

ADDENDUM NO. 2

to
CONTRACT DOCUMENTS

for
**STEM LAB ALTERATIONS AND RENOVATIONS AT
CLEARVIEW REGIONAL MIDDLE SCHOOL**
located at 595 Jefferson Road, Mullica Hill, NJ 08062

for the
CLEARVIEW REGIONAL HIGH SCHOOL DISTRICT
Mullica Hill, Gloucester County, New Jersey

Issued: November 1, 2023

FVHD PROJECT #5162C

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INTENT

This Document supersedes all conflicting and contrary information in said Contract Documents. Said documents are hereby amended in certain particulars as described herein after. Unless specifically noted or specified hereinafter all work shall conform to the applicable provisions of the Contract Documents. Bidders shall acknowledge receiving this document and previously issued Addendum No. 1 on the Bid Proposal Form.

This Addendum includes five (5) pages and the following:

1. Addendum No. 2 (MEP Portion) as prepared by Gillan and Hartmann, Inc., dated 11/01/23, 3-pages.
2. Revised Specification Section(s): 08700, 18-pages.
3. Revised Drawings:
 - a. Plumbing: P001, P201.
 - b. Mechanical: H101, H102, H201, H202.
 - c. Electrical: E001, E101, E201, E202, E701.
4. Revised Drawing:
 - a. Architectural: A301.

REQUESTS FOR INFORMATION (RFI'S)

1. Question: Please provide further detail regarding the Structural Steel for the Duct Openings from the Roof, such what the existing framing is, the size of the openings, locations, do these openings span more than one bay of existing framing, etc.

Response: The location of the openings are the responsibility of the contractor to coordinate and verify in field. See "Typical Opening Detail at Roof Under New HVAC Curb" on drawing A301 for new framing requirements.

2. Question: They show a typical detail for a roof frame, but don't show where the openings are located.

Response: Location of the openings are the responsibility of the contractor to coordinate and verify in field with roof and mechanical plans. Refer to drawing A301 for approximate location of the openings and approximate location over the existing structural framing.

3. Question: They show 2 new RTU's but nothing tells me what openings, or if any are required. If anything is required here, we need to know what the existing framing is, what the access is, the size of the openings, locations, do these openings span more than one bay of existing framing, etc.

Response: Access to the roof is to be coordinated with Owner. Refer to drawing A301 for approximate location of the openings and approximate location over the existing structural framing. See "Typical Opening Detail at Roof Under New HVAC Curb" on drawing A301 for new framing requirements.

4. Question: Mech. Drwgs. might show the openings, but I still need to know what is there, what I'm connecting to, spans, location of framing, etc.

Response: Refer to answer to RFI #3 (above).

5. Question: Who is to provide the Virco Furniture item# 8, 9, 10, 11, 12? What are the specifications for Virco item #10, 11 and 12?

Response: Refer to drawing A401 (re-issued under Addendum 1) for furniture and equipment provided as part of this contract.

6. Question: Can the architect confirm what cabinets are to be under the counter on the West wall with the cleanup sink?

Response: Refer to the Equipment Schedule and Room Layout on drawing A401 (re-issued under Addendum 1).

7. Question: Does the school have a BMS System? The spec. indicates factory provided localized controls with network card for future use?

Response: The Clearview Middle School is currently served by an existing BMS (JACE) system which is maintained by Peterson Service Company. This existing BMS system is scheduled to be updated/replaced under separate contract and is not part of this contract. Specifications/notes for RTU-1 & RTU-2 under this project shall be revised to include the following clarity: "Mechanical Contractor shall retain the existing Building Automation Contractor for RTU-1 & RTU-2 integration into existing building BMS system. Installation shall be complete, including but not limited to all required wiring, hardware, programming, graphics and integration".

8. Question: We realize that the original RFI deadline was 10/25, but since the bid date has been pushed out to 11/14, we are hoping you will still consider our RFI to Gillan & Hartmann:

Would CaptiveAire (RTU-1) and SystemAir (RTU-2) be considered approved equals to the Basis of Design?

Response: Refer to AIA A201 and Section 00800 pertaining to the procedure for any "Request for Substitutions".

REFER TO DRAWINGS

The following Drawings and/or Sketches are attached to this Addendum:

DRAWING NO. TITLE

A301	WALL SECTIONS AND MISCELLANEOUS DETAILS
P001	PLUMBING SYMBOLS, ABBREVIATIONS, & GENERAL NOTES
P201	PLUMBING FIRST FLOOR NEW WORK PLAN
H101	HVAC FIRST FLOOR DEMOLITION PLAN
H102	HVAC ROOF DEMOLITION PLAN
H201	HVAC FIRST FLOOR NEW WORK PLAN
H202	HVAC ROOF NEW WORK PLAN
E001	ELECTRICAL SYMBOL LEGEND
E101	LIGHTING AND POWER REMOVAL WORK
E201	LIGHTING AND POWER NEW WORK
E202	STEM LAB ROOF POWER AND FIRE ALARM NEW WORK
E701	ELECTRICAL DETAILS

The following Drawings to be revised or corrected as follows:

DRAWING NO. CHANGES AND CORRECTIONS

A301	Delete drawing A301 in its entirety and substitute with the enclosed revised drawing.
P001, P201	Delete the referenced drawings in their entirety and substitute with the enclosed revised drawings.
H101, H102, H201, H202	Delete the referenced drawings in their entirety and substitute with the enclosed revised drawings.
E001, E101, E201, E202, E701	Delete the referenced drawings in their entirety and substitute with the enclosed revised drawings.

REFER TO SPECIFICATIONS

PART 1 - SECTION 01900 - GUARANTEES AND WARRANTIES

<u>Page</u>	<u>Paragraph</u>	
01900-1	1.1, B	Change all references in the subparagraph from one (1) year , to read two (2) years .
01900-4	1.2, J.1	Change reference in the subparagraph from one (1) year , to read two (2) years .
01900-5	1.2, M.2.a	Change reference in the subparagraph from one (1) year , to read two (2) years .
	1.2, N.2	Change reference in the subparagraph from one (1) year , to read two (2) years .
01900-6	1.2, O.1.d	Change reference in the subparagraph from one (1) year , to read two (2) years .
	1.2, O.1 f	Change reference in the subparagraph from one (1) year , to read two (2) years .
	1.4, A.1	Change reference in the subparagraph from one (1) year , to read two (2) years .
01900-7	1.5, A.1	Change reference in the subparagraph from one (1) year , to read two (2) years .
01900-8	1.6, A.1	Change reference in the subparagraph from one (1) year , to read two (2) years .

PART 2 - SECTION 08700 - FINISH HARDWARE

Delete Section 08700 in its entirety and substitute with the enclosed revised document.

PART 1 - SECTION 09650 - RESILIENT FLOORING

Page Paragraph

09650-6 2.4, B Add the following subparagraph:

1. Model "SSR-XX-B" as manufactured by Tarkett; or approved equal.

END OF ADDENDUM NO. 2

ADDENDUM NO. 2 (MEP portion)
to the
SPECIFICATIONS AND DRAWINGS
for the
**NEW STEM LAB AT CLEARVIEW
REGIONAL MIDDLE SCHOOL IN
CLEARVIEW REGIONAL HIGH SCHOOL
DISTRICT**

Located at

595 Jefferson Rd, Mullica Hill, New Jersey 08062



Gillan and Hartmann, Inc.

1. MEP Addendum No. 2 dated November 01, 2023, is issued as part of the Contract Documents, dated October 11, 2023 to inform and/or specify changes, which take precedence over information contained in the original Contract Documents. Unless otherwise specifically noted or specified hereinafter, or shown on drawings or schedules accompanying this Addendum, all work required by this Addendum shall conform to the applicable provisions of the Contract Documents. It shall be the responsibility of the Bidder to include in their bid any cost implications of this Addendum. All Bidders are to indicate on the form of proposal submitted by them, acknowledgment of receipt and compliance with the contents of this change to the Contract Documents.
2. Any provision in any of the Contract Documents which may be in conflict or be inconsistent with the contents of this Addendum shall be void to the extent of such conflict or inconsistency.
3. HVAC TRADE
 - 3.1 CLARIFICATIONS:
 - 3.1.1. None.
 - 3.2 ERRATA IN THE SPECIFICATIONS
 - 3.2.1. None.
 - 3.3 ERRATA ON THE DRAWINGS
 - 3.3.1. Drawing H201 – HVAC First Floor New Work Plan: Slide RTU-2 T-Stat location closer to door to avoid conflict with new wall mounted white board.
4. PLUMBING TRADE
 - 4.1 CLARIFICATIONS:
 - 4.1.1. None.
 - 4.2 ERRATA IN THE SPECIFICATIONS
 - 4.2.1. None.
 - 4.3 ERRATA ON THE DRAWINGS:
 - 4.3.1. None.
5. ELECTRICAL TRADE
 - 5.1 CLARIFICATIONS:
 - 5.1.1. None.

5.2 ERRATA IN THE SPECIFICATIONS

5.2.1. None.

5.3 ERRATA ON THE DRAWINGS:

5.3.1. Drawing E001:

5.3.1.1. Change symbol legend note for new plugstrip to read as follows: New plugstrip with 12” plug cord to be set in trough of desks in room 305.

5.3.2. Drawing E101:

5.3.2.1. Change removal note number 3 to read as follows: Remove, clean and store existing clock, speaker, and cover from the back box for reinstallation as shown on 2/E201. Protect the wire connections in the back box from paint and dirt. Back box is to remain in place.

END OF ADDENDUM NO. 2

SECTION 08700 – FINISH HARDWARE

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes commercial door hardware for the following:
 - 1. Swinging doors.
 - 2. Other doors to the extent indicated.
- B. Door hardware includes, but is not necessarily limited to, the following:
 - 1. Mechanical door hardware.
 - 2. Electromechanical door hardware.
 - 3. Cylinders specified for doors in other sections.
- C. Codes and References: Comply with the version year adopted by the Authority Having Jurisdiction.
 - 1. ANSI A117.1 - Accessible and Usable Buildings and Facilities.
 - 2. ICC/IBC - International Building Code.
 - 3. NFPA 70 - National Electrical Code.
 - 4. NFPA 80 - Fire Doors and Windows.
 - 5. NFPA 101 - Life Safety Code.
 - 6. NFPA 105 - Installation of Smoke Door Assemblies.
 - 7. State Building Codes, Local Amendments.
- D. Standards: All hardware specified herein shall comply with the following industry standards as applicable. Any undated reference to a standard shall be interpreted as referring to the latest edition of that standard:
 - 1. ANSI/BHMA Certified Product Standards - A156 Series.
 - 2. UL10C - Positive Pressure Fire Tests of Door Assemblies.
 - 3. ANSI/UL 294 - Access Control System Units.
 - 4. UL 305 - Panic Hardware.
 - 5. ANSI/UL 437- Key Locks.

1.3 SUBMITTALS

- A. Product Data: Manufacturer's product data sheets including installation details, material descriptions, dimensions of individual components and profiles, operational descriptions and finishes.

- B. Door Hardware Schedule: Prepared by or under the supervision of supplier, detailing, fabrication and assembly of door hardware, as well as procedures and diagrams. Coordinate the final Door Hardware Schedule with doors, frames, and related work to ensure proper size, thickness, hand, function, and finish of door hardware.
1. Format: Comply with scheduling sequence and vertical format in DHI's "Sequence and Format for the Hardware Schedule."
 2. Organization: Organize the Door Hardware Schedule into door hardware sets indicating complete designations of every item required for each door or opening. Organize door hardware sets in same order as in the Door Hardware Sets at the end of Part 3. Submittals that do not follow the same format and order as the Door Hardware Sets will be rejected and subject to resubmission.
 3. Content: Include the following information:
 - a. Type, style, function, size, label, hand, and finish of each door hardware item.
 - b. Manufacturer of each item.
 - c. Fastenings and other pertinent information.
 - d. Location of door hardware set, cross-referenced to Drawings, both on floor plans and in door and frame schedule.
 - e. Explanation of abbreviations, symbols, and codes contained in schedule.
 - f. Mounting locations for door hardware.
 - g. Door and frame sizes and materials.
 - h. Warranty information for each product.
 4. Submittal Sequence: Submit the final Door Hardware Schedule at earliest possible date, particularly where approval of the Door Hardware Schedule must precede fabrication of other work that is critical in the Project construction schedule. Include Product Data, Samples, Shop Drawings of other work affected by door hardware, and other information essential to the coordinated review of the Door Hardware Schedule.
- C. Shop Drawings: Details of electrified access control hardware indicating the following:
1. Wiring Diagrams: Upon receipt of approved schedules, submit detailed system wiring diagrams for power, signaling, monitoring, communication, and control of the access control system electrified hardware. Differentiate between manufacturer-installed and field-installed wiring. Include the following:
 - a. Elevation diagram of each unique access controlled opening showing location and interconnection of major system components with respect to their placement in the respective door openings.
 - b. Complete (risers, point-to-point) access control system block wiring diagrams.
 - c. Wiring instructions for each electronic component scheduled herein.
 2. Electrical Coordination: Coordinate with related sections the voltages and wiring details required at electrically controlled and operated hardware openings.
- D. Keying Schedule: After a keying meeting with the owner has taken place prepare a separate keying schedule detailing final instructions. Submit the keying schedule in electronic format. Include keying system explanation, door numbers, key set symbols,

hardware set numbers and special instructions. Owner must approve submitted keying schedule prior to the ordering of permanent cylinders/cores.

E. Informational Submittals:

1. Product Test Reports: Indicating compliance with cycle testing requirements, based on evaluation of comprehensive tests performed by manufacturer and witnessed by a qualified independent testing agency.

F. Operating and Maintenance Manuals: Provide manufacturers operating and maintenance manuals for each item comprising the complete door hardware installation in quantity as required in Division 01, Closeout Procedures.

1.4 QUALITY ASSURANCE

A. Manufacturers Qualifications: Engage qualified manufacturers with a minimum 5 years of documented experience in producing hardware and equipment similar to that indicated for this Project and that have a proven record of successful in-service performance.

B. Certified Products: Where specified, products must maintain a current listing in the Builders Hardware Manufacturers Association (BHMA) Certified Products Directory (CPD).

C. Installer Qualifications: A minimum 3 years documented experience installing both standard and electrified door hardware similar in material, design, and extent to that indicated for this Project and whose work has resulted in construction with a record of successful in-service performance.

D. Door Hardware Supplier Qualifications: Experienced commercial door hardware distributors with a minimum 5 years documented experience supplying both mechanical and electromechanical hardware installations comparable in material, design, and extent to that indicated for this Project. Supplier recognized as a factory direct distributor by the manufacturers of the primary materials with a warehousing facility in Project's vicinity. Supplier to have on staff a certified Architectural Hardware Consultant (AHC) available during the course of the Work to consult with Contractor, Architect, and Owner concerning both standard and electromechanical door hardware and keying.

E. Source Limitations: Obtain each type and variety of door hardware specified in this section from a single source unless otherwise indicated.

1. Electrified modifications or enhancements made to a source manufacturer's product line by a secondary or third party source will not be accepted.

2. Provide electromechanical door hardware from the same manufacturer as mechanical door hardware, unless otherwise indicated.

F. Each unit to bear third party permanent label indicating compliance with the referenced testing standards.

G. Keying Conference: Conduct conference to comply with requirements in Division 01 Section "Project Meetings." Keying conference to incorporate the following criteria into the final keying schedule document:

1. Function of building, purpose of each area and degree of security required.
 2. Plans for existing and future key system expansion.
 3. Requirements for key control storage and software.
 4. Installation of permanent keys, cylinder cores and software.
 5. Address and requirements for delivery of keys.
- H. Pre-Submittal Conference: Conduct coordination conference in compliance with requirements in Division 01 Section "Project Meetings" with attendance by representatives of Supplier(s), Installer(s), and Contractor(s) to review proper methods and the procedures for receiving, handling, and installing door hardware.
1. Prior to installation of door hardware, conduct a project specific training meeting to instruct the installing contractors' personnel on the proper installation and adjustment of their respective products. Product training to be attended by installers of door hardware (including electromechanical hardware) for aluminum, hollow metal and wood doors. Training will include the use of installation manuals, hardware schedules, templates and physical product samples as required.
 2. Inspect and discuss electrical roughing-in, power supply connections, and other preparatory work performed by other trades.
 3. Review sequence of operation narratives for each unique access controlled opening.
 4. Review and finalize construction schedule and verify availability of materials.
 5. Review the required inspecting, testing, commissioning, and demonstration procedures
- I. At completion of installation, provide written documentation that components were applied according to manufacturer's instructions and recommendations and according to approved schedule.

1.5 DELIVERY, STORAGE, AND HANDLING

- A. Inventory door hardware on receipt and provide secure lock-up and shelving for door hardware delivered to Project site. Do not store electronic access control hardware, software or accessories at Project site without prior authorization.
- B. Tag each item or package separately with identification related to the final Door Hardware Schedule, and include basic installation instructions with each item or package.
- C. Deliver, as applicable, permanent keys, cylinders, cores, access control credentials, software and related accessories directly to Owner via registered mail or overnight package service. Instructions for delivery to the Owner shall be established at the "Keying Conference".

1.6 COORDINATION

- A. Templates: Obtain and distribute to the parties involved templates for doors, frames, and other work specified to be factory prepared for installing standard and electrified hardware. Check Shop Drawings of other work to confirm that adequate provisions are made for locating and installing hardware to comply with indicated requirements.
- B. Door and Frame Preparation: Doors and corresponding frames are to be prepared, reinforced and pre-wired (if applicable) to receive the installation of the specified

electrified, monitoring, signaling and access control system hardware without additional in-field modifications.

1.7 WARRANTY

- A. General Warranty: Reference Division 01, General Requirements. Special warranties specified in this Article shall not deprive Owner of other rights Owner may have under other provisions of the Contract Documents and shall be in addition to, and run concurrent with, other warranties made by Contractor under requirements of the Contract Documents.
- B. Warranty Period: Written warranty, executed by manufacturer(s), agreeing to repair or replace components of standard and electrified door hardware that fails in materials or workmanship within specified warranty period after final acceptance by the Owner. Failures include, but are not limited to, the following:
 - 1. Structural failures including excessive deflection, cracking, or breakage.
 - 2. Faulty operation of the hardware.
 - 3. Deterioration of metals, metal finishes, and other materials beyond normal weathering.
 - 4. Electrical component defects and failures within the systems operation.
- C. Special Owner Requested Warranty Period: Unless otherwise indicated, warranty shall be **two (2) years** from date of Substantial Completion.

PART 2 - PRODUCTS

2.1 SCHEDULED DOOR HARDWARE

- A. General: Provide door hardware for each door to comply with requirements in Door Hardware Sets and each referenced section that products are to be supplied under.
- B. Designations: Requirements for quantity, item, size, finish or color, grade, function, and other distinctive qualities of each type of door hardware are indicated in the Door Hardware Sets at the end of Part 3. Products are identified by using door hardware designations, as follows:
 - 1. Named Manufacturer's Products: Product designation and manufacturer are listed for each door hardware type required for the purpose of establishing requirements. Manufacturers' names are abbreviated in the Door Hardware Schedule.
- C. Please note that ASSA ABLOY is transitioning the Yale Commercial brand to Arrow. This affects only the brand name; the products and product numbers will remain unchanged. The brand transition is expected to be complete in or about May of 2024, and products shipping after that time will be branded Arrow.
- D. Substitutions: Requests for substitution and product approval for inclusive mechanical and electromechanical door hardware in compliance with the specifications must be submitted in writing and in accordance with the procedures and time frames outlined in Division 01,

Substitution Procedures. Approval of requests is at the discretion of the architect, owner, and their designated consultants.

2.2 BUTT HINGES

- A. Hinges: ANSI/BHMA A156.1 butt hinges with number of hinge knuckles and other options as specified in the Door Hardware Sets.
1. Quantity: Provide the following hinge quantity:
 - a. Two Hinges: For doors with heights up to 60 inches.
 - b. Three Hinges: For doors with heights 61 to 90 inches.
 - c. Four Hinges: For doors with heights 91 to 120 inches.
 - d. For doors with heights more than 120 inches, provide 4 hinges, plus 1 hinge for every 30 inches of door height greater than 120 inches.
 2. Hinge Size: Provide the following, unless otherwise indicated, with hinge widths sized for door thickness and clearances required:
 - a. Widths up to 3'0": 4-1/2" standard or heavy weight as specified.
 - b. Sizes from 3'1" to 4'0": 5" standard or heavy weight as specified.
 3. Hinge Weight and Base Material: Unless otherwise indicated, provide the following:
 - a. Exterior Doors: Heavy weight, non-ferrous, ball bearing or oil impregnated bearing hinges unless Hardware Sets indicate standard weight.
 - b. Interior Doors: Standard weight, steel, ball bearing or oil impregnated bearing hinges unless Hardware Sets indicate heavy weight.
 4. Hinge Options: Comply with the following:
 - a. Non-removable Pins: With the exception of electric through wire hinges, provide set screw in hinge barrel that, when tightened into a groove in hinge pin, prevents removal of pin while door is closed; for the all out-swinging lockable doors.
 5. Manufacturers:
 - a. McKinney (MK) - TA/T4A Series, 5 knuckle.
 - b. Or approved equal

2.3 CONTINUOUS HINGES

- A. Continuous Geared Hinges: ANSI/BHMA A156.26 Grade 1-600 continuous geared hinge with minimum 0.120-inch thick extruded 6063-T6 aluminum alloy hinge leaves and a minimum overall width of 4 inches. Hinges are non-handed, reversible and fabricated to template screw locations. Factory trim hinges to suit door height and prepare for electrical cut-outs.
1. Where specified, provide modular continuous geared hinges that ship in two or three pieces and form a single continuous hinge upon installation.

