



Crabtree, Rohrbaugh & Associates - Architects

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Charlottesville, VA 22902

Virginia • Pennsylvania • Maryland • West Virginia

ADDENDUM NO. 2

FEBRUARY 28, 2024

Staunton City Public Schools, VA
Shelburne Middle School Additions and Renovations
CRA Project No. 3636

TO: All Prospective Bidders and Other Recipients of Contract Drawings and Specifications

This Addendum is hereby made a part of the Contract Document, which will be the basis of the Contract. The Addendum is issued to modify and/or correct the original Contract Documents, drawings dated January 24, 2024 and specifications dated February 5, 2024. Attach this Addendum to your Contract Documents. Receipt of this Addendum must be acknowledged on the Proposal Form. Failure to do so may subject the bidder to disqualification.

GENERAL

1. Each Bid must be submitted on the most recent Bid Forms provided by Crabtree, Rohrbaugh & Associates (potentially updated by Addendum), and must be accompanied by a Bid Bond, certified check, or cashier's check equal to five (5%) percent of the total price submitted inclusive of Add Alternates. The Owner also reserves the right to reject any or all Bids for any reason whatsoever.
2. All bidders are hereby notified that they are responsible to review all parts of this addendum for conditions and requirements that may apply to their individual contract. All Plan Holders shall review their Bidding Documents against the Table of Contents and List of Drawings to ensure that all Specifications Sections and Drawings are in your possession. Failure to notify Crabtree, Rohrbaugh & Associates of missing bid documents will not relieve the Bidder of the requirements contained therein.
3. Sign-in sheet from February 22, 2024 Pre-Bid Meeting attached for reference.

SPECIFICATIONS – VOLUME 1

SECTION 000000 – TABLE OF CONTENTS

1. **DELETE** this section in its entirety and **REPLACE** with the attached section.

SECTION 012300 – ALTERNATES

1. **REVISE** the reference in ALT #3 to Masonry Wall Repair to read Concrete Wall Repair.

SPECIFICATIONS – VOLUME 2

SECTION 083313 – COILING COUNTER DOORS

1. **REVISE** 2.2, H to read:

H. Locking Devices: Equip door with locking device assembly.

1. Locking Device Assembly Door # 126B: Cremone type, both jamb sides locking bars, operable from inside with thumb turn.
2. Locking Device Assembly Door #004A, #004B and #004C: Manufacturers cylinder lock located in door sill, operable from outside (Design Classroom side).

SECTION 101423 – PANEL SIGNAGE

1. **DELETE** 1.3.c.2 in its entirety.
2. **REVISE** 2.2 MANUFACTURERS to be 2.1 MANUFACTURERS.
3. **REPLACE** 2.2 in its entirety.

2.2 FRAMELESS PANEL SIGNS (ADDENDUM #2)

- I. Laminated-Sheet Sign: Photopolymer (white on color) face sheet with raised graphics laminated to acrylic backing sheet to produce composite sheet.

- a. Composite-Sheet Thickness: 0.125 inch (3.18 mm).
- b. Surface-Applied, Flat Graphics: Applied paint.
- c. Surface-Applied, Raised Graphics: Applied polymer characters.

- B. Cast Acrylic Sheet: Provide cast (not extruded or continuous cast) methyl methacrylate monomer plastic sheet, in sizes and thicknesses indicated, with a minimum flexural strength of 16,000 psi when tested according to ASTM D 790, with a minimum allowable continuous service temperature of 176 deg F, and of the following general types:

1. Opaque Sheet: Where sheet material is indicated as "opaque," provide colored opaque acrylic sheet in colors and finishes as selected from the manufacturer's standards.

- C. Fasteners: Use concealed and tamper-proof fasteners fabricated from acrylic.

- D. Colored Coatings for Acrylic Plastic Sheet: Use colored coatings, including inks and paints for copy and background colors that are recommended by acrylic manufacturers for optimum adherence to acrylic surface and are non-fading for the application intended.

- E. Frameless Panel Signs: Comply with requirements indicated for materials, thicknesses, finishes, colors, designs, shapes, sizes, and details of construction.

1. Produce smooth, even, level sign panel surfaces, constructed to remain flat under installed conditions within a tolerance of plus or minus 1/16 inch measured diagonally. Minimum of 25 color selections.
2. Panel signs shall be as indicated with 1" high room numbers and 5/8" high room identification. Standard grade 2 Braille shall be ½" below copy. All signage shall comply with ADA guidelines.
3. Text shall be Helvetica Narrow. Letters shall be formed, foiled, stamped, or silk screened.
4. Edge Condition: Square
5. Edge Color: Same as background.
6. Corner Condition: Square Corners
7. Sizes: Refer to Drawings
8. Refer to drawings for quantities and locations for Sign Types.
9. Provide a quantity of (12) extra signs for the project.
10. NOTE: FINAL TEXT FOR ALL SIGNS TO BE APPROVED BY OWNER PRIOR TO MANUFACTURING.

F. Graphic Content and Style: Provide sign copy that complies with the requirements indicated for size, style, spacing, content, position, material, finishes, and colors of letters, numbers, and other graphic devices.

1. Signs shall consist of internationally-adopted graphic silhouette symbols indicating entrances to male, female, gender-neutral, and family restrooms, as well as handicapped-accessibility, where occurs.
2. Provide signs at the entrances of all non-accessible restrooms that graphically indicate the directions to the nearest handicapped-accessible restrooms.

G. Signs with Changeable Message Capability: Fabricate signs to allow insertion of changeable messages as follows:

1. For snap-in changeable inserts beneath removable face sheet, furnish one suction or other device to assist in removing face sheet. Furnish initial changeable insert. Furnish two blank inserts for each sign for Owner's use.
2. For slide-in changeable inserts, fabricate slot without burrs or constrictions that inhibit function. Furnish initial changeable insert.

SECTION 108000 – TOILET ACCESSORIES

1. **ADD** this section in its entirety.

SPECIFICATIONS – VOLUME 3

SECTION 237400 – PACKAGED ROOFTOP AIR-CONDITIONING UNITS

1. **DELETE** this section in its entirety and **REPLACE** with the attached section.
 - a. Specification revised to no longer list Trane/KCC as approved manufacturer. Tempmaster/York were added as an approved manufacturer.

ARCHITECTURAL DRAWINGS

DRAWING CC.1 – OVERALL CODE COMPLIANCE PLAN

1. **DELETE** this sheet in its entirety and **REPLACE** with the attached sheet.
 - a. **Clarifications** on existing rated separations.

DRAWING CC.2 – GROUND FLOOR AND FIRST FLOOR RENOVATION CODE COMPLIANCE PLAN

1. **DELETE** this sheet in its entirety and **REPLACE** with the attached sheet.
 - a. **Clarifications** on existing rated separations.

DRAWING CC.3 – FIRST FLOOR ADDITION CODE COMPLIANCE PLAN

1. **DELETE** this sheet in its entirety and **REPLACE** with the attached sheet.
 - a. **Clarifications** on existing rated separations.

DRAWING CC.4 – SECOND FLOOR ADDITION CODE COMPLIANCE PLAN

1. **DELETE** this sheet in its entirety and **REPLACE** with the attached sheet.
 - a. **Clarifications** on existing rated separations.

DRAWING A1.0 – OVERALL FLOOR / PHASING PLANS

1. **ADD** Sheet in its entirety.

DRAWING A1.1 - PARTIAL LOWER LEVEL AND FIRST FLOOR PLAN – RENOVATION

1. **DELETE** this sheet in its entirety and **REPLACE** with the attached sheet.
 - a. **REVISED** LAYOUT OF ADDED STORAGE IN Design Classroom 004.

DRAWING A1.2 – PARTIAL FIRST FLOOR PLAN – ADDITION (ALTERNATE #1)

1. **DELETE** this sheet in its entirety and **REPLACE** with the attached sheet.
 - a. **REVISED** Telescopic Platform and seating layout.

DRAWING A1.3 – PARTIAL second FLOOR PLAN – ADDITION (ALTERNATE #1)

1. **DELETE** this sheet in its entirety and **REPLACE** with the attached sheet.
 - a. **REVISED** Telescopic Platform and seating layout.

DRAWING A2.1 – EXTERIOR ELEVATIONS – RENOVATIONS

1. **DELETE** this sheet in its entirety and **REPLACE** with the attached sheet.
 - a. Added notes for masonry repair products.
 - b. Brick repair at existing door lintel replacement.

DRAWING A3.1 – BUILDING AND WALL SECTIONS – RENOVATION

1. **DELETE** this sheet in its entirety and **REPLACE** with the attached sheet.
 - a. **ADD** Detail 7/A3.1 – Wall Section

DRAWING A3.4 – BUILDING SECTIONS – ADDITION (ALTERNATE #1)

1. **DELETE** this sheet in its entirety and **REPLACE** with the attached sheet.
 - a. **REVISED** graphics identifying Telescopic Platform and Seating system.

DRAWING A3.7 – WALL SECTIONS – ADDITION (ALTERNATE #1)

1. **DELETE** this sheet in its entirety and **REPLACE** with the attached sheet.

- a. **REVISED** notes identifying Telescopic Platform and Seating system.

DRAWING A4.1 – LARGE SCALE TOILET PLANS – RENOVATION AND ADDITION

1. **DELETE** this sheet in its entirety and **REPLACE** with the attached sheet.
 - a. REVISE Enlarged Scale Plan 2/A4.1

DRAWING A4.5 – LARGE SCALE STAIR PLANS – ADDITION (ALTERNATE #1)

1. **DELETE** this sheet in its entirety and **REPLACE** with the attached sheet.
 - a. REVISED Stair lay-out.
 - b. REVISED Notes and graphics for Telescopic Platform and Seating.

DRAWING A5.6 – DETAILS – ADDITION

1. **DELETE** this sheet in its entirety and **REPLACE** with the attached sheet.
 - a. **REVISED** Detail 2/A5.6.

DRAWING A6.2 – SIGNAGE SCHEDULE

1. **DELETE** this sheet in its entirety and **REPLACE** with the attached sheet.
 - a. **REVISE** signage legend per the attached sheet.
 - b. **REVISE** general note per the attached sheet.

DRAWING A6.3 – DOOR SCHEDULE, DOOR TYPES AND HM FRAME ELEVATIONS

1. **DELETE** this sheet in its entirety and **REPLACE** with the attached sheet.
 - a. **ADD** Coiling Counter Doors to schedule.

DRAWING A6.4 – HOLLOW METAL FRAME DETAILS

1. **DELETE** this sheet in its entirety and **REPLACE** with the attached sheet.
 - a. **ADD** Coiling Counter Door Details.

INTERIOR DRAWINGS

DRAWING I4.2 – LARGE SCALE LAYOUTS – SCIENCE LABS

1. **DELETE** this sheet in its entirety and **REPLACE with the attached sheet.**
 - a. **REVISE** item no. 400, description, model & dimensions per the attached sheet.

DRAWING I4.4 – LARGE SCALE LAYOUTS ADMIN., NURSE & GUID – ALTERNATE BID

1. **DELETE** this sheet in its entirety and **REPLACE with the attached sheet.**
 - a. **ADD** detail 4/I4.4 reception station detail.
 - b. **ADD** detail 5/I4.4 reception station section.

PLUMBING DRAWINGS

DRAWING P2.1 – PLUMBING ENLARGED NEW WORK PLAN

1. **DELETE** this sheet in its entirety and **REPLACE** with the attached sheet.
 - a. **ADD** three (3) balancing valves, three (3) check valves and three (3) ball valves to the DHWR branches above the group restroom area.
 - b. **REVISE** the last twenty (20) feet of DHWR piping to be sized at $\frac{3}{4}$ " in lieu of $\frac{1}{2}$ " above the grouped restroom.

ELECTRICAL DRAWINGS

DRAWING ED1.1 – ELECTRICAL PARTIAL LOWER LEVEL AND FIRST FLOOR DEMO PLANS - RENOVATION

1. **DELETE** this sheet in its entirety and **REPLACE** with the attached sheet.
 - a. **ADD** keynotes E180 and E181 to clarify existing/demo conditions in admin area.

DRAWING E1.1 – POWER PARTIAL LOWER LEVEL AND FIRST FLOOR NEW WORK – RENOVATION

1. **DELETE** this sheet in its entirety and **REPLACE** with the attached sheet.
 - a. **ADD** (1) tamper-resistant duplex receptacle and connect to existing circuit in Admin 141.
 - b. **ADD** keynote E182 calling for wire mold as required in Work Room 145.

DRAWING E1.3 – LIGHTING PARTIAL LOWER LEVEL AND FIRST FLOOR NEW WORK – RENOVATION

1. **DELETE** this sheet in its entirety and **REPLACE** with the attached sheet.
 - a. **REVISE** location of dimmer switch in Admin 141.

DRAWING E1.4 – SYSTEMS PARTIAL LOWER LEVEL AND FIRST FLOOR NEW WORK – RENOVATION

1. **DELETE** this sheet in its entirety and **REPLACE** with the attached sheet.
 - a. **ADD** (1) double-data drop in Admin 141.
 - b. **ADD** keynote E182 calling for wire mold as required in Work Room 145.

DRAWING E1.5 – FIRE ALARM PARTIAL LOWER LEVEL AND FIRST FLOOR NEW WORK – RENOVATION

1. **DELETE** this sheet in its entirety and **REPLACE** with the attached sheet.
 - a. **REVISE** locations of notification devices in Admin 141 and Conference 143.

DRAWING E1.8 – LIGHTING FIRST FLOOR NEW WORK LIGHTING PLAN – ADDITION

1. **DELETE** this sheet in its entirety and **REPLACE** with the attached sheet.
 - a. **ADD** (1) dimmer switch in Multi-Purpose Room 129.
 - b. **ADD** (1) lighting relay in Multi-Purpose Room 129.
 - c. **REVISE** switch leg designations for fixtures in Multi-Purpose Room 129.
 - d. **ADD** (1) dimmer switch in Lobby 115.

DRAWING E3.1 – PANEL SCHEDULES

1. **DELETE** this sheet in its entirety and **REPLACE** with the attached sheet.
 - a. **REVISE** new circuit for greenhouse from panel “DP1” to be 100A/2P in lieu of 30A/3P.

DRAWING UED1.1 – ELECTRICAL DEMO PLAN – SITE

1. **DELETE** this sheet in its entirety and **REPLACE** with the attached sheet.
 - a. **ADD** note to clarify that all work on this sheet is to be included as a part of Alternate #1.
 - b. **REVISE** keynote U1 to clarify extent of demolition for site structures.
 - c. **ADD** keynotes U15 and U16 to clarify extent of work related to relocation of greenhouse.
 - d. **ADD** demolition of (1) pole-mounted site light.

DRAWING UE1.1 – ELECTRICAL NEW WORK PLAN – SITE

1. **DELETE** this sheet in its entirety and **REPLACE** with the attached sheet.
 - a. **ADD** note to clarify that all work on this sheet is to be included as a part of Alternate #1.

- b. **REVISE** keynotes U9 and U10 to clarify specifications of new circuit and disconnect for relocated greenhouse.
- c. **ADD** keynotes U17 and U18 to clarify extent of work related to relocation of greenhouse.

End of Addendum No. 2

Attachments:

General:

Pre-Bid Sign-In Sheet dated February 22, 2024

Specifications:

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SECTION 108000 TOILET ACCESSORIES

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 Work of this Section includes the following:
 - 1. Supply and install Toilet and Bath Accessory items as scheduled.
 - 2. Installation of Owner supplied Toilet and Bath accessories as scheduled.
- B. Toilet compartments and related accessories are specified in another Division 10 Section.

1.3 SUBMITTALS

- A. General: Submit the following according to Conditions of the Contract and Division 1 Specification Sections.
- B. Product data for each toilet accessory item specified, including construction details relative to materials, dimensions, gages, profiles, mounting method, specified options, and finishes.
- C. Schedule indicating types, quantities, sizes, and installation locations (by room) for each toilet accessory item to be provided for project.
- D. Setting drawings where cutouts are required in other work, including templates, substrate preparation instructions, and directions for preparing cutouts and installing anchorage devices.
- E. Maintenance instructions including replaceable parts and service recommendations.

1.4 QUALITY ASSURANCE

- A. Inserts and Anchorages: Furnish accessory manufacturers' standard inserts and anchoring devices that must be set in concrete or built into masonry. Coordinate delivery with other work to avoid delay.
- B. Single-Source Responsibility: Provide products of same manufacturer for each type of accessory unit and for units exposed to view in same areas, unless otherwise acceptable to Architect.

1.5 PROJECT CONDITIONS

- A. Coordination: Coordinate accessory locations, installation, and sequencing with other work to avoid interference with and ensure proper installation, operation, adjustment, cleaning, and servicing of toilet accessory items.

1.6 WARRANTY

- A. Warranty: Submit a written warranty executed by mirror manufacturer, agreeing to replace any mirrors that develop visible silver spoilage defects within warranty period.
- B. Warranty Period: 5 years from date of Substantial Completion.
- C. The warranty shall not deprive the Owner of other rights the Owner may have under other provisions of the Contract Documents and will be in addition to and run concurrent with other warranties made by the Contractor under requirements of the Contract Documents.

PART 2 - PRODUCTS

2.1 ACCEPTABLE MANUFACTURERS

- A. Available Manufacturers: Subject to compliance with requirements, manufacturers offering toilet accessories that may be incorporated in the Work include, but are not limited to, the following:
 - 1. Toilet Accessories
 - a. Bobrick Washroom Equipment, Inc.
 - b. American Specialties, Inc.
 - c. Bradley Corporation

2.2 MATERIALS, GENERAL

- A. Stainless Steel: AISI Type 302/304, with polished No. 4 finish, 0.034-inch (22-gage) minimum thickness.
- B. Sheet Steel: Cold-rolled, commercial quality ASTM A366, 0.04-inch (20-gage) minimum. Surface preparation and metal pretreatment as required for applied finish.
- C. Galvanized Steel Sheet: ASTM A 527, G60.
- D. Chromium Plating: Nickel and chromium electro-deposited on base metal, ASTM B 456, Type SC 2.
- E. Mirror Glass: Nominal 6.0-mm (0.23-inch) thick, conforming to ASTM C 1036, Type I, Class 1, Quality q2, and with silvering, electro-plated copper coating, and protective organic coating.

- F. Galvanized Steel mounting Devices: ASTM A 153, hot-dip galvanized after fabrication.
- G. Fasteners: Screws, bolts, and other devices of same material as accessory unit, or of galvanized steel where concealed.

2.3 TOILET ACCESSORY SCHEDULE

- A. A Toilet Accessory Schedule on the drawings lists the types of accessories required. The schedule includes model numbers of specific items as manufactured by Bobrick. The inclusion of these model numbers is to provide a guide as to the quality, function, size, and materials of the intended products, not to be exclusionary or proprietary. Equal products by other manufacturers specified are acceptable.

2.4 FABRICATION

- A. General: Only a maximum 1-1/2-inch-diameter, unobtrusive stamped manufacturer logo, as approved by Architect, is permitted on exposed face of toilet or bath accessory units. On either interior surface not exposed to view or back surface, provide additional identification by either a printed, waterproof label or a stamped nameplate, indicating manufacturer's name and product model number.
- B. Surface-Mounted Toilet Accessories, General: Except where otherwise indicated, fabricate units with tight seams and joints, exposed edges rolled. Hang doors or access panels with continuous stainless steel piano hinge. Provide concealed anchorage wherever possible.
- C. Framed Mirror Units, General: Fabricate frames for glass mirror units to accommodate wood, felt, plastic, or other glass edge protection material. Provide mirror backing and support system that will permit rigid, tamperproof glass installation and prevent moisture accumulation.
- D. Mirror Unit Hangers: Provide system for mounting mirror units that will permit rigid, tamperproof, and theft proof installation, as follows:
 - 1. One-piece, galvanized-steel, wall-hanger device with spring-action locking mechanism to hold mirror unit in position with no exposed screws or bolts.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Install toilet accessory units according to manufacturers' instructions, using fasteners appropriate to substrate as recommended by unit manufacturer. Install units plumb and level, firmly anchored in locations and at heights indicated.

- B. Secure mirrors to walls in concealed, tamperproof manner with special hangers, toggle bolts, or screws. Set units plumb, level, and square at locations indicated, according to manufacturer's instructions for type of substrate involved.
- C. Install grab bars to withstand a downward load of at least 250 lbf, complying with ASTM F 446.

3.2 ADJUSTING AND CLEANING

- A. Adjust toilet accessories for proper operation and verify that mechanisms function smoothly. Replace damaged or defective items.
- B. Clean and polish all exposed surfaces strictly according to manufacturer's recommendations after removing temporary labels and protective coatings.

END OF SECTION 108000

SECTION 237400 – PACKAGED ROOFTOP AIR-CONDITIONING UNITS

PART 1: GENERAL

1.01 SECTION INCLUDES

- A. Packaged Rooftop air conditioners

1.02 REFERENCES

- A. AFBMA 9 - Load Ratings and Fatigue Life for Ball Bearings.
- B. AMCA 99—Standards Handbook
- C. AMCA 210—Laboratory Methods of Testing Fans for Rating Purposes
- D. AMCA 500—Test Methods for Louver, Dampers, and Shutters.
- E. AHRI 340/360 - Unitary Large Equipment
- F. NEMA MG1—Motors and Generators
- G. National Electrical Code.
- H. NFPA 70—National Fire Protection Agency.
- I. SMACNA—HVAC Duct Construction Standards—Metal and Flexible.
- J. UL 900—Test Performance of Air Filter Units.

1.03 SUBMITTALS

- A. Shop Drawings: Indicate assembly, unit dimensions, weight loading, required clearances, construction details, field connection details, electrical characteristics and connection requirements.
- B. Product Data:
 - 1. Provide literature that indicates dimensions, weights, capacities, ratings, fan performance, and electrical characteristics and connection requirements.
 - 2. Provide computer generated fan curves with specified operating point clearly plotted.
 - 3. Manufacturer's Installation Instructions.

