



Powers/Hagerman/Corgroup  
10315 Allisonville Rd  
Fishers, IN 46038

## **Eastwood Middle School Addendum 5 11/16/18**

---

1. The geotechnical report dated 11/8/18 is attached.
2. Attached is an updated site logistics plan.
3. Specification Section
4. In Specification Section 011200 Multiple Contract Summary, Section 1.6 Temporary Facilities, delete paragraphs N and O and replace with the following.
  - N. Temporary Electrical(Replaces N & O):
    1. Temporary IOSHA Building Lighting: BP 20-Electrical shall furnish , Install, maintain and remove a temporary lighting system throughout the building, New structures and existing areas that the ceilings and lighting has been removed. Any “task Specific” lighting required shall be by the bid package(BP) subcontractor requiring the lighting.
    2. BP 20 shall also furnish, install and maintain, and remove a temporary 120 volt power panels in each PHASE area, new and existing that will supply the new construction. Panels will be located to provide power to within 100’ of any location in the PHASE.
    3. Temporary office trailers-BP 20 shall furnish a 400AMP service to the construction trailer area(NE corner of the site shown on the Flex/Phasing plan). Furnish, Install and remove the service. Provide required permits and plan on hooking up 4 construction trailers.
    4. Temporary Power(BP 20) per PHASE will be energized after the structural steel erection. Prior all required power will be supplied by each contractor to complete their work. This includes providing generators if required.
  5. In Specification Section 011200 Multiple Contract Summary, Section 1.6 Temporary Facilities, add paragraph V.
    - V. Temporary Heat(Added Item BP 19)
      1. Temporary Heat and A/C using Permanent equipment: BP 19 shall understand the permanent new and existing heating and A/C system will be used to condition the building prior to substantial completion of the project. Therefore, this BP shall include the cost to perform the following items:
      2. BP 19 contractor shall submit a plan to maintain HVAC systems to existing and new spaces.
      3. BP 19 contractor shall include all cost to extend the equipment warranties from the time the equipment is started to actual substantial completion per PHASE.
      4. BP 19 contractor shall include cost to provide equipment and system maintenance, as required by the equipment manufacturer, from the time the equipment/system is started to the actual PHASE substantial completion.
      5. BP 19 shall include costs to furnish, install expendables such as filters, water treatment media(solid or liquid) and any items required by the equipment/system



**Powers/Hagerman/Corgroup**  
10315 Allisonville Rd  
Fishers, IN 46038

- manufacturer to properly operate the equipment/system. This includes replacing the filters as needed throughout the construction process.
6. BP 19 shall furnish, install, maintain/replace as needed, and remove temporary filter media over each supply and return grille throughout the PHASE during the system operation to substantial completion. The temporary filter media shall be left on each grille until the test and balance activity starts. If temporary filter media is not installed or is not maintained, BP 19 shall clean all duct that dirt/dust build up inside.
  7. BP 19 shall furnish and install permanent equipment filters prior to the mechanical system test and balance activity or as directed by the Construction Manager.
  8. BP 19 shall provide temporary controls as required to monitor and maintain all HVAC systems
6. In Specification Section 011200 Multiple Contract Summary, add the following paragraphs to contract 12b-Dyrwall, Acoustical Ceiling, EIFS.
19. Temporary Exterior Wall Construction: Furnish and install 1250 LF to extend from existing slab to bottom of existing deck. Wall to be weather/air tight. Wall to be construction of: Denglass, Reinforced-fire retardant visqueen, 3 5/8” metal stud, R-13 insulation and 5/8” drywall, drywall seams to be taped with painter’s tape. Furnish and install 4 – hollow metal doors, frames, and hardware sets. Temporary hardware set to include hinges, storeroom function lockset and construction core.
20. Temporary Interior Wall Construction: Furnish and install 650 LF of wall to extend to bottom of acoustical ceiling, then install visqueen from acoustical ceiling to bottom of deck. Wall construction to be 5/8” drywall both sides, 3 5/8” metal studs with sound insulation. Tape drywall seams with painter’s tape. Furnish and install 3 – hollow metal doors, frames, and hardware sets. Temporary hardware set to include hinges, storeroom function lockset and construction core.
7. The following specification Sections were previously issued. The contract responsibilities are as follows.
    - a. 03 05 59 -Penetrating Colloidal Silical Concrete Treatments-Contract 5.
    - b. 11 53 13 Laboratory Fume Hood-Contract 17
    - c. 11 61 33 Theatrical Rigging Systems-Contract 12a
    - d. 12 66 13 Telescoping Stands-Contract 12a
  8. Delete the previously issued specification sections 01 23 00 Alternates and 00 43 23 Alternates form and replace with the attached.

**Attachments:**

Architectural Addendum 5 dated 11/16/18

Geotechnical Report dated 11/8/18

Site Logistics Plan

Specification Section 01 23 00 Alternates (Revised Addendum 5)

Specification Section 00 43 23 Alternates form (Revised Addendum 5)

**SECTION 012300 – ALTERNATES (Revised Addendum 5)****PART 1 - GENERAL****1.1 RELATED DOCUMENTS**

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

**1.2 SUMMARY**

- A. Section includes administrative and procedural requirements for alternates.

**1.3 DEFINITIONS**

- A. Alternate: An amount proposed by bidders and stated on the Bid Form for certain work defined in the bidding requirements that may be added to or deducted from the base bid amount if the Owner decides to accept a corresponding change either in the amount of construction to be completed or in the products, materials, equipment, systems, or installation methods described in the Contract Documents.
  - 1. Alternates described in this Section are part of the Work only if enumerated in the Agreement.
  - 2. The cost or credit for each alternate is the net addition to or deduction from the Contract Sum to incorporate alternates into the Work. No other adjustments are made to the Contract Sum.

**1.4 PROCEDURES**

- A. Coordination: Revise or adjust affected adjacent work as necessary to completely integrate work of the alternate into Project.
  - 1. Include as part of each alternate, miscellaneous devices, accessory objects, and similar items incidental to or required for a complete installation whether or not indicated as part of alternate.
- B. Execute accepted alternates under the same conditions as other work of the Contract.
- C. Schedule: A schedule of alternates is included at the end of this Section. Specification Sections referenced in schedule contain requirements for materials necessary to achieve the work described under each alternate.

**PART 2 - PRODUCTS (Not Used)****PART 3 - EXECUTION****3.1 SCHEDULE OF ALTERNATES**

## A. Alternate No. 01 – Wood seat bleachers

Base Bid – Provide plastic bleachers per Section 126600 “TELESCOPING STANDS” in both gymnasiums.

Alternate – In lieu of plastic bleachers, provide wood bleachers per Section 126600 “TELESCOPING STANDS” in both gymnasiums.

## B. Alternate No. 02-LVT flooring in corridors

Base Bid – Provide Vinyl Composition Tile (VCT) per Section 096519 “RESILIENT TILE FLOORING” in the corridors where indicated.

Alternate – In lieu of VCT, provide Luxury Vinyl Tile (LVT) per Section 096519 “RESILIENT TILE FLOORING” in the corridors where indicated.

## C. Alternate No. 03- Gymnasium HVAC

Base Bid – Existing HVAC equipment to remain. Provide new piping and reconnect to existing AHU’s in the main gymnasium.

Alternate – Replace AHU’s with new RTU’s, provide new ductwork and relief hoods as well as electrical and structural scope to power the units in both gyms as indicated in the Contract Documents.

## D. Alternate No. 04- 2nd Floor Glazing

Base Bid – Provide glazing type IG-1 as indicated on the A-600 sheets at all exterior first floor glazing.

Alternate Bid – Provide IG-1 in lieu of IG-3 on at all exterior second floor glazing. See 088000 “GLAZING” and A-600 Series drawings.

## E. Alternate No. 05-Epoxy flooring in cafeteria



Base Bid – Provide Luxury Vinyl Tile (LVT) per Section 096519 “RESILIENT TILE FLOORING” in the cafeteria.

Alternate – In lieu of LVT, provide Resinous Flooring and base per Section 096723.17 “RESINOUS FLOORING – LEVEL 3” in the cafeteria.

F. Alternate No. 06- Locker room HVAC

Base Bid – Mechanical units to remain in the locker rooms. Remove existing diffusers, clean existing ductwork, and then reinstall the existing diffusers into the new ceiling and reconnect to existing ductwork. Provide new fire alarm and fire protection.

Alternate – Replace existing AHU and replace with new RTU, reconnect RTU to existing duct work, remove existing diffusers, clean existing ductwork, and then reinstall the existing diffusers into the new ceiling and reconnect to existing ductwork as indicated in the Contract Documents.

G. Alternate No. 07- P.E. and Locker room G103A and Ancillary spaces as indicated on A-101.

Base Bid – Lockers to remain, new ceiling. Fire alarm and fire protection.

Alternate – Provide new 12”x12”x72” (6 high, slope top) P.E. lockers in main corridor as indicated. Remove and replace lockers in G103A with 15x15x36 double height lockers as indicated in the Drawings and Specification Section 105113 “METAL LOCKER.” Demo door and enclose wall as indicated and provide two new doors to Storage as indicated on A-101. Add chain link fence with 2 gates as indicated.

H. Alternate No. 08- Kitchen freezer and Cooler

Base Bid – Existing Freezer and Cooler to remain in the kitchen.

Alternate – Provide new Freezer (Item #5) and Cooler (Item #13) (per Section 114000 “FOOD SERVICE EQUIPMENT”) including roof mounted condensers, electrical to power units, and data rough-ins to monitor the units. Infill area of recessed slab south of new Freezer to flush with Kitchen finish floor. Provide associated shelving items #6 and #7 as well as #14 and #15.

I. Alternate No. 09-Kitchen and support spaces renovation

Base Bid – Upgrade fire alarm and fire protection only in kitchen and support spaces as well as exhaust fan for dishwasher.

Alternate– Renovate the Kitchen including new CMU wall for Hood assembly, the Hood (Item 23), Vegetable Prep Table & Sink (Item 16), Prep Table & Sink (Item 25), Handwashing Sink (Item 12), associated mechanical (ductwork, piping, and RTU), plumbing, fire protection, and electrical work, new resinous flooring, wall painting, ceiling tile, laundry equipment connections, and renovations to staff restrooms and custodial room. Provide items #24 Hot Water Dispenser and #55 Stainless Steel Wall Cabinet.

J. Alternate No. 10- Kitchen pass through units

Base Bid – No kitchen pass through units.

Alternate – Provide 3 Single Door Pass-thru Refrigerator Units (Item 28) and 3 Single Door Pass-Through Heated Cabinets (Item 29) as indicated in Section 114000 “FOOD SERVICE EQUIPMENT” and in the Food Service Drawings.

K. Alternate No. 11-Mobile Kitchen tables and Combi Oven

Base Bid – No mobile worktables or Combi oven.

Alternate – Provide 2 mobile kitchen tables (Item 26) and a Combi Oven with Stand (Item 21) as indicated in Section 114000 “FOOD SERVICE EQUIPMENT” and in the Food Service Drawings.

L. Alternate No. 12 – Kitchen serving line & Milk Coolers

Base Bid – No new 3rd Serving line or milk coolers.

Alternate – Provide 3rd Serving Line, including Serving Table (Item 37), Drop-in Two Pan Hot/cold Well (Item 38), Self-Serve Breath Guard (Item 39), Serving Table (Item 40), Drop-In Frost Top (Item 41), Self-Serve Breath Guard (Item 42) as well as 2 Milk Coolers (Item 49) as indicated in Section 114000 “FOOD SERVICE EQUIPMENT” and in the Food Service Drawings.

M. Alternate No. 13 – Acoustical Treatment – Band, Choir, Orchestra, Practice & Ensemble

Base Bid – Provide APC-1 ceiling only in band, choir, orchestra, practice rooms and ensemble room.

Alternate – Provide Acoustical wall panels, acoustic ceiling APC-4 and Waveform Harmonix-K ceiling panels in the band, choir, orchestra, and ensemble rooms as indicated in the Contract Documents.

N. Alternate No. 14 – Acoustical Treatment – Cafetorium

Base Bid – Provide APC-4 and trim as indicated on AC1F1. Do not provide any acoustic wall treatment or ceiling reflector at front of Platform in the Cafeteria.

Alternate Bid – Provide acoustic wall treatment per Sheet I-203. Provide acoustic reflector at front of Platform per drawings.

O. Alternate No. 15 – TPO Roof

Base Bid – Provide EPDM roof membrane per SECTION 075323.

Alternate Bid – Provide TPO roof membrane per SECTION 075423.

P. Alternate No. 16 – Air Cooled Chillers – Specification Section 236423. Provide pricing for the following alternate manufacturers: The owner will choose one of the alternates to create a complete project. Install per the contract documents. Any changes in electrical, mechanical, or temperature controls that are required for non-basis of design equipment are the responsibility of the installing contractor.

Base Bid – No equipment provided

Alt A – Daikin

Alt B – Trane

Alt C – York

Q. Alternate No. 17 – Modular Central-Station Air-Handling Units – Specification Section 237313 Provide pricing for the following alternate manufacturers: The owner will choose one of the alternates to create a complete project. Install per the contract documents. Any changes in electrical, mechanical, or temperature controls that are required for non-basis of design equipment are the responsibility of the installing contractor.

Base Bid – No equipment provided

Alt A – Trane

Alt B – Daikin

Alt C – York

Alt D – Krueger

- R. Alternate No. 18 – Custom Air-Handling Units – Specification Section 237414. Provide pricing for the following alternate manufacturers: The owner will choose one of the alternates to create a complete project. Install per the contract documents. Any changes in electrical, mechanical, or temperature controls that are required for non-basis of design equipment are the responsibility of the installing contractor.

Base Bid – No equipment provided

Alt A – Haakon

Alt B – Ventrol

Alt C – York Custom

Alt D – Energy Labs

Alt E – Ingenia

- S. Alternate No. 19 – HVAC Controls – Specification Section 230900.99. Provide pricing for the following alternate manufacturers: The owner will choose one of the alternates to create a complete project. Install per the contract documents. Any changes in electrical, mechanical, or temperature controls that are required for non-basis of design equipment are the responsibility of the installing contractor.

Base bid: No controls.

Alt A: Provide Delta Controls.

Alt B: Provide Siemens Controls

Alt C: Provide Andover Controls

- T. Alternate No. 20 – Piping connections – Specification Section 232113. Provide pricing for the following alternate manufacturers: The owner will choose one of the alternates to create a complete project. Install per the contract documents. Any changes in electrical, mechanical, or temperature controls that are required for non-basis of design equipment are the responsibility of the installing contractor.

Base Bid – No work to be completed

Alt A – Provide fully welded pipe.

Alt B – Provide Grooved Pipe (Victaulic)

END OF SECTION 012300

**DOCUMENT 004323 - ALTERNATES FORM (Addendum 5)**

**1.1 GENERAL INFORMATION**

- A. Bidder: \_\_\_\_\_.
- B. Contact Name: \_\_\_\_\_.
- C. Contact Email: \_\_\_\_\_.
- D. Contact Mobile: \_\_\_\_\_.
- E. Alternates for bid package No. (turn in one sheet for each bid package) \_\_\_\_\_
- F. Project Name: Eastwood Middle School
- G. Project Location: 4401 E 62<sup>nd</sup> St., Indianapolis, IN 46220
- H. Owner: M.S.D. of Washington Township

**1.2 BID FORM SUPPLEMENT**

- A. This form is required to be attached to the Bid Form.

**1.3 DESCRIPTION**

- A. The undersigned Bidder proposes the amount below be added to or deducted from the Base Bid if particular alternates are accepted by Owner. Amounts listed for each alternate include costs of related coordination, modification, or adjustment.
  - 1. Cost-Plus-Fee Contract: Alternate price given below includes adjustment to Contractor's Fee.
- B. If the alternate does not affect the Contract Sum, the Bidder shall indicate "NO CHANGE."
- C. If the alternate does not affect the Work of this Contract, the Bidder shall indicate "NOT APPLICABLE."
- D. The Bidder shall be responsible for determining from the Contract Documents the effects of each alternate on the Contract Time and the Contract Sum.
- E. Owner reserves the right to accept or reject any alternate, in any order, and to award or amend the Contract accordingly within ninety (90) days of the Notice of Award unless otherwise indicated in the Contract Documents.

- F. Acceptance or non-acceptance of any alternates by the Owner shall have no effect on the Contract Time unless the "Schedule of Alternates" Article below provides a formatted space for the adjustment of the Contract Time.

**1.4 SCHEDULE OF ALTERNATES**

- A. Alternate No. 01 – Wood seat bleachers (Base bid-plastic seat bleachers)  
Add \$ \_\_\_\_\_
- B. Alternate No. 02-LVT flooring in corridors (Base bid-vct flooring in corridors)  
Add \$ \_\_\_\_\_
- C. Alternate No. 03-Add gymnasium HVAC (Base bid-gymnasium hvac to remain)  
Add \$ \_\_\_\_\_
- D. Alternate No. 04- Two layers of laminated glass on second floor windows (Base bid-one layer of laminated glass on second floor and two layers on first floor)  
Add \$ \_\_\_\_\_
- E. Alternate No. 05-Epoxy flooring in cafeteria (Base bid-lvt flooring)  
Add/Deduct (Circle One) \$ \_\_\_\_\_
- F. Alternate No. 06-Add locker room HVAC (Base bid-locker room hvac to remain)  
Add \$ \_\_\_\_\_
- G. Alternate No. 07-Replace lockers in PE and Locker rooms (Base bid-lockers to remain)  
Add \$ \_\_\_\_\_
- H. Alternate No. 08- Replace the kitchen freezer and Cooler (Base bid-cooler and freezer to remain)  
Add \$ \_\_\_\_\_
- I. Alternate No. 09-Kitchen and support spaces renovation (Base bid-kitchen and support spaces to remain)  
Add \$ \_\_\_\_\_
- J. Alternate No. 10-Add kitchen pass through units (Base bid-no pass through units)  
Add \$ \_\_\_\_\_

- K. Alternate No. 11-Mobile Kitchen tables and Combi Oven(Base bid-tables and Combi Oven to remain)

Add \$ \_\_\_\_\_

- L. Alternate No. 12 – New third kitchen serving line and milk coolers (Base bid-no new third serving line and milk coolers)

Add \$ \_\_\_\_\_

- M. Alternate No. 13 – Acoustical Treatment – Band, Choir, Orchestra & Ensemble (Base Bid-no acoustical treatment in these areas)

Add \$ \_\_\_\_\_

- N. Alternate No. 14 – Acoustical Treatment – Cafetorium (Base Bid-no acoustical treatment in cafetorium)

Add \$ \_\_\_\_\_

- O. Alternate No. 15 – TPO Roof (Bae Bid-EPDM ROOF)

Add \$ \_\_\_\_\_

- P. Alternate No. 16 – Air Cooled Chillers

- a. Add \$ \_\_\_\_\_

- b. Add \$ \_\_\_\_\_

- c. Add\$ \_\_\_\_\_

- Q. Alternate No. 17 – Modular AHUs

- a. Add \$ \_\_\_\_\_

- b. Add \$ \_\_\_\_\_

- c. Add \$ \_\_\_\_\_

- d. Add \$ \_\_\_\_\_

- R. Alternate No. 18 – Custom AHUs

- a. Add \$ \_\_\_\_\_

- b. Add \$ \_\_\_\_\_

- c. Add \$ \_\_\_\_\_

- d. Add \$ \_\_\_\_\_

- e. Add \$ \_\_\_\_\_



S. Alternate No. 19 HVAC Controls

- a. Add \$ \_\_\_\_\_
- b. Add \$ \_\_\_\_\_
- c. Add \$ \_\_\_\_\_

T. Alternate No. 20 Piping Connections

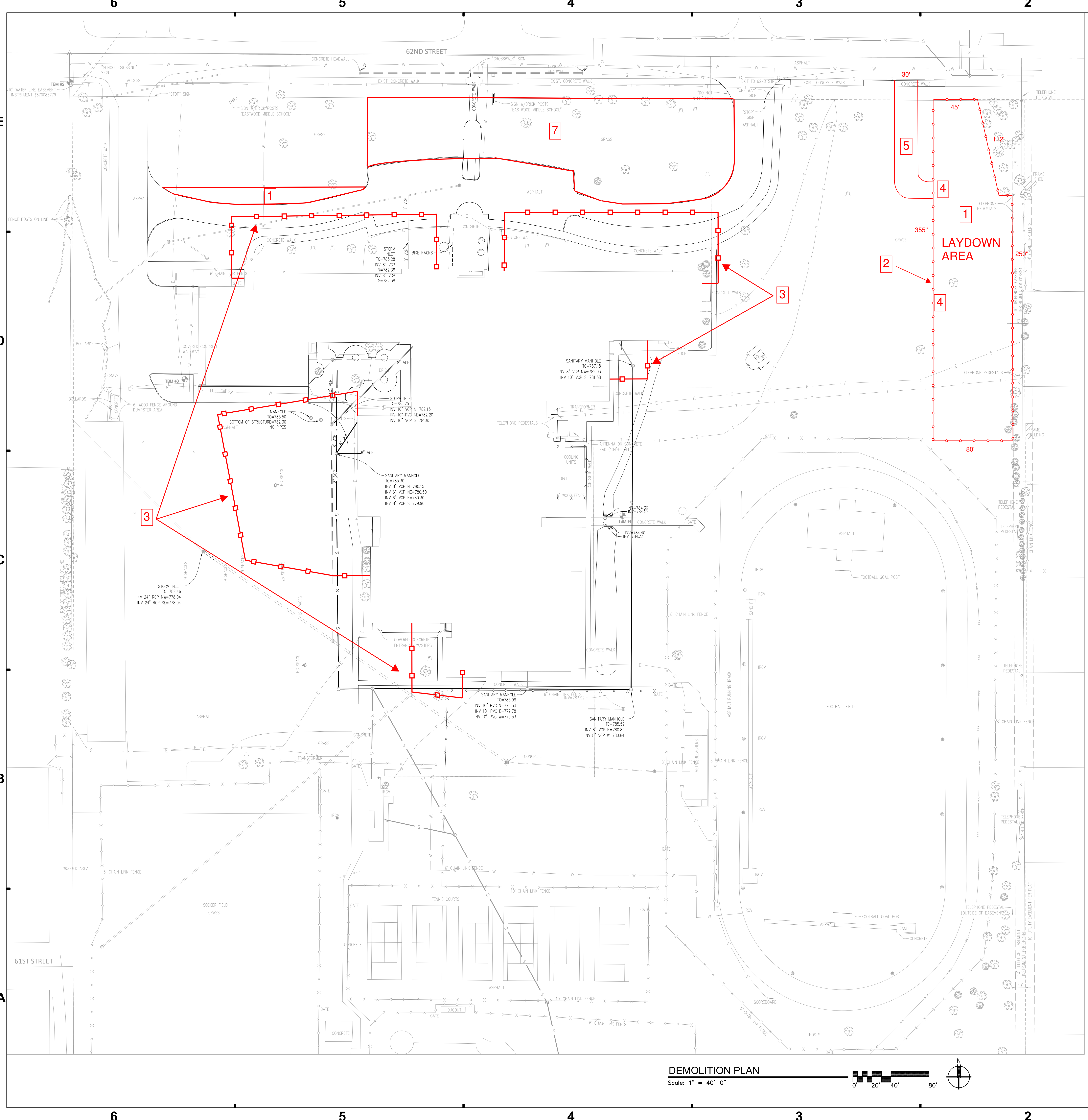
- a. Add \$ \_\_\_\_\_
- b. Add \$ \_\_\_\_\_

**1.5 SUBMISSION OF BID SUPPLEMENT**

- A. Respectfully submitted this \_\_\_\_ day of \_\_\_\_\_, 2012.
- B. Submitted By: \_\_\_\_\_ (Insert name of bidding firm or corporation).
- C. Authorized Signature: \_\_\_\_\_ (Handwritten signature).
- D. Signed By: \_\_\_\_\_ (Type or print name).
- E. Title: \_\_\_\_\_ (Owner/Partner/President/Vice President).

END OF DOCUMENT 004323





### Legend and Symbols

- 1 Strip and stockpile onsite 6" of topsoil and furnish, install and compact 6" of #53 stone. Summer of 2020 remove stone and replace topsoil. (Contract No. 1)
- 2 Fencing around Laydown Area to be 6' chain link with driven posts. (Contract No. 3b)
- 3 Fencing around building additions to be 6' chain link on stands. Provide stone or sand bags at stands. (Contract No. 12a)
- 4 2 - 10' swing gates. Two locations. (Contract No. 3b)
- 5 Strip and stockpile onsite 6" of topsoil and furnish, install and compact 6" of #53 stone. This is where the permanent drive will be located. Include sidewalk demo and permits. (Contract No. 1)
- 6 Not shown on this sheet, but required to be in bid is: Additional contractor parking to be added at south end of school property off of Vera Drive. Strip and stockpile onsite 6" of topsoil. Furnish, install, and compact 6" of #53 stone in at 140' x 260' area. Additionally, an 18" culvert pipe 40' long will need to be added for access off of Vera Dr. Drive to access parking area will require 6" topsoil to be stripped and stockpiled onsite. Furnish, install, and compact #53 stone in an 30' x 40' area for drive. Include right of way and/or driveway permit if required. (Contract No. 1)
- 7 Strip and stockpile onsite 6" of topsoil and furnish, install and compact 6" of #53 stone. Fall of 2019 remove stone and install for final condition. (Contract No. 1)

**DEMOLITION PLAN**  
Scale: 1" = 40'-0"

**SCHMIDT ASSOCIATES**  
415 Massachusetts Avenue  
Indianapolis, IN 46204  
www.schmidt-arch.com

Project No. 2017-114.EMS  
Project Date 10.17.2018  
Produced ZB/KB

### Bid Documents

Keith M. Buck  
These Drawings and Specifications, and all copies thereof are and shall remain the property and copyright of the Architect. They shall be used only with respect to this Project and are not to be used on any other Project or Work without prior written permission from the Architect.

#	Revision	Date
1	ADDENDUM #4	11-09-18

7321 SHADELAND STATION, INDIANAPOLIS IN 46255  
(317)841-4799 (317)841-4790  
shrewsbury.com

**KEY PLAN**

M.S.D. of Washington Township

**EASTWOOD MIDDLE SCHOOL**

### Site Logistics Plan



# **ADDENDUM NO. 5**

## **NOVEMBER 16, 2018**

PREPARED BY SCHMIDT ASSOCIATES FOR:  
**EASTWOOD MIDDLE SCHOOL**  
**WASHINGTON TOWNSHIP BOARD TRUSTEES, WASHINGTON TOWNSHIP, M.S.D.**  
**OF**

This Addendum consists of 12 Addendum pages and attachment pages totaling 58 pages.

Acknowledge receipt of this Addendum by inserting its number on the Bid Form. Failure to do so may subject the Bid to disqualification. This Addendum is part of the Contract Documents.

Bidder is encouraged to verify with reprographer of record all Addenda issued (do not rely exclusively on third party plan room services).

### **PART 1 - CHANGES TO PRIOR ADDENDA**

#### **1.1 ADDENDUM NO. 2**

A. In Item number 2.2, D, 1 change 3.8, A as follows:

“A. Glass type G2 for laminated glazing: ¼” thick clear annealed glass.”

### **PART 2 - CHANGES TO THE PROJECT MANUAL**

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

#### **2.1 DIVISION 07 – THERMAL AND MOISTURE PROTECTION**

A. **Section 072100 “THERMAL INSULATION”**

1. ADD Text to 2.3 A. 1. as follows:

“c. Johns Manville”

## 2.2 DIVISION 08 – OPENINGS

### A. Section 084113 – Aluminum-Framed Entrances and Storefronts

1. Delete word “Five” from subparagraph 1.8, A, 2 and replace it with word “Two”.
2. Delete numbers and words “[Five]”, “[20]”, and “<Insert number>” from subparagraph 1.8, B, 2. Warranty Period shall be 10 years.

## 2.3 DIVISION 09 – FINISHES

### A. Section 092900 “GYPSUM BOARD”

1. ADD subparagraph 2.3, D as follows:

“D. Abuse-Resistant Gypsum Board: ASTM C 1396/C 1396M gypsum board, tested according to ASTM C 1629/C 1629M.

- 1) Manufacturers: Subject to compliance with requirements, provide products by the following:
  - a) CertainTeed Corporation.
  - b) Continental Building Products, LLC.
  - c) Georgia-Pacific Building Products.
  - d) National Gypsum Company.
  - e) USG Corporation.”
  - 2) Core: 5/8”, Type X.
  - 3) Surface Abrasion: ASTM C 1629/ C 1620M, meets or exceeds Level 2 requirements.
  - 4) Indentation: ASTM C 1629/C 1629M, meets or exceeds Level requirements.
  - 5) Soft-Body Impact: ASTM C 1629/C 1629M, meets or exceeds Level 1 requirements.
  - 6) Long Edges: Tapered.
  - 7) Mold Resistance: ASTM D 3273, score of 10 as rated according to ASTM D 3274.

### B. Section 096468 “REPAIR AND REFINISH WOOD GYM FLOOR”

1. ADD Paragraph 2.1 F. as follows:

“F. Refinished wood floor areas where telescoping stands are to be located must have a floor tolerance under 1/8” in 10ft.”

## 2.4 DIVISION 10 – SPECIALTIES

### A. Section 102600 “WALL AND DOOR PROTECTION”

1. DELETE AND REPLACE Subparagraph 2.2, A, 1, f. as follows:

“f. Height: Top of door frame.”

**B. NOT USED**

**C. Section 102800 "TOILET, BATH, & LAUNDRY ACCESSORIES"**

1. ADD Text to 2.4. A. as follows:  
    "3. Saniflow Speedflow Plus 100-120V"

**2.5 DIVISION 12 – FURNISHINGS**

**A. Section 126613 "TELESCOPING STANDS"**

1. 2.01 8. ADD Interkal and Kodiak Industries Ltd. as approved manufacturers.

**2.6 DIVISION 14 - CONVEYING EQUIPMENT**

**A. Section 144200 "WHEELCHAIR LIFTS"**

1. 2.2. A. 1. c. : ADD Bruno as an accepted manufacturer.
2. DELETE AND REPLACE Text in 2.2 F. 1. a. as follows:  
    "a. Horsepower: 1 hp"

**2.7 DIVISION 21 - FIRE SUPPRESSION DIVISION**

**A. Section 211313 "WET SPRINKLER SYSTEM"**

1. DELETE AND REPLACE Article 2.1-5a in its entirety.  
    "a. Office Spaces: 130 – 200 sq.ft."

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

**A. Section 238126 "SPLIT-SYSTEM AIR CONITIONERS"**

1. ADD A MANUFACTUER LISTED UNDER 2.1.A:  
    "York"

**B. Section 238219 "FAN COIL UNITS"**

1. DELETE A MANUFACTUER LISTED UNDER 2.2.A:  
    "Nailor and Greenheck"
2. ADD A MANUFACTUER LISTED UNDER 2.2.A:  
    "Diakin"

**C. Section 238413 "HUMIDIFIERS"**

1. ADD A MANUFACTUER LISTED UNDER 2.1.A:  
“Nortec”
2. DELETE AND REPLACE Text within 2.1.B:  
“Water Source: Softened water”
3. DELETE AND REPLACE Text within 2.3.A:  
“Microprocessor control panel shall be field-installed on wall and field-piped to the humidifier grid; compatible for interface to a central HVAC instrumentation and controls system. Provide the following features andfunctions”

## **2.9 DIVISION 26 – ELECTRICAL**

### **A. Theatrical Requirements ""**

1. ADD Document titled “Theatrical Requirements” per the attached document after “Drawing Number 001 – Riser” in PART 3 of this Addendum..

## **2.10 DIVISION 27 – COMMUNICATIONS**

### **A. Section 27 15 00.23 “AUDIO-VIDEO COMMUNICATIONS HORIZONTAL CABLING”**

1. ADD Section 1.1.C.20 “USB Cabling”
2. MODIFY Section 2.6 “HDMI CABLING”  
ADD 2.6.2. to read as follows “Cable shall be built with Optical Fiber to allow for long distance connections”  
MODIFY 2.6.3 to include the following
3. Acceptable Manufacturers
  - a. Extron
  - b. Kramer
  - c. Comprehensive
  - d. C2G
  - e. Or Equal

3. ADD Section 2.2.21 “USB Cabling” to read as follows

### **B. Contractor shall provide and install USB cabling as required.**

1. Provide pre-molded cables in lengths as required.
2. Shall support USB 2.0
3. Acceptable Manufacturers
  - a. Extron
  - b. Kramer
  - c. Comprehensive
  - d. C2G
  - e. Or Equal

**C. Section 27 15 43 “COMMUNICATIONS FACEPLATES AND CONNECTORS”**

1. ADD Section 1.1.B.4. “AV Input Locations”
2. ADD Section 2.4 “AV Input Locations”

**2.4 AV INPUT LOCATIONS**

- A. Contractor shall provide AV Input boxes only as shown on the T-Series drawings. Any other locations shall be clarified with the Owner before use.
- B. The faceplate shall be a one-piece, dual-gang flush-mount style that fits standard NEMA openings and accommodates low-voltage box eliminators for a flush mount.
- C. The faceplate shall have connections for one (1) Optical HDMI, one (1) USB 2.0
- D. Color shall be White/Office White unless otherwise noted.
- E. Acceptable Manufacturers:
  1. Extron
  2. Legrand/C2G
  3. Or Equal

**F. Section 27 15 43 “CLASSROOM AV SYSTEM ”**

1. MODIFY Section 2.2 “Matrix Transmitter”
  - B.3 – Revise to read “Shall have a minimum of one (1) HDMI with stereo audio inputs.”
  - B.4 – Delete line item
  - B.11.a – Revise to read “Extron”
2. MODIFY Section 2.3 “Matrix Receiver”
  - B.6.a – Revise to read “Extron”

**PART 3 - CHANGES TO THE DRAWINGS**

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

**3.1 S-SERIES DRAWINGS**

**A. SHEET SF1A1 – FOUNDATION PLAN – UNIT A**

1. Add the following note No. 19 to the FOUNDATION PLAN NOTES: At all perimeter foundations, provide foundation drain per detail 23/S-400.

**B. SHEET SF1B1 – FOUNDATION PLAN – UNIT B**

1. Add the following note No. 19 to the FOUNDATION PLAN NOTES: At all perimeter foundations, provide foundation drain per detail 23/S-400.

**C. SHEET SF1C1 – FOUNDATION PLAN – UNIT C**

1. Add the following note No. 19 to the FOUNDATION PLAN NOTES: At all perimeter foundations, provide foundation drain per detail 23/S-400.

**D. SHEET SF1D1 – FOUNDATION PLAN – UNIT D**

1. Add the following note No. 19 to the FOUNDATION PLAN NOTES: At all perimeter foundations, provide foundation drain per detail 23/S-400.

**E. SHEET SF1E1 – FOUNDATION PLAN – UNIT E**

1. Add the following note No. 19 to the FOUNDATION PLAN NOTES: At all perimeter foundations, provide foundation drain per detail 23/S-400.

**F. SHEET SF1F1 – FOUNDATION PLAN – UNIT F**

1. Add the following note No. 19 to the FOUNDATION PLAN NOTES: At all perimeter foundations, provide foundation drain per detail 23/S-400.

**G. SHEET SF1G1 – FOUNDATION PLAN – UNIT G**

1. Add the following note No. 19 to the FOUNDATION PLAN NOTES: At all perimeter foundations, provide foundation drain per detail 23/S-400.

**H. SHEET S-500 – STRUCTURAL GENERAL NOTES**

1. Add the following note No. 19 to the STEEL JOIST NOTES: All roof joists in areas where a suspended ceiling is shown in the Architectural Drawings shall be designed to support the weight of the ceiling, and to meet the deflection criteria of roofs with suspended ceilings as noted above.



### 3.2 A-SERIES DRAWINGS

#### A. Drawing Number A-001 ARCHITECTURAL GENERAL NOTES AND ABBREVIATIONS *and* AF1A1-AF1G1.

##### 1. GENERAL PLAN NOTES

- a. Revise note "O" to read as follows:
  - 1) "Refer to Interiors drawings and specifications for corner guards."
- b. Revise note "U" to read as follows:
  - 1) "U. Locate defibrillator cabinets adjacent to fire extinguisher cabinets."
- c. ADD note "V" as follows:
  - 1) "V. Floor flatness immediately under operable panel partitions should not vary more than .125"."

#### B. Drawing Number A-002 Wall Types

1. ADD the following WALL TYPE NOTE to the WALL TYPE LEGEND
  - a. "D. EXTERIOR WALLS: GYPSUM BOARD IN THE EXTERIOR WALL ASSEMBLY CAN STOP 4" ABOVE CEILING WHERE THERE IS RIDID INSULATION IN THE WALL CAVITY.
2. DETAIL 1C/ A-002, Delete reference to self-adhering air barrier.

#### C. Drawing Number A-003

1. DELETE AND REPLACE per attached.

#### D. Drawing Numbers AD1A1-AD1G1 ARCHITECTURAL DEMOLITION UNIT PLANS

1. DELETE and REPLACE note #11 with the following:
  - a. "11. REMOVE EXISTING LOCKERS AND ASSOCIATED CONCRETE BASE AND BULKHEAD/ WALL FRAMING. OWNER'S ABATEMENT CONTRACATOR TO REMOVE EXISTING PLASTER. SEE A-003, TEMPORARY CLASSROOM PLAN WHERE LOCKERS WILL BE REUSED AND THEN REMOVED AFTER TEMPORARY CLASSROOM OCCUPATION OF THE CAFÉTERIA."

#### E. Drawing Numbers AF1A1-AF1G1 FLOOR PLAN NOTES

1. DELETE and REPLACE note #7 with the following:
  - a. "7. 10 22 26 – OPERABLE PANEL PARTITION AND TRACK. 8FT HIGH. "S4iD" WALL to DECK ABOVE. PROVIDE 1 LAMINATED FULL VIEW GLASS PANEL ON THE NORTH AND SOUTH PARTITIONS. "

2. DELETE text for notes 8 and 10 and REPLACE with the following:
  - a. 8 and 10: "102226 – OPERABLE PARTITION AND TRACK. MARKER SURFACE ON ALL PANELS. MANUAL. 8 FT HIGH. 3FT X 7FT MAN DOOR IN PARTITION. "S4iD" WALL TO DECK ABOVE."
- F. **Drawing Number AF1A1**
  1. DELETE AND REPLACE per attached.
- G. **Drawing Number AF1B1**
  1. DELETE AND REPLACE per attached.
- H. **Drawing Number AF1D1**
  1. Room LGI D112, add wall type "S4iD' " to the south west boxed area.
- I. **Drawing Number AF1F1**
  1. DELETE AND REPLACE per attached.
- J. **Drawing Number AF1B2**
  1. Room LGI D112, add wall type "S4iD' " to the south west boxed area.
- K. **Drawing Number AF1C2**
  1. Room LGI D112, add wall type "S4iD' " to the south west boxed area.
- L. **Drawing Number A-320, A-321, A-322, A-323, A-324**
  1. DELETE AND REPLACE per attached.
- M. **Drawing Number A-401**
  1. DELETE AND REPLACE per attached.
- N. **Drawing Number A-510**
  1. Detail 4D is a pocket for the Glass Partition.
    - a. Add opening for partition track, width as required per manufacturer.
    - b. Add plastic laminate doors to enclose pocket, by partition manufacturer.
  2. Details 4D, 6C, 6B, 6A:
    - a. Revise to provide (S4iD) insulation around perimeter when operable partitions are closed.

O. Drawing Number A-600

1. ADD the following door:
  - a. "ST3, 3'-0" x 7'-0" WD door in existing frame. Verify dimensions of existing frame. Hardware set 073. (Unit B1, under stair)"

P. Drawing Number A-601, A-602, A-603

1. DELETE AND REPLACE per attached.

### 3.3 I-SERIES DRAWINGS

A. Drawing Numbers IN1A1-IN1G1 INTERIOR PLAN NOTES

1. DELETE AND REPLACE Note #7 with the following:  
"7. 10 26 00 - PROVIDE SURFACE-MOUNTED CORNER GUARD STARTING AT 4" AFF TO TOP OF DOOR FRAME."
2. DELETE AND REPLACE Note #30 with the following:  
"30. CAFETERIA FLOORING ALTERNATE: PROVIDE RESINOUS FLOORING AND BASE (RSF-3/RSFB-3) IN PATTERN MATCHING LVT PATTERN- UP TO THREE (3) COLORS. BASE BID: PROVIDE FLOORING AS INDICATED. REFERENCE FLOOR PATTERN PLANS FOR CONFIGURATION."

B. Drawing Number IN1B1

1. ADD Elevation symbol 1A/200 (OH, opposite hand) at east wall of Resource B112, referencing typical classroom casework elevation.

C. Not used

### 3.4 M-SERIES DRAWINGS

A. Drawing Number MH1A1

1. DELETE AND REPLACE Drawing in its entirety.

B. Drawing Number MP1A1

1. DELETE AND REPLACE Drawing in its entirety.

C. Drawing Number MP1D1

1. DELETE AND REPLACE Drawing in its entirety.

D. Drawing Number MP1A1

1. DELETE AND REPLACE Drawing in its entirety.

**E. Drawing Number MH1A1**

1. DELETE AND REPLACE Drawing in its entirety.

**3.5 P-SERIES DRAWINGS**

**A. Drawing Number P-001**

1. ADD Note Plumbing General Note 11 as follows.

“11. INCOMING FIRE PROTECTION WATER SERVICE AND FIRE DEPARTMENT CONNECTION MAIN FROM 5'-0" OUTSIDE OF BUILDING TO FLANGED CONNECTION 12" ABOVE FLOOR OR FROM WALL SHALL BE PROVIDED BY DIVISION 22.”

**B. Drawing Number FP100, FP101 & FP102**

1. DELETE AND REPLACE Note Fire Protection General Notes in its entirety.

“1. REFER TO PHASING PLANS WHERE SELECT AREAS OF SPRINKLER ZONES WILL REQUIRE EARLY ACTIVATION. SAME ZONES MAY REQUIRE ONE OR MORE DRAIN DOWNS TO CONNECT REMAINING PHASED AREAS WITH REACTIVATION OF ZONE. DOWNTIME OF ACTIVATED ZONES MUST BE MINIMIZED.

2. SPRINKLER SCHEDULE:  
ROOMS WITHOUT CEILINGS: UPRIGHT SPRINKLERS  
ROOMS WITH CEILINGS: CONCEALED TYPE SPRINKLER HEADS  
WALL MOUNTING: SIDEWALL SPRINKLER HEADS  
SUBJECT TO FREEZING: DRY PENDANT SPRINKLER HEADS
3. ALL SPRINKLER COVERAGE SHALL COMPLY WITH MINIMUM STANDARDS AS ESTABLISHED BY NFPA 13, INCLUDING OFFICE SPACES.
4. EXTENDED COVERAGE SPRINKLER HEADS WILL BE PERMITTED AS ESTABLISHED BY NFPA 13.
5. INCOMING FIRE PROTECTION WATER SERVICE AND FIRE DEPARTMENT CONNECTION MAIN FROM 5'-0" OUTSIDE OF BUILDING TO FLANGED CONNECTION 12" ABOVE FLOOR OR FROM WALL SHALL BE PROVIDED BY DIVISION 22.
6. UNOCCUPIED CRAWLSPACE IS CONSTRUCTED OF NON-COMBUSTIBLE MATERIALS AND WILL NOT REQUIRE SPRINKLER COVERAGE AS DETERMINED BY CODE CONSULTANT.
7. EXISTING SPRINKLER COVERAGE IN KITCHEN AND CAFE SPACE SHALL BE REWORKED AS NEEDED TO ACCOMMODATE REVISED LAYOUTS, CEILINGS AND THE SCOPE OF OTHER DISCIPLINES. A COMPLETE REMOVAL AND REPLACEMENT IS NOT REQUIRED. ALL SPRINKLER HEADS SHALL BE REPLACED WITH NEW HEADS.”

### 3.6 E-SERIES DRAWING.

#### A. General

1. Add theatrical lighting riser drawing (Riser 001), see attached.
2. Add Document "Theatrical Requirements" following Riser 001.

#### B. Drawing Number ES102

DELETE AND REPLACE Drawing ES102 in its entirety.

#### C. Drawing Number ED1F1

1. DELETE AND REPLACE Drawing ED1F1 in its entirety.

#### D. Drawing Number EL1A1

1. DELETE AND REPLACE Drawing EL1A1 in its entirety.

#### E. Drawing Number EL1B0

1. DELETE AND REPLACE Drawing EL1B0 in its entirety.

#### F. Drawing Number EL1C0

1. DELETE AND REPLACE Drawing EL1C0 in its entirety.

#### G. Drawing Number EL1D0

1. DELETE AND REPLACE Drawing EL1D0 in its entirety.

#### H. Drawing Number EL1E0

1. DELETE AND REPLACE Drawing EL1E0 in its entirety.

#### I. Drawing Number EP1B1

1. DELETE AND REPLACE Drawing EP1B1 in its entirety.

#### J. Drawing Number EP1BR

1. MODIFY Drawing EP1BR so that conductor size for disconnect switch DS-RB5 is F70.

#### K. Drawing Number EP1D1

1. DELETE AND REPLACE Drawing EP1D1 in its entirety.

#### L. Drawing Number EP1D2

1. DELETE AND REPLACE Drawing EP1D2 in its entirety.

#### M. Drawing Number EP1DR

1. MODIFY Drawing EP1DR so that conductor size for disconnect switch DS-RD4 is F70.

**N. Drawing Number EP1E1**

1. DELETE AND REPLACE Drawing EP1E1 in its entirety.

**O. Drawing Number E-403**

1. DELETE AND REPLACE Drawing E-403 in its entirety.

**P. Drawing Number E-604**

1. DELETE AND REPLACE Drawing E-604 in its entirety.

**Q. Drawing Number E-605**

1. MODIFY Schedule Disconnect Switch Schedule so that disconnect DS-RB5 (serving ERU-2) has a 70A fuse.
2. MODIFY Schedule Disconnect Switch Schedule so that disconnect DS-RD4 (serving ERU-1) has a 70A fuse.

**R. Drawing Number E-606**

1. MODIFY Schedule 2HC1 so that 3 pole breaker at pole 5,7,9 (ERU-2) is 70A.
2. MODIFY Schedule 2HD1 so that 3 pole breaker at pole 5,7,9 (ERU-1) is 70A.

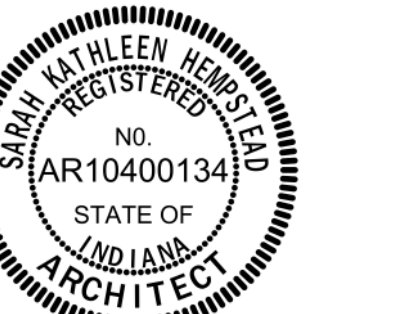
**END OF ADDENDUM 5**



**SCHMIDT ASSOCIATES**  
 415 Massachusetts Avenue  
 Indianapolis, IN 46204  
 www.schmidt-arch.com

Project No. 2017-114.EMS  
 Project Date 10.21.18  
 Produced CM TE

**Bid Documents**

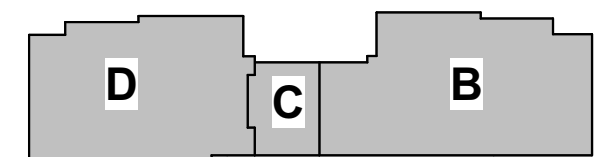


*Sarah K. Hempstead*  
 These Drawings and Specifications, and all copies thereof are and shall remain the property and copyright of the Architect. They shall be used only with respect to this Project and are not to be used on any other Project or Work without prior written permission from the Architect.

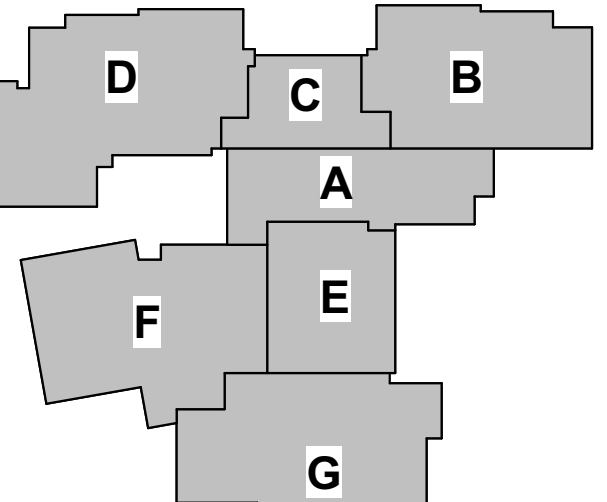
#	Revision	Date
A2	Addendum #2	11.01.2018
A5	Addendum #5	11.16.2018

4401 East 62nd Street  
 Indianapolis, IN 46220

**SECOND FLOOR**



**FIRST FLOOR**



**KEY PLAN**

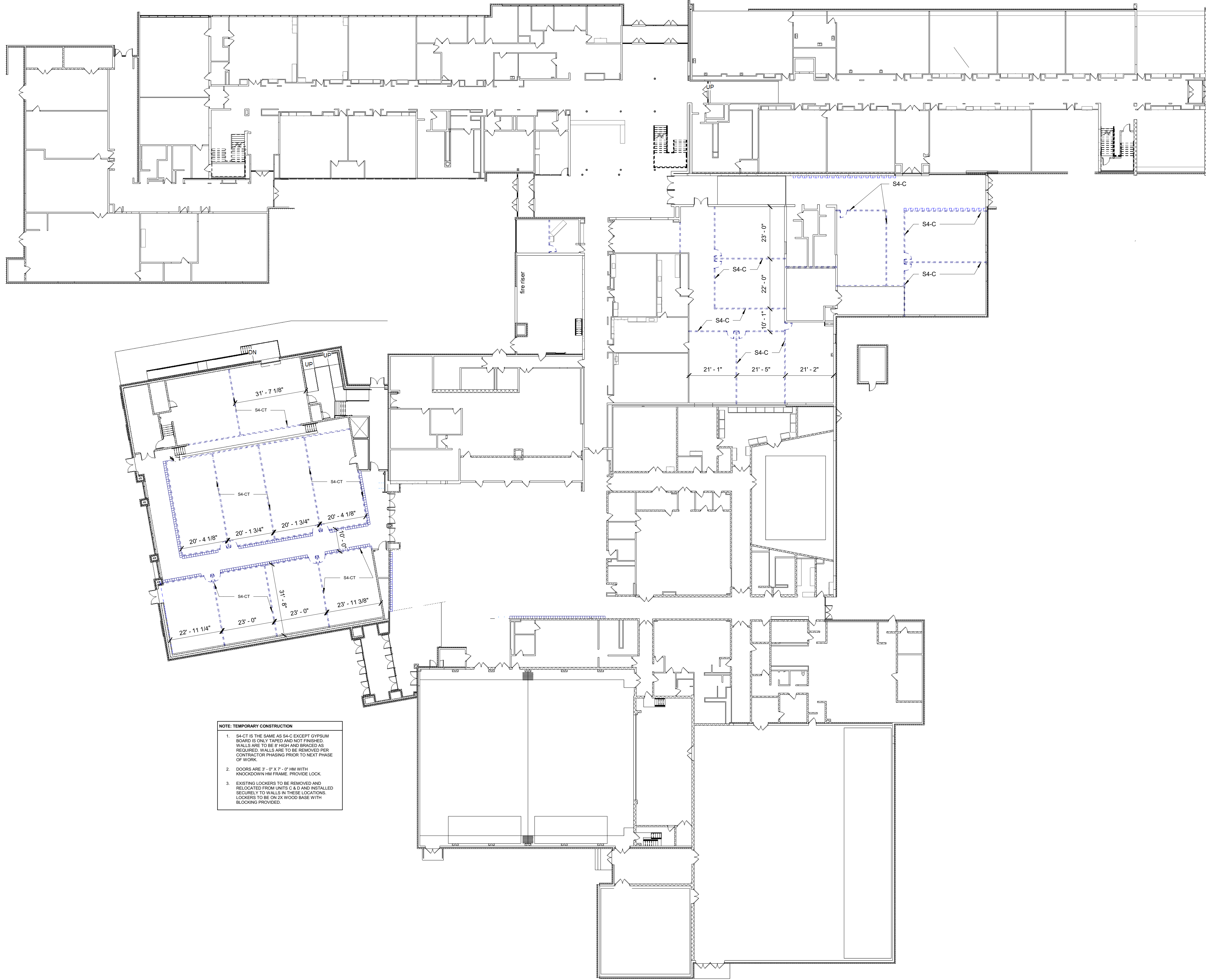


M.S.D. of Washington Township  
**EASTWOOD**  
  
**EAGLES**

**EASTWOOD MIDDLE SCHOOL**

**TEMPORARY CLASSROOM PLAN**

**A-003**



**NOTE: TEMPORARY CONSTRUCTION**

- S4-CT IS THE SAME AS S4-C EXCEPT COPPER BOARD IS ONLY TAPED AND NOT FINISHED. WALLS ARE TO BE FRAM AND BRACED AS REQUIRED. WALLS ARE TO BE REMOVED PER CONTRACTOR PHASING PRIOR TO NEXT PHASE OF WORK.
- DOORS ARE 2'-0" X 7'-0" HM WITH KNOCKDOWN FRAME. PROVIDE LOCK.
- EXISTING LOCKERS TO BE REMOVED AND RELOCATED FROM UNITS C & D AND INSTALLED SECURED TO WALLS IN THESE LOCATIONS. LOCKERS TO BE ON 2X WOOD BASE WITH BLOCKING PROVIDED.

6 5 4 3 2 1  
 E  
 D  
 C  
 B  
 A  
 6 5 4 3 2 1  
 6 5 4 3 2 1



### General Plan Notes

- A. All dimensions shown are to face of stud or masonry, unless noted otherwise. Dimensions designated as "CLR" or "clear" indicate a clear dimension from face of finish to face of finish. Dimensions of exterior walls are to outside edge of foundation.
- B. Dimensions for all openings for Mechanical, Plumbing, Fire Protection and Electrical shall be fire stopped at each floor penetration.
- C. Provide bracing and blocking as required in walls supporting casework, lockboards, markerboards, and restroom accessories as well as owner provided paper towel holders @ each sink.
- D. All door frames are located 4" from adjacent wall, unless noted otherwise.
- E. All exposed corners of CMU shall be bullnosed.
- F. Seal all joints between dissimilar materials.
- G. All gypsum wallboard is 5/8" Type "X", unless noted otherwise. Gypsum board is Abuse Resistant Type X Gypsum Board in Corridor TO 6 foot high. Abuse Resistant Gypsum board to 4 foot high in Sensory Room.
- H. Where new floors meet existing floors, a smooth, straight, and flush transition shall be constructed. Verify in field existing floor elevations and conditions where a new floor shall be constructed adjacent. Trim and patch existing floor as required to achieve desired transition.
- I. All exterior windows are Type "CW11", unless noted otherwise.
- J. All interior walls are Type "M8-D", unless noted otherwise.
- K. Base elevation is 0'-0" = 786.28' (United States Geological Survey data).
- L. Hatching within walls shown in plans and sections indicates new construction.
- M. All existing exterior doors are to be replaced with new exterior doors. All exterior doors will be tied to security and have door position switch monitors. Provide all necessary power, data and hardware.
- N. See plans for locations of door actuators/ accessible entry systems. Provide all power, data, and hardware required for the system to operate the doors.
- O. Refer to interiors drawings and specifications for corner guards.
- P. All exterior hollow metal doors and frames to receive 099600.99 High Performance Coating, color as directed.
- Q. Provide locker fillers to enclose locker banks to adjacent walls. Locate accessible lockers per owner/architect direction.
- R. Where exposed columns are w/in 6" of an adjacent wall, provide "L" shape steel closure plate to span distance. Provide high performance coatings to match column.
- S. Columns in Kitchen are to be wrapped w/ stainless steel per 114000.
- T. All exposed structure is to receive 099600.00 High Performance Coating, color as directed.
- U. Locate diffuser cabinets adjacent to fire extinguisher cabinets.
- V. Floor flatness immediately under operable panel partitions should not vary more than .125".

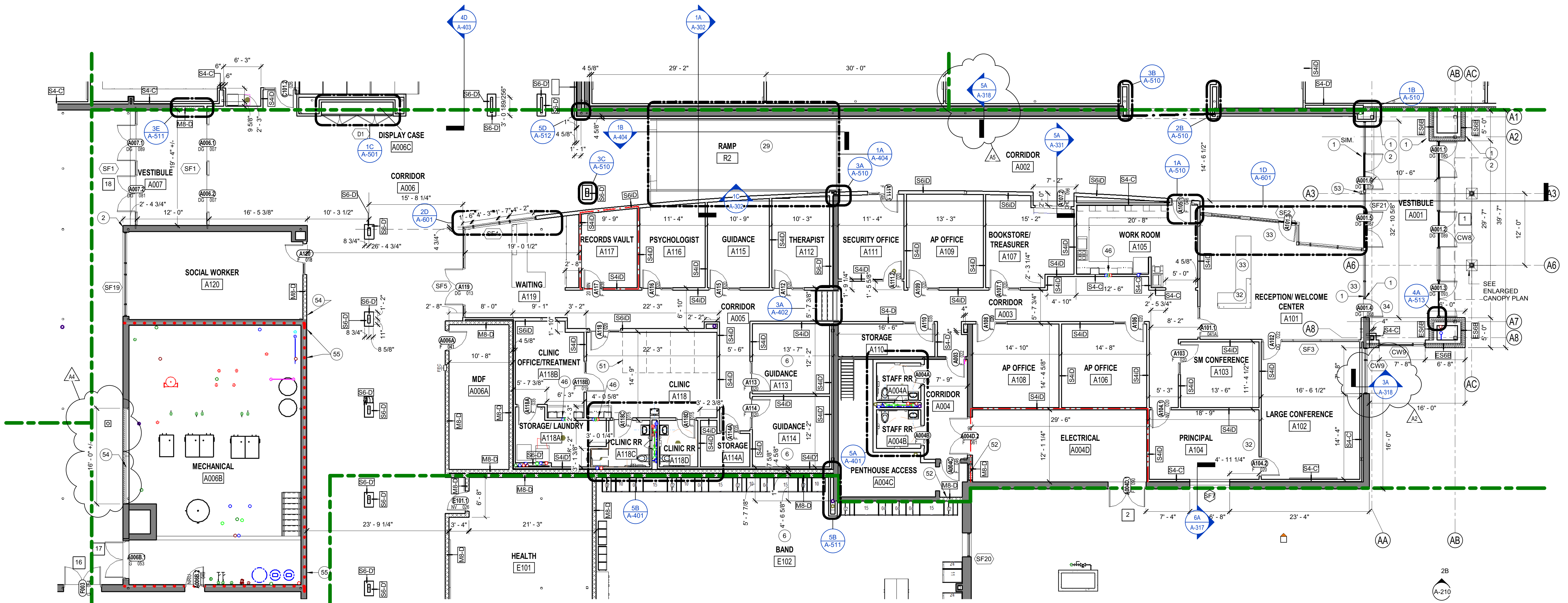
### FLOOR PLAN NOTES

#	Note
1	087100 DOOR ACTUATOR LOCATION. COORDINATE WITH E and T SERIES DRAWINGS
2	087100 DOOR ACCESS CONTROL LOCATION. COORDINATE WITH T and E SERIES DRAWINGS
3	03 30 00 - INFILL EXISTING SLAB WITH TOPPING MATERIAL TO LEVEL AFTER REMOVAL OF EXISTING QUARRY TILE AND THICK-SET BED. PREP FOR NEW FLOOR FINISH
4	CHROMA KEY GREEN PAINT. LENGTH OF EAST WALL ONLY.
5	FUME HOOD. AIR MASTER SYSTEMS ELIMINATOR 100 SERIES. AIRFLOW FUME HOOD w/ PLASTIC LAMINATE (MATCH OTHER CASEWORK IN ROOM) ADA BASE CAB. EPOXY TOP. CUR SINK. STANDARD LIGHT SWITCH. BLOWER SWITCH. GAS AND POWER ON FACE OF UNIT. STAINLESS STEEL SASH. CEILING ENCLOSURE. FINISHED BACK.
6	07 71 00 - ACOUSTIC JOINT SEALANT AROUND ENTIRE PERIMETER OF ROOM. SEAL WALLS TIGHT TO DECK AND FLOOR.
7	10 22 28 - OPERABLE PANEL PARTITION AND TRACK. 8FT HIGH. "S4ID" WALL TO DECK ABOVE. PROVIDE 1 LAMINATED GLASS PANEL ON THE NORTH AND SOUTH PARTITIONS.
8	10 22 28 - OPERABLE PARTITION AND TRACK. MARKER SURFACE ON ALL PANELS. MANUAL. 8 FT HIGH. 3FT X 7FT MAN DOOR IN PARTITION. "S4ID" WALL TO DECK ABOVE.
9	10 22 28 - GLASS OPERABLE PARTITION AND TRACK. 8FT HIGH. "S4ID" WALL TO DECK ABOVE.
10	102228 - OPERABLE PARTITION AND TRACK. MARKER SURFACE ON ALL PANELS. MANUAL. 8 FT HIGH. 3FT X 7FT MAN DOOR IN PARTITION. "S4ID" WALL TO DECK ABOVE.
11	SEAL EXISTING EXTERIOR WALL AT EXISTING ROOF DECK ENTIRE PERIMETER OF GYM BY FILLING DECK FLUTES AND GAPS AT TOP OF WALL W/ INSULATION AND BLOCKING AS REQUIRED.
12	10 51 13 - PE LOCKERS. (350) MINIMUM 12"x12"x12" - TO 6FT. SLOPE TOP - ALTERNATE BID. SEE A-101.
13	11 53 13 LABORATORY FUME HOOD. PROVIDE CLOSURE PANEL FROM HOOD TO ROOF MATCHING HOOD MATERIAL.
14	REWORK EXISTING DISH RETURN CONVEYOR BELT PER FOOD SERVICE DRAWINGS. PATCH EXISTING WALL TO MATCH SURROUNDING EXISTING SURFACES. TOOTH-IN CMU.
15	09 64 66 - REFINISH EXISTING ATHLETIC WOOD FLOOR. PROVIDE NEW COURT AND LINE MARKINGS TO COORDINATE WITH EXISTING GOALS AND VOLLEYBALL INSERTS. REMOVE AND REINSTALL DAMAGED WOOD. COORDINATE WITH NEW BLEACHER LAYOUT.
16	12 66 00 - MOTORIZED TELESCOPING BLEACHER SYSTEM. 2- STOPS. FULL EXPANSE EXTENDS OUT OVER COURT. PARTIAL OPENING IS BEHIND COURT LINES. VERIFY EXISTING FLOORING CONDITIONS FOR STRUCTURAL SUPPORT OF NEW BLEACHERS. VERIFY EXISTING DIMENSIONS, ADJACENT OBJECTS, AND OBSTRUCTIONS. SUPPLEMENT UNDERFLOOR STRUCTURE AS REQUIRED.
17	12 66 00 - MOTORIZED TELESCOPING BLEACHER SYSTEM w/ 26" ROW SPACING. (CAF E)
18	07 95 00 - FLOOR TO FLOOR EXPANSION COVER
19	PROVIDE ACOUSTICAL WALL PANELS. SEE ELEVATIONS ON SHEET

### FLOOR PLAN NOTES

#	Note
26	04 20 00 - SPECIAL SHAPE BRICK. INSIDE OR OUTSIDE CORNER.
27	11 61 43 - PLATFORM CURTAINS & TRACKS. SEE ENLARGED PLANS
28	14 42 00 - WHEELCHAIR LIFT
29	05 52 13 - NEW HAND RAIL/GUARDRAIL AT EXISTING RAMP OR STAIR. SEE ENLARGED PLANS.
30	07 95 00 - FLOOR TO WALL EXPANSION COVER
32	PANIC BUTTON ON MILLWORK. SEE TECHNOLOGY DRAWINGS.
33	08 71 00 - LOCK/UNLOCK SWITCH FROM RECEPTION DESK FOR 3 DOORS.
34	INTERCOM - TALK/VIDEO. SEE TECHNOLOGY DRAWINGS
35	08 53 00 - WALL MOUNTED MIRRORS. 36"x72"
36	10 51 13 - CORRIDOR LOCKERS. (1,100) MINIMUM 15X15X36 DOUBLE STACKED TO 6FT. SLOPE TOP. 350 MIN EACH POD.
37	PLYWOOD PANELS - SEE TECHNOLOGY DRAWINGS
38	DECORATIVE GRILLE w/ BLACK FABRIC ADHERED TO BACK SURFACE. SECURE TO GRILL TO PREVENT OBJECT PENETRATION IN CAVITY. REFER TO MECHANICAL DRAWINGS.
39	ALIGN NEW WALL W/ EXISTING
40	PATCH AND REPAIR EXISTING WALL ABOVE LOCKERS AFTER INSTALLATION OF NEW LOCKERS.
41	144200 - NEW CHAIR LIFT
42	087100 REWORK FOR DOOR ACCESS CONTROL LOCATION. COORDINATE WITH T and E SERIES DRAWINGS.
43	09 64 66 - REMOVE AND REPLACE DAMAGED WOOD FLOOR. RETAIN EXISTING STEEL SPLINE. MATCH EXISTING WOOD FLOOR IN SPECIES, THICKNESS, SIZE AND FINISH. DRILL HOLE IN WOOD. ANCHOR TO FLOOR. PLUG HOLE W/ SAME SPECIES.
44	EXISTING FLOOR DUCT TO REMAIN
45	PIN BACK ROW (S) OF BLEACHERS TO PROVIDE DOOR CLEARANCE. PROVIDE RAIL. MAINTAIN EGRESS PATH. V.I.F.
46	PROVIDE IN WALL BLOCKING FOR OWNER PROVIDED/CONTRACTOR INSTALLED EQUIPMENT.
49	116623 - ATHLETIC WALL PADS. 8FT HIGH. AROUND PERIMETER OF ROOM. CUSTOM FIT TO COLUMNS AND PROVIDE CUT OUTS AROUND EQUIPMENT AND DEVICES.
50	EXISTING LOCKERS TO REMAIN
51	10 21 23 - CUBICLE CURTAINS AND TRACK
52	099600 - HIGH PERFORMANCE COATING ON EXISTING PENTHOUSE EXTERIOR AND LOUVERS. COLOR AS DIRECTED BY ARCHITECT.
52	INFILL EXISTING WALL TO MATCH EXISTING ADJACENT MATERIALS. TOOTH-IN NEW MASONRY WHERE APPLICABLE.
53	084413 - WRAP COLUMN IN BREAK METAL TO MATCH ADJACENT CURTAIN WALL.
54	INFILL EXISTING WALL TO MATCH EXISTING ADJACENT MATERIALS. TOOTH-IN NEW MASONRY WHERE APPLICABLE.
55	PATCH EXISTING WALL W/ GYPSUM BOARD WHERE EXISTING ASBESTOS CONTAINING PLASTER IS TO BE REMOVED BY OTHER. SEE ASBESTOS ASSESSMENT.

**4D PENTHOUSE PLAN**  
1" = 10'-0"



**1A FIRST FLOOR UNIT PLANS - UNIT A**  
1/8" = 1'-0"

**SCHMIDT ASSOCIATES**  
415 Massachusetts Avenue  
Indianapolis, IN 46204  
www.schmidt-arch.com

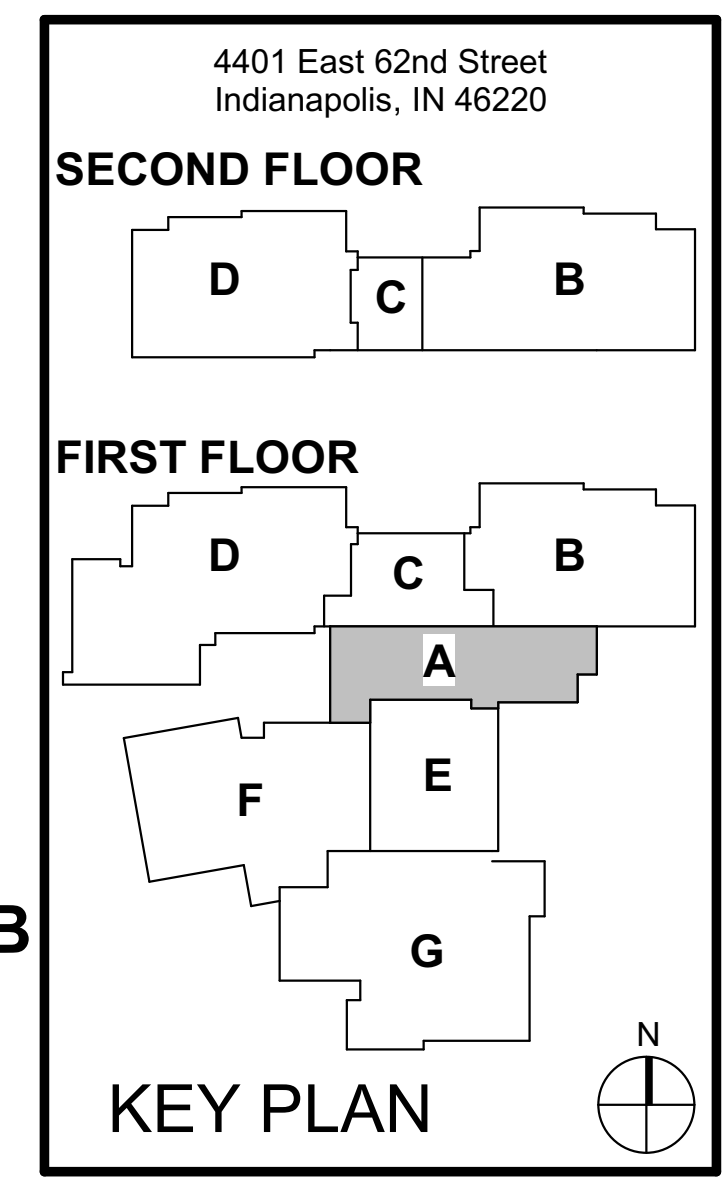
Project No. 2017-114.EMS  
Project Date 10.21.18  
Produced CM TE

## Bid Documents

Sarah K. Hempstead

These Drawings and Specifications, and all copies thereof are and shall remain the property and copyright of the Architect. They shall be used only with respect to this Project and are not to be used on any other Project or Work without prior written permission from the Architect.

#	Revision	Date
A2	Addendum #2	11.01.2018
A4	Addendum #4	11.09.2018
A5	Addendum #5	11.16.2018



M.S.D. of Washington Township

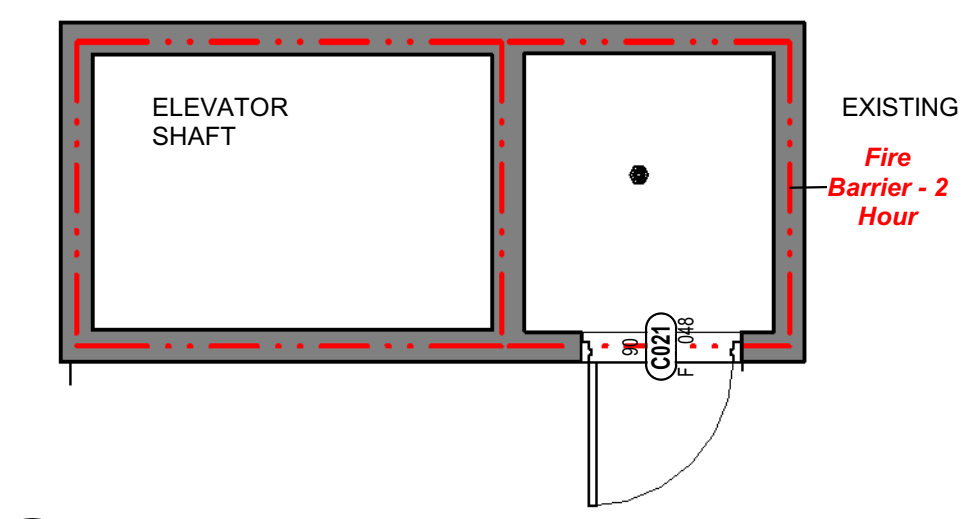
# EASTWOOD EAGLES

EASTWOOD MIDDLE SCHOOL



**General Plan Notes**

- A. All dimensions shown are to face of stud or masonry, unless noted otherwise. Dimensions designated as "CLR" or "clear" indicate a clear dimension from face of finish to face of finish. Dimensions of exterior walls are to outside edge of foundation.
- B. Dimensions for all openings for Mechanical, Plumbing, Fire Protection and Electrical shall be fire stopped at each floor penetration.
- C. Provide bracing and blocking as required in walls supporting casework, lockboards, markerboards, and restroom accessories as well as owner provided paper towel holders @ each sink.
- D. All door frames are located 4" from adjacent wall, unless noted otherwise.
- E. All exposed outside corners of CMU shall be bullnosed.
- F. Seal all joints between dissimilar materials.
- G. All gypsum wallboard is 5/8" Type "X", unless noted otherwise. Gypsum board is Abuse Resistant Type X Gypsum Board in Corridor TO 6 foot high. Abuse Resistant Gypsum board to 4 foot high in Sensory Room.
- H. Where new floors meet existing floors, a smooth, straight, and flush transition shall be constructed. Verify in field existing floor elevations and conditions where a new floor shall be constructed adjacent. Trim and patch existing floor as required to achieve desired transition.
- I. All exterior windows are Type "CW11", unless noted otherwise.
- J. All interior walls are Type "M8-D", unless noted otherwise.
- K. Base elevation is 0'-0" = 786.28' (United States Geological Survey data).
- L. Hatching within walls shown in plans and sections indicates new construction.
- M. All existing exterior doors are to be replaced with new exterior doors. All exterior doors will be tied to security and have door position switch monitors. Provide all necessary power, data and hardware.
- N. See plans for locations of door actuators/ accessible entry systems. Provide all power, data, and hardware required for the system to operate the doors.
- O. Refer to Interiors drawings and specifications for corner guards.
- P. All exterior hollow metal doors and frames to receive 099600.99 High Performance Coating, color as directed.
- Q. Provide locker fillers to enclose locker banks to adjacent walls. Locate accessible lockers per owner/architect direction.
- R. Where exposed columns are w/in 6" of an adjacent wall, provide "L" shape steel closure plate to span distance. Provide high performance coatings to match column.
- S. Columns in Kitchen are to be wrapped w/ stainless steel per 114000.
- T. All exposed structure is to receive 099600.00 High Performance Coating, color as directed.
- U. Locate diffuser cabinets adjacent to fire extinguisher cabinets.
- V. Floor flatness immediately under operable panel partitions should not vary more than .125".



**(2D) CRAWL SPACE - ELEVATOR EQUIPMENT ROOM**  
114" x 1'-0"

**FLOOR PLAN NOTES**

- | #  | Note  |
|----|---|
| 1  | 087100 DOOR ACTUATOR LOCATION. COORDINATE WITH E and T SERIES DRAWINGS.   |
| 2  | 087100 DOOR ACCESS CONTROL LOCATION. COORDINATE WITH T and E SERIES DRAWINGS.   |
| 3  | 03 30 00 - INFILL EXISTING SLAB WITH TOPPING MATERIAL TO LEVEL. AFTER REMOVAL OF EXISTING QUARRY TILE AND THICK-SET BED. PREP FOR NEW FLOOR FINISH.   |
| 4  | CHROMA KEY GREEN PAINT. LENGTH OF EAST WALL ONLY.   |
| 5  | FUME HOOD. AIR MASTER SYSTEMS ELIMINATOR 100 SERIES. AIRFLOW FUME HOOD w/ PLASTIC LAMINATE (MATCH OTHER CASEWORK IN ROOM) ADA BASE CAB. EPOXY TOP. CUP SINK. STANDARD LIGHT SWITCH. BLOWER SWITCH. GAS AND POWER ON FACE OF UNIT. STAINLESS STEEL SASH. CEILING ENCLOSURE. FINISHED BACK.   |
| 6  | 07 71 00 - ACOUSTIC JOINT SEALANT AROUND ENTIRE PERIMETER OF ROOM. SEAL WALLS TIGHT TO DECK AND FLOOR.  |
| 7  | 10 22 28 - OPERABLE PANEL PARTITION AND TRACK. 8FT HIGH. "S4ID" WALL TO DECK ABOVE. PROVIDE 1" LAMINATED GLASS PANEL ON THE NORTH AND SOUTH PARTITIONS.   |
| 8  | 10 22 28 - 102228 - OPERABLE PARTITION AND TRACK. MARKER SURFACE ON ALL PANELS. MANUAL. 8 FT HIGH. 3FT X 7FT MAN DOOR IN PARTITION. "S4ID" WALL TO DECK ABOVE.  |
| 9  | 10 22 28 - GLASS OPERABLE PARTITION AND TRACK. 8FT HIGH. S4ID WALL TO DECK ABOVE.   |
| 10 | 102226 - OPERABLE PARTITION AND TRACK. MARKER SURFACE ON ALL PANELS. MANUAL. 8 FT HIGH. 3FT X 7FT MAN DOOR IN PARTITION. "S4ID" WALL TO DECK ABOVE.   |
| 11 | SEAL EXISTING EXTERIOR WALL AT EXISTING ROOF DECK ENTIRE PERIMETER OF GYM BY FILLING DECK FLUTES AND GAPS AT TOP OF WALL W/ INSULATION AND BLOCKING AS REQUIRED.  |
| 12 | 10 51 13 - PE LOCKERS. (350) MINIMUM 12"X12"X12" - TO 6FT. SLOPE TOP - ALTERNATE BID. SEE A-101.  |
| 16 | 11 53 13 LABORATORY FUME HOOD. PROVIDE CLOSURE PANEL FROM HOOD TO ROOF. MATCH HOOD LAYOUT.  |
| 18 | REWORK EXISTING DISH RETURN CONVEYOR BELT PER FOOD SERVICE DRAWINGS. PATCH EXISTING WALL TO MATCH SURROUNDING EXISTING SURFACES. TOOTH-HAM ON.  |
| 19 | 09 64 66 - REFINISH EXISTING ATHLETIC WOOD FLOOR. PROVIDE NEW COURT AND LINE MARKINGS TO COORDINATE WITH EXISTING GOALS AND VOLLEYBALL INSERTS. REMOVE AND REINSTALL DAMAGED WOOD. COORDINATE WITH NEW BLEACHER LAYOUT.   |
| 20 | 12 66 00 - MOTORIZED TELESCOPING BLEACHER SYSTEM. 2- STOPS. FULL EXPANSION EXTENDS OUT OVER COURT. PARTIAL OPENING IS BEHIND COURT LINES. VERIFY EXISTING FLOORING CONDITIONS FOR STRUCTURAL SUPPORT OF NEW BLEACHERS. VERIFY EXISTING DIMENSIONS, ADJACENT OBJECTS AND OBSTRUCTIONS. SUPPLEMENT UNDERFLOOR STRUCTURES AS REQUIRED. |
| 21 | 12 66 00 - MOTORIZED TELESCOPING BLEACHER SYSTEM w/ 26" ROW SPACING. (CAFE)   |
| 22 | 07 95 00 - FLOOR TO FLOOR EXPANSION COVER   |
| 23 | PROVIDE ACOUSTICAL WALL PANELS. SEE ELEVATIONS ON SHEET   |
| 28 | 04 20 00 - SPECIAL SHAPE BRICK. INSIDE OR OUTSIDE CORNER.   |
| 27 | 11 61 43 - PLATFORM CURTAINS & TRACKS. SEE ENLARGED PLANS   |
| 28 | 14 42 00 - WHEELCHAIR LIFT  |
| 29 | 05 52 13 - NEW HAND RAIL/GUARDRAIL AT EXISTING RAMP OR STAIR. SEE ENLARGED PLANS.   |
| 30 | 07 95 00 - FLOOR TO WALL EXPANSION COVER  |
| 32 | PANIC BUTTON ON MILLWORK. SEE TECHNOLOGY DRAWINGS.  |
| 33 | 08 71 00 - LOCK/UNLOCK SWITCH FROM RECEPTION DESK FOR 3 DOORS.  |
| 34 | INTERCOM - TALK/VIDEO. SEE TECHNOLOGY DRAWINGS  |
| 35 | 08 83 00 - WALL MOUNTED MIRRORS - 36"X24"   |
| 36 | 10 51 13 - CORRIDOR LOCKERS. (1,100) MINIMUM 15X15X36 DOUBLE STACKED TO 8FT. SLOPE TOP 50 MIN EACH POD.   |
| 37 | PLYWOOD PANELS - SEE TECHNOLOGY DRAWINGS  |
| 38 | DECORATIVE GRILLE w/ BLACK FABRIC ADHERED TO BACK SURFACE. SECURE TO GRILLE TO PREVENT OBJECT PENETRATION IN CAVITY. REFER TO MECHANICAL DRAWINGS.  |
| 39 | ALIGN NEW WALL W/ EXISTING  |
| 40 | PATCH AND REPAIR EXISTING WALL ABOVE LOCKERS AFTER INSTALLATION OF NEW LOCKERS.   |
| 41 | 144200 - NEW CHAIR LIFT   |
| 42 | 087100 ROUGH-IN FOR DOOR ACCESS CONTROL LOCATION. COORDINATE WITH T and E SERIES DRAWINGS.  |
| 43 | 09 64 66 - REMOVE AND REPLACE DAMAGED WOOD FLOOR. RETAIN EXISTING STEEL SPLINE. MATCH EXISTING WOOD FLOOR IN SPECIES, THICKNESS, SIZE AND FINISH. DRILL HOLE IN WOOD. ANCHOR TO FLOOR. PLUG HOLE W/ SAME SPECIES.   |
| 44 | EXISTING FLOOR DUCT TO REMAIN   |
| 45 | PIN BACK ROW (S) OF BLEACHERS TO PROVIDE DOOR CLEARANCE. PROVIDE RAIL. MAINTAIN EGRESS PATH. V.I.F.   |
| 46 | PROVIDE IN WALL BLOCKING FOR OWNER PROVIDED/CONTRACTOR INSTALLED EQUIPMENT.   |
| 49 | 116823 - ATHLETIC WALL PADS, 6FT HIGH, AROUND PERIMETER OF ROOM. CUSTOM FIT TO COLUMNS AND PROVIDE CUT OUTS AROUND EQUIPMENT AND DEVICES.   |
| 50 | EXISTING LOCKERS TO REMAIN  |
| 51 | 10 21 23 - CUBICLE CURTAINS AND TRACK   |
| 52 | 099600 - HIGH PERFORMANCE COATING ON EXISTING PENTHOUSE EXTERIOR AND LOUVERS. COLOR AS DIRECTED BY ARCHITECT.   |
| 52 | INFILL EXISTING WALL TO MATCH EXISTING ADJACENT MATERIALS. TOOTH-IN NEW MASONRY WHERE APPLICABLE.   |
| 53 | 084413 - WRAP COLUMN IN BREAK METAL TO MATCH ADJACENT CURTAIN WALL  |
| 54 | INFILL EXISTING WALL TO MATCH EXISTING ADJACENT MATERIALS. TOOTH-IN NEW MASONRY WHERE APPLICABLE.   |
| 55 | PATCH EXISTING WALL W/ GYPSUM BOARD WHERE EXISTING ASBESTOS CONTAINING PLASTER IS TO BE REMOVED BY OTHER. SEE ASBESTOS ASSESSMENT.  |

**SCHMIDT ASSOCIATES**  
415 Massachusetts Avenue  
Indianapolis, IN 46204  
www.schmidt-arch.com

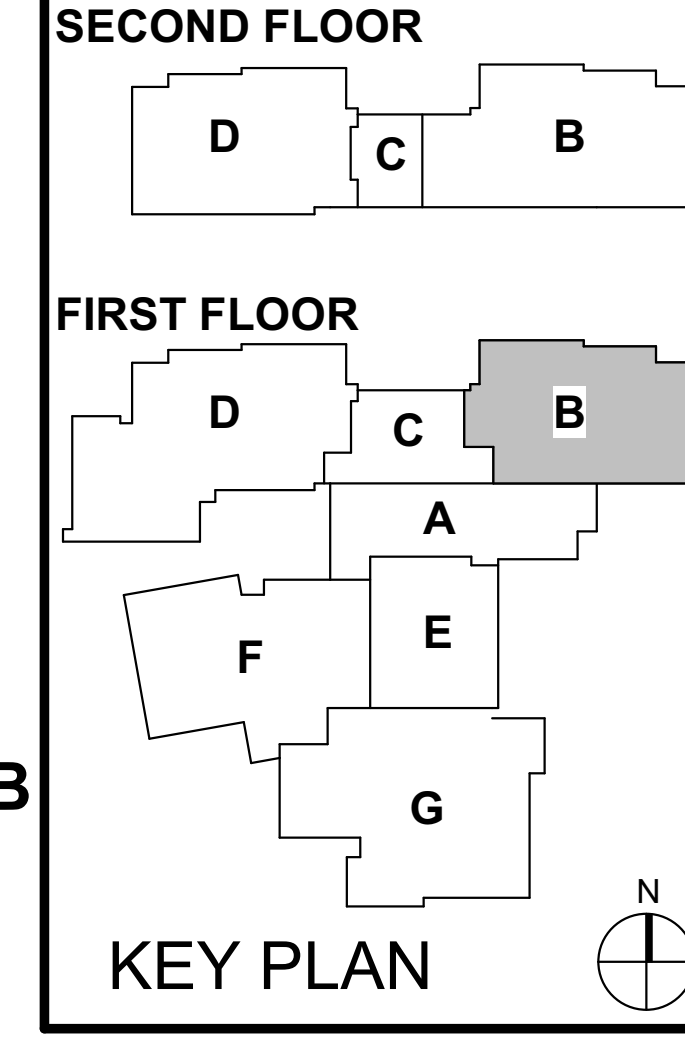
Project No. 2017-114.EMS  
Project Date 10.21.18  
Produced CM TE

**Bid Documents**

Sarah K. Hempstead

#	Revision	Date
A2	Addendum #2	11.01.2018
A4	Addendum #4	11.09.2018
A5	Addendum #5	11.16.2018

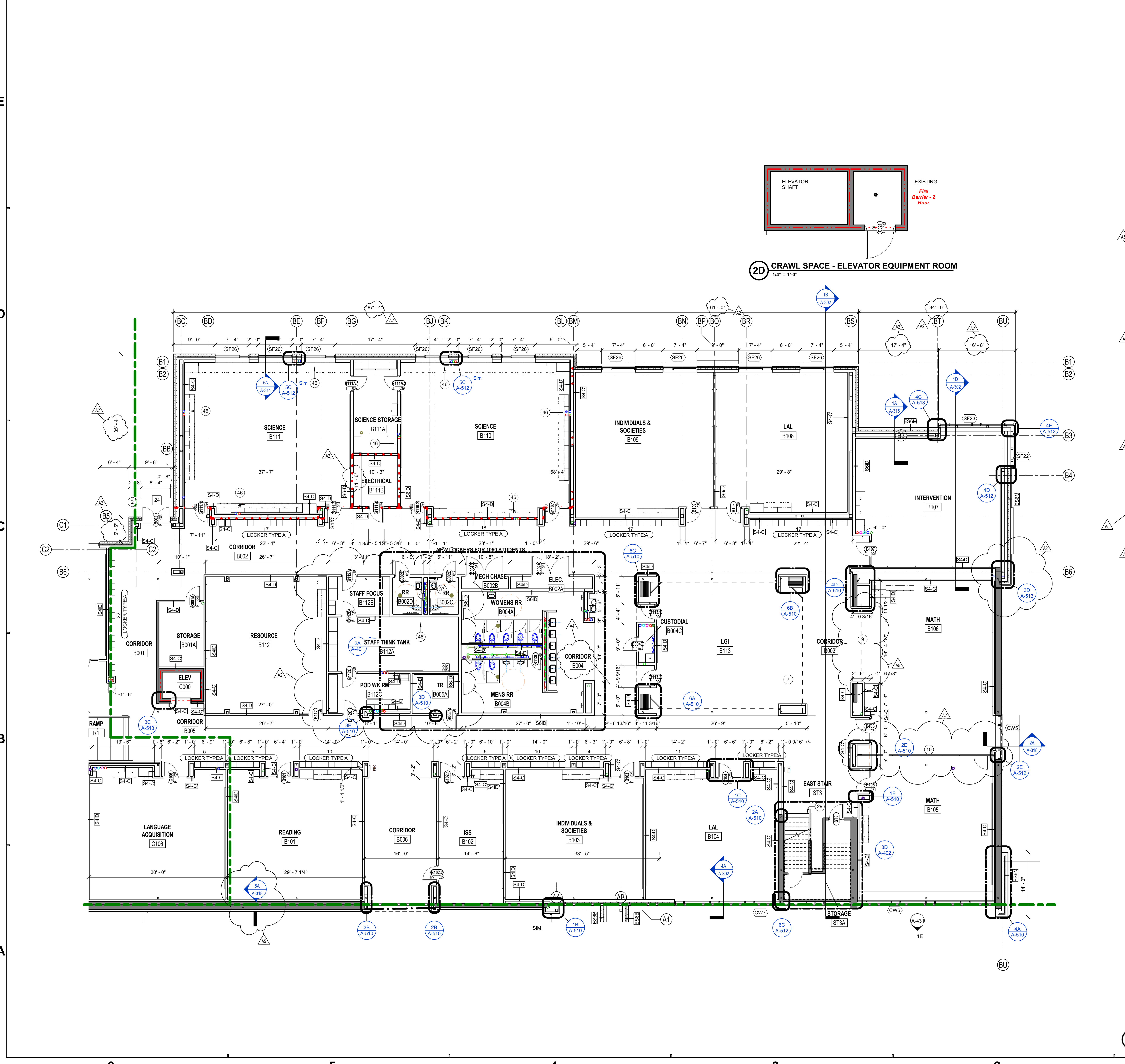
4401 East 62nd Street  
Indianapolis, IN 46220



M.S.D. of Washington Township  
**EASTWOOD**  
 **EAGLES**  
**EASTWOOD MIDDLE SCHOOL**

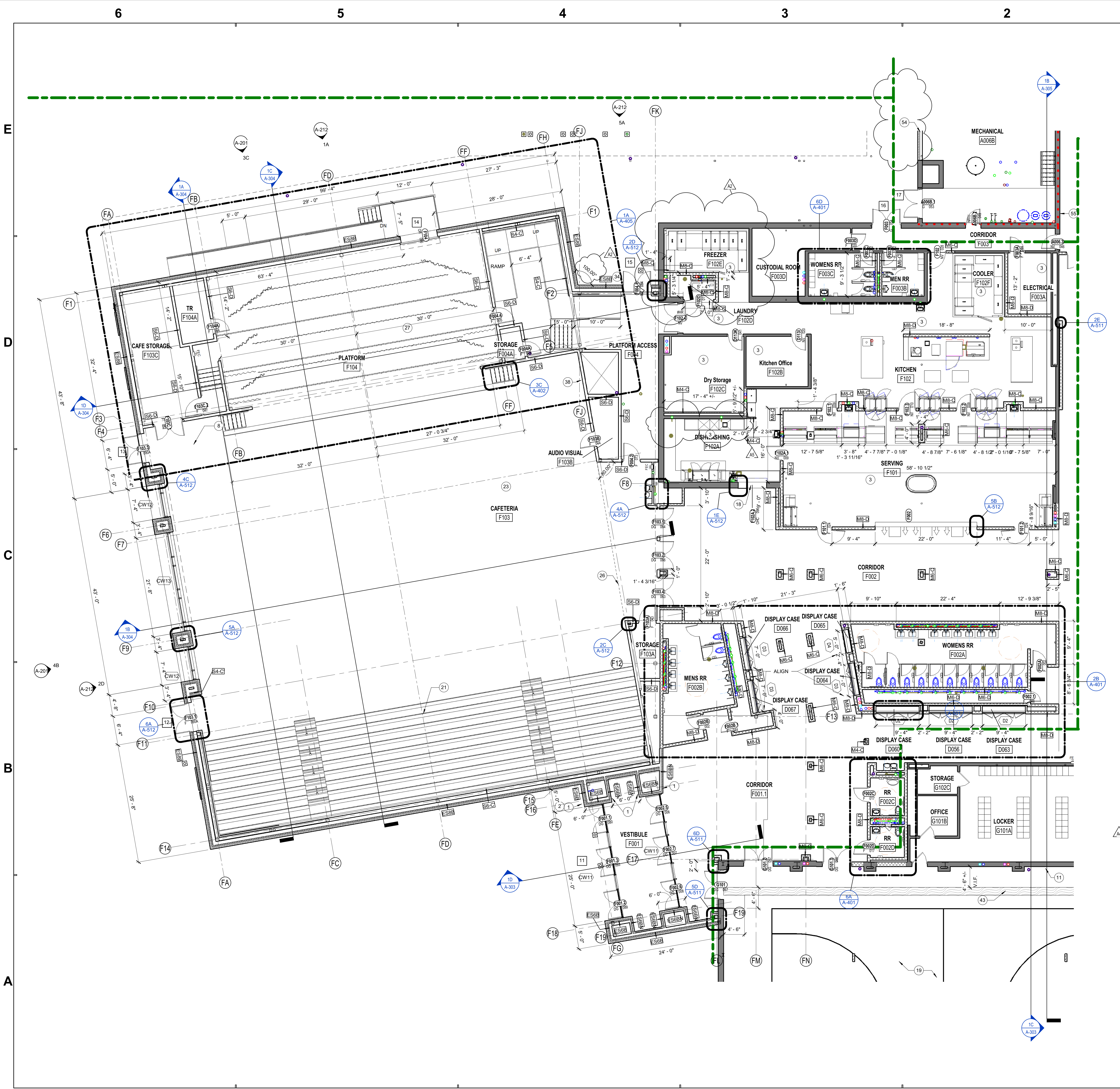
FIRST FLOOR PLAN - UNIT B

AF1B1



**(1A) FIRST FLOOR UNIT PLANS - UNIT B**  
1/8" = 1'-0"





**General Plan Notes**

- A. All dimensions shown are to face of stud or masonry, unless noted otherwise. Dimensions designated as "CLR" or "clear" indicate a clear dimension from face of finish to face of finish. Dimensions of exterior walls are to outside edge of foundation.
- B. Dimensions for all openings for Mechanical, Plumbing, Fire Protection and Electrical shall be fire stopped at each floor penetration.
- C. Provide bracing and blocking as required in walls supporting casework, lockers, marketboards, and restroom accessories as well as owner provided paper towel holders @ each sink.
- D. All door frames are located 4" from adjacent wall, unless noted otherwise.
- E. All exposed outside corners of CMU shall be bullnosed.
- F. Seal all joints between dissimilar materials.
- G. All gypsum wallboard is 5/8" Type "X", unless noted otherwise. Gypsum board is Abuse Resistant Type X Gypsum Board in Corridor TO 6 foot high. Abuse Resistant Gypsum board to 4 foot high in Sensory Room.
- H. Where new floors meet existing floors, a smooth, straight, and flush transition shall be constructed. Verify in field existing floor elevations and conditions where a new floor shall be constructed adjacent. Trim and patch existing floor as required to achieve desired transition.
- I. All exterior windows are Type "CW11", unless noted otherwise.
- J. All interior walls are Type "M8-D", unless noted otherwise.
- K. Base elevation is 0'-0" = 786.28' (United States Geological Survey data).
- L. Hatching within walls shown in plans and sections indicates new construction.
- M. All existing exterior doors are to be replaced with new exterior doors. All exterior doors will be tied to security and have door position switch monitors. Provide all necessary power, data and hardware.
- N. See plans for locations of door actuators/ accessible entry systems. Provide all power, data, and hardware required for the system to operate the doors.
- O. Refer to Interiors drawings and specifications for corner guards.
- P. All exterior hollow metal doors and frames to receive 099600.99 High Performance Coating, color as directed.
- Q. Provide locker fillers to enclose locker banks to adjacent walls. Locate accessible lockers per owner/architect direction.
- R. Where exposed columns are within 6" of an adjacent wall, provide "L" shape steel closure plate to span distance. Provide high performance coatings to match column.
- S. Columns in Kitchen are to be wrapped w/ stainless steel per 114000.
- T. All exposed structure is to receive 099600.00 High Performance Coating, color as directed.
- U. Locate diffuser cabinets adjacent to fire extinguisher cabinets.
- V. Floor flatness immediately under operable panel partitions should not vary more than .125".

**FLOOR PLAN NOTES**

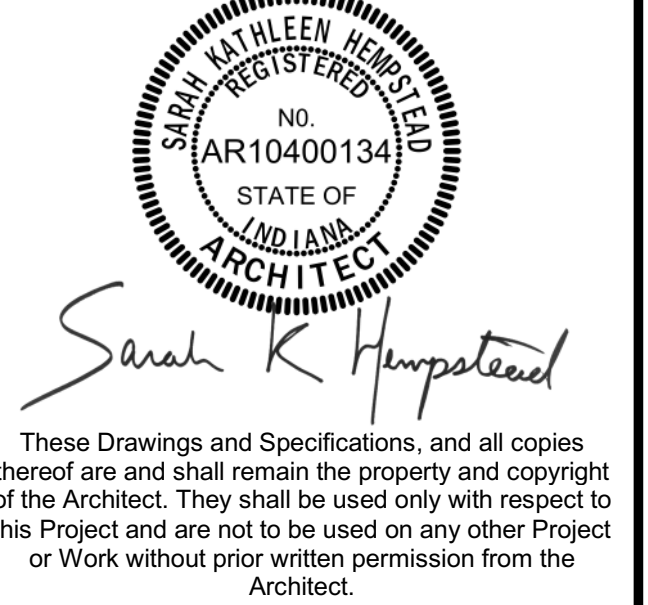
- | #  | Note   |
|----|--|
| 1  | 087100 DOOR ACTUATOR LOCATION. COORDINATE WITH E and T SERIES DRAWINGS.  |
| 2  | 087100 DOOR ACCESS CONTROL LOCATION. COORDINATE WITH T and E SERIES DRAWINGS.  |
| 3  | 03 30 00 - INFILL EXISTING SLAB WITH TOPPING MATERIAL TO LEVEL AFTER REMOVAL OF EXISTING QUARRY TILE AND THICK-SET BED. PREP FOR NEW FLOOR FINISH.   |
| 4  | CHROMA KEY GREEN PAINT. LENGTH OF EAST WALL ONLY.  |
| 5  | FUME HOOD. AIR MASTER SYSTEMS ELIMINATOR 100 SERIES. AIRFLOW FUME HOOD w/ PLASTIC LAMINATE (MATCH OTHER CASEWORK IN ROOM) ADA BASE CAB. EPOXY TOP. CUP SINK. STANDARD LIGHT SWITCH. BLOWER SWITCH. GAS AND POWER ON FACE OF UNIT. STAINLESS STEEL SASH. CEILING ENCLOSURE. FINISHED BACK.  |
| 6  | 07 71 00 - ACOUSTIC JOINT SEALANT AROUND ENTIRE PERIMETER OF ROOM. SEAL WALLS TIGHT TO DECK AND FLOOR.   |
| 7  | 10 22 26 - OPERABLE PANEL PARTITION AND TRACK. 8FT HIGH. "S4ID" WALL TO DECK ABOVE. PROVIDE 1" LAMINATED GLASS PANEL ON THE NORTH AND SOUTH PARTITIONS.  |
| 8  | 10 22 26 - OPERABLE PARTITION AND TRACK. MARKER SURFACE ON ALL PANELS. MANUAL. 8 FT HIGH. 3FT X 7FT MAN DOOR IN PARTITION. "S4ID" WALL TO DECK ABOVE.  |
| 9  | 10 22 26 - GLASS OPERABLE PARTITION AND TRACK. 8FT HIGH. S4ID WALL TO DECK ABOVE.  |
| 10 | 102226 - OPERABLE PARTITION AND TRACK. MARKER SURFACE ON ALL PANELS. MANUAL. 8 FT HIGH. 3FT X 7FT MAN DOOR IN PARTITION. "S4ID" WALL TO DECK ABOVE.  |
| 11 | SEAL EXISTING EXTERIOR WALL AT EXISTING ROOF DECK ENTIRE PERIMETER OF GYM BY FILLING DECK FLUTES AND GAPS AT TOP OF WALL W/ INSULATION AS REQUIRED.  |
| 12 | 10 51 13 - PE LOCKERS. (350) MINIMUM 12"x12"x12" - TO 8FT. SLOPE TOP - ALTERNATE BID. SEE A-101.   |
| 16 | 11 53 13 LABORATORY FUME HOOD. PROVIDE CLOSURE PANEL FROM HOOD TO FLOOR MATCHING DECK MATERIAL.  |
| 18 | REWORK EXISTING DISH RETURN CONVEYOR BELT PER FOOD SERVICE DRAWINGS. PATCH EXISTING WALL TO MATCH SURROUNDING EXISTING SURFACES. TOOTH-IN CMU.   |
| 19 | 09 64 66 - REFINISH EXISTING ATHLETIC WOOD FLOOR. PROVIDE NEW COURT AND LINE MARKINGS TO COORDINATE WITH EXISTING GOALS AND VOLLEYBALL INSERTS. REMOVE AND REINSTALL DAMAGED WOOD. COORDINATE WITH NEW BLEACHERS DRAWINGS.   |
| 20 | 12 66 00 - MOTORIZED TELESCOPING BLEACHER SYSTEM. 2 - STOPS. FULL EXPANSE EXTENDS OUT OVER COURT. PARTIAL OPENING IS BEHIND COURT LINES. VERIFY EXISTING FLOORING CONDITIONS FOR STRUCTURAL SUPPORT OF NEW BLEACHERS. VERIFY EXISTING DIMENSIONS, ADJACENT OBJECTS, AND OBSTRUCTIONS. SUPPLEMENT UNDERFLOOR STRUCTURE AS REQUIRED. |
| 21 | 12 66 00 - MOTORIZED TELESCOPING BLEACHER SYSTEM w/ 26" ROW SPACING. (CAFE)  |
| 22 | 07 95 00 - FLOOR TO FLOOR EXPANSION COVER  |
| 23 | PROVIDE ACOUSTICAL WALL PANELS. SEE ELEVATIONS ON SHEET  |
| 26 | 04 20 00 - SPECIAL SHAPE BRICK. INSIDE OR OUTSIDE CORNER.  |
| 27 | 11 61 43 - PLATFORM CURTAINS & TRACKS. SEE ENLARGED PLANS  |
| 28 | 14 42 00 - WHEEL CHAIR LIFT  |
| 29 | 05 52 13 - NEW HAND RAIL/GUARDRAIL AT EXISTING RAMP OR STAIR. SEE ENLARGED PLANS.  |
| 30 | 07 95 00 - FLOOR TO WALL EXPANSION COVER   |
| 32 | PANIC BUTTON ON MILLWORK. SEE TECHNOLOGY DRAWINGS.   |
| 33 | 08 71 00 - LOCK/UNLOCK SWITCH FROM RECEPTION DESK FOR 3 DOORS.   |
| 34 | INTERCOM - TALK/VIDEO. SEE TECHNOLOGY DRAWINGS   |
| 35 | 08 83 00 - WALL MOUNTED MIRRORS - 36"x72"  |
| 36 | 10 51 13 - CORRIDOR LOCKERS. (1,100) MINIMUM 15X15X36 DOUBLE STACKED TO 8FT. SLOPE TOP. 350 MIN EACH P.O.D.  |
| 37 | PLYWOOD PANELS - SEE TECHNOLOGY DRAWINGS   |
| 38 | DECORATIVE GRILLE w/ BLACK FABRIC ADHERED TO BACK SURFACE. SECURE TO GRILLE TO PREVENT OBJECT PENETRATION IN CAVITY. REFER TO MECHANICAL DRAWINGS.   |
| 39 | ALIGN NEW WALL W/ EXISTING   |
| 40 | PATCH AND REPAIR EXISTING WALL ABOVE LOCKERS AFTER INSTALLATION OF NEW LOCKERS.  |
| 41 | 144200 - NEW CHAIR LIFT  |
| 42 | 087100 ROUGH-IN FOR DOOR ACCESS CONTROL LOCATION. COORDINATE WITH T and E SERIES DRAWINGS.   |
| 43 | 09 64 66 - REMOVE AND REPLACE DAMAGED WOOD FLOOR. RETAIN EXISTING STEEL SPLINE. MATCH EXISTING WOOD FLOOR IN SPECIES, THICKNESS, SIZE AND FINISH. DRILL HOLE IN WOOD. ANCHOR TO FLOOR. PLUG HOLE W/ SAME SPECIES.  |
| 44 | EXISTING FLOOR DUCT TO REMAIN  |
| 45 | PIN BACK ROW (S) OF BLEACHERS TO PROVIDE DOOR CLEARANCE. PROVIDE RAIL. MAINTAIN EGRESS PATH. V.I.F.  |
| 46 | PROVIDE IN WALL BLOCKING FOR OWNER PROVIDED/CONTRACTOR INSTALLED EQUIPMENT.  |
| 49 | 118623 - ATHLETIC WALL PADS. 8FT HIGH. AROUND PERIMETER OF ROOM. CUSTOM FIT TO COLUMNS AND PROVIDE CUT OUTS AROUND EQUIPMENT AND DEVICES.  |
| 50 | EXISTING LOCKERS TO REMAIN   |
| 51 | 10 21 23 - CUBICLE CURTAINS AND TRACK  |
| 52 | 099600 - HIGH PERFORMANCE COATING ON EXISTING PENTHOUSE EXTERIOR AND LOUVERS. COLOR AS DIRECTED BY ARCHITECT   |
| 53 | INFILL EXISTING WALL TO MATCH EXISTING ADJACENT MATERIALS. TOOTH-IN NEW MASONRY WHERE APPLICABLE.  |
| 54 | 084413 - WRAP COLUMN IN BREAK METAL TO MATCH ADJACENT CURTAIN WALL.  |
| 55 | INFILL EXISTING WALL TO MATCH EXISTING ADJACENT MATERIALS. TOOTH-IN NEW MASONRY WHERE APPLICABLE.  |
| 56 | PATCH EXISTING WALL W/ GYPSUM BOARD WHERE EXISTING ASBESTOS CONTAINING PLASTER IS TO BE REMOVED BY OTHER. SEE ASBESTOS ASSESSMENT.   |

**1A FIRST FLOOR UNIT PLANS - UNIT F**  
1/8" = 1'-0"



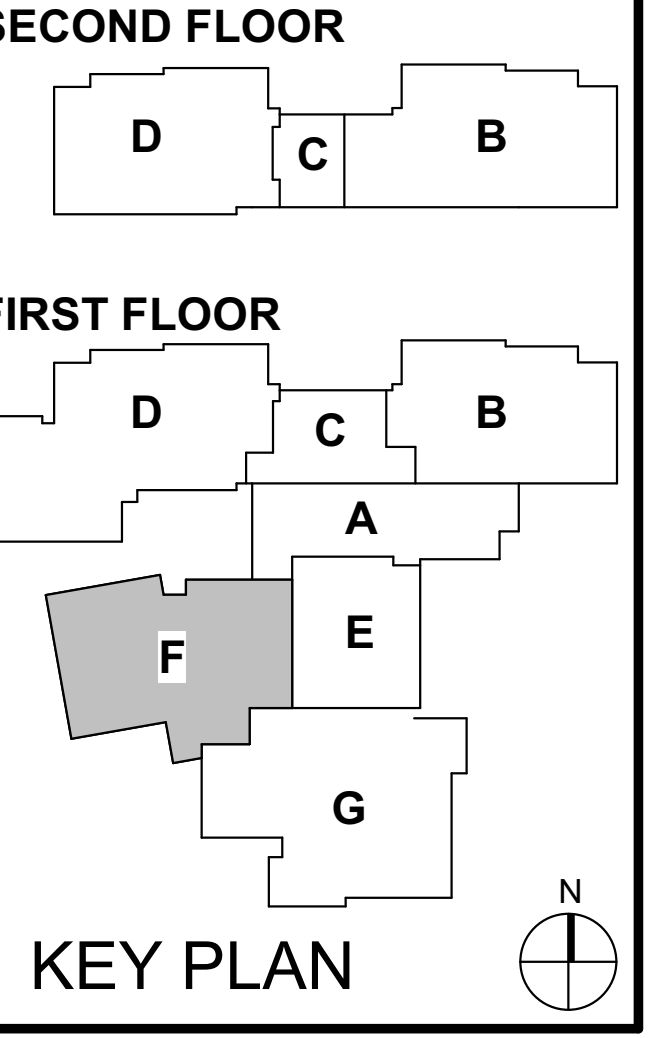
Project No. 2017-114.EMS  
Project Date 10.21.18  
Produced CM TE

**Bid Documents**



#	Revision	Date
A2	Addendum #2	11.01.2018
A4	Addendum #4	11.09.2018
A5	Addendum #5	11.16.2018

4401 East 62nd Street  
Indianapolis, IN 46220



**EASTWOOD MIDDLE SCHOOL**

**FIRST FLOOR PLAN - UNIT F**

**AF1F1**

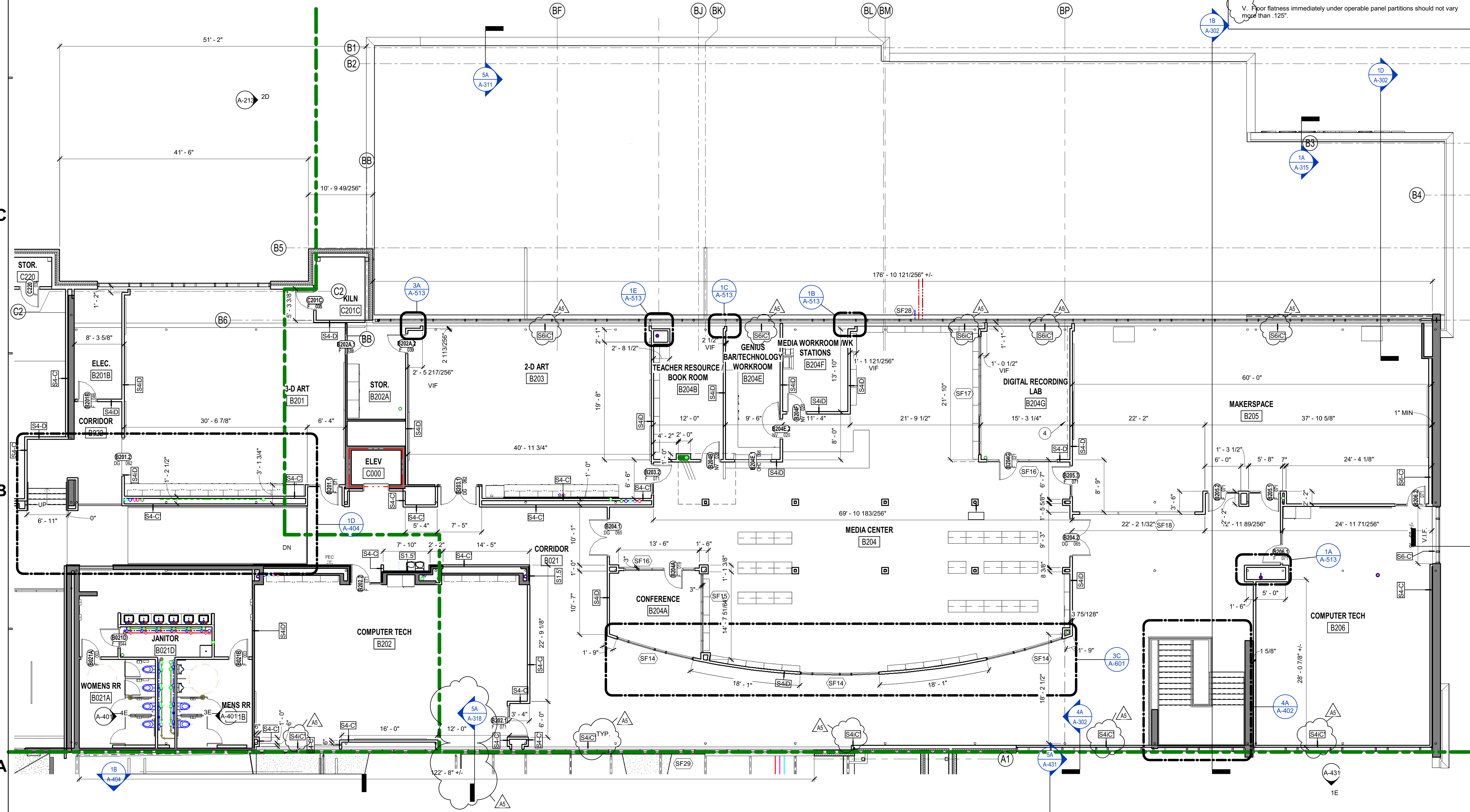


**General Plan Notes**

- A. All dimensions shown are to face of stud or masonry, unless noted otherwise. Dimensions designated as "CLR" or "clear" indicate a clear dimension from face of finish to face of finish. Dimensions of exterior walls are to outside edge of foundation.
- B. Dimensions for all openings for Mechanical, Plumbing, Fire Protection and Electrical shall be fire stopped at each floor penetration.
- C. Provide bracing and blocking as required in walls supporting casework, tackboards, markerboards, and restroom accessories as well as owner provided paper towel holders @ each sink.
- D. All door frames are located 4" from adjacent wall, unless noted otherwise.
- E. All exposed outside corners of CMU shall be bullnosed.
- F. Seal all joints between dissimilar materials.
- G. All gypsum wallboard is 5/8" Type "X", unless noted otherwise. Gypsum board is Abuse Resistant Type X Gypsum Board in Corridor TO 6 foot high. Abuse Resistant Gypsum board to 4 foot high in Sensory Room.
- H. Where new floors meet existing floors, a smooth, straight, and flush transition shall be constructed. Verify in field existing floor elevations and conditions where a new floor shall be constructed adjacent. Trim and patch existing floor as required to achieve desired transition.
- I. All exterior windows are Type "CW11", unless noted otherwise.
- J. All interior walls are Type "M8-D", unless noted otherwise.
- K. Base elevation is 0'-0" = 786.28' (United States Geological Survey data).
- L. Hatching within walls shown in plans and sections indicates new construction.
- M. All existing exterior doors are to be replaced with new exterior doors. All exterior doors will be tied to security and have door position switch monitors. Provide all necessary power, data and hardware.
- N. See plans for locations of door actuators/ accessible entry systems. Provide all power, data, and hardware required for the system to operate the doors.
- O. Refer to Interiors drawings and specifications for corner guards.
- P. All exterior hollow metal doors and frames to receive 099600.99 High Performance Coating, color as directed.
- Q. Provide locker fillers to enclose locker banks to adjacent walls. Locate accessible lockers per owner/architect direction.
- R. Where exposed columns are within 6" of an adjacent wall, provide "L" shape steel closure plate to span distance. Provide high performance coatings to match column.
- S. Columns in Kitchen are to be wrapped w/ stainless steel per 114000.
- T. All exposed structure is to receive 099600.00 High Performance Coating, color as directed.
- U. Locate diffuser/cabinet adjacent to fire extinguisher cabinets.
- V. Floor flatness immediately under operable panel partitions should not vary more than .125".

**FLOOR PLAN NOTES**

- | #  | Note   |
|----|--|
| 1  | 087100 DOOR ACTUATOR LOCATION. COORDINATE WITH E and T SERIES DRAWINGS   |
| 2  | 087100 DOOR ACCESS CONTROL LOCATION. COORDINATE WITH T and E SERIES DRAWINGS   |
| 3  | 03 30 00 - INFILL EXISTING SLAB WITH TOPPING MATERIAL TO LEVEL. AFTER REMOVAL OF EXISTING QUARRY TILE AND THICK-SET BED. PREP FOR NEW FLOOR FINISH!  |
| 4  | CHROMA KEY GREEN PAINT. LENGTH OF EAST WALL ONLY.  |
| 5  | FUME HOOD. AIR MASTER SYSTEMS ELIMINATOR 100 SERIES. AIRFOIL FUME HOOD w/ PLASTIC LAMINATE (MATCH OTHER CASEWORK IN ROOM) ADA BASE CAB. EPOXY TOP. CUP SINK. STANDARD LIGHT SWITCH. BLOWER SWITCH. GAS AND POWER ON FACE OF UNIT. STAINLESS STEEL SASH. CEILING ENCLOSURE. FINISHED BACK.  |
| 6  | 07 71 00 - ACOUSTIC JOINT SEALANT AROUND ENTIRE PERIMETER OF ROOM. SEAL WALLS TIGHT TO DECK AND FLOOR.   |
| 7  | 10 22 26 - OPERABLE PANEL PARTITION AND TRACK. 8 FT HIGH. "S4ID" WALL TO DECK ABOVE. PROVIDE 1" LAMINATED GLASS PANEL ON THE NORTH AND SOUTH PARTITIONS.   |
| 8  | 10 22 26 - 102226 - OPERABLE PARTITION AND TRACK. MARKER SURFACE ON ALL PANELS. MANUAL. 8 FT HIGH. 3 FT X 7 FT MAN DOOR IN PARTITION. "S4ID" WALL TO DECK ABOVE.   |
| 9  | 10 22 26 - GLASS OPERABLE PARTITION AND TRACK. 8 FT HIGH. "S4ID" WALL TO DECK ABOVE.   |
| 10 | 102226 - OPERABLE PARTITION AND TRACK. MARKER SURFACE ON ALL PANELS. MANUAL. 8 FT HIGH. 3 FT X 7 FT MAN DOOR IN PARTITION. "S4ID" WALL TO DECK ABOVE.  |
| 11 | SEAL EXISTING EXTERIOR WALL AT EXISTING ROOF DECK ENTIRE PERIMETER OF GYM BY FILING DECK FLUTES AND GAPS AT TOP OF WALL W/ INSULATION AND BLOCKING AS REQUIRED.  |
| 12 | 10 51 13 - PE LOCKERS. (350) MINIMUM 12"x12"x12" - TO 6FT, SLOPE TOP - ALTERNATE BID. SEE A-101.   |
| 16 | 11 53 13 LABORATORY FUME HOOD. PROVIDE CLOSURE PANEL FROM HOOD TO ROOF MATCHING HOOD MATERIAL.   |
| 18 | REWORK EXISTING DISH RETURN CONVEYOR BELT PER FOOD SERVICE DRAWINGS. PATCH EXISTING WALL TO MATCH SURROUNDING EXISTING SURFACES. TOOTH-IN CMU.   |
| 19 | 09 64 66 - REFINISH EXISTING ATHLETIC WOOD FLOOR. PROVIDE NEW COURT AND LINE MARKINGS TO COORDINATE WITH EXISTING GOALS AND VOLLEYBALL INSERTS. REMOVE AND REINSTALL DAMAGED WOOD. COORDINATE WITH NEW BLEACHER LAYOUT.  |
| 20 | 12 66 00 - MOTORIZED TELESCOPING BLEACHER SYSTEM - 2 STOPS. FULL EXPANSE EXTENDS OUT OVER COURT. PARTIAL OPENING IS BEHIND COURT LINES. VERIFY EXISTING FLOORING CONDITIONS FOR STRUCTURAL SUPPORT OF NEW BLEACHERS. VERIFY EXISTING DIMENSIONS. ADJACENT OBJECTS AND OBSTRUCTIONS. SUPPLEMENT UNDERFLOOR STRUCTURE AS REQUIRED. |
| 21 | 12 66 00 - MOTORIZED TELESCOPING BLEACHER SYSTEM w/ 26" ROW SPACING. (CAFÉ)  |
| 22 | 07 95 00 - FLOOR TO FLOOR EXPANSION COVER  |
| 23 | PROVIDE ACOUSTICAL WALL PANELS. SEE ELEVATIONS ON SHEET.   |
| 26 | 04 20 00 - SPECIAL SHAPE BRICK. INSIDE OR OUTSIDE CORNER.  |
| 27 | 11 61 43 - PLATFORM CURTAINS & TRACKS. SEE ENLARGED PLANS.   |
| 28 | 14 42 00 - WHEELCHAIR LIFT   |
| 29 | 05 52 13 - NEW HAND RAIL GUARDRAIL AT EXISTING RAMP OR STAIR. SEE ENLARGED PLANS.  |
| 30 | 07 95 00 - FLOOR TO WALL EXPANSION COVER   |
| 32 | PANIC BUTTON ON MILLWORK. SEE TECHNOLOGY DRAWINGS.   |
| 33 | 08 71 00 - LOCK/UNLOCK SWITCH FROM RECEPTION DESK FOR 3 DOORS.   |
| 34 | INTERCOM - TALK/VIDEO. SEE TECHNOLOGY DRAWINGS   |
| 35 | 08 83 00 - WALL MOUNTED MIRRORS - 36"x72"  |
| 36 | 10 51 13 - CORRIDOR LOCKERS (1,100) MINIMUM 15X15X36 DOUBLE STACKED TO 6FT, SLOPE TOP. 350 MIN EACH POD.   |
| 37 | PLYWOOD PANELS - SEE TECHNOLOGY DRAWINGS   |
| 38 | DECORATIVE GRILLE w/ BLACK FABRIC ADHERED TO BACK SURFACE. SECURE TO GRILL TO PREVENT OBJECT PENETRATION IN CAVITY. REFER TO MECHANICAL DRAWINGS.  |
| 39 | ALIGN NEW WALL W/ EXISTING   |
| 40 | PATCH AND REPAIR EXISTING WALL ABOVE LOCKERS AFTER INSTALLATION OF NEW LOCKERS.  |
| 41 | 144200 - NEW CHAIR LIFT  |
| 42 | 087100 DESIGN-IN FOR DOOR ACCESS CONTROL LOCATION. COORDINATE WITH T and E SERIES DRAWINGS.  |
| 43 | 09 64 66 - REMOVE AND REPLACE DAMAGED WOOD FLOOR IN SPECIES. THICKNESS, SIZE AND FINISH. DRILL HOLE IN WOOD. ANCHOR TO FLOOR. PLUG HOLE W/ SAME SPECIES.   |
| 44 | EXISTING FLOOR DUCT TO REMAIN  |
| 45 | PIN BACK ROW (S) OF BLEACHERS TO PROVIDE DOOR CLEARANCE. PROVIDE RAIL. MAINTAIN EGRESS PATH. V.I.F.  |
| 46 | PROVIDE IN WALL BLOCKING FOR OWNER PROVIDED/CONTRACTOR INSTALLED EQUIPMENT.  |
| 49 | 118623 - ATHLETIC WALL PADS. 8 FT HIGH. AROUND PERIMETER OF ROOM. CUSTOM FIT TO COLUMNS AND PROVIDE CUT OUTS AROUND EQUIPMENT AND DEVICES.   |
| 50 | EXISTING LOCKERS TO REMAIN   |
| 51 | 10 21 23 - CURTILE CURTAINS AND TRACK  |
| 52 | 099600 - HIGH PERFORMANCE COATING ON EXISTING PENTHOUSE EXTERIOR AND LOUVERS. COLOR AS DIRECTED BY ARCHITECT.  |
| 53 | 084413 - WRAP COLUMN IN BREAK METAL TO MATCH ADJACENT CURTAIN WALL.  |
| 54 | INFILL EXISTING WALL TO MATCH EXISTING ADJACENT MATERIALS. TOOTH-IN NEW MASONRY WHERE APPLICABLE.  |
| 56 | PATCH EXISTING WALL W/ GYPSUM BOARD WHERE EXISTING ASBESTOS CONTAINING PLASTER IS TO BE REMOVED BY OTHER. SEE ASBESTOS ASSESSMENT.   |



Project No. 2017-114.EMS  
 Project Date 10.21.18  
 Produced CM TE

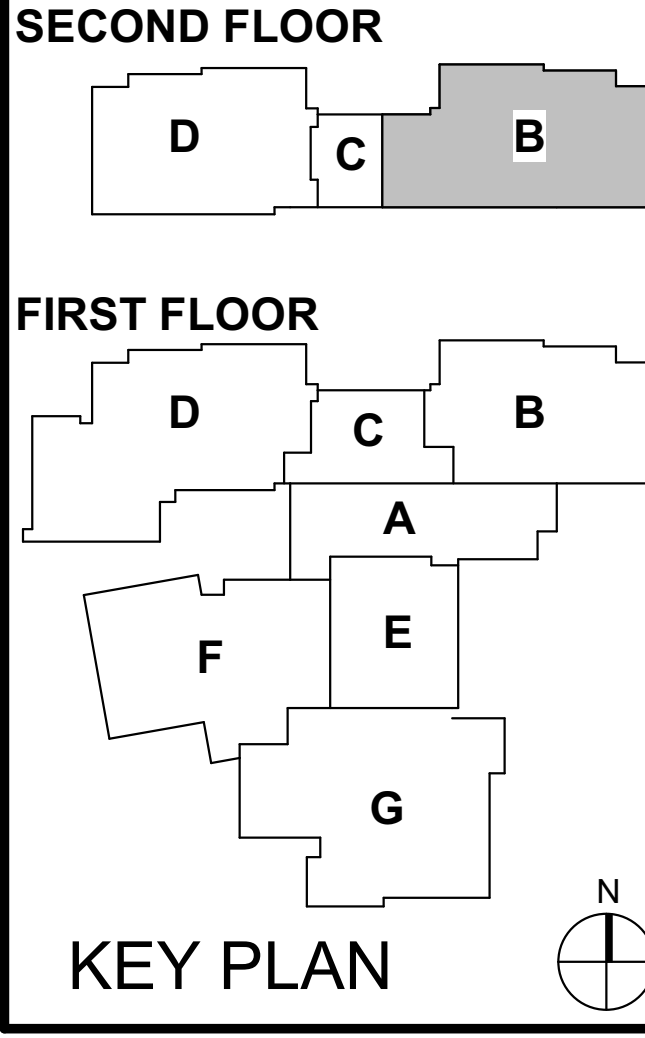
**Bid Documents**



These Drawings and Specifications, and all copies thereof are and shall remain the property and copyright of the Architect. They shall be used only with respect to this Project and are not to be used on any other Project or Work without prior written permission from the Architect.

#	Revision	Date
A2	Addendum #2	11.01.2018
A5	Addendum #5	11.16.2018

4401 East 62nd Street  
 Indianapolis, IN 46220



EASTWOOD MIDDLE SCHOOL

SECOND FLOOR PLAN - UNIT B

AF1B2

**1A SECOND FLOOR UNIT PLANS - UNIT B**  
 1/8" = 1'-0"

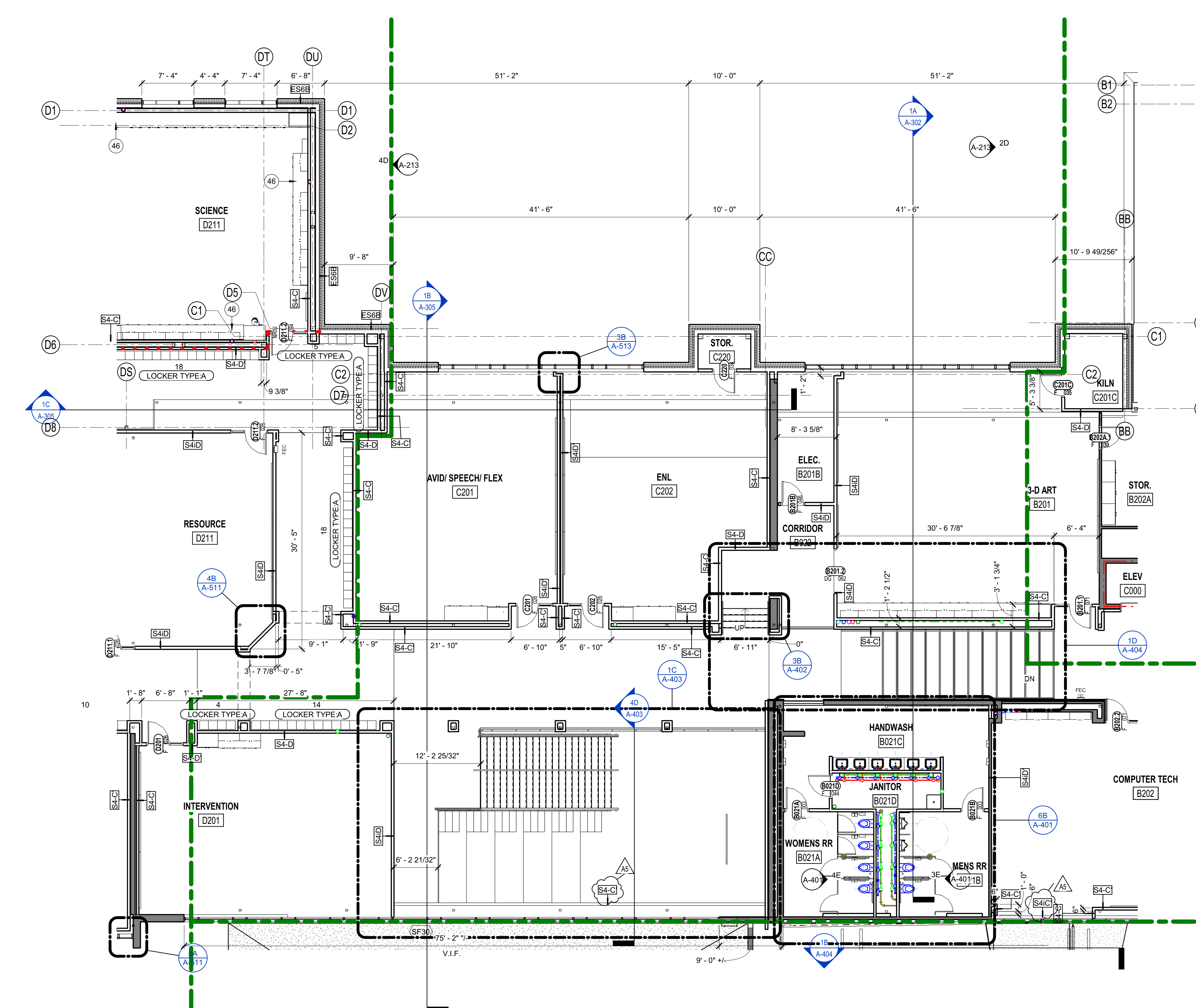


### General Plan Notes

- A. All dimensions shown are to face of stud or masonry, unless noted otherwise. Dimensions designated as "CLR" or "clear" indicate a clear dimension from face of finish to face of finish. Dimensions of exterior walls are to outside edge of foundation.
- B. Dimensions for all openings for Mechanical, Plumbing, Fire Protection and Electrical shall be fire stopped at each floor penetration.
- C. Provide bracing and blocking as required in walls supporting casework, tackboards, markerboards, and restroom accessories as well as owner provided paper towel holders @ each sink.
- D. All door frames are located 4" from adjacent wall, unless noted otherwise.
- E. All exposed outside corners of CMU shall be bullnosed.
- F. Seal all joints between dissimilar materials.
- G. All gypsum wallboard is 5/8" Type "X", unless noted otherwise. Gypsum board is Abuse Resistant Type X Gypsum Board in Corridor TO 6 foot High. Abuse Resistant Gypsum board to 4 foot high in Sensory Room.
- H. Where new floors meet existing floors, a smooth, straight, and flush transition shall be constructed. Verify in field existing floor elevations and conditions where a new floor shall be constructed adjacent. Trim and patch existing floor as required to achieve desired transition.
- I. All exterior windows are Type "CW11", unless noted otherwise.
- J. All interior walls are Type "M8-D", unless noted otherwise.
- K. Base elevation is 0'-0" = 786.28' (United States Geological Survey data).
- L. Hatching within walls shown in plans and sections indicates new construction.
- M. All existing exterior doors are to be replaced with new exterior doors. All exterior doors will be tied to security and have door position switch monitors. Provide all necessary power, data and hardware.
- N. See plans for locations of door actuators/ accessible entry systems. Provide all power, data, and hardware required for the system to operate the doors.
- O. Refer to interiors drawings and specifications for corner guards.
- P. All exterior hollow metal doors and frames to receive 099600.99 High Performance Coating, color as directed.
- Q. Provide locker fillers to enclose locker banks to adjacent walls. Locate accessible lockers per owner/architect direction.
- R. Where exposed columns are within 6" of an adjacent wall, provide "L" shape steel closure plate to span distance. Provide high performance coatings to match column.
- S. Columns in Kitchen are to be wrapped w/ stainless steel per 114000.
- T. All exposed structure is to receive 099600.00 High Performance Coating, color as directed.
- U. Locate diffuser/cabinet adjacent to fire extinguisher cabinets.
- V. Floor finish immediately under operable panel partitions should not vary more than .125".

### FLOOR PLAN NOTES

#	Note
1	087100 DOOR ACTUATOR LOCATION. COORDINATE WITH E and T SERIES DRAWINGS
2	087100 DOOR ACCESS CONTROL LOCATION. COORDINATE WITH T and E SERIES DRAWINGS
3	033000 - INFILL EXISTING SLAB WITH TOPPING MATERIAL TO LEVEL AFTER REMOVAL OF EXISTING QUARRY TILE AND THICK-SET BED. PREP FOR NEW FLOOR FINISH.
4	CHROMA KEY GREEN PAINT. LENGTH OF EAST WALL ONLY.
5	FUME HOOD, AIR MASTER SYSTEMS ELIMINATOR 100 SERIES; AIRFOIL FUME HOOD w/ PLASTIC LAMINATE (MATCH OTHER CASEWORK IN ROOM) ADA BASE CAB. EPOXY TOP. CUP SINK. STANDARD LIGHT SWITCH. BLOWER SWITCH. GAS AND POWER ON FACE OF UNIT. STAINLESS STEEL SASH. CEILING ENCLOSURE. FINISHED BACK.
6	077100 - ACOUSTIC JOINT SEALANT AROUND ENTIRE PERIMETER OF ROOM. SEAL WALLS TIGHT TO DECK AND FLOOR.
7	102226 - OPERABLE PANEL PARTITION AND TRACK. 8FT HIGH. "S4ID" WALL TO DECK ABOVE. PROVIDE 1" LAMINATED GLASS PANEL ON THE NORTH AND SOUTH PARTITIONS.
8	102226 - OPERABLE PARTITION AND TRACK. MARKER SURFACE ON ALL PANELS. MANUAL. 8 FT HIGH. 3FT X 7FT MAN DOOR IN PARTITION. "S4ID" WALL TO DECK ABOVE
9	102226 - GLASS OPERABLE PARTITION AND TRACK. 8FT HIGH. S4ID WALL TO DECK ABOVE.
10	102226 - OPERABLE PARTITION AND TRACK. MARKER SURFACE ON ALL PANELS. MANUAL. 8 FT HIGH. 3FT X 7FT MAN DOOR IN PARTITION. "S4ID" WALL TO DECK ABOVE.
11	SEAL EXISTING EXTERIOR WALL AT EXISTING ROOF DECK ENTIRE PERIMETER OF GYM BY FILING DECK FLUTES AND GAPS AT TOP OF WALL. W/ INSULATION AND BLOCKING AS REQUIRED.
12	105113 - PE LOCKERS. (350) MINIMUM 12"X12"X12" - TO 6FT. SLOPE TOP - ALTERNATE BID. SEE A-101.
16	115313 LABORATORY FUME HOOD. PROVIDE CLOSURE PANEL FROM HOOD TO ROOF MATCHING HOOD MATERIAL
18	REWORK EXISTING DISH RETURN CONVEYOR BELT PER FOOD SERVICE DRAWINGS. PATCH EXISTING WALL TO MATCH SURROUNDING EXISTING SURFACES. TOOTH-IN CMU.
19	096466 - REFINISH EXISTING ATHLETIC WOOD FLOOR. PROVIDE NEW COURT AND LINE MARKINGS TO COORDINATE WITH EXISTING GOALS AND VOLLEYBALL INSERTS. REMOVE AND REINSTALL DAMAGED WOOD. COORDINATE WITH NEW BLEACHER LAYOUT.
20	126600 - MOTORIZED TELESCOPING BLEACHER SYSTEM. 2- STOPS. FULL EXPANSE EXTENDS OUT OVER COURT. PARTIAL OPENING IS BEHIND COURT LINE. VERIFY EXISTING FLOORING CONDITIONS FOR STRUCTURAL SUPPORT OF NEW BLEACHERS. VERIFY EXISTING DIMENSIONS. ADJACENT OBJECTS AND OBSTRUCTIONS. SUPPLEMENT UNDER FLOOR STRUCTURE AS REQUIRED.
21	126600 - MOTORIZED TELESCOPING BLEACHER SYSTEM w/ 26" ROW SPACING. (CAFE)
22	079500 - FLOOR TO FLOOR EXPANSION COVER
23	PROVIDE ACCUSTICAL WALL PANELS. SEE ELEVATIONS ON SHEET
26	042000 - SPECIAL SHAPE BRICK. INSIDE OR OUTSIDE CORNER. SEE ENLARGED PLANS.
27	116143 - PLATFORM CURTAINS & TRACKS. SEE ENLARGED PLANS
28	144200 - WHEELCHAIR LIFT
29	055213 - NEW HAND RAIL/GUARDRAIL AT EXISTING RAMP OR STAIR. SEE ENLARGED PLANS.
30	079500 - FLOOR TO WALL EXPANSION COVER
32	PANIC BUTTON ON MILLWORK. SEE TECHNOLOGY DRAWINGS.
33	087100 - LOCK/UNLOCK SWITCH FROM RECEPTION DESK FOR 3 DOORS.
34	INTERCOM - TALK/VIDEO. SEE TECHNOLOGY DRAWINGS
35	088300 - WALL MOUNTED MIRRORS -36"X72"
36	105113 - CORRIDOR LOCKERS (1,100) MINIMUM 15X15X36 DOUBLE STACKED TO 8FT. SLOPE TOP. 350 MIN EACH POD.
37	PLYWOOD PANELS - SEE TECHNOLOGY DRAWINGS
38	DECORATIVE GRILLE w/ BLACK FABRIC ADHERED TO BACK SURFACE. SECURE TO GRILL TO PREVENT OBJECT PENETRATION IN CAVITY. REFER TO MECHANICAL DRAWINGS.
39	ALIGN NEW WALL W/ EXISTING
40	PATCH AND REPAIR EXISTING WALL ABOVE LOCKERS AFTER INSTALLATION OF NEW LOCKERS.
41	144200 - NEW CHAIR LIFT
42	087100 ROUGH-IN FOR DOOR ACCESS CONTROL LOCATION. COORDINATE WITH T and E SERIES DRAWINGS.
43	096466 - REMOVE AND REPLACE DAMAGED WOOD FLOOR. RETAIN EXISTING STEEL SPLINE. MATCH EXISTING WOOD FLOOR IN SPECIES, THICKNESS, SIZE AND FINISH. DRILL HOLE IN WOOD, ANCHOR TO FLOOR. PLUG HOLES W/ SAME SPECIES.
44	EXISTING FLOOR DUCT TO REMAIN
45	PIN BACK ROW (S) OF BLEACHERS TO PROVIDE DOOR CLEARANCE. PROVIDE RAIL. MAINTAIN EGRESS PATH. V.I.F.
46	PROVIDE IN WALL BLOCKING FOR OWNER PROVIDED/CONTRACTOR INSTALLED EQUIPMENT.
49	116623 - ATHLETIC WALL PADS, 6FT HIGH, AROUND PERIMETER OF ROOM. CUSTOM FIT TO COLUMNS AND PROVIDE CUT OUTS AROUND EQUIPMENT AND DEVICES
50	EXISTING LOCKERS TO REMAIN
51	102123 - CUBICLE CURTAINS AND TRACK
52	099600 - HIGH PERFORMANCE COATING ON EXISTING PENTHOUSE EXTERIOR AND LOUVERS. COLOR AS DIRECTED BY ARCHITECT
52	INFILL EXISTING WALL TO MATCH EXISTING ADJACENT MATERIALS. TOOTH-IN NEW MASONRY WHERE APPLICABLE.
53	084413 - WRAP COLUMN IN BREAK METAL TO MATCH ADJACENT CURTAIN WALL.
54	INFILL EXISTING WALL TO MATCH EXISTING ADJACENT MATERIALS. TOOTH-IN NEW MASONRY WHERE APPLICABLE.
55	PATCH EXISTING WALL W/ GYPSUM BOARD WHERE EXISTING ASBESTOS CONTAINING PLASTER IS TO BE REMOVED BY OTHER. SEE ASBESTOS ASSESSMENT.



1A SECOND FLOOR UNIT PLANS - UNIT C  
1/8" = 1'-0"



Project No. 2017-114.EMS  
 Project Date 10.21.18  
 Produced CM TE

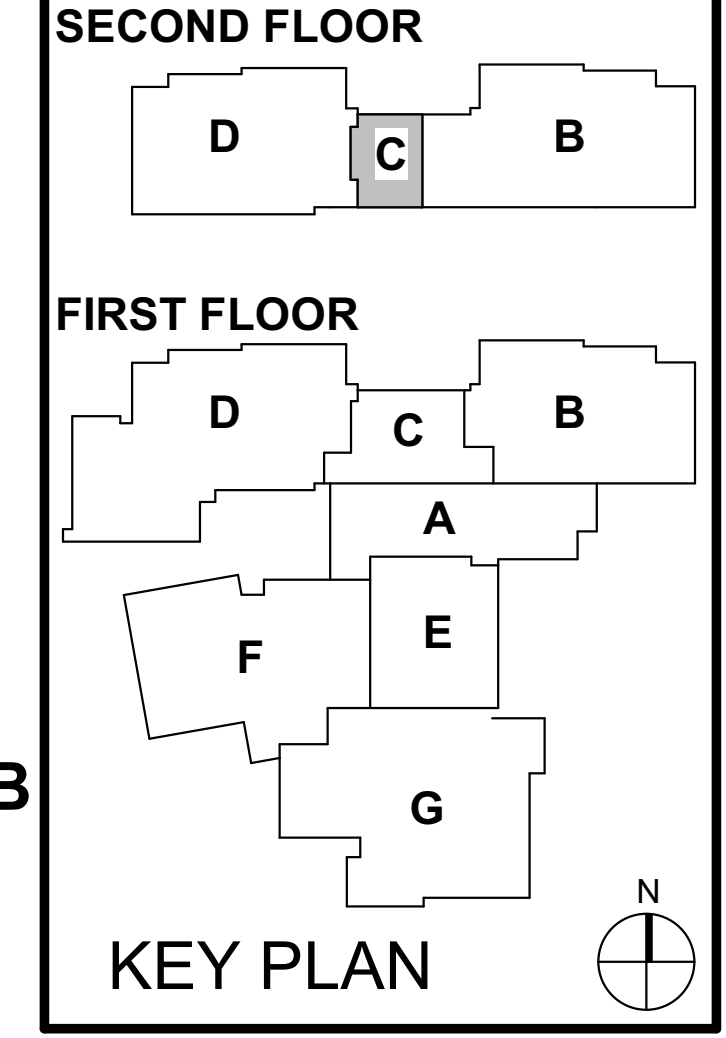
## Bid Documents



#	Revision	Date
A2	Addendum #2	11.01.2018
A5	Addendum #5	11.16.2018

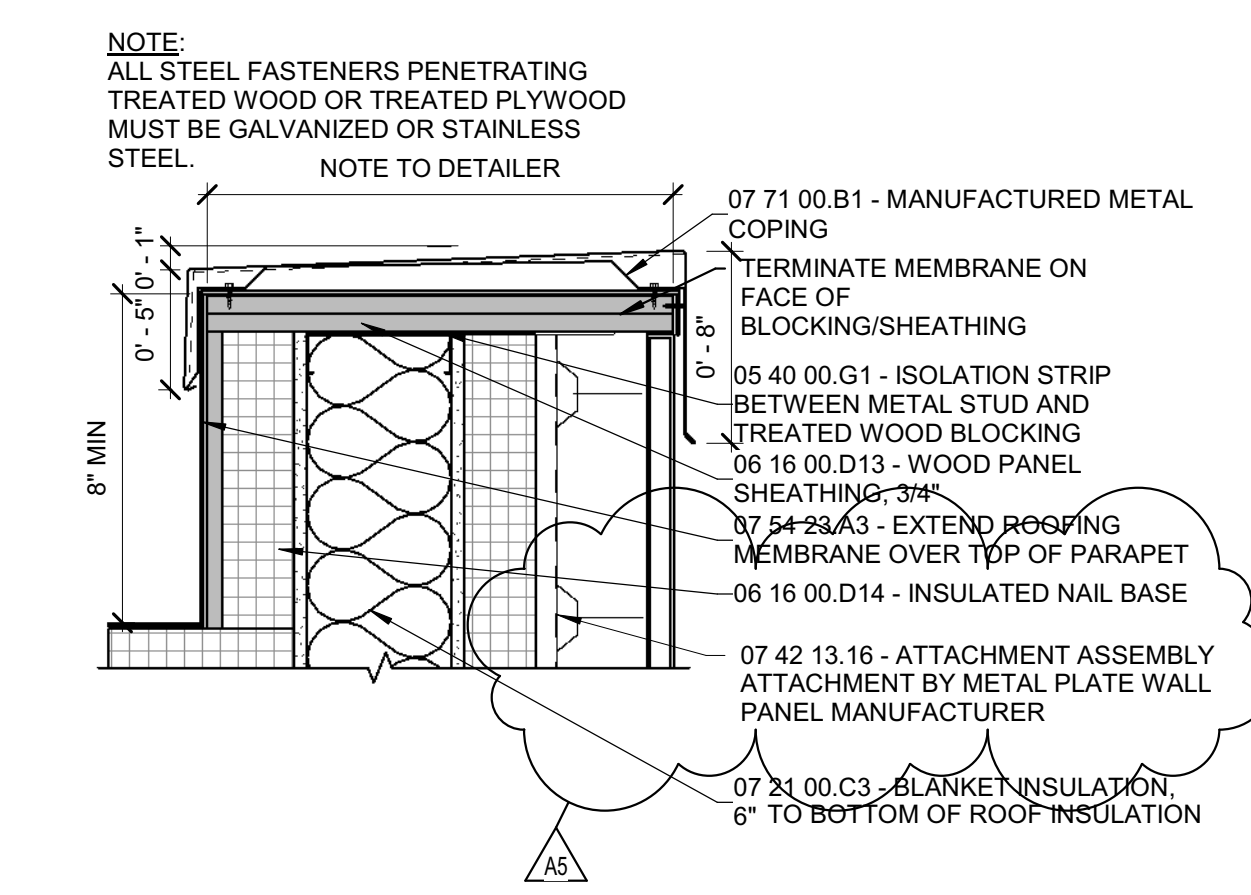
These Drawings and Specifications, and all copies thereof are and shall remain the property and copyright of the Architect. They shall be used only with respect to this Project and are not to be used on any other Project or Work without prior written permission from the Architect.

4401 East 62nd Street  
 Indianapolis, IN 46220

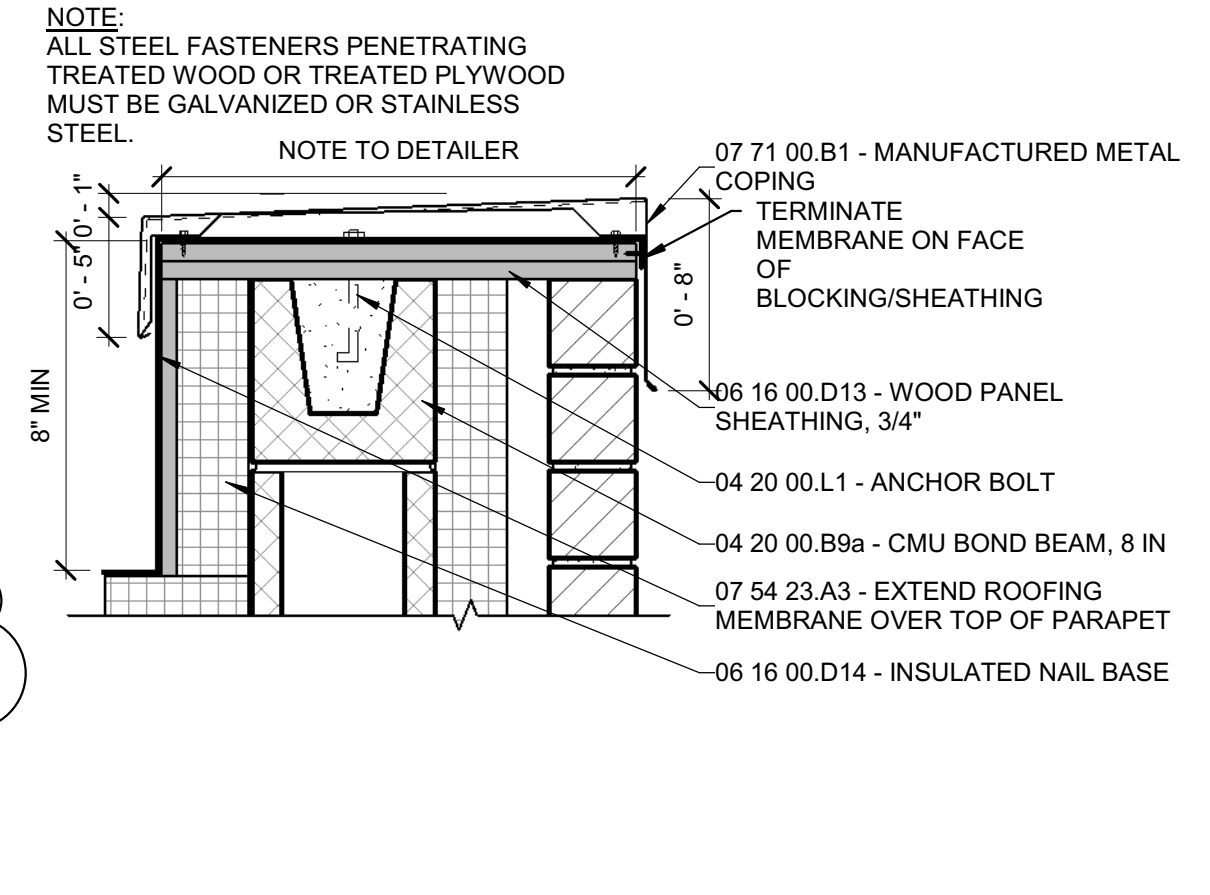


EASTWOOD MIDDLE SCHOOL  
 SECOND FLOOR PLAN - UNIT C  
 AF1C2

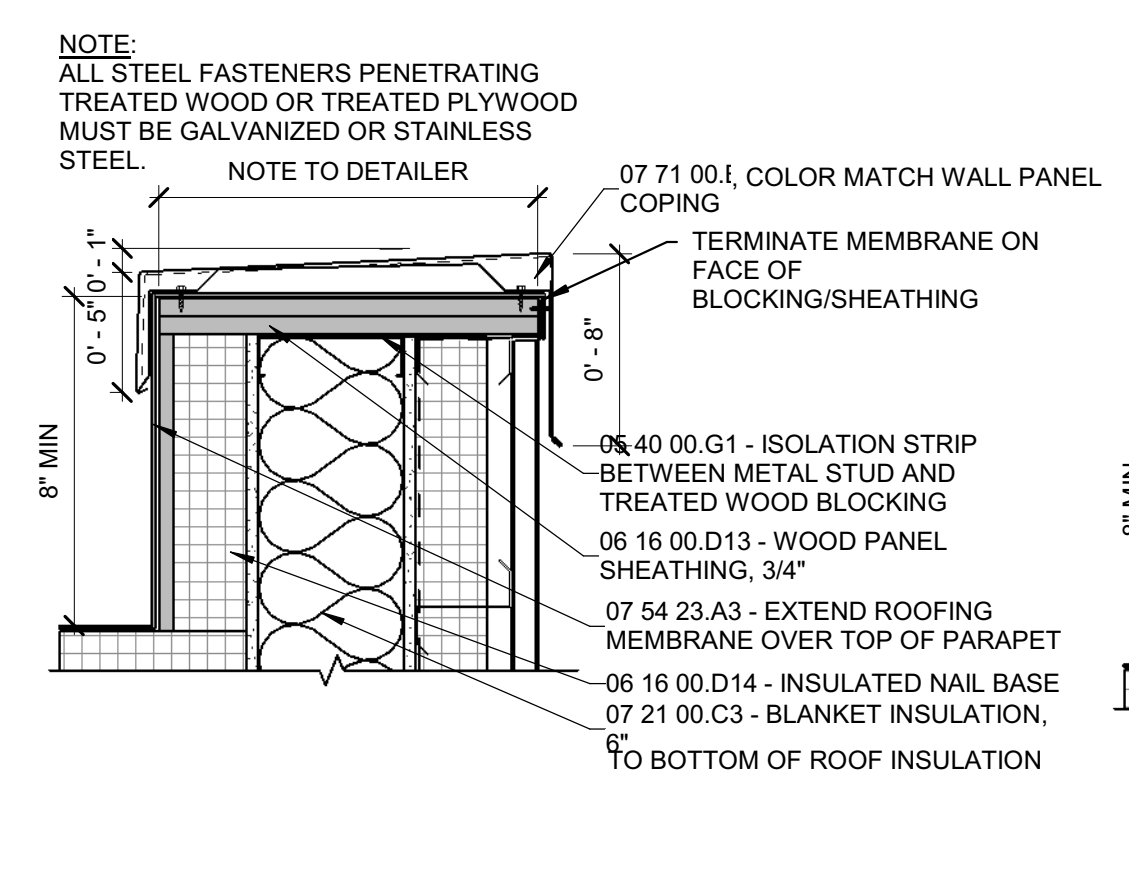




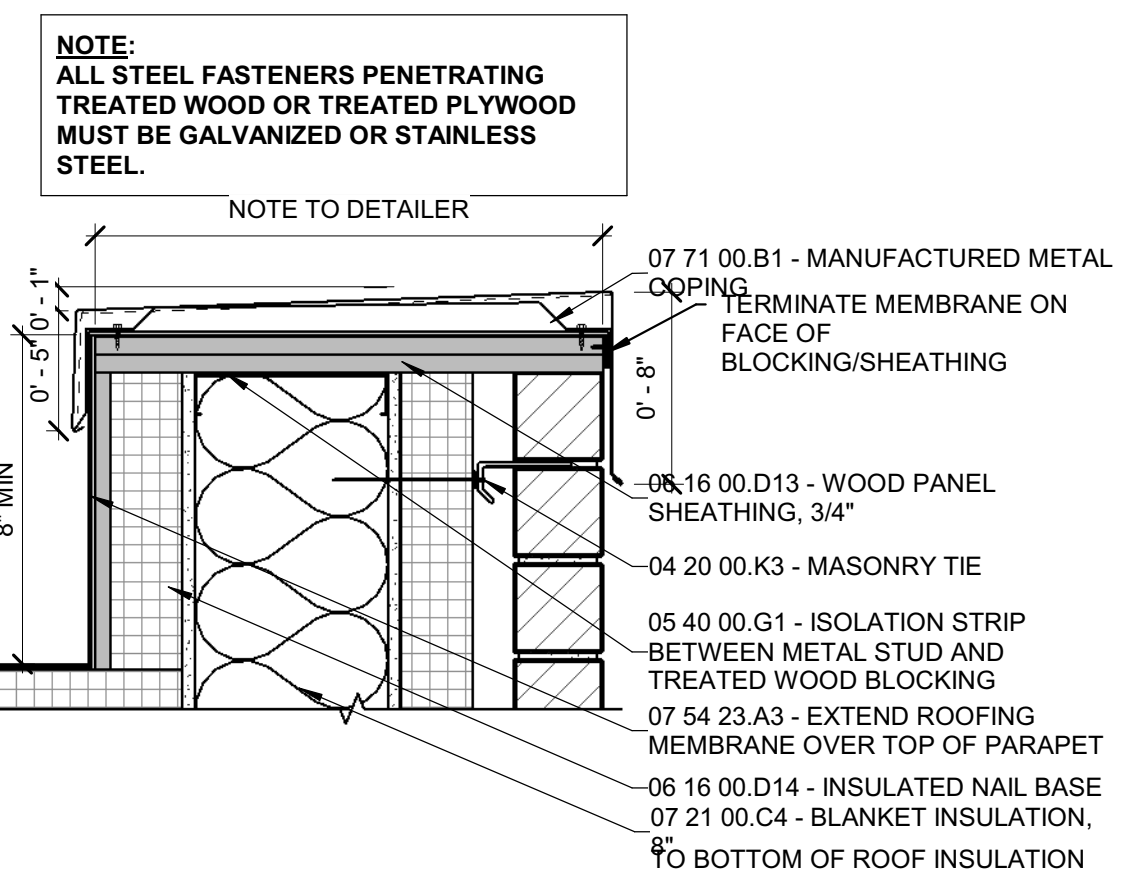
4E METAL COPING  
1 1/2" = 1'-0"



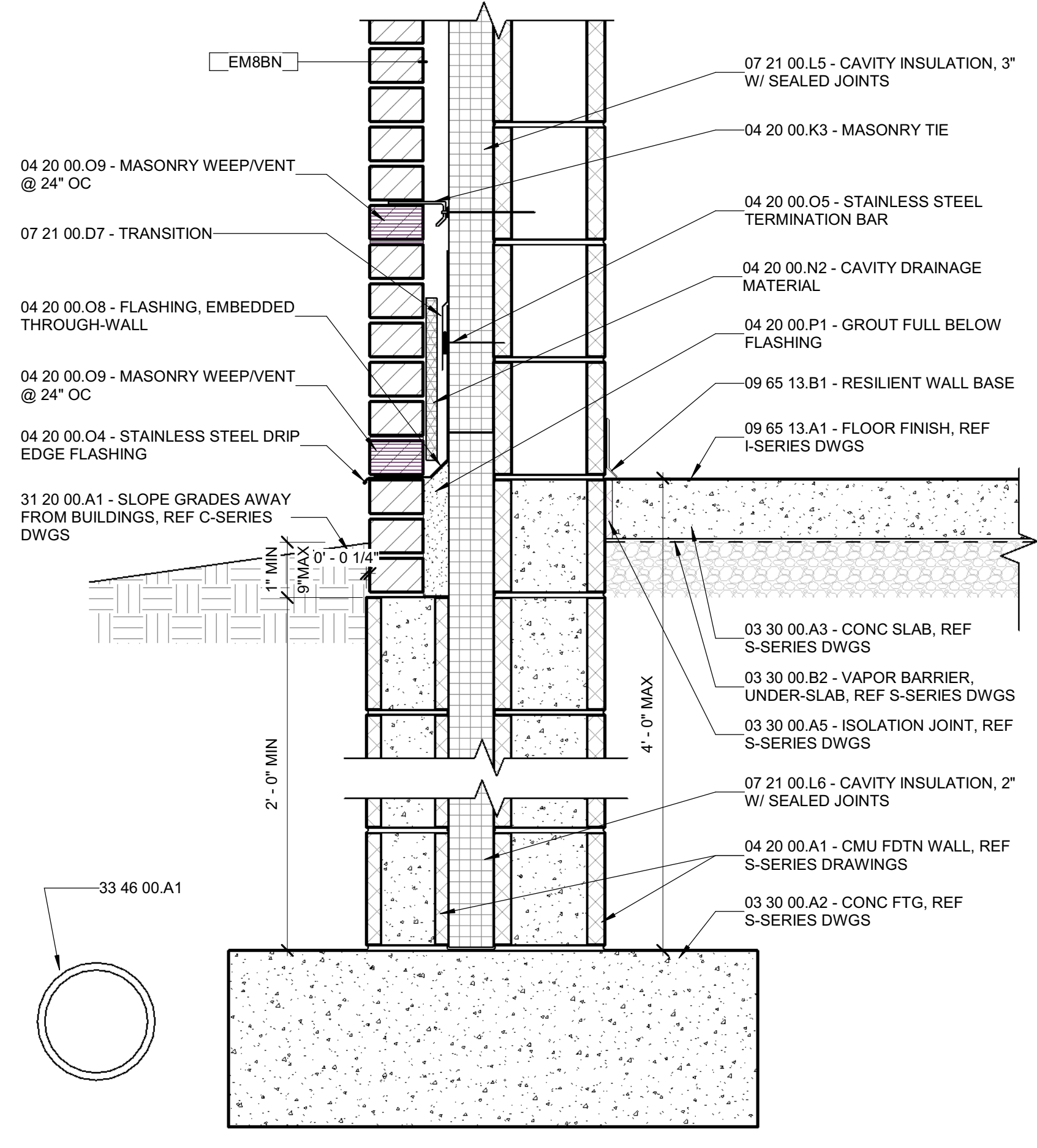
3E METAL COPING  
1 1/2" = 1'-0"



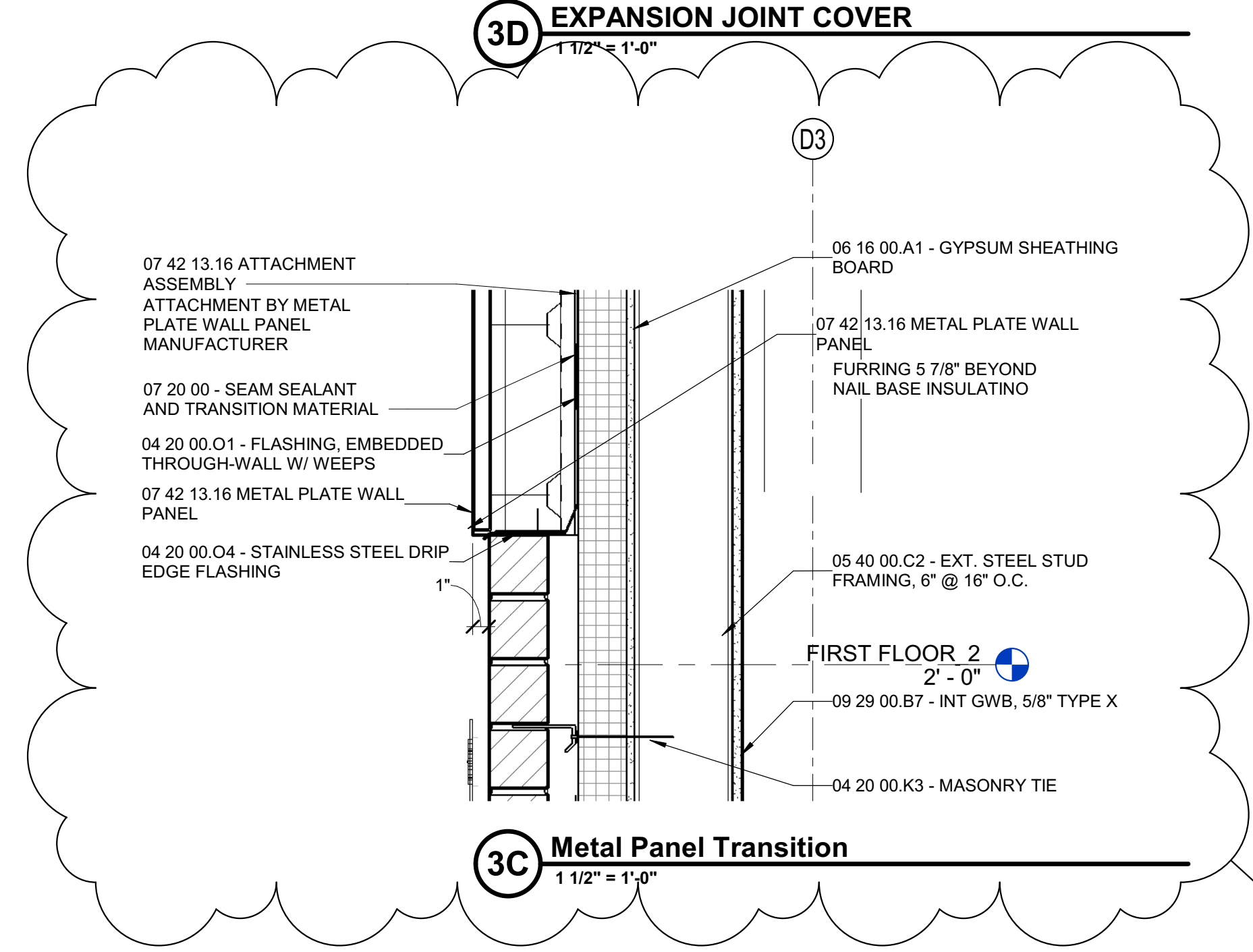
2E METAL COPING  
1 1/2" = 1'-0"



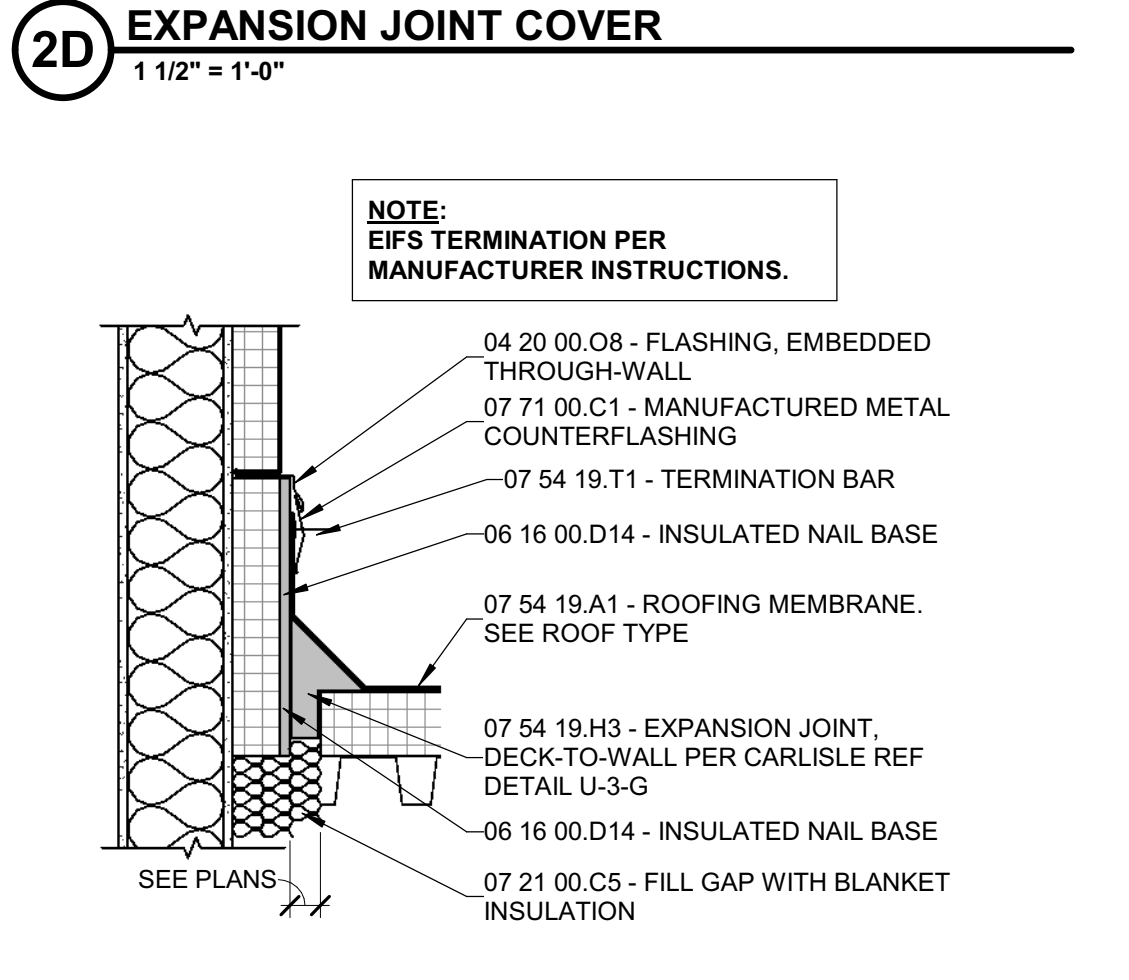
1E METAL COPING  
1 1/2" = 1'-0"



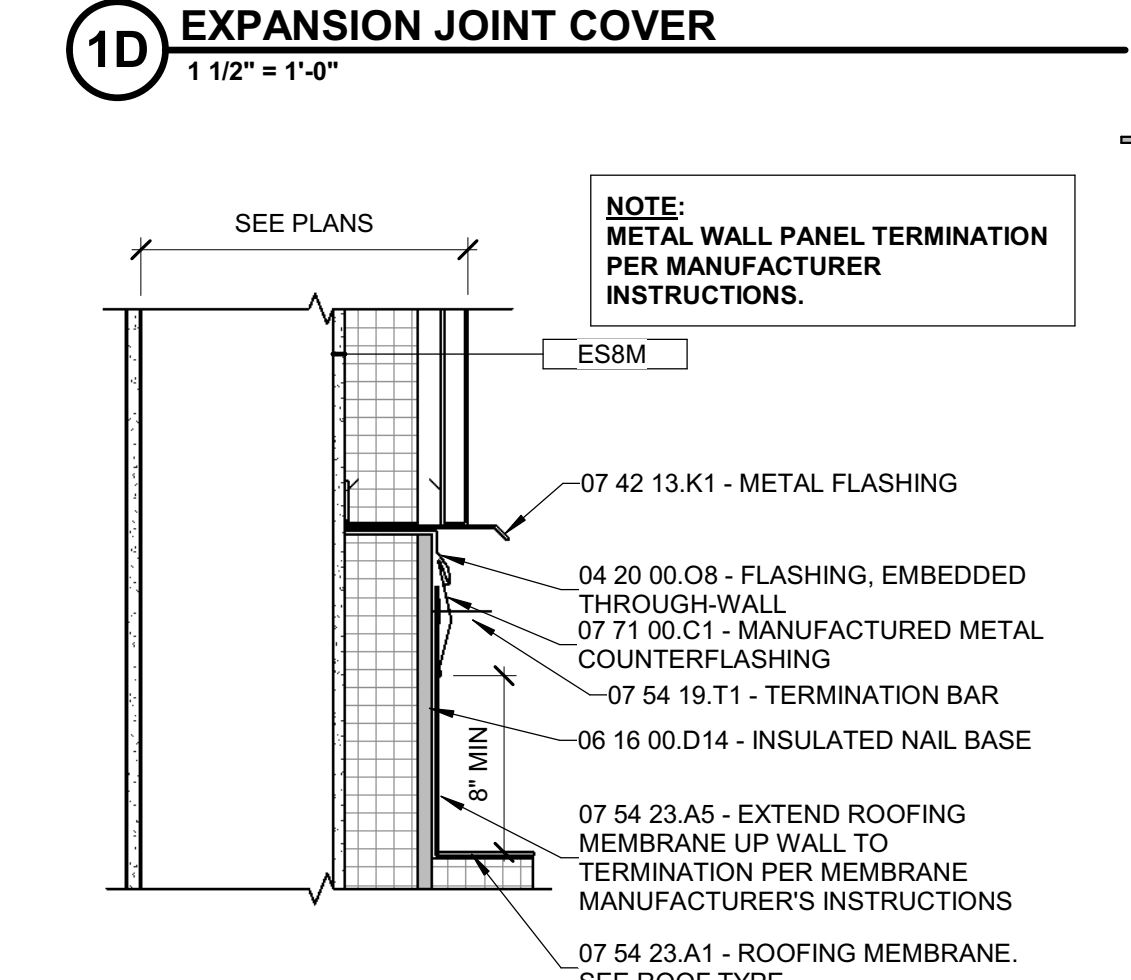
5C FOUNDATION  
1 1/2" = 1'-0"



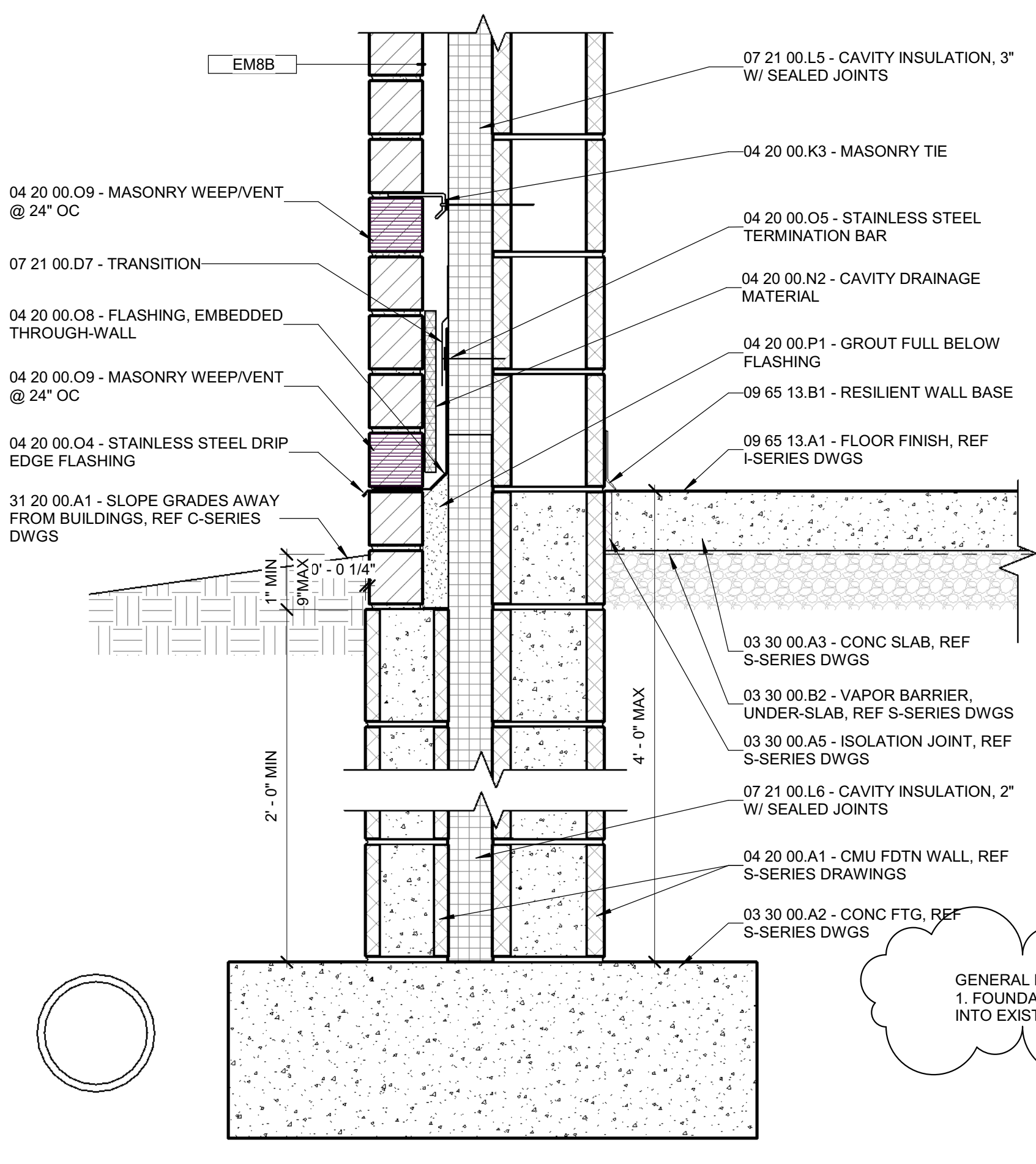
3D EXPANSION JOINT COVER  
1 1/2" = 1'-0"



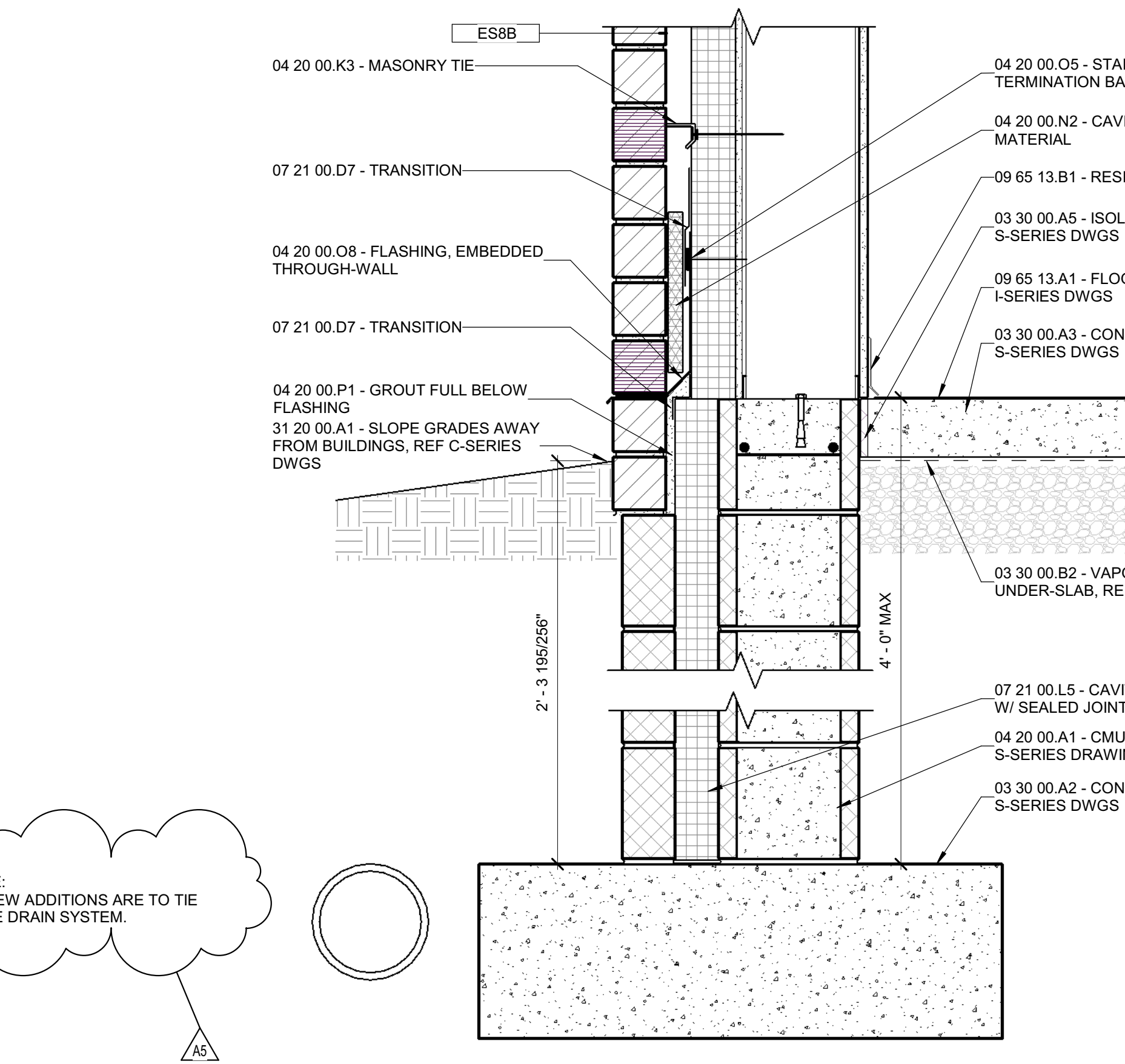
2C ROOF EXPANSION JOINT  
1" = 1'-0"



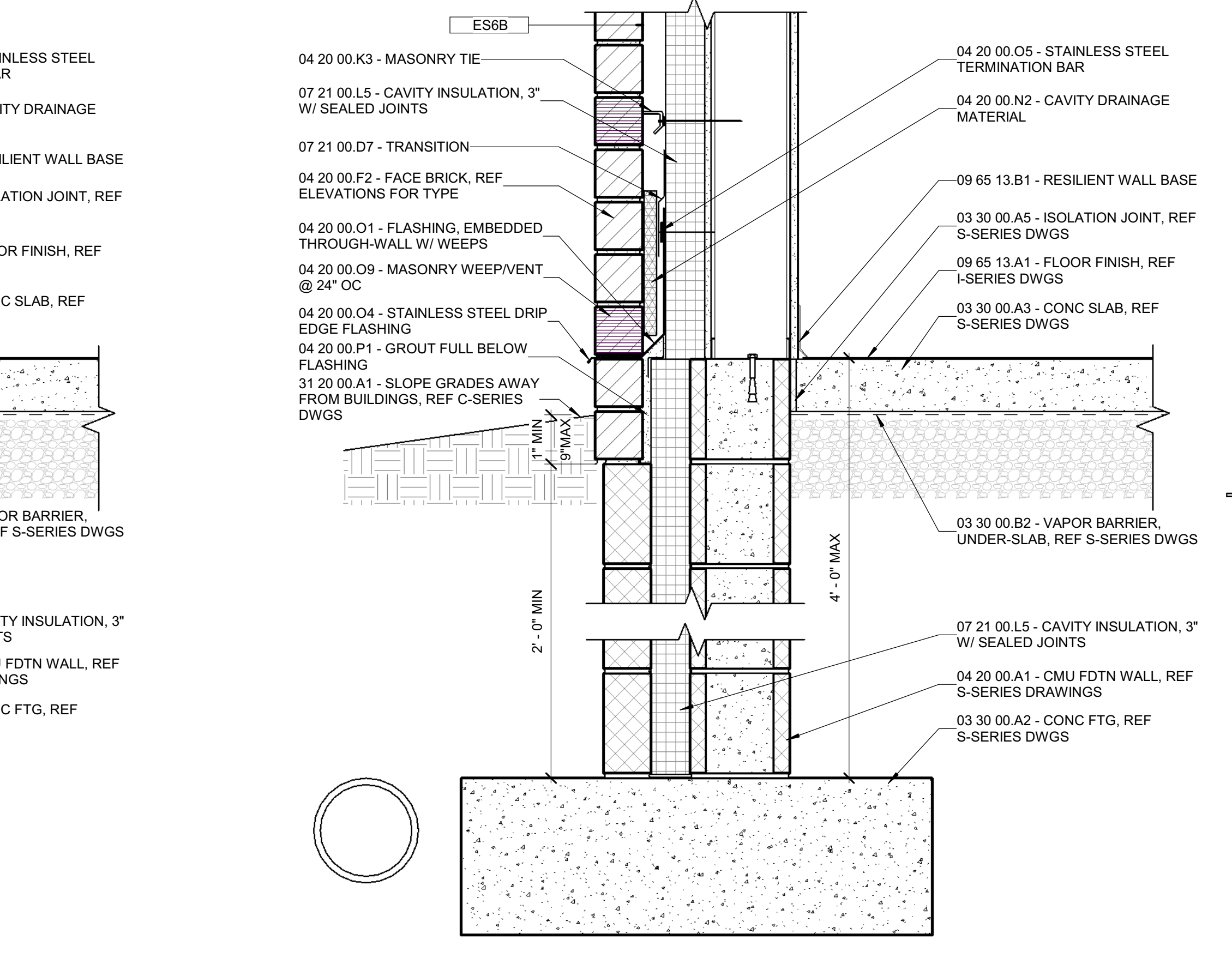
1C ROOF TERMINATION  
1 1/2" = 1'-0"



5A FOUNDATION  
1 1/2" = 1'-0"



3A FOUNDATION  
1 1/2" = 1'-0"



1A FOUNDATION  
1 1/2" = 1'-0"

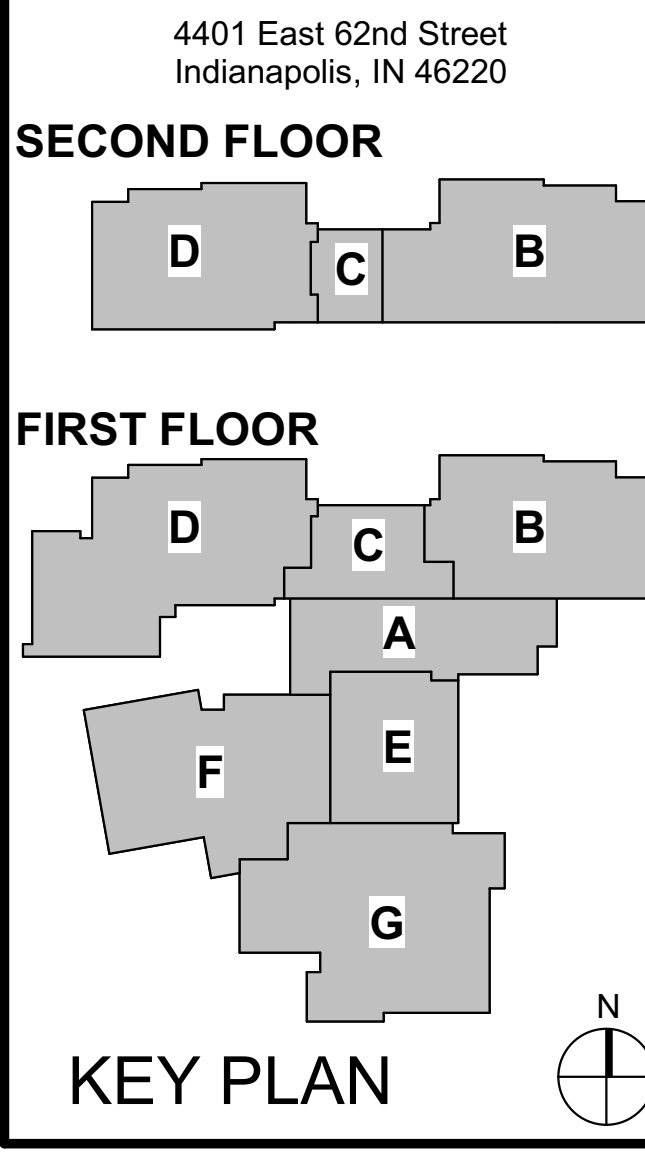
GENERAL FOUNDATION NOTE:  
1. FOUNDATION DRAINS AT NEW ADDITIONS ARE TO TIE INTO EXISTING CRAWL SPACE DRAIN SYSTEM.

Project No. 2017-114.EMS  
Project Date 10.21.18  
Produced CM TE

Bid Documents

These Drawings and Specifications, and all copies thereof are and shall remain the property and copyright of the Architect. They shall be used only with respect to this Project and are not to be used on any other Project or Work without prior written permission from the Architect.

#	Revision	Date
A5	Addendum #5	11.16.2018




M.S.D. of Washington Township  
**EASTWOOD**  
  
**EAGLES**  
EASTWOOD MIDDLE SCHOOL

SECTION DETAILS



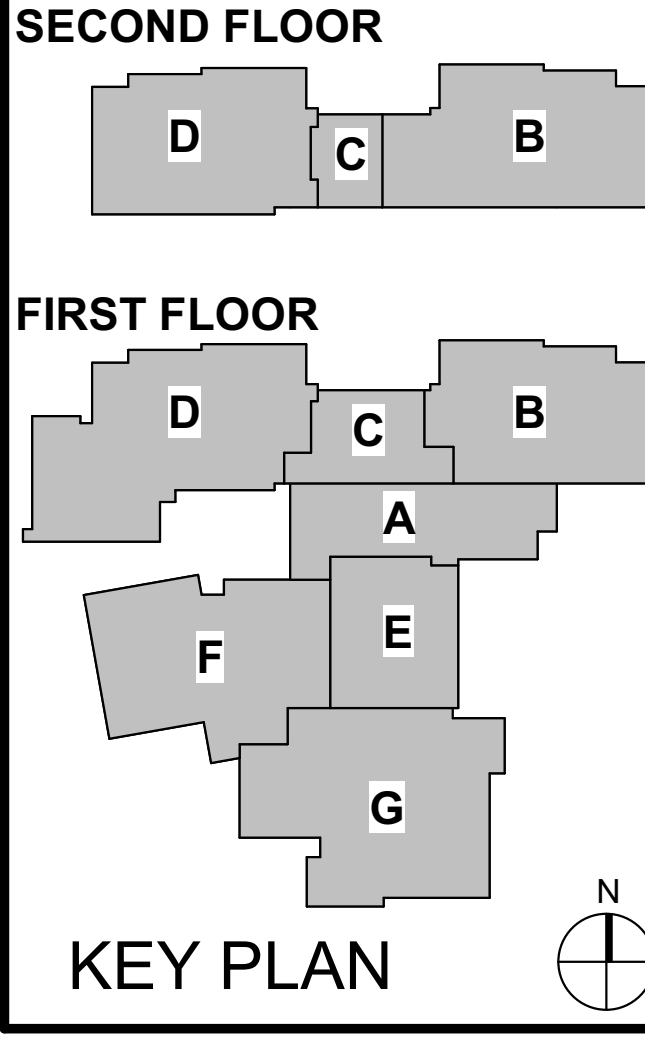
**Bid Documents**



Sarah K. Hempstead  
These Drawings and Specifications, and all copies thereof are and shall remain the property and copyright of the Architect. They shall be used only with respect to the Project and are not to be used on any other Project or Work without prior written permission from the Architect.

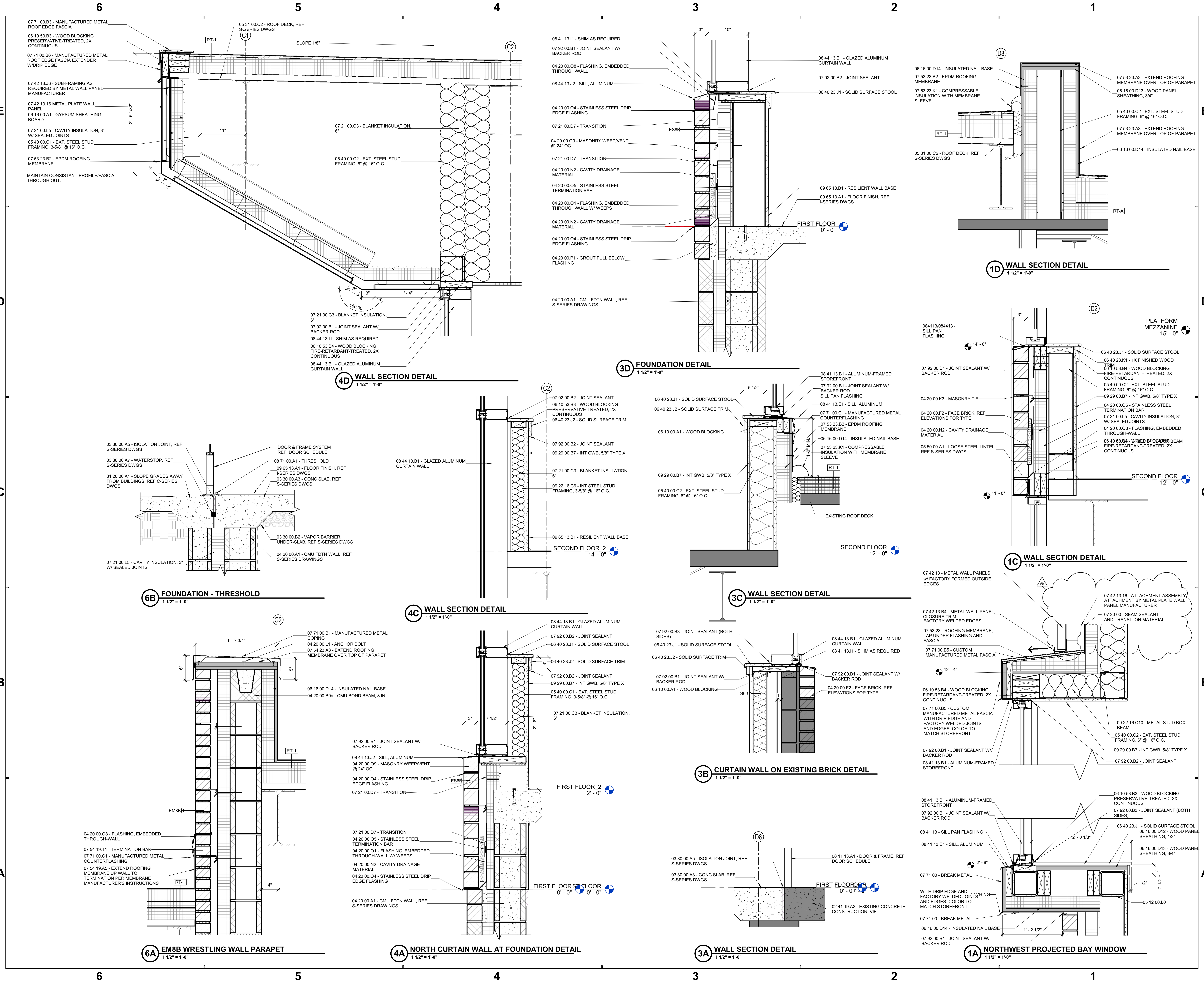
#	Revision	Date
A5	Addendum #5	11.16.2018

4401 East 62nd Street  
Indianapolis, IN 46220



M.S.D. of  
Washington  
Township  
**EASTWOOD**  
  
**EAGLES**  
EASTWOOD  
MIDDLE SCHOOL

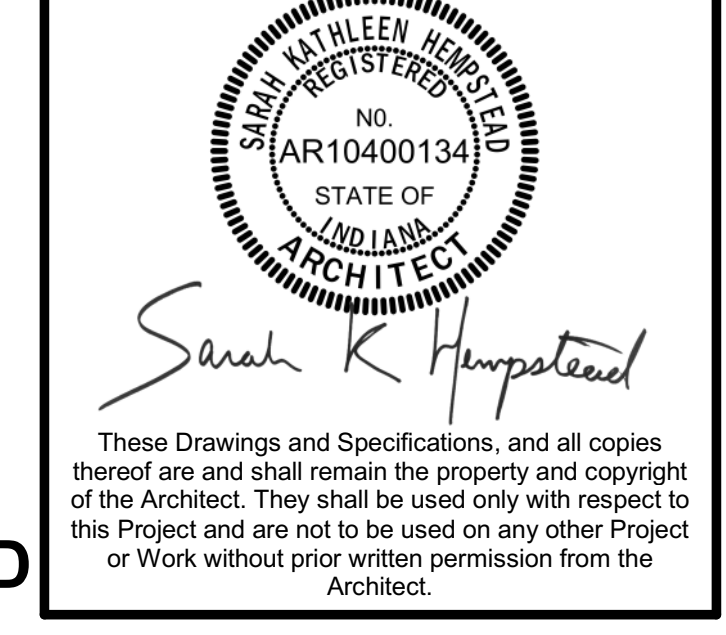
SECTION DETAILS



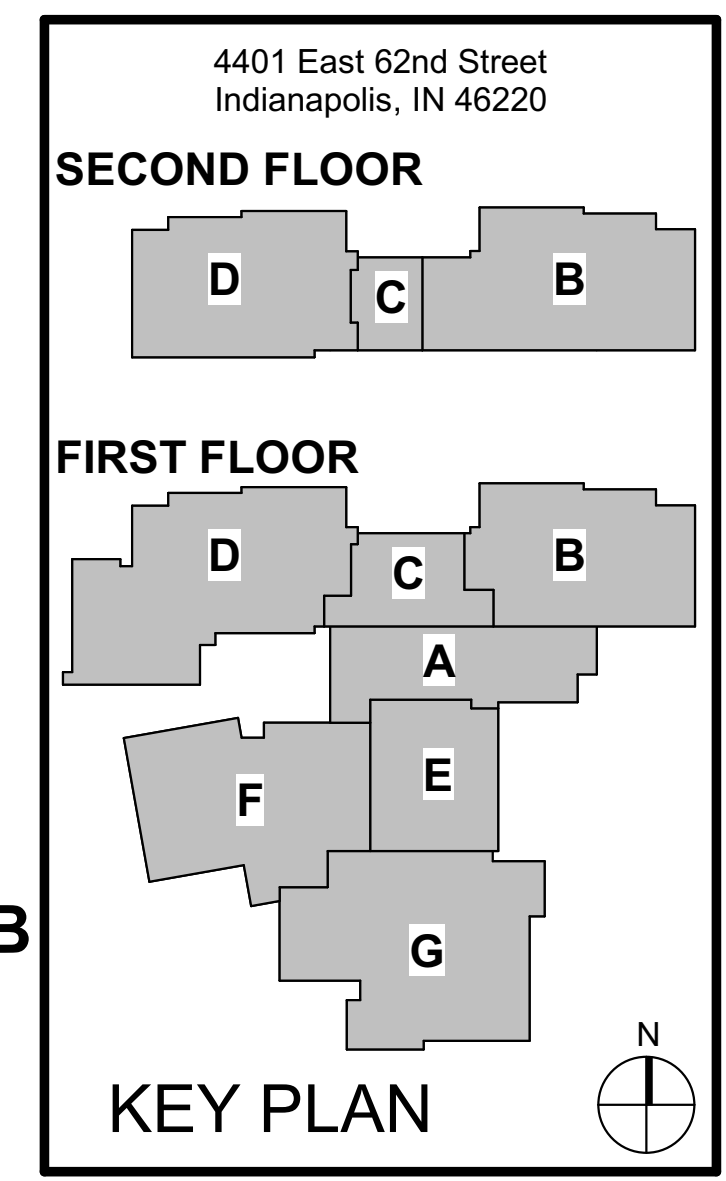
ARCH: SCHMIDT ASSOCIATES  
 2017-114.EMS.MS.D. OF WASHINGTON TOWNSHIP EASTWOOD MIDDLE SCHOOL  
 SECTION DETAILS  
 A-321  
 10/21/18



**Bid Documents**



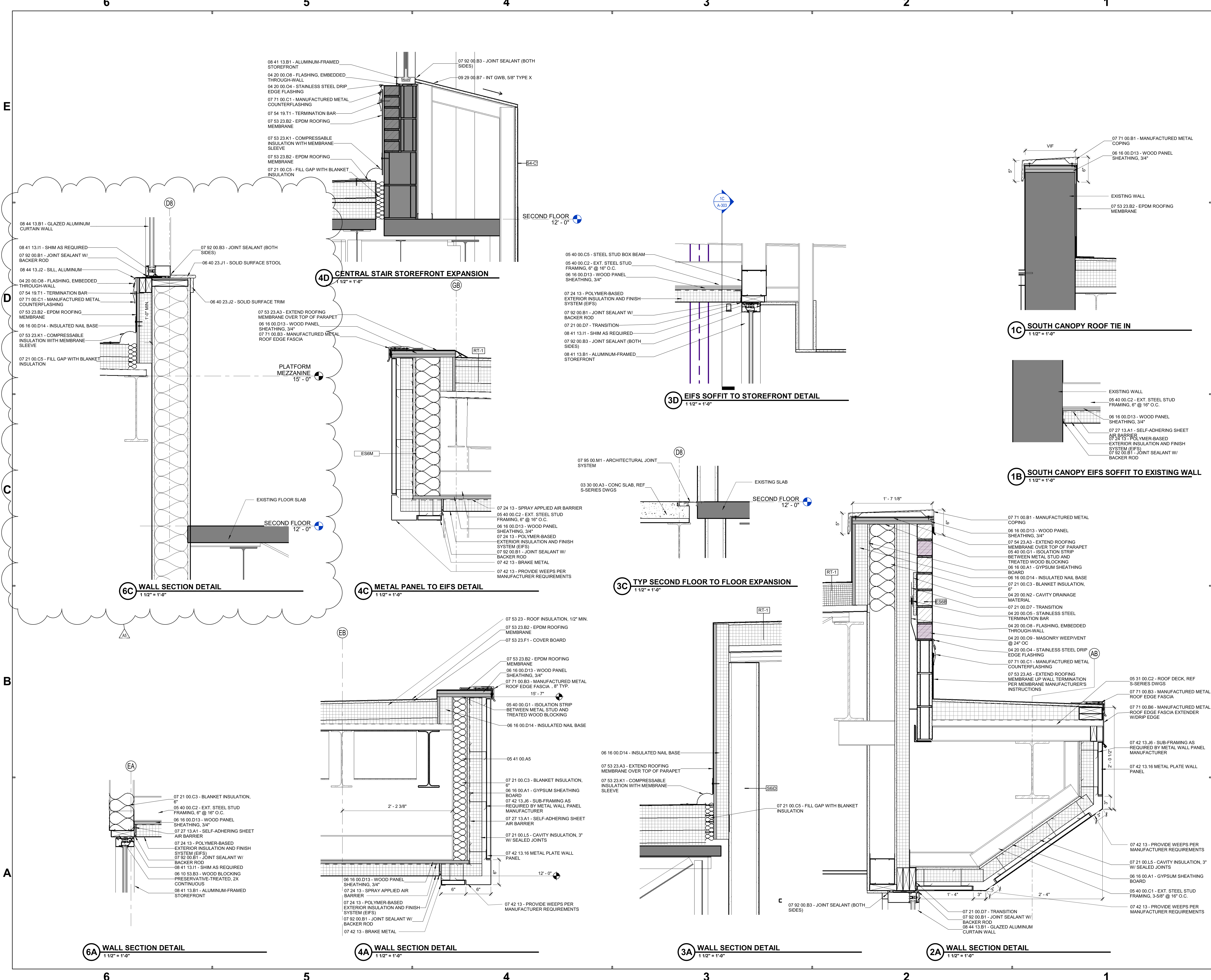
#	Revision	Date
A5	Addendum #5	11.16.2018



4401 East 62nd Street  
Indianapolis, IN 46220

**EASTWOOD EAGLES**

**EASTWOOD MIDDLE SCHOOL**



4401 EASTWOOD MIDDLE SCHOOL  
 2017-114.EMS  
 10.21.18  
 CM TE  
 11.16.2018  
 A-322



6

5

4

3

2

1

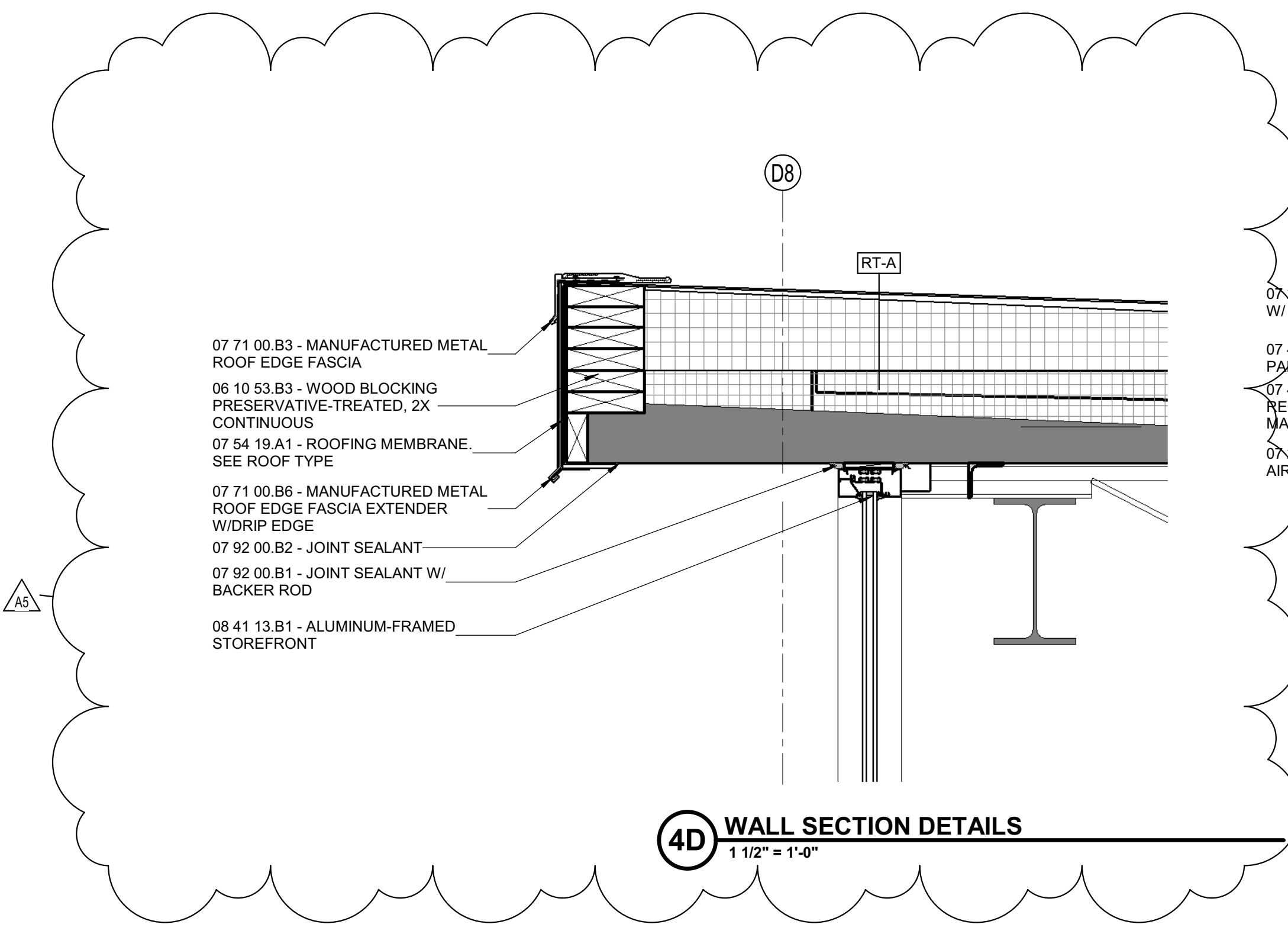
E

D

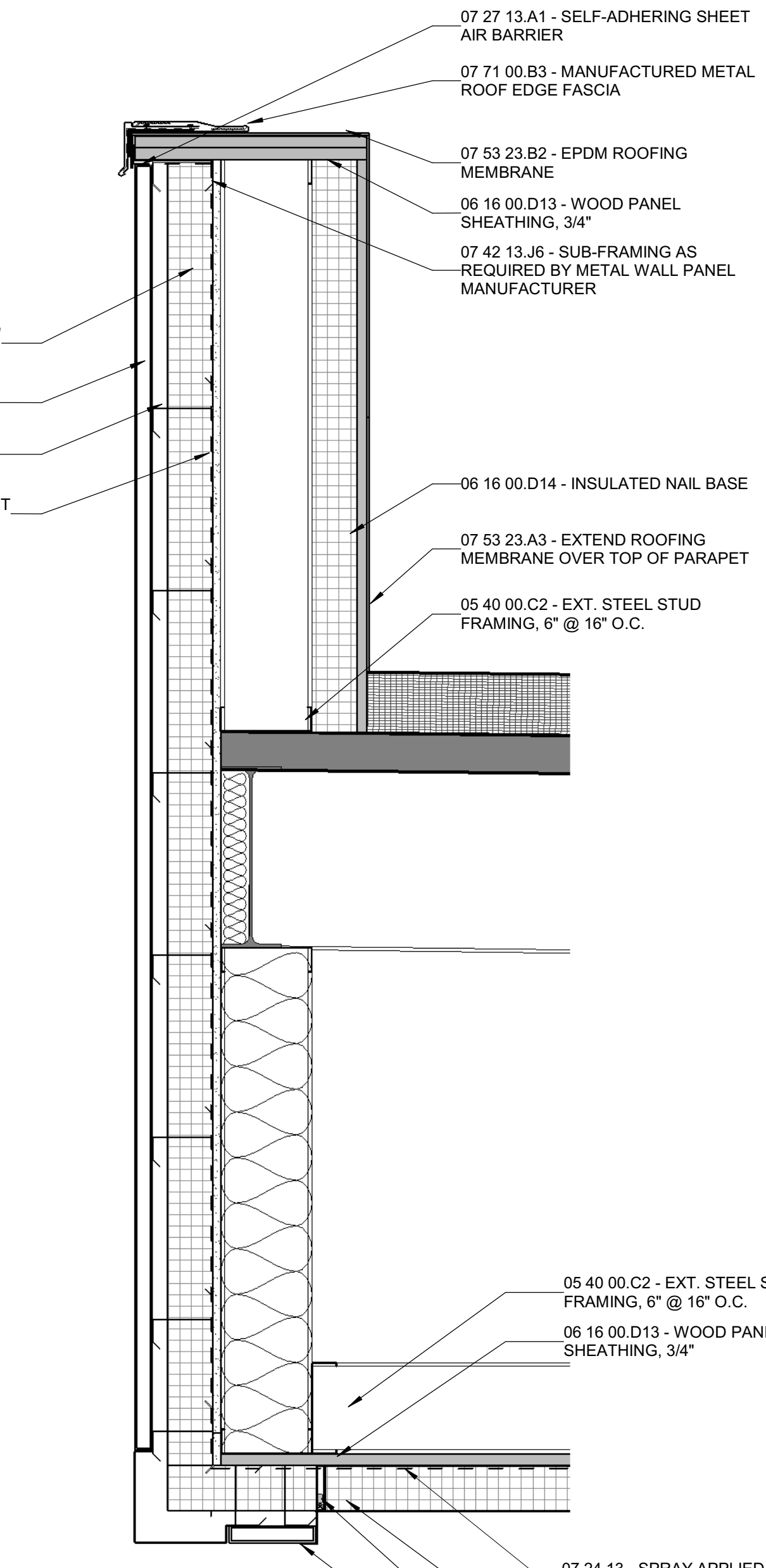
C

B

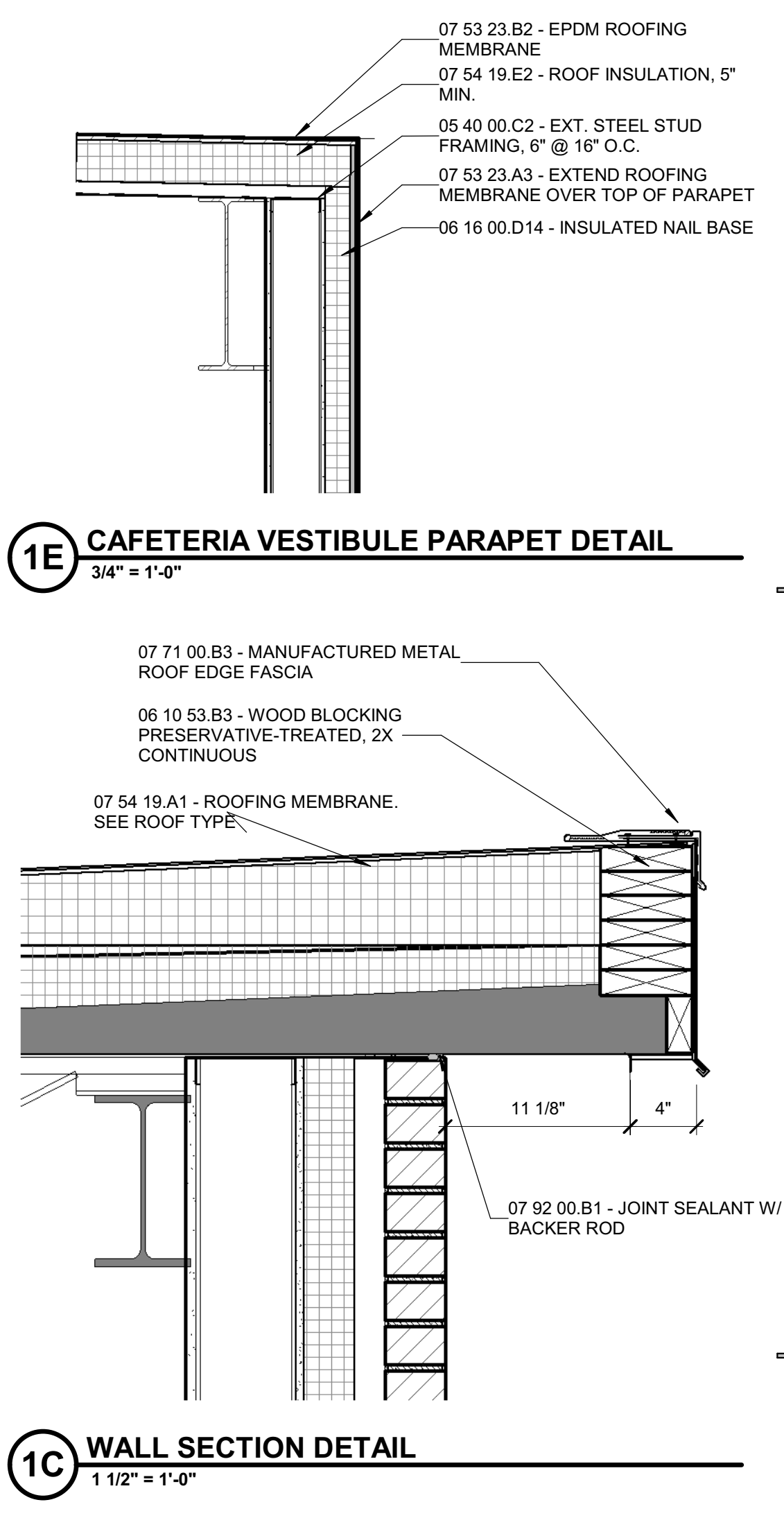
A



4D WALL SECTION DETAILS 1 1/2" = 1'-0"

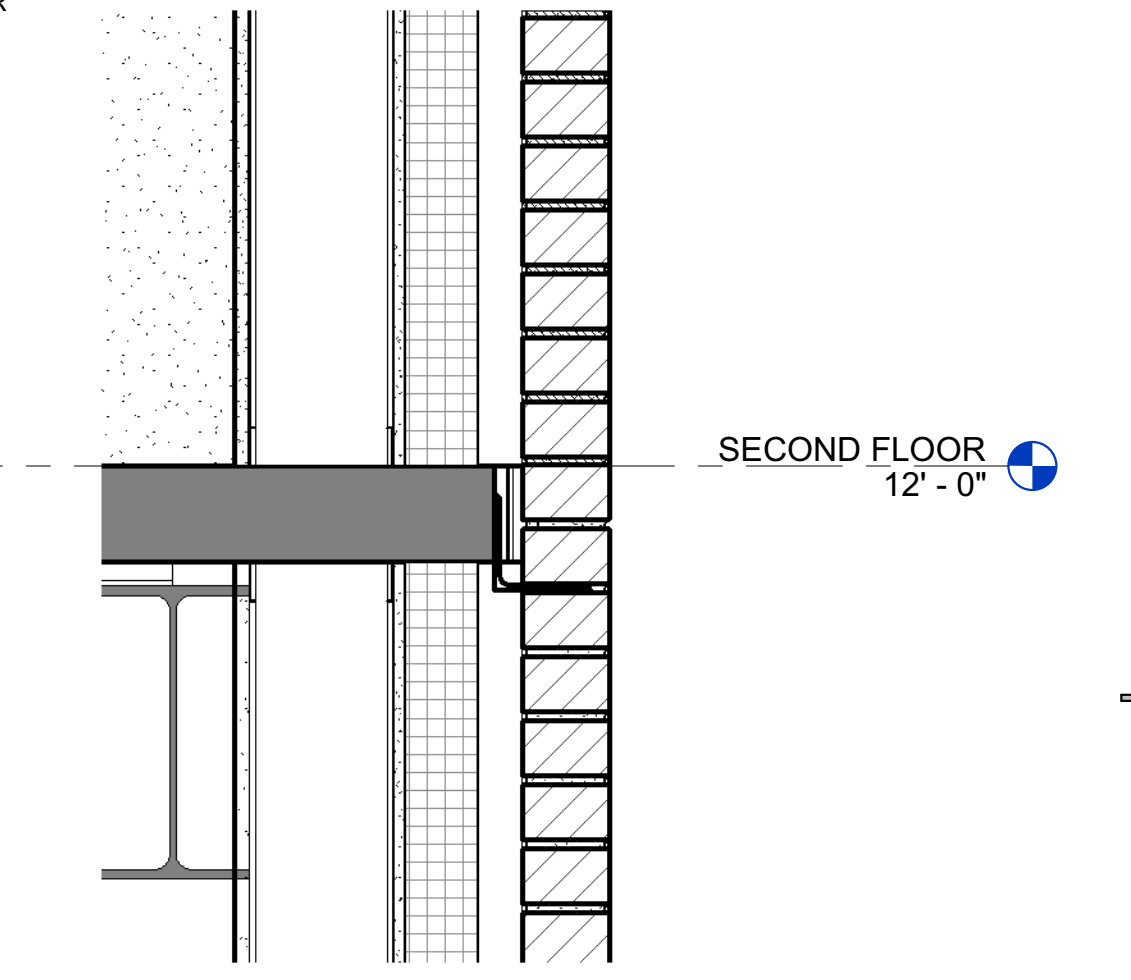


2C WALL SECTION DETAIL 1 1/2" = 1'-0"

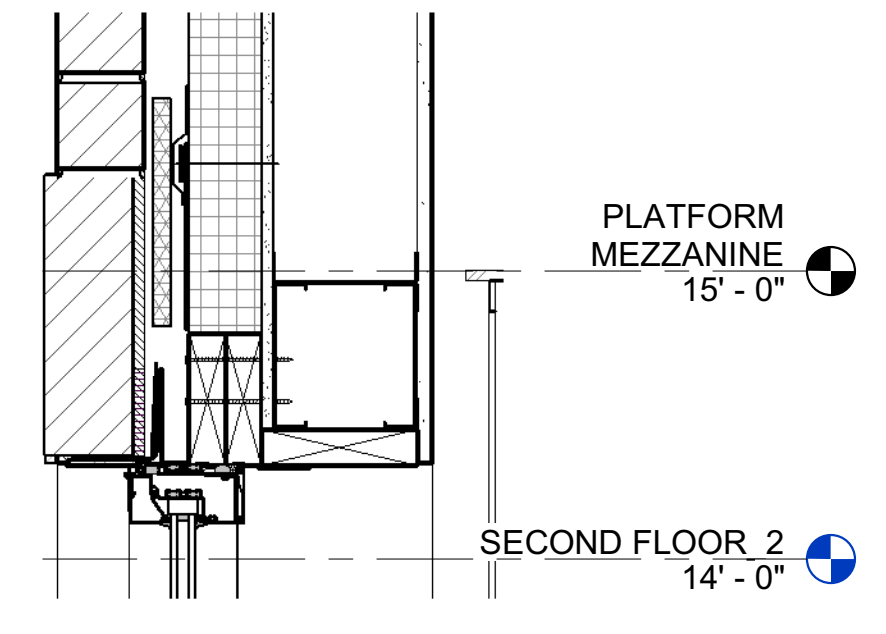


1E CAFETERIA VESTIBULE PARAPET DETAIL 3/4" = 1'-0"

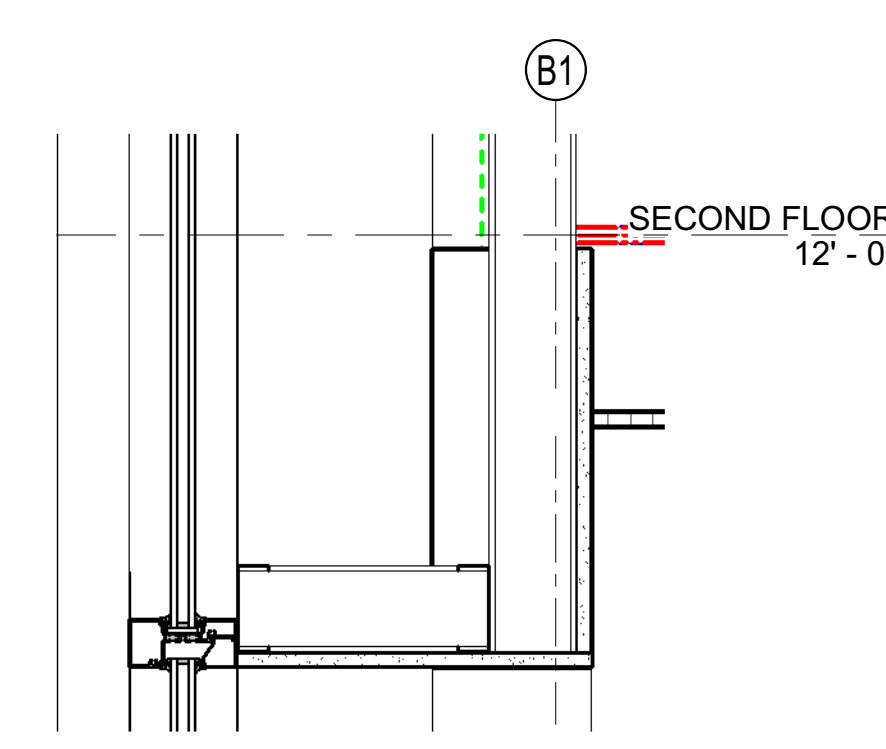
1C WALL SECTION DETAIL 1 1/2" = 1'-0"



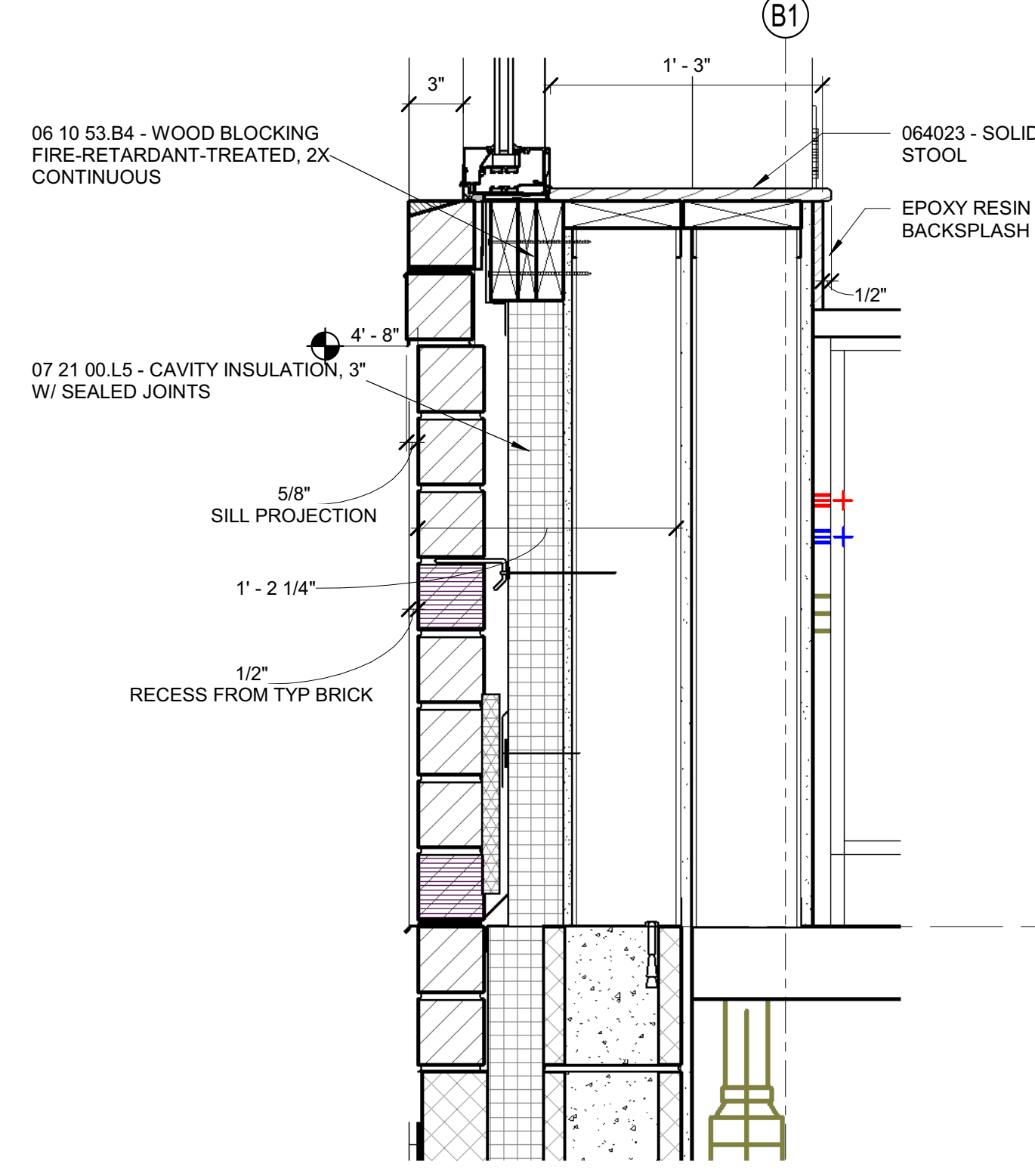
1B WALL SECTION DETAIL 1 1/2" = 1'-0"



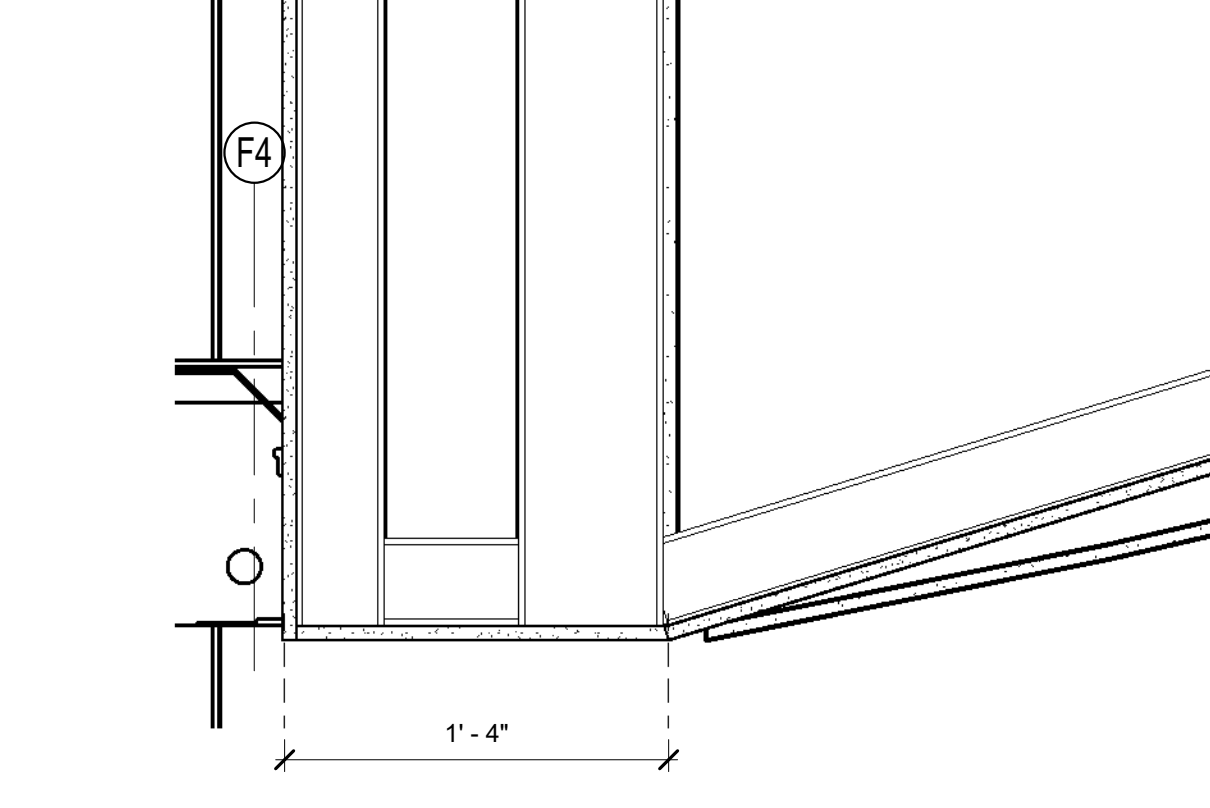
4C WALL SECTION DETAIL 1 1/2" = 1'-0"



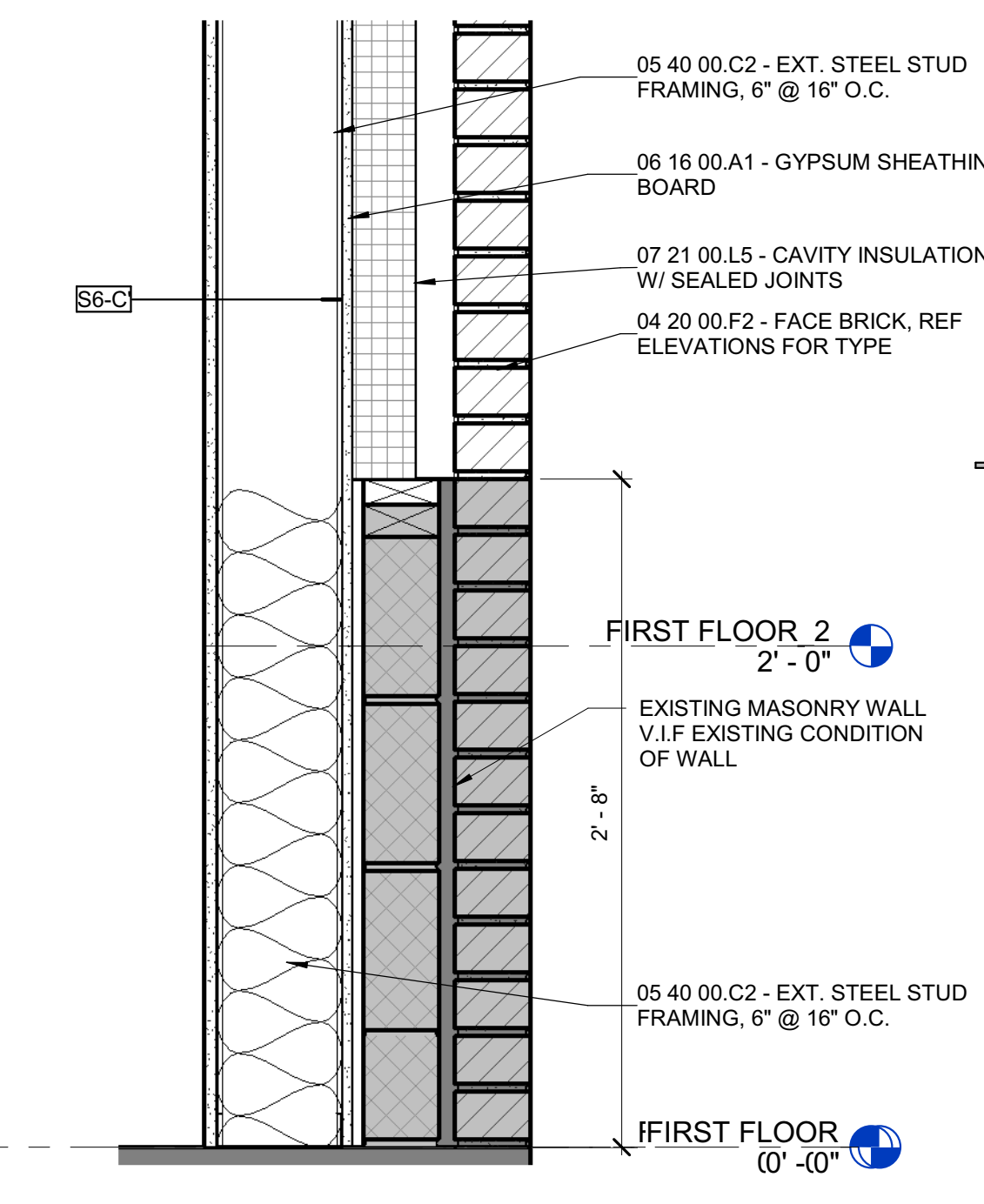
4B WALL SECTION DETAIL 1 1/2" = 1'-0"



4A WALL SECTION DETAIL 1 1/2" = 1'-0"

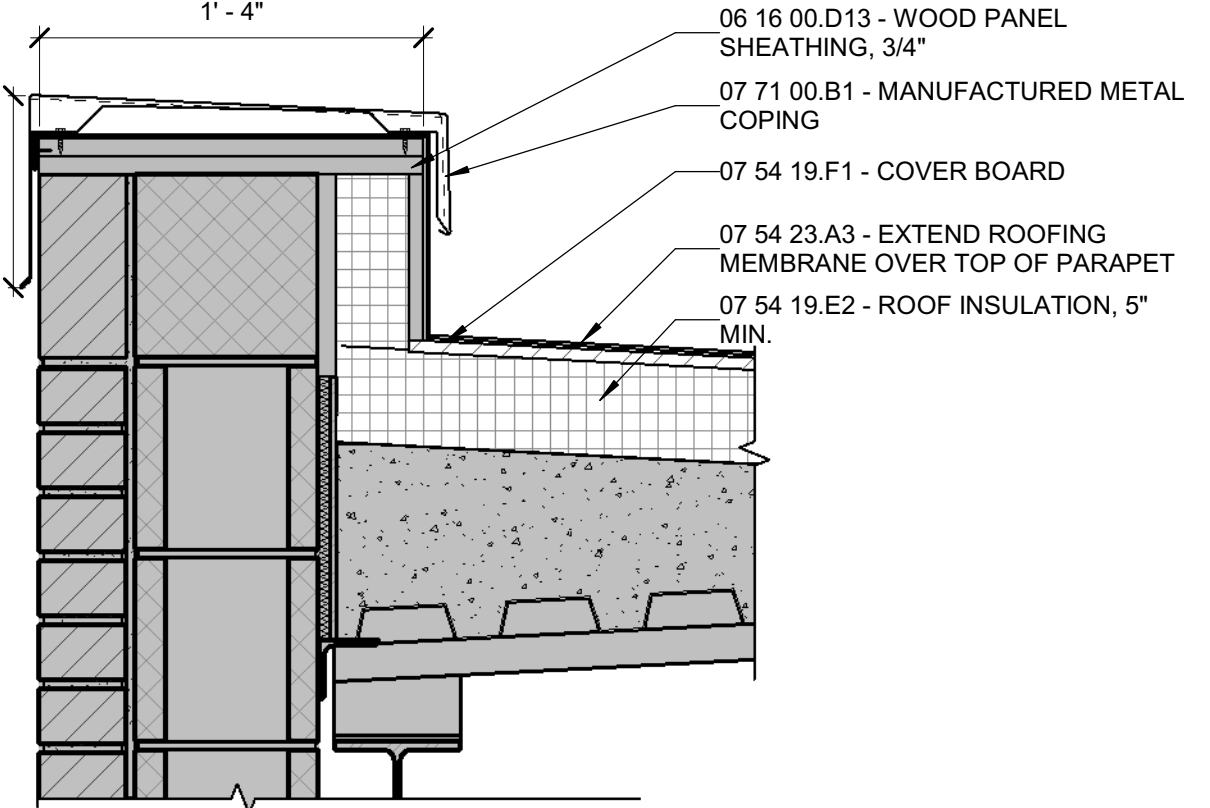


2A WALL SECTION DETAIL 1 1/2" = 1'-0"



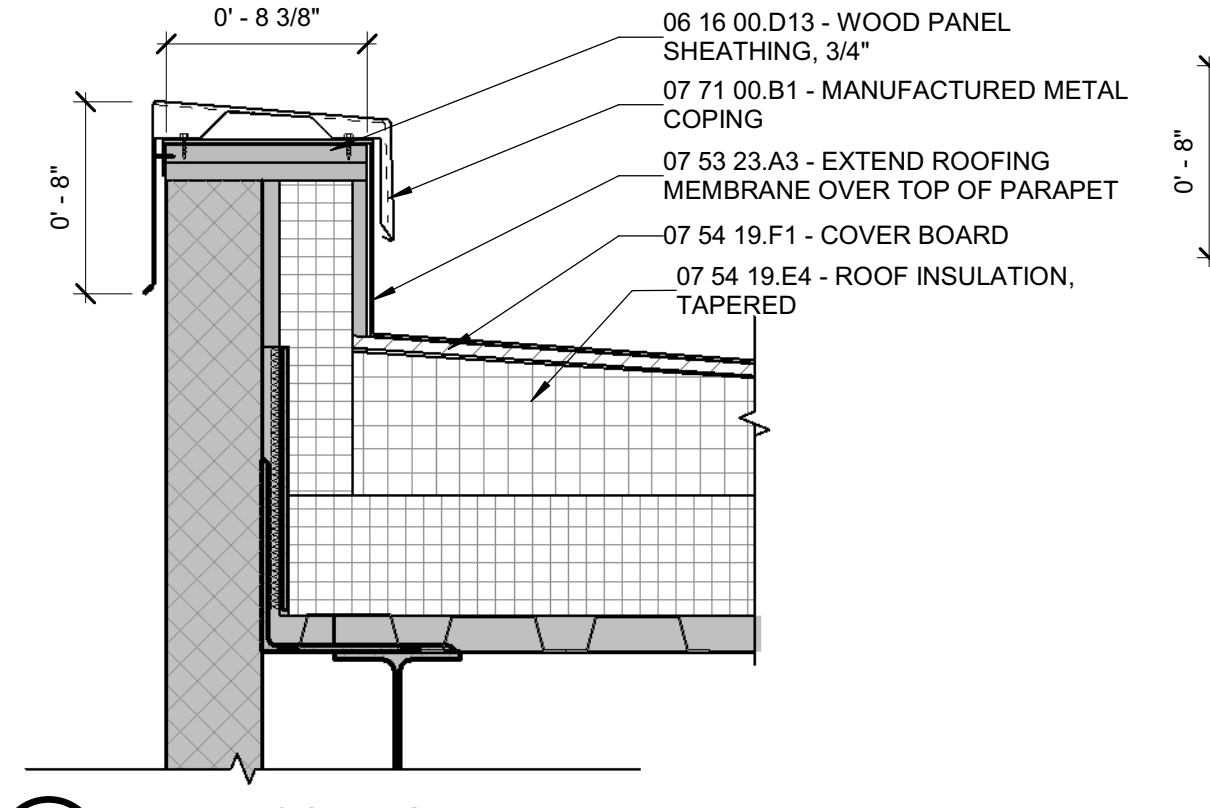
1A WALL SECTION DETAIL 1 1/2" = 1'-0"

NOTE: ALL STEEL FASTENERS PENETRATING TREATED WOOD OR TREATED PLYWOOD MUST BE GALVANIZED OR STAINLESS STEEL.



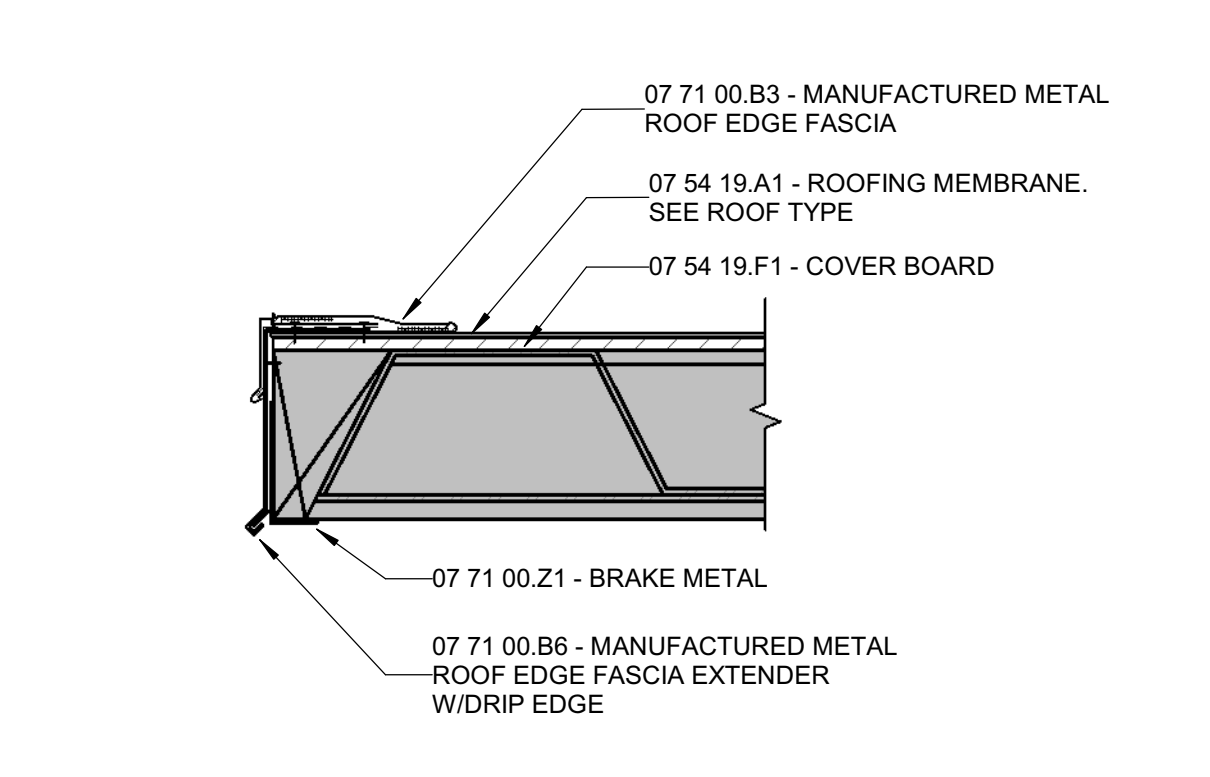
6C METAL COPING 1 1/2" = 1'-0"

NOTE: ALL STEEL FASTENERS PENETRATING TREATED WOOD OR TREATED PLYWOOD MUST BE GALVANIZED OR STAINLESS STEEL.



6B METAL COPING 1 1/2" = 1'-0"

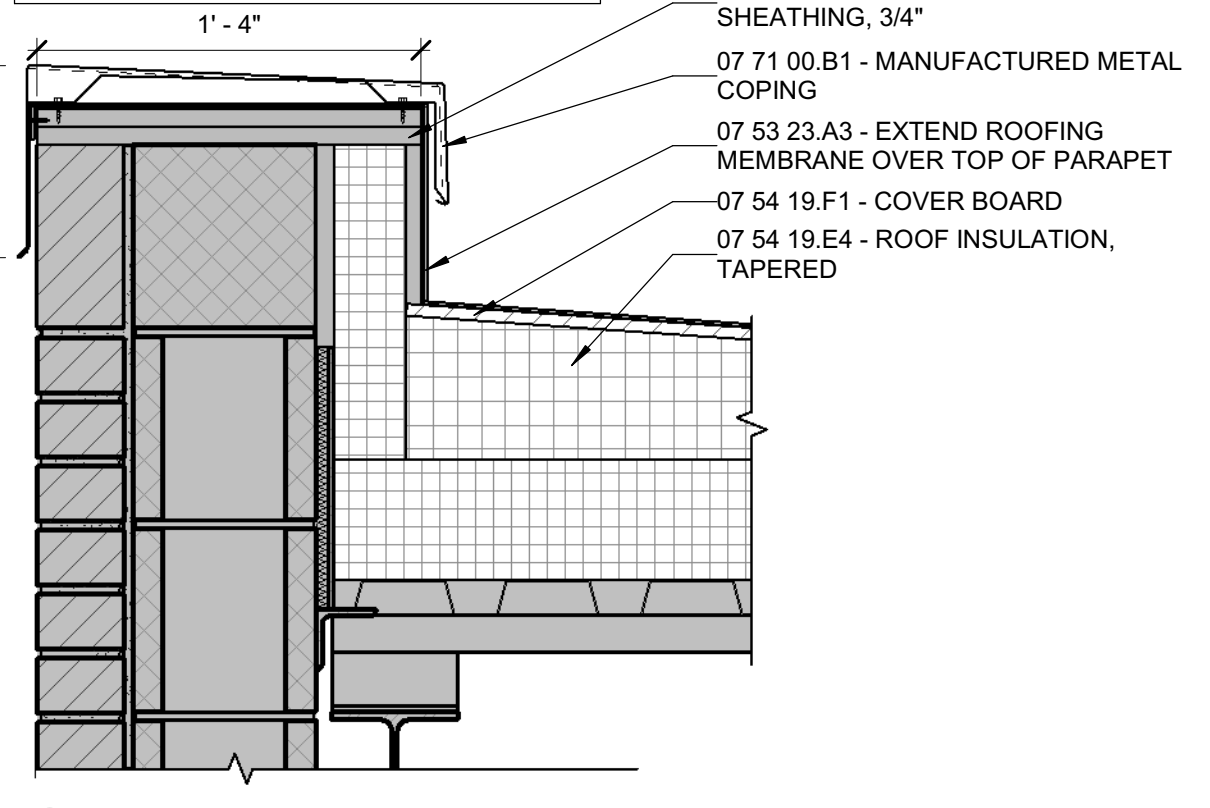
NOTE: ALL STEEL FASTENERS PENETRATING TREATED WOOD OR TREATED PLYWOOD MUST BE GALVANIZED OR STAINLESS STEEL.



6A METAL COPING 1 1/2" = 1'-0"

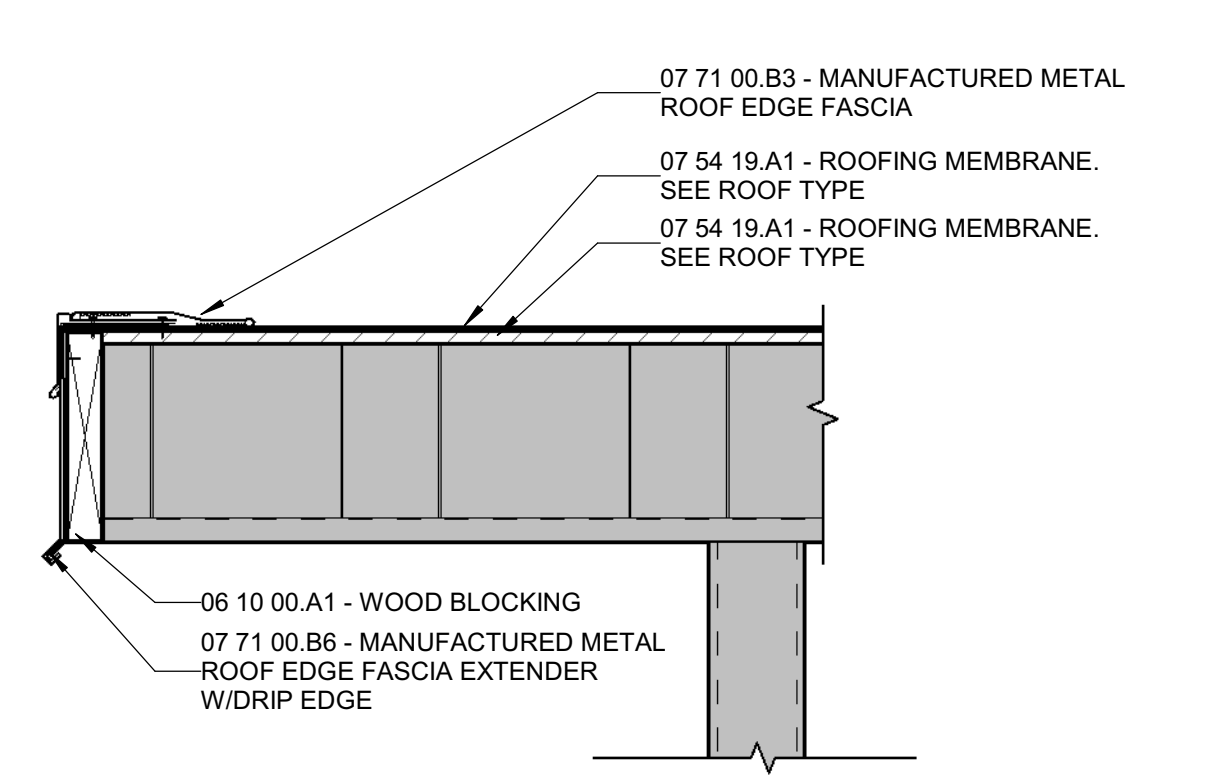
5C WALL SECTION DETAIL 1 1/2" = 1'-0"

NOTE: ALL STEEL FASTENERS PENETRATING TREATED WOOD OR TREATED PLYWOOD MUST BE GALVANIZED OR STAINLESS STEEL.



5B METAL COPING 1 1/2" = 1'-0"

NOTE: ALL STEEL FASTENERS PENETRATING TREATED WOOD OR TREATED PLYWOOD MUST BE GALVANIZED OR STAINLESS STEEL.



5A METAL COPING 1 1/2" = 1'-0"

**SCHMIDT ASSOCIATES**  
 415 Massachusetts Avenue  
 Indianapolis, IN 46204  
 www.schmidt-arch.com

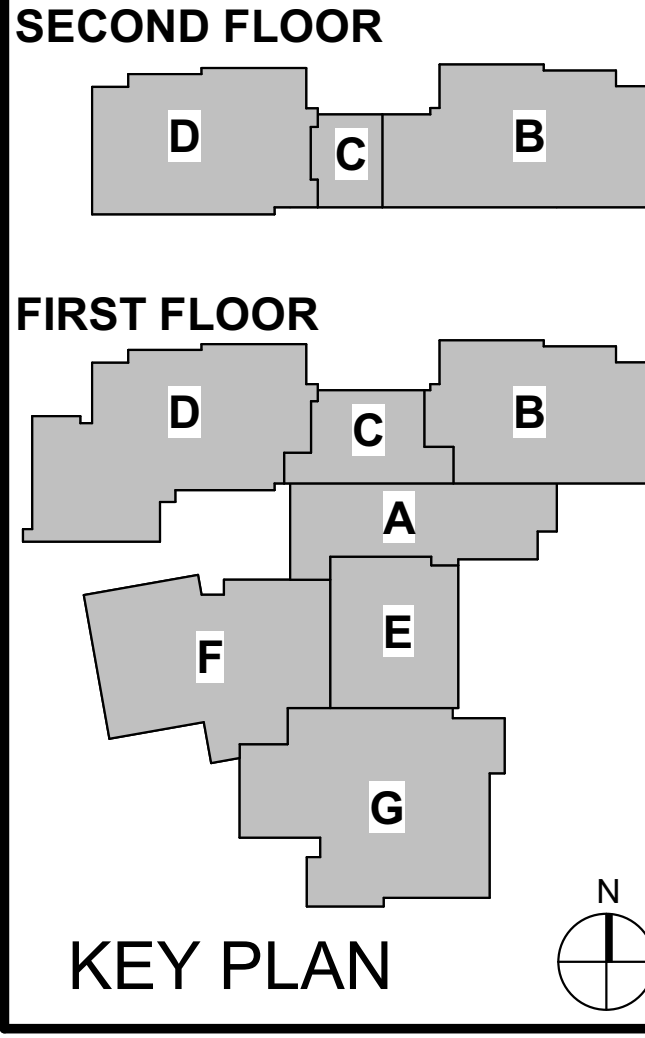
Project No. 2017-114.EMS  
 Project Date 10.21.18  
 Produced CM TE

Bid Documents

Sarah K. Hempstead  
 These Drawings and Specifications, and all copies thereof are and shall remain the property and copyright of the Architect. They shall be used only with respect to this Project and are not to be used on any other Project or Work without prior written permission from the Architect.

#	Revision	Date
A5	Addendum #5	11.16.2018

4401 East 62nd Street Indianapolis, IN 46220



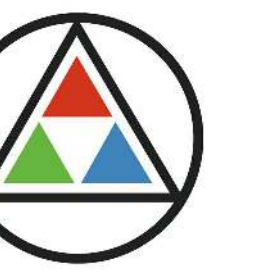
M.S.D. of Washington Township  
**EASTWOOD EAGLES**

EASTWOOD MIDDLE SCHOOL

SECTION DETAILS

A-323





**SCHMIDT ASSOCIATES**  
 415 Massachusetts Avenue  
 Indianapolis, IN 46204  
 www.schmidt-arch.com

Project No. 2017-114.EMS  
 Project Date 10.21.18  
 Produced CM TE

**Bid Documents**

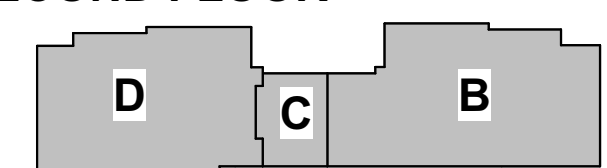


*Sarah K. Hempstead*  
 These Drawings and Specifications, and all copies thereof are and shall remain the property and copyright of the Architect. They shall be used only with respect to this Project and are not to be used on any other Project or Work without prior written permission from the Architect.

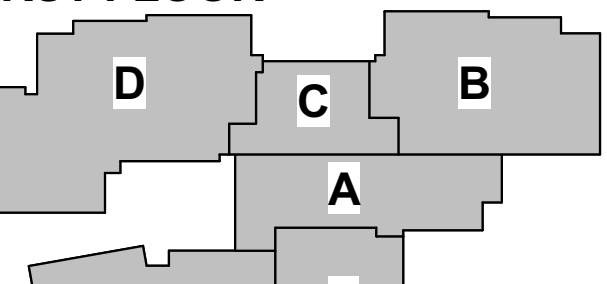
#	Revision	Date
A2	Addendum #2	11.01.2018
A5	Addendum #5	11.16.2018

4401 East 62nd Street  
 Indianapolis, IN 46220

**SECOND FLOOR**



**FIRST FLOOR**



**KEY PLAN**

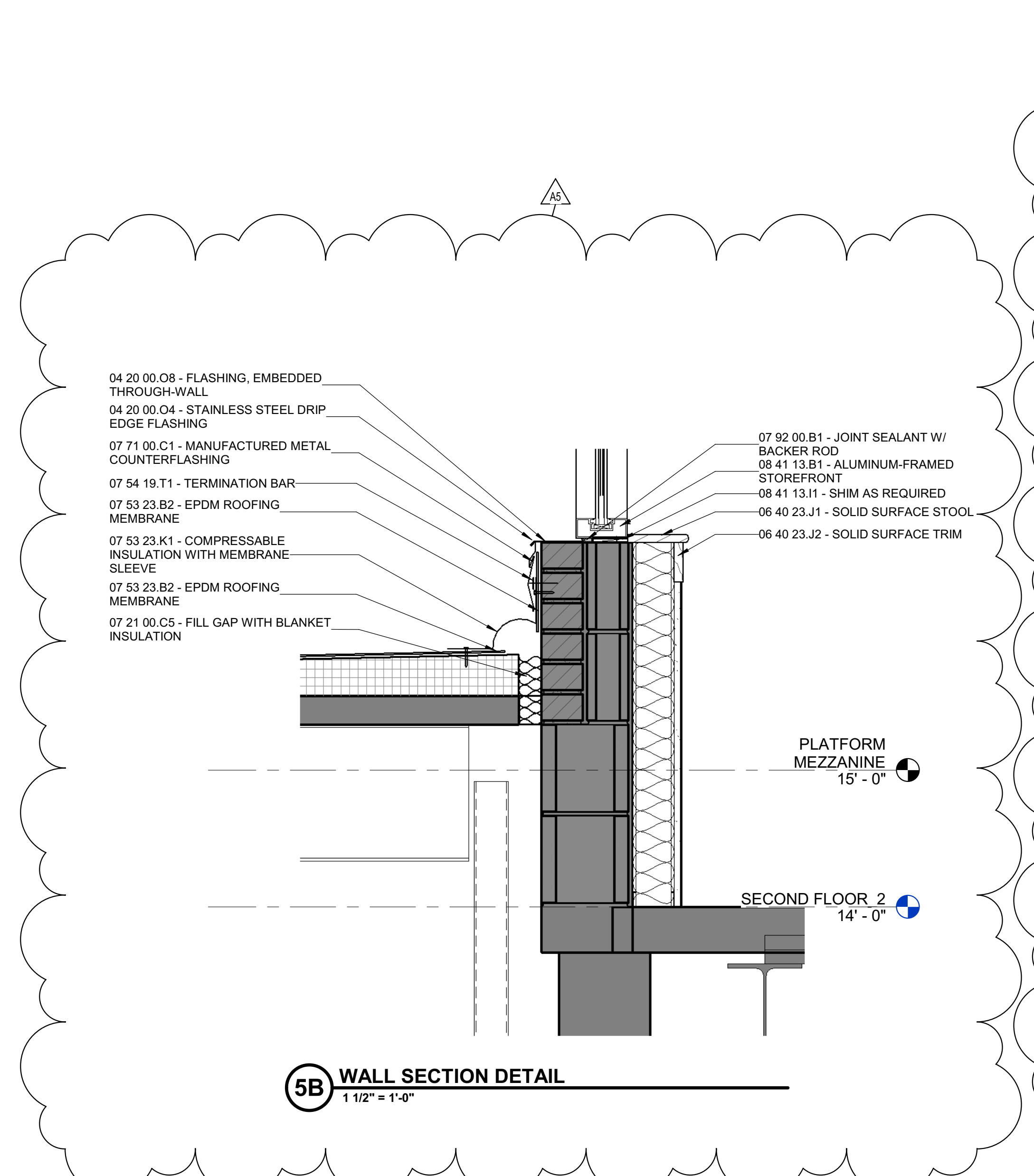


M.S.D. of Washington Township  
**EASTWOOD**  
  
**EAGLES**

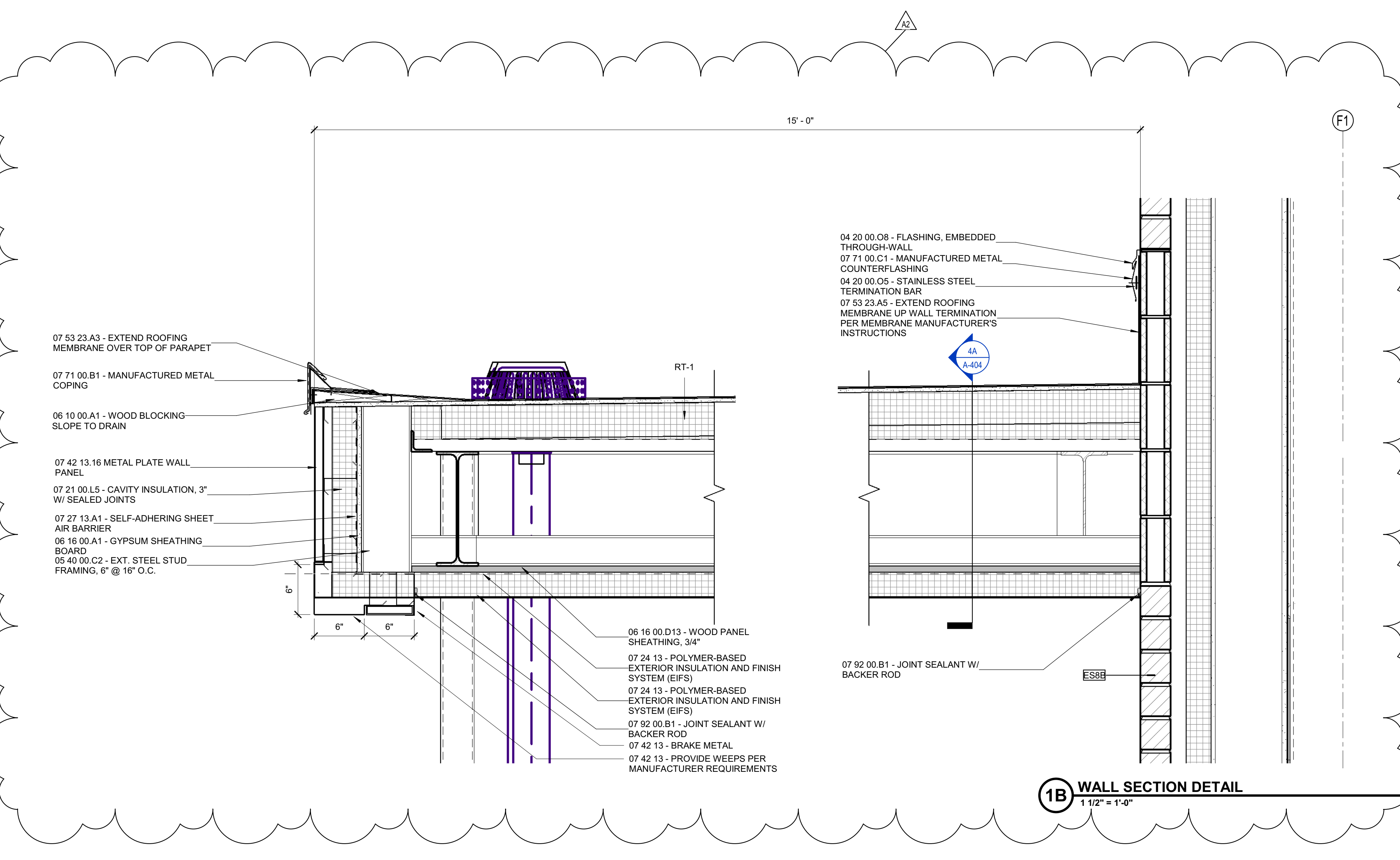
**EASTWOOD MIDDLE SCHOOL**

**SECTION DETAILS**

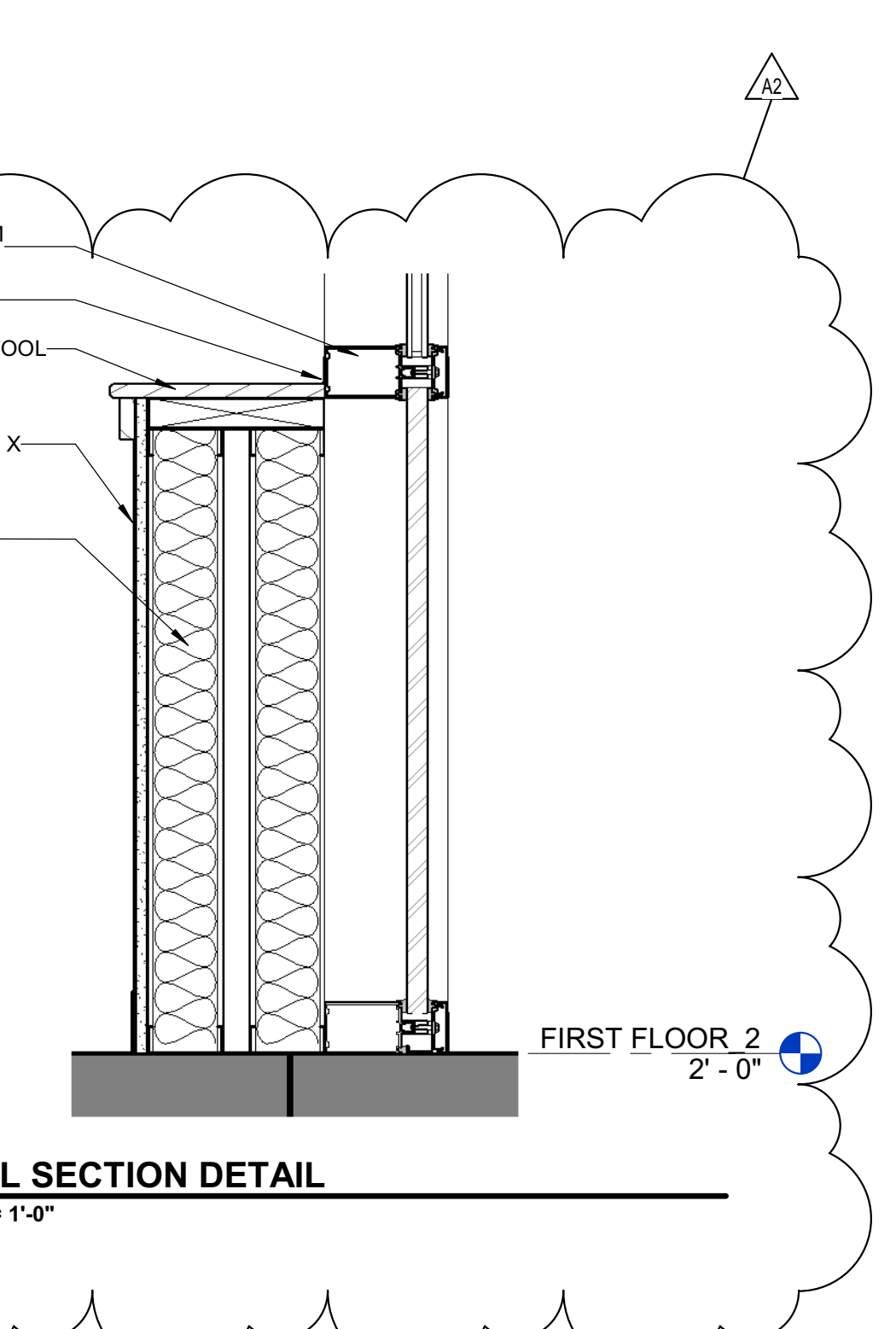
A-324



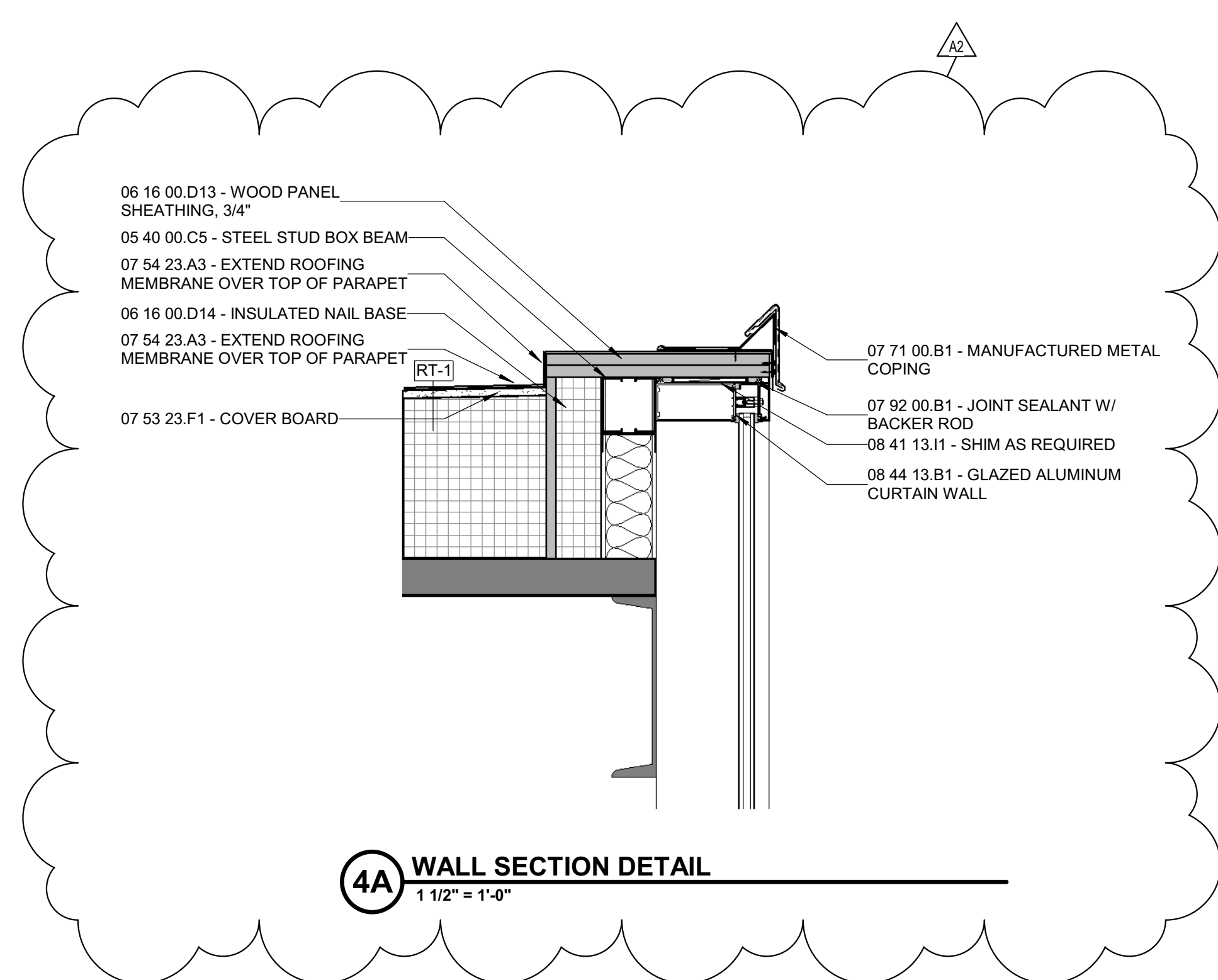
**5B WALL SECTION DETAIL**  
 1 1/2" = 1'-0"



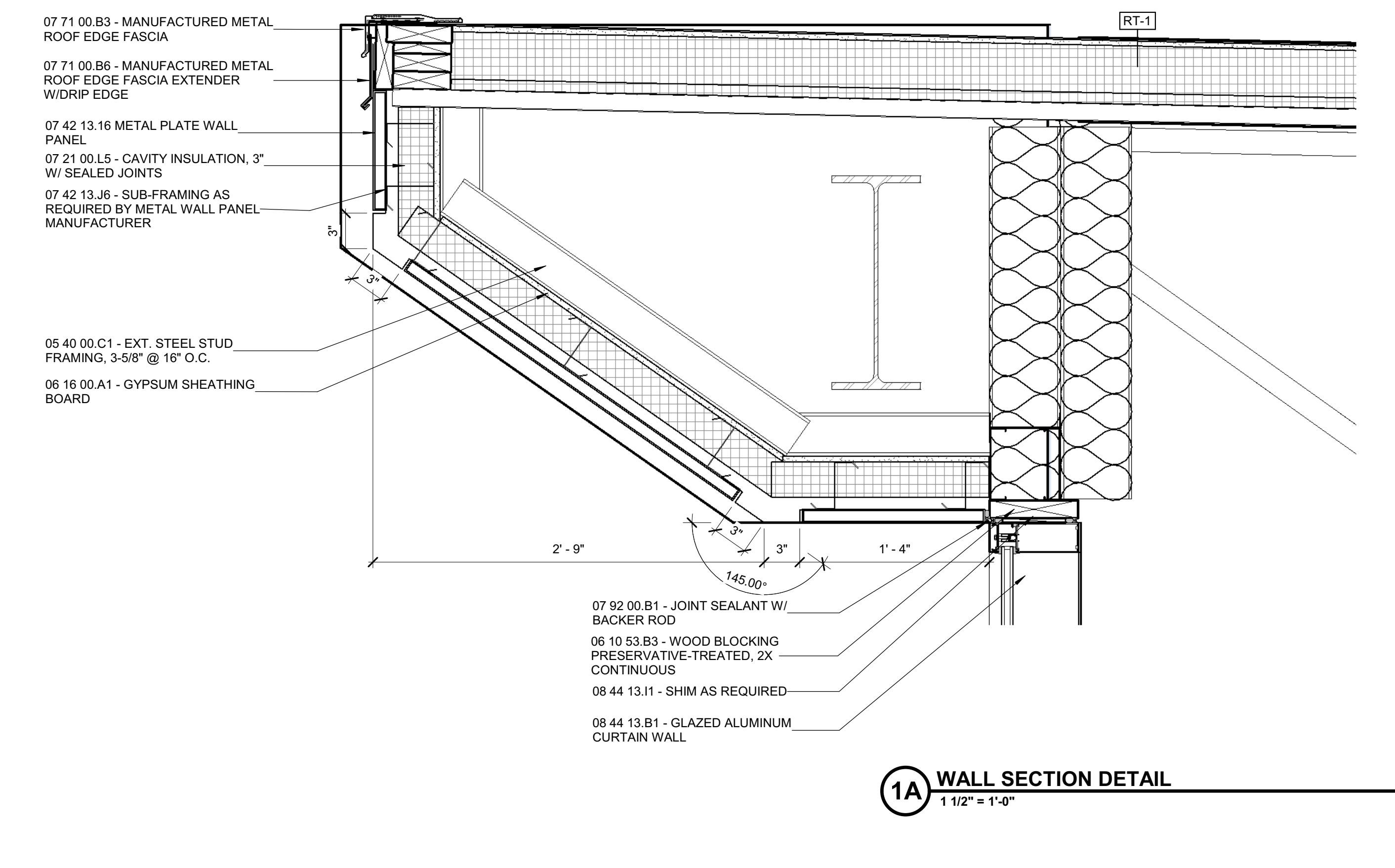
**1B WALL SECTION DETAIL**  
 1 1/2" = 1'-0"



**6A WALL SECTION DETAIL**  
 1 1/2" = 1'-0"



**4A WALL SECTION DETAIL**  
 1 1/2" = 1'-0"

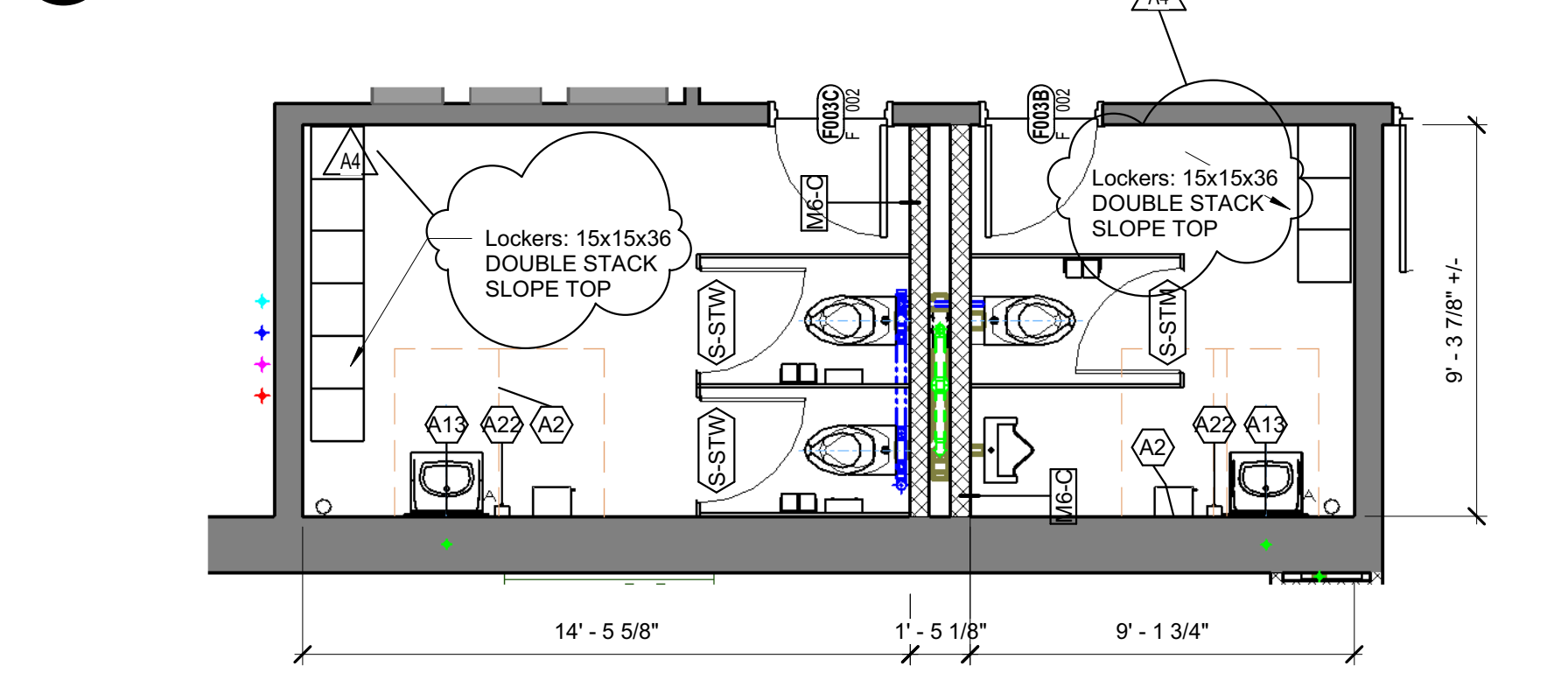


**1A WALL SECTION DETAIL**  
 1 1/2" = 1'-0"

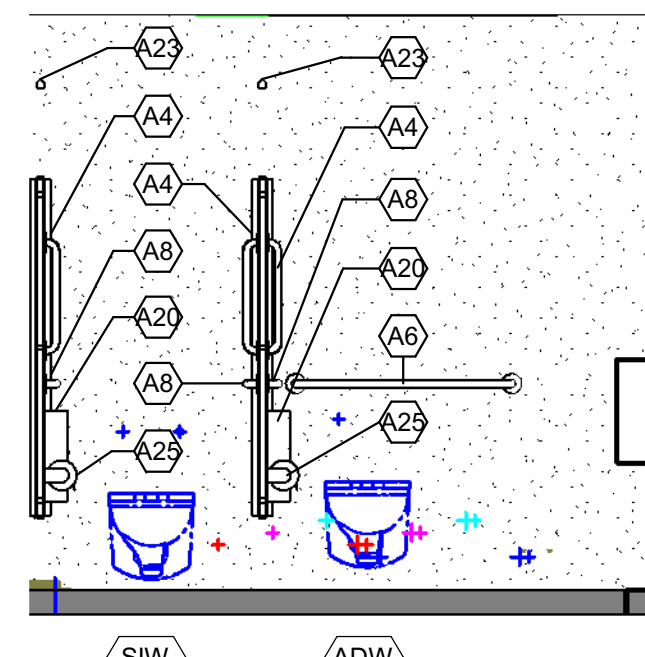
10/27/2018 10:58 AM  
 2017-114.EMS - 10/27/2018 10:58 AM  
 10/27/2018 10:58 AM



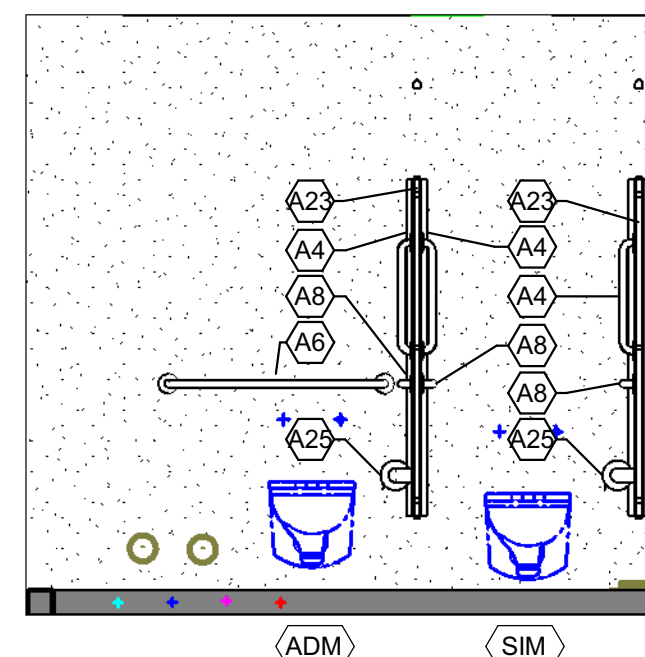
**6E STANDARD SHOWER ELEVATIONS**  
1/2" = 1'-0"



**4E RESTROOM STALL ELEVATION**  
3/8" = 1'-0"



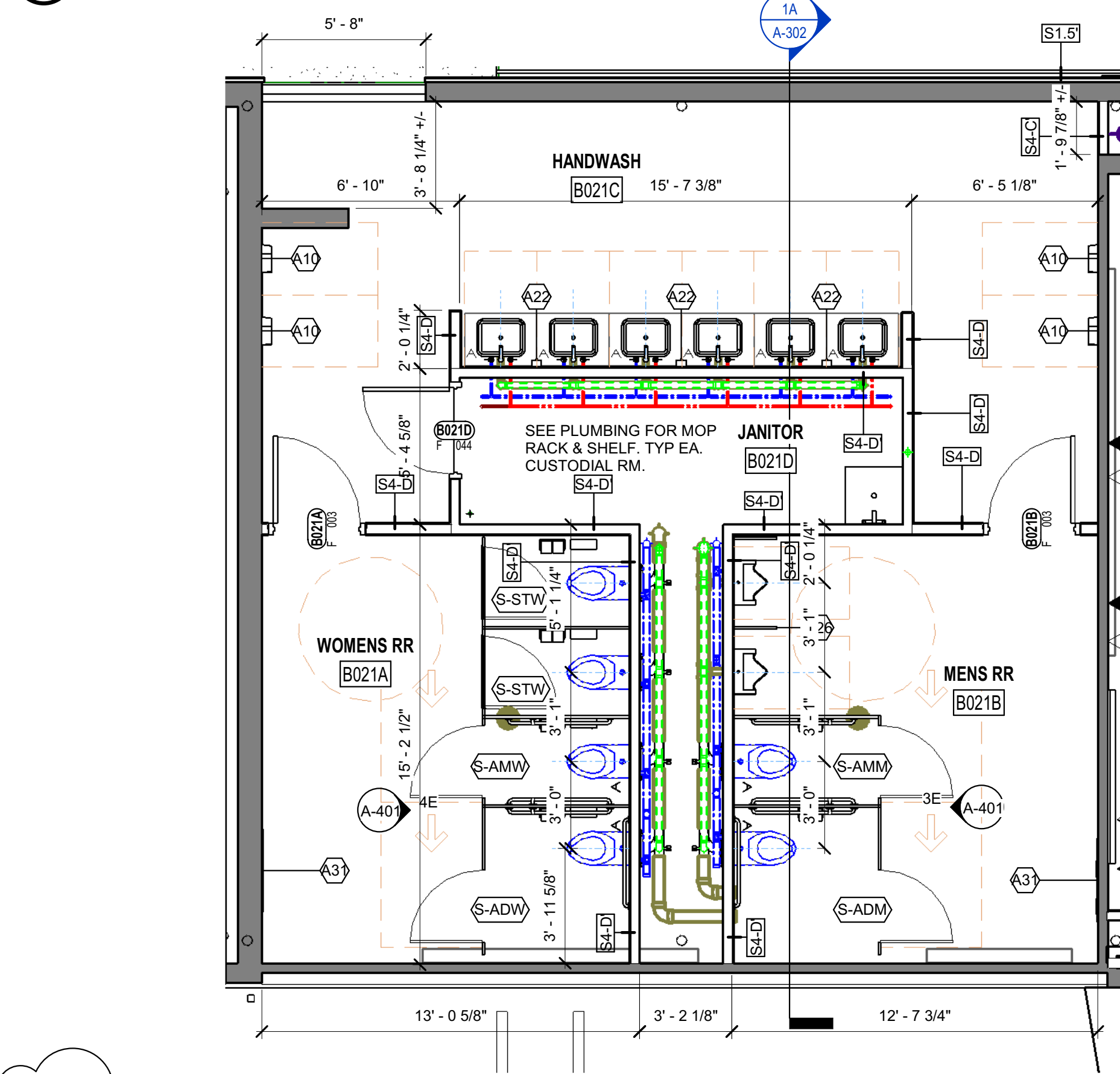
**3E RESTROOM STALL ELEVATION**  
3/8" = 1'-0"



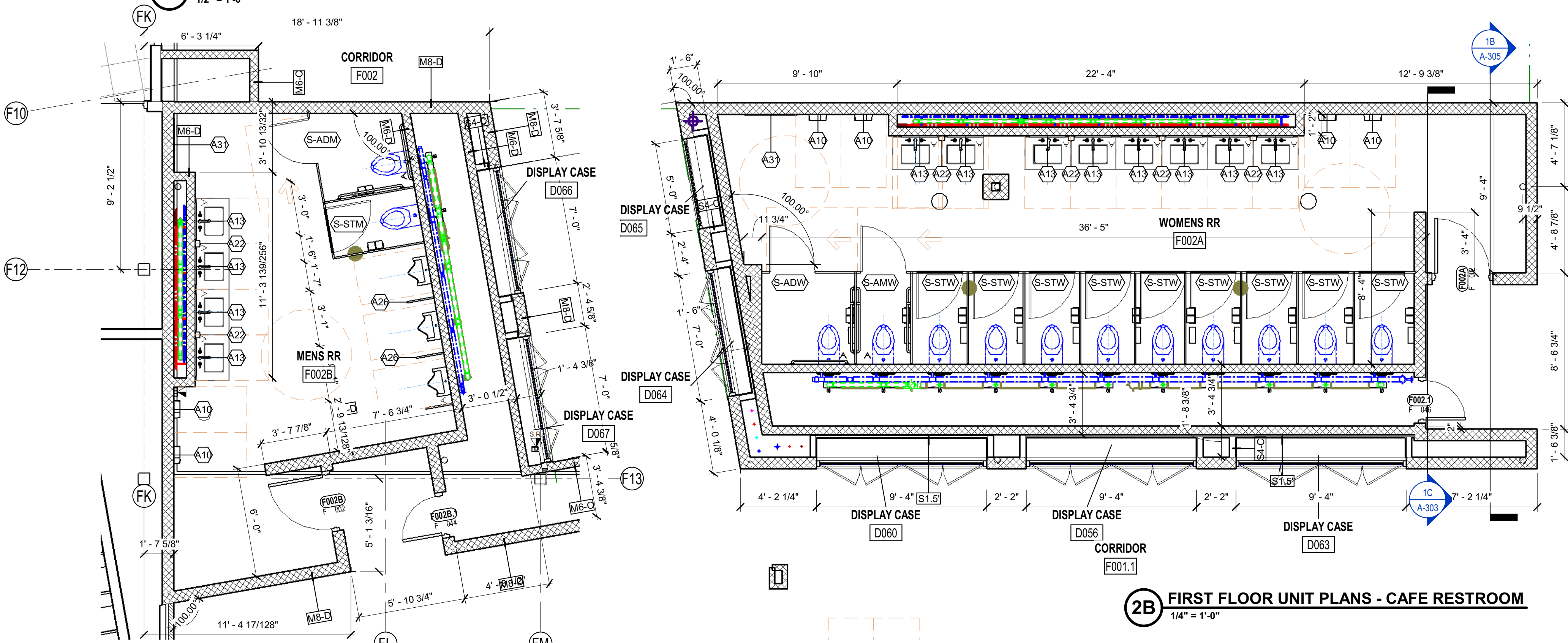
Type Mark	Keynote	Description	Mounting	Furnished By	Installed By
	10 28 00	FOLDING SHOWER SEAT, ADA	BOTTOM @ 4" ABOVE FIXTURE	CONTRACTOR	CONTRACTOR
	10 28 13	MIRROR - 24" X 36"	COORDINATE W/ SHOWER ENCLOSURE HEIGHT	CONTRACTOR	CONTRACTOR
	10 28 00	SHOWER CURTAIN ROD & CURTAIN	BOTTOM @ 30"	CONTRACTOR	CONTRACTOR
A1	08 31 13	ACCESS DOOR - 16" X 16"	BOTTOM @ 40" AFF	CONTRACTOR	CONTRACTOR
A2	10 28 00	PAPER TOWEL DISPENSER - SLIM	DISPENSER OPENING @ 42" AFF	OWNER	CONTRACTOR
A3	10 28 00	CHANGING TABLE - SURFACE MOUNTED	UNDERSIDE OF BED @ 2' - 3" MIN AFF	CONTRACTOR	CONTRACTOR
A4	10 28 00	GRAB BAR - 18" VERTICAL	BOTTOM @ 40" AFF	CONTRACTOR	CONTRACTOR
A6	10 28 00	GRAB BAR - 36" HORIZONTAL	TOP @ 2-11" AFF	CONTRACTOR	CONTRACTOR
A8	10 28 00	GRAB BAR - 42" HORIZONTAL	TOP @ 2-11" AFF	CONTRACTOR	CONTRACTOR
A10	10 28 00	HAND DRYER - 70 JBA	BOTTOM @ 42" AFF	CONTRACTOR	CONTRACTOR
A13	10 28 13	MIRROR - 24" X 36"	BOTTOM @ 4" ABOVE FIXTURE	CONTRACTOR	CONTRACTOR
A20	10 28 00	SANITARY NAPKIN DISPOSAL - SURFACE	TOP @ 30" AFF	CONTRACTOR	CONTRACTOR
A22	10 28 00	FOAM SOAP DISPENSER	BOTTOM @ 2" ABOVE LAVATORY, DRIP IN SINK WHERE THERE IS NO MIRROR	OWNER	CONTRACTOR
A23	10 21 13	TOILET PARTITION	FLOOR MOUNTED, OVERHEAD BRACED	CONTRACTOR	CONTRACTOR
A25	10 28 00	TOILET TISSUE DISPENSER - DOUBLE	BOTTOM @ 1'-6" AFF	CONTRACTOR	CONTRACTOR
A26	10 21 13	URINAL SCREEN	BOTTOM @ 1'-6" AFF	CONTRACTOR	CONTRACTOR
A30	10 28 00	HAND SANITIZER DISPENSER	BOTTOM @ 2" ABOVE LAVATORY, DRIP IN SINK WHERE THERE IS NO MIRROR	OWNER	CONTRACTOR
A31	10 28 13	MIRROR - 30" X 60"	BOTTOM @ 4" ABOVE FIXTURE	CONTRACTOR	CONTRACTOR

Toilet Stall Mark	Description
S-ADM	ADA - MENS STALL
S-ADW	ADA - WOMENS STALL
S-AMM	AMBULATORY - MENS STALL
S-AMW	AMBULATORY - WOMENS STALL
S-SIM	SINGLE OCCUPANCY STALL
S-SIW	SINGLE OCCUPANCY STALL
S-STM	STANDARD - MENS STALL
S-STW	STANDARD - WOMENS STALL

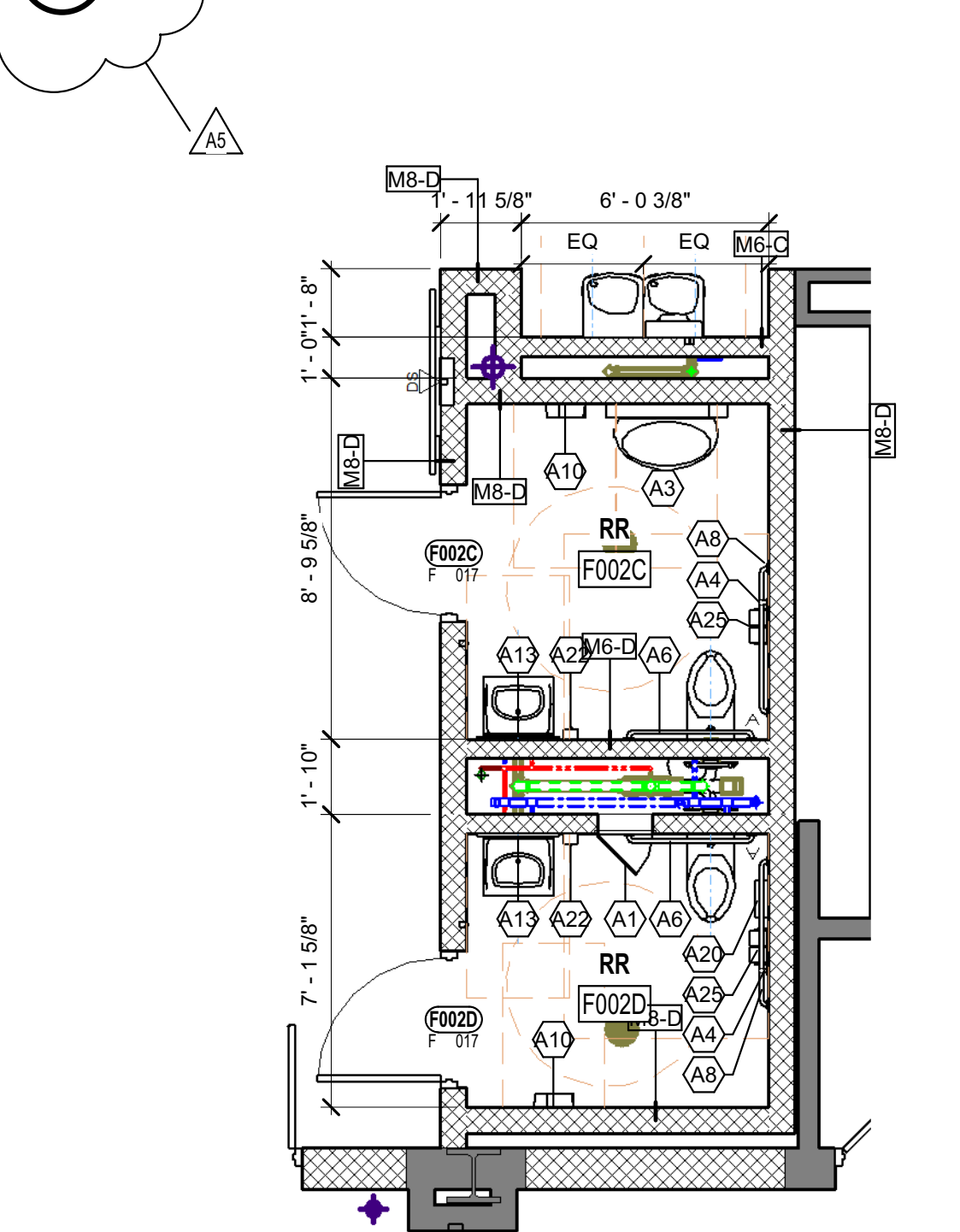
**6D KITCHEN RESTROOMS**  
1/4" = 1'-0"



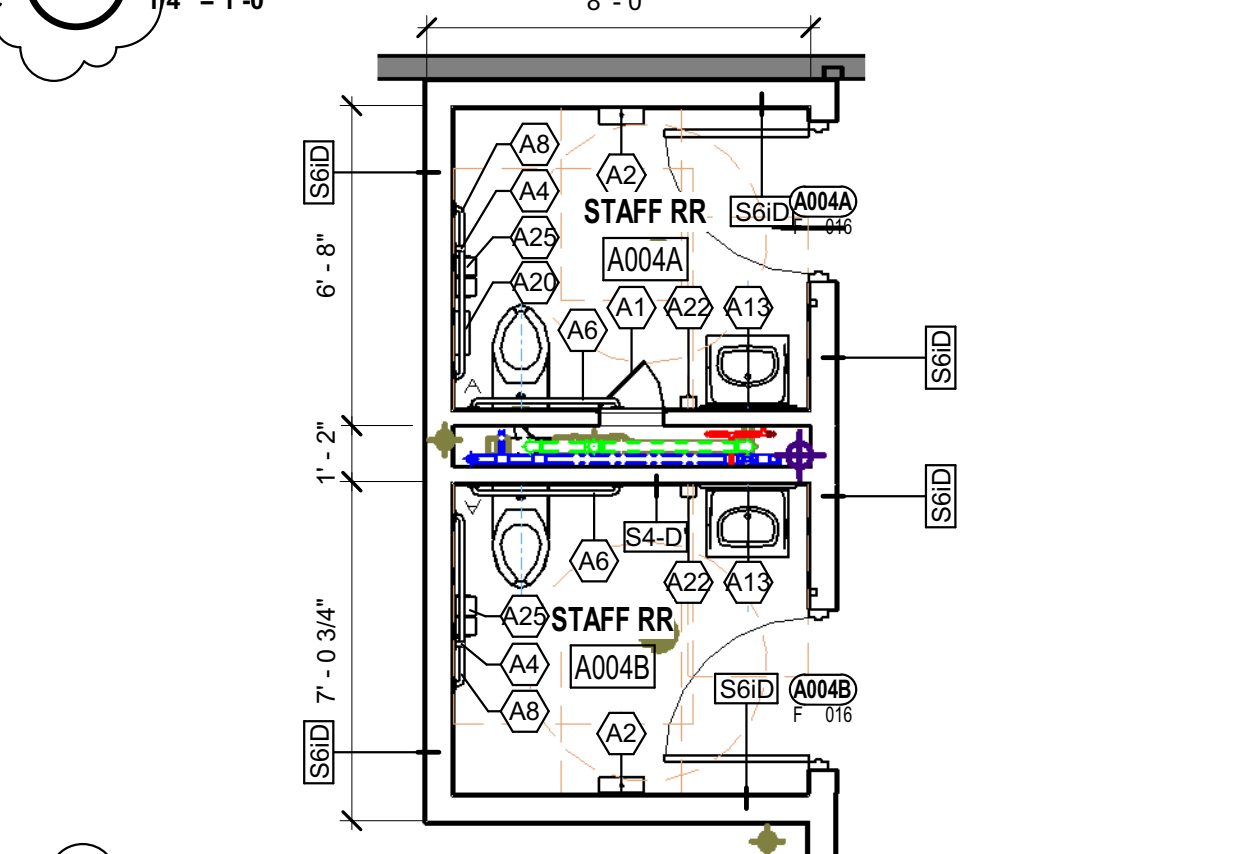
**4D STANDARD RESTROOM ELEVATIONS**  
1/2" = 1'-0"



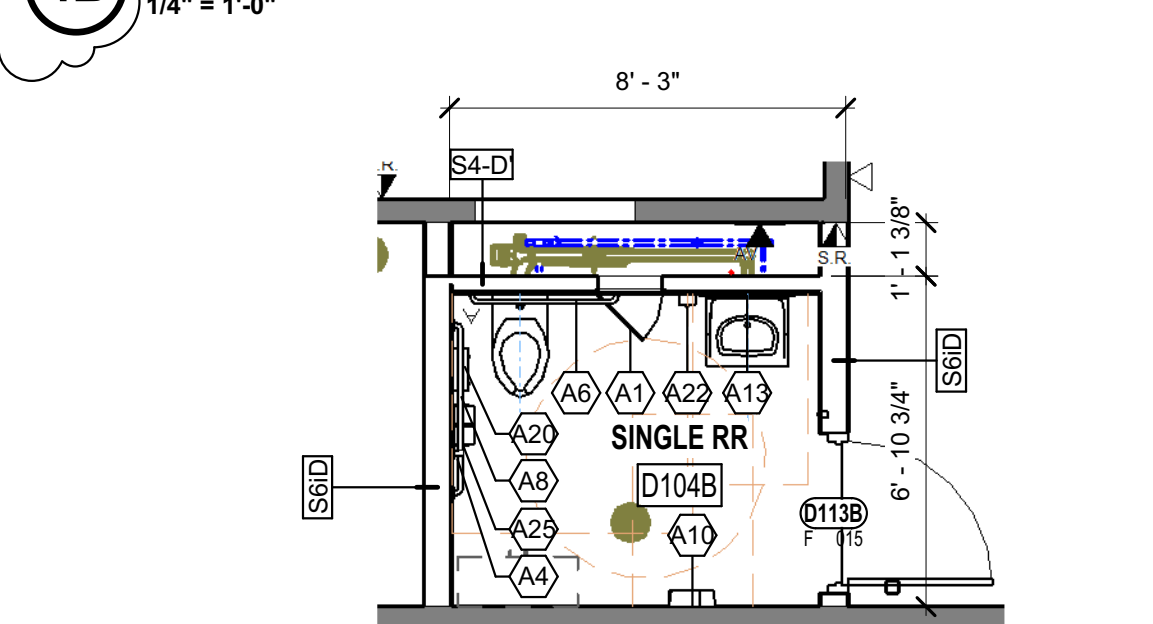
**6B SECOND FLOOR UNIT PLANS - EAST RESTROOM**  
1/4" = 1'-0"



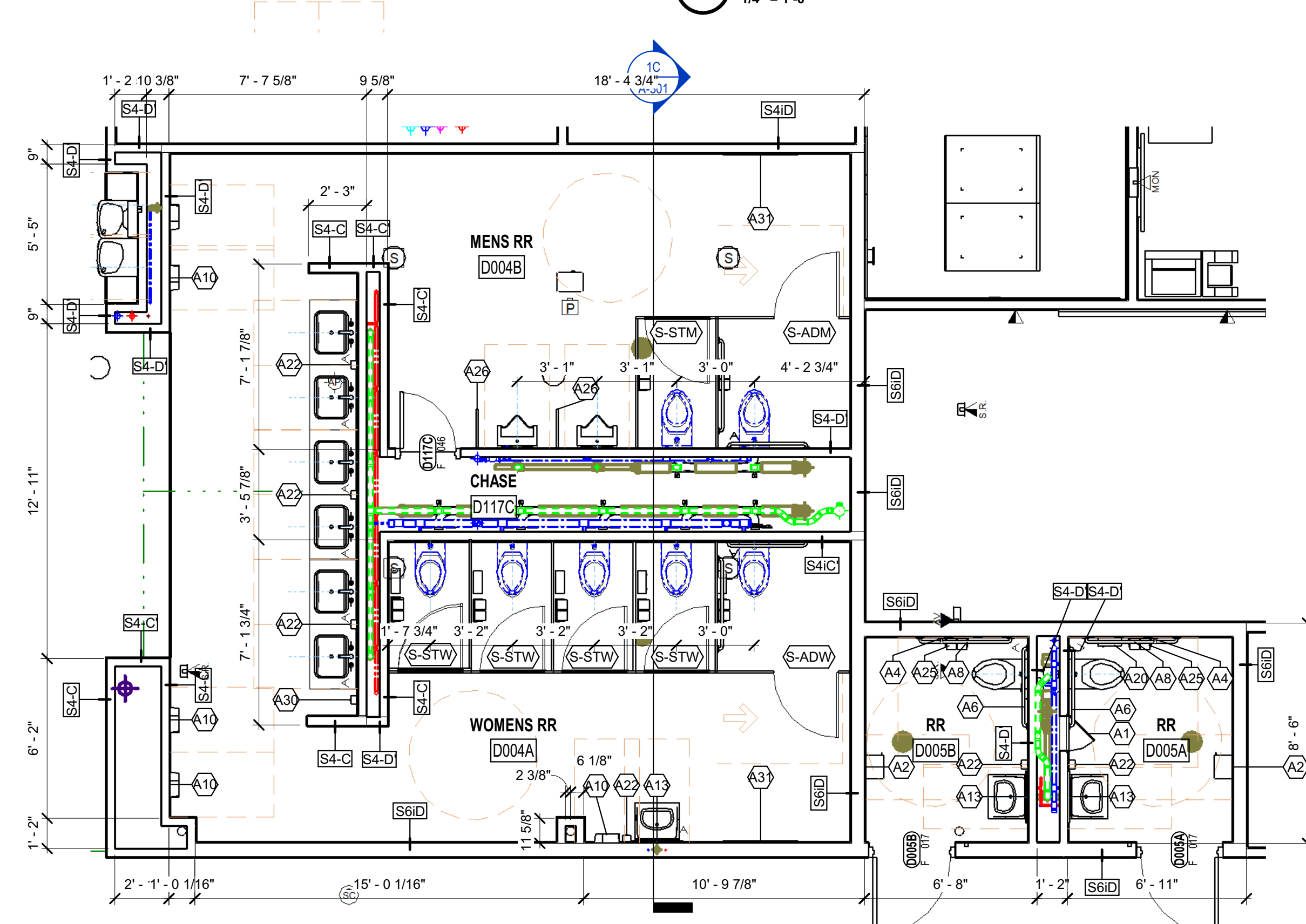
**5B FIRST FLOOR UNIT PLANS - ADMIN WEST RESTROOM**  
1/4" = 1'-0"



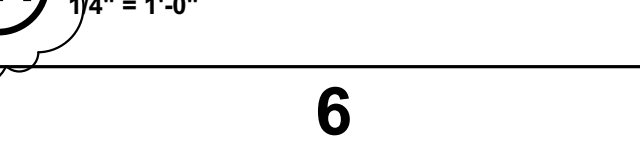
**4B FIRST FLOOR UNIT PLANS - SE WEST RESTROOM**  
1/4" = 1'-0"



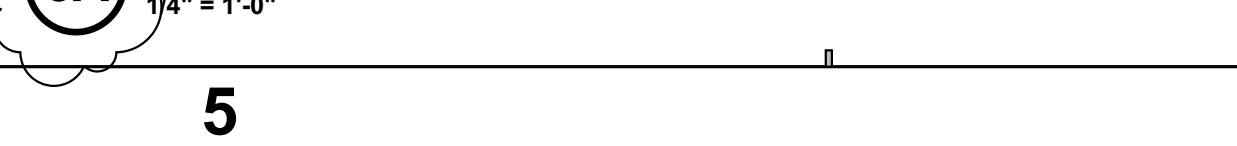
**2B FIRST FLOOR UNIT PLANS - CAFE RESTROOM**  
1/4" = 1'-0"



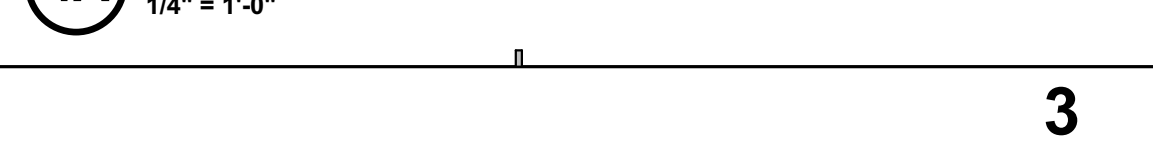
**6A FAMILY/STAFF RESTROOMS**  
1/4" = 1'-0"



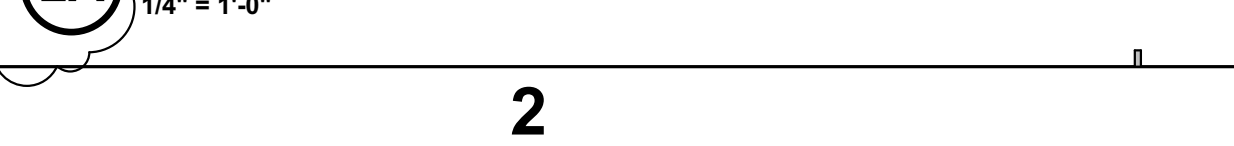
**5A FIRST FLOOR UNIT PLANS - ADMIN EAST RESTROOM**  
1/4" = 1'-0"



**4A FIRST FLOOR UNIT PLANS - SE EAST RESTROOM**  
1/4" = 1'-0"



**2A FIRST FLOOR UNIT PLANS - NORTHWEST RESTROOM**  
1/4" = 1'-0"



**SCHMIDT ASSOCIATES**  
415 Massachusetts Avenue  
Indianapolis, IN 46204  
www.schmidt-arch.com

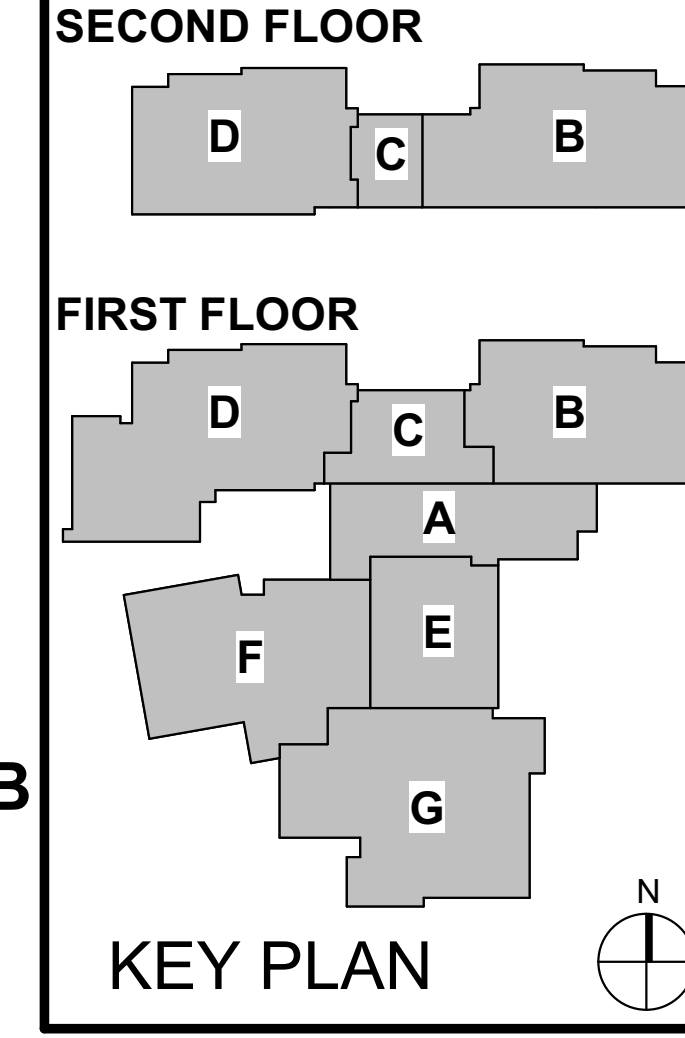
Project No. 2017-114.EMS  
Project Date 10.21.18  
Produced CM TE

**Bid Documents**

Professional seal and signature of Sarah K. Hempstead, State of Indiana Registered Professional Architect.

#	Revision	Date
A4	Addendum #4	11.09.2018
A5	Addendum #5	11.16.2018

4401 East 62nd Street  
Indianapolis, IN 46220



M.S.D. of Washington Township  
**EASTWOOD EAGLES**  
EASTWOOD MIDDLE SCHOOL

ENLARGED RESTROOM PLANS

A-401



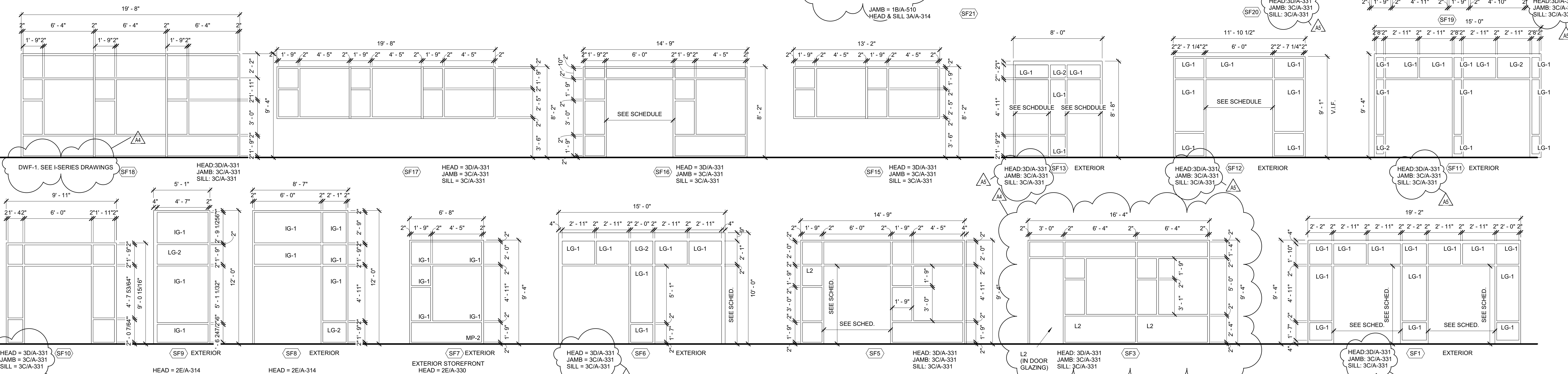
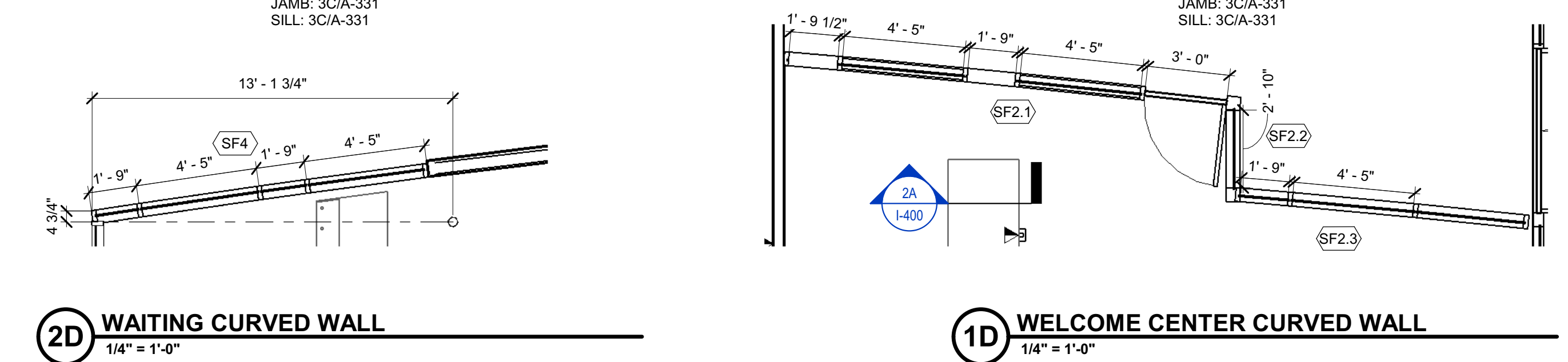
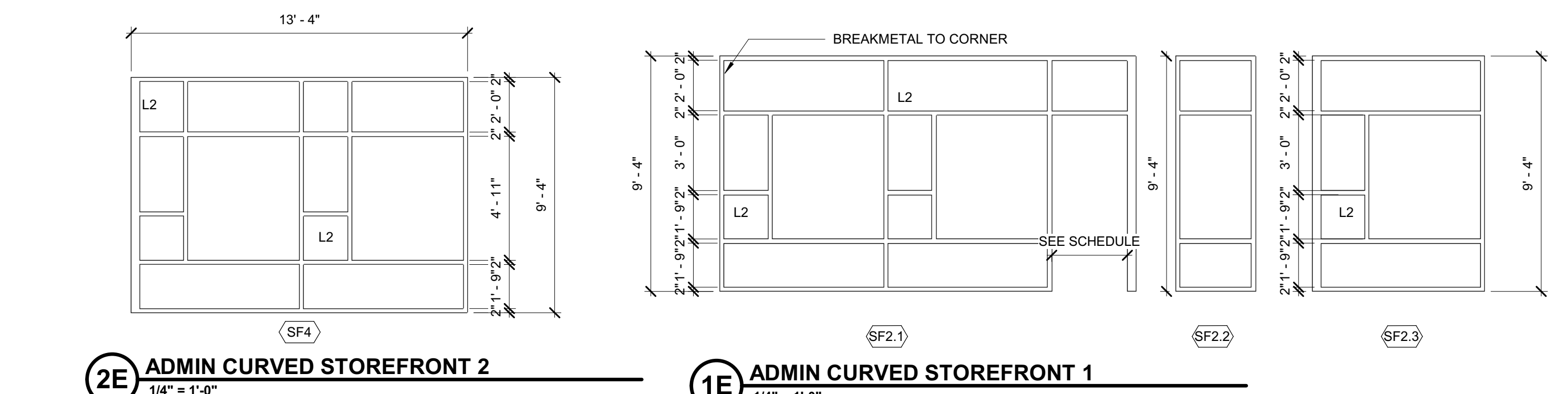
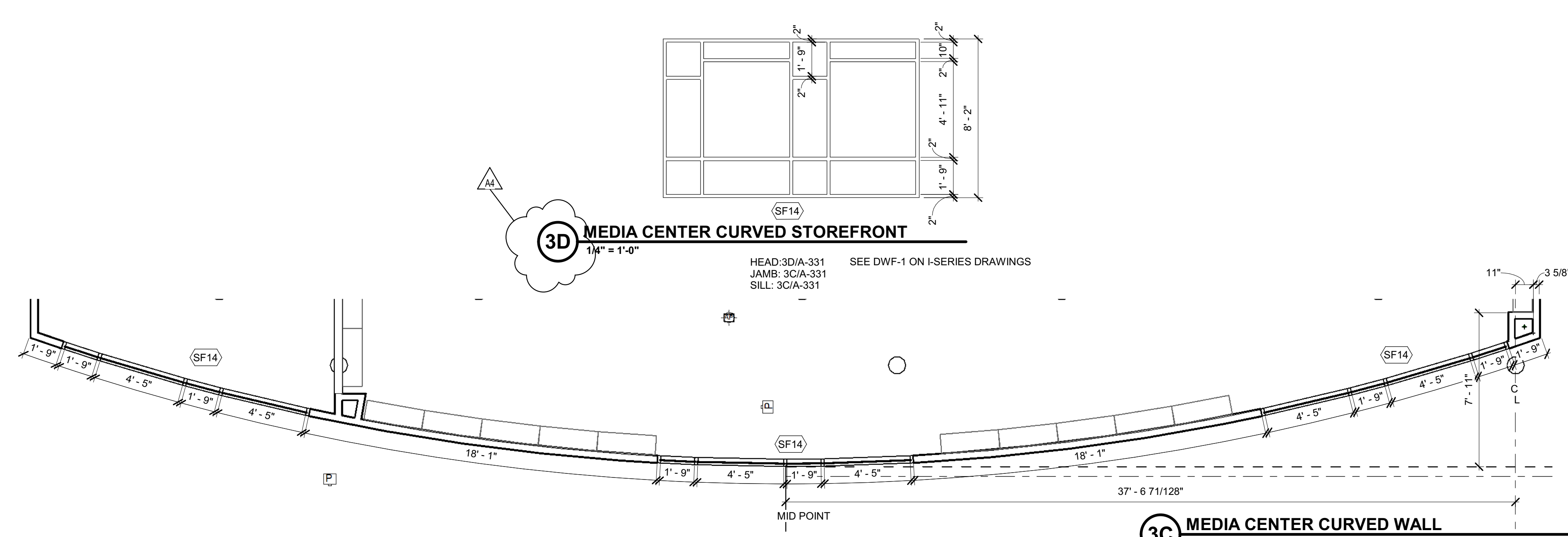
E

D

C

B

A



**GLAZING TYPE LEGEND**

- IG-1 = 08 80 00 - LOW E, CLEAR INSULATING GLASS, CLEAR LAMINATED
- IG-2 = 08 80 00 - LOW E, INSULATED GLASS, TRANSLUCENT BLUE
- IG-3 = 08 80 00 - LOW E, CLEAR INSULATING GLASS, TEMPERED

NOTE: SEE ALTERNATES FOR THE 2ND FLOOR WINDOWS TO ALL BE IG-1 IN LIEU OF IG-3.

- MP-1 = 08 80 00 - INSULATING METAL SPANDREL - BLUE
- MP-2 = 08 80 00 - INSULATING METAL SPANDREL - MATCH FRAME COLOR

**CURTAIN / STOREFRONT WALL NOTES:**

- TYPICAL CURTAIN WALL IS 6" DEEP
- STORY CURTAIN WALL IS 7.25" DEEP
- CAFÉ CURTAIN WALL IS 10" DEEP
- ALL EXTERIOR STOREFRONT IS TO BE THERMALLY BROKEN
- VERIFY EXISTING OPENINGS TO RECEIVE NEW GLAZING
- COORDINATE HORIZONTAL FRAME MEMBER HEIGHTS WITH REQUIREMENTS FOR FRAME MOUNTED LIGHTS. SEE E-SERIES DRAWINGS
- COORDINATE W/ T-SERIES DRAWINGS FOR ACCESS CONTROL DEVICE LOCATIONS
- SEE UNIT PLANS AND HARDWARE SET FOR ADA OPERATOR LOCATIONS.

- ABBREVIATIONS**
- AL Aluminum
  - HM Hollow Metal
  - ST Steel
  - WD Wood
  - TG Tempered Glazing
  - IG Insulated Glazing
  - LG Laminated Glazing
  - FG Frosted Glazing
  - SP Spandrel Panel
- GENERAL NOTES**
- This Door Schedule(s) is furnished for whatever assistance it may afford the Contractor. Do not consider it as entirely inclusive. Carefully examine the Drawings (especially the Floor Plans) and the Specifications to determine the extent of door and frame quantities required (including interior borrowed lite or sidelite openings). Should any particular door, frame, or interior borrowed lite or sidelite shown on the Drawings be inadvertently omitted from this Schedule, supply same as required for similar openings.
  - The "QT" column designates the number of leaves in the opening. The "Door Width" column designates the total width of all leaves. In multiple leaf conditions, the leaves shall equally divide the "Door Width" unless noted otherwise; however, the active leaf shall not be less than 3'-0" wide.
  - Door Type "X" denotes a frame with no door such as a borrowed lite, reference Frame Elevations.
  - An asterisk (\*) in a dimension denotes a width that varies, reference plans, elevations, details and schedules.
  - Verify locksets with the Owner during submittals.
  - Where doors are indicated to swing 180 degrees, position frame in wall to allow door to swing 180 degrees.
  - All exterior doors are thermally insulated.
  - All existing doors to remain shall receive new cores.
  - Provide cores for display case doors. See A-600 series.
  - See T-Series drawings and specifications for access control.
  - Single restrooms are to have privacy indicators.
  - New penthouse doors are to be 1ft min. above adjacent roof.
  - Make weather tight assembly at Overhead and counter doors on the exterior.
  - Provide rain drip at exterior doors as specified.

- DOOR & FRAME SCHEDULE NOTES**  
See Notes Column in Door Schedule
- Acoustic door and frame assembly. STC 54. All glazing is to be laminated and all trim frames grouted full.
  - New door in existing frame.
  - Provide new wood transom above new wood door.
  - Local alarm sounds when exit device is activated.
  - Location of ADA push pad.
  - Door tied to button at reception desk. See E and T-Series.
  - Card reader controlled door. Coordinate w/ E and T Series.
  - Rough-in for card reader controlled door. Coordinate w/ E and T Series.
  - Door position monitoring and lockset control. Coordinate w/ E and T Series.
  - Door position monitoring. Coordinate w/ T-Series.

**SCHMIDT ASSOCIATES**  
415 Massachusetts Avenue  
Indianapolis, IN 46204  
www.schmidt-arch.com

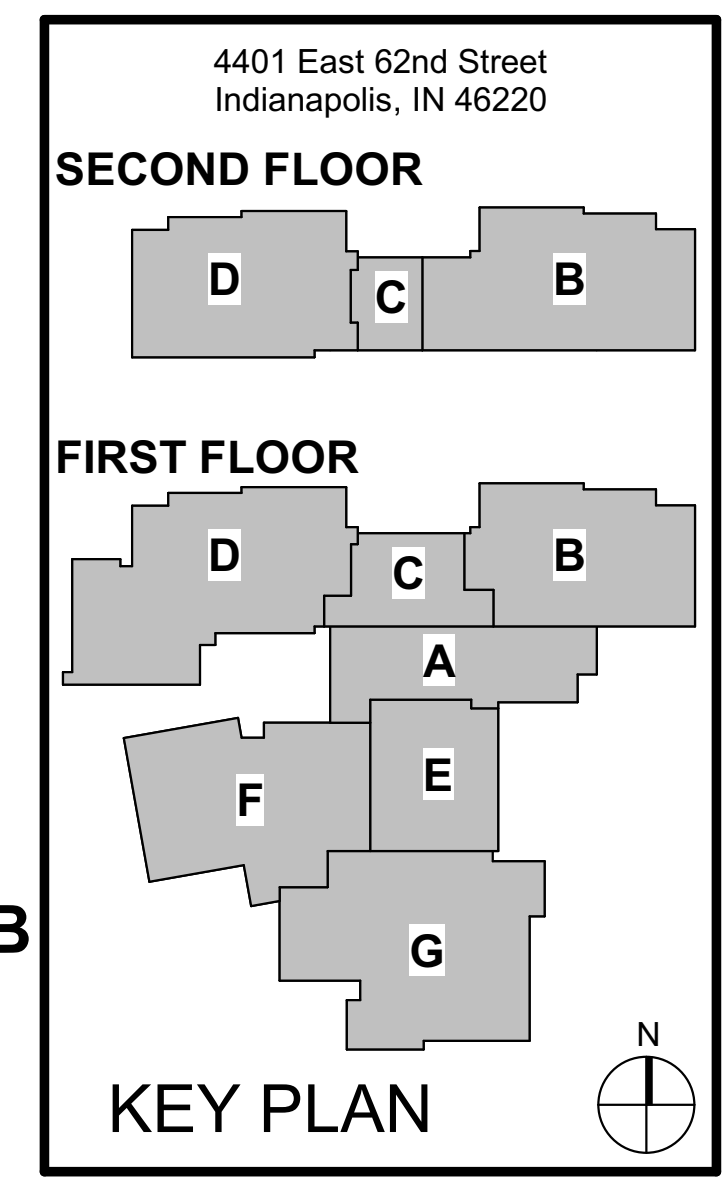
Project No. 2017-114.EMS  
Project Date 10.21.18  
Produced CM TE

**Bid Documents**

Sarah K. Hempstead

These Drawings and Specifications, and all copies thereof are and shall remain the property and copyright of the Architect. They shall be used only with respect to this Project and are not to be used on any other Project or Work without prior written permission from the Architect.

#	Revision	Date
A2	Addendum #2	11.01.2018
A4	Addendum #4	11.09.2018
A5	Addendum #5	11.16.2018



M.S.D. of Washington Township  
**EASTWOOD EAGLES**

**EASTWOOD MIDDLE SCHOOL**

**FRAME ELEVATIONS**

**A-601**



6 5 4 3 2 1

**GLAZING TYPE LEGEND**

- IG-1 = 08 80 00 - LOW E. CLEAR INSULATING GLASS, CLEAR LAMINATED
- IG-2 = 08 80 00 - LOW E. INSULATED GLASS, TRANSLUCENT BLUE
- IG-3 = 08 80 00 - LOW E. CLEAR INSULATING GLASS, TEMPERED.

NOTE: SEE ALTERNATES FOR THE 2ND FLOOR WINDOWS TO ALL BE IG-1 IN LIEU OF IG-3.

- MP-1 = 08 80 00 - INSULATING METAL SPANDREL - BLUE
- MP-2 = 08 80 00 - INSULATING METAL SPANDREL - MATCH FRAME COLOR

L1 = 08 80 00 - 5/16" CLEAR LAMINATED GLAZING (1/8" + 060 + 1/8")  
ALL INTERIOR GLAZING IS L1 UNLESS NOTED OTHERWISE

L2 = 08 80 00 - 5/16" BLUE LAMINATED GLAZING (MATCH EXTERIOR BLUE)

**CURTAIN / STOREFRONT WALL NOTES:**


- TYPICAL CURTAIN WALL IS 6" DEEP
- STORY CURTAIN WALL IS 7.25" DEEP.
- CAFE CURTAIN WALL IS 10" DEEP.
- ALL EXTERIOR STOREFRONT IS TO BE THERMALLY BROKEN
- VERIFY EXISTING OPENINGS TO RECEIVE NEW GLAZING
- COORDINATE HORIZONTAL FRAME MEMBER HEIGHTS WITH REQUIREMENTS FOR FRAME MOUNTED LIGHTS. SEE E-SERIES DRAWINGS.
- COORDINATE W/ T-SERIES DRAWINGS FOR ACCESS CONTROL DEVICE LOCATIONS.
- SEE UNIT PLANS AND HARDWARE SET FOR ADA OPERATOR LOCATIONS.



**SCHMIDT ASSOCIATES**  
415 Massachusetts Avenue  
Indianapolis, IN 46204  
www.schmidt-arch.com

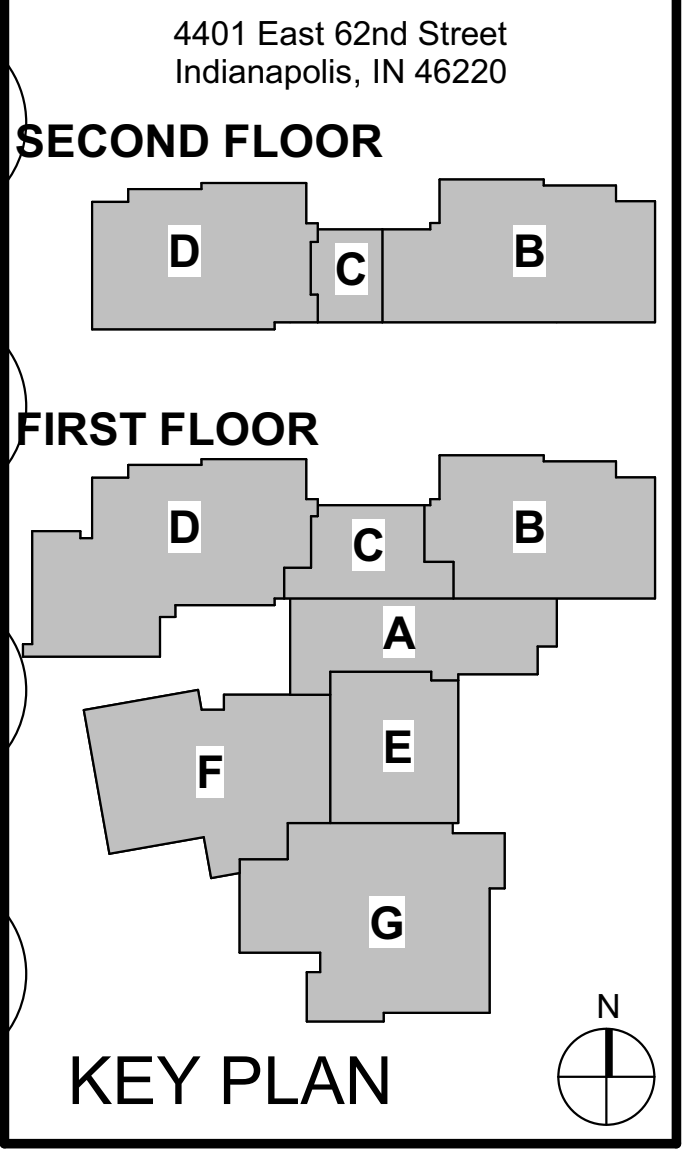
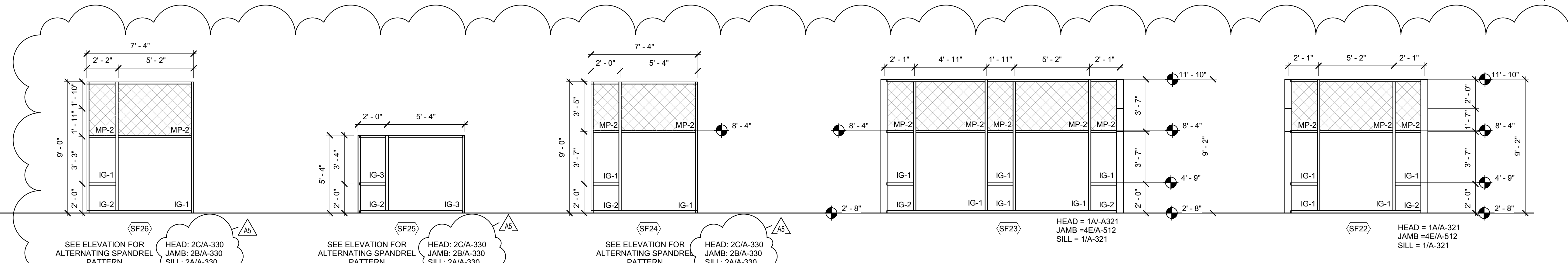
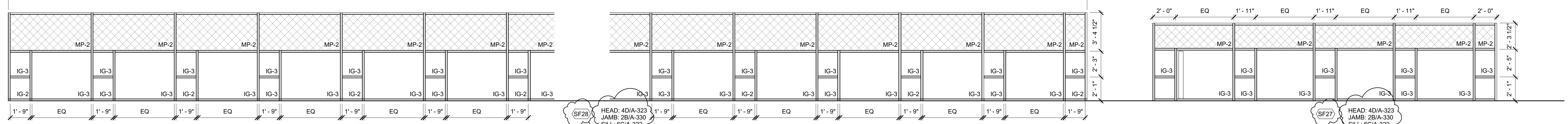
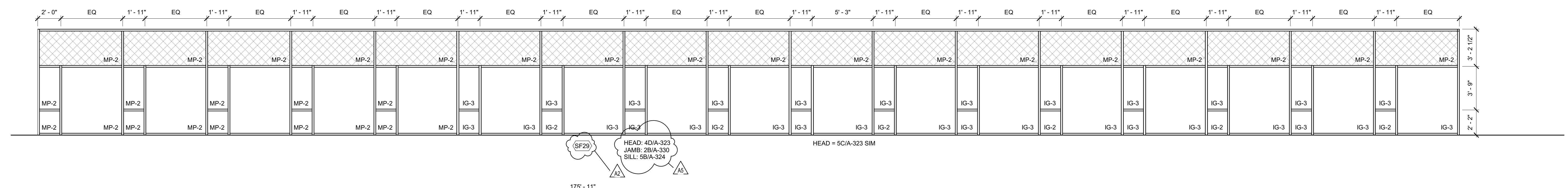
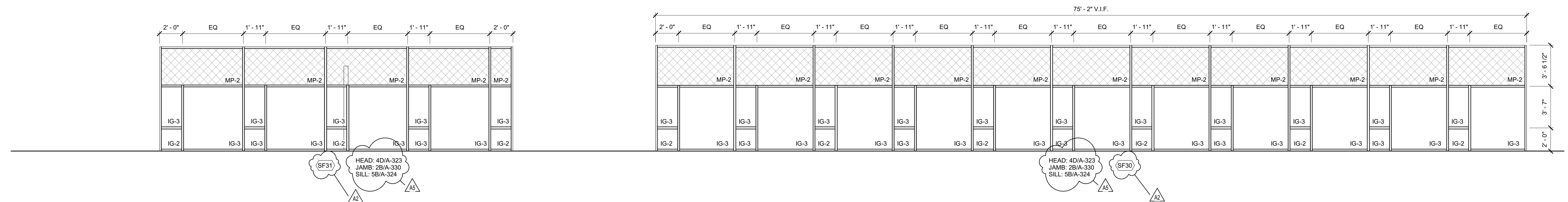
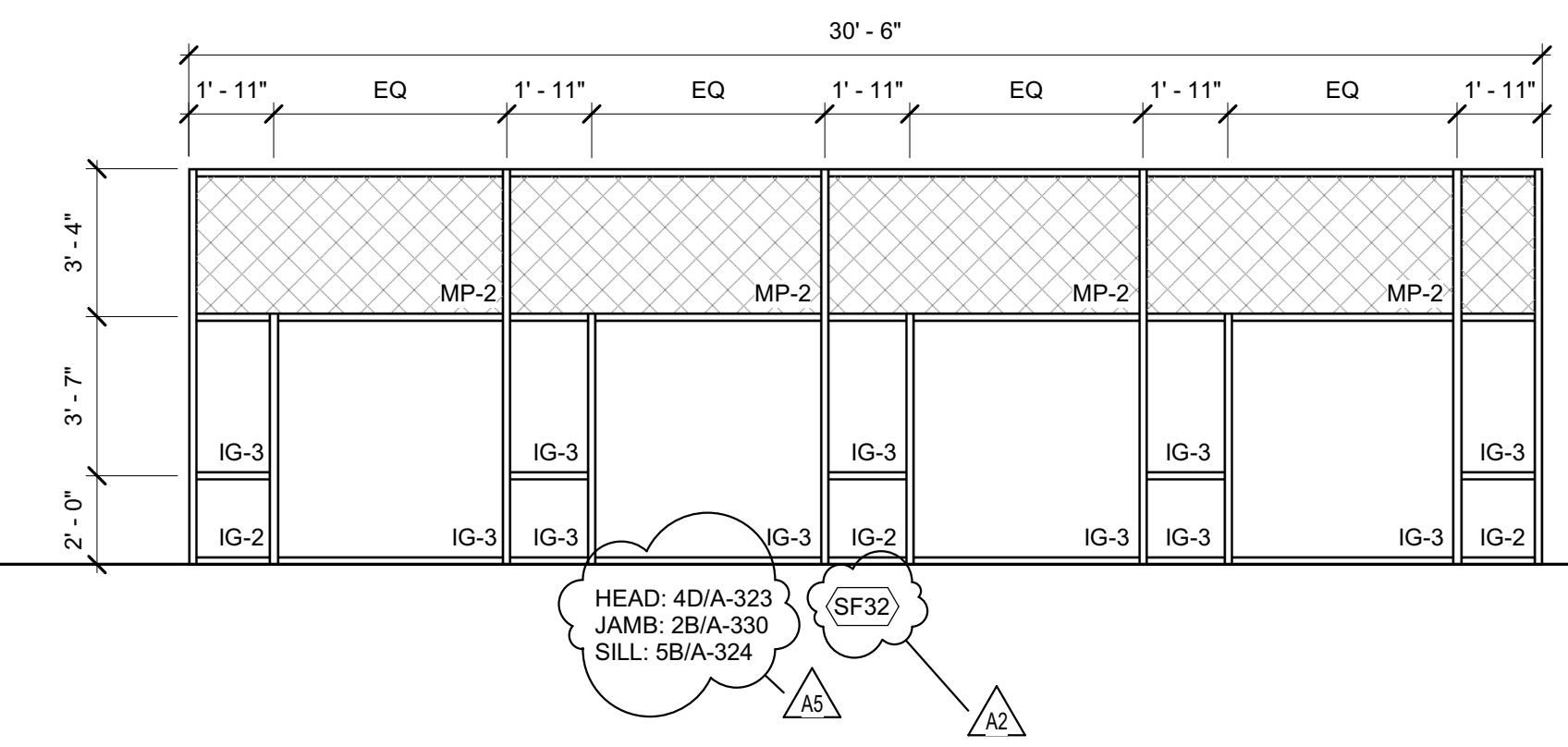
Project No. 2017-114.EMS  
Project Date 10.21.18  
Produced CM TE

**Bid Documents**



Sarah K. Hempstead  
These Drawings and Specifications, and all copies thereof are and shall remain the property and copyright of the Architect. They shall be used only with respect to the Project and are not to be used on any other Project or Work without prior written permission from the Architect.

#	Revision	Date
A2	Addendum #2	11.01.2018
A4	Addendum #4	11.09.2018
A5	Addendum #5	11.16.2018



M.S.D. of Washington Township

**EASTWOOD**



**EAGLES**

EASTWOOD MIDDLE SCHOOL

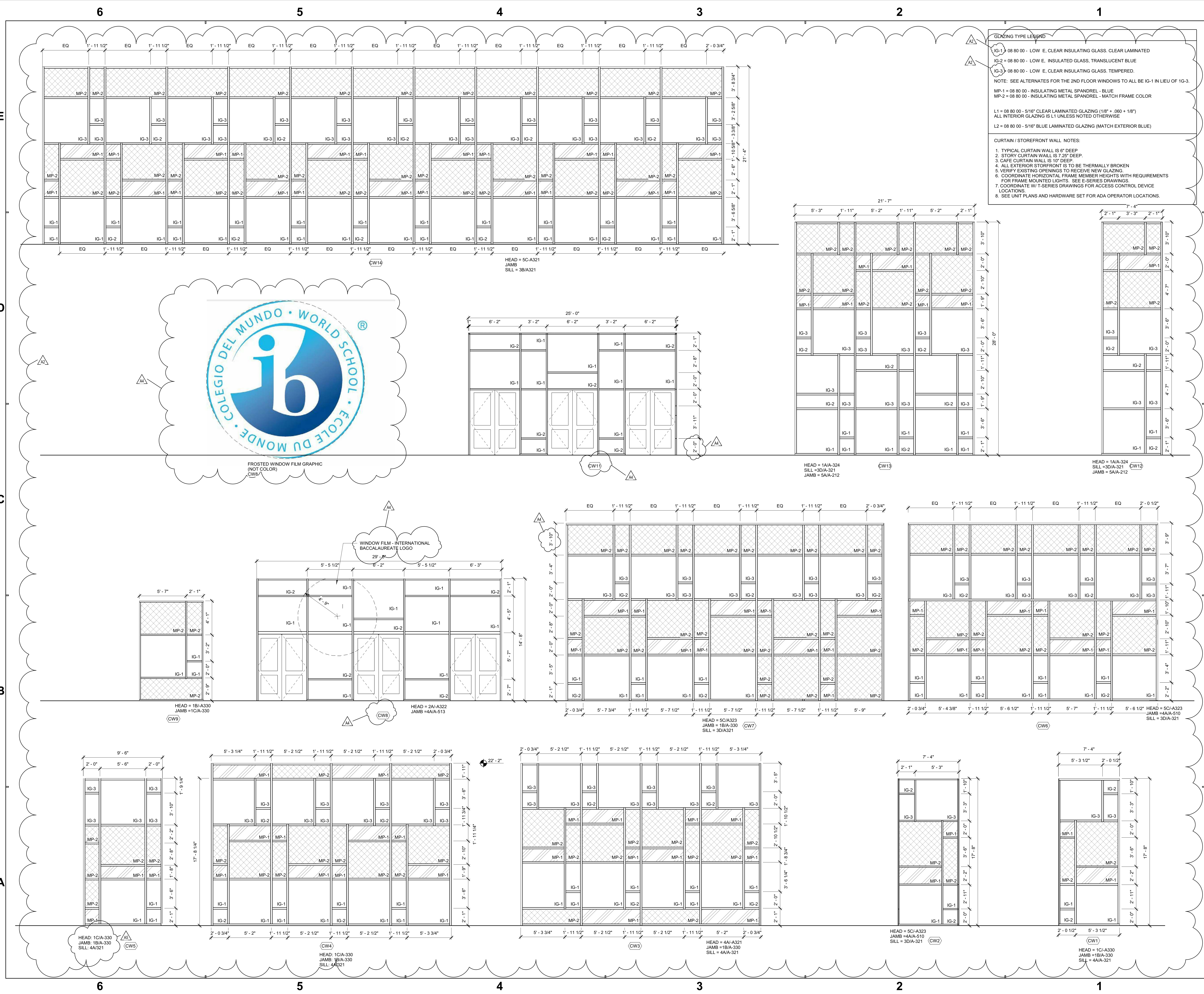
FRAME ELEVATIONS

A-602

6 5 4 3 2 1

4401 EAST 62ND STREET, INDIANAPOLIS, IN 46220  
 2017-114.EMS  
 10/21/18  
 CM TE





**GLAZING TYPE LEGEND**

IG-1 = 08 80 00 - LOW E, CLEAR INSULATING GLASS, CLEAR LAMINATED  
 IG-2 = 08 80 00 - LOW E, INSULATED GLASS, TRANSLUCENT BLUE  
 IG-3 = 08 80 00 - LOW E, CLEAR INSULATING GLASS, TEMPERED.  
 NOTE: SEE ALTERNATES FOR THE 2ND FLOOR WINDOWS TO ALL BE IG-1 IN LIEU OF IG-3.

MP-1 = 08 80 00 - INSULATING METAL SPANDREL - BLUE  
 MP-2 = 08 80 00 - INSULATING METAL SPANDREL - MATCH FRAME COLOR

L1 = 08 80 00 - 5/16" CLEAR LAMINATED GLAZING (1/8" + .060 + 1/8")  
 ALL INTERIOR GLAZING IS L1 UNLESS NOTED OTHERWISE  
 L2 = 08 80 00 - 5/16" BLUE LAMINATED GLAZING (MATCH EXTERIOR BLUE)

**CURTAIN / STOREFRONT WALL NOTES:**

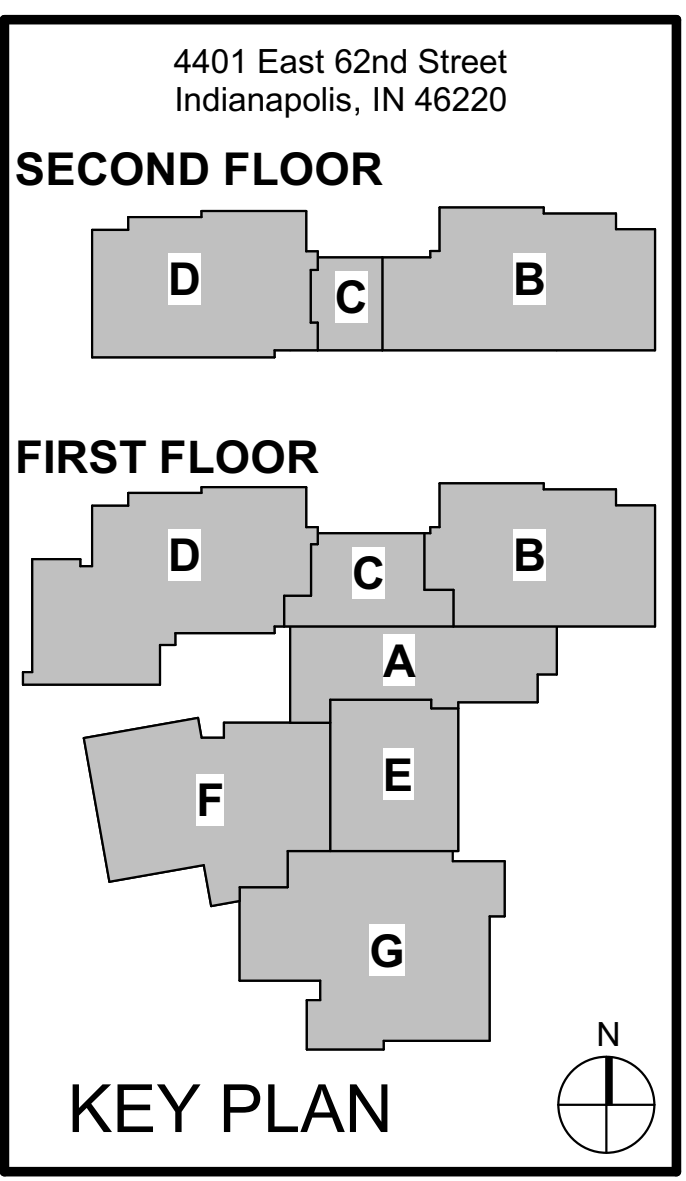
1. TYPICAL CURTAIN WALL IS 6" DEEP
2. STORY CURTAIN WALL IS 7.25" DEEP
3. CAFE CURTAIN WALL IS 10" DEEP
4. ALL EXTERIOR STOREFRONT IS TO BE THERMALLY BROKEN
5. VERIFY EXISTING OPENINGS TO RECEIVE NEW GLAZING
6. COORDINATE HORIZONTAL FRAME MEMBER HEIGHTS WITH REQUIREMENTS FOR FRAME MOUNTED LIGHTS. SEE E-SERIES DRAWINGS.
7. COORDINATE W/ T-SERIES DRAWINGS FOR ACCESS CONTROL DEVICE LOCATIONS.
8. SEE UNIT PLANS AND HARDWARE SET FOR ADA OPERATOR LOCATIONS.

Project No. 2017-114.EMS  
 Project Date 10.21.18  
 Produced CM TE

**Bid Documents**

These Drawings and Specifications, and all copies thereof are and shall remain the property and copyright of the Architect. They shall be used only with respect to the Project and are not to be used on any other Project or Work without prior written permission from the Architect.

#	Revision	Date
A2	Addendum #2	11.01.2018
A4	Addendum #4	11.09.2018
A5	Addendum #5	11.16.2018



M.S.D. of Washington Township  
**EASTWOOD**

**EAGLES**

EASTWOOD MIDDLE SCHOOL

FRAME ELEVATIONS  
 A-603



**SHEET KEYNOTES**

- 1 10" GOOSENECK UP THROUGH ROOF. PROVIDE MOTORIZED DAMPER ON O.A.
- 2 8" GOOSENECK UP THROUGH ROOF. PROVIDE MOTORIZED DAMPER ON O.A.
- 3 30" X14" SUPPLY AIR UP.
- 4 12X12 EA DUCT UP TO EF-4.
- 5 PROVIDE DRYER VENT IN WALL. REFER TO DETAIL #10 AND DETAIL #13 ON M-504.
- 6 8" X 8" EXHAUST AIR UP TO EF-11. COVER DUCT OPENING WITH WIRE MESH.
- 7 PROVIDE 18X12 TRANSFER GRILLE. COVER OPENINGS IN WIRE MESH. PROVIDE FIRE DAMPER IN OPENINGS OVER WALL.
- 8 46"X14" RETURN AIR UP.
- 9 PROVIDE WIRE MESH OVER RETURN AIR OPENING.
- 10 PROVIDE A HORN AND STROBE CONNECTED TO THE REFRIGERANT MONITOR ALARM ABOVE DOOR.
- 11 RETURN GRILLE. REFER TO DETAIL #1 ON M-303.
- 12 ROUTE CONDENSATE TO NEAREST FLOOR DRAIN.

**GENERAL SHEET NOTES**

- SEE M-001 FOR GENERAL SHEET NOTES.
- ALL DUCTWORK TO BE TIGHT TO STRUCTURE WHERE EVER POSSIBLE.

#	Name
A001	VESTIBULE
A004	CORRIDOR
A004A	STAFF RR
A004B	STAFF RR
A004C	PENTHOUSE ACCESS
A004D	ELECTRICAL CORRIDOR
A006	CORRIDOR
A008A	MDF
A008B	MECHANICAL
A008C	DISPLAY CASE
A007	VESTIBULE
A009	VESTIBULE
A101	RECEPTION/ WELCOME CENTER
A102	LARGE CONFERENCE
A103	SM CONFERENCE
A104	PRINCIPAL
A105	WORK ROOM
A106	AP OFFICE
A107	BOOKSTORE/ TREASURER
A108	AP OFFICE
A109	AP OFFICE
A110	STORAGE
A111	SECURITY OFFICE
A112	THERAPIST
A113	GUIDANCE
A114	GUIDANCE
A114A	STORAGE
A115	GUIDANCE
A116	PSYCHOLOGIST
A117	RECORDS VAULT
A118A	STORAGE/ LAUNDRY
A118B	CLINIC OFFICE/TREATMENT
A118C	CLINIC RR
A118D	CLINIC RR
A119	WAITING
A120	SOCIAL WORKER



Project No. 2017-114.EMS  
 Project Date 10.17.18  
 Produced DNH / ABT & NAR

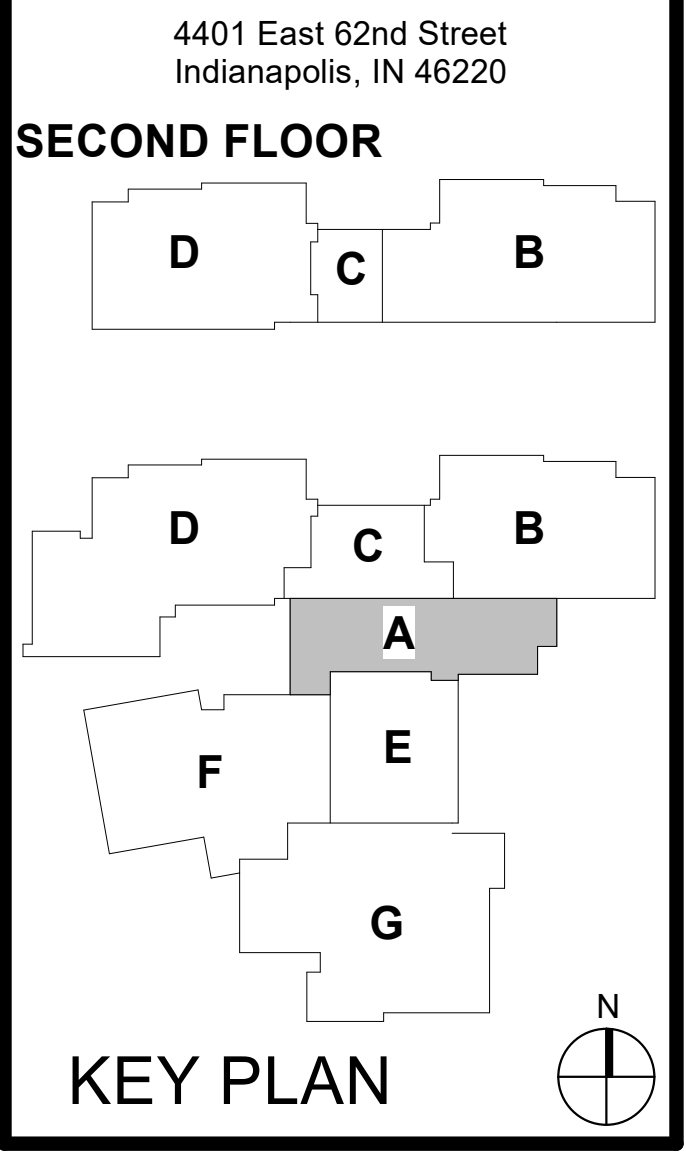
**Bid Documents**



These Drawings and Specifications, and all copies thereof are and shall remain the property and copyright of the Architect. They shall be used only with respect to this Project and are not to be used on any other Project or Work without prior written permission from the Architect.

#	Revision	Date
A2	Addendum #2	11.1.2018
A4	Addendum #4	11.9.2018
A5	Addendum #5	Date 5

1344 S. Rangeline Rd,  
 Suite 202  
 Carmel, IN 46032  
 v. (317) 344-8045  
 Job #: 17058

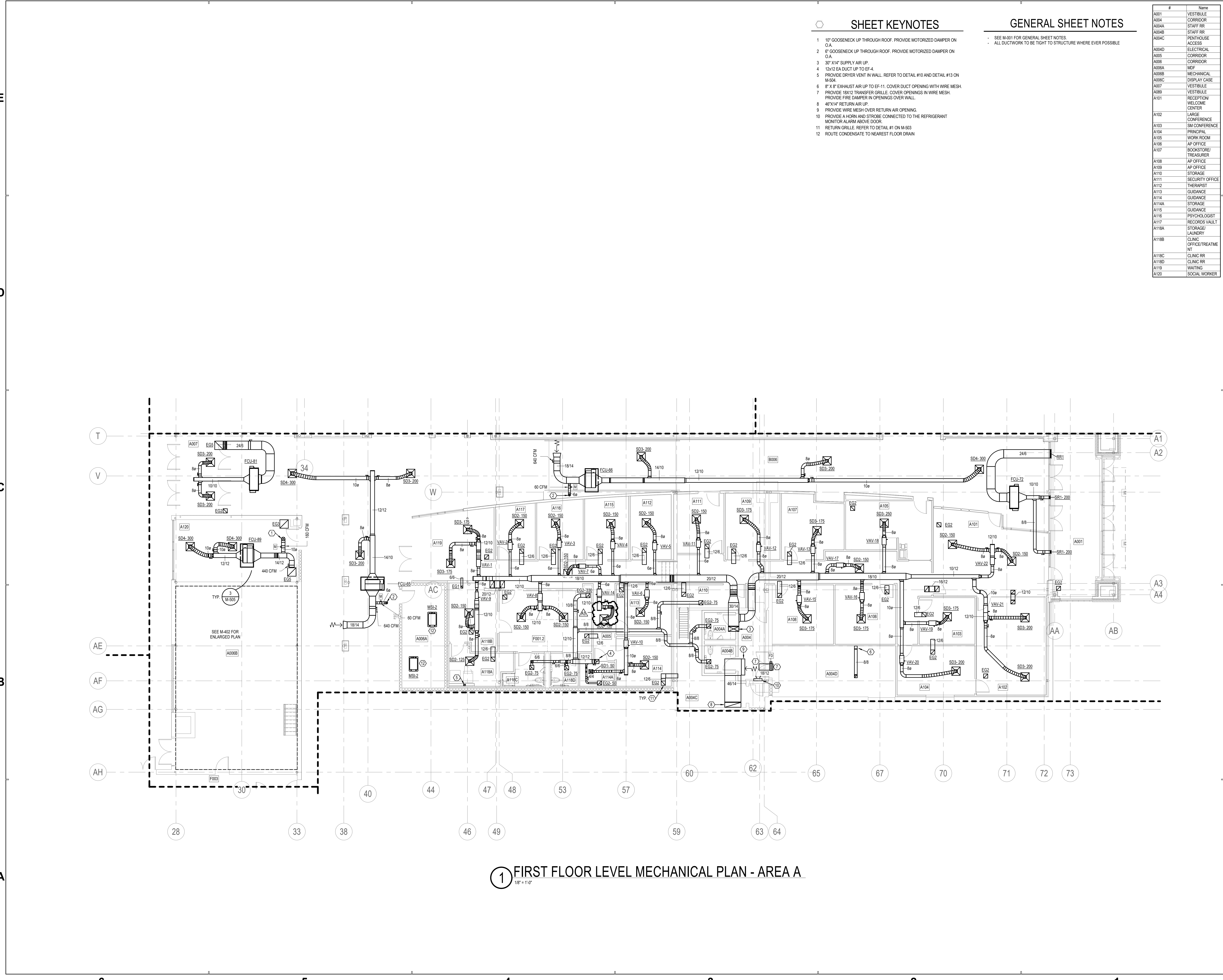


M.S.D. of Washington Township

**EASTWOOD MIDDLE SCHOOL**

FIRST FLOOR HVAC PLAN  
 - UNIT A

**MH1A1**



**1 FIRST FLOOR LEVEL MECHANICAL PLAN - AREA A**  
 1/8" = 1'-0"

DATE: 11/17/18 11:42 AM  
 PROJECT: EASTWOOD MIDDLE SCHOOL  
 SHEET: FIRST FLOOR HVAC PLAN - UNIT A  
 DRAWN BY: DNH  
 CHECKED BY: ABT  
 APPROVED BY: NAR



6 5 4 3 2 1

GENERAL SHEET NOTES

- SEE M-01 FOR GENERAL SHEET NOTES
- ALL DUCTWORK TO BE TIGHT TO STRUCTURE WHERE EVER POSSIBLE

SHEET KEYNOTES

- HHSR - 1-1/4" DOWN, CWSR - 1-1/2" DOWN
- HHSR 1" UP, 1-1/2" DOWN, CWSR 1" UP, 1-1/2" DOWN, MECHANICAL CONTRACTOR TO COORDINATE WITH FIRE PROTECTION CONTRACTOR
- HHSR - 3/4" UP, HHSR - 1" DOWN, CWSR - 3/4" UP, 1" DOWN
- HHSR - 1-1/4" UP, 1-1/2" DOWN, CWSR 1-1/2" UP, 2" DOWN
- HHSR - 3" UP AND DOWN, CWSR - 3" UP, 4" DOWN
- REFER TO SHEET MP1C1 FOR CONTINUATION
- 2" CONDENSATE DOWN
- 2" CONDENSATE DOWN AND 1-1/2" CONDENSATE UP
- CONDENSATE DOWN TO OPEN SANITARY CONNECTION BEHIND WALL
- CONDENSATE FROM ABOVE
- CONDENSATE DOWN TO FLOOR DRAIN IN THIS ROOM.

#	Name
D002B	STOR.
D002C	DP
D004A	WOMENS RR
D004B	MENS RR
D004C	CUSTODIAL CLOSET
D005A	RR
D005B	RR
D006	CORRIDOR
D006A	BUILDING STORAGE / CUSTODIAN
D006B	STOR.
D006C	STOR.
D101	READING
D102	INDIVIDUALS & SOCIETIES
D103	LAL
D104-1	MATH-1
D104-2	MATH-2
D104B	SINGLE RR
D105-1	MATH-1
D105-2	MATH-2
D106	INTERVENTION
D107	LAL
D108	INDIVIDUALS & SOCIETIES
D109	SCIENCE
D109A	SCIENCE STORAGE
D110	SCIENCE
D111	RESOURCE
D111A	STAFF THINK TANK
D111B	STAFF FOCUS
D111C	POD WK RM
D112	LGI
D113	SE CLASSROOM
D113A	CONFERENCE
D114	SENSORY
D114A	STOR.
D114B	ELECTRICAL
D115	S.P. ED LIFE SKILLS
D115A	SPEECH/PT
D115C	STOR.
D116	FLEX
D117C	CHASE

**SCHMIDT ASSOCIATES**  
415 Massachusetts Avenue  
Indianapolis, IN 46204  
www.schmidt-arch.com

Project No. 2017-114.EMS  
Project Date 10.17.18  
Produced DNH / ABT & NAR

**Bid Documents**

These Drawings and Specifications, and all copies thereof are and shall remain the property and copyright of the Architect. They shall be used only with respect to this Project and are not to be used on any other Project or Work without prior written permission from the Architect.

#	Revision	Date
A2	Addendum #2	11.1.2018
A4	Addendum #4	11.9.2018
A5	Addendum #5	Date 5

1344 S. Rangeline Rd,  
Suite 202  
Carmel, IN 46032  
v. (317) 344-8045  
Job #: 17058

4401 East 62nd Street  
Indianapolis, IN 46220

**SECOND FLOOR**

**KEY PLAN**

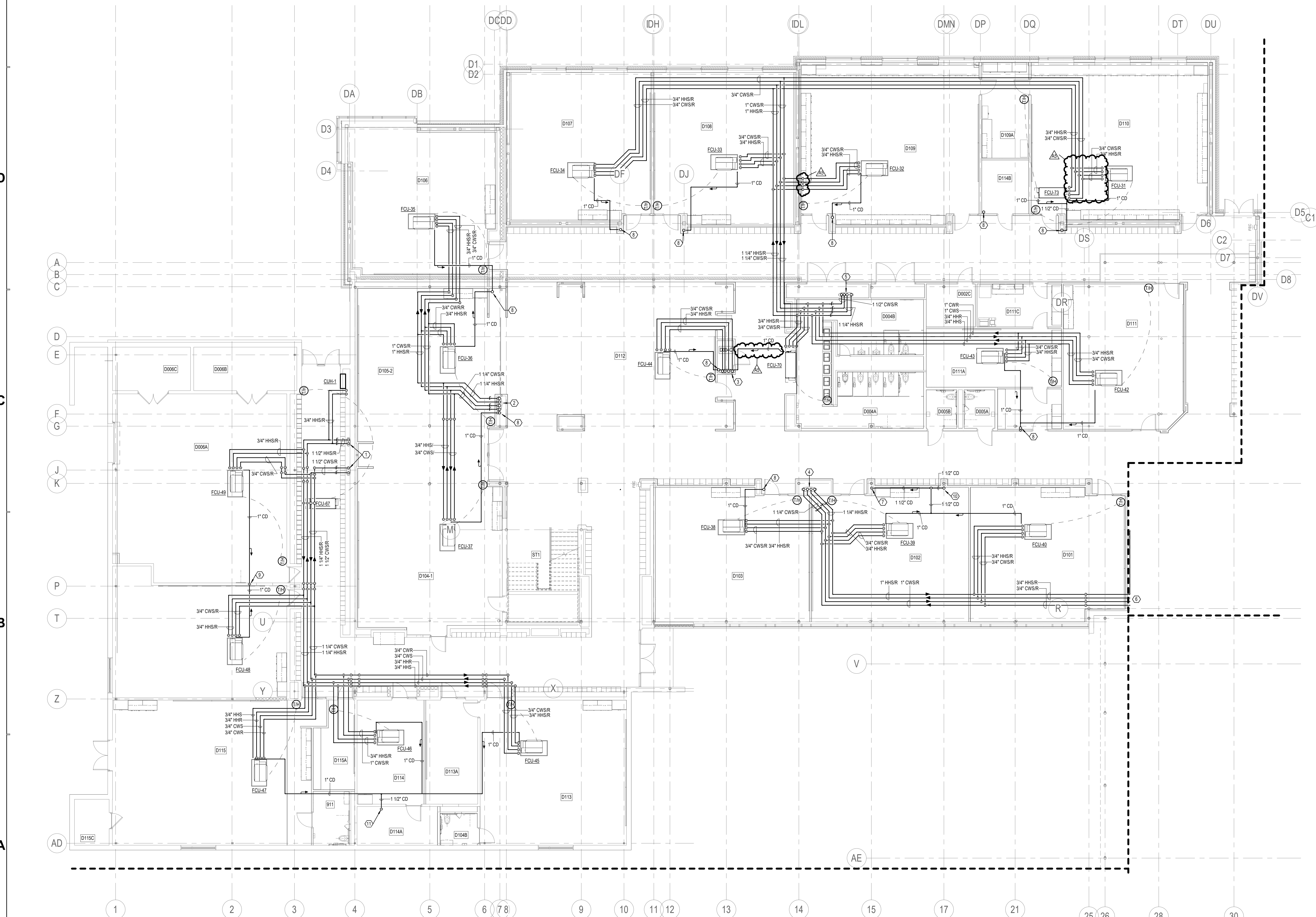
M.S.D. of Washington Township

**EASTWOOD EAGLES**

EASTWOOD MIDDLE SCHOOL

FIRST FLOOR PIPING PLAN - UNIT D

**MP1D1**



**1** FIRST FLOOR LEVEL MECHANICAL PIPING PLAN - AREA D  
1/8" = 1'-0"

6 5 4 3 2 1

E  
D  
C  
B  
A

AD  
Z  
Y  
X  
V  
U  
T  
P  
K  
J  
G  
F  
E  
D  
C  
B  
A

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 17 21 25 26 28 30

6 5 4 3 2 1



GENERAL SHEET NOTES

- SEE M-01 FOR GENERAL SHEET NOTES.
- ALL DUCTWORK TO BE TIGHT TO STRUCTURE WHERE EVER POSSIBLE.

SHEET KEYNOTES

- 1 REFER TO SHEET MP1A1 FOR CONTINUATION OF PIPING
- 2 2" CONDENSATE DOWN
- 3 HHSR 2" UP CWSR - 2 1/2" UP
- 4 REFER TO SHEET MP1F1 FOR CONTINUATION

#	Name
E001	VESTIBULE
E002	CORRIDOR
E002A	BAND STORAGE
E002B	LIBRARY & INSTRUMENT REPAIR
E003	CORRIDOR
E003A	PRACTICE
E003B	PRACTICE
E003C	PRACTICE
E004-1	CORRIDOR-1
E004-2	CORRIDOR-2
E005	VESTIBULE
E006	CORRIDOR
E101	HEALTH
E102	BAND
E103	ORCHESTRA
E104	CHOIR
E104A	CHOIR STORAGE
E105	ENSEMBLE
E106	CONCESSION



**SCHMIDT ASSOCIATES**  
 415 Massachusetts Avenue  
 Indianapolis, IN 46204  
 www.schmidt-arch.com

Project No. 2017-114.EMS  
 Project Date 10.17.18  
 Produced DNH / ABT & NAR

**Bid Documents**



These Drawings and Specifications, and all copies thereof are and shall remain the property and copyright of the Architect. They shall be used only with respect to this Project and are not to be used on any other Project or Work without prior written permission from the Architect.

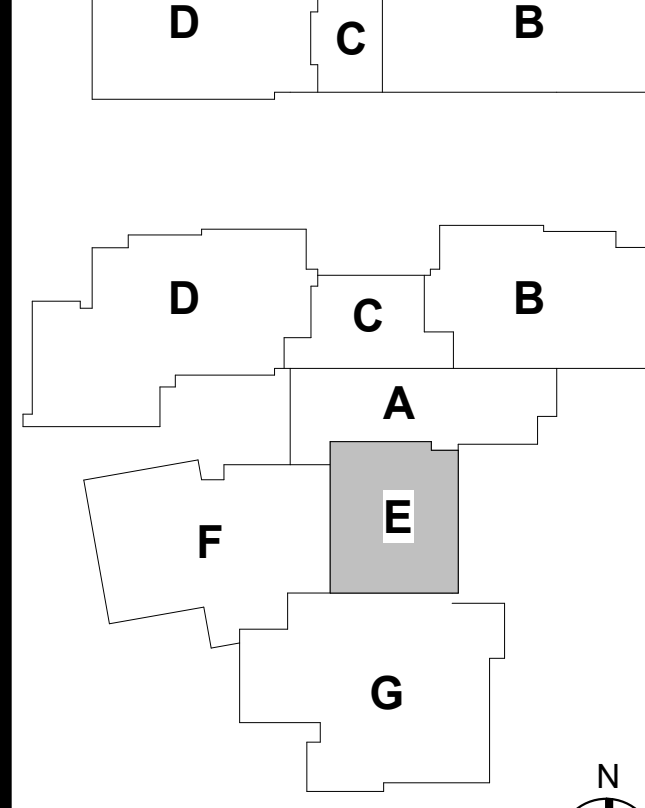
#	Revision	Date
A2	Addendum #2	11.1.2018
A4	Addendum #4	11.9.2018
A5	Addendum #5	Date 5



1344 S. Rangeline Rd,  
 Suite 202  
 Carmel, IN 46032  
 v. (317) 344-8045  
 Job #: 17058

4401 East 62nd Street  
 Indianapolis, IN 46220

**SECOND FLOOR**



M.S.D. of  
 Washington  
 Township

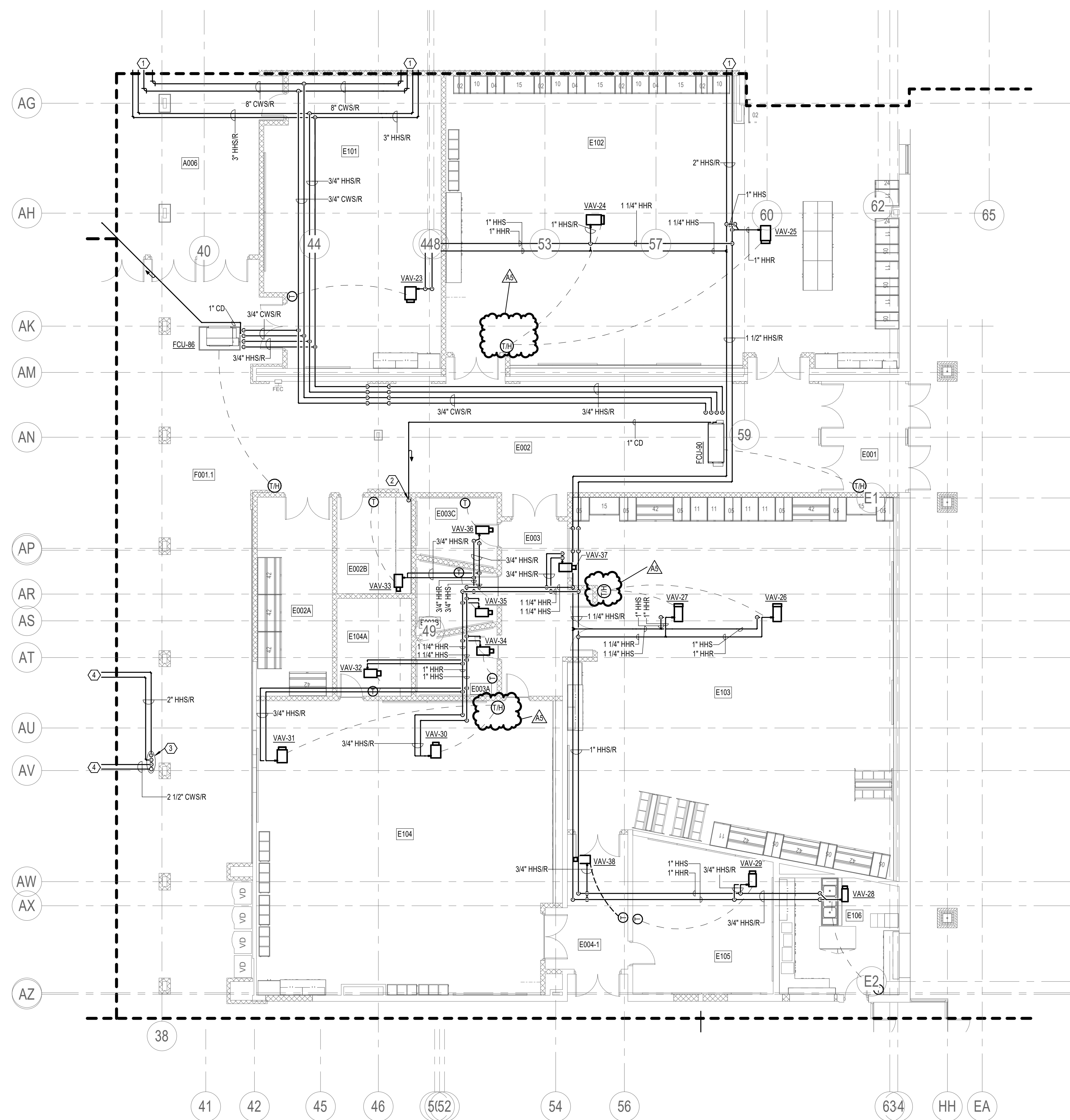


**EASTWOOD  
 EAGLES**

EASTWOOD  
 MIDDLE SCHOOL

FIRST FLOOR PIPING  
 PLAN - UNIT E

MP1E1



**1 FIRST FLOOR LEVEL MECHANICAL PIPING PLAN - AREA E**  
 1/8" = 1'-0"

PIPING PLAN AND MECHANICAL PLAN UNIT E  
 2017-114.EMS PART 3: PIPING UNIT E, MECHANICAL PLAN UNIT E, EASTWOOD MIDDLE SCHOOL  
 PROJECT LOCATION: 4401 EAST 62ND STREET, INDIANAPOLIS, IN 46220  
 DATE: 10/17/2018

6 5 4 3 2 1

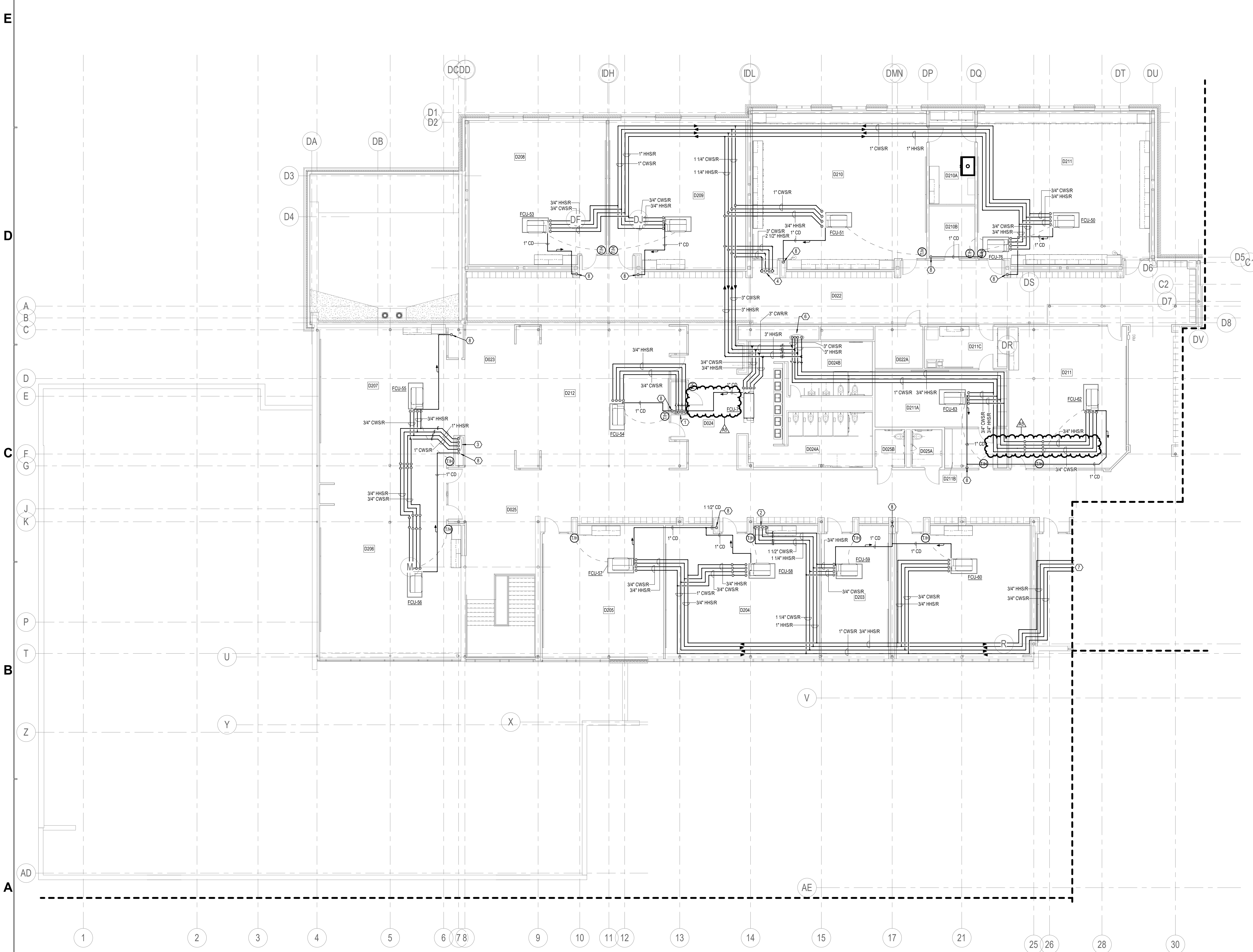
GENERAL SHEET NOTES

- SEE M.001 FOR GENERAL SHEET NOTES
- ALL DUCTWORK TO BE TIGHT TO STRUCTURE WHERE EVER POSSIBLE

SHEET KEYNOTES

- 3/4" CWSR DOWN, 3/4" HHSR DOWN
- HHSR - 1-1/4" DOWN, CWSR - 1-1/2" DOWN
- CWSR - 1" DOWN, HHSR - 1" DOWN
- 3" CWSR, 2-1/2" HHSR UP TO ERU
- 3" CWSR, 3" HHSR DOWN
- REFER TO SHEET MP1C2
- 1-1/2" CONDENSATE DOWN

#	Name
D021	CORRIDOR
D022	CORRIDOR
D022A	IDF
D023	CORRIDOR
D024	CORRIDOR
D024A	WOMENS RR
D024B	MENS RR
D025	CORRIDOR
D025A	RR
D025B	RR
D021	INTERVENTION
D021	SM GROUP
D024	INDIVIDUALS & SOCIETIES
D025	LAL
D026	MATH
D027	MATH
D028	LAL
D029	INDIVIDUALS & SOCIETIES
D0210	SCIENCE
D0210A	SCIENCE STORAGE
D0210B	STORAGE
D0211	RESOURCE
D0211	SCIENCE
D0211A	STAFF THINK TANK
D0211B	STAFF FOCUS
D0211C	POD WK RM
D0212	LG



E  
D  
C  
B  
A

A  
B  
C  
D  
E  
F  
G  
J  
K  
P  
T  
Z  
AD

1 SECOND FLOOR LEVEL MECHANICAL PIPING PLAN - AREA D  
1/8" = 1'-0"

6 5 4 3 2 1

**SCHMIDT ASSOCIATES**  
415 Massachusetts Avenue  
Indianapolis, IN 46204  
www.schmidt-arch.com

Project No. 2017-114.EMS  
Project Date 10.17.18  
Produced DNH / ABT & NAR

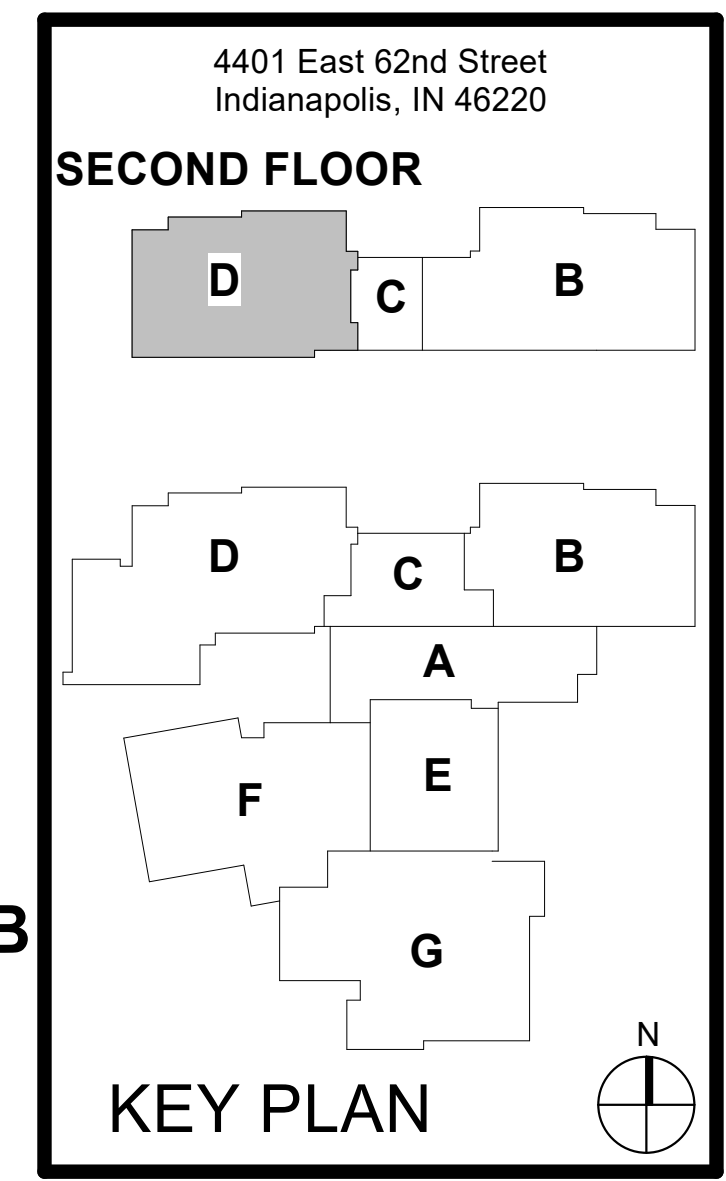
Bid Documents



These Drawings and Specifications, and all copies thereof are and shall remain the property and copyright of the Architect. They shall be used only with respect to this Project and are not to be used on any other Project or Work without prior written permission from the Architect.

#	Revision	Date
A2	Addendum #2	11.1.2018
A4	Addendum #4	11.9.2018
A5	Addendum #5	Date 5

1344 S. Rangeline Rd,  
Suite 202  
Carmel, IN 46032  
v. (317) 344-8045  
Job #: 17058



M.S.D. of Washington Township

**EASTWOOD EAGLES**

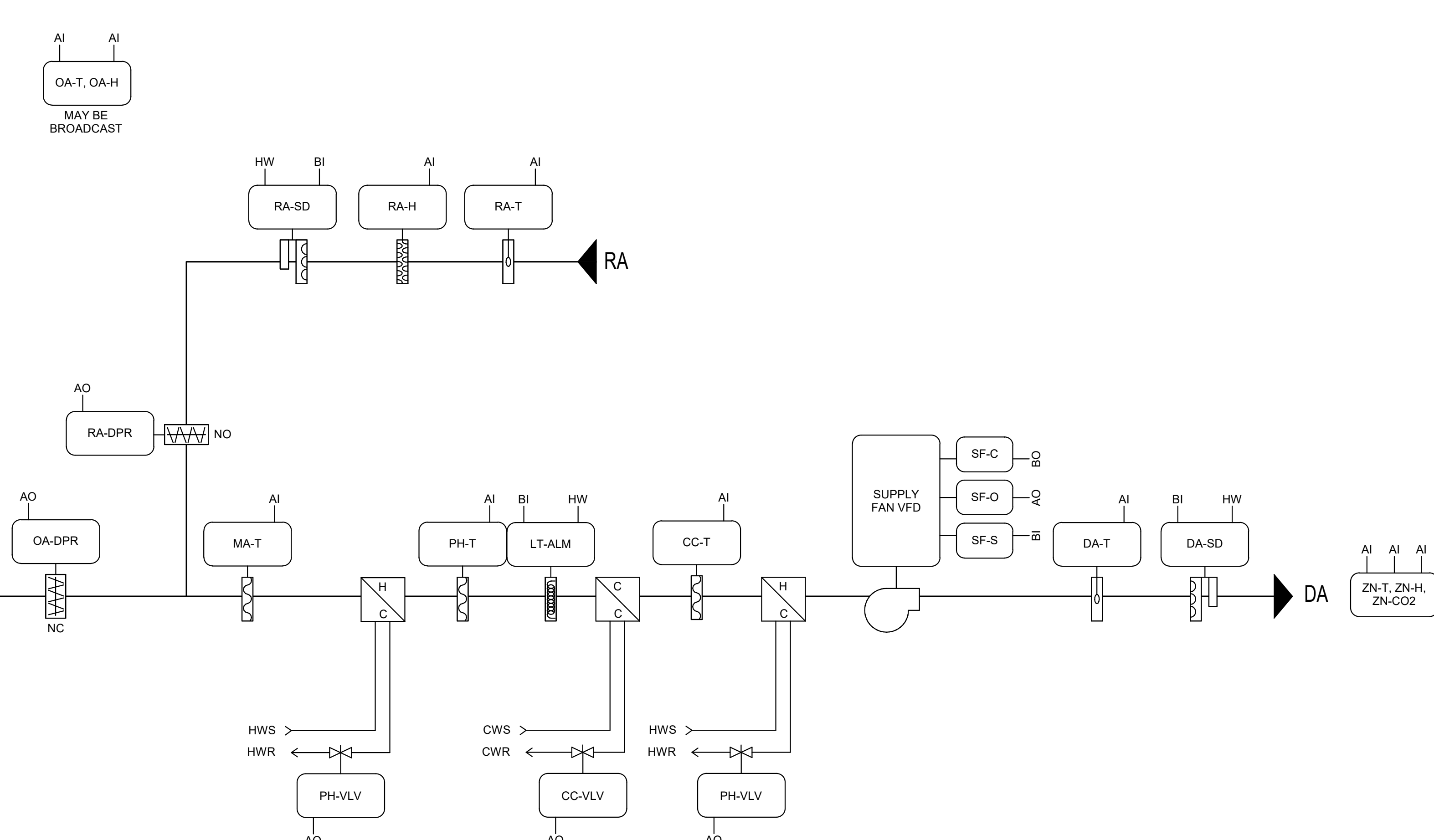
EASTWOOD MIDDLE SCHOOL

SECOND FLOOR PIPING PLAN - UNIT D

MP1D2



6C RTU-1 thru 5, 10, 11 NOT TO SCALE



RTU-1 THRU 11 SEQUENCE OF OPERATION

TCC SHALL FURNISH AND INSTALL DAMPER ACTUATORS, DAMPERS PROVIDED BY AHU MANUFACTURER. TCC CONTROL PANEL TO BE MOUNTED WITHIN THE AHU IN SAME CABINET AS VFD LOCATED IN DISCHARGE SECTION.

**SUPPLY FAN START/STOP:** THE SUPPLY FAN (SF-C) WILL BE STARTED ACCORDING TO THE SCHEDULE OR MANUALLY AS SELECTED BY THE OPERATOR. IF THE SUPPLY FAN STATUS (SF-S) DOES NOT MATCH THE COMMANDED VALUE, AN ALARM WILL BE GENERATED. WHEN THE SUPPLY FAN STATUS INDICATES THE FAN STARTED, THE CONTROL SEQUENCE WILL BE ENABLED. MAXIMUM SUPPLY FAN SPEED (SF-O) SHALL BE SET BY THE TEST AND BALANCE CONTRACTOR.

**OCCUPIED COOLING MODE:** SUPPLY FAN SHALL START (SF-C) AT FULL COOLING DEMAND WITH OUTDOOR AIR DAMPER OPEN AT MINIMUM POSITION (UNLESS ECONOMIZER IS ENABLED) AND FAN (SF-O) AT MAX SPEED. DECREASES IN COOLING DEMAND SHALL DECREASE FAN SPEED FROM FULL SPEED DOWN TO MINIMUM SPEED (25% OF FULL SPEED). FURTHER DECREASES IN COOLING DEMAND SHALL BE WITH THE FAN SPEED AT MINIMUM AND THE CHILLED WATER CONTROL VALVE (CLG-VLV) POSITION MODULATING IN RESPONSE TO THE ZONE SETPOINT (ZN-T). OCCUPIED COOLING SETPOINT SHALL BE 74F (ADJ).

**UNOCCUPIED COOLING MODE:** SUPPLY FAN SHALL RUN AT 60% OF MAX SPEED AND THE OUTSIDE AIR DAMPERS SHALL CLOSE (UNLESS ECONOMIZER IS ENABLED) WHEN THE SPACE TEMPERATURE RISES ABOVE THE UNOCCUPIED COOLING SETPOINT OF 78F (ADJ). THE CHILLED WATER CONTROL VALVE SHALL MODULATE IN RESPONSE TO THE ZONE SETPOINT. WHEN THE SPACE TEMPERATURE DROPS 2F BELOW THE UNOCCUPIED COOLING SETPOINT, THE SUPPLY FAN SHALL BE DISABLED.

**OCCUPIED HEATING MODE:** SUPPLY FAN SHALL START AT FULL HEATING DEMAND WITH OUTDOOR AIR DAMPER OPEN AT MINIMUM POSITION AND FAN AT MAX SPEED. DECREASES IN HEATING DEMAND SHALL BE WITH THE FAN AT MAX SPEED AND THE PREHEAT COIL (PH-VLV) MODULATING IN RESPONSE TO THE ZONE SETPOINT. DISCHARGE AIR TEMPERATURE SHALL NOT EXCEED 95F. OCCUPIED HEATING SETPOINT SHALL BE 70F (ADJ).

**UNOCCUPIED HEATING MODE:** SUPPLY FAN SHALL RUN AT 60% OF MAX SPEED WITH THE OUTSIDE AIR DAMPERS CLOSED WHEN THE SPACE TEMPERATURE DROPS BELOW THE UNOCCUPIED HEATING SETPOINT OF 64F (ADJ). THE PREHEAT COIL CONTROL VALVE SHALL MODULATE IN RESPONSE TO THE ZONE SETPOINT. WHEN THE SPACE TEMPERATURE RISES 2F ABOVE THE UNOCCUPIED HEATING SETPOINT, THE SUPPLY FAN SHALL BE DISABLED.

**PREHEAT FACE & BYPASS CONTROL:** WHEN THE OUTSIDE AIR TEMPERATURE IS BELOW 38F, THE PREHEAT COIL VALVE WILL BE WIDE OPEN AND THE HEATING SHALL BE MAINTAINED BY MODULATING THE BYPASS DAMPER (PH-F&B). WHEN THE OUTSIDE AIR TEMPERATURE IS ABOVE 38F, THE BYPASS DAMPER WILL BE WIDE OPEN TO THE COIL AND THE HEATING SHALL BE MAINTAINED BY MODULATING THE PREHEAT VALVE.

**ZONE HUMIDITY CONTROL:** IF THE ZONE HUMIDITY (ZN-H) RISES ABOVE SETPOINT, THE SUPPLY FAN SHALL RUN AT 50% OF MAX SPEED, THE COOLING COIL VALVE WILL BE COMMANDED OPEN AND THE REHEAT VALVE (RH-VLV) SHALL MODULATE TO MAINTAIN THE ZONE TEMPERATURE. A DIFFERENTIAL WILL PREVENT THE UNIT FROM CYCLING BETWEEN THIS MODE.

**ENTHALPY SWITCHOVER:** WHEN THE SHARED OUTSIDE AIR ENTHALPY (OA-T, OA-H) IS BELOW THE RETURN AIR ENTHALPY (RA-T, RA-H), THE ECONOMIZER WILL BE ENABLED. WHEN THE SHARED OUTSIDE AIR ENTHALPY RISES ABOVE THE RETURN AIR ENTHALPY, THE ECONOMIZER WILL BE DISABLED.

**ZONE CARBON DIOXIDE CONTROL:** WHEN THE ZONE CARBON DIOXIDE LEVEL (ZN-CO2) EXCEEDS THE SETPOINT OF 1000PPM, THE MIXED AIR DAMPERS SHALL BRING IN MORE OUTSIDE AIR SUBJECT TO A MIXED AIR TEMPERATURE (MA-T) LOW LIMIT AND HIGH LIMIT EQUAL TO ENTERING AIR TEMPERATURES NOTED ON THE MECHANICAL SCHEDULE (M-601). LOW LIMIT SHALL BE EQUAL TO THE ENTERING AIR TEMPERATURE FOR THE PREHEAT COIL AND THE HIGH LIMIT SHALL BE THE ENTERING AIR TEMPERATURE FOR THE COOLING COIL. OUTSIDE AIR DAMPER SHALL BE CAPABLE OF CLOSING IF CO2 LEVELS ARE BELOW 900PPM. A DIFFERENTIAL SHALL BE PUT IN PLACE TO PREVENT CYCLING OF DAMPERS IN THIS MODE.

**MORNING WARM-UP:** A MORNING WARMUP CYCLE SHALL BE IMPLEMENTED, UPON TRANSITION FROM UNOCCUPIED TO OCCUPIED MODE. FANS TURN ON, OUTSIDE AIR DAMPER REMAINS CLOSED, RETURN AIR DAMPER REMAINS OPEN. PREHEAT VALVE IS DRIVEN FULLY OPEN SUBJECT TO A HIGH LIMIT DISCHARGE OF 90F (ADJ) AND COOLING VALVE IS FULLY CLOSED. UNIT REMAINS IN THIS MODE UNTIL THE RETURN AIR TEMPERATURE (RA-T) REACHES THE MORNING WARMUP CYCLE TERMINATION SETPOINT OF 70F (ADJ). UPON REACHING THIS SETPOINT, THE AIR HANDLING UNIT ENTERS ITS NORMAL OCCUPIED MODE OF OPERATION (ZONE TEMPERATURE CONTROL).

**SAFETY:** ALL OF THE SAFETY DEVICES ARE MANUAL RESET. THE DEVICE THAT HAS TRIPPED MUST BE MANUALLY RESET BEFORE RESTARTING THE AIR HANDLING UNIT. THE SUPPLY FAN WILL BE SHUTDOWN WHEN ANY OF THE FOLLOWING OCCUR:  
 -IF A TEMPERATURE LOW LIMIT (LT-ALM) SWITCH SENSES A TEMPERATURE BELOW SETPOINT. LOW LIMIT TO BE LOCATED ON THE DISCHARGE SIDE OF THE PREHEAT COIL.  
 -IF A FIRE ALARM (DA-SD, RA-SD) SHUTDOWN CONTACT IS PROVIDED

**SHUTDOWN:** WHEN THE UNIT IS SHUTDOWN BY EITHER A STOP COMMAND OR SYSTEM SAFETY THE UNIT WILL BE SET AS FOLLOWS:  
 SUPPLY FAN WILL BE OFF  
 OUTSIDE AIR DAMPER WILL CLOSE  
 RETURN AIR DAMPER WILL OPEN  
 COOLING VALVE WILL CLOSE  
 PREHEAT AND REHEAT VALVES WILL OPEN

**POINTS LIST:** THE FOLLOWING REPRESENTS THE MINIMUM POINTS TO BE PROVIDED AND DISPLAYED IN THE SYSTEM GRAPHICS. ADDITIONAL POINTS REQUIRED TO MEET THE SEQUENCE SHALL BE PROVIDED AND ALSO SHOWN.

**BINARY INPUTS**  
 SUPPLY FAN STATUS (SF-S)  
 SMOKE DETECTORS (DA-SD, RA-SD)  
 LOW LIMIT (LT-ALM)

**BINARY OUTPUTS**  
 SUPPLY FAN START/STOP (SF-C)

**ANALOG INPUTS**  
 OUTSIDE AIR TEMPERATURE (OA-T, MAY BE BROADCAST)  
 OUTSIDE AIR HUMIDITY (OA-H, MAY BE BROADCAST)  
 ZONE TEMPERATURE (ZN-T)  
 ZONE HUMIDITY (ZN-H)  
 ZONE CARBON DIOXIDE (ZN-CO2)  
 MIXED AIR TEMPERATURE (MA-T)  
 RETURN AIR TEMPERATURE (RA-T)  
 RETURN AIR HUMIDITY (RA-H)  
 PREHEAT COIL DISCHARGE AIR TEMPERATURE (PH-T)  
 COOLING COIL DISCHARGE AIR TEMPERATURE (CC-T)  
 DISCHARGE TEMPERATURE (DA-T)

**ANALOG OUTPUTS**  
 SUPPLY FAN SPEED (SF-O)  
 OUTDOOR AIR DAMPER (OA-DPR)  
 RETURN AIR DAMPER (RA-DPR)  
 PREHEAT COIL VALVE (PH-VLV)  
 COOLING COIL VALVE (CC-VLV)  
 REHEAT COIL VALVE (RH-VLV)  
 FACE & BYPASS DAMPER (PH-F&B)

**CALCULATED (SHOWN ON GRAPHICS)**  
 OUTSIDE AND RETURN AIR ENTHALPY

RTU-6 THRU 9 SEQUENCE OF OPERATION

TCC SHALL FURNISH AND INSTALL DAMPER ACTUATORS, DAMPERS PROVIDED BY AHU MANUFACTURER. RTU-6 & 7 SERVE THE SMALLER GYM, RTU-8 & 9 SERVE THE LARGER GYM. THE RTUs SHALL OPERATE IN A LEAD/LAG FASHION FOR EACH GYM. IF THE LEAD RTU FAILS TO START, THE LAG RTU SHALL START AND AN ALARM SHALL BE SENT TO THE FRONT END OPERATOR'S TERMINAL. THE LAG RTU SHALL ALSO START IF THE SUPPLY FAN ON THE LEAD RTU IS ABOVE 80% OF MAXIMUM SPEED. LEAD/LAG OF RTUs SHALL CYCLE ON A MONTHLY BASIS.

**SUPPLY FAN START/STOP:** THE SUPPLY FAN (SF-C) WILL BE STARTED ACCORDING TO THE SCHEDULE OR MANUALLY AS SELECTED BY THE OPERATOR. IF THE SUPPLY FAN STATUS (SF-S) DOES NOT MATCH THE COMMANDED VALUE, AN ALARM WILL BE GENERATED. WHEN THE SUPPLY FAN STATUS INDICATES THE FAN STARTED, THE CONTROL SEQUENCE WILL BE ENABLED. MAXIMUM SUPPLY FAN SPEED (SF-O) SHALL BE SET BY THE TEST AND BALANCE CONTRACTOR.

**OCCUPIED COOLING MODE:** SUPPLY FAN SHALL START (SF-C) AT FULL COOLING DEMAND WITH OUTDOOR AIR DAMPER OPEN AT MINIMUM POSITION (UNLESS ECONOMIZER IS ENABLED) AND FAN (SF-O) AT MAX SPEED. DECREASES IN COOLING DEMAND SHALL DECREASE FAN SPEED FROM FULL SPEED DOWN TO MINIMUM SPEED (25% OF FULL SPEED). FURTHER DECREASES IN COOLING DEMAND SHALL BE WITH THE FAN SPEED AT MINIMUM AND THE CHILLED WATER CONTROL VALVE (CLG-VLV) POSITION MODULATING IN RESPONSE TO THE ZONE SETPOINT (ZN-T). OCCUPIED COOLING SETPOINT SHALL BE 74F (ADJ).

**UNOCCUPIED COOLING MODE:** SUPPLY FAN SHALL RUN AT 60% OF MAX SPEED AND THE OUTSIDE AIR DAMPERS SHALL CLOSE (UNLESS ECONOMIZER IS ENABLED) WHEN THE SPACE TEMPERATURE RISES ABOVE THE UNOCCUPIED COOLING SETPOINT OF 78F (ADJ). THE CHILLED WATER CONTROL VALVE SHALL MODULATE IN RESPONSE TO THE ZONE SETPOINT. WHEN THE SPACE TEMPERATURE DROPS 2F BELOW THE UNOCCUPIED COOLING SETPOINT, THE SUPPLY FAN SHALL BE DISABLED.

**OCCUPIED HEATING MODE:** SUPPLY FAN SHALL START AT FULL HEATING DEMAND WITH OUTDOOR AIR DAMPER OPEN AT MINIMUM POSITION AND FAN AT MAX SPEED. DECREASES IN HEATING DEMAND SHALL BE WITH THE FAN AT MAX SPEED AND THE PREHEAT COIL (PH-VLV) MODULATING IN RESPONSE TO THE ZONE SETPOINT. DISCHARGE AIR TEMPERATURE SHALL NOT EXCEED 95F. OCCUPIED HEATING SETPOINT SHALL BE 70F (ADJ).

**UNOCCUPIED HEATING MODE:** SUPPLY FAN SHALL RUN AT 60% OF MAX SPEED WITH THE OUTSIDE AIR DAMPERS CLOSED WHEN THE SPACE TEMPERATURE DROPS BELOW THE UNOCCUPIED HEATING SETPOINT OF 64F (ADJ). THE PREHEAT COIL CONTROL VALVE SHALL MODULATE IN RESPONSE TO THE ZONE SETPOINT. WHEN THE SPACE TEMPERATURE RISES 2F ABOVE THE UNOCCUPIED HEATING SETPOINT, THE SUPPLY FAN SHALL BE DISABLED.

**ZONE HUMIDITY CONTROL:** IF THE ZONE HUMIDITY (ZN-H) RISES ABOVE SETPOINT, THE SUPPLY FAN SHALL RUN AT 50% OF MAX SPEED, THE COOLING COIL VALVE WILL BE COMMANDED OPEN AND THE REHEAT VALVE (RH-VLV) SHALL MODULATE TO MAINTAIN THE ZONE TEMPERATURE. A DIFFERENTIAL WILL PREVENT THE UNIT FROM CYCLING BETWEEN THIS MODE.

**ENTHALPY SWITCHOVER:** WHEN THE SHARED OUTSIDE AIR ENTHALPY (OA-T, OA-H) IS BELOW THE RETURN AIR ENTHALPY (RA-T, RA-H), THE ECONOMIZER WILL BE ENABLED. WHEN THE SHARED OUTSIDE AIR ENTHALPY RISES ABOVE THE RETURN AIR ENTHALPY, THE ECONOMIZER WILL BE DISABLED.

**ZONE CARBON DIOXIDE CONTROL:** WHEN THE ZONE CARBON DIOXIDE LEVEL (ZN-CO2) EXCEEDS THE SETPOINT OF 1000PPM, THE MIXED AIR DAMPERS SHALL BRING IN MORE OUTSIDE AIR SUBJECT TO A MIXED AIR TEMPERATURE (MA-T) LOW LIMIT AND HIGH LIMIT EQUAL TO ENTERING AIR TEMPERATURES NOTED ON THE MECHANICAL SCHEDULE (M-601). LOW LIMIT SHALL BE EQUAL TO THE ENTERING AIR TEMPERATURE FOR THE PREHEAT COIL AND THE HIGH LIMIT SHALL BE THE ENTERING AIR TEMPERATURE FOR THE COOLING COIL. OUTSIDE AIR DAMPER SHALL BE CAPABLE OF CLOSING IF CO2 LEVELS ARE BELOW 900PPM. A DIFFERENTIAL SHALL BE PUT IN PLACE TO PREVENT CYCLING OF DAMPERS IN THIS MODE.

**MORNING WARM-UP:** A MORNING WARMUP CYCLE SHALL BE IMPLEMENTED, UPON TRANSITION FROM UNOCCUPIED TO OCCUPIED MODE. FANS TURN ON, OUTSIDE AIR DAMPER REMAINS CLOSED, RETURN AIR DAMPER REMAINS OPEN. PREHEAT VALVE IS DRIVEN FULLY OPEN SUBJECT TO A HIGH LIMIT DISCHARGE OF 90F (ADJ) AND COOLING VALVE IS FULLY CLOSED. UNIT REMAINS IN THIS MODE UNTIL THE RETURN AIR TEMPERATURE (RA-T) REACHES THE MORNING WARMUP CYCLE TERMINATION SETPOINT OF 70F (ADJ). UPON REACHING THIS SETPOINT, THE AIR HANDLING UNIT ENTERS ITS NORMAL OCCUPIED MODE OF OPERATION (ZONE TEMPERATURE CONTROL).

**SAFETY:** ALL OF THE SAFETY DEVICES ARE MANUAL RESET. THE DEVICE THAT HAS TRIPPED MUST BE MANUALLY RESET BEFORE RESTARTING THE AIR HANDLING UNIT. THE SUPPLY FAN WILL BE SHUTDOWN WHEN ANY OF THE FOLLOWING OCCUR:  
 -IF A TEMPERATURE LOW LIMIT (LT-ALM) SWITCH SENSES A TEMPERATURE BELOW SETPOINT. LOW LIMIT TO BE LOCATED ON THE DISCHARGE SIDE OF THE PREHEAT COIL.  
 -IF A FIRE ALARM (DA-SD, RA-SD) SHUTDOWN CONTACT IS PROVIDED

**SHUTDOWN:** WHEN THE UNIT IS SHUTDOWN BY EITHER A STOP COMMAND OR SYSTEM SAFETY THE UNIT WILL BE SET AS FOLLOWS:  
 SUPPLY FAN WILL BE OFF  
 OUTSIDE AIR DAMPER WILL CLOSE  
 RETURN AIR DAMPER WILL OPEN  
 COOLING VALVE WILL CLOSE  
 PREHEAT AND REHEAT VALVES WILL OPEN

**POINTS LIST:** THE FOLLOWING REPRESENTS THE MINIMUM POINTS TO BE PROVIDED AND DISPLAYED IN THE SYSTEM GRAPHICS. ADDITIONAL POINTS REQUIRED TO MEET THE SEQUENCE SHALL BE PROVIDED AND ALSO SHOWN.

**BINARY INPUTS**  
 SUPPLY FAN STATUS (SF-S)  
 SMOKE DETECTORS (DA-SD, RA-SD)  
 LOW LIMIT (LT-ALM)

**BINARY OUTPUTS**  
 SUPPLY FAN START/STOP (SF-C)

**ANALOG INPUTS**  
 OUTSIDE AIR TEMPERATURE (OA-T, MAY BE BROADCAST)  
 OUTSIDE AIR HUMIDITY (OA-H, MAY BE BROADCAST)  
 ZONE TEMPERATURE (ZN-T)  
 ZONE HUMIDITY (ZN-H)  
 ZONE CARBON DIOXIDE (ZN-CO2)  
 MIXED AIR TEMPERATURE (MA-T)  
 RETURN AIR TEMPERATURE (RA-T)  
 RETURN AIR HUMIDITY (RA-H)  
 PREHEAT COIL DISCHARGE AIR TEMPERATURE (PH-T)  
 COOLING COIL DISCHARGE AIR TEMPERATURE (CC-T)  
 DISCHARGE TEMPERATURE (DA-T)

**ANALOG OUTPUTS**  
 SUPPLY FAN SPEED (SF-O)  
 OUTDOOR AIR DAMPER (OA-DPR)  
 RETURN AIR DAMPER (RA-DPR)  
 PREHEAT COIL VALVE (PH-VLV)  
 COOLING COIL VALVE (CC-VLV)  
 REHEAT COIL VALVE (RH-VLV)

**CALCULATED (SHOWN ON GRAPHICS)**  
 OUTSIDE AND RETURN AIR ENTHALPY

6A RTU-6 thru 9 NOT TO SCALE

SCHMIDT ASSOCIATES  
 415 Massachusetts Avenue  
 Indianapolis, IN 46204  
 www.schmidt-arch.com

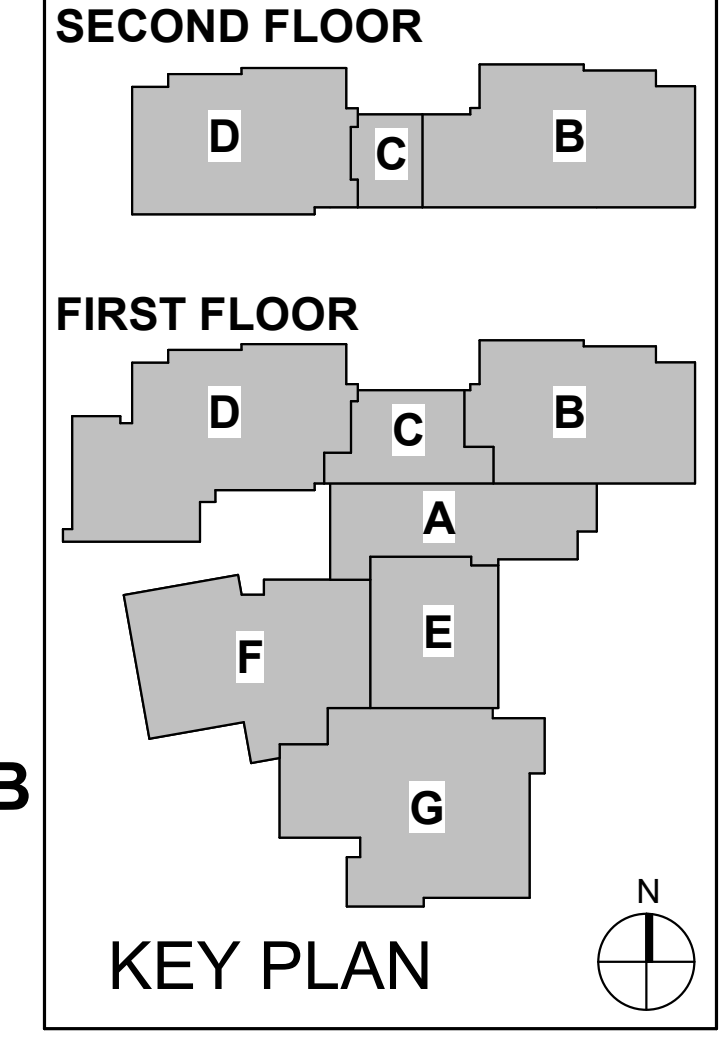
Project No. 2017-114.EMS  
 Project Date 10.17.18  
 Produced Designer/Author

Bid Documents

Sarah K. Hempstead  
 These Drawings and Specifications, and all copies thereof are and shall remain the property and copyright of the Architect. They shall be used only with respect to this Project and are not to be used on any other Project or Work without prior written permission from the Architect.

#	Revision	Date
A5	Addendum #5	11.16.2018

4401 East 62nd Street  
 Indianapolis, IN 46220

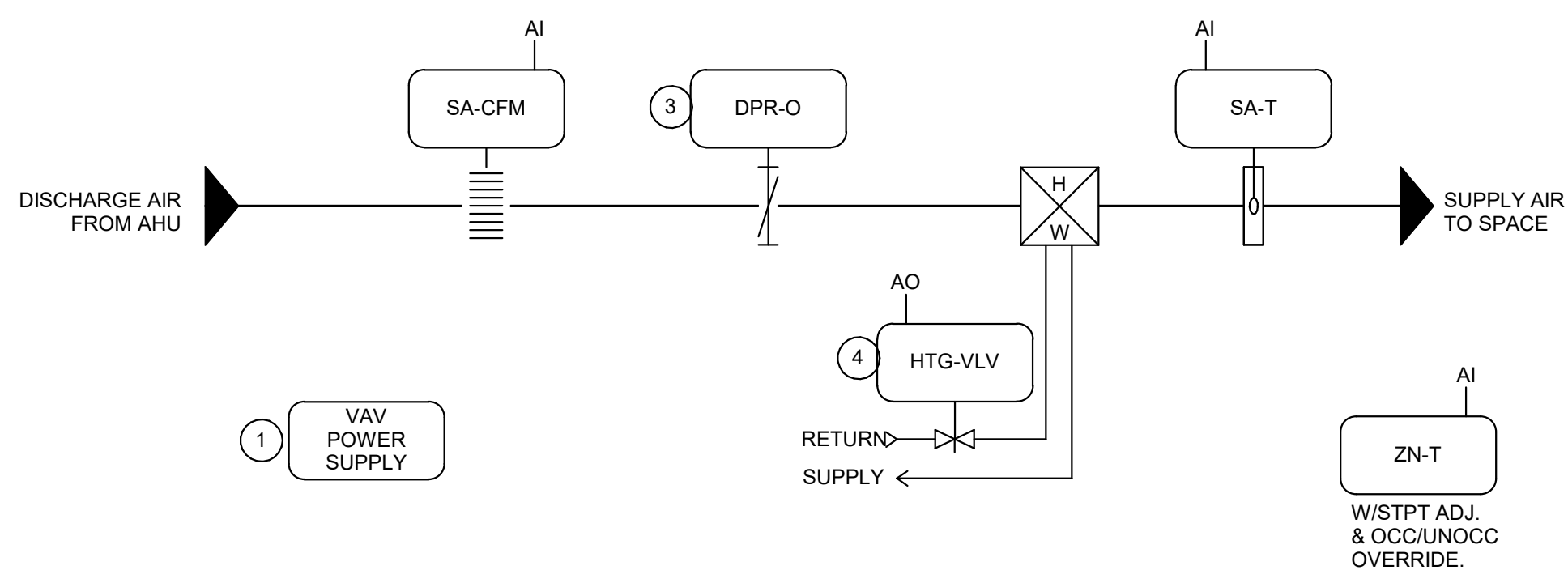


M.S.D. of Washington Township  
**EASTWOOD**  
  
**EAGLES**  
 EASTWOOD MIDDLE SCHOOL

TEMPERATURE CONTROL SCHEMATICS

M-703





**VAV BOX WITH REHEAT SEQUENCE OF OPERATION**

**DISCHARGE AIR TEMPERATURE SENSOR:** TCC SHALL PROVIDE A SUPPLY AIR TEMPERATURE SENSOR (SA-T) FOR MONITORING PURPOSES AND TO LIMIT THE DISCHARGE AT 95F (ADJ).

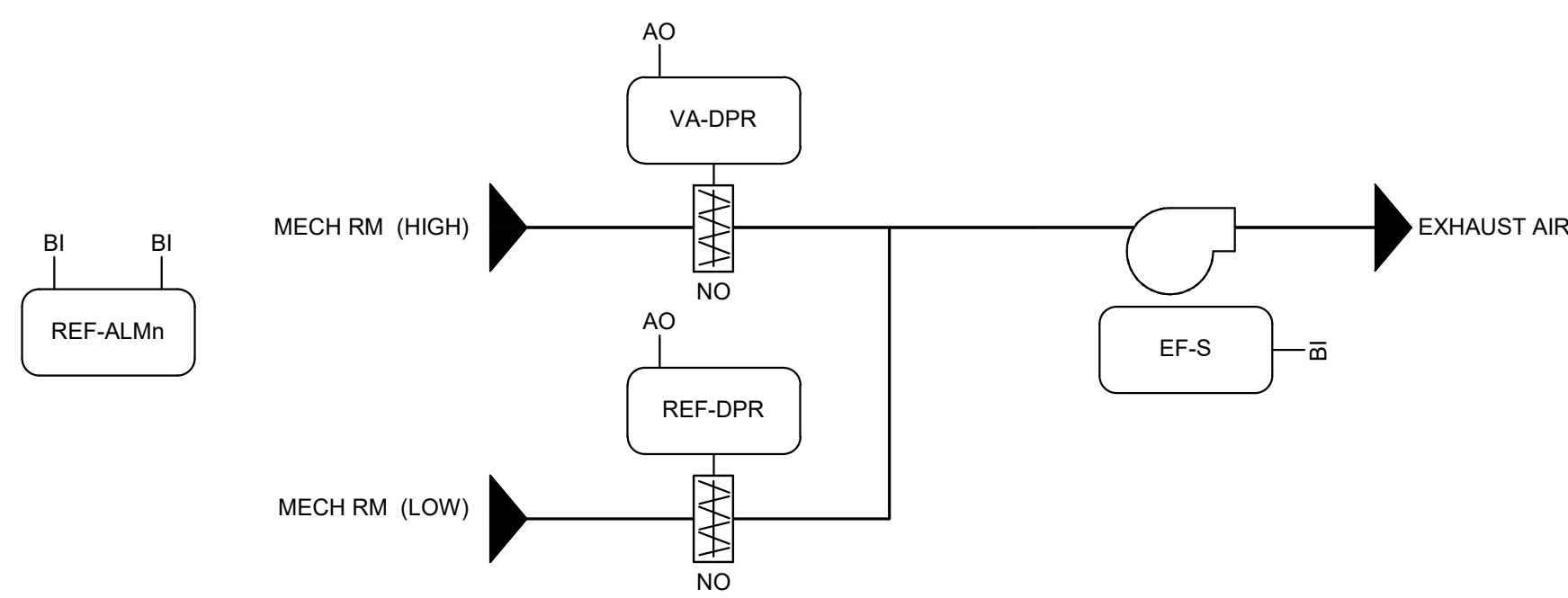
**OCCUPIED MODE:** WHEN THE ZONE TEMPERATURE (ZN-T) IS BETWEEN THE HEATING AND COOLING SETPOINTS, THE PRIMARY AIR DAMPER (DPR-O) WILL BE AT THE MINIMUM CFM (SA-CFM) AND THE REHEAT VALVE (RH-VLV) SHALL BE FULLY CLOSED. ON A RISE IN ZONE TEMPERATURE ABOVE THE COOLING SETPOINT, THE PRIMARY AIR DAMPER SHALL INCREASE THE CFM AND THE REHEAT VALVE SHALL REMAIN FULLY CLOSED. ON A DROP IN TEMPERATURE BELOW THE HEATING SETPOINT, THE REHEAT VALVE SHALL MODULATE OPEN AND THE PRIMARY AIR DAMPER SHALL MAINTAIN MINIMUM CFM. SPACE SENSORS SHALL HAVE SETPOINT ADJUSTMENT AND UNOCCUPIED CYCLE OVERRIDE (SOFTWARE SELECTABLE AS DETERMINED BY THE OWNER).

**UNOCCUPIED (NIGHT SETBACK) MODE:** WHEN IN THE UNOCCUPIED MODE, THE VAV BOX SEQUENCE SHALL BE THE SAME AS THE ABOVE OCCUPIED SEQUENCE. UNOCCUPIED HEATING SETPOINT SHALL BE 55F AND THE COOLING SETPOINT SHALL BE 85F. WHEN ANY TWO VAV BOXES REACH EITHER THEIR HEATING OR COOLING SETPOINT, THE AIR HANDLING UNIT SHALL START AND RUN TO MAINTAIN THE UNOCCUPIED SETPOINT. PROVIDE DIFFERENTIAL TO PREVENT SHORT CYCLING OF AHU.

**NOTES FOR VAV BOXES**

1. 24 VOLT POWER TO VAV BOXES BY TEMPERATURE CONTROL CONTRACTOR. USE POWER SUPPLY EQUAL TO FUNCTIONAL DEVICES F1000A OR F1000A AS APPLICABLE. 120 VOLT POWER TO POWER SUPPLIES BY DIV. 26. SEE ELECTRICAL DRAWINGS FOR LOCATIONS OF (2) POWER FEEDS PROVIDED FOR VAV CONTROLS. (1) FOR UNIT A & (1) FOR UNIT E.
2. TCC SHALL LOAD POWER SUPPLIES AS REQUIRED TO PROPERLY SERVE CONTROLS ON VAV BOXES. PROVIDE NUMBER REQUIRED. TCC SHALL PROVIDE FUSE PROTECTION AS REQUIRED FOR CONTROLS.
3. VAV CONTROLLER/ACTUATOR FURNISHED BY TCC TO VAV BOX MANUFACTURER FOR FACTORY INSTALLATION AND WIRING.
4. FURNISHED BY TCC, INSTALLED BY THE DIV. 23 CONTRACTOR.

**6D VAV BOX WITH REHEAT**  
NOT TO SCALE



**REFRIGERANT MONITORING:** REFRIGERANT MONITORING AS DESCRIBED BELOW SHALL BE FURNISHED AND INSTALLED BY THE TCC. PROVIDE A NEW SYSTEM TO SENSE 410A REFRIGERANT. ALL EQUIPMENT ASSOCIATED WITH A REFRIGERANT ALARM (START OR DISABLE) SHALL BE WIRED DIRECTLY FROM REFRIGERANT MONITORING SYSTEM TO THE CONTROLLED DEVICE (BOILERS, DOMESTIC WATER HEATERS, EXHAUST FAN, ETC.) AS CALLED OUT IN SEQUENCE. STATUS OF THE EXHAUST FAN AND BOTH ALARM LEVELS SHALL BE MONITORED BY THE BMS.

**A LEVEL 1 ALARM (REF-ALM1)** SHALL AUTOMATICALLY ILLUMINATE A STROBE LIGHT INSIDE THE EQUIPMENT ROOM TO ALERT THE BUILDING PERSONNEL. THE LEVEL 1 RELAY SHALL REMAIN "LATCHED" ON UNTIL MANUALLY RESET. IT SHALL ALSO AUTOMATICALLY START THE MECHANICAL SPACE VENTILATION BY OPENING THE LOW DAMPER (REF-DPR, FAIL POSITION NORMALLY OPEN) IN THE MECHANICAL ROOM AND ACTIVATING AN EXHAUST FAN (DIRECT-WIRED, NO BMS INTERFACE OTHER THAN STATUS). BMS SHALL NOTIFY THE APPROPRIATE MAINTENANCE PERSONNEL THAT A LEVEL 1 ALARM HAS OCCURRED (IE: **WARNING - REFRIGERANT MONITOR LEVEL 1 ALARM, OUTDOOR AIR IS NOW BEING DRAWN INTO THE EQUIPMENT ROOM.**)

**A LEVEL 2 ALARM (REF-ALM2),** IN ADDITION TO THE AFOREMENTIONED, SHALL AUTOMATICALLY SHUT DOWN THE BOILERS AND DOMESTIC WATER HEATERS THAT IS CONTAMINATED WITH REFRIGERANT, AND ACTIVATE WARNING LIGHTS AND HORNS ON THE EXTERIOR SIDE OF EVERY DOOR INTO THE EQUIPMENT ROOM, AND SOUND THE HORN INSIDE THE EQUIPMENT ROOM. THE BMS SHALL NOTIFY THE APPROPRIATE MAINTENANCE PERSONNEL THAT A LEVEL 2 ALARM HAS OCCURRED (IE: **EMERGENCY - REFRIGERANT MONITOR LEVEL 2 ALARM, OUTDOOR AIR IS NOW BEING DRAWN INTO THE EQUIPMENT ROOM, BOILERS AND DOMESTIC WATER HEATERS ARE DISABLED.**)

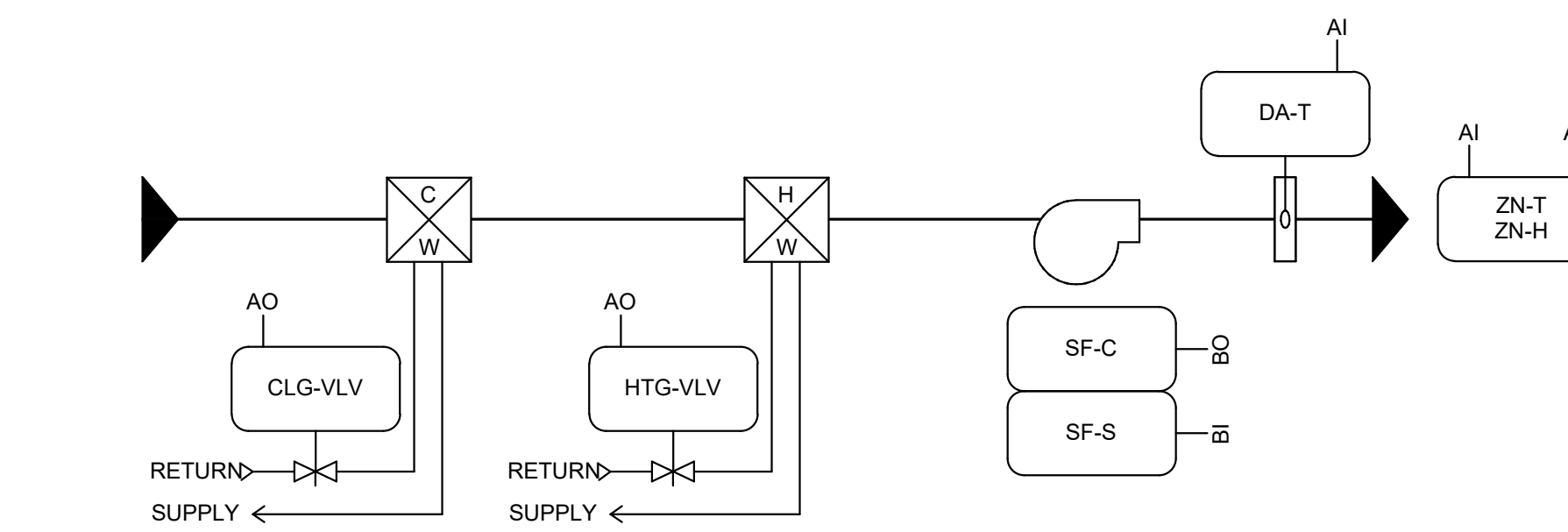
WITH THE EXCEPTION OF A 15 MINUTE MECHANICAL CIRCUIT INTERRUPTION TIMER FOR THE EQUIPMENT ROOM HORN AND EXTERNAL INDICATORS, ALL ALARM STATUS AND AUTOMATIC ACTIONS SHALL BE MAINTAINED AND ALARM RESET SHALL BE INHIBITED UNTIL THE REFRIGERANT LEVELS ARE BELOW THE APPROPRIATE CONCENTRATION LEVELS. LEVEL 1 AND 2 ALARM ACTIONS SHALL RETURN TO NORMAL OPERATION WHEN THE REFRIGERANT CONCENTRATION DROPS BELOW PRESET LEVELS. THE BMS SHALL INDICATE A RETURN TO NORMAL OPERATION MESSAGE. THE MONITORING UNIT SHALL INDICATE LOCALLY A UNIT MALFUNCTION AND AIRFLOW LOSS ALARMS.

ENABLING OF THE EXHAUST FAN SHALL BE DIRECTLY WIRED TO REFRIGERANT MONITORING SYSTEM. ACCEPTABLE REFRIGERANT MONITORS ARE CHILLGARD, HALOGUARD AND TRANE. MINIMUM OF TWO SENSORS ARE REQUIRED, ONE TO COVER EACH CHILLER

(3) SETS OF HORN/STROBE SHALL BE FURNISHED AND INSTALLED BY TCC. TWO WILL BE LOCATED ON THE EXTERIOR DOORS ON THE SECOND FLOOR OF THE PENTHOUSE. THE OTHER SHALL BE LOCATED ON THE OUTSIDE OF THE FIRST FLOOR ENTRY DOOR FOR A00C.

**HIGH DAMPER CONTROL:** WHEN THE SPACE TEMPERATURE IN THE MECHANICAL ROOM IS ABOVE 78F (ADJ), THE MECHANICAL ROOM VENTILATION DAMPER (VA-DPR) SHALL OPEN AND THE EXHAUST FAN SHALL BE ENABLED. ENABLING OF EXHAUST FAN SHALL BE DONE IN PARALLEL WITH THE REFRIGERANT MONITOR.

**6B REFRIGERANT MONITORING**  
1/8" = 1'-0"



**FAN COIL UNIT SEQUENCE OF OPERATION**

**SUPPLY FAN START/STOP:** THE SUPPLY FAN (SF-C) WILL BE STARTED ACCORDING TO THE OWNER-DEFINED SCHEDULE. IF THE SUPPLY FAN STATUS (SF-S) DOES NOT MATCH THE COMMANDED VALUE, AN ALARM WILL BE GENERATED. WHEN THE SUPPLY FAN STATUS INDICATES THE FAN STARTED, THE CONTROL SEQUENCE WILL BE ENABLED.

**ZONE CONTROL:** THE COOLING VALVE (CLG-VLV) AND HEATING VALVE (HTG-VLV) WILL MODULATE IN SEQUENCE TO MAINTAIN THE ZONE TEMPERATURE (ZN-T) AT SETPOINT.

**ZONE HUMIDITY CONTROL:** WHEN THE ZONE HUMIDITY (ZN-H) RISES ABOVE SETPOINT, THE COOLING VALVE WILL BE COMMANDED 50% OPEN AND THE HEATING VALVE WILL MODULATE TO MAINTAIN ZONE TEMPERATURE. A DIFFERENTIAL PREVENTS THE UNIT FROM CYCLING IN THIS MODE.

**NIGHT SETBACK/NIGHT SETUP:** WHEN IN UNOCCUPIED MODE, THE UNIT WILL CYCLE AS NECESSARY TO MAINTAIN THE NIGHT SETBACK ZONE TEMPERATURE AT SETPOINT. A DIFFERENTIAL PREVENTS THE UNIT FROM CYCLING EXCESSIVELY.

**SHUTDOWN:** WHEN THE UNIT IS SHUTDOWN BY EITHER A STOP COMMAND OR SYSTEM SAFETY THE UNIT WILL BE SET AS FOLLOWS:  
SUPPLY FAN WILL BE OFF  
COOLING VALVE WILL CLOSE  
HEATING VALVE WILL MODULATE TO MAINTAIN THE DISCHARGE SENSOR AT 60F (ADJ)

**POINTS LIST:** THE FOLLOWING REPRESENTS THE MINIMUM POINTS TO BE PROVIDED AND DISPLAYED IN THE SYSTEM GRAPHICS. ADDITIONAL POINTS REQUIRED TO MEET THE SEQUENCE SHALL BE PROVIDED AND ALSO SHOWN.

**BINARY INPUTS:**  
SUPPLY FAN STATUS (SF-S)

**BINARY OUTPUTS:**  
SUPPLY FAN START/STOP (SF-C)

**ANALOG INPUTS:**  
DISCHARGE TEMPERATURE (DA-T)  
ZONE TEMPERATURE (ZN-T)  
ZONE HUMIDITY (ZN-H)

**ANALOG OUTPUTS:**  
HEATING COIL CONTROL (HTG-VLV)  
COOLING COIL CONTROL (CLG-VLV)

**2D FAN COIL UNITS**  
NOT TO SCALE

**TEMPERATURE CONTROL MISCELLANEOUS SCOPE OF WORK**

**EXHAUST FAN CONTROL:** THE EXHAUST FANS (EF-C) SHALL BE STARTED ACCORDING TO THE OWNER-DEFINED SCHEDULE. IF THE EXHAUST FAN STATUS (EF-S) DOES NOT MATCH THE COMMANDED VALUE, AN ALARM SHALL BE GENERATED.

**IT ROOMS:** FURNISH AND INSTALL A TEMPERATURE SENSOR FOR MONITORING PURPOSES. IF THE ZONE TEMPERATURE EXCEEDS 78F (ADJ), AN ALARM SHALL BE GENERATED. SENSORS SHALL BE LOCATED IN A006A, B005A, D002C, D002A, F103B, F104A AND G104B

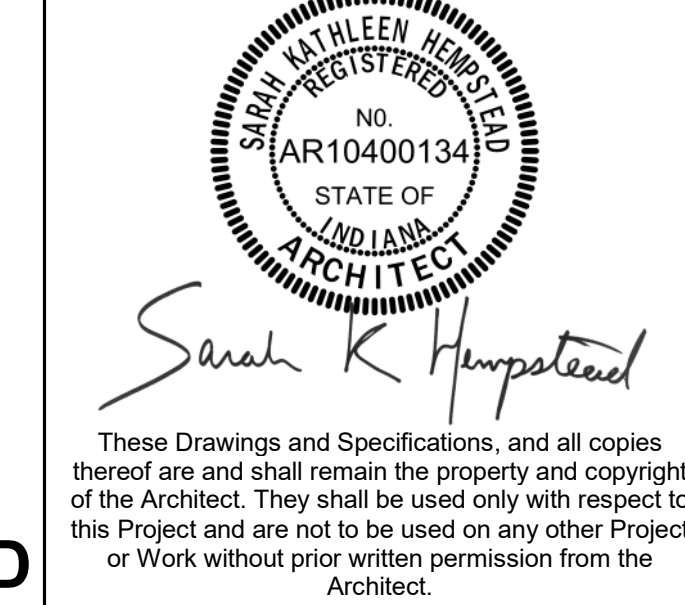
**CABINET HEATERS:** FURNISH AND INSTALL A LINE VOLTAGE THERMOSTAT TO CYCLE THE FAN AND OPEN A 2-POSITION HEATING VALVE WHEN THE SPACE SETPOINT DROPS BELOW 68F (ADJ)

**EXTERIOR LIGHTING CONTROL:** FURNISH AND INSTALL A PHOTOCELL TO ENABLE THE OUTDOOR LIGHTING. THERE ARE (3) LIGHTING CONTACTORS THAT WILL REQUIRE A BINARY OUTPUT AND ASSOCIATED RELAY. CONTACTORS ARE LOCATED IN ELECTRICAL A004D, D114B AND F003A. OUTDOOR LIGHTING SHALL ALSO BE CAPABLE OF BEING ENABLED BASED ON AN OWNER-DEFINED TIME SCHEDULE.

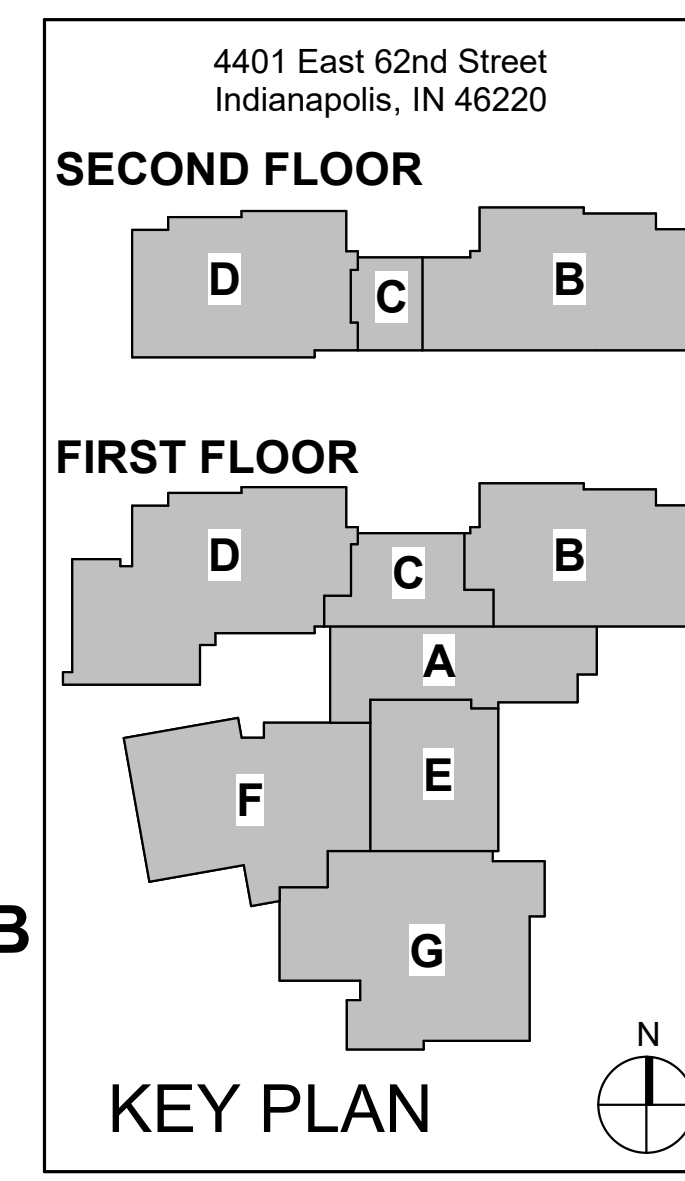


Project No. 2017-114.EMS  
Project Date 10.17.18  
Produced Designer/Author

**Bid Documents**



#	Revision	Date
A5	Addendum #5	11.16.2018



**TEMPERATURE CONTROL SCHEMATICS**

M-704



6

5

4

3

2

1

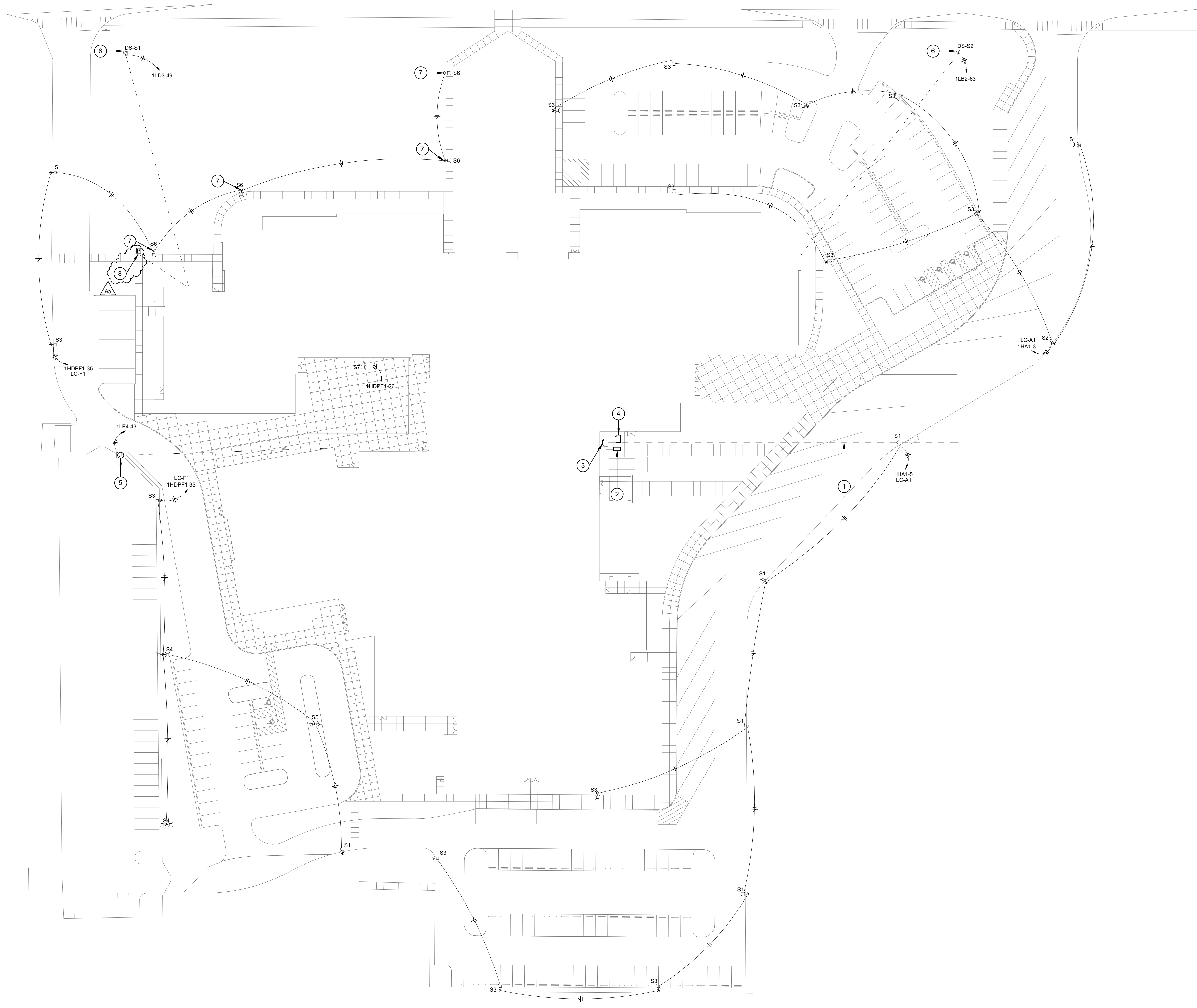
E

D

C

B

A



GENERAL SITE NOTES	
#	NOTES
A	REFER TO SHEET E-001 FOR ADDITIONAL INFORMATION.
B	ONLY PEDESTRIAN POLES TYPE 'S6' SHALL HAVE A 6" BASE. SEE DETAIL 1D/E-502 FOR ADDITIONAL INFORMATION.
C	ALL SITE POLE CIRCUITS SHALL HAVE MINIMUM #10 CONDUCTORS IN 1".
D	CONTACT LINDA LOHMILLER FOR ALL UTILITY COORDINATE QUESTIONS. SHE CAN BE REACHED AT 317-281-5274 OR LINDA.LOHMILLER@AES.COM.
E	E.C. SHALL INCLUDE ALL FEES REQUIRED IN BID FOR NEW ELECTRICAL SERVICE AND MODIFICATIONS.

SITE PLAN NOTES	
#	NOTES
1	EXISTING PRIMARY TO BE REWORKED BY IP&L TO FEED NEW AND EXISTING TRANSFORMER SIMULTANEOUSLY.
2	NEW GENERATOR LOCATION. SEE ONE-LINE DIAGRAM AND SHEET EP1C1 FOR ADDITIONAL INFORMATION.
3	EXISTING TRANSFORMER SHALL STAY IN SERVICE UNTIL ALL EXISTING POWER DISTRIBUTION HAS BEEN REPLACED. SEE ONE-LINE DIAGRAM FOR ADDITIONAL INFORMATION.
4	NEW TRANSFORMER LOCATION. E.C. SHALL PROVIDE CONCRETE PAD. COORDINATE EXACT REQUIREMENTS WITH IP&L. SEE ONE-LINE DIAGRAM FOR ADDITIONAL INFORMATION.
5	120V CONNECTION FOR MOTORIZED GATE. CONDUCTORS SHALL BE ROUTED IN 1".
6	DISCONNECT INDICATED FOR SIGN. COORDINATE EXACT LOCATION WITH CIVIL DRAWINGS. COORDINATE EXACT REQUIREMENTS WITH SIGN MANUFACTURER.
7	PROVIDE 6" CONCRETE BASE FOR SITE POLES INDICATED. ALL OTHER POLES SHALL HAVE 12" CONCRETE BASES. SEE BASE DETAILS ON SHEET E-502 FOR ADDITIONAL INFORMATION.
8	POST INDICATOR VALVE. PROVIDE 1" MINIMUM FOR UNDERGROUND CONDUIT. CONNECT TO FACP.



Project No. 2017-114.EMS  
 Project Date 10.17.18  
 Produced DLJ

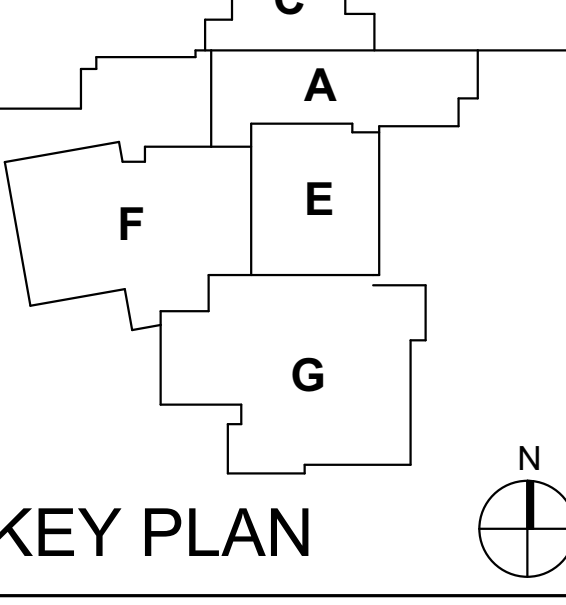
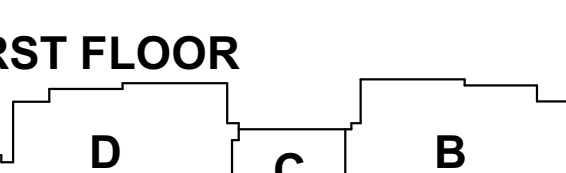
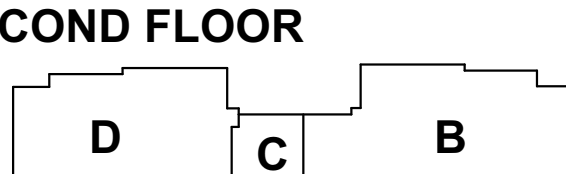
**Bid Documents**



*Sarah K. Hempstead*  
 These Drawings and Specifications, and all copies thereof are and shall remain the property and copyright of the Architect. They shall be used only with respect to this Project and are not to be used on any other Project or Work without prior written permission from the Architect.

#	Revision	Date
A1	Addendum #1	10.25.2018
A2	Addendum #2	11.01.2018
A5	Addendum #5	11.16.2018

4401 East 62nd Street  
 Indianapolis, IN 46220



EASTWOOD MIDDLE SCHOOL

ELECTRICAL SITE PLAN

ES102

**2A ELECTRICAL SITE PLAN - NEW WORK**  
 1" = 40'-0"

6

5

4

3

2

1



6

5

4

3

2

1

E

D

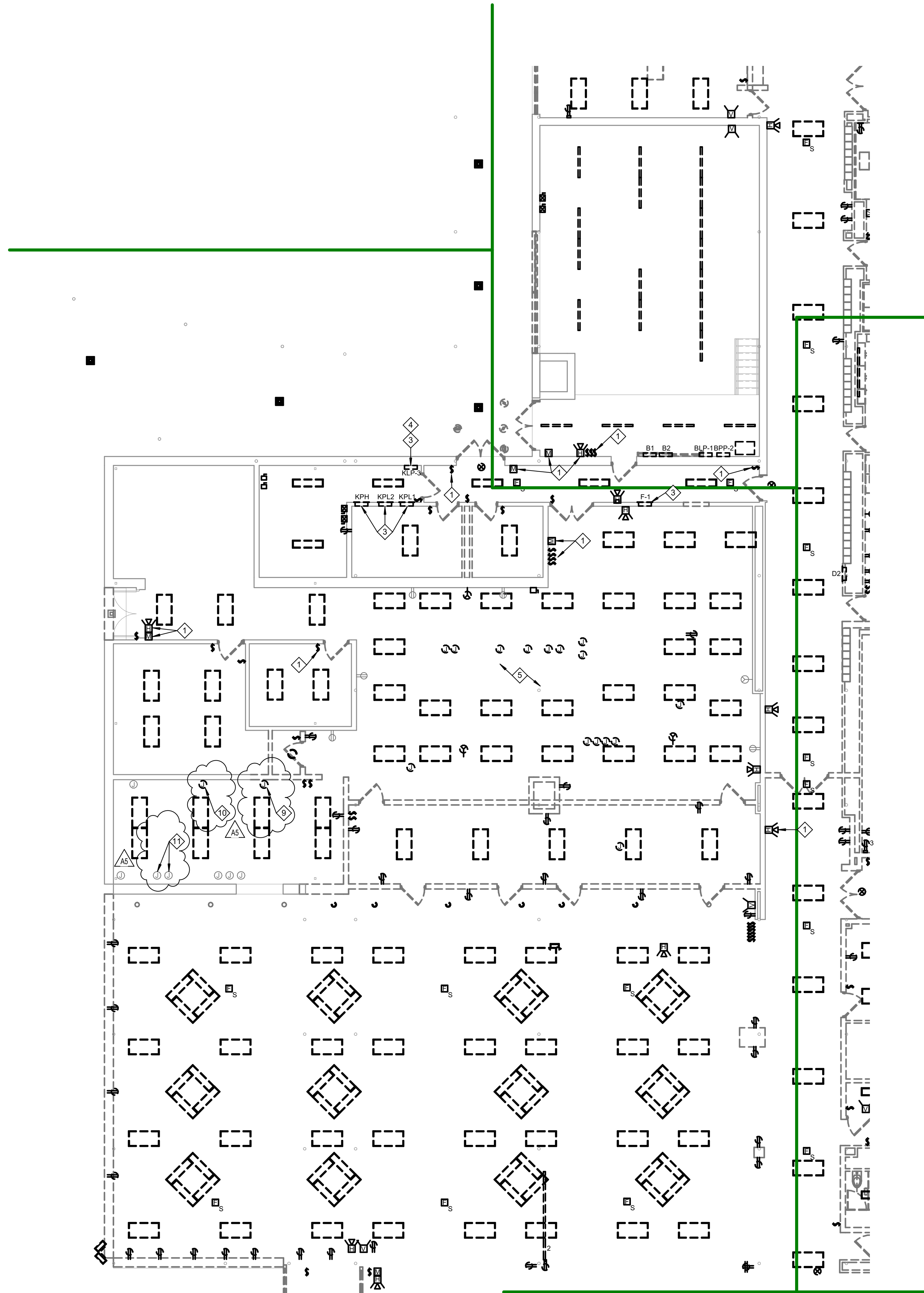
C

B

A

GENERAL DEMOLITION NOTES	
#	NOTES
A	REFER TO SHEET E-001 FOR ADDITIONAL INFORMATION.
B	THIS DRAWING REPRESENTS INFORMATION OBTAINED FROM ORIGINAL CONTRACT DRAWINGS AND FIELD SURVEY. VERIFY BY ON-SITE OBSERVATION THE EXTENT OF WORK PRIOR TO SUBMISSION OF BID.
C	CONTRACT DOCUMENTS CONSIST OF BOTH PROJECT MANUAL AND DRAWINGS AND ARE MEANT TO BE COMPLEMENTARY. ANYTHING APPEARING ON EITHER MUST BE EXECUTED THE SAME AS IF SHOWN ON BOTH.
D	THOROUGHLY EXAMINE THE WORK OF OTHER CONTRACTORS AND PROPERLY INSTALL ALL WORK REQUIRED FOR THE PROJECT.
E	THE OWNER HOLDS RIGHT OF FIRST REFUSAL FOR ALL DEMOLISHED ELECTRICAL EQUIPMENT.
F	ALL ELECTRICAL ITEMS SHOWN WITH LIGHT LINEWORK ARE EXISTING TO REMAIN COMPLETE.
G	REMOVE ALL ELECTRICAL ITEMS SHOWN WITH BOLD/DASHED LINEWORK COMPLETE.
H	COORDINATE AND DISCONNECT ALL ARCHITECTURAL, MECHANICAL, AND PLUMBING EQUIPMENT AS NOTED FOR REMOVAL BY OTHERS. REMOVE ALL ASSOCIATED ELECTRICAL EQUIPMENT, RACEWAYS, CONDUCTORS, ETC. SERVING THE EQUIPMENT.
I	PROVIDE ALL CUTTING AND PATCHING AS REQUIRED FOR THE REMOVAL OF EXISTING ELECTRICAL EQUIPMENT. REFER TO SPECIFICATIONS.
J	PROVIDE A BLANK COVERPLATE FOR ALL EXISTING WALL OPENINGS WHERE ELECTRICAL EQUIPMENT HAS BEEN REMOVED AND NOT REPLACED. IN AREAS RECEIVING NEW WALL TREATMENTS, PATCH THE EXISTING OPENING.
K	NUMBER BESIDE RECEPTACLE INDICATES QUANTITY IN VERTICAL RACEWAY.

DEMOLITION PLAN NOTES	
#	NOTES
1	MAINTAIN BACK BOX FOR NEW DEVICE.
2	RELOCATE EXISTING FIRE ALARM CONTROL PANEL. SEE SHEET EP1A.1 FOR NEW LOCATION. EXISTING DEVICES ON LATER PHASES SHALL REMAIN CONNECTED. EXTEND WIRING AND CONDUIT AS REQUIRED. REMOVE WHEN ALL PHASES ARE COMPLETE.
3	REMOVED PANELBOARD INDICATED. MAINTAIN BRANCH CIRCUITS AND CONDUIT FOR RECONNECTION TO NEW PANELBOARD.
4	CIRCUITS IN PANELBOARD INDICATED WILL BE CONSOLIDATED INTO PANELBOARD "11K1".
5	COORDINATE WHAT EQUIPMENT IS RELOCATED AND REMOVED WITH ALTERNATES.
6	MAINTAIN EXISTING LIGHTING CIRCUIT FOR RECONNECTION TO NEW LIGHT FIXTURES.
7	REMOVE PANELBOARD INDICATED LEAVING EXISTING TUB. MAINTAIN BRANCH CIRCUITS AND CONDUIT FOR RECONNECTION TO NEW PANELBOARD.
8	LIGHTS AND DEVICES INDICATED ARE LOCATED IN THE LOWER LEVEL OF BOILER ROOM.
9	IMMERSION HEATER TO BE RELOCATED ALONG SAME WALL. SEE SHEET E-403 FOR NEW LOCATION. MAINTAIN EXISTING CIRCUIT FOR RECONNECTION.
10	GARBAGE DISPOSAL TO BE RELOCATED ALONG SAME WALL. SEE SHEET E-403 FOR NEW LOCATION. MAINTAIN EXISTING CIRCUIT FOR RECONNECTION.
11	DISCONNECT DISHWASHER AND BOOSTER HEATER. MAINTAIN CIRCUIT FOR RECONNECTION IN SAME LOCATION.



**2A** FIRST FLOOR DEMOLITION PLAN - UNIT F  
1/8" = 1'-0"



Project No. 2017-114.EMS  
Project Date 10.17.18  
Produced DLJ

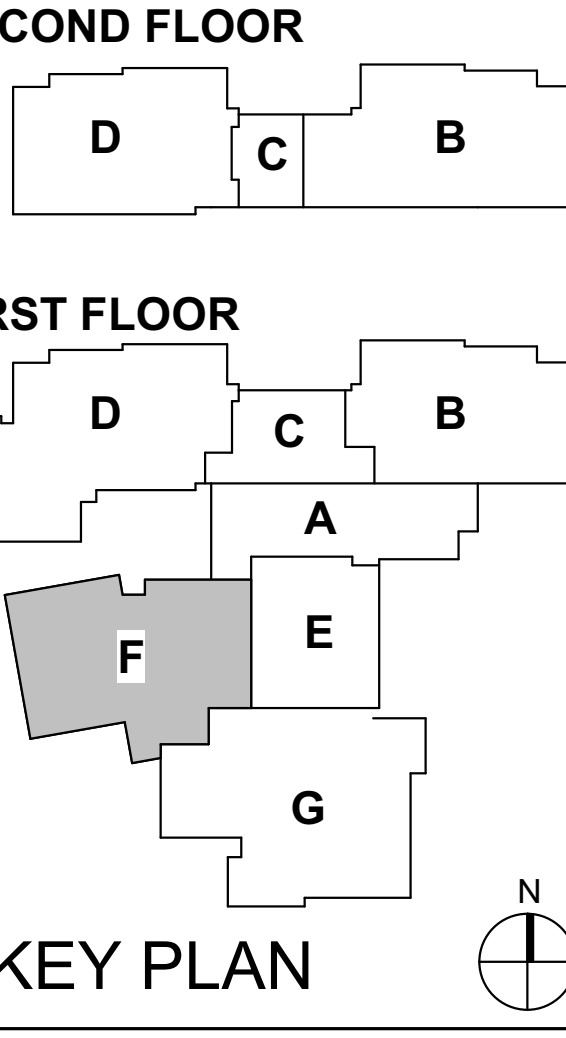
**Bid Documents**



These Drawings and Specifications, and all copies thereof are and shall remain the property and copyright of the Architect. They shall be used only with respect to this Project and are not to be used on any other Project or Work without prior written permission from the Architect.

#	Revision	Date
A5	Addendum #5	11.16.2018

4401 East 62nd Street  
Indianapolis, IN 46220



EASTWOOD MIDDLE SCHOOL

FIRST FLOOR DEMOLITION PLAN - UNIT F  
ED1F1

6

5

4

3

2

1

6 5 4 3 2 1

GENERAL LIGHTING NOTES	
#	NOTES
A	REFER TO SHEET E-001 FOR ADDITIONAL INFORMATION.

LIGHTING PLAN NOTES	
#	NOTES
1	USE BACK BOX THAT WAS MAINTAINED DURING DEMOLITION FOR NEW DEVICE.
2	LIGHTING CONTACTOR SHALL BE CONTROLLED BY THE BUILDING MANAGEMENT SYSTEM. SEE DETAIL 3D/E-603 AND CONTACTOR SCHEDULE ON SHEET E-604 FOR ADDITIONAL INFORMATION.
3	MOUNT FIXTURE TO MULLION DIRECTLY ABOVE DOOR. USE TYPE "UP" CABLE INSIDE MULLION.
4	MOUNT FIXTURES TO BOTTOM OF ENTRY PLATFORM.
5	ASSOCIATED THREE WAY SWITCH LOCATED AT ENTRY DOOR AT SECOND LEVEL PLATFORM. SEE SHEET EL1F1 FOR LOCATION.
6	ASSOCIATED THREE WAY SWITCH LOCATED AT BASEMENT ENTRY DOOR. SEE DETAIL 3D/EL1A1 FOR LOCATION.
7	CONNECT FIXTURES TO CIRCUIT THAT WAS MAINTAINED DURING DEMOLITION, UNLESS NOTED OTHERWISE.
8	SWITCH INDICATED IS FOR BASEMENT LIGHTING CONTROL.
9	PROVIDE LOW VOLTAGE SINGLE GANG SWITCH DIMMER WITH 3 SELECTOR BUTTONS AND UP/DOWN DIMMING.
10	MOUNT BOTTOM SIDE OF CROSS BEAM. USE PERLINS AND COLUMNS TO ROUTE CONDUCTORS.
11	MOUNT CYLINDER SO THE BOTTOM OF FIXTURE IS LEVEL WITH CEILING.
12	LOCATE FIXTURE INDICATED ABOVE EXIT DOOR AT THE TOP OF THE STEPS.



Project No. 2017-114.EMS  
 Project Date 10.17.18  
 Produced DLJ

**Bid Documents**



These Drawings and Specifications, and all copies thereof are and shall remain the property and copyright of the Architect. They shall be used only with respect to this Project and are not to be used on any other Project or Work without prior written permission from the Architect.

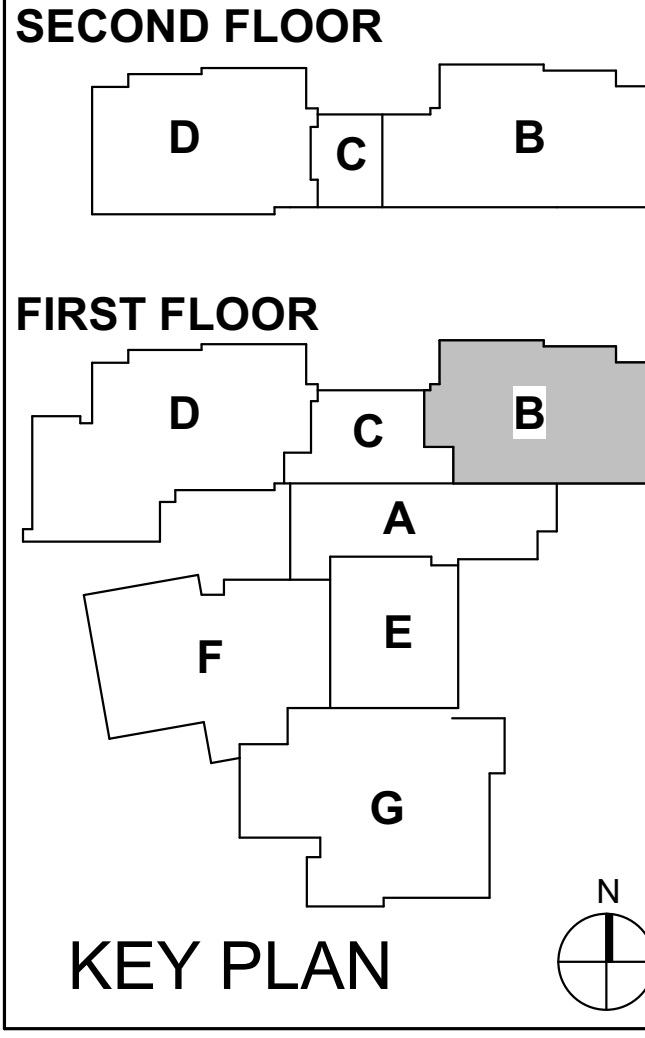
#	Revision	Date
A5	Addendum #5	11.16.2018

E  
D  
C  
B  
A



**1A** CRAWLSPACE LIGHTING PLAN - UNIT B  
 1/8" = 1'-0"

4401 East 62nd Street  
 Indianapolis, IN 46220



EASTWOOD  
 MIDDLE SCHOOL

CRAWLSPACE LIGHTING  
 PLAN - UNIT B

EL1B0

6 5 4 3 2 1

ALL WORK SHALL BE IN ACCORDANCE WITH THE 2015 INTERNATIONAL ELECTRIC CODE (IEC) AND THE 2015 INTERNATIONAL CODES AND STANDARDS FOR LIGHTING (IESNA). THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE LOCAL AUTHORITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE LOCAL AUTHORITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE LOCAL AUTHORITIES.



6

5

4

3

2

1

GENERAL LIGHTING NOTES	
#	NOTES
A	REFER TO SHEET E-001 FOR ADDITIONAL INFORMATION.

LIGHTING PLAN NOTES	
#	NOTES
1	USE BACK BOX THAT WAS MAINTAINED DURING DEMOLITION FOR NEW DEVICE.
2	LIGHTING CONTACTOR SHALL BE CONTROLLED BY THE BUILDING MANAGEMENT SYSTEM. SEE DETAIL 3D/E-603 AND CONTACTOR SCHEDULE ON SHEET E-604 FOR ADDITIONAL INFORMATION.
3	MOUNT FIXTURE TO MULLION DIRECTLY ABOVE DOOR. USE TYPE "UP" CABLE INSIDE MULLION.
4	MOUNT FIXTURES TO BOTTOM OF ENTRY PLATFORM.
5	ASSOCIATED THREE WAY SWITCH LOCATED AT ENTRY DOOR AT SECOND LEVEL PLATFORM. SEE SHEET EL1F1 FOR LOCATION.
6	ASSOCIATED THREE WAY SWITCH LOCATED AT BASEMENT ENTRY DOOR. SEE DETAIL SD/EL1A1 FOR LOCATION.
7	CONNECT FIXTURES TO CIRCUIT THAT WAS MAINTAINED DURING DEMOLITION, UNLESS NOTED OTHERWISE.
8	SWITCH INDICATED IS FOR BASEMENT LIGHTING CONTROL.
9	PROVIDE LOW VOLTAGE SINGLE GANG SWITCH DIMMER WITH 3 SELECTOR BUTTONS AND UP/DOWN DIMMING.
10	MOUNT BOTTOM SIDE OF CROSS BEAM. USE PERLINS AND COLUMNS TO ROUTE CONDUCTORS.
11	MOUNT CYLINDER SO THE BOTTOM OF FIXTURE IS LEVEL WITH CEILING.
12	LOCATE FIXTURE INDICATED ABOVE EXIT DOOR AT THE TOP OF THE STEPS.



Project No. 2017-114.EMS  
 Project Date 10.17.18  
 Produced DLJ

**Bid Documents**



These Drawings and Specifications, and all copies thereof are and shall remain the property and copyright of the Architect. They shall be used only with respect to this Project and are not to be used on any other Project or Work without prior written permission from the Architect.

#	Revision	Date
A5	Addendum #5	11.16.2018

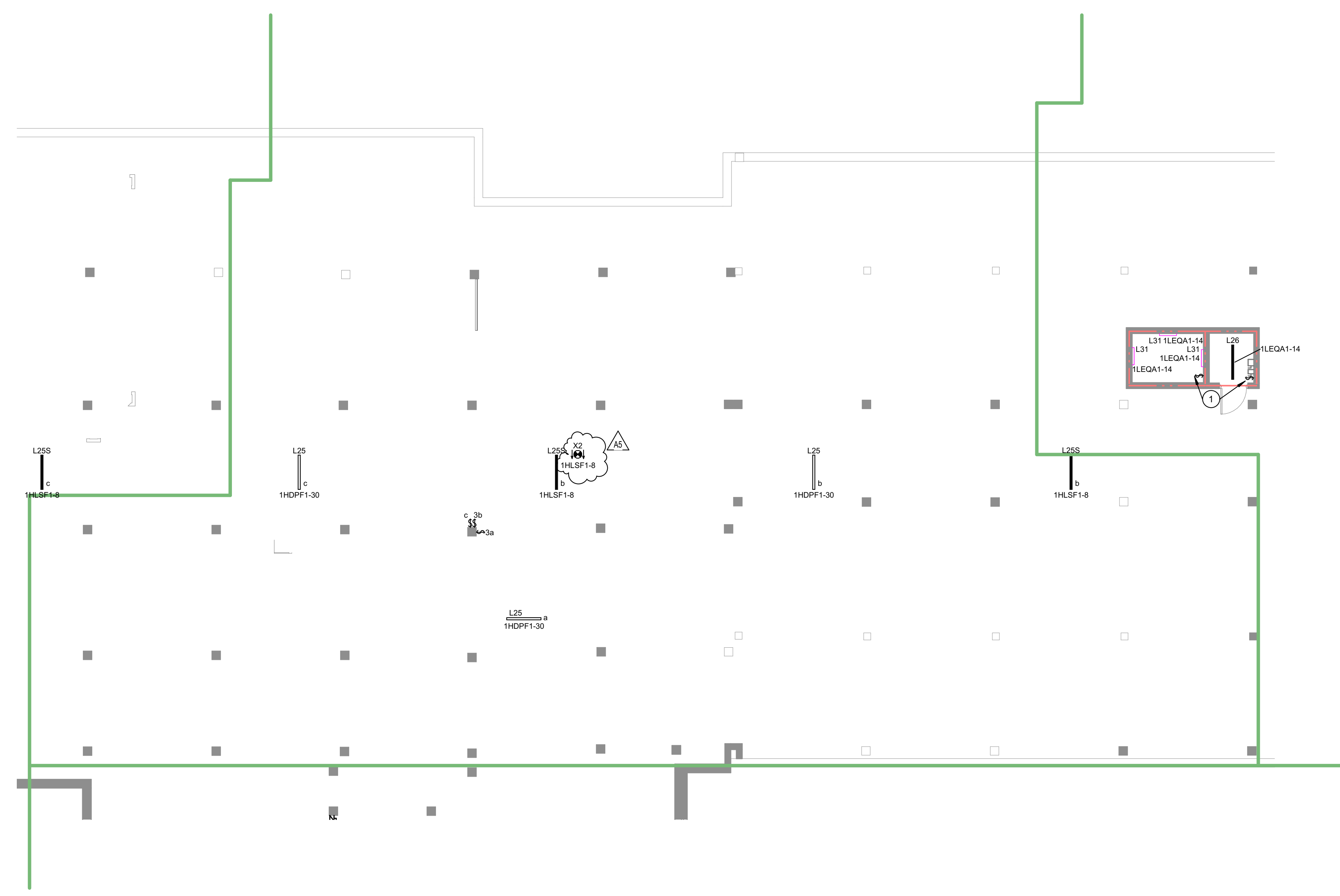
E

D

C

B

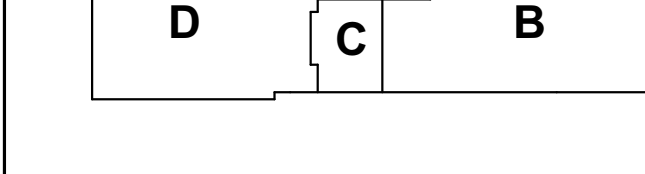
A



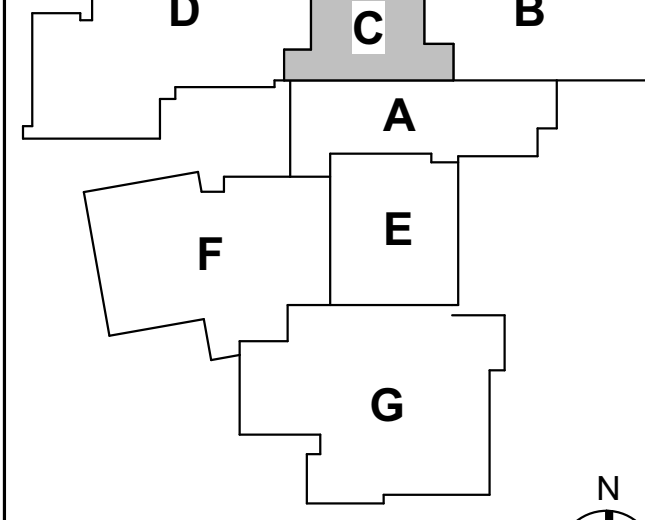
**2A CRAWLSPACE LIGHTING PLAN - UNIT C**  
 1/8" = 1'-0"

4401 East 62nd Street  
 Indianapolis, IN 46220

**SECOND FLOOR**



**FIRST FLOOR**



**KEY PLAN**

M.S.D. of Washington Township

**EASTWOOD**



**EAGLES**

EASTWOOD MIDDLE SCHOOL

CRAWLSPACE LIGHTING PLAN - UNIT C

EL1C0

6

5

4

3

2

1

PLANTING: 2017.10.18.14.15.16.17.18.19.20.21.22.23.24.25.26.27.28.29.30.31.32.33.34.35.36.37.38.39.40.41.42.43.44.45.46.47.48.49.50.51.52.53.54.55.56.57.58.59.60.61.62.63.64.65.66.67.68.69.70.71.72.73.74.75.76.77.78.79.80.81.82.83.84.85.86.87.88.89.90.91.92.93.94.95.96.97.98.99.100.101.102.103.104.105.106.107.108.109.110.111.112.113.114.115.116.117.118.119.120.121.122.123.124.125.126.127.128.129.130.131.132.133.134.135.136.137.138.139.140.141.142.143.144.145.146.147.148.149.150.151.152.153.154.155.156.157.158.159.160.161.162.163.164.165.166.167.168.169.170.171.172.173.174.175.176.177.178.179.180.181.182.183.184.185.186.187.188.189.190.191.192.193.194.195.196.197.198.199.200.201.202.203.204.205.206.207.208.209.210.211.212.213.214.215.216.217.218.219.220.221.222.223.224.225.226.227.228.229.230.231.232.233.234.235.236.237.238.239.240.241.242.243.244.245.246.247.248.249.250.251.252.253.254.255.256.257.258.259.260.261.262.263.264.265.266.267.268.269.270.271.272.273.274.275.276.277.278.279.280.281.282.283.284.285.286.287.288.289.290.291.292.293.294.295.296.297.298.299.300.301.302.303.304.305.306.307.308.309.310.311.312.313.314.315.316.317.318.319.320.321.322.323.324.325.326.327.328.329.330.331.332.333.334.335.336.337.338.339.340.341.342.343.344.345.346.347.348.349.350.351.352.353.354.355.356.357.358.359.360.361.362.363.364.365.366.367.368.369.370.371.372.373.374.375.376.377.378.379.380.381.382.383.384.385.386.387.388.389.390.391.392.393.394.395.396.397.398.399.400.401.402.403.404.405.406.407.408.409.410.411.412.413.414.415.416.417.418.419.420.421.422.423.424.425.426.427.428.429.430.431.432.433.434.435.436.437.438.439.440.441.442.443.444.445.446.447.448.449.450.451.452.453.454.455.456.457.458.459.460.461.462.463.464.465.466.467.468.469.470.471.472.473.474.475.476.477.478.479.480.481.482.483.484.485.486.487.488.489.490.491.492.493.494.495.496.497.498.499.500.501.502.503.504.505.506.507.508.509.510.511.512.513.514.515.516.517.518.519.520.521.522.523.524.525.526.527.528.529.530.531.532.533.534.535.536.537.538.539.540.541.542.543.544.545.546.547.548.549.550.551.552.553.554.555.556.557.558.559.560.561.562.563.564.565.566.567.568.569.570.571.572.573.574.575.576.577.578.579.580.581.582.583.584.585.586.587.588.589.590.591.592.593.594.595.596.597.598.599.600.601.602.603.604.605.606.607.608.609.610.611.612.613.614.615.616.617.618.619.620.621.622.623.624.625.626.627.628.629.630.631.632.633.634.635.636.637.638.639.640.641.642.643.644.645.646.647.648.649.650.651.652.653.654.655.656.657.658.659.660.661.662.663.664.665.666.667.668.669.670.671.672.673.674.675.676.677.678.679.680.681.682.683.684.685.686.687.688.689.690.691.692.693.694.695.696.697.698.699.700.701.702.703.704.705.706.707.708.709.710.711.712.713.714.715.716.717.718.719.720.721.722.723.724.725.726.727.728.729.730.731.732.733.734.735.736.737.738.739.740.741.742.743.744.745.746.747.748.749.750.751.752.753.754.755.756.757.758.759.760.761.762.763.764.765.766.767.768.769.770.771.772.773.774.775.776.777.778.779.780.781.782.783.784.785.786.787.788.789.790.791.792.793.794.795.796.797.798.799.800.801.802.803.804.805.806.807.808.809.810.811.812.813.814.815.816.817.818.819.820.821.822.823.824.825.826.827.828.829.830.831.832.833.834.835.836.837.838.839.840.841.842.843.844.845.846.847.848.849.850.851.852.853.854.855.856.857.858.859.860.861.862.863.864.865.866.867.868.869.870.871.872.873.874.875.876.877.878.879.880.881.882.883.884.885.886.887.888.889.890.891.892.893.894.895.896.897.898.899.900.901.902.903.904.905.906.907.908.909.910.911.912.913.914.915.916.917.918.919.920.921.922.923.924.925.926.927.928.929.930.931.932.933.934.935.936.937.938.939.940.941.942.943.944.945.946.947.948.949.950.951.952.953.954.955.956.957.958.959.960.961.962.963.964.965.966.967.968.969.970.971.972.973.974.975.976.977.978.979.980.981.982.983.984.985.986.987.988.989.990.991.992.993.994.995.996.997.998.999.1000.



6 5 4 3 2 1

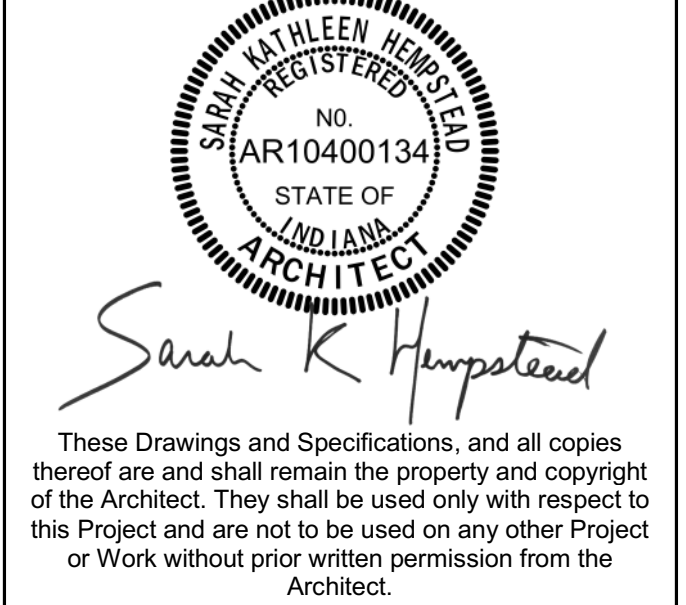
GENERAL LIGHTING NOTES	
#	NOTES
A	REFER TO SHEET E-001 FOR ADDITIONAL INFORMATION.

LIGHTING PLAN NOTES	
#	NOTES
1	USE BACK BOX THAT WAS MAINTAINED DURING DEMOLITION FOR NEW DEVICE.
2	LIGHTING CONTACTOR SHALL BE CONTROLLED BY THE BUILDING MANAGEMENT SYSTEM. SEE DETAIL 3D/E-603 AND CONTACTOR SCHEDULE ON SHEET E-604 FOR ADDITIONAL INFORMATION.
3	MOUNT FIXTURE TO MULLION DIRECTLY ABOVE DOOR. USE TYPE "UP" CABLE INSIDE MULLION.
4	MOUNT FIXTURES TO BOTTOM OF ENTRY PLATFORM.
5	ASSOCIATED THREE WAY SWITCH LOCATED AT ENTRY DOOR AT SECOND LEVEL PLATFORM. SEE SHEET EL1F1 FOR LOCATION.
6	ASSOCIATED THREE WAY SWITCH LOCATED AT BASEMENT ENTRY DOOR. SEE DETAIL 3D/EL1A1 FOR LOCATION.
7	CONNECT FIXTURES TO CIRCUIT THAT WAS MAINTAINED DURING DEMOLITION, UNLESS NOTED OTHERWISE.
8	SWITCH INDICATED IS FOR BASEMENT LIGHTING CONTROL.
9	PROVIDE LOW VOLTAGE SINGLE GANG SWITCH DIMMER WITH 3 SELECTOR BUTTONS AND UP/DOWN DIMMING.
10	MOUNT BOTTOM SIDE OF CROSS BEAM. USE PERLINS AND COLUMNS TO ROUTE CONDUCTORS.
11	MOUNT CYLINDER SO THE BOTTOM OF FIXTURE IS LEVEL WITH CEILING.
12	LOCATE FIXTURE INDICATED ABOVE EXIT DOOR AT THE TOP OF THE STEPS.

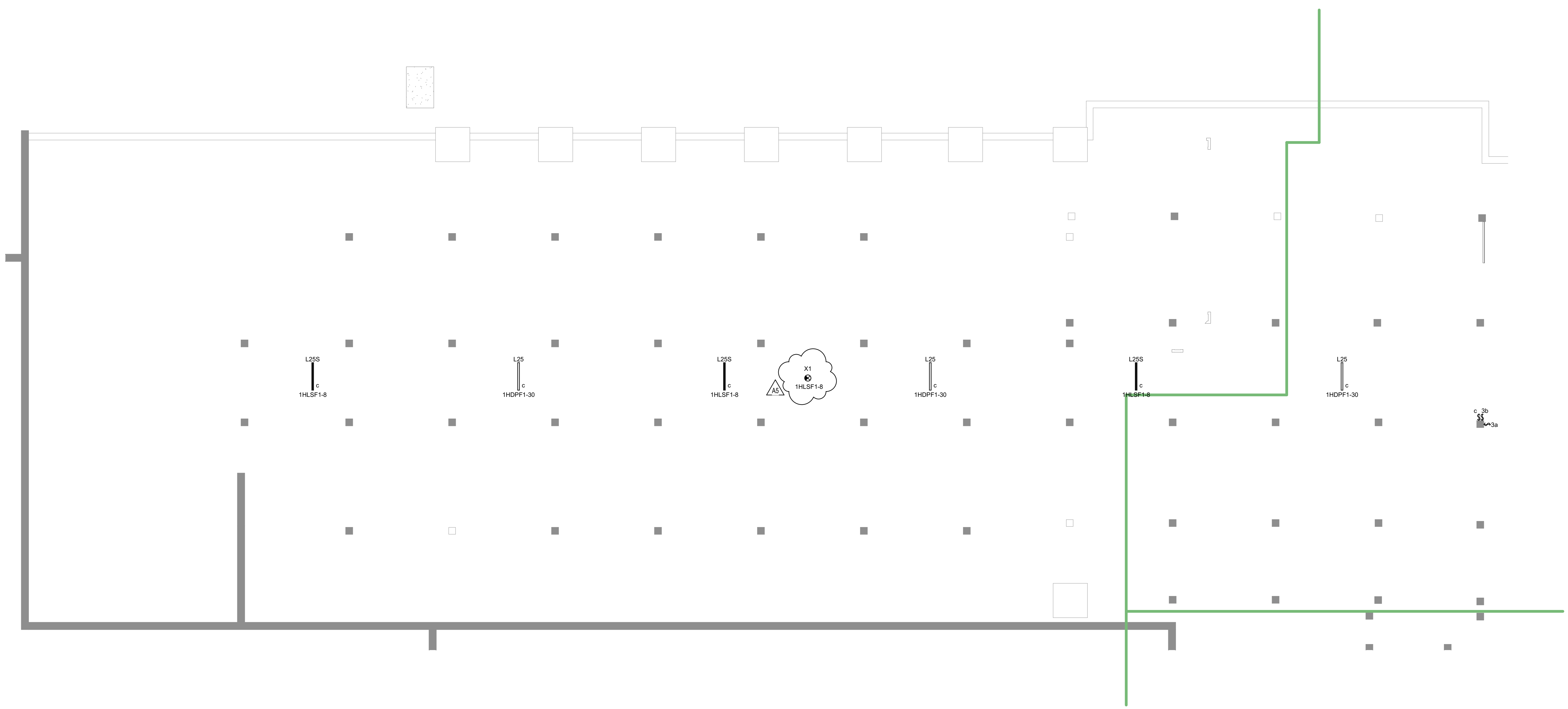


Project No. 2017-114.EMS  
 Project Date 10.17.18  
 Produced DLJ

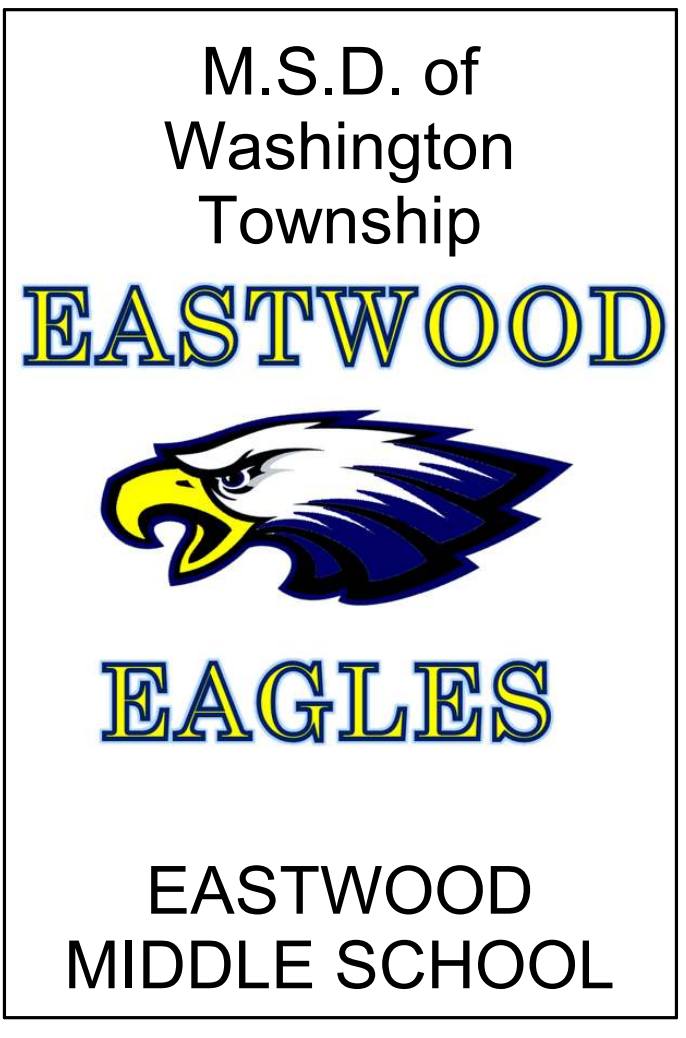
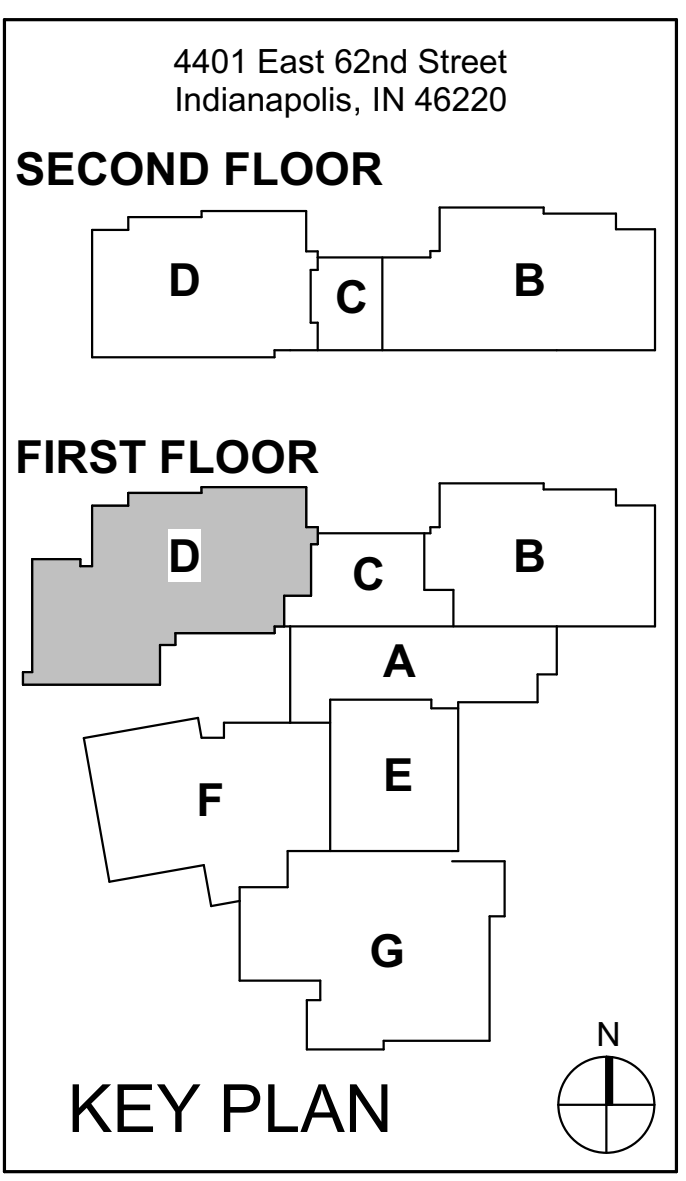
**Bid Documents**



#	Revision	Date
A5	Addendum #5	11.16.2018



**2A** CRAWLSPACE LIGHTING PLAN - UNIT D  
 1/8" = 1'-0"



CRAWLSPACE LIGHTING PLAN - UNIT D

EL1D0

6 5 4 3 2 1

ALL DIMENSIONS UNLESS OTHERWISE NOTED. DATE: 10/17/18  
 2017-114.EMS - E-001 - Crawlspace Lighting Plan - Unit D  
 11/16/2018 11:11 AM  
 11/16/2018 11:11 AM  
 11/16/2018 11:11 AM

6 5 4 3 2 1

GENERAL LIGHTING NOTES	
#	NOTES
A	REFER TO SHEET E-001 FOR ADDITIONAL INFORMATION.

LIGHTING PLAN NOTES	
#	NOTES
1	USE BACK BOX THAT WAS MAINTAINED DURING DEMOLITION FOR NEW DEVICE.
2	LIGHTING CONTACTOR SHALL BE CONTROLLED BY THE BUILDING MANAGEMENT SYSTEM. SEE DETAIL 3D/E-603 AND CONTACTOR SCHEDULE ON SHEET E-604 FOR ADDITIONAL INFORMATION.
3	MOUNT FIXTURE TO MULLION DIRECTLY ABOVE DOOR. USE TYPE "UP" CABLE INSIDE MULLION.
4	MOUNT FIXTURES TO BOTTOM OF ENTRY PLATFORM.
5	ASSOCIATED THREE WAY SWITCH LOCATED AT ENTRY DOOR AT SECOND LEVEL PLATFORM. SEE SHEET EL1F1 FOR LOCATION.
6	ASSOCIATED THREE WAY SWITCH LOCATED AT BASEMENT ENTRY DOOR. SEE DETAIL SD/EL1A1 FOR LOCATION.
7	CONNECT FIXTURES TO CIRCUIT THAT WAS MAINTAINED DURING DEMOLITION, UNLESS NOTED OTHERWISE.
8	SWITCH INDICATED IS FOR BASEMENT LIGHTING CONTROL.
9	PROVIDE LOW VOLTAGE SINGLE GANG SWITCH DIMMER WITH 3 SELECTOR BUTTONS AND UP/DOWN DIMMING.
10	MOUNT BOTTOM SIDE OF CROSS BEAM. USE PERLINS AND COLUMNS TO ROUTE CONDUCTORS.
11	MOUNT CYLINDER SO THE BOTTOM OF FIXTURE IS LEVEL WITH CEILING.
12	LOCATE FIXTURE INDICATED ABOVE EXIT DOOR AT THE TOP OF THE STEPS.



**SCHMIDT ASSOCIATES**  
415 Massachusetts Avenue  
Indianapolis, IN 46204  
www.schmidt-arch.com

Project No. 2017-114.EMS  
Project Date 10.17.18  
Produced DLJ

**Bid Documents**

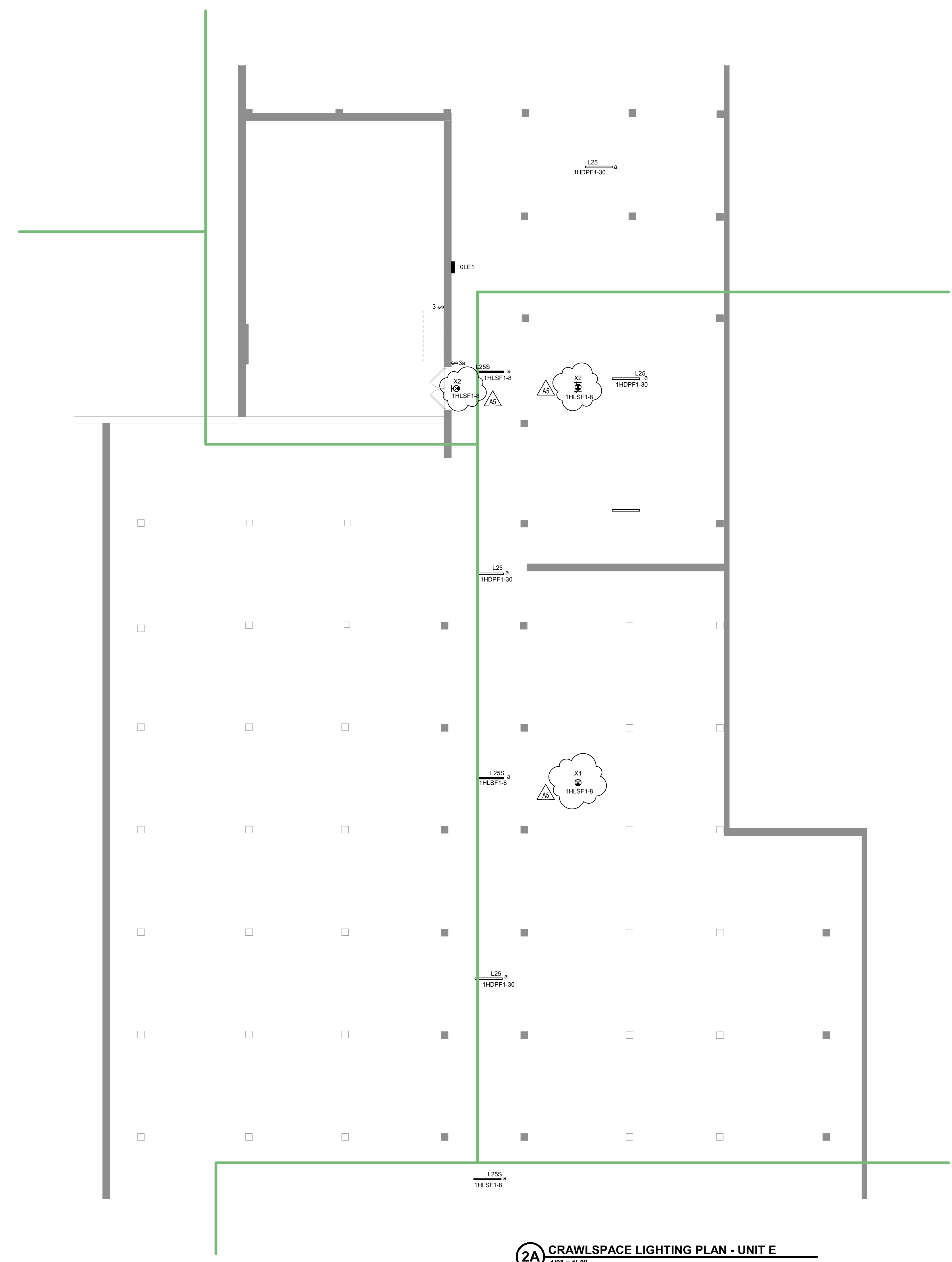


*Sarah K. Hempstead*

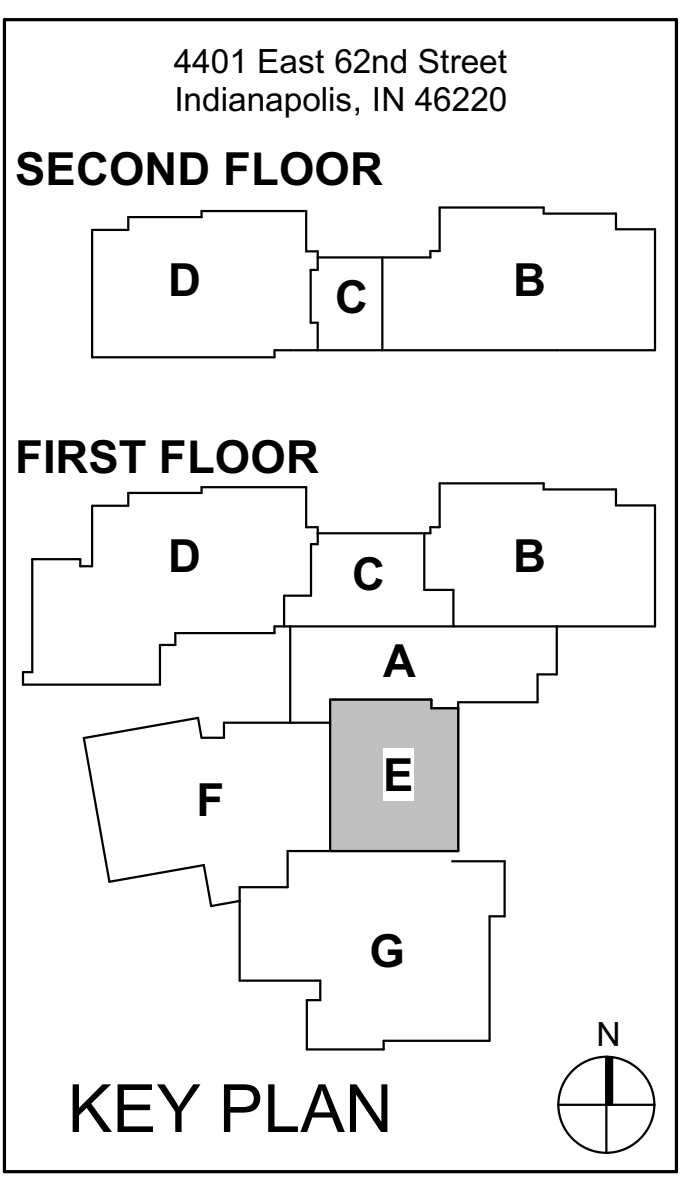
These Drawings and Specifications, and all copies thereof are and shall remain the property and copyright of the Architect. They shall be used only with respect to this Project and are not to be used on any other Project or Work without prior written permission from the Architect.

#	Revision	Date
A5	Addendum #5	11.16.2018

E  
D  
C  
B  
A




**2A CRAWSPACE LIGHTING PLAN - UNIT E**  
1/8" = 1'-0"



M.S.D. of Washington Township

**EASTWOOD**



**EAGLES**

**EASTWOOD MIDDLE SCHOOL**

CRAWSPACE LIGHTING PLAN - UNIT E

EL1E0

6 5 4 3 2 1

ALL DIMENSIONS UNLESS OTHERWISE NOTED.  
2017.11.16.18 M.S.D. of Washington Township, 4401 East 62nd Street, Indianapolis, IN 46220  
PROJECT NO. 2017-114.EMS  
SHEET NO. EL1E0  
DATE 11.16.2018



6

5

4

3

2

1

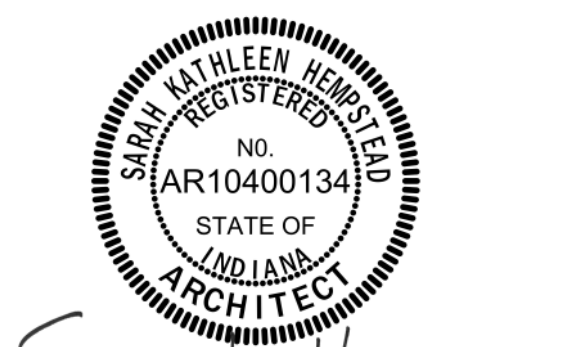
GENERAL LIGHTING NOTES	
#	NOTES
A	REFER TO SHEET E-001 FOR ADDITIONAL INFORMATION.

LIGHTING PLAN NOTES	
#	NOTES
1	USE BACK BOX THAT WAS MAINTAINED DURING DEMOLITION FOR NEW DEVICE.
2	LIGHTING CONTACTOR SHALL BE CONTROLLED BY THE BUILDING MANAGEMENT SYSTEM. SEE DETAIL 3DIE-603 AND CONTACTOR SCHEDULE ON SHEET E-604 FOR ADDITIONAL INFORMATION.
3	MOUNT FIXTURE TO MULLION DIRECTLY ABOVE DOOR. USE TYPE "UF" CABLE INSIDE MULLION.
4	MOUNT FIXTURES TO BOTTOM OF ENTRY PLATFORM.
5	ASSOCIATED THREE WAY SWITCH LOCATED AT ENTRY DOOR AT SECOND LEVEL PLATFORM. SEE SHEET EL1F1 FOR LOCATION.
6	ASSOCIATED THREE WAY SWITCH LOCATED AT BASEMENT ENTRY DOOR. SEE DETAIL SD1EL1A1 FOR LOCATION.
7	CONNECT FIXTURES TO CIRCUIT THAT WAS MAINTAINED DURING DEMOLITION, UNLESS NOTED OTHERWISE.
8	SWITCH INDICATED IS FOR BASEMENT LIGHTING CONTROL.
9	PROVIDE CON. VOLTS, SINGL. PHASING SWITCH DIMMER WITH 3 SELECTOR SWITCHES AND UP/DOWN MARKINGS.
10	MOUNT BOTTOM SIDE OF CROSS BEAM. USE PERLINS AND COLUMNS TO ROUTE CONDUCTORS.
11	MOUNT CYLINDER TO THE BOTTOM OF FIXTURE LEVEL WITH CEILING.
12	LOCATE FIXTURE INDICATED ABOVE EXIT DOOR AT THE TOP OF THE STEPS.



Project No. 2017-114.EMS  
 Project Date 10.17.18  
 Produced DLJ

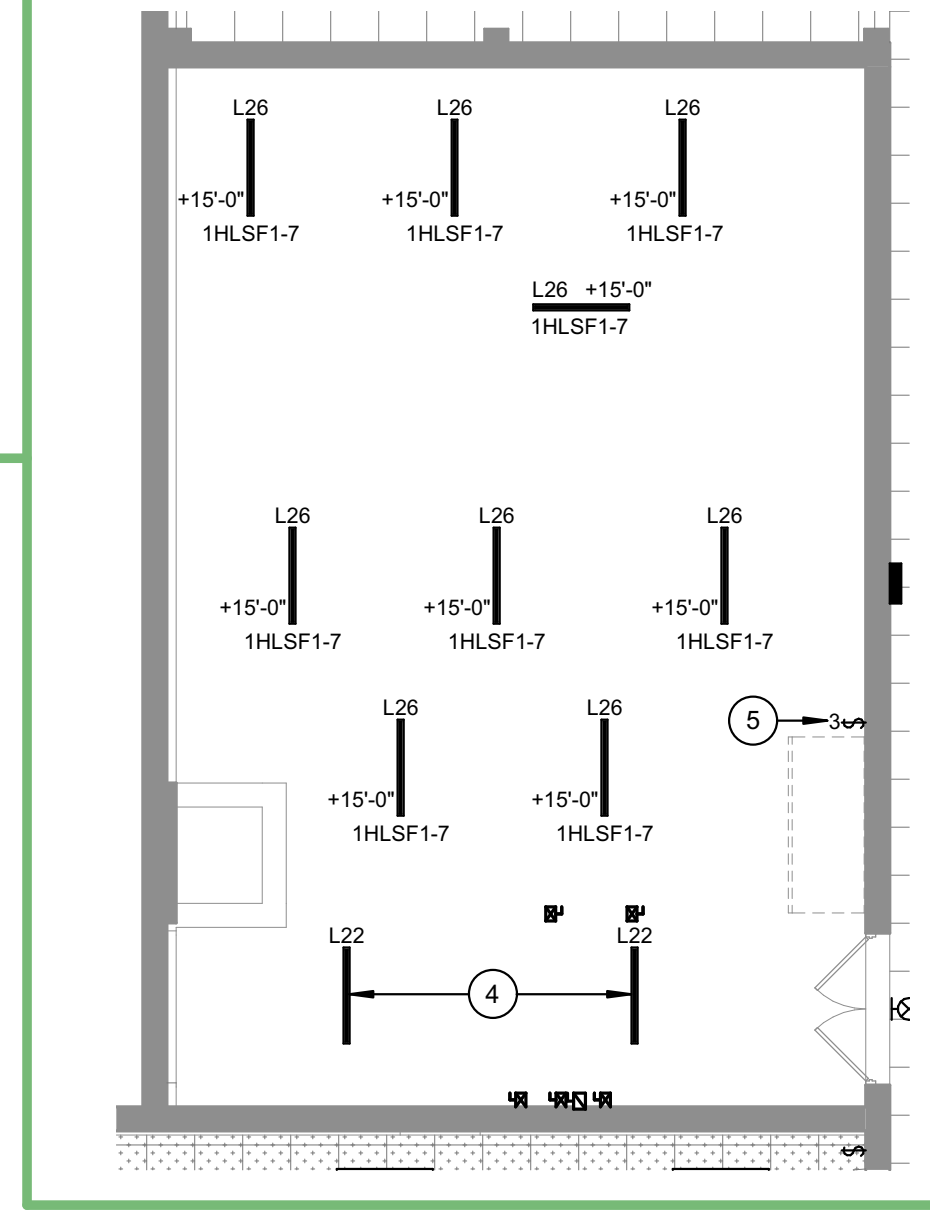
**Bid Documents**



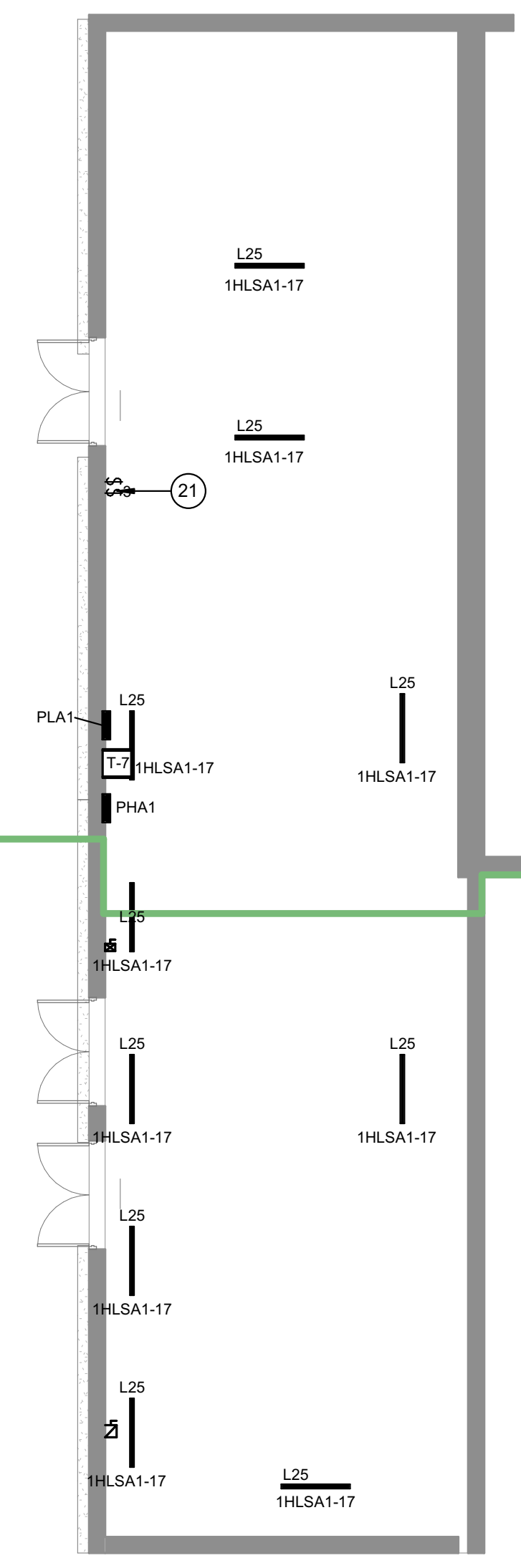
*Sarah K. Hempstead*  
 These Drawings and Specifications, and all copies thereof are and shall remain the property and copyright of the Architect. They shall be used only with respect to this Project and are not to be used on any other Project or Work without prior written permission from the Architect.

#	Revision	Date
A1	Addendum #1	10.25.2018
A2	Addendum #2	11.01.2018
A5	Addendum #5	11.16.2018

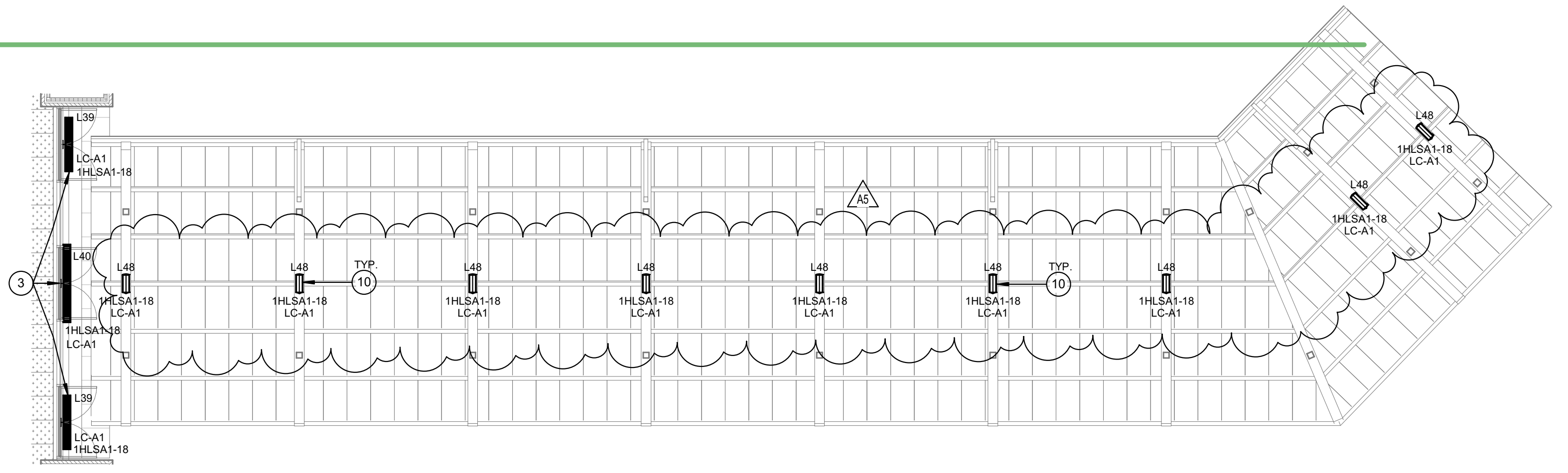
**6D BOILER ROOM LIGHTING PLAN**  
 1/8" = 1'-0"



**4C PENTHOUSE LIGHTING PLAN**  
 1/8" = 1'-0"



**1C CANOPY LIGHTING**  
 1/8" = 1'-0"

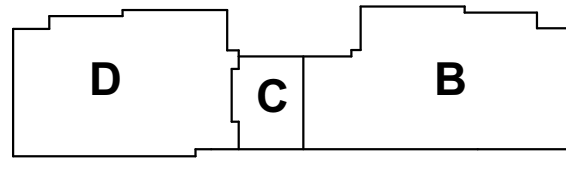


**1A FIRST FLOOR LIGHTING PLAN - UNIT A**  
 1/8" = 1'-0"

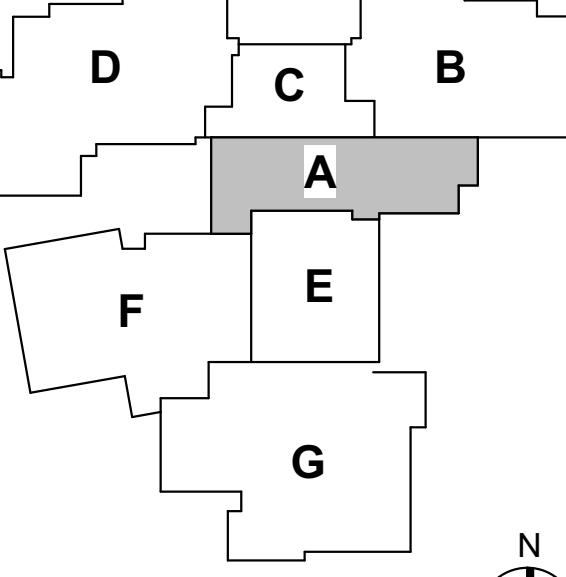


4401 East 62nd Street  
 Indianapolis, IN 46220

**SECOND FLOOR**



**FIRST FLOOR**



**KEY PLAN**



**EASTWOOD MIDDLE SCHOOL**

**FIRST FLOOR LIGHTING PLAN - UNIT A**

**EL1A1**

ALL DIMENSIONS UNLESS OTHERWISE NOTED.  
 ALL FIXTURES TO BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTALLATION INSTRUCTIONS.  
 ALL FIXTURES TO BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTALLATION INSTRUCTIONS.  
 ALL FIXTURES TO BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTALLATION INSTRUCTIONS.



#	POWER PLAN NOTES
1	USE BACK BOX THAT WAS MAINTAINED DURING DEMOLITION FOR NEW DEVICE.
2	120V CONNECTION FOR HAND DRYER.
3	GROUNDING ELECTRODES. COORDINATE LOCATION WITH UTILITY PRIMARY FEEDERS. SEE SPECIFICATIONS FOR ADDITIONAL INFORMATION.
4	GENERATOR EMERGENCY SHUT OFF.
5	BUILDING GROUNDING ELECTRODE BUS. SEE SCHEMATIC 1D/E-603 FOR ADDITIONAL INFORMATION.
6	PROVIDE 1" C FOR START CONTROLS TO EACH ATS. COORDINATE ROUTING WITH UTILITY PRIMARY FEEDERS. INSTALL WIRING PER MANUFACTURER'S INSTALLATION GUIDELINES.
7	ROUTE GENERATOR FEED FROM BREAKER ENCLOSURE TO EACH ATS. COORDINATE ROUTING WITH UTILITY PRIMARY FEEDERS. SEE ONE-LINE DIAGRAM ON SHEET E-602 FOR ADDITIONAL INFORMATION.
8	PROVIDE 3 SETS OF 2#12, 1" C FOR BATTERY CHARGER. BLOCK HEATER AND LIGHT. CONNECT EACH TO DEDICATED CIRCUITS INDICATED. VERIFY VOLTAGE OF BLOCK HEATER PRIOR TO PROVIDING CIRCUIT CONNECTION.
9	GENERATOR CONTROL PANEL.
10	RELOCATED EXISTING FIRE ALARM CONTROL PANEL. EXTEND WIRE AND CONDUIT TO NEW LOCATION. EXISTING DEVICES ON LATER PHASES SHALL REMAIN CONNECTED. PROVIDE ALL HARDWARE, ACCESSORIES AND PROGRAMING SO THAT EXISTING FACP IS INTEGRATED INTO NEW FACP LOCATED IN ELECTRICAL C081. REMOVE WHEN ALL PHASES ARE COMPLETE.
11	RECEPTACLE FOR SHORT THROW PROJECTOR. COORDINATE EXAC LOCATION AND ELEVATION WITH T-SERIES DRAWINGS. MOUNT ADJACENT RECEPTACLE DIRECTLY BELOW (IF SHOWN).
12	120V CONNECTION FOR SANITIZING GOGGLE CABINET. COORDINATE EXACT REQUIREMENTS WITH MANUFACTURER'S INSTALLATION GUIDELINES.
13	RECEPTACLE FOR MONITOR. COORDINATE EXAC LOCATION AND ELEVATION WITH T-SERIES DRAWINGS. MOUNT ADJACENT RECEPTACLE DIRECTLY BELOW (IF SHOWN).
14	EACH SIDE OF QUADRAPLEX SHALL HAVE A DEDICATED CIRCUIT. NO SHARED NEUTRALS.
16	PROVIDE NEW PANELBOARD TO REPLACE DEMOLISHED PANELBOARD. RECONNECT BRANCH CIRCUITS THAT WERE MAINTAINED DURING DEMOLITION TO NEW PANELBOARD. SEE PANELBOARD SCHEDULE FOR BREAKER CAPACITIES AND QUANTITY.

#	POWER PLAN NOTES
17	PROVIDE SINGLE CHANNEL RACEWAY. SEE SPECIFICATIONS FOR EXACT REQUIREMENTS.
18	PROVIDE DUAL CHANNEL RACEWAY. SEE SPECIFICATIONS FOR EXACT REQUIREMENTS.
19	PROVIDE (4) CIRCUITS FROM EXISTING PANELBOARD PLP-1 TO LGE EAST WALL FOR TEMPORARY CLASSROOMS (PROVIDE SPARE BREAKERS AS REQUIRED). SEE PLAN NOTE 20 IN DETAIL 2A/E1P1C1 FOR EXACT LOCATION (ROOMS C101 & C102). CIRCUITS TO BE RECONNECTED TO NEW PANELBOARD 22P1 DURING PHASE 1.
20	PROVIDE SINGLE CHANNEL RACEWAY TO (2) DUPLEX RECEPTACLES FOR TEMPORARY CLASSROOM. EACH DUPLEX RECEPTACLE SHALL GET A DEDICATED CIRCUIT FROM PANELBOARD PLP-1. RUNNING THESE CIRCUITS SHALL TAKE PRIORITY OVER OTHER PHASE 1 WORK TO GET CLASSROOMS OPERABLE. THESE RECEPTACLES SHALL BE REMOVED DURING PHASE 3A. SEE DETAIL 1A/E1P1C1 FOR MEZZANINE PANELBOARD LOCATION.
21	THREE POLE SWITCH INDICATED TO CONTROL PENTHOUSE ACCESS A004C LIGHTS.
22	MOUNT RECEPTACLE INDICATED AT 46" DIRECTLY ABOVE ADJACENT RECEPTACLE. SEE DETAIL 27/401 FOR DATA AND POWER LAYOUT.
23	OUTDOOR UNIT POWERS INDOOR UNIT MSH-1.
24	INDOOR UNIT IS POWERED FROM OUTDOOR UNIT LOCATED ON ROOF. SEE ROOF POWER PLANS FOR ADDITIONAL INFORMATION.
25	TO KILN EXHAUST HOOD SPEED CONTROLLER.
26	KILN HOOD CONNECTION UP TO EF-13. KILN HOOD CONTROLLER BY MANUFACTURER.
27	120V CONNECTION FOR WHEEL CHAIR LIFT. COORDINATE EXACT REQUIREMENTS WITH MANUFACTURER'S INSTALLATION GUIDELINES.
28	CONNECT TO EF-10. HOOD CONTROLS BY MANUFACTURER.
29	DOWN TO HOOD CONTROLS.
30	PROVIDE NEW PANELBOARD. RECONNECT BRANCH CIRCUITS THAT WERE MAINTAINED DURING DEMOLITION TO NEW PANELBOARD.
31	SINGLE POINT CONNECTION TO DISCONNECT/VFD BY DIVISION 23. COORDINATE EXACT REQUIREMENTS WITH M.C.
32	LIGHTING AND RECEPTACLE CONNECTION. COORDINATE EXACT REQUIREMENTS WITH M.C.
33	E.C. RESPONSIBLE FOR WIRING BETWEEN SPLITS.
34	PROVIDE UNISTRUT FOR DISCONNECT MOUNTING.

#	POWER PLAN NOTES
35	BOILER EPO. SEE SCHEMATIC 5A/E-603 FOR ADDITIONAL INFORMATION.
36	ROOF MOUNTED RECEPTACLE. SEE DETAIL 5C/E-501.
37	120V CONNECTION FOR PLUMBING FIXTURE SENSORS.
38	DUPLEX FOR CHARGING CART.
39	RACK MOUNTED RECEPTACLES. COORDINATE EXACT LOCATION WITH TELECOMMUNICATIONS CONTRACTOR.
40	RECEPTACLE FOR ACCESS CONTROL PANEL. COORDINATE EXACT LOCATION WITH ACCESS CONTROL CONTRACTOR.
41	120V CONNECTION FOR DOOR POWER SUPPLY.
42	DUCT DETECTOR(S) INDICATED ARE ASSOCIATED WITH ROOF TOP MECHANICAL EQUIPMENT LISTED ADJACENT PLAN NOTE.
43	EXISTING ELEVATOR DISCONNECTS. CONNECT TO NEW CIRCUITS INDICATED.
44	VERIFY NEMA TYPE AND LOCATION PRIOR TO ROUGH-IN.
45	208V CONNECTION FOR STACKABLE WASHER AND DRYER. COORDINATE EXACT REQUIREMENTS WITH MANUFACTURER'S INSTALLATION GUIDELINES.
47	MOUNT OVERHEAD DOOR DISCONNECT AT MOTOR. PROVIDE WIRING TO CONTROLLER. COORDINATE EXACT REQUIREMENTS WITH MANUFACTURER'S INSTALLATION GUIDELINES.
48	MICROWAVE LOCATED ON LOWER SHELF. COORDINATE ELEVATION AND LOCATION WITH CASEWORK.
49	FIRE ALARM ANNUNCIATOR PANEL WITH NOTIFIER FIRST VISION WEB BASED INTERACTIVE TOUCH SCREEN DISPLAY. SEE SPECIFICATIONS FOR ADDITIONAL INFORMATION.
50	120V CONNECTION FOR TEMPERATURE CONTROL PANEL.
51	RELAY PANEL WITH (24) 1P RELAYS. COORDINATE ALL CONNECTIONS WITH THEATRICAL LIGHTING CONSULTANT PROVIDED RISER.
52	DIN28 DMX WALL MOUNTED 14X14 ENCLOSURE. COORDINATE ALL CONNECTIONS WITH THEATRICAL LIGHTING CONSULTANT PROVIDED RISER.
53	PIPE MOUNTED QUAD AT ELECTRIC. COORDINATE ALL CONNECTIONS WITH THEATRICAL LIGHTING CONSULTANT PROVIDED RISER. VERIFY EXACT LOCATION WITH OWNER PRIOR TO ROUGH-IN.
54	ONE BUTTON ENTRY STATION. COORDINATE ALL CONNECTIONS WITH THEATRICAL LIGHTING CONSULTANT PROVIDED RISER. VERIFY EXACT LOCATION WITH OWNER PRIOR TO ROUGH-IN.
55	STAGE WALL BOX. COORDINATE ALL CONNECTIONS WITH THEATRICAL LIGHTING CONSULTANT PROVIDED RISER. VERIFY EXACT LOCATION WITH OWNER PRIOR TO ROUGH-IN.

#	GENERAL POWER NOTES
A	REFER TO SHEET E-001 FOR ADDITIONAL INFORMATION.
B	COORDINATE ALL RECEPTACLES WITH BUSINESS FURNITURE PLANS PRIOR TO ROUGH-IN.

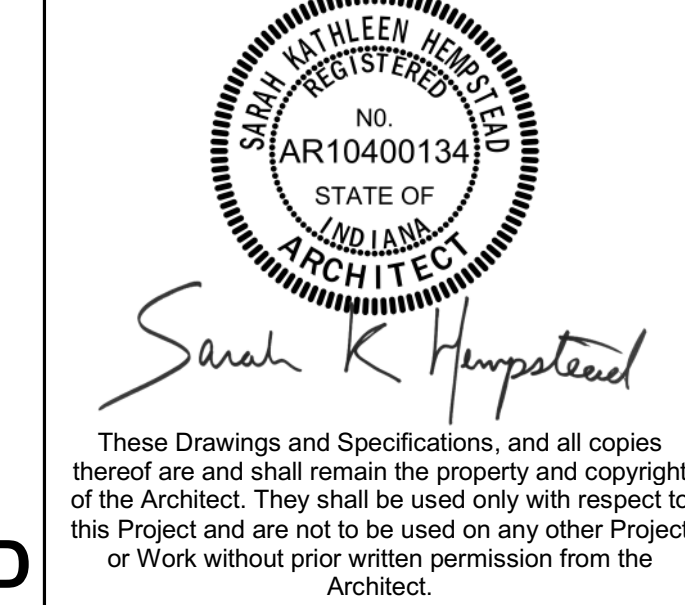
  

#	POWER PLAN NOTES
56	PROVIDE CIRCUIT ABOVE CEILING FOR FUTURE PROJECTOR. COORDINATE EXACT LOCATION WITH TELECOMMUNICATIONS CONTRACTOR.
57	STAGE MANAGERS PANEL. COORDINATE ALL CONNECTIONS WITH THEATRICAL LIGHTING CONSULTANT PROVIDED RISER. VERIFY EXACT LOCATION WITH OWNER PRIOR TO ROUGH-IN.
58	CONTROL CONSOLE. COORDINATE ALL CONNECTIONS WITH THEATRICAL LIGHTING CONSULTANT PROVIDED RISER. VERIFY EXACT LOCATION WITH OWNER PRIOR TO ROUGH-IN.
59	VFD FURNISHED BY DIVISION 23. INSTALLED BY DIVISION 26.
60	ROUTE HOT CONDUCTOR THROUGH WATER HEATER CONTROL PANEL AHEAD OF MOTOR STARTER. SEE MANUFACTURER WIRING DIAGRAM FOR EXACT REQUIREMENTS.
61	FIRE ALARM ADDRESSABLE RELAYS. ONE FOR THE P.A. SYSTEM THE SECOND FOR ACCESS CONTROL. COORDINATE EXACT REQUIREMENTS WITH ASSOCIATED CONTRACTORS.
62	CONNECT ELECTRONIC METERING TO BMS SYSTEM.
63	12"X12" JUNCTION BOX FOR MOTORIZED BLEACHERS. INSTALL BOX AT 5'-0" A.F.F. TO C.L. INSTALL IN LOCATION AS RECOMMENDED BY BLEACHER MANUFACTURER. CONTACTORS AND CONTROLLERS ARE PROVIDED. INSTALLED AND WIRED BY MANUFACTURER. INSTALL (1) 3/4" C BETWEEN BOX AND ADJACENT DISCONNECT SWITCH. CONNECT COMPLETE.
64	120V CONNECTION FOR MOTORIZED SHADES.
65	SAW CUT TO PROVIDE POWER AND DATA TO RECEPTION DESK.
66	120V CONNECTION FOR TIME CLOCK. COORDINATE EXACT LOCATION PRIOR TO ROUGH-IN.
67	RECEPTACLE FOR METAL DETECTOR. COORDINATE EXACT LOCATION WITH OWNER PRIOR TO ROUGH-IN.
68	120V CONNECTION FOR LIFE SKILLS ALARM HORN.
69	PROVIDE ACOUSTICAL PUTTY FOR DEVICE INDICATED.
70	COORDINATE LOCATION OF CEILING RECEPTACLES WITH OWNER PRIOR TO ROUGH-IN.
71	QUAD RECEPTACLES INDICATED SHALL BE MOUNTED TO PIP GRID. COORDINATE EXACT LOCATION WITH OWNER.
72	PROVIDE CONCRETE ENCASED DUCT BANK FOR ALL GENERATOR CONDUIT. SEE DETAIL 3A/E-502 FOR ADDITIONAL INFORMATION.
73	PROVIDE CONCRETE ENCASED DUCT BANK FOR SERVICE ENTRANCE FEEDERS. SEE DETAIL 3D/E-502 FOR ADDITIONAL INFORMATION.
74	PROVIDE (1) SMOKE DETECTOR, (1) HORN/STROBE AND (1) STROBE IN UNDER STAGE STORAGE.
75	120V CONNECTION FOR FIRE ALARM CONTROL PANEL.

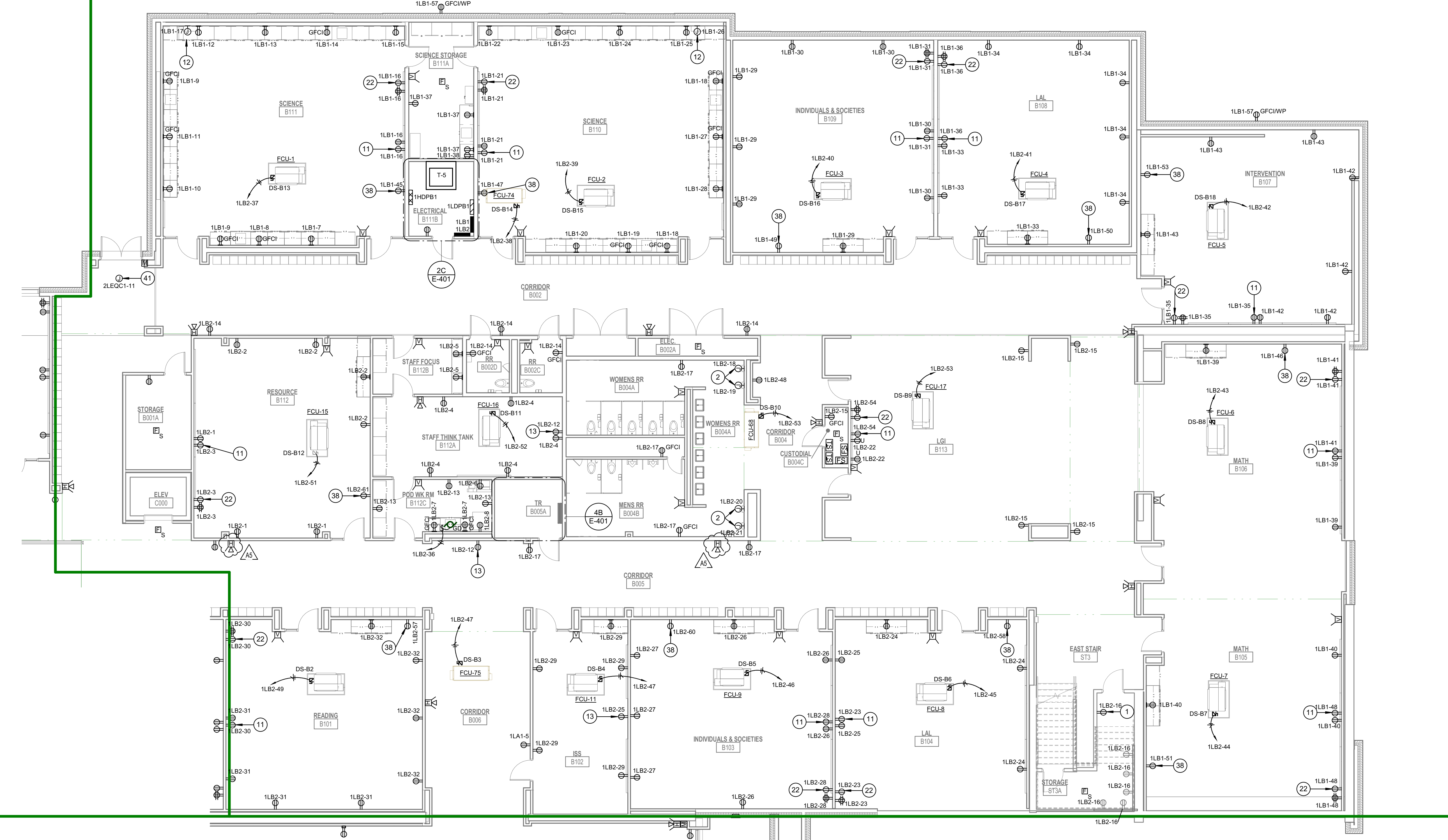


Project No. 2017-114.EMS  
 Project Date 10.17.18  
 Produced DLJ

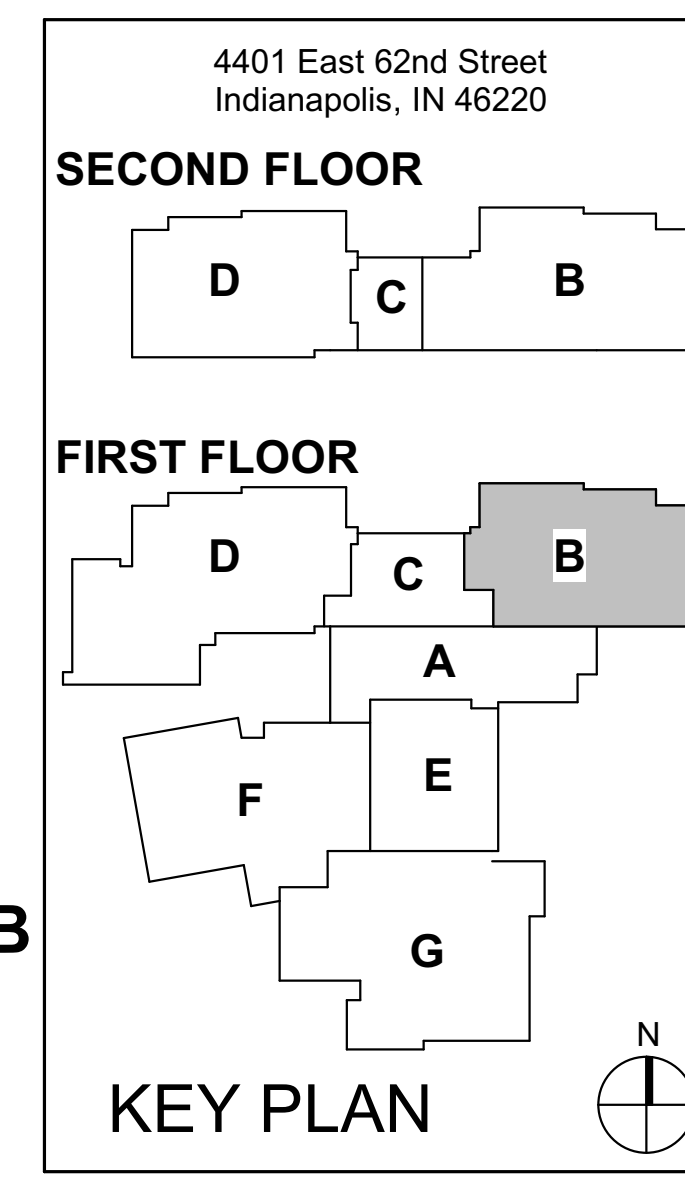
Bid Documents



#	Revision	Date
A1	Addendum #1	10.25.2018
A2	Addendum #2	11.01.2018
A5	Addendum #5	11.16.2018



2B FIRST FLOOR POWER PLAN - UNIT B  
 1/8" = 1'-0"



EASTWOOD MIDDLE SCHOOL

FIRST FLOOR POWER PLAN - UNIT B

EP1B1

DATE PLOTTED: 10/25/2018 10:41:18 AM  
 PLOTTER: HP DesignJet T1100e  
 FILE: I:\Projects\2017-114.EMS\Drawings\EP1B1.dwg  
 USER: dschmidt  
 PLOT SCALE: 1/8" = 1'-0"



#	POWER PLAN NOTES
1	USE BACK BOX THAT WAS MAINTAINED DURING DEMOLITION FOR NEW DEVICE.
2	120V CONNECTION FOR HAND DRYER.
3	GROUNDING ELECTRODES. COORDINATE LOCATION WITH UTILITY PRIMARY FEEDERS. SEE SPECIFICATIONS FOR ADDITIONAL INFORMATION.
4	GENERATOR EMERGENCY SHUT OFF.
5	BUILDING GROUNDING ELECTRODE BUS. SEE SCHEMATIC 1D/E-603 FOR ADDITIONAL INFORMATION.
6	PROVIDE 1" FOR START CONTROLS TO EACH ATS. COORDINATE ROUTING WITH UTILITY PRIMARY FEEDERS. INSTALL WIRING PER MANUFACTURER'S INSTALLATION GUIDELINES.
7	ROUTE GENERATOR FEED FROM BREAKER ENCLOSURE TO EACH ATS. COORDINATE ROUTING WITH UTILITY PRIMARY FEEDERS. SEE ONE-LINE DIAGRAM ON SHEET E-602 FOR ADDITIONAL INFORMATION.
8	PROVIDE 3 SETS OF 2#12, #120, 1" C FOR BATTERY CHARGER, BLOCK HEATER AND LIGHT. CONNECT EACH TO DEDICATED CIRCUITS INDICATED. VERIFY VOLTAGE OF BLOCK HEATER PRIOR TO PROVIDING CIRCUIT CONNECTION.
9	GENERATOR CONTROL PANEL.
10	RELOCATED EXISTING FIRE ALARM CONTROL PANEL. EXTEND WIRE AND CONDUIT TO NEW LOCATION. EXISTING DEVICES ON LATER PHASES SHALL REMAIN CONNECTED. PROVIDE ALL HARDWARE, ACCESSORIES AND PROGRAMING SO THAT EXISTING FACP IS INTEGRATED INTO NEW FACP LOCATED IN ELECTRICAL C061. REMOVE WHEN ALL PHASES ARE COMPLETE.
11	RECEPTACLE FOR SHORT THROW PROJECTOR. COORDINATE EXAC LOCATION AND ELEVATION WITH T-SERIES DRAWINGS. MOUNT ADJACENT RECEPTACLE DIRECTLY BELOW (IF SHOWN).
12	120V CONNECTION FOR SANITIZING GOGGLE CABINET. COORDINATE EXACT REQUIREMENTS WITH MANUFACTURER'S INSTALLATION GUIDELINES.
13	RECEPTACLE FOR MONITOR. COORDINATE EXAC LOCATION AND ELEVATION WITH T-SERIES DRAWINGS. MOUNT ADJACENT RECEPTACLE DIRECTLY BELOW (IF SHOWN).
14	EACH SIDE OF QUADRAPLEX SHALL HAVE A DEDICATED CIRCUIT. NO SHARED NEUTRALS.
16	PROVIDE NEW PANELBOARD TO REPLACE DEMOLISHED PANELBOARD. RECONNECT BRANCH CIRCUITS THAT WERE MAINTAINED DURING DEMOLITION TO NW PANELBOARD. SEE PANELBOARD SCHEDULE FOR BREAKER CAPACITIES AND QUANTITY.

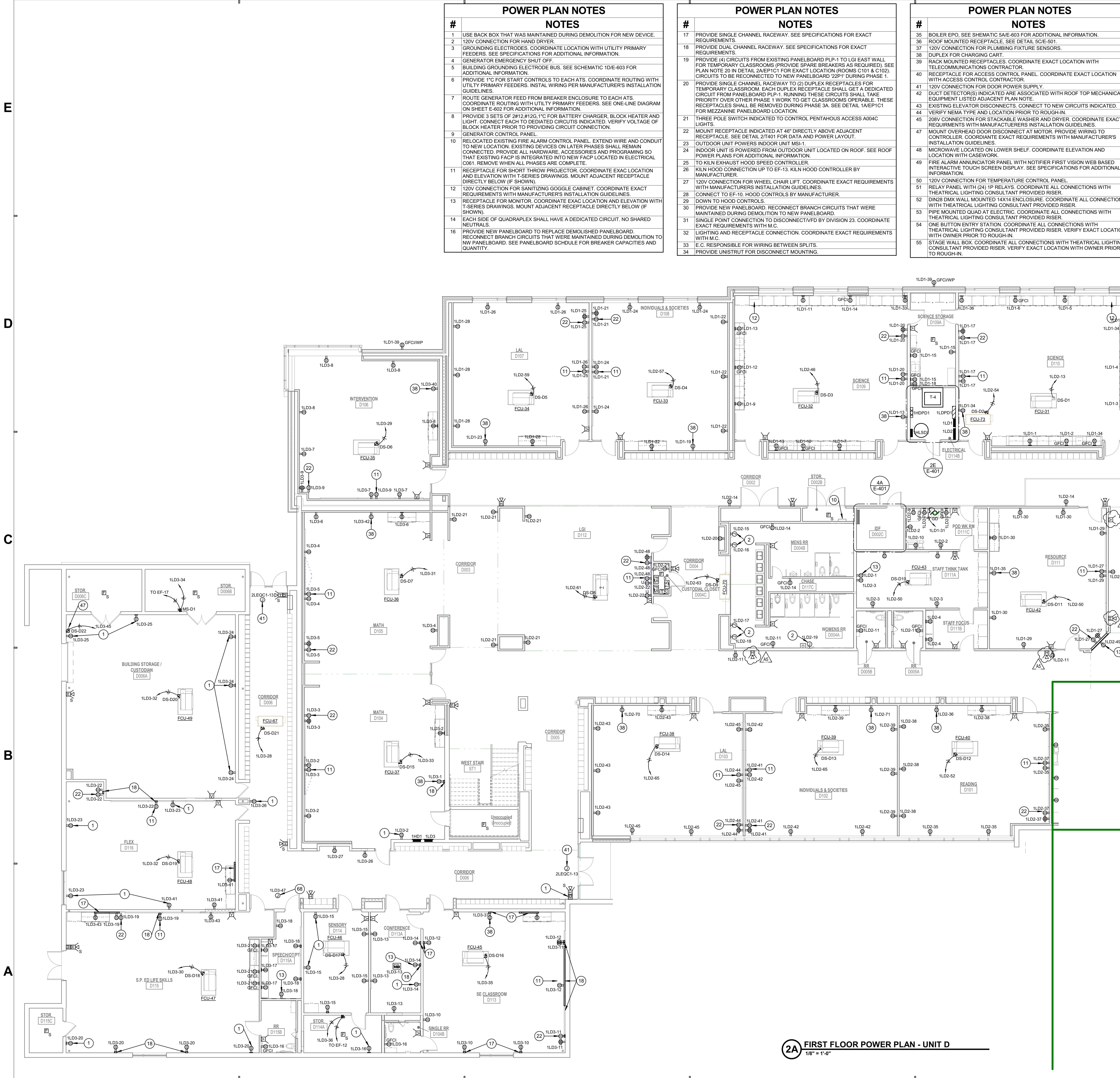
#	POWER PLAN NOTES
17	PROVIDE SINGLE CHANNEL RACEWAY. SEE SPECIFICATIONS FOR EXACT REQUIREMENTS.
18	PROVIDE DUAL CHANNEL RACEWAY. SEE SPECIFICATIONS FOR EXACT REQUIREMENTS.
19	PROVIDE (4) CIRCUITS FROM EXISTING PANELBOARD PLP-1 TO LGE EAST WALL FOR TEMPORARY CLASSROOMS (PROVIDE SPARE BREAKERS AS REQUIRED). SEE PLAN NOTE 20 IN DETAIL 2AE(P)C1 FOR EXACT LOCATION (ROOMS C101 & C102). CIRCUITS TO BE RECONNECTED TO NEW PANELBOARD 22P1 DURING PHASE 1.
20	PROVIDE SINGLE CHANNEL RACEWAY TO (2) DUPLEX RECEPTACLES FOR TEMPORARY CLASSROOM. EACH DUPLEX RECEPTACLE SHALL GET A DEDICATED CIRCUIT FROM PANELBOARD PLP-1. RUNNING THESE CIRCUITS SHALL TAKE PRIORITY OVER OTHER PHASE 1 WORK TO GET CLASSROOMS OPERABLE. THESE RECEPTACLES SHALL BE REMOVED DURING PHASE 3A. SEE DETAIL 1AEP1C1 FOR MEZZANINE PANELBOARD LOCATION.
21	THREE POLE SWITCH INDICATED TO CONTROL PENTHOUSE ACCESS A04C LIGHTS.
22	MOUNT RECEPTACLE INDICATED AT 48" DIRECTLY ABOVE ADJACENT RECEPTACLE. SEE DETAIL 27A01 FOR DATA AND POWER LAYOUT.
23	OUTDOOR UNIT POWERS INDOOR UNIT MSI-1.
24	INDOOR UNIT IS POWERED FROM OUTDOOR UNIT LOCATED ON ROOF. SEE ROOF POWER PLANS FOR ADDITIONAL INFORMATION.
25	TO KILN EXHAUST HOOD SPEED CONTROLLER.
26	KILN HOOD CONNECTION UP TO EF-13. KILN HOOD CONTROLLER BY MANUFACTURER.
27	120V CONNECTION FOR WHEEL CHAIR LIFT. COORDINATE EXACT REQUIREMENTS WITH MANUFACTURER'S INSTALLATION GUIDELINES.
28	CONNECT TO EF-10. HOOD CONTROLLER BY MANUFACTURER.
29	DOWN TO HOOD CONTROLS.
30	PROVIDE NEW PANELBOARD. RECONNECT BRANCH CIRCUITS THAT WERE MAINTAINED DURING DEMOLITION TO NEW PANELBOARD.
31	SINGLE POINT CONNECTION TO DISCONNECT/VPD BY DIVISION 23. COORDINATE EXACT REQUIREMENTS WITH M.C.
32	LIGHTING AND RECEPTACLE CONNECTION. COORDINATE EXACT REQUIREMENTS WITH M.C.
33	E.C. RESPONSIBLE FOR WIRING BETWEEN SPLITS.
34	PROVIDE UNISTRUT FOR DISCONNECT MOUNTING.

#	POWER PLAN NOTES
35	BOILER EPO. SEE SCHEMATIC 5A/E-603 FOR ADDITIONAL INFORMATION.
36	ROOF MOUNTED RECEPTACLE. SEE DETAIL 50/E-501.
37	120V CONNECTION FOR PLUMBING FIXTURE SENSORS.
38	DUPLEX FOR CHARGING CART.
39	RACK MOUNTED RECEPTACLES. COORDINATE EXACT LOCATION WITH TELECOMMUNICATIONS CONTRACTOR.
40	RECEPTACLE FOR ACCESS CONTROL PANEL. COORDINATE EXACT LOCATION WITH ACCESS CONTROL CONTRACTOR.
41	120V CONNECTION FOR DOOR POWER SUPPLY.
42	DUCT DETECTOR(S) INDICATED ARE ASSOCIATED WITH ROOF TOP MECHANICAL EQUIPMENT LISTED ACCESS CONTROL PLAN NOTE.
43	EXISTING ELEVATOR DISCONNECTS. CONNECT TO NEW CIRCUITS INDICATED.
44	VERIFY NEMA TYPE AND LOCATION PRIOR TO ROUGH-IN.
45	208V CONNECTION FOR STACKABLE WASHER AND DRYER. COORDINATE EXACT REQUIREMENTS WITH MANUFACTURER'S INSTALLATION GUIDELINES.
47	MOUNT OVERHEAD DOOR DISCONNECT AT MOTOR. PROVIDE WIRING TO CONTROLLER. COORDINATE EXACT REQUIREMENTS WITH MANUFACTURER'S INSTALLATION GUIDELINES.
48	MICROWAVE LOCATED ON LOWER SHELF. COORDINATE ELEVATION AND LOCATION WITH MANUFACTURER'S INSTALLATION GUIDELINES.
49	FIRE ALARM ANNUNCIATOR PANEL WITH NOTIFIER FIRST VISION WEB BASED INTERACTIVE TOUCH SCREEN DISPLAY. SEE SPECIFICATIONS FOR ADDITIONAL INFORMATION.
50	120V CONNECTION FOR TEMPERATURE CONTROL PANEL.
51	RELAY PANEL WITH (24) 1P RELAYS. COORDINATE ALL CONNECTIONS WITH THEATRICAL LIGHTING CONSULTANT PROVIDED RISER.
52	DIN28 DIM WALL MOUNTED 14X14 ENCLOSURE. COORDINATE ALL CONNECTIONS WITH THEATRICAL LIGHTING CONSULTANT PROVIDED RISER.
53	PIPE MOUNTED QUAD AT ELECTRIC. COORDINATE ALL CONNECTIONS WITH THEATRICAL LIGHTING CONSULTANT PROVIDED RISER.
54	ONE BUTTON ENTRY STATION. COORDINATE ALL CONNECTIONS WITH THEATRICAL LIGHTING CONSULTANT PROVIDED RISER. VERIFY EXACT LOCATION WITH OWNER PRIOR TO ROUGH-IN.
55	STAGE WALL BOX. COORDINATE ALL CONNECTIONS WITH THEATRICAL LIGHTING CONSULTANT PROVIDED RISER. VERIFY EXACT LOCATION WITH OWNER PRIOR TO ROUGH-IN.

#	GENERAL POWER NOTES
A	REFER TO SHEET E-001 FOR ADDITIONAL INFORMATION.
B	COORDINATE ALL RECEPTACLES WITH BUSINESS FURNITURE PLANS PRIOR TO ROUGH-IN.

#	POWER PLAN NOTES
56	PROVIDE CIRCUIT ABOVE CEILING FOR FUTURE PROJECTOR. COORDINATE EXACT LOCATION WITH TELECOMMUNICATIONS CONTRACTOR.
57	STAGE MANAGERS PANEL. COORDINATE ALL CONNECTIONS WITH THEATRICAL LIGHTING CONSULTANT PROVIDED RISER. VERIFY EXACT LOCATION WITH OWNER PRIOR TO ROUGH-IN.
58	CONTROL CONSOLE. COORDINATE ALL CONNECTIONS WITH THEATRICAL LIGHTING CONSULTANT PROVIDED RISER. VERIFY EXACT LOCATION WITH OWNER PRIOR TO ROUGH-IN.
59	VPD FURNISHED BY DIVISION 23. INSTALLED BY DIVISION 26.
60	ROUTE HOT CONDUCTOR THROUGH WATER HEATER CONTROL PANEL AHEAD OF MOTOR STARTER. SEE MANUFACTURER WIRING DIAGRAM FOR EXACT REQUIREMENTS.
61	FIRE ALARM ADDRESSABLE RELAYS. ONE FOR THE P.A. SYSTEM THE SECOND FOR ACCESS CONTROL. COORDINATE EXACT REQUIREMENTS WITH ASSOCIATED CONTRACTORS.
62	CONNECT ELECTRONIC METERING TO BMS SYSTEM.
63	12"X12" JUNCTION BOX FOR MOTORIZED BLEACHERS. INSTALL BOX AT 5'-0" A.F. TO C.L. INSTALL IN LOCATION AS RECOMMENDED BY BLEACHER MANUFACTURER. CONTACTORS AND CONTROLLERS ARE PROVIDED. INSTALLED AND WIRED BY MANUFACTURER. INSTALL (1) 3/4" C BETWEEN BOX AND ADJACENT DISCONNECT SWITCH. CONNECT COMPLETE.
64	120V CONNECTION FOR MOTORIZED SHADES.
65	SAW CUT TO PROVIDE POWER AND DATA TO RECEPTION DESK.
66	120V CONNECTION FOR TIME CLOCK. COORDINATE EXACT LOCATION PRIOR TO ROUGH-IN.
67	RECEPTACLE FOR METAL DETECTOR. COORDINATE EXACT LOCATION WITH OWNER PRIOR TO ROUGH-IN.
68	120V CONNECTION FOR LIFE SKILLS ALARM HORN.
69	PROVIDE ACOUSTICAL PUTTY FOR DEVICE INDICATED.
70	COORDINATE LOCATION OF CEILING RECEPTACLES WITH OWNER PRIOR TO ROUGH-IN.
71	QUAD RECEPTACLES INDICATED SHALL BE MOUNTED TO PIP GRID. COORDINATE EXACT LOCATION WITH OWNER.
72	PROVIDE CONCRETE ENCASED DUCT BANK FOR ALL GENERATOR CONDUIT. SEE DETAIL 5A/E-502 FOR ADDITIONAL INFORMATION.
73	PROVIDE CONCRETE ENCASED DUCT BANK FOR SERVICE ENTRANCE FEEDERS. SEE DETAIL 3D/E-502 FOR ADDITIONAL INFORMATION.
74	PROVIDE (1) SMOKE DETECTOR, (1) HORN/STROBE AND (1) STROBE IN UNDER STAGE STORAGE.
75	120V CONNECTION FOR FIRE ALARM CONTROL PANEL.



2A FIRST FLOOR POWER PLAN - UNIT D  
1/8" = 1'-0"



Project No. 2017-114.EMS  
Project Date 10.17.18  
Produced DLJ

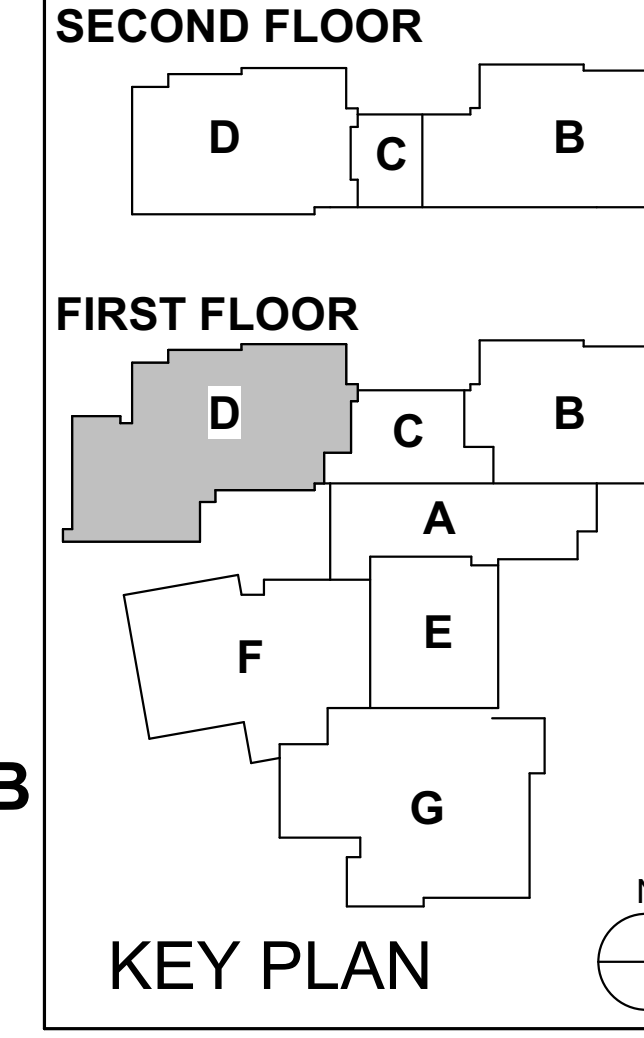
Bid Documents



These Drawings and Specifications, and all copies thereof are and shall remain the property and copyright of the Architect. They shall be used only with respect to this Project and are not to be used on any other Project or Work without prior written permission from the Architect.

#	Revision	Date
A1	Addendum #1	10.25.2018
A2	Addendum #2	11.01.2018
A5	Addendum #5	11.16.2018

4401 East 62nd Street  
Indianapolis, IN 46220



EASTWOOD MIDDLE SCHOOL

FIRST FLOOR POWER PLAN - UNIT D  
EP1D1



6 5 4 3 2 1

### POWER PLAN NOTES

#	NOTES
1	USE BACK BOX THAT WAS MAINTAINED DURING DEMOLITION FOR NEW DEVICE.
2	120V CONNECTION FOR HAND DRYER.
3	GROUNDING ELECTRODES. COORDINATE LOCATION WITH UTILITY PRIMARY FEEDERS. SEE SPECIFICATIONS FOR ADDITIONAL INFORMATION.
4	GENERATOR EMERGENCY SHUT OFF.
5	BUILDING GROUNDING ELECTRODE BUS. SEE SCHEMATIC 101E-603 FOR ADDITIONAL INFORMATION.
6	PROVIDE 1" FC FOR START CONTROLS TO EACH ATS. COORDINATE ROUTING WITH UTILITY PRIMARY FEEDERS. INSTALL WIRING PER MANUFACTURER'S INSTALLATION GUIDELINES.
7	ROUTE GENERATOR FEED FROM BREAKER ENCLOSURE TO EACH ATS. COORDINATE ROUTING WITH UTILITY PRIMARY FEEDERS. SEE ONE-LINE DIAGRAM ON SHEET E-002 FOR ADDITIONAL INFORMATION.
8	PROVIDE 3 SETS OF 2#12#12G, 1" FC FOR BATTERY CHARGER, BLOCK HEATER AND LIGHT. CONNECT EACH TO DEDICATED CIRCUIT INDICATED. VERIFY VOLTAGE OF BLOCK HEATER PRIOR TO PROVIDING CIRCUIT CONNECTION.
9	GENERATOR CONTROL PANEL.
10	RELOCATED EXISTING FIRE ALARM CONTROL PANEL. EXTEND WIRE AND CONDUIT TO NEW LOCATION. EXISTING DEVICES ON LATER PHASES SHALL REMAIN CONNECTED. PROVIDE ALL HARDWARE, ACCESSORIES AND PROGRAMING SO THAT EXISTING FACP IS INTEGRATED INTO NEW FACP LOCATED IN ELECTRICAL ROOM. REMOVE WHEN ALL PHASES ARE COMPLETE.
11	RECEPTACLE FOR SHORT THROW PROJECTOR. COORDINATE EXAC LOCATION AND ELEVATION WITH T-SERIES DRAWINGS. MOUNT ADJACENT RECEPTACLE DIRECTLY BELOW (IF SHOWN).
12	120V CONNECTION FOR SANITIZING GOGGLE CABINET. COORDINATE EXACT REQUIREMENTS WITH MANUFACTURER'S INSTALLATION GUIDELINES.
13	RECEPTACLE FOR MONITOR. COORDINATE EXAC LOCATION AND ELEVATION WITH T-SERIES DRAWINGS. MOUNT ADJACENT RECEPTACLE DIRECTLY BELOW (IF SHOWN).
14	EACH SIDE OF QUADRAPLEX SHALL HAVE A DEDICATED CIRCUIT. NO SHARED NEUTRALS.
16	PROVIDE NEW PANELBOARD TO REPLACE DEMOLISHED PANELBOARD. RECONNECT BRANCH CIRCUITS THAT WERE MAINTAINED DURING DEMOLITION TO NW PANELBOARD. SEE PANELBOARD SCHDULE FOR BREAKER CAPACITIES AND QUANTITY.

### POWER PLAN NOTES

#	NOTES
17	PROVIDE SINGLE CHANNEL RACEWAY. SEE SPECIFICATIONS FOR EXACT REQUIREMENTS.
18	PROVIDE DUAL CHANNEL RACEWAY. SEE SPECIFICATIONS FOR EXACT REQUIREMENTS.
19	PROVIDE (4) CIRCUITS FROM EXISTING PANELBOARD PL-1 TO LG1 EAST WALL FOR TEMPORARY CLASSROOMS (PROVIDE SPARE BREAKERS AS REQUIRED). SEE PLAN NOTE 20 IN DETAIL 2AEP1C1 FOR EXACT LOCATION (ROOMS C101 & C102). CIRCUITS TO BE RECONNECTED TO NEW PANELBOARD 22P1 DURING PHASE 1.
20	PROVIDE SINGLE CHANNEL RACEWAY TO (2) DUPLEX RECEPTACLES FOR TEMPORARY CLASSROOM. EACH DUPLEX RECEPTACLE SHALL GET A DEDICATED CIRCUIT FROM PANELBOARD PL-1. RUNNING THESE CIRCUITS SHALL TAKE PRIORITY OVER OTHER PHASE 1 WORK TO GET CLASSROOMS OPERABLE. THESE RECEPTACLES SHALL BE REMOVED DURING PHASE 3A. SEE DETAIL 1AEP1C1 FOR MEZZANINE PANELBOARD LOCATION.
21	THREE POLE SWITCH INDICATED TO CONTROL PENTHOUSE ACCESS A04C LIGHTS.
22	MOUNT RECEPTACLE INDICATED AT 48" DIRECTLY ABOVE ADJACENT RECEPTACLE. SEE DETAIL 21401 FOR DATA AND POWER LAYOUT.
23	OUTDOOR UNIT POWERS INDOOR UNIT MSH-1.
24	INDOOR UNIT IS POWERED FROM OUTDOOR UNIT LOCATED ON ROOF. SEE ROOF POWER PLANS FOR ADDITIONAL INFORMATION.
25	TO KLN EXHAUST HOOD SPEED CONTROLLER.
26	KLN HOOD CONNECTION UP TO EF-13. KLN HOOD CONTROLLER BY MANUFACTURER.
27	120V CONNECTION FOR WHEEL CHAIR LIFT. COORDINATE EXACT REQUIREMENTS WITH MANUFACTURER'S INSTALLATION GUIDELINES.
28	CONNECT TO EF-10. HOOD CONTROLS BY MANUFACTURER.
29	DOWN TO HOOD CONTROLS.
30	PROVIDE NEW PANELBOARD. RECONNECT BRANCH CIRCUITS THAT WERE MAINTAINED DURING DEMOLITION TO NEW PANELBOARD.
31	SINGLE POINT CONNECTION TO DISCONNECT/VFD BY DIVISION 23. COORDINATE EXACT REQUIREMENTS WITH M.C.
32	LIGHTING AND RECEPTACLE CONNECTION. COORDINATE EXACT REQUIREMENTS WITH M.C.
33	E.C. RESPONSIBLE FOR WIRING BETWEEN SPLITS.
34	PROVIDE UNISTRUT FOR DISCONNECT MOUNTING.

### POWER PLAN NOTES

#	NOTES
35	BOILER EPO. SEE SCHEMATIC SAE-603 FOR ADDITIONAL INFORMATION.
36	ROOF MOUNTED RECEPTACLE. SEE DETAIL. S01E-501.
37	120V CONNECTION FOR PLUMBING FIXTURE SENSORS.
38	DUPLEX FOR CHARGING CART.
39	RACK MOUNTED RECEPTACLES. COORDINATE EXACT LOCATION WITH TELECOMMUNICATIONS CONTRACTOR.
40	RECEPTACLE FOR ACCESS CONTROL PANEL. COORDINATE EXACT LOCATION WITH ACCESS CONTROL CONTRACTOR.
41	120V CONNECTION FOR DOOR POWER SUPPLY.
42	DUCT DETECTOR(S) INDICATED ARE ASSOCIATED WITH ROOF TOP MECHANICAL EQUIPMENT LISTED ADJACENT PLAN NOTE.
43	EXISTING ELEVATOR DISCONNECTS. CONNECT TO NEW CIRCUITS INDICATED.
44	VERIFY NEMA TYPE AND LOCATION PRIOR TO ROUGH-IN.
45	208V CONNECTION FOR STACKABLE WASHER AND DRYER. COORDINATE EXACT REQUIREMENTS WITH MANUFACTURER'S INSTALLATION GUIDELINES.
47	MOUNT OVERHEAD DOOR DISCONNECT AT MOTOR. PROVIDE WIRING TO CONTROLLER. COORDINATE EXACT REQUIREMENTS WITH MANUFACTURER'S INSTALLATION GUIDELINES.
48	MICROWAVE LOCATED ON LOWER SHELF. COORDINATE ELEVATION AND LOCATION WITH CASEWORK.
49	FIRE ALARM ANNUNCIATOR PANEL WITH NOTIFIER FIRST VISION WEB BASED INTERACTIVE TOUCH SCREEN DISPLAY. SEE SPECIFICATIONS FOR ADDITIONAL INFORMATION.
50	120V CONNECTION FOR TEMPERATURE CONTROL PANEL.
51	RELAY PANEL WITH (24) 1P RELAYS. COORDINATE ALL CONNECTIONS WITH THEATRICAL LIGHTING CONSULTANT PROVIDED RISER.
52	DIN28 DMX WALL MOUNTED 14X14 ENCLOSURE. COORDINATE ALL CONNECTIONS WITH THEATRICAL LIGHTING CONSULTANT PROVIDED RISER.
53	PIPE MOUNTED QUAD AT ELECTRIC. COORDINATE ALL CONNECTIONS WITH THEATRICAL LIGHTING CONSULTANT PROVIDED RISER.
54	ONE BUTTON ENTRY STATION. COORDINATE ALL CONNECTIONS WITH THEATRICAL LIGHTING CONSULTANT PROVIDED RISER. VERIFY EXACT LOCATION WITH OWNER PRIOR TO ROUGH-IN.
55	STAGE WALL BOX. COORDINATE ALL CONNECTIONS WITH THEATRICAL LIGHTING CONSULTANT PROVIDED RISER. VERIFY EXACT LOCATION WITH OWNER PRIOR TO ROUGH-IN.

### GENERAL POWER NOTES

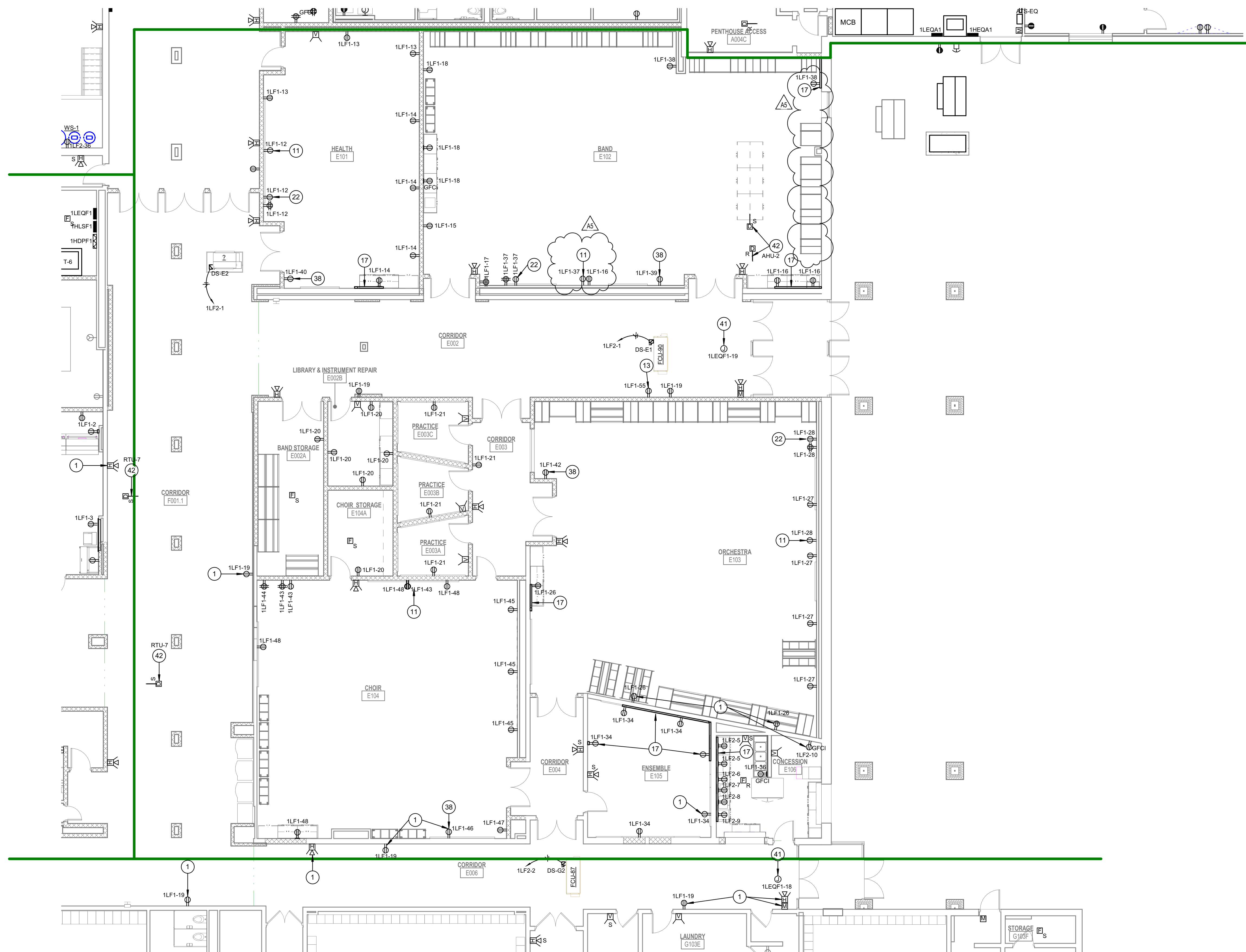
#	NOTES
A	REFER TO SHEET E-001 FOR ADDITIONAL INFORMATION.
B	COORDINATE ALL RECEPTACLES WITH BUSINESS FURNITURE PLANS PRIOR TO ROUGH-IN.

### POWER PLAN NOTES

#	NOTES
56	PROVIDE CIRCUIT ABOVE CEILING FOR FUTURE PROJECTOR. COORDINATE EXACT LOCATION WITH TELECOMMUNICATIONS CONTRACTOR.
57	STAGE MANAGERS PANEL. COORDINATE ALL CONNECTIONS WITH THEATRICAL LIGHTING CONSULTANT PROVIDED RISER. VERIFY EXACT LOCATION WITH OWNER PRIOR TO ROUGH-IN.
58	CONTROL CONSOLE. COORDINATE ALL CONNECTIONS WITH THEATRICAL LIGHTING CONSULTANT PROVIDED RISER. VERIFY EXACT LOCATION WITH OWNER PRIOR TO ROUGH-IN.
59	VFD FURNISHED BY DIVISION 23. INSTALLED BY DIVISION 26.
60	ROUTE HOT CONDUCTOR THROUGH WATER HEATER CONTROL PANEL AHEAD OF MOTOR STARTER. SEE MANUFACTURER WIRING DIAGRAM FOR EXACT REQUIREMENTS.
61	FIRE ALARM ADDRESSABLE RELAYS. ONE FOR THE P.A. SYSTEM THE SECOND FOR ACCESS CONTROL. COORDINATE EXACT REQUIREMENTS WITH ASSOCIATED CONTRACTORS.
62	CONNECT ELECTRONIC METERING TO BMS SYSTEM.
63	12"X12" 6" JUNCTION BOX FOR MOTORIZED BLEACHERS. INSTALL BOX AT 5'-0" A.F.F. TO C.L. INSTALL IN LOCATION AS RECOMMENDED BY BLEACHER MANUFACTURER. CONTACTORS AND CONTROLLERS ARE PROVIDED. INSTALLED AND WIRED BY MANUFACTURER. INSTALL (1) 3/4" C BETWEEN BOX AND ADJACENT DISCONNECT SWITCH. CONNECT COMPLETE.
64	120V CONNECTION FOR MOTORIZED SHADES.
65	SAW CUT TO PROVIDE POWER AND DATA TO RECEPTION DESK.
66	120V CONNECTION FOR TIME CLOCK. COORDINATE EXACT LOCATION PRIOR TO ROUGH-IN.
67	RECEPTACLE FOR METAL DETECTOR. COORDINATE EXACT LOCATION WITH OWNER PRIOR TO ROUGH-IN.
68	120V CONNECTION FOR LIFE SKILLS ALARM HORN.
69	PROVIDE ACOUSTICAL PUTTY FOR DEVICE INDICATED.
70	COORDINATE LOCATION OF CEILING RECEPTACLES WITH OWNER PRIOR TO ROUGH-IN.
71	QUAD RECEPTACLES INDICATED SHALL BE MOUNTED TO PIP GRID. COORDINATE EXACT LOCATION WITH OWNER.
72	PROVIDE CONCRETE ENCASED DUCT BANK FOR ALL GENERATOR CONDUIT. SEE DETAIL SAE-502 FOR ADDITIONAL INFORMATION.
73	PROVIDE CONCRETE ENCASED DUCT BANK FOR SERVICE ENTRANCE FEEDERS. SEE DETAIL SAE-502 FOR ADDITIONAL INFORMATION.
74	PROVIDE (1) SMOKE DETECTOR, (1) HORN/STROBE AND (1) STROBE IN UNDER STAGE STORAGE.
75	120V CONNECTION FOR FIRE ALARM CONTROL PANEL.

E  
D  
C  
B  
A

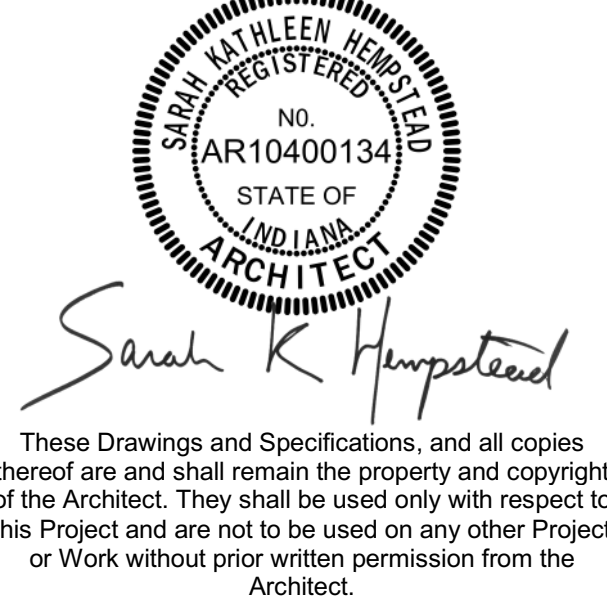


2B FIRST FLOOR POWER PLAN - UNIT E  
1/8" = 1'-0"



Project No. 2017-114.EMS  
Project Date 10.17.18  
Produced DLJ

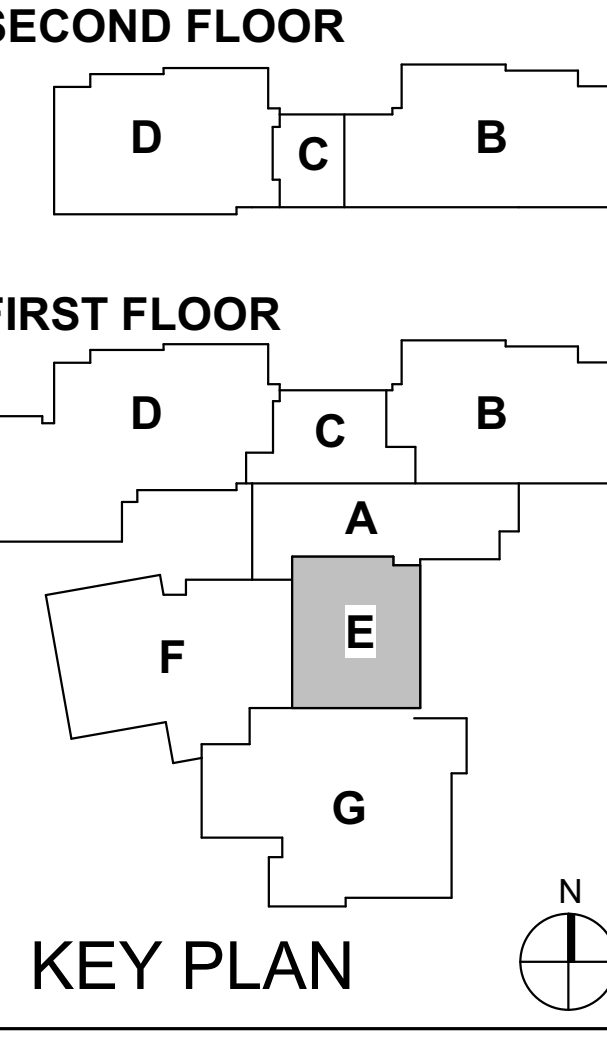
## Bid Documents



#	Revision	Date
A1	Addendum #1	10.25.2018
A2	Addendum #2	11.01.2018
A5	Addendum #5	11.16.2018

These Drawings and Specifications, and all copies thereof are and shall remain the property and copyright of the Architect. They shall be used only with respect to this Project and are not to be used on any other Project or Work without prior written permission from the Architect.

4401 East 62nd Street  
Indianapolis, IN 46220



M.S.D. of Washington Township  
**EASTWOOD**  
  
**EAGLES**  
EASTWOOD MIDDLE SCHOOL

FIRST FLOOR POWER PLAN - UNIT E

EP1E1

A  
6 5 4 3 2 1



### POWER PLAN NOTES

#	NOTES
1	USE BACK BOX THAT WAS MAINTAINED DURING DEMOLITION FOR NEW DEVICE.
2	120V CONNECTION FOR HAND DRYER.
3	GROUNDING ELECTRODES, COORDINATE LOCATION WITH UTILITY PRIMARY FEEDERS. SEE SPECIFICATIONS FOR ADDITIONAL INFORMATION.
4	GENERATOR EMERGENCY SHUT OFF.
5	BUILDING GROUNDING ELECTRODE BUS. SEE SCHEMATIC I/DIE-603 FOR ADDITIONAL INFORMATION.
6	PROVIDE 1" C FOR START CONTROLS TO EACH ATS. COORDINATE ROUTING WITH UTILITY PRIMARY FEEDERS. INSTAL WIRING PER MANUFACTURER'S INSTALLATION GUIDELINES.
7	ROUTE GENERATOR FEED FROM BREAKER ENCLOSURE TO EACH ATS. COORDINATE ROUTING WITH UTILITY PRIMARY FEEDERS. SEE ONE-LINE DIAGRAM ON SHEET E-002 FOR ADDITIONAL INFORMATION.
8	PROVIDE 3 SETS OF 2#12-1/2G, 1" C FOR BATTERY CHARGER, BLOCK HEATER AND LIGHT. CONNECT EACH TO DEDICATED CIRCUIT INDICATED. VERIFY VOLTAGE OF BLOCK HEATER PRIOR TO PROVIDING CIRCUIT CONNECTION.
9	GENERATOR CONTROL PANEL.
10	RELOCATED EXISTING FIRE ALARM CONTROL PANEL. EXTEND WIRE AND CONDUIT TO NEW LOCATION. EXISTING DEVICES ON LATER PHASES SHALL REMAIN CONNECTED. PROVIDE ALL HARDWARE, ACCESSORIES AND PROGRAMING SO THAT EXISTING FACP IS INTEGRATED INTO NEW FACP LOCATED IN ELECTRICAL COB1. REMOVE WHEN ALL PHASES ARE COMPLETE.
11	RECEPTACLE FOR SHORT THROW PROJECTOR. COORDINATE EXAC LOCATION AND ELEVATION WITH T-SERIES DRAWINGS. MOUNT ADJACENT RECEPTACLE DIRECTLY BELOW (IF SHOWN).
12	120V CONNECTION FOR SANITIZING GOGGLE CABINET. COORDINATE EXACT REQUIREMENTS WITH MANUFACTURER'S INSTALLATION GUIDELINES.
13	RECEPTACLE FOR MONITOR. COORDINATE EXAC LOCATION AND ELEVATION WITH T-SERIES DRAWINGS. MOUNT ADJACENT RECEPTACLE DIRECTLY BELOW (IF SHOWN).
14	EACH SIDE OF QUADRAPLEX SHALL HAVE A DEDICATED CIRCUIT. NO SHARED NEUTRALS.
16	PROVIDE NEW PANELBOARD TO REPLACE DEMOLISHED PANELBOARD. RECONNECT BRANCH CIRCUITS THAT WERE MAINTAINED DURING DEMOLITION TO NW PANELBOARD. SEE PANELBOARD SCHEDULE FOR BREAKER CAPACITIES AND QUANTITY.

### POWER PLAN NOTES

#	NOTES
17	PROVIDE SINGLE CHANNEL RACEWAY. SEE SPECIFICATIONS FOR EXACT REQUIREMENTS.
18	PROVIDE DUAL CHANNEL RACEWAY. SEE SPECIFICATIONS FOR EXACT REQUIREMENTS.
19	PROVIDE 4" CIRCUITS FROM EXISTING PANELBOARD PLP-1 TO LIG1 EAST WALL FOR TEMPORARY CLASSROOMS (PROVIDE SPARE BREAKERS AS REQUIRED). SEE PLAN NOTE 20 IN DETAIL 2A/EPC1 FOR EXACT LOCATION (ROOMS C101 & C102). CIRCUITS TO BE RECONNECTED TO NEW PANELBOARD 22P1 DURING PHASE 1.
20	PROVIDE SINGLE CHANNEL RACEWAY TO 2" DUPLEX RECEPTACLES FOR TEMPORARY CLASSROOM. EACH DUPLEX RECEPTACLE SHALL GET A DEDICATED CIRCUIT FROM PANELBOARD PLP-1. RUNNING THESE CIRCUITS SHALL TAKE PRIORITY OVER OTHER PHASE 1 WORK TO GET CLASSROOMS OPERABLE. THESE RECEPTACLES SHALL BE REMOVED DURING PHASE 3A. SEE DETAIL 1A/EPC1 FOR MEZZANINE PANELBOARD LOCATION.
21	THREE POLE SWITCH INDICATED TO CONTROL PENTHAOUS ACCESS A04C LIGHTS.
22	MOUNT RECEPTACLE INDICATED AT 48" DIRECTLY ABOVE ADJACENT RECEPTACLE. SEE DETAIL 2T401 FOR DATA AND POWER LAYOUT.
23	OUTDOOR UNIT POWERS INDOOR UNIT MSH-1.
24	INDOOR UNIT IS POWERED FROM OUTDOOR UNIT LOCATED ON ROOF. SEE ROOF POWER PLANS FOR ADDITIONAL INFORMATION.
25	TO KILN EXHAUST HOOD SPEED CONTROLLER.
26	KILN HOOD CONNECTION UP TO EF-13. KILN HOOD CONTROLLER BY MANUFACTURER.
27	120V CONNECTION FOR WHEEL CHAIR LIFT. COORDINATE EXACT REQUIREMENTS WITH MANUFACTURER'S INSTALLATION GUIDELINES.
28	CONNECT TO EF-10. HOOD CONTROLS BY MANUFACTURER.
29	DOWN TO HOOD CONTROLS.
30	PROVIDE NEW PANELBOARD. RECONNECT BRANCH CIRCUITS THAT WERE MAINTAINED DURING DEMOLITION TO NEW PANELBOARD.
31	SINGLE POINT CONNECTION TO DISCONNECT VFD BY DIVISION 23. COORDINATE EXACT REQUIREMENTS WITH M.C.
32	LIGHTING AND RECEPTACLE CONNECTION. COORDINATE EXACT REQUIREMENTS WITH M.C.
33	E.C. RESPONSIBLE FOR WIRING BETWEEN SPLITS.
34	PROVIDE UNISTRUT FOR DISCONNECT MOUNTING.

### POWER PLAN NOTES

#	NOTES
35	BOILER EPO. SEE SCHEMATIC SAE-603 FOR ADDITIONAL INFORMATION.
36	ROOF MOUNTED RECEPTACLE. SEE DETAIL SCIE-501.
37	120V CONNECTION FOR PLUMBING FIXTURE SENSORS.
38	DUPLEX FOR CHARGING CART.
39	RACK MOUNTED RECEPTACLES. COORDINATE EXACT LOCATION WITH TELECOMMUNICATIONS CONTRACTOR.
40	RECEPTACLE FOR ACCESS CONTROL PANEL. COORDINATE EXACT LOCATION WITH ACCESS CONTROL CONTRACTOR.
41	120V CONNECTION FOR DOOR POWER SUPPLY.
42	DUCT DETECTOR(S) INDICATED ARE ASSOCIATED WITH ROOF TOP MECHANICAL EQUIPMENT LISTED ADJACENT PLAN NOTE.
43	EXISTING ELEVATOR DISCONNECTS. CONNECT TO NEW CIRCUITS INDICATED.
44	VERIFY NEMA TYPE AND LOCATION PRIOR TO ROUGH-IN.
45	208V CONNECTION FOR STACKABLE WASHER AND DRYER. COORDINATE EXACT REQUIREMENTS WITH MANUFACTURER'S INSTALLATION GUIDELINES.
47	MOUNT OVERHEAD DOOR DISCONNECT AT MOTOR. PROVIDE WIRING TO CONTROL HOLLER. COORDINATE EXACT REQUIREMENTS WITH MANUFACTURER'S INSTALLATION GUIDELINES.
48	MICROWAVE LOCATED ON LOWER SHELF. COORDINATE ELEVATION AND LOCATION WITH CASEWORK.
49	FIRE ALARM ANNUNCIATOR PANEL WITH NOTIFIER FIRST VISION WEB BASED INTERACTIVE TOUCH SCREEN DISPLAY. SEE SPECIFICATIONS FOR ADDITIONAL INFORMATION.
50	120V CONNECTION FOR TEMPERATURE CONTROL PANEL.
51	RELAY PANEL WITH 24(1)P RELAYS. COORDINATE ALL CONNECTIONS WITH THEATRICAL LIGHTING CONSULTANT PROVIDED RISER.
52	DIN28 DMX WALL MOUNTED 14X14 ENCLOSURE. COORDINATE ALL CONNECTIONS WITH THEATRICAL LIGHTING CONSULTANT PROVIDED RISER.
53	PIPE MOUNTED QUAD AT ELECTRIC. COORDINATE ALL CONNECTIONS WITH THEATRICAL LIGHTING CONSULTANT PROVIDED RISER.
54	ONE BUTTON ENTRY STATION. COORDINATE ALL CONNECTIONS WITH THEATRICAL LIGHTING CONSULTANT PROVIDED RISER. VERIFY EXACT LOCATION WITH OWNER PRIOR TO ROUGH-IN.
55	STAGE WALL BOX. COORDINATE ALL CONNECTIONS WITH THEATRICAL LIGHTING CONSULTANT PROVIDED RISER. VERIFY EXACT LOCATION WITH OWNER PRIOR TO ROUGH-IN.

### GENERAL POWER NOTES

#	NOTES
A	REFER TO SHEET E-001 FOR ADDITIONAL INFORMATION.
B	COORDINATE ALL RECEPTACLES WITH BUSINESS FURNITURE PLANS PRIOR TO ROUGH-IN.

### POWER PLAN NOTES

#	NOTES
56	PROVIDE CIRCUIT ABOVE CEILING FOR FUTURE PROJECTOR. COORDINATE EXACT LOCATION WITH TELECOMMUNICATIONS CONTRACTOR.
57	STAGE MANAGERS PANEL. COORDINATE ALL CONNECTIONS WITH THEATRICAL LIGHTING CONSULTANT PROVIDED RISER. VERIFY EXACT LOCATION WITH OWNER PRIOR TO ROUGH-IN.
58	CONTROL CONSOLE. COORDINATE ALL CONNECTIONS WITH THEATRICAL LIGHTING CONSULTANT PROVIDED RISER. VERIFY EXACT LOCATION WITH OWNER PRIOR TO ROUGH-IN.
59	VFD FURNISHED BY DIVISION 23. INSTALLED BY DIVISION 26.
60	ROUTE HOT CONDUCTOR THROUGH WATER HEATER CONTROL PANEL AHEAD OF MOTOR STARTER. SEE MANUFACTURER WIRING DIAGRAM FOR EXACT REQUIREMENTS.
61	FIRE ALARM ADDRESSABLE RELAYS. ONE FOR THE P.A. SYSTEM THE SECOND FOR ACCESS CONTROL. COORDINATE EXACT REQUIREMENTS WITH ASSOCIATED CONTRACTORS.
62	CONNECT ELECTRONIC METERING TO BMS SYSTEM.
63	12"X12" 6" JUNCTION BOX FOR MOTORIZED BLEACHERS. INSTALL BOX AT 5'-0" A.F.F. TO C.L. INSTALL IN LOCATION AS RECOMMENDED BY BLEACHER MANUFACTURER. CONTACTORS AND CONTROLLERS ARE PROVIDED. INSTALLED AND WIRED BY MANUFACTURER. INSTALL (1) 3/4" C BETWEEN BOX AND ADJACENT DISCONNECT SWITCH. CONNECT COMPLETE.
64	120V CONNECTION FOR MOTORIZED SHADES.
65	SAW CUT TO PROVIDE POWER AND DATA TO RECEPTION DESK.
66	120V CONNECTION FOR TIME CLOCK. COORDINATE EXACT LOCATION PRIOR TO ROUGH-IN.
67	RECEPTACLE FOR METAL DETECTOR. COORDINATE EXACT LOCATION WITH OWNER PRIOR TO ROUGH-IN.
68	120V CONNECTION FOR LIFE SKILLS ALARM HORN.
69	PROVIDE ACOUSTICAL PUTTY FOR DEVICE INDICATED.
70	COORDINATE LOCATION OF CEILING RECEPTACLES WITH OWNER PRIOR TO ROUGH-IN.
71	QUAD RECEPTACLES INDICATED SHALL BE MOUNTED TO PIP GRID. COORDINATE EXACT LOCATION WITH OWNER.
72	PROVIDE CONCRETE ENCASED DUCT BANK FOR ALL GENERATOR CONDUIT. SEE DETAIL SAE-502 FOR ADDITIONAL INFORMATION.
73	PROVIDE CONCRETE ENCASED DUCT BANK FOR SERVICE ENTRANCE FEEDERS. SEE DETAIL SAE-502 FOR ADDITIONAL INFORMATION.
74	PROVIDE (1) SMOKE DETECTOR, (1) HORN/STROBE AND (1) STROBE IN UNDER STAGE STORAGE.
75	120V CONNECTION FOR FIRE ALARM CONTROL PANEL.



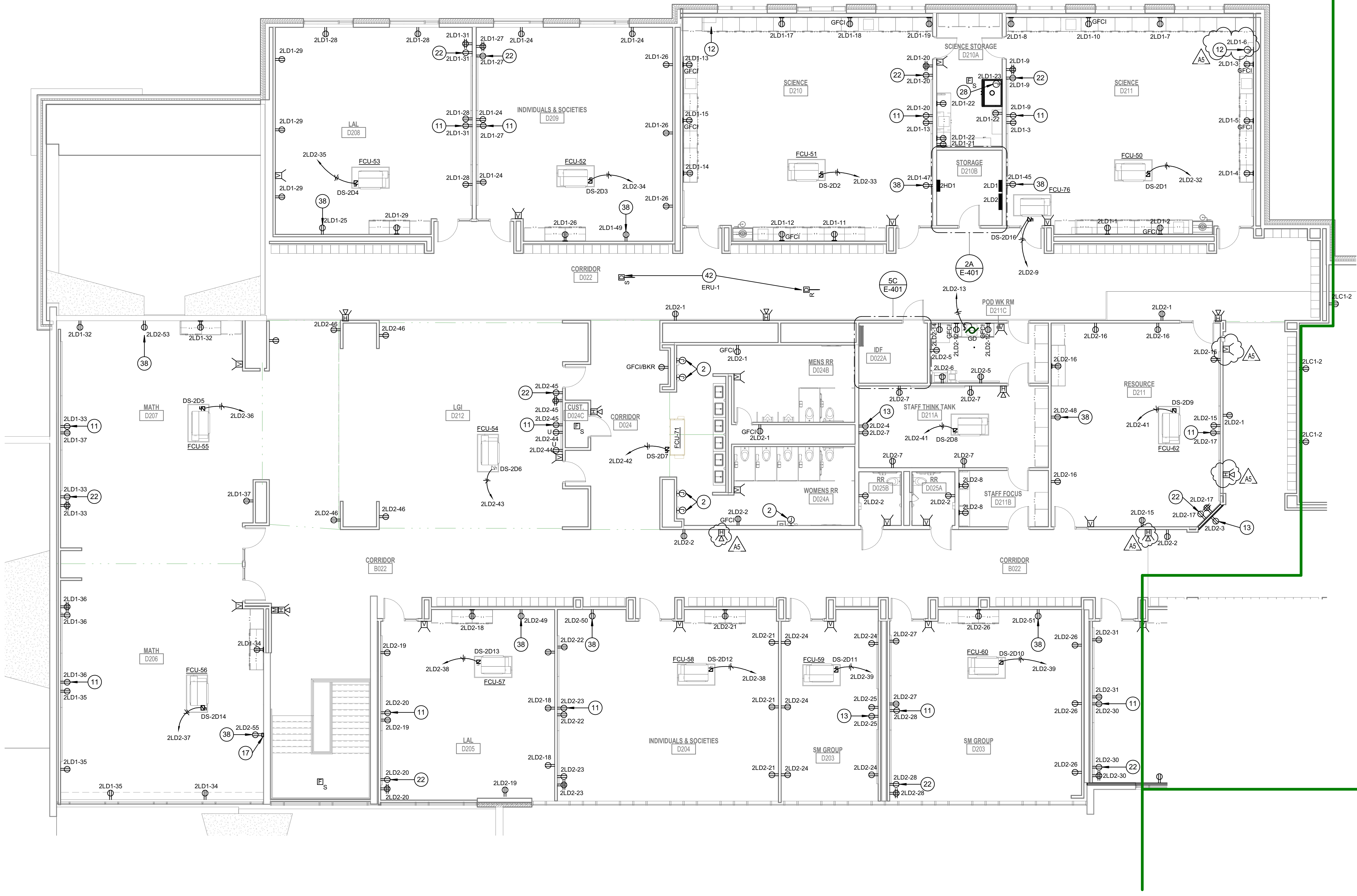
Project No. 2017-114.EMS  
 Project Date 10.17.18  
 Produced DLJ

## Bid Documents



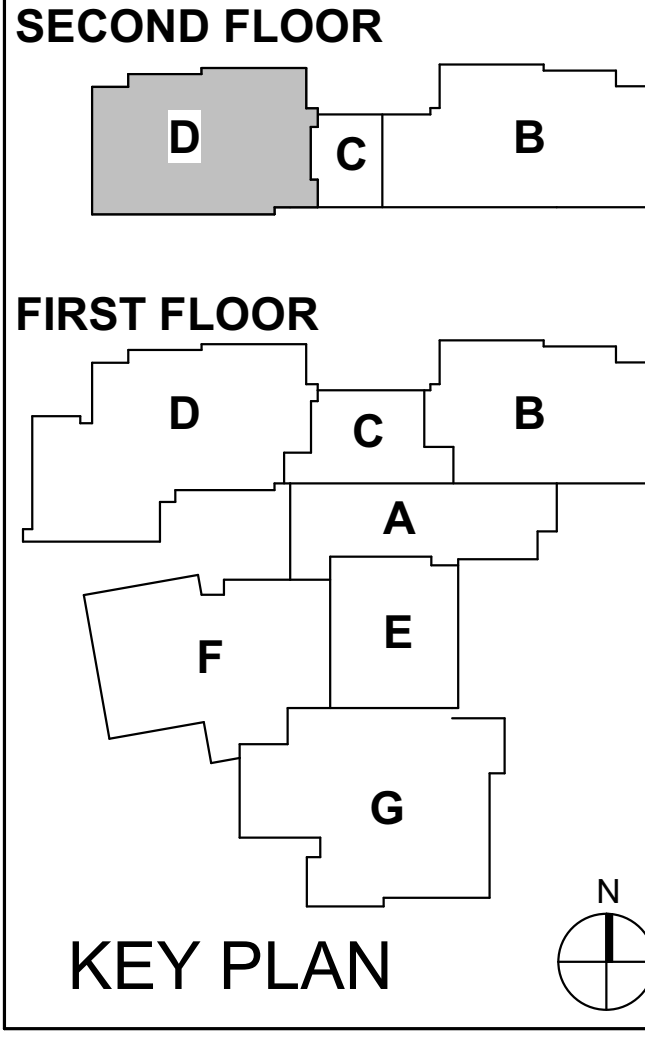
These Drawings and Specifications, and all copies thereof are and shall remain the property and copyright of the Architect. They shall be used only with respect to this Project and are not to be used on any other Project or Work without prior written permission from the Architect.

#	Revision	Date
A1	Addendum #1	10.25.2018
A2	Addendum #2	11.01.2018
A5	Addendum #5	11.16.2018



2A SECOND FLOOR POWER PLAN - UNIT D  
 1/8" = 1'-0"

4401 East 62nd Street  
 Indianapolis, IN 46220



EASTWOOD MIDDLE SCHOOL

SECOND FLOOR POWER PLAN - UNIT D

EP1D2



KITCHEN SCHEDULE											
ITEM	EQUIPMENT DESCRIPTION	VOLTAGE	PHASE	AMP	PANEL	CIRCUIT #	WIRE SIZE	P	N	G	REMARKS
E5A	LIGHTS AND DOOR OPTIONS	120 V	1	8.00 A	1LK1	61	F20	1	1	1	E.C. RESPONSIBLE FOR ALL FINAL ELECTRICAL HOOK-UPS AND DISCONNECTS TO LIGHTS AND ALL HEATED DOOR OPTIONS. SEE FOOD SERVICE DRAWINGS FOR EXACT REQUIREMENTS.
E5B	HEAT DRAIN TAPE	120 V	1	8.00 A	1LK1	62	F20	1	1	1	SEE FOOD SERVICE DRAWINGS FOR EXACT REQUIREMENTS.
E5C	FREEZER CONDENSER	208 V	1	16.70 A	1LK1	51,53	F30	3	0	1	CONDENSER LOCATED ON ROOF. FURNISH AND INSTALL ALL CONDUIT AND WIRING NECESSARY BETWEEN EVAPORATOR COILS, CONDENSING UNITS AND ELECTRICAL DISCONNECTS. CONDENSING UNIT POWER SHALL FEED EVAPORATOR FANS AND EVAPORATOR HEATER. SEE FOOD SERVICE DRAWINGS FOR EXACT REQUIREMENTS.
E13A	LIGHTS AND DOOR OPTIONS	120 V	1	8.00 A	1LF3	1	F20	1	1	1	E.C. RESPONSIBLE FOR ALL FINAL ELECTRICAL HOOK-UPS AND DISCONNECTS TO LIGHTS AND ALL HEATED DOOR OPTIONS. SEE FOOD SERVICE DRAWINGS FOR EXACT REQUIREMENTS.
E13B	COOLER EVAPORATOR FANS	120 V	1	1.60 A	1LF3	2	F20	1	1	1	E.C. RESPONSIBLE FOR ALL FINAL ELECTRICAL HOOK-UPS AND DISCONNECTS TO LIGHTS AND ALL HEATED DOOR OPTIONS. SEE FOOD SERVICE DRAWINGS FOR EXACT REQUIREMENTS.
E13C	COOLER CONDENSER	208 V	1	16.70 A	1LF3	3,5,7	F30	3	0	1	CONDENSER LOCATED ON ROOF. FURNISH AND INSTALL ALL CONDUIT AND WIRING NECESSARY BETWEEN EVAPORATOR COILS, CONDENSING UNITS AND ELECTRICAL DISCONNECTS. SEE FOOD SERVICE DRAWINGS FOR EXACT REQUIREMENTS.
E16A	WORK TABLE	120 V	1	16.00 A	1LK2	51	F20	1	1	1	CONNECT CIRCUIT TO MANUFACTURER PROVIDED JUNCTION BOX. PROVIDE SAW CUTTING AS REQUIRED.
E16B	WORK TABLE	120 V	1	16.00 A	1LK2	53	F20	1	1	1	CONNECT CIRCUIT TO MANUFACTURER PROVIDED JUNCTION BOX. PROVIDE SAW CUTTING AS REQUIRED.
E16C	WORK TABLE	208 V	1	24.00 A	1LK2	48,50	F30	2	0	1	CONNECT CIRCUIT TO MANUFACTURER PROVIDED JUNCTION BOX.
E19A	STEAMER	480 V	3	0.00 A	1HK1	2,4,6	F30	3	1	1	PROVIDE SHUNT TRIP BREAKER. VERIFY CONNECTION WITH EXISTING EQUIPMENT.
E19B	STEAMER	480 V	3	0.00 A	1HK1	9,11,13	F30	3	1	1	PROVIDE SHUNT TRIP BREAKER. VERIFY CONNECTION WITH EXISTING EQUIPMENT.
E20A	RACK OVEN	120 V	1	9.40 A	1LK2	47	F20	1	1	1	
E20B	RACK OVEN	480 V	3	22.00 A	F30	3	F30	3	1	1	PROVIDE SHUNT TRIP BREAKER. VERIFY CONNECTION WITH EXISTING EQUIPMENT.
E21A	COMBI OVEN	480 V	3	28.90 A	1HK1	10,12,14	F40	3	1	1	PROVIDE SHUNT TRIP BREAKER.
E21B	COMBI OVEN	480 V	3	28.90 A	1HK1	16,18,20	F40	3	1	1	PROVIDE SHUNT TRIP BREAKER.
E22	TILT SKILLET	480 V	3	8.00 A	1HK1	1,3,5	F20	3	1	1	PROVIDE SHUNT TRIP BREAKER. VERIFY CONNECTION WITH EXISTING EQUIPMENT.
E23	HOOD JUNCTION BOX	120 V	1	5.00 A	1LK1	60	F20	1	1	1	SEE FOOD SERVICE DRAWINGS FOR EXACT REQUIREMENTS.
E23A	FIRE SUPPRESSION SYSTEM	120 V	1	5.00 A	1LK1	11	F20	1	1	1	SEE FOOD SERVICE DRAWINGS FOR EXACT REQUIREMENTS.
E23B	HOOD EXHAUST FAN	480 V	3	3.30 A	1HK1	24,26,28	F20	3	0	1	FAN LOCATED ON ROOF. SEE FOOD SERVICE DRAWINGS FOR EXACT REQUIREMENTS.
E23C	HOOD SUPPLY FAN	120 V	3	7.10 A	1LK1	37	F30	3	0	1	FAN LOCATED ON ROOF. SEE FOOD SERVICE DRAWINGS FOR EXACT REQUIREMENTS.
E25A	WORK TABLE	120 V	1	16.00 A	1LK2	43	F20	1	1	1	CONNECT CIRCUIT TO MANUFACTURER PROVIDED JUNCTION BOX. PROVIDE SAW CUTTING AS REQUIRED.
E25B	WORK TABLE	120 V	1	16.00 A	1LK2	45	F20	1	1	1	CONNECT CIRCUIT TO MANUFACTURER PROVIDED JUNCTION BOX. PROVIDE SAW CUTTING AS REQUIRED.
E25C	WORK TABLE	208 V	1	24.00 A	1LK2	44,46	F30	2	0	1	CONNECT CIRCUIT TO MANUFACTURER PROVIDED JUNCTION BOX. PROVIDE SAW CUTTING AS REQUIRED.
E28	PASS THROUGH REF.	120 V	1	7.20 A	1LK1	25	F20	1	1	1	PROVIDE NEMA 5-20R. LOCATE RECEPTACLE IN FLOOR BOX SHOWN. SAW CUT AS REQUIRED. INCLUDE WORK IN BASE BID.
E28A	PASS THROUGH REF.	120 V	1	7.20 A	1LK1	27	F20	1	1	1	PROVIDE NEMA 5-20R. INCLUDE WORK IN BASE BID.
E28B	PASS THROUGH REF.	120 V	1	7.20 A	1LK1	59	F20	1	1	1	PROVIDE NEMA 5-20R. INCLUDE WORK IN BASE BID.
E29	PASS THROUGH HEAT	208 V	1	7.80 A	1LK1	56,58	F20	2	1	1	PROVIDE NEMA L14-20R. INCLUDE WORK IN BASE BID.
E29A	PASS THROUGH HEAT	208 V	1	7.80 A	1LK1	61,63	F20	2	1	1	PROVIDE NEMA L14-20R. INCLUDE WORK IN BASE BID.
E29B	PASS THROUGH HEAT	208 V	1	7.80 A	1LK1	65,67	F20	2	1	1	PROVIDE NEMA L14-20R. INCLUDE WORK IN BASE BID.
E32	DROP-IN FROST TOP	120 V	1	6.70 A	1LK1	68	F20	1	1	1	PROVIDE NEMA 5-20R. INCLUDE WORK IN BASE BID.
E32A	DROP-IN FROST TOP	120 V	1	6.70 A	1LK1	70	F20	1	1	1	PROVIDE NEMA 5-20R. INCLUDE WORK IN BASE BID. PROVIDE SINGLE CHANNEL SURFACE RACEWAY. COORDINATE BEST LOCATION WITH FOOD SERVICE CONTRACTOR.
E34	FOUR PAN HOT FOOD TABLE	208 V	1	22.00 A	1LF3	49,51	F30	2	1	1	VERIFY CONNECTION WITH EXISTING EQUIPMENT. INCLUDE WORK IN BASE BID.
E34A	FOUR PAN HOT FOOD TABLE	208 V	1	22.00 A	1LF3	48,50	F30	2	1	1	VERIFY CONNECTION WITH EXISTING EQUIPMENT. LOCATE RECEPTACLE IN FLOOR BOX SHOWN. SAW CUT AS REQUIRED. INCLUDE WORK IN BASE BID.
E35	HOT FOOD MERCHANDISER	208 V	1	10.20 A	1LF3	52,54	F20	2	1	1	VERIFY CONNECTION WITH EXISTING EQUIPMENT. LOCATE RECEPTACLE IN FLOOR BOX SHOWN. SAW CUT AS REQUIRED. INCLUDE WORK IN BASE BID.
E35A	REFRIGERATED MERCHANDISER	208 V	1	16.00 A	<unnamed>	F20	2	1	1	1	VERIFY CONNECTION WITH EXISTING EQUIPMENT. LOCATE RECEPTACLE IN FLOOR BOX SHOWN. SAW CUT AS REQUIRED. INCLUDE WORK IN BASE BID.
E38	DROP-IN FROST TOP/DROP-IN TWO PAN HOT/COLD WELL	120 V	1	9.60 A	1LF3	53	F20	2	1	1	PROVIDE NEMA L14-20R. INCLUDE WORK IN BASE BID.
E41	DROP-IN FROST TOP	120 V	1	6.70 A	1LK1	74	F30	2	1	1	PROVIDE NEMA 5-20R. INCLUDE WORK IN BASE BID.
E43	REFRIGERATED ISLAND MERCHANDISER	120 V	1	20.97 A	1LK1	74	F30	2	1	1	PROVIDE NEMA 5-20R. LOCATE RECEPTACLE IN FLOOR BOX SHOWN. SAW CUT AS REQUIRED. INCLUDE WORK IN BASE BID.
E45	GARGAGE DISPOSAL SYSTEM	208 V	3	7.50 A	1LK1	75,77,79	F20	3	0	1	CONNECT TO K.E.C. FURNISHED CONTROL PANEL.
E49	MILK COOLER	120 V	1	2.70 A	1LK1	72	F20	1	1	1	PROVIDE NEMA 5-20R. INCLUDE WORK IN BASE BID.
E50	REFRIGERATED MERCHANDISER	208 V	1	16.00 A	1LK1	64,66	F20	2	1	1	VERIFY CONNECTION WITH EXISTING EQUIPMENT. LOCATE RECEPTACLE IN FLOOR BOX SHOWN. SAW CUT AS REQUIRED. INCLUDE WORK IN BASE BID.
E50A	REFRIGERATED MERCHANDISER	208 V	1	16.00 A	1LK1	69,71	F20	2	1	1	VERIFY CONNECTION WITH EXISTING EQUIPMENT. LOCATE RECEPTACLE IN FLOOR BOX SHOWN. SAW CUT AS REQUIRED. INCLUDE WORK IN BASE BID.
E52	P.O.S.	120 V	1	20.97 A	1LK1	73	F20	2	1	1	PROVIDE NEMA 5-20R. LOCATE RECEPTACLE IN FLOOR BOX SHOWN. SAW CUT AS REQUIRED. INCLUDE WORK IN BASE BID.
E54A	WASHER	120 V	1	10.00 A	1LF2	25	F20	1	1	1	
E54B	DRYER	208 V	3	24.00 A	1LF2	24,26	F30	2	1	1	PROVIDE NEMA 14-30R. VERIFY NEMA CONFIGURATION WITH SUPPLIER.

**GENERAL KITCHEN NOTES**

**NOTES**

- REFER TO SHEET E-001 FOR ADDITIONAL INFORMATION.
- REFER TO FOOD SERVICE DRAWINGS, DETAILS AND REQUIREMENTS FOR ALL RECEPTACLE AND DIRECT CONNECTION MOUNTING HEIGHTS.
- FOOD SERVICE DRAWING REQUIREMENTS SUPERCEDES ALL WORK SHOWN ON THIS DRAWING.
- FIELD VERIFY BREAKER SIZES AND QUANTITIES WITH NEW AND EXISTING EQUIPMENT. EXISTING CIRCUITS ARE UNKNOWN AND DUPLICATES WILL BE PRESENT.

**KITCHEN POWER PLAN NOTES**

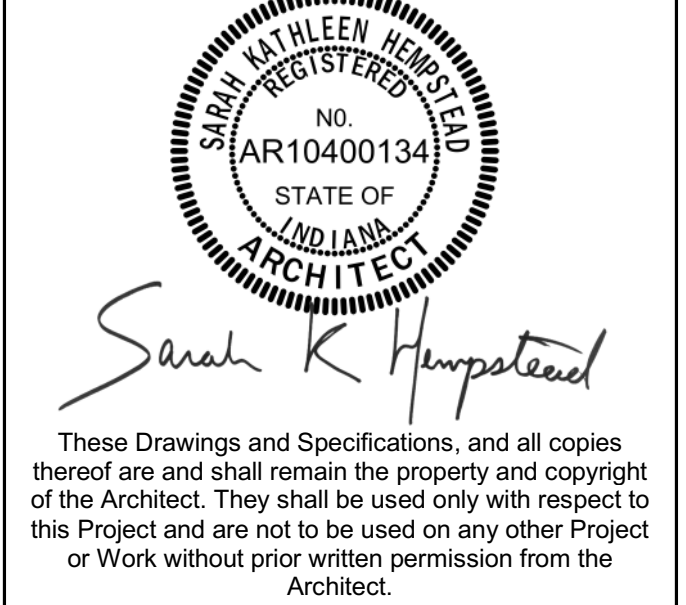
**NOTES**

- E.C. SHALL PROVIDE CONTROL WIRING FROM TERMINAL BLOCK ON HOOD TO MICRO SWITCH IN FIRE PROTECTION SYSTEM CABINET.
- CONTROL WIRING PIGTAIL FROM TERMINAL STRIP IN HOOD JUNCTION BOX TO SUPPLY FAN FURNISHED BY K.E.C. INSTALLED BY E.C.
- PROVIDE CONDUIT AND FOUR WIRES FROM TERMINAL BLOCK ON HOOD TO EXHAUST FAN MOTOR STARTER PANEL.
- E.C. SHALL FURNISH AND INSTALL AN OCTAGON BOX FOR THE FIRE SYSTEM PULL STATION, MOUNTING THE CENTERLINE OF THE BOX AT 42" AFF. RUN 1/2" CONDUIT FROM THE TOP OF THE BOX TO 6" ABOVE THE CEILING. COORDINATE EXACT LOCATION WITH K.E.C.
- RECEPTACLE FOR MONITOR. COORDINATE EXACT LOCATION AND ELEVATION WITH T-SERIES DRAWINGS. MOUNT ADJACENT RECEPTACLE DIRECTLY BELOW (IF SHOWN).
- USE BACK BOX THAT WAS MAINTAINED DURING DEMOLITION FOR NEW DEVICE.
- RECONNECT IMMERSION HEATER TO CIRCUIT THAT WAS MAINTAINED DURING DEMOLITION. EXTEND WIRE AND CONDUIT AS REQUIRED.
- RECONNECT GARGAGE DISPOSAL TO CIRCUIT THAT WAS MAINTAINED DURING DEMOLITION. EXTEND WIRE AND CONDUIT AS REQUIRED.
- RECONNECT DISHWASHER AND BOOSTER HEATER TO CIRCUIT THAT WAS MAINTAINED DURING DEMOLITION.

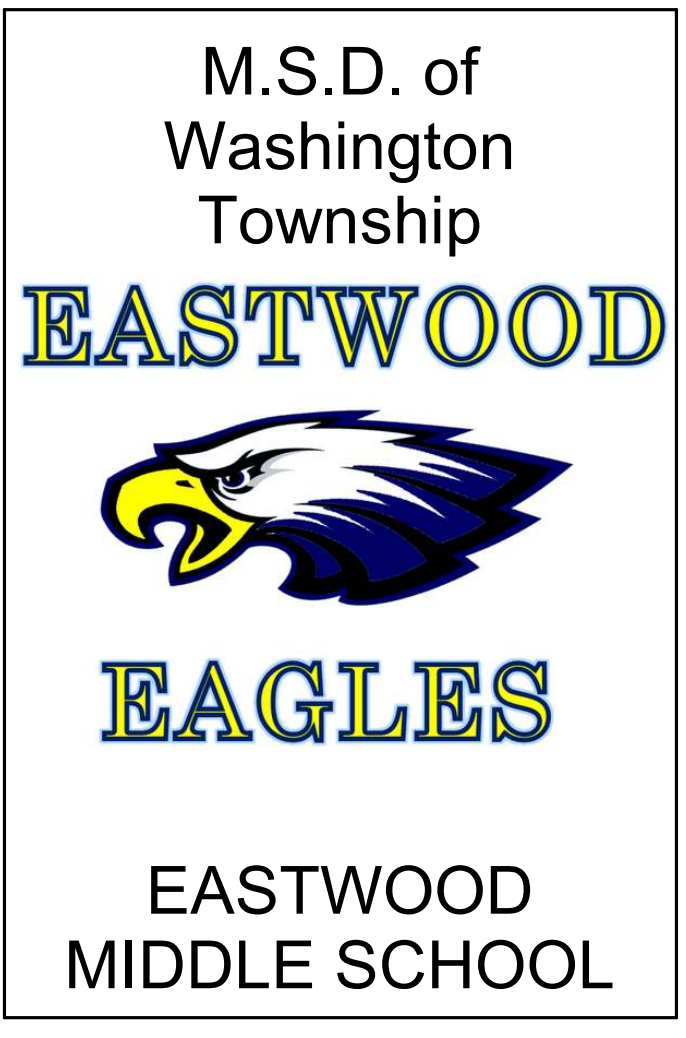
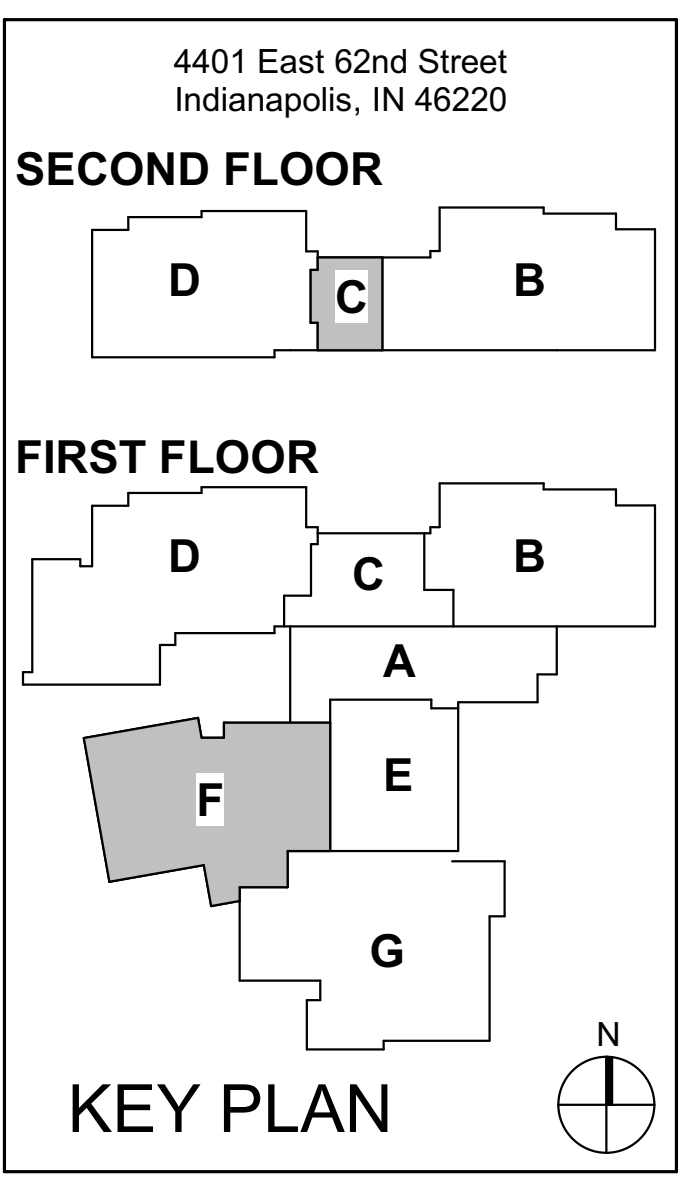


Project No. 2017-114.EMS  
 Project Date 10.17.18  
 Produced DLJ

**Bid Documents**

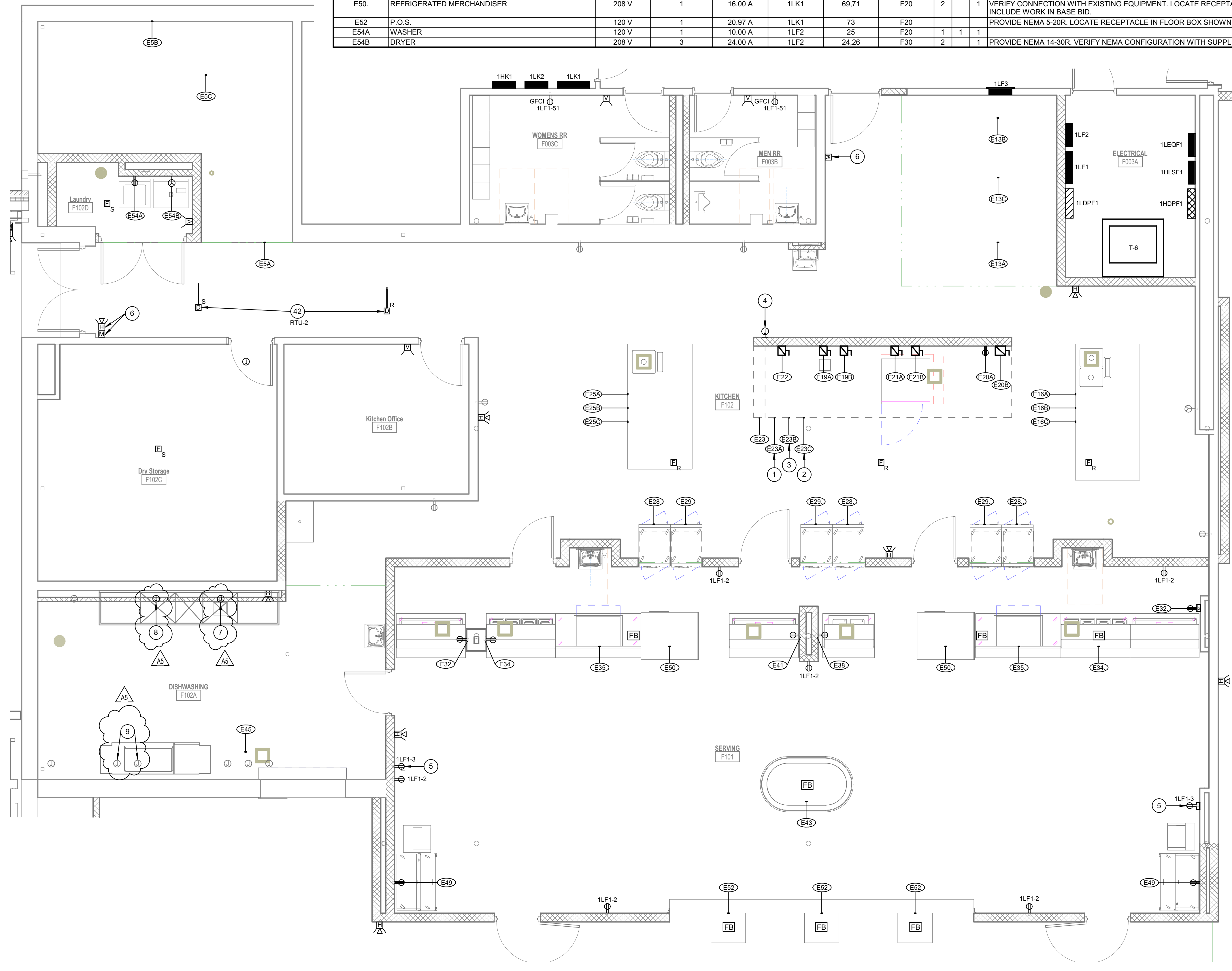


#	Revision	Date
A2	Addendum #2	11.01.2018
A5	Addendum #5	11.16.2018



ENLARGED PLANS

E-403



**2A ENLARGED KITCHEN POWER PLAN**  
 1/4" = 1'-0"

4/18/2018 10:42 AM  
 2017-114.EMS E-403  
 Project: 2017-114.EMS  
 Drawing: E-403  
 Title: ENLARGED PLANS  
 Author: DLJ  
 Date: 10/17/18  
 Scale: 1/4" = 1'-0"  
 Plot: 10/17/18 10:42 AM



E  
D  
C  
B  
A

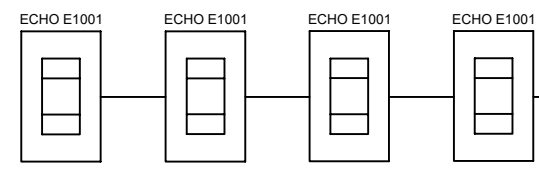
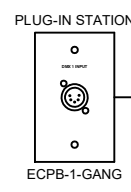
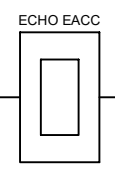
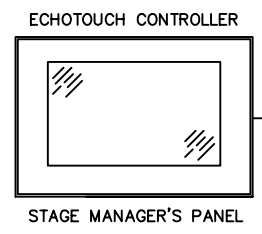
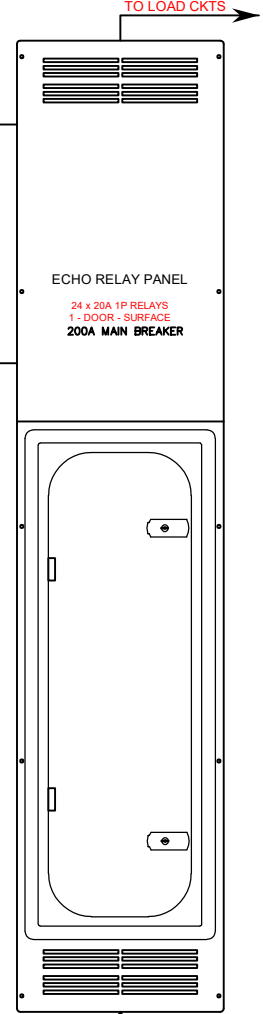
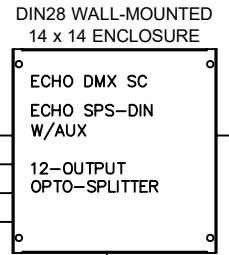
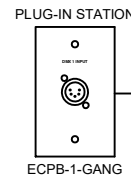
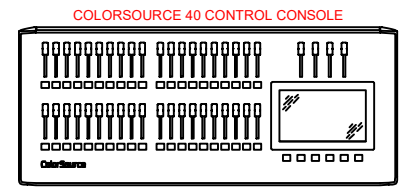
FIXTURE	DESCRIPTION	VOLTAGE	TYPE	SOURCE			MOUNTING	LENS/REFLECTOR	CERTIFICATIONS	ACCEPTABLE MANUFACTURERS	FIXTURE
				LUMENS	WATTS	CCT					
L31	2 LENSED LED STRIP LIGHT, 0-10V DIMMING, WHITE FINISH.	120/277 V	LED	2,300 LM	22 W	4000 K	WALL MOUNTED	SEMI-FROSTED LENS	DLIC	METALUX SNLED COLUMBIA LCL LITHONIA ZL1D	L31
L32S	2X4 PRISMATIC LED TROFFER, WHITE FLUSH ALUMINUM DOOR, 0-10V DIMMING, TRIPLE GASKETED WITH SMOOTH LENS, PROVIDE INTEGRAL SHUNT RELAY.	120/277 V	LED	7,400 LM	59 W	3500 K	RECESSED IN GRID	PATTERN 12 FROST ACRYLIC LENS, 0.125" MINIMUM	DLIC	METALUX 24GR COLUMBIA LJ24 LITHONIA 2GTL4	L32S
L33	LED TAPE LIGHT WITH ALUMINUM RIGID MOUNTING CHANNEL.	120/277 V	LED	260 LM PER FOOT	0 W	4000 K	SURFACE/CEILING	FROSTED ACRYLIC LENS	DLIC	CONTECH KLU5 DESIGN ILLI ARCHITECTURAL LIGHTING	L33
L34	LED MARINE GRADE SURFACE MOUNTED EXTERIOR FIXTURE	120/277 V	LED	5,657 LM	56 W	4000 K	SURFACE/CEILING	PRISMATIC POLYCARBONATE CLEAR LENS	DLIC	LUMINAIRE ANX13 KENALL MR13PD NEWSTAR TR	L34
L35	LED WALL LIGHT, DIE-CAST ALUMINUM HOUSING, HINGED DOOR FRAME, DARK BRONZE FINISH, U.L. LISTED FOR WET LOCATIONS.	120/277 V	LED	4,300 LM	50 W	4000 K	WALL MOUNTED	TYPE IV DISTRIBUTION	DLIC	MCGRAW-EDISON ISS SPAULDING QSP LITHONIA WSG	L35
L36	LED WALL LIGHT, DIE-CAST ALUMINUM HOUSING, HINGED DOOR FRAME, DARK BRONZE FINISH, U.L. LISTED FOR WET LOCATIONS.	120/277 V	LED	6,400 LM	61 W	4000 K	WALL MOUNTED	TYPE IV DISTRIBUTION	DLIC	MCGRAW-EDISON ISS SPAULDING QSP LITHONIA WSG	L36
L37	4" ROUND LED DOWNLIGHT, SELF-FLANGED TRIM, WIDE DISTRIBUTION (75"), 0-10V DIMMING.	120/277 V	LED	1,000 LM	11 W	4000 K	RECESSED IN DRYWALL	SEMI-SPECULAR CLEAR	ENERGY STAR	PORTFOLIO LD4B GOTHAM EVO PRESCOLITE LF4SL	L37
L38	36" EXTERIOR SURFACE MOUNTED EXTRUDED ALUMINUM LED FIXTURE, U.L. LISTED WET LOCATION, BRONZE FINISH, SELF-TESTING, SELF-CONTAINED 90 MINUTE EMERGENCY BATTERY PACK.	120/277 V	LED	1,300 LM	15 W	4000 K	SURFACE/WALL	DIFFUSED POLYCARBONATE	N/A	LUMINAIRE BLD38 NEW STAR GTW	L38
L39	48" EXTERIOR SURFACE MOUNTED EXTRUDED ALUMINUM LED FIXTURE, U.L. LISTED WET LOCATION, BRONZE FINISH, SELF-TESTING, SELF-CONTAINED 90 MINUTE EMERGENCY BATTERY PACK.	120/277 V	LED	2,000 LM	20 W	4000 K	SURFACE/WALL	DIFFUSED POLYCARBONATE	N/A	LUMINAIRE BLD48 NEW STAR GTW	L39
L40	72" EXTERIOR SURFACE MOUNTED EXTRUDED ALUMINUM LED FIXTURE, U.L. LISTED WET LOCATION, BRONZE FINISH, SELF-TESTING, SELF-CONTAINED 90 MINUTE EMERGENCY BATTERY PACK.	120/277 V	LED	3,000 LM	30 W	4000 K	SURFACE/WALL	DIFFUSED POLYCARBONATE	N/A	LUMINAIRE BLD72 NEW STAR GTW	L40
L41	1X4 PRISMATIC LED TROFFER, WHITE FLUSH ALUMINUM DOOR, 0-10V DIMMING.	120/277 V	LED	4,200 LM	38 W	4000 K	RECESSED IN GRID	PATTERN 12 FROST ACRYLIC LENS, 0.125" MINIMUM	DLIC	METALUX 14GR COLUMBIA LJ14 LITHONIA GTL	L41
L42	2X4 PRISMATIC LED TROFFER, WHITE FLUSH ALUMINUM DOOR, 0-10V DIMMING, TRIPLE GASKETED WITH SMOOTH LENS.	120/277 V	LED	7,400 LM	59 W	4000 K	RECESSED IN GRID	PATTERN 12 FROST ACRYLIC LENS, 0.125" MINIMUM	DLIC	METALUX 24GR COLUMBIA LJ24 LITHONIA 2GTL4	L42
L43	2X4 ARCHITECTURAL LED TROFFER, WHITE FLUSH ALUMINUM DOOR, 0-10V DIMMING.	120/277 V	LED	8,500 LM	74 W	4000 K	RECESSED IN GRID	SMOOTH FROSTED ACRYLIC LENS	DLIC	METALUX 24RTC COLUMBIA LCA24 LITHONIA 2BLT4	L43
L43S	2X4 ARCHITECTURAL LED TROFFER, WHITE FLUSH ALUMINUM DOOR, 0-10V DIMMING, PROVIDE INTEGRAL SHUNT RELAY.	120/277 V	LED	8,500 LM	74 W	4000 K	RECESSED IN GRID	SMOOTH FROSTED ACRYLIC LENS	DLIC	METALUX 24RTC COLUMBIA LCA24 LITHONIA 2BLT4	L43S
L44	DIRECT/INDIRECT LED PENDANT	120/277 V	LED	3,697 LM	36 W	4000 K	PENDANT	FROSTED LENS	DLIC	COOPER 12 IRRIDIUM DAY-LITE STYL FINELITE S1818 14" X 18" 18" E-BECON, P/N: 131-9	L44
L45	4" LED ROUND PENDANT, CUSTOM FINISH AS SELECTED BY OWNER	120/277 V	LED	5,350 LM	80 W	4000 K	PENDANT (AC)	ACRYLIC LENS	N/A	GLIGHTING ORBIS: BIRCHWOOD LIGHTING KATRINA: SPI LIGHTING NOVATO RING	L45
L46	8" LED CYLINDER, BLACK FINISH.	120/277 V	LED	6,000 LM	73 W	4000 K	3/8" THREAD PENDANT	MATTE DIFFUSE	N/A	LITHONIA LDN9CYL PRESCOLITE MEGALLUM PORTFOLIO LDR88	L46
L47	EXTRUDED ALUMINUM LED PENDANT, 0-10V DIMMING, 25% UP LIGHT, 75% DOWN LIGHT.	120/277 V	LED	4,000 LM PER 4"	38 W	3500 K	PENDANT	FLUSH SATIN LENS	N/A	CORE LITE CONTINUA PEARLLESS STAPLE FINELITE SERIES 18	L47
L47E	EXTRUDED ALUMINUM LED PENDANT, 0-10V DIMMING, 25% UP LIGHT, 75% DOWN LIGHT, PROVIDE INTEGRAL SHUNT RELAY.	120/277 V	LED	4,000 LM PER 4"	38 W	4000 K	PENDANT	FLUSH SATIN LENS	N/A	CORE LITE CONTINUA PEARLLESS STAPLE FINELITE SERIES 18	L47E
L48	LED VANDAL RESISTANCE SCONCE WITH DECORATIVE TRIM, ALUMINUM HOUSING WITH LIFE TIME WARRANTY.	120/277 V	LED	2,300 LM	20 W	4000 K	STEAL CROSS	OPAL POLYCARBONATE	UL	LUMINAIRE SONAR-KEN	L48
L49	8" LED CYLINDER, BLACK FINISH.	120/277 V	LED	6,000 LM	91 W	4000 K	3/8" THREAD PENDANT	MATTE DIFFUSE	N/A	LITHONIA LDN9CYL PRESCOLITE MEGALLUM PORTFOLIO LDR88	L49
L50	LED IN-GROUND BUILDING FLOOD LIGHT, HEAVY DUTY DIE-CAST ALUMINUM, UL LISTED FOR WET LOCATION.	120/277 V	LED	2,891 LM	26 W	4000 K	GROUND MOUNTED	TEMPERED GLASS	DLIC	LUMARK NFLED-S-C70-D-LVW-33 LITHONIA DSX15 FIELDED HUBBELL FML	L50
L51	DECORATIVE LED PENDANT/ SILVER/ALUMINUM FINISH, 6" FROSTED ACRYLIC LENS WITH CLEAR OUTER GLASS, MONOPOINT CANOPY, 0-10V DIMMING.	120/277 V	LED	700 LM	12 W	4000 K	MONOPOINT PENDANT	GLASS	N/A	PRIMA CONTOR VII OR APPROVED EQUAL	L51
S1	LED SITE FIXTURE TYPE II DISTRIBUTION, SINGLE-PIECE ALUMINUM HOUSING, ARM MOUNT, U.L. LISTED WET LOCATION, DARK BRONZE FINISH, ROUND, STRAIGHT, ALUMINUM, POLE DESIGNED TO SUPPORT FIXTURE(S) IN 100 MPH WINDS WITH 1.3 GUST FACTOR, PRIMARY FUSES, FLAT LENS, SURGE PROTECTION, (1) HEAD.	277 V	LED	19,305 LM	183 W	4000 K	25' POLE, BASE BY DIVISION 26 CONTRACTOR	ACRYLIC LENS	N/A	MCGRAW-EDISON GLEON LED BEACON VPS LITHONIA DSX1 LED	S1
S2	LED SITE FIXTURE TYPE III DISTRIBUTION, SINGLE-PIECE ALUMINUM HOUSING, ARM MOUNT, U.L. LISTED WET LOCATION, DARK BRONZE FINISH, ROUND, STRAIGHT, ALUMINUM, POLE DESIGNED TO SUPPORT FIXTURE(S) IN 100 MPH WINDS WITH 1.3 GUST FACTOR, PRIMARY FUSES, FLAT LENS, SURGE PROTECTION, (1) HEAD.	277 V	LED	19,258 LM	183 W	4000 K	25' POLE, BASE BY DIVISION 26 CONTRACTOR	ACRYLIC LENS	N/A	MCGRAW-EDISON GLEON LED BEACON VPS LITHONIA DSX1 LED	S2
S3	LED SITE FIXTURE TYPE IV DISTRIBUTION, SINGLE-PIECE ALUMINUM HOUSING, ARM MOUNT, U.L. LISTED WET LOCATION, DARK BRONZE FINISH, ROUND, STRAIGHT, ALUMINUM, POLE DESIGNED TO SUPPORT FIXTURE(S) IN 100 MPH WINDS WITH 1.3 GUST FACTOR, PRIMARY FUSES, FLAT LENS, SURGE PROTECTION, (1) HEAD.	277 V	LED	18,840 LM	183 W	4000 K	25' POLE, BASE BY DIVISION 26 CONTRACTOR	ACRYLIC LENS	N/A	MCGRAW-EDISON GLEON LED BEACON VPS LITHONIA DSX1 LED	S3
S4	LED SITE FIXTURE, SINGLE-PIECE ALUMINUM HOUSING, ARM MOUNT, U.L. LISTED WET LOCATION, DARK BRONZE FINISH, ROUND, STRAIGHT, ALUMINUM, POLE DESIGNED TO SUPPORT FIXTURE(S) IN 100 MPH WINDS WITH 1.3 GUST FACTOR, PRIMARY FUSES, FLAT LENS, SURGE PROTECTION, (2) HEADS, 180' APART.	277 V	LED	18,840 LM PER HEAD	366 W	4000 K	25' POLE, BASE BY DIVISION 26 CONTRACTOR	ACRYLIC LENS	N/A	MCGRAW-EDISON GLEON LED BEACON VPS LITHONIA DSX1 LED	S4
S5	LED SITE FIXTURE, SINGLE-PIECE ALUMINUM HOUSING, ARM MOUNT, U.L. LISTED WET LOCATION, DARK BRONZE FINISH, ROUND, STRAIGHT, ALUMINUM, POLE DESIGNED TO SUPPORT FIXTURE(S) IN 100 MPH WINDS WITH 1.3 GUST FACTOR, PRIMARY FUSES, FLAT LENS, SURGE PROTECTION, (2) HEADS, 180' APART.	277 V	LED	19,258 LM PER HEAD	366 W	4000 K	25' POLE, BASE BY DIVISION 26 CONTRACTOR	ACRYLIC LENS	N/A	MCGRAW-EDISON GLEON LED BEACON VPS LITHONIA DSX1 LED	S5
S6	LED PEDERIAN SITE FIXTURE, SINGLE-PIECE ALUMINUM HOUSING, ARM MOUNT, U.L. LISTED WET LOCATION, DARK BRONZE FINISH, ROUND, STRAIGHT, ALUMINUM, POLE DESIGNED TO SUPPORT FIXTURE(S) IN 100 MPH WINDS WITH 1.3 GUST FACTOR, PRIMARY FUSES, FLAT LENS, SURGE PROTECTION, (1) HEAD.	277 V	LED	4,387 LM	38 W	4000 K	12' POLE, BASE BY DIVISION 26 CONTRACTOR	ACRYLIC LENS	N/A	MCGRAW-EDISON GLEON LED BEACON VPS LITHONIA DSX1 LED	S6
S7	LED PEDERIAN SITE FIXTURE, SINGLE-PIECE ALUMINUM HOUSING, ARM MOUNT, U.L. LISTED WET LOCATION, DARK BRONZE FINISH, ROUND, STRAIGHT, ALUMINUM, POLE DESIGNED TO SUPPORT FIXTURE(S) IN 100 MPH WINDS WITH 1.3 GUST FACTOR, PRIMARY FUSES, FLAT LENS, SURGE PROTECTION, (1) HEAD.	277 V	LED	14,507 LM	134 W	4000 K	12' POLE, BASE BY DIVISION 26 CONTRACTOR	ACRYLIC LENS	N/A	MCGRAW-EDISON GLEON LED BEACON VPS LITHONIA DSX1 LED	S7
X1	LED EXIT LIGHT, MATTE WHITE DIE-CAST ALUMINUM HOUSING, BRUSHED ALUM, SINGLE FACE, STENCIL FACE, GREEN LETTERS, AC ONLY.	120/277 V	LED	N/A	5 W	N/A	UNIVERSAL	N/A	N/A	DUAL-LITE SE SURE-LITES CX LITHONIA LE	X1
X2	LED EXIT LIGHT, MATTE WHITE DIE-CAST ALUMINUM HOUSING, BRUSHED ALUM, DOUBLE FACE, STENCIL FACE, GREEN LETTERS, AC ONLY.	120/277 V	LED	N/A	5 W	N/A	UNIVERSAL	N/A	N/A	DUAL-LITE SE SURE-LITES CX LITHONIA LE	X2

LIGHTING CONTACTOR SCHEDULE												
LOCATION LABEL	NUMBER	NAME	VOLTAGE	COIL CIRCUIT			CONTROL	ENCLOSURE	NUMBER OF CONTACTS	CIRCUIT(S) CONTROLLED		
				PANEL	CIRCUIT	AMPERAGE				1	2	3
LC-A1	A004D	ELECTRICAL	120 V	1L1SA1	2	30 A	BMS	NEMA 1	8	1HLA1.3	1HLSA1-18	
LC-D1	D148	ELECTRICAL	120 V	1L1SA1	4	30 A	BMS	NEMA 1	6	1HLS1-2	1HDP1-3,14	
LC-F1	F003A	ELECTRICAL	120 V	1LEQ1	18	30 A	BMS	NEMA 1	10	1HLSF1-4,5,6	1HDP1-1,26,33,35	

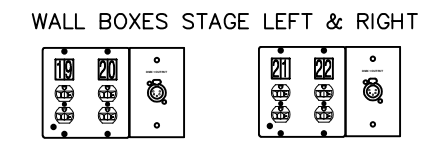
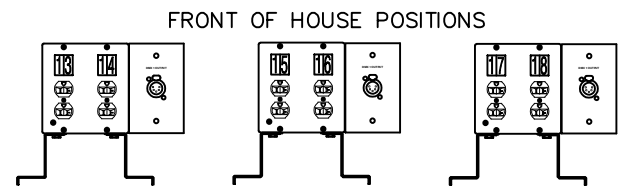
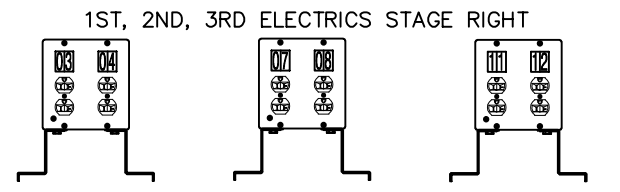
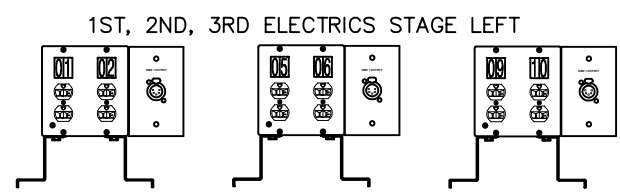
GENERAL LIGHT FIXTURE SCHEDULE NOTES	
#	NOTES
A	REFER TO LIGHT FIXTURE SCHEDULE AND REFLECTED CEILING PLANS FOR MOUNTING REQUIREMENTS, CEILING TYPES, AND FINAL LOCATIONS. PROVIDE APPROPRIATE MOUNTING TRIM REQUIRED FOR CEILING TYPE.
B	PROVIDE FACTORY INSTALLED DISCONNECTS FOR ALL LINEAR FIXTURES.
C	PROVIDE VIBRATION DAMPERS FOR ALL ALUMINUM & STEEL POLES 20'-0" AND ABOVE.
D	PROVIDE SELF-DIAGNOSTICS AND SELF-TESTING FOR ALL LIFE SAFETY FIXTURES (EXIT FIXTURES, WALL PACKS, INVERTERS BALLASTS, ETC.)

FIXTURE	DESCRIPTION	VOLTAGE	TYPE	SOURCE			MOUNTING	LENS/REFLECTOR	CERTIFICATIONS	ACCEPTABLE MANUFACTURERS	FIXTURE
				LUMENS	WATTS	CCT					
L1	2X4 ARCHITECTURAL LED TROFFER, WHITE FLUSH ALUMINUM DOOR, 0-10V DIMMING.	120/277 V	LED	3,000 LM	23 W	4000 K	RECESSED IN GRID	SMOOTH FROSTED ACRYLIC LENS	DLIC	METALUX 24RTC COLUMBIA LCA24 LITHONIA 2BLT4	L1
L1S	2X4 ARCHITECTURAL LED TROFFER, WHITE FLUSH ALUMINUM DOOR, 0-10V DIMMING, PROVIDE INTEGRAL SHUNT RELAY.	120/277 V	LED	3,000 LM	23 W	4000 K	RECESSED IN GRID	SMOOTH FROSTED ACRYLIC LENS	DLIC	METALUX 24RTC COLUMBIA LCA24 LITHONIA 2BLT4	L1S
L2	2X4 ARCHITECTURAL LED TROFFER, WHITE FLUSH ALUMINUM DOOR, 0-10V DIMMING.	120/277 V	LED	4,000 LM	32 W	4000 K	RECESSED IN GRID	SMOOTH FROSTED ACRYLIC LENS	DLIC	METALUX 24RTC COLUMBIA LCA24 LITHONIA 2BLT4	L2
L2S	2X4 ARCHITECTURAL LED TROFFER, WHITE FLUSH ALUMINUM DOOR, 0-10V DIMMING, PROVIDE INTEGRAL SHUNT RELAY.	120/277 V	LED	4,000 LM	32 W	4000 K	RECESSED IN GRID	SMOOTH FROSTED ACRYLIC LENS	DLIC	METALUX 24RTC COLUMBIA LCA24 LITHONIA 2BLT4	L2S
L3S	2X4 ARCHITECTURAL LED TROFFER, WHITE FLUSH ALUMINUM DOOR, 0-10V DIMMING, PROVIDE INTEGRAL SHUNT RELAY.	120/277 V	LED	4,300 LM	34 W	4000 K	RECESSED IN GRID	PATTERN 12 ACRYLIC LENS, 0.125" MINIMUM	DLIC	METALUX 24GR COLUMBIA LJ24 LITHONIA 2GTL4	L3S
L4	2X4 ARCHITECTURAL LED TROFFER, WHITE FLUSH ALUMINUM DOOR, 0-10V DIMMING.	120/277 V	LED	4,800 LM	38 W	4000 K	RECESSED IN GRID	SMOOTH FROSTED ACRYLIC LENS	DLIC	METALUX 24RTC COLUMBIA LCA24 LITHONIA 2BLT4	L4
L4S	2X4 ARCHITECTURAL LED TROFFER, WHITE FLUSH ALUMINUM DOOR, 0-10V DIMMING, PROVIDE INTEGRAL SHUNT RELAY.	120/277 V	LED	4,800 LM	38 W	4000 K	RECESSED IN GRID	SMOOTH FROSTED ACRYLIC LENS	DLIC	METALUX 24RTC COLUMBIA LCA24 LITHONIA 2BLT4	L4S
L5S	2X4 ARCHITECTURAL LED TROFFER, WHITE FLUSH ALUMINUM DOOR, 0-10V DIMMING, PROVIDE INTEGRAL SHUNT RELAY.	120/277 V	LED	5,200 LM	48 W	4000 K	RECESSED IN GRID	SMOOTH FROSTED ACRYLIC LENS	DLIC	METALUX 24C2 COLUMBIA RLA24 LITHONIA 2ALL2	L5S
L6	2X4 ARCHITECTURAL LED TROFFER, WHITE FLUSH ALUMINUM DOOR, 0-10V DIMMING.	120/277 V	LED	6,000 LM	48 W	4000 K	RECESSED IN GRID	SMOOTH FROSTED ACRYLIC LENS	DLIC	METALUX 24C2 COLUMBIA RLA24 LITHONIA 2ALL2	L6
L7	2X2 ARCHITECTURAL LED TROFFER, WHITE FLUSH ALUMINUM DOOR, 0-10V DIMMING.	120/277 V	LED	3,200 LM	37 W	4000 K	RECESSED IN GRID	SMOOTH FROSTED ACRYLIC LENS	DLIC	METALUX 22C2 COLUMBIA RLA22 LITHONIA 2ALL2	L7
L7S	2X2 ARCHITECTURAL LED TROFFER, WHITE FLUSH ALUMINUM DOOR, 0-10V DIMMING, PROVIDE INTEGRAL SHUNT RELAY.	120/277 V	LED	3,200 LM	37 W	4000 K	RECESSED IN GRID	SMOOTH FROSTED ACRYLIC LENS	DLIC	METALUX 22C2 COLUMBIA RLA22 LITHONIA 2ALL2	L7S
L8	2X2 ARCHITECTURAL LED TROFFER, WHITE FLUSH ALUMINUM DOOR, 0-10V DIMMING.	120/277 V	LED	4,000 LM	31 W	4000 K	RECESSED IN GRID	SMOOTH FROSTED ACRYLIC LENS	DLIC	METALUX 22RTC COLUMBIA LCA22 LITHONIA 2BLT2	L8
L8S	2X2 ARCHITECTURAL LED TROFFER, WHITE FLUSH ALUMINUM DOOR, 0-10V DIMMING, PROVIDE INTEGRAL SHUNT RELAY.	120/277 V	LED	4,000 LM	31 W	4000 K	RECESSED IN GRID	SMOOTH FROSTED ACRYLIC LENS	DLIC	METALUX 22RTC COLUMBIA LCA22 LITHONIA 2BLT2	L8S
L9	2X2 ARCHITECTURAL LED TROFFER, WHITE FLUSH ALUMINUM DOOR, 0-10V DIMMING.	120/277 V	LED	4,800 LM	36 W	4000 K	RECESSED IN GRID	SMOOTH FROSTED ACRYLIC LENS	DLIC	METALUX 22RTC COLUMBIA LCA22 LITHONIA 2BLT2	L9
L9S	2X2 ARCHITECTURAL LED TROFFER, WHITE FLUSH ALUMINUM DOOR, 0-10V DIMMING, PROVIDE INTEGRAL SHUNT RELAY.	120/277 V	LED	4,800 LM	36 W	4000 K	RECESSED IN GRID	SMOOTH FROSTED ACRYLIC LENS	DLIC	METALUX 22RTC COLUMBIA LCA22 LITHONIA 2BLT2	L9S
L10	1X4 ARCHITECTURAL LED TROFFER, WHITE FLUSH ALUMINUM DOOR, 0-10V DIMMING.	120/277 V	LED	2,700 LM	23 W	4000 K	RECESSED IN GRID	SMOOTH FROSTED ACRYLIC LENS	DLIC	METALUX 14RTC COLUMBIA LCA14 LITHONIA 2BL4	L10
L10S	1X4 ARCHITECTURAL LED TROFFER, WHITE FLUSH ALUMINUM DOOR, 0-10V DIMMING, PROVIDE INTEGRAL SHUNT RELAY.	120/277 V	LED	2,700 LM	23 W	4000 K	RECESSED IN GRID	SMOOTH FROSTED ACRYLIC LENS	DLIC	METALUX 14RTC COLUMBIA LCA14 LITHONIA 2BL4	L10S
L11	2X4 PRISMATIC LED TROFFER, WHITE FLUSH ALUMINUM DOOR, 0-10V DIMMING.	120/277 V	LED	3,400 LM	28 W	4000 K	RECESSED IN GRID	PATTERN 12 ACRYLIC LENS, 0.125" MINIMUM	DLIC	METALUX 24GR COLUMBIA LJ24 LITHONIA 2GTL4	L11
L11DW	2X4 PRISMATIC LED TROFFER, WHITE FLUSH ALUMINUM DOOR, 0-10V DIMMING, PROVIDE DRYWALL ADAPTOR KIT.	120/277 V	LED	3,400 LM	28 W	4000 K	SURFACE/CEILING	PATTERN 12 ACRYLIC LENS, 0.125" MINIMUM	DLIC	METALUX 24GR COLUMBIA LJ24 LITHONIA 2GTL4	L11DW
L12	2X4 PRISMATIC LED TROFFER, WHITE FLUSH ALUMINUM DOOR, 0-10V DIMMING.	120/277 V	LED	4,300 LM	34 W	4000 K	RECESSED IN GRID	PATTERN 12 ACRYLIC LENS, 0.125" MINIMUM	DLIC	METALUX 24GR COLUMBIA LJ24 LITHONIA 2GTL4	L12
L13	2X4 PRISMATIC LED TROFFER, WHITE FLUSH ALUMINUM DOOR, 0-10V DIMMING.	120/277 V	LED	4,800 LM	35 W	4000 K	RECESSED IN GRID	PATTERN 12 ACRYLIC LENS, 0.125" MINIMUM	DLIC	METALUX 24GR COLUMBIA LJ24 LITHONIA 2GTL4	L13
L13S	2X4 PRISMATIC LED TROFFER, WHITE FLUSH ALUMINUM DOOR, 0-10V DIMMING, PROVIDE INTEGRAL SHUNT RELAY.	120/277 V	LED	4,800 LM	35 W	4000 K	RECESSED IN GRID	PATTERN 12 ACRYLIC LENS, 0.125" MINIMUM	DLIC	METALUX 24GR COLUMBIA LJ24 LITHONIA 2GTL4	L13S
L14	2X4 PRISMATIC LED TROFFER, WHITE FLUSH ALUMINUM DOOR, 0-10V DIMMING.	120/277 V	LED	5,600 LM	42 W	4000 K	RECESSED IN GRID	PATTERN 12 ACRYLIC LENS, 0.125" MINIMUM	DLIC	METALUX 24GR COLUMBIA LJ24 LITHONIA 2GTL4	L14
L15	2X4 PRISMATIC LED TROFFER, WHITE FLUSH ALUMINUM DOOR, 0-10V DIMMING, TRIPLE GASKETED WITH SMOOTH LENS.	120/277 V	LED	4,800 LM	35 W	4000 K	RECESSED IN GRID	PATTERN 12 ACRYLIC LENS, 0.125" MINIMUM	DLIC	METALUX 24GR COLUMBIA LJ24 LITHONIA 2GTL4	L15
L15S	2X4 PRISMATIC LED TROFFER, WHITE FLUSH ALUMINUM DOOR, 0-10V DIMMING, TRIPLE GASKETED WITH SMOOTH LENS, PROVIDE INTEGRAL SHUNT RELAY.	120/277 V	LED	4,800 LM	35 W	4000 K	RECESSED IN GRID	PATTERN 12 ACRYLIC LENS, 0.125" MINIMUM	DLIC	METALUX 24GR COLUMBIA LJ24 LITHONIA 2GTL4	L15S
L16	2X4 PRISMATIC LED TROFFER, WHITE FLUSH ALUMINUM DOOR, 0-10V DIMMING, TRIPLE GASKETED WITH SMOOTH LENS.	120/277 V	LED	5,600 LM	42 W	4000 K	RECESSED IN GRID	PATTERN 12 ACRYLIC LENS, 0.125" MINIMUM	DLIC	METALUX 24GR COLUMBIA LJ24 LITHONIA 2GTL4	L16
L16S	2X4 PRISMATIC LED TROFFER, WHITE FLUSH ALUMINUM DOOR, 0-10V DIMMING, TRIPLE GASKETED WITH SMOOTH LENS, PROVIDE INTEGRAL SHUNT RELAY.	120/277 V	LED								





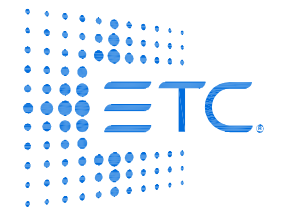
1Ø, 2 WIRE + GND  
120V / 60 Hz.  
20A MAX.  
FROM ERP  
(BY OTHERS)



3Ø, 4 WIRE + GND  
120 / 208 VAC  
200A. MAX.  
60Hz.  
(BY OTHERS)

Eastwood Middle School  
Indianapolis, IN

**Indianapolis Stage**  
Sales & Rentals, Inc.  
Lighting, Curtains, Rigging,  
Theatrical Equipment and Supplies  
317-635-9430  
905 Massachusetts Avenue Indianapolis, IN 46202 317-635-9433 (fax) www.indystage.com



**ETC, Inc.**  
3031 Pleasant View Rd  
PO Box 620979  
Middleton WI 53562-0979  
Tel +1 608 831 4116  
Toll Free +1 800 688 4116  
Fax +1 608 836 1736  
etcconnect.com

DRAWING TITLE:  
**RISER**

DRAWING NUMBER:  
**001**

NOT TO SCALE | October 10, 218

KEY TO WIRE TYPE		
SYMBOL	TYPE	WIRE
DMX	DMX	(1) Belden 9729 or (1) Carol CO910 <b>This MUST be home run with no junctions or splices.</b>
NET	ETCNet	(1) Belden 1583A or (1) any cat5 cable <b>This MUST be home run with no junctions or splices.</b>
U/E	Unison / Echo	(1) Belden 8471 & (1) #14 AWG [stranded]
U/EV	Unison / Echo Power	(2) Belden 8471 & (1) #14 AWG [stranded]

Wiring to Unison / Echo is topography free. It can be wired in any order or configuration.

PLEASE NOTE Each 20AMP circuit from the dimmer racks to all lighting loads MUST have separate neutrals.



# THEATRICAL REQUIREMENTS

CUSTOMER: Eastwood Middle School				PROJECT: Theatrical Lighting & Control	
Contact Name:				QUOTE #: <b>1018-21</b>	
Contact E-mail:					
Contact Phone:					
Terms:		Net 15 (approved accounts)		Ship Via:	Freight: Pre-pay and Add
ITEM	QTY	MFG.	PART #	DESCRIPTION	
<b>Console</b>					
1.0	1	ETC	CS40	ColorSource 40 console	
1.1	1	Lex	DMX-5P-15	5-pin DMX cable, Neutrik, 15'	
<b>Architectural Control</b>					
2.0	1	ETC	DIN14	14" X 14" Din Rail Enclosure	
2.1	1	ETC	E-SPS-DIN	Echo DIN rail-mount Station Power Supply with Auxiliary Power	
2.2	1	ETC	EDMXC	Echo DMX Scene Controller	
2.3	1	ETC	EACC-4	EchoAccess Interface, Black	
2.4	1	ETC	ETS-4	EchoTouch Controller, Black	
2.5	4	ETC	E1001-4	1 Button Inspire Station, Black	
2.6	2	ETC	ECPB DMXIN	ECPB; DMX In Plug-in station (1 gang)	
2.7	1	DFD	1212-DIN	12-output RDM Opto-splitter	
<b>Power Control</b>					
3.0	1	ETC	ERP-24R1-	Relay enclosure 120/208V 3 phase MLO includes 24 1-pole relays and breakers	
3.1	1	ETC	ERP-SMD	Surface Mount Door Kit for 120V enclosure	
3.2	1	ETC	ERP MCB	RP Main Circuit Breaker Kit - 120/208V 3-phase 200A; 10kA SCCR	
3.3	1	ETC	ERP 1PB 20A	Single-pole 120V branch circuit breaker, 20A	
<b>Distribution</b>					
4.0	6	Altman	450-X	Pipe mount outlet box, 2-duplex, 1 DMX Out	
4.1	3	Altman	450-X	Pipe mount outlet box, 2-duplex	
4.2	2	Altman	450-X	Wall mount outlet box, 2-duplex, 1 DMX Out	
<b>Fixtures</b>					
5.0	12	ETC	CSSPOTS	ColorSource Spot Light Engine, XLR, w/ Barrel, Black	
5.1	12	ETC	4XXEDLT	XX° EDLT Lens tube with lens installed, Black Beam spread TBD	
5.2	12	Lex	DMX-5P-15	5-pin DMX cable, Neutrik, 15'	
5.3	36	ETC	CSPARDB	ColorSource PAR Deep Blue, XLR, Black	
5.4	36	ETC	400CC	C-Clamp	
5.5	36	ETC	SELOW-7.5	D40 Wide Oval Diffuser in Frame, Black	
5.6	36	Lex	DMX-5P-15	5-pin DMX cable, Neutrik, 15'	
5.7	6	ETC	MXLR5TERM	5-pin XLR male DMX terminator	
5.8	48	IndyStg	SC-B	Safety Cable, Black	



6

5

4

3

2

1

E

D

C

B

A

E

D

C

B

A



**SCHMIDT ASSOCIATES**  
415 Massachusetts Avenue  
Indianapolis, IN 46204  
www.schmidt-arch.com

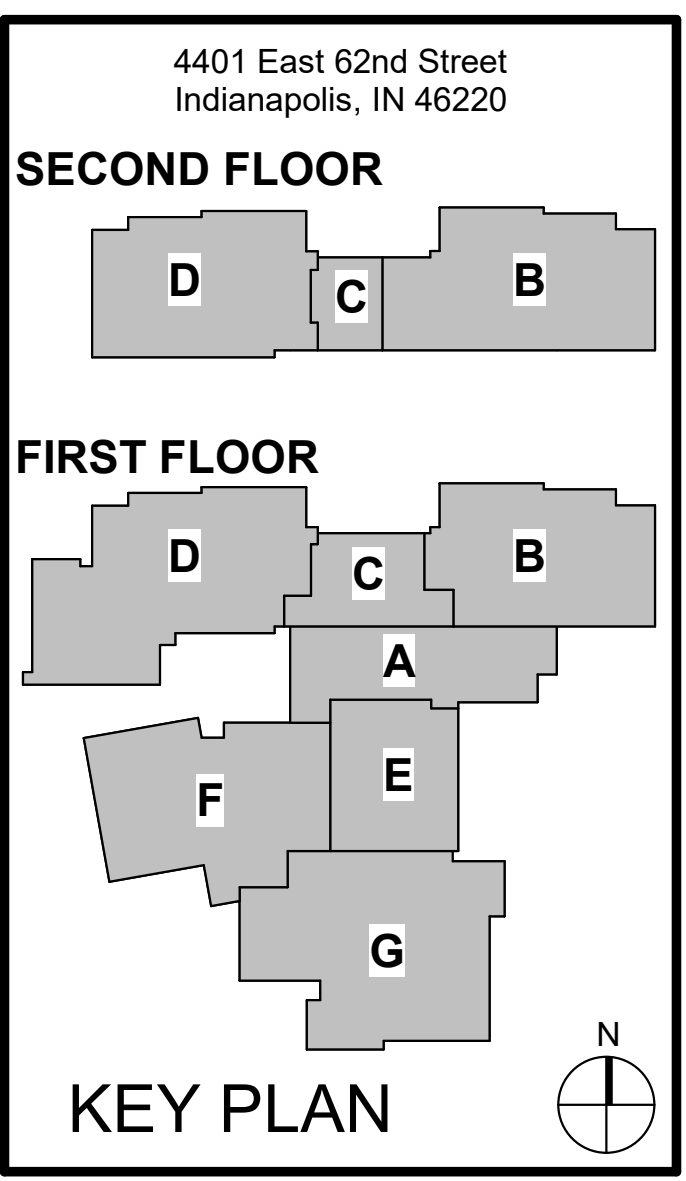
Project No. 2017-114.EMS  
Project Date 10.17.2018  
Produced Designer Author

### Bid Documents



These Drawings and Specifications, and all copies thereof are and shall remain the property and copyright of the Architect. They shall be used only with respect to this Project and are not to be used on any other Project or Work without prior written permission from the Architect.

#	Revision	Date
	Addendum #5	11/16/18



M.S.D. of  
Washington  
Township

**EASTWOOD**

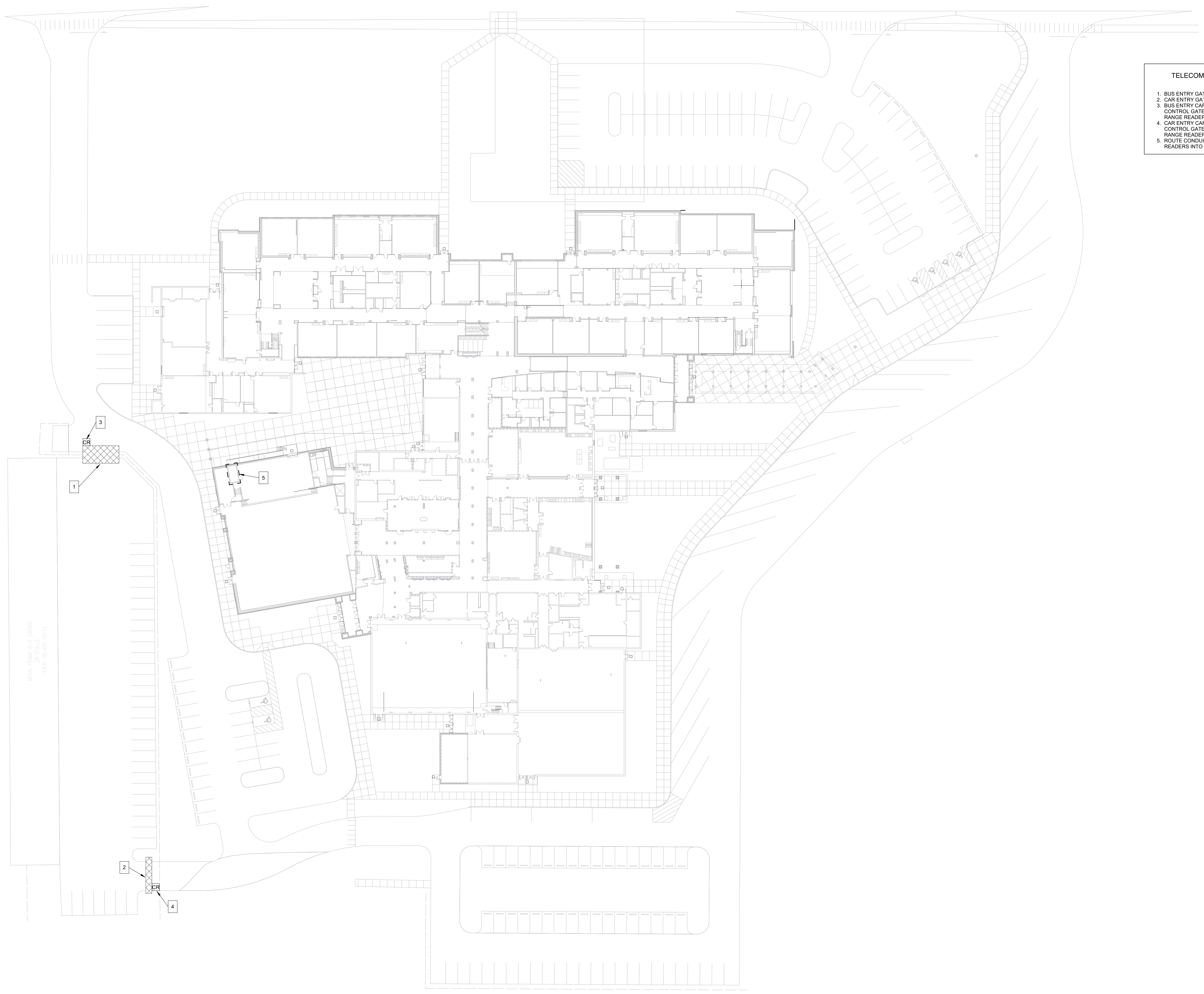
**EAGLES**

**EASTWOOD  
MIDDLE SCHOOL**

TELECOM SITE PLAN

**T001**

- TELECOM SITE PLAN NOTES**
1. BUS ENTRY GATE LOCATION
  2. CAR ENTRY GATE LOCATION
  3. BUS ENTRY CARD READER LOCATION TO CONTROL GATE. PROVIDE AND INSTALL LONG RANGE READER AT 77 A.F.S
  4. CAR ENTRY CARD READER LOCATION TO CONTROL GATE. PROVIDE AND INSTALL LONG RANGE READER AT 48 A.F.S
  5. ROUTE CONDUITS FROM ENTRY GATE CARD READERS INTO TELECOM ROOM F104A



**1 TELECOM SITE PLAN**  
1/32" = 1'-0"

6

5

4

3

2

1



6 5 4 3 2 1

E  
D  
C  
B  
A

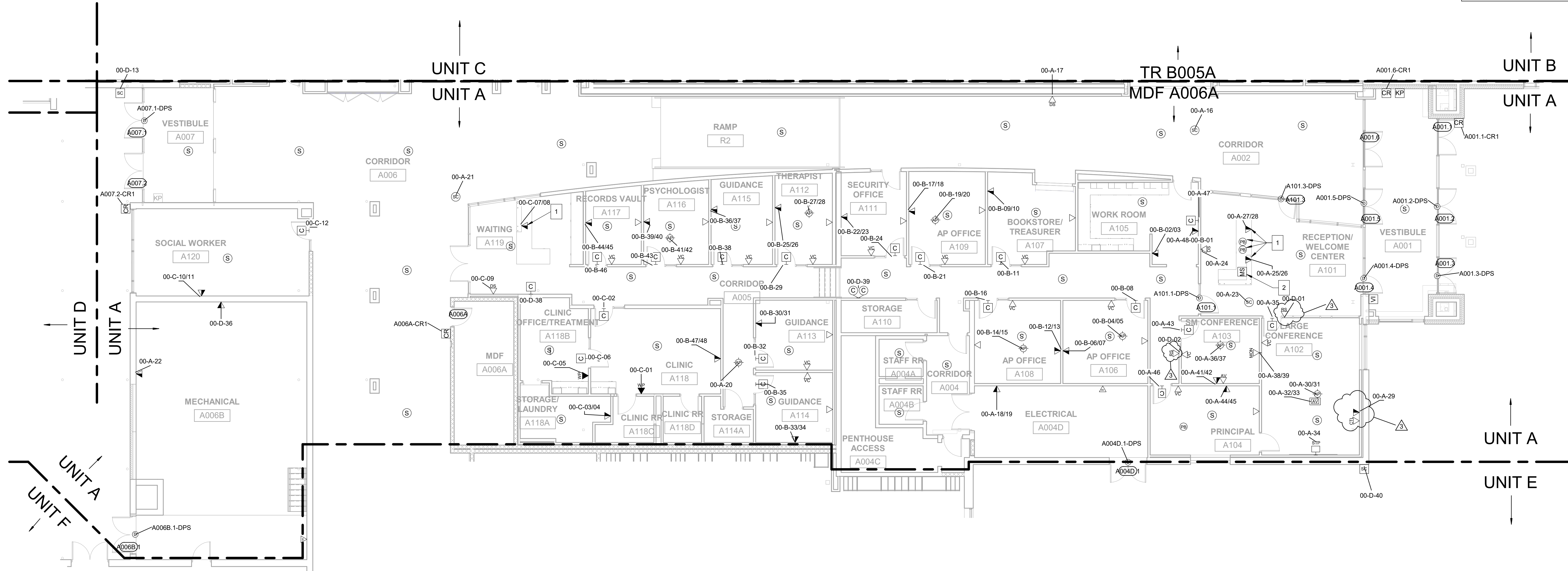
TELECOM LEGEND		
▼ DATA VOICE LOCATION	W M WIRELESS MIC ANTENNA	MS VIDEO INTERCOM MASTER STATION LOCATION
▽ DATA ROUGH-IN LOCATION	W M WALL MOUNTED MICROPHONE LOCATION	CM DOOR MONITORING / CONTROL LOCATION
□ SHORT THROW PROJECTOR LOCATION	AV AV INPUT LOCATION	KP INTRUSION DETECTION SYSTEM KEYPAD
□ CLOCK LOCATION	AV AV ROUGH-IN LOCATION	DU DURESS/PANIC BUTTON LOCATION
HA HEARING ASSISTANT ANTENNA LOCATION	AV AV CONTROL LOCATION	LJ LOUDSPEAKER JUNCTION BOX
WA WIRELESS ACCESS POINT - WALL MOUNTED	CS CEILING SPEAKER - PAGING	VC VOLUME CONTROL LOCATION
CA WIRELESS ACCESS POINT - CEILING MOUNTED	SP CEILING SPEAKER - PROGRAM AUDIO	WP WALL PHONE LOCATION
CP CEILING MOUNTED PROJECTOR LOCATION	SW SPEAKER - WALL MOUNTED	CS CALL SWITCH LOCATION
DS DIGITAL SIGNAGE LOCATION	SC SECURITY CAMERA - CEILING MOUNTED	CR CARD READER LOCATION
MON MONITOR LOCATION	SW SECURITY CAMERA - WALL MOUNTED	CR CARD READER ROUGH-IN LOCATION
MP CEILING PENDANT MICROPHONE LOCATION	AI AUDIO CONTROL INPUT LOCATION	MD MOTION DETECTOR LOCATION
VI VIDEO INTERCOM DOOR STATION LOCATION	AF AV FLOORBOX LOCATION	CC DUAL SIDED CLOCK LOCATION
		IR IR MICROPHONE LOCATION

GENERAL HORIZONTAL CABLING NOTES

- A MINIMUM CATEGORY 6A COMPLIANT 4-PAIR UNSHIELDED TWISTED PAIR (UTP). ALL HORIZONTAL CABLING MUST BE PLENUM RATED.
- B MANUFACTURERS CERTIFIED INCLUDING THE MINIMUM PERFORMANCE AND APPLICATIONS WARRANTY.
- C 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.
- D PROVIDE A MINIMUM 10 FOOT MAINTENANCE LOOP ON EACH HORIZONTAL CABLING RUN. MAINTENANCE LOOPS SHALL BE STORED ABOVE ACCESSIBLE CEILING, IN CABLE TRAY, AND IN TELECOMMUNICATION ROOM CABLE TRAY. CABLING ABOVE CEILING SHALL BE SUSPENDED FROM APPROPRIATE SUPPORTS AND SHALL NOT TOUCH THE CEILING.
- E ALL PIN/PAIR ASSIGNMENTS SHALL BE T568B.
- F CABLE JACKET COLOR SHALL BE YELLOW UNLESS SPECIFICALLY NOTED OTHERWISE.
- G LABELING SHALL BE COMPLETED AS DEFINED IN THE CONTRACT DOCUMENTS AND SHALL BE COORDINATED WITH THE OWNER.
- H PROVIDE ALL TELECOMMUNICATION OUTLETS AS SHOWN ON THE DRAWINGS AND AS REQUIRED TO PROVIDE CONNECTIONS FOR EACH DEVICE SHOWN ON THE DRAWINGS.
- I ALL TESTING OF HORIZONTAL CABLING SHALL BE COMPLETED AS DIRECTED BY THE PROJECT SPECIFICATIONS. ALL CABLING MUST BE TESTED AND CERTIFIED TO THE APPLICABLE STANDARDS.

SHEET NOTES

- 1. CONTRACTOR SHALL INSTALL DEVICE WITHIN CASEWORK AND PROVIDE CONDUIT UNDER SLAB FROM NEAREST WALL TO DEVICE LOCATION.
- 2. DESK MOUNTED MASTER STATION. REFER TO DETAIL & SHEET T403.



1 FIRST FLOOR TELECOM PLAN - UNIT A  
1/8" = 1'-0"

6 5 4 3 2 1



Project No. 2017-114.EMS  
Project Date 10.17.2018  
Produced Matthew Connolly

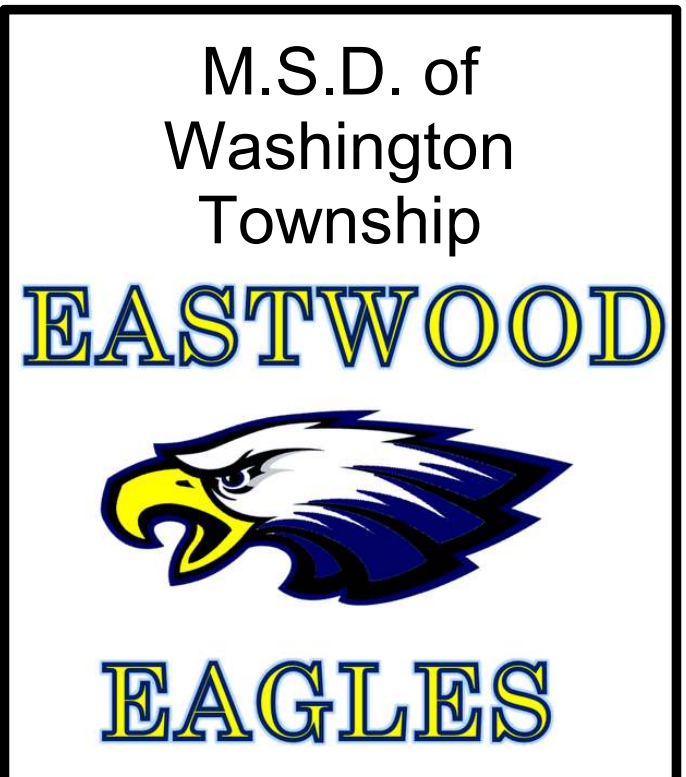
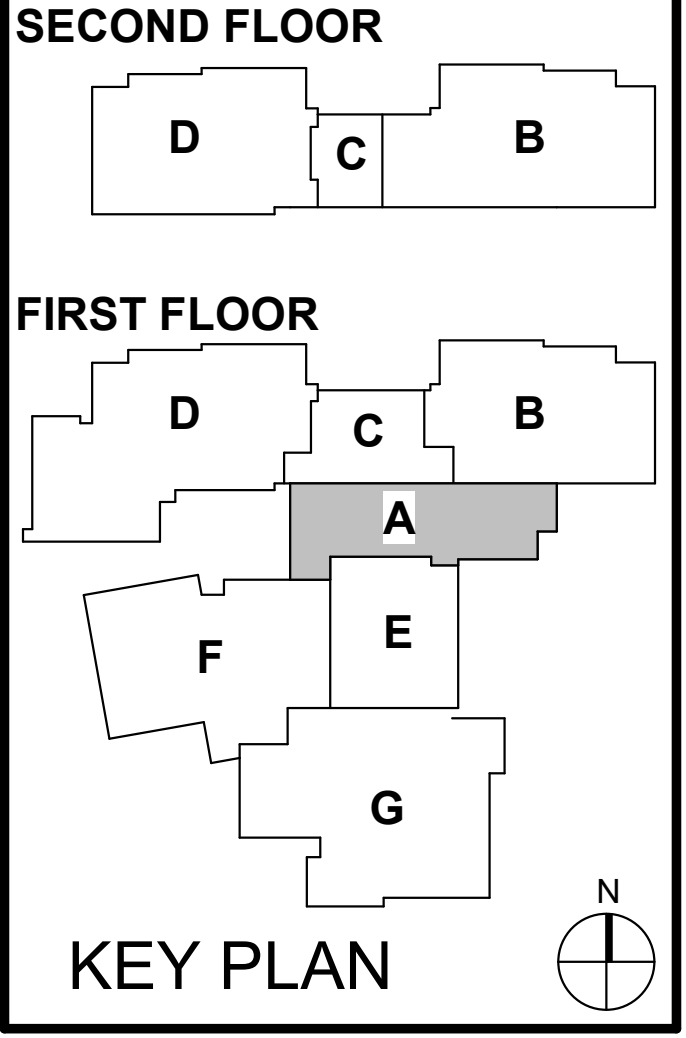
Bid Documents



These Drawings and Specifications, and all copies thereof are and shall remain the property and copyright of the Architect. They shall be used only with respect to this Project and are not to be used on any other Project or Work without prior written permission from the Architect.

#	Revision	Date
	Addendum #2	11/01/18
	Addendum #4	11/09/18
	Addendum #5	11/16/18

4401 East 62nd Street  
Indianapolis, IN 46220



EASTWOOD MIDDLE SCHOOL

FIRST FLOOR TELECOM PLAN - UNIT A

TF2A1

Small vertical text at the bottom left corner, likely a revision or drawing number.



**Bid Documents**

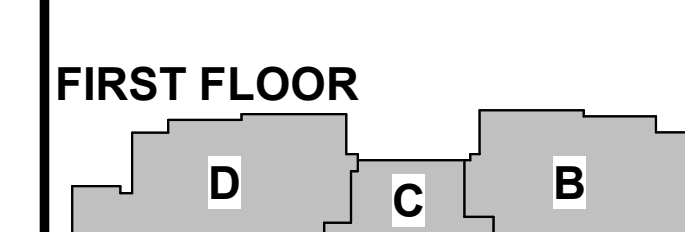


These Drawings and Specifications, and all copies thereof are and shall remain the property and copyright of the Architect. They shall be used only with respect to this Project and are not to be used on any other Project or Work without prior written permission from the Architect.

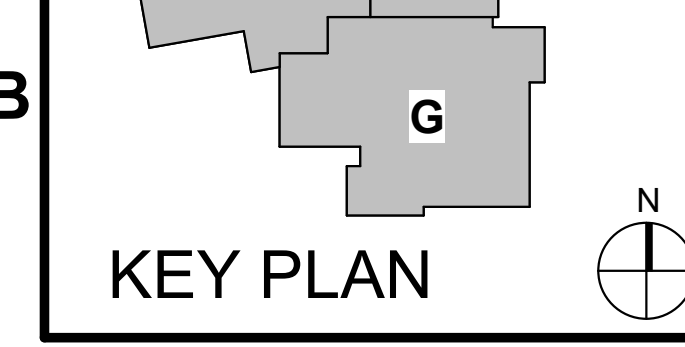
#	Revision	Date
	Addendum #5	11/16/18

4401 East 62nd Street  
Indianapolis, IN 46220

**SECOND FLOOR**



**FIRST FLOOR**



**KEY PLAN**

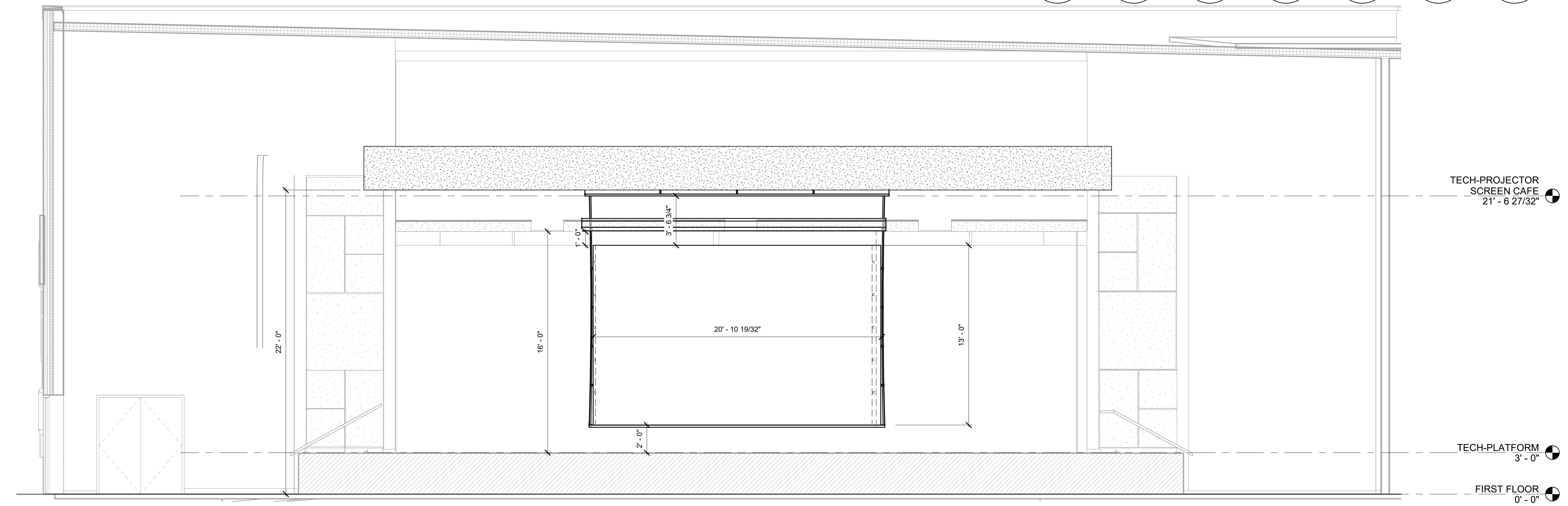
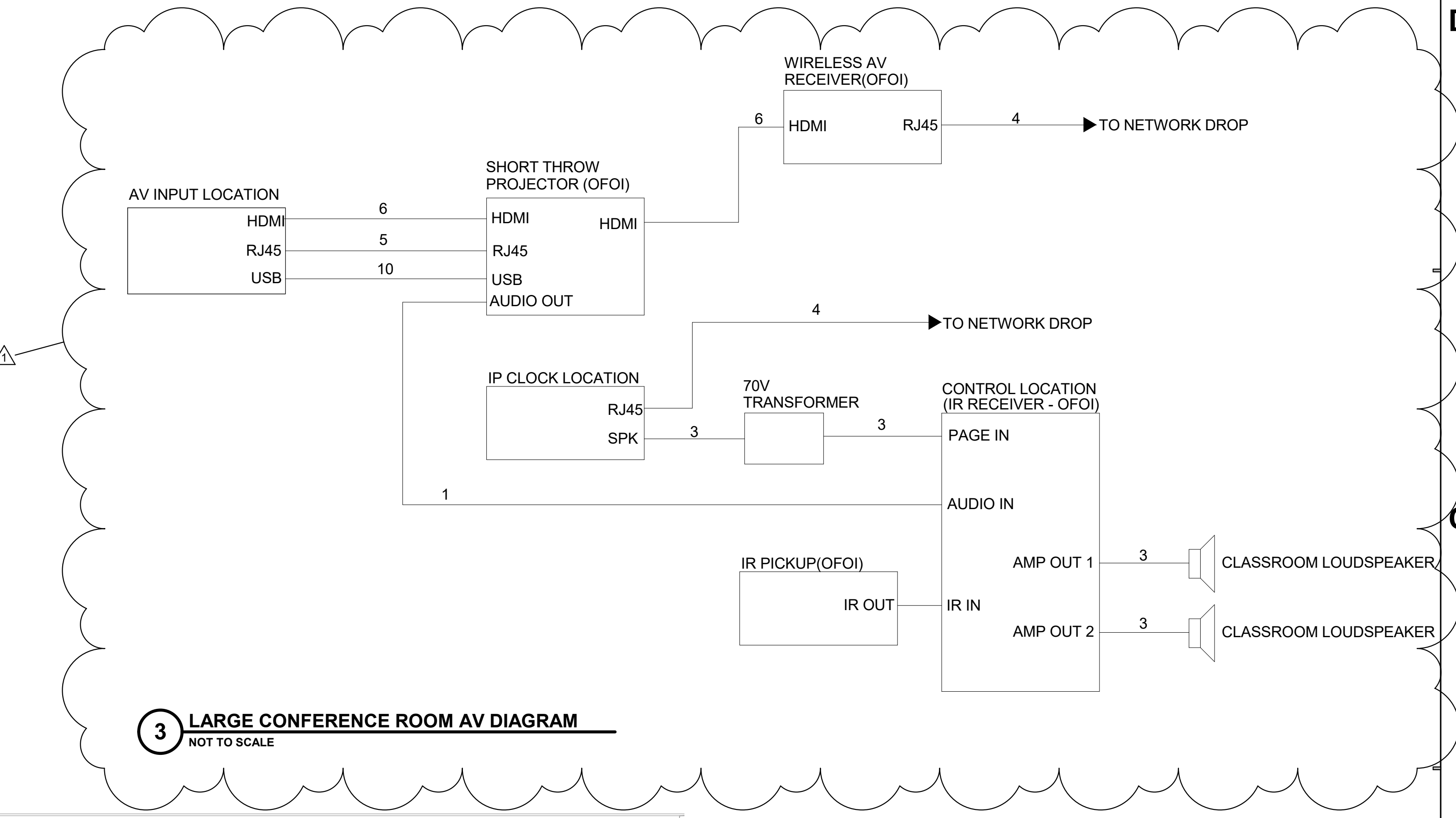
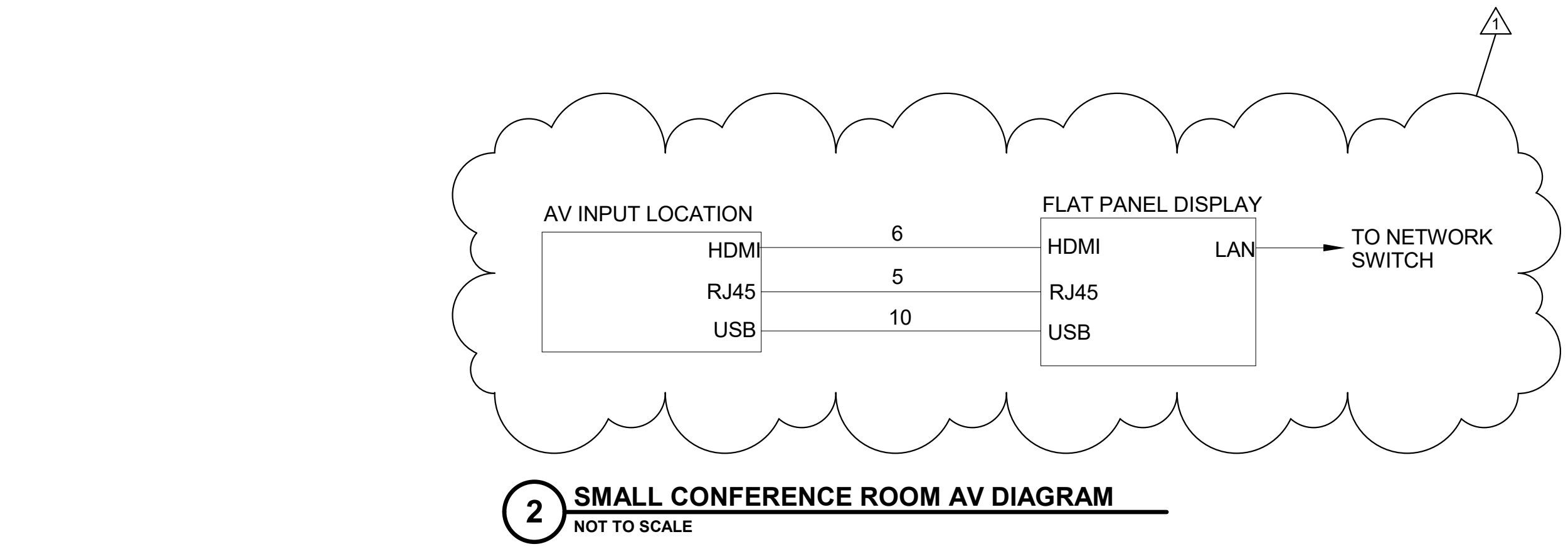
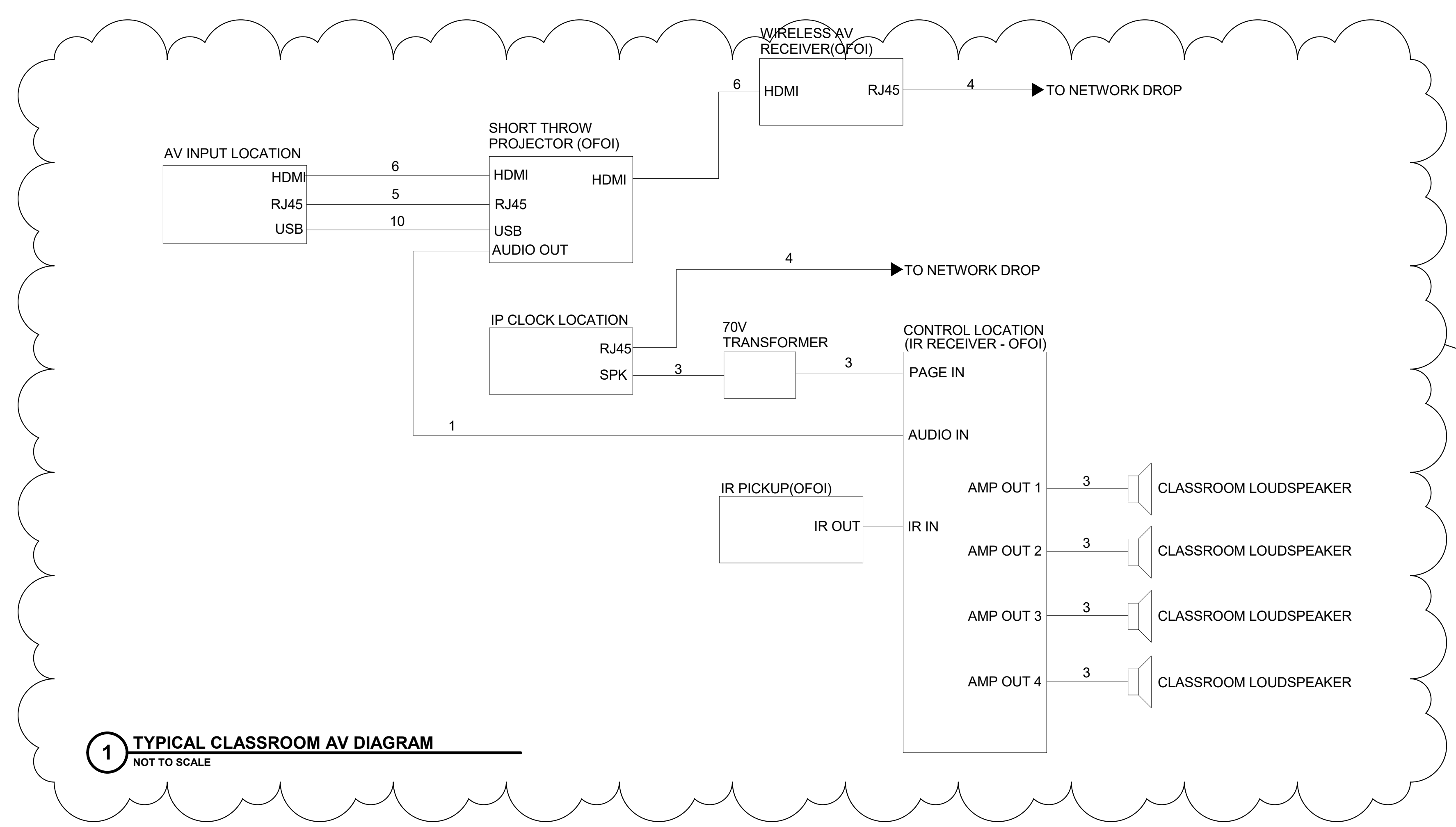
M.S.D. of Washington Township  
**EASTWOOD**  
  
**EAGLES**  
EASTWOOD MIDDLE SCHOOL

AV DIAGRAMS

T305

**CABLING LEGEND**

1. MICROPHONE / LINE LEVEL CABLING
2. UNBALANCED AUDIO CABLING
3. 16 AWG LOUDSPEAKER CABLING
4. UTP CABLING
5. STP CABLING
6. HDMI CABLING
7. FIBER CABLING
8. RS-232 CABLING
9. RELAY CABLING
10. RF CABLING
11. IR CABLING
12. PROVIDED AND INSTALLED BY OTHERS



**aa CAFETERIA PROJECTOR SCREEN SIZING SECTION**  
1/4" = 1'-0"

Title: AV DIAGRAMS  
 Date: 10/17/2018  
 Project: 2017-114.EMS  
 Drawing: T305  
 Scale: 1/4" = 1'-0"  
 Author: Designer  
 Checker: Designer  
 Approver: Designer



6 5 4 3 2 1


CABLING LEGEND	
1	MICROPHONE / LINE LEVEL CABLING
2	UNBALANCED AUDIO CABLING
3	18AWG LOUDSPEAKER CABLING
4	UTP CABLING
5	STP CABLING
6	HDMI CABLING
7	VGA CABLING
8	RS-232 CABLING
9	RELAY CABLING
10	RF CABLING
11	IR CABLING
12	PROVIDED AND INSTALLED BY OTHERS



**SCHMIDT ASSOCIATES**  
 415 Massachusetts Avenue  
 Indianapolis, IN 46204  
 www.schmidt-arch.com

Project No. 2017-114.EMS  
 Project Date 10.17.2018  
 Produced Designer Author

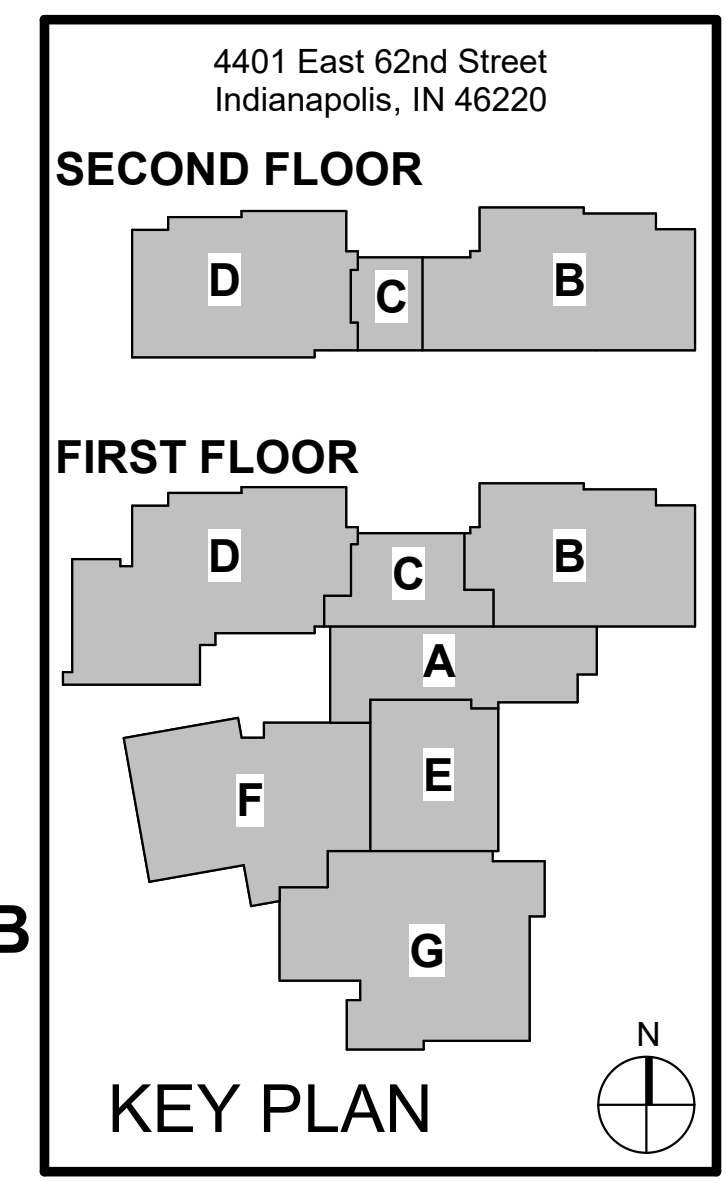
**Bid Documents**



REGISTERED COMMUNICATIONS DISTRIBUTION DESIGNER  
**Bicsi**  
 MATTHEW J. CONNOLLY DESIGNER  
 REG. No. 153914R  
 EXPIRES 12-31-15

These Drawings and Specifications, and all copies thereof are and shall remain the property and copyright of the Architect. They shall be used only with respect to this Project and are not to be used on any other Project or Work without prior written permission from the Architect.

#	Revision	Date
	Addendum #5	11/16/18



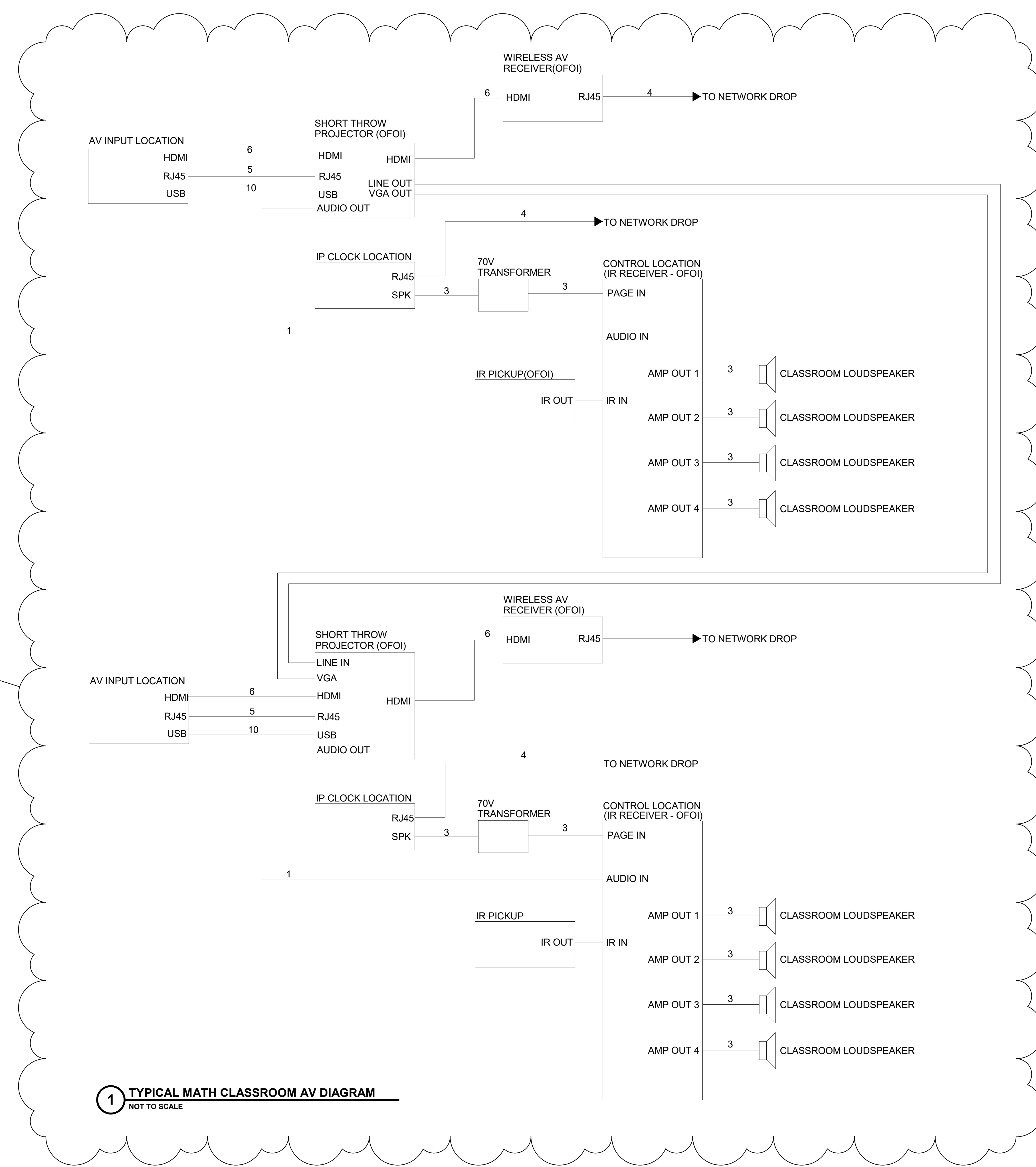
M.S.D. of Washington Township  
**EASTWOOD**



**EAGLES**

EASTWOOD MIDDLE SCHOOL

AV DIAGRAMS  
**T306**

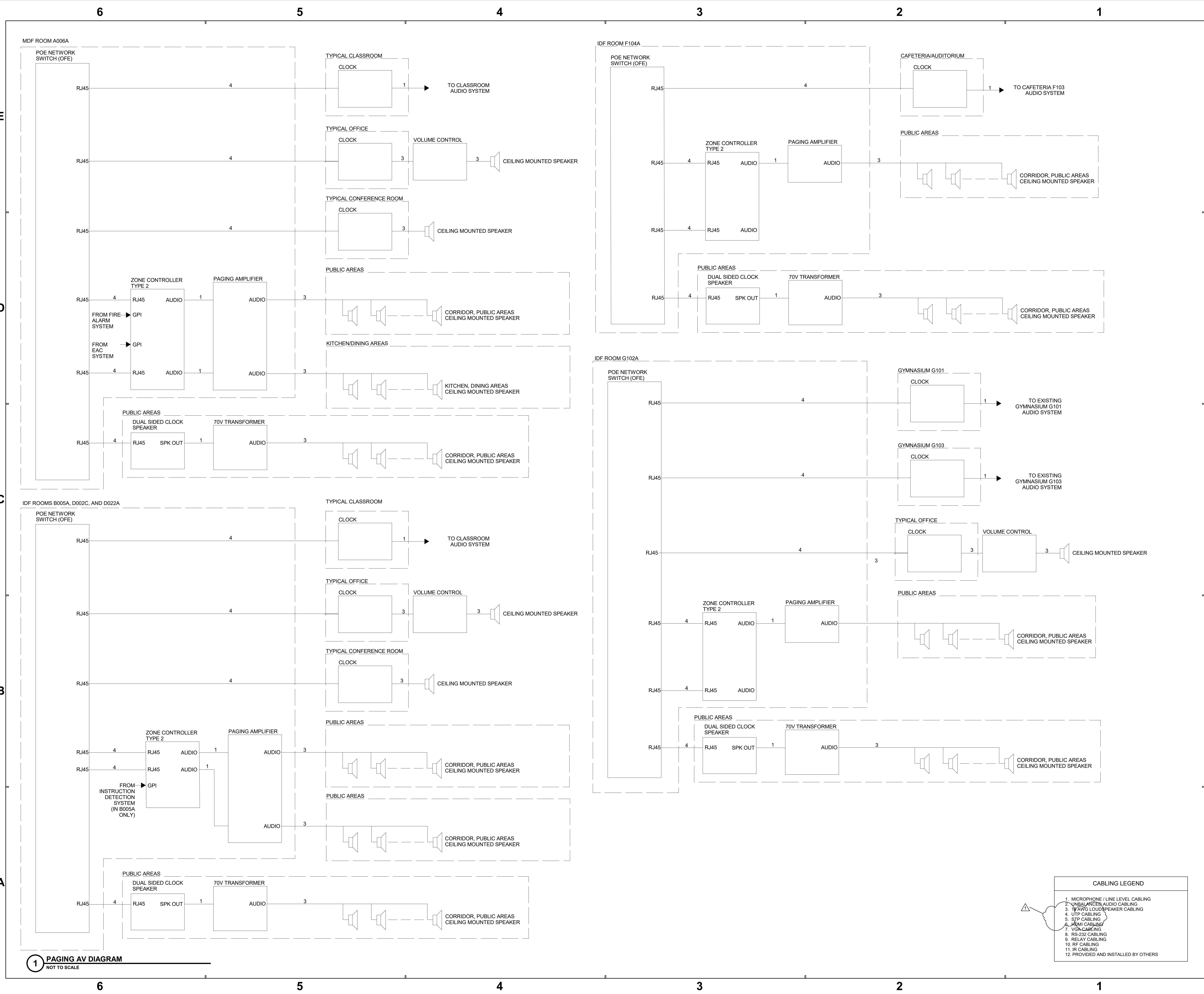


**1 TYPICAL MATH CLASSROOM AV DIAGRAM**  
 NOT TO SCALE

6 5 4 3 2 1

2017-114.EMS.MS.D. of Washington Township, 4401 East 62nd Street, Indianapolis, IN 46220  
 11/16/18 11:48 AM  
 11/16/18 11:48 AM





Project No. 2017-114.EMS  
Project Date 10.17.2018  
Produced Designer Author

**Bid Documents**

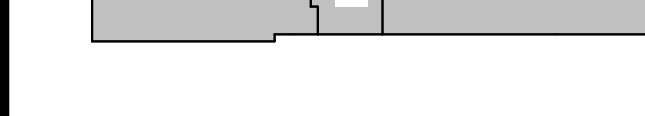


These Drawings and Specifications, and all copies thereof are and shall remain the property and copyright of the Architect. They shall be used only with respect to this Project and are not to be used on any other Project or Work without prior written permission from the Architect.

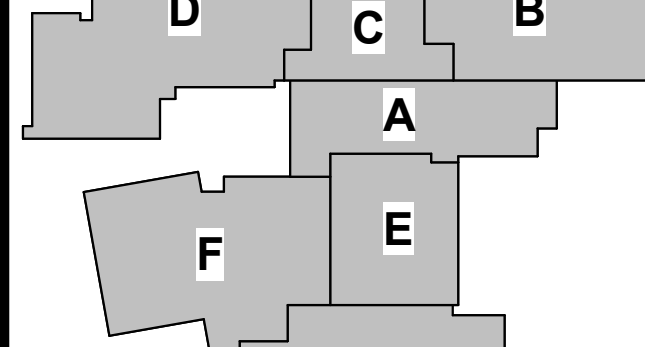
#	Revision	Date
	Addendum #5	11/16/18

4401 East 62nd Street  
Indianapolis, IN 46220

**SECOND FLOOR**



**FIRST FLOOR**



**KEY PLAN**



**EASTWOOD MIDDLE SCHOOL**

**AV DIAGRAMS**

T307

**CABLING LEGEND**

- MICROPHONE / LINE LEVEL CABLING
- UNBALANCED AUDIO CABLING
- 16AWG LOUDSPEAKER CABLING
- UTP CABLING
- STP CABLING
- MINI CABLING
- VIDEO CABLING
- RS-232 CABLING
- RELAY CABLING
- RF CABLING
- IR CABLING
- PROVIDED AND INSTALLED BY OTHERS



6 5 4 3 2 1

CABLING LEGEND	
1.	MICROPHONE / LINE LEVEL CABLING
2.	UNBALANCED AUDIO CABLING
3.	PAIRING LOUDSPEAKER CABLING
4.	UTP CABLING
5.	STP CABLING
6.	HDMI CABLING
7.	VGA CABLING
8.	RS-232 CABLING
9.	RELAY CABLING
10.	RF CABLING
11.	IR CABLING
12.	PROVIDED AND INSTALLED BY OTHERS



**SCHMIDT ASSOCIATES**  
 415 Massachusetts Avenue  
 Indianapolis, IN 46204  
 www.schmidt-arch.com

Project No. 2017-114.EMS  
 Project Date 10.17.2018  
 Produced Designer Author

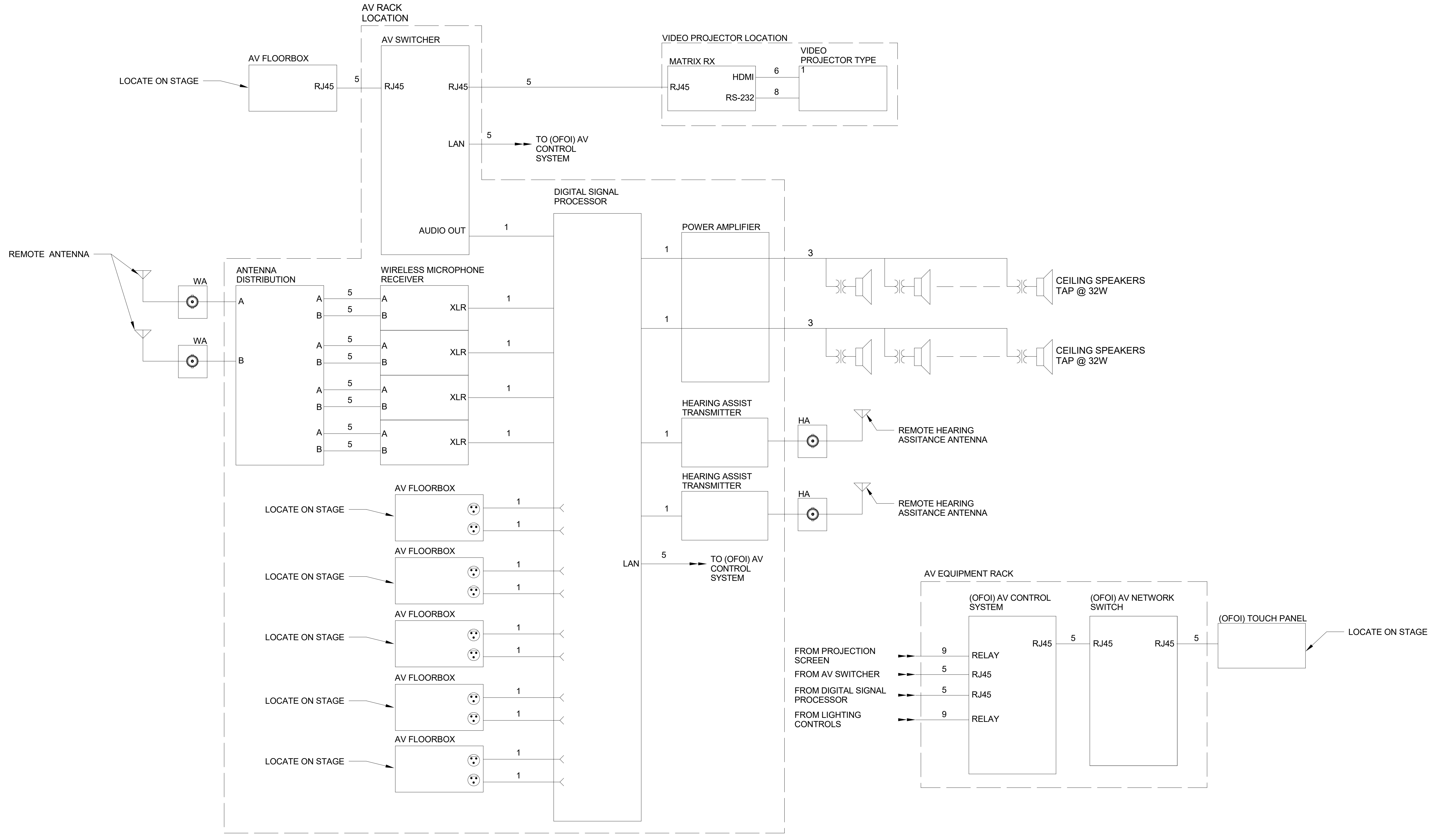
**Bid Documents**



**Bicsi**  
 REGISTERED COMMUNICATIONS DISTRIBUTION DESIGNER  
 MATTHEW J. CONNOLLY DESIGN  
 REG. No. 153914R  
 EXPIRES 12-31-15

These Drawings and Specifications, and all copies thereof are and shall remain the property and copyright of the Architect. They shall be used only with respect to this Project and are not to be used on any other Project or Work without prior written permission from the Architect.

#	Revision	Date
	Addendum #5	11/16/18

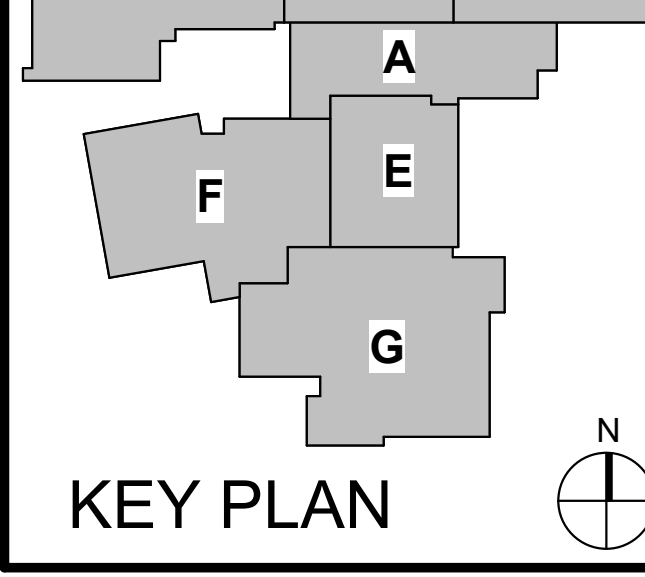


1 CAFETERIA AV DIAGRAM  
 N.T.S.

4401 East 62nd Street  
 Indianapolis, IN 46220

**SECOND FLOOR**

**FIRST FLOOR**



M.S.D. of Washington Township

**EASTWOOD**



EASTWOOD MIDDLE SCHOOL

AV DIAGRAMS

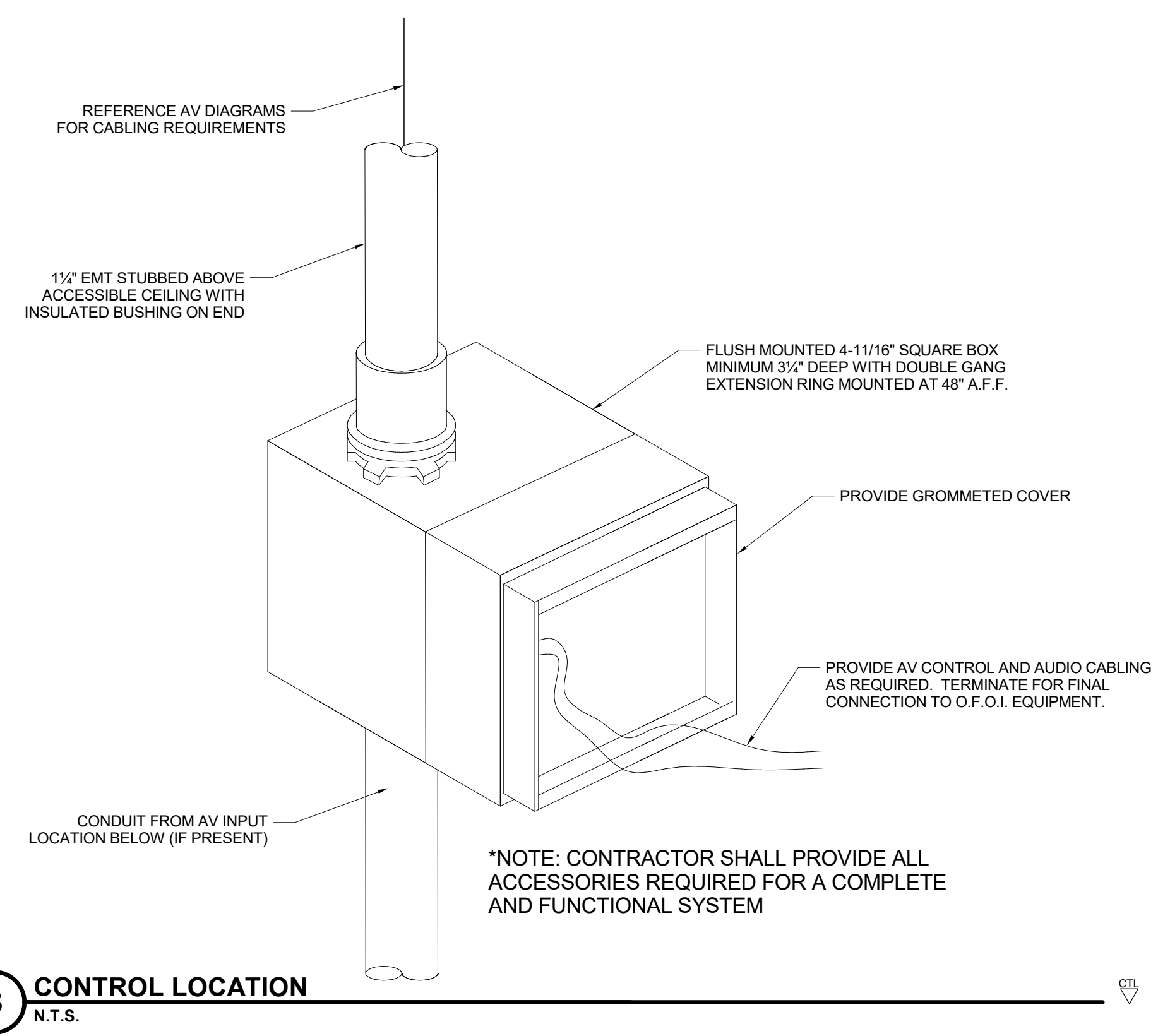
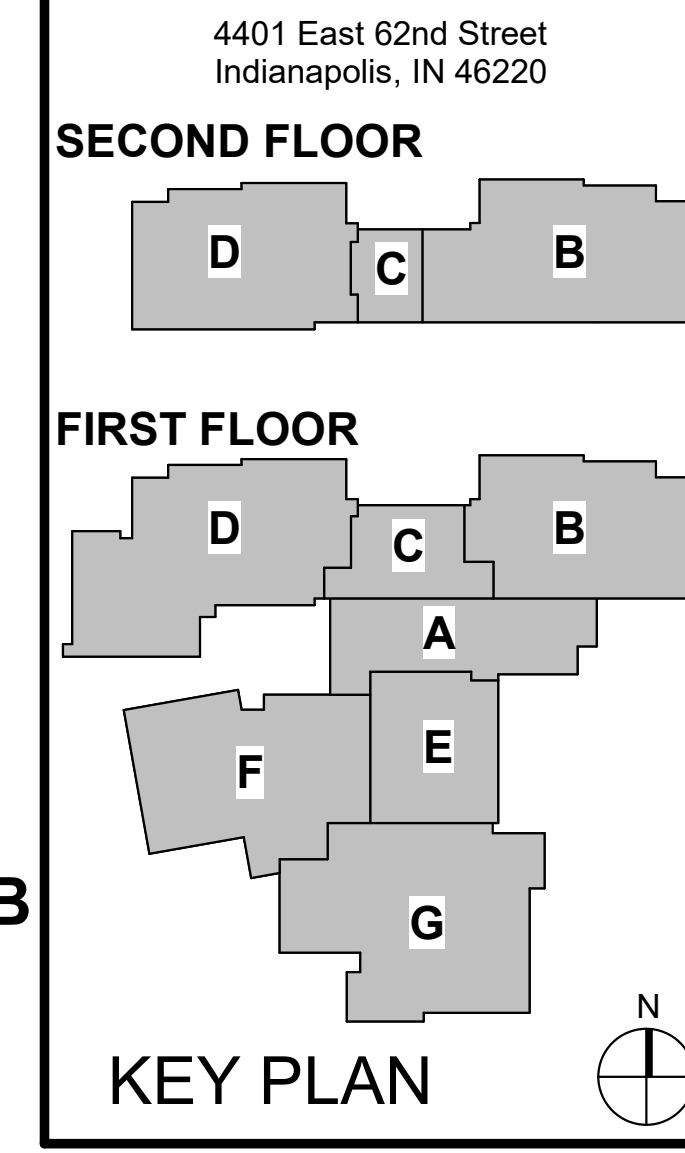
T308

6 5 4 3 2 1

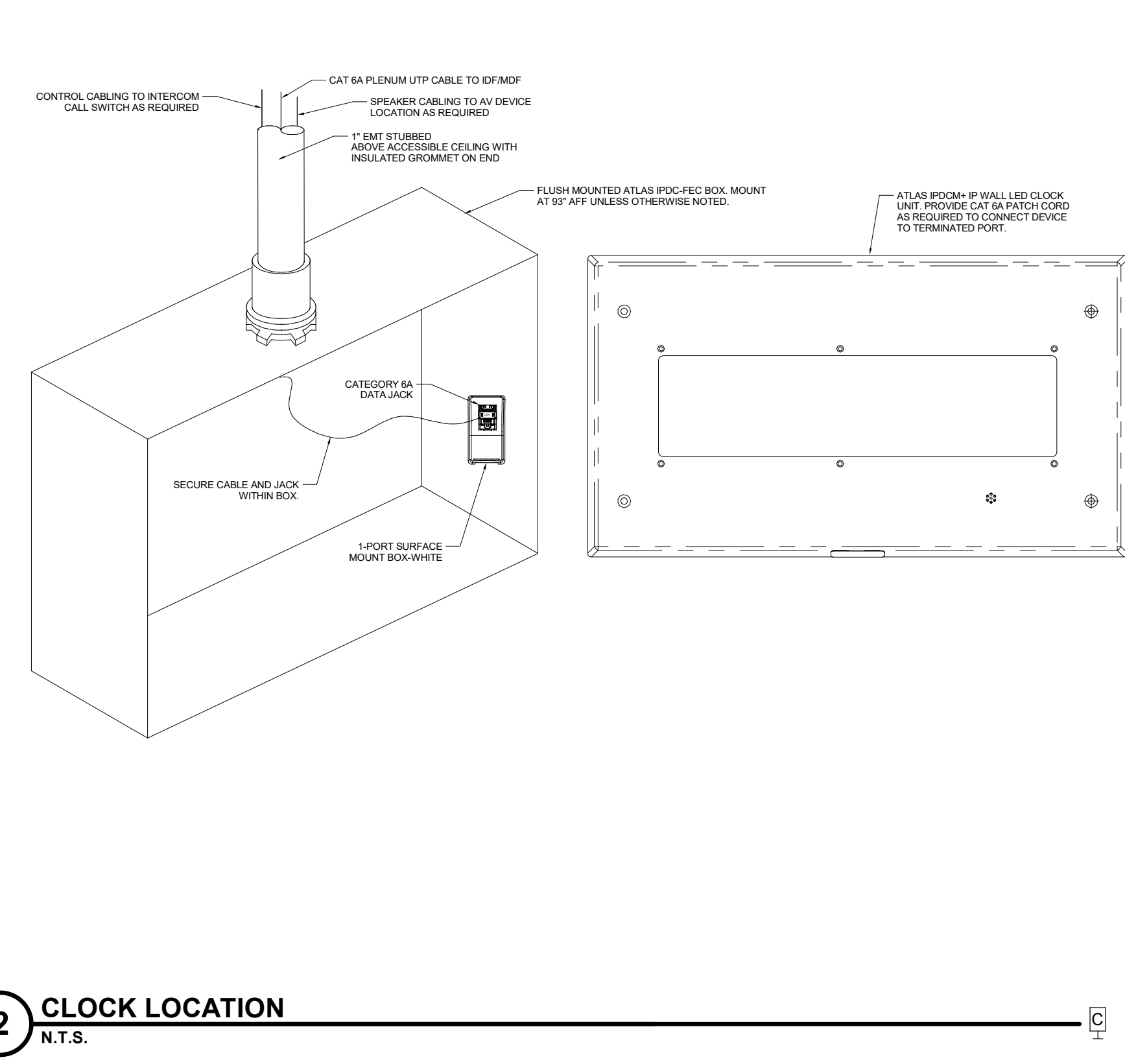
Date: 10/17/2018  
 2017-114.EMS.M.D. of Washington Township, 4401 East 62nd Street, Indianapolis, IN 46220  
 Project No. 2017-114.EMS  
 Project Date 10.17.2018  
 Produced Designer Author



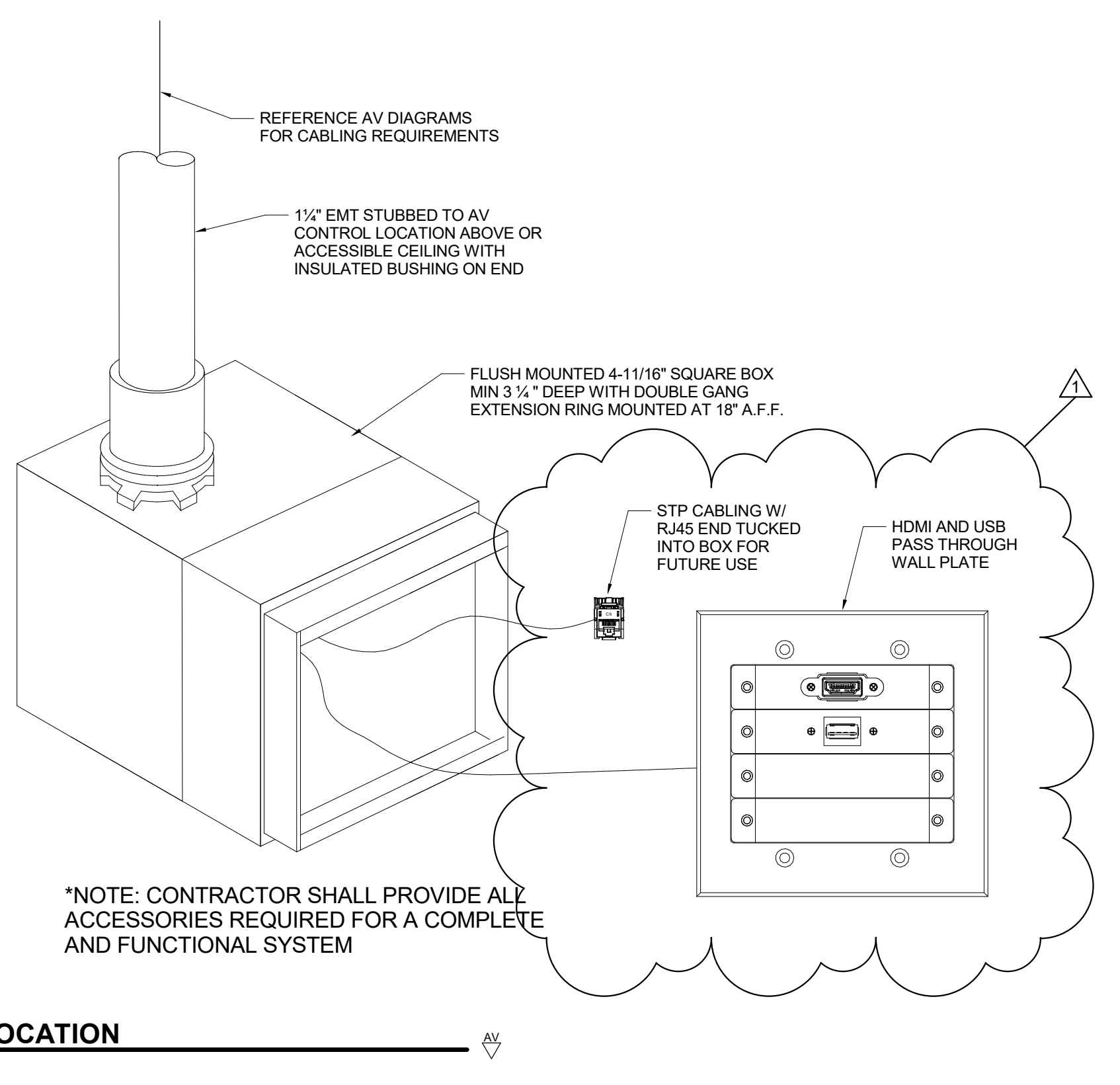
#	Revision	Date
	Addendum #5	11/16/18



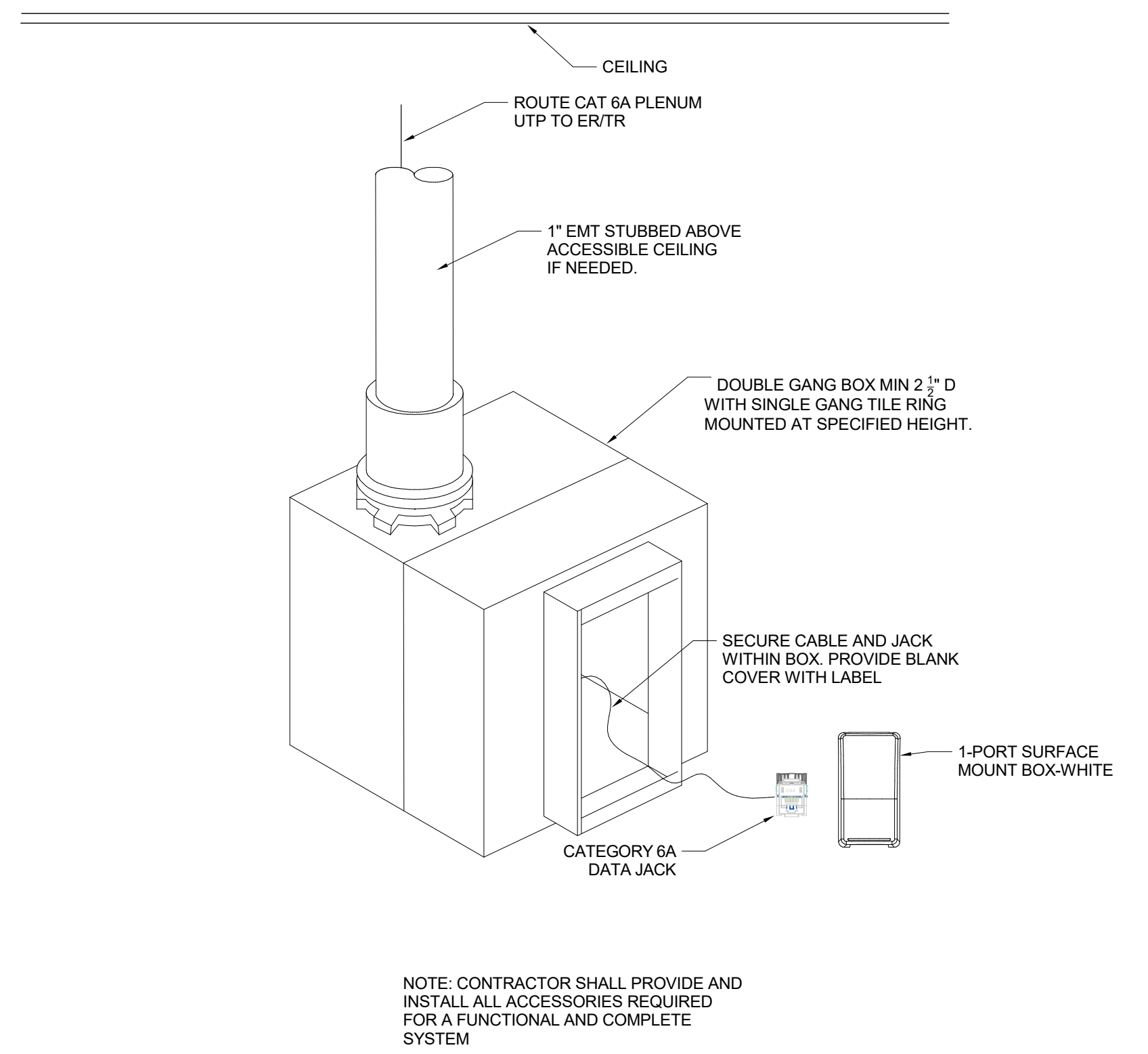
**3 CONTROL LOCATION**  
N.T.S.



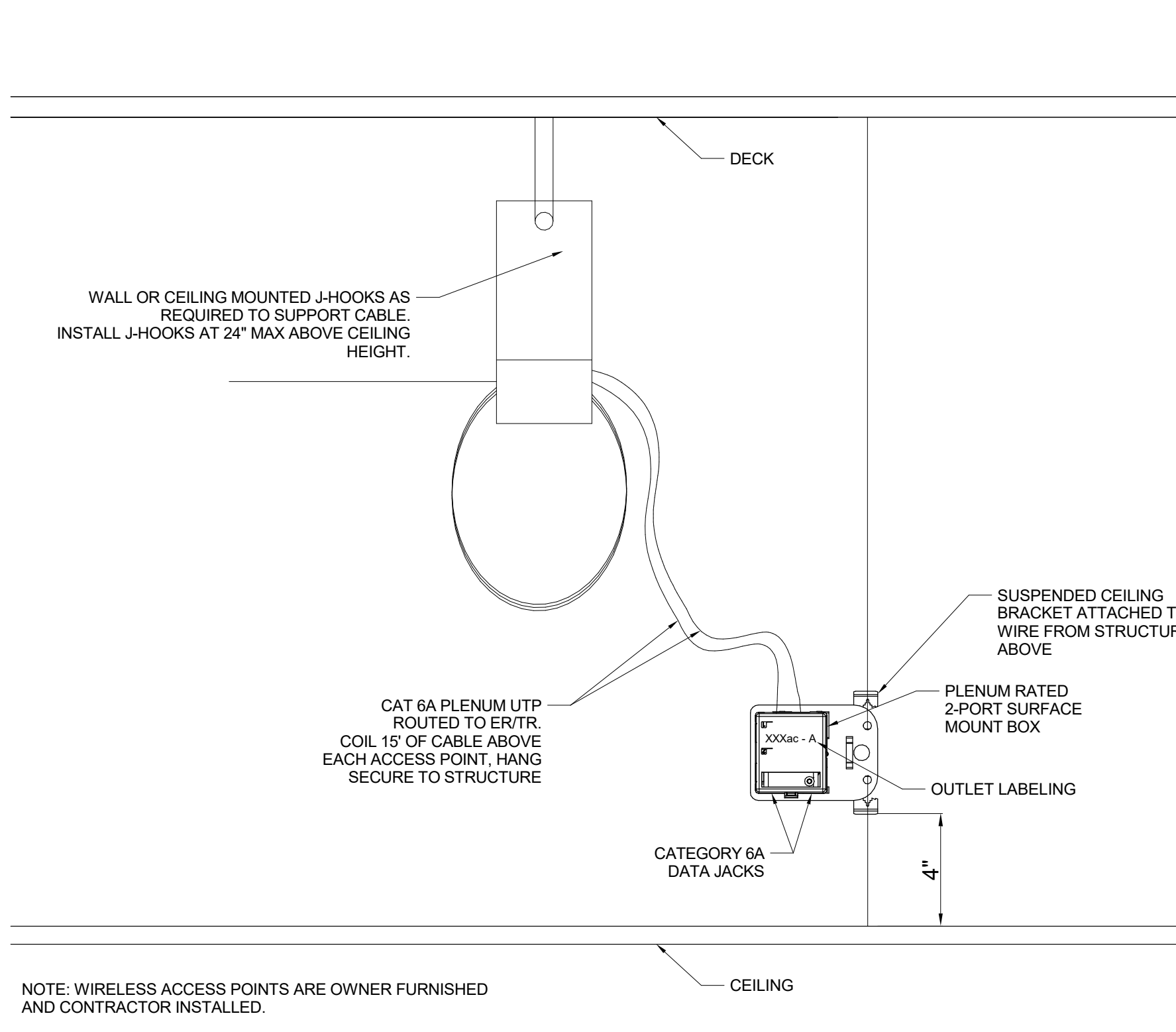
**2 CLOCK LOCATION**  
N.T.S.



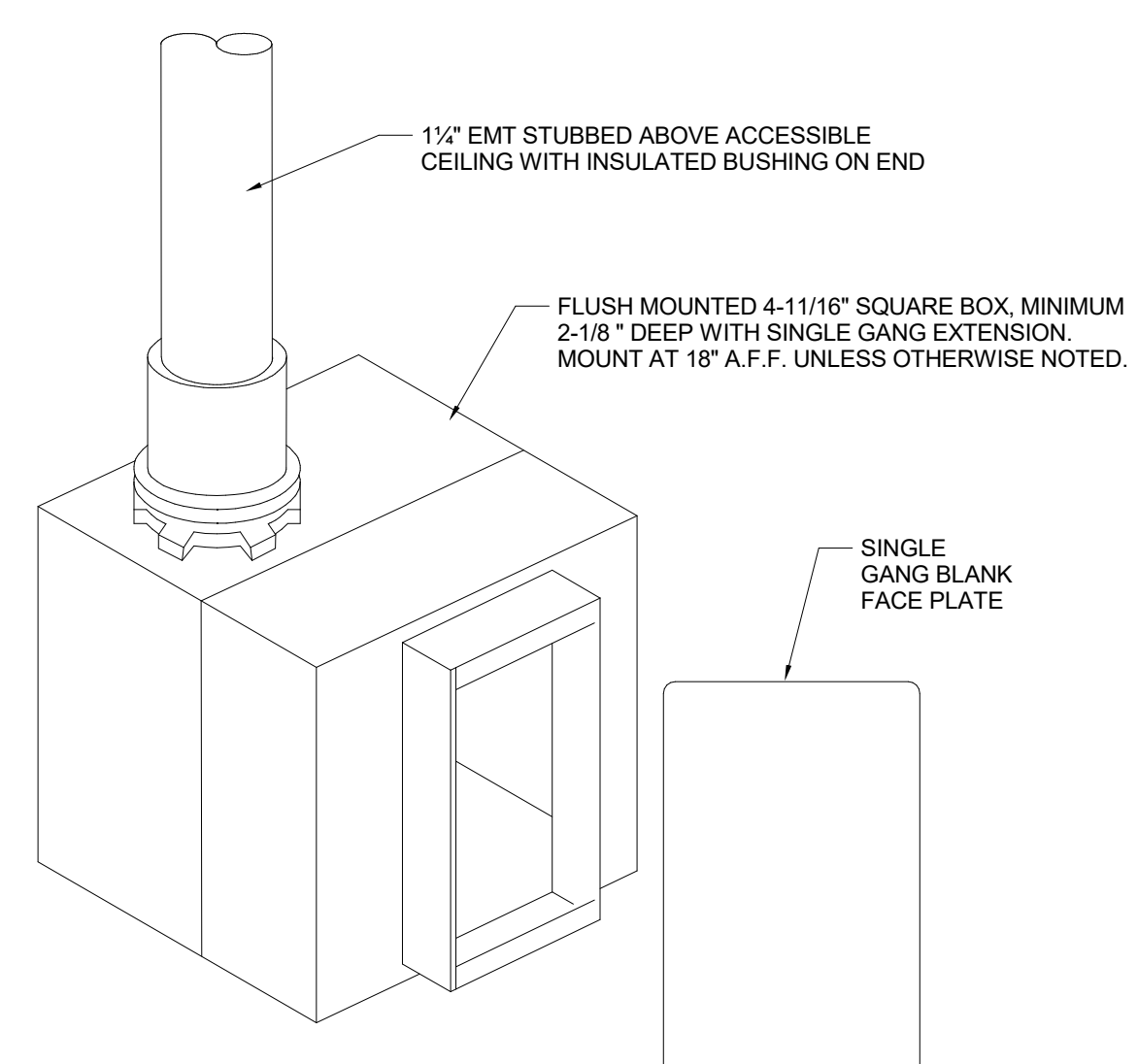
**1 AV INPUT LOCATION**  
NOT TO SCALE



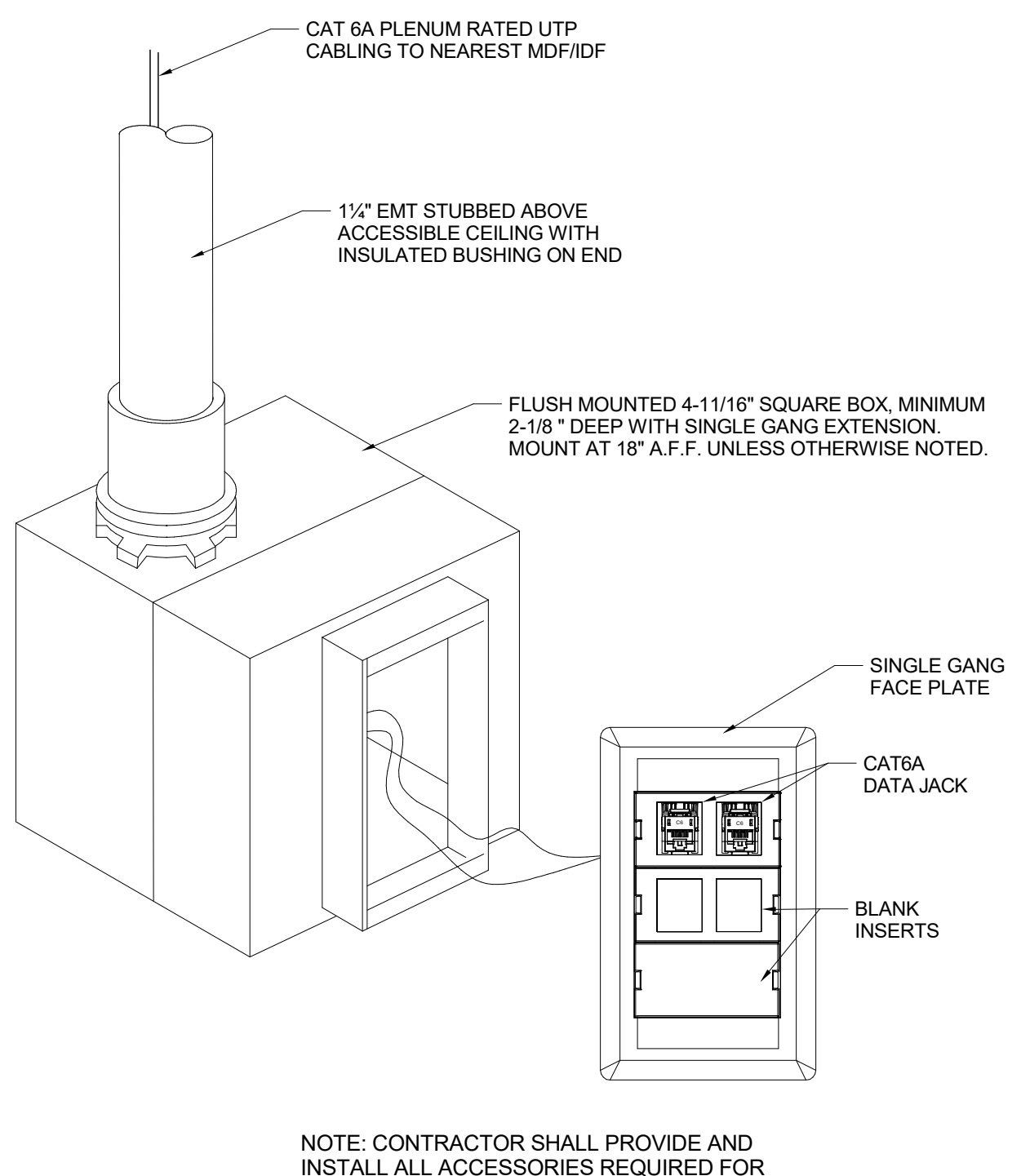
**12 WIRELESS ACCESS POINT - WALL MOUNTED**  
N.T.S.



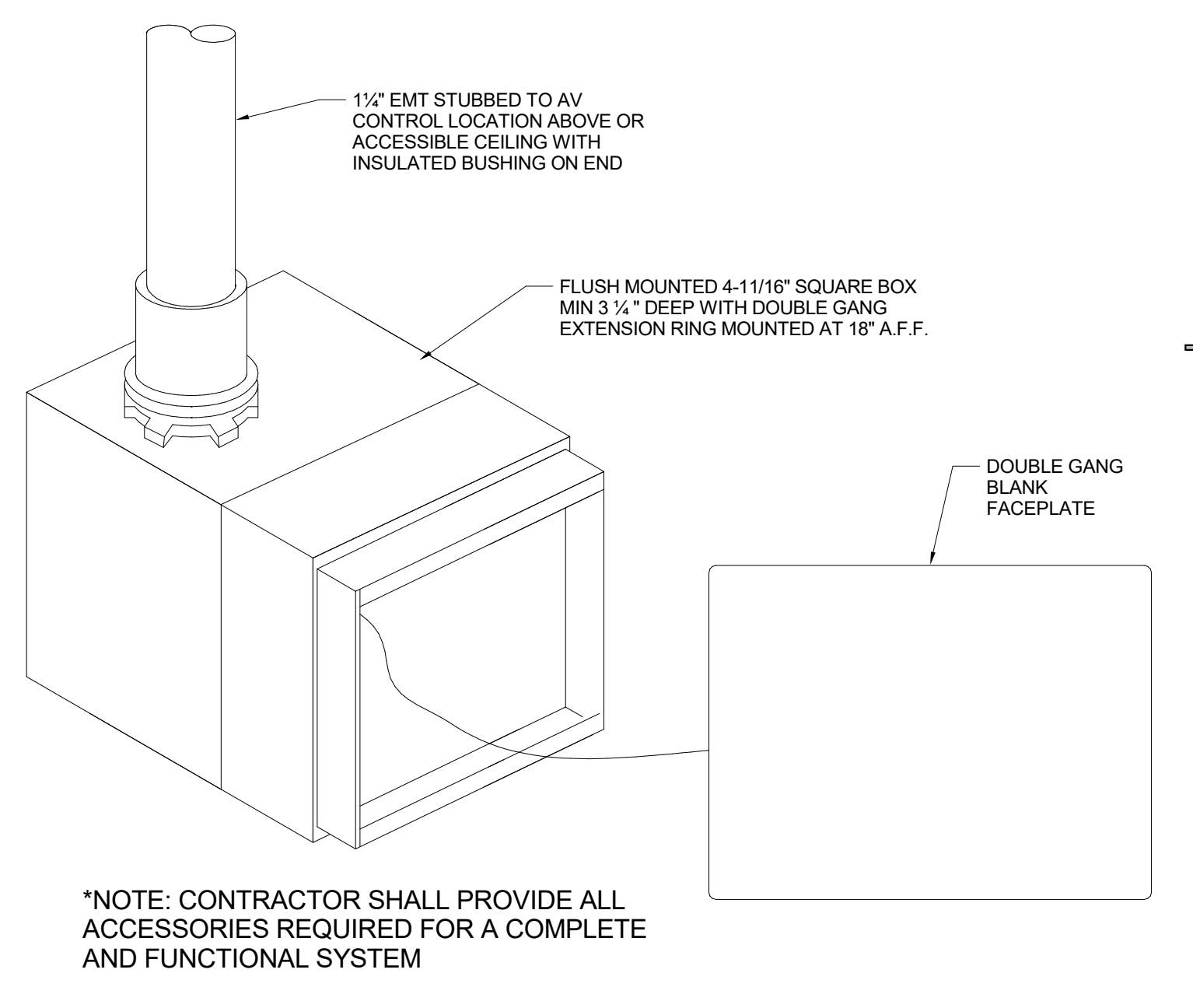
**6 WIRELESS ACCESS POINT - CEILING MOUNTED**  
N.T.S.



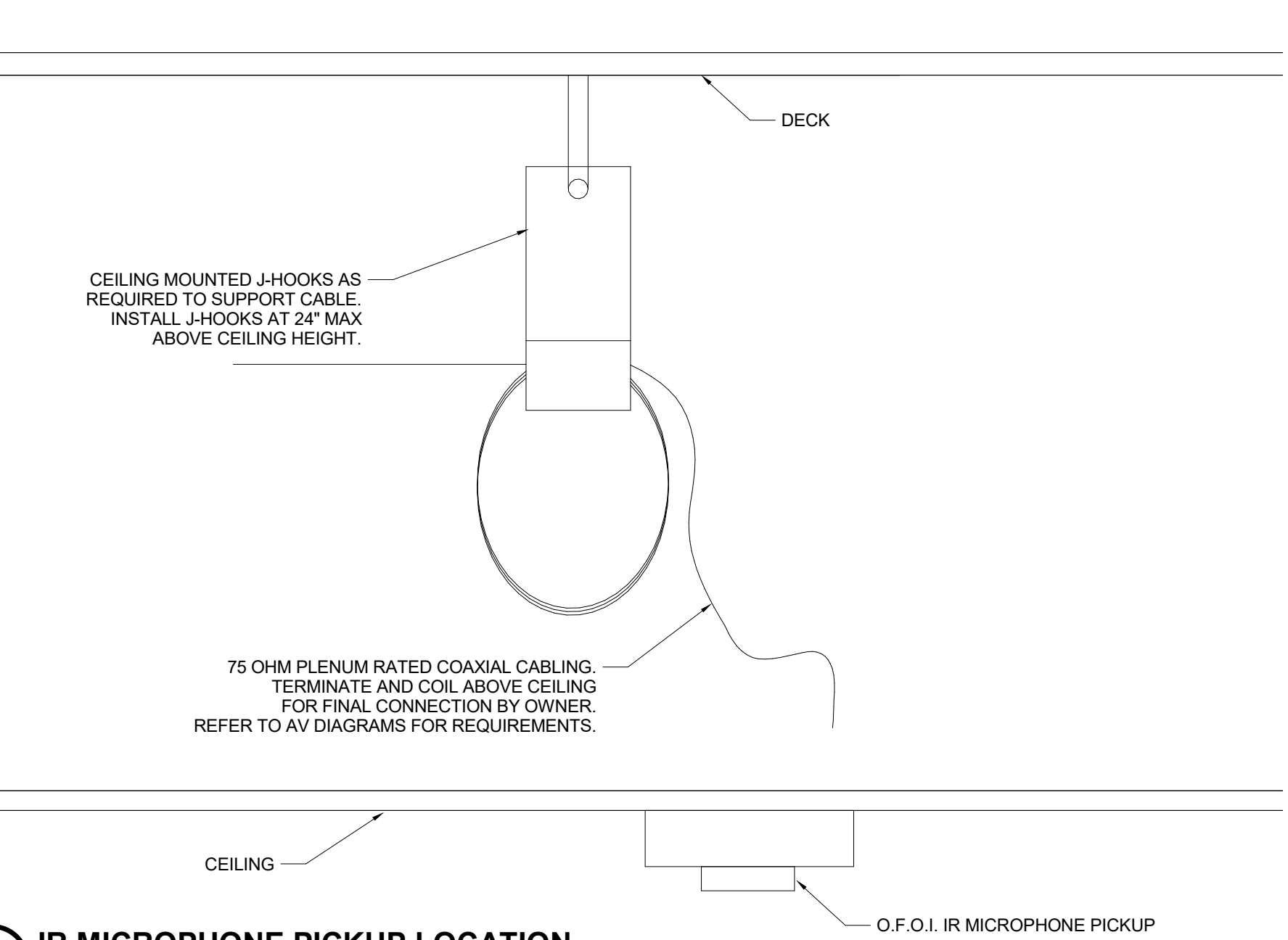
**5 DATA ROUGH-IN LOCATION**  
N.T.S.



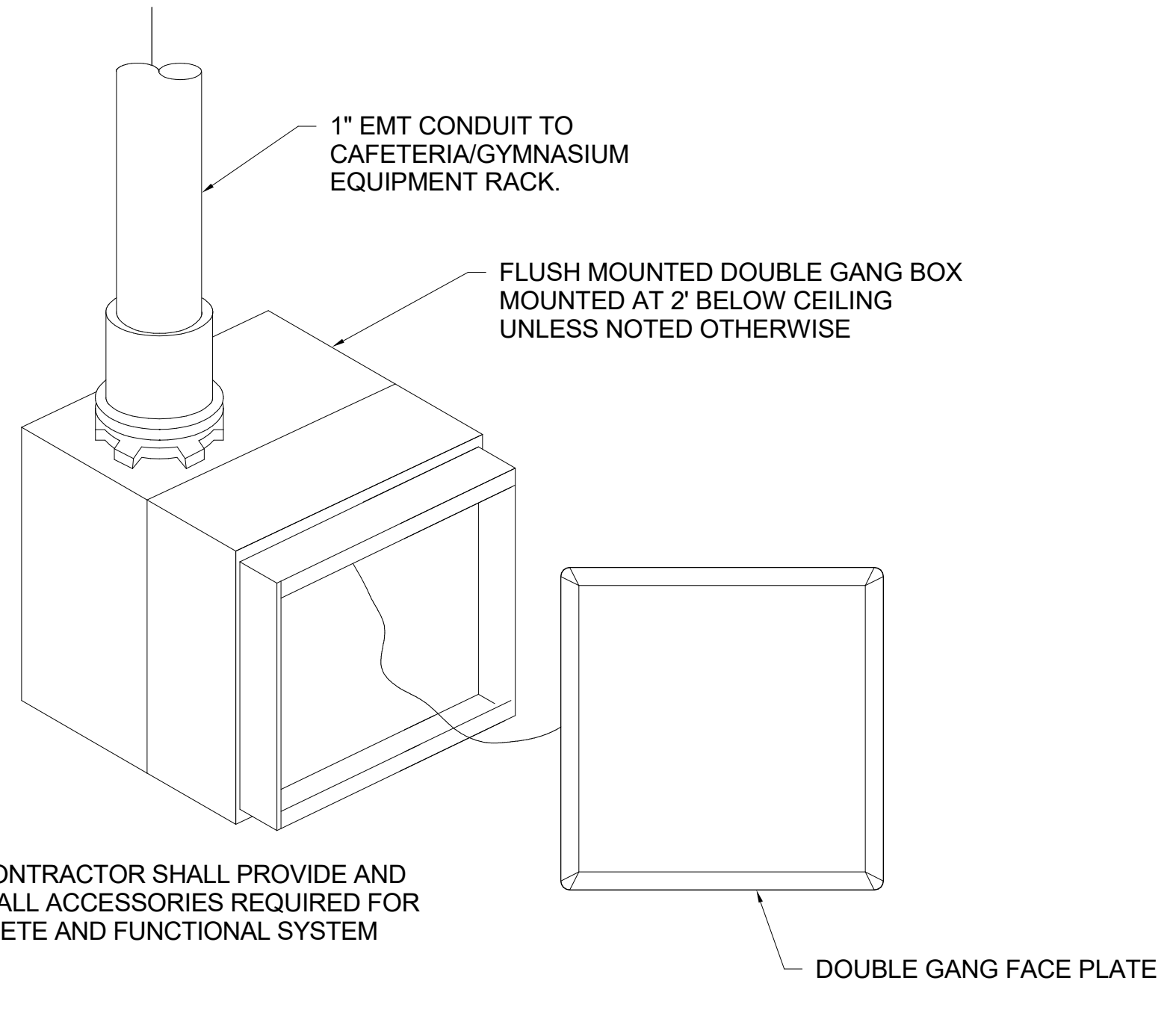
**4 DATA VOICE LOCATION**  
N.T.S.



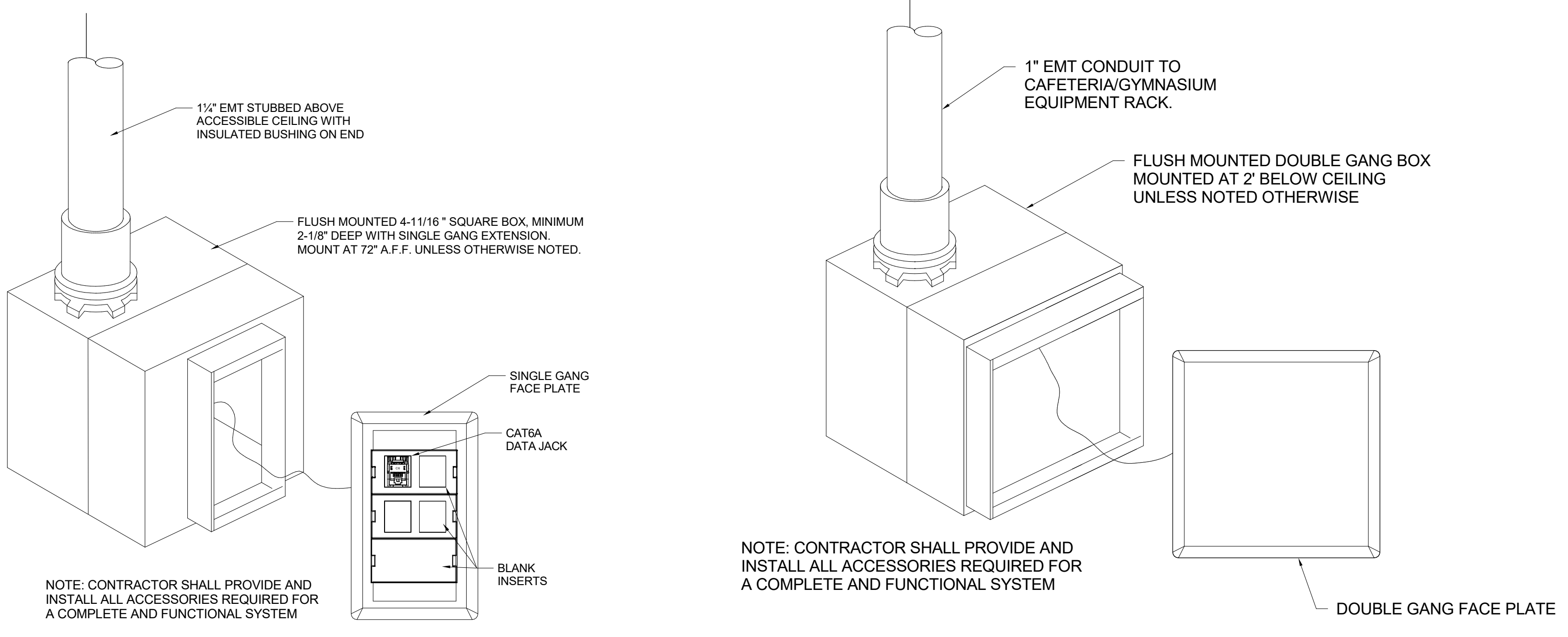
**11 AV ROUGH-IN LOCATION**  
NOT TO SCALE



**10 IR MICROPHONE PICKUP LOCATION**  
N.T.S.



**9 HEARING ASSIST LOCATION**  
N.T.S.



**8 DIGITAL SIGNAGE LOCATION**  
N.T.S.



MDF A006A TELECOM SCHEDULE

Table with columns: TELECOM ROOM, ROOM NUMBER, LABEL, DATA PORTS, COMMENTS. Lists various telecom equipment locations for MDF A006A.

MDF A006A TELECOM SCHEDULE

Table with columns: TELECOM ROOM, ROOM NUMBER, LABEL, DATA PORTS, COMMENTS. Lists various telecom equipment locations for MDF A006A.

IDF D022A TELECOM SCHEDULE

Table with columns: TELECOM ROOM, ROOM NUMBER, LABEL, DATA PORTS, COMMENTS. Lists various telecom equipment locations for IDF D022A.

IDF D002C TELECOM SCHEDULE

Table with columns: TELECOM ROOM, ROOM NUMBER, LABEL, DATA PORTS, COMMENTS. Lists various telecom equipment locations for IDF D002C.

IDF D002C TELECOM SCHEDULE

Table with columns: TELECOM ROOM, ROOM NUMBER, LABEL, DATA PORTS, COMMENTS. Lists various telecom equipment locations for IDF D002C.

SCHMIDT ASSOCIATES logo and address: 415 Massachusetts Avenue, Indianapolis, IN 46204.

Project No. 2017-114.EMS
Project Date 10.17.2018
Produced Matthew Connolly

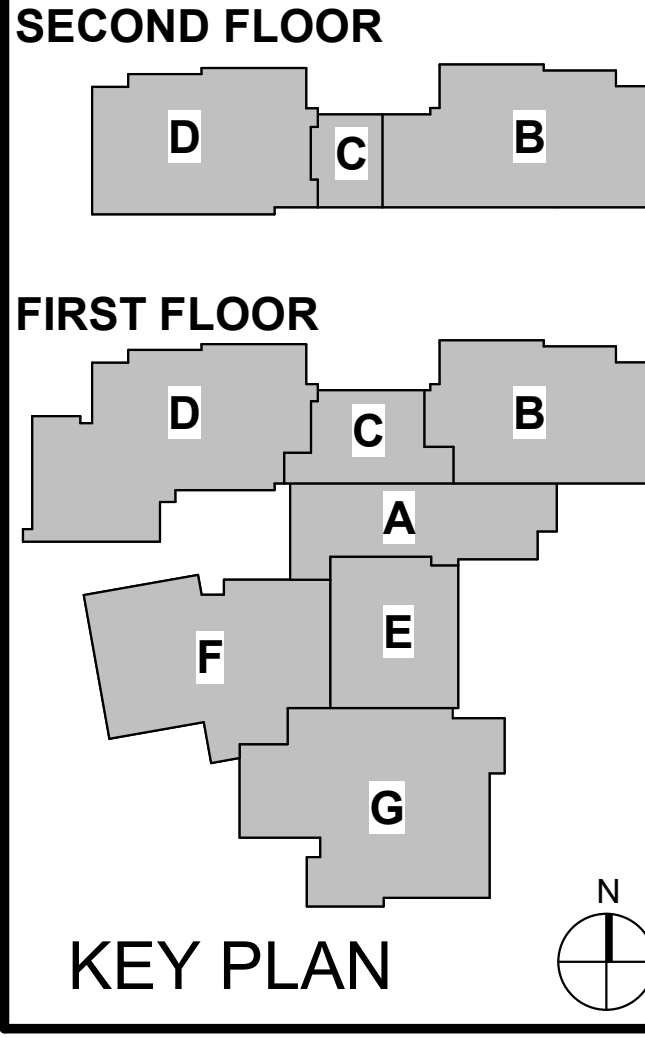
Bid Documents

Bicsi logo and registration information: REGISTERED COMMUNICATIONS DISTRIBUTION DESIGNER, REG. NO. 153914R, EXPIRES 12-31-15.

These Drawings and Specifications, and all copies thereof are and shall remain the property and copyright of the Architect.

Revision table with columns: #, Revision, Date. Lists Addendum #2, Addendum #4, and Addendum #5.

4401 East 62nd Street, Indianapolis, IN 46220



M.S.D. of Washington Township EASTWOOD



EASTWOOD MIDDLE SCHOOL

TELECOM SCHEDULES



TR B005A TELECOM SCHEDULE

Table with columns: TELECOM ROOM, ROOM NUMBER, LABEL, DATA PORTS, COMMENTS. Lists various telecom equipment locations for TR B005A.

TR B005A TELECOM SCHEDULE

Table with columns: TELECOM ROOM, ROOM NUMBER, LABEL, DATA PORTS, COMMENTS. Lists various telecom equipment locations for TR B005A.

TR F104A TELECOM SCHEDULE

Table with columns: TELECOM ROOM, ROOM NUMBER, LABEL, DATA PORTS, COMMENTS. Lists various telecom equipment locations for TR F104A.

ACCESS CONTROL SCHEDULE

Table with columns: DOOR NUMBER, PANEL LOCATION, LABEL, COMMENTS. Lists access control points and door types.

IT G012A TELECOM SCHEDULE

Table with columns: TELECOM ROOM, ROOM NUMBER, LABEL, DATA PORTS, COMMENTS. Lists various telecom equipment locations for IT G012A.



Project No. 2017-114.EMS
Project Date 10.17.2018
Produced Designer/Author

Bid Documents

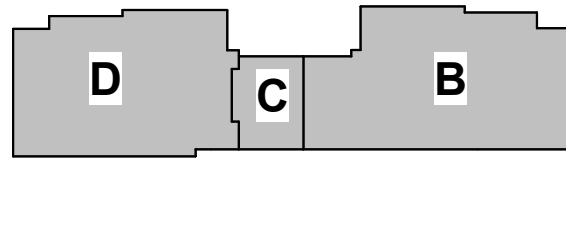


These Drawings and Specifications, and all copies thereof are and shall remain the property and copyright of the Architect.

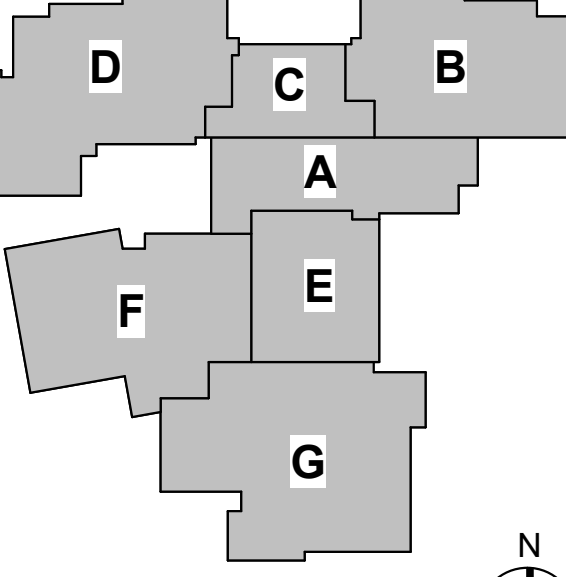
Table with columns: #, Revision, Date. Lists addendum revisions.

4401 East 62nd Street
Indianapolis, IN 46220

SECOND FLOOR



FIRST FLOOR



KEY PLAN

M.S.D. of Washington Township

EASTWOOD



EAGLES

EASTWOOD MIDDLE SCHOOL

TELECOM & SECURITY SCHEDULES

T501



Report of Geotechnical Engineering Investigation  
**Eastwood Middle School Additions and Renovation**  
**4401 East 62<sup>nd</sup> Street**  
**Indianapolis, Indiana**  
Patriot Project No.: 18-1645-01G

**Prepared For:**

Mr. Wesley Harrison  
Lynch, Harrison & Brumleve, Inc.  
550 Virginia Avenue  
Indianapolis, Indiana 46203

**Prepared By:**

Patriot Engineering and Environmental, Inc.  
6150 East 75th Street  
Indianapolis, Indiana 46250

November 8, 2018





**PATRIOT ENGINEERING  
and ENVIRONMENTAL, Inc.**

*Engineering Value for Project Success*

November 8, 2018

Mr. Wesley Harrison  
Lynch, Harrison & Brumleve, Inc.  
550 Virginia Avenue  
Indianapolis, Indiana 46203

Re: Report of Geotechnical Engineering Investigation  
**Eastwood Middle School Additions and Renovation**  
**4401 East 62<sup>nd</sup> Street**  
**Indianapolis, Indiana**  
Patriot Project No.: 18-1645-01G

Dear Wes:

Attached is the report of our subsurface investigation for the above referenced project. This investigation was completed in general accordance with our Proposal No. P18-1328-01G dated August 20, 2018.

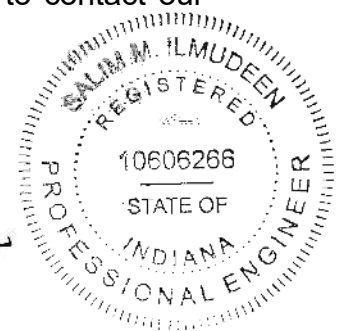
This report includes detailed and graphic logs of eighteen (18) soil borings drilled at the proposed project site. Also included in the report are the results of laboratory tests performed on samples obtained from the site, and geotechnical recommendations pertinent to the site development, foundation design, and construction.

We appreciate the opportunity to perform this geotechnical engineering investigation and are looking forward to working with you during the construction phase of the project. If you have any questions regarding this report or if we may be of any additional assistance regarding any geotechnical aspect of the project, please do not hesitate to contact our office.

Respectfully submitted,  
**Patriot Engineering and Environmental, Inc.**

**Michael Hammond, E.I.**  
Geotechnical Engineer

**Salim Ilmudeen, P.E.**  
Principal Engineer





## TABLE OF CONTENTS

<b>1.0 INTRODUCTION .....</b>	<b>1</b>
1.1 General .....	1
1.2 Purpose and Scope.....	1
<b>2.0 PROJECT INFORMATION .....</b>	<b>1</b>
<b>3.0 SITE AND SUBSURFACE CONDITIONS.....</b>	<b>2</b>
3.1 Site Conditions .....	2
3.2 General Subsurface Conditions.....	2
3.3 Groundwater Conditions.....	3
<b>4.0 DESIGN RECOMMENDATIONS .....</b>	<b>4</b>
4.1 Basis .....	4
4.2 Foundations .....	4
4.3 Floor Slabs.....	5
4.4 Seismic Considerations .....	6
4.5 Pavements .....	7
<b>5.0 CONSTRUCTION CONSIDERATIONS .....</b>	<b>8</b>
5.1 Site Preparation .....	8
5.2 Foundation Excavations .....	9
5.3 Structural Fill and Fill Placement Control .....	10
5.4 Chemical Modification Considerations.....	11
5.5 Groundwater Considerations.....	12
<b>6.0 INVESTIGATIONAL PROCEDURES.....</b>	<b>12</b>
6.1 Field Work.....	12
6.2 Laboratory Testing .....	13
<b>7.0 ILLUSTRATIONS .....</b>	<b>14</b>

### APPENDICES

Appendix A:	Site Vicinity Map (Figure No. 1)
	Boring Location Map (Figure No. 2)
	Boring Logs
	Boring Log Key
	Unified Soil Classification System (USCS)
Appendix B:	Seismic Site Class Evaluation
Appendix C:	General Qualifications
	Standard Clause for Unanticipated Subsurface Conditions



## **REPORT OF GEOTECHNICAL ENGINEERING INVESTIGATION**

### **Eastwood Middle School Additions and Renovation 4401 East 62<sup>nd</sup> Street Indianapolis, Indiana Patriot Project No.: 18-1645-01G**

## **1.0 INTRODUCTION**

### **1.1 General**

Eastwood Middle School in conjunction with Lynch, Harrison & Brumleve, Inc. is planning the construction of new additions at the existing Eastwood Middle School located at 4401 East 62<sup>nd</sup> Street in Indianapolis, Indiana. The results of our geotechnical engineering investigation for the project are presented in this report.

### **1.2 Purpose and Scope**

The purpose of this investigation is to determine the general near surface and subsurface conditions within the project area and to develop the geotechnical engineering recommendations necessary for the design and construction of the proposed additions. This was achieved by drilling soil borings, and by conducting laboratory tests on samples taken from the borings. This report contains the results of our findings, an engineering interpretation of these results with respect to the available project information, and recommendations to aid in the design and construction of the proposed additions.

## **2.0 PROJECT INFORMATION**

The proposed project includes the construction of new additions to the existing Eastwood Middle School located at 4401 East 62<sup>nd</sup> Street in Indianapolis, Indiana. The proposed building additions will be one (1) and two (2)-story structures of slab-on-grade construction. The proposed additions are located surrounding the existing building, with portions varying in size on the north, west, south, and east side of the existing structure. In additions, the renovations will include modification and construction of new pavement areas at the school.

Based on information provided by Lynch, Harrison & Brumleve, Inc., we understand that the proposed structures will have wall loads not exceeding 2,000 pounds per lineal feet (plf), isolated column loads not exceeding 160 kips, and that floor loads will not exceed 150 pounds per square foot (psf). Additionally, based on visual observations of the



existing site, it is assumed that any grade raise fill to complete the construction of building pads, finished pavement subgrades, etc., will not exceed 2 feet above the existing ground surface.

### 3.0 SITE AND SUBSURFACE CONDITIONS

#### 3.1 Site Conditions

The project site includes multiple areas surrounding the existing Eastwood Middle School building. These areas consist of both grass areas, as well as portions within the existing parking lot. The surrounding area is generally an area of residential development. The topography in the area proposed for construction is generally flat.

#### 3.2 General Subsurface Conditions

Our interpretation of the subsurface conditions is based upon eighteen (18) soil borings drilled at the approximate locations shown on the Boring Location Map (Figure No. 2) in Appendix "A". All depths discussed below refer to depths below the existing ground surface. Based on the results of the soil borings completed at the site, the following subsurface profile is presented. A description of each general soil unit has been identified and is described below:

Topsoil – Topsoil, a surficial layer of material that is a blend of silts, sands, and clays, with varying amounts of organic matter, was encountered at the ground surface at fourteen (14) of the eighteen (18) boring locations. The topsoil layer was about 8 to 10 inches thick in the borings.

Asphalt – Asphalt underlain by crushed stone was encountered in four (4) soil borings (B-5 through B-8). The asphalt layer was about 6 to 10 inches thick, underlain by approximately 4 to 6 inches of crushed stone.

Silty and/or Sandy Clay (CL and CL-ML) - The surficial layer is generally underlain by medium stiff to hard silty and/or sandy clay. The silty and/or sandy clay layers typically extends to termination of the soil borings (approximately 15 to 40 feet below the existing ground surface) with interbedded sand layers. **However, layers of very soft to soft clays were encountered at two (2) boring locations. Table 1 below presents the extent of the unsuitable soils encountered in the soil borings.** The natural moisture content of the medium stiff to hard materials ranges from 8 to 29 percent (%). The silty and/or sandy clay layers have unconfined compressive strengths, as determined by a



hand penetrometer, of 0.75 to greater than 4.5 tons per square foot (tsf). Standard Penetration Test N-values (blow counts) in these materials varied from 5 to more than 50 blows per foot (bpf).

**Table No. 1: Summary of Unsuitable Soils Encountered in Borings**

<b>Boring Number</b>	<b>Soil Classification</b>	<b>Approximate Depth of Unsuitable Soils (feet)<sup>(1)</sup></b>
B-1	Very Soft to Soft Silty Clay (CL)	3.5 to 8.5
B-8	Soft Silty Clay (CL)	0 to 3.5

<sup>(1)</sup> Represents depth below existing ground surface.

Sands (SP-SM, SC, and SM) – Within the silty and/or sandy clay layers, loose to medium dense sand, clayey sand, and silty sand layers were encountered in eight (8) soil borings at depths between 3.5 to 20+ feet below existing grade. Standard Penetration Test N-values in these sands varied from 6 and 40 bpf.

Sandy Silt (ML) – Within the silty and/or sandy clay layers, a medium dense sandy silt layer was encountered from 6 to 8.5 feet below the existing ground surface in Boring B-5. The Standard Penetration Test N-value in this sandy silty was 11 bpf.

The soil conditions described above are general, and some variations in the descriptions should be expected; for more specific information, please refer to the boring logs presented in Appendix “A”. It should be noted that the dashed stratification lines shown on the soil boring logs indicate approximate transitions between soil types. In-situ stratification changes could occur gradually or at different depths.

### **3.3 Groundwater Conditions**

The term groundwater pertains to any water that percolates through the soil found on site. This includes any overland flow that permeates through a given depth of soil, perched water, and water that occurs below the “water table”, a zone that remains saturated and water-bearing year round.

Groundwater was observed during drilling in five (5) of the eighteen (18) soil borings performed at the site at depths between 17 to 19 feet below the existing ground surface. Groundwater was not observed in the remaining borings during drilling. Immediately after the borings were completed and the augers were removed from the boreholes,



groundwater was observed at depths between 14 to 31 feet below the existing ground surface in three (3) of the eighteen (18) soil borings. The remaining borings were dry at the cave-in depths shown on the boring logs.

It should be recognized that fluctuations in the groundwater level should be expected over time due to variations in rainfall and other environmental or physical factors. ***The true static groundwater level can only be determined through observations made in cased holes over a long period of time, the installation of which was beyond the scope of this investigation.***

## 4.0 DESIGN RECOMMENDATIONS

### 4.1 Basis

Our recommendations are based on data presented in this report, which include soil borings, laboratory testing, and our experience with similar projects. Subsurface variations that may not be indicated by a dispersive exploratory boring program can exist on any site. If such variations or unexpected conditions are encountered during construction, or if the project information is incorrect or changed, we should be informed immediately since the validity of our recommendations may be affected.

### 4.2 Foundations

As previously mentioned, very soft to soft clays were encountered in two (2) soil borings performed at the project site (refer to Table 1). ***If very soft to soft clays or other unsuitable materials are encountered at the footing level or below, they must be undercut and replaced with well-compacted structural fill or improved in-place prior to construction of foundations or the footings can be extended to suitable natural soils. If soft soils are encountered near the existing structure, shoring and/or underpinning of the existing structure may be necessary to undercut the unsuitable soils.*** Following the excavation of the footing areas, the foundations subgrade should be visually inspected by a *Patriot* representative and probed at multiple locations at isolated footings and at every 10 feet (maximum) along wall footings using a Dynamic Cone Penetrometer (DCP) to a minimum depth of 5 feet below the footing subgrade to verify that the underlying soil has a SPT blow count of 7 or more or unconfined compressive strength of 1.0 tsf or more. Any unsuitable soils encountered at the footing subgrade or below should be removed and replaced with well-compacted structural fill.



Provided the above recommendations are followed, the proposed structures can be supported on spread footings bearing on the medium stiff to very stiff silty and/or sandy clays encountered at shallow depths or on new well-compacted structural fill overlying the same. These footings should be proportioned using a net allowable soil bearing pressure not exceeding 2,500 pounds per square foot (psf) for column footings or 2,000 psf for wall (strip) footings. For proper performance at the recommended design bearing pressure, foundations must be constructed in compliance with the recommendations for footing excavation inspection that are discussed in Section 5.0 "*Construction Considerations*".

In using the above net allowable soil bearing pressures, the weight of the foundation and backfill over the foundation need not be considered. Hence, only loads applied at or above the minimum finished grade adjacent to the footing need to be used for dimensioning the foundations. Each new foundation should be positioned so it does not induce significant pressure on adjacent foundations; otherwise the stress overlap must be considered in the design.

All exterior foundations and foundations in unheated areas should be located at a depth of at least 30 inches below final exterior grade for frost protection. However, interior foundations in heated areas can bear at depths of approximately 24 inches below the finished floor. We recommend that wall (strip) footings be at least 18 inches wide and column footings be at least 24 inches wide for bearing capacity considerations.

We estimate that the total foundation settlement should not exceed approximately 1 inch and that differential settlement should not exceed about  $\frac{3}{4}$  inch. Careful field control during construction is necessary to minimize the actual settlement that will occur.

***Positive drainage of surface water, including downspout discharge, should be maintained away from structure foundations to avoid wetting and weakening of the foundation soils both during construction and after construction is complete.***

#### **4.3 Floor Slabs**

The near surface or shallow subgrade soils encountered within the proposed addition footprints generally consist of medium stiff to very stiff silty and/or sandy clays, which if properly prepared are suitable for floor slab support. ***However, soft clays were encountered in two (2) of the eighteen (18) soil borings at the project site. If soft clays or other unsuitable soils are encountered in floor slab areas, these unsuitable soils should be undercut and replaced with well-compacted structural***



**fill prior to construction of floor slabs.** Furthermore, depending on the weather conditions at the time of construction, scarifying and drying and/or chemical modification (Refer to Section 5.4 “Chemical Modification Considerations”) may be necessary to manage moisture contents in the clays in order to achieve the necessary subgrade soil support prior to the placement of floor slabs or any grade raise fill.

We recommend that all floor slabs be designed as "floating", that is, fully ground supported and not structurally connected to walls or foundations. This is to minimize the possibility of cracking and displacement of the floor slabs because of differential movements between the slab and the foundation. Although the movements are estimated to be within the tolerable limits for the structural safety, such movements could be detrimental to the slabs if they were rigidly connected to the foundations. Additionally, we recommend that all slabs should be liberally jointed and designed with the appropriate reinforcement for the anticipated loading conditions.

The building floor slabs should be supported on a minimum 6 inch thick well-compacted granular base course (i.e. Indiana Department of Transportation (INDOT) No. 53 crushed stone) bearing on a suitably prepared subgrade (Refer to Section 5.0 “*Construction Considerations*”). The granular base course is expected to help distribute loads and equalize moisture conditions beneath the slab.

Provided that the recommendations above for floor slab design and construction are followed, a modulus of subgrade reaction, “K<sub>30</sub>” value of 100 pounds per cubic inch (pci), is recommended for the design of ground supported floor slabs. It should be noted that the “K<sub>30</sub>” modulus is based on a 30 inch diameter plate load empirical relationship.

#### **4.4 Seismic Considerations**

For structural design purposes, we recommend using a **Site Classification of “C”** as defined by the 2014 Indiana Building Code (modified 2012 International Building Code (IBC)). Furthermore, along with using a Site Classification of “C”, we recommend the use of the maximum considered spectral response acceleration and design spectral response acceleration coefficients provided in Table No. 2 below. Refer to Appendix “B” for “*Seismic Site Class Evaluation*” report summary.

**Table No. 2: Seismic Design Spectral Response Acceleration Coefficients**

Period (seconds)	Maximum Considered Spectral Response Acceleration Coefficient	Soil Factor	Design Spectral Response Acceleration Coefficient
0.2	$S_s = 0.151 \text{ g}$	1.20	$S_{DS} = 0.121 \text{ g}$
1.0	$S_1 = 0.083 \text{ g}$	1.70	$S_{D1} = 0.094 \text{ g}$

These values were obtained from the “*Earthquake Ground Motion Parameters*” program for seismic design, developed by the United States Geological Survey (USGS) Earthquake Hazard Program, utilizing latitude 39.86756° (degree) north and longitude 86.09258° (degree) west as the designation for identifying the location of the parcel. Other earthquake resistant design parameters should be applied consistent with the minimum requirements of the 2014 Indiana Building Code.

**4.5 Pavements**

The near surface or shallow subgrade soils encountered within the proposed pavement areas generally consist of medium stiff to very stiff silty and/or sandy clays, which if properly prepared are suitable for pavement support. ***However, soft clays were encountered in two (2) of the eighteen (18) soil borings at the project site. If soft clays or other unsuitable soils are encountered in pavement areas, these unsuitable soils should be undercut and replaced with well-compacted structural fill prior to construction of pavements.*** Furthermore, depending on the weather conditions at the time of construction, scarifying and drying and/or chemical modification (Refer to Section 5.4 “Chemical Modification Considerations”) may be necessary to manage moisture contents in the clays in order to achieve the necessary subgrade soil support prior to the placement of pavement sections or any grade raise fill.

***If construction is performed during a wet or cold period, the contractor will need to exercise care during the grading and fill placement activities in order to achieve the necessary subgrade soil support for the pavement section (Refer to Section 5.0 “Construction Considerations”).*** The base soil for the pavement section will need to be firm and dry. The subgrade should be sloped properly in order to provide good base drainage. To minimize the effects of groundwater or surface water conditions, the base



section for the pavement system should be sufficiently high above adjacent ditches and properly graded to provide pavement surface and pavement base drainage.

Based upon the near surface soils encountered in the borings, we recommend using a California Bearing Ratio (CBR) value of 3 for the design of flexible (hot mix asphalt (HMA)) pavement sections. For design of rigid (concrete) pavement sections, we recommend using a modulus of subgrade reaction value of 100 pounds per cubic inch (pci). It should be recognized though, that the recommended CBR and modulus of subgrade reaction values provided are based on empirical relationships only, and laboratory tests may determine higher allowable values.

## 5.0 CONSTRUCTION CONSIDERATIONS

### 5.1 Site Preparation

All areas that will support foundations, floors, pavements or newly placed structural fill must be properly prepared. All loose surficial soil or “topsoil” and other unsuitable materials must be removed. Unsuitable materials include: frozen soil, relatively soft material, relatively wet soils, deleterious material, or soils that exhibit a high organic content. ***Additionally, all existing trees, under-brush and associated root-mass must also be completely removed within the proposed building and pavement areas prior to construction.***

Approximately 8 to 10 inches of loose surficial topsoil was encountered in the borings. The topsoil was measured at discrete locations as shown on the Boring Location Map (Figure No. 2) in Appendix “A”. The topsoil thickness measured at the boring locations may or may not be representative of the overall average topsoil thickness at the site. Therefore, it is possible that the actual stripping depth could significantly vary from this data. The data presented should be viewed only as a guide to the minimum stripping depth that will be required to remove organic material at the surface. Additional field exploration by *Patriot* would be required to provide an accurate estimate of the stripping depth. This limited data indicates that a minimum stripping depth will be required to remove the organic material at the surface, followed by the potential for additional stripping and/or scarification and recompaction as may be required to achieve suitable subgrade support. ***Additionally, if saturated conditions exist with the surface soils, light tracked equipment could be required to avoid pushing organics deeper into the suitable subgrade soils.*** A *Patriot* representative should verify the stripping depth at the time grading operations occur.

**Prior to construction of floor slabs, pavements or the placement of new structural fill, the exposed subgrade must be evaluated by a Patriot representative; which will include proofrolling of the subgrade.** Proofrolling should consist of repeated passes of a loaded, pneumatic-tired vehicle such as a tandem-axle dump-truck or scraper. The proofrolling operations should be observed by a *Patriot* representative, and the proofrolling vehicle should be loaded as directed by *Patriot*. Any area found to rut, pump, or deflect excessively should be compacted in-place or, if necessary, undercut and replaced with structural fill, compacted as specified in Section 5.3 “*Structural Fill and Fill Placement Control*”.

Care must be exercised during grading and fill placement operations. **The combination of heavy construction equipment traffic and excess surface moisture can cause pumping and deterioration of the near surface soils. The severity of this potential problem depends to a great extent on the weather conditions prevailing during construction.** The contractor must exercise discretion when selecting equipment sizes and also make a concerted effort to control construction traffic and surface water while the subgrade soils are exposed. We recommend that heavy construction equipment (i.e. dump trucks, scrapers, etc.) be rerouted away from the building and pavement areas. If such problems do arise, the operations in the affected area should be halted and the *Patriot* representative contacted to evaluate the condition.

## 5.2 Foundation Excavations

Upon completion of the foundation excavations and prior to the placement of reinforcing steel, a *Patriot* representative should check the exposed subgrade to confirm that a bearing surface of adequate strength has been reached. Any localized soft soil zones encountered at the bearing elevations should be further excavated until adequate support soils are encountered. The cavity should be backfilled with structural fill as defined below, or the footing can be poured at the excavated depth. Structural fill used as backfill beneath footings should be limited to lean concrete, well-graded sand and gravel, or crushed stone placed and compacted in accordance with Section 5.3 “*Structural Fill and Fill Placement Control*”.

If it is necessary to support spread footings on structural fill, the fill pad must extend laterally a minimum distance beyond the edge of the footing. The minimum structural pad width would correspond with a point at which an imaginary line extending downward from the outside edge of the footing at a 1H:2V (horizontal: vertical) slope intersects the surface of the natural soils. For example, if the depth to the bottom of excavation is 4 feet



below the bottom of the foundation, the excavation would need to extend laterally beyond the edge of the footing at least 2 feet, as shown in Illustration "A" found at the conclusion of this report.

Excavation slopes should be maintained within all requirements set-forth by the Occupational Safety and Health Standards (OSHA), but specifically Section 1926 Subpart "P" – "Excavations". We recommend that any surcharge fill or heavy equipment be kept at least 5 feet away from the edge of the excavation.

In addition, excavations that occur near existing in-use foundations should be carefully performed making a conscious effort not to undermine the support of the in-use foundations. If it is necessary to excavate soil adjacent to and below the bearing elevation of any in-use foundations, *Patriot* should be contacted to make further recommendations regarding these excavations. Please refer to Illustration "B" at the end of this report for further details.

Construction traffic on the exposed surface of the bearing soil will potentially cause some disturbance of the subgrade and consequently loss of bearing capacity. However, the degree of disturbance can be minimized by proper protection of the exposed surface.

### **5.3 Structural Fill and Fill Placement Control**

Structural fill, defined as any fill which will support structural loads, should be clean and free of organic material, debris, deleterious materials and frozen soils. Samples of the proposed fill materials should be tested prior to initiating the earthwork and backfilling operations to determine the classification, the natural and optimum moisture contents and maximum dry density and overall suitability as a structural fill. ***Structural fill should have a liquid limit less than 40 and a plasticity index less than 20.***

All structural fill beneath floor slabs, adjacent to foundations and over foundations, should be compacted to at least 95 percent (%) of its maximum Standard Proctor dry density (ASTM D-698). This minimum compaction requirement should be increased to 100 percent (%) of the maximum Standard Proctor dry density for fill supporting footings, provided these are designed as outlined Section 4.0 "*Design Recommendations*".

Structural fill supporting, around and over utilities should be compacted to at least 95 percent (%) of its maximum Standard Proctor dry density (ASTM D-698) for utilities underlying structural areas (i.e. buildings, pavements, sidewalks, etc.). However, the minimum compaction requirement can be reduced for backfill around and over the utilities to 90 percent (%) of the maximum Standard Proctor dry density where utilities underlie greenbelt areas (i.e. grassy lawns, landscaping, etc.). It is recommended that a clean well-grade granular material be utilized as the bedding material, as well as the backfill material around and over the utility lines.

In cut areas, where pavement sections are planned, the upper 10 inches of subgrade should be scarified and compacted to a dry density of at least 100 percent (%) of the Standard Proctor maximum dry density (ASTM D-698). Any grade-raise fill placed within 1 foot of the base of the pavement section should also be compacted to at least 100 percent (%) of the Standard Proctor maximum dry density. This can be reduced to 95 percent (%) for structural fill placed more than 1 foot below the base of the pavement section.

To achieve the recommended compaction of the structural fill, we suggest that the fill be placed and compacted in layers not exceeding 8 inches in loose thickness (the loose lift thickness should be reduced to 6 inches when utilizing small hand compactors) and within the range of 2 percentage (%) points below or above the optimum moisture content value. All fill placement should be monitored by a *Patriot* representative. ***Each lift should be tested for proper compaction at a frequency of at least one (1) test every 2,500 square feet (ft<sup>2</sup>) per lift for the building areas, at least one (1) test every 10,000 square feet (ft<sup>2</sup>) per lift for the parking and roadway areas, and at a frequency of at least one (1) test for every 50 lineal feet of utility installation.***

#### **5.4 Chemical Modification Considerations**

The addition of lime or lime kiln dust (LKD) to clay soils of moderate to high plasticity generally results in the reduction of the plasticity properties of the soil, reduction in moisture holding capacity, swell reduction, and increased soil strength. Prior to the application of the lime or lime kiln dust (LKD), a number of representative samples of soils should be obtained from the final graded subgrade soils to determine the lime or lime kiln dust (LKD) reactivity and percentage (%) of lime or lime kiln dust (LKD) needed for modification of the soils (usually 5 to 8 percent (%)). A specialty contractor experienced in lime modification should apply and determine the rate at which hydrated lime or lime kiln



dust (LKD) is mixed into the existing soils. Mixing depths of 12 to 18 inches is typical. A *Patriot* representative should monitor the mixing and compaction processes.

***It should be noted that in areas where chemical modification of the natural subgrade soil is completed prior to the placement of grade raise fill and the grade raise fill is less than 18 inches in thickness, we recommend that any cohesive grade raise fill be modified similar to the natural subgrade.*** It has been our experience that untreated cohesive structural fill, in less than 18 inches in thickness, placed on top of chemically modified soil may become unstable over time due to excessive moisture accumulation. The underlying chemically modified soil may act as a barrier to natural water seepage into the soil profile, thereby trapping the water within the structural fill to the point of saturation.

## **5.5 Groundwater Considerations**

Groundwater was observed during our field activities at depths between about 14 to 31 feet below the existing ground surface; which is expected to be below the anticipated foundation excavation depths. Therefore, depending on seasonal conditions, localized and sporadic groundwater infiltration may occur into the building foundation excavations on this site.

Groundwater inflow into shallow excavations **above** the groundwater table is expected to be adequately controlled by conventional methods such as gravity drainage and/or pumping from sumps. More significant inflow can be expected in deeper excavations **below** the groundwater table requiring more aggressive dewatering techniques, such as well or wellpoint systems. For groundwater to have minimal effects on the construction, foundation excavations should be constructed and poured in the same day, if possible.

## **6.0 INVESTIGATIONAL PROCEDURES**

### **6.1 Field Work**

A total of eighteen (18) soil borings were drilled, sampled, and tested at the project site between October 23<sup>rd</sup> to 26<sup>th</sup>, 2018 at the approximate locations shown on the Boring Location Map (Figure No. 2) in Appendix "A". The depths that the soil borings were advanced to are shown on the Boring Logs in Appendix "A". All depths are given as feet below the existing ground surface.

The borings were advanced using 3¼ inch inside diameter hollow-stem augers. Samples were recovered in the undisturbed material below the bottom of the augers using the standard drive sample technique in accordance with ASTM D 1586-74. A 2 inch outside diameter by 1<sup>3</sup>/<sub>8</sub> inch inside diameter split-spoon sampler was driven a total of 18 inches with the number of blows of a 140 pound hammer falling 30 inches recorded for each 6 inches of penetration. The sum of blows for the final 12 inches of penetration is the Standard Penetration Test result commonly referred to as the N-value (or blow-count). Split-spoon samples were recovered at 2.5 feet intervals, beginning at a depth of 1 foot below the existing surface grade, extending to a depth of 10 feet, and at 5 feet intervals thereafter to the termination of the boring.

Water levels were monitored at each borehole location during drilling and upon completion of the boring. The boreholes were backfilled with a mixture of auger cuttings and bentonite chips. Boring performed in pavement areas were patched prior to demobilization for safety considerations.

Upon completion of the boring program, all of the samples retrieved during drilling were returned to *Patriot's* soil testing laboratory where they were visually examined and classified. A laboratory-generated log of each boring was prepared based upon the driller's field log, laboratory test results, and our visual examination. Test boring logs and a description of the classification system are included in Appendix "A" in this report. Indicated on each log are: the primary strata encountered, the depth of each stratum change, the depth of each sample, the Standard Penetration Test results, groundwater conditions, and selected laboratory test data. The laboratory logs were prepared for each boring giving the appropriate sample data and the textural description and classification.

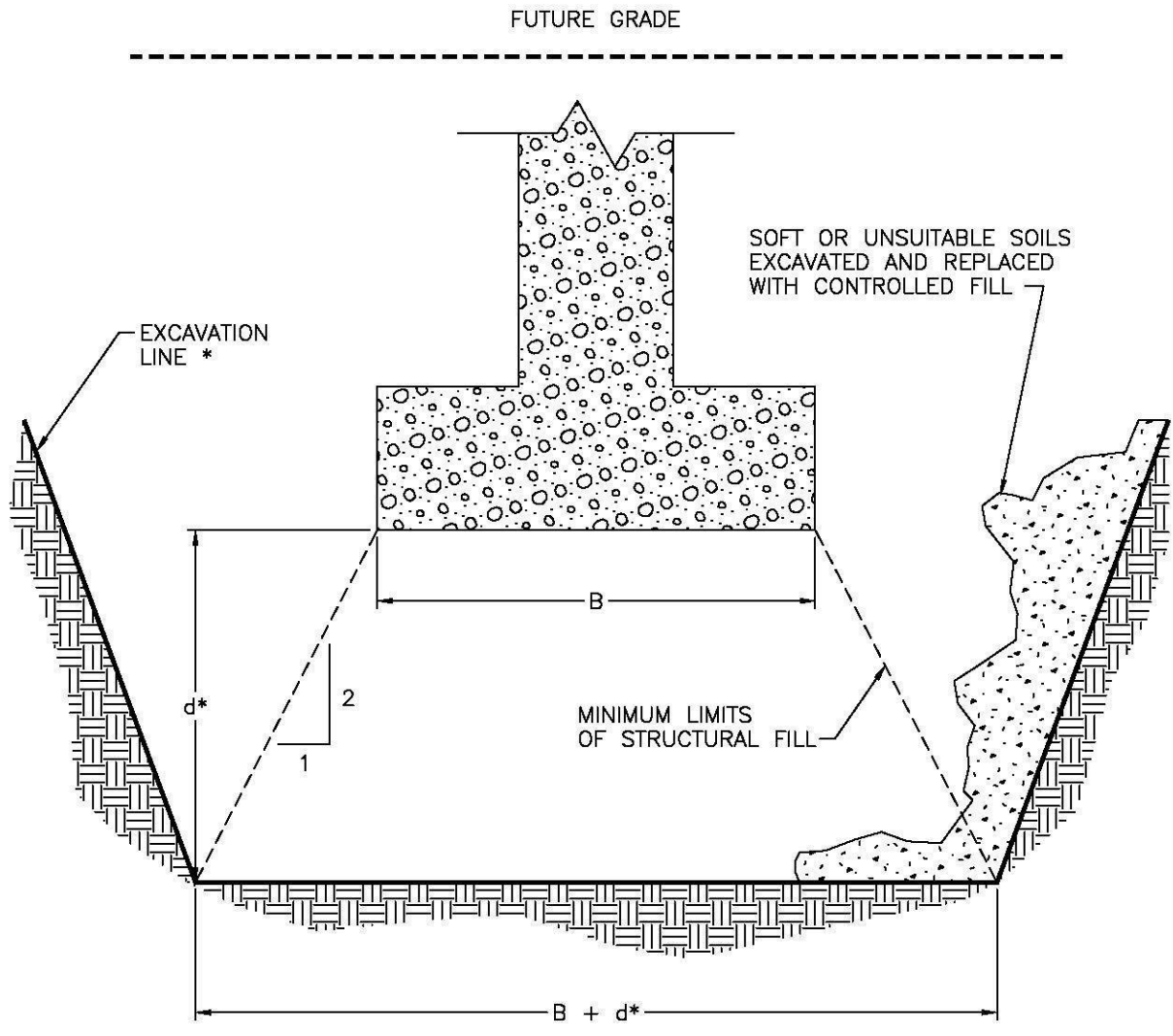
## **6.2 Laboratory Testing**

Representative samples recovered in the borings were selected for testing in the laboratory to evaluate their physical properties and engineering characteristics. Laboratory analysis included natural moisture content determinations (ASTM D 2216) and an estimate of the unconfined compressive strength ( $q_u$ ) of the cohesive soil samples utilizing a calibrated hand penetrometer ( $q_p$ ) were obtained. The results of laboratory tests are summarized in Section 3.2 "*General Subsurface Conditions*". Soil descriptions on the boring logs are in accordance with the Unified Soil Classification System (USCS).



## **7.0 ILLUSTRATIONS**

See Illustrations “A” and “B” on the following pages. These illustrations are presented to further visually clarify several of the construction considerations presented in Section 5.2 “*Foundation Excavations*”.



\*d IS DEPTH TO SUITABLE SOILS

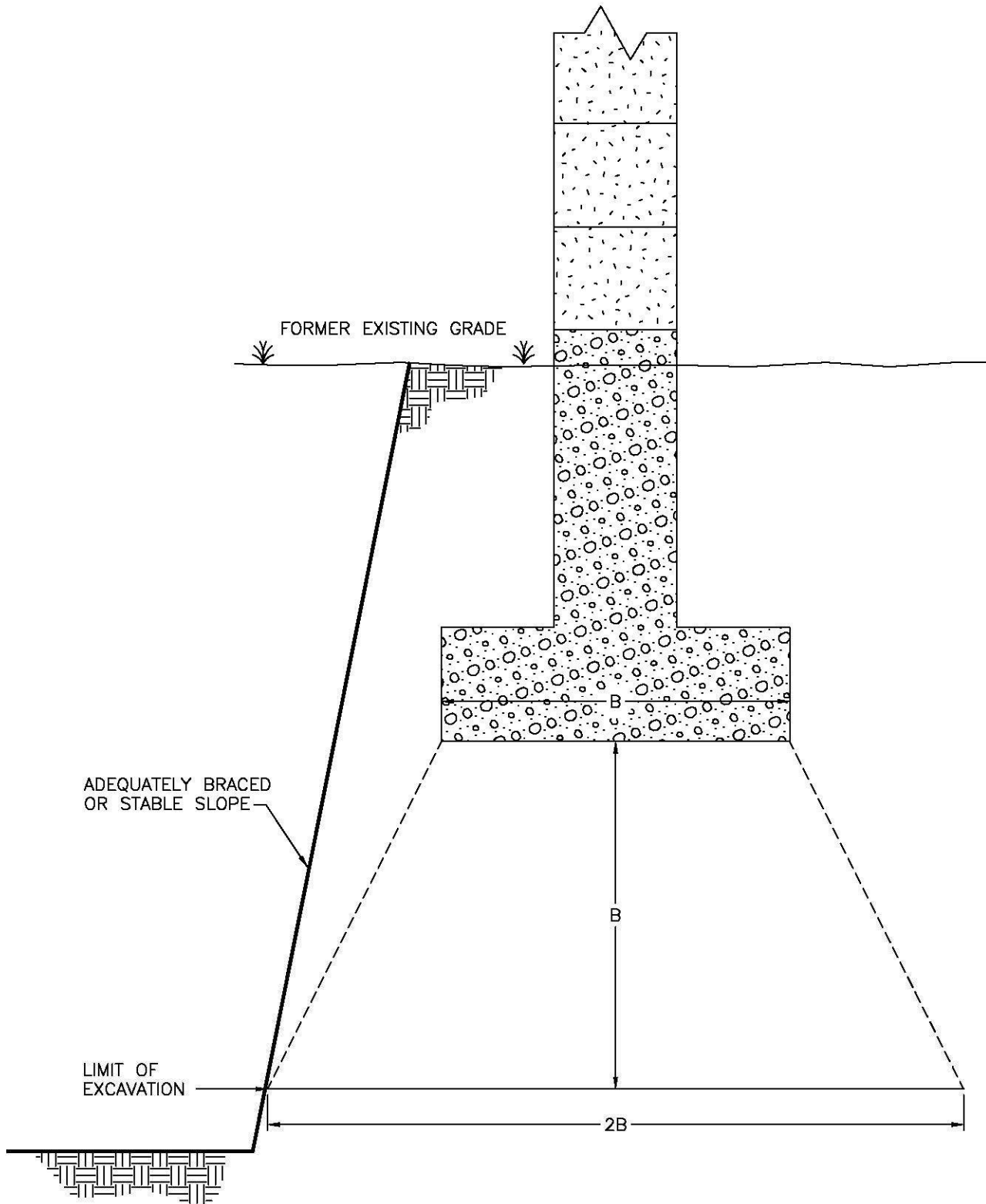
\* IN COMPLIANCE WITH OSHA STANDARDS

**PATRIOT ENGINEERING  
and Environmental, Inc.**  
Engineering Value for Project Success  
Consulting Environmental, Geotechnical  
and Materials Engineers

Excavation for Footings  
In an Area of Fill  
**ILLUSTRATION A**

job. no.: \_\_\_\_\_ figure: \_\_\_\_\_





Excavation Near Existing  
In Use Foundations  
ILLUSTRATION B



**PATRIOT ENGINEERING  
and Environmental, Inc.**

*Engineering Value for Project Success  
Consulting Environmental, Geotechnical  
and Materials Engineers*

job. no.:

figure:

**APPENDIX A**

**SITE VICINITY MAP (FIGURE NO. 1)**

**BORING LOCATION MAP (FIGURE NO. 2)**

**BORING LOGS**

**BORING LOG KEY**

**UNIFIED SOIL CLASSIFICATION SYSTEM  
(USCS)**



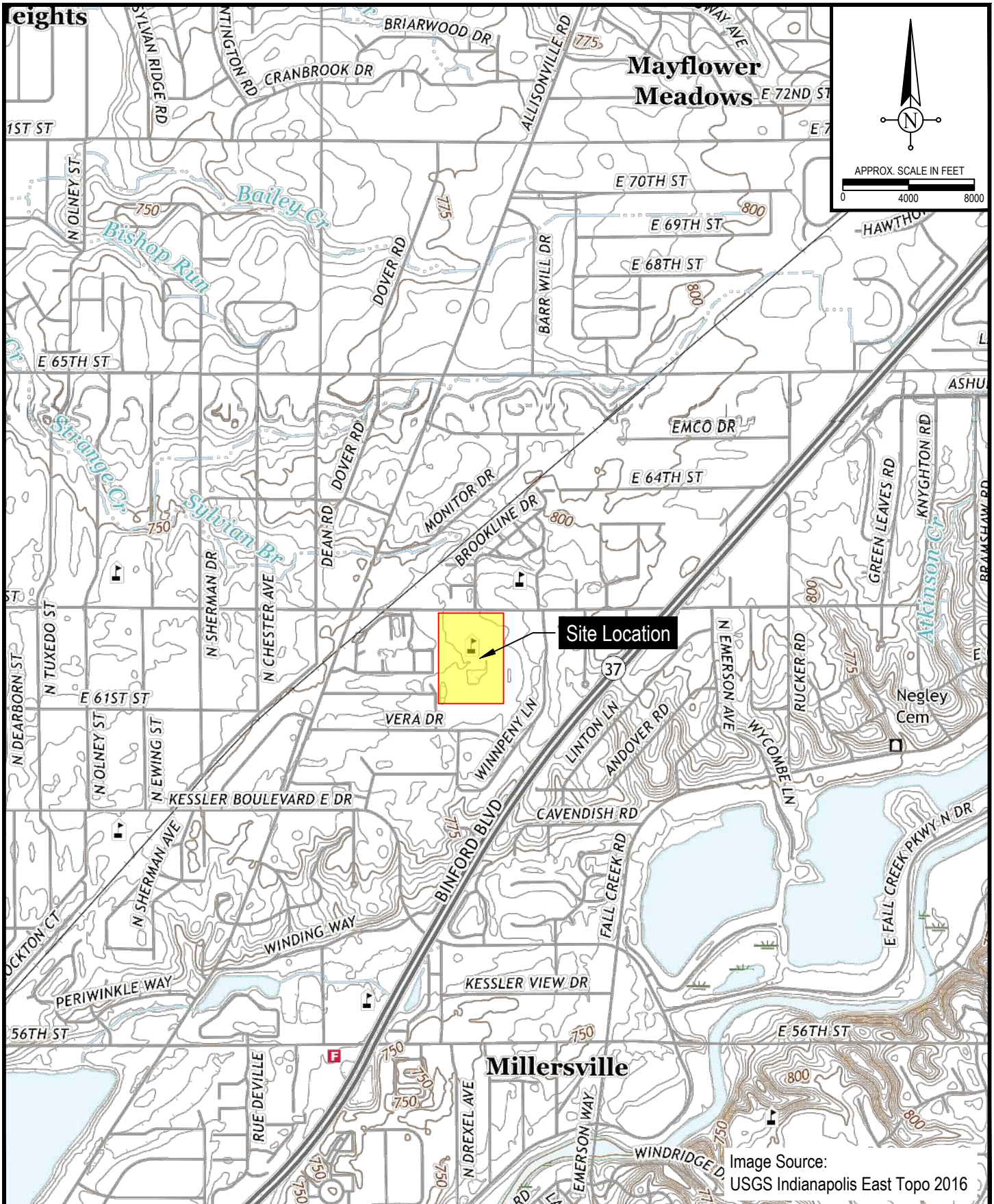


Image Source:  
USGS Indianapolis East Topo 2016



**Patriot Engineering &  
Environmental, Inc.**

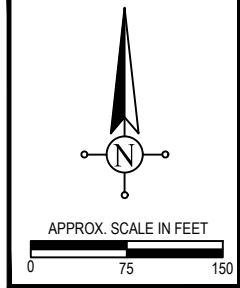
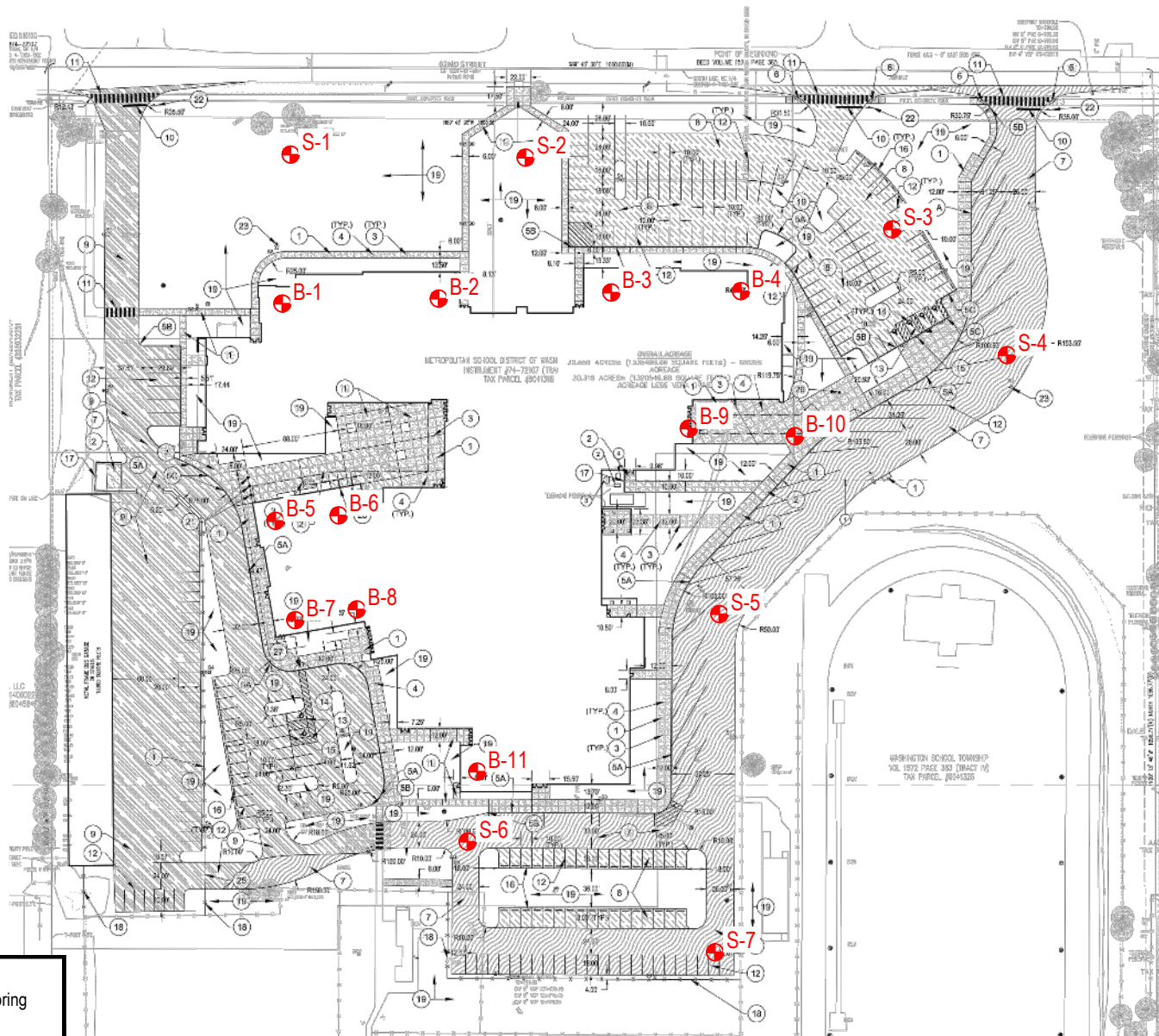
Project: Eastwood Middle School  
4401 East 62nd Street  
Indianapolis, Indiana

Project Number: 18-1645-01	Drawn By: J. DuMond
Date: November 6, 2018	Approved: M. Hammond
	DWG: 18-1645-01_geo

Figure 1

Site Vicinity Map





**LEGEND**  
 ● PATRIOT Soil Boring  
 B-1 Soil Boring ID



**NOTES:**  
 1. Boring locations were staked by PATRIOT. All locations are shown as approximate.  
 2. All locations were determined in the field with references to existing landmarks.  
 3. Source: Schmidt Assoc. Layout Plan  
 4. Scale as shown.

Project: Eastwood Middle School  
 4401 East 62nd Street  
 Indianapolis, Indiana

Project Number: 18-1645-01	Drawn By: J. DuMond
Date: November 6, 2018	Approved: M. Hammond
	DWG: 18-1645-01_geo

Figure 2  
 Soil Boring Location Map





# LOG OF BORING B-1

Eastwood Middle School  
4401 East 62nd Street  
Indianapolis, Indiana

Client Name : Lynch, Harrison & Brumleve, Inc. Driller : J. Boeche  
 Project Number : 18-1645-01G Sampling : Splitspoon  
 Logged By : E. Rothe  
 Start Date : 10/26/2018  
 Drilling Method : HSA

Depth (Feet)	Water Level	USCS	GRAPHIC	Water Levels		Samples	Rec %	SPT Results	qp tsf	w %	REMARKS
				▼ During Drilling	▽ After Completion						
				◆ After 24 Hours DESCRIPTION							
0				TOPSOIL (10")							
		CL		Brown and gray, moist, medium stiff to soft, SILTY CLAY with trace sand		1	78	3/4/3	1.5	20	
		CL		Brown, very moist, very soft, SILTY CLAY with trace sand		2	56	2/2/2	0.75	16	
		CL		Brown, moist, medium stiff, SILTY CLAY with trace sand		3	78	1/1/1		25	
		CL		Brown, moist, medium stiff, SILTY CLAY with trace sand		4	67	1/3/4	0.75	17	
		CL		Gray, moist, stiff, SILTY CLAY		5	89	5/7/7		18	
		CL-ML		Gray, slightly moist, very stiff to hard, SANDY SILTY CLAY with trace gravel		6	89	2/8/15	>4.5	8	
<p>Boring terminated at 20 feet.</p> <p>Groundwater was not encountered during drilling, nor upon completion.</p>											



# LOG OF BORING B-1A

Eastwood Middle School  
4401 East 62nd Street  
Indianapolis, Indiana

Client Name : Lynch, Harrison & Brumleve, Inc. Driller : J. Boeche  
 Project Number : 18-1645-01G Sampling : Shelby Tube  
 Logged By : S. Vaught  
 Start Date : 10/26/2018  
 Drilling Method : HSA

Depth (Feet)	Water Level	USCS	GRAPHIC	Water Levels			Samples	Rec %	SPT Results	qp tsf	w %	REMARKS	
				▼ During Drilling	▽ After Completion	◆ After 24 Hours							
				DESCRIPTION									
0				Blank drilled from 0 to 6 feet. Refer to Boring B-1 for a description of soil strata.									Boring B-1A offset 7 feet east from boring B-1.
5		SC-SM		Brown, slightly moist, SILTY, CLAYEY SAND				1	58		22		Sample No. 1: Shelby tube pushed from 6 to 8 feet.  Unit Weight Test: Wet Unit Weight = 132.1 pcf Dry Unit Weight = 108.2 pcf
		CL		Brown, moist, SILTY CLAY with trace sand									Boring did not cave upon auger removal.
10				Boring terminated at 8 feet.									Groundwater was not encountered during drilling, nor upon completion.
15													
20													
25													
30													
35													
40													
45													





**PATRIOT ENGINEERING  
and Environmental Inc.**

Indianapolis, Terre Haute, Evansville, Fort Wayne,  
Lafayette, Bloomington, Louisville KY, Dayton OH,  
Nashville TN, Carmi IL, New Orleans LA

**LOG OF BORING B-2**

(Page 1 of 1)

Eastwood Middle School  
4401 East 62nd Street  
Indianapolis, Indiana

Client Name : Lynch, Harrison & Brumleve, Inc. Driller : J. Boeche  
Project Number : 18-1645-01G Sampling : Splitspoon  
Logged By : E. Rothe  
Start Date : 10/26/2018  
Drilling Method : HSA

Depth (Feet)	Water Level	USCS	GRAPHIC	Water Levels		Samples	Rec %	SPT Results	qp tsf	w %	REMARKS
				▼ During Drilling	▽ After Completion						
				DESCRIPTION							
0				TOPSOIL (9")							
		CL		Brown, slightly moist, stiff to very stiff, SANDY CLAY with trace gravel		1	100	6/9/11	3.25	11	
5		CL				2	100	7/11/13	2.25	11	
		CL		Brown and gray, slightly moist, very stiff to hard, SANDY CLAY with trace gravel		3	100	4/6/8	1.5	13	
10		CL				4	100	7/13/16	>4.5	15	
15		CL				5	100	6/11/17	2.25	11	
20	▼	SP-SM		Brown, saturated, dense, fine to medium grained, SAND with trace silt and trace gravel		6	100	13/18/22			Boring caved to 17 feet upon auger removal.
Boring terminated at 20 feet.											
25											
30											
35											
40											
45											



# LOG OF BORING B-3

Eastwood Middle School  
4401 East 62nd Street  
Indianapolis, Indiana

Client Name : Lynch, Harrison & Brumleve, Inc. Driller : J. Boeche  
Project Number : 18-1645-01G Sampling : Splitspoon  
Logged By : E. Rothe  
Start Date : 10/26/2018  
Drilling Method : HSA

Depth (Feet)	Water Level	USCS	GRAPHIC	Water Levels			Samples	Rec %	SPT Results	qp tsf	w %	REMARKS
				▼ During Drilling	▽ After Completion	◆ After 24 Hours						
				DESCRIPTION								
0				TOPSOIL (10")								
		CL		Brown and gray, moist, stiff, SILTY CLAY with trace sand			1	89	2/3/6	1.75	24	
		CL		Brown, slightly moist, stiff, SANDY CLAY with trace gravel			2	89	3/6/7	1.25	12	
		CL		Brown and gray, slightly moist, stiff, SANDY CLAY with trace gravel			3	89	5/4/5	1.25	14	
		SP-SM		Gray, slightly moist, medium dense, fine to medium grained, SAND with trace silt and trace gravel			4	89	22/17/6			
		CL		Gray, slightly moist, stiff, SANDY CLAY			5	44	6/7/8		12	Boring caved to 15 feet upon auger removal.
		CL		Brown, slightly moist, very stiff, SANDY CLAY			6	89	14/9/13		10	
Boring terminated at 20 feet.												Groundwater was not encountered during drilling, nor upon completion.





# LOG OF BORING B-4

Eastwood Middle School  
4401 East 62nd Street  
Indianapolis, Indiana

Client Name : Lynch, Harrison & Brumleve, Inc. Driller : J. Boeche  
 Project Number : 18-1645-01G Sampling : Splitspoon  
 Logged By : E. Rothe  
 Start Date : 10/26/2018  
 Drilling Method : HSA

Depth (Feet)	Water Level	USCS	GRAPHIC	Water Levels		Description	Samples	Rec %	SPT Results	qp tsf	w %	REMARKS
				▼ During Drilling	▽ After Completion							
0					◆ After 24 Hours	TOPSOIL (10")						
0 - 1.5		CL	[Hatched Pattern]			Brown, slightly moist, stiff, SANDY CLAY with trace gravel	1	78	5/5/6	1.0	12	
1.5 - 3.5		CL	[Hatched Pattern]			Brown and gray, moist, stiff, SILTY CLAY with trace sand	2	89	2/4/6	1.0	16	
3.5 - 6.5		CL	[Hatched Pattern]			Brown, slightly moist, very stiff, SANDY CLAY	3	89	2/5/6	3.0	12	
6.5 - 13.5		CL	[Hatched Pattern]				4	89	4/8/11	3.0	10	
13.5 - 18.5		CL	[Hatched Pattern]			Gray, slightly moist, stiff, SANDY CLAY with trace gravel	5	89	3/4/11	1.0	12	Boring caved to 15 feet upon auger removal.
18.5 - 20.0		CL SP-SM	[Hatched Pattern]			Brown, slightly moist, very stiff, SANDY CLAY with trace gravel	6	89	7/8/18		9	
20.0 - 20.5						Brown, slightly moist, medium dense, fine to medium grained, SAND with trace silt and trace gravel						Groundwater was not encountered during drilling, nor upon completion.
20.5 - 25.0						Boring terminated at 20 feet.						



# LOG OF BORING B-5

Eastwood Middle School  
4401 East 62nd Street  
Indianapolis, Indiana

Client Name : Lynch, Harrison & Brumleve, Inc. Driller : J. Boeche  
 Project Number : 18-1645-01G Sampling : Splitspoon  
 Logged By : E. Rothe  
 Start Date : 10/26/2018  
 Drilling Method : HSA

Depth (Feet)	Water Level	USCS	GRAPHIC	Water Levels		Samples	Rec %	SPT Results	qp tsf	w %	REMARKS
				▼ During Drilling	▽ After Completion						
				◆ After 24 Hours DESCRIPTION							
0				ASPHALT (10")							
				CRUSHED STONE (6")							
		CL-ML		Brown and gray, slightly moist, stiff, SANDY SILTY CLAY		1	89	6/6/5		14	
		CL		Brown and gray, moist, medium stiff, SILTY CLAY with trace sand		2	78	2/4/4	1.0	24	
		ML		Brown and gray, slightly moist, medium dense, SANDY SILT		3	89	2/5/6			
		CL		Brown and gray, moist, medium stiff to stiff, SILTY CLAY with trace sand		4	89	1/3/5	2.0	22	
	▽										
		CL		Gray, slightly moist, very stiff to hard, SANDY CLAY with trace gravel		5	89	6/12/12	2.5	10	
	▼										Boring caved to 16 feet upon auger removal.
						6	89	10/17/20	>4.5	9	
20				Boring terminated at 20 feet.							
25											
30											
35											
40											
45											





# LOG OF BORING B-6

Eastwood Middle School  
4401 East 62nd Street  
Indianapolis, Indiana

Client Name : Lynch, Harrison & Brumleve, Inc. Driller : J. Boeche  
 Project Number : 18-1645-01G Sampling : Splitspoon  
 Logged By : E. Rothe  
 Start Date : 10/23/2018  
 Drilling Method : HSA

Depth (Feet)	Water Level	USCS	GRAPHIC	DESCRIPTION	Samples	Rec %	SPT Results	qp tsf	w %	REMARKS	
											Water Levels
				▼ During Drilling ▽ After Completion ◆ After 24 Hours							
0				ASPHALT (6")							
				CRUSHED STONE (6")							
		CL		Brown, moist, medium stiff, SILTY CLAY with trace sand	1	44	4/2/4	1.25	19		
				Brown, slightly moist, stiff, SANDY CLAY with trace gravel	2	67	3/4/8	3.0	11		
5					3	89	3/4/6	2.5	11		
		CL			4	89	3/6/9	3.5	11		
10											
		CL		Gray, slightly moist, stiff, SANDY CLAY with trace gravel	5	78	4/5/6		11		
15											
	▼	CL		Gray, slightly moist, very stiff to hard, SANDY CLAY with trace gravel	6	89	8/12/19	2.0	10		
20											
		CL		Gray, moist, stiff to very stiff, SANDY CLAY trace gravel	7	78	4/5/9	3.0	16		
25											
		CL		Brown and gray, slightly moist, very stiff, SANDY CLAY with trace gravel	8	17	4/8/12		15		
30	▽										
		CL		Gray, slightly moist, very stiff, SANDY CLAY with trace gravel	9	17	5/7/9		14	Boring caved to 35 feet upon auger removal.	
35											
		CL		Gray, moist, very stiff, SILTY CLAY with trace sand	10	100	6/9/21	2.0	19		
40											
				Boring terminated at 40 feet.							
45											



# LOG OF BORING B-7

Eastwood Middle School  
4401 East 62nd Street  
Indianapolis, Indiana

Client Name : Lynch, Harrison & Brumleve, Inc. Driller : J. Boeche  
 Project Number : 18-1645-01G Sampling : Splitspoon  
 Logged By : E. Rothe  
 Start Date : 10/23/2018  
 Drilling Method : HSA

Depth (Feet)	Water Level	USCS	GRAPHIC	DESCRIPTION	Samples	Rec %	SPT Results	qp tsf	w %	REMARKS
0				ASPHALT (8")						
				CRUSHED STONE (6")						
		CL		Gray, moist, medium stiff to stiff, SILTY CLAY with trace sand	1	78	4/4/4	3.0	17	
		CL		Brown and gray, moist, medium stiff, SILTY CLAY with trace sand	2	78	2/2/3		22	
5		CL		Brown and gray, slightly moist, stiff to very stiff, SANDY CLAY with trace gravel	3	89	2/5/6	3.0	12	
		CL			4	89	3/4/5	2.0	13	
	▽	CL		Brown, slightly moist, stiff to very stiff, SANDY CLAY with trace gravel	5	67	4/6/7	2.0	14	
15	▼	CL			6	78	8/12/11	2.0	11	Boring caved to 16 feet upon auger removal.
20				Boring terminated at 20 feet.						
25										
30										
35										
40										
45										





**PATRIOT ENGINEERING**  
and Environmental Inc.

Indianapolis, Terre Haute, Evansville, Fort Wayne,  
Lafayette, Bloomington, Louisville KY, Dayton OH,  
Nashville TN, Carmi IL, New Orleans LA

**LOG OF BORING B-8**

(Page 1 of 1)

Eastwood Middle School  
4401 East 62nd Street  
Indianapolis, Indiana

Client Name : Lynch, Harrison & Brumleve, Inc. Driller : J. Boeche  
 Project Number : 18-1645-01G Sampling : Splitspoon  
 Logged By : E. Rothe  
 Start Date : 10/23/2018  
 Drilling Method : HSA

Depth (Feet)	Water Level	USCS	GRAPHIC	Water Levels					REMARKS	
				▼ During Drilling	▽ After Completion	◆ After 24 Hours	Samples	Rec %		SPT Results
DESCRIPTION										
0				ASPHALT (10")						
				CRUSHED STONE (4")						
		CL		Gray, moist, soft, SILTY CLAY with trace sand	1	78	2/2/2	0.25	21	Boring caved to 15 feet upon auger removal.
		CL		Brown and gray, moist, medium stiff to stiff, SILTY CLAY with trace sand	2	67	5/3/4	1.25	21	
		CL			3	89	1/2/4	1.25	19	
		CL		Brown and gray, slightly moist, stiff to very stiff, SANDY CLAY with trace gravel	4	78	3/5/7	3.75	12	
		CL		Brown, slightly moist, very stiff, SANDY CLAY with trace gravel	5	89	4/8/11	2.75	11	
		CL			6	89	6/7/9	2.5	10	
20	▼			Boring terminated at 20 feet.						
25										
30										
35										
40										
45										



# LOG OF BORING B-9

Eastwood Middle School  
4401 East 62nd Street  
Indianapolis, Indiana

Client Name : Lynch, Harrison & Brumleve, Inc. Driller : J. Boeche  
 Project Number : 18-1645-01G Sampling : Splitspoon  
 Logged By : E. Rothe  
 Start Date : 10/26/2018  
 Drilling Method : HSA

Depth (Feet)	Water Level	USCS	GRAPHIC	Water Levels		Samples	Rec %	SPT Results	qp tsf	w %	REMARKS
				▼ During Drilling	▽ After Completion						
				◆ After 24 Hours		DESCRIPTION					
0				TOPSOIL (8")							
		CL		Brown, moist, stiff to very stiff, SILTY CLAY with trace sand		1	100	7/5/11	1.25	24	
5		CL		Brown and gray, slightly moist, stiff, SANDY CLAY with trace gravel		2	78	3/6/6	1.25	14	
		CL		Brown, moist, medium stiff to stiff, SILTY CLAY with trace sand		3	78	2/3/3	1.5	18	
10		CL		Brown, slightly moist, stiff, SANDY CLAY with trace gravel		4	100	3/4/5	1.5	13	
15		CL		Brown, slightly moist, hard, SANDY CLAY with trace gravel		5	100	11/16/23	>4.5	11	
20		SP-SM		Brown, slightly moist, dense, fine to medium grained, SAND with trace silt and little gravel		6	100	6/14/16			Boring caved to 18 feet upon auger removal.
Boring terminated at 20 feet.											Groundwater was not encountered during drilling, nor upon completion.
25											
30											
35											
40											
45											





# LOG OF BORING B-10

Eastwood Middle School  
4401 East 62nd Street  
Indianapolis, Indiana

Client Name : Lynch, Harrison & Brumleve, Inc. Driller : J. Boeche  
 Project Number : 18-1645-01G Sampling : Splitspoon  
 Logged By : E. Rothe  
 Start Date : 10/26/2018  
 Drilling Method : HSA

Depth (Feet)	Water Level	USCS	GRAPHIC	Water Levels			Samples	Rec %	SPT Results	qp tsf	w %	REMARKS
				▼ During Drilling	▽ After Completion	◆ After 24 Hours						
				DESCRIPTION								
0				TOPSOIL (9")								
		CL		Brown, moist, stiff to very stiff, SILTY CLAY with trace sand			1	100	6/9/10	2.25	17	
5		CL		Brown, slightly moist, medium stiff, SANDY CLAY			2	100	7/9/11	1.5	22	
		CL		Brown, slightly moist, medium stiff, SANDY CLAY			3	78	2/3/4	1.0	14	
10		CL		Brown, moist, medium stiff to stiff, SANDY CLAY with trace to little gravel			4	100	3/3/6	1.0	17	
15		SC		Brown, slightly moist, loose, CLAYEY SAND			5	100	3/3/3			
20		CL SP-SM		Brown, slightly moist, hard, SANDY CLAY			6	78	7/14/22		11	
				Brown, slightly moist, dense, fine to medium grained, SAND with trace silt and trace gravel								Boring caved to 17 feet upon auger removal.
				Boring terminated at 20 feet.								Groundwater was not encountered during drilling, nor upon completion.



# LOG OF BORING B-11

Eastwood Middle School  
4401 East 62nd Street  
Indianapolis, Indiana

Client Name : Lynch, Harrison & Brumleve, Inc. Driller : J. Boeche  
 Project Number : 18-1645-01G Sampling : Splitspoon  
 Logged By : E. Rothe  
 Start Date : 10/26/2018  
 Drilling Method : HSA

Depth (Feet)	Water Level	USCS	GRAPHIC	Water Levels		Samples	Rec %	SPT Results	qp tsf	w %	REMARKS
				▼ During Drilling	▽ After Completion						
				◆ After 24 Hours DESCRIPTION							
0				TOPSOIL (10")							
		CL		Brown, moist, stiff to very stiff, SILTY CLAY with trace sand		1	78	6/6/7	2.25	18	
		SM		Brown, slightly moist, medium dense, SILTY SAND		2	89	4/5/6			
		CL		Brown and gray, moist, stiff, SILTY CLAY with trace sand		3	89	3/5/6	1.75	20	
						4	89	3/4/6	1.25	21	
		CL		Brown, slightly moist, stiff, SANDY CLAY with trace gravel		5	89	2/4/5	1.25	14	Boring caved to 14 feet upon auger removal.
		CL		Brown, slightly moist, hard, SANDY CLAY with trace gravel		6	89	12/17/23	>4.5	9	
Boring terminated at 20 feet.											Groundwater was not encountered during drilling, nor upon completion.
25											
30											
35											
40											
45											





# LOG OF BORING S-1

Eastwood Middle School  
4401 East 62nd Street  
Indianapolis, Indiana

Client Name : Lynch, Harrison & Brumleve, Inc. Driller : J. Boeche  
 Project Number : 18-1645-01G Sampling : Splitspoon  
 Logged By : E. Rothe  
 Start Date : 10/26/2018  
 Drilling Method : HSA

Depth (Feet)	Water Level	USCS	GRAPHIC	Water Levels		Samples	Rec %	SPT Results	qp tsf	w %	REMARKS	
				▼ During Drilling	▽ After Completion							
				DESCRIPTION								
0				TOPSOIL (10")								
		CL		Brown and gray, very moist, medium stiff, SILTY CLAY with trace sand		1	78	3/3/5		29		
						2	67	2/2/4	0.75	20		
5				Brown, slightly moist, stiff to very stiff, SANDY CLAY with trace gravel		3	89	3/5/5	2.0	11		
		CL				4	89	4/6/6	>4.5	12		
10											Boring caved to 11 feet upon auger removal.	
		CL		Gray, slightly moist, stiff, SANDY CLAY with trace gravel		5	89	3/4/5	2.0	11		
15				Boring terminated at 15 feet.							Groundwater was not encountered during drilling, nor upon completion.	
20												
25												
30												
35												
40												
45												



**PATRIOT ENGINEERING  
and Environmental Inc.**

Indianapolis, Terre Haute, Evansville, Fort Wayne,  
Lafayette, Bloomington, Louisville KY, Dayton OH,  
Nashville TN, Carmi IL, New Orleans LA

**LOG OF BORING S-2**

(Page 1 of 1)

Eastwood Middle School  
4401 East 62nd Street  
Indianapolis, Indiana

Client Name : Lynch, Harrison & Brumleve, Inc. Driller : J. Boeche  
Project Number : 18-1645-01G Sampling : Splitspoon  
Logged By : E. Rothe  
Start Date : 10/26/2018  
Drilling Method : HSA

Depth (Feet)	Water Level	USCS	GRAPHIC	Water Levels		Samples	Rec %	SPT Results	qp tsf	w %	REMARKS
				▼ During Drilling	▽ After Completion						
				◆ After 24 Hours		DESCRIPTION					
0				TOPSOIL (10")							
		CL		Brown, moist, medium stiff, SILTY CLAY with trace sand		1	78	2/3/4	0.75	23	Boring caved to 11 feet upon auger removal.
5		CL		Brown and gray, slightly moist, stiff, SANDY CLAY with trace gravel		2	89	4/6/7	1.0	12	
		CL		Brown, moist, very stiff, SILTY CLAY		3	89	3/5/5	1.5	13	
10		CL		Brown, moist, very stiff, SILTY CLAY		4	89	5/7/10	2.5	17	
15		CL		Gray, slightly moist, stiff, SANDY CLAY		5	89	3/3/6	1.75	11	
Boring terminated at 15 feet.											Groundwater was not encountered during drilling, nor upon completion.
20											
25											
30											
35											
40											
45											





**PATRIOT ENGINEERING  
and Environmental Inc.**

Indianapolis, Terre Haute, Evansville, Fort Wayne,  
Lafayette, Bloomington, Louisville KY, Dayton OH,  
Nashville TN, Carmi IL, New Orleans LA

**LOG OF BORING S-3**

(Page 1 of 1)

Eastwood Middle School  
4401 East 62nd Street  
Indianapolis, Indiana

Client Name : Lynch, Harrison & Brumleve, Inc. Driller : J. Boeche  
Project Number : 18-1645-01G Sampling : Splitspoon  
Logged By : E. Rothe  
Start Date : 10/26/2018  
Drilling Method : HSA

Depth (Feet)	Water Level	USCS	GRAPHIC	Water Levels		Samples	Rec %	SPT Results	qp tsf	w %	REMARKS
				▼ During Drilling	▽ After Completion						
				◆ After 24 Hours		DESCRIPTION					
0				TOPSOIL (10")							
		CL		Brown, moist, stiff, SILTY CLAY with trace sand		1	44	2/4/5	1.25	22	Boring caved to 11 feet upon auger removal.
5		CL		Brown, slightly moist, stiff to very stiff, SANDY CLAY with trace gravel		2	89	3/5/4	1.75	12	
		CL				3	89	5/6/7	2.5	13	
		CL				4	89	3/5/7	2.0	15	
15		SM		Brown, slightly moist, medium dense, SILTY SAND with trace gravel		5	89	5/11/19			
Boring terminated at 15 feet.											Groundwater was not encountered during drilling, nor upon completion.
20											
25											
30											
35											
40											
45											



**PATRIOT ENGINEERING**  
and Environmental Inc.

Indianapolis, Terre Haute, Evansville, Fort Wayne,  
Lafayette, Bloomington, Louisville KY, Dayton OH,  
Nashville TN, Carmi IL, New Orleans LA

**LOG OF BORING S-4**

(Page 1 of 1)

Eastwood Middle School  
4401 East 62nd Street  
Indianapolis, Indiana

Client Name : Lynch, Harrison & Brumleve, Inc. Driller : J. Boeche  
 Project Number : 18-1645-01G Sampling : Splitspoon  
 Logged By : E. Rothe  
 Start Date : 10/26/2018  
 Drilling Method : HSA

Depth (Feet)	Water Level	USCS	GRAPHIC	Water Levels		Samples	Rec %	SPT Results	qp tsf	w %	REMARKS
				▼ During Drilling	▽ After Completion						
				◆ After 24 Hours		DESCRIPTION					
0				TOPSOIL (10")							
		CL		Brown and gray, very moist to moist, medium stiff to stiff, SILTY CLAY with trace sand		1	78	4/5/7	1.5	25	
5						2	78	2/4/3	0.75	22	
		CL		Brown, slightly moist, stiff to very stiff, SANDY CLAY		3	89	4/4/5	1.75	12	
10						4	78	3/3/5	2.25	12	
		CL		Brown, slightly moist, very stiff, SANDY CLAY with trace gravel		5	89	3/9/8	2.75	10	
15				Boring terminated at 15 feet.							Boring caved to 12 feet upon auger removal.
											Groundwater was not encountered during drilling, nor upon completion.
20											
25											
30											
35											
40											
45											





**PATRIOT ENGINEERING**  
and Environmental Inc.

Indianapolis, Terre Haute, Evansville, Fort Wayne,  
Lafayette, Bloomington, Louisville KY, Dayton OH,  
Nashville TN, Carmi IL, New Orleans LA

**LOG OF BORING S-5**

(Page 1 of 1)

Eastwood Middle School  
4401 East 62nd Street  
Indianapolis, Indiana

Client Name : Lynch, Harrison & Brumleve, Inc. Driller : J. Boeche  
Project Number : 18-1645-01G Sampling : Splitspoon  
Logged By : E. Rothe  
Start Date : 10/26/2018  
Drilling Method : HSA

Depth (Feet)	Water Level	USCS	GRAPHIC	Water Levels			Samples	Rec %	SPT Results	qp tsf	w %	REMARKS
				▼ During Drilling	▽ After Completion	◆ After 24 Hours						
				DESCRIPTION								
0				TOPSOIL (8")								
				Brown and gray, moist to very moist, medium stiff to stiff, SILTY CLAY with trace sand			1	100	4/6/6	2.0	19	
5		CL					2	100	4/5/7	1.25	21	
							3	100	4/3/5		26	
10		CL		Brown, slightly moist, very stiff, SANDY CLAY with trace gravel			4	100	4/6/10	2.0	13	
15		SP-SM		Brown, slightly moist, medium dense, fine to medium grained, SAND with trace silt and trace gravel			5	100	6/12/17			Boring caved to 14 feet upon auger removal.
				Boring terminated at 15 feet.								Groundwater was not encountered during drilling, nor upon completion.
20												
25												
30												
35												
40												
45												



**PATRIOT ENGINEERING  
and Environmental Inc.**

Indianapolis, Terre Haute, Evansville, Fort Wayne,  
Lafayette, Bloomington, Louisville KY, Dayton OH,  
Nashville TN, Carmi IL, New Orleans LA

**LOG OF BORING S-6**

(Page 1 of 1)

Eastwood Middle School  
4401 East 62nd Street  
Indianapolis, Indiana

Client Name : Lynch, Harrison & Brumleve, Inc. Driller : J. Boeche  
Project Number : 18-1645-01G Sampling : Splitspoon  
Logged By : E. Rothe  
Start Date : 10/26/2018  
Drilling Method : HSA

Depth (Feet)	Water Level	USCS	GRAPHIC	Water Levels		Samples	Rec %	SPT Results	qp tsf	w %	REMARKS
				▼ During Drilling	▽ After Completion						
				◆ After 24 Hours DESCRIPTION							
0				TOPSOIL (9")							
		CL		Brown, slightly moist, medium stiff, SANDY CLAY		1	33	2/3/4		13	
5		CL		Brown, moist, medium stiff to stiff, SILTY CLAY with trace sand and trace gravel		2	78	2/4/4	1.0	19	
	3					100	3/2/6	2.5	20		
	4					100	2/4/5		21		
15		CL		Brown and gray, moist, medium stiff, SILTY CLAY with trace sand		5	100	2/2/3		16	Boring caved to 16 feet upon auger removal.
20		CL		Brown, slightly moist, very stiff to hard, SANDY CLAY		6	89	2/4/10	>4.5	10	
Boring terminated at 20 feet.											Groundwater was not encountered during drilling, nor upon completion.
25											
30											
35											
40											
45											





**PATRIOT ENGINEERING**  
and Environmental Inc.

Indianapolis, Terre Haute, Evansville, Fort Wayne,  
Lafayette, Bloomington, Louisville KY, Dayton OH,  
Nashville TN, Carmi IL, New Orleans LA

**LOG OF BORING S-7**

(Page 1 of 1)

Eastwood Middle School  
4401 East 62nd Street  
Indianapolis, Indiana

Client Name : Lynch, Harrison & Brumleve, Inc. Driller : J. Boeche  
Project Number : 18-1645-01G Sampling : Splitspoon  
Logged By : E. Rothe  
Start Date : 10/26/2018  
Drilling Method : HSA

Depth (Feet)	Water Level	USCS	GRAPHIC	Water Levels		Samples	Rec %	SPT Results	qp tsf	w %	REMARKS
				▼ During Drilling	▽ After Completion						
				◆ After 24 Hours		DESCRIPTION					
0				TOPSOIL (9")							
		CL		Dark brown, moist, stiff, SILTY CLAY with trace sand		1	78	2/6/6	2.0	16	
		CL		Brown and gray, very moist, stiff, SILTY CLAY with trace sand		2	89	4/5/6	1.5	25	
		CL		Brown and gray, moist, stiff, SILTY CLAY with trace gravel		3	100	4/5/5	1.25	18	
		CL				4	100	2/4/6	1.5	21	
		CL		Brown, slightly moist, very stiff to hard, SANDY CLAY with trace gravel and interbedded sand seams		5	56	4/6/17	>4.5	9	Boring caved to 13 feet upon auger removal.
<p>Boring terminated at 15 feet.</p> <p>Groundwater was not encountered during drilling, nor upon completion.</p>											
20											
25											
30											
35											
40											
45											

## BORING LOG KEY

### UNIFIED SOIL CLASSIFICATION SYSTEM FIELD CLASSIFICATION SYSTEM FOR SOIL EXPLORATION

#### NON COHESIVE SOILS

(Silt, Sand, Gravel and Combinations)

Density		Grain Size Terminology		
		<u>Soil Fraction</u>	<u>Particle Size</u>	<u>US Standard Sieve Size</u>
Very Loose	-4 blows/ft. or less	Boulders	Larger than 12"	Larger than 12"
Loose	-5 to 10 blows/ft.	Cobbles	3" to 12"	3" to 12"
Medium Dense	-11 to 30 blows/ft.	Gravel: Coarse	¾" to 3"	¾" to 3"
Dense	-31 to 50 blows/ft.	Small	4.76mm to ¾"	#4 to ¾"
Very Dense	-51 blows/ft. or more	Sand: Coarse	2.00mm to 4.76mm	#10 to #4
		Medium	0.42mm to 2.00mm	#40 to #10
		Fine	0.074mm to 0.42mm	#200 to #40
		Silt	0.005mm to 0.074 mm	Smaller than #200
		Clay	Smaller than 0.005mm	Smaller than #200

#### RELATIVE PROPORTIONS FOR SOILS

<u>Descriptive Term</u>	<u>Percent</u>
Trace	1 - 10
Little	11 - 20
Some	21 - 35
And	36 - 50

#### COHESIVE SOILS

(Clay, Silt and Combinations)

<u>Consistency</u>	<u>Unconfined Compressive Strength (tons/sq. ft.)</u>	<u>Field Identification (Approx.) SPT Blows/ft.</u>
Very Soft	Less than 0.25	0 - 2
Soft	0.25 - < 0.5	3 - 4
Medium Stiff	0.5 - < 1.0	5 - 8
Stiff	1.0 - < 2.0	9 - 15
Very Stiff	2.0 - < 4.0	16 - 30
Hard	Over 4.0	> 30

**Classification** on logs are made by visual inspection.

**Standard Penetration Test** - Driving a 2.0" O.D., 1<sup>3/8</sup>" I.D., sampler a distance of 1.0 foot into undisturbed soil with a 140 pound hammer free falling a distance of 30.0 inches. It is customary for **Patriot** to drive the spoon 6.0 inches to seat into undisturbed soil, then perform the test. The number of hammer blows for seating the spoon and making the tests are recorded for each 6.0 inches of penetration on the drill log (Example - 6/8/9). The standard penetration test results can be obtained by adding the last two figures (i.e. 8 + 9 = 17 blows/ft.).

**Strata Changes** - In the column "Soil Descriptions" on the drill log the horizontal lines represent strata changes. A solid line (——) represents an actually observed change, a dashed line (- - - -) represents an estimated change.

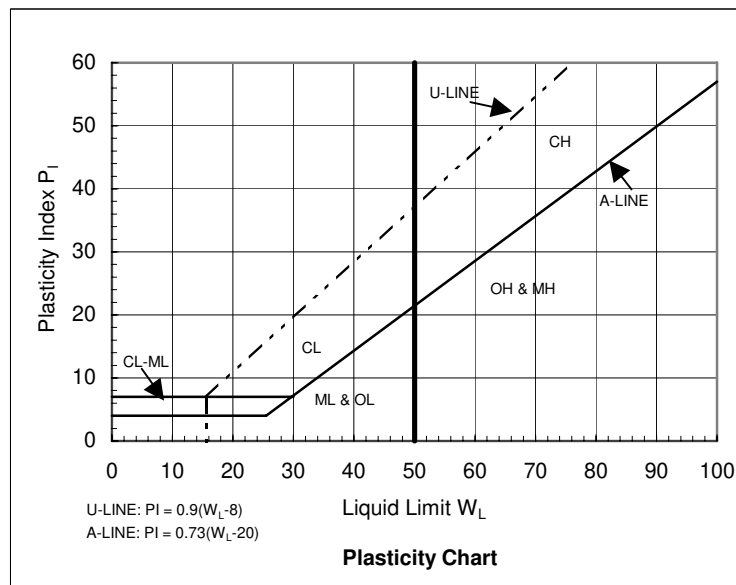
**Groundwater** observations were made at the times indicated. Porosity of soil strata, weather conditions, site topography, etc., may cause changes in the water levels indicated on the logs.

**Groundwater symbols:** ▼-observed groundwater elevation, encountered during drilling; ▽-observed groundwater elevation upon completion of boring.



# Unified Soil Classification System

Major Divisions		Group Symbol	Typical Names	Classification Criteria for Coarse-Grained Soils				
Coarse-grained soils (more than half of material is larger than No. 200)	Gravels (more than half of coarse fraction is larger than No. 4 sieve size)	Clean gravels (little or no fines)	GW	Well-graded gravels, gravel-sand mixtures, little or no fines	$C_u \geq 4$ $1 \leq C_c \leq 3$	$C_u = \frac{D_{60}}{D_{10}}$	$C_c = \frac{D_{30}^2}{D_{10} D_{60}}$	
			GP	Poorly graded gravels, gravel-sand mixtures, little or no fines	Not meeting all gradation requirements for GW ( $C_u < 4$ or $1 > C_c > 3$ )			
		Gravels with fines (appreciable amount of fines)	GM	$\frac{d}{u}$	Silty gravels, gravel-sand-silt mixtures	Atterberg limits below A line or $P_i < 4$		Above A line with $4 < P_i < 7$ are borderline cases requiring use of dual symbols
			GC		Clayey gravels, gravel-sand-clay mixtures	Atterberg limits above A line or $P_i > 7$		
	Sands (more than half of coarse fraction is smaller than No. 4 sieve size)	Clean sands (little or no fines)	SW	Well-graded sands, gravelly sands, little or no fines	$C_u \geq 6$ $1 \leq C_c \leq 3$	$C_u = \frac{D_{60}}{D_{10}}$	$C_c = \frac{(D_{30})^2}{D_{10} D_{60}}$	
			SP	Poorly graded sands, gravelly sands, little or no fines	Not meeting all gradation requirements for SW ( $C_u < 6$ or $1 > C_c > 3$ )			
		Sands with fines (appreciable amount of fines)	SM	$\frac{d}{u}$	Silty sands, sand-silt mixtures	Atterberg limits below A line or $P_i < 4$		Limits plotting in hatched zone with $4 \leq P_i \leq 7$ are borderline cases requiring use of dual symbols
			SC		Clayey sands, sand-clay mixtures	Atterberg limits above A line with $P_i > 7$		
	Fine-grained soils (more than half of material is smaller than No. 200)	Silt and clays (liquid limit <50)	ML	Inorganic silts and very fine sands, rock flour, silty or clayey fine sands, or clayey silts with slight plasticity	<ol style="list-style-type: none"> <li>Determine percentages of sand and gravel from grain size curve.</li> <li>Depending on percentages of fines (fraction smaller than 200 sieve size), coarse-grained soils are classified as follows: Less than 5% - GW, GP, SW, SP More than 12% - GM, GC, SM, SC 5-12% - Borderline cases requiring dual symbols</li> </ol>			
			CL	Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays				
OL			Organic silts and organic silty clays of low plasticity					
Silt and clays (liquid limit >50)		MH	Inorganic silts, micaceous or diatomaceous fine sandy or silty soils, elastic silts					
		CH	Inorganic clays or high plasticity, fat clays					
		OH	Organic clays of medium to high plasticity, organic silts					
Highly organic soils		PT	Peat and other highly organic soils					



**APPENDIX B**

**SEISMIC SITE CLASS EVALUATION**



# USGS Design Maps Summary Report

## User-Specified Input

**Report Title** Eastwood Middle School Additions and Renovation  
 Tue November 6, 2018 15:13:27 UTC

**Building Code Reference Document** 2012/2015 International Building Code  
 (which utilizes USGS hazard data available in 2008)

**Site Coordinates** 39.86756°N, 86.09258°W

**Site Soil Classification** Site Class C – “Very Dense Soil and Soft Rock”

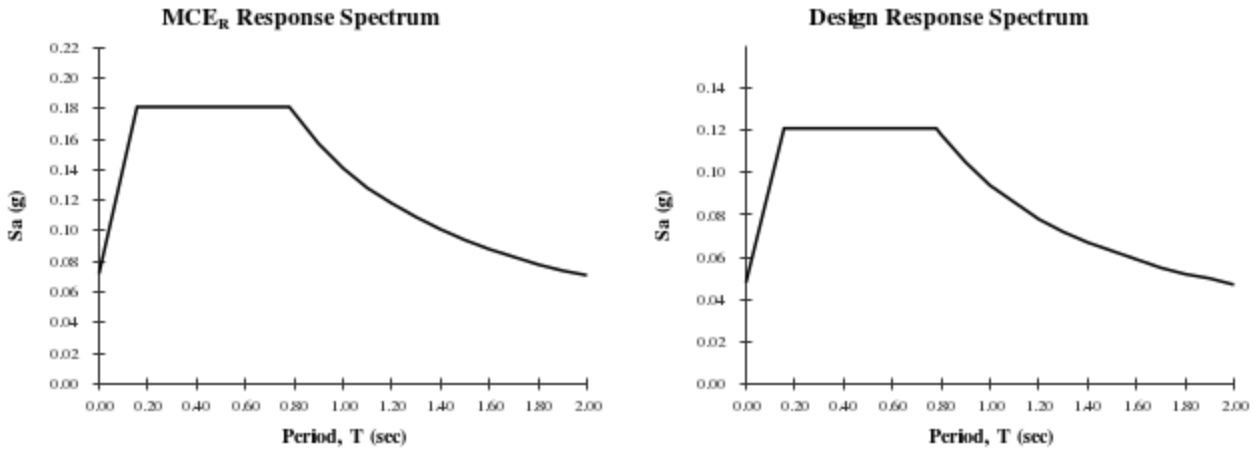
**Risk Category** I/II/III



## USGS-Provided Output

$S_S = 0.151 \text{ g}$	$S_{MS} = 0.181 \text{ g}$	$S_{DS} = 0.121 \text{ g}$
$S_1 = 0.083 \text{ g}$	$S_{M1} = 0.141 \text{ g}$	$S_{D1} = 0.094 \text{ g}$

For information on how the SS and S1 values above have been calculated from probabilistic (risk-targeted) and deterministic ground motions in the direction of maximum horizontal response, please return to the application and select the “2009 NEHRP” building code reference document.



Although this information is a product of the U.S. Geological Survey, we provide no warranty, expressed or implied, as to the accuracy of the data contained therein. This tool is not a substitute for technical subject-matter knowledge.

**APPENDIX C**

**GENERAL QUALIFICATIONS**

**STANDARD CLAUSE FOR UNANTICIPATED  
SUBSURFACE CONDITIONS**



**GENERAL QUALIFICATIONS**  
**of Patriot Engineering's Geotechnical Engineering Investigation**

This report has been prepared at the request of our client for his use on this project. Our professional services have been performed, findings obtained, and recommendations prepared in accordance with generally accepted geotechnical engineering principles and practices. This warranty is in lieu of all other warranties either expressed or implied.

The scope of our services did not include any environmental assessment or investigation for the presence or absence of wetlands, hazardous or toxic materials in the soil, groundwater, or surface water within or beyond the site studied. Any statements in this report or on the test borings logs regarding vegetation types, odors or staining of soils, or other unusual conditions observed are strictly for the information of our client and the owner.

This report may not contain sufficient information for purposes of other parties or other uses. This company is not responsible for the independent conclusions, opinions or recommendations made by others based on the field and laboratory data presented in this report. Should there be any significant differences in structural arrangement, loading or location of the structure, our analysis should be reviewed.

The recommendations provided herein were developed from the information obtained in the test borings, which depict subsurface conditions only at specific locations. The analysis, conclusions, and recommendations contained in our report are based on site conditions as they existed at the time of our exploration. Subsurface conditions at other locations may differ from those occurring at the specific drill sites. The nature and extent of variations between borings may not become evident until the time of construction. If, after performing on-site observations during construction and noting the characteristics of any variation, substantially different subsurface conditions from those encountered during our explorations are observed or appear to be present beneath excavations, we must be advised promptly so that we can review these conditions and reconsider our recommendations where necessary.

If there is a substantial lapse of time between the submission of our report and the start of work at the site, or if conditions have changed due to natural causes or construction operations at or adjacent to the site, we urge that our report be reviewed to determine the applicability of the conclusions and recommendations considering the changed conditions and time lapse.

We urge that Patriot be retained to review those portions of the plans and specifications that pertain to earthwork and foundations to determine whether they are consistent with our recommendations. In addition, we are available to observe construction, particularly the compaction of structural backfill and preparation of the foundations, and such other field observations as may be necessary.

In order to fairly consider changed or unexpected conditions that might arise during construction, we recommend the following verbiage (Standard Clause for Unanticipated Subsurface Conditions) be included in the project contract.

## **STANDARD CLAUSE FOR UNANTICIPATED SUBSURFACE CONDITIONS**

"The owner has had a subsurface exploration performed by a soils consultant, the results of which are contained in the consultant's report. The consultant's report presents his conclusions on the subsurface conditions based on his interpretation of the data obtained in the exploration. The contractor acknowledges that he has reviewed the consultant's report and any addenda thereto, and that his bid for earthwork operations is based on the subsurface conditions as described in that report. It is recognized that a subsurface exploration may not disclose all conditions as they actually exist and further, conditions may change, particularly groundwater conditions, between the time of a subsurface exploration and the time of earthwork operations. In recognition of these facts, this clause is entered in the contract to provide a means of equitable additional compensation for the contractor if adverse unanticipated conditions are encountered and to provide a means of rebate to the owner if the conditions are more favorable than anticipated.

At any time during construction operations that the contractor encounters conditions that are different than those anticipated by the soils consultant's report, he shall immediately (within 24 hours) bring this fact to the owner's attention. If the owner's representative on the construction site observes subsurface conditions which are different than those anticipated by the consultant's report, he shall immediately (within 24 hours) bring this fact to the contractor's attention. Once a fact of unanticipated conditions has been brought to the attention of either the owner or the contractor, and the consultant has concurred, immediate negotiations will be undertaken between the owner and the contractor to arrive at a change in contract price for additional work or reduction in work because of the unanticipated conditions. The contract agrees that the following unit prices would apply for additional or reduced work under the contract. For changed conditions for which unit prices are not provided, the additional work shall be paid for on a time and materials basis."

Another example of a changed conditions clause can be found in paper No. 4035 by Robert F. Borg, published in ASCE Construction Division Journal, No. CO2, September 1964, page 37.