2. Manufacturers:
 - a. Pemko (PE).
 - b. Or approved equal

2.4 DOOR OPERATING TRIM

- A. Flush Bolts and Surface Bolts: Provide products conforming to ANSI/BHMA A156.3 and A156.16, Grade 1.
 1. Flush bolts to be furnished with top rod of sufficient length to allow bolt retraction device location approximately six feet from the floor.
 2. Furnish dust proof strikes for bottom bolts.
 3. Surface bolts to be minimum 8" in length and U.L. listed for labeled fire doors and U.L. listed for windstorm components where applicable.
 4. Provide related accessories (mounting brackets, strikes, coordinators, etc.) as required for appropriate installation and operation.
 5. Manufacturers:
 - a. Rockwood (RO).
 - b. Or approved equal
- B. Door Push Plates and Pulls: ANSI/BHMA A156.6 door pushes and pull units of type and design specified in the Hardware Sets. Coordinate and provide proper width and height as required where conflicting hardware dictates.
 1. Push/Pull Plates: Minimum .050 inch thick, size as indicated in hardware sets, with beveled edges, secured with exposed screws unless otherwise indicated.
 2. Door Pull and Push Bar Design: Size, shape, and material as indicated in the hardware sets. Minimum clearance of 2 1/2-inches from face of door unless otherwise indicated.
 3. Offset Pull Design: Size, shape, and material as indicated in the hardware sets. Minimum clearance of 2 1/2-inches from face of door and offset of 90 degrees unless otherwise indicated.
 4. Pulls, where applicable, shall be provided with a 10" clearance from the finished floor on the push side to accommodate wheelchair accessibility.
 5. Fasteners: Provide manufacturer's designated fastener type as indicated in Hardware Sets.
 6. Manufacturers:
 - a. Rockwood (RO).
 - b. Or approved equal

2.5 CYLINDERS AND KEYING

- A. General: Cylinder manufacturer to have minimum (10) years experience designing secured master key systems and have on record a published security keying system policy.
 1. Manufacturers:
 - a. Match Existing, Field Verify.

- B. Keying System: Each type of lock and cylinders to be factory keyed.
 - 1. Supplier shall conduct a "Keying Conference" to define and document keying system instructions and requirements.
 - 2. Furnish factory cut, nickel-silver large bow permanently inscribed with a visual key control number as directed by Owner.
 - 3. Existing System: Field verify and key cylinders to match Owner's existing system.
- C. Key Quantity: Provide the following minimum number of keys:
 - 1. Change Keys per Cylinder: Two (2)
 - 2. Master Keys (per Master Key Level/Group): Five (5).
- D. Key Registration List (Bitting List):
 - 1. Provide keying transcript list to Owner's representative in the proper format for importing into key control software.
 - 2. Provide transcript list in writing or electronic file as directed by the Owner.

2.6 CYLINDRICAL LOCKS AND LATCHING DEVICES

- A. Cylindrical Locksets, Grade 1 (Heavy Duty): ANSI/BHMA A156.2, Series 4000, Operational Grade 1 Certified Products Directory (CPD) listed.
 - 1. Manufacturers:
 - a. Corbin Russwin Hardware (RU) - CLX3300 Series.
 - b. Oak Security Group (OK) - 1CL 2CSI1H2A.
 - c. Or approved equal

2.7 LOCK AND LATCH STRIKES

- A. Strikes: Provide manufacturer's standard strike with strike box for each latch or lock bolt, with curved lip extended to protect frame, finished to match door hardware set, unless otherwise indicated, and as follows:
 - 1. Flat-Lip Strikes: For locks with three-piece antifriction latchbolts, as recommended by manufacturer.
 - 2. Extra-Long-Lip Strikes: For locks used on frames with applied wood casing trim.
 - 3. Aluminum-Frame Strike Box: Provide manufacturer's special strike box fabricated for aluminum framing.
 - 4. Double-lipped strikes: For locks at double acting doors. Furnish with retractable stop for rescue hardware applications.
- B. Standards: Comply with the following:
 - 1. Strikes for Mortise Locks and Latches: BHMA A156.13.
 - 2. Strikes for Bored Locks and Latches: BHMA A156.2.
 - 3. Strikes for Auxiliary Deadlocks: BHMA A156.36.
 - 4. Dustproof Strikes: BHMA A156.16.

2.8 CONVENTIONAL EXIT DEVICES

- A. General Requirements: All exit devices specified herein shall meet or exceed the following criteria:
1. Exit devices shall have a **five (5) year** warranty.
 2. At doors not requiring a fire rating, provide devices complying with NFPA 101 and listed and labeled for "Panic Hardware" according to UL305. Provide proper fasteners as required by manufacturer including sex nuts and bolts at openings specified in the Hardware Sets.
 3. Where exit devices are required on fire rated doors, provide devices complying with NFPA 80 and with UL labeling indicating "Fire Exit Hardware". Provide devices with the proper fasteners for installation as tested and listed by UL. Consult manufacturer's catalog and template book for specific requirements.
 4. Except on fire rated doors, provide exit devices with hex key dogging device to hold the pushbar and latch in a retracted position. Provide optional keyed cylinder dogging on devices where specified in Hardware Sets.
 5. Devices must fit flat against the door face with no gap that permits unauthorized dogging of the push bar. The addition of filler strips is required in any case where the door light extends behind the device as in a full glass configuration.
 6. Flush End Caps: Provide flush end caps made of architectural metal in the same finish as the devices as in the Hardware Sets. Plastic end caps will not be acceptable.
 7. Lever Operating Trim: Where exit devices require lever trim, furnish manufacturer's heavy duty escutcheon trim with threaded studs for thru-bolts.
 - a. Lock Trim Design: As indicated in Hardware Sets, provide finishes and designs to match that of the specified locksets.
 - b. Where function of exit device requires a cylinder, provide a cylinder (Rim or Mortise) as specified in Hardware Sets.
 8. Vertical Rod Exit Devices: Where surface or concealed vertical rod exit devices are used at interior openings, provide as less bottom rod (LBR) unless otherwise indicated. Provide dust proof strikes where thermal pins are required to project into the floor.
 9. Narrow Stile Applications: At doors constructed with narrow stiles, or as specified in Hardware Sets, provide devices designed for maximum 2" wide stiles.
 10. Dummy Push Bar: Nonfunctioning push bar matching functional push bar.
 11. Rail Sizing: Provide exit device rails factory sized for proper door width application.
 12. Through Bolt Installation: For exit devices and trim as indicated in Door Hardware Sets.
- B. Conventional Push Rail Exit Devices (Heavy Duty): ANSI/BHMA A156.3, Grade 1 Certified Products Directory (CPD) listed panic and fire exit hardware devices furnished in the functions specified in the Hardware Sets. Exit device latch to be stainless steel, pullman type, with deadlock feature.
1. Manufacturers:
 - a. Corbin Russwin Hardware (RU) - ED4000 / ED5000 Series.
 - b. Or approved equal

2.9 DOOR CLOSERS

- A. All door closers specified herein shall meet or exceed the following criteria:
1. General: Door closers to be from one manufacturer, matching in design and style, with the same type door preparations and templates regardless of application or spring size. Closers to be non-handed with full sized covers.
 2. Standards: Closers to comply with UL-10C for Positive Pressure Fire Test and be U.L. listed for use of fire rated doors.
 3. Size of Units: Comply with manufacturer's written recommendations for sizing of door closers depending on size of door, exposure to weather, and anticipated frequency of use. Where closers are indicated for doors required to be accessible to the Americans with Disabilities Act, provide units complying with ANSI ICC/A117.1.
 4. Closer Arms: Provide heavy duty, forged steel closer arms unless otherwise indicated in Hardware Sets.
 5. Closers shall not be installed on exterior or corridor side of doors; where possible install closers on door for optimum aesthetics.
 6. Closer Accessories: Provide door closer accessories including custom templates, special mounting brackets, spacers and drop plates as required for proper installation. Provide through-bolt and security type fasteners as specified in the hardware sets.
- B. Door Closers, Surface Mounted (Heavy Duty): ANSI/BHMA A156.4, Grade 1 Certified Products Directory (CPD) listed surface mounted, heavy duty door closers with complete spring power adjustment, sizes 1 thru 6; and fully operational adjustable according to door size, frequency of use, and opening force. Closers to be rack and pinion type, one piece cast iron or aluminum alloy body construction, with adjustable backcheck and separate non-critical valves for closing sweep and latch speed control. Provide non-handed units standard.
1. Heavy duty surface mounted door closers shall have a **thirty (30) year** warranty.
 2. Manufacturers:
 - a. Norton Rixson (NO) - 7500 Series.
 - b. Or approved equal
- C. Door Closers, Surface Mounted (Unitrol): ANSI/BHMA A156.4, Grade 1 Certified Products Directory (CPD) listed surface mounted closers with door stop mechanism to absorb dead stop shock on arm and top hinge. Hold-open arms to have a spring loaded mechanism in addition to shock absorber assembly. Arms to be provided with rigid steel main arm and secondary arm lengths proportional to the door width.
1. Manufacturers:
 - a. Norton Rixson (NO) - Unitrol Series.
 - b. Or approved equal

2.10 ARCHITECTURAL TRIM

- A. Door Protective Trim

1. General: Door protective trim units to be of type and design as specified below or in the Hardware Sets.
2. Size: Fabricate protection plates (kick, armor, or mop) not more than 2" less than door width (LDW) on stop side of single doors and 1" LDW on stop side of pairs of doors, and not more than 1" less than door width on pull side. Coordinate and provide proper width and height as required where conflicting hardware dictates. Height to be as specified in the Hardware Sets.
3. Where plates are applied to fire rated doors with the top of the plate more than 16" above the bottom of the door, provide plates complying with NFPA 80. Consult manufacturer's catalog and template book for specific requirements for size and applications.
4. Protection Plates: ANSI/BHMA A156.6 protection plates (kick, armor, or mop), fabricated from the following:
 - a. Stainless Steel: 300 grade, 050-inch thick.
5. Options and fasteners: Provide manufacturer's designated fastener type as specified in the Hardware Sets. Provide countersunk screw holes.
6. Manufacturers:
 - a. Rockwood (RO).
 - b. Or approved equal

2.11 DOOR STOPS AND HOLDERS

- A. General: Door stops and holders to be of type and design as specified below or in the Hardware Sets.
- B. Door Stops and Bumpers: ANSI/BHMA A156.16, Grade 1 door stops and wall bumpers. Provide wall bumpers, either convex or concave types with anchorage as indicated, unless floor or other types of door stops are specified in Hardware Sets. Do not mount floor stops where they will impede traffic. Where floor or wall bumpers are not appropriate, provide overhead type stops and holders.
 1. Manufacturers:
 - a. Rockwood (RO).
 - b. Or approved equal
- C. Overhead Door Stops and Holders: ANSI/BHMA A156.8, Grade 1 Certified Products Directory (CPD) listed overhead stops and holders to be surface or concealed types as indicated in Hardware Sets. Track, slide, arm and jamb bracket to be constructed of extruded bronze and shock absorber spring of heavy tempered steel. Provide non-handed design with mounting brackets as required for proper operation and function.
 1. Manufacturers:
 - a. Norton Rixson (RF).
 - b. Rockwood (RO).
 - c. Sargent Manufacturing (SA).

2.12 ARCHITECTURAL SEALS

- A. General: Thresholds, weatherstripping, and gasket seals to be of type and design as specified below or in the Hardware Sets. Provide continuous weatherstrip gasketing on exterior doors and provide smoke, light, or sound gasketing on interior doors where indicated. At exterior applications provide non-corrosive fasteners and elsewhere where indicated.
- B. Smoke Labeled Gasketing: Assemblies complying with NFPA 105 that are listed and labeled by a testing and inspecting agency acceptable to authorities having jurisdiction, for smoke control ratings indicated, based on testing according to UL 1784.
 - 1. Provide smoke labeled perimeter gasketing at all smoke labeled openings.
- C. Fire Labeled Gasketing: Assemblies complying with NFPA 80 that are listed and labeled by a testing and inspecting agency acceptable to authorities having jurisdiction, for fire ratings indicated, based on testing according to UL-10C.
 - 1. Provide intumescent seals as indicated to meet UL10C Standard for Positive Pressure Fire Tests of Door Assemblies, and NPFA 252, Standard Methods of Fire Tests of Door Assemblies.
- D. Sound-Rated Gasketing: Assemblies that are listed and labeled by a testing and inspecting agency, for sound ratings indicated.
- E. Replaceable Seal Strips: Provide only those units where resilient or flexible seal strips are easily replaceable and readily available from stocks maintained by manufacturer.
- F. Manufacturers:
 - 1. Pemko (PE).
 - 2. Or approved equal

2.13 ELECTRONIC ACCESSORIES

- A. Door Position Switches: Door position magnetic reed contact switches specifically designed for use in commercial door applications. On recessed models the contact and magnetic housing snap-lock into a 1" diameter hole. Surface mounted models include wide gap distance design complete with armored flex cabling. Provide SPDT, N/O switches with optional Rare Earth Magnet installation on steel doors with flush top channels.
 - 1. Manufacturers:
 - a. Securitron (SU) - DPS Series.
 - b. Or approved equal

2.14 FABRICATION

- A. Fasteners: Provide door hardware manufactured to comply with published templates generally prepared for machine, wood, and sheet metal screws. Provide screws according to manufacturers recognized installation standards for application intended.

2.15 FINISHES

- A. Standard: Designations used in the Hardware Sets and elsewhere indicate hardware finishes complying with ANSI/BHMA A156.18, including coordination with traditional U.S. finishes indicated by certain manufacturers for their products.
- B. Provide quality of finish, including thickness of plating or coating (if any), composition, hardness, and other qualities complying with manufacturer's standards, but in no case less than specified by referenced standards for the applicable units of hardware
- C. Protect mechanical finishes on exposed surfaces from damage by applying a strippable, temporary protective covering before shipping.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine scheduled openings, with Installer present, for compliance with requirements for installation tolerances, labeled fire door assembly construction, wall and floor construction, and other conditions affecting performance.
- B. Notify architect of any discrepancies or conflicts between the door schedule, door types, drawings and scheduled hardware. Proceed only after such discrepancies or conflicts have been resolved in writing.

3.2 PREPARATION

- A. Hollow Metal Doors and Frames: Comply with ANSI/DHI A115 series.
- B. Wood Doors: Comply with ANSI/DHI A115-W series.

3.3 INSTALLATION

- A. Install each item of mechanical and electromechanical hardware and access control equipment to comply with manufacturer's written instructions and according to specifications.
 - 1. Installers are to be trained and certified by the manufacturer on the proper installation and adjustment of fire, life safety, and security products including: hanging devices; locking devices; closing devices; and seals.
- B. Mounting Heights: Mount door hardware units at heights indicated in following applicable publications, unless specifically indicated or required to comply with governing regulations:
 - 1. Standard Steel Doors and Frames: DHI's "Recommended Locations for Architectural Hardware for Standard Steel Doors and Frames."
 - 2. DHI TDH-007-20: Installation Guide for Doors and Hardware.
 - 3. Where indicated to comply with accessibility requirements, comply with ANSI A117.1 "Accessibility Guidelines for Buildings and Facilities."

4. Provide blocking in drywall partitions where wall stops or other wall mounted hardware is located.
- C. Retrofitting: Install door hardware to comply with manufacturer's published templates and written instructions. Where cutting and fitting are required to install door hardware onto or into surfaces that are later to be painted or finished in another way, coordinate removal, storage, and reinstallation of surface protective trim units with finishing work specified in Division 9 Sections. Do not install surface-mounted items until finishes have been completed on substrates involved.
- D. Thresholds: Set thresholds for exterior and acoustical doors in full bed of sealant complying with requirements specified in Division 7 Section "Joint Sealants."
- E. Storage: Provide a secure lock up for hardware delivered to the project but not yet installed. Control the handling and installation of hardware items so that the completion of the work will not be delayed by hardware losses before and after installation.

3.4 FIELD QUALITY CONTROL

- A. Field Inspection (Punch Report): Reference Division 01 Sections "Closeout Procedures". Produce project punch report for each installed door opening indicating compliance with approved submittals and verification hardware is properly installed, operating and adjusted. Include list of items to be completed and corrected, indicating the reasons or deficiencies causing the Work to be incomplete or rejected.
 1. Organization of List: Include separate Door Opening and Deficiencies and Corrective Action Lists organized by Mark, Opening Remarks and Comments, and related Opening Images and Video Recordings.

3.5 ADJUSTING

- A. Initial Adjustment: Adjust and check each operating item of door hardware and each door to ensure proper operation or function of every unit. Replace units that cannot be adjusted to operate as intended. Adjust door control devices to compensate for final operation of heating and ventilating equipment and to comply with referenced accessibility requirements.

3.6 CLEANING AND PROTECTION

- A. Protect all hardware stored on construction site in a covered and dry place. Protect exposed hardware installed on doors during the construction phase. Install any and all hardware at the latest possible time frame.
- B. Clean adjacent surfaces soiled by door hardware installation.
- C. Clean operating items as necessary to restore proper finish. Provide final protection and maintain conditions that ensure door hardware is without damage or deterioration at time of owner occupancy.

3.7 DEMONSTRATION

- A. Instruct Owner's maintenance personnel to adjust, operate, and maintain mechanical and electromechanical door hardware.

3.8 DOOR HARDWARE SETS

- A. The hardware sets represent the design intent and direction of the owner and architect. They are a guideline only and should not be considered a detailed hardware schedule. Discrepancies, conflicting hardware and missing items should be brought to the attention of the architect with corrections made prior to the bidding process. Omitted items not included in a hardware set should be scheduled with the appropriate additional hardware required for proper application and functionality.
 - 1. Quantities listed are for each pair of doors, or for each single door.
 - 2. The supplier is responsible for handing and sizing all products.
 - 3. Where multiple options for a piece of hardware are given in a single line item, the supplier shall provide the appropriate application for the opening.
 - 4. At existing openings with new hardware the supplier shall field inspect existing conditions prior to the submittal stage to verify the specified hardware will work as required. Provide alternate solutions and proposals as needed.
- B. Manufacturer's Abbreviations:
 - 1. MK - McKinney
 - 2. PE - Pemko
 - 3. RO - Rockwood
 - 4. RU - Corbin Russwin
 - 5. OT - Other
 - 6. RF - Rixson
 - 7. NO - Norton
 - 8. SU - Securitron
 - 9. OK - Oak Security Group

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Hardware Sets

Set: 1.0

Door: 305A.2

2 Continuous Hinge	CFM-SLF-HD1-M		PE
1 Flush Bolt	2845 / 2945	US26D	RO
1 Mortise Exit Device, Nightlatch	ED5657L N9M57ET M110	630	RU
1 Mortise Cylinder	- Match Owner's existing key system	626	OT
1 Conc Overhead Stop	6-X36	630	RF
1 Surface Closer	UNI7500	689	NO
2 Kick Plate	K1050 10" high CSK BEV	US32D	RO
1 Weatherstrip	- Integral within construction of door and frame assembly		OT
2 Sweep	29326CNB TKSP		PE
1 Threshold	1715AK MSES25SS		PE
2 Position Switch	DPS-M-BK		SU ⚡
1 Wiring Diagram	- Elevation and Point to Point as Specified		OT

Notes: Add kick plate

*****FIELD VERIFY SPECIFIED HARDWARE IS COMPATIBLE WITH EXISTING CONDITIONS*****

Door position switches to monitor / report open closed status of opening to security system.