1.04 OPERATION AND MAINTENANCE DATA

- A. Maintenance Data: Provide instructions for installation, maintenance and service

1.05 QUALIFICATIONS

- A. Manufacturer: Company specializing in manufacturing the Products specified in this section with minimum five years documented experience, who issues complete catalog data on total product.
- B. Startup must be done by trained personnel experienced with rooftop equipment.
- C. Do not operate units for any purpose, temporary or permanent, until ductwork is clean, filters and remote controls are in place, bearings lubricated, and manufacturers' installation instructions have been followed.

1.06 DELIVERY, STORAGE, AND HANDLING

- A. Deliver, store, protect and handle products to site.
- B. Accept products on site and inspect for damage.
- C. Store in clean dry place and protect from weather and construction traffic. Handle carefully to avoid damage to components, enclosures, and finish.

PART 2: PRODUCTS

2.01 MANUFACTURERS

A. Basis of Design: Daikin Applied

1. APPROVED ALTERNATE MANUFACTURERS

a. AAON

b. ~~KCC HORIZON (TRANE)~~ **TEMPMASTER/YORK (REVISED @ ADDENDUM #2)**

2.02 GENERAL DESCRIPTION

A. Furnish as shown on plans, Daikin Applied Rebel Single zone Heating and Cooling Unit(s) model DPS. Unit performance and electrical characteristics shall be per the job schedule.

B. Configuration: Fabricate as detailed on prints and drawings:

1. Return plenum / economizer section
2. Filter section
3. Cooling coil section
4. Supply fan section
5. Gas heating section.
6. Condensing unit section

C. The complete unit shall be cETLus listed.

D. The unit shall be ASHRAE 90.1-2016 compliant and labeled.

E. Each unit shall be specifically designed for outdoor rooftop application and include a weatherproof cabinet. Each unit shall be completely factory assembled and shipped in one piece. Packaged units shall be shipped fully charged with R-410 Refrigerant and oil.

F. The unit shall undergo a complete factory run test prior to shipment. The factory test shall include a refrigeration circuit run test, a unit control system operations checkout, a unit refrigerant leak test and a final unit inspection.

G. All units shall have decals and tags to indicate caution areas and aid unit service. Unit nameplates shall be fixed to the main control panel door. Electrical wiring diagrams shall be attached to the control panels. Installation, operating and maintenance bulletins and start-up forms shall be supplied with each unit.

H. Performance: All scheduled EER, IEER, capacities and face areas are minimum accepted values. All scheduled amps, kW, and HP are maximum accepted values that allow scheduled capacity to be met.

I. Warranty: The manufacturer shall provide 12-month parts only warranty. Defective parts shall be repaired or replaced during the warranty period at no charge. The warranty period shall commence at startup or six months after shipment, whichever occurs first.

2.03 CABINET, CASING, AND FRAME

A. Panel construction shall be double-wall construction for all panels. All floor panels shall have a solid galvanized steel inner liner on the air stream side of the unit to protect insulation during service and maintenance. Insulation shall be a minimum of 1" thick with an R-value of 7.0, and shall be 2 part injected foam. Panel design shall include no exposed insulation edges. Unit cabinet shall be designed to operate at total static pressures up to 5.0 inches w.g.

B. Exterior surfaces shall be constructed of painted galvanized steel, for aesthetics and long-term durability. Paint finish will include a base primer with a high-quality polyester resin topcoat. Finished, unabraded panel surfaces shall be exposed to an ASTM B117 salt spray environment and exhibit no visible red rust at a minimum of 3,000 hours exposure. Finished, abraded surfaces shall be tested per ASTM D1654, having a mean scribe creepage not exceeding 1/16" at 1,000 hours minimum exposure to an ASTM B117 salt spray environment. Measurements of results shall be quantified using ASTM D1654 in conjunction with ASTM D610 and ASTM D714 to evaluate blister and rust ratings.

C. Service doors shall be provided on the fan section, filter section, control panel section, and heating vestibule in order to provide user access to unit components. All service access doors shall be mounted on multiple, stainless steel hinges and shall be secured by a latch system. Removable service panels secured by multiple mechanical fasteners are not acceptable.

D. The unit base shall overhang the roof curb for positive water runoff and shall seat on the roof curb gasket to provide a positive, weathertight seal. Lifting brackets shall be provided on the unit base to accept cable or chain hooks for rigging the equipment.

2.04 OUTDOOR/RETURN AIR SECTION

A. Unit shall be provided with an outdoor air economizer section. The economizer section shall include outdoor, return, and exhaust air dampers. The economizer operation shall be fully integral to the mechanical cooling and allow up to 100% of mechanical cooling if needed to maintain the cooling discharge air temperature. The outdoor air hood shall be factory installed and constructed from galvanized steel finished with the same durable paint finish as the main unit. The hood shall include moisture eliminator filters to drain water away from the entering air stream. The outside and return air dampers shall be sized to handle 100% of the supply air volume. The dampers shall be parallel blade design. Damper blades shall be gasketed with side seals to provide an air leakage rate of 1.5 cfm / square foot of damper area at 1" differential pressure in according with testing defined in AMCA 500. A barometric exhaust damper shall be provided to exhaust air out of the back of the unit. A bird screen shall be provided to prevent infiltration of rain and foreign materials. Exhaust damper blades shall be lined with vinyl gasketing on contact edges. Control of the dampers shall be by a factory installed direct coupled actuator. Damper actuator shall be of the modulating, spring return type. A comparative enthalpy control shall be provided to sense and compare enthalpy in both the outdoor and return air streams to determine if outdoor air is suitable for "free" cooling. If outdoor air is suitable for "free" cooling, the outdoor air dampers shall modulate in response to the unit's temperature control system.

B. Provide a field installed Duct/Space mounted CO2 sensor. Outside air damper position will modulate between the Demand Control Ventilation Limit (minimum position setpoint) and the Ventilation Limit (maximum non-economizer position setpoint) to satisfy the space requirements. Damper position will be controlled to the greater of the two command signals, either minimum outside air flow or space IAQ (CO2).

C. Economizer assembly Fault Detection and Diagnostics (FDD) shall be 90.1, IECC, and California Title 24 compliant. MicroTech III controls shall display a warning, and write a warning to the BAS, if the economizer malfunctions in accordance with 90.1, IECC, and Title 24 specifications.

2.05 ENERGY RECOVERY

A. The rooftop unit shall be provided with an AHRI certified rotary wheel air-to-air heat exchanger in a cassette frame complete with seals, drive motor and drive belt. The energy recovery wheel shall be an integral part of the rooftop unit with unitary construction and does not require field assembly. Bolt-on energy recovery units that require field assembly and section to section gasketing and sealing are not acceptable.

B. The wheel capacity, air pressure drop and effectiveness shall be AHRI certified per AHRI Standard 1060. Thermal performance shall be certified by the manufacturer in accordance with ASHRAE Standard 84, Method of Testing Air-to-Air Heat Exchangers and AHRI Standard 1060, Rating Air-to-Air Heat Exchangers For Energy Recovery Ventilation Equipment.

C. The rooftop unit shall be designed with a track so the entire energy recovery wheel cassette can slide out from the rooftop unit to facilitate cleaning.

D. The unit shall have 2" Merv 7 filters for the outdoor air before the wheel to help keep the wheel clean and reduce maintenance. Filter access shall be by a hinged access door with ¼ turn latches.

E. The matrix design shall have channels to reduce cross contamination between the outdoor air and the exhaust air. The layers shall be effectively captured in aluminum and stainless steel segment frames that provide a rigid and self-supporting matrix. All diameter and perimeter seals shall be provided as part of the cassette assembly and shall be factory set. Drive belt(s) of stretch urethane shall be provided for wheel rim drive without the need for external tensioners or adjustment.

F. The total energy recovery wheel shall be coated with silica gel desiccant permanently bonded without the use of binders or adhesives, which may degrade desiccant performance. The substrate shall be lightweight polymer and shall not degrade nor require additional coatings for application in marine or coastal environments. Coated segments shall be washable with detergent or alkaline coil cleaner and water. Desiccant shall not dissolve nor deliquesce in the presence of water or high humidity.

G. Wheels shall be provided with removable energy transfer matrix. Wheel frame construction shall be a welded hub, spoke and rim assembly of stainless, plated and/or coated steel and shall be self-supporting without matrix segments in place. Segments shall be removable without the use of tools to facilitate maintenance and cleaning.

H. Wheel bearings shall be selected to provide an L-10 life in excess of 400,000 hours. Rim shall be continuous rolled stainless steel. Wheels shall be connected to the shaft by means of taper lock hubs.

I. The exhaust air fan shall be a direct drive SWSI plenum fan. The exhaust fan shall be sized for the airflow requirements per the construction schedule. The unit controller shall control the exhaust fan to maintain building pressure. A VFD shall be provided for the exhaust fan motor or the exhaust fan motor shall be an ECM motor. The rooftop unit shall have single point electrical power connection and shall be ETL listed.

J. The control of the energy recovery wheel shall be an integral part of the rooftop unit's DDC controller. The DDC controller shall have visibility of the outdoor air temperature, leaving wheel temperature, return air temperature, and exhaust air temperature. These temperatures shall be displayed at the rooftop units DDC controller LCD display. All of these temperatures shall be made available through the BACnet interface.

K. The rooftop unit with the energy recovery wheel shall incorporate the economizer operation. The energy recovery wheel shall have a bypass damper. When the unit is in the economizer mode of operation the energy recovery wheel shall stop and the bypass dampers shall be opened. The outdoor air shall be drawn through the bypass dampers to reduce the pressure drop of the outdoor airstream.

L. The rooftop unit DDC controller shall provide frost control for the energy recovery wheel. When a frost condition is encountered the unit controller shall stop the wheel. When in the frost control mode the wheel shall be jogged periodically and not be allowed to stay in the stationary position.

2.06 EXHAUST FAN

A. Exhaust fan shall be a single width, single inlet (SWSI) airfoil centrifugal fan. The fan wheel shall be Class II construction with aluminum fan blades that are continuously welded to the hub plate and end rim. The exhaust fan shall be a direct drive fan mounted to the motor shaft. Belts and sheaves are not acceptable due to the additional maintenance.

B. The fan motor shall be a totally enclosed EC motor that is speed controlled by the rooftop unit controller. The motor shall include thermal overload protection and protect the motor in the case of excessive motor temperatures. The motor shall have phase failure protection and prevent the motor from operation in the event of a loss of phase. Motors shall be premium efficiency.

C. The unit DDC controller shall provide building static pressure control. The unit controller shall provide proportional control of the exhaust fans from 25% to 100% of the supply air fan designed airflow to maintain the adjustable building pressure setpoint. The field shall mount the required sensing tubing from the building to the factory mounted building static pressure sensor.

2.07 FILTERS

A. Unit shall be provided with a draw-through filter section. The filter rack shall be designed to accept a 2" prefilter and a 4" final filter. The unit design shall have a hinged access door for the filter section. The manufacturer shall ship the rooftop unit with 2" MERV 8 and 4" MERV 14 filters.

2.08 COOLING COIL

A. The indoor coil section shall be installed in a draw through configuration, upstream of the supply air fan. The coil section shall be complete with a factory piped cooling coil and an ASHRAE 62.1 compliant double sloped drain pan.

B. The direct expansion (DX) cooling coils shall be fabricated of seamless high efficiency copper tubing that is mechanically expanded into high efficiency aluminum plate fins. Coils shall be a multi-row, staggered tube design with a minimum of 3 rows. All cooling coils shall have an interlaced coil circuiting that keeps the full coil face active at all load conditions. All coils shall be factory leak tested with high pressure air under water.

C. The cooling coil shall have an electronic controlled expansion valve. The unit controller shall control the expansion valve to maintain liquid subcooling and the superheat of the refrigerant system.

D. The refrigerant suction lines shall be fully insulated from the expansion valve to the compressors.

E. The drain pan shall be stainless steel and positively sloped. The slope of the drain pan shall be in two directions and comply with ASHRAE Standard 62.1. The drain pan shall have a minimum slope of

1/8" per foot to provide positive draining. The drain pan shall extend beyond the leaving side of the coil. The drain pan shall have a threaded drain connection extending through the unit base.

F. A drain pan over flow safety shall shut off the unit and issue a warning before over flow occurs.

2.09 HOT GAS REHEAT

A. Unit shall be equipped with a fully modulating hot gas reheat coil with hot gas coming from the unit condenser

B. Hot gas reheat coil shall be a Micro Channel design. The aluminum tube shall be a micro channel design with high efficiency aluminum fins. Fins shall be brazed to the tubing for a direct bond. The capacity of the reheat coil shall allow for a 20°F temperature rise at all operating conditions.

C. The modulating hot gas reheat systems shall allow for independent control of the cooling coil leaving air temperature and the reheat coil leaving air temperature. The cooling coil and reheat coil leaving air temperature setpoints shall be adjustable through the unit controller. During the dehumidification cycle the unit shall be capable of 100% of the cooling capacity. The hot gas reheat coil shall provide discharge temperature control within +/- 2°F.

D. Each coil shall be factory leak tested with high-pressure air under water.

2.010 SUPPLY FAN

A. Supply fan shall be a single width, single inlet (SWSI) airfoil centrifugal fan. The fan wheel shall be Class II construction with fan blades that are continuously welded to the hub plate and end rim. The supply fan shall be a direct drive fan mounted to the motor shaft. Belts and sheaves are not acceptable due to the additional maintenance.

B. All fan assemblies shall be statically and dynamically balanced at the factory, including a final trim balance, prior to shipment.

C. Supply fan and motor assembly combinations larger than 8 hp or 22" diameter shall be internally isolated on 1" deflection, spring isolators and include removable shipping tie downs.

D. The fan motor shall be a totally enclosed EC motor that is speed controlled by the rooftop unit controller. The motor shall include thermal overload protection and protect the motor in the case of excessive motor temperatures. The motor shall have phase failure protection and prevent the motor from operation in the event of a loss of phase. Motors shall be premium efficiency.

E. The supply fan shall be capable of airflow modulation from 30% to 100% of the scheduled designed airflow. The fan shall not operate in a state of surge at any point within the modulation range.

2.011 HEATING SECTION

A. The rooftop unit shall include a natural gas heating section. The gas furnace design shall be one natural gas fired heating module factory installed downstream of the supply air fan in the heat section. The heating module shall be a tubular design with in-shot gas burners.

B. The module shall be complete with furnace controller and control valve capable of 5:1 modulating operation.

C. The module shall be complete with furnace controller and control valve capable of 10:1 modulating operation.

D. The heat exchanger tubes shall be constructed of stainless steel.

- E. The module shall have an induced draft fan that will maintain a negative pressure in the heat exchanger tubes for the removal of the flue gases.
- F. Each burner module shall have two flame roll-out safety protection switches and a high temperature limit switch that will shut the gas valve off upon detection of improper burner manifold operation. The induced draft fan shall have an airflow safety switch that will prevent the heating module from turning on in the event of no airflow in the flue chamber.
- G. The factory-installed DDC unit control system shall control the gas heat module. Field installed heating modules shall require a field ETL certification. The manufacturer's rooftop unit ETL certification shall cover the complete unit including the gas heating modules.

2.012 HEAT PUMP HEATING

- A. The evaporator coil, condenser coil, compressors and refrigerant circuit shall be designed for heatpump operation. The refrigerant circuit shall contain a 4 way reversing valve for the heatpump operation. The outdoor coil shall have an electronic expansion valve to control the refrigerant flow. The unit controller shall modulate the expansion valve to maintain compressor operation within the compressor operational envelope.
- B. The refrigerant system shall have a pump-down cycle.
- C. The unit shall have a natural gas furnace for hybrid heating. When the heatpump operation cannot maintain the discharge air temperature setpoint the natural gas furnace shall temper the airstream to the discharge air temperature setpoint.

2.013 CONDENSING SECTION

- A. Outdoor coils shall have seamless copper tubes, mechanically bonded into aluminum plate-type fins. The fins shall have full drawn collars to completely cover the tubes. A sub-cooling coil shall be an integral part of the main outdoor air coil. Each outdoor air coil shall be factory leak tested with high-pressure air under water.
- B. Fan motors shall be an ECM type motor for proportional control. The unit controller shall proportionally control the speed of the condenser fan motors to maintain the head pressure of the refrigerant circuit from ambient condition of 25~120°F. Mechanical cooling shall be provided to 25°F.
- F. The motor shall include thermal overload protection and protect the motor in the case of excessive motor temperatures. The motor shall have phase failure protection and prevent the motor from operation in the event of a loss of phase.
- C. The condenser fan shall be low noise blade design. Fan blade design shall be a dynamic profile for low tip speed. Fan blade shall be of a composite material.
- D. The unit shall have scroll compressors. One of the compressors shall be an inverter compressor providing proportional control. The unit controller shall control the speed of the compressor to maintain the discharge air temperature. The inverter compressor shall have a separate oil pump and an oil separator for each compressor that routes oil back to the compressor instead of through the discharge line.
- E. Pressure transducers shall be provided for the suction pressure and head pressure. Temperature sensor shall be provided for the suction temperature and the refrigerant discharge temperature of the compressors. All of the above devices shall be an input to the unit controller and the values be displayed at the unit controller.

F. Refrigerant circuit shall have a bypass valve between the suction and discharge refrigerant lines for low head pressure compressor starting and increased compressor reliability. When there is a call for mechanical cooling the bypass valve shall open to equalizing the suction and discharge pressures. When pressures are equalized the bypass valve shall close and the compressor shall be allowed to start.

G. Each circuit shall be dehydrated and factory charged with R-410A Refrigerant and oil.

2.014 ELECTRICAL

A. Unit wiring shall comply with NEC requirements and with all applicable UL standards. All electrical components shall be UL recognized where applicable. All wiring and electrical components provided with the unit shall be number and color-coded and labeled according to the electrical diagram provided for easy identification. The unit shall be provided with a factory wired weatherproof control panel. Unit shall have a single point power terminal block for main power connection. A terminal board shall be provided for low voltage control wiring. Branch short circuit protection, 115-volt control circuit transformer and fuse, system switches, and a high temperature sensor shall also be provided with the unit. Each compressor and condenser fan motor shall be furnished with contactors and inherent thermal overload protection. Supply fan motors shall have contactors and external overload protection. Knockouts shall be provided in the bottom of the main control panels for field wiring entrance.

B. A single non-fused disconnect switch shall be provided for disconnecting electrical power at the unit. Disconnect switches shall be mounted internally to the control panel and operated by an externally mounted handle.

2.015 CONTROLS

A. Provide a complete integrated microprocessor based Direct Digital Control (DDC) system to control all unit functions including temperature control, scheduling, monitoring, unit safety protection, including compressor minimum run and minimum off times, and diagnostics. This system shall consist of all required temperature sensors, pressure sensors, controller and keypad/display operator interface. All MCBs and sensors shall be factory mounted, wired and tested.

B. The stand-alone DDC controllers shall not be dependent on communications with any on-site or remote PC or master control panel for proper unit operation. The microprocessor shall maintain existing set points and operate stand alone if the unit loses either direct connect or network communications. The microprocessor memory shall be protected from voltage fluctuations as well as any extended power failures. All factory and user set schedules and control points shall be maintained in nonvolatile memory. No settings shall be lost, even during extended power shutdowns.

C. The DDC control system shall permit starting and stopping of the unit locally or remotely. The control system shall be capable of providing a remote alarm indication. The unit control system shall provide for outside air damper actuation, emergency shutdown, remote heat enable/disable, remote cool enable/disable, heat indication, cool indication, and fan operation.

D. All digital inputs and outputs shall be protected against damage from transients or incorrect voltages. All field wiring shall be terminated at a separate, clearly marked terminal strip.

E. The DDC controller shall have a built-in time schedule. The schedule shall be programmable from the unit keypad interface. The schedule shall be maintained in nonvolatile memory to insure that it is not lost during a power failure. There shall be one start/stop per day and a separate holiday schedule. The controller shall accept up to sixteen holidays each with up to a 5-day duration. Each unit shall also have the ability to accept a time schedule via BAS network communications.

F. The keypad interface shall allow convenient navigation and access to all control functions. The unit keypad/display character format shall be 4 lines x 20 characters. All control settings shall be password protected against unauthorized changes. For ease of service, the display format shall be English language readout. Coded formats with look-up tables will not be accepted. The user interaction with the display shall provide the following information as a minimum:

1. Return air temperature.
2. Discharge air temperature.
3. Outdoor air temperature.
4. Space air temperature.
5. Outdoor enthalpy, high/low.
6. Compressor suction temperature and pressure
7. Compressor head pressure and temperature
8. Expansion valve position
9. Condenser fan speed
10. Inverter compressor speed
11. Dirty filter indication.
12. Airflow verification.
13. Cooling status.
14. Control temperature (Changeover).
15. VAV box output status.
16. Cooling status/capacity.
17. Unit status.
18. All time schedules.
19. Active alarms with time and date.
20. Previous alarms with time and date.
21. Optimal start
22. Supply fan and exhaust fan speed.
23. System operating hours.
 - a. Fan
 - b. Exhaust fan
 - c. Cooling
 - d. Individual compressor
 - e. Heating
 - f. Economizer
 - g. Tenant override

G. The user interaction with the keypad shall provide the following:

1. Controls mode
 - a. Off manual

- b. Auto
- c. Heat/Cool
- d. Cool only
- e. Heat only
- f. Fan only
- 2. Occupancy mode
 - a. Auto
 - b. Occupied
 - c. Unoccupied
 - d. Tenant override
- 3. Unit operation changeover control
 - a. Return air temperature
 - b. Space temperature
 - c. Network signal
- 4. Cooling and heating change-over temperature with deadband
- 5. Cooling discharge air temperature (DAT)
- 6. Supply reset options
 - a. Return air temperature
 - b. Outdoor air temperature
 - c. Space temperature
 - d. Airflow (VAV)
 - e. Network signal
 - f. External (0-10 vdc)
 - g. External (0-20 mA)
- 7. Temperature alarm limits
 - a. High supply air temperature
 - b. Low supply air temperature
 - c. High return air temperature
- 8. Lockout control for compressors.
- 9. Compressor interstage timers
- 10. Night setback and setup space temperature.
- 11. Building static pressure.
- 12. Economizer changeover
 - a. Enthalpy
 - b. Drybulb temperature
- 13. Currently time and date
- 14. Tenant override time
- 15. Occupied/unoccupied time schedule
- 16. One event schedule
- 17. Holiday dates and duration
- 18. Adjustable set points
- 19. Service mode
 - a. Timers normal (all time delays normal)

b. Timers fast (all time delays 20 sec)

H. If the unit is to be programmed with a night setback or setup function, an optional space sensor shall be provided. Space sensors shall be available to support field selectable features. Sensor options shall include:

1. Zone sensor with tenant override switch
2. Zone sensor with tenant override switch plus heating and cooling set point adjustment. (Space Comfort Control systems only)

I. To increase the efficiency of the cooling system the DDC controller shall include a discharge air temperature reset program for part load operating conditions. The discharge air temperature shall be controlled between a minimum and a maximum discharge air temperature (DAT) based on one of the following inputs:

1. Airflow
2. Outside air temperature
3. Space temperature
4. Return air temperature
5. External signal of 1-5 vdc
6. External signal of 0-20 mA
7. Network signal

2.016 ROOF CURB

A. A prefabricated heavy gauge galvanized steel, mounting curb shall be provided for field assembly on the roof decking prior to unit shipment. The roof curb shall be a full perimeter type with complete perimeter support of the air handling section and condensing section. The curb shall be a minimum of 14" high and include a nominal 2" x 4" wood nailing strip. Gasket shall be provided for field mounting between the unit base and roof curb.

