ADDENDUM NO. 03

June 21, 2024

Additions and Renovations to Franklin Central High School Phase 2B
6215 S. Franklin Rd.
Indianapolis, IN, 46259

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 May 29, 2024, by VPS 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 3 – 1 through ADD 3 - 2 and attached VPS Addendum No. 03 dated June 21, 2024, consisting of 6 (six) pages, sections 127650 Telescoping Platform and Gallery 3-Chair System, 32 90 00 Planting, C220, C230, S3, S9, A3, ADD3-SK1, ADD3-SK2, ADD3-SK3, ADD3-SK4, PF1N, PF1R, PP1N, PP1R, PP1T, M001, M507, M601, T201F, T201J&M and T305, CES pages 1-2..

A. **SPECIFICATION SECTION 00 00 20 TABLE OF CONTENTS**

ADD SECTIONS
12 76 50 Telescoping Platform and Gallery 3-Chair System
32 90 00 Planting

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

A. BID CATEGORY NO. 1 - GENERAL TRADES

Add the following Specification Section:
12 76 50 Telescoping Platform and Gallery 3-Chair System
32 90 00 Planting

Add the following Clarification:

16. Responsible for thickened slab work per attached sketch.
17. Provide hardware for aluminum doors to BC#7.
18. Responsible for Note #3 Sheet FS1.3.
19. Responsible for wood on Details 2/2A/3 on Sheet A103.

F. BID CATEGORY NO. 6 METAL STUDS, DRYWALL & ACOUSTICAL

Add the following Specification Section:

09 27 13 – Glass-Fiber-Reinforced Plaster Fabrications

Add the following Clarification:

5. Responsible for metal studs on Details 2/2A/3 on Sheet A103.

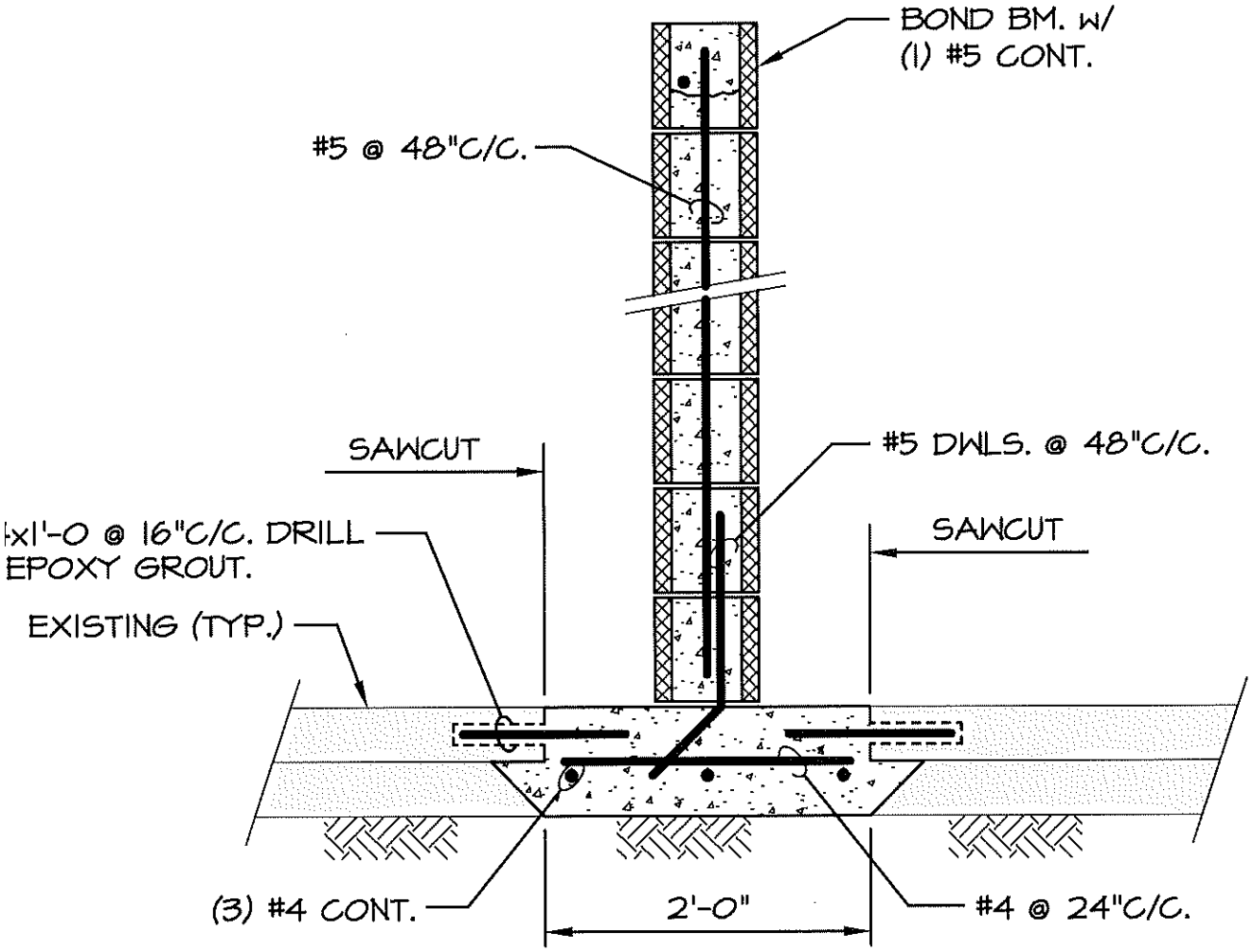
J. BID CATEGORY NO. 10 CASEWORK

Add the following Clarification:

2. Provide stainless steel countertops in Room U120.
3. Provide solid surface sills.

C. **SPECIFICATION SECTION 01 53 10 FENCES**

2.01 -A. Allow for 2000 Lineal Feet.



THICKENED SLAB DETAIL

(TYPICAL AT ALL NEW CMU WALLS @ EXISTING FLOOR SLAB)

Clarification Walls that are less than 10'-8 tall do not require reinforcing and thickened slab. See Architectural drawings for wall locations and heights.

VPS ARCHITECTURE

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Distribution: To all Planholders

ADDENDUM NO. 3 (THREE)

DATE: **June 21, 2024**
PROJECT: **Additions & Renovations to Franklin Central High School Phase 2B**
OWNER: **Franklin Township Community School Corporation**
PROJECT NO.: **2022063.10**

The original Specifications and Drawings dated May 2024 for the project referenced above, are amended as noted in this Addendum No. 3 (Three). Receipt of this Addendum and any subsequent Addenda must be acknowledged on the Proposal Form. This section of the Addendum consists of 6 (Six) Addendum pages, 43 (Forty-Three) items and 22 (Twenty-Two) attachments.

ITEM **DESCRIPTION**

General Items | Clarifications:

3-1 All new CMU corridor walls shall be Wall Type 1, unless noted otherwise.

3-2 In Unit U, there are NO tie rods encased in concrete that connect the foundations of the PEMB columns.

3-3 Case Systems is an approved manufacturer of the Science Lab Tables included in the Casework package.

3-4 All microphones, arms, and other radio studio equipment is existing to be reused.

3-5 Hearing assistance components will be shared between the Student Activity Center and the VIP Lounge.

3-6 The Dance Studio is also the divisible classroom; they are the same space. Room F137/F138.

3-7 All equipment and cabling per Section 274130 Athletics Scoreboards and Equipment shall be provided and installed by the AV Contractor. AV Contractor may sub out Daktronics directly for the installation of the video board if they so desire.

3-8 The intent of the Hearing Assistance System for the Student Activity Center as a whole receives the total quantity listed per ADA requirements. The separate racks are to be linked together via DANTE. Each rack may receive half of the total channels or any combination as required for full functionality.

3-9 The Classroom/Science Lab Projectors are Owner furnished and installed (OFOI). The AV Contractor is responsible for providing and installing the ceiling classroom projector mounting plate, the classroom speaker/amplifier, and the wall mounted manual projection screen.

3-10 CLEAR-COM ARCADIA System: Provide quantity of licenses required for system to function with quantity of speaker stations shown within AV diagrams. Future licensing may be procured within future construction projects.

3-11 The bleachers on the West End Zone shall be 15 rows.

<u>Specification Items:</u>

3-12 Section 074246 Cementitious Wall Panels: Cemfort is an approved manufacturer *but must provide custom color match to Swisspearl*.

3-13 Section 102226 Operable Partitions: Moderco is an approved manufacturer.

3-14 Section 105113 Metal Lockers: Revise Paragraph 3.4 as follows:

3.4 LOCKER SCHEDULE BASIS OF DESIGN LYON METAL PRODUCTS

A. Type A
1. ~~**Single**~~ **Double** tier locker, 18" x 24" x 72", ~~**open face with built-in seat**~~ **(refer to ADD3-SK4)**.

B. Type B
1. ~~**Double**~~ **Single** tier locker, 12" x 12" x 72" **(refer to Locker Elevations, 7A/A604)**.

C. Type C
1. Six tier locker, 12" x 12" x 72 **(refer to Locker Elevations, 7A/A604)**.

3-15 Section 126613 Telescoping Seating: Revise Paragraph 2.5.B.1.a. as follows, "Auto-Fold".

3-16 Section 127650 Telescoping Platform and Gallery 3-Chair System: Add attached section in its entirety (for Black Box Theater).

3-17 Section 133419 Metal Building Systems: A two-coat fluoropolymer finish shall be provided in lieu of three-coat fluoropolymer finish, typical at all conditions.

3-18 Section 224200 Commercial Plumbing Fixtures: WaterSaver is an approved manufacturer for Laboratory Gas Service Fittings.

3-19 Section 237313.13 Indoor Basic Air-Handling Units: Revise Paragraph K.2 as follows:

2. Doors
a. Fabrication: Formed and reinforced, double-wall and insulated panels of same materials and thicknesses as casing.
b. Hinges: A minimum of two ball-bearing hinges or stainless steel piano hinge and two wedge-lever latches, operable from inside and outside. Arrange doors as shown on details on drawings. Provide safety latch retainers on doors so that doors do not open uncontrollably.
c. Gasket: Neoprene, applied around entire perimeters of panel frames. Size: Large enough to allow for unobstructed access for inspection and maintenance of air-handling unit's internal components. At least 12 inches wide by full height of unit casing up to a maximum of 60 inches.

3-20 Section 274116 Integrated Audio Visual Systems and Equipment: Add Paragraph 2.5.1.g as follows:

g. VIP Lounge
  i. Shure QLX-D4 (Quantity: as shown on AV diagrams)
  ii. Shure QLXD2/SM58 (Quantity: 1 per receiver)
  iii. Shure QLXD1 (Quantity: 1 per receiver)
  iv. Shure WL183 with tie clip and connector cable (Quantity: 1 per receiver)
  v. Shure UA844+ Antenna Distribution (as required)
  vi. Shure SB900B Rechargeable Battery (Quantity: 1 for spare usage)
  vii. Shure SBC200 Dual Charging Case (Quantity: 1 per every 2 handheld mics)
  viii. Shure UA8 (Quantity: as shown on AV diagrams)
  ix. Or Equal

3-21 Section 329000 Planting: Add attached section in its entirety.

Drawing Items:

3-22 C220: Replace drawing in its entirety with attached revision.

3-23 C230: Replace drawing in its entirety with attached revision.

3-24 C250: Plan Note 5, Flush Concrete Stoop, shall be as indicated on attached sketch, ADD3-SK1.

3-25 A102 and S201: Per Room Finish Schedule on drawing A603, Orchestra J115 and Black Box Theater J139 shall receive wood floor system. Existing slabs shall be removed and replaced as indicated on S201, Foundation Plan - Unit F. Orchestra J115 shall receive LVT border, similar to Choir Rooms F131 and J125.

3-26 A113: At Gaming Rooms A118, A119, A120, and A121, Reference Note 2 shall be revised to reference Note 4, which provides ‘Compasso’ trim at transition of acoustical ceiling to raised gyp. bd. soffit at perimeter of room.

3-27 The following, existing drawings are provided for reference: S3, S9, and A3.

3-28 S201 and FS1.3: Per Note 3/FS1.3, referring to Plans 2 and 3/FS1.3, existing slabs shall be removed and replaced with new depressed concrete slabs as required for installation of new coolers/freezers. Refer to General Note on drawing S201.

3-29 S204: In Note 1, the abbreviation U.N. indicates, “unless noted”.

3-30 Refer to attached sketch, ADD3-SK2 for Wall Type and Infill Clarifications.

3-31 Refer to attached sketch, ADD3-SK3 for Wall Type information at Unit U, Second Floor.

3-32 A604: Add Type A Locker Elevation as indicated on attached sketch, ADD3-SK4.

3-33 PF1N: Replace drawing in its entirety with attached revision.

3-34 PF1R: Replace drawing in its entirety with attached revision.

3-35 PP1N: Replace drawing in its entirety with attached revision.

3-36 PP1R: Replace drawing in its entirety with attached revision.

3-37 PP1T: Replace drawing in its entirety with attached revision.

3-38 M001: Replace drawing in its entirety with attached revision.

3-39 M507: Replace drawing in its entirety with attached revision.

3-40 M601: Replace drawing in its entirety with attached revision.

3-41 T201F: Replace drawing in its entirety with attached revision.

3-42 T201J&M: Replace drawing in its entirety with attached revision.

3-43 T305: Replace drawing in its entirety with attached revision.

PREPARED BY: _____
George S. Link, AIA

Attachments: Section 127650 Telescoping Platform and Gallery 3-Chair System

Section 329000 Planting
C220
C230
S3
S9
A3
ADD3-SK1
ADD3-SK2
ADD3-SK3
ADD3-SK4
PF1N
PF1R
PP1N
PP1R
PP1T
M001
M507
M601
T201F
T201J&M
T305

PART 1 - GENERAL

1.01 SUMMARY

A. Section Includes: Telescoping Platform Seating includes, electrically operated systems of multiple-tiered seating rows comprising of seat, deck components, understructure that permits closing without requiring dismantling, into a nested configuration for storing or for moving purposes.

1. Typical applications include the following:

a. Wall Attached Telescoping Platform Seats.

B. Related Sections:

1. Division 9 finishes sections for adequate floor & wall construction for operation of Telescoping Platform Seats. Flooring shall be level and rear wall plumb within 1/8" [3mm] in 8'-0 [2438mm]. Maximum Platform force on the floor, of a 19'6" [5944] section, shall be a static point load of less than 300 psi [2.07 Mpa]

2. Division 16 Electrical sections for electrical wiring and connections for electrically operated Telescoping Platform Seats.

1.02 REFERENCES

A. National Fire Protection Association 102-2006
B. ICC 300-2002
C. American Welding society (AWS):

1. AWS D1.1 Structural Welding Code - Steel.
2. AWS D1.3 Structural Welding Code - Sheet Steel.

D. American Institute of Steel Construction (AISC):

1. AISC - Design of Hot Rolled Steel Structural Members.

E. American National Standards Institute (ANSI).

F. American Iron & Steel Institute (AISI):

1. AISI - Design Cold Formed Steel Structural Members.

G. Aluminum Association (AA):

1. AA - Aluminum Structures, Construction Manual Series.

H. American Society for Testing Materials (ASTM):

1. ASTM - Standard Specification for Properties of Materials.

I. National Forest Products Association (NFoPA):

1. NFOPA - National Design Specification for Wood Construction.

J. Southern Pine Inspection Bureau (SPIB):

1. SPIB - Standard Grading Rules for Southern Pine.

K. National Bureau of Standards/Products Standard (NBS/PS):

1. PS1 - Construction and Industrial Plywood.

L. Americans with Disability Act (ADA)

1. ADA - Standards for Accessible Design.

1.03 MANUFACTURER'S SYSTEM ENGINEERING DESCRIPTION

A. Structural Performance: Engineer, fabricate and install telescopic Platform seating systems to the following structural loads without exceeding allowable design working stresses of materials involved, including anchors and connections. Apply each load to produce maximum stress in each respective component of each Platform seat unit.

1. Design Loads: Comply with NFPA 102, 2002 Edition, Chapter 5 for design loads, as well as ICC 300 – 2002.

B. Manufacturer's System Design Criteria:

1. Platform seat assembly; Design to support and resist, in addition to it's own weight, the following forces:

a. Live load of 120 lbs per linear foot [1751 N/m] on seats and decking
b. Uniformly distributed live load of not less than 100 lbs per sq. ft. [4788 N/m^2] of gross horizontal projection.
c. Parallel sway load of 24 lbs. per linear foot [350 N/m] of row.
d. Perpendicular sway load of 10 lbs. per linear foot [146 N/m] of row.

2. Hand Railings, Posts and Supports: Engineered to withstand the following forces applied separately:

a. Concentrated load of 200 lbs. [890 N] applied at any point and in any direction.
b. Uniform load of 50 lbs. per foot [730 N/m] applied in any direction.

3. Guard Railings, Post and Supports: Engineered to withstand the following forces applied separately:

a. Concentrated load of 200 lbs. [890 N] applied at any point and in any direction along top rail.

b. Uniform load of 50 lbs. per foot [730 N/m] applied horizontally at top rail and a simultaneous uniform load of 100 lbs. per foot [1460 N/m] applied vertically downward.

4. Member Sizes and Connections: Design criteria (current edition) of the following shall be the basis for calculation of member sizes and connections:

a. AISC: Manual of Steel Construction
b. AISI: Specification for Design of Cold Formed Steel Structural Members
c. AA: Specification for Aluminum Structures
d. NFOPA: National Design Guide For Wood Construction.

C. Chairs

1. Seats:

a. Shall be cantilevered, self-centering, automatic three-quarters lift with over center retracting feature for ease of row passage and janitorial access.
b. Seat shall be tested and professionally certified to support and withstand an evenly distributed 440 lb [1957 N] static load without failure or irregularities that would impair usefulness.
c. Self-lifting seat shall be tested and professionally certified through an independent testing laboratory to withstand 350,000 operating cycles without failure of seat mechanism or measurable component wear.
d. Seat shall be tested and professionally certified to withstand 10,000 impacts of a 40 lb [178 N] sandbag dropped on the center of the seat from a height of 12"[305mm]. The rate of impacts shall be approximately 18 per minute

2. Backs:

a. Back shall withstand an evenly distributed front or rear static load of 330 lbs [1468N].
b. Back shall be tested and professionally certified to withstand, without failure, 10,000 swinging impacts each to the front and rear of the back by means of two opposing 40 lb. [18 Kg] sandbags. The sandbags shall be moved horizontally and equally for 10,000 cycles each at the distance of 12"[305mm] at a rate of 35 cycles per minute.

3. Armrests shall be tested and professionally certified to withstand, without failure, a 200 lb [890 N] static load applied both perpendicular to and vertically down on the arm.

4. Materials (Flammability) shall satisfy applicable test, codes, standards, or requirements as follows:

a. Copolymer polypropylene shall have a burn rate of 1 inch [25 mm] per minute or less per ASTM 635.

b. Upholstery materials shall meet requirements as set forth in the state of California Bureau of Home Furnishings Technical Bulletin 117.

c. Fire-performance Characteristics of Seat Padding: Provide seating that complies with test method: California Technical Bulletin 117

d. Cushioning and padding shall be self-extinguishing as defined in the requirements as set forth in the State of California Bureau of Home Furnishings Technical Bulletin 117.

1.04 SUBMITTALS

A. Section Cross-Reference: Required submittals in accordance with "Conditions of the Contract" and Division 1 General Requirements sections of this "Project Manual."

B. Project Data: Manufacturer's product data for each system. Include the following:

1. Project list: Ten (10) seating projects of similar size, complexity and in service for at least five (5) years.
2. Deviations: List of deviations from these project specifications, if any.

C. Shop Drawings: Indicate Telescoping Platform Seat assembly layout. Show seat heights, row spacing and rise, aisle widths and locations, assembly dimensions, anchorage to supporting structure, material types and finishes.

1. Wiring Diagrams: Indicate electrical wiring and connections.
2. Graphics Layout Drawings: Indicate pattern of contrasting or matching seat colors

D. Samples: Seat materials and color finish as selected by Architect from manufacturers offered color finishes.

E. Manufacturer Qualifications: Certification of insurance coverage and manufacturing experience of manufacturer.

F. Installer Qualifications: Installer qualifications indicating capability, experience, and manufacturer acceptance.

G. Engineer Qualifications: Certification by a professional engineer registered in the state of manufacturer that the equipment to be supplied meets or exceeds the design criteria of this specification.

H. Operating/Maintenance Manuals: Provide to Owner maintenance manuals. Demonstrate operating procedures, recommended maintenance and inspection program.

I. Warranty: Manufacturers standard warranty documents.

1.05 QUALITY ASSURANCE

A. Seating Layout: Comply with current NFPA 102 Standard for Assembly seating, Tents, and Membrane Structures, and specifically with Folding and Telescopic Seating, except where additional requirements are indicated or imposed by authorities having jurisdiction.

B. Welding Standards & Qualification: Comply with AWS D1.1 Structural Welding Code - Steel and AWS D1.3 Structural Welding Code - Sheet Steel.

C. Insurance Qualifications: Mandatory that each bidder submit with his bid an insurance certificate from the manufacturer evidencing the following insurance coverage:

1. Workers Compensation - including Employers Liability with the following limits:

   $500,000.00 (US) Each Accident
   $500,000.00 (US) Disease - Policy Limit
   $500,000.00 (US) Disease - Each Employee

2. Commercial General Liability - including premises/ operations, independent contractors and products completed operations liability. Limits of liability shall not be less than $5,000,000.00 (US).

D. Manufacturer Qualifications: Manufacturer who has a minimum of twenty years of experience manufacturing telescoping Platform seats.

E. Installer Qualifications: Engage experienced Installer who has specialized in installation of telescoping Platform seat types similar to types required for this project and who is acceptable to, or certified by, telescoping Platform seat manufacturer.

F. Engineer Qualifications: Engage licensed professional engineer experienced in providing engineering services of the kind indicated that have resulted in the successful installation of telescoping Platforms similar in material, design, fabrication, and extent to those types indicated for this project.

1.06 DELIVERY, STORAGE AND HANDLING

A. Deliver telescopic Platforms in manufacturers packaging clearly labeled with manufacturer name and content.

B. Handle seating equipment in a manner to prevent damage.

C. Deliver the seating at a scheduled time for installation that will not interfere with other trades operating in the building.

1.07 PROJECT CONDITIONS

A. Field Measurements: Coordinate actual dimensions of construction affecting telescoping bleachers installation by accurate field measurements before fabrication. Show recorded measurements on final shop drawings. Coordinate field measurements and fabrication schedule with construction progress to avoid delay of Work.

1.08 WARRANTY

A. Manufacturer's Product Warranty: Submit manufacturer's standard warranty form for telescoping Platforms. This warranty is in addition to, and not a limitation of other rights Owner may have under Contract Documents.

1. Warranty Period: Five years from Date of Acceptance.
2. Beneficiary: Issue warranty in legal name of project Owner.
3. Warranty Acceptance: Owner is sole authority that will determine acceptance of warranty documents.

1.09 MAINTENANCE AND OPERATION

A. Instructions: Both operation and maintenance shall be transmitted to the Owner by the manufacturer of the seating or his representative.

B. Service: Maintenance and operation of the seating system shall be the responsibility of the Owner or his duly authorized representative, and shall include the following:

1. Operation of the Seating System shall be supervised by responsible personnel who will assure that the operation is in accordance with the manufacturer's instructions.
2. Only attachments specifically approved by the manufacturer for the specific installation shall be attached to the seating.
3. An annual inspection and required maintenance of each seating system shall be performed to assure safe conditions. At least biannually the inspection shall be performed by a professional engineer or factory qualified service personnel.

PART 2 - PRODUCTS

2.01 MANUFACTURERS

A. Manufacturer: Hussey Seating Company, U.S.A.

1. Address: North Berwick, Maine, 03906
2. Telephone: (207) 676-2271; Fax: (207) 676-9690

3. Product: Hussey Telescopic Platform Seat System

a. MAXAM-*Plus* Series Telescopic Platform Seats, row spacing in 33 inches [838].
b. MAXAM-*Plus* Series Telescopic Platform Seats, rise spacing of 11 5/8” [295].
c. Aisle Type: foot level aisles, front steps, and intermediate aisle steps.
d. Seat Type: Gallery 3 Chairs
1) Gallery 3 Chairs color finish: SELECT: manufacturers 19 standard colors.
e. Rail Type: Self Storing end rails, aisle hand rails, custom vertical end rails
f. Operation: electrical power
1) Electrical Power System: Integral power with pendant control, limit switches
g. Platform Type: wall attached
h. Chair Operation: Lift Assist
i. Lift-Assist: Chairs shall be ganged in group(s) of one to fourteen, manually raised and lowered as one unit with gas strut assist to offset weight. Lift-Assist operation will require unlocking of chair gangs with ergonomic t-handle tool at aisle location.

i. Gallery Chair Dimensions

i. Seat up envelope: 10 1/4” [260mm]
ii. Seat down envelope: 23 15/16” [608mm]
iii. Seat height: 18” [457mm]
iv. Armrest height: 26 1/8” [663mm]
v. Back height: 32” [813mm]

j. Chair Construction: fully enveloped upholstered back & seat

4. Product Description/Criteria:

   a. Bank Length: SEE DRAWINGS SHEET A802___
   b. Aisle Widths: _____
   c. Number of Tiers: _____
   d. Row Spacing(s): _____
   e. Row Rise: _____
   f. Open Dimension: _____
   g. Closed Dimension: _____
   h. Overall Unit Height: _____
   i. Net Capacity: _____ per seat

5. Miscellaneous Product Accessories: top seat filler, seat numbers, row letters.
6. Special Applications: tapered sections, extended rear deck filler, rear wall column cutouts.

2.03 MATERIALS

A. Lumber: ANSI/Voluntary Product 20, B & B Southern Pine

B. Plywood: ANSI/Voluntary Product PS1, APA A-C Exterior Grade.

C. Structural Steel Shapes, Plates and Bars: ASTM A 36.

D. Uncoated Steel Strip (Non-Structural Components): ASTM A1011, Commercial Quality, Hot-Rolled Strip.

E. Uncoated Steel Strip (Structural Components): ASTM A1011 Grade 33, 40, 45, or 50, Structural Quality, Hot-Rolled Strip.

F. Galvanized Steel Strip: ASTM A653 Grade 40, zinc coated by the hot-dip process, structural quality.

G. Structural Tubing: ASTM A500 Grade B, cold-formed.

H. Polyethylene Plastic: ASTM D 1248, Type III, Class B; molded, color-pigmented, textured, impact-resistant, structural formulation; in color indicated or, if not otherwise indicated, as selected by Architect from manufacturer's standard colors.

I. Fasteners: Vibration-proof, of size and material standard with manufacturer.

2.04 UNDERSTRUCTURE FABRICATION

A. Frame System:

1. Wheels: Not less than four 5" [127] diameter by 1 1/4" [32] with non-marring soft rubber face to protect wood and synthetic floor surfaces, with molded-in sintered iron oil impregnated bushings to fit 3/8" [10] diameter axles secured with E-type snap rings.
2. Lower Track: Continuous Positive Interglide System interlocks each adjacent CPI unit using an integral, continuous, anti-drift feature and through-bolted guide at front to prevent separation and misalignment. Each CPI unit shall contain a Low Profile Posi-Lock LX to

lock each row in open position and allow unlocking automatically. Provide adjustable stops to allow field adjustment of row spacings.
3. Slant Columns: High tensile steel, tubular shape.
4. Sway Bracing: High tensile steel members through-bolted to columns.
5. Deck Stabilizer: High tensile steel member through-bolted to nose and riser at three locations per section. Interlocks with adjacent stabilizer on upper tier using low-friction nylon roller to prevent separation and misalignment. Incorporates multiple stops to allow field adjustment of row spacings.
6. Deck Support: Securely captures decking for entire length of section

B. Deck System:

1. Section Lengths: Each bank shall contain sections not to exceed 19’ 5” (5944) in length with a minimum of two supporting frames per row, each section.
2. Nosing and Rear Riser: Continuous roll formed galvanized steel members.
3. Attachment: Through-Bolted fore/aft to deck stabilizers, and frame cantilevers.
4. Deck End Overhang: Not to exceed frame support by more than 5'-7 1/2" [1715].
5. Carpeted Decks: Provide at decks and steps double tufted, anti-static, solid and crush resistant 100% polypropylene pile with high-density foam backing carpet. Mount to Classic Wood deck as substrate. Carpet color to be of manufacturer's standard selection.

2.05 SEATING FABRICATION

A. Gallery 3 Telescopic Platform Chair System

1. Chair System: Beam-mounted design, consisting of back & seat assemblies fastened to rigidly mounted stanchion assemblies mounted to transverse beam. Stanchion assemblies articulate from manual or manual with gas assist operating mechanism.

2. Fully Enveloped Upholstered Backs & Seats:

a. The inner back panel shall be 17/32” [13mm] 9 ply thick-formed hardwood with an ergonomically engineered contour. The wings for attachment of chair back to standard shall be not less than 14 GA [1.9mm] and will be attached via low profile fasteners. Wings shall position the chair back at 13 degrees.
b. The inner seat panel shall be 17/32” [13mm] 9 ply thick-formed hardwood. The hinge arms for attachment of seat bottom to standard shall be not less than 13 GA [2.5mm] and will be attached via low profile fasteners. Hinge Arms shall position the seat bottom at 10 degrees.
c. The profiled urethane cut foam shall be no less than:

i. Back: 1 1/8” [30mm]
ii. Seat: 1 3/4” [45mm]

d. Chair back and seat upholstery covers shall be of a three-piece construction, without welts, taut, and securely retained.
e. Tailoring shall evidence a superior level of design, workmanship and fit.

3. Stanchion Assembly:

a. To be of powder-coated cast aluminum grade AA 380 and independently secured to mounting beam.
b. Each of the independent seat hinges shall be fitted with up and down stops as well as self-centering, preloaded coiled seat return springs.
c. Chairs must be designed with two independent return springs which position seat to 100 percent (100%) fold position for added aisle passage. Seat action shall be dampened for a constant velocity return and no final oscillations to the rest position.
d. Seat support, return springs, and stops shall be enveloped and concealed by the aluminum cast cover. Superior comfort shall be derived through careful ergonomic engineering.
e. Armrests: Shall be manual flip-up operation and made of injection-molded, leather textured polypropylene secured to polypropylene armrest base with concealed fasteners.

4. Chair Beam: Shall be constructed of 12GA steel tube, powder-coated, with polymer end caps and serve as the focal attachment and shall in-turn transmit all forces to the beam support.

5. Beam support: Shall be cast steel support arms. Closed seam steel tube standards are unacceptable. Top of support arms shall be designed to capture and secure the beam in place. Support arms articulate from manual or manual with gas assist operating mechanism.

2.06 SHOP FINISHES

A. Understructure: For rust resistance, steel understructure shall be finished on all surfaces with black "Dura-Coat" enamel. Understructure finish shall contain a silicone additive to improve scratch resistance of finish.

B. Wear Surfaces: Surface subject to normal wear by spectators shall have a finish that does not wear to show different color underneath:

1. Steel nosing and rear risers shall be pre-galvanized with a minimum spangle of G-60 zinc plating.

2. Decking to be carpeted.

C. Railings: Steel railings shall be finished with powder coated semi - gloss black.

D. Chair Components

1. FINISH FOR Steel / Aluminum Components: (Indoor) Material shall be pre-treated in an iron phosphate wash system prior to finish application. Finish shall be a specially blended polyester T.G.I.C./Epoxy powder coating with a minimum dry film thickness of 1.5 mils [0.038 mm].

2. Injection molded polypropylene or nylon: Shall be pigmented, in one of manufacturers standard colors and have a textured surface.

3. Fabric: Upholstery material shall be one of manufacturers standard grade fabric offerings.

4. Color: Shall be per manufacturer's standards. Seating Contractor shall submit color samples for owner's approval prior to manufacture.

2.07 FASTENINGS:

A. Welds: Performed by welders certified by AWS standards for the process employed.
B. Structural Connections: Secured by structural bolts with prevailing torque lock nuts or Free-spinning nuts in combination with lock washers.

2.08 ELECTRICAL OPERATION

A. Integral Power: Furnish and install Hussey PF(1/2/3/4), an integral automatic electro-mechanical powered frame propulsion system, to open and close telescopic seating. Integral Power and Control System shall be Underwriters Laboratories, Inc. (UL) approved and listed as well as CE Compliant for EU applications.

1. Operation shall be with a removable pendant control unit which plugs into seating bank for operator management of stop, start, forward, and reverse control of the power operation.
2. Each Powered Frame unit shall consist of output shaft gear reducer with 6" [152] diameter x 4" [102] wide wheels covered with non-marring 1/2" [13] thick composite rubber. Reducers shall be fitted with 3 phase induction motorswhich will provide an average operating speed of (46/25) f.p.m [0.23 / 0.12 m/s].
3. Operating Loads: Each Powered Frame provides (220 / 550) lbs pull force [979 / 2447 N] which equals approximately (28 / 35) psi [193 / 241 kPa] lateral shear on the floor.

Each integral power system provided is U.L. Listed and or C.E. Compliant.

4. Limit Switches: Furnish and install both open and closed limit switches for the integral power system. The limit switches will automatically stop integral power operation when seating has reached the fully extended or closed position.

A. Power operation shall utilize a combination of contactors and limit switches to insure the wiring is not energized except during operation. Straight wired electric system is not allowed.

5. Electrical: Seating Manufacturer shall provide all wiring within seating bank including pendant control.

a. Each unit for PF(1/2/3/4) is power operated by a 1/2 horsepower, 1725 R.P.M., 208 Volts, 50/60 Hz., three phase 1.25 service factor motor. This motor draws a full load current of 2.2 amperes. Power supply required shall be 120/208 volts three phase 5 wire plus ground service with 20 amps. Motors, housing, and wiring shall be installed and grounded in complete accord with the National Electrical Code.
b. The electrical contractor shall provide required power source with no greater than 4% voltage drop at the seatings' junction box. The electrical contractor shall perform all wiring connections in junction box that are attached to or a part of the building.

2.09 ACCESSORIES

A. Front Aisle Sure-Steps: Provide at each vertical aisle location front aisle sure-step. Front sure-steps shall engage with front row to prevent accidental separation or movement. Blow molded

end caps shall have full radius on all four edges. Quantity and location as indicated. Steel Aisle Steps.

B. Non-Slip Tread: Provide at front edge of each aisle locations an adhesive-backed abrasive non-slip tread surface.

C. Foot Level Aisles: Provide deck level full width vertical aisles located as indicated.

D. Intermediate Aisle Steps: Intermediate aisle steps shall be of boxed fully enclosed type construction. Blow molded end caps shall have full radius on all four edges. Step shall have non-skid on surface. Quantity and location as indicated. Steel Aisle Steps.

E. Intermediate Aisle Handrails: Provide single pedestal mount handrails 34” [864] high with terminating mid rail. Handrails shall be attached to the socket and shall rotate 90° for easy storage in socket. Aisle handrails that are detached from the socket for storage are unacceptable.

F. Self Storing End Rails: Provide steel self-storing 42" [1066] high above seat, end rail with tubular supports and intermediate members designed with 4" [102] sphere passage requirements.

G. Seat Numbers: Provide each plastic seat module with a 1 3/4" x 1 1/4" [45 x 32] oval etched Lexan plate. Easy to read black numerals will be on the plate fitted in a vandal resistant recess

H. Row Letters: Provide at each row end of plastic seat a 1 3/4" x 1 1/4" [45 x 32] oval etched Lexan plate with black numerals. Plates to be fitted flush in vandal resistant end cap recess.

I. Extended Rear Deck Filler: Provide at rear deck level, an extended rear deck filler mounted between rear wall building columns. Select extended rear deck filler from (12) twelve standard sizes to meet site conditions.

J. Rear Wall Column Cutouts: Provide custom cutouts at rear wall building columns. Top row(s) to be cutout and scribe fitted to meet wall column conditions.

K. Armrests, Injection Molded Plastic: Armrests shall be of injection molded, leather textured polypropylene. Armrest to be secured to standard with concealed fasteners.

PART 3 - EXECUTION

3.01 EXAMINATION

A. Verification of Conditions: Verify area to receive telescoping Platform seats are free of impediments interfering with installation and condition of installation substrates are acceptable to receive telescoping Platform seats in accordance with telescoping Platform seats manufacturer's recommendations. Do not commence installation until conditions are satisfactory.

3.02 INSTALLATION

A. Manufacturer's Recommendations: Comply with telescoping Platform seats manufacturer's recommendations for product installation requirements.

B. General: Install telescoping Platform seats in accordance with manufacturer's installation instructions and final shop drawings. Provide accessories, anchors, fasteners, inserts and other items for installation of telescoping Platform seats and for permanent attachment to adjoining construction.

3.03 ADJUSTMENT AND CLEANING

A. Adjustment: After installation completion, test and adjust each telescoping Platform seats assembly to operate in compliance with manufacturer's operations manual.

B. Cleaning: Clean installed telescoping Platform seats on both exposed and semi-exposed surfaces. Touch-up finishes to restore damage or soiled surfaces.

3.04 PROTECTION

A. General: Provide final protection and maintain conditions, in a manner acceptable to manufacturer and installer to ensure Telescoping Platform seats are without damage or deterioration at time of substantial completion.

END OF SECTION 127650

SECTION 32 90 00 - PLANTING

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Furnish and install all labor, material, and equipment necessary for planting as indicated or implied by the Contract Documents.

B. Related Sections:

1. Division 31 Section "Earthwork".
2. Division 32 Section "Seeding".

1.2 QUALITY ASSURANCE

A. Installer Qualifications:

1. Engage an experienced installer who has completed planting work similar in material, design, and extent to that indicated for this project and with a record of successful landscape establishment.
2. All work described in this Section is to be done by an installer specializing in such work with five (5) documented years of experience in similar work.

B. Refer to Division 31 Section "Earthwork" for topsoil requirements and amendment recommendations to bring soil to optimal condition for growing and maintaining planting.

C. Provide quality, size, genus, species, and variety of trees and shrubs indicated, complying with applicable requirements of ANSI Z60.1-"American Standard for Nursery Stock."

D. Inspection:

1. Furnish plant materials inspected by Architect/Engineer at the growing site and tagged or otherwise approved for delivery.
2. Inspection at growing site does not preclude right of rejection at the job site.
3. Follow guidelines established by American Association of Nurserymen.

E. Certification:

1. Furnish plant materials certified to be free from hazardous insects or apparent disease.
2. Furnish certification that plant materials provided are the species specified.

F. Nomenclature:

1. Species shall be true to Botanical and Common Name or Variety.
2. American Joint Committee on Horticulture Nomenclature-Standard Plant Names.
3. U.S.A. Standard for Nursery Stock
4. State Nurserymen's Association.

1.3 SUBMITTALS

A. One copy of Certificates of Inspection of regulatory agencies as specified herein.

B. One copy of each applicable publication.

C. Topsoil analysis: refer to Division 31 Section "Earthwork."

D. Maintenance instruction: Prior to the end of maintenance period, furnish three (3) copies of written maintenance instructions to the Architect/Engineer for maintenance and care of installed plants through their full growing season.

E. Samples:

1. Submit container sample of gravel showing a range of color and size for approval.
2. Submit sample of wood mulch for approval.

F. Qualification data for firms and persons specified in the "Quality Assurance" Article to demonstrate their capabilities and experience. Include list of completed projects with project names and addresses, names and address of Owners, and other information specified.

1.4 PRODUCT HANDLING

A. Preparation for Delivery:

1. Balled and burlap (B & B) plants:

a. Dig and prepare for shipment in manner that will not damage roots, branches, shape, and future development after replanting. All plants shall be dug to retain as many fibrous roots as possible.
b. Ball with firm, natural balls of soil of at least minimum size recommended by ANSI 260.1. Broken, loose, or manufactured balls shall be rejected.
c. Each plant must be dug such that the trunk flare is visible at the top of the root ball. Plants where the trunk flare is not visible shall be rejected.
d. Wrap balls firmly with burlap and stout rope.
e. All plants shall be dug immediately before moving unless specified otherwise.
f. Immediately before digging, all evergreens shall be sprayed with anti-dessicant spray, applying an adequate film over trunks, branches, twigs and/or foliage.

g. All plant material shall be marked to indicate the north side at time of digging.
h. Do not prune prior to delivery.
i. Do not dig or transport after leaf buds are open unless directed by Architect/Engineer. If deciduous trees or shrubs are moved in full-leaf, spray with anti-desiccant at nursery before moving and again two weeks after planting.

2. Potted plants:

a. Dig with sufficient root structure and surrounding soil to maintain life.
b. Pot shall be of sufficient size to handle root spread.
c. Potting soil shall be humus mix.

B. Delivery:

1. Deliver fertilizer to site in original unopened containers bearing manufacturer's guarantee chemical analysis, name, trade name, trademark, and conformance to state law.
2. Protect during delivery to prevent damage to root balls or desiccation of leaves.
3. Notify Architect/engineer of delivery schedule in advance.
4. Each shipment shall be certified by State and Federal authorities to be free from disease and infestations.
5. All inspection certificates required by law to this effect shall accompany each shipment invoice or order to stock and/on arrival, the certificates shall be filed with the Architect/Engineer.
6. All plants shall be packed, transported, and handled with utmost care to insure adequate protection against injury.
7. Remove unacceptable plant material from the job site immediately.

C. Inspection:

1. All plants shall be subject to inspection in the nursery before any plants are dug.
2. The Contractor, or his representative, shall accompany the Architect/Engineer on the inspection trips.
3. Expenses of such inspections shall be included in the Bid Price.
4. All plant materials shall be protected by the Contractor until it is inspected and approved by the Architect/Engineer at the site of the project.
5. All rejected materials shall be immediately removed from the site and replaced with acceptable material at no additional cost.
6. The Architect/Engineer, or his representative, shall be the sole judge of the quality and acceptability of plant material.

D. Storage:

1. Balled and burlap plant stock:

a. Deliver direct from nursery.
b. Heel-in immediately upon delivery, if not to be planted within 24 hours.

c. Protect roots of plant materials from drying or other possible injury.
d. If planting is delayed more than 6 hours after delivery, set plants in shade, protected from weather and mechanical damage.

E. Handling:

1. Do not drop plants.
2. Do not pick up container or balled plants by stems or trunks.

1.5 JOB CONDITIONS

A. Time of planting:

1. The Contractor shall start his planting when other division of this work, including placing the topsoil to finish grade, has progressed sufficiently to permit planting. Planting operations shall be conducted under favorable weather conditions and during normal planting seasons which are suitable with locally accepted practice.

1.6 SCHEDULING

A. Coordination:

1. Install trees, shrubs, and ground cover plants before lawns are installed, unless specifically directed otherwise.
2. If planting of trees and shrubs occurs in existing lawns or after lawn work, protect lawn areas and promptly repair damage to lawns resulting from planting operations.

PART 2 - PRODUCTS

2.1 PLANTING MATERIALS

A. Plant List:

1. A complete list of plants, of height, caliper, and other requirements as shown in the Contract Documents. Refer to the Contract Documents.
2. Label at least one tree and one shrub of each variety with a securely attached waterproof tag bearing legible designation of botanical and common name.
3. Planting will be specimen quality.

B. Substitutions:

1. No substitutions shall be accepted, except with the written permission of the Architect/Engineer.

C. Quality:

1. All plants shall have normal, well-developed branches and vigorous root systems as recommended by ANSI Z60.1
2. Plants shall be sound, healthy, vigorous and free from defects, disfiguring knots, abrasions at the bark, sun-scald injuries, plant diseases, insect eggs, borers, and all other forms of infections.

D. Source of New Planting Materials:

1. All woody plants shall be nursery grown and shall have been growing under the same climatic conditions as the location of this project for a least 2 years prior to date of planting on this project.

E. Measurements:

1. A plant shall be measured as it stands in its natural position.
2. Stock furnish shall be a fair-average between the minimum and maximum size as specified.
3. Large plants which have been cut back to the specified sizes will not be accepted.
4. Guidelines of the American Association of Nurserymen shall govern handling and balling unless the specifications call for high priority.
5. Plant materials shall be specimen stock.
6. Ground cover plants shall be nursery grown, well established in 2-1/4 inch peat pots.

2.2 PLANTING SOIL FOR LANDSCAPE BEDS

A. Depth: Landscape beds shall be backfilled to a depth of 6 inches.

B. Mix:

1. Landscape beds shall be backfilled with a mixture of 2 parts topsoil and 1 part compost or alfalfa/pine bark mixture as specified herein and as noted on the Drawings.
2. Apply soil amendments and fertilizer in amounts recommended by topsoil analysis.

2.3 PLANTING SOIL FOR TREE PITS/MOUNDS

A. Mix:

1. Tree pits shall be backfilled with on site soils. Potting soil, peat moss or wood chips are not needed.
2. Apply soil amendments and fertilizer in amounts recommended by topsoil analysis.

2.4 INORGANIC SOIL AMENDMENTS

A. Lime:

1. ASTM C602 agricultural limestone containing a minimum 80 percent calcium carbonate equivalent as follows:
2. Class T with a minimum 99 percent passing through No 8 sieve and a minimum 75 percent passing through No 60 sieve.

B. Aluminum Sulfate: Commercial grade, unadulterated

C. Agricultural Gypsum: Finely ground, containing a minimum of 90 percent calcium sulfate.

D. Sand: Clean, washed, natural or manufactured, free of toxic materials.

2.5 ORGANIC SOIL AMENDMENTS

A. Peat: Sphagnum peat moss, partially decomposed, finely divided or granular texture, with a pH range of 3.4-4.8.

B. Compost: Well composted, stable and weed free organic matter, pH range of 5.5 to 8; moisture content 35-55 percent by weight; 100 percent passing through 1 inch sieve; not exceeding 0.5 percent inert contaminants and free of substances toxic to humans and plantings.

2.6 FERTILIZER

A. Bone Meal: Commercial, raw or steamed, finely ground; minimum 4 percent nitrogen and 20 percent phosphoric acid.

B. Superphosphate: commercial, phosphate mixture, soluble; a minimum of 20 percent available phosphoric acid.

C. Commercial Fertilizer:

1. Commercial grade complete fertilizer of neutral character, consisting of fast and slow release nitrogen 50 percent derived from natural organic sources of urea formaldehyde, phosphorous, and potassium in the following composition:
2. Composition: 12 percent of actual nitrogen, 12 percent phosphorous and 12 percent potassium by weight.

D. Slow-Release Fertilizer:

1. Granular or pelleted fertilizer consisting of 50 percent water insoluble nitrogen, phosphorous, and potassium in the following composition:
2. Composition: 20 percent nitrogen, 10 percent phosphorous and 10 percent potassium by weight.

2.7 GUYING AND STAKING MATERIAL

A. Stakes and Guys:

1. Provide stakes and dead-men of sound new hardwood free of knotholes and other defects.
2. Provide wire ties and guys of two-stranded, twisted, pliable galvanized iron wire not lighter than 12 gauge with zinc-coated turnbuckles.
3. Provide not less than 1/2" diameter black plastic hose, cut to required lengths, to protect tree trunks from damage by wires.
4. All other staking methods to be approved by Architect/Engineer prior to installation.
5. Remove stakes and guys no later than 12 months after installation.

B. Wrapping: For fall installations only: breathable fabric tree-wrap not less than 4 inches wide, designed to prevent bore damage and winter splitting.

2.8 WATER

A. Quality: Potable.

2.9 MULCH

A. Mulch shall be placed to 3" depth as shown on the planting details.

B. Mulch shall be shredded hardwood bark, free of sawdust and manufactured by the high-pressure water technique

2.10 STONE MULCH

A. Hard, durable stone, washed free of loam, sand, clay and other foreign substances.

B. Type: Uncrushed smooth river gravel.

C. Size: 1" minimum, 1 1/2" maximum.

2.11 SOIL SEPARATION

A. MIRAFI-140N-Mirafi, Inc. or approved equal, to separate soil from drainage material.

2.12 ANTI-DESSICCANT

A. Emulsion type film-forming agent designed to permit transpiration but retard excessive loss of moisture from plants. Deliver in manufacturer's fully identified containers and mix in accordance with manufacturer's instructions.

2.13 EDGING

A. Metal:

1. Black painted steel with integral stakes: Sure-loc or approved equal.
2. Edge strip shall be 1/4 inch by 5 inch deep.
3. Stakes shall be painted steel in manufacturer's standard gauge and length.

B. Location:

1. Edging to be installed between lawn areas and planting beds.
2. Install at other locations designated on the Drawings.

PART 3 - EXECUTION

3.1 PREPARATION

A. Description:

1. Verify final grades have been established prior to beginning planting operations.
2. Planting shall be located where it is shown on the plan.
3. Prior to the excavation of planting areas or plant pits, or placing tree stakes, the Contractor shall ascertain the locations of all utility lines, electric cables, and conduits so that the proper precautions may be taken not to disturb or damage and subsurface improvement. Should there be obstructions; the Contractor shall promptly notify the Architect/Engineer.
4. Before planting, the Contractor shall ascertain that all holes drain, and in any which do not, Contractor shall provide 1 foot diameter French drain of sufficient depth to permit drainage or subsurface drain tile system.
5. After performing topsoil analysis, make all corrections to soil as required to bring the pH value between 6.0 and 7.2.
6. Stake out locations for plants and outline of planting beds on ground prior to installation.
7. Do not begin excavation until stake out of plant locations and plant beds are acceptable to the Architect/Engineer.
8. Planting beds and planting pits shall be prepared as shown on the Drawings and as noted on this Project Manual. Any damage to paving or other materials shall be removed and replaced at Contractor's expense.

3.2 EXCAVATION FOR PLANTING

A. Pits and Trenches:

1. Trench shape: 1:1 slope on sides and flat bottom.
2. Plant pits: circular in shape
3. Make excavations at least two times as wide as the ball diameter and equal to the ball depth.
4. Fill excavations with water and allow to percolate out before planting.

B. Planting Beds:

1. Bring beds to smooth, even surface conforming to established grades after full settlement has occurred.
2. Remove sticks, stones over 1/2 inch in any diameter, rubbish and other extraneous matter.

3.3 PLANTING

A. General:

1. Center plant in pit or trench on unexcavated or compacted soil.
2. Plant so that the north side of the plant as marked faces north.
3. Set plant plumb and hold rigidly in position until soil has been tamped firmly around ball or roots.
4. Use planting mix as specified for backfill.
5. Place sufficient planting soil (compacted) under plant to bring top of root ball 1 inch above surrounding grade.
6. When pit is 2/3 filled, water thoroughly and allow water to soak away before placing remained of backfill.
7. If settling of the backfill occurs after watering, add more backfill to bring to finish grade up to top of root ball.

B. Bindings:

1. Remove all bindings and burlap from top 1/3 of root ball. If plant is shipped with a wire basket, cut the wire basket in four places and fold down into the planting hole. All balls with frayed roots shall be cut off cleanly.
2. After soil settles, fill pit with planting soil, water, and leave pit surface even with finished grade of surrounding ground.

C. Watering Basin:

1. Construct a soil berm, 3 inches above finish grade, forming a watering basin with a level bottom around each deciduous and evergreen tree.
2. Size: Greater than diameter of ball or spread of roots if bare-rooted.
3. All water basins shall be removed prior to final inspection.

D. Balled Plants (B & B):

1. Center plant in pit on unexcavated or compacted soil.
2. Plant top of root ball 1" higher than surrounding grade.
3. Cut burlap or ropes, wires, and other wrapping materials.
4. Do no pull wrapping from under ball.
5. Do not plant if ball is cracked or broken before or during planting process.

3.4 MULCHING

A. General:

1. Mulch tree rings and landscape beds within three (3) days after planting.
2. Cover watering basin or bed evenly to depth shown on the Drawings.
3. Water thoroughly immediately after mulching.

3.5 WRAPPING, GUYING AND STAKING OF TREES

A. Install tree wraps if fall installation. Wrap fabric from the bottom up with sufficient overlap to cover all bark. Apply from trunk flare to first branch. Remove mid-april.

B. Guy and stake any leaning trees. All trees may be staked if site is exceptionally windy, otherwise, install on an as needed basis.

C. At end of warranty period, remove all guying and staking material from site, unless otherwise directed by Architect/Engineer.

3.6 PRUNING AND REPAIR

A. Description:

1. Do not heavily prune plants at the time of planting.
2. Prune only crossover limbs, co-dominant leaders, and broken or dead branches.
3. No plants shall be pruned or clipped prior to delivery except at the permission of the Architect/Engineer.
4. Broken or badly bruised branches shall be removed with a clean cut.
5. All pruning shall be done to trees during the course of planting operations shall promptly be treated as required in accordance with recognized horticultural practices and the instructions of the Architect/Engineer

3.7 CLEANING

A. Description:

1. Sweep and wash paved surfaces.
2. Immediately clean spills from paved and finished surface areas.
3. Remove debris and excess materials from project site.

3.8 WARRANTY AND MAINTENANCE

A. Begin maintenance immediately after each area is landscaped and continue until acceptable landscape is established, but not less than 60 days after date of Substantial Completion.

1. If full maintenance period has not elapsed before the end of planting season, continue maintenance during the next planting season.
2. Maintenance includes watering, fertilizing, weeding, trimming, replanting, and other operations to provide a healthy landscape.
3. Keep planting saucers and beds free of weeds, grass, and other undesired vegetation growth.

B. Begin warranty period after date of Substantial Completion and continue for a period of one full year.

1. The Warranty specified in this section does not deprive the Owner of other rights he may have in these specifications.
2. The Warranty period for new landscape areas shall be for one full year after date of Substantial Completion against defects including death and unsatisfactory growth except for defects resulting from Owner abuse or neglect or incidents beyond Contractor's control.
3. Replacement plants under this warranty shall be granted for one full year from date of installation and acceptance.
4. The Contractor shall, at no cost to the Owner, repair damage done to walks, buildings, roads, and other plants or lawns during plant replacement.

3.9 FINAL INSPECTION AND ACCEPTANCE

A. Description:

1. Request final inspection in writing for acceptance at least 10 days before end of warranty period.
2. At the end of the warranty period on the completed landscape and on written notice from the Contractor, the Architect/Engineer will, within 15 days of such written notice, make an inspection of the landscape to determine if a satisfactory planting has been produced. If a satisfactory landscape has not been established, another inspection will be made after written notice from the Contractor that the landscape is ready for inspection following the next growing season.

END OF SECTION 32 90 00

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PROJECT NAME: ADDITIONS & RENOVATIONS TO FRANKIN CENTRAL HIGH SCHOOL PHASE 2B
OWNER NAME: FRANKIN TWP. COMMUNITY SCHOOL CORP.
CES PROJECT NO. 2023-015.FP2 ARCHITECT PROJECT NO. 2022063.10
ADDENDUM NO. 3
DATED: 6/21/2024

This Addendum consists of 2 Addendum page(s) and 5 attachment pages totaling 7 pages. This Addendum shall supplement, amend, and become part of the Bid Documents. All Bids shall be based on these modifications. Bidders shall acknowledge the receipt of this addendum on their Bid Form.

PART 1 - CHANGES TO THE PROJECT MANUAL

Modifications described herein shall be incorporated in the Project Manual. All other Work shall remain unchanged.

1.1 DIVISION 23 - HEATING, VENTILATING, AND AIR-CONDITIONING(HVAC)

A. **Section 23 73 13.13 "INDOOR BASIC AIR-HANDLING UNITS"**

1. DELETE AND REPLACE Paragraph K.2 in its entirety and replace with the following:

"2. Doors:

a. Fabrication: Formed and reinforced, double-wall and insulated panels of same materials and thicknesses as casing.
b. Hinges: A minimum of two ball-bearing hinges or stainless steel piano hinge and two wedge-lever latches, operable from inside and outside. Arrange doors as shown on details on drawings. Provide safety latch retainers on doors so that doors do not open uncontrollably.
c. Gasket: Neoprene, applied around entire perimeters of panel frames.
d. Size: Large enough to allow for unobstructed access for inspection and maintenance of air-handling unit's internal components. At least 12 inches wide by full height of unit casing up to a maximum of 60 inches"

PART 2 - CHANGES TO THE DRAWINGS

Modifications described herein shall be incorporated in the Drawings. All other Work shall remain unchanged.

2.1 DRAWING SHEETS: ADDITIONS, DELETIONS AND REPLACEMENTS

DRAWING NO.	INDICATE ACTION: REPLACE (R), ADD (A), DELETE (D)
M-SERIES DRAWINGS	
M001 – SYMBOLS AND ABBREVIATIONS	DELETE AND REPLACE
M507 – MECHANICAL DETAILS	DELETE AND REPLACE
M601 – MECHANICAL SCHEDULES	DELETE AND REPLACE
P-SERIES DRAWINGS	
PF1N - FOUNDATION PLUMBING PLAN -UNIT N	DELETE AND REPLACE
PF1R - FOUNDATION PLUMBING PLAN -UNIT R	DELETE AND REPLACE
PP1N - FIRST FLOOR PLUMBING PLAN -UNIT N	DELETE AND REPLACE
PP1R - FIRST FLOOR PLUMBING PLAN -UNIT R	DELETE AND REPLACE
PP1T - FIRST FLOOR PLUMBING PLAN -UNIT T	DELETE AND REPLACE

END OF ADDENDUM NO. 3

FCHS 2B
ADDENDUM #3

SPECIFICATIONS

1. 27 41 16 – Integrated Audio Visual Systems and Equipment
    a. Added part 2.51.g to read as follows:

g. VIP Lounge

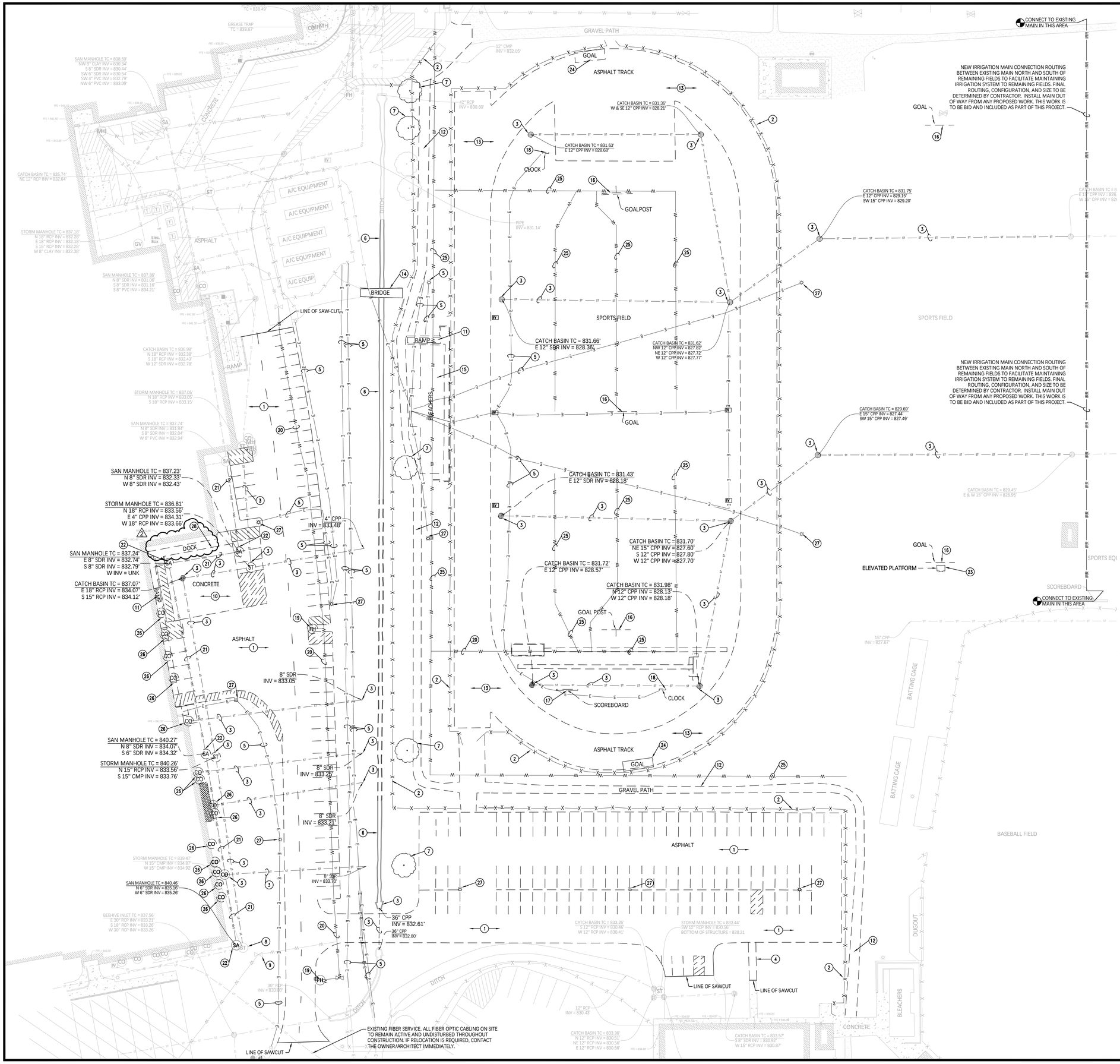
i. Shure QLX-D4 (Quantity: as shown on AV diagrams)
ii. Shure QLXD2/SM58 (Quantity: 1 per receiver)
iii. Shure QLXD1 (Quantity: 1 per receiver)
iv. Shure WL183 with tie clip and connector cable (Quantity: 1 per receiver)
v. Shure UA844+ Antenna Distribution (as required)
vi. Shure SB900B Rechargeable Battery (Quantity: 1 for spare usage)
vii. Shure SBC200 Dual Charging Case (Quantity: 1 per every 2 handheld mics)
viii. Shure UA8 (Quantity: as shown on AV diagrams)
ix. Or Equal

DRAWINGS

1. T201F – FIRST FLOOR TECHNOLOGY PLAN – UNIT F
    a. Added intercom speaker station rough-ins.
2. T201J&M – FIRST FLOOR TECHNOLOGY PLAN – UNITs J&M
    a. Added intercom speaker station rough-ins.
3. T305 – AV DIAGRAMS
    a. Updated theater intercom diagram.

ATTACHMENTS:

1. T201F – FIRST FLOOR TECHNOLOGY PLAN – UNIT F
2. T201J&M – FIRST FLOOR TECHNOLOGY PLAN – UNITs J&M
3. T305 – AV DIAGRAMS



GENERAL NOTES

A. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING, AND VERIFYING, THAT ALL PERMITS AND APPROVALS ARE OBTAINED FROM THE RESPECTIVE CITY, COUNTY, STATE AND FEDERAL AGENCIES PRIOR TO STARTING CONSTRUCTION.

B. CONTRACTOR SHALL VERIFY LOCATION AND INVERT ELEVATIONS OF EXISTING SEWERS PRIOR TO START OF CONSTRUCTION.

C. CONTRACTOR SHALL MAINTAIN A COMPLETE AND OPERABLE UTILITY SYSTEM AT ALL TIMES.

D. CONTRACTOR SHALL INCLUDE COSTS FOR CUTTING AND PATCHING AS REQUIRED IN THEIR BID PROPOSAL TO COMPLETELY INSTALL THE WORK INDICATED.

E. CONTRACTOR SHALL INCLUDE ALL TAP FEES, PERMIT FEES AND APPLICATION FEES IN THEIR BID PROPOSAL AS NECESSARY TO COMPLETELY INSTALL THE WORK INDICATED.

F. INFORMATION SHOWN WAS OBTAINED FROM AN OWNER FURNISHED SITE SURVEY OF EXISTING CONDITIONS AND IS UNCONFIRMED. CONTRACTOR IS REQUIRED TO FIELD VERIFY THIS INFORMATION AND NOTIFY ARCHITECT OF ANY DISCREPANCIES SO MODIFICATION CAN BE MADE.

G. CONTRACTOR SHALL COORDINATE EXACT UTILITY LOCATIONS WITH THE OWNER AND LOCAL UTILITY COMPANIES PRIOR TO COMMENCING ANY WORK. UTILIZE THE INDIANA UNDERGROUND UTILITY LOCATION SERVICE AT 811 OR 800-382-5544 PRIOR TO ANY EXCAVATION ON THE SITE.

○ PLAN NOTES

1. REMOVE EXISTING ASPHALT PAVEMENT COMPLETE. MAKE STRAIGHT SAW-CUT AT TERMINATION.
2. REMOVE CHAINLINK FENCE COMPLETE.
3. REMOVE EXISTING STORM STRUCTURE AND PIPE COMPLETE.
4. REMOVE EXISTING CONCRETE WALK COMPLETE.
5. REMOVE EXISTING ELECTRIC LINE COMPLETE. RE-FEED EXISTING CIRCUIT & LIGHTS AS NEEDED. REFER TO ELECTRICAL SITE PLAN FOR REROUTING INFORMATION.
6. REMOVE EXISTING DITCH COMPLETE.
7. REMOVE EXISTING PLANTINGS COMPLETE.
8. ADJUST CASTING TO PROPOSED GRADE.
9. ADJUST VALVES TO PROPOSED GRADE.
10. REMOVE EXISTING CONCRETE. 2
11. REMOVE EXISTING CONCRETE ACCESSIBLE RAMP COMPLETE.
12. REMOVE EXISTING GRAVEL PATH.
13. REMOVE EXISTING ASPHALT TRACK PATH.
14. REMOVE EXISTING WOODEN BRIDGE.
15. REMOVE EXISTING BLEACHERS AND PRESS BOX STRUCTURE.
16. REMOVE EXISTING FOOTBALL GOALPOST COMPLETE.
17. REMOVE EXISTING SCORE BOARD.
18. REMOVE EXISTING CLOCK.
19. REMOVE EXISTING FIRE HYDRANT.
20. REMOVE EXISTING WATER LINE COMPLETE. MAINTAIN OPERABLE UTILITY SYSTEM AT ALL TIMES.
21. REMOVE EXISTING SANITARY PIPE COMPLETE. MAINTAIN OPERABLE UTILITY SYSTEM AT ALL TIMES.
22. REMOVE EXISTING SANITARY STRUCTURES COMPLETE. MAINTAIN OPERABLE UTILITY SYSTEM AT ALL TIMES.
23. REMOVE EXISTING ELEVATED PLATFORM COMPLETE.
24. REMOVE EXISTING SOCCER GOAL COMPLETE. STORE PER OWNER DIRECTION.
25. REMOVE IRRIGATION SYSTEM, PIPING, SPRINKLER HEADS, CONTROL BOXES, AND VALVES COMPLETE WITHIN PROJECT AREA. REFEED AND CONNECT IRRIGATION SERVICE TO SPORTS FIELDS REMAINING TO EAST OF PROJECT. SEE NEW MAIN ROUTING ON THIS DRAWING TO FACILITATE THIS REFEEDING.
26. REMOVE UTILITY CLEANOUTS COMPLETE. MAINTAIN OPERABLE UTILITY SYSTEM AT ALL TIMES.
27. REMOVE EXISTING SITE LIGHT, POLE, BASE, AND WIRING COMPLETE. 2
28. REMOVE EXISTING CONCRETE RAISED LOADING DOCK PLATFORM COMPLETE. REFER TO ARCHITECTURAL DRAWINGS FOR ANY REQUIRED ADDITIONAL INFORMATION FOR DEMOLITION OF A STRUCTURE ADJACENT TO THE EXISTING BUILDING.

#	Revision	Date
1	ADDENDUM #1	06.14.2024
2	ADDENDUM #3	06.21.2024

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Indianapolis, IN 46240
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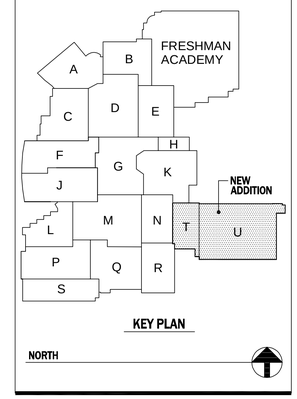

KEY PLAN

NORTH

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ADDITION & RENOVATIONS TO:

FRANKLIN CENTRAL HIGH SCHOOL PHASE 2B

FRANKLIN TOWNSHIP COMMUNITY SCHOOL CORPORATION INDIANAPOLIS, INDIANA

Drawing Title: SITE DEMOLITION PLAN

NICHOLAS BIJAN VIRGILIO REGISTERED No. PE11500269 STATE OF INDIANA PROFESSIONAL ENGINEER

Project No: 2022063.10

Project Date: MAY 29, 2024

Drawing No: C220

Nicholas Bijan Virgilio

GENERAL NOTES

A. REFER TO UTILITY DETAILS FOR NOTE REFERENCES.
B. ALL CASTINGS SHALL HAVE THE WORDS "NO DUMPING DRAINS TO STREAM" CAST IN RAISED OR RECESSED LETTERS AT A MINIMUM OF 1" HEIGHT. A SYMBOL OF A FISH SHALL ALSO BE CAST WITH THE LETTERS.
C. CASTINGS TO BE NEENAH TYPE OR APPROVED EQUAL.
D. CONTRACTOR TO VERIFY LOCATIONS AND ELEVATIONS OF EXISTING UTILITIES PRIOR TO THE START OF CONSTRUCTION.

○ PLAN NOTES

1. REFER TO PLUMBING DRAWINGS FOR LOCATION, INVERT, SIZE AND CONTINUATION INTO BUILDING.
2. 6" ROOF DRAIN (HDPE). SLOPE AT 1.00% MIN TOWARD STRUCTURE.
3. 12" ROOF DRAIN (HDPE). SLOPE AT 1.00% MIN TOWARD STRUCTURE.
4. DOWNSPOUT ADAPTER, DUCTILE IRON, PAINTED BLACK. REFER TO ARCHITECTURE FOR EXACT LOCATION OF DOWNSPOUT.
5. STORM PIPE TO BE INSTALLED UNDERNEATH RETAINING WALL FOUNDATION.

STRUCTURE SCHEDULE

MARK	INVERT		CASTING		STRUCTURE	
	INLET	OUTLET	ELEVATION	TYPE	TYPE	DETAIL
STR-1	N 831.00 W 829.95	829.68	832.95	R3405	INLET	C241
STR-2	W 828.72 N 828.52	828.32	832.30	R3405	INLET	C241
STR-3	827.92	827.92	833.75	R1772	MANHOLE	C241
STR-3A	827.72	827.72	831.90	R3405	MANHOLE	C241
STR-4	N 827.50 S 827.47 NE 829.58 NW 827.47	827.47	832.35	R3405	MANHOLE	C241
STR-5	827.85	827.85	832.55	R3405	MANHOLE	C241
STR-6	N 828.10 E 829.68 W 828.67	828.10	832.55	R3405	INLET	C241
STR-7	828.51	828.41	832.55	R3405	INLET	C241
STR-8	W 828.77 SE 829.58	828.77	834.35	R1772	MANHOLE	C241
STR-9	828.96	828.96	832.45	R3405	MANHOLE	C241
STR-10	829.26	829.26	832.45	R3405	INLET	C241
STR-11	-	829.56	832.45	R3405	INLET	C241
STR-12	N 828.96 SE 829.72	828.96	833.75	R1772	INLET	C241
STR-13	829.24	829.24	833.20	R3405	INLET	C241
STR-14	829.44	829.44	833.20	R3405	INLET	C241
STR-15	829.64	829.64	833.20	R3405	INLET	C241
STR-16	-	829.90	832.40	R3405	INLET	C241
STR-17	830.00	830.00	833.00	R3286-8V	INLET	C241
STR-18	-	829.90	834.45	R3286-8V	INLET	C241
STR-19	-	829.90	835.50	R3286-8V	INLET	C241
STR-20	-	830.30	835.50	R3286-8V	INLET	C241
STR-21	-	830.00	833.00	R3286-8V	INLET	C241
STR-22	832.61	832.61	837.60	R1772	MANHOLE	C241
STR-23	827.30	827.30	836.10	R1772	MANHOLE	C241
STR-24	SE 827.28 S 827.31	827.28	836.05	R1772	MANHOLE	C241
STR-25	-	827.28	833.00	R1772	OUTLET CONTROL STRUCTURE	C241
STR-26	W 828.67 E 829.99 N 829.27	828.67	832.40	R3286-8V	INLET	C241
STR-27	W 828.89 N 829.09	828.89	832.40	R3286-8V	INLET	C241
STR-28	W 829.14 N 829.14	829.14	832.40	R3286-8V	INLET	C241
STR-29	W 829.47 N 829.77	829.37	832.40	R3286-8V	INLET	C241
STR-30	829.85	829.85	832.75	R3286-8V	INLET	C241
STR-31	829.07	829.07	832.60	R2560-E	INLET	C241
STR-32	–	829.60	832.60	R2560-E	INLET	C241
STR-33	–	831.50	832.50	ROUND GRATE	NYLOPLAST	C242
STR-34	N 838.69 W 839.21 S 838.01	830.92	840.95	R1772	MANHOLE	C241
DIV-1	W 827.37 E 828.20	827.37	833.95	R1772	DIVERSION MANHOLE	C241
BMP-1	827.34	827.34	833.95	SEE DETAIL	AQUASHIELD XC-9 UNIT	C245

#	Revision	Date
1	ADDENDUM #1	06.14.2024
2	ADDENDUM #3	06.21.2024

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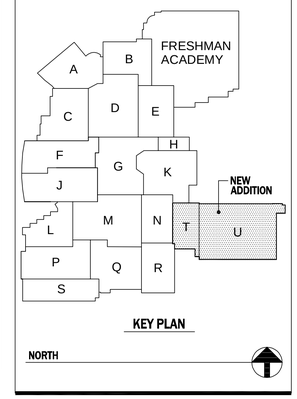

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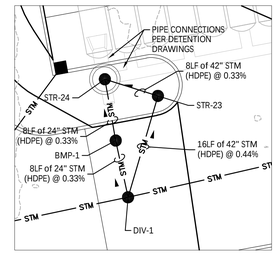
ADDITION & RENOVATIONS TO:

FRANKLIN CENTRAL HIGH SCHOOL PHASE 2B

FRANKLIN TOWNSHIP COMMUNITY SCHOOL CORPORATION
INDIANAPOLIS, INDIANA

Drawing Title:

SITE GRADING & DRAINAGE PLAN



1 ENLARGEMENT
SCALE: 1"=10'

0 30 60 FEET
SCALE:1" = 30'

NICHOLAS BRIAN VERGOS
REGISTERED
No. PE11500269
STATE OF INDIANA
PROFESSIONAL ENGINEER

Project No:	2022063.10
Project Date:	MAY 29, 2024
Drawing No:	C230

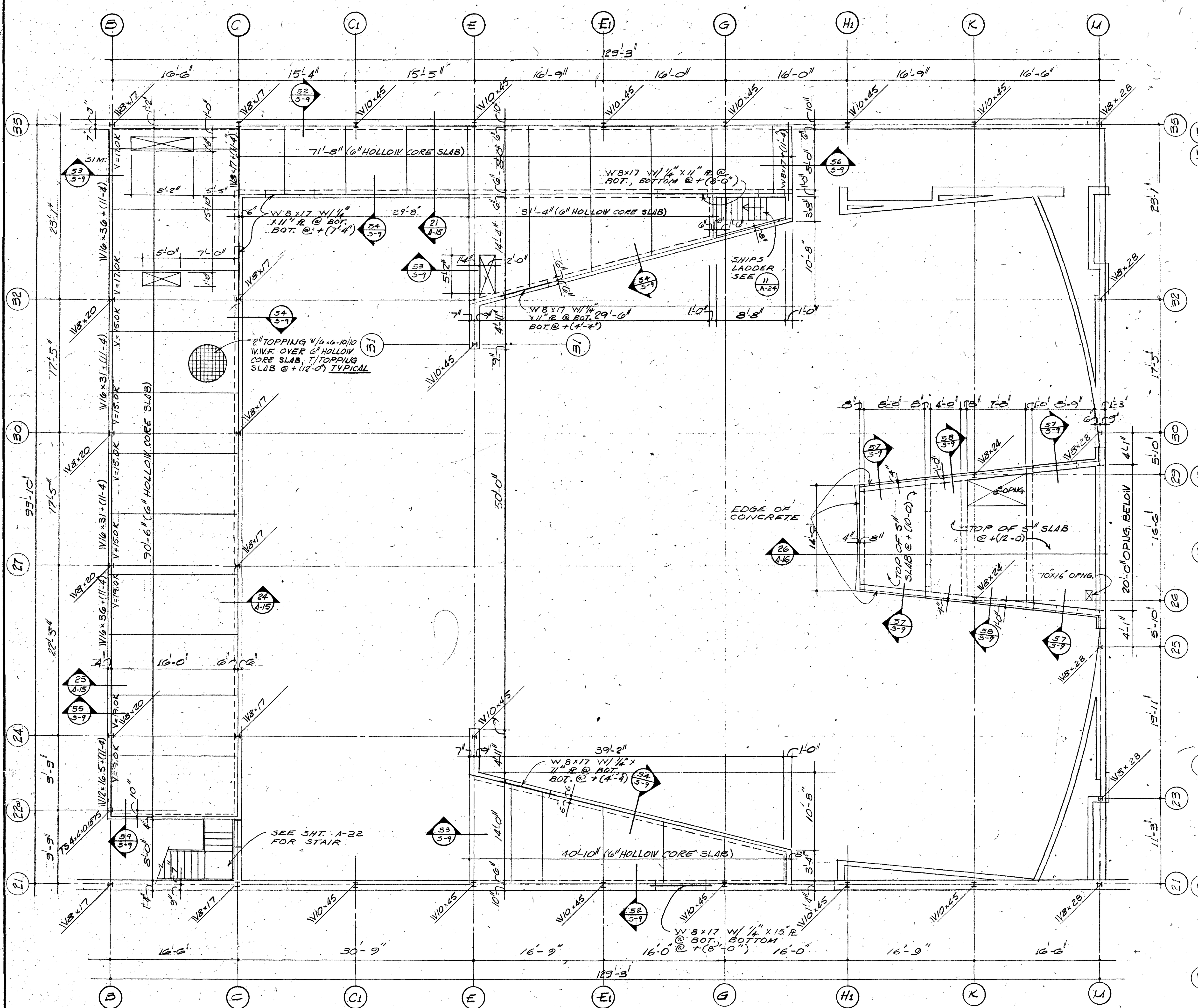
JPS Consulting Engineers - K:\Civil Projects\23JPSC48 Franklin Township Schools - Phase 2\Drawings\C230.dwg June 15, 2024 - 9:15 AM Nvergatos

NOTES:

- FOR GENERAL NOTES AND TYPICAL FOUNDATION DETAILS SEE SHT. NO. S-2. FOR FOOTING SCHEDULE SEE SHEET NO. S-1.
- TOP OF ALL INTERIOR COLUMN FOOTINGS @ -(0'-8") UNLESS NOTED OTHERWISE.
- ALL GRADE BEAMS SHOWN (SHADED) ON THIS PLAN SHALL BE 3'-0" DEEP, 14" WIDE. GRADE BEAM SHALL HAVE 4#7 CONT. (2T & 2B) AND 18" GRADE BEAM SHALL HAVE 4#8 CONT. (2T & 2B) TOP OF ALL GRADE BEAM SHALL BE @ -(0'-8") UNLESS NOTED OTHERWISE.
- ✱: AT COLUMNS BEARING THIS SYMBOL PROVIDE 16"×18" PIER W/8#7 VERTICAL W/#3 DOUBLE TIES @ 8" O.C. TOP OF PIER @ -(3'-4").
- DETAILS INSIDE AUDITORIUM SYMMETRICAL ABOUT ℄ OF AUDITORIUM UNLESS NOTED OTHERWISE.

SHEET NO. S-3:

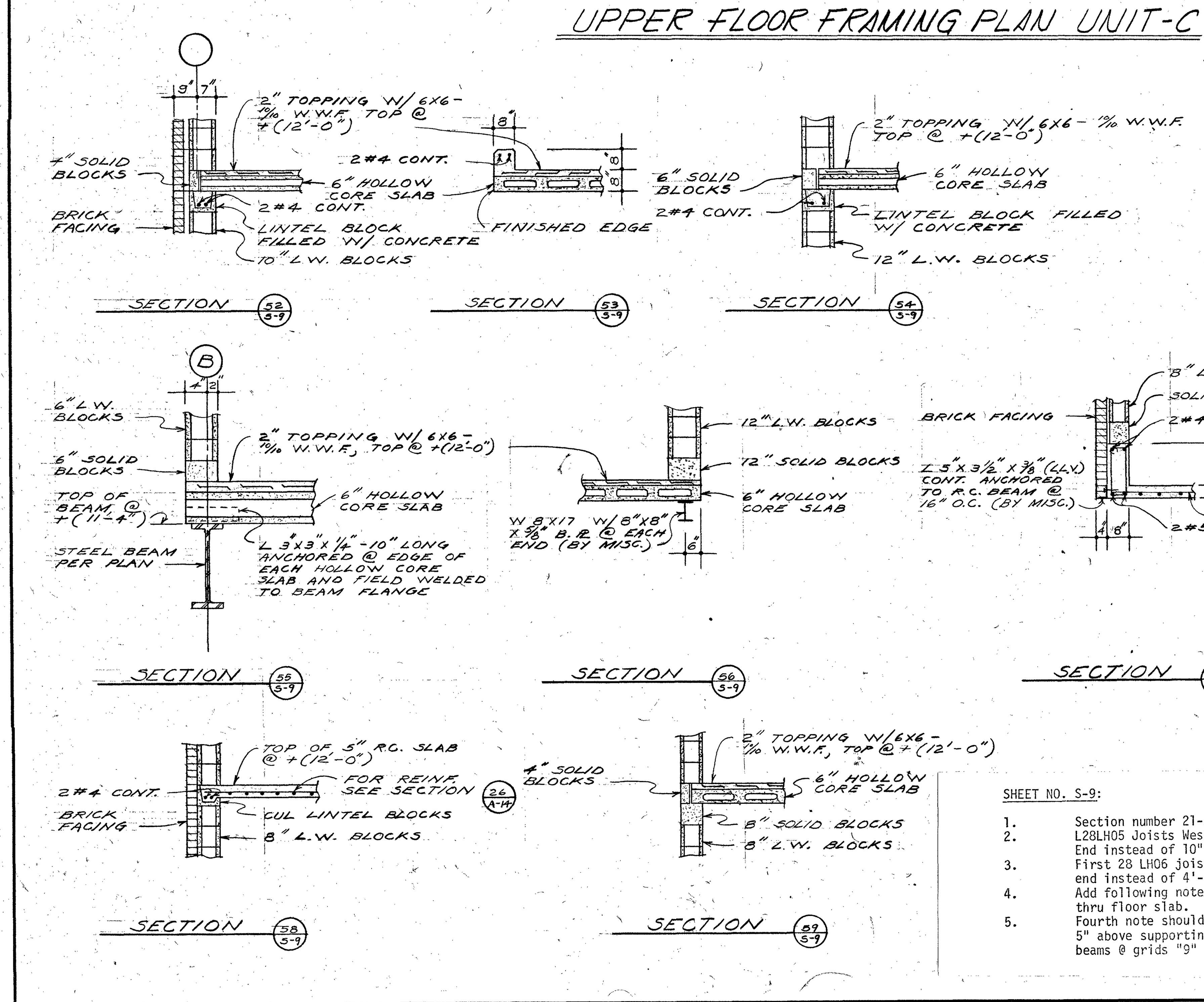
1. 8W17 columns @ 21-B and 35-B should be rotated 90° from the position shownon plan.
2. The block wall on south side of East entrance of choir room should be 8" wall.
3. 9 Risers @ seating in suditorium should be 7" each. These risers should have 4" (throat) slab with 6 x 6 - 10/10 W-W-F.
4. The section marked 26-A14 should be changed to read as 26-A16.
5. All columns on grid M @ 21,23,25,30,32 and 35 should be marked as W8 x 28 instead of W8 x 17.
6. Section 1-S2 should apply @ North entrance near canopy.
7. 8" dimension just West of grid H1 on South side should be changed to 7".
8. The clear distance between grade beams just West of grid 'P' should be 7'-2" instead of 7'-9" as shown. Distance from grid 'P' to, East side of, grade beam should be 7'-4" instead of 7'-11" as shown.
9. Longitudinal reinforcing in lower thickened slab at section 9-S3 should be marked #4@12" o.c.
10. Note at top of section. 10-S3 should read as follows: Provide temporary bracing to wall until the top slab is cured.
11. Outlines of footing and pier @ T-37 should be shown per sheet No. S-1
12. For North elevation of shear wall 'A' along grid 'M' see attached drawing No. SA1.



UPPER FLOOR FRAMING PLAN UNIT-C

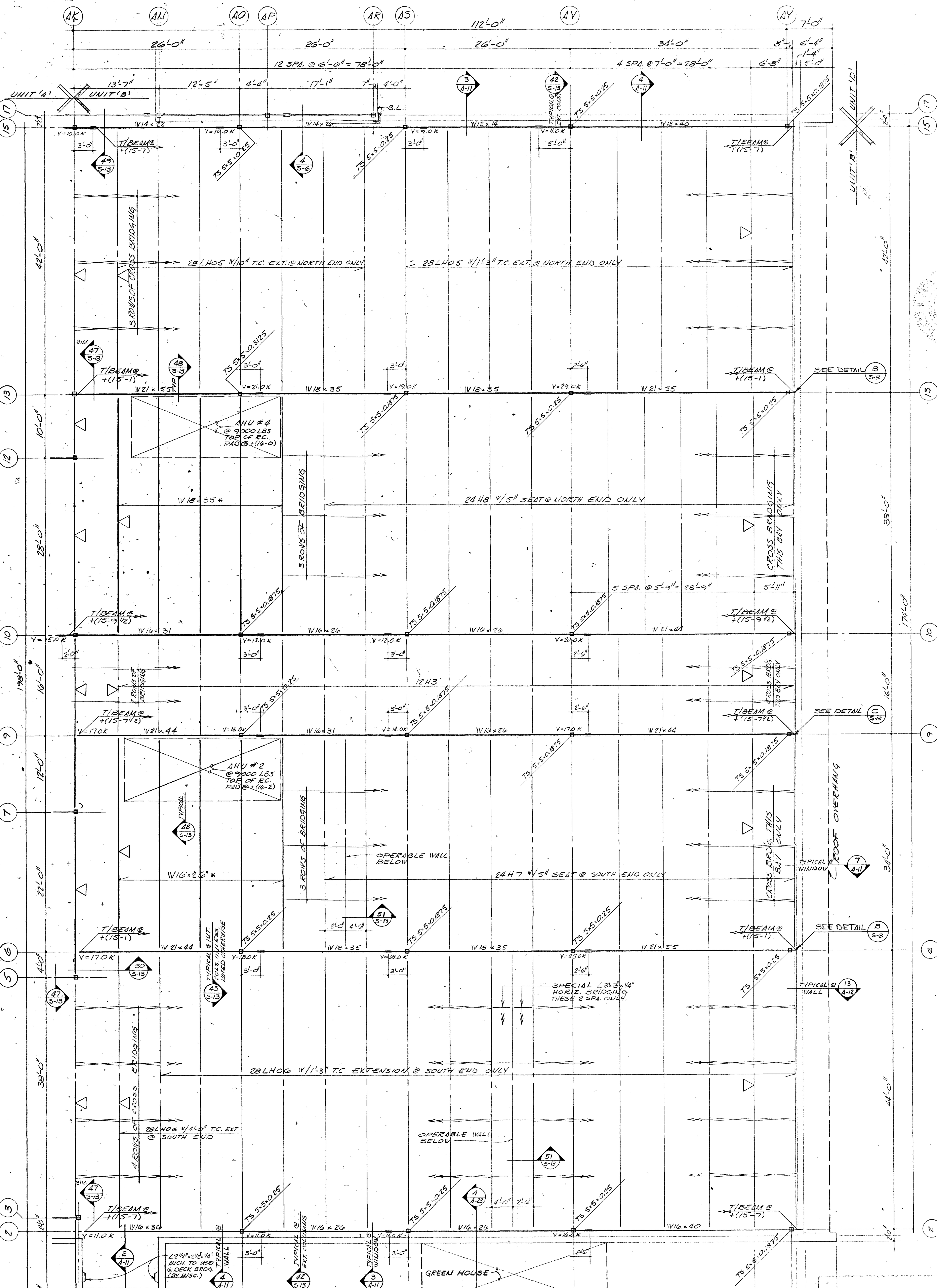
NOTES

- FOR GENERAL NOTES SEE SHEET NO. S-2.
- FOR TYPICAL ROOF OPENING FRAME DETAIL SEE SHEET NO. S-8.
- ALL 6" HOLLOW CORE SLAB SHALL BE DESIGNED TO CARRY 85 PSF SUPERIMPOSED LOAD EXCLUDING D.L. OF 2" TOPPING SLAB. PROVIDE HEADERS AS REQUIRED @ OPENINGS THRU FLOOR SLAB.
- SLOPE BEAMS - CONNECT 5" ABOVE SUPPORTING BEAMS @ GRIDS "6" & "13" AND 2 1/2" ABOVE SUPPORTING BEAMS @ GRIDS "9" & "10". PROVIDE HEADERS AS REQ'D. @ OPENINGS THRU FLOOR SLAB.
- FOR SIZE AND LOCATIONS OF ROOF OPENINGS SEE MECHANICAL AND ARCHITECTURAL DRAWING. ALSO SEE TYPICAL ROOF OPENING FRAME DETAIL ON SHEET NO. S-8.

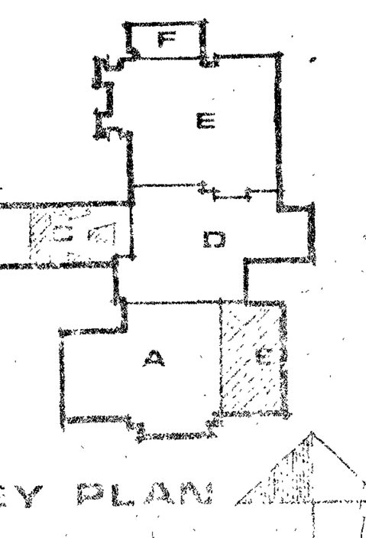


SHEET NO. S-9:

1. Section number 21-A15 at upper floor framing plan should be changed 21-A14.
2. L28LH05 Joists West of grid "as" should have 9" T.C. extension @ North End instead of 10" as noted on plan.
3. First 28 LH06 joist east of grid "AM should have 5'-0" T.C. Extension @ South end instead of 4'-0" as noted.
4. Add following note to third note: Provide steel headers as required @ opening thru floor slab.
5. Fourth note should revised to read as follows: *: slope beams - connect 5" above supporting beams @ grids "6" and "13" and 2'-1/2" above supporting beams @ grids "9" and "10".



ROOF FRAMING PLAN UNIT 'B'



KEY PLAN

James Associates—Architects • Engineers
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(317) 547-9441
Fort Wayne Vincennes

FRANKLIN TOWNSHIP COMMUNITY HIGH SCHOOL
MARION COUNTY, INDIANA

ROOF FRAMING PLAN UNIT-'B'
UPPER FLOOR FRAMING UNIT-'C'

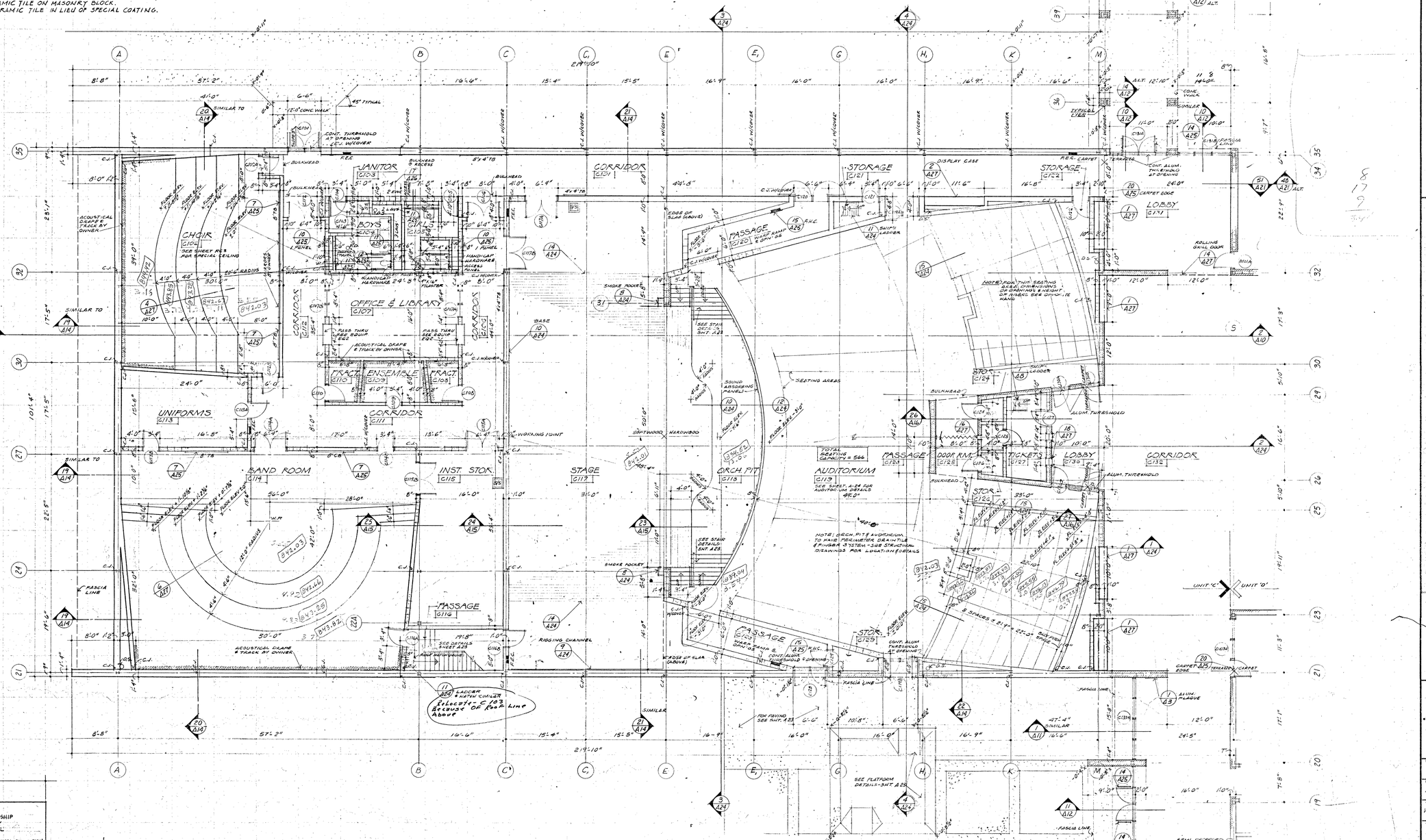
ALTERNATES TO BASE BID

GC 5 SWIMMING POOL: ALL WORK REQUIRED TO COMPLETE SWIMMING POOL WORK, INCLUDING BUT NOT LIMITED TO TANK, DECK, SEATING, BUILDING ENCLOSURE, AND CANOPY.

GC 6 DEMOUNTABLE PARTITIONS:
- a) SINGLE LAYER VINYL FACED GYPSUM BOARD ON METAL STUD.
- b) VINYL FACED SOLID GYPSUM PANELS
- c) METAL FACED GYPSUM BOARD ON METAL STUD.
- d) PLASTIC LAMINATED SOLID CORE PANELS.

GC 7 FLOORING:
- a) CONTINUOUS AREA - QUARRY TILE IN LIEU OF TERRAZO
- b) CAFETERIA - QUARRY TILE IN LIEU OF VINYL ASBESTOS TILE
- c) GYMNASIUM BALCONY - "TARKET" IN LIEU OF SEALED CONCRETE
- d) GYMNASIUM BALCONY - VINYL ASBESTOS TILE IN LIEU OF SEALED CONCRETE.
- e) GYMNASIUM FLOOR - CUSTOM WOOD SYSTEM.

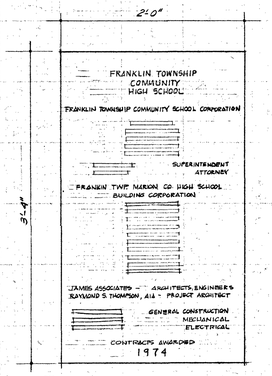
GC 8 WALLS:
- a) TOILET ROOMS - SPECIAL COATING IN LIEU OF CERAMIC TILE
- b) SHOWER ROOMS - SPECIAL COATING ON POURED CONCRETE IN LIEU OF CERAMIC TILE ON MASONRY BLOCK.
- c) KITCHEN - CERAMIC TILE IN LIEU OF SPECIAL COATING.



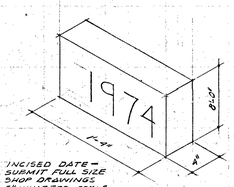
UNIT 'C' FLOOR PLAN

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

± 0 = ELEVATION 842.0'

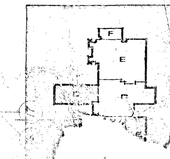


1 ALUM. PLAQUE DETAIL



"INCISED DATE = SUBMIT FULL SIZE SHOP DRAWINGS STYLE NUMBERS - STYLE TO BE SELECTED BY ARCHITECT.

2 LIMESTONE DATESTONE



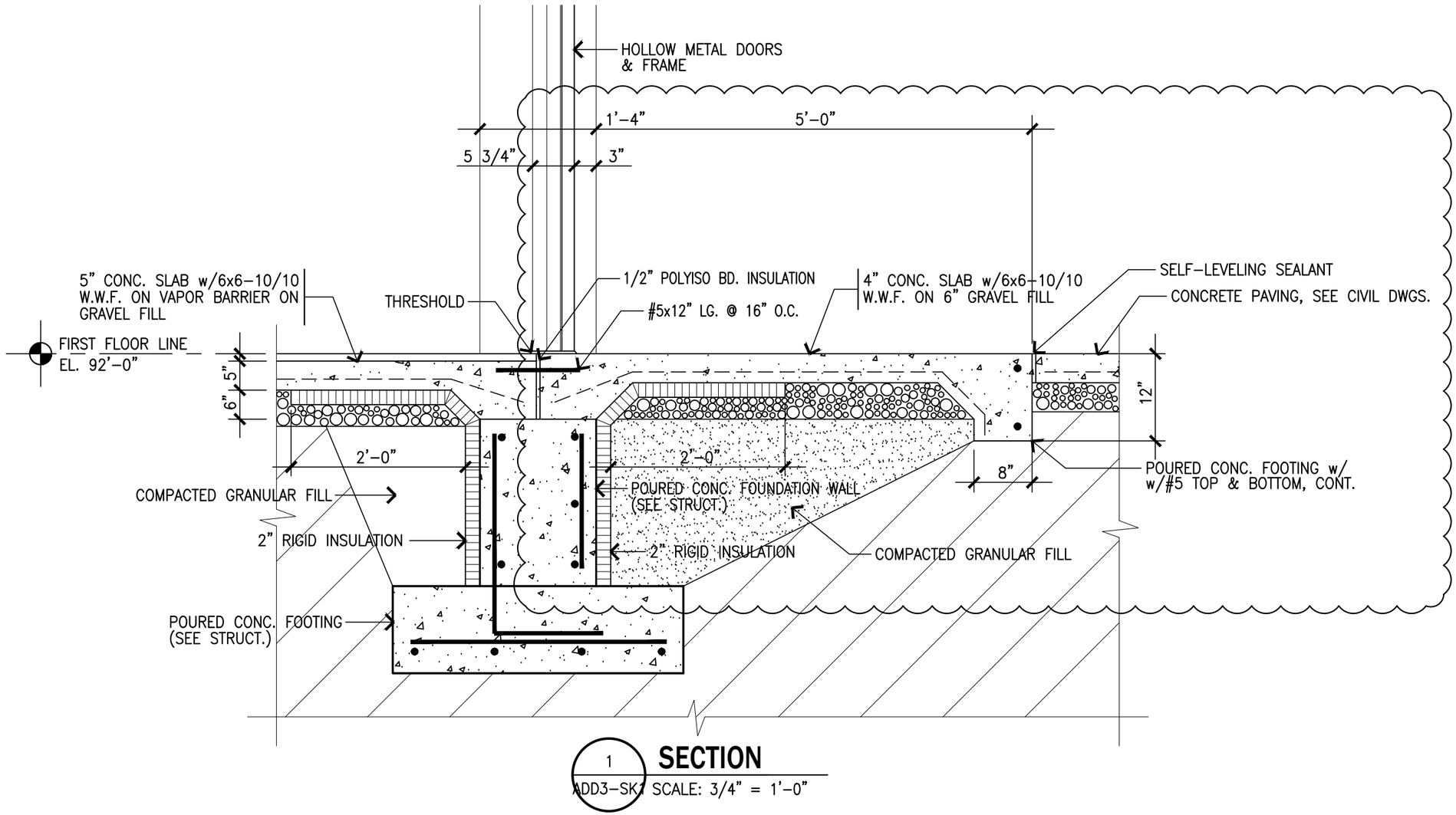
James Associates Architects, Engineers 2223 East 46th St., Indianapolis, Indiana 46205, Area Code 317 547-5441

FRANKLIN TOWNSHIP COMMUNITY HIGH SCHOOL
MARION COUNTY, INDIANA

RAYMOND S. THOMPSON REGISTERED No. 7103 STATE OF INDIANA ARCHITECT

DRAWN	DJH
DATE	MAY 10, 1974
CHECKED	WHITAKER
COMM. NO.	7350
REVISIONS	

A3



1 SECTION

ADD3–SK1 SCALE: 3/4" = 1'–0"

GENERAL NOTE:

1. CONCRETE STOOP DETAIL, AS REFERENCED ON SHEET C250, SITE IMPROVEMENT PLAN, PLAN NOTE 5.

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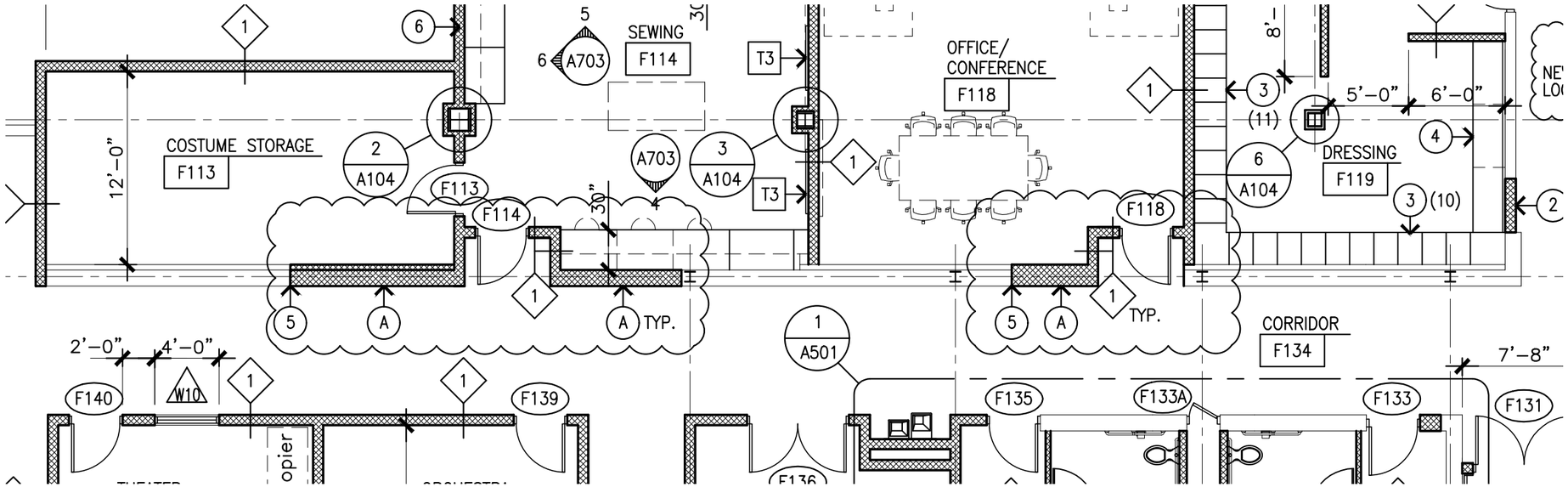
ADDITION & RENOVATIONS TO:

FRANKLIN CENTRAL HIGH SCHOOL
PHASE 2B

FRANKLIN TOWNSHIP COMMUNITY SCHOOL CORPORATION
INDIANAPOLIS, INDIANA

CONCRETE STOOP DETAIL

Project No.: 2022063.10
Date: 6/21/24
Drawing No.: **ADD3-SK1**



1 / A101 PARTIAL FIRST FLOOR PLAN - UNIT F

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

GENERAL NOTE:

1. WALL TYPE 1 ADDED TO RECESSED ENTRANCES TO ROOMS F114 & F118. ALL SIMILAR ENTRANCES SHALL ALSO RECEIVE WALL TYPE 1.
2. REFERENCE NOTE A ADDED TO C.M.U. INFILL AREAS. THIS APPLIES TO ALL SIMILAR CONDITIONS.

REFERENCE NOTES:

(A) INFILL OPENING WITH C.M.U. TO MATCH EXISTING ADJACENT WALLS. REMAINDER OF WALL SHALL BE SIMILAR TO WALL TYPE 1.

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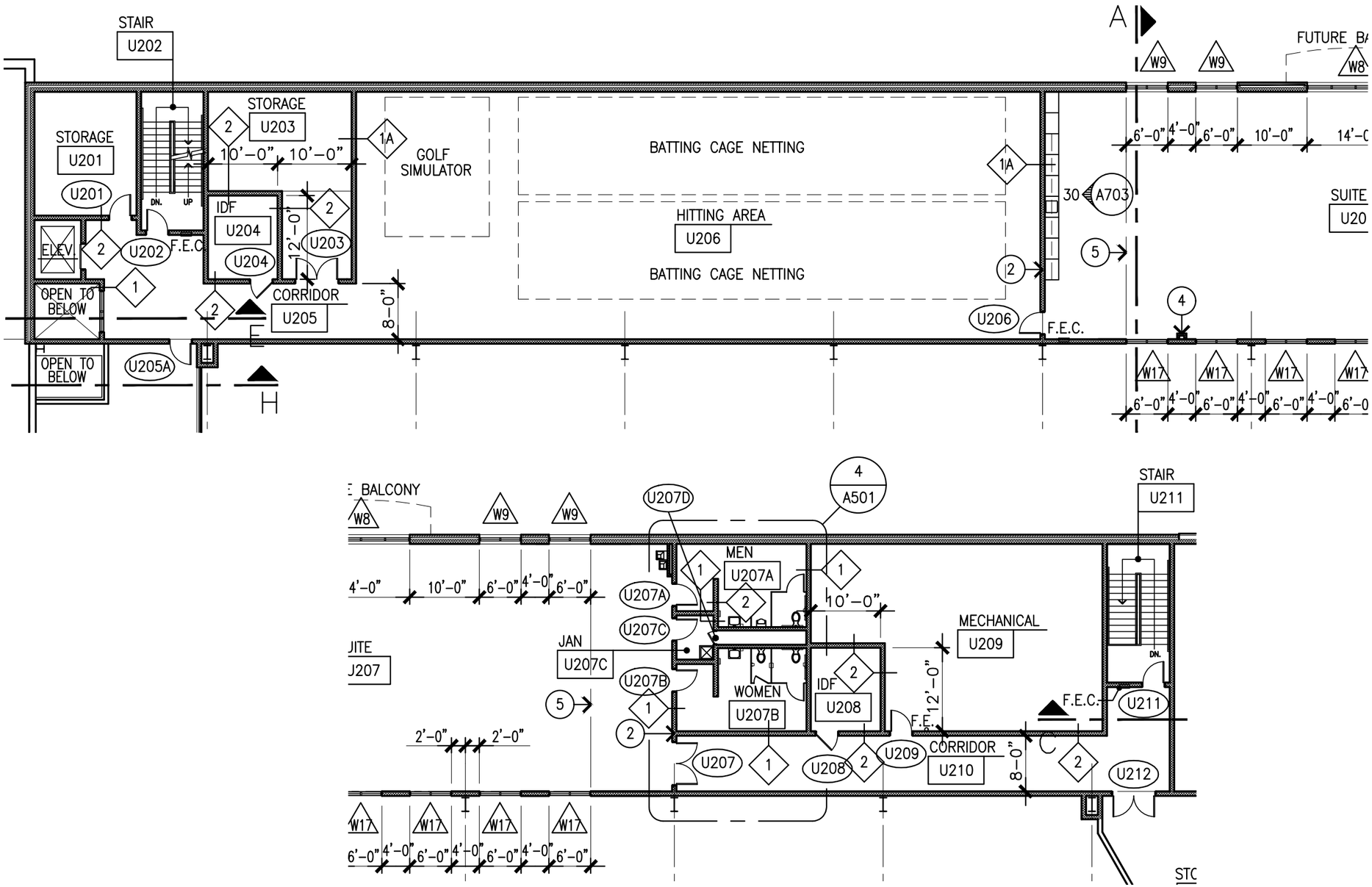
ADDITION & RENOVATIONS TO:

FRANKLIN CENTRAL HIGH SCHOOL
PHASE 2B

FRANKLIN TOWNSHIP COMMUNITY SCHOOL CORPORATION
INDIANAPOLIS, INDIANA

WALL TYPE & INFILL CLARIFICATIONS

Project No.:	2022063.10
Date:	6/21/24
Drawing No.:	ADD3-SK2



1 / A110 SECOND FLOOR PLAN - UNIT U

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

GENERAL NOTE:

1. SEE ADDED WALL TYPES AS NOTED.

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ADDITION & RENOVATIONS TO:

FRANKLIN CENTRAL HIGH SCHOOL
PHASE 2B

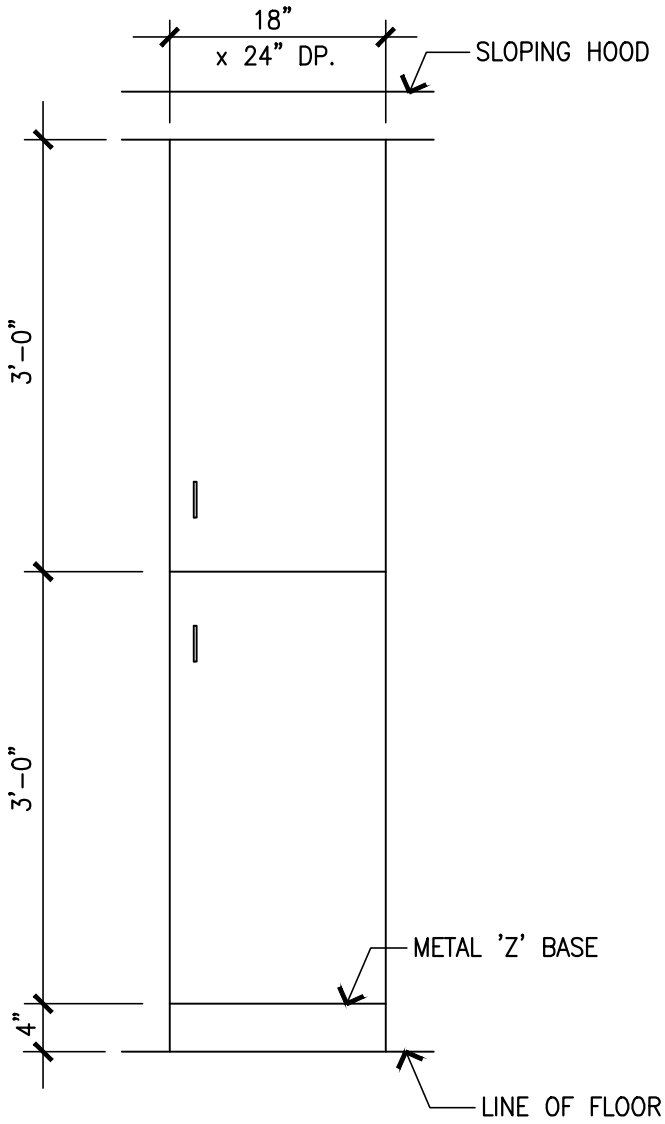
FRANKLIN TOWNSHIP COMMUNITY SCHOOL CORPORATION
INDIANAPOLIS, INDIANA

UNIT U - WALL TYPE INFORMATION

Project No.: 2022063.10
Date: 6/21/24
Drawing No.: **ADD3-SK3**

GENERAL NOTE:

1. LOCKER ELEVATION PROVIDED FOR TYPE 'A' DOUBLE–TIER METAL LOCKERS AS INDICATED ON SHEETS A101 & A102.



1 ADD3–SK4 **LOCKER ELEVATION** (TYPE 'A' DOUBLE–TIER)
SCALE: 3/4" = 1'–0"

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ADDITION & RENOVATIONS TO:

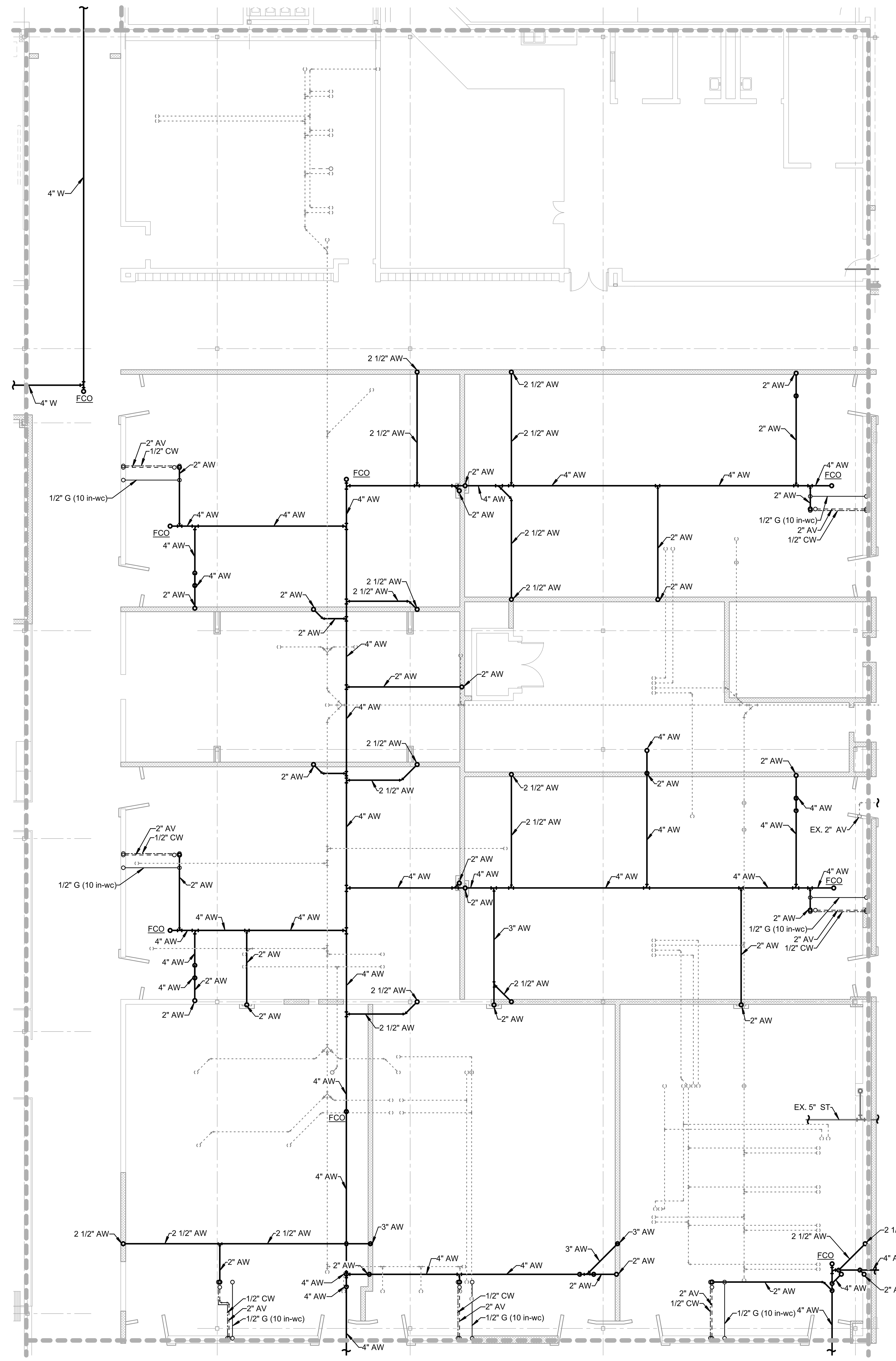
FRANKLIN CENTRAL HIGH SCHOOL
PHASE 2B

FRANKLIN TOWNSHIP COMMUNITY SCHOOL CORPORATION
INDIANAPOLIS, INDIANA

LOCKER ELEVATION - TYPE 'A'

Project No.: 2022063.10
Date: 6/21/24
Drawing No.: **ADD3-SK4**

#	Revision	Date
3	ADDENDUM #3	06.21.2024



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

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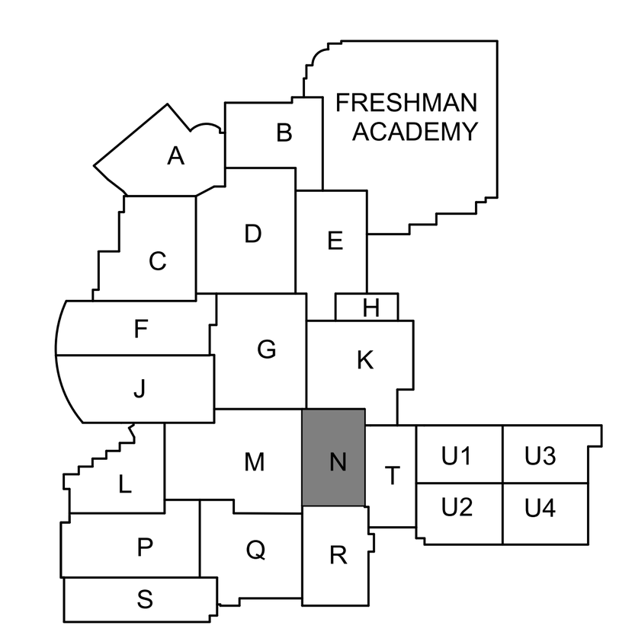

KEY PLAN

NORTH

VPS ARCHITECTURE
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ADDITION & RENOVATIONS TO:

FRANKLIN CENTRAL HIGH SCHOOL PHASE 2B

FRANKLIN TOWNSHIP COMMUNITY SCHOOL CORPORATION INDIANAPOLIS, INDIANA

Drawing Title:

FOUNDATION PLUMBING PLAN - UNIT N

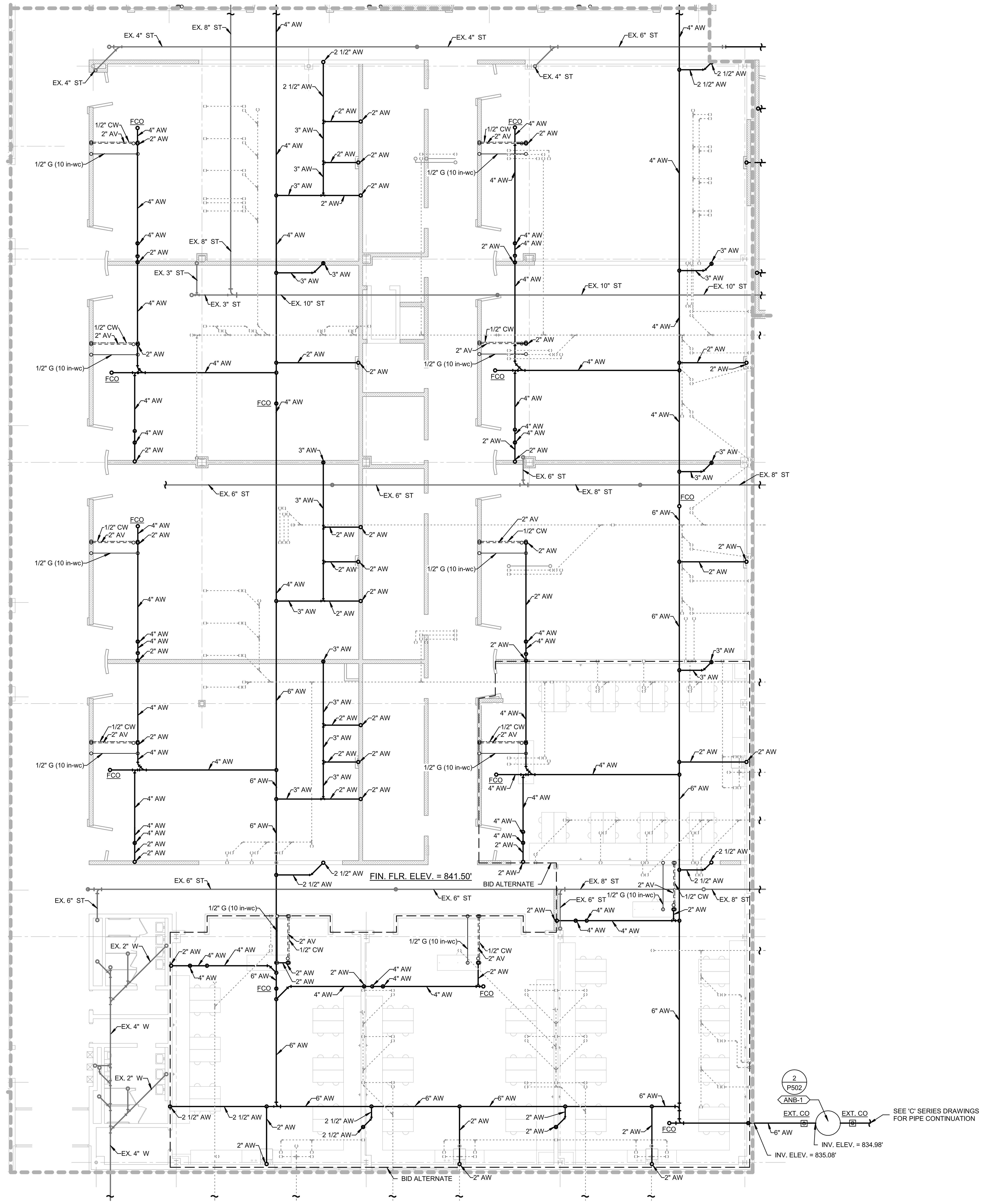
Project No: 2022063.10

Project Date: May 29, 2024

GABRIEL S. CURRIER REGISTERED No. PE10808972 STATE OF INDIANA PROFESSIONAL ENGINEER

Drawing No: PF1N

#	Revision	Date
1	ADDENDUM #1	06.14.2024
3	ADDENDUM #3	06.21.2024



1 FOUNDATION PLUMBING PLAN - UNIT R

1/8" = 1'-0"

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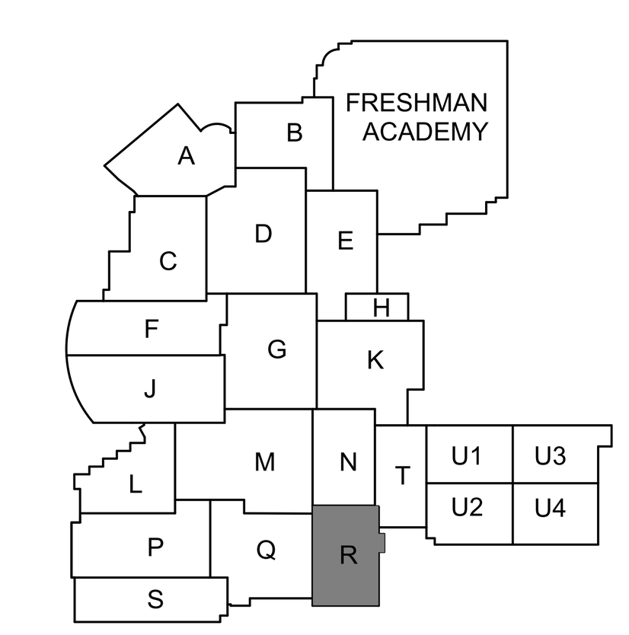

KEY PLAN

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ADDITION & RENOVATIONS TO:

FRANKLIN CENTRAL HIGH SCHOOL PHASE 2B

FRANKLIN TOWNSHIP COMMUNITY SCHOOL CORPORATION INDIANAPOLIS, INDIANA

Drawing Title:

FOUNDATION PLUMBING PLAN - UNIT R

GABRIEL S. CURRLER REGISTERED No. PE10808972 STATE OF INDIANA PROFESSIONAL ENGINEER

Project No: 2022063.10

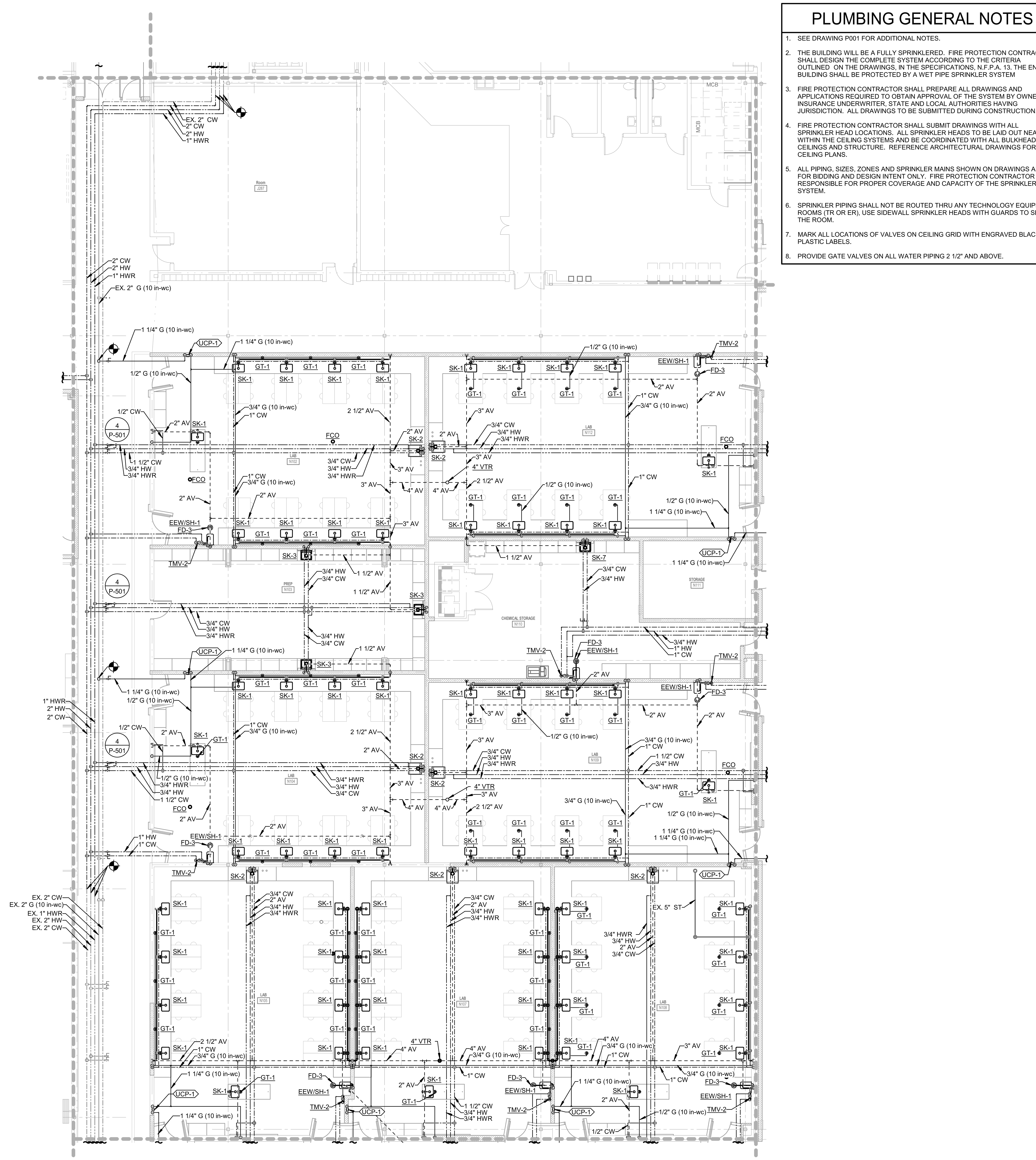
Project Date: May 29, 2024

Drawing No: PF1R

#	Revision	Date
3	ADDENDUM #3	06.21.2024

PLUMBING GENERAL NOTES

1. SEE DRAWING P001 FOR ADDITIONAL NOTES.
2. THE BUILDING WILL BE A FULLY SPRINKLERED. FIRE PROTECTION CONTRACTOR SHALL DESIGN THE COMPLETE SYSTEM ACCORDING TO THE CRITERIA OUTLINED ON THE DRAWINGS, IN THE SPECIFICATIONS, N.F.P.A. 13. THE ENTIRE BUILDING SHALL BE PROTECTED BY A WET PIPE SPRINKLER SYSTEM
3. FIRE PROTECTION CONTRACTOR SHALL PREPARE ALL DRAWINGS AND APPLICATIONS REQUIRED TO OBTAIN APPROVAL OF THE SYSTEM BY OWNERS INSURANCE UNDERWRITER, STATE AND LOCAL AUTHORITIES HAVING JURISDICTION. ALL DRAWINGS TO BE SUBMITTED DURING CONSTRUCTION.
4. FIRE PROTECTION CONTRACTOR SHALL SUBMIT DRAWINGS WITH ALL SPRINKLER HEAD LOCATIONS. ALL SPRINKLER HEADS TO BE LAID OUT NEATLY WITHIN THE CEILING SYSTEMS AND BE COORDINATED WITH ALL BULKHEADS, CEILINGS AND STRUCTURE. REFERENCE ARCHITECTURAL DRAWINGS FOR CEILING PLANS.
5. ALL PIPING, SIZES, ZONES AND SPRINKLER MAINS SHOWN ON DRAWINGS ARE FOR BIDDING AND DESIGN INTENT ONLY. FIRE PROTECTION CONTRACTOR IS RESPONSIBLE FOR PROPER COVERAGE AND CAPACITY OF THE SPRINKLER SYSTEM.
6. SPRINKLER PIPING SHALL NOT BE ROUTED THRU ANY TECHNOLOGY EQUIPMENT ROOMS (TR OR ER), USE SIDEWALL SPRINKLER HEADS WITH GUARDS TO SERVE THE ROOM.
7. MARK ALL LOCATIONS OF VALVES ON CEILING GRID WITH ENGRAVED BLACK PLASTIC LABELS.
8. PROVIDE GATE VALVES ON ALL WATER PIPING 2 1/2" AND ABOVE.



1 FIRST FLOOR PLUMBING PLAN - UNIT N
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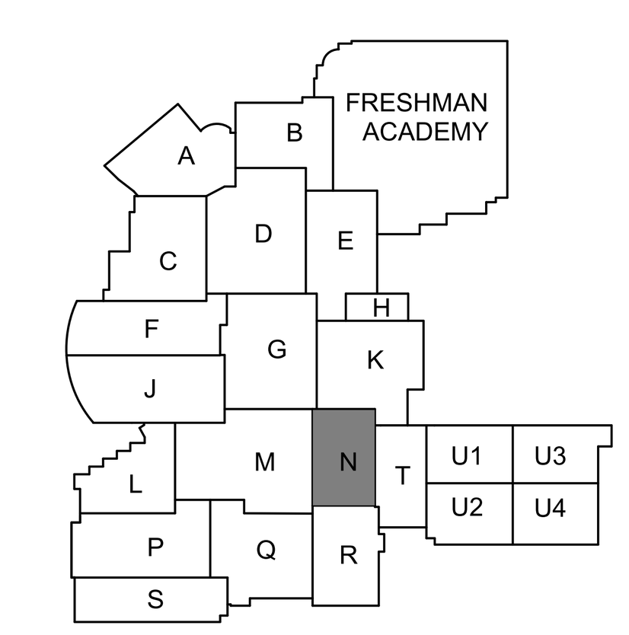

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ADDITION & RENOVATIONS TO:

FRANKLIN CENTRAL HIGH SCHOOL PHASE 2B

FRANKLIN TOWNSHIP COMMUNITY SCHOOL CORPORATION INDIANAPOLIS, INDIANA

Drawing Title:

FIRST FLOOR PLUMBING PLAN - UNIT N

Project No: 2022063.10

Project Date: May 29, 2024

GABRIEL S. CURRLER REGISTERED No. PE10808972 STATE OF INDIANA PROFESSIONAL ENGINEER

Drawing No: PP1N

#	Revision	Date
3	ADDENDUM #3	06.21.2024

PLUMBING GENERAL NOTES

1. SEE DRAWING P001 FOR ADDITIONAL NOTES.
2. THE BUILDING WILL BE A FULLY SPRINKLERED. FIRE PROTECTION CONTRACTOR SHALL DESIGN THE COMPLETE SYSTEM ACCORDING TO THE CRITERIA OUTLINED ON THE DRAWINGS, IN THE SPECIFICATIONS, N.F.P.A. 13. THE ENTIRE BUILDING SHALL BE PROTECTED BY A WET PIPE SPRINKLER SYSTEM
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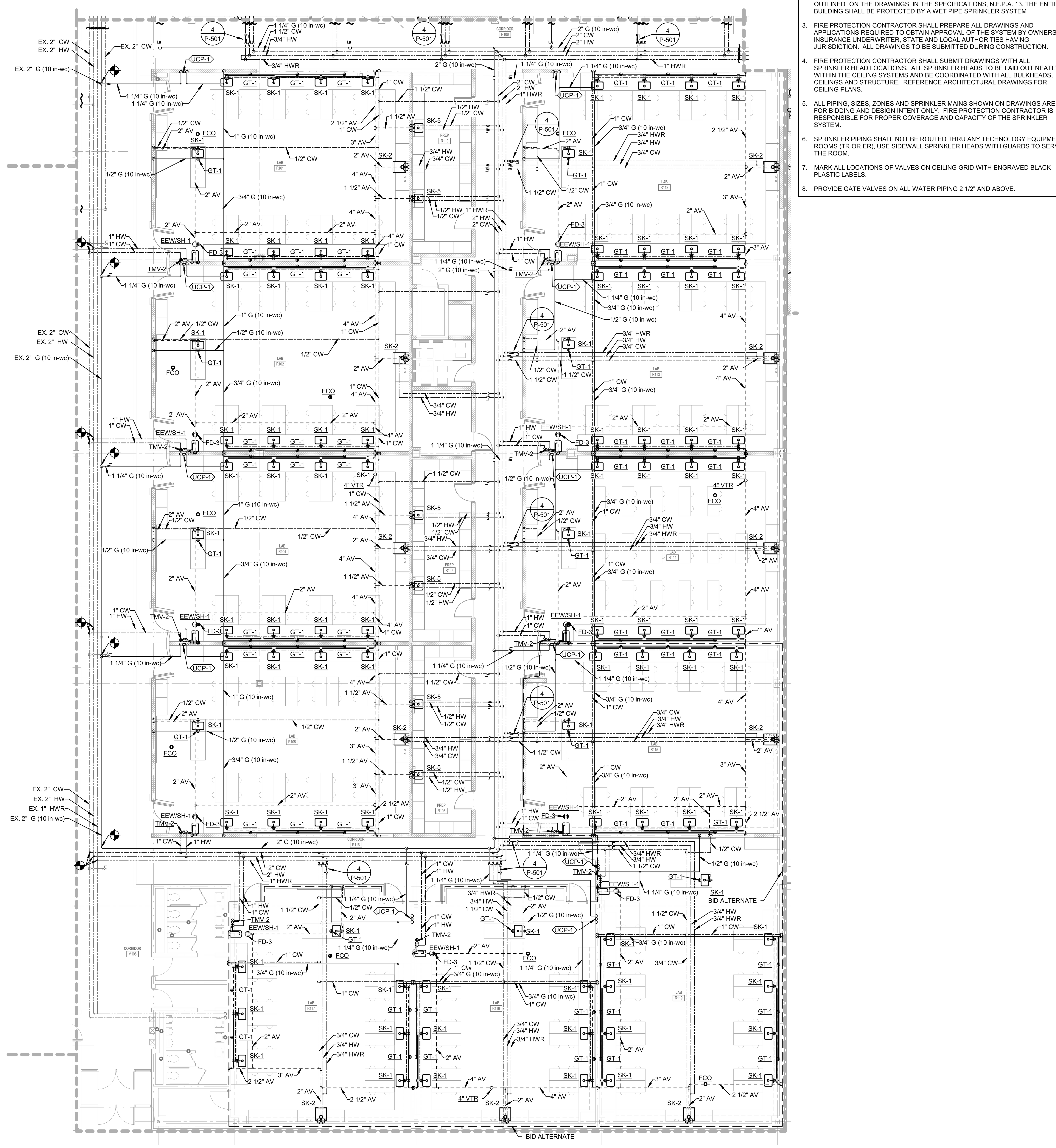

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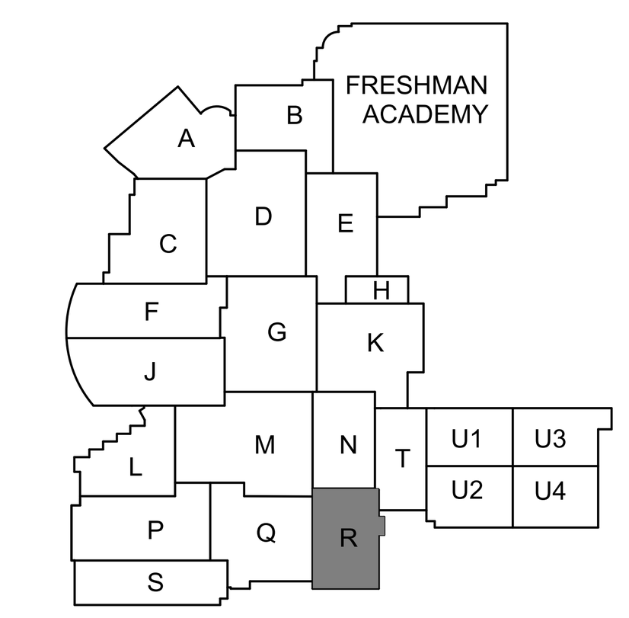

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ADDITION & RENOVATIONS TO:

FRANKLIN CENTRAL HIGH SCHOOL PHASE 2B

FRANKLIN TOWNSHIP COMMUNITY SCHOOL CORPORATION INDIANAPOLIS, INDIANA

Drawing Title:

FIRST FLOOR PLUMBING PLAN - UNIT R

Project No: 2022063.10

Project Date: May 29, 2024

GABRIEL S. CURRIER REGISTERED No. PE10808972 STATE OF INDIANA PROFESSIONAL ENGINEER

Drawing No: PP1R

#	Revision	Date
1	ADDENDUM #1	06.14.2024
3	ADDENDUM #3	06.21.2024

PLUMBING GENERAL NOTES

1. SEE DRAWING P001 FOR ADDITIONAL NOTES.
2. THE BUILDING WILL BE A FULLY SPRINKLERED. FIRE PROTECTION CONTRACTOR SHALL DESIGN THE COMPLETE SYSTEM ACCORDING TO THE CRITERIA OUTLINED ON THE DRAWINGS, IN THE SPECIFICATIONS, N.F.P.A. 13. THE ENTIRE BUILDING SHALL BE PROTECTED BY A WET PIPE SPRINKLER SYSTEM
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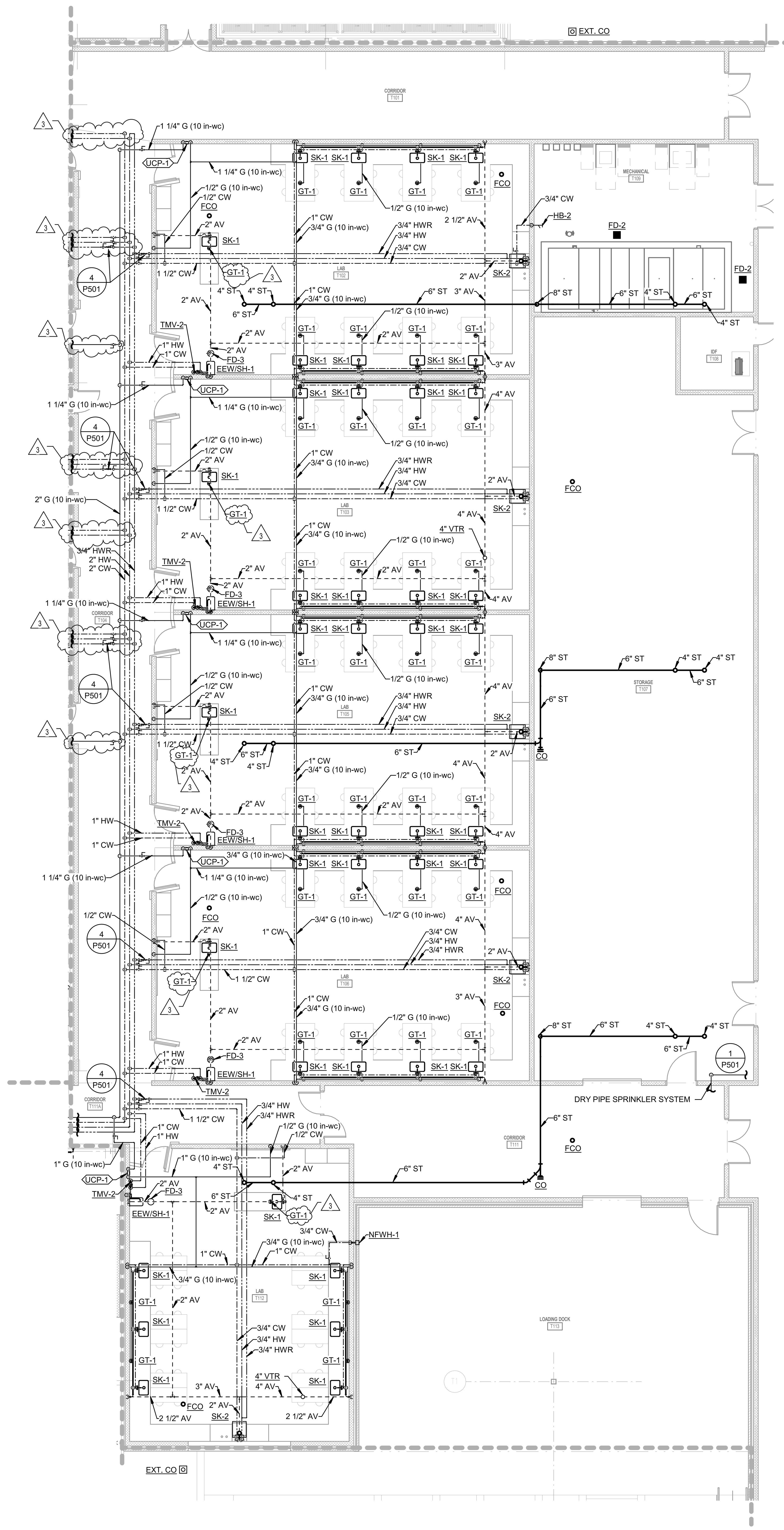

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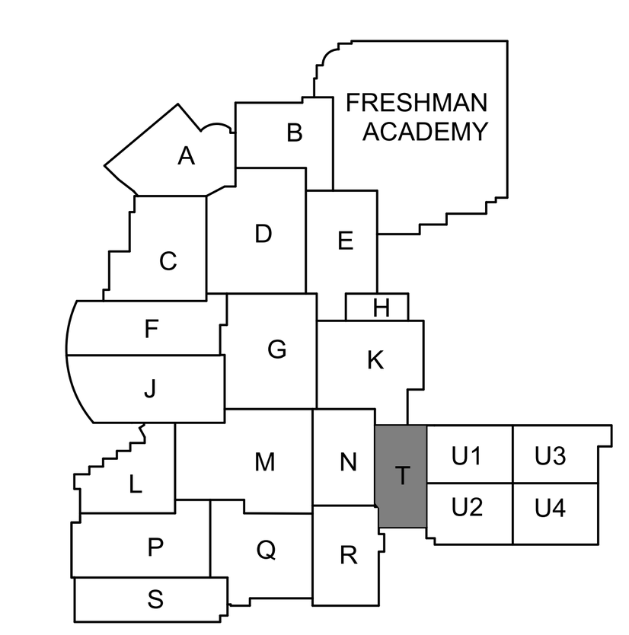

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ADDITION & RENOVATIONS TO:
FRANKLIN CENTRAL HIGH SCHOOL PHASE 2B
FRANKLIN TOWNSHIP COMMUNITY SCHOOL CORPORATION
INDIANAPOLIS, INDIANA

Drawing Title:
FIRST FLOOR PLUMBING PLAN - UNIT T

GABRIEL S. CURRIER REGISTERED NO. PE10808972 STATE OF INDIANA PROFESSIONAL ENGINEER

Project No: 2022063.10
Project Date: **May 29, 2024**
1
Drawing No: PP1T

DUCTWORK SYMBOLS

Symbol label	Description
	BELLMOUTH FITTING
	SHOETAP (OR 45° ENTRY) FITTING
	MANUAL VOLUME DAMPER
AD / BDD	BDD = BACKDRAFT DAMPER OBD = OPPOSED BLADE DAMPER PBD = PARALLEL BLADE DAMPER
AD / SD	SD = SMOKE DAMPER
AD / FSD	FSD = FIRE/SMOKE DAMPER
AD / FD-(A/B)	FD-(A/B) = FIRE DAMPER (TYPE A OR TYPE B)
M	MOTORIZED CONTROL DAMPER
AD	ACCESS DOOR
	INTERNALLY INSULATED DUCTWORK
	FLEXIBLE CONNECTION
AIR FLOW, 20°, 30°	DUCT-MOUNTED REHEAT COIL (HYDRONIC)
	NEW TO EXISTING
BDD	COUNTERBALANCED BACKDRAFT DAMPER
MBDD	MOTORIZED BACKDRAFT DAMPER
	DROP IN DUCTWORK (SUPPLY ONLY)
	DROP IN DUCTWORK (EXHAUST, RETURN, ETC.)
	RISE IN DUCTWORK (SUPPLY ONLY)
	RISE IN DUCTWORK (EXHAUST, RETURN, ETC.)
R→ D→	OFFSET IN DUCTWORK (R = RISE D = DROP)
12"x8"	RECTANGULAR DUCTWORK
12"Ø	ROUND SPIRAL DUCTWORK
12"x8"Θ	OVAL DUCTWORK
	INSULATED FLEXIBLE DUCTWORK
	STANDARD RADIUS ELBOW, CENTER RADIUS 1-1/2 TIMES WIDTH OF DUCT
	90° ELBOW WITH TURNING VANES
	DUCT TRANSITION
	SHOETAP WITH SQUARE TO ROUND TRANSITION
	CONICAL FITTING
	90° TEE FITTING
	45° LATERAL FITTING

PIPING SYSTEMS

Symbol	Description
CWR	CHILLED WATER RETURN
CWS	CHILLED WATER SUPPLY
CD	CONDENSATE DRAIN
CR	CONDENSER WATER RETURN
CS	CONDENSER WATER SUPPLY
DTR	DUAL TEMPERATURE RETURN
DTS	DUAL TEMPERATURE SUPPLY
HPR	HEAT PUMP RETURN
HPS	HEAT PUMP SUPPLY
HWR	HEATING HOT WATER RETURN
HWS	HEATING HOT WATER SUPPLY
HPSR	HIGH PRESSURE STEAM RETURN
HPSS	HIGH PRESSURE STEAM SUPPLY
LPSR	LOW PRESSURE STEAM RETURN
LPSS	LOW PRESSURE STEAM SUPPLY
MPSR	MEDIUM PRESSURE STEAM RETURN
MPSS	MEDIUM PRESSURE STEAM SUPPLY
RR	REFRIGERANT RETURN
RS	REFRIGERANT SUPPLY
RSGR	REFRIGERANT SUCTION GAS RETURN
CPD	STEAM CONDENSATE PUMP DISCHARGE
SV	STEAM VENT

DUCTWORK SYSTEMS

Symbol	Description
EA	EXHAUST AIR
EA/RL	EXHAUST/RELIEF AIR
KEA	KITCHEN EXHAUST AIR
OA	OUTSIDE AIR
RLA	RELIEF AIR
RA	RETURN AIR
SA	SUPPLY AIR
TA	TRANSFER AIR

NOTE SYMBOLS

Symbol	Description
1 (diamond)	DEMOLITION PLAN NOTE
1 (circle)	NEW WORK PLAN NOTE
3 ← DETAIL NUMBER / M501 ← SHEET NUMBER	DETAIL REFERENCE
2 / M301	SECTION REFERENCE
	NEW TO EXISTING
	DEMO TO THIS POINT
XXX-1	EQUIPMENT TAG
MARK → SD24-12 / 300 ← CFM	DIFFUSER, REGISTER, GRILLE TAG

EQUIPMENT SYMBOLS

Symbol	Description
	LINEAR DIFFUSER W/TYPE AND CFM (TWO-WAY SIDE TYPE)
	SUPPLY DIFFUSER W/TYPE AND CFM (FOUR-WAY TYPE)
	SUPPLY DIFFUSER W/TYPE AND CFM (THREE-WAY TYPE)
	SUPPLY DIFFUSER W/TYPE AND CFM (TWO-WAY SIDE TYPE)
	SUPPLY DIFFUSER W/TYPE AND CFM (ONE-WAY SIDE TYPE)
	RETURN GRILLE W/ TYPE AND CFM
	EXHAUST GRILLE W/ TYPE AND CFM
WALL	SIDEWALL GRILLE W/TYPE AND CFM
AT ROOF	ROOF-MOUNTED EXHAUST FAN
AT CEILING	CEILING-MOUNTED EXHAUST FAN
CO2	CARBON DIOXIDE SENSOR
H	HUMIDITY SENSOR
T	THERMOSTAT

NOTE:
NOT ALL INFORMATION ON THIS SHEET WILL BE USED IN THIS PROJECT

ABBREVIATIONS

Abbreviation	Meaning
ACU	AIR CONDITIONING UNIT
ACCU	AIR COOLED CONDENSING UNIT
AAF	AUTOMATIC AIR VENT
AD	ACCESS DOOR ("M" DWGS). AREA DRAIN ("P" DWGS)
ADJ	ADJUSTABLE
AFF	ABOVE FINISHED FLOOR
AFM	AIR FLOW MONITORING
AHU	AIR HANDLING UNIT
ALTER	ALTERNATE
AMP	AMPERE (AMP, AMPS)
AS	AIR SEPARATOR
APD	AIR PRESSURE DROP (IN WG)
AV	AUTOMATIC VENT
BBD	BOILER BLOW DOWN
BDD	BACKDRAFT DAMPER
BFC	BELOW FINISHED CEILING
BFW	BOILER FEED WATER
BFWP	BOILER FEED WATER PUMP
BHP	BRAKE HORSEPOWER
BLDG	BUILDING
BOD	BOTTOM OF DUCT
BOP	BOTTOM OF PIPING
BSB	BRANCH SELECTOR BOX
BTUH	BRITISH THERMAL UNIT PER HOUR
CA	COMBUSTION AIR
CD	CONDENSATE DRAIN
CAB	CABINET
CAV	CONSTANT AIR VOLUME
CF	CUBIC FEET
CFM	CUBIC FEET PER MINUTE
CFOI	CONTRACTOR FURNISHED/OWNER INSTALLED
CH	CHILLER
CHP	CHILLED WATER PUMP
CHCF	CHILLED WATER CHEMICAL FEED
CWR	CHILLED WATER RETURN
CWS	CHILLED WATER SUPPLY
CI	CAST IRON
CO	CLEANOUT
CONV	CONVECTOR
COP	COEFFICIENT OF PERFORMANCE
CP	CONDENSATE PUMP
CT	COOLING TOWER
CUH	CABINET UNIT HEATER
CUV	CLASSROOM UNIT VENTILATOR
CV	CONTROL VALVE
CWCF	CONDENSER WATER CHEMICAL FEED
CWP	CONDENSER WATER PUMP
CR	CONDENSER WATER RETURN
CS	CONDENSER WATER SUPPLY
DV	DRAIN VALVE
DN	DOWN
DPT	DIFFERENTIAL PRESSURE TANSMITTER
EA	EXHAUST AIR
EAT	ENTERING AIR TEMPERATURE (°F)
EC	ELECTRICAL CONTRACTOR
EER	ENERGY EFFICIENCY RATIO
EF	EXHAUST FAN
EFF	EFFICIENCY
EG	EXHAUST GRILLE
ELEC	ELECTRIC
ELEV	ELEVATION
ENCL	ENCLOSURE
EOM	END OF MAIN DRIP
EQUIP	EQUIPMENT
ESP	EXTERNAL STATIC PRESSURE (IN WG)
ET	EXPANSION TANK
EUH	ELECTRIC UNIT HEATER
EVAP	EVAPORAT(E), (ING), (ED), (OR)
EWT	ENTERING WATER TEMPERATURE (°F)
EXP	EXPANSION
EX.	EXISTING
°F	DEGREES FAHRENHEIT
F&B	FACE AND BY-PASS
F&T	FLOAT & THERMOSTATIC STEAM TRAP
FCP	FLUID COOLER PUMP
FCU	FAN COIL UNIT
FD	FIRE DAMPER
FF	FILTER FEEDER
FPM	FEET PER MINUTE
FT	FOOT/FEET
FTR	FINNED TUBE RADIATION
GA	GAUGE
GAL	GALLON
GALV	GALVANIZED
GFS	GLYCOL FILL STATION
GIV	GRAVITY INTAKE VENTILATOR
GPH	GALLONS PER HOUR
GPM	GALLONS PER MINUTE
GR	GLYCOL RETURN
GS	GLYCOL SUPPLY
GRV	GRAVITY RELIEF VENTILATOR
H	HUMIDITY/HUMIDIFIER
HE	HEAT EXCHANGER
HORIZ	HORIZONTAL
HP	HORSEPOWER/HEAT PUMP
HPWR	HEAT PUMP WATER RETURN
HPWS	HEAT PUMP WATER SUPPLY
HPWP	HEAT PUMP WATER PUMP
HPS	HIGH PRESSURE STEAM
HPC	HIGH PRESSURE CONDENSATE
HRP	HEAT RECOVERY PUMP
HSPF	HEATING SEASONAL PERFORMANCE FACTOR
HWCF	HEATING HOT WATER CHEMICAL FEED
HWP	HEATING HOT WATER PUMP
HWR	HEATING HOT WATER RETURN
HWS	HEATING HOT WATER SUPPLY
HZ	FREQUENCY (MEGAHERTZ)
ID	INSIDE DIAMETER
IFBP	INTEGRAL FACE AND BYPASS
IN	INCH/INCHES
INT	INTERIOR
KW	KILOWATT
LAB	LABORATORY
LAD	LAMINAR AIR DIFFUSER
LAF	LAMINAR AIR FLOW
LAT	LEAVING AIR TEMPERATURE (°F)
LBS	POUND
LD	LINEAR DIFFUSER
LEC	LABORATORY EQUIPMENT CONTRACTOR
LFC	LABORATORY FURNISHINGS CONTRACTOR
LFD	LAMINAR FLOW DIFFUSER
LPS	LOW PRESSURE STEAM
LPC	LOW PRESSURE CONDENSATE
LWT	LEAVING WATER TEMPERATURE (°F)
MAT	MIXED AIR TEMPERATURE (°F)
MBH	THOUSANDS OF BTU PER HOUR
MC	MECHANICAL CONTRACTOR
MCC	MOTOR CONTROL CENTER
MD	MOTORIZED DAMPER
MISC	MISCELLANEOUS
MPS	MEDIUM PRESSURE STEAM
MPC	MEDIUM PRESSURE CONDENSATE
MTD	MOUNTED
MV	MANUAL VENT
NA	NOT APPLICABLE
NC	NORMALLY CLOSED
NO	NORMALLY OPEN
OA	OUTSIDE AIR
OAT	OUTSIDE AIR TEMPERATURE (°F)
OBD	OPPOSED BLADE DAMPER
OFCI	OWNER FURNISHED/CONTRACTOR INSTALLED
OFOI	OWNER FURNISHED/OWNER INSTALLED
P	PUMP
PBD	PARALLEL BLADE DAMPER
PCHR	PANEL CHILLED WATER RETURN
PCHS	PANEL CHILLED WATER SUPPLY
PD	PRESSURE DROP (IN OR WG AS NOTED)
PE	PNEUMATIC-ELECTRIC
PH	PHASE
PHC	PREHEAT COIL
PHWR	PERIMETER HEATING HOT WATER RETURN
PHWS	PERIMETER HEATING HOT WATER SUPPLY
PI	PRESSURE INDICATOR
PNEU	PNEUMATIC
PPM	PARTS PER MILLION
PREFAB	PREFABRICATED
PSI	POUNDS PER SQUARE INCH
PSIG	POUNDS PER SQUARE INCH GAUGE
PT	PNEUMATIC TUBE
PTS	PNEUMATIC TUBE STATION
R	THERMAL RESISTANCE
R(#)	REFRIGERANT (NUMBER)
RA	RETURN AIR
RAT	RETURN AIR TEMPERATURE (°F)
RECIR	RECIRCULAT(E), (OR), (ING)
RES	RELATIVE HUMIDITY
RF	RETURN FAN
RG	RETURN GRILLE
RH	RELATIVE HUMIDITY
RHC	REHEAT COIL
RHG	REFRIGERANT HOT GAS
RL	REFRIGERANT LIQUID
RP	RADIANT PANEL (CEILING-MOUNTED)
RPM	REVOLUTIONS PER MINUTE
RS	REFRIGERANT SUCTION
RV	REFRIGERANT VENT
SA	SUPPLY AIR
SF	SUPPLY FAN
SAT	SUPPLY AIR TEMPERATURE (°F)
SCC	STEAM CONDENSATE COOLER
SD	SUPPLY DIFFUSER
SEER	SEASONAL ENERGY EFFICIENCY RATIO
SF	SQUARE FOOT
SG	SUPPLY GRILLE
SHR	SENSIBLE HEAT RATIO
SHT	SHEET
SPEC	SPECIFICATIONS
SRV	SAFETY RELIEF VALVE
SS	STAINLESS STEEL
ST	STORAGE TANK
STD	STANDARD
STP	STORAGE TANK PUMP
STR	STORAGE TANK RETURN
STS	STORAGE TANK SUPPLY
STRUCT	STRUCTURE(E), (AL)
SUCT	SUCTION
SV	STEAM VENT
TB	TERMINAL BOX
TC	TEMPERATURE CONTROL
TCC	TEMPERATURE CONTROL CONTRACTOR
TD	TEMPERATURE DIFFERENCE
TEMP	TEMPERATURE
TONS	TONS OF REFRIGERATION
TSP	TOTAL STATIC PRESSURE (IN WG)
TSTAT	THERMOSTAT
TYP.	TYPICAL
U	HEAT TRANSFER COEFFICIENT
UH	UNIT HEATER
UV	UNIT VENTILATOR
VA	VOLT AMPERE
VAR	VARIABLE
VAV	VARIABLE AIR VOLUME
VB	VACUUM BREAKER
VC	VACUUM CLEANING
VD	VOLUME DAMPER
VERT	VERTICAL
VFD	VARIABLE FREQUENCY DRIVE
VIF	VERIFY IN FIELD
VRV	VARIABLE REFRIGERANT VOLUME
WG	WATER GAUGE
WPD	WATER PRESSURE DROP

GENERAL VALVES & FITTINGS

Symbol label	Description
	RISE IN PIPING
	DROP IN PIPING
	CAPPED PIPE
	PIPE CONTINUED ON ANOTHER DRAWING
	CHECK VALVE
	PLUG VALVE
	PRESSURE REGULATING VALVE
	VALVE - SEE SPECIFICATIONS FOR VALVE TYPE
	BUTTERFLY VALVE
	RELIEF VALVE
	TRIPLE DUTY VALVE
	GATE VALVE
	BALL VALVE
DPT	DIFFERENTIAL PRESSURE TANSMITTER
	VALVE IN RISER
	ANGLE VALVE
	MANUAL BALANCING VALVE
	AUTOMATIC BALANCING VALVE
	TWO-WAY CONTROL VALVE
	THREE-WAY CONTROL VALVE
	UNION
	THERMOMETER WELL
	THERMOMETER & WELL
	GAUGE CONNECTION(S) & WELL
	MANUAL AIR VENT
	AUTOMATIC AIR VENT
	PETE'S PLUG
	Y-STRAINER W/BLOWDOWN VALVE & CAP
	PIPE GUIDES
	PIPE ANCHORS
	FLEXIBLE PIPING CONNECTOR
	PIPE EXPANSION JOINT
F&T	STEAM TRAP W/DESIGNATION
	EXPANSION LOOP (SIZE INDICATED ON DRAWINGS)
	GAS COCK
	CONCENTRIC REDUCER
	ECCENTRIC REDUCER
	PRESSURE REDUCING VALVE

GENERAL NOTES

1. THESE GENERAL NOTES APPLY TO M-SERIES DRAWINGS. ADDITIONAL GENERAL NOTES SPECIFIC TO A PARTICULAR DRAWING ARE NOTED ON THOSE SHEETS.
2. IT IS THE INTENT OF THESE DOCUMENTS TO PROVIDE MECHANICAL SYSTEMS THAT ARE FULLY FUNCTIONAL. PROVIDE ALL ITEMS SPECIFIED AND REQUIRED FOR COMPLETE OPERATIONAL SYSTEMS.
3. THE WORK INDICATED ON THE DRAWINGS ARE BASED ON EXISTING DRAWINGS AND FIELD VERIFICATION. THESE DRAWINGS INDICATE REQUIRED SIZE AND POINTS OF TERMINATION FOR PIPING, DUCTWORK, CONDUIT, ETC. THE EQUIPMENT SHOWN ILLUSTRATES SUGGESTED ROUTING, BUT ALL NECESSARY OFFSETS MAY NOT BE SHOWN. DIVISION 23 SHALL INSTALL HIS WORK IN A MANNER THAT WILL CONFORM WITH THE STRUCTURE. DIVISION 23 SHALL AVOID OBSTRUCTIONS, PRESERVE HEADROOM AND MAINTAIN MAXIMUM CLEARANCE WITHOUT FURTHER INSTRUCTION FROM THE ARCHITECT/ENGINEER OR ADDITIONAL COST TO THE OWNER.
4. ALL DUCTWORK, PIPING, AND VALVES SHALL BE CONCEALED ABOVE CEILING AND WITHIN WALLS IN FINISHED AREAS UNLESS OTHERWISE INDICATED.
5. ALL VALVES, ETC. SHALL BE INSTALLED ALLOWING EASY ACCESS BETWEEN LIGHT FIXTURES AND NO HIGHER THAN 12" TO 24" ABOVE THE CEILING. PROVIDE FITTINGS IN DUCTWORK AND PIPING AS REQUIRED SO THAT NO PIPING REMAINS TIGHT TO ROOF STRUCTURE. PROVIDE ACCESS PANELS AS REQUIRED. AREA ADJACENT TO THE ACCESS PANELS SHALL BE CLEAR OF ANY OBSTRUCTIONS. PROVIDE EXTENDED VALVE HANDLES FOR INSULATED PIPING.
6. DIVISION 23 SHALL BE GUIDED BY THE ARCHITECT/ENGINEER'S REFLECTED CEILING PLAN FOR LOCATION OF DIFFUSERS, REGISTERS, GRILLES SHOWN OR COVERED BY THESE PLANS. RETURN GRILLES SHALL NOT ALIGN WITH SUPPLY AIR THROW.
7. CONTRACTOR SHALL COORDINATE EXACT LOCATION OF ALL GRILLES, REGISTERS AND DIFFUSERS IN CEILINGS WITH THE CEILING SYSTEM AND LIGHT FIXTURES. PROVIDE FLEXIBLE DUCT UPSTREAM OF EACH DIFFUSER WHERE SHOWN.
8. ARROWS ON THE HOT WATER / COLD WATER MAINS INDICATE THE DIRECTION OF FLOW. PITCH MAINS UPWARD A MINIMUM OF 1" PER 60' IN THE DIRECTION OF FLOW. ARROWS ON STEAM AND CONDENSATE PIPING AND DRAIN LINE INDICATE THE DOWNWARD PITCH OF THE PIPING.
9. INSTALL AIR VENTS AT ALL HIGH POINTS AND DRAINS AT ALL LOW POINTS OF WATER PIPING SYSTEMS. DRAINS TO HAVE HOSE END THREADS WITH CLEARANCE TO ATTACH HOSE.
10. ALL PIPING BRANCHES TO EQUIPMENT SHALL HAVE SAME SIZE VALVES AND FITTINGS AS THAT OF THE LINE SIZE WITH THE EXCEPTION OF THE TEMPERATURE CONTROL VALVES.
11. PIPE "SWING" CONNECTIONS WITH UNIONS OR FLANGES SHALL BE MADE EXTERNAL TO COILS OR A TUBE BUNDLE TO FACILITATE REMOVAL OF THAT ITEM WITHOUT DISTURBING THE BRANCH VALVES AND/OR PIPING.
12. DUCT AND PIPING PENETRATING FLOOR SLABS AND/OR WALLS SHALL BE SEALED WITH ACOUSTIC SEALANT. IF THE FLOOR OR WALL IS FIRE RATED PROVIDE THE FIRE STOPPING OR FIRE DAMPER TO MAINTAIN THE FIRE RATING.
13. ALL RECTANGULAR SHEET METAL DUCT SIZES ARE INSIDE DIMENSIONS. ALL ROUND DUCT SIZES SHOWN ARE INSIDE DIAMETERS. ALLOWANCE FOR ACOUSTICAL LINER WHERE INDICATED ON DRAWINGS MUST BE ADDED TO OBTAIN OUTSIDE SHEET METAL DIMENSION.
14. ALL WALL THERMOSTATS, TEMPERATURE SENSORS, AND/OR HUMIDISTATS SHALL BE APPROXIMATELY 46" ABOVE FINISHED FLOOR TO CENTER AND LINED UP HORIZONTALLY WITH LIGHT SWITCHES UNLESS OTHERWISE NOTED OR DIRECTED BY THE ARCHITECT/ENGINEER.
15. DIVISION 23 CONTRACTOR SHALL BE RESPONSIBLE FOR HIS RESPECTIVE WORK FOR REPAIRING AND PATCHING TO MATCH EXISTING SURFACES, SIDEWALKS, STREETS, FLOORS, WALLS, ROOFS, CEILING AND PAVEMENT. CONTRACTOR SHALL INCLUDE IN BID PROPOSAL ALL COSTS FOR CUTTING AND PATCHING REQUIRED TO INSTALL NEW OR REMOVE EXISTING WORK, EQUIPMENT, OR SYSTEMS.
16. DIVISION 23 CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ALL OF HIS WORK TO BE INSTALLED WITH ANY AND ALL OTHER CONTRACTORS TO BE AFFECTED BY SUCH WORK, PRIOR TO ORDERING ANY OF THE EQUIPMENT. THIS SHALL INCLUDE BUT NOT LIMITED TO ELECTRICAL CHARACTERISTICS, CONNECTIONS REQUIRED, PHYSICAL SIZE, COLOR AND FIT. ALSO REFER TO SPECIFICATIONS AND ALL PAINTING TO MATCH ADJACENT FINISHES.
17. COORDINATE INSTALLATION OF NEW WORK WITH ALL OTHER TRADES AND EXISTING CONDITIONS AS REQUIRED FOR A COMPLETE AND OPERABLE HVAC SYSTEM. RELOCATE PIPING, ELECTRIC CONDUIT, STRUCTURAL BRACING, ETC., AS REQUIRED FOR A COMPLETE INSTALLATION OF HVAC WORK. COORDINATE ROUTING OF NEW DUCTWORK ABOVE CEILINGS WITH EXISTING ELECTRIC CABLE TRAY. M.C. TO COORDINATE ALL DUCTWORK ROUTING AND DUCTWORK ELEVATIONS WITH STRUCTURAL STEEL SUPPORTS FOR FOLDING WALLS. REFERENCE STRUCTURAL DRAWINGS FOR SIZE AND LOCATIONS OF STEEL. FIELD VERIFY ALL EXISTING CONDITIONS.
18. CONTRACTOR SHALL COORDINATE EXACT LOCATION OF ALL VAV REHEAT BOXES AND DUCTWORK WITH THE CEILING SYSTEM AND LIGHT FIXTURES. FIELD VERIFY EXISTING CEILING SYSTEMS AND LOCATION OF EXISTING LIGHT FIXTURES. ALLOW REQUIRED CLEARANCES FOR SERVICE TO BOX AND CONTROLS.
19. CONTRACTOR SHALL RELOCATE EXISTING LIGHT FIXTURE AND CEILING GRID SUPPORT HANGERS AS REQUIRED FOR INSTALLATION OF NEW VAV REHEAT BOXES, DUCTWORK AND PIPING.
20. IF MEANS OF AIRFLOW BALANCING ARE NOT INDICATED, PROVIDE MANUAL BALANCING DAMPER IN BRANCH DUCT TO EACH AIR INLET OR OUTLET, OR PROVIDE MANUAL DAMPER INTEGRAL TO EACH AIR INLET OR OUTLET THAT IS ACCESSIBLE FROM THE SPACE BEING SERVED. IF MANUAL DAMPERS ARE LOCATED ABOVE DRYWALL (OR SIMILAR) CEILING SYSTEMS, PROVIDE MEANS OF ACCESS WITHIN THE CEILING SYSTEM. COORDINATE LOCATION OF MANUAL BALANCING DAMPERS WITH TAB CONTRACTOR. (3)
21. PROVIDE 45°/90° FITTING WITH VOLUME DAMPER LIKE FLEXMASTER MODEL STO AT ALL SUPPLY AIR AND PRIMARY AIR BRANCH DUCTWORK TAKEOFFS.
22. CONTRACTOR SHALL REVIEW RETURN AIR PATH BACK TO ALL HVAC EQUIPMENT. PROVIDE RETURN AIR OPENINGS AND/OR JUMPER DUCTS IN WALLS ABOVE THE CEILING WHERE REQUIRED. COORDINATE WITH GENERAL TRADES. VELOCITY THRU R.A. OPENINGS SHALL NOT EXCEED 500 FPM. FIELD VERIFY LOCATION OF EXISTING WALLS EXTENDING TO DECK.
23. ALL TRANSFER AIR DUCTS TO BE INTERNALLY INSULATED TO DETER NOISE TRANSFER. SIZE SHOWN ON PLANS INDICATES ACTUAL FREE AREA.
24. COORDINATE ALL OPENINGS THROUGH EXISTING WALL CONSTRUCTION WITH GENERAL TRADES. SEAL AROUND DUCTWORK AND PIPING TO HELP REDUCE THE TRANSFER OF NOISE BETWEEN CLASSROOMS. FIELD VERIFY ALL EXISTING CONDITIONS PRIOR TO SUBMITTING OF BID.
25. MAXIMUM LENGTH OF FLEXIBLE DUCTWORK CONNECTED TO A DIFFUSER SHALL BE 5'-0".
26. ALL DUCTWORK CONSTRUCTION SHALL BE FABRICATED SHEET METAL & BUILT IN ACCORDANCE WITH "SMACNA" STANDARDS.
27. ALL SUPPLY AND OUTDOOR AIR DUCTWORK SHALL BE EXTERNALLY INSULATED. SEE SPECIFICATION FOR ADDITIONAL INSULATION REQUIREMENTS.
28. ALL ROUND DUCT TO BE EXTERNALLY INSULATED UNLESS NOTED OTHERWISE. SIZE SHOWN INDICATES ACTUAL DUCT FREE AREA. SEE SPECIFICATION FOR ADDITIONAL INSULATION REQUIREMENTS.
29. ALL NEW ROOF WORK TO BE IN ACCORDANCE WITH OWNER'S EXISTING ROOF WARRANTY.
30. ALL ROOF PENETRATIONS TO BE SEALED WATER TIGHT. PACK VOID BETWEEN DUCT PENETRATING ROOF AND STRUCTURE WITH FIBERGLASS INSULATION AND CAULK WATER TIGHT. FOR HIGH TEMPERATURE OR GREASE DUCTS UTILIZE MINERAL WOOL.
31. TEMPERATURE CONTROL CONTRACTOR SHALL PROVIDE ALL CONTROL WIRING COMPLETE FOR THIS PROJECT. ALL WIRING (AND INTERLOCK WIRING) TO THERMOSTATS, SPACE SENSORS, HUMIDISTATS, CARBON DIOXIDE MONITORS, ETC. ARE TO BE CONCEALED WITHIN THE WALL.
32. ALL HARD 90° ELBOWS IN SUPPLY DUCTWORK ARE TO HAVE TURNING VANES PER SPECIFICATION AIR DUCT ACCESSORIES.
33. REMOVE ALL WORK MADE OBSOLETE BY NEW CONSTRUCTION.
34. DEMOLITION OF EXISTING MECHANICAL EQUIPMENT TO INCLUDE ASSOCIATED PIPING AND DUCTWORK NECESSARY FOR NEW EQUIPMENT INSTALLATION.
35. ALL EXISTING TO REMAIN AND NEW PVC PLUMBING VENT LINES LOCATED ABOVE CEILING IN RETURN PLENUM ARE TO BE EXTERNALLY WRAPPED WITH FLAME AND SMOKE SPREAD RATED INSULATION MATERIAL AS REQUIRED.
36. ALL EXHAUST FANS, RELIEF VENTS, FLUES, AND PLUMBING VENTS TO BE INSTALLED A MINIMUM OF 10 FT. FROM OUTDOOR AIR INTAKES.
37. CONTRACTOR SHALL CLEAN ALL OF HIS WORK. AIR DISTRIBUTION SYSTEMS SHALL HAVE ALL DIRT AND FOREIGN MATERIAL REMOVED FROM INSIDE AND OUTSIDE OF DUCTS, PLENUMS, HOUSINGS, DEVICES, TERMINALS, ETC. PROTECT OPEN ENDS OF DUCTWORK AND INLETS AND OUTLETS OF EQUIPMENT AND DEVICES DURING CONSTRUCTION. CLEAN ALL ACCESSIBLE PARTS OF DUCTWORK AND AIR PASSAGES IN EQUIPMENT BEFORE FILTERS ARE INSTALLED OR REPLACED FOR SYSTEM BALANCING.
38. FURNISH AND INSTALL ACCEPTABLE CONCRETE INSERTS, ANCHORS, CLAMPS, BRACKETS, HANGERS, STRUCTURAL MEMBERS (ANGLES, CHANNELS, ETC.) AND FRAMES, ETC., REQUIRED FOR SUPPORTING ALL RESPECTIVE WORK. SUPPORTING DEVICES, ASSEMBLIES AND ATTACHMENTS SHALL BE DESIGNED AND ARRANGED TO CARRY THE WEIGHT OF THE SUPPORTED ITEMS INCLUDING HANGER AND CONTENTS WITHOUT TRANSMITTING VIBRATION OR NOISE TO THE BUILDING CONSTRUCTION; DESIGNED, APPROPRIATE AND APPROVED FOR THE PURPOSE USED; HAVE A NEAT AND FINISHED APPEARANCE AND COMPLEMENT THE INSTALLATION; HAVE CORROSION PROTECTION SUITABLE FOR THE ATMOSPHERE WHERE INSTALLED; ADEQUATELY AND SAFELY ATTACHED TO THE BUILDING STRUCTURE OR STRUCTURAL MEMBERS. EXPOSED SUPPORTS SHALL BE PAINTED UNLESS OF NON-FERROUS MATERIAL OR PROVIDED WITH PLATED (RUSTPROOF) FINISH.
39. PROVIDE NEC CLEARANCES AND SERVICE CLEARANCES FOR EQUIPMENT. COORDINATE EQUIPMENT SERVICE ACCESS. CLEARANCES INDICATED ARE BASED UPON BEST AVAILABLE INFORMATION. CONTRACTOR SHALL VERIFY PIPING, DUCTWORK, ETC., ROUTING PRIOR TO SUBMITTING A BID PROPOSAL AND INCLUDE ANY SUCH COSTS AS REQUIRED TO INSTALL WORK AS SHOWN AND INTENDED.
40. ELEVATOR EQUIPMENT ROOMS: DO NOT ROUTE ANY SYSTEMS THROUGH ELEVATOR EQUIPMENT ROOMS. FOR SYSTEMS THAT SERVE ELEVATOR EQUIPMENT ROOMS, DO NOT ROUTE OVER ELEVATOR EQUIPMENT OR ELECTRICAL COMPONENTS AND DO NOT HINDER SERVICE ACCESS.
41. TELECOMMUNICATIONS ROOMS (MDF AND IDF): DO NOT ROUTE ANY SYSTEMS THROUGH TELECOMMUNICATIONS ROOMS. FOR SYSTEMS THAT SERVE T-COMM ROOMS, DO NOT ROUTE OVER EQUIPMENT OR ELECTRICAL COMPONENTS AND DO NOT HINDER SERVICE ACCESS.
42. ELECTRICAL EQUIPMENT ROOMS: DO NOT ROUTE ANY SYSTEMS THROUGH ELECTRIC ROOMS. FOR SYSTEMS THAT SERVE ELECTRIC ROOMS, DO NOT ROUTE OVER EQUIPMENT, PANELS, TRANSFORMERS, VFD'S, OR ELECTRICAL COMPONENTS AND DO NOT HINDER SERVICE ACCESS.
43. EXISTING VALVES MADE INACCESSIBLE BY NEW DUCT AND/OR PIPING SHALL BE RELOCATED AS REQUIRED FOR ACCESS.
44. DURING REMOVAL OF ITEMS, CAUTION SHALL BE USED TO PREVENT DAMAGE TO ANY EQUIPMENT HAVING SALVAGE VALUE. ALL REUSABLE SALVAGED MATERIAL SHALL REMAIN THE PROPERTY OF THE OWNER AND BE RETAINED FOR HIS INSPECTION. ONLY ITEMS SO INSPECTED AND REJECTED BY THE OWNER SHALL BE DISPOSED OF BY THE CONTRACTOR. ALL OTHER ITEMS SHALL BE TURNED OVER AND DEPOSITED AS DIRECTED BY THE OWNER.
45. CONTRACT DOCUMENTS CONSIST OF BOTH PROJECT MANUAL AND DRAWINGS AND BOTH ARE MEANT TO BE COMPLEMENTARY - ANYTHING APPEARING ON EITHER MUST BE EXECUTED THE SAME AS IF SHOWN ON BOTH.
46. VERIFY EXACT SIZE AND LOCATION OF ALL EXISTING PIPING AND DUCTWORK PRIOR TO CONSTRUCTION OR BIDDING.

#	Revision	Date
3	ADDENDUM #3	06.21.2024

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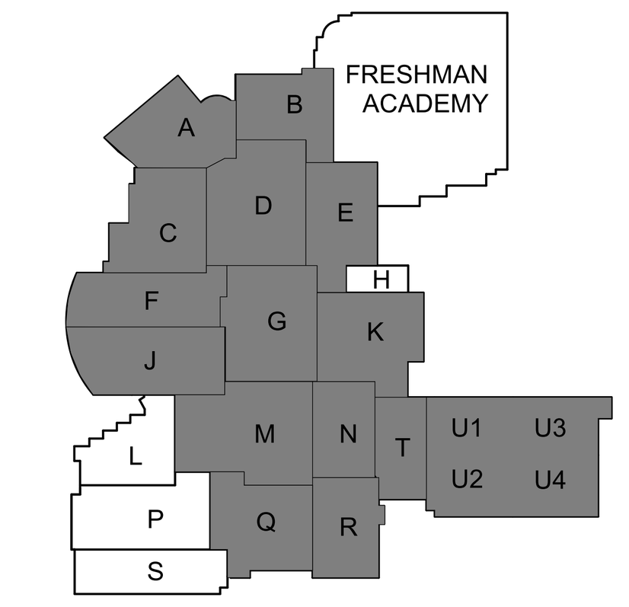

KEY PLAN

NORTH

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www.VPSARCH.com

ADDITION & RENOVATIONS TO:

FRANKLIN CENTRAL HIGH SCHOOL PHASE 2B

FRANKLIN TOWNSHIP COMMUNITY SCHOOL CORPORATION INDIANAPOLIS, INDIANA

Drawing Title:

MECHANICAL SYMBOLS AND ABBREVIATIONS

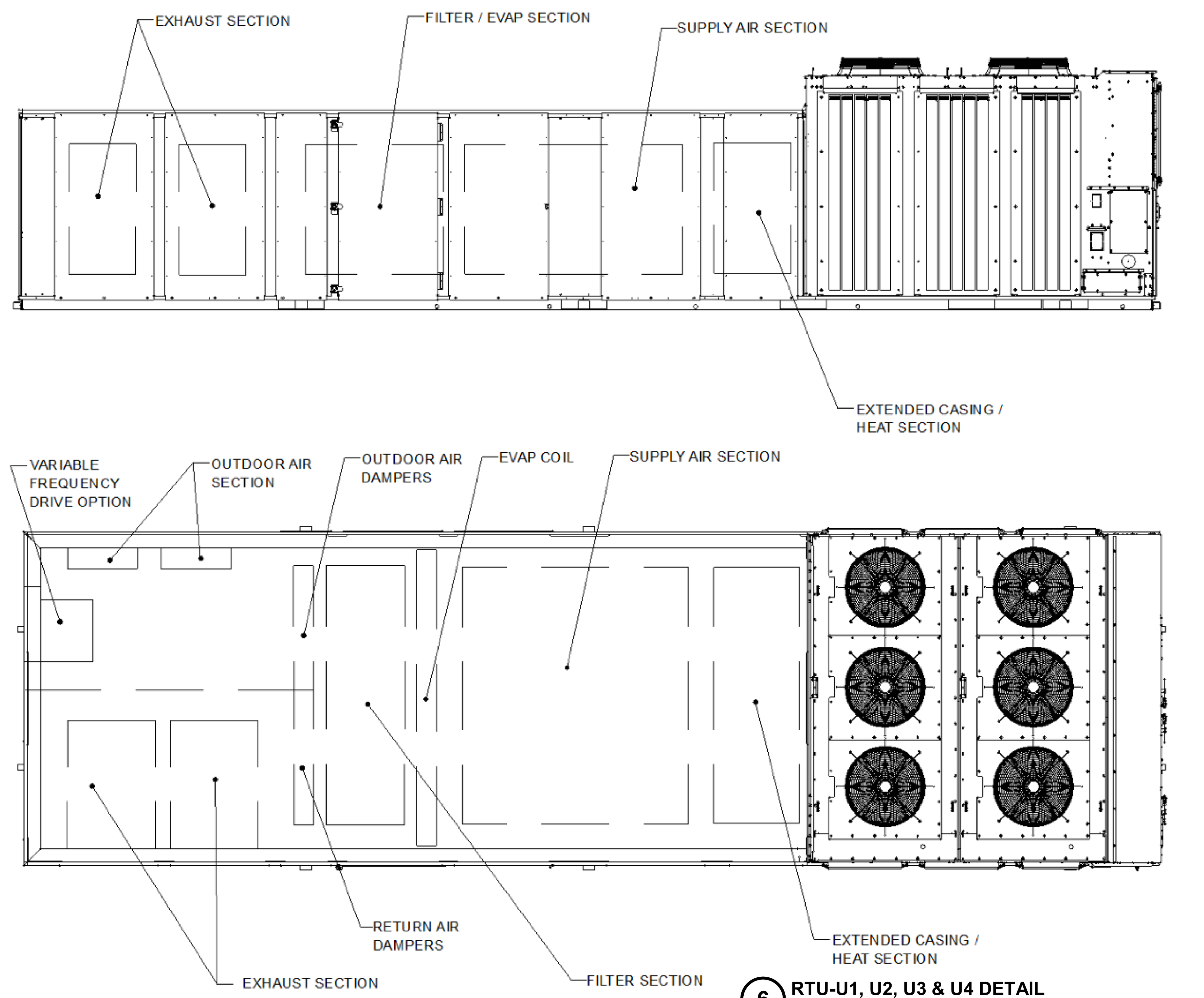
GABRIEL S. CURRIER REGISTERED No. PE10808972 STATE OF INDIANA PROFESSIONAL ENGINEER

Project No: 2022063.10

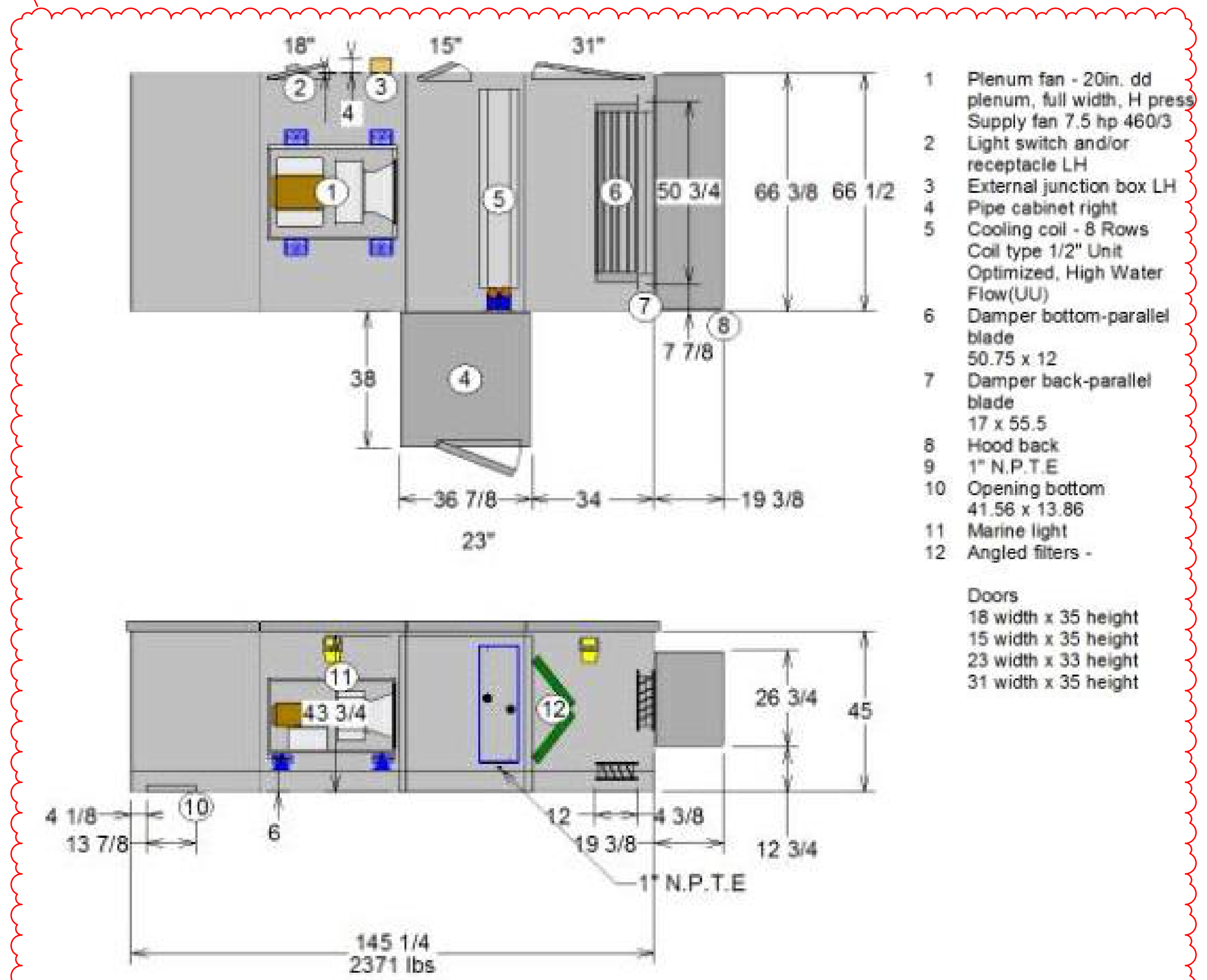
Project Date: May 29, 2024

Drawing No: M001

#	Revision	Date
3	ADDENDUM #3	06.21.2024



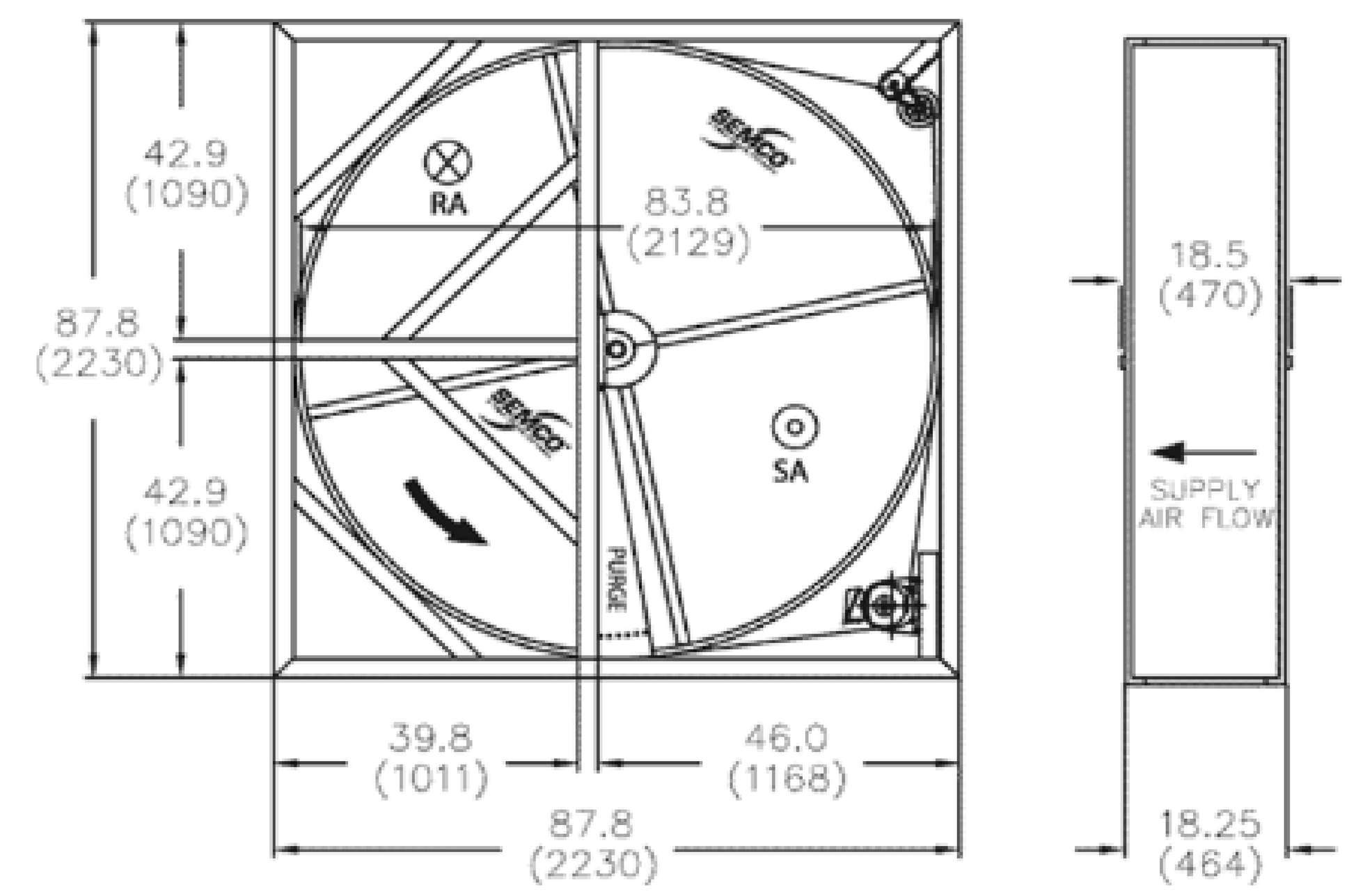
6 RTU-U1, U2, U3 & U4 DETAIL
NOT TO SCALE



1. Plenum fan - 20in. dd plenum, full width, H press Supply fan 7.5 hp 460/3
2. Light switch and/or receptacle LH
3. External junction box LH
4. Pipe cabinet right
5. Cooling coil - 8 Rows Coil type 1/2" Unit Optimized, High Water Flow(UU)
6. Damper bottom-parallel blade 50.75 x 12
7. Damper back-parallel blade 17 x 55.5
8. Hood back
9. 1" N.P.T.E
10. Opening bottom 41.56 x 13.86
11. Marine light
12. Angled filters -

Doors
18 width x 35 height
15 width x 35 height
23 width x 33 height
31 width x 35 height

4 AHU-K1 DETAIL
NOT TO SCALE



3 RTU-U1-U4 ERV DETAIL
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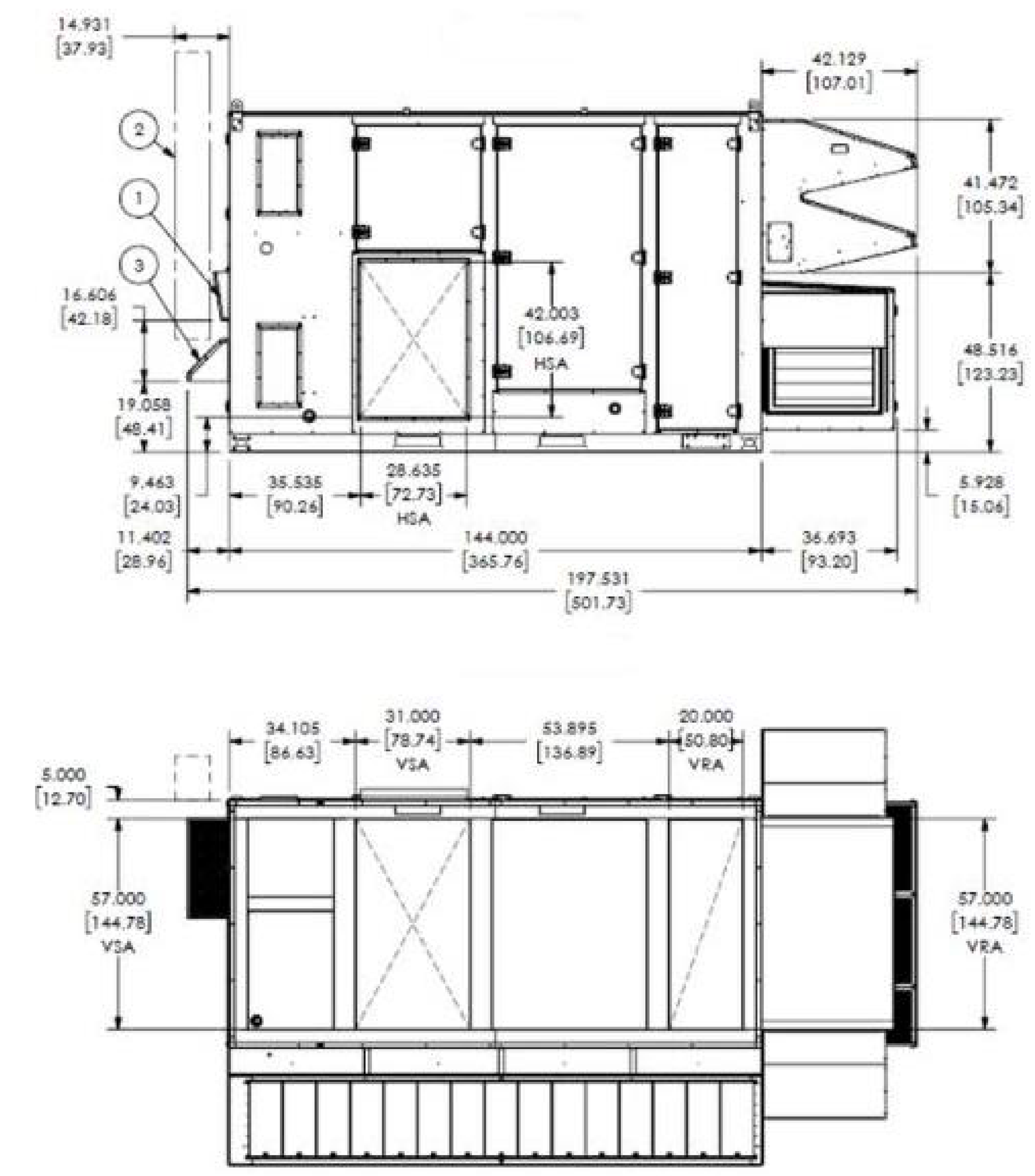
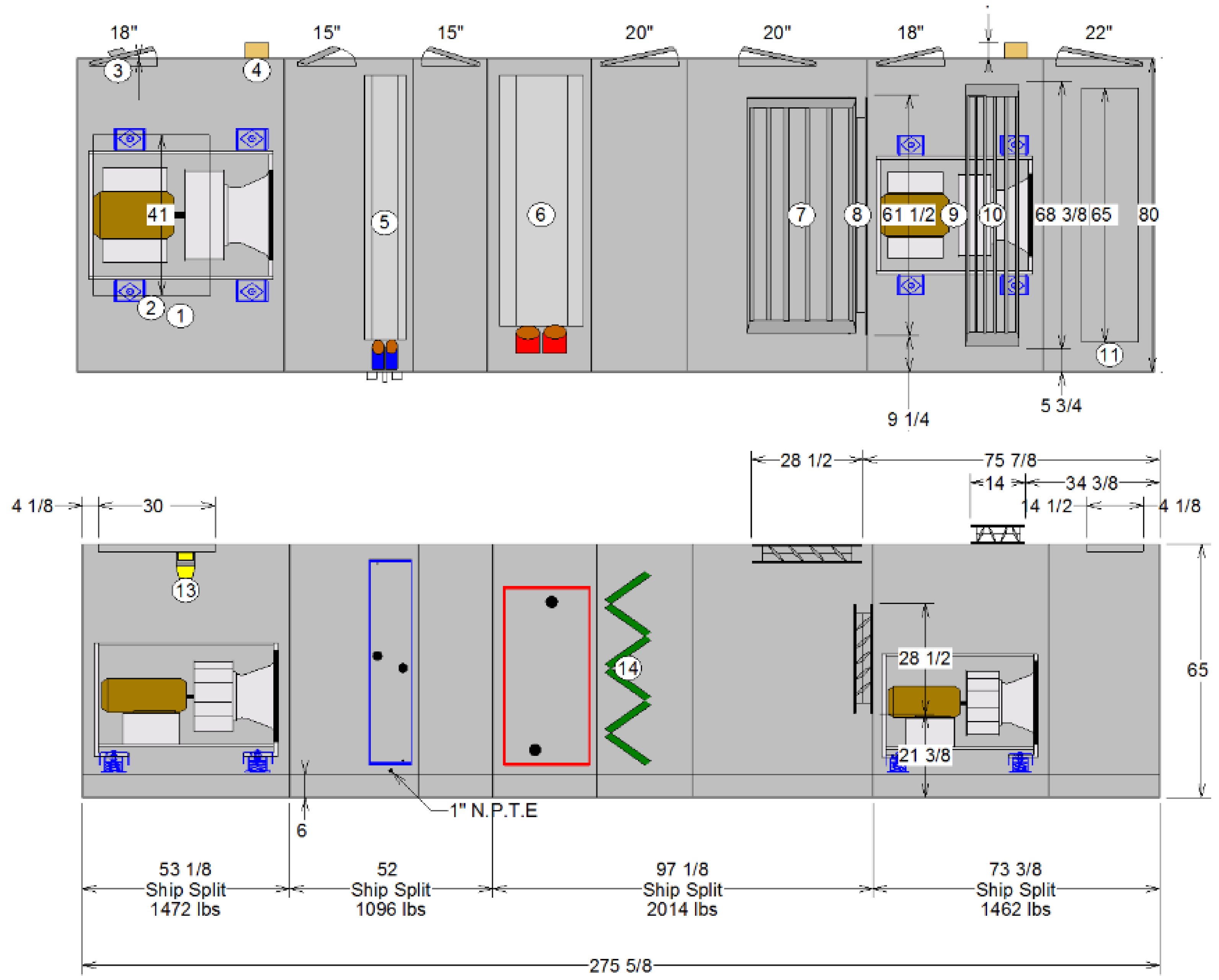


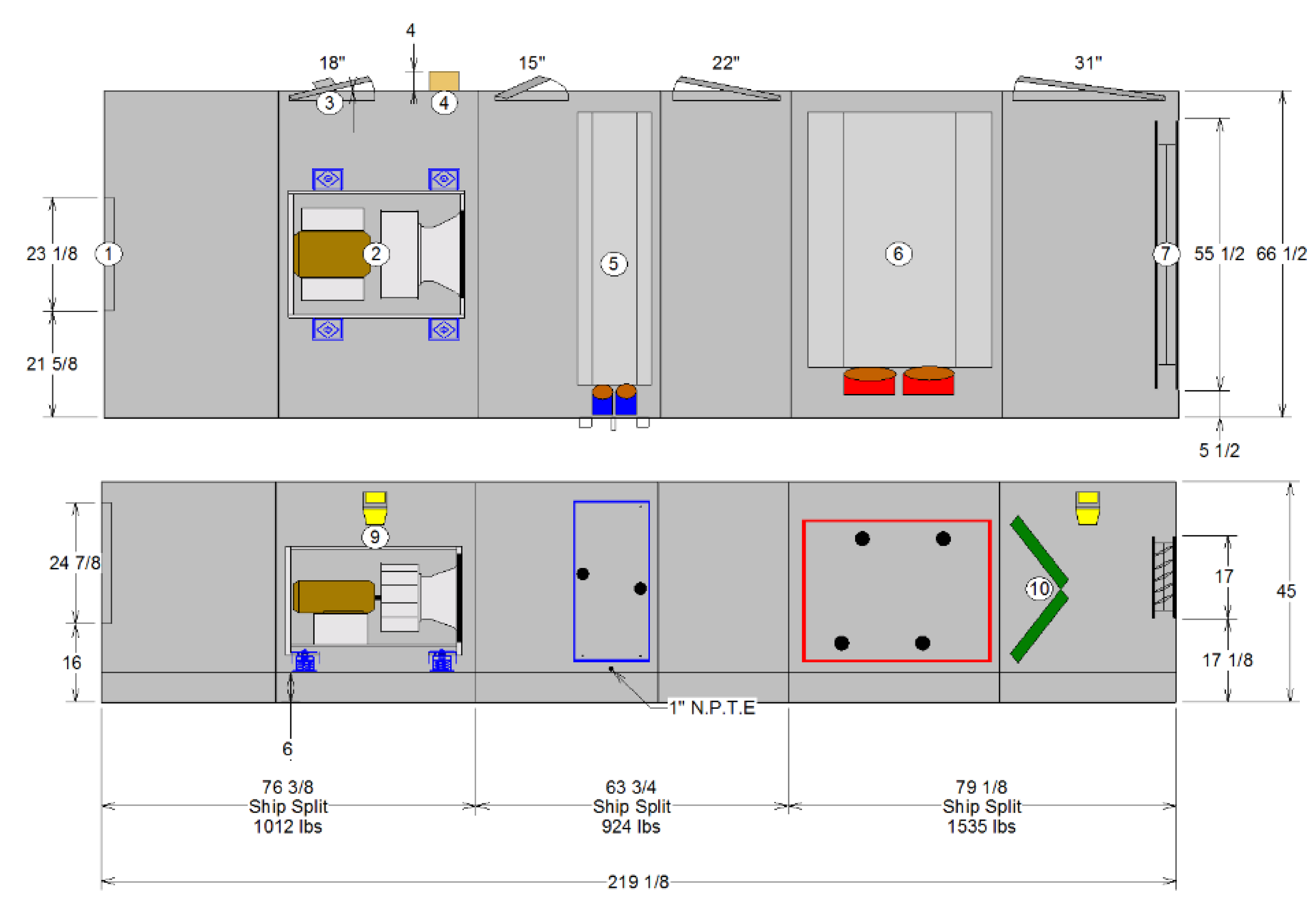
2 AHU-U5 & AHU-6 DETAIL
NOT TO SCALE



1. Plenum fan - 27in. dd plenum, full width, H press Supply fan 15 hp 460/3
2. Opening top 41 x 30
3. Light switch and/or receptacle LH
4. External junction box LH (2)
5. Cooling coil - 8 Rows Coil type 1/2" Unit Optimized, High Water Flow(UU)
6. Heating coil - Rows Coil type
7. Damper top-parallel blade 61.5 x 28.5
8. Damper back-parallel blade 28.5 x 61.5
9. Plenum fan - 24.5in. dd plenum, full width, H press Return fan 7.5 hp 460/3
10. Damper top 68.375 x 14
11. Opening top 65 x 14.5
12. 1" N.P.T.E
13. Marine light
14. Angled filters - Pleated media - MERV 8

Doors
18 width x 55 height
15 width x 55 height
20 width x 55 height
22 width x 55 height

5 AHU T1 DETAIL
NOT TO SCALE



1. Opening front 24.9 x 23.133
2. Plenum fan - 20in. dd plenum, full width, M press Supply fan 5 hp 460/3
3. Light switch and/or receptacle LH
4. External junction box LH
5. Cooling coil - 8 Rows Coil type 5/8" Shipping Coil, General (W)
6. Heating coil - Rows Coil type
7. Damper back-parallel blade 17 x 55.5
8. 1" N.P.T.E
9. Marine light
10. Angled filters -

Doors
18 width x 35 height
15 width x 35 height
22 width x 35 height
31 width x 35 height

1 AHU 36 DETAIL
NOT TO SCALE

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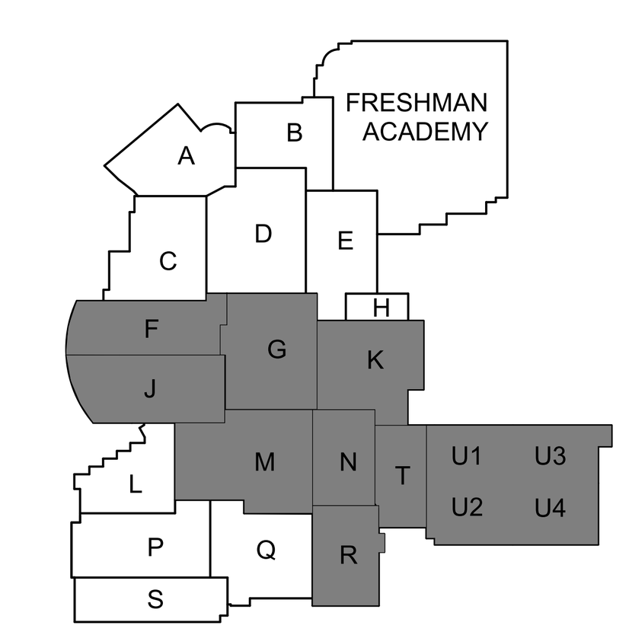

KEY PLAN

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ADDITION & RENOVATIONS TO:
FRANKLIN CENTRAL HIGH SCHOOL PHASE 2B
FRANKLIN TOWNSHIP COMMUNITY SCHOOL CORPORATION
INDIANAPOLIS, INDIANA

Drawing Title:
MECHANICAL DETAILS

GABRIEL S. CURRIER
REGISTERED
No. PE10808972
STATE OF INDIANA
PROFESSIONAL ENGINEER

Project No: 2022063.10
Project Date: May 29, 2024
Drawing No: M507

AHU SCHEDULE

MARK	IDENTITY DATA: MANUFACTURER	MODEL	LOCATION	AREA SERVED	DIMENSIONS: L	W	H	WEIGHT (LBS)	SUPPLY FAN DATA: AIRFLOW (CFM)	ESP/TSP (IN-WG)	RPM	MOTOR: QTY	HP EA.	BHP EA.	SUPPLY FAN ELECTRICAL DATA: VOLT/PH/HZ	FLA (A)	MCA (A)	MOCP (A)	RETURN FAN DATA: AIRFLOW (CFM)	ESP/TSP (IN-WG)	RPM	MOTOR: QTY	HP EA.	BHP EA.	RETURN FAN ELECTRICAL DATA: VOLT/PH/HZ	FLA (A)	MCA (A)	MOCP (A)
AHU-2	TRANE	CSAA035	ROOF	UNIT N	192"	100"	74"	6,801	17,026	3/5	1,800	2	10.0	9.6	460/3/60	12.5	-	-	-	-	-	-	-	-	-	-	-	-
AHU-3	TRANE	CSAA025	ROOF	UNIT N	227"	80"	68"	6,501	12,420	3/5.5	1,800	1	20.0	15.1	460/3/60	24.0	-	-	-	-	-	-	-	-	-	-	-	-
AHU-4	TRANE	CSAA040	ROOF	UNIT N	167"	113"	74"	6,386	18,546	3/4.6	1,800	2	10.0	9.9	460/3/60	12.5	-	-	-	-	-	-	-	-	-	-	-	-
AHU-5	TRANE	CSAA012	ROOF	UNIT G	170"	66"	48"	2,513	5,100	1.9/3.4	1,800	1	5.0	4.1	460/3/60	6.7	-	-	-	-	-	-	-	-	-	-	-	-
AHU-6	TRANE	CSAA025	ROOF	UNIT K	189"	80"	68"	4,678	11,200	3/4.8	1,800	1	15.0	13.3	460/3/60	18.1	-	-	-	-	-	-	-	-	-	-	-	-
AHU-7	TRANE	CSAA012	MEZZANINE	UNIT G	136"	67"	45"	1,900	5,100	2/3.7	1,800	1	5.0	4.8	460/3/60	6.7	-	-	-	-	-	-	-	-	-	-	-	-
AHU-8	TRANE	CSAA012	MEZZANINE	UNIT G	136"	67"	45"	1,925	5,285	1.9/3.6	1,800	1	5.0	4.6	460/3/60	6.7	-	-	-	-	-	-	-	-	-	-	-	-
AHU-9	TRANE	CSAA012	MEZZANINE	UNIT G	135"	67"	45"	1,826	6,000	1.8/3.6	1,800	1	7.5	5.4	460/3/60	9.8	-	-	-	-	-	-	-	-	-	-	-	-
AHU-10	TRANE	CSAA014	MEZZANINE	UNIT G	140"	72"	45"	2,115	6,350	2/3.73	1,800	1	7.5	6.2	460/3/60	9.8	-	-	-	-	-	-	-	-	-	-	-	-
AHU-21	TRANE	CSAA050	ROOF	UNIT K	199"	126"	83"	8,357	21,175	3/4.75	1,800	2	15.0	12.8	460/3/60	18.1	-	-	-	-	-	-	-	-	-	-	-	-
AHU-22	TRANE	CSAA021	MEZZANINE	UNIT F	171"	80"	57"	3,000	9,300	2.5/3.9	1,800	1	10.0	9.1	460/3/60	12.5	-	-	-	-	-	-	-	-	-	-	-	-
AHU-23	TRANE	CSAA017	MEZZANINE	UNIT F	173"	72"	53"	2,619	8,445	2.3/4.2	1,800	1	10.0	9.1	460/3/60	12.5	-	-	-	-	-	-	-	-	-	-	-	-
AHU-24	TRANE	CSAA017	UNIT F	UNIT F	112"	72"	102"	2,270	7,985	1.8/3.5	1,800	2	6.0	5.4	460/3/60	12.8	14.4	20	-	-	-	-	-	-	-	-	-	-
AHU-29	TRANE	CSAA050	MEZZANINE	UNIT R	204"	126"	80"	6,940	22,000	3/4.32	1,800	2	15.0	12.9	460/3/60	18.1	-	-	-	-	-	-	-	-	-	-	-	-
AHU-30	TRANE	CSAA050	MEZZANINE	UNIT R	204"	126"	80"	6,940	22,000	3/4.32	1,800	2	15.0	12.9	460/3/60	18.1	-	-	-	-	-	-	-	-	-	-	-	-
AHU-35	TRANE	CSAA014	MEZZANINE	UNIT J	171"	72"	45"	2,304	6,500	1.5/3.0	1,800	1	7.5	5.3	460/3/60	9.8	-	-	-	-	-	-	-	-	-	-	-	-
AHU-36	TRANE	CSAA017	MEZZANINE	UNIT J	169"	72"	53"	2,362	7,790	1.5/2.8	1,800	1	7.5	6.9	460/3/60	9.8	-	-	-	-	-	-	-	-	-	-	-	-
AHU-K1	TRANE	CSAA012	MEZZANINE	UNIT K	145"	67"	48"	2,773	6,000	1.8/3.7	1,800	1	7.5	5.5	460/3/60	9.8	-	-	-	-	-	-	-	-	-	-	-	-
AHU-T1	TRANE	CSAA035	UNIT T	UNIT T	289"	100"	71"	8,485	15,000	2.25/4.63	1,800	2	10.0	8.9	460/3/60	12.5	-	-	15,000	0.5/1.1	1,800	2	5.0	3.8	460/3/60	7	-	-

AHU SCHEDULE (CONTINUED)

MARK	PREHEAT COIL DATA: AIRFLOW (CFM)	CAPACITY (BTUH)	FLOW (GPM)	EAT (°F) DB	LAT (°F) DB	WPD (FT-WG)	FACE VEL. (FPM)	APD (IN-WG)	ROWS	FPI	FLUID TYPE	COOLING COIL DATA: TOTAL CAP. (BTUH)	SENSIBLE CAP. (BTUH)	FLOW (GPM)	EAT (°F) DB/WB	LAT (°F) DB/WB	EWT/LWT (°F)	WPD (FT-WG)	FACE VEL. (FPM)	APD (IN-WG)	ROWS	FPI	FLUID TYPE	MIN OA (CFM)	NOTES
AHU-2	17,026	346,030	34.7	45.0	64	2.4	522	0.07	1	6.7	WATER	708,770	506,990	154	82/68	55/54.7	42/52	16.8	508	0.80	6	10.3	30% PG	4,257	1-3,7
AHU-3	6,440	438,990	50	3.9	65.83	0.62	372	0.30	4	9.0	WATER	357,690	351,260	77	82/64	55/54.4	42/52	8.3	427	0.54	6	9.2	30% PG	6,080	1-3,5,7
AHU-4	-	-	-	-	-	-	-	-	-	-	-	744,570	538,330	161	84/69	58/57	42/52	20.0	481	0.51	6	9.0	30% PG	4,637	1-3,7
AHU-5	2,735	78,790	7.9	46.6	73.2	0.9	222	0.04	2	6.0	WATER	114,050	104,680	25	73.7/61.5	55/53.7	42/52	3.2	415	0.30	4	8.4	30% PG	915	1-3,7
AHU-6	11,200	232,630	23.3	45.0	64	1.11	465	0.06	1	6.7	WATER	461,400	333,510	100	82/68	55/54.9	42/52	13.1	448	0.70	6	11.9	30% PG	2,800	1-3,7
AHU-7	2,525	94,470	9.47	30.5	65	1.12	205	0.04	2	6.4	WATER	253,260	115,970	55	75/70	55/54.9	42/52	6.6	432	0.55	4	13.3	30% PG	1,340	1,4,7
AHU-8	2,455	91,040	9.12	33.0	67	0.81	218	0.02	1	6.7	WATER	266,410	124,280	58	76/70	55/54.9	42/52	7.3	447	0.61	4	13.8	30% PG	1,575	1,4,7
AHU-9	3,000	119,730	12	28.2	65	1.5	244	0.05	2	7.6	WATER	158,410	138,420	35	76/63	55/54	42/52	5.8	488	0.45	4	10.2	30% PG	1,675	1,4,7
AHU-10	3,175	90,800	9.1	46.0	72	1.12	233	0.04	2	6.0	WATER	295,300	125,380	64	73/69	55/54.9	42/52	13.9	484	0.53	6	7.4	30% PG	890	1,4,7
AHU-21	21,175	475,750	47.7	45.0	66	2.45	450	0.06	1	6.7	WATER	873,740	630,540	189	82/68	55/54.8	42/52	12.4	432	0.63	6	11.3	30% PG	5,293	2-4,7
AHU-22	6,005	276,130	27.7	22.6	65	3.12	303	0.04	1	8.4	WATER	265,770	220,820	58	77/64	55/54.04	42/52	5.3	469	0.42	4	10.1	30% PG	3,425	1-3,6,7
AHU-23	4,820	218,500	22	23.2	65	2.4	321	0.05	1	8.7	WATER	401,370	221,850	87	78/69	54.5/54	42/52	7.8	503	0.80	8	6.0	30% PG	3,100	1,4,6,7
AHU-24	4,155	207,280	20.8	19.0	65	2.18	277	0.04	1	8.5	WATER	399,540	185,110	71	76/70	55/54.9	42/54	5.4	475	0.78	8	6.8	30% PG	2,235	1,4,7
AHU-29	11,000	585,740	59	12.9	62	3.64	234	0.02	1	47.5	WATER	623,560	611,940	135	81/63	55/53	42/52	11.4	456	0.35	6	6.9	30% PG	8,815	1,4,6,7
AHU-30	11,000	585,740	59	12.9	62	3.64	234	0.02	1	47.5	WATER	623,560	611,940	135	81/63	55/53	42/52	11.4	456	0.35	6	6.9	30% PG	8,815	1,4,6,7
AHU-35	4,000	148,790	15	30.7	65	1.6	320	0.04	1	7.7	WATER	188,570	155,790	40	76/64	55/54.2	42/52	4.1	495	0.50	4	10.8	30% PG	2,110	1,4,7
AHU-36	3,975	127,640	13	39.0	69	1.1	265	0.03	1	6.7	WATER	166,650	164,860	36	74/61	55/53.3	42/52	4.8	464	0.33	4	7.8	30% PG	1,585	1,4,7
AHU-K1	-	-	-	-	-	-	-	-	-	-	-	216,320	165,200	39	80/66	55/54	42/54	2.3	488	0.73	8	6.8	30% PG	900	1-3,7
AHU-T1	7,500	358,400	66	21.7	65	10.6	361	0.22	3	9.0	WATER	676,880	419,410	146	80.3/69	0.1	42/52	15.5	447	0.64	6	10.2	30% PG	5,000	1,4,7

AIR HANDLING UNIT SCHEDULE NOTES

1. TCC PROVIDED VFD INSTALLED BY EC.
2. EC TO PROVIDE NEMA ENCLOSURE FOR VFD.
3. PROVIDE WITH 18" ROOF CURB.
4. PROVIDE WITH 6" MOUNTING RAILS.
5. PROVIDE WITH INTEGRAL FACE & BYPASS HHW COIL.
6. SOME UNIT SPLITS WILL REQUIRE FIELD DISSASSEMBLY AND REASSEMBLY BY CONTRACTOR PER MANUFACTUERS INSTRUCTIONS. MAXIMUM SIZE TO FIT THROUGH 34"x 82" DOOR.
7. BLOW OUT STRAINER AFTER CHEMICAL TREATMENT CLEANING HAS BEEN COMPLETED PRIOR TO FILLING WITH GLYCOL.

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PACKAGED ROOFTOP UNIT SCHEDULE

MARK	IDENTITY DATA: MANUF.	MODEL	LOCATION	AREA SERVED	WEIGHT (LBS)	DIMENSIONS: L	W	H	SUPPLY FAN DATA: AIRFLOW (CFM)	ESP/TSP (IN-WG)	RPM	MOTOR: QTY	HP	BHP	EXHAUST FAN DATA: AIRFLOW (CFM)	ESP/TSP (IN-WG)	RPM	MOTOR: QTY	HP	BHP	MIN OA (CFM)	UNIT CONTROLS	ELECTRICAL DATA: VOLT/PH/HZ	MCA (A)	MOCP (A)
RTU-U1	TRANE	SFHMF704P	ROOF	UNIT U	12,670	395"	119"	88"	22,100	2/4.27	-	1	40.0	32.3	20,000	0.5/-	555	1	15.0	6.3	14,800	PACKAGED	460/3/60	205.0	250
RTU-U2	TRANE	SFHMF704P	ROOF	UNIT U	12,670	395"	119"	88"	22,100	2/4.27	-	1	40.0	32.3	20,000	0.5/-	555	1	15.0	6.3	14,800	PACKAGED	460/3/60	205.0	250
RTU-U3	TRANE	SFHMF704P	ROOF	UNIT U	12,670	395"	119"	88"	22,100	2/4.27	-	1	40.0	32.3	20,000	0.5/-	555	1	15.0	6.3	14,800	PACKAGED	460/3/60	205.0	250
RTU-U4	TRANE	SFHMF704P	ROOF	UNIT U	12,670	395"	119"	88"	22,100	2/4.27	-	1	40.0	32.3	20,000	0.5/-	555	1	15.0	6.3	14,800	PACKAGED	460/3/60	205.0	250
RTU-U5	TRANE	N360	ROOF	UNIT U	5,546	197"	93"	93"	8,000	2.5/3.56	2,134	1	10.0	7.2	8,000	-	-	-	-	-	1,500	PACKAGED	460/3/60	112.0	125
RTU-U6	TRANE	N360	ROOF	UNIT U	5,546	197"	93"	93"	8,000	2.5/3.56	2,134	1	10.0	7.2	8,000	-	-	-	-	-	1,500	PACKAGED	460/3/60	112.0	125
ERV-U1	TRANE	D025	ROOF	UNIT U	4,529	183"	95"	68"	5,350	2/4.0	1,603	1	7.5	5.7	5,350	1.5/2.7	1,678	1	5.0	3.5	5,350	PACKAGED	460/3/60	68.0	80

DOAS SCHEDULE NOTES:

1. OVERLOAD PROTECTED DISCONNECT BY MANUFACTURER. SINGLE POINT POWER. HIGH-FAULT 65 KA SCCR.
2. PROVIDE WITH 14" ROOF CURB.
3. PROVIDE WITH FLUE EXTENSION.
4. MAXIMUM LENGTH 400".

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PACKAGED ROOFTOP UNIT SCHEDULE (CONTINUED)

MARK	AIRFLOW (CFM)	ENERGY RECOVERY DATA: TYPE	SUMMER: EAT (°F) DB/WB	SUMMER: LAT (°F) DB/WB	SUMMER: HEAT RECOVERED (BTUH)	WINTER: EAT (°F) DB/WB	WINTER: LAT (°F) DB/WB	WINTER: HEAT RECOVERED (BTUH)	DX COOLING DATA: TOTAL (BTUH)	SENSIBLE (BTUH)	EAT (°F) DB/WB	LAT (°F) DB/WB	FACE VEL. (FPM)	APD (IN-WG)	ROWS	FPI	COMPRESSOR INFO: TYPE	QTY	EER	REGRIG. TYPE	GAS-FIRED HEATING DATA: INPUT (BTUH)	OUTPUT (BTUH)	EAT/LAT (°F)	FURNACE INFO: TYPE	CONTROL	HOT GAS REHEAT: CAPACITY (BTUH)	EAT/LAT (°F)	NOTES
RTU-U1	22,100	WHEEL	88.9/74	79.5/66.9	414,000	8.7/8	48.7/41.2	852,251	835,390	604,880	78/65.7	53.2/53.1	514	-	6	-	SCROLL	4	15.5	R454B	850,000	688,500	56/84.7	INDIRECT	MODULATING	832,140	73/70	1-4
RTU-U2	22,100	WHEEL	88.9/74	79.5/66.9	414,000	8.7/8	48.7/41.2	852,251	837,190	603,390	78/65.7	53.2/53.1	514	-	6	-	SCROLL	4	15.5	R454B	850,000	688,500	56/84.7	INDIRECT	MODULATING	832,140	73/70	1-4
RTU-U3	22,100	WHEEL	88.9/74	79.5/66.9	414,000	8.7/8	48.7/41.2	852,251	837,190	603,390	78/65.7	53.2/53.1	514	-	6	-	SCROLL	4	15.5	R454B	850,000	688,500	56/84.7	INDIRECT	MODULATING	832,140	73/70	1-4
RTU-U4	22,100	WHEEL	88.9/74	79.5/66.9	414,000	8.7/8	48.7/41.2	852,251	837,190	603,390	78/65.7	53.2/53.1	514	-	6	-	SCROLL	4	15.5	R454B	850,000	688,500	56/84.7	INDIRECT	MODULATING	832,140	73/70	1-4
RTU-U5	8,000	-	-	-	-	-	-	-	299,000	217,300	79/66	56/54.2	361	0.33	6	12	DIG. SCROLL	2	8.4	R454B	300,000	243,000	54.8/82.8	INDIRECT	MODULATING	-	-	1-3
RTU-U6	8,000	-	-	-	-	-	-	-	299,000	217,300	79/67	56/54.3	361	0.33	6	12	DIG. SCROLL	2	8.4	R454B	300,000	243,000	54.8/82.9	INDIRECT	MODULATING	-	-	1-3
ERV-U1	5,350	WHEEL	95/76	80.9/69.3	137,900	.6/-1.7	49.8/40.4	334,640	277,000	178,900	81.4/67.7	51/50.9	237	0.31	6	14	INV. SCROLL	2	-	R454B	400,000	324,000	42.6/98.6	INDIRECT	MODULATING	203	51/86.1	1-3

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3

SPLIT SYSTEM SCHEDULE - 23 81 26

INDOOR UNIT: MARK	MANUFACTURER	MODEL	WEIGHT (LBS)	DIMENSIONS: L	W	H	COOLING CAPACITY: TOTAL (BTUH)	SENSIBLE (BTUH)	CAPACITY (BTUH)	AIRFLOW DATA: MIN (CFM)	MAX (CFM)	DESIGN (CFM)	EXT. STATIC (IN-WG)	OUTDOOR UNIT: MARK	MODEL	SERVES	WEIGHT (LBS)	COOLING DATA: NOMINAL (BTUH)	AMBIENT (°F)	EER	SEER	REF. TYPE	ELECTRICAL DATA: VOLTS (V)	PH	FREQ (HZ)	MCA (A)	MOCP (A)	NOTES
SS-F1	MITSUBISHI	TPKA0A0241KA70A	46	51"	14"	18"	24,000	18,480	24,000	635	775	705	0.00	CU-F1	TRUZA0241HA70NA	SS-F1	153	24,000.0	95	12.2	21.4	R-410A	208	1	60	19.0	30.0	1-4
SS-F2	MITSUBISHI	TPKA0A0121LA00A	28	35"	9"	1'-0"	12,000	4,400	12,000	265	455	350	0.00	CU-F2	TRUYA0121KA70NA	SS-F2	92	12,000.0	95	13.3	21.0	R-410A	208	1	60	11.0	20.0	1-4
SS-J1	MITSUBISHI	TPKA0A0181LA00A	28	68"	9"	12"	18,000	13,140	18,000	265	455	350	0.00	CU-J1	TRUZA0181KA70NA	SS-J1	100	18,000.0	95	14.4	12.6	R-410A	208	1	60	11.0	20.0	1-4
SS-M1	MITSUBISHI	TPKA0A0181LA00A	28	68"	9"	12"	18,000	13,140	18,000	265	455	350	0.00	CU-J1	TRUZA0181KA70NA	SS-M1	100	18,000.0	95	14.4	12.6	R-410A	208	1	60	11.0	20.0	1-4
SS-R1	MITSUBISHI	TPKA0A0181LA00A	28	68"	9"	12"	18,000	13,140	18,000	265	455	350	0.00	CU-J1	TRUZA0181KA70NA	SS-R1	100	18,000.0	95	14.4	12.6	R-410A	208	1	60	11.0	20.0	1-4
SS-T1	MITSUBISHI	TPKA0A0121LA00A	28	35"	9"	1'-0"	12,000	4,400	12,000	265	455	350	0.00	CU-F2	TRUYA0121KA70NA	SS-T1	92	12,000.0	95	13.3	21.0	R-410A	208	1	60	11.0	20.0	1-4
SS-U1	MITSUBISHI	TPKA0A0121LA00A	28	35"	9"	1'-0"	12,000	4,400	12,000	265	455	350	0.00	CU-F2	TRUYA0121KA70NA	SS-U1	92	12,000.0	95	13.3	21.0	R-410A	208	1	60	11.0	20.0	1-4
SS-U2	MITSUBISHI	TPKA0A0121LA00A	28	35"	9"	1'-0"	12,000	4,400	12,000	265	455	350	0.00	CU-F2	TRUYA0121KA70NA	SS-U2	92	12,000.0	95	13.3	21.0	R-410A	208	1	60	11.0	20.0	1-4

SPLIT SYSTEMS UNIT SCHEDULE NOTES:

1. DISCONNECT BY DIVISION 26.
2. SUPPLY WITH WIND BAFFLES FOR LOW AMBIENT COOLING.
3. SUPPLY WITH BACNET INTERFACE CARD.
4. SUPPLY WITH CONDENSATE PUMP.

#	Revision	Date
1	ADDENDUM #1	06.14.2024
3	ADDENDUM #3	06.21.2024

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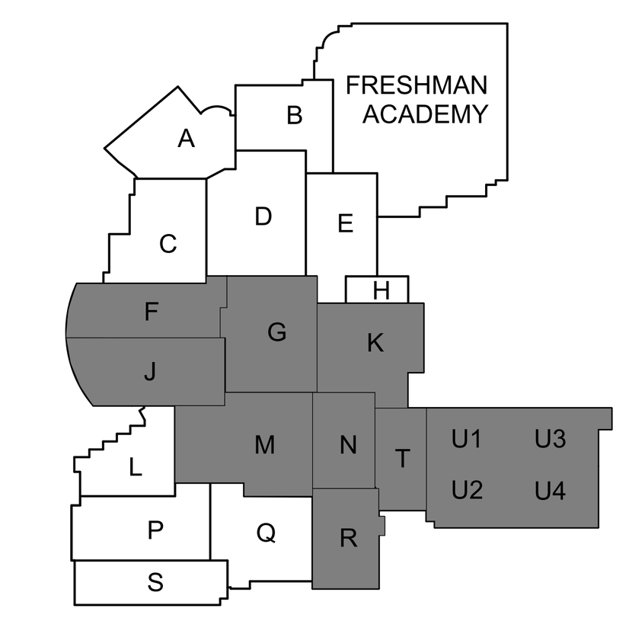


KEY PLAN

NORTH

VPS ARCHITECTURE
905 N. Capital Ave. - Suite 100 Indianapolis, Indiana 46204
P (317) 353-3281
www.VPSARCH.com

ADDITION & RENOVATIONS TO:

FRANKLIN CENTRAL HIGH SCHOOL PHASE 2B

FRANKLIN TOWNSHIP COMMUNITY SCHOOL CORPORATION
INDIANAPOLIS, INDIANA

Drawing Title:

MECHANICAL SCHEDULES

Project No: 2022063.10

Project Date: May 29, 2024

GABRIEL S. CURRLER
REGISTERED
No. PE10808972
STATE OF INDIANA
PROFESSIONAL ENGINEER

Drawing No: M601

REVISION	DESCRIPTION	DATE
1	Addendum #3	06/21/2024

SHEET NOTES

1. DATA LOCATION TO BE INSTALLED ADJACENT TO ELECTRONIC ACCESS CONTROL ENCLOSURE MOUNTED AT 54" A.F.F.
2. DATA LOCATION TO SERVE AV RACK LOCATION.
3. 60" H x 96" W 16:10 CEILING RECESSED ELECTRIC PROJECTION SCREEN
4. 87 1/2" H x 140" W 16:10 CEILING RECESSED ELECTRIC PROJECTION SCREEN
5. DEVICE SHALL BE ROUGH-IN ONLY. CONTRACTOR SHALL PROVIDE AND INSTALL APPROPRIATELY SIZED BLANK FACEPLATE.
6. LOCATION TO SERVE 3D PRINTER. CONFIRM FINAL LOCATION WITH OWNER PRIOR TO ROUGH-IN.

AREA OUT OF SCOPE

SCENE SHOP C101

NEW IDF F125

EXT-CR

XXX-DPS

SCENE STORAGE F112

DRESSING F115

DRESSING F117

DRESSING F120

DRESSING F122

CORRIDOR F116

OFFICE/ CONFERENCE F118

CONSTUME STORAGE F113

SEWING F114

CORRIDOR F123

DRESSING F123

DRESSING F119

CHOIR F124

CORRIDOR G101

G101-CR

G101A-MH

TEACHER OFFICE F140

ORCHESTRA STORAGE F139

CORRIDOR F134

GIRLS' F135

BOYS' F133

IDF F125

F125-CR

DRESSING F129

ELEC. F128

SMALL GROUP F126

CLASSROOM F138

CLASSROOM F137

ORCHESTRA STORAGE F136

CHOIR BREAKOUT F130

ORCHESTRA SECTIONAL F132

CHOIR F131

SMALL GROUP F127

CORRIDOR F141

AREA OUT OF SCOPE

OFFICE J120

PRACTICE J121

ORCHESTRA SECTIONAL J123

CHOIR OFFICE J126

CHOIR BREAKOUT J127

SMALL GROUP J128

CHOIR J125

CORRIDOR J119

ORCHESTRA J115

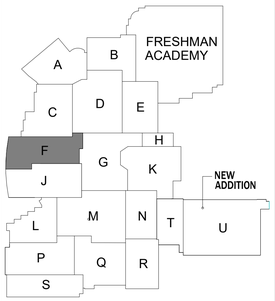
1 FIRST FLOOR TECHNOLOGY PLAN - UNIT F
1/8" = 1'-0"

GENERAL HORIZONTAL CABLING NOTES

A	REFER TO TECHNOLOGY SCOPE MATRIX ON SHEET T001 FOR SCOPE DELINEATION.
B	PAINTING OF THE STRUCTURED CABLING WILL VOID THE WARRANTY. ENSURE PROPER COORDINATION WITH PAINTING CONTRACTOR SO THAT ALL STRUCTURED CABLING IS PROTECTED PRIOR TO ANY PAINTING.
C	PROVIDE ALL TELECOMMUNICATION OUTLETS AS SHOWN ON THE DRAWINGS AND AS REQUIRED TO PROVIDE CONNECTIONS FOR EACH DEVICE SHOWN ON THE DRAWINGS.

TECHNOLOGY LEGEND

- DATA LOCATION
- TS TEACHER STATION LOCATION
- AP WIRELESS ACCESS POINT - CEILING MOUNTED
- AP WIRELESS ACCESS POINT - WALL MOUNTED
- P PROJECTOR LOCATION
- TP TOUCH PANEL LOCATION
- TP TABLE TOP TOUCH PANEL LOCATION
- AV AV INPUT LOCATION - TYPE 1
- AV AV INPUT LOCATION - TYPE 2 & 3
- AV AV INPUT LOCATION - TYPE 4 & 5
- CM AV CONTROL LOCATION
- AV AV FLOOR BOX LOCATION
- AV RACK AV EQUIPMENT RACK LOCATION
- CAM AV CAMERA LOCATION
- BT BLUETOOTH RECEIVER LOCATION
- MIC MICROPHONE INPUT LOCATION
- M CEILING MICROPHONE LOCATION
- VID VIDEO INPUT LOCATION
- USB USB EXTENDER LOCATION
- VC VOLUMN CONTROL LOCATION
- BC BLEACHER CONNECTION LOCATION
- MIX AUDIO MIXING LOCATION
- AIR ON-AIR SIGN LOCATION
- AS ON-AIR SWITCH LOCATION
- SPK SPEAKER LOCATION - WALL MOUNTED
- IS INTERCOM SPEAKER LOCATION
- LC LOUDSPEAKER CONNECTION LOCATION - WALL MOUNTED
- LC LOUDSPEAKER CONNECTION LOCATION - CEILING MOUNTED
- LS SAC LOUDSPEAKER LOCATION
- MON MONITOR LOCATION
- DS DIGITAL SIGNAGE LOCATION
- WA WIRELESS MICROPHONE ANTENNA
- VB VIDEO WALL INFRASTRUCTURE LOCATION
- VW VIDEO BOARD LOCATION
- S PAGING SPEAKER - CEILING MOUNTED
- S PROGRAM SPEAKER - CEILING MOUNTED
- CLASSROOM SPEAKER/AMPLIFIER
- PS PARTITION SENSOR
- SC SECURITY CAMERA - CEILING MOUNTED
- SC SECURITY CAMERA - WALL MOUNTED
- VI VIDEO INTERCOM DOOR STATION
- CR CARD READER LOCATION
- D DOOR POSITION SENSOR
- MH MAGNETIC HOLD OPEN LOCATION



KEY PLAN

NORTH

VPS ARCHITECTURE

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ADDITION & RENOVATIONS TO:

FRANKLIN CENTRAL HIGH SCHOOL PHASE 2B

FRANKLIN TOWNSHIP COMMUNITY SCHOOL CORPORATION
INDIANAPOLIS, INDIANA

Drawing Title:
FIRST FLOOR TECHNOLOGY PLAN - UNIT F

BICSI REGISTERED COMMUNICATIONS DISTRIBUTION DESIGNER
Douglas J Driscoll
BICSI ID # 123408
EXPIRES 12-31-26
RCDD

DESIGN 27 TECHNOLOGY ARCHITECTS
1650 E. 49TH ST. INDIANAPOLIS, IN 46205
317.536.8000
DESIGN27.COM

Project No: 2022063.10

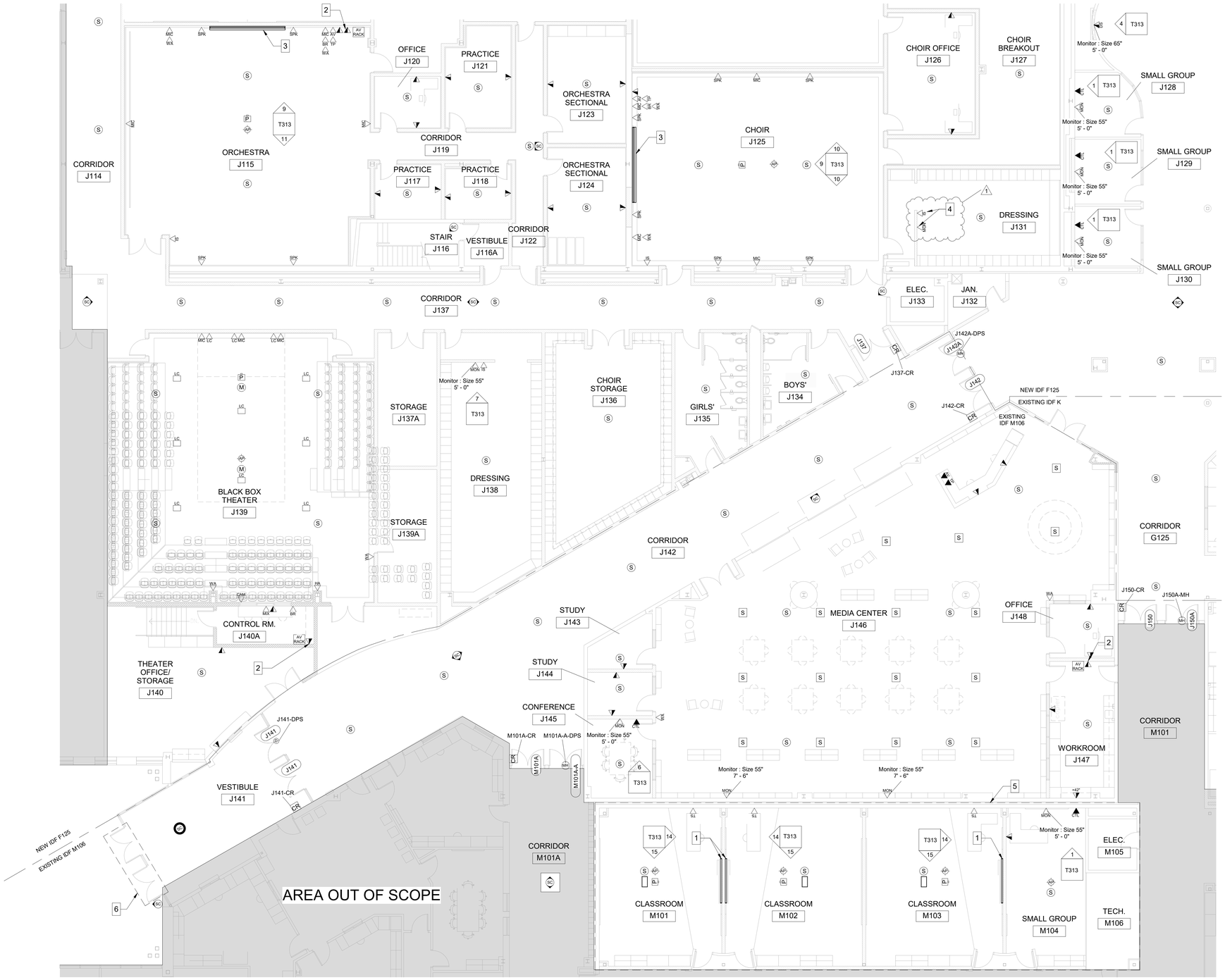
Project Date: MAY 29, 2024

Drawing No: T201F

REVISION	DESCRIPTION	DATE
1	Addendum #3	06/21/2024

SHEET NOTES

1. 57 1/2" H x 92" W 16:10 WALL MOUNTED MANUAL PROJECTION SCREEN.
2. DATA LOCATION TO SERVE AV RACK LOCATION.
3. 87 1/2" H x 140" W 16:10 CEILING RECESSED ELECTRIC PROJECTION SCREEN
4. DEVICE SHALL BE ROUGH-IN ONLY. CONTRACTOR SHALL PROVIDE AND INSTALL APPROPRIATELY SIZED BLANK FACEPLATE.
5. AREA WITHIN BOUNDARY TO BE PRICED AS AN ALTERNATE. REFER TO ARCHITECTURAL DOCUMENTATION FOR ADDITIONAL INFORMATION.
6. CONTRACTOR SHALL MAINTAIN EXISTING ACCESS CONTROL AT OPENING.



1 FIRST FLOOR TECHNOLOGY PLAN - UNIT J & UNIT M
1/8" = 1'-0"

GENERAL HORIZONTAL CABLING NOTES

A	REFER TO TECHNOLOGY SCOPE MATRIX ON SHEET T001 FOR SCOPE DELINEATION.
B	PAINTING OF THE STRUCTURED CABLING WILL VOID THE WARRANTY. ENSURE PROPER COORDINATION WITH PAINTING CONTRACTOR SO THAT ALL STRUCTURED CABLING IS PROTECTED PRIOR TO ANY PAINTING.
C	PROVIDE ALL TELECOMMUNICATION OUTLETS AS SHOWN ON THE DRAWINGS AND AS REQUIRED TO PROVIDE CONNECTIONS FOR EACH DEVICE SHOWN ON THE DRAWINGS.

TECHNOLOGY LEGEND

- DATA LOCATION
- TS TEACHER STATION LOCATION
- WAP WIRELESS ACCESS POINT - CEILING MOUNTED
- AP WIRELESS ACCESS POINT - WALL MOUNTED
- P PROJECTOR LOCATION
- TP TOUCH PANEL LOCATION
- TTP TABLE TOP TOUCH PANEL LOCATION
- AV AV INPUT LOCATION - TYPE 1
- AV AV INPUT LOCATION - TYPE 2 & 3
- AV AV INPUT LOCATION - TYPE 4 & 5
- CTL AV CONTROL LOCATION
- AV AV FLOOR BOX LOCATION
- AV RACK AV EQUIPMENT RACK LOCATION
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- M CEILING MICROPHONE LOCATION
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- USB USB EXTENDER LOCATION
- VC VOLUMN CONTROL LOCATION
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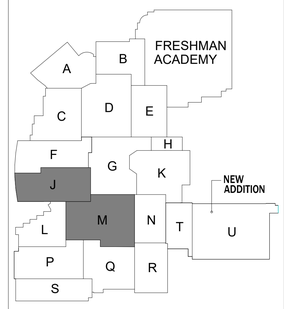
- WA WIRELESS MICROPHONE ANTENNA
- VB VIDEO WALL INFRASTRUCTURE LOCATION
- VW VIDEO BOARD LOCATION
- S PAGING SPEAKER - CEILING MOUNTED
- S PROGRAM SPEAKER - CEILING MOUNTED
- CLASSROOM SPEAKER/AMPLIFIER
- PS PARTITION SENSOR
- SC SECURITY CAMERA - CEILING MOUNTED
- SC SECURITY CAMERA - WALL MOUNTED
- VI VIDEO INTERCOM DOOR STATION
- CR CARD READER LOCATION
- D DOOR POSITION SENSOR
- MH MAGNETIC HOLD OPEN LOCATION



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ADDITION & RENOVATIONS TO:

FRANKLIN CENTRAL HIGH SCHOOL PHASE 2B

FRANKLIN TOWNSHIP COMMUNITY SCHOOL CORPORATION INDIANAPOLIS, INDIANA

Drawing Title: FIRST FLOOR TECHNOLOGY PLAN - UNIT J & UNIT M

DESIGNED/DISTRIBUTED/SUPERVISED
Bicsi
Douglas J Driscoll
BICSI ID # 123408
EXPIRES 12-31-26
RCDD

Project No: 2022063.10
Project Date: MAY 29, 2024

DESIGN 27 TECHNOLOGY ACOUSTICS
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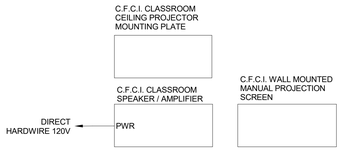
317.536.8000
DESIGN27.COM

Drawing No: T201J&M

REVISION	DESCRIPTION	DATE
1	Addendum #3	06/21/2024

AUDIO VISUIAL DIAGRAM NOTES

1 BALANCED MICROPHONE/LINE LEVEL CABLING
2 12AWG LOUDSPEAKER CABLING
3 UTP CABLING
4 STP CABLING
5 HDMI CABLING
6 RS-232 CABLING
7 RF CABLING
8 GPIO CABLING



1 TYPICAL CLASSROOM/SCIENCE LAB AV DIAGRAM
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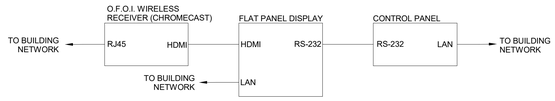
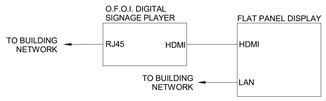


2 TYPICAL SMALL GROUP/CONFERENCE ROOM AV DIAGRAM
N.T.S.



3 TYPICAL DIGITAL SIGNAGE AV DIAGRAM
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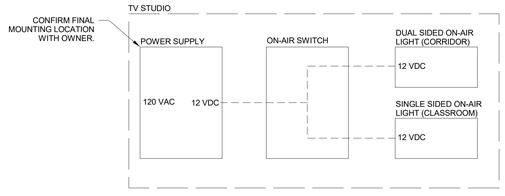

4 ON-AIR SIGN AV DIAGRAM
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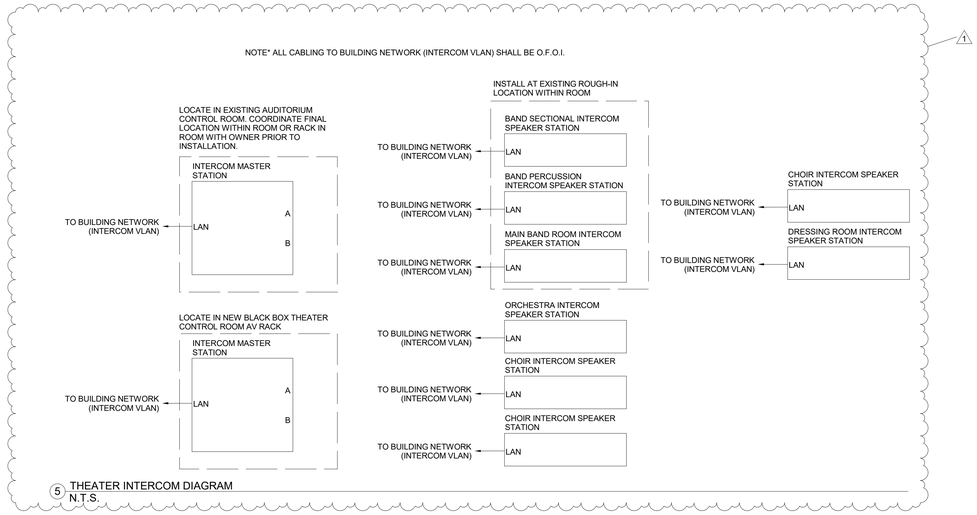

5 THEATER INTERCOM DIAGRAM
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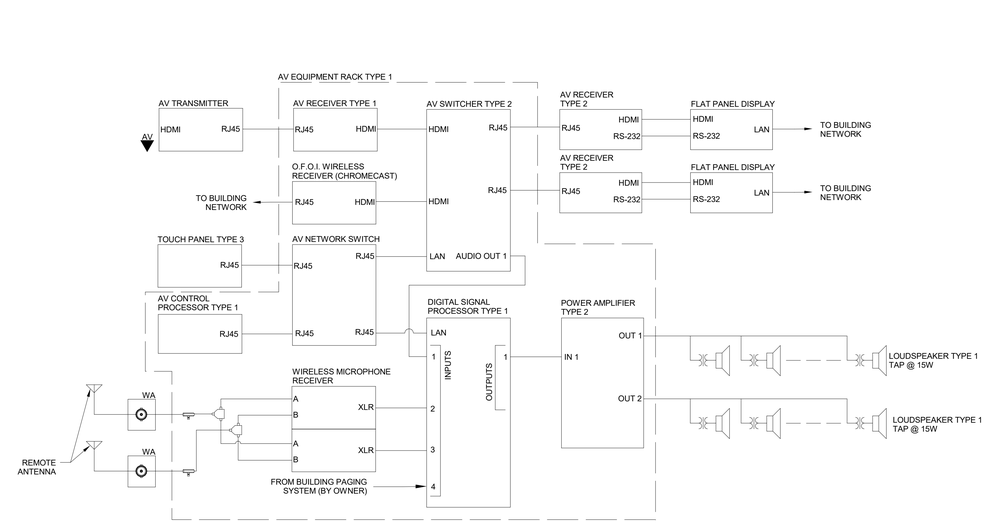

6 MEDIA CENTER AV DIAGRAM
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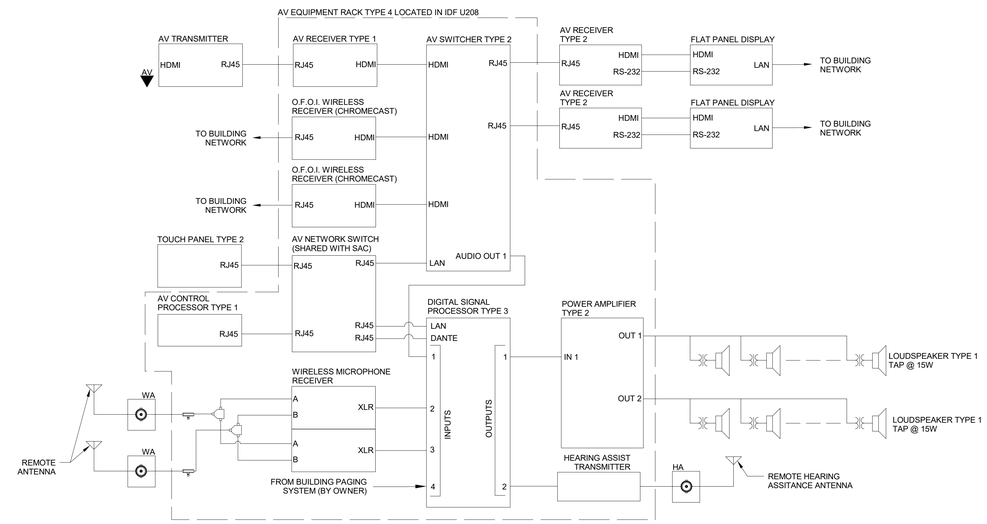

7 VIP LOUNGE AV DIAGRAM
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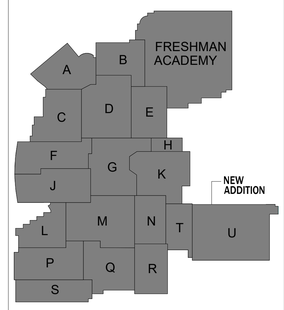

KEY PLAN

NORTH

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Drawing Title:
AV DIAGRAMS

REGISTERED COMMUNICATIONS DISTRIBUTION DESIGNER BICSI RCDD
Douglas J Driscoll
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EXPIRES 12-31-26

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