Set: 2.0

Door: 305B

1 Continuous Hinge	CFM-HD1-M		PE
1 Storeroom Lock	CLX3357 NZD LC	626	RU
1 Cylinder	- Match Owner's existing key system	626	OT
1 Surface Closer	CPS7500	689	NO
1 Kick Plate	K1050 10" high CSK BEV	US32D	RO
3 Silencer	608 / 609		RO

Notes: Add wall stop

*****FIELD VERIFY SPECIFIED HARDWARE IS COMPATIBLE WITH EXISTING CONDITIONS*****

Set: 3.0

Door: 305.2

1 Continuous Hinge	CFM-HD1-M		PE
1 Entrance Lock	CLX3351 NZD LC	626	RU
1 Cylinder	- Match Owner's existing key system	626	OT
1 Conc Overhead Stop	2-X36	630	RF
1 Kick Plate	K1050 10" high CSK BEV	US32D	RO
1 Wall Stop	406 / 409	US32D	RO
1 Gasketing	ACP112BL/2		PE
1 Gasketing	S44BL		PE
1 Gasketing	S773BL		PE
1 Door Bottom	STC411APK		PE

Notes: Add wall stop

Set: 4.0

Door: 305.1

1 Continuous Hinge	CFM-HD1-M		PE
1 Communicating Lock	CLX3362 NZD LC	626	RU
2 Cylinder	- Match Owner's existing key system	626	OT
1 Kick Plate	K1050 10" high CSK BEV	US32D	RO
1 Wall Stop	406 / 409	US32D	RO
1 Gasketing	ACP112BL/2		PE
1 Gasketing	S44BL		PE
1 Gasketing	S773BL		PE
1 Door Bottom	STC411APK		PE

Notes:

Set: 5.0

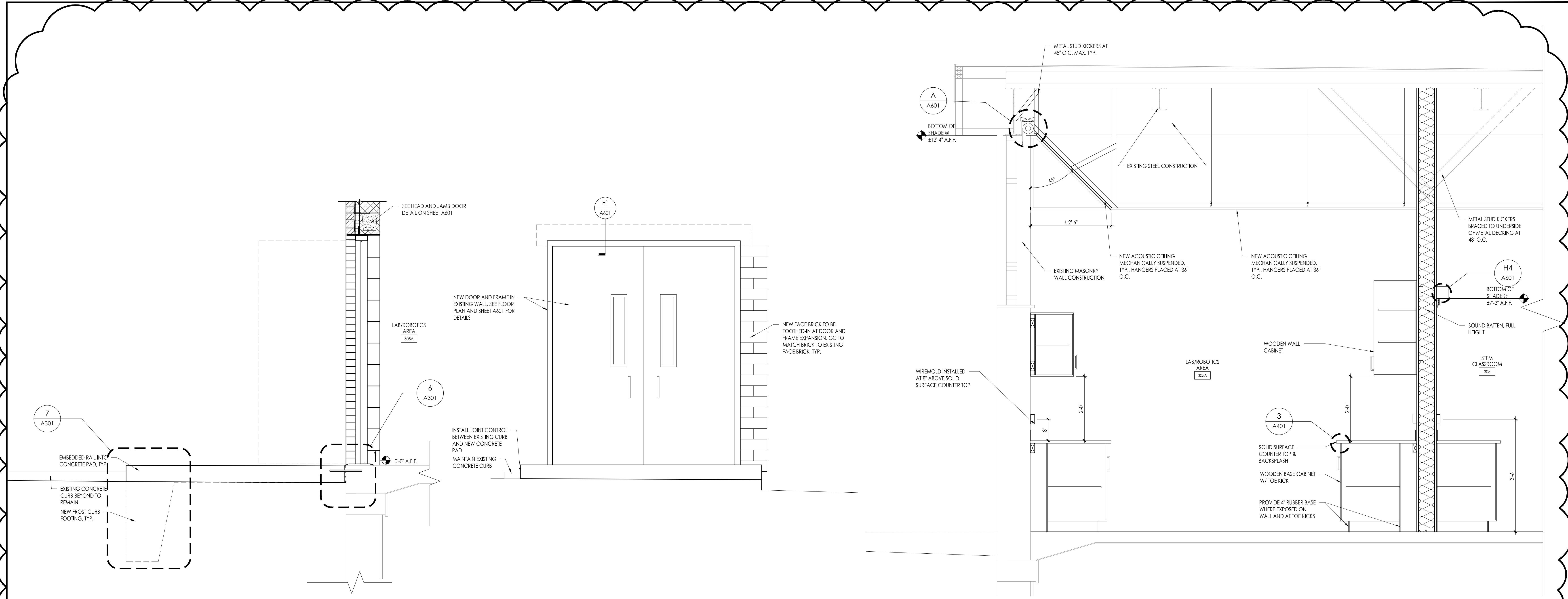
Doors: 305, 305A

1 Continuous Hinge	CFM-HD1-M		PE
1 Classroom Intruder Lock	1CL 2CSI1H2A	626	OK
2 Cylinder	- Match Owner's existing key system	626	OT
1 Surface Closer	PR7500	689	NO
1 Kick Plate	K1050 10" high CSK BEV	US32D	RO
1 Wall Stop	406 / 409	US32D	RO
1 Gasketing	ACP112BL/2		PE
1 Gasketing	S44BL		PE
1 Gasketing	S773BL		PE
1 Door Bottom	STC411APK		PE

Notes:

*****FIELD VERIFY SPECIFIED HARDWARE IS COMPATIBLE WITH EXISTING CONDITIONS*****

END OF SECTION 08700



1 WALL SECTION
Scale: 3/4" = 1'-0"

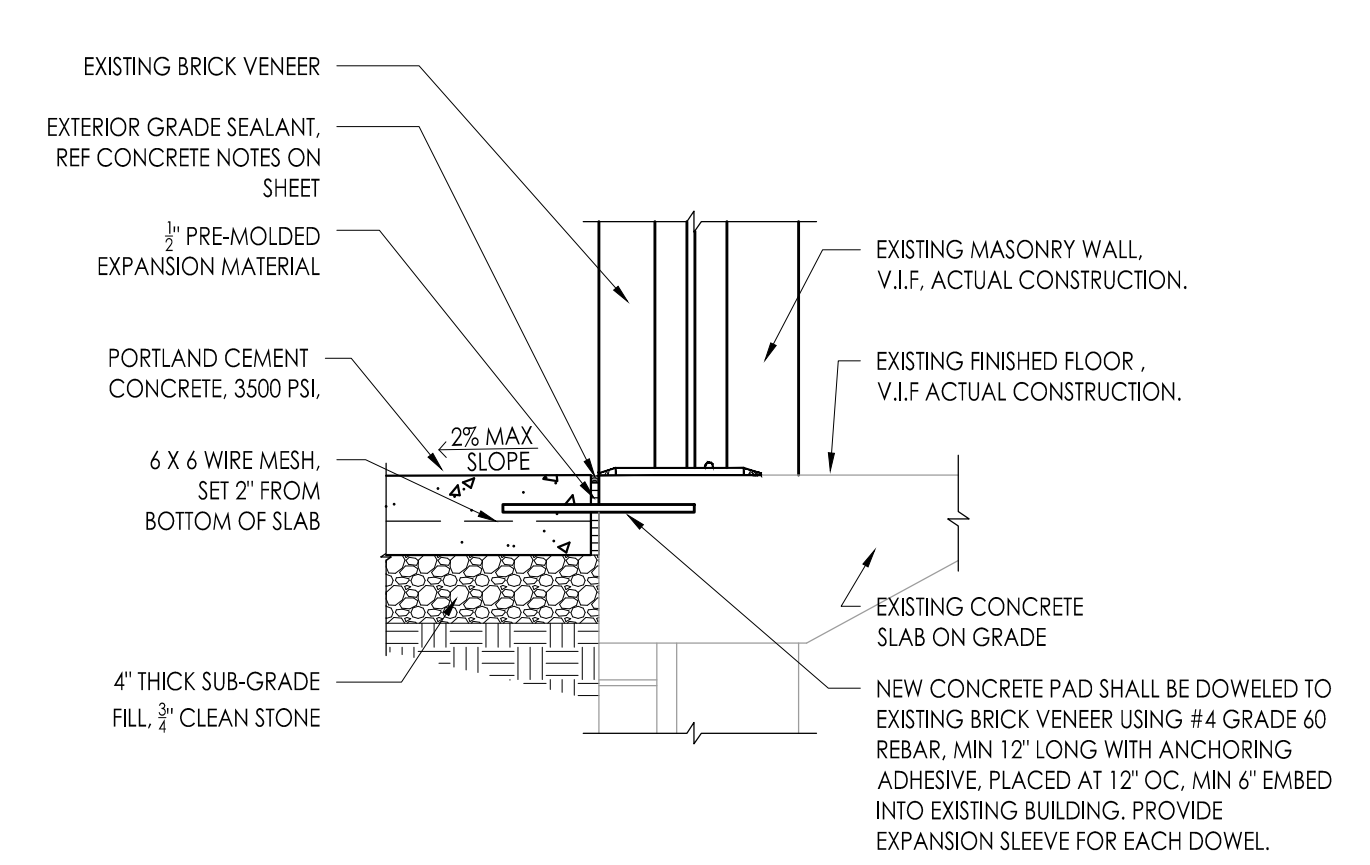
2 WALL SECTION
Scale: 3/4" = 1'-0"

3 WALL SECTION
Scale: 3/4" = 1'-0"

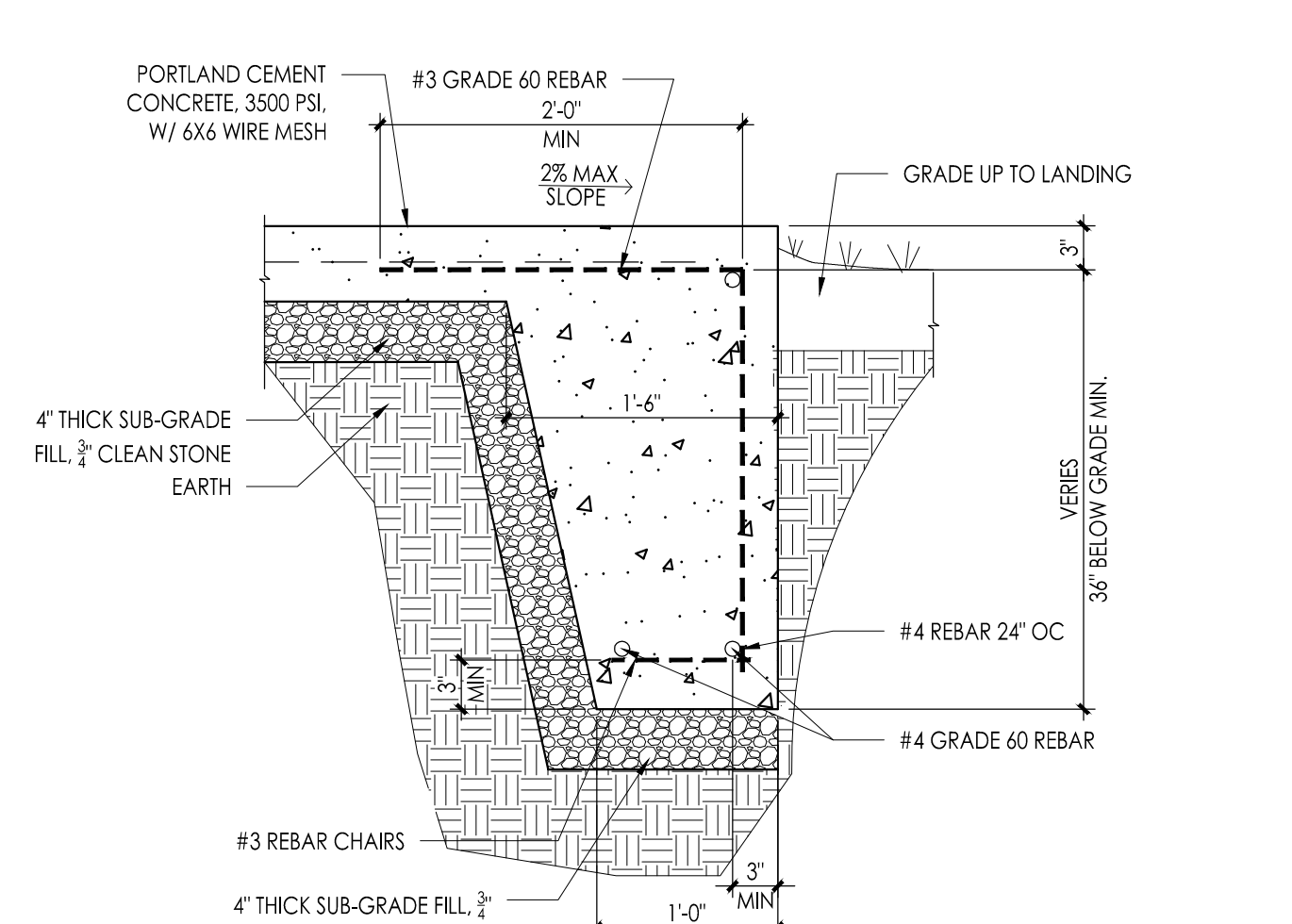
4 WALL SECTION
Scale: 3/4" = 1'-0"

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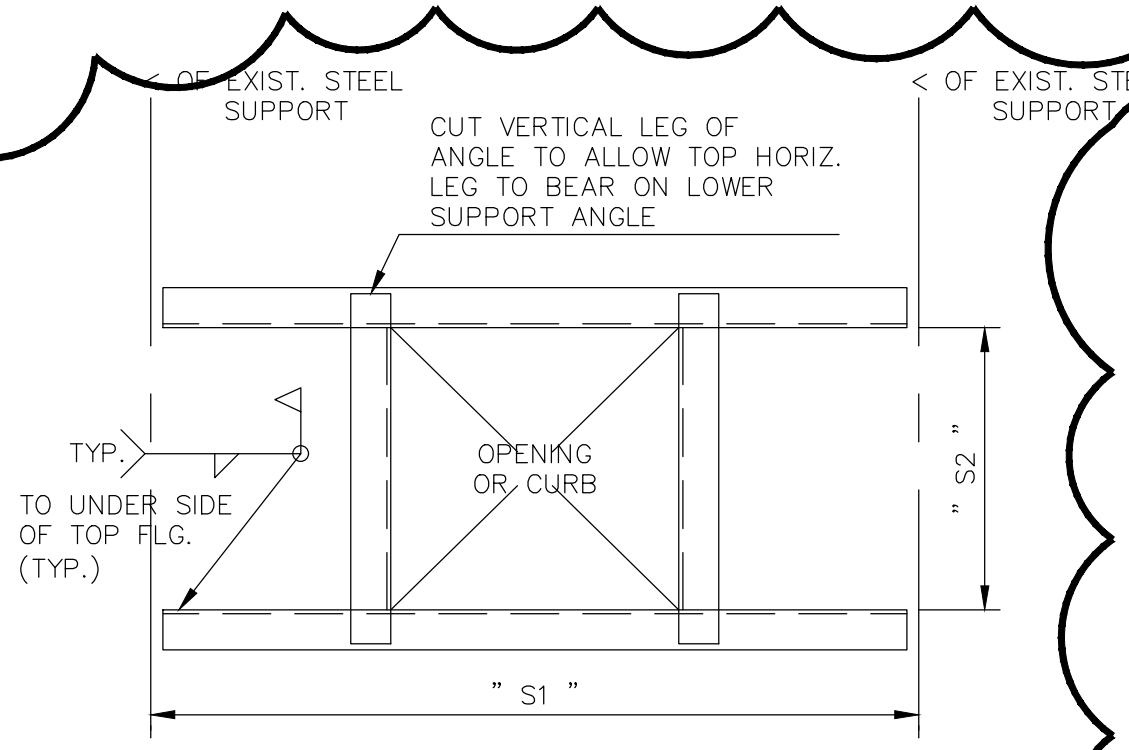
5 WALL SECTION
Scale: 3/4" = 1'-0"



6 CONCRETE PAD TIE-IN TO EXISTING
Scale: 1" = 1'-0"



7 TURNDOWN CONCRETE PAD
Scale: 1" = 1'-0"



NOTES:
 1. CONTRACTOR SHALL VERIFY ALL OPENINGS AND EXACT LOCATIONS OF OPENINGS PRIOR TO FABRICATION & ERECTION.
 2. PROVIDE NEW STEEL ANGLES ON ALL SIDES OF MECH'L CURBS UNLESS EXISTING BEAM, JOIST OR ANGLE IS SHOWN ON PLAN.
 NEW ANGLE SIZES TO BE:
 FOR "S1" OR "S2" < 6'-6" L-4"x4"x3/8"
 FOR "S1" OR "S2" > 6'-6" L-6"x6"x3/8"

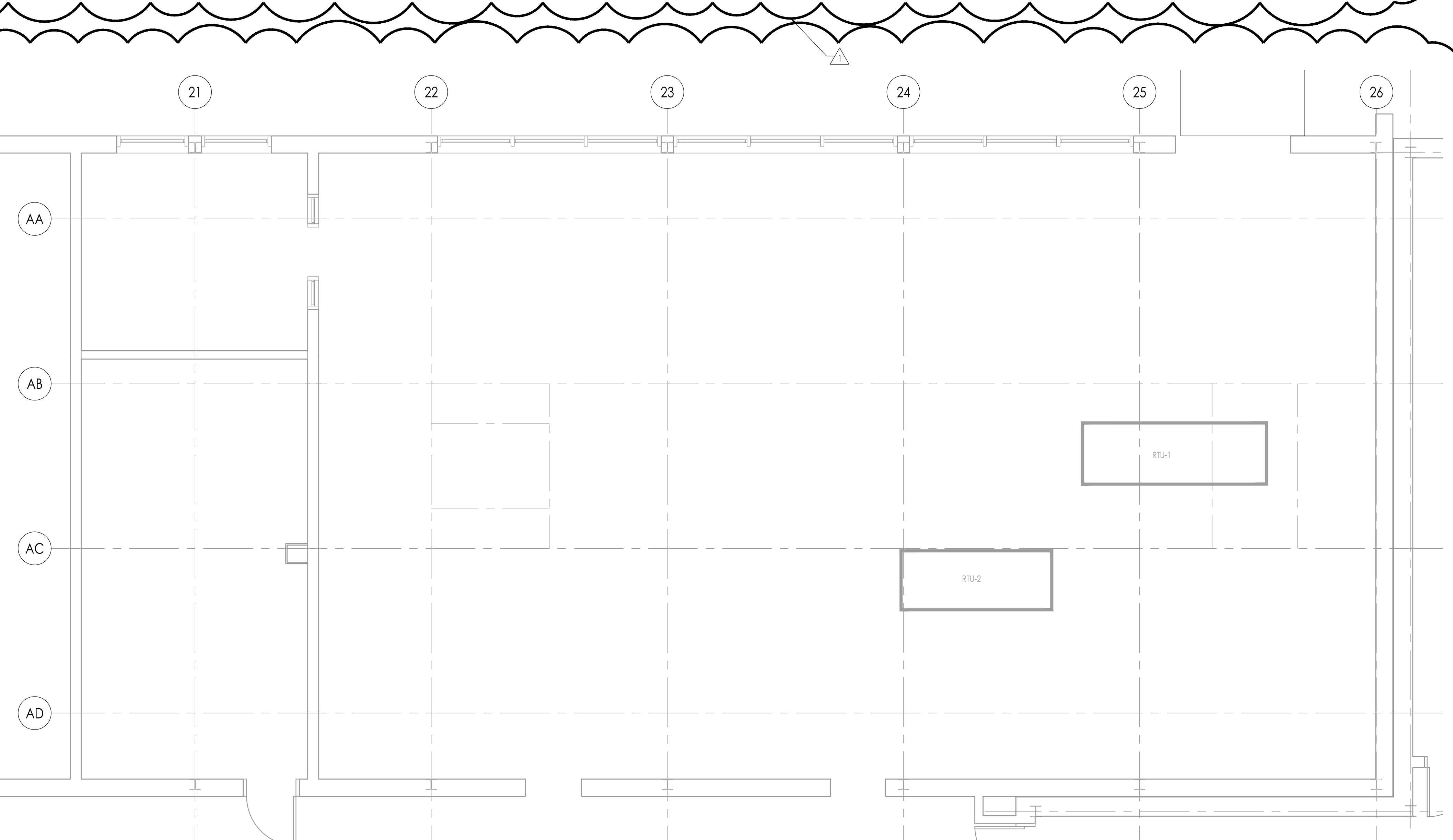
TYPICAL OPENING DETAIL AT ROOF UNDER NEW HVAC CURB
 NOT TO SCALE

NOTES:
 UNLESS OTHERWISE SPECIFIED ON DRAWINGS PROVIDE & INSTALL LINTELS FOR ALL SQUARE HEAD MASONRY OPENINGS IN ALL MASONRY WALLS IN ACCORDANCE WITH THE FOLLOWING SCHEDULES & COMMENTS.