PART 3: EXECUTION

3.01 EXAMINATION

- A. Examine substrates, areas, and conditions, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance of RTUs.
- B. Examine roughing-in for RTUs to verify actual locations of piping and duct connections before equipment installation.
- C. Examine roofs for suitable conditions where RTUs will be installed.
- D. Proceed with installation only after unsatisfactory conditions have been corrected.

3.02 INSTALLATION

A. Roof Curb: Install on roof structure or concrete base, level and secure, according to NRCA's "Low-Slope Membrane Roofing Construction Details Manual," Illustration "Raised Curb Detail for Rooftop Air Handling Units and Ducts." and ARI Guideline B. Install RTUs on curbs and coordinate roof penetrations and flashing with roof construction specified in Division 07, Section "Roof Accessories." Secure RTUs to upper curb rail, and secure curb base to roof framing or concrete base with anchor bolts.

B. Unit Support: Install unit level on structural curbs. Coordinate wall penetrations and flashing with wall construction. Secure RTUs to structural support with anchor bolts.

3.03 CONNECTIONS

A. Install condensate drain, minimum connection size, with trap and indirect connection to **roof surface, away from all access walkways and maintenance areas for the unit**, and as acceptable to the authority having jurisdiction.

B. Install piping adjacent to RTUs to allow service and maintenance.

C. Duct installation requirements are specified in other Division 23, Sections. Drawings indicate the general arrangement of ducts. The following are specific connection requirements:

1. Install ducts to termination at top of roof curb.
2. Remove roof decking only as required for passage of ducts. Do not cut out decking under entire roof curb.
3. Connect supply ducts to RTUs with flexible duct connectors specified in Division 23, Section "Air Duct Accessories."
4. Install return-air duct continuously through roof structure.

3.04 FIELD QUALITY CONTROL

A. Manufacturer's Field Service: Engage a factory-authorized service representative to inspect, test, and adjust components, assemblies, and equipment installations, including connections. Report results in writing.

B. Perform tests and inspections and prepare test reports.

C. Tests and Inspections:

1. After installing RTUs and after electrical circuitry has been energized, test units for compliance with requirements.
2. Inspect for and remove shipping bolts, blocks, and tie-down straps.
3. Operational Test: After electrical circuitry has been energized, start units to confirm proper motor rotation and unit operation.
4. Test and adjust controls and safeties. Replace damaged and malfunctioning controls and equipment.

D. Remove and replace malfunctioning units and retest as specified above.

3.05 STARTUP SERVICE

A. Engage a factory-authorized service representative to perform startup service.

1. Verify communication established with EMS.

B. Complete installation and startup checks according to manufacturer's written instructions and do the following:

1. Inspect for visible damage to unit casing.
2. Inspect for visible damage to furnace combustion chamber.
3. Inspect for visible damage to compressor, coils, and fans.
4. Inspect internal insulation.
5. Verify that labels are clearly visible.
6. Verify that clearances have been provided for servicing.
7. Verify that controls are connected and operable.
8. Verify that filters are installed.
9. Clean condenser coil and inspect for construction debris.
10. Clean furnace flue and inspect for construction debris.
11. Connect and purge gas line.
12. Remove packing from vibration isolators.
13. Inspect operation of barometric relief dampers.
14. Verify lubrication on fan and motor bearings.
15. Inspect fan-wheel rotation for movement in correct direction without vibration and binding.
16. Start unit according to manufacturer's written instructions.
 - a. Start refrigeration system.
 - b. Do not operate below recommended low-ambient temperature.
 - c. Complete startup sheets and attach copy with Contractor's startup report.
17. Inspect and record performance of interlocks and protective devices; verify sequences.
18. Operate unit for an initial period as recommended or required by manufacturer.
19. Perform the following operations for both minimum and maximum firing. Adjust burner for peak efficiency.
 - a. Measure gas pressure on manifold.
 - b. Inspect operation of power vents.
 - c. Measure combustion air temperature at inlet to combustion chamber.
 - d. Measure flue gas temperature at furnace discharge.
 - e. Perform flue gas analysis. Measure and record flue gas carbon dioxide and oxygen concentration.
 - f. Measure supply air temperature and volume when burner is at maximum firing rate and when burner is off. Calculate useful heat to supply air.

20. Calibrate thermostats.
21. Adjust and inspect high-temperature limits.
22. Inspect outdoor-air dampers for proper stroke and interlock with return-air dampers.
23. Start refrigeration system and measure and record the following when ambient is a minimum of 15 deg F above return-air temperature:
 - a. Coil leaving-air, dry- and wet-bulb temperatures.
 - b. Coil entering-air, dry- and wet-bulb temperatures.
 - c. Outdoor-air, dry-bulb temperature.
 - d. Outdoor-air-coil, discharge-air, dry-bulb temperature.
24. Inspect controls for correct sequencing of heating, mixing dampers, refrigeration, and normal and emergency shutdown.
25. Measure and record the following minimum and maximum airflows. Plot fan volumes on fan curve.
 - a. Supply-air volume.
 - b. Return-air volume.
 - c. Relief-air volume.
 - d. Outdoor-air intake volume.
26. Simulate maximum cooling demand and inspect the following:
 - a. Compressor refrigerant suction and hot-gas pressures.
 - b. Short circuiting of air through condenser coil or from condenser fans to outdoor-air intake.
27. Verify operation of remote panel including pilot-light operation and failure modes. Inspect the following:
 - a. High temperature limit on gas fired heat exchanger.
 - b. Low-temperature safety operation.
 - c. Filter high-pressure differential alarm.
 - d. Economizer to minimum outdoor-air changeover.
 - e. Relief-air fan operation.
 - f. Smoke and firestat alarms.
28. After startup and performance testing and prior to Substantial Completion, replace existing filters with new filters.

3.06 CLEANING AND ADJUSTING

A. Occupancy Adjustments: When requested within 12 months of date of Substantial Completion, provide on-site assistance in adjusting system to suit actual occupied conditions. Provide up to two visits to site during other-than-normal occupancy hours for this purpose.

B. After completing system installation and testing, adjusting, and balancing RTU and air-distribution systems, clean filter housings and install new filters.

3.07 DEMONSTRATION

A. Refer to Division 01 Section, "Demonstration & Training" for requirements.

B. Engage a factory-authorized service representative to train Owner's maintenance personnel to adjust, operate, and maintain packaged rooftop HVAC units as specified below:

1. Perform not less than 16 hours of training.
2. Train Owner's maintenance personnel on procedures and schedules for starting and stopping, troubleshooting, servicing, and maintaining packaged rooftop HVAC units.
3. Review data in maintenance manuals. Refer to Division 01, Section "Contract Closeout."
4. Review data in maintenance manuals. Refer to Division 01, Section "Operation and Maintenance Data."
5. Schedule training with Owner, through Architect, with at least seven days' advance notice.
6. Contractor shall provide all materials and labor necessary to demonstrate system operation to Architect/Engineer as required by Division 23, Section "Commissioning of the HVAC System." The contractor shall repeatedly make site visits, demonstrate and make revisions to system at their own expense until all systems are accepted by the Architect and Engineer.

END OF SECTION 237400

SHELBURNE MIDDLE SCHOOL RENOVATIONS AND ADDITION
CITY OF STAUNTON, VIRGINIA

BUILDING CODE INFORMATION:

APPLICABLE CODES:

2018 VIRGINIA CONSTRUCTION CODE
2018 VIRGINIA EXISTING BUILDING CODE
2009 ICC/ANSI A117.1

LAST ADDITION AND RENOVATION:

1997 - BASED ON 1994 BOCA, EDUCATIONAL USE, TYPE 2C CONSTRUCTION (CURRENT 2B)

CONSTRUCTION CLASSIFICATION:

EXISTING:
EXISTING BUILDING - BASED ON LAST 1997 ADDITION, CODE IN AFFECT WAS 1994
BOCA, EDUCATIONAL USE, TYPE 2C CONSTRUCTION (CURRENT 2B)
PROPOSED RENOVATIONS AND ADDITION :
TYPE IIB, MASONRY BEARING WALL CONSTRUCTION
FULLY SPRINKLED PER NFPA 13

BUILDING OCCUPANCY:

EXISTING OCCUPANCY:
E - EDUCATIONAL
PROPOSED RENOVATIONS AND RENOVATION:
E - EDUCATIONAL

AREA CALCULATIONS

GROUND FLOOR - EXISTING
AREA SQUARE FOOTAGE
NON-RENOV 1,224 SF
RENOVATION 4,300 SF
SUB-TOTAL 5,524 SF

FIRST FLOOR - EXISTING
AREA SQUARE FOOTAGE
A 49,240 SF
B 31,765 SF
C 17,828 SF
RENOVATION 4,300 SF
SUB-TOTAL 103,133 SF

SECOND FLOOR - EXISTING
AREA SQUARE FOOTAGE
E 21,910 SF

EXISTING BUILDING TOTAL = 130,567 SF
EXISTING BUILDING RENOVATION = 13,896 SF

ADDITION SQUARE FOOTAGE
FIRST FLOOR 7,641 SF
SECOND FLOOR 830 SF
ADDITION TOTAL 8,471 SF

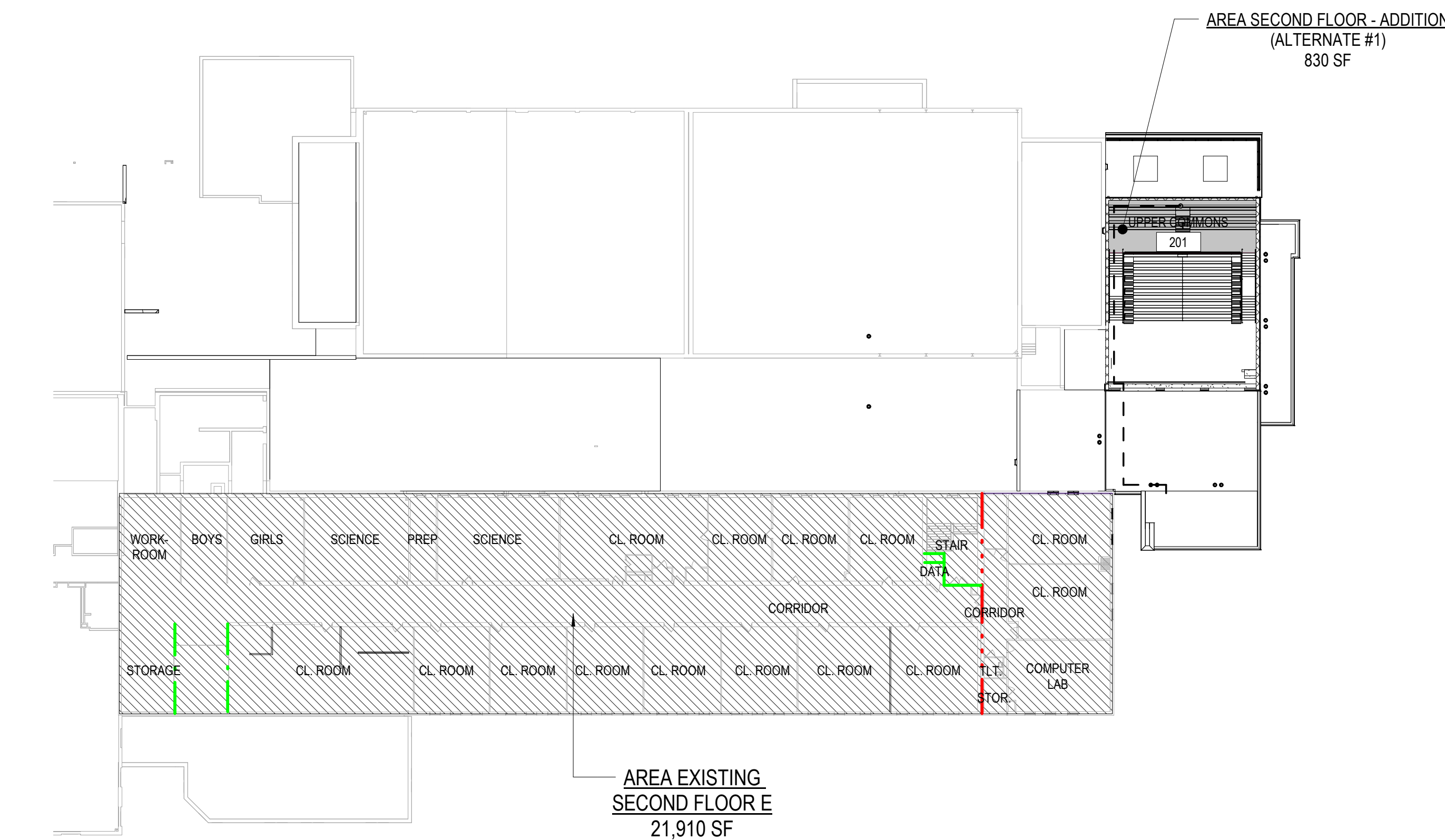
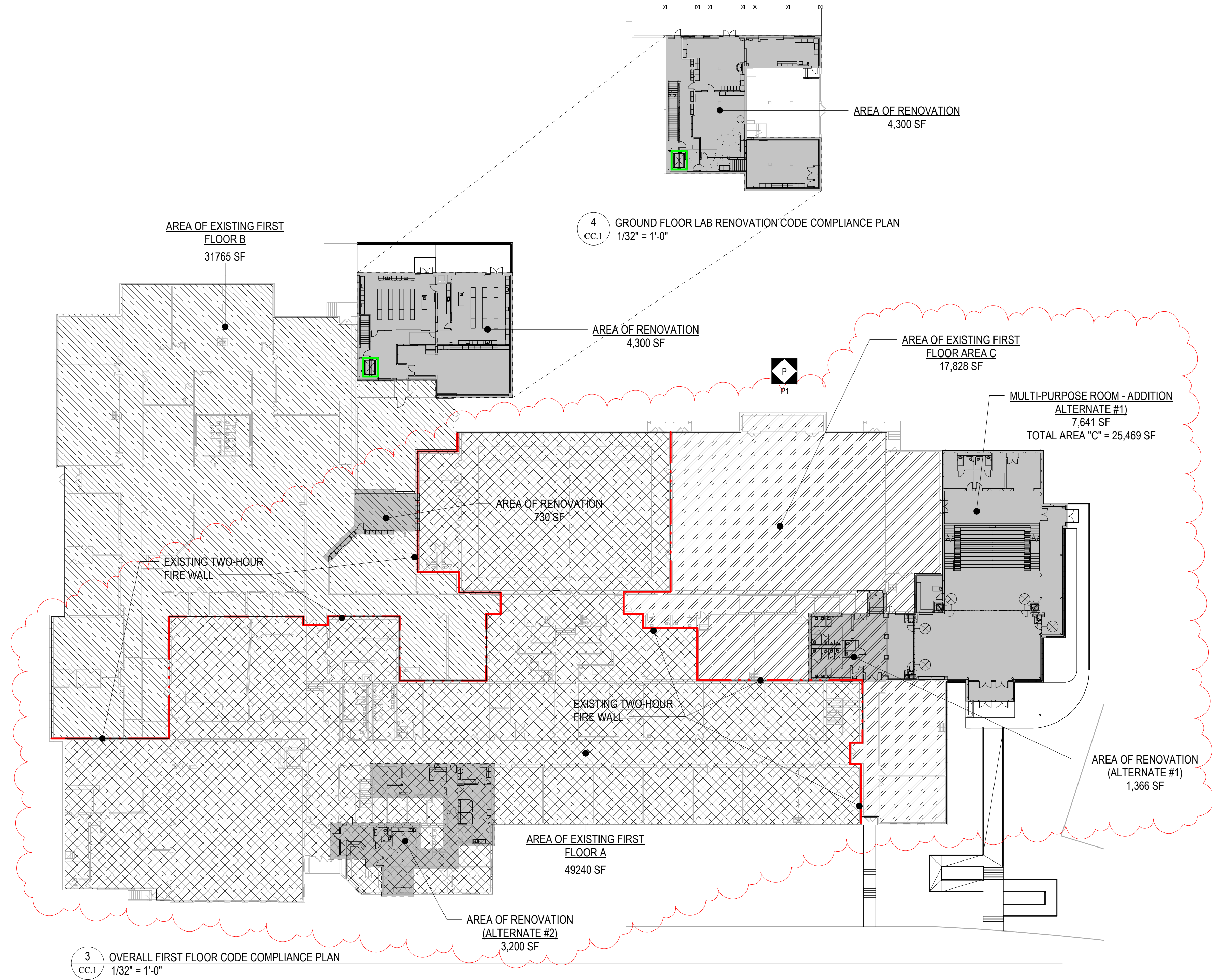
TOTAL SQUARE FOOTAGE
138,186

SHELBURNE MIDDLE SCHOOL ADDITIONS/ALTERATIONS										CRA 3636
Per VCC 2018 Occupant Load Table 1004.1.2 and 2015 IPC Min. Plumbing Fixture Table 403.1										12/27/2023
MULTIPURPOSE ADDITION										
SEATING										
				336.00	336.00	1.34	2.58	0.84	0.84	0.67
Total				336.00						
						1.34	2.58	0.84	0.84	0.67
						Male	Female	Male	Female	Drinking
						2	3	1	1	Fountains
						4	4	1	3	4

RESTROOM FACILITIES PROVIDED NEAR LOBBY AREA

CODE COMPLIANCE LEGEND

.....	CONSTRUCTION RESISTING PASSAGE OF SMOKE
.....	1 HOUR RATED FIRE BARRIER
.....	2 HOUR RATED FIRE BARRIER
.....	2 HOUR RATED FIRE WALL
→	ACCESSIBLE ENTRANCE
→	ACCESSIBLE MEANS OF EGRESS
HE	HORIZONTAL EXIT
▲	FIRE EXTINGUISHER LOCATIONS
● - -	EVACUATION ROUTE
XXXXXX	RATED CEILING SYSTEM



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REVISIONS

NO.	DATE	NAME	DESCRIPTION OF CHANGES
1	2/11/2024	PERMIT #1	

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CHARLOTTESVILLE VA 22902

434-975-7262

ADDITIONS AND RENOVATIONS

SHELBURNE MIDDLE SCHOOL

SCHOOL BOARD OF THE CITY OF STAUNTON, VA

300 GRUBERT AVENUE, STAUNTON, VIRGINIA

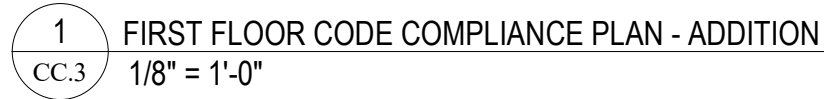


OVERALL CODE COMPLIANCE PLAN	
PLOT SCALE:	As indicated
FILENAME:	
DATE:	01/24/2023

PROJECT
3636

CC.1

PROJECT
3636
CC.2

[illegible]

FIRST FLOOR ADDITION CODE COMPLIANCE PLAN	
PLOT SCALE: 1/8" = 1'-0"	
FILENAME:	
DATE: 01/24/2023	

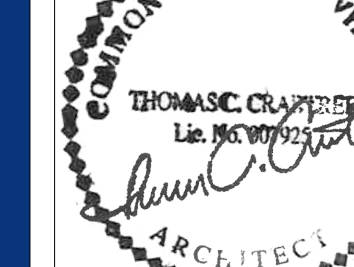
PROJECT
3636
CC.3

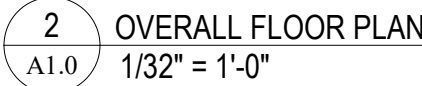


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SHELburnE MIDDLE SCHOOL
SCHOOL BOARD OF THE CITY OF STAUNTON, VA
300 GRUBERT AVENUE, STAUNTON, VIRGINIA**

	
SECOND FLOOR ADDITION CODE COMPLIANCE PLAN	
PLOT SCALE: 1/8" = 1'-0"	PROJECT 3636
FILENAME:	CC.4
DATE: 01/24/2023	

[illegible]

WHITE SULPHUR SPRINGS, WEST VIRGINIA

ADDITIONS AND RENOVATIONS
SHELburnE MIDDLE SCHOOL
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300 GRUBERT AVENUE, STAUNTON, VIRGINIA

OVERALL FLOOR/PHASING
PLANS

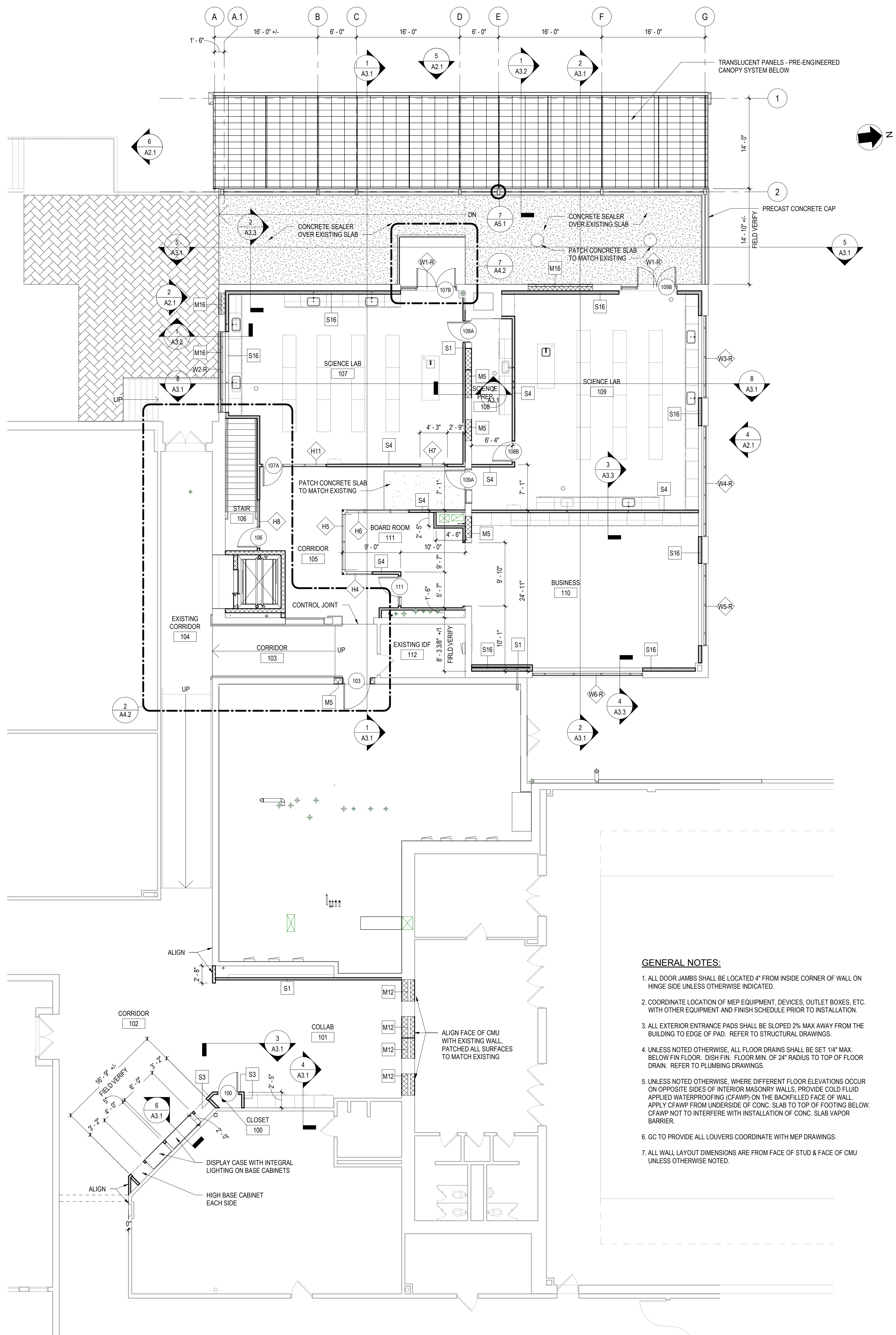
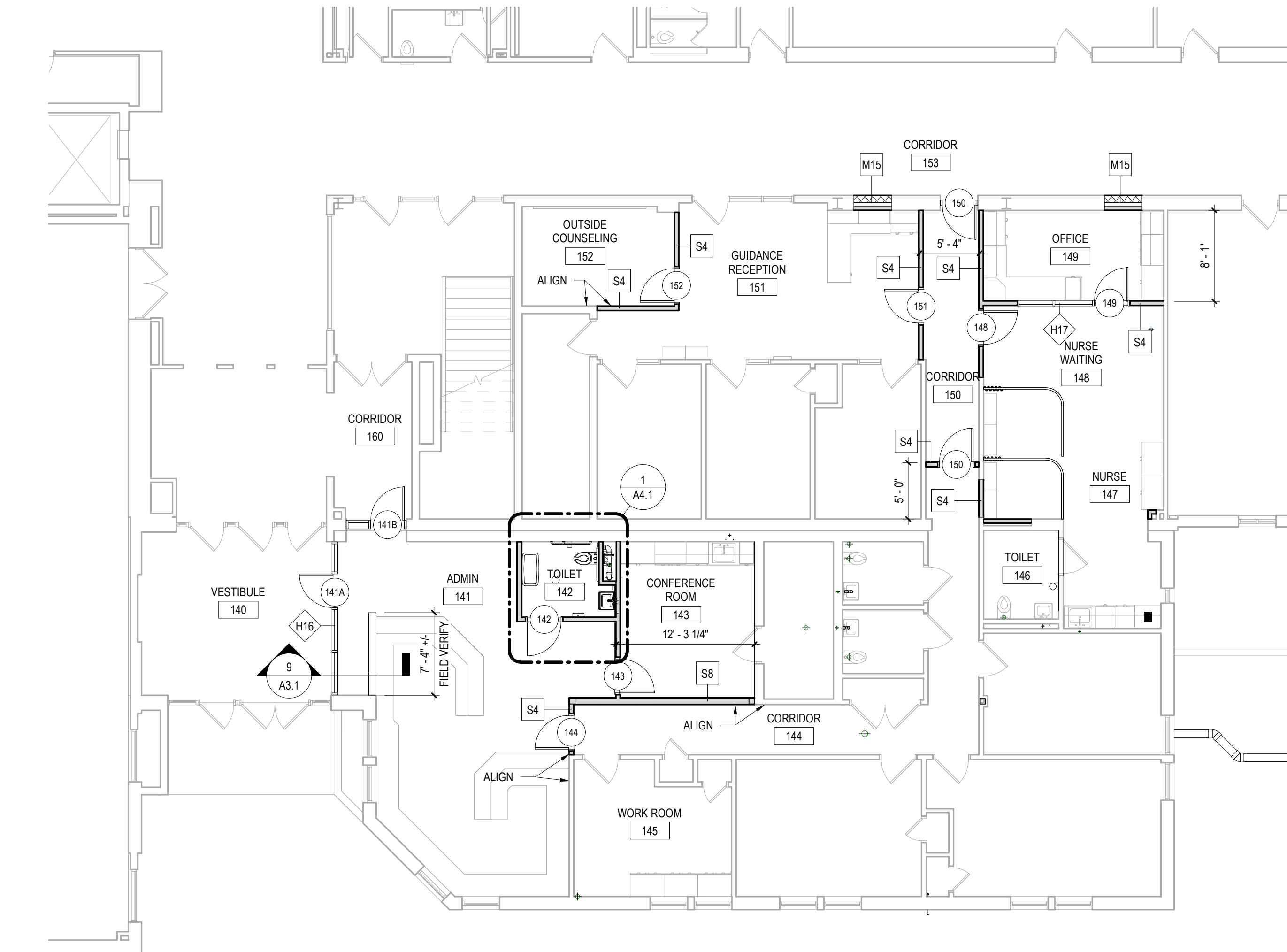
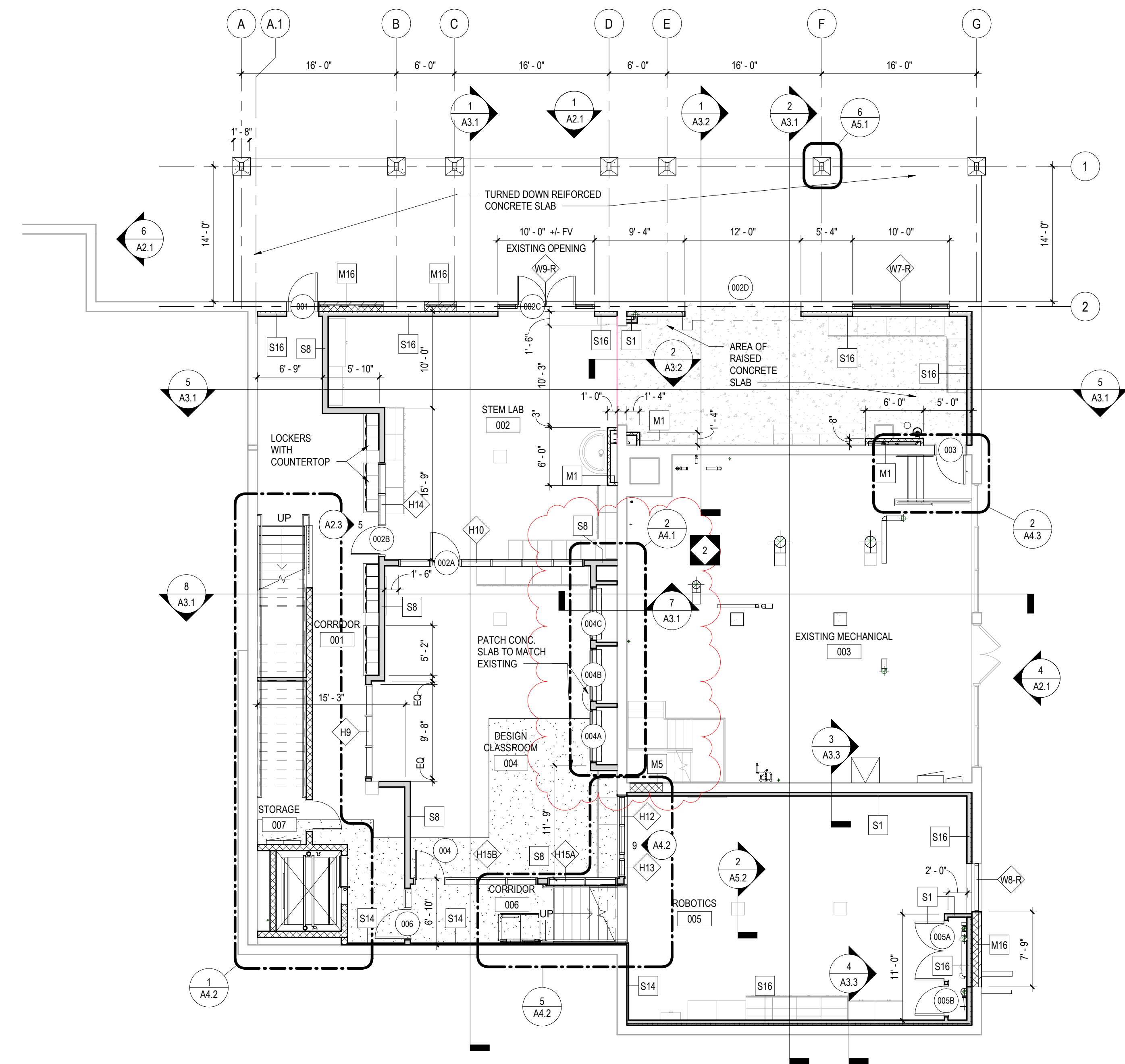
PLOT SCALE:
1/32" = 1'-0"

FILENAME

DATE: 01/24/2023

PROJECT
3636

A1.0



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REVISIONS

NO.	DATE	NAME	DESCRIPTION OF CHANGES
2	02/28/2024		ADDENDUM #2

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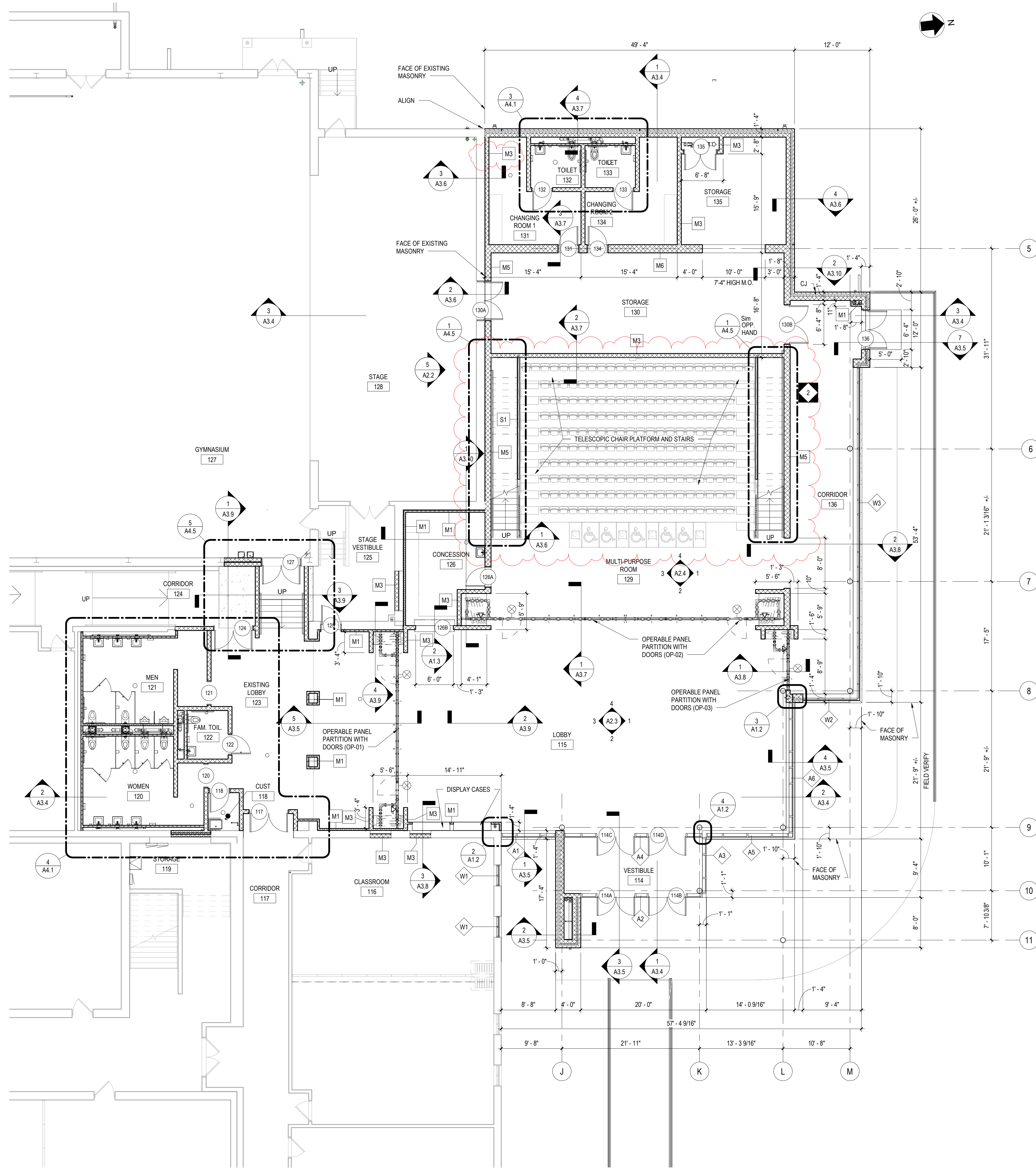


PARTIAL LOWER LEVEL AND
FIRST FLOOR PLAN -
RENOVATION
PLOT SCALE:
1/8" = 1'-0"
FILENAME:
DATE:
01/24/2023

PROJECT
3636

A1.1

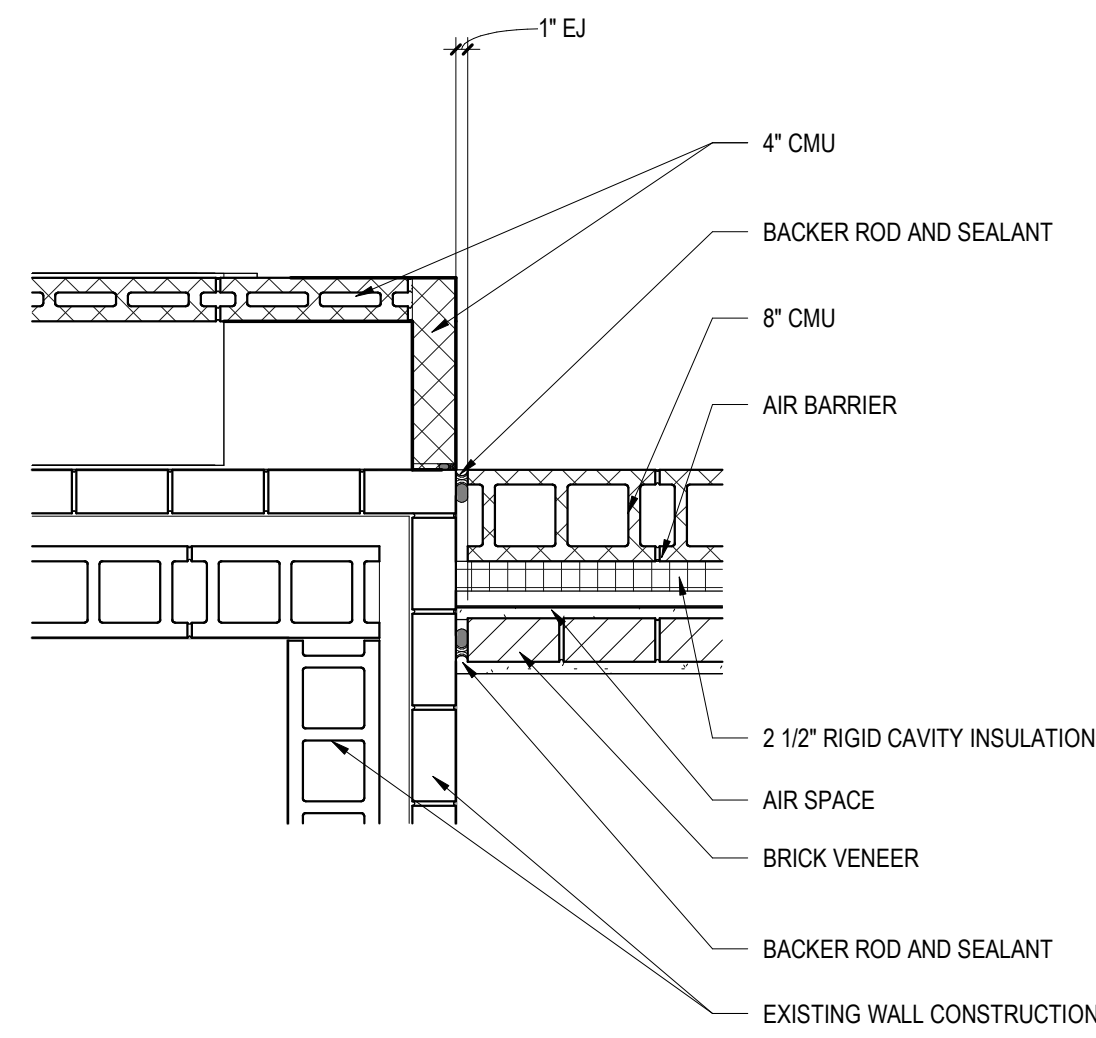
ADDITIONS AND RENOVATIONS
SHELburne MIDDLE SCHOOL
SCHOOL BOARD OF THE CITY OF STAUNTON, VA
300 GRUBERT AVENUE, STAUNTON, VIRGINIA



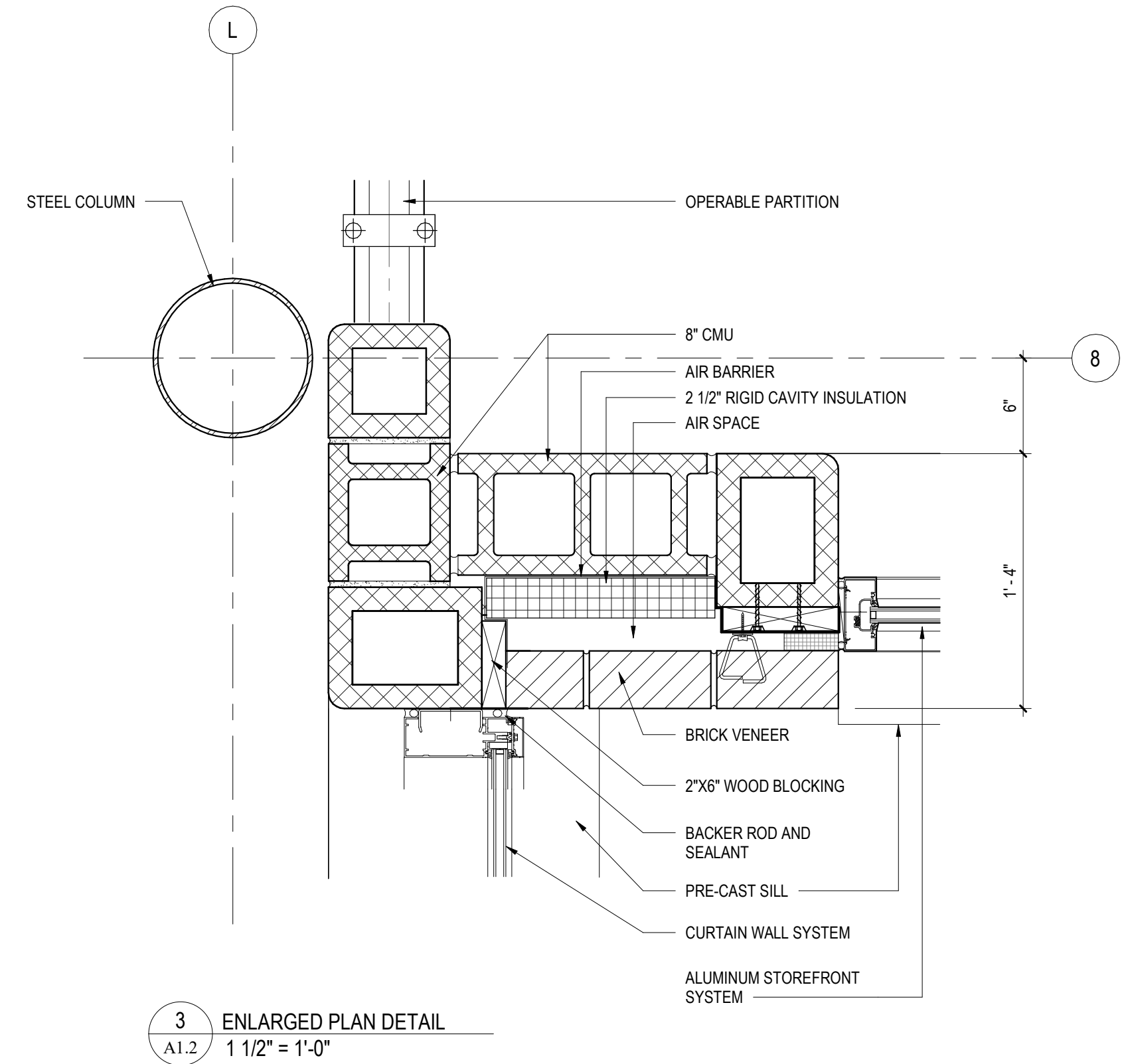
1 FIRST FLOOR PLAN (ALTERNATE #1)
1/8" = 1'-0"

GENERAL NOTES:

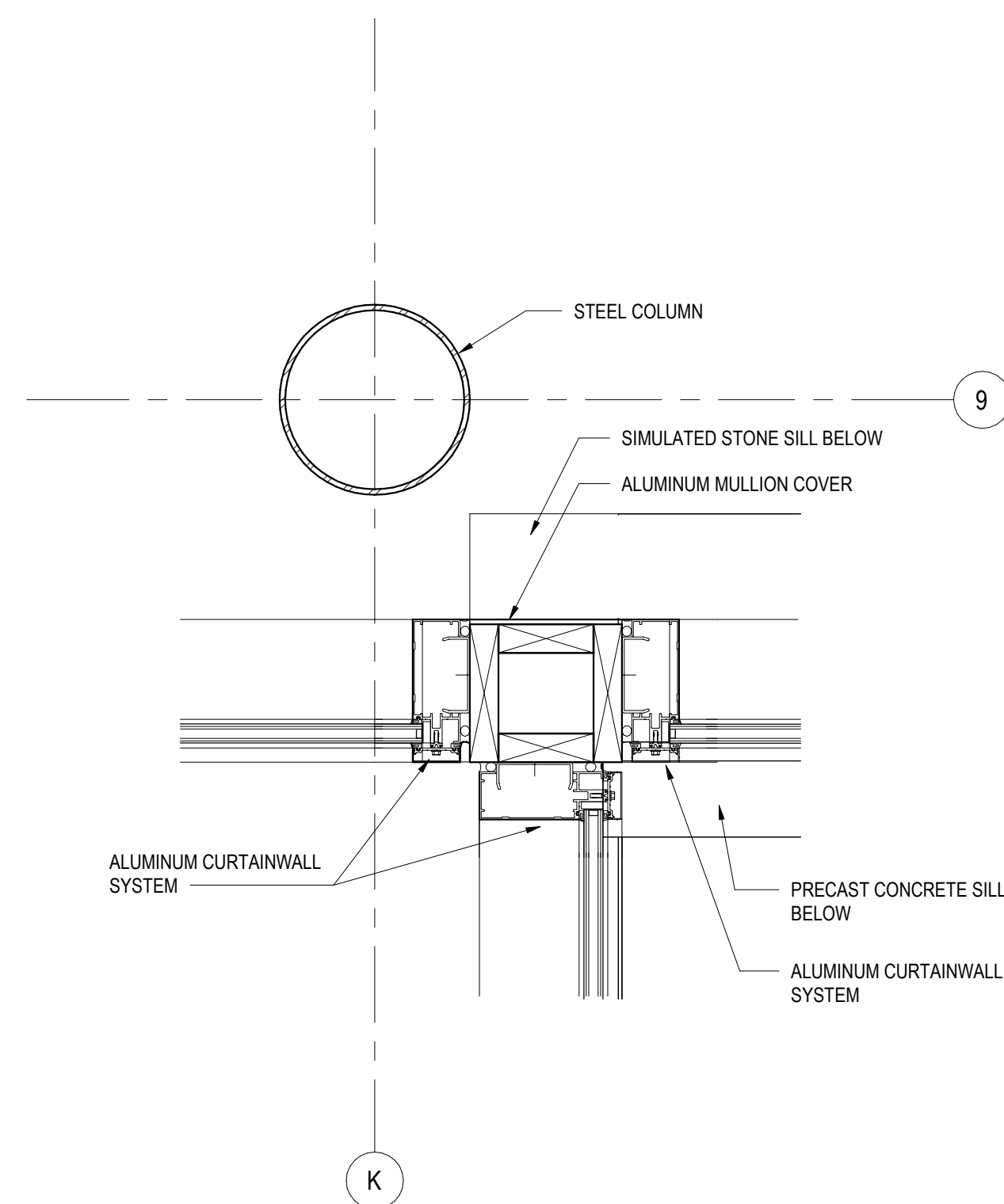
- ALL DOOR JAMBS SHALL BE LOCATED 4" FROM INSIDE CORNER OF WALL ON HINGE SIDE UNLESS OTHERWISE INDICATED.
- COORDINATE LOCATION OF MEP EQUIPMENT, DEVICES, OUTLET BOXES, ETC. WITH OTHER EQUIPMENT AND FINISH SCHEDULE PRIOR TO INSTALLATION.
- ALL EXTERIOR ENTRANCE PADS SHALL BE SLOPED 2% MAX AWAY FROM THE BUILDING TO EDGE OF PAD. REFER TO STRUCTURAL DRAWINGS.
- UNLESS NOTED OTHERWISE, ALL FLOOR DRAINS SHALL BE SET 1/4" MAX. BELOW FIN FLOOR. DISH FIN. FLOOR MIN. OF 24" RADIUS TO TOP OF FLOOR DRAIN. REFER TO PLUMBING DRAWINGS.
- UNLESS NOTED OTHERWISE, WHERE DIFFERENT FLOOR ELEVATIONS OCCUR ON OPPOSITE SIDES OF INTERIOR MASONRY WALLS, PROVIDE COLD FLUID APPLIED WATERPROOFING (CFWP) ON THE BACKFILLED FACE OF WALL. APPLY CFWP FROM UNDERSIDE OF CONC. SLAB TO TOP OF FOOTING BELOW. CFWP NOT TO INTERFERE WITH INSTALLATION OF CONC. SLAB VAPOR BARRIER.
- GC TO PROVIDE ALL LOUVERS COORDINATE WITH MEP DRAWINGS.
- ALL WALL LAYOUT DIMENSIONS ARE FROM FACE OF STUD & FACE OF CMU UNLESS OTHERWISE NOTED.



2 EXPANSION JOINT AT CORNER DETAIL
3/4" = 1'-0"



3 ENLARGED PLAN DETAIL
1 1/2" = 1'-0"



4 ENLARGED PLAN DETAIL
1 1/2" = 1'-0"

REVISIONS

NO.	DATE	NAME	DESCRIPTION OF CHANGES
2	02/28/2024		ADDENDUM #2

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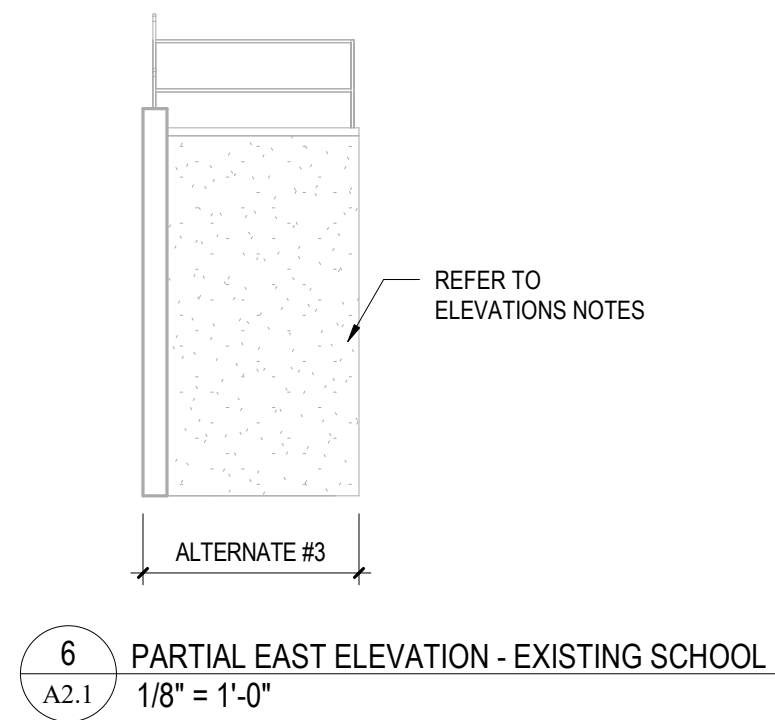
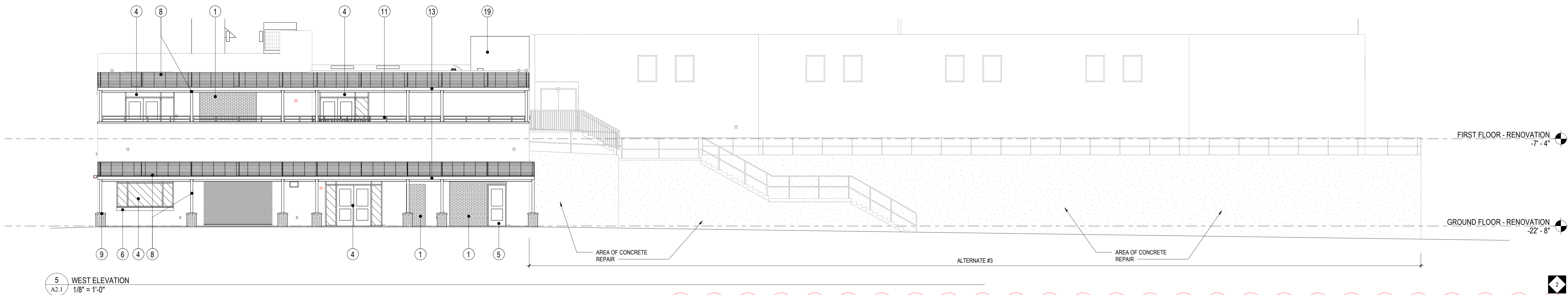
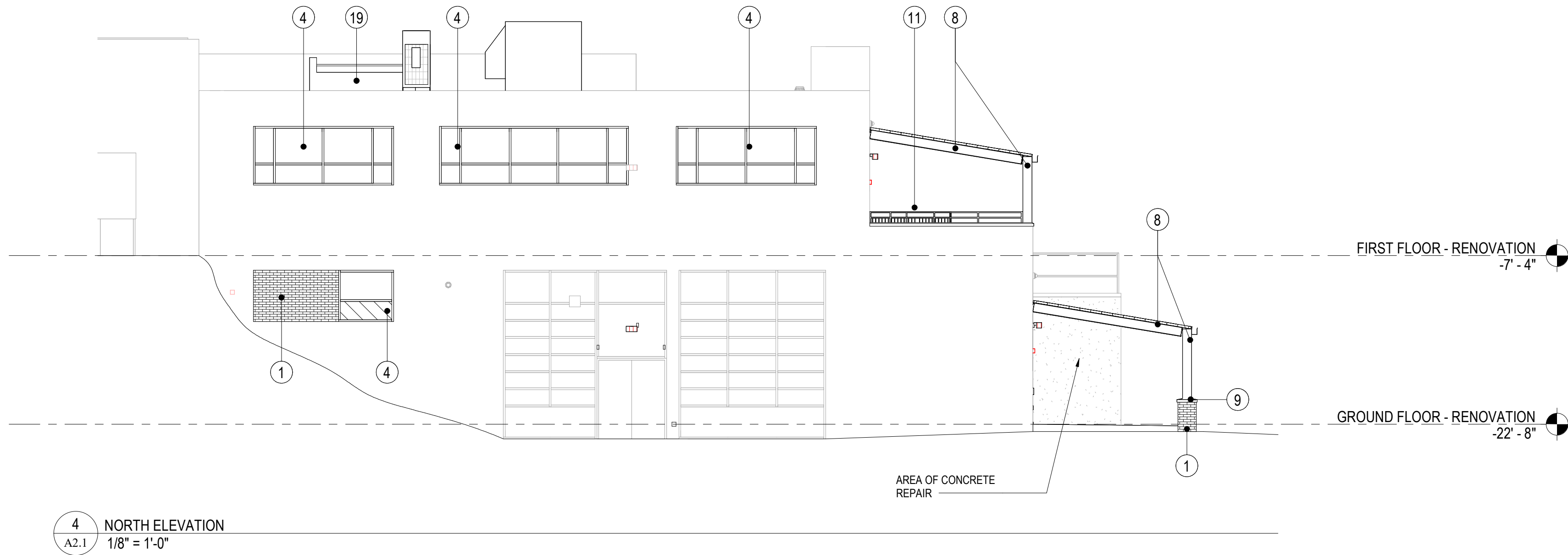
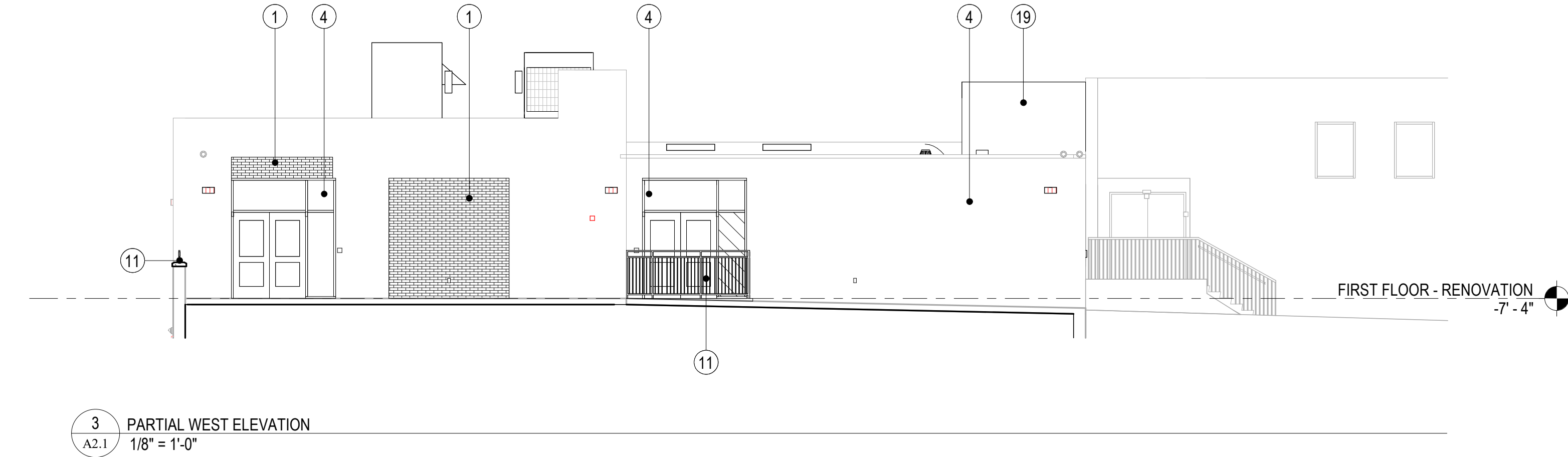
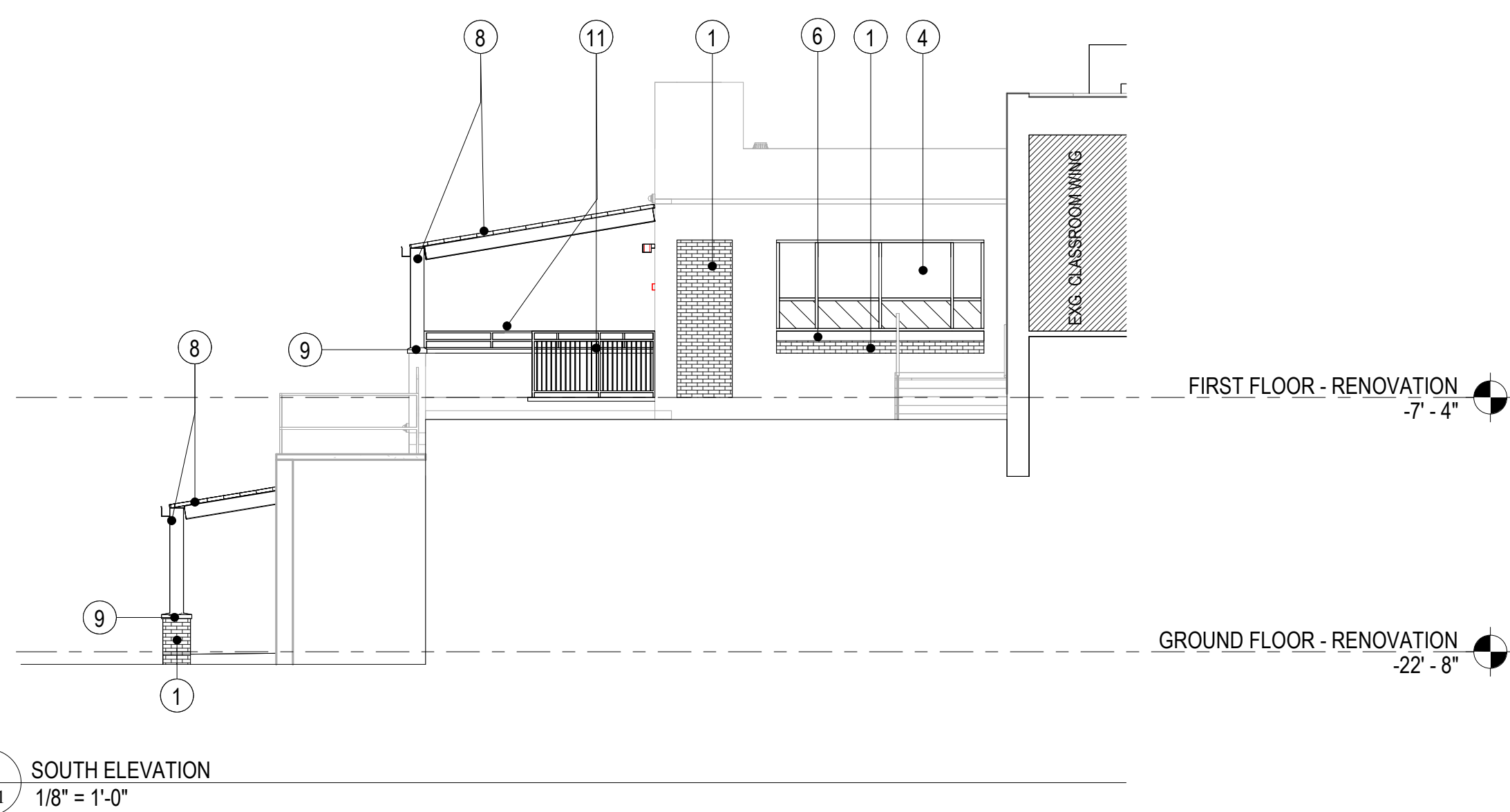
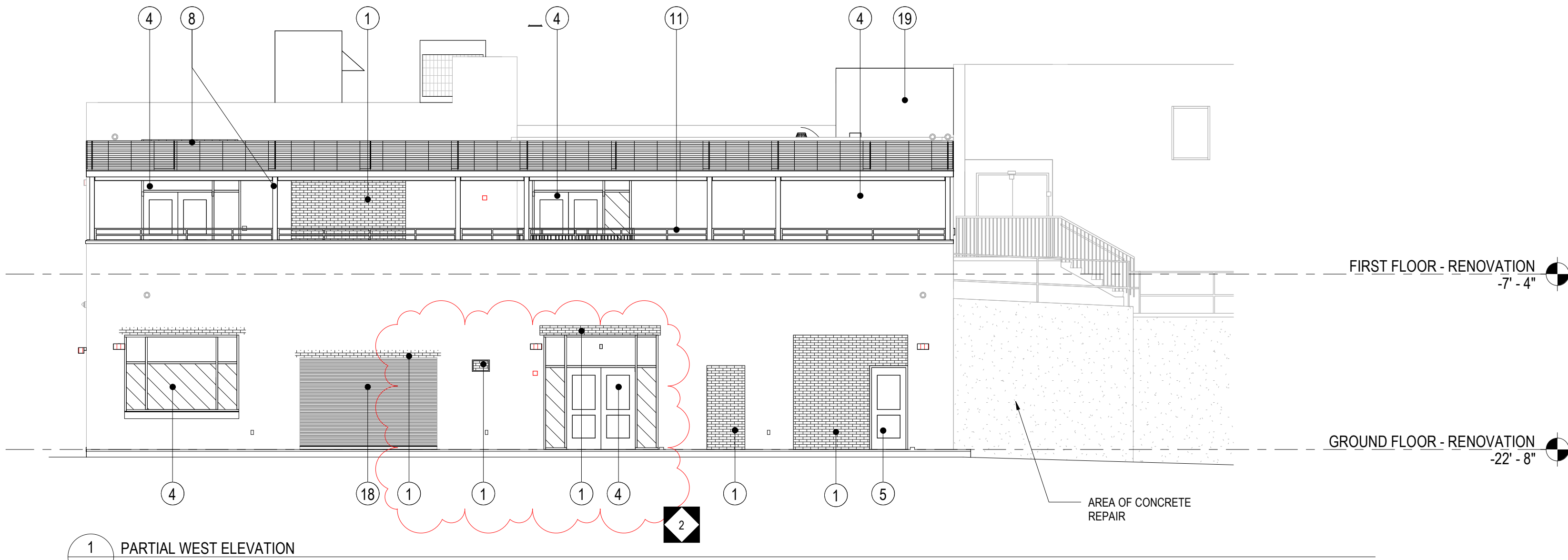
ADDITIONS AND RENOVATIONS
SHELburne MIDDLE SCHOOL
SCHOOL BOARD OF THE CITY OF STAUNTON, VA
300 GRUBERT AVENUE, STAUNTON, VIRGINIA



PARTIAL FIRST FLOOR PLAN -
ADDITION (ALTERNATE #1)
PLOT SCALE:
As indicated
FILENAME:
DATE:
01/24/2023

PROJECT
3636

A1.2



ELEVATION LEGEND	
TAG	ELEVATION NOTE
1	BRICK VENEER TO MATCH EXISTING
2	PREF. METAL PANEL
3	CMU - SPLIT FACE BLOCK - MATCH EXISTING
4	ALUMINUM STOREFRONT SYSTEM
5	HOLLOW METAL DOOR
6	PRECAST CONCRETE SILL
7	METAL FASCIA
8	PRE-ENGINEERED TRANSLUCENT PANEL ROOF W/ ALUMINUM STRUCTURE CANOPY SYSTEM
9	PRECAST CONCRETE CAP
10	PAINTED HSS STEEL COLUMN
11	EXTERIOR METAL RAILING
12	CONTROL JOINT
13	METAL GUTTER SYSTEM
14	METAL DOWNSPOUT SYSTEM
15	EXTERIOR RAISED METAL LETTER SIGNAGE
16	ALUMINUM MECHANICAL SCREEN
17	ALUMINUM CURTAIN WALL SYSTEM
18	OVERHEAD DOOR
19	MEMBRANE ROOFING
20	PRE-ENGINEERED CANOPY SYSTEM
21	PRE-FINISHED METAL CAP FLASHING TO MATCH ALUMINUM PANELS

CONCRETE REPAIR NOTES:

SOUND EXPOSED CONCRETE AT INDICATED REPAIR AREAS BY AUDITORY METHODS (HAMMER) TO DETERMINE THE EXTENT OF UNSOUND CONCRETE. SOUND CONCRETE IS CONCRETE THAT IS FREE OF DELAMINATIONS, CRACKS, FISSURES AND DISINTEGRATION AND HAS ADHESION OF CEMENT PASTE TO AGGREGATE AND REINFORCING.

REMOVE ALL UNSOUND, LOOSE, SPALLING OR DAMAGED CONCRETE FROM CONCRETE WALL AS REQUIRED. SAW CUT EDGES 1/4" DEEP TO PREVENT FEATHER EDGING OF REPAIR MATERIAL. SAW CUT IN A REGULAR SQUARE OR RECTANGULAR PATTERN TO MINIMIZE CORNERS OF PATCH.

COAT ALL EXPOSED, CLEANED REINFORCING ENDS WITH REINFORCING COATING SYSTEM AS SPECIFIED BELOW.

PREPARE THE SURFACE OF THE CONCRETE TO RECEIVE A NEW PATCH BY USING SURFACE CONDITIONERS OR OTHER ACCEPTABLE METHODS IN STRICT ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS AS REQUIRED TO INSURE PROPER BONDING OF THE CONCRETE PATCH.

PATCH AND BUILD UP EXISTING CONCRETE AS REQUIRED WITH THE NON-SAG CONCRETE REPAIR MORTAR AS SPECIFIED. WHERE MULTIPLE LIFTS ARE REQUIRED TO OBTAIN THE DEPTH OF THE PATCH, SCORE THE SURFACE OF THE PROCEEDING LIFT PER MANUFACTURER'S RECOMMENDATIONS TO INSURE BOND. THE FINAL LIFT SHALL BE TINTED TO MATCH GENERAL COLOR OF EXISTING CONCRETE OR HAVE EXPOSED AGGREGATE TO MATCH EXISTING AGGREGATE AS INDICATED.

CURE CONCRETE PATCH BY SUFFICIENT MEANS AND SUFFICIENT DURATION AS REQUIRED IN STRICT ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS AND ACI RECOMMENDATIONS/STANDARDS TO OBTAIN A SOUND MONOLITHIC PATCH.

PRODUCT LIST:

REINFORCING COATING AND BONDING AGENT
SIKA 32 HI-MOD, EUCLID DURAL 452 GEL, FIVE STAR BONDING ADHESIVE, OR APPROVED EQUAL
ASTM C881 TYPE V, EPOXY-CEMENTITIOUS, SOLVENT-FREE SPECIFICALLY FORMULATED AS A BONDING AGENT AND AN ANTI-CORROSION COATING. INDEPENDENT TEST DATA SHALL BE SUPPLIED ON PROPERTIES AS A PROTECTIVE REINFORCEMENT COATING. A TWO-COMPONENT POLYMERMODIFIED CEMENTITIOUS REPAIR.

CONCRETE REPAIR MORTAR
SIKAQUICK VOH, EUCLID EUCOREPAIR V100, MASTEREMACO N425, OR APPROVED EQUAL
MORTAR WITH LATEX ADDITIVES ALLOWING HIGH BUILD APPLICATIONS ON VERTICAL AND OVERHEAD REPAIRS. COMPRESSIVE STRENGTH = 5000 PSI MINIMUM AT 28 DAYS.

CAULKING (OR SEALANTS)
QUICKRETE POLYURETHANE CONCRETE CRACK SEALANT,
SIKA PRO SELECT MORTAR FIX,
LOCTITE PL CONCRETE NON-SAG POLYURETHANE SEALANT,
OR APPROVED EQUAL

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REVISIONS

NO.	DATE	NAME	DESCRIPTION OF CHANGES
2	02/28/2024		ADDENDUM #2

CRABTREE ROHRBAUGH & ASSOCIATES - ARCHITECTS

250 WEST MAIN STREET, SUITE 200
CHARLOTTESVILLE VA 22902
434-975-7262

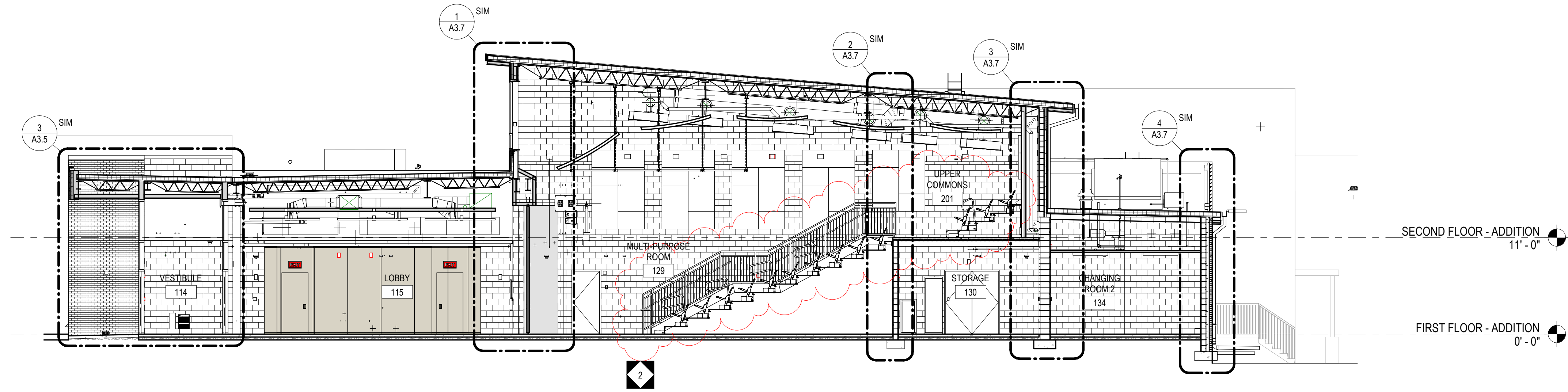
MECHANICSBURG, PENNSYLVANIA
TOWSON, MARYLAND
WHITE SULPHUR SPRINGS, WEST VIRGINIA

ADDITIONS AND RENOVATIONS
SHELburne MIDDLE SCHOOL
SCHOOL BOARD OF THE CITY OF STAUNTON, VA
300 GRUBERT AVENUE, STAUNTON, VIRGINIA

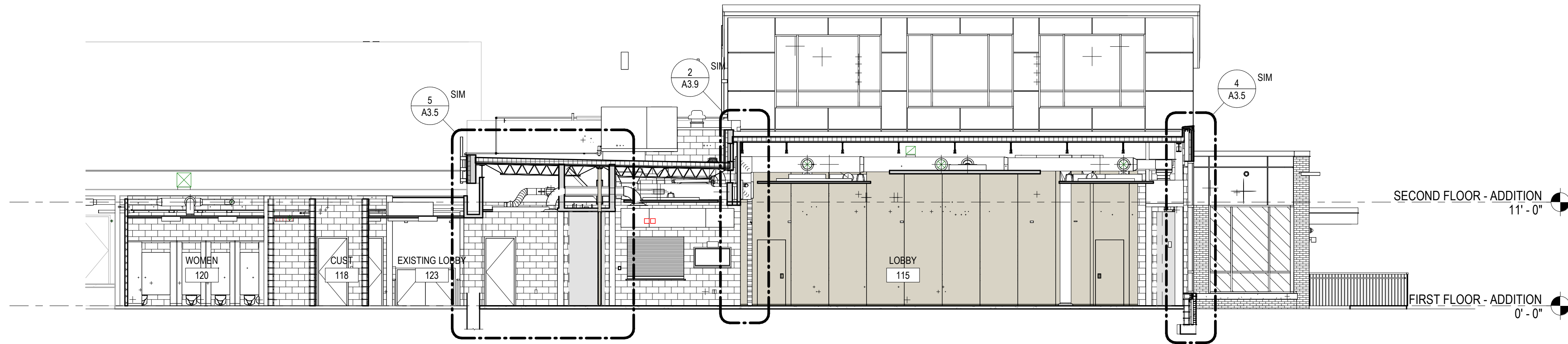


EXTERIOR ELEVATIONS -
RENOVATION

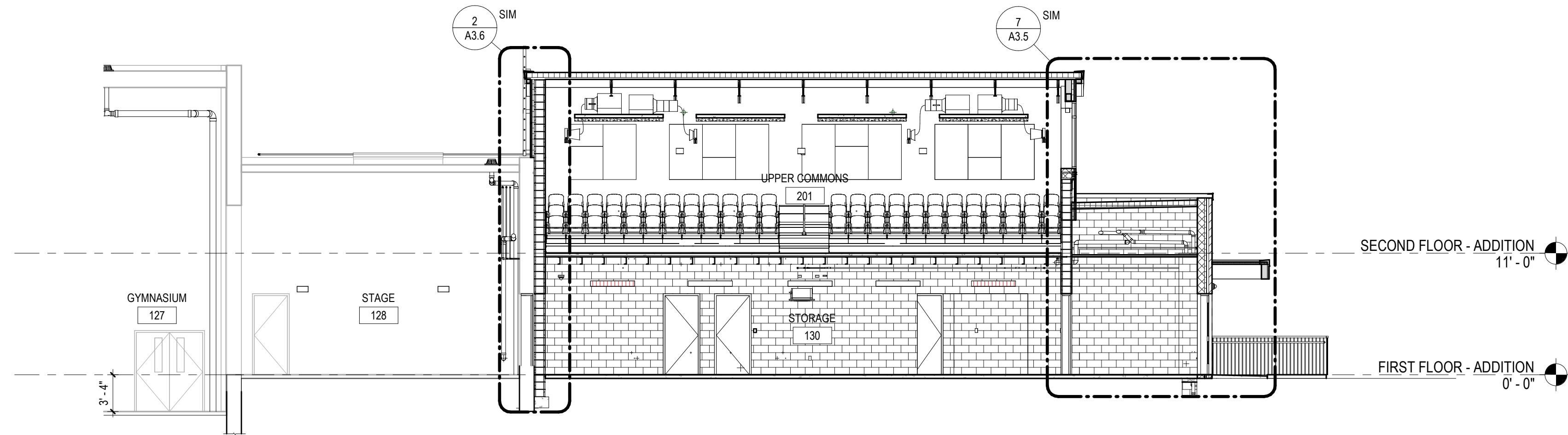
PROJECT
3636
A2.1



1 BUILDING SECTION
1/8" = 1'-0"



2 BUILDING SECTION
1/8" = 1'-0"



3 BUILDING SECTION
1/8" = 1'-0"

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REVISIONS

NO.	MM-DD-YY	NAME	DESCRIPTION OF CHANGES
2	02/28/2024		ADDENDUM #2

CRABTREE ROHRBAUGH & ASSOCIATES - ARCHITECTS

250 WEST MAIN STREET, SUITE 200
CHARLOTTESVILLE VA 22902
434-975-7262

MECHANICSBURG, PENNSYLVANIA
TOWSON, MARYLAND
WHITE SULPHUR SPRINGS, WEST VIRGINIA
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ADDITIONS AND RENOVATIONS
SHELburne MIDDLE SCHOOL
SCHOOL BOARD OF THE CITY OF STAUNTON, VA
300 GRUBERT AVENUE, STAUNTON, VIRGINIA

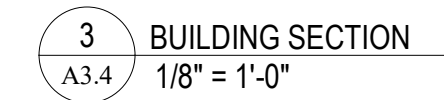
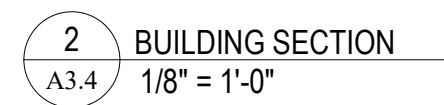
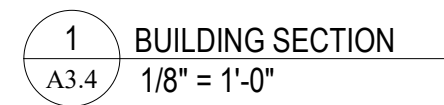


BUILDING SECTIONS -
ADDITION (ALTERNATE #1)

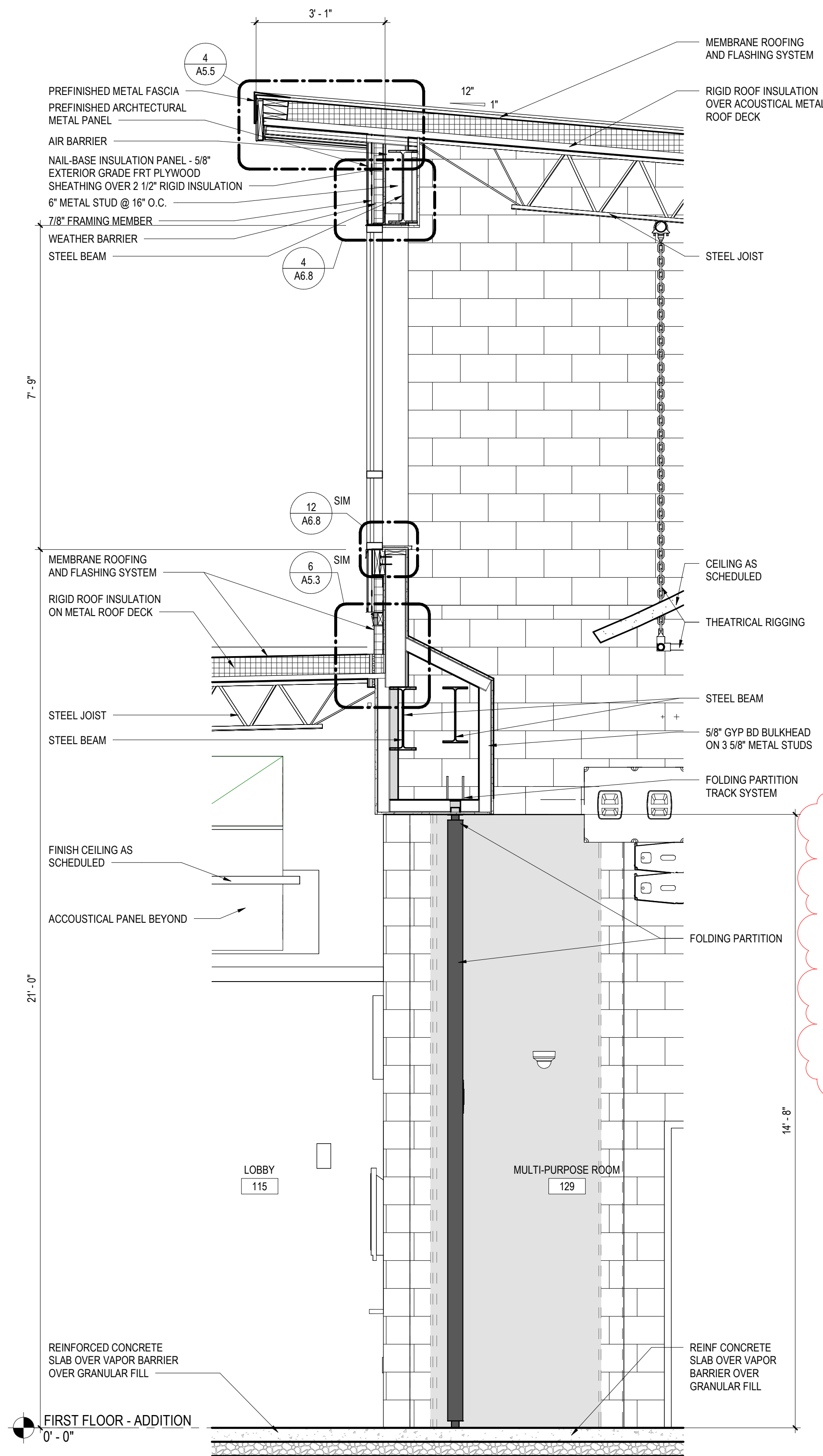
PLOT SCALE:
1/8" = 1'-0"
FILENAME:
DATE:
01/24/2023

PROJECT
3636

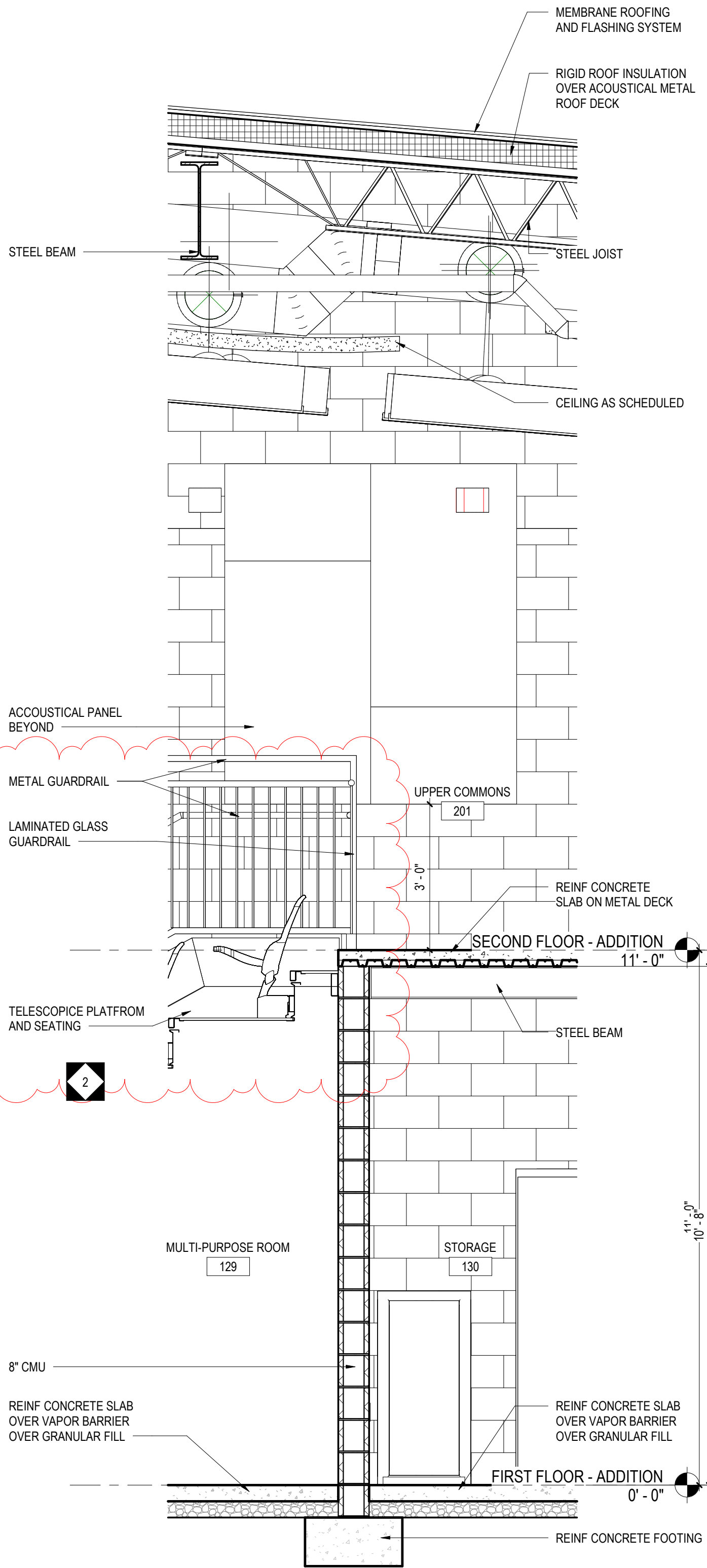
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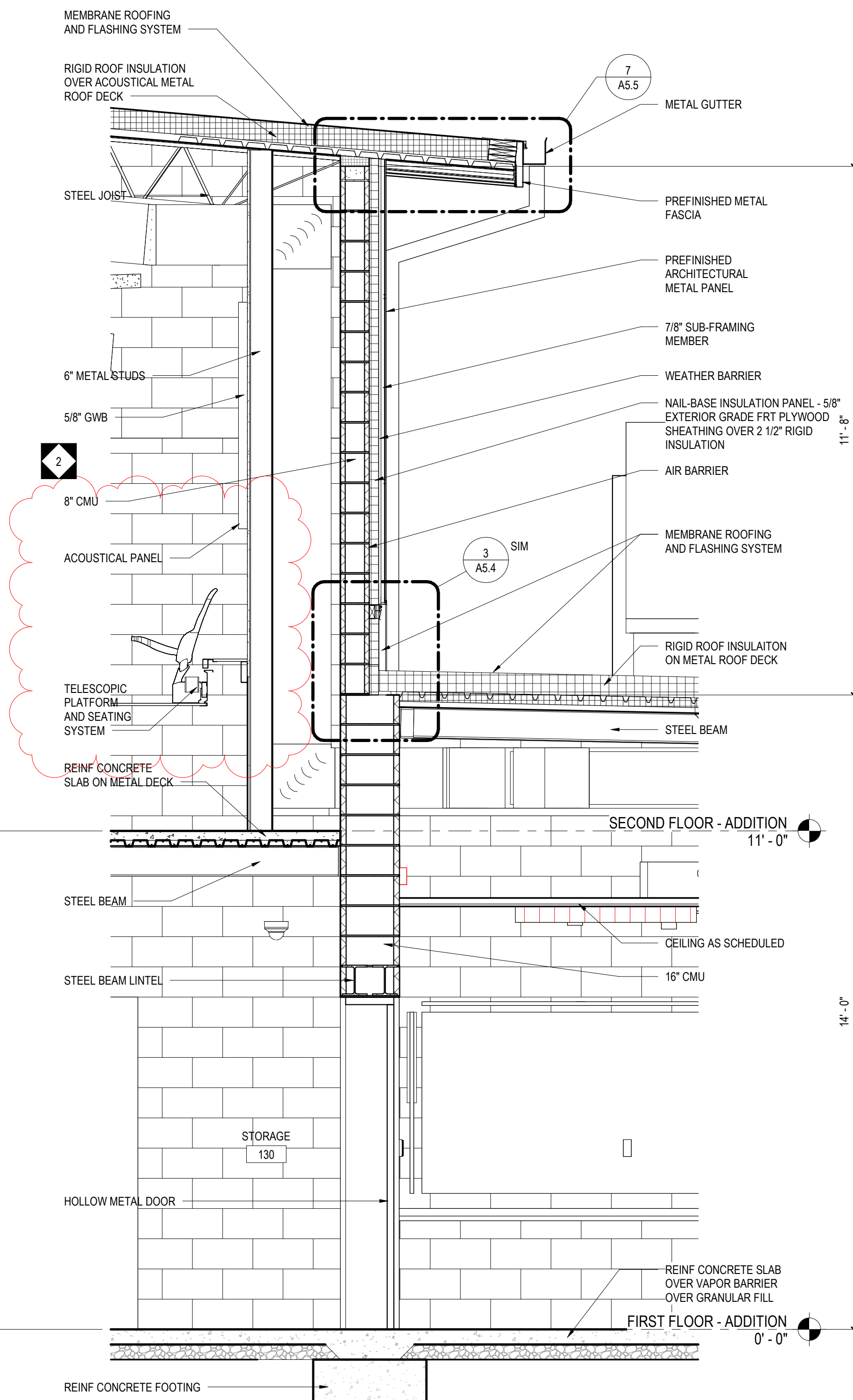
PROJECT
3636
A3.4



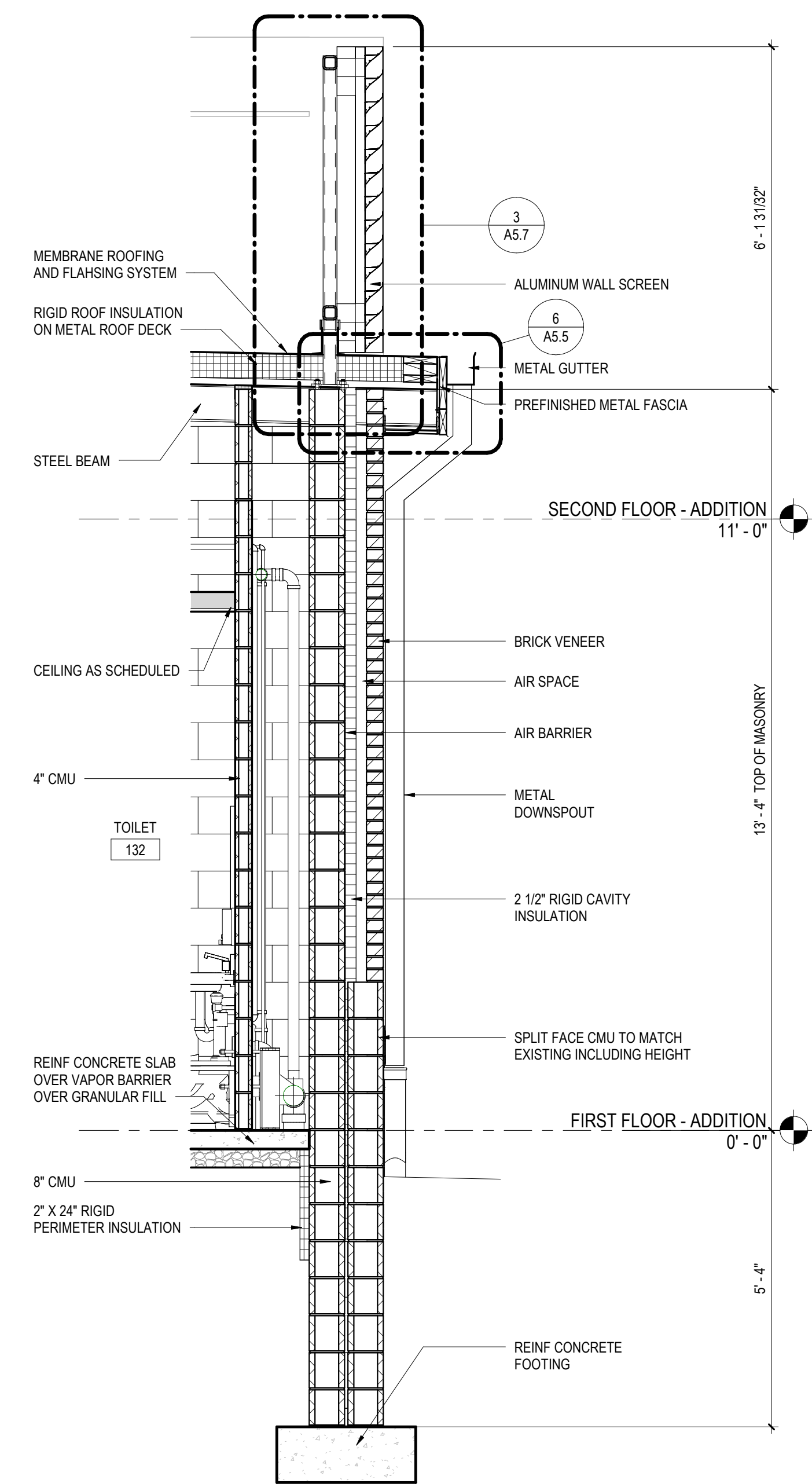
1 WALL SECTION
1/2" = 1'-0"

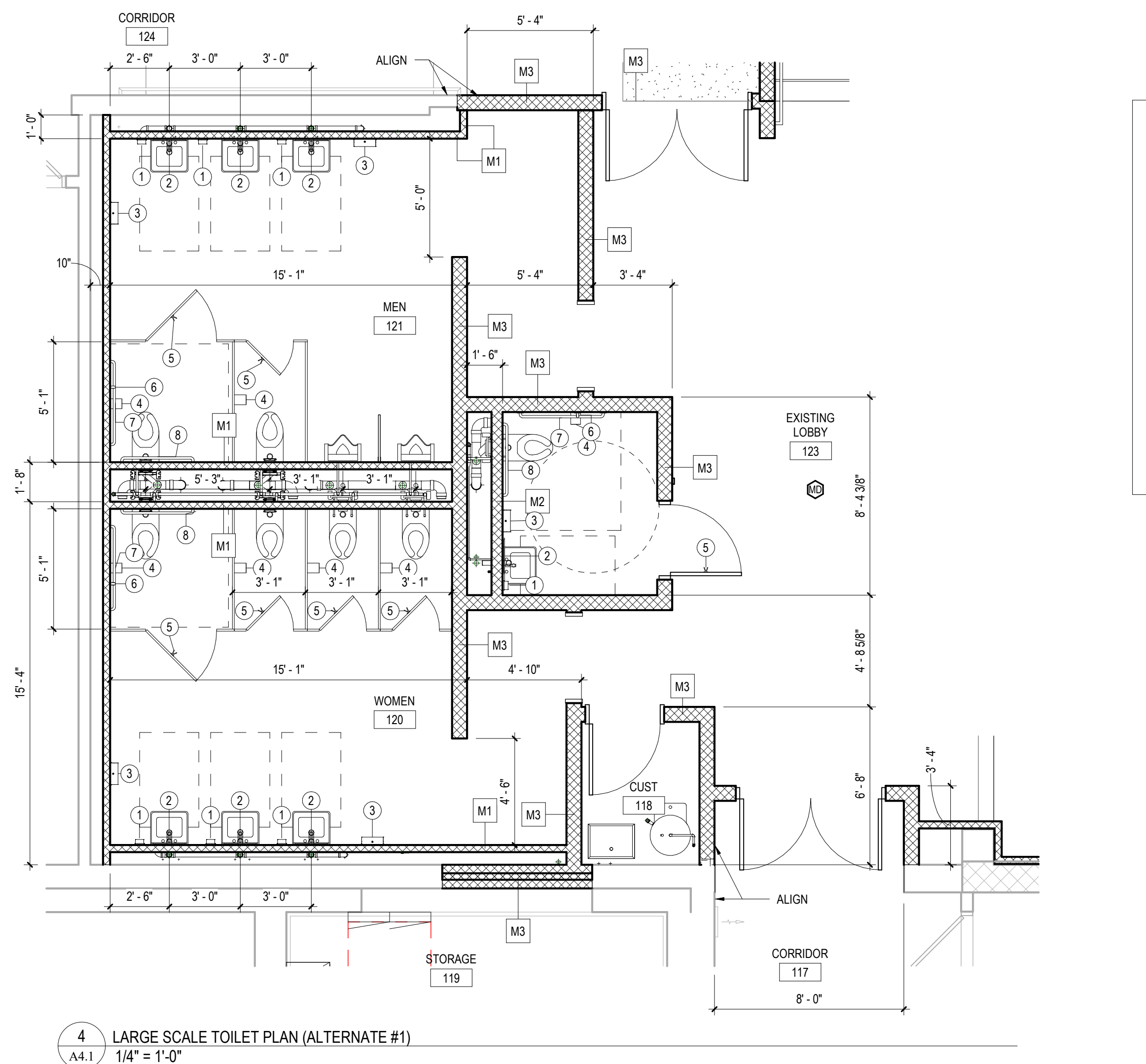
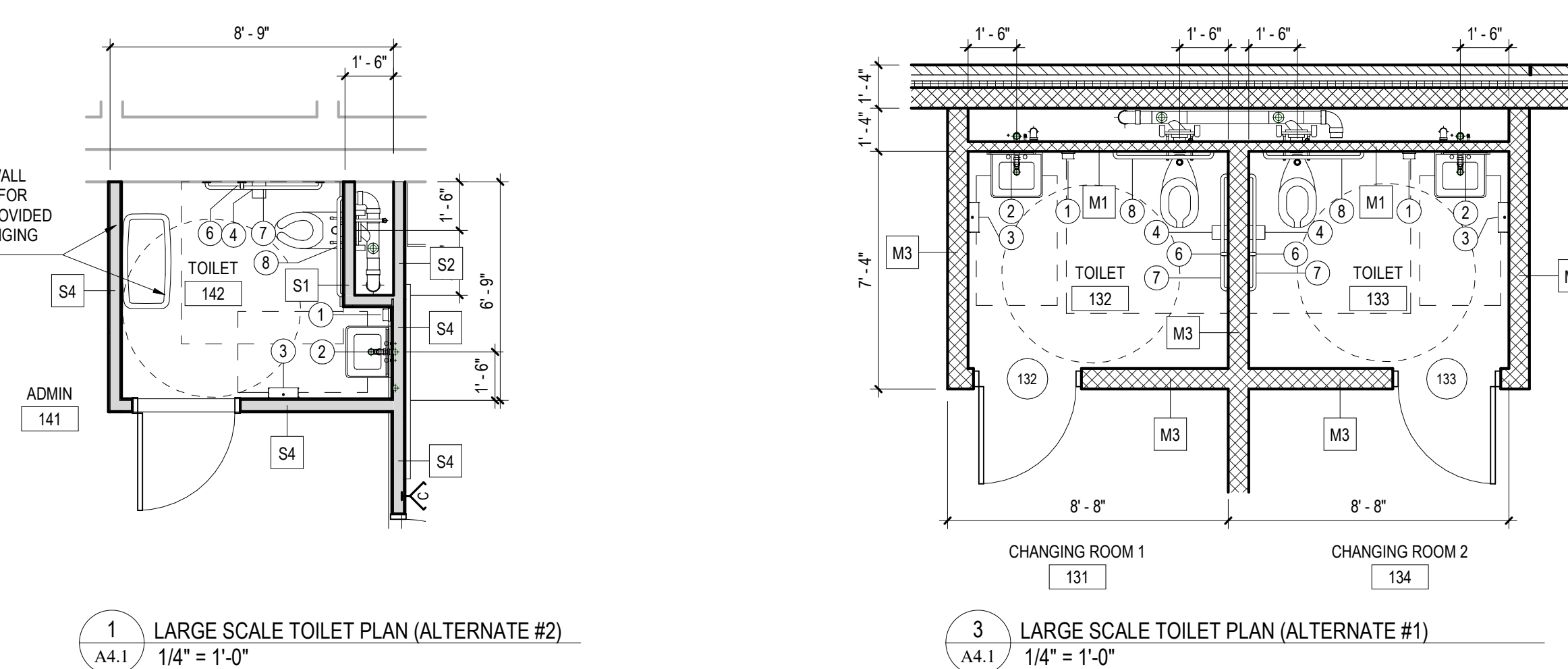
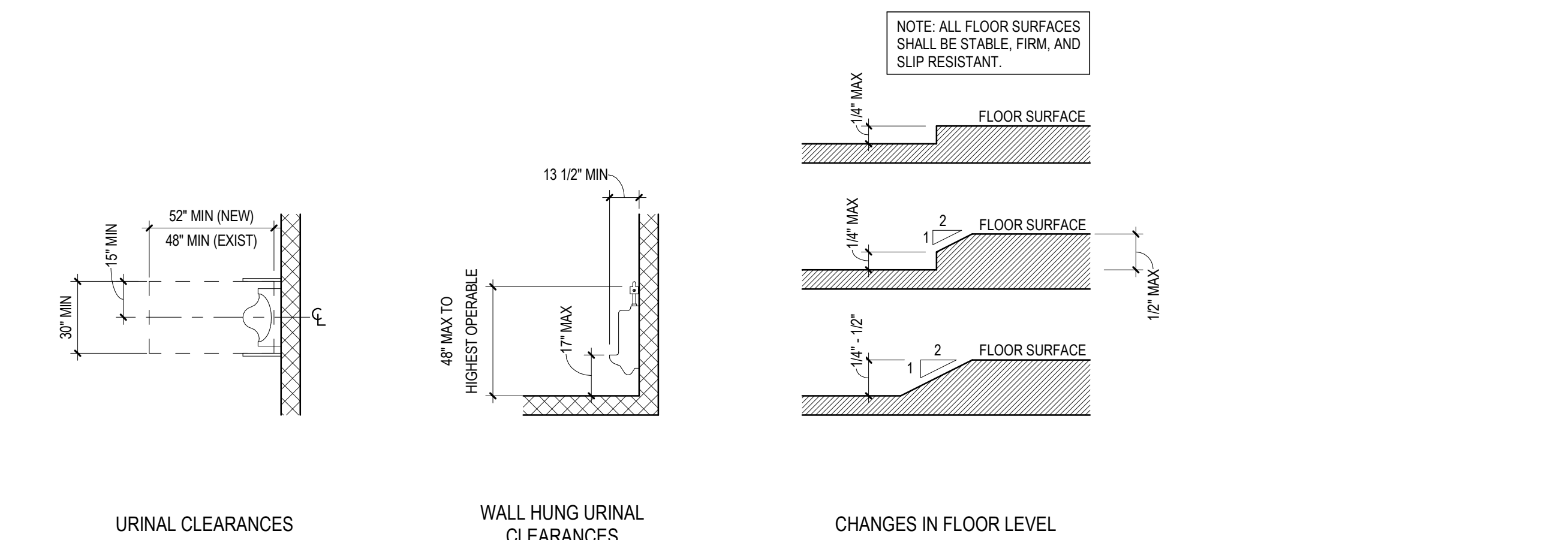
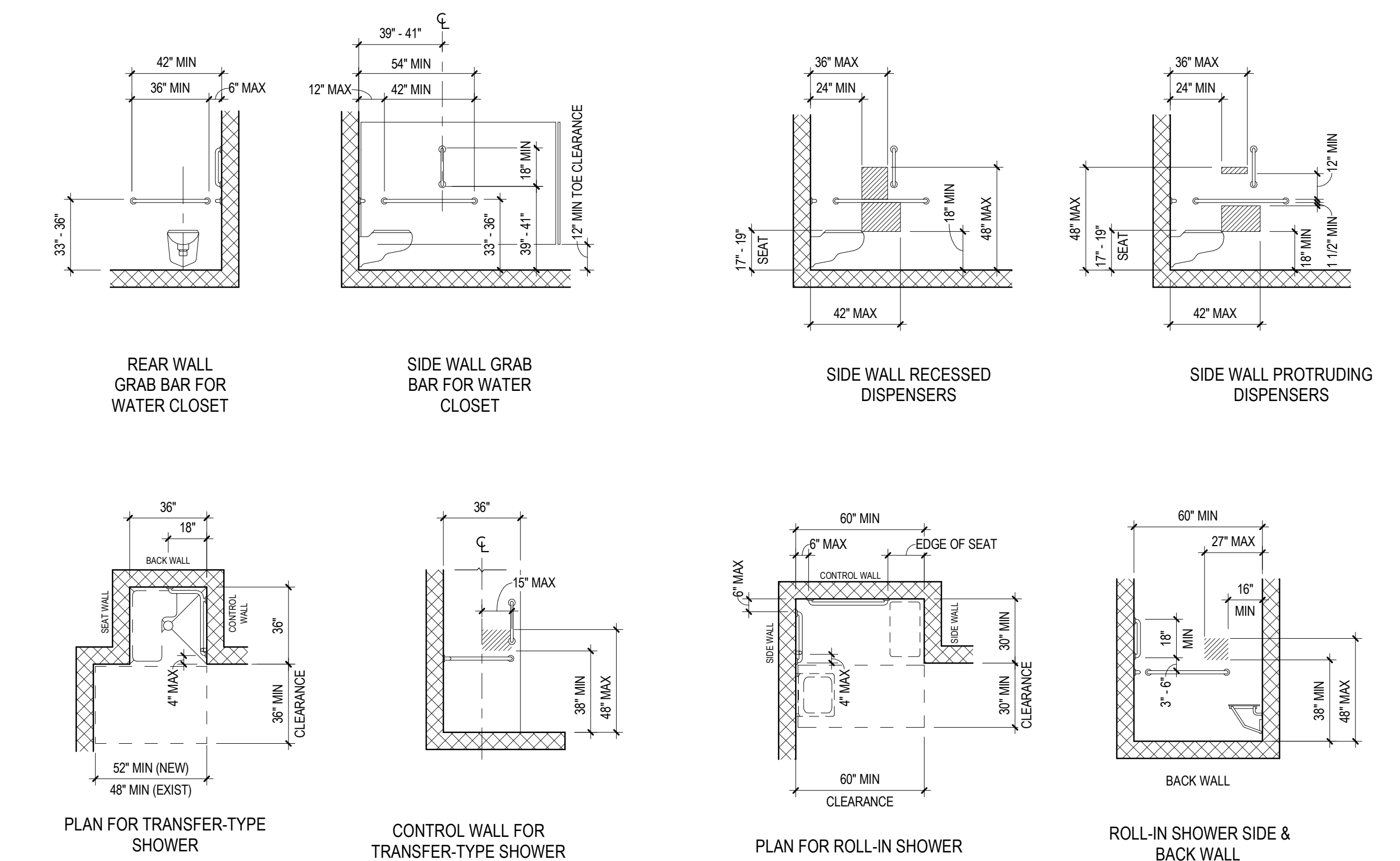
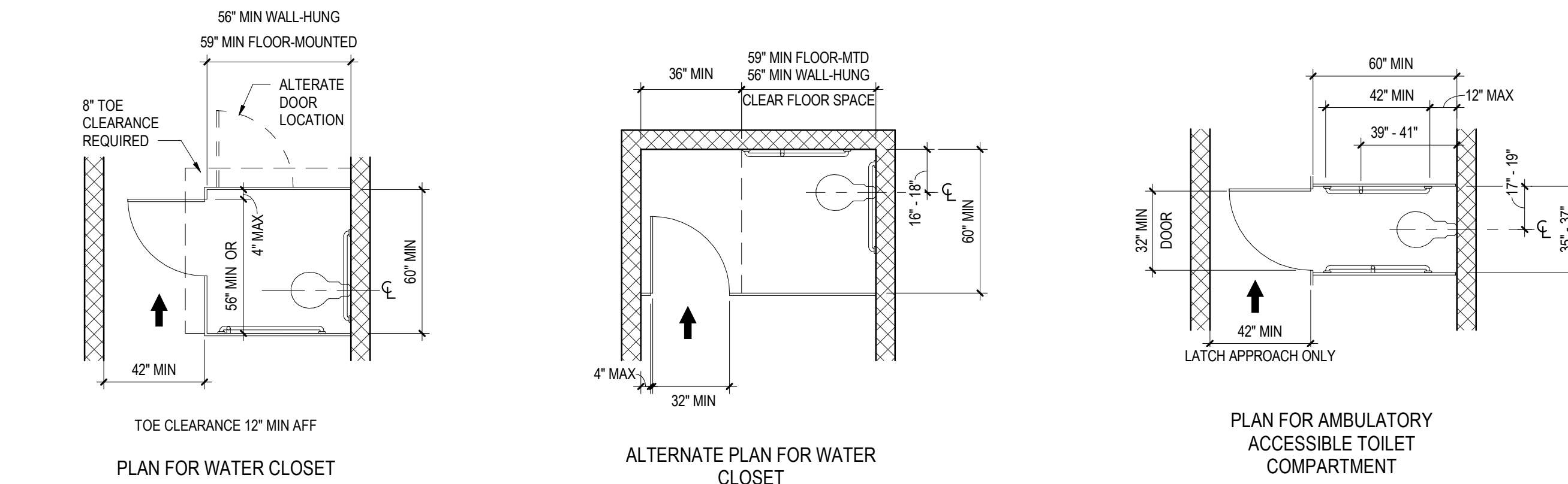
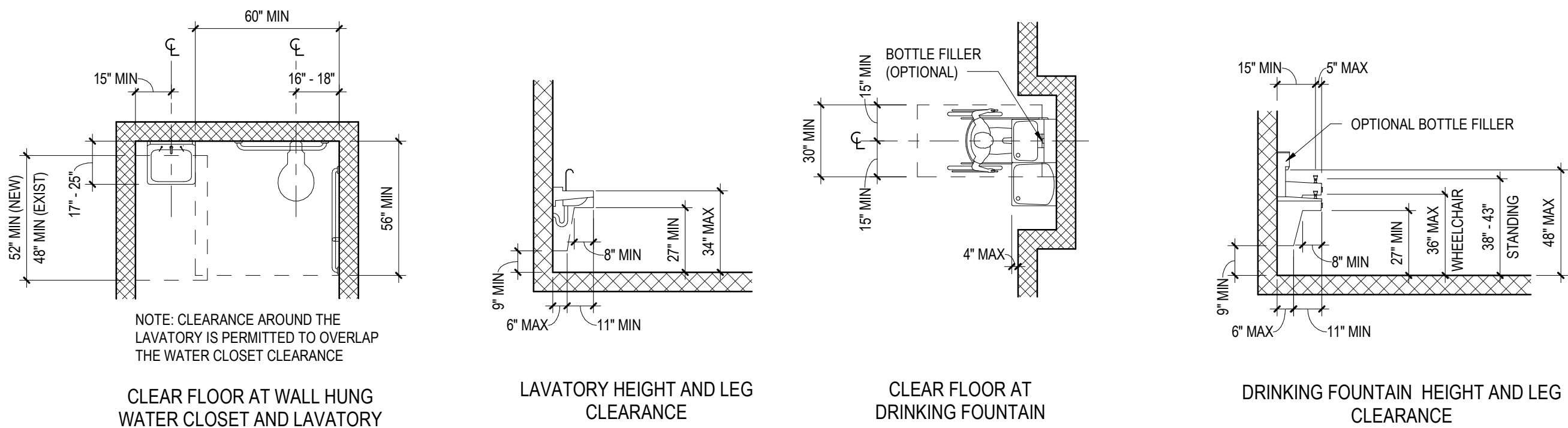


2 WALL SECTION
1/2" = 1'-0"



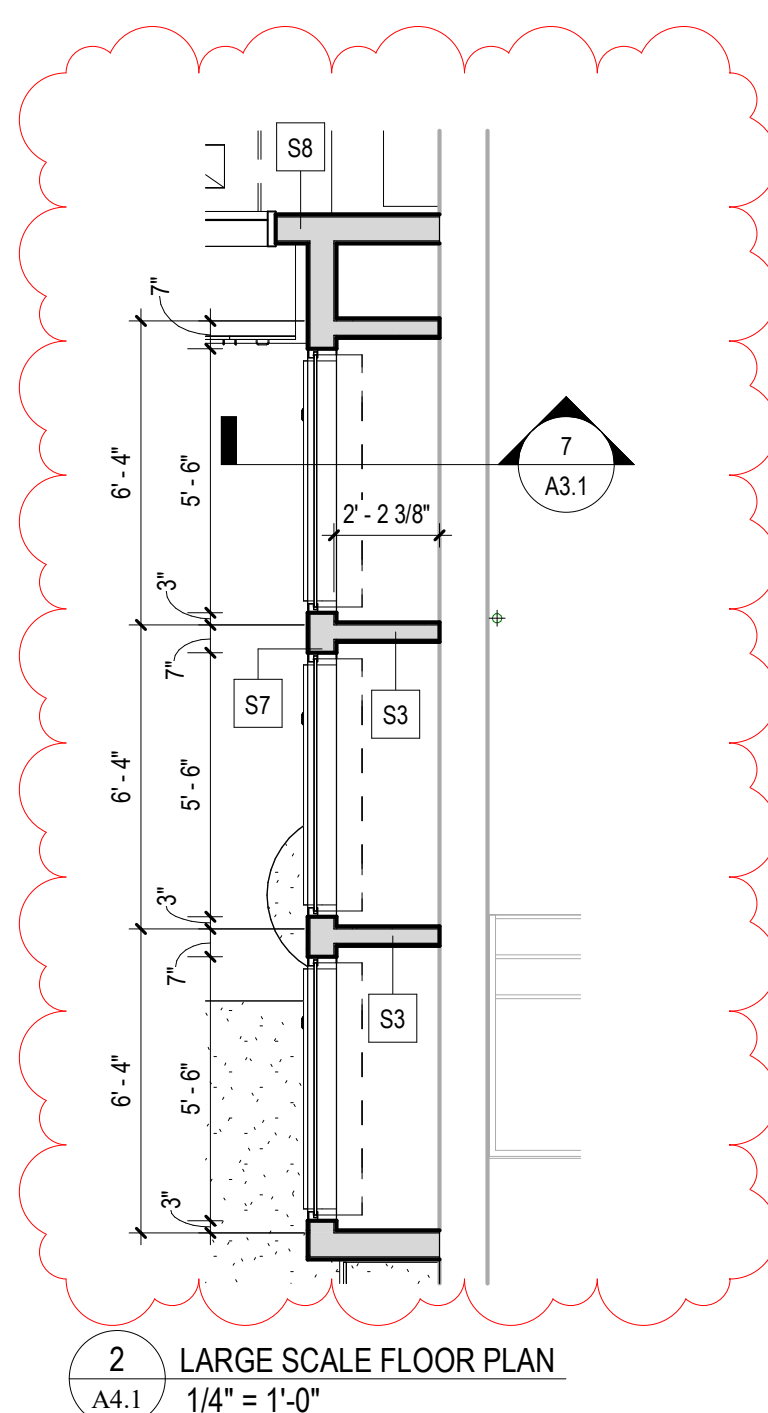
3 WALL SECTION
1/2" = 1'-0"





- GENERAL NOTES:**
- ACCESSIBLE FIXTURES ARE INDICATED WITH THE REQUIRED CLEAR FLOOR SPACE CLEARANCES FOR ALL ACCESSIBLE ROUTES & MANEUVERING CLEARANCES.
 - PLUMBING FIXTURE ROUGH-IN DIMENSIONS & TOILET PARTITION LAYOUT DIMENSIONS ARE FROM THE WALL FINISH MATERIAL.
 - PROVIDE WOOD BLOCKING IN STUD WALLS FOR ALL TOILET ACCESSORIES.
 - TOILET PARTITION DIMENSIONS ARE TO THE PANEL CENTERLINE UNLESS NOTED OTHERWISE. MINIMUM CLEAR DIMENSIONS MUST BE PROVIDED WHERE NOTED.
 - COORDINATE ALL WALL FINISHES WITH THE ROOM FINISH SCHEDULE.
 - CONTRACTOR TO CONFIRM WITH THE OWNER'S REPRESENTATIVE THE LOCATION OF ALL SURFACE-MOUNTED TOILET ROOM ACCESSORIES PRIOR TO INSTALLATION.
 - URINAL PARTITIONS SHALL BEGIN AT A HEIGHT NO MORE THAN 12" FROM AND EXTEND NOT LESS THAN 60" ABOVE THE FINISHED FLOOR SURFACE. URINAL PARTITIONS SHALL EXTEND FROM THE WALL SURFACE AT EACH SIDE OF THE URINAL A MINIMUM OF 18".
 - ACCESSIBLE LOCKERS ARE INDICATED AS "1" AT DOUBLE TIER LOCKERS, ONLY THE BOTTOM TIER IS REQUIRED TO BE ACCESSIBLE. FOR FOUR TIER LOCKERS, ONLY THE BOTTOM TWO TIERS ARE REQUIRED TO BE ACCESSIBLE.

TOILET ACCESSORY SCHEDULE			
No.	DESCRIPTION	MOUNTING	MANUFACTURER MODEL
1	URINAL SCREEN	AS SPECIFIED	-
2	SURFACE MOUNTED SOAP DISPENSER	PUSH BUTTON @ 44" MAX AFF	BOBRICK B-2111
3	MIRROR 18" x 30" w/ SS FRAME	40" AFF TO BOTTOM EDGE OF REFLECTING SURFACE	BOBRICK B-165 (1830)
4	SURFACE MOUNTED PAPER TOWEL DISPENSER	48" MAX TO OUTLET OF DISPENSER	BOBRICK B-2860
5	18" GRAB BAR (VERTICAL)	39" MIN - 41" MAX AFF TO BOTTOM OF GRAB BAR	BOBRICK B-5805 x 18
6	42" GRAB BAR (HORIZONTAL)	33" MIN - 36" MAX AFF TO TOP OF GRIPPING SURFACE	BOBRICK B-5805 x 42
7	36" GRAB BAR (HORIZONTAL)	33" MIN - 36" MAX AFF TO TOP OF GRIPPING SURFACE	BOBRICK B-5805 x 36



REVISIONS		
NO.	DATE	DESCRIPTION OF CHANGES
2	02/28/2024	ADDENDUM #2

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ADDITIONS AND RENOVATIONS
 SHELburne MIDDLE SCHOOL
 SCHOOL BOARD OF THE CITY OF STAUNTON, VA
 300 GRUBERT AVENUE, STAUNTON, VIRGINIA



LARGE SCALE TOILET PLANS - RENOVATION AND ADDITION

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

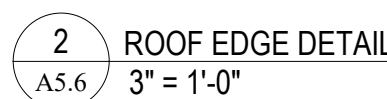
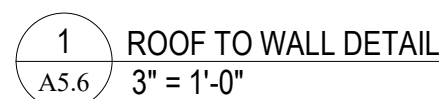
FILENAME:

DATE:
01/24/2023

PROJECT
3636

A4.1

A4.5

[illegible]

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DETAILS - ADDITION

PLOT SCALE:
3" = 1'-0"

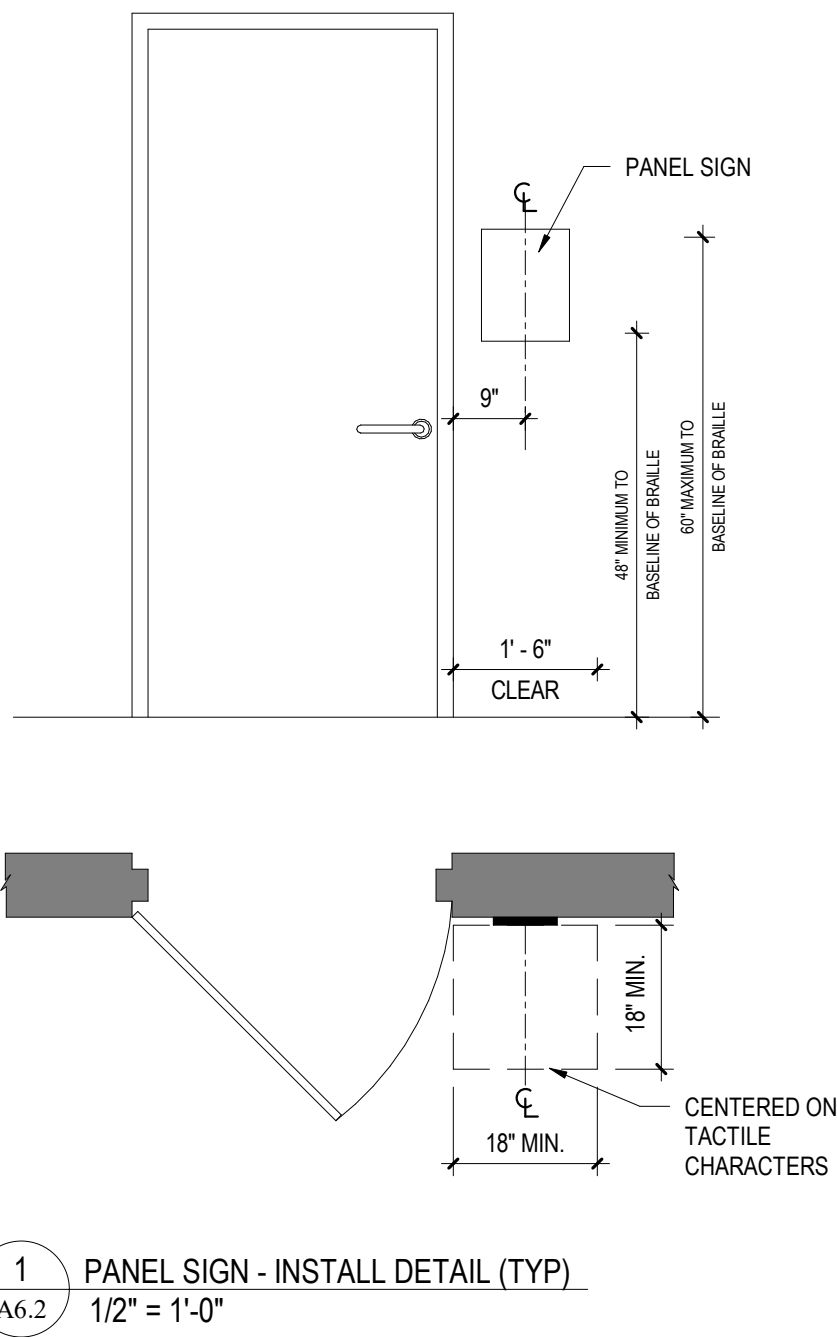
FILENAME

DATE: 01/24/2023

PROJECT
3636

A5.6

SIGNAGE SCHEDULE											
ORIGINAL		SIGN TO READ		SIGN TYPE				DIRECTIONAL ARROW			
ROOM#	ARCHITECTURAL ROOM NAME	ROOM#	ROOM NAME	TYPE	ADA	FEMALE	MALE	TRANSGENDER	LEFT	RIGHT	REMARKS
006	CORRIDOR	TBD	ROBOTICS	1A							1
153	CORRIDOR	--	--	--							0
FIRST FLOOR											
98	CAFETERIA	--	--	--							0
100	CLOSET	--	--	--							0
101	COLLAB	--	--	--							0
102	CORRIDOR	--	--	--							0
103	CORRIDOR	--	--	--							0
104	EXISTING CORRIDOR	--	--	--							0
105	CORRIDOR	--	--	--							0
106	STAIR	--	STAIRS	3A							1
107	SCIENCE LAB	TBD	SCIENCE LAB	1A							1
108	SCIENCE PREP	TBD	PREP ROOM	1A							2
109	SCIENCE LAB	TBD	SCIENCE LAB	1A							1
110	BUSINESS	--	--	--							0
111	BOARD ROOM	TBD	BUSINESS LAB	1A							1
112	EXISTING IDF	TBD	DATA	1A							1
116	CLASSROOM	--	--	--							0
117	CORRIDOR	--	--	--							0
119	STORAGE	--	--	--							0
127	GYMNASIUM	--	--	--							0
138	VESTIBULE	--	--	--							0
139	SCIENCE LAB	TBD	SCIENCE LAB	1A							1
GROUND FLOOR											
001	CORRIDOR	--	--	--							0
002	STEM LAB	TBD	LAB	1A							1
003	EXISTING MECHANICAL	TBD	MECHANICAL	1A							1
004	DESIGN CLASSROOM	TBD	DESIGN LAB	1A							1
005	ROBOTICS	--	--	--							0
006	ELEVATOR	--	ELEVATOR	1A							1
007	STORAGE	TBD	STORAGE	1A							1
SIGNAGE SCHEDULE - ALTERNATE BID											
ORIGINAL		SIGN TO READ		SIGN TYPE				DIRECTIONAL ARROW			
ROOM#	ARCHITECTURAL ROOM NAME	ROOM#	ROOM NAME	TYPE	ADA	FEMALE	MALE	TRANSGENDER	LEFT	RIGHT	REMARKS
140	VESTIBULE	--	--	--							0
141	ADMIN	TBD	MAIN OFFICE	1A							2
142	TOILET	--	RESTROOM	2A	•	•	•	•			1
143	CONFERENCE ROOM	TBD	CONFERENCE ROOM	1C							1
144	CORRIDOR	TBD	OFFICE	1A							2
145	WORK ROOM	TBD	WORK ROOM	1B							1
146	TOILET	--	RESTROOM	2A	•	•	•	•			1
147	NURSE	--	--	--							0
148	NURSE WAITING	TBD	NURSE	1B							1
149	OFFICE	TBD	OFFICE	1A							1
150	CORRIDOR	TBD	MAIN OFFICE	1A							1
151	GUIDANCE RECEPTION	TBD	GUIDANCE	1A							1
152	OUTSIDE COUNSELING	TBD	CONFERENCE ROOM	1C							1
160	CORRIDOR	--	--	--							0
FIRST FLOOR											
114	VESTIBULE	--	--	--							0
115	LOBBY	--	--	--							0
118	CUST	TBD	CUSTODIAL	1A							1
120	WOMEN	--	WOMEN	2A	•	•					1
121	MEN	--	MEN	2A	•		•				1
122	FAM. TOIL.	--	FAMILY RESTROOM	2B	•	•	•				1
123	EXISTING LOBBY	--	--	--							0
124	CORRIDOR	--	--	--							0
125	STAGE VESTIBULE	TBD	STAGE	1A							1
126	CONCESSION	TBD	CONCESSION	1A							1
128	STAGE	--	--	--							0
129	MULTI-PURPOSE ROOM	--	--	--							0
130	STORAGE	TBD	STORAGE	1A							2
131	CHANGING ROOM 1	TBD	CHANGING ROOM	1A							1
132	TOILET	--	RESTROOM	2A							1
133	TOILET	--	RESTROOM	2A							1
134	CHANGING ROOM 2	TBD	CHANGING ROOM	1A							1
135	STORAGE	TBD	STORAGE	1A							1
136	CORRIDOR	--	--	--							0
SECOND FLOOR											
201	UPPER COMMONS	--	--								0



- GENERAL NOTE IN REFERENCE TO A6.2 DRAWING
1. INSTALL SIGNS LEVEL, PLUMB, AND AT THE HEIGHT INDICATED, WITH SIGN SURFACES FREE FROM DISTORTION OR OTHER DEFECTS IN APPEARANCE.
 2. TACTILE CHARACTERS SHALL BE 48 INCHES MINIMUM ABOVE THE FLOOR, MEASURED TO THE BASELINE OF THE LOWEST TACTILE CHARACTER AND 60 INCHES MAXIMUM ABOVE THE FLOOR, MEASURED TO THE BASELINE OF THE HIGHEST TACTILE CHARACTER.
 3. WHERE A TACTILE SIGN IS PROVIDED AT A DOOR, THE SIGN SHALL BE ALONGSIDE THE DOOR AT THE LATCH SIDE. WHERE A TACTILE SIGN IS PROVIDED AT DOUBLE DOORS WITH ONE ACTIVE LEAF, THE SIGN SHALL BE LOCATED ON THE INACTIVE LEAF. WHERE A TACTILE SIGN IS PROVIDED AT DOUBLE DOORS WITH TWO ACTIVE LEAVES, THE SIGN SHALL BE TO THE RIGHT OF THE RIGHT HAND DOOR. WHERE THERE IS NO WALL SPACE ON THE LATCH SIDE OF A SINGLE DOOR, OR TO THE RIGHT SIDE OF DOUBLE DOORS, SIGNS SHALL BE ON THE NEAREST ADJACENT WALL.
 4. SIGNS CONTAINING TACTILE CHARACTERS SHALL BE LOCATED SO THAT A CLEAR FLOOR AREA 18 INCHES MINIMUM BY 18 INCHES MINIMUM, CENTERED ON THE TACTILE CHARACTERS, IS PROVIDED BEYOND THE ARC OF ANY DOOR SWING BETWEEN THE CLOSED POSITION AND 45 DEGREE OPEN POSITION.
 - a. EXCEPTION: SIGNS WITH TACTILE CHARACTERS SHALL BE PERMITTED ON THE PUSH SIDE OF DOORS WITH CLOSERS AND WITHOUT HOLD OPEN DEVICES.
 5. GENERAL CONTRACTOR SHALL COORDINATE WITH ELECTRICAL CONTRACTOR REGARDING NUMBERING FOR ELECTRICAL PANELS.
 6. IN ADDITION TO THE SIGNAGE SCHEDULE PLEASE PROVIDE THE FOLLOWING SIGN TYPES:
 - a. SIGN TYPE 3C: NOT USED
 - b. SIGN TYPE 4A: 115, 129 & 201.
 - c. SIGN TYPE 4B: 001, 002C, 114C, & 136.
 - d. SIGN TYPE 4C: 001, 002C, 114A, & 136.
 - e. SIGN TYPE 4D: @ EACH ELEVATOR ACCESS ON ALL FLOORS.
 - f. SIGN TYPE 4E: NOT USED
 - g. SIGN TYPE 4F: NOT USED
 - h. SIGN TYPE 4G: NOT USED
 - i. SIGN TYPE 5A: NOT USED
 - j. SIGN TYPE 5B: NOT USED

TYPE 1A SIZE: 8"x8" NOT TO SCALE	TYPE 1B SIZE: 8"x8" NOT TO SCALE	TYPE 1C SIZE: 8"x8" NOT TO SCALE
TYPE 1D SIZE: 8"x4" NOT TO SCALE	TYPE 2A SIZE: 8"x10" NOT TO SCALE	TYPE 2B SIZE: 8"x10" NOT TO SCALE
TYPE 3A SIZE: 8"x10" NOT TO SCALE	TYPE 3B SIZE: 8"x12" NOT TO SCALE	TYPE 3C SIZE: 8"x10" NOT TO SCALE
TYPE 3D SIZE: 10"x10" NOT TO SCALE	TYPE 4A SIZE: 8"x10" NOT TO SCALE	TYPE 4B SIZE: 8"x10" NOT TO SCALE
TYPE 4C SIZE: 8"x10" NOT TO SCALE	TYPE 4D SIZE: 8"x10" NOT TO SCALE	TYPE 4E SIZE: 8"x10" NOT TO SCALE
TYPE 4F SIZE: 8"x10" NOT TO SCALE	TYPE 4G SIZE: 8"x10" NOT TO SCALE	TYPE 4H SIZE: 8"x10" NOT TO SCALE
TYPE 5A-SIZE: 8"x8" NOT TO SCALE EXTERIOR FRAMELESS SIGN	TYