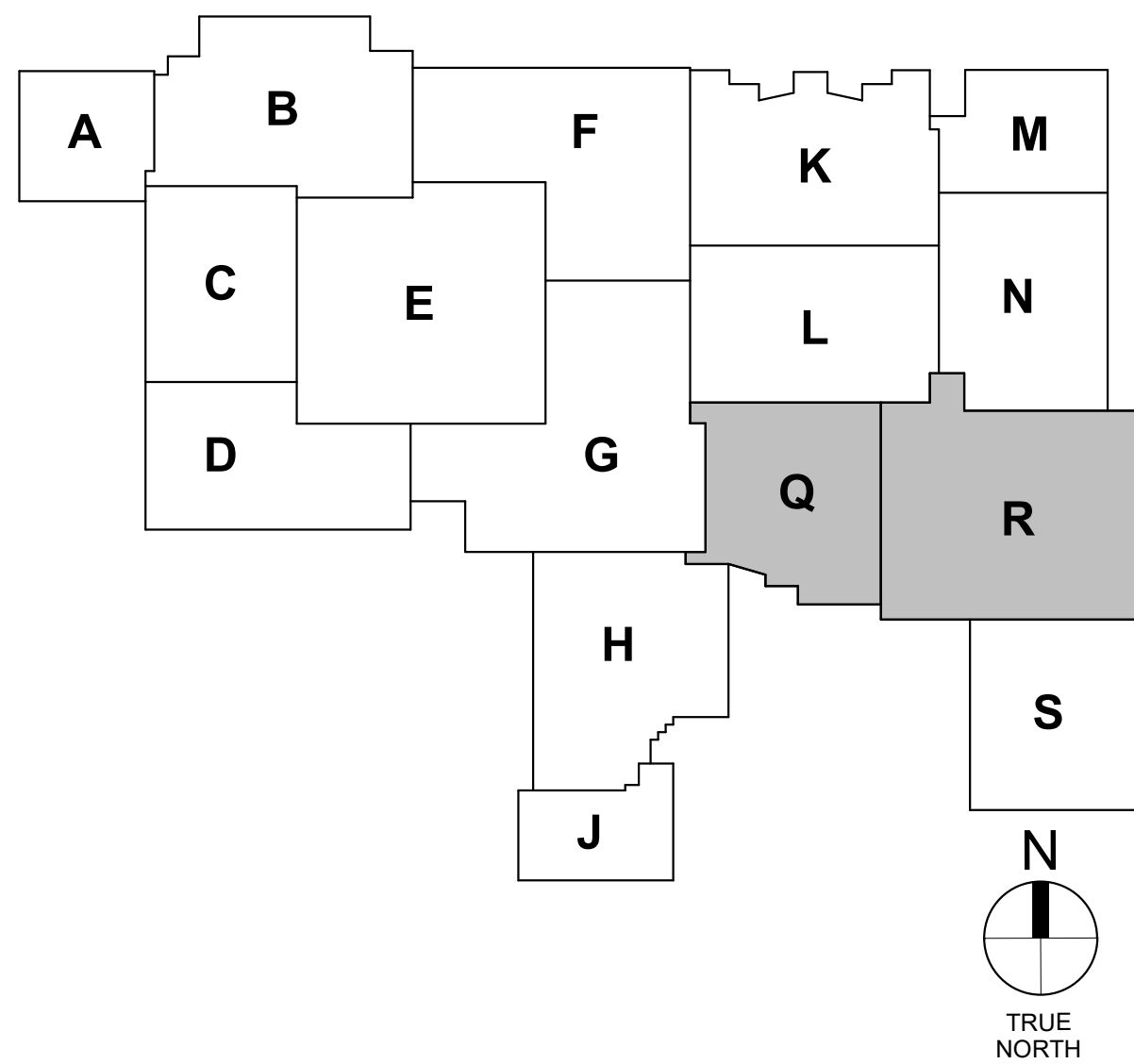
1 ELECTRICAL POWER BASEMENT PLAN  
1/8" = 1'-0"

### GENERAL POWER NOTES

- A. REFER TO ELECTRICAL SYMBOLS AND ABBREVIATIONS SHEET E-001 FOR ADDITIONAL INFORMATION.
- B. PROVIDE A GEAR SUBMITTAL FOR GENERAL APPROVAL PRIOR TO CONDUCTING STUDIES. IMPLEMENT RECOMMENDATIONS TO ELECTRICAL GEAR FOR FINAL APPROVAL AFTER STUDIES ARE COMPLETED AND APPROVED.
- C. COORDINATE ALL DEVICE LOCATIONS WITH ARCHITECT AND INTERIOR DESIGNER.
- D. PROVIDE LABELS ON ALL EQUIPMENT MODIFIED BY THIS PROJECT. PROVIDE LABELS ON ALL JUNCTION BOXES AND CONDUITS MODIFIED OR PROVIDED BY THIS PROJECT. PROVIDE UPDATED PANELBOARD DIRECTORIES ON ALL PANELBOARDS MODIFIED BY THIS PROJECT.

### POWER PLAN NOTES

1. PROVIDE DIGITAL GYM EQUIPMENT RELAY CONTROLLER. PROVIDE AND FSR OR SIMILAR LOCKABLE COVER. COORDINATE BOX REQUIREMENT FOR PRECAST INSTALLATION. ROUTE CONDUIT FROM CONTROLLER THROUGH THE PRECAST INTO THE RELAY CABINET IN STORAGE R116. PROVIDE CONTROLLER PROGRAMMING AS REQUIRED.
2. PROVIDE GYM EQUIPMENT RELAY CABINET. COORDINATE QUANTITY OF RELAYS REQUIRED WITH GYM EQUIPMENT. CIRCUITS AND EQUIPMENT RELAY CONNECTIONS SHOWN ASSUME (4) EQUIPMENT CONNECTIONS PER RELAY. PROVIDE ADDITIONAL RELAY CIRCUITS FROM PANEL 1LN1.
3. COORDINATE MONITOR RECEPTACLE LOCATION WITH TECHNOLOGY DRAWINGS.
4. COORDINATE SCOREBOARD INSTALLATION LOCATION WITH ARCHITECTURAL DRAWINGS AND MANUFACTURER'S REQUIREMENTS.
5. PROVIDE (4) GANG FLOORBOX WITH (2) DUPLEX RECEPTACLES AND (2) GANGS FOR DATA DEVICES. REFER TO TECHNOLOGY DRAWINGS FOR ADDITIONAL REQUIREMENTS.
6. MOUNT IDF CABINET RECEPTACLES WITHIN THE CABINET PER MANUFACTURER'S REQUIREMENTS.
7. COORDINATE MONITOR RECEPTACLE LOCATION WITH TECHNOLOGY DRAWINGS. ROUTE CONDUIT BEHIND EXISTING WALL. DO NOT INSTALL EXPOSED CONDUITS OR RACEWAY.
8. PROVIDE GROUNDING BUSBAR, CABLES, AND CONNECTIONS PER TECHNOLOGY DRAWINGS. CONNECT GROUNDING BUSBAR TO PANEL 1LN1.
9. COORDINATE ACCESS CONTROL PANEL HARDWARE CONNECTION LOCATION IN THE FIELD.
10. CONNECT EXISTING BRANCH CIRCUITS MAINTAINED DURING DEMOLITION TO THE NEW SWITCHBOARD OR POWER DISTRIBUTION PANELBOARD AT THIS LOCATION. REFER TO THE ONE-LINE DIAGRAM FOR REQUIREMENTS.
11. INSTALL EXISTING TRANSFORMER T-7 MAINTAINED DURING DEMOLITION AT THIS LOCATION. REFER TO THE ONE-LINE DIAGRAM FOR REQUIREMENTS.
12. INDOOR SPLIT SYSTEM UNIT IS POWERED FROM THE OUTDOOR UNIT, CU-1 ON THE ROOF. PROVIDE NECESSARY WIRING AND CONNECTIONS TO INDOOR UNIT. CONNECT DOOR POWER SUPPLY TO CIRCUIT INDICATED.
13. CONNECT AUTO DOOR OPERATOR POWER SUPPLY TO CIRCUIT INDICATED AND PROVIDE WIRING, PUSHBUTTONS, AND WIRING FOR OPERATION AS INDICATED.
14. LOCATE ALL ABOVE CEILING POWER SUPPLIES FOR EQUIPMENT IN VESTIBULE Q107 ABOVE THE CEILING IN GIRLS LOCKER ROOM Q121.
15. PROVIDE DIRECT WIRE CONNECTION OR RECEPTACLE FOR WASHER PER MANUFACTURER'S REQUIREMENTS.
16. PROVIDE DIRECT WIRE CONNECTION OR RECEPTACLE FOR DRYER PER MANUFACTURER'S REQUIREMENTS.



PERRY TOWNSHIP SCHOOLS  
SOUTHPORT HIGH SCHOOL ADDITION AND  
RENOVATION  
971 EAST BANTA ROAD, INDIANAPOLIS, IN 46627



REVISIONS:		Desc:
#	Date	
1	02/08/2026	Addendum #02

100% CONSTRUCTION DOCUMENTS

PROJECT: #241735
DATE: 01-08-2026
DRAWN BY: AMN

ELECTRICAL  
POWER  
BASEMENT  
PLAN

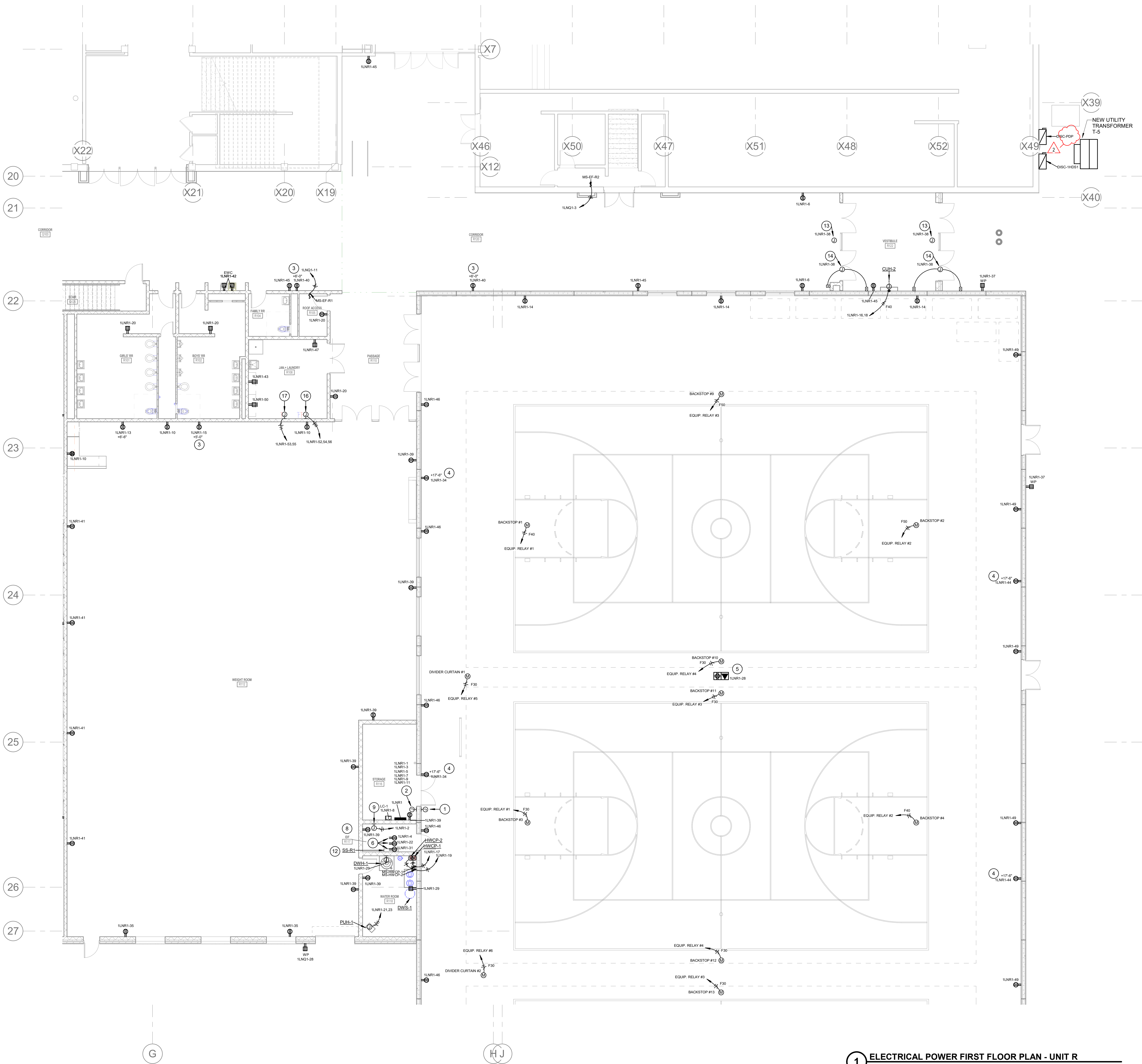
EP101

LANCER ASSOCIATES  
ARCHITECTURE



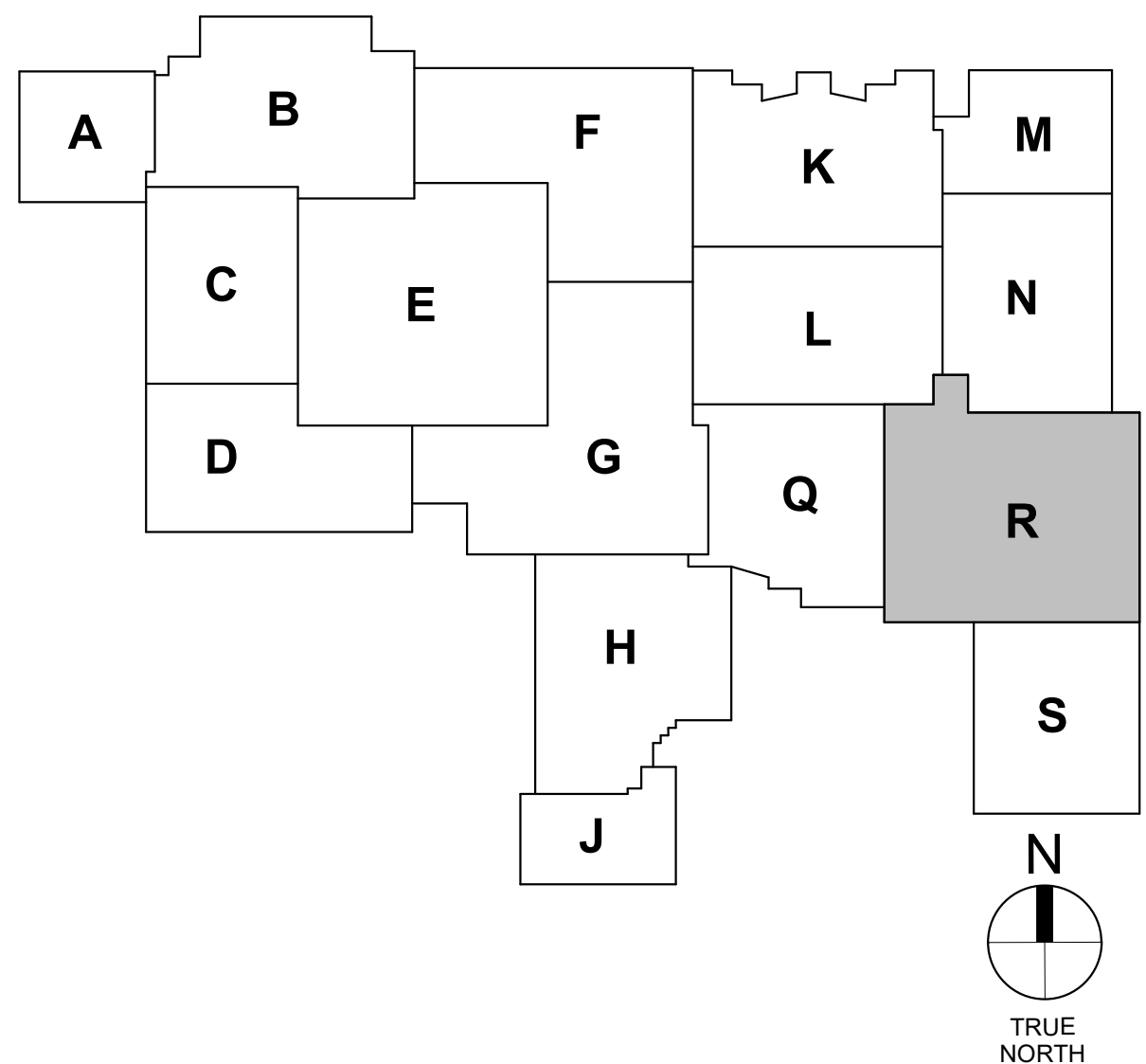
145 NORTH EAST STREET  
INDIANAPOLIS, IN 46204



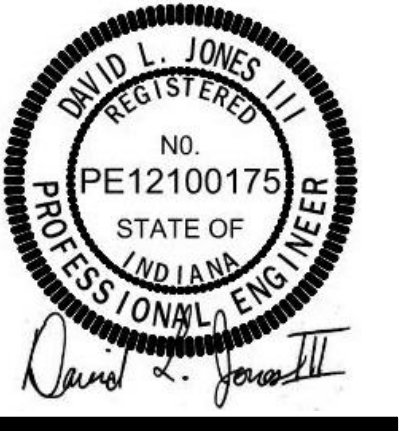


1 ELECTRICAL POWER FIRST FLOOR PLAN - UNIT R  
1/8" = 1'-0"

- ### GENERAL POWER NOTES
- REFER TO ELECTRICAL SYMBOLS AND ABBREVIATIONS SHEET E-001 FOR ADDITIONAL INFORMATION.
  - PROVIDE A GEAR SUBMITTAL FOR GENERAL APPROVAL PRIOR TO CONDUCTING STUDIES. IMPLEMENT RECOMMENDATIONS TO ELECTRICAL GEAR FOR FINAL APPROVAL AFTER STUDIES ARE COMPLETED AND APPROVED.
  - COORDINATE ALL DEVICE LOCATIONS WITH ARCHITECT AND INTERIOR DESIGNER.
  - PROVIDE LABELS ON ALL EQUIPMENT MODIFIED BY THIS PROJECT. PROVIDE LABELS ON ALL JUNCTION BOXES AND CONDUITS MODIFIED OR PROVIDED BY THIS PROJECT. PROVIDE UPDATED PANELBOARD DIRECTORIES ON ALL PANELBOARDS MODIFIED BY THIS PROJECT.
- ### POWER PLAN NOTES
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  - PROVIDE GYM EQUIPMENT RELAY CABINET. COORDINATE QUANTITY OF RELAYS REQUIRED WITH GYM EQUIPMENT. CIRCUITS AND EQUIPMENT RELAY CONNECTIONS SHOWN ASSUME (4) EQUIPMENT CONNECTIONS PER RELAY. PROVIDE ADDITIONAL RELAY CIRCUITS FROM PANEL 1LNRI.
  - COORDINATE MONITOR RECEPTACLE LOCATION WITH TECHNOLOGY DRAWINGS.
  - COORDINATE SCOREBOARD INSTALLATION LOCATION WITH ARCHITECTURAL DRAWINGS AND MANUFACTURER'S REQUIREMENTS.
  - PROVIDE (4) GANG FLOORBOX WITH (2) DUPLEX RECEPTACLES AND (2) GANGS FOR DATA DEVICES. REFER TO TECHNOLOGY DRAWINGS FOR ADDITIONAL REQUIREMENTS.
  - MOUNT IDF CABINET RECEPTACLES WITHIN THE CABINET PER MANUFACTURER'S REQUIREMENTS.
  - COORDINATE MONITOR RECEPTACLE LOCATION WITH TECHNOLOGY DRAWINGS. ROUTE CONDUIT BEHIND EXISTING WALL. DO NOT INSTALL EXPOSED CONDUITS OR RACEWAY.
  - PROVIDE GROUNDING BUSBAR, CABLES, AND CONNECTIONS PER TECHNOLOGY DRAWINGS. CONNECT GROUNDING BUSBAR TO PANEL 1LNRI.
  - COORDINATE ACCESS CONTROL PANEL HARDWARE CONNECTION LOCATION IN THE FIELD.
  - CONNECT EXISTING BRANCH CIRCUITS MAINTAINED DURING DEMOLITION TO THE NEW SWITCHBOARD OR POWER DISTRIBUTION PANELBOARD AT THIS LOCATION. REFER TO THE ONE-LINE DIAGRAM FOR REQUIREMENTS.
  - INSTALL EXISTING TRANSFORMER T-7 MAINTAINED DURING DEMOLITION AT THIS LOCATION. REFER TO THE ONE-LINE DIAGRAM FOR REQUIREMENTS.
  - INDOOR SPLIT SYSTEM UNIT IS POWERED FROM THE OUTDOOR UNIT, CU-1 ON THE ROOF. PROVIDE NECESSARY WIRING AND CONNECTIONS TO INDOOR UNIT. CONNECT DOOR POWER SUPPLY TO CIRCUIT INDICATED.
  - CONNECT AUTO DOOR OPERATOR POWER SUPPLY TO CIRCUIT INDICATED AND PROVIDE WIRING, PUSHBUTTONS, AND WIRING FOR OPERATION AS INDICATED.
  - LOCATE ALL ABOVE CEILING POWER SUPPLIES FOR EQUIPMENT IN VESTIBULE Q107 ABOVE THE CEILING IN GIRLS LOCKER ROOM Q121.
  - PROVIDE DIRECT WIRE CONNECTION OR RECEPTACLE FOR WASHER PER MANUFACTURER'S REQUIREMENTS.
  - PROVIDE DIRECT WIRE CONNECTION OR RECEPTACLE FOR DRYER PER MANUFACTURER'S REQUIREMENTS.



PERRY TOWNSHIP SCHOOLS  
SOUTHPORT HIGH SCHOOL ADDITION AND  
RENOVATION  
971 EAST BANTA ROAD, INDIANAPOLIS, IN 46627



REVISONS:	#	Date	Desc.
1	01/08/2026	Adendum #01	
2	02/09/2026	Adendum #02	

100% CONSTRUCTION DOCUMENTS  
PROJECT: #241735  
DATE: 01-08-2026  
DRAWN BY: AMN

ELECTRICAL  
POWER FIRST  
FLOOR PLAN -  
UNIT R

EP103



ENCLOSED SWITCHES & CIRCUIT BREAKERS SCHEDULE											
LABEL	EQUIPMENT SERVED	EQUIPMENT RATINGS				ACCESSORIES				REMARKS	
		VOLTAGE	POLES	AMPERAGE	FUSED	FUSE SIZE	NEMA ENCL	AUX. CONTACTS	SOLID NEUTRAL		
DISC-HDS1	HDS1	600 V	3	1600 A	Yes	1600	3R	(1) N.O. / N.C.	No	SERVICE RATED.	
DISC-CU1	CU-1/SS1	240 V	2	60 A	Yes	35	3R	(1) N.O. / N.C.	No		
DISC-PDP	PDP	600 V	3	1200 A	Yes	1200	3R	(1) N.O. / N.C.	No	SERVICE RATED.	

2

ENCLOSED & VARIABLE-FREQUENCY MOTOR CONTROLLERS SCHEDULE													
LABEL	EQUIPMENT SERVED	EQUIPMENT RATINGS				NEMA ENCL	STARTER		DISCONNECT SWITCH		REMOTE CAPACITOR	REMARKS	
		VOLTAGE	PHASE	HP	FLA		TYPE	NEMA SIZE	TYPE	FUSE SIZE			
MS-EF-Q1	EF-Q1	208 V	2	1	8.3 A	1	FVNR	1	FUSIBLE	8	-		
MS-EF-Q2	EF-Q2	120 V	1	1/3	7.2 A	-	-	-	-	-	-	HORSE POWER RATED TOGGLE WITH MOTOR OVERLOADS.	
MS-EF-R1	EF-R1	120 V	1	1/2	9.8 A	-	-	-	-	-	-	HORSE POWER RATED TOGGLE WITH MOTOR OVERLOADS.	
MS-EF-R2	EF-R2	120 V	1	1/6	4.4 A	-	-	-	-	-	-	HORSE POWER RATED TOGGLE WITH MOTOR OVERLOADS.	
MS-EF-S1	EF-S1	120 V	1	1/4	5.8 A	-	-	-	-	-	-	HORSE POWER RATED TOGGLE WITH MOTOR OVERLOADS.	
MS-HWCP-1	HWCP-1	120 V	1	1/6	4.4 A	-	-	-	-	-	-	HORSE POWER RATED TOGGLE WITH MOTOR OVERLOADS.	
MS-HWCP-2	HWCP-2	120 V	1	1/6	4.4 A	-	-	-	-	-	-	HORSE POWER RATED TOGGLE WITH MOTOR OVERLOADS.	
MS-SEP-1	SEP-1	208 V	3	2	7.8 A	1	FVNR	1	FUSIBLE	10	-		

LIGHTING CONTACTORS SCHEDULE											
LABEL	VOLTAGE	EQUIPMENT RATINGS				COIL CIRCUIT			CONTROL	CIRCUIT(S) CONTROLLED	REMARKS
		AMPERAGE	POLES	NEMA ENCL	ACCESSORIES	VOLTAGE	PANEL	CIRCUIT			
LC-1	600 V	30 A	4	NEMA 1	H-O-A PILOT LIGHT	120 V	1LNR1	8	PHOTOCELL LOCATED ON ROOF	1HNQ1-22 1HNQ1-24.26	

GENERAL LIGHT FIXTURE SCHEDULE NOTES

- A REFER TO ELECTRICAL SYMBOLS AND ABBREVIATIONS SHEET E-001 FOR ADDITIONAL INFORMATION.
- B PROVIDE VIBRATION DAMPERS FOR ALL ALUMINUM AND STEEL POLES 10'-0" AND ABOVE.
- C PROVIDE SELF-DIAGNOSTICS AND SELF-TESTING FOR ALL LIFE SAFETY FIXTURES (EXIT FIXTURES, WALL PACKS, INVERTERS BALLASTS, ETC.)
- D PROVIDE 0-10V ELECTRONIC DIMMING DRIVER DOWN TO 10% UNLESS OTHERWISE NOTED.
- E PROVIDE A MINIMUM OF ONE CLIP PER SIDE UP TO 4' AND CABLE SUPPORTS FOR EACH LIGHT FIXTURE.
- F REFER TO ARCHITECTURAL PLANS FOR CEILING TYPE.
- G SUBMIT LIGHTING PER APPROPRIATE SPECIFICATION SECTION.

INTERIOR/EXTERIOR/EMERGENCY & EXIT LIGHT FIXTURES SCHEDULE													
LABEL	DESCRIPTION	VOLTAGE	TYPE	SOURCE			MOUNTING	LENS/REFLECTOR	CERTIFICATIONS	ACCEPTABLE MANUFACTURERS	LABEL		
				LUMENS	WATTS	CCT							
EM1	LED EMERGENCY WALL LIGHT. DIE-CAST ALUMINUM HOUSING. NORMALLY OFF WITH INTEGRAL BATTERY. PROVIDE BATTERY HEATER FOR -22 DEGREE F OPERATION. DARK BRONZE FINISH. U.L. LISTED FOR WET LOCATIONS.	120/277 V	LED	635 LM	11 W	4000 K	WALL MOUNTED	WIDE THROW	DLC	LITHONIA AFF DUALLITE PG EVENLITE WEATHERLITE LSL LSDBEL	EM1		
L1	16" DIAMETER LED HIGHBAY. WHITE POLYESTER POWDER COAT FINISH. ROUND. DECORATIVE SHIELD. WIDE DISTRIBUTION. 0-10V DIMMING.	120/277 V	LED	36,000 LM	340 W	4000 K	SUSPENDED	HIGH IMPACT POLYCARBONATE LENS	DLC	METALUX SSLED HOLOPHANE PHS HUBBELL PHB JADEMAR JPHBS	L1		
L1E	16" DIAMETER LED HIGHBAY. WHITE POLYESTER POWDER COAT FINISH. ROUND. DECORATIVE SHIELD. WIDE DISTRIBUTION. 0-10V DIMMING. PROVIDE WITH EMERGENCY BATTERY INVERTER.	120/277 V	LED	36,000 LM	340 W	4000 K	SUSPENDED	HIGH IMPACT POLYCARBONATE LENS	DLC	METALUX SSLED HOLOPHANE PHS HUBBELL PHB JADEMAR JPHBS	L1E		
L2	2X4 LED FLAT PANEL. 0-10V DIMMING.	120/277 V	LED	5,000 LM	40 W	4000 K	RECESSED IN GRID	WHITE FROST ACRYLIC	DLC	METALUX 24FP COLUMBIA CFP24 LITHONIA EPANL 24 WILLIAMS BP	L2		
L2E	2X4 LED FLAT PANEL. 0-10V DIMMING. PROVIDE WITH EMERGENCY BATTERY INVERTER.	120/277 V	LED	5,000 LM	40 W	4000 K	RECESSED IN GRID	WHITE FROST ACRYLIC	DLC	METALUX 24FP COLUMBIA CFP24 LITHONIA EPANL 24 WILLIAMS BP	L2E		
L3	6" SQUARE LED DOWNLIGHT. SELF-FLANGED TRIM. U.L. LISTED WET LOCATION. 0-10V DIMMING.	120/277 V	LED	2,000 LM	22 W	4000 K	RECESSED	DIFFUSE IMPACT RESISTANT POLYCARBONATE LENS	DLC	PORTFOLIO LDS06B PRESCOLITE LTR-6SQD LITHONIA LDN6 SQUARE WILLIAMS BDS	L3		
L3E	6" SQUARE LED DOWNLIGHT. SELF-FLANGED TRIM. U.L. LISTED WET LOCATION. 0-10V DIMMING. PROVIDE WITH EMERGENCY BATTERY INVERTER.	120/277 V	LED	2,000 LM	22 W	4000 K	RECESSED	DIFFUSE IMPACT RESISTANT POLYCARBONATE LENS	DLC	PORTFOLIO LDS06B PRESCOLITE LTR-6SQD LITHONIA LDN6 SQUARE WILLIAMS BDS	L3E		
L4	4' LENSED LED STRIP LIGHT. 0-10V DIMMING. WHITE FINISH.	120/277 V	LED	5,400 LM	45 W	4000 K	CHAIN MOUNTED TO STRUCTURE	SEMI-FROSTED LENS	DLC	METALUX SNLED COLUMBIA MPS LITHONIA ZLID WILLIAMS FS	L4		
L4E	4' LENSED LED STRIP LIGHT. 0-10V DIMMING. WHITE FINISH. PROVIDE WITH EMERGENCY BATTERY INVERTER.	120/277 V	LED	5,400 LM	45 W	4000 K	CHAIN MOUNTED TO STRUCTURE	SEMI-FROSTED LENS	DLC	METALUX SNLED COLUMBIA MPS LITHONIA ZLID WILLIAMS FS	L4E		
L5	4"x4' EXTRUDED ALUMINUM LED PENDANT. 60/40 UP/DOWN LIGHT. 0-10V DIMMING.	120/277 V	LED	7,500 LM	71 W	4000 K	PENDANT	FLUSH SATIN LENS	DLC	FOCAL POINT FSM4LS ALW LIGHTPLANE PINNACLE EDGE WILLIAMS M4X	L5		
L5E	4"x4' EXTRUDED ALUMINUM LED PENDANT. 60/40 UP/DOWN LIGHT. 0-10V DIMMING.	120/277 V	LED	7,500 LM	71 W	4000 K	PENDANT	FLUSH SATIN LENS	DLC	FOCAL POINT FSM4LS ALW LIGHTPLANE PINNACLE EDGE WILLIAMS M4X	L5E		
L7	LED WALL LIGHT. DIE-CAST ALUMINUM HOUSING. HINGED DOOR FRAME. DARK BRONZE FINISH. U.L. LISTED FOR WET LOCATIONS.	120/277 V	LED	9,500 LM	85 W	4000 K	WALL MOUNTED	TYPE III DISTRIBUTION	N/A	RAB WIPLED LUMECON BLS-UTWP RAYON SWPK LITHONIA TWR2 XO WGH LED	L7		
L8	ARCHITECTURAL FLOOD LIGHT. U.L. WET LOCATION LISTED. DARK BRONZE FINISH. WIDE FLOOD 6X6 OPTIC.	120/277 V	LED	3,000 LM	22 W	4000 K	SURACE	WIDE FLOOD	N/A	LITHONIA DSX1 FLOOD LUMECON BLS-FLD MCGRAW EDISON GFLD XO SLING FLOOD	L8		
L9	ARCHITECTURAL LINEAR EXTERIOR WALL WASH. NOMINAL 48" LONG MOUNTED ON 14" ARMS. AIM AT SIGN WITH 15 DEGREE TILT. BLACK FINISH.	120/277 V	LED	3,000 LM	32 W	4000 K	SURFACE	ASYMMETRIC	ETL	INSIGHT ESX PAL ACCWLB8 SPI ECHO VELOCITY 3.5 LUMENPULSE LUMENFACADE PURE	L9		
L10	6" SQUARE LED DOWNLIGHT. SELF-FLANGED TRIM. 0-10V DIMMING.	120/277 V	LED	2,000 LM	22 W	4000 K	RECESSED	SEMI-SPECULAR CLEAR	DLC	PORTFOLIO LDS06B PRESCOLITE LTR-6SQD LITHONIA LDN6 SQUARE WILLIAMS BDS	L10		
L10E	6" SQUARE LED DOWNLIGHT. SELF-FLANGED TRIM. 0-10V DIMMING. PROVIDE WITH EMERGENCY BATTERY INVERTER.	120/277 V	LED	2,000 LM	22 W	4000 K	RECESSED	SEMI-SPECULAR CLEAR	DLC	PORTFOLIO LDS06B PRESCOLITE LTR-6SQD LITHONIA LDN6 SQUARE WILLIAMS BDS	L10E		
L11	8" SQUARE LED DOWNLIGHT. SELF-FLANGED TRIM. 0-10V DIMMING.	120/277 V	LED	8,000 LM	85 W	4000 K	RECESSED	SEMI-SPECULAR CLEAR	DLC	COOPER LIGHTING LITHONIA LIGHTING CURRENT LIGHTING WILLIAMS LIGHTING	L11		
L11E	8" SQUARE LED DOWNLIGHT. SELF-FLANGED TRIM. 0-10V DIMMING.	120/277 V	LED	8,000 LM	85 W	4000 K	RECESSED	SEMI-SPECULAR CLEAR	DLC	COOPER LIGHTING LITHONIA LIGHTING CURRENT LIGHTING WILLIAMS LIGHTING	L11E		
L12	4"x8' EXTRUDED ALUMINUM LED. 0-10V DIMMING.	120/277 V	LED	3,000 LM	25 W	4000 K	RECESSED	FLUSH SATIN LENS	DLC	FOCAL POINT FSM4LS ALW LIGHTPLANE PINNACLE EDGE WILLIAMS M4X	L12		
L13	4"x8' EXTRUDED ALUMINUM LED. 0-10V DIMMING.	120/277 V	LED	4,000 LM	35 W	4000 K	RECESSED	FLUSH SATIN LENS	DLC	FOCAL POINT FSM4LS ALW LIGHTPLANE PINNACLE EDGE WILLIAMS M4X	L13		
L13E	4"x8' EXTRUDED ALUMINUM LED. 0-10V DIMMING. PROVIDE WITH EMERGENCY BATTERY INVERTER.	120/277 V	LED	4,000 LM	35 W	4000 K	RECESSED	FLUSH SATIN LENS	DLC	FOCAL POINT FSM4LS ALW LIGHTPLANE PINNACLE EDGE WILLIAMS M4X	L13E		
L14	4"x4' EXTRUDED ALUMINUM LED. 0-10V DIMMING.	120/277 V	LED	2,000 LM	15 W	4000 K	RECESSED	FLUSH SATIN LENS	DLC	FOCAL POINT FSM4LS ALW LIGHTPLANE PINNACLE EDGE WILLIAMS M4X	L14		
L15	4"x12' EXTRUDED ALUMINUM LED. 0-10V DIMMING. PROVIDE HORIZONTAL TO VERTICAL CORNER FOR INSTANCES NOTED ON PLANS.	120/277 V	LED	6,000 LM	53 W	4000 K	RECESSED	FLUSH SATIN LENS	DLC	FOCAL POINT FSM4LS ALW LIGHTPLANE PINNACLE EDGE WILLIAMS M4X	L15		
L15E	4"x12' EXTRUDED ALUMINUM LED. 0-10V DIMMING. PROVIDE WITH EMERGENCY BATTERY INVERTER.	120/277 V	LED	6,000 LM	53 W	4000 K	RECESSED	FLUSH SATIN LENS	DLC	FOCAL POINT FSM4LS ALW LIGHTPLANE PINNACLE EDGE WILLIAMS M4X	L15E		
SL1	LED SITE FIXTURE. SINGLE-PIECE ALUMINUM HOUSING. ARM MOUNT. U.L. LISTED WET LOCATION. 480V SINGLE PHASE. WHITE FINISH. SQUARE, STRAIGHT, ALUMINUM. POLE DESIGNED TO SUPPORT FIXTURE(S) IN 100 MPH WINDS WITH 1.3 GUST FACTOR. PRIMARY FUSES. FLAT LENS. SURGE PROTECTION. (1) HEAD.	480 V	LED	45,000 LM	450 W	4000 K	30' POLE. BASE BY DIVISION 26 CONTRACTOR	FORWARD THROW (DEFINED BY LITHONIA)	N/A	MCGRAW-EDISON GLEON LED BEACON VPS LITHONIA DSX2 LED LUMECON LDS-LAL	SL1		
X1	LED EXIT LIGHT. WHITE POLYCARBONATE HOUSING. SINGLE FACE. RED LETTERS. SELF-POWERED. NICKEL-CADMIUM BATTERY. SELF-DIAGNOSTIC/SELF-TESTING MODULE.	120/277 V	LED	N/A	5 W	N/A	UNIVERSAL	N/A	N/A	LITHONIA LQM LIFE SAFETY LSXS COMPASS CE SURE-LITES LPX	X1		
X2	VANDAL PROOF LED EXIT LIGHT. DIE-CAST ALUMINUM HOUSING. WHITE FINISH. SINGLE FACE. STENCIL FACE. RED LETTERS. SELF-POWERED. NICKEL-CADMIUM BATTERY. SELF-DIAGNOSTIC/SELF-TESTING MODULE.	120/277 V	LED	N/A	5 W	N/A	UNIVERSAL	VANDAL-RESISTANT POLYCARBONATE SHIELD WITH TAMPERPROOF SCREWS	N/A	SURE-LITES UX DUAL-LITE SEWL LITHONIA LV LSL LSNIDWL	X2		



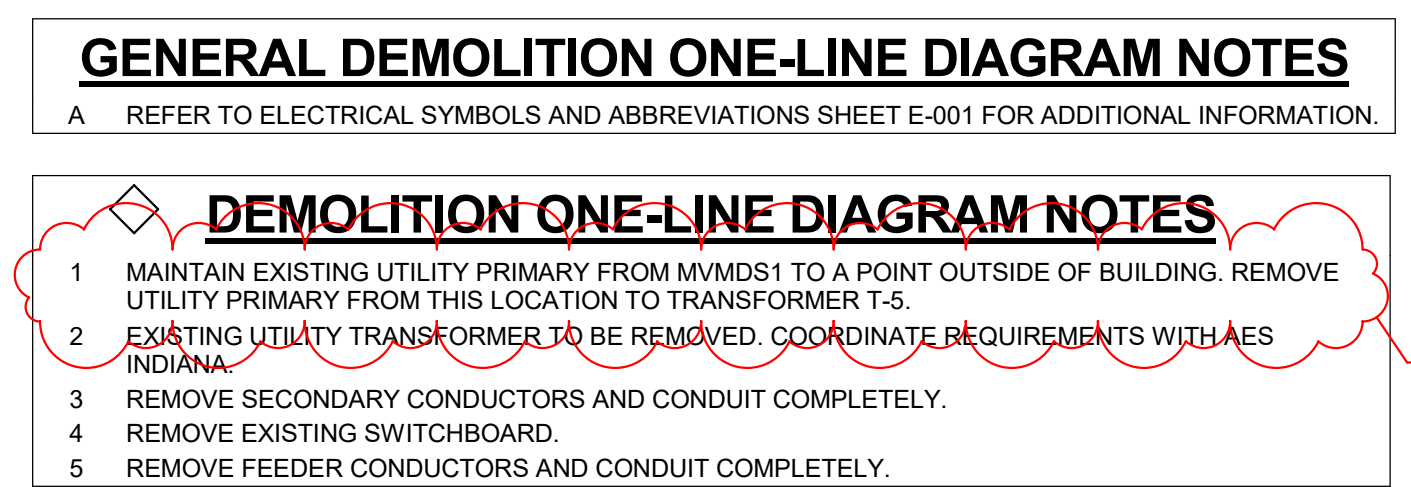
REVISIONS:		#	Date	Desc.
1	01/26/2026	1	As per RFI #01	As per RFI #01
2	02/06/2026	2	As per RFI #02	As per RFI #02

100% CONSTRUCTION DOCUMENTS

PROJECT: #241735
DATE: 01-06-2026
DRAWN BY: AMN

ELECTRICAL  
SCHEDULES





**DEMOLITION ONE-LINE DIAGRAM NOTES**

- 1 MAINTAIN EXISTING UTILITY PRIMARY FROM MVMD15 TO A POINT OUTSIDE OF BUILDING. REMOVE UTILITY PRIMARY FROM THIS LOCATION TO TRANSFORMER T-5.
- 2 EXISTING UTILITY TRANSFORMER TO BE REMOVED. COORDINATE REQUIREMENTS WITH AES INDIANAPOLIS.
- 3 REMOVE SECONDARY CONDUCTORS AND CONDUIT COMPLETELY.
- 4 REMOVE EXISTING SWITCHBOARD.
- 5 REMOVE FEEDER CONDUCTORS AND CONDUIT COMPLETELY.

A REFER TO ELECTRICAL SYMBOLS AND ABBREVIATIONS SHEET E-001 FOR ADDITIONAL INFORMATION.

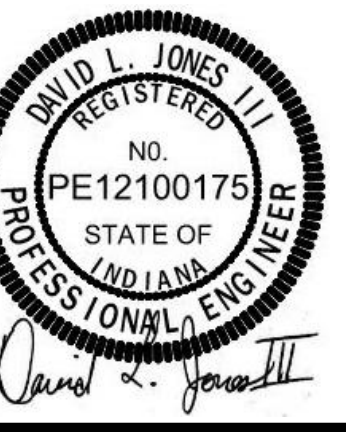
B PROVIDE LABELS ON ALL EQUIPMENT MODIFIED BY THIS PROJECT. PROVIDE LABELS ON ALL JUNCTION BOXES AND CONDUITS MODIFIED OR PROVIDED BY THIS PROJECT. PROVIDE UPDATED PANELBOARD DIRECTORIES ON ALL PANELBOARDS MODIFIED BY THIS PROJECT

- 1 PROVIDE POLE BOX INDICATED ON ELECTRICAL SITE PLAN TO CONNECT EXISTING MEDIUM VOLTAGE FEEDER FROM SWITCHGEAR VMYMD1 TO THE NEW PRIMARY FEEDER FOR TRANSFORMER T-5.
- 2 PROVIDE 4" CONDUIT WITH FULL TPALE FROM UTILITY RISER POLE TO NEW UTILITY TRANSFORMER.
- 3 NEW UTILITY TRANSFORMER. PROVIDE PAD PER AES REQUIREMENTS.
- 4 CONNECT BOTH NEW SERVICE DISCONNECTS TO NEW GROUND RING PER SITE PLAN WITH #20 GROUNDING WIRE.
- 5 PROVIDE NEW DISTRIBUTION PANELBOARD PDP IN NEMA 4X.



**2 ONE-LINE DIAGRAM**  
NOT TO SCALE

PERRY TOWNSHIP SCHOOLS  
 SOUTHPORT HIGH SCHOOL ADDITION AND  
 RENOVATION  
 971 EAST BANTA ROAD, INDIANAPOLIS, IN 46201



#	Date	Desc.
1	01/30/2026	Addendum #01
2	02/06/2026	Addendum #02

100% CONSTRUCTION  
DOCUMENTS

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PROJECT: #24173S

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DATE: 01-06-2026

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DRAWN BY: AMN

## ELECTRICAL ONE-LINE DIAGRAMS