LOOSE LINTEL SCHEDULE		
[FOR 4", 8", 12" & 16" WALLS]		
MASONRY OPENING	LINTEL SIZE	REMARKS
UP TO 4'-0"	L-3 1/2" x 3 1/2" x 1/4"	
4'-1" TO 6'-0"	L-5" x 1 1/2" x 5/16"	
6'-1" TO 8'-0"	L-6" x 3 1/2" x 5/16"	
OVER 8'-0"	W 8 x 18 +>	

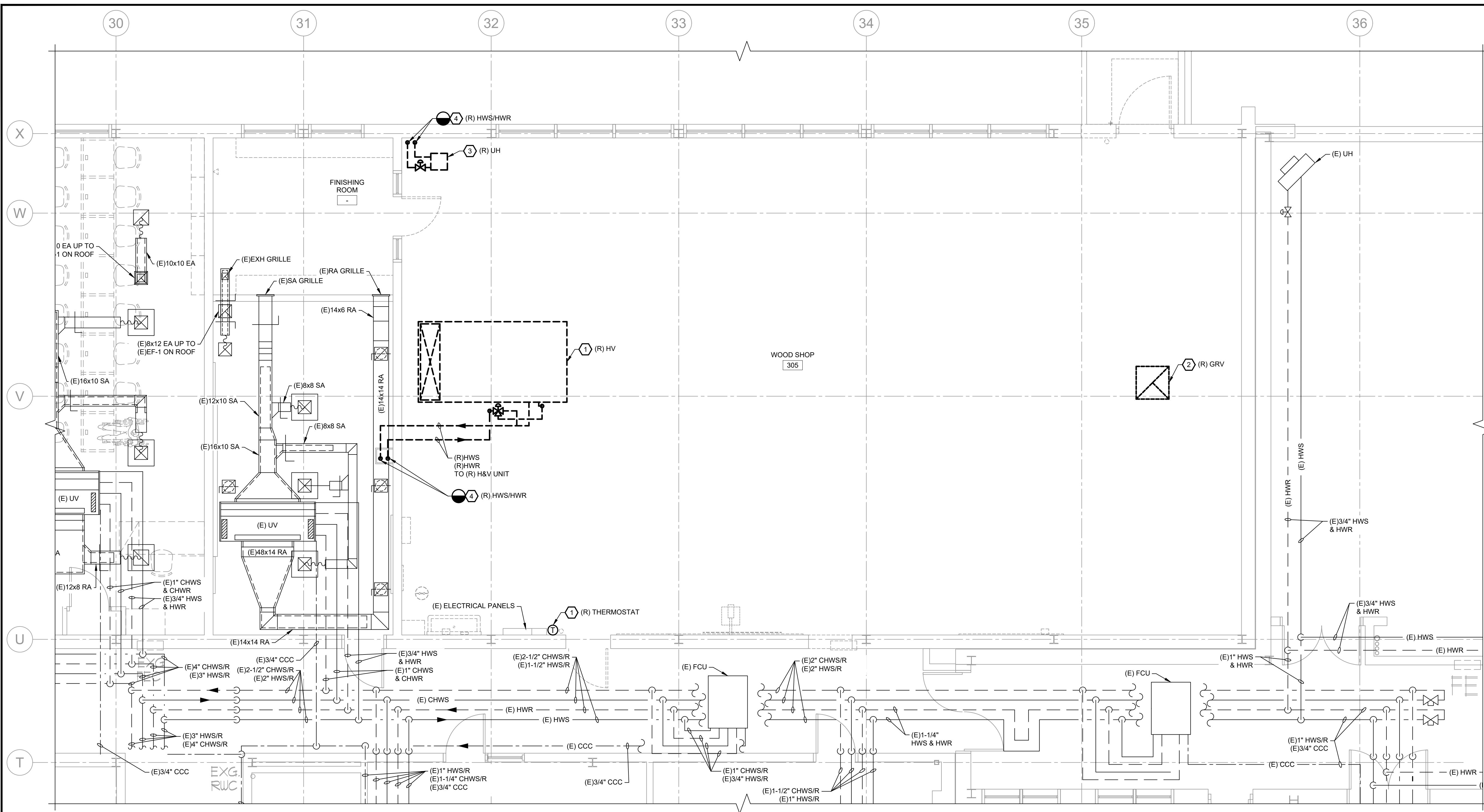
LOOSE LINTEL SCHEDULE		
[FOR 6" WALLS]		
MASONRY OPENING	LINTEL SIZE	REMARKS
2'-0" TO 6'-0"	WT 7 x 11	
6'-1" TO 8'-0"	WT 8 x 13	

NOTES:
 1. PROVIDE ONE (1) ANGLE FOR EACH 4" OF MASONRY WIDTH.
 2. BEAR LINTELS & MINIMUM EACH SIDE OF OPENING.
 3. ALL LINTELS IN EXTERIOR WALLS TO BE GALVANIZED.
 4. WHERE OPENINGS LOCATED NEXT TO COLUMNS OR BEAMS, ATTACH TO STRUCTURAL STEEL CONNECTION NOT TO PROTRUDE INTO OPENING.
 5. CONSULT ARCHITECTURAL, MECHANICAL & ELECTRICAL DRAWINGS FOR OPENING SIZE & LOCATION.



RTU ROOF FRAMING PLAN (REFERENCE ONLY)
 SCALE: 1/4" = 1'-0"

NOTE: THIS PLAN IS ONLY FOR REFERENCE AND APPROXIMATION OF THE EXISTING STRUCTURE AND PROPOSED LOCATION OF THE ROOFTOP UNITS. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING THE ACTUAL LOCATIONS OF THE OPENINGS WITH MEP AND ROOFING PLANS.



- DEMOLITION NOTES:**
- 1 DEMOLISH AND REMOVE EXISTING DECK HUNG HEATING & VENTILATING (HV) UNIT AND ALL ASSOCIATED PIPING, DUCTWORK, CONTROLS AND HANGERS. COORDINATE ROOFWALL PATCHING/PAINTING WITH THE GENERAL CONTRACTOR.
 - 2 REFER TO H102 FOR DEMOLITION OF ROOF MOUNTED GRAVITY VENTILATOR. RETAIN OPENING AND TEMPORARILY CAP UNTIL OPENING IS ENLARGED UNDER NEW WORK.
 - 3 DEMOLISH AND REMOVE EXISTING DECK HUNG UNIT HEATER AND ALL ASSOCIATED PIPING, CONTROLS AND HANGERS. REMOVE HWS/HWR PIPING TO BELOW FLOOR AND PROVIDE CAP. COORDINATE PATCHING/PAINTING WITH THE GENERAL CONTRACTOR.
 - 4 DEMOLISH AND REMOVE HWS/HWR BACK TO POINT INDICATED AND PROVIDE CAP.

1 PARTIAL FIRST FLOOR PLAN - HVAC DEMOLITION
 H101 SCALE: 1/4" = 1'-0"

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G F V H D LOCALIZE
 Date

F V H D P C . C O M

Project Name
STEM Lab Alterations & Renovations at Clearview Regional Middle School

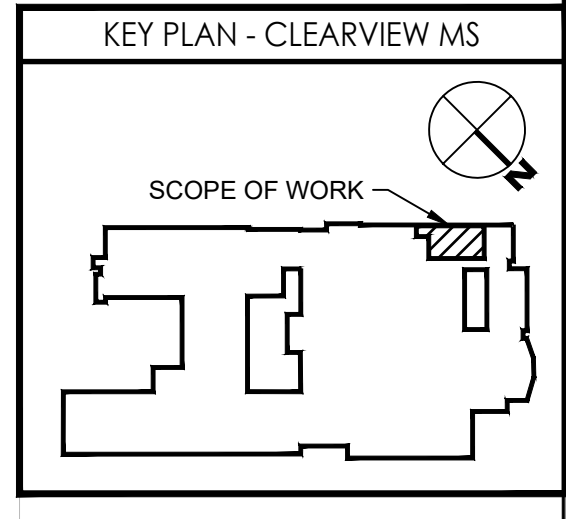
Project Owner Name
Clearview Regional High School District

Project Location
595 Jefferson Rd, Mullica Hill, NJ 08062

Project Number
5162C
 Project Date
10/11/2023
 Checked By
DLD
 Drawn By
RAMS
 Scale
1/4" SCALE

Drawing Name
HVAC FIRST FLOOR DEMOLITION PLAN

Revisions	No.	Date	Description
	1	10.20.23	ADDENDUM 1

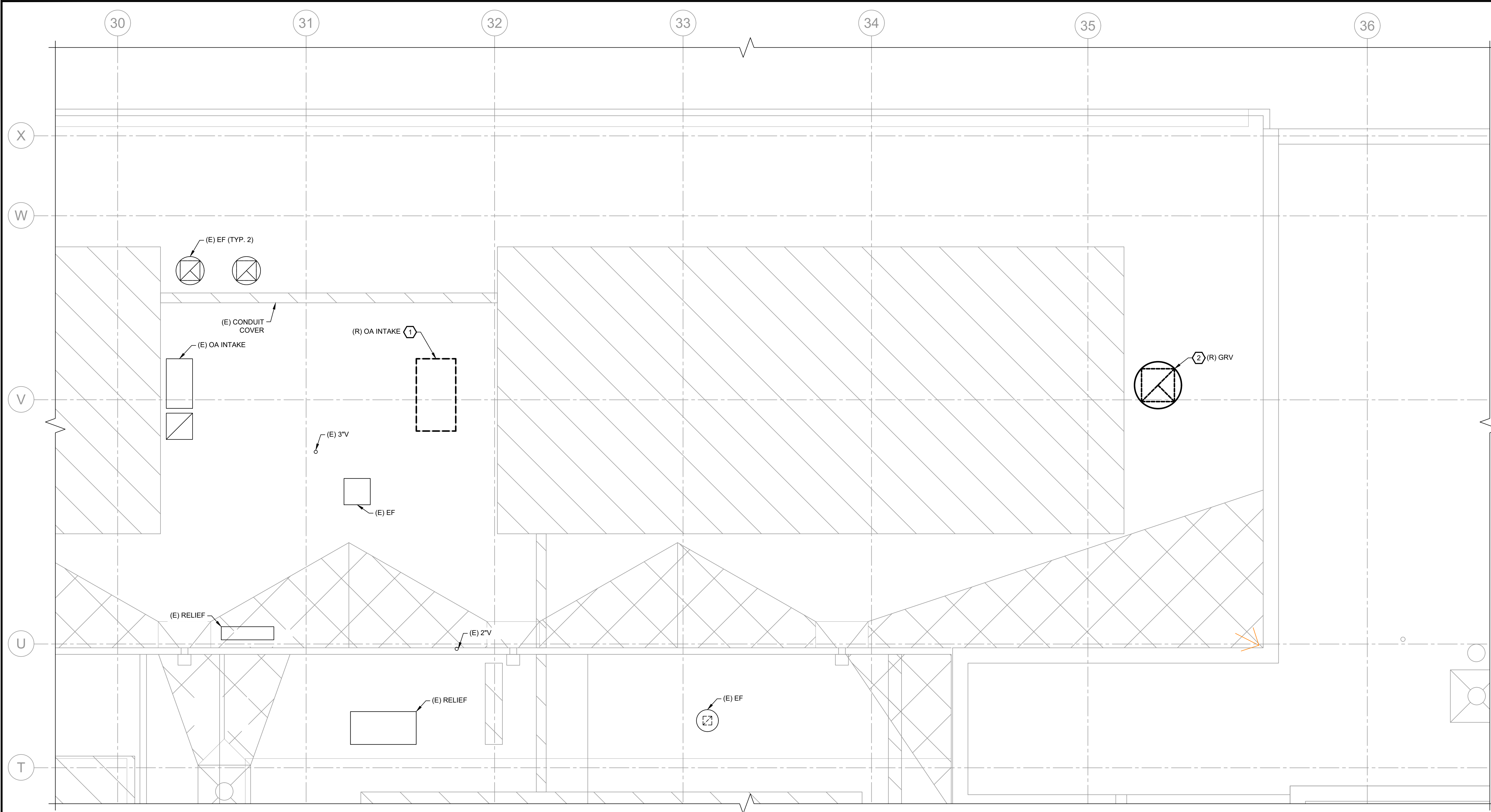


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ENGINEER _____ DATE _____

Drawing Number
H101

- DEMOLITION NOTES:**
- DEMOLISH AND REMOVE OUTSIDE AIR INTAKE AND ALL ASSOCIATED DUCTWORK, CONTROLS AND MOUNTING. COORDINATE WITH THE GENERAL CONTRACTOR FOR CAPPING EXISTING ROOF CURBS AND ALL ASSOCIATED ALL INFILL/PATCHING/PAINTING.
 - DEMOLISH AND REMOVE EXISTING ROOF MOUNTED GRAVITY VENTILATOR WITH MOTOR OPERATED MODULATING DAMPER AND ALL ASSOCIATED CONTROLS AND MOUNTING. RETAIN OPENING AND TEMPORARILY CAP FOR RE-USE UNDER NEW WORK.



1 PARTIAL ROOF PLAN - HVAC DEMOLITION
SCALE: 1/4" = 1'-0"

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G. Veisz
Date: _____

F V H D P C C O M

Project Name
STEM Lab Alterations & Renovations at Clearview Regional Middle School

Project Owner Name
Clearview Regional High School District

Project Location
**595 Jefferson Rd,
Mullica Hill, NJ
08062**

Project Number
5162C

Project Date
10/11/2023

Checked By
DLD

Drawn By
RAMS

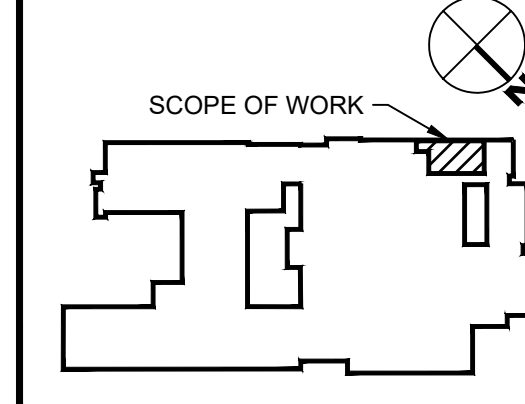
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Drawing Name
HVAC ROOF DEMOLITION PLAN

Revisions		
No.	Date	Description
1	10.20.23	ADDENDUM 1

Drawing Number
H102

KEY PLAN - CLEARVIEW MS



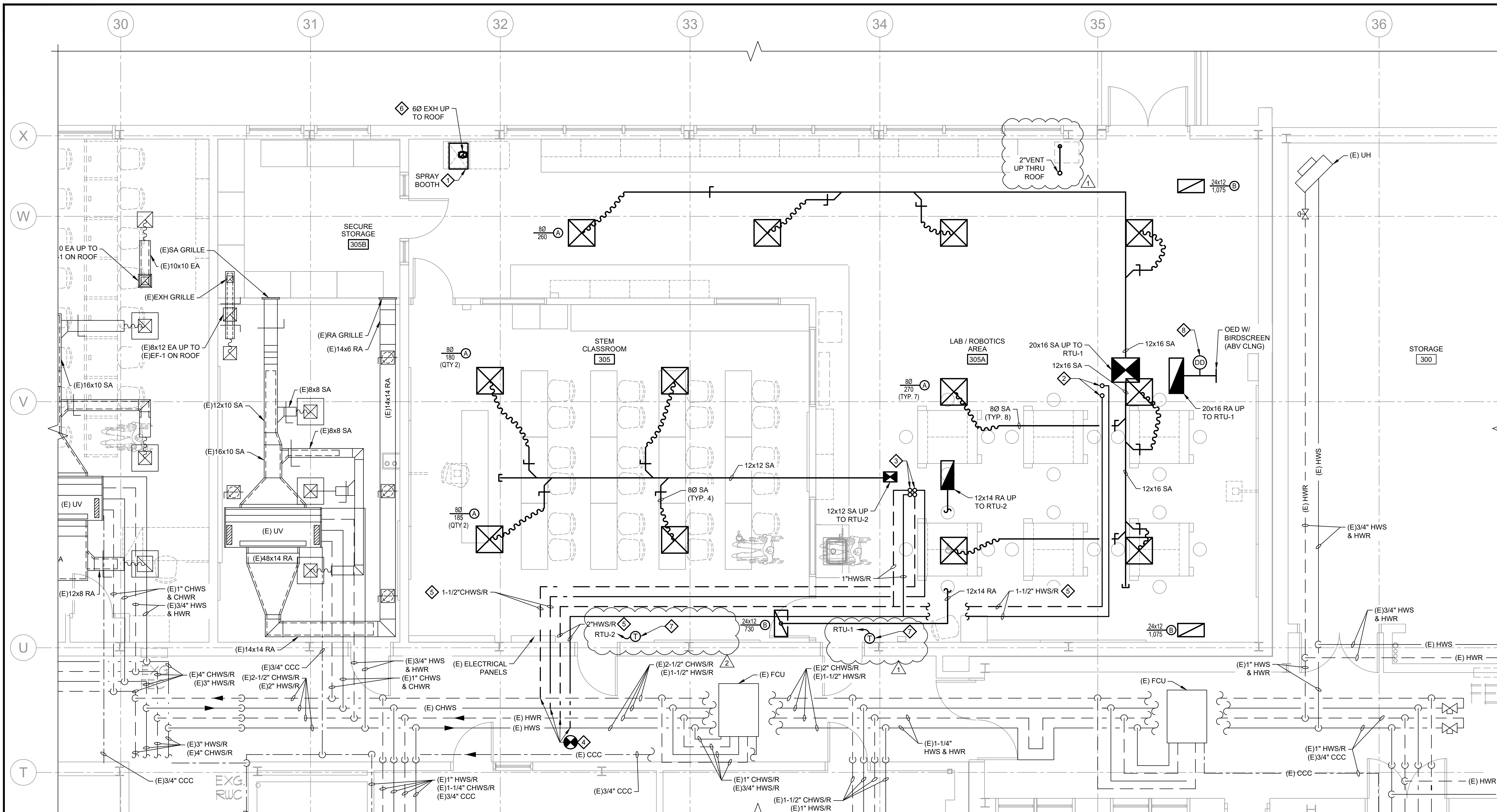
REFERENCE DIMENSION



INDICATED DIMENSION IS MEASURED AT ONE (1) INCH IN LENGTH AND PROVIDED FOR REFERENCE/VERIFICATION ONLY.

Gillan & Hartmann, Inc.
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Cert. of Auth. #24027933400 © GHM Project No. 21023-1107

ENGINEER _____ DATE _____



1 PARTIAL FIRST FLOOR PLAN - HVAC NEW WORK
 H201 SCALE: 1/4" = 1'-0"

NEW WORK NOTES:

- ◆ MECHANICAL CONTRACTOR SHALL FURNISH AND CONNECT 6" EXHAUST DUCTWORK TO SPRAY BOOTH AND EXHAUST FAN PROVIDED BY OTHERS. EXTEND 6" EXHAUST UP THRU ROOF WITH THIMBLE AND FLASHING COLLAR. TERMINATE ABOVE ROOF. REFER TO DETAIL ON DRAWING H501 FOR ADDITIONAL REQUIREMENTS.
- ◆ 1-1/2" HWS/R UP THROUGH ROOF INTO RTU-1 SERVICE ENTRY. ROUTE PIPING INSIDE OF PIPE ENCLOSURE TO HOT WATER COIL. INSULATE AND SEAL PIPE PENETRATIONS THROUGH COVER.
- ◆ 1-1/2" CHWS/R AND 1" HWS/R UP THROUGH ROOF INTO RTU-2 AND CONNECT TO COILS. ROUTE PIPING INSIDE OF PIPE ENCLOSURE. INSULATE AND SEAL PIPE PENETRATIONS THROUGH COVER.
- ◆ VERIFY IN FIELD EXISTING CHWS/R AND HWS/R PIPING NEAR LOCATION INDICATED. EXTEND AND CONNECT TO EXISTING MAINBRANCH WITH SHUT-OFFS AS REQUIRED. COORDINATE CORING/CUTTING/PATCHING/PAINTING WITH THE GENERAL CONTRACTOR.
- ◆ PIPE ROUTE SHOWN IS APPROXIMATE. CONTRACTOR SHALL ADJUST AS REQUIRED TO AVOID CONFLICTS WITH NEW/EXISTING CONDITIONS.
- ◆ ADJUST FINAL PLACEMENT OF SPRAY BOOTH EXHAUST DUCT ROOF PENETRATION AS REQUIRED TO MAINTAIN MINIMUM 1' CLEARANCE FROM ALL OUTSIDE AIR INTAKES.
- ◆ APPROXIMATE LOCATION OF THERMOSTAT COORDINATE FINAL PLACEMENT WITH THE ARCHITECT AND GENERAL CONTRACTOR. MECHANICAL CONTRACTOR SHALL FURNISH AND INSTALL ALL CONTROL WIRING AND CONDUIT BETWEEN FINAL T-STAT LOCATIONS AND ASSOCIATED ROOF MOUNTED EQUIPMENT.
- ◆ DUCT MOUNTED SMOKE DETECTOR AND SHUNT-TRIP FURNISHED LOOSE BY ELECTRICAL CONTRACTOR. MECHANICAL CONTRACTOR SHALL INSTALL DUCT SMOKE DETECTOR AND SHUNT-TRIP INCLUDING ALL REQUIRED CONTROL WIRING AND INTERCONNECTION TO RTU-1. ELECTRICAL CONTRACTOR SHALL MAKE ALL FINAL CONNECTIONS TO POWER AND FIRE ALARM SYSTEMS.

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 1515 Lower Ferry Road - Trenton - New Jersey, 08618
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Date: *[Signature]*
 F V H D P C . C O M

Project Name
STEM Lab Alterations & Renovations at Clearview Regional Middle School

Project Owner Name
Clearview Regional High School District

Project Location
595 Jefferson Rd, Mullica Hill, NJ 08062

Project Number
5162C

Project Date
10/11/2023

Checked By
DLD

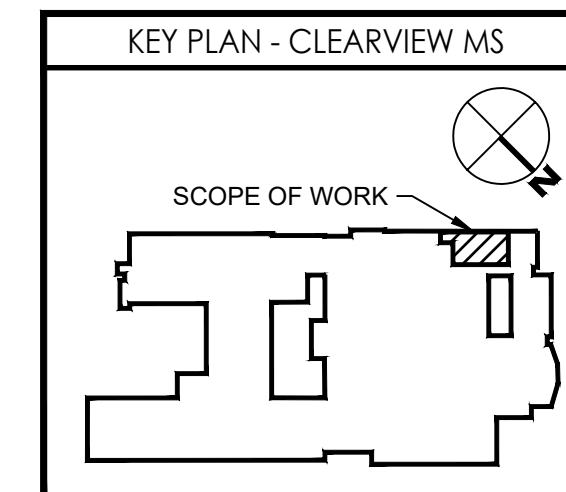
Drawn By
RAMS

Scale
1/4" SCALE

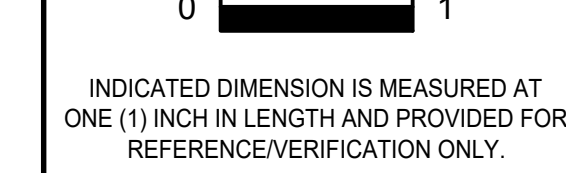
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HVAC FIRST FLOOR NEW WORK PLAN

Revisions		
No.	Date	Description
1	10.20.23	ADDENDUM 1
2	11.01.23	ADDENDUM 2

Drawing Number
H201



KEY PLAN - CLEARVIEW MS

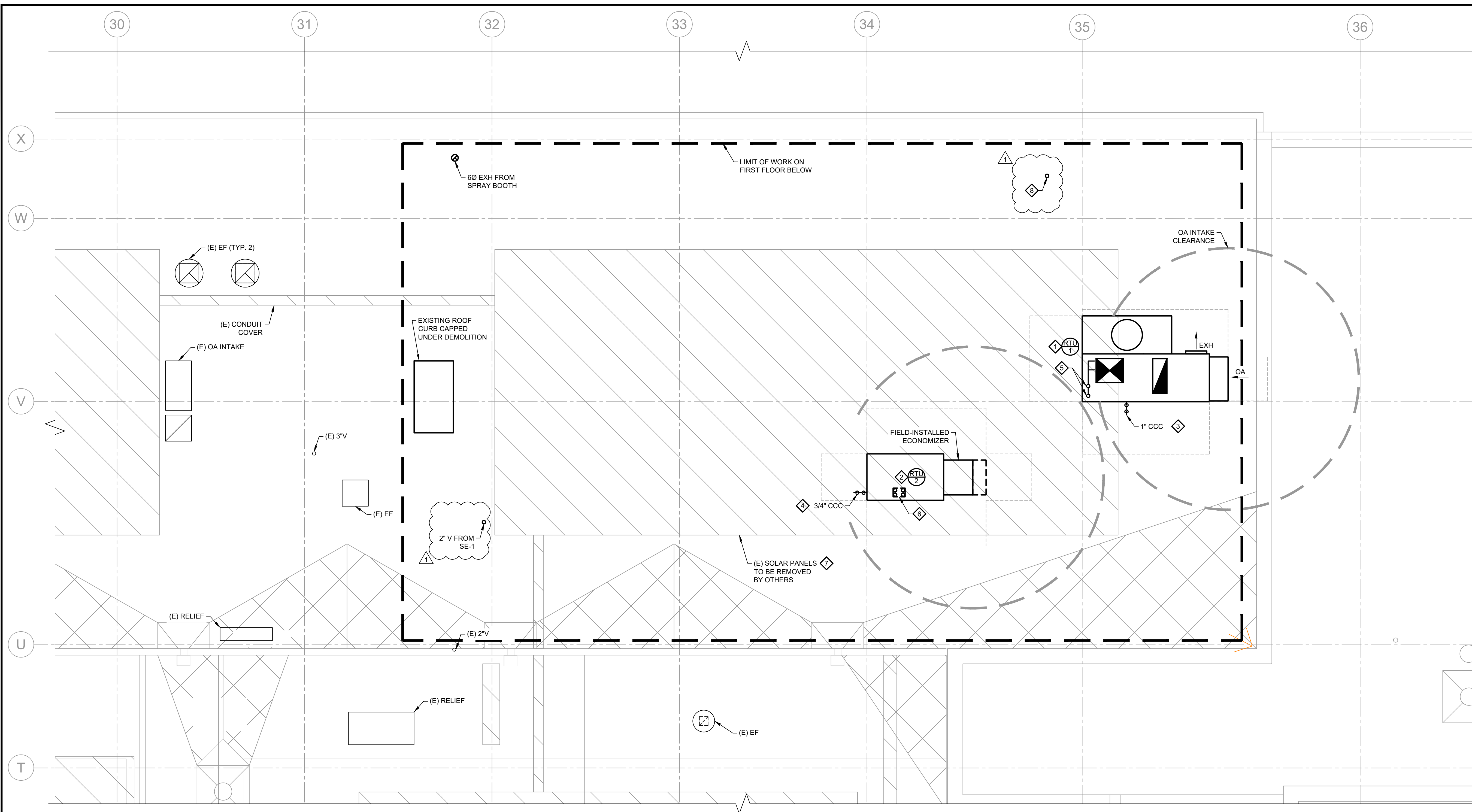


REFERENCE DIMENSION

INDICATED DIMENSION IS MEASURED AT ONE (1) INCH LENGTH AND PROVIDED FOR REFERENCE/VERIFICATION ONLY.

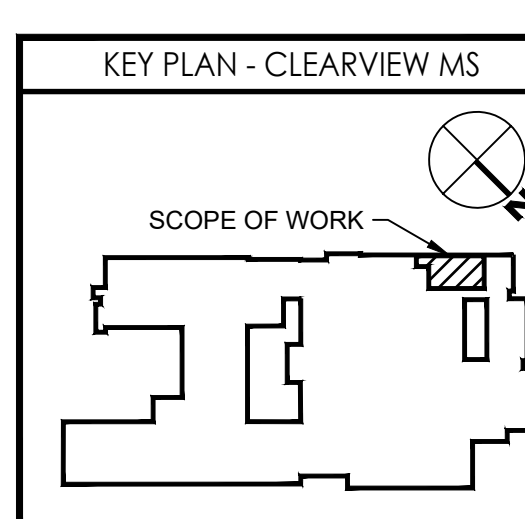
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ENGINEER _____ DATE _____

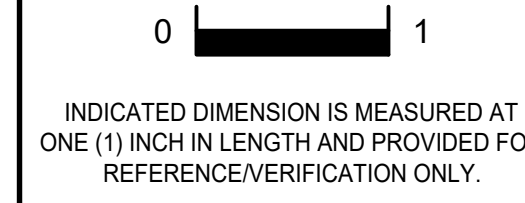


- NEW WORK NOTES:**
- ◆ FURNISH AND INSTALL ROOF MOUNTED 100% OUTDOOR AIR DOAS UNIT (RTU-1) NEAR LOCATION INDICATED WITH ROOF CURB. ENLARGE ROOF OPENING REMAINING FROM PREVIOUSLY REMOVED GRAVITY VENTILATOR AS REQUIRED FOR DOAS-1. COORDINATE FINAL INSTALLATION WITH THE ELECTRICAL AND GENERAL CONTRACTORS.
 - ◆ FURNISH AND INSTALL ROOF MOUNTED ROOF TOP UNIT (RTU-2) NEAR LOCATION INDICATED WITH ROOF CURB. COORDINATE FINAL INSTALLATION WITH THE ELECTRICAL AND GENERAL CONTRACTORS.
 - ◆ 1" COOLING COIL CONDENSATE (CCC) DRAIN FROM RTU-1 AND SPILL TO ROOF. POINT DIRECTION OF DISCHARGE TOWARDS NEAREST ROOF DRAIN.
 - ◆ 3/4" COOLING COIL CONDENSATE (CCC) DRAIN FROM RTU-2 AND SPILL TO ROOF. POINT DIRECTION OF DISCHARGE TOWARDS NEAREST ROOF DRAIN.
 - ◆ 1-1/2" HWS/R UP TO RTU-1. ROUTE PIPING INSIDE OF ROOF CURB.
 - ◆ 1-1/2" CHWS/R AND 1" HWS/R UP THROUGH ROOF TO RTU-2. ROUTE PIPING INSIDE OF ROOF CURB.
 - ◆ EXISTING SOLAR PANELS TO BE REWORKED UNDER SEPARATE PROJECT.
 - ◆ 2" VENT UP FROM FLAMMABLE STORAGE CABINET.

1 PARTIAL ROOF PLAN - HVAC NEW WORK
SCALE: 1/4" = 1'-0"



KEY PLAN - CLEARVIEW MS



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ENGINEER _____ DATE _____

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G. Veisz
Date

F V H D P C . C O M

Project Name
STEM Lab Alterations & Renovations at Clearview Regional Middle School

Project Owner Name
Clearview Regional High School District

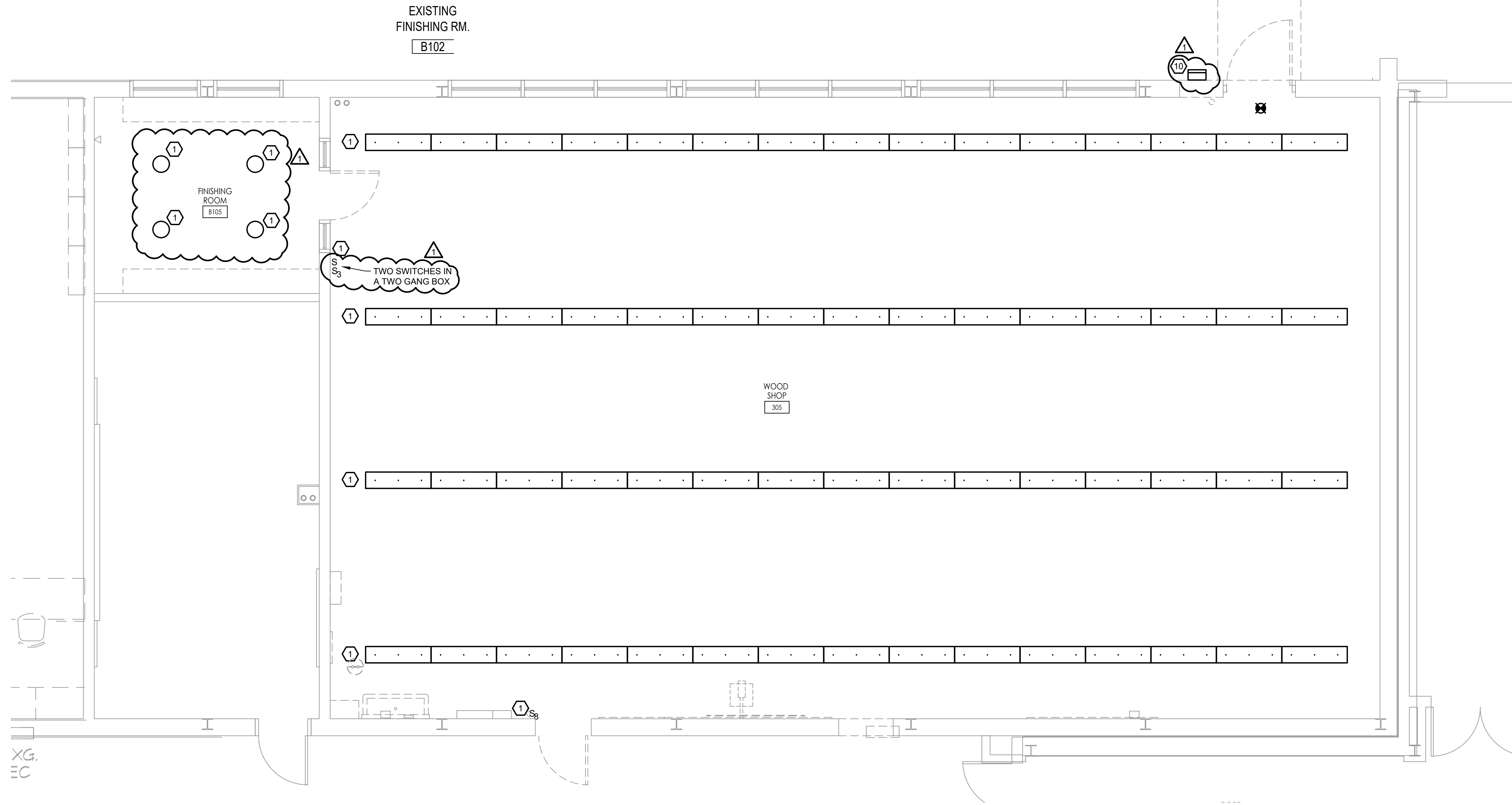
Project Location
595 Jefferson Rd, Mullica Hill, NJ 08062

Project Number
5162C
Project Date
10/11/2023
Checked By
DLD
Drawn By
RAMS
Scale
1/4" SCALE

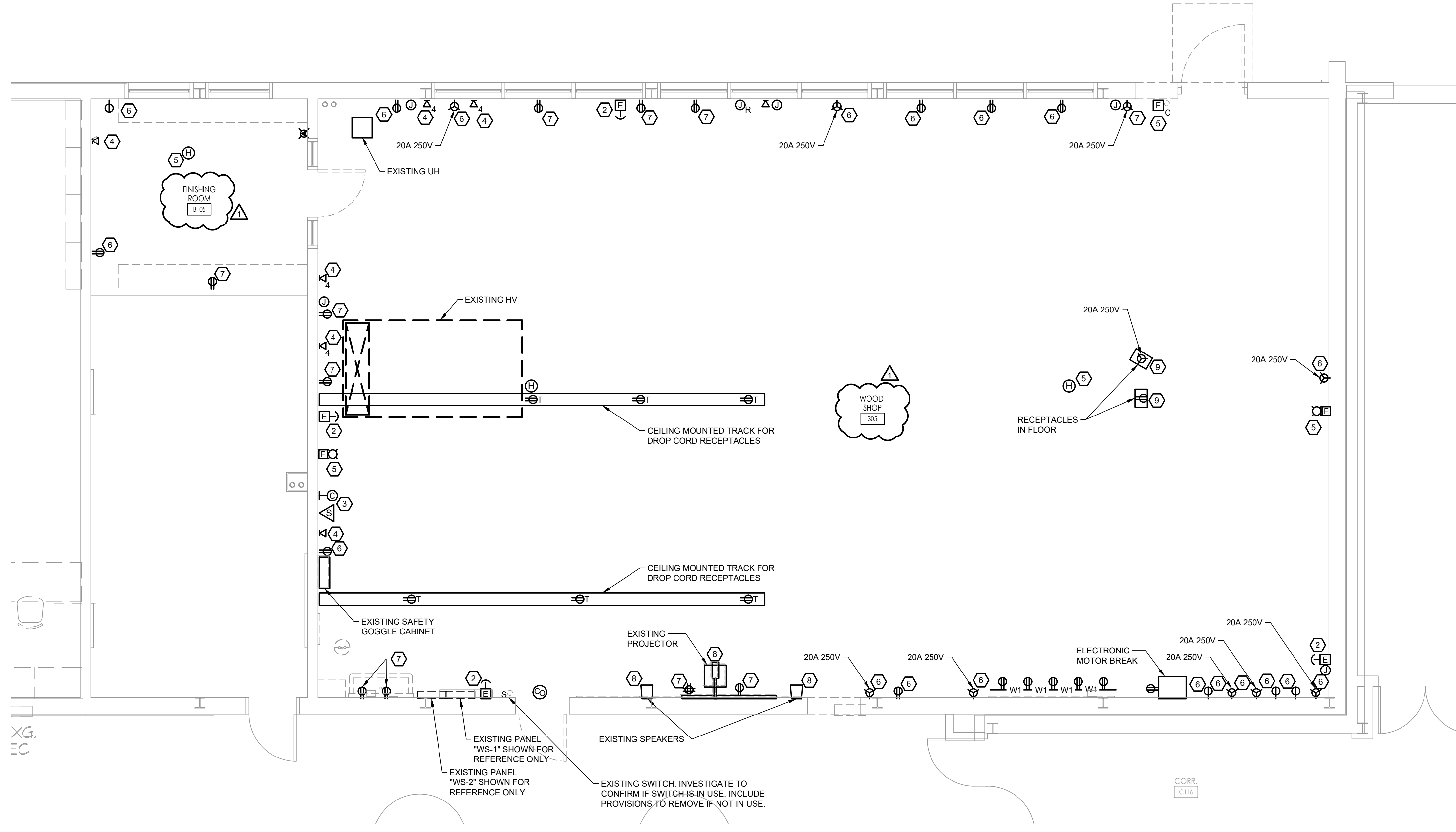
Drawing Name
HVAC ROOF NEW WORK PLAN

Revisions	No.	Date	Description
1	10.20.23		ADDENDUM 1

Drawing Number
H202

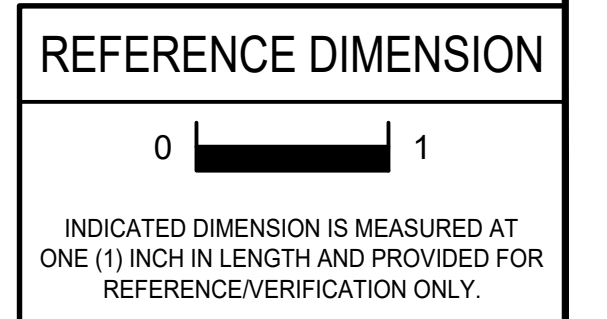


1 STEM LAB - LIGHTING REMOVAL WORK
SCALE: 1/4" = 1'-0"



2 STEM LAB - POWER AND NETWORK REMOVAL WORK
SCALE: 1/4" = 1'-0"

- REMOVAL NOTES:**
- DISCONNECT AND REMOVE ALL EXISTING LIGHTS AND ASSOCIATED LIGHT SWITCHES AS SHOWN INCLUDING EXIT SIGNS AND BATTERY POWERED LIGHTS AND ASSOCIATED BATTERIES AND BOXES. INSTALL COVER PLATES WHERE WALL SWITCHES WERE REMOVED AND NOT BEING REPLACED AND PAINT TO MATCH WALL FINISH. SEE GENERAL DEMOLITION NOTES ON DRAWING E001.
 - DISCONNECT AND REMOVE POWER AND CONTROL WIRING FROM EXISTING EPO BACK TO ITS SOURCE. COORDINATE ALL WORK WITH THE MC.
 - REMOVE, CLEAN AND STORE EXISTING CLOCK, SPEAKER, AND COVER FROM THE BACK BOX FOR REINSTALLATION AS SHOWN ON 2/E201. PROTECT THE WIRE CONNECTIONS IN THE BACK BOX FROM PAINT AND DIRT. BACK BOX IS TO REMAIN IN PLACE.
 - DISCONNECT AND REMOVE DATA JACK AND WIRING BACK TO THE SOURCE. TURN DATA JACK OVER TO OWNER.
 - PROTECT AND SUPPORT EXISTING FIRE ALARM DETECTORS AND NOTIFICATION DEVICES TO MAINTAIN FIRE ALARM SYSTEM SERVICE THROUGHOUT THE PROJECT UNTIL NEW DEVICES ARE IN SERVICE. COORDINATE ALL WORK WITH THE FIRE ALARM SYSTEM VENDOR. REFER TO GENERAL NOTES ON DRAWING E001 FOR ALL REMOVAL WORK.
 - DISCONNECT AND REMOVE WIRING FOR RECESSED RECEPTACLES AND REPLACE WITH BLANK FACEPLATE.
 - DISCONNECT AND REMOVE WIRING FOR SURFACE MOUNTED RECEPTACLES AND ASSOCIATED WIREMOLD.
 - DISCONNECT AND REMOVE PROJECTOR, SPEAKERS, AND ASSOCIATED WIRING BACK TO SOURCE.
 - DISCONNECT AND REMOVE FLOOR MOUNTED RECEPTACLES AND ASSOCIATED WIRING BACK TO SOURCE. REMOVE ASSOCIATED JUNCTION BOX AND SEAL FLUSH WITH FLOOR.
 - DISCONNECT AND REMOVE EXTERIOR LIGHT FIXTURE AND MAINTAIN THE EXISTING BRANCH CIRCUIT WIRING TO THE OTHER LIGHTS ON THE CIRCUIT. PATCH AND PAINT THE WALL AS REQUIRED TO MATCH THE EXISTING WALL FINISH.



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ENGINEER: MICHAEL S. GILLAN, PE DATE: NO. 24GE04470000

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10/11/23
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F.V.H.D.P.C.C.O.M.

Project Name
STEM Lab Alterations & Renovations at Clearview Regional Middle School

Project Owner Name
Clearview Regional High School District

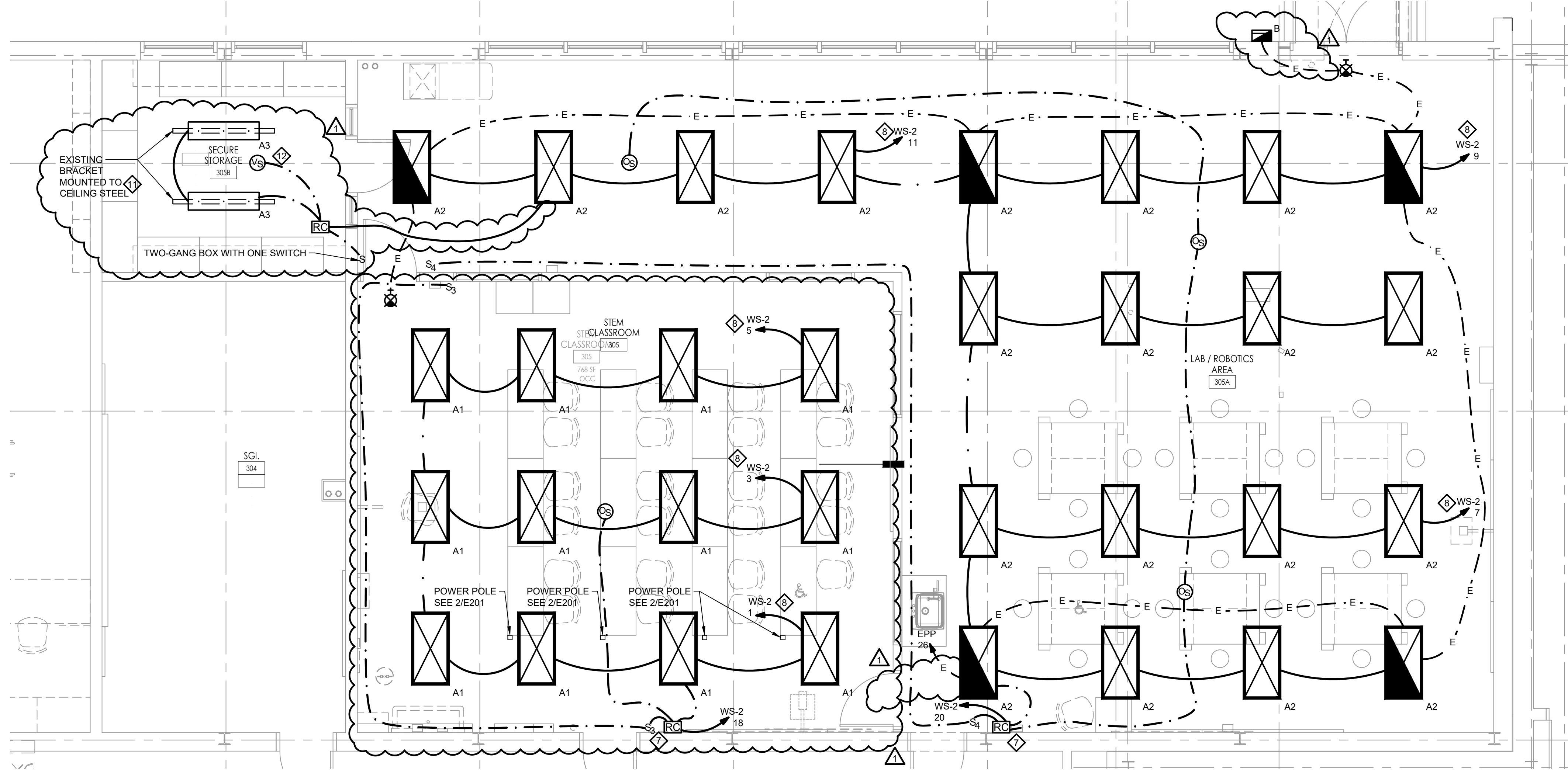
Project Location
595 Jefferson Rd, Mullica Hill, NJ 08062

Project Number
5162C
Project Date
10/11/2023
Checked By
DRH
Drawn By
IJA
Scale
AS NOTED

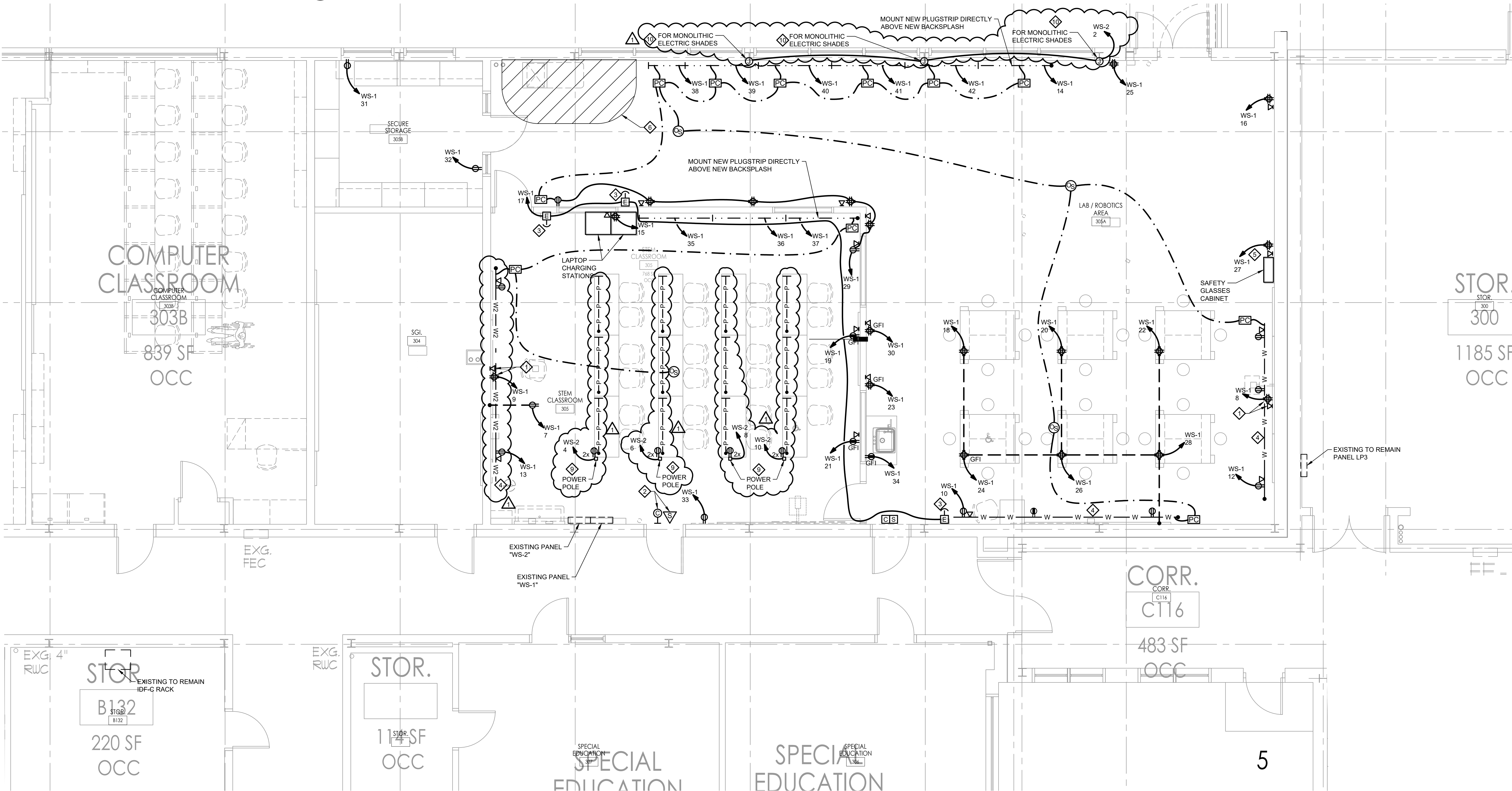
Drawing Name
LIGHTING AND POWER REMOVAL WORK

Revisions	No.	Date	Description
	1	10.20.23	ADDENDUM 1
	2	11.01.23	ADDENDUM 2

Drawing Number
E101



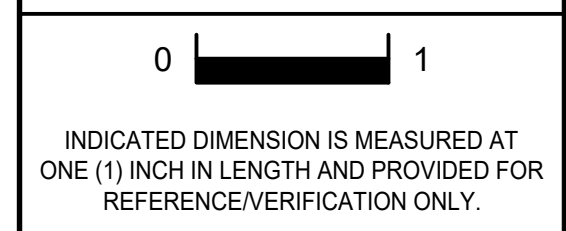
1 STEM LAB - LIGHTING NEW WORK
E201 SCALE: 1/4" = 1'-0"



2 STEM LAB - POWER AND NETWORK NEW WORK
E201 SCALE: 1/4" = 1'-0"

- NEW WORK NOTES:**
- ◆ PROVIDE ONE WALL MOUNTED DUPLEX RECEPTACLE AND ONE WALL MOUNTED DATA OUTLET IN SEPARATE BACKBOXES ADJACENT TO THE PROJECTOR. COORDINATE EXACT LOCATION WITH THE OWNER.
 - ◆ REINSTALL CLOCK, SPEAKER, AND COVER THAT WERE REMOVED IN DRAWING 1/E101.
 - ◆ PROVIDE NEW EMERGENCY POWER OFF DEVICES AS SHOWN ON DRAWING. COORDINATE LOCATIONS OF EPO SWITCHES AND KEYED RESET SWITCHES WITH OWNER.
 - ◆ PROVIDE NEW SURFACE MOUNTED TWO CHANNEL METAL WIREMOLD RACEWAY VERTICALLY DOWN AND HORIZONTALLY ALONG THE WALL APPROXIMATELY 48" AFF (UNLESS NOTED OTHERWISE) AS SHOWN ON DRAWING. COORDINATE THE EXACT LOCATION OF THE WIREMOLD MOUNTED RECEPTACLES AND THE EXACT HEIGHT AND LENGTH OF THE WIREMOLD WITH THE OWNER AND GC PRIOR TO BEGINNING OF WORK.
 - ◆ COORDINATE LOCATION OF THE RECEPTACLE WITH THE LENGTH OF CORD PROVIDED WITH THE WALL MOUNTED GOGGLE CABINET.
 - ◆ DO NOT INSTALL ANY ELECTRICAL DEVICES OR CONNECTIONS OTHER THAN THOSE SPECIFICALLY SHOWN WITHIN THIS BOUNDED AREA OF THE SPRAY BOOTH.
 - ◆ INSTALL NEW ROOM CONTROLLER ABOVE DROP CEILING.
 - ◆ PROVIDE AUTOMATIC AND MANUAL LIGHTING CONTROL AS SHOWN ON DETAIL 1/E701.
 - ◆ PROVIDE CEILING AND FLOOR ANCHORED WHITE METAL POWER POLE WITH (2) DUPLEX RECEPTACLES FOR POWER TO DESK PLUG STRIPS. MOUNT RECEPTACLES BELOW THE DESK TOP LEVEL (30").
 - ◆ PROVIDE JUNCTION BOXES WITH BRACH CIRCUIT WIRING ABOVE THE DROPPED CEILING FOR THE MONOLITHIC ELECTRIC POWERED WINDOW SHADES.
 - ◆ STEM MOUNT THE 1X4 LIGHT FIXTURES IN THIS ROOM TO THE EXISTING BRACKET THAT IS MOUNTED TO THE STRUCTURAL CEILING STEEL.
 - ◆ PROVIDE AUTOMATIC AND MANUAL LIGHTING CONTROL DEVICES AND WIRING AS SHOWN ON DETAIL 3/E701.

REFERENCE DIMENSION



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ENGINEER: MICHAEL S. GILLAN, PE DATE: NO. 24GE04470000

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F.V.H.D.P.C.C.O.M.

Project Name:
STEM Lab Alterations & Renovations at Clearview Regional Middle School

Project Owner Name:
Clearview Regional High School District

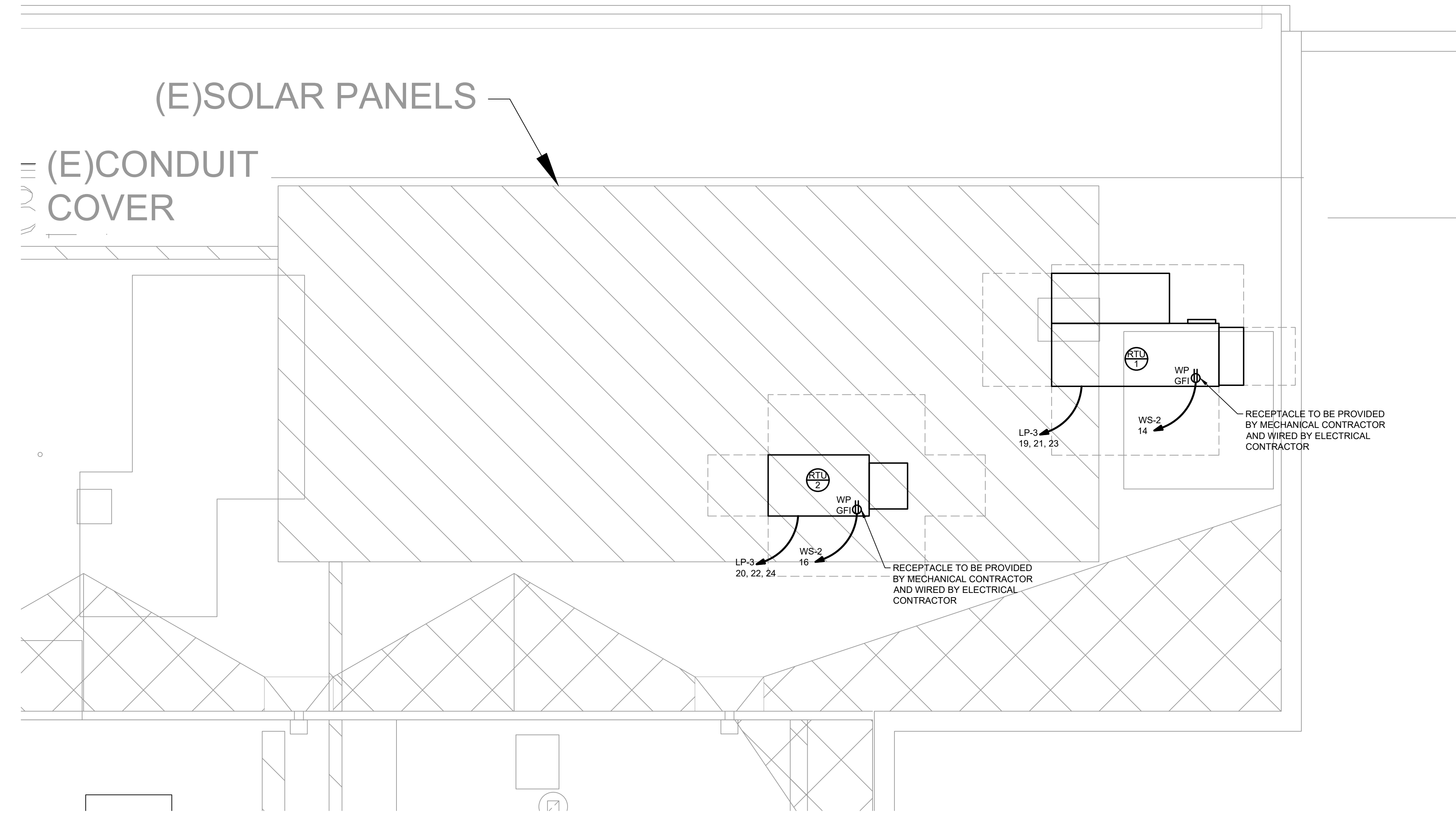
Project Location:
595 Jefferson Rd, Mullica Hill, NJ 08062

Project Number:
5162C
Project Date:
10/11/2023
Checked By:
DRH
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IJA
Scale:
AS NOTED

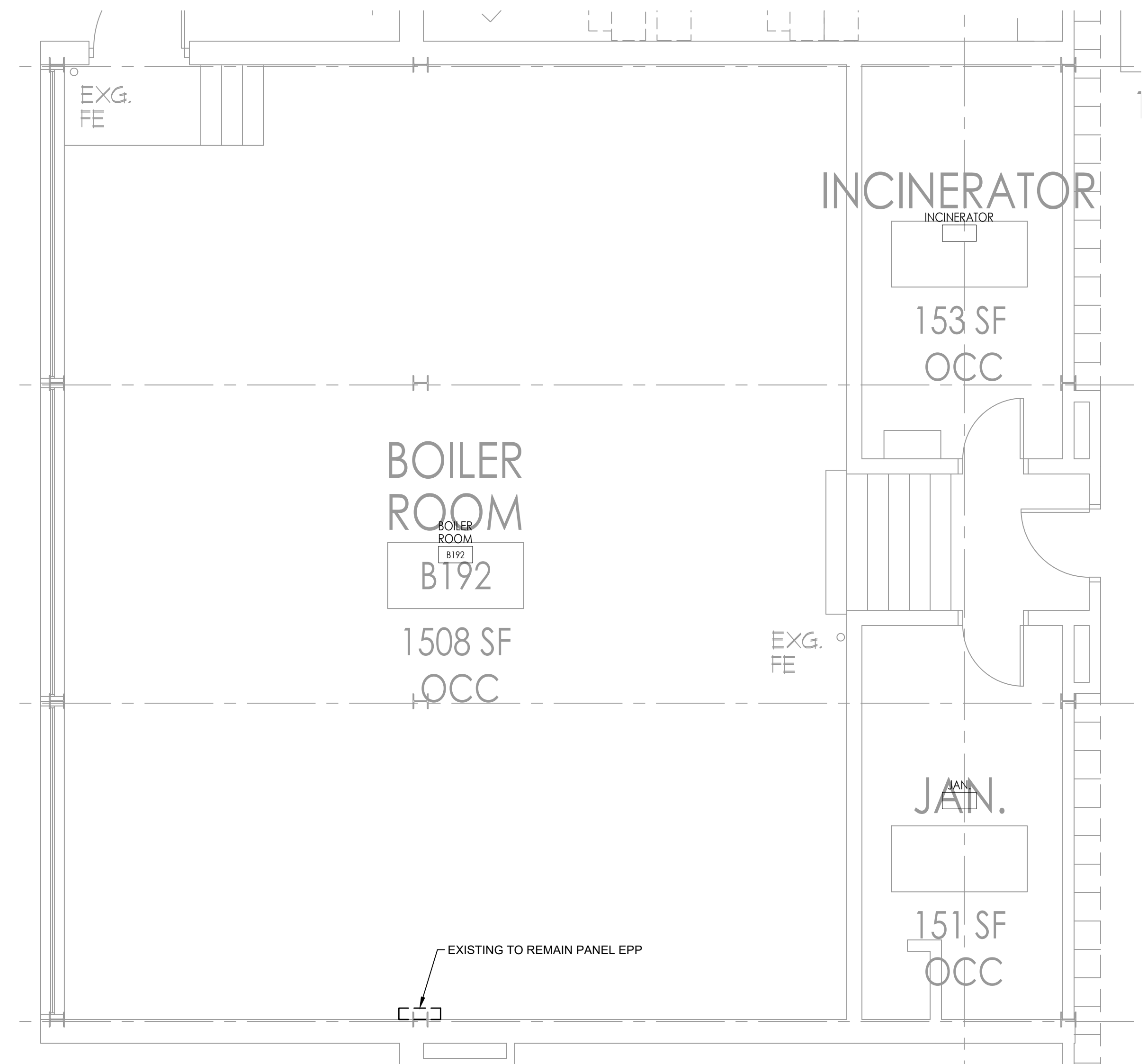
Drawing Name:
LIGHTING AND POWER NEW WORK

Revisions	No.	Date	Description
1	10.20.23		ADDENDUM 1

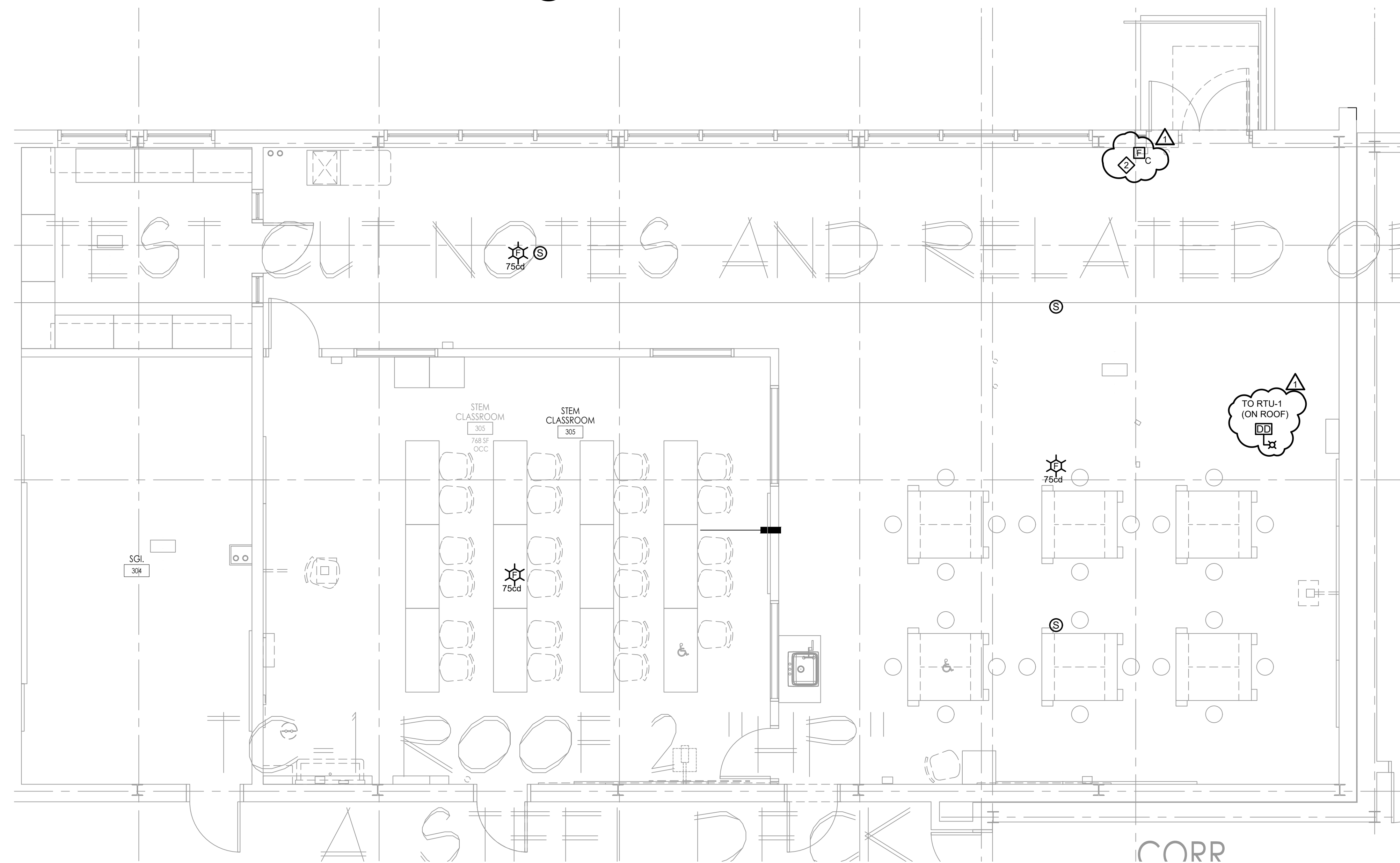
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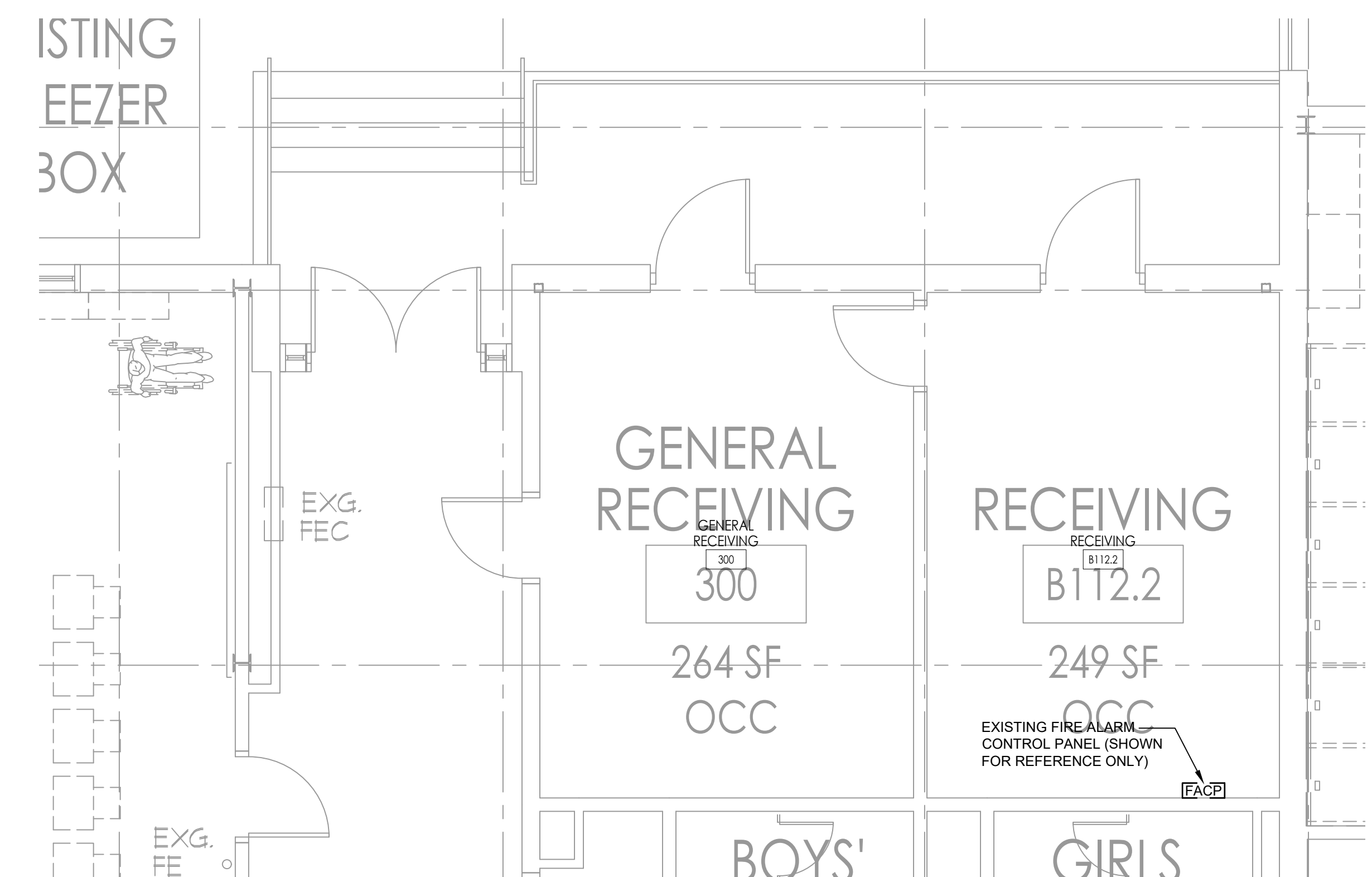
1 STEM LAB - ROOF PLAN NEW WORK
E202 SCALE: 1/4" = 1'-0"



3 STEM LAB - BOILER ROOM EMERGENCY PANEL "EPP"
E202 SCALE: 1/4" = 1'-0"

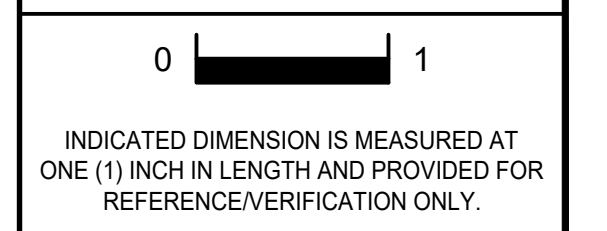


2 STEM LAB - FIRE ALARM NEW WORK
E202 SCALE: 1/4" = 1'-0"



4 STEM LAB - FIRE ALARM CONTROL PANEL
E202 SCALE: 1/4" = 1'-0"

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ENGINEER MICHAEL S. GILLAN, PE DATE NO. 24E04470000

- NEW WORK NOTES:**
- ◆ INSTALL THE NEW WEATHERPROOF GF RECEPTACLE ON TOP OF ROOF ADJACENT TO NEW UNITS RTU-1 AND RTU-2.
 - ◆ REINSTALL AND INTERCEPT EXISTING WIRING FOR SPECIFIED FIRE ALARM DEVICE AS REQUIRED.

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Project Name
STEM Lab Alterations & Renovations at Clearview Regional Middle School

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Project Location
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Drawing Name
STEM LAB ROOF POWER AND FIRE ALARM NEW WORK

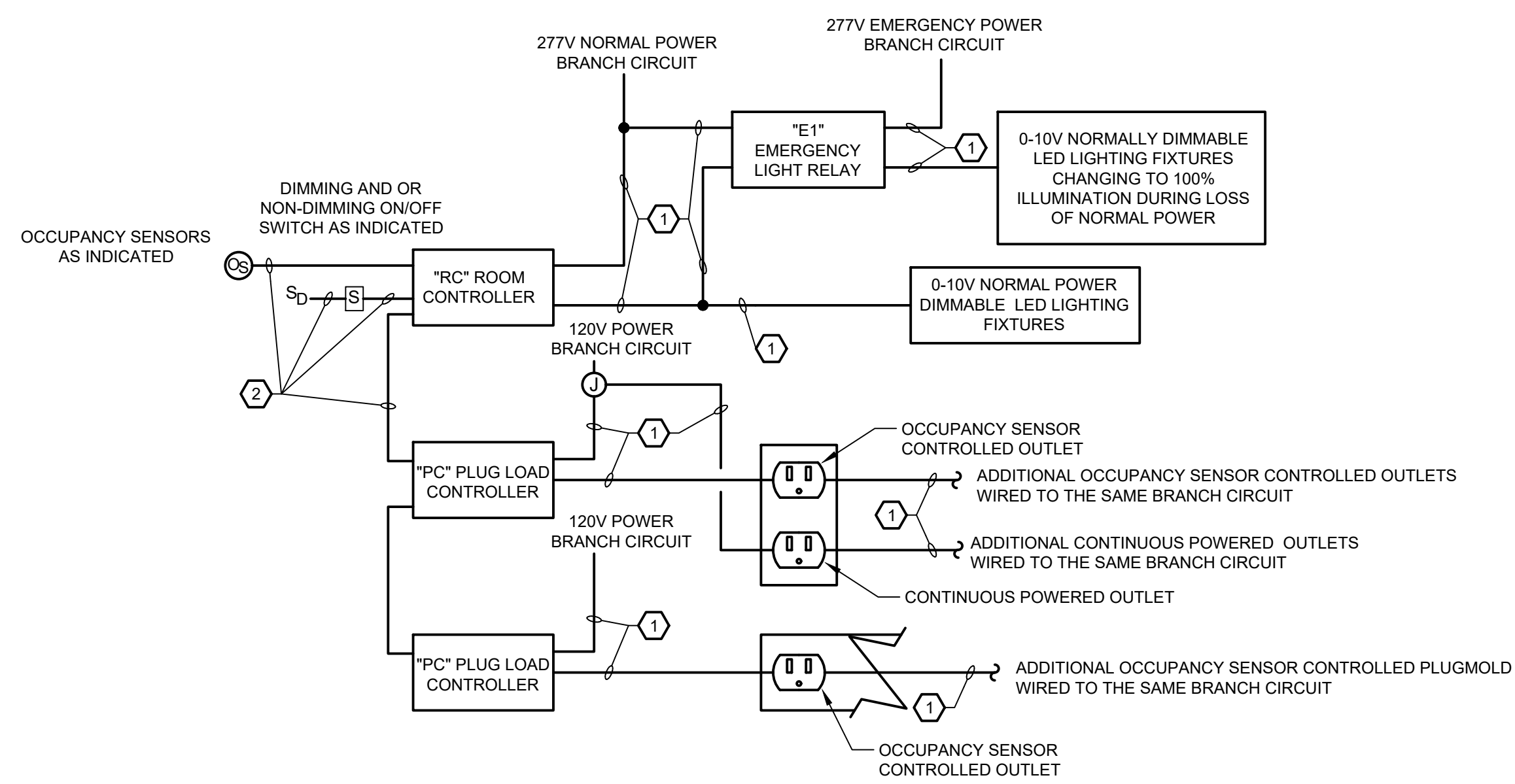
Revisions	No.	Date	Description
1	10.20.23		ADDENDUM 1

Drawing Number
E202

SHEET NOTES:

- 2 #12, 1 #10, 3/4" CONDUIT WIRING UNLESS OTHERWISE INDICATED. PROVIDE THE REQUIRED BOXES AND CONNECTORS FOR WIRING WHERE THE MANUFACTURER RECOMMENDS ONE WIRE PER RECEPTACLE TERMINAL.
WIRING AS REQUIRED BY THE EQUIPMENT MANUFACTURER AND THE NATIONAL ELECTRICAL CODE. PROVIDE WIRING IN 3/4" CONDUIT WHERE CONCEALED IN WALLS.

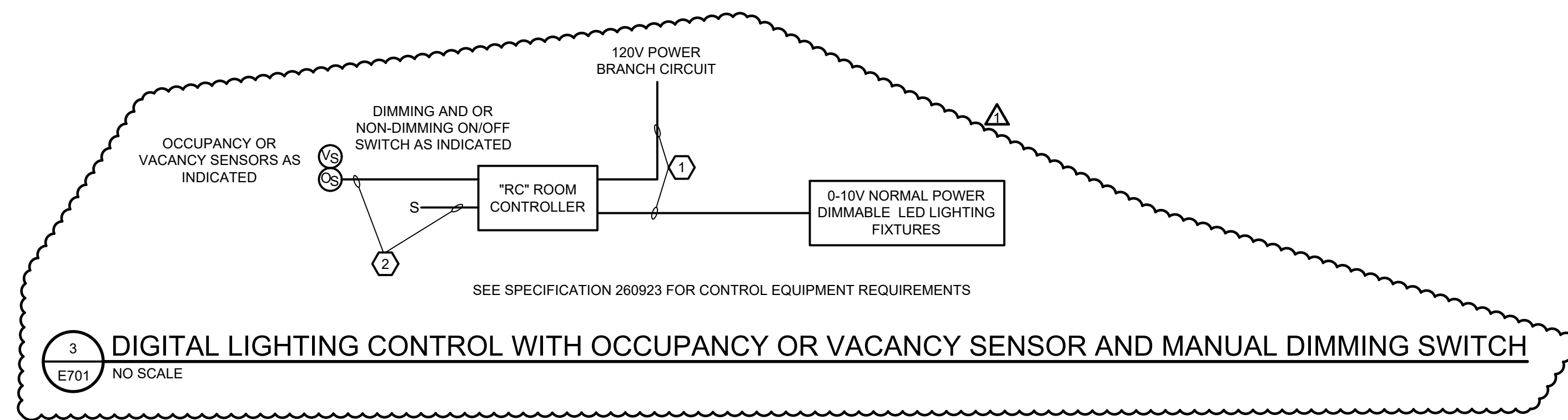
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SEE SPECIFICATION 260923 FOR CONTROL EQUIPMENT REQUIREMENTS

DIGITAL LIGHTING CONTROL WITH OCCUPANCY SENSOR AND MANUAL DIMMING SWITCH WITH "RC" ROOM CONTROLLER AND EMERGENCY LIGHTING RELAY "PC" RECEPTACLE CONTROL DEVICE

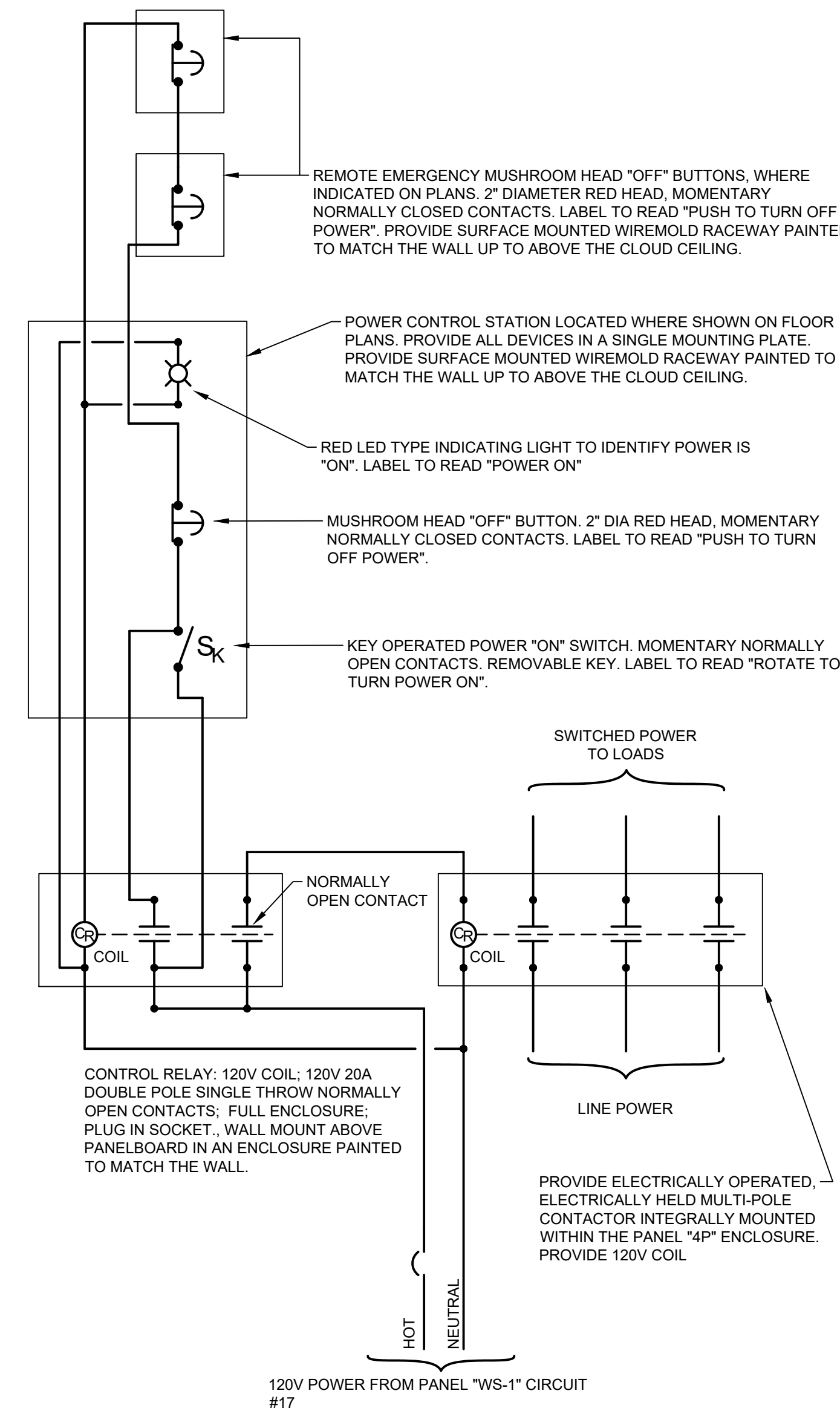
E701 NO SCALE



SEE SPECIFICATION 260923 FOR CONTROL EQUIPMENT REQUIREMENTS

DIGITAL LIGHTING CONTROL WITH OCCUPANCY OR VACANCY SENSOR AND MANUAL DIMMING SWITCH

E701 NO SCALE



STEM LAB ROOM POWER CONTROL DIAGRAM

E701 SCALE: NO SCALE

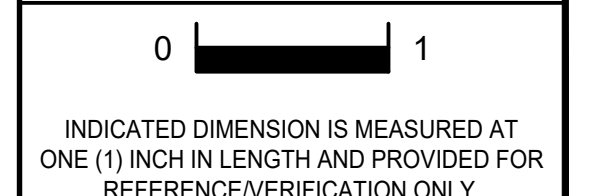
Table for LP3 panel showing schedule for existing electrical panel, general panel data (voltage, bus, mcb), and load served details.

Table for WS-2 panel showing schedule for existing electrical panel, general panel data (voltage, bus, mcb), and load served details.

Table for WS-1 panel showing schedule for existing electrical panel, general panel data (voltage, bus, mcb), and load served details.

Table for EPP panel showing schedule for existing electrical panel, general panel data (voltage, bus, mcb), and load served details.

REFERENCE DIMENSION



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E701

PLUMBING

	NEW OR REMOVAL WORK (REFER TO PLAN)
	EXISTING
	GAS
	STORM DRAIN
	SOIL OR WASTE PIPING
	VENT
	ACID WASTE
	ACID VENT
	DOMESTIC COLD WATER
	SOFT COLD WATER
	CHILLED DRINKING WATER SUPPLY
	CHILLED DRINKING WATER RETURN
	DOMESTIC HOT WATER
	DOMESTIC HOT WATER RETURN
	DISTILLED WATER
	DEIONIZED WATER
	DOMESTIC HOT WATER (140°)
	DOMESTIC HOT WATER RETURN (140°)
	DOMESTIC HOT WATER (180°)
	DOMESTIC HOT WATER RETURN (180°)
	FIRST AID PIPING
	PRE ACTION SPRINKLER PIPING
	DRY SPRINKLER PIPING
	FORCED SANITARY / STORM MAIN
	FIRE PROTECTION WATER SUPPLY
	SPRINKLER PIPING
	AUTOMATIC FIRE SPRINKLER SYSTEM DRAIN
	FUEL OIL SUPPLY
	FUEL OIL RETURN
	FUEL OIL VENT
	REGULAR UNLEADED GASOLINE
	PREMIUM GASOLINE
	DIESEL FUEL
	GASOLINE VENT
	LUBRICATING OIL
	LUBRICATING OIL VENT
	WASTE OIL
	WASTE OIL VENT
	COMPRESSED AIR
	MEDICAL COMPRESSED AIR
	LABORATORY COMPRESSED AIR
	VACUUM
	LABORATORY WASTE
	MEDICAL VACUUM
	LABORATORY VACUUM
	VACUUM CLEANING
	OXYGEN
	LIQUID OXYGEN
	HIGH PRESSURE STEAM (100-70 PSI)
	HIGH PRESSURE CONDENSATE
	NITROUS OXIDE
	NITROGEN
	TEMPERED WATER
	INDIRECT WASTE PIPING
	LAWN SPRINKLER SUPPLY
	PIPE SLOPE - IN DIRECTION OF ARROW
	FLOW - IN DIRECTION OF ARROW
	GATE VALVE
	GLOBE VALVE
	CHECK VALVE
	BALANCING VALVE
	BALL VALVE
	BUTTERFLY VALVE
	ANGLE GATE VALVE
	VALVE ON RISE
	GAS PRESSURE REGULATOR
	GAS COCK, GAS STOP
	SOLENOID VALVE
	TWO-WAY CONTROL VALVE
	THREE-WAY CONTROL VALVE
	PRESSURE REDUCING VALVE
	RELIEF OR SAFETY VALVE
	UNION
	STRAINER
	STRAINER W/ BLOW-DOWN VALVE
	FLOW SENSOR
	SIGHT GLASS
	PIPE GUIDE
	PIPE ANCHOR
	FLEXIBLE CONNECTION

PLUMBING ABBREVIATIONS

AD	AREA DRAIN
A.P.	ACCESS PANEL
BT	BATH TUB
B	BIDET
BS	BAR SINK
BFP	BACKFLOW PREVENTER
CS	CLINICAL SERVICE SINK
CP	CONCRETE PIPING
CO	CLEAN OUT
C.I.	CAST IRON
CB	CATCH BASIN
CSK	CUP SINK
DW	DISHWASHER
DS	DRY STANDPIPE
DD	DECK DRAIN
D.A.P.	DUPLEX ALARM PANEL
D.Z.V.	DUPLEX ZONE VALVE BOX
D.I.P.	DUCTILE IRON PIPE
ES	EMERGENCY SHOWER
EWC	ELECTRIC WATER COOLER
(E)	EXISTING
EW	EYE WASH
F.S.E.C.	FOOD SERVICE EQUIPMENT CONTRACTOR
FH	FIRE HYDRANT
FS	FLOW SWITCH
FE	FIRE EXTINGUISHER
F.D.V.	FIRE DEPARTMENT VALVE
F.D.C.	FIRE DEPARTMENT CONNECTION
F.A.I.	FRESH AIR INLET
F.C.V.	FLOW CONTROL VALVE
FD	FLOOR DRAIN
F.H.C.	FIRE HOSE CONNECTION
FM	FORCED MAIN
G	GAS OUTLET
GD	GARAGE DRAIN
GT	GARAGE TRAP
HB	HOSE BIBB
I.E.	INVERT ELEVATION
I.W.	INDIRECT WASTE
LAV	LAVATORY
LT	LAUNDRY TUB
KS	KITCHEN SINK
MR	MOP RECEPTOR
N	NITROUS OXIDE OUTLET
O	OXYGEN OUTLET
PD	PLANTER DRAIN
PVC	POLY VINYL CHLORIDE
P.I.V.	POST INDICATOR VALVE
PRV	PRESSURE REGULATING VALVE
Q.Z.V.	QUADRUPLE ZONE VALVE BOX
Q.A.P.	QUADRUPLE ALARM PANEL
RD	ROOF DRAIN
RWC	RAIN WATER CONDUCTOR
R.C.P.	REINFORCED CONCRETE PIPE
S.A.	SHOCK ABSORBER
SH	SHOWER
S	SANITARY
SW	SAFE WASTE
SMH	SANITARY MANHOLE
STMH	STORM MANHOLE
SS	SERVICE SINK
SK	SINK
SL	SURGEONS LAVATORY
TC	TERRA COTTA
T.A.P.	TRIPLE ALARM PANEL
T.Z.V.	TRIPLE ZONE VALVE BOX
T.E.	TOP ELEVATION
TB	THRUST BLOCK
TS	TAMPER SWITCH
UR	URINAL
V	VACUUM
V	VENT
VTR	VENT THRU ROOF
VB	VACUUM BREAKER
YH	YARD HYDRANT
WC	WATER CLOSET
WH	WALL HYDRANT
WB	WASHER BOX
W	WASTE

PLUMBING GENERAL NOTES:

- GENERAL NOTES APPLY TO ALL PLUMBING DRAWINGS.
- COORDINATE AND FIELD VERIFY ALL DIMENSIONS, SIZES, CLEARANCES, AND LOCATIONS PRIOR TO THE START OF CONSTRUCTION. WHEN CONFLICT ARISES, MAKE ANY NECESSARY CHANGES TO ROUTING OF PIPING WITHOUT COMPROMISING THE INTEGRITY AND PERFORMANCE OF THE SYSTEM, AND AT NO ADDITIONAL COST TO THE OWNER.
- PROVIDE ALL ASSOCIATED LIFE SAFETY DEVICES FOR ALL PIPING PENETRATIONS.
- PLUMBING PIPING LAYOUTS ARE SCHEMATIC IN NATURE. PROVIDE OFFSETS AND FITTINGS AS REQUIRED TO ACCOMMODATE FIELD CONDITIONS.
- COORDINATE CONSTRUCTION OF ALL PLUMBING WORK WITH ARCHITECTURAL, ELECTRICAL, HVAC, ETC. SHOWN ON OTHER CONTRACT DOCUMENT DRAWINGS.
- EQUIPMENT INSULATION SHALL BE INSTALLED AS NOT TO CONCEAL THE EQUIPMENT NAME PLATE.
- PLUMBING REMOVAL WORK IN THE BUILDING SHALL BE THE RESPONSIBILITY OF THE PLUMBING CONTRACTOR INCLUDING PLUMBING EQUIPMENT, SYSTEMS, APPARATUS, AND ACCESSORIES.
- THE DRAWINGS SHOW A GENERAL REPRESENTATION OF QUANTITIES AND LOCATIONS OF EXISTING PLUMBING COMPONENTS AND SYSTEMS, AND ARE NOT ALL INCLUSIVE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE REMOVAL OF THE PLUMBING BUILDING SYSTEMS TO FULFILL THE INTENT OF THE DESIGN INDICATED BY THE CONTRACT DOCUMENTS. UNLESS OTHERWISE NOTED, REMOVAL WORK IS TO INCLUDE, BUT NOT LIMITED TO REMOVAL OF EQUIPMENT, APPARATUS, SYSTEM ACCESSORIES, PIPING, INSULATION, DOMESTIC WATER HEATERS, VALVES, DROPS, RISERS, AUXILIARY SYSTEMS/PIPING/CONTROLS, VALVES, PIPING ACCESSORIES, CONTROLS, CONTROL WIRING/TUBING, CONDUITS, BASES, SUPPORTS, HANGERS AND SYSTEM APPURTENANCES.
- ENSURE ALL WORK IS IN CONFORMANCE WITH ALL APPLICABLE BUILDING CODES. WORK SHALL BE COMPLETED IN STRICT ACCORDANCE WITH THE LATEST EDITIONS OF THE APPLICABLE CONSTRUCTION CODE, AND ALL OTHER FEDERAL, STATE, AND LOCAL AGENCY REGULATIONS HAVING JURISDICTION OVER THIS PROJECT. IN THE EVENT OF ANY DISCREPANCIES BETWEEN AGENCY REQUIREMENTS, OBSERVE THE MORE STRINGENT OF REQUIREMENTS.
- ALL WORK SHALL COMPLY WITH THE STANDARDS OF THE NATIONAL BOARD OF FIRE UNDERWRITERS (NBFI), INDUSTRIAL RISK INSURANCE UNDERWRITERS (IRI), FACTORY MUTUAL (FM), OR THE APPLICABLE RATING BUREAU, THE NATIONAL ELECTRIC CODE (NEC), THE AMERICAN GAS ASSOCIATION (AGA), AND THE AMERICAN SOCIETY OF HEATING AND AIR CONDITIONING ENGINEERS (ASHRAE), OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA), AND ALL OTHER APPLICABLE FEDERAL, STATE AND LOCAL BUILDING CODES AND THE REQUIREMENTS OF ALL PUBLIC UTILITY COMPANIES SERVING THE PROJECT SITE.
- COORDINATE LOCATION OF ALL MECHANICAL, PLUMBING, AND ELECTRICAL EQUIPMENT WITH THE RESPECTIVE TRADE CONTRACTORS.
- ALL EQUIPMENT AND OR MATERIAL BEING REMOVED IS THE RESPONSIBILITY OF THE PLUMBING CONTRACTOR AND WILL BE RETAINED, DISPOSED OF, AND REMOVED FROM THE SITE AT THE DIRECTION OF THE OWNER.
- NOTE THAT THE IDENTIFICATION LABELS TO BE USED/MADE FOR ALL SYSTEMS MUST USE THE OWNER'S ROOM NUMBERS AND ROOM NAMES, NOT THE NUMBERS OR NAMES ON THE CONSTRUCTION DOCUMENTS. MEET WITH THE OWNER TO REVIEW AND CONFIRM ROOM NUMBERS AND NAMES PRIOR TO LABELING SYSTEMS.
- PLUMBING CONTRACTOR SHALL COORDINATE WITH THE GENERAL CONTRACTOR FOR ALL CUTTING AND PATCHING NECESSARY TO PERFORM ABOVE SLAB WORK. MATCH EXISTING MATERIALS, FINISHES, FIRE RATINGS, PAINT COLORS, ETC. IN ALL AREAS OF PATCHING.
- ALL PIPING TO BE CONCEALED UNLESS OTHERWISE INDICATED.
- PROVIDE ALL NECESSARY HANGERS AND/OR SUPPORTS TO FACILITATE INSTALLATION OF ALL PIPING, EQUIPMENT, ETC.
- PLUMBING CONTRACTOR TO COORDINATE ALL PLUMBING VALVE ACCESS WITH G.C.
- NOT USED
- ALL ROOF CURBS FURNISHED BY PLUMBING CONTRACTOR AND INSTALLED BY PLUMBING CONTRACTOR. FLASHING FOR ROOF CURBS FURNISHED BY GENERAL CONTRACTOR AND INSTALLED BY GENERAL CONTRACTOR. COUNTER FLASHING FOR ROOF CURBS FURNISHED BY PLUMBING CONTRACTOR AND INSTALLED BY GENERAL CONTRACTOR. OPENINGS IN ROOF FOR ROOF CURBS PROVIDED BY PLUMBING CONTRACTOR.

REFERENCE DIMENSION



INDICATED DIMENSION IS MEASURED AT ONE (1) INCH IN LENGTH AND PROVIDED FOR REFERENCE/VERIFICATION ONLY.

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Project Name
STEM Lab Alterations & Renovations at Clearview Regional Middle School

Project Owner Name
Clearview Regional High School District

Project Location
595 Jefferson Rd, Mullica Hill, NJ 08062

Project Number
5162C

Project Date
10/11/2023

Checked By
DLD

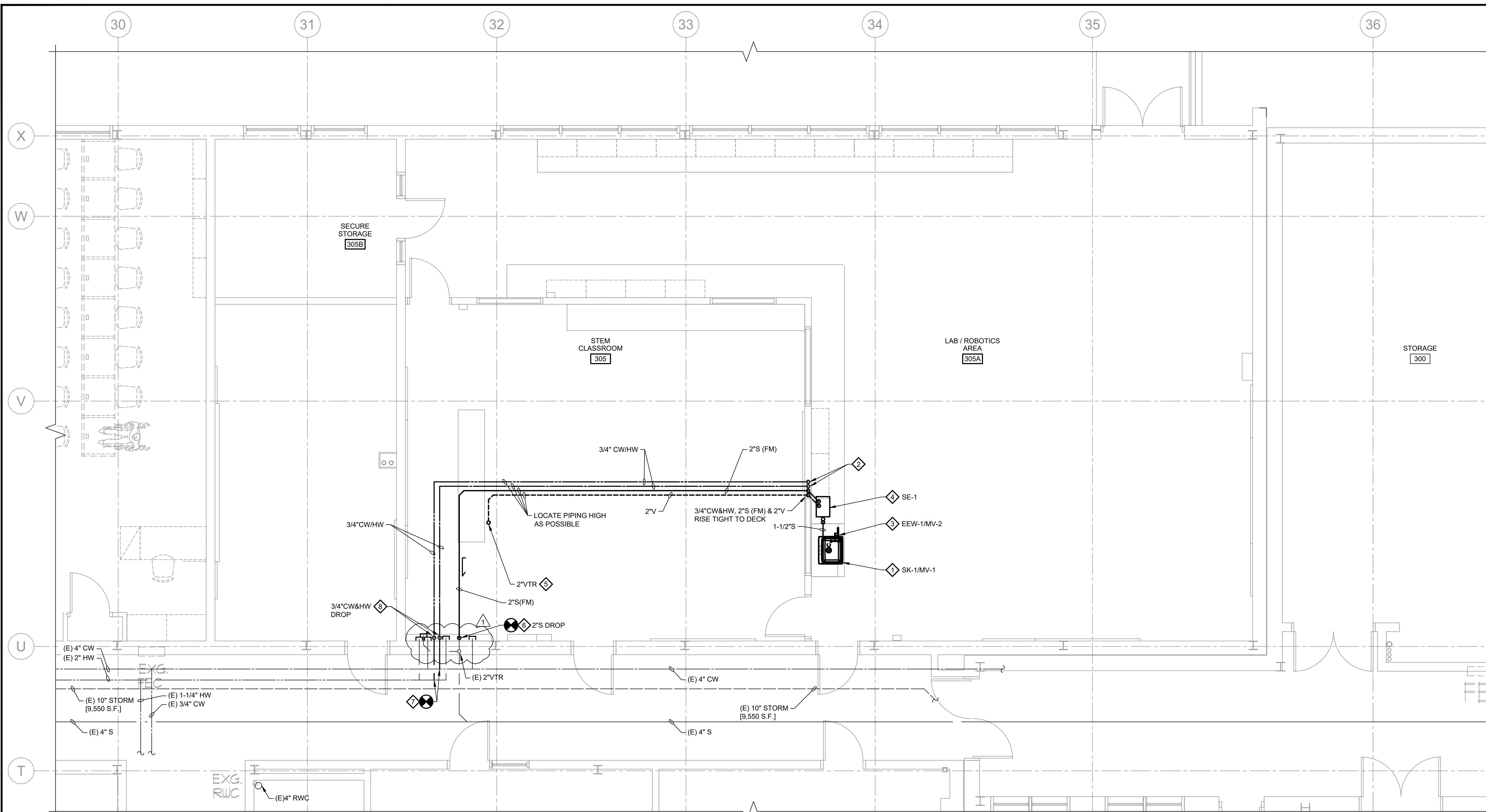
Drawn By
RAMS

Scale
AS NOTED

Drawing Name
PLUMBING SYMBOLS, ABBREVIATIONS, & GENERAL NOTES

Revisions	No.	Date	Description
	1	10.20.23	ADDENDUM 1

Drawing Number
P001



GENERAL SHEET NOTES:

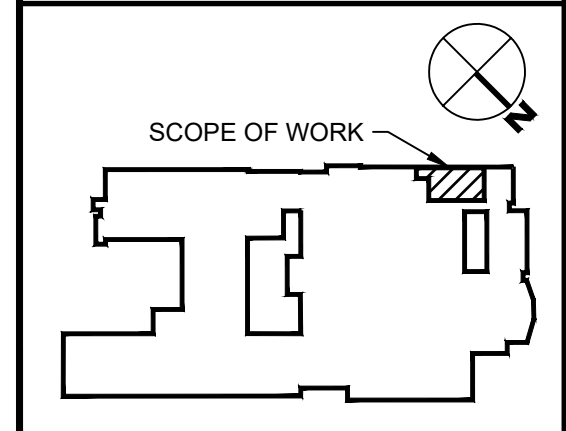
- FIELD VERIFY EXISTING CONDITIONS AND LOCATIONS PRIOR TO WORK. IMMEDIATELY REPORT ANY DISCREPANCIES OR CONDITIONS NOT SHOWN ON THE DRAWINGS TO THE ARCHITECT OR OWNER.
- ALL EQUIPMENT AND OR MATERIAL BEING REMOVED DURING DEMOLITION SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE RETAINED OR DISPOSED OF AND REMOVED FROM THE SITE AT THE DIRECTION OF THE OWNER.
- SCHEDULE ALL TEMPORARY SHUTDOWNS OF EQUIPMENT OR SYSTEMS WITH THE OWNER PRIOR TO WORK.

NEW WORK NOTES:

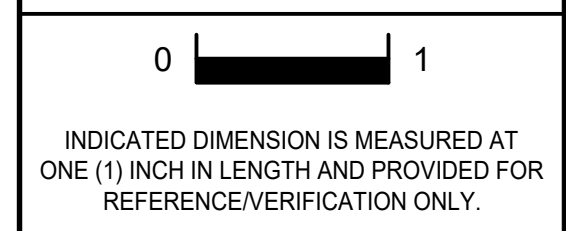
- COUNTER MOUNTED SINK (SK-1) FURNISHED BY OTHERS INSTALLED BY PLUMBING CONTRACTOR. FURNISH AND INSTALL DRAIN, TAILPIECE, TRAP AND TRAP ARM. 2" S FROM SK-1 AND DRAIN TO ADJACENT EJECTOR PUMP (SE-1). ROUTE SAN PIPING THROUGH WALL AS REQUIRED TO KEEP HIDDEN FROM VIEW. FURNISH AND INSTALL MIXING VALVE (MV-1) WITHIN CASEWORK BELOW SK-1 IN AN ACCESSIBLE LOCATION. 1/2" CW&HW TO MV-1, 1/2" CW & HW (105°F) FROM MV-1 UP TO SK-1 FAUCET ASSEMBLY WITH ANGLE STOP VALVES AND STAINLESS STEEL FLEXIBLE CONNECTIONS. COORDINATE ALL WORK WITH THE GENERAL CONTRACTOR.
- DROP 3/4" CW&HW DOWN IN WALL AND OFFSET BELOW WINDOW TO SK-1 CASEWORK.
- INSTALL COUNTER MOUNTED EMERGENCY EYEWASH (EEW-1) FURNISHED BY OTHERS. LOCATE EEW-1 ON SK-1 DECK. INSTALL MIXING VALVE (MV-2) WITHIN CASEWORK BELOW SK-1 IN AN ACCESSIBLE LOCATION. 1/2" CW&HW TO MV-2, 1/2" TPEP FROM MV-2 UP TO EEW-1 ASSEMBLY WITH SHUT-OFF. COORDINATE ALL WORK WITH THE GENERAL CONTRACTOR.
- FURNISH AND INSTALL SEWAGE EJECTOR PUMP (SE-1) WITH BASIN, LID, CONTROL PANEL WITH FLOATS AND CHECK VALVE. MOUNT UNIT ABOVE FLOOR WITHIN CASEWORK NEAR LOCATION INDICATED. COORDINATE FINAL PLACEMENT WITH ARCHITECT. COORDINATE POWER CONNECTIONS WITH THE ELECTRICAL CONTRACTOR.
- 2" VENT THRU ROOF (VTR) SHOWN IN APPROXIMATE LOCATION. EXTEND VENT UP THROUGH ROOF WITH PENETRATION THIMBLE, FLASHING COLLAR AND CLAMP. COORDINATE FINAL PLACEMENT OF VTR WITH THE ARCHITECT AND GENERAL CONTRACTOR PRIOR TO ROUGH IN. ADJUST FINAL PLACEMENT TO MAINTAIN 10" MIN FROM ALL OUTSIDE AIR INTAKES AND AVOID CONFLICTS WITH ROOF MOUNTED SOLAR PANELS/EQUIPMENT.
- CONTRACTOR SHALL VERIFY IN FIELD EXISTING 2" SANITARY STUB NEAR LOCATION INDICATED REMAINING FROM DEMOLITION. EXTEND AND CONNECT NEW 2" S(FM) AND 2" V TO EXISTING. MODIFY EXISTING PIPING AS REQUIRED. COORDINATE CUTTING/PATCHING/PAINTING WITH THE GENERAL CONTRACTOR.
- CONTRACTOR SHALL VERIFY IN FIELD EXISTING CW&HW MAINS ABOVE THE CORRIDOR NEAR LOCATION INDICATED. EXTEND AND CONNECT NEW 3/4" CW&HW TO EXISTING. MODIFY EXISTING PIPING AS REQUIRED. COORDINATE CUTTING/CORING/PATCHING/PAINTING WITH THE GENERAL CONTRACTOR.
- 3/4" CW&HW DROP DOWN TO CRAWLSPACE BELOW. FURNISH AND INSTALL WALL/FLOOR SLEEVES FOR ALL PIPE PENETRATIONS AS REQUIRED. COORDINATE SAW-CUTTING, HOLE CORING, PATCHING AND FINAL PLACEMENT WITH THE ARCHITECT AND GENERAL CONTRACTOR. SEAL TO MATCH FIRE RATING OF WALLS PIPES PASS THROUGH.

1 PARTIAL FIRST FLOOR PLAN - PLUMBING NEW WORK
SCALE: 1/4" = 1'-0"

KEY PLAN - CLEARVIEW MS



REFERENCE DIMENSION



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Project Name
STEM Lab Alterations & Renovations at Clearview Regional Middle School

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DLD
Drawn By
RAMS
Scale
1/4" SCALE

Drawing Name
PLUMBING FIRST FLOOR NEW WORK PLAN

Revisions	No.	Date	Description
	1	10.20.23	ADDENDUM 1

Drawing Number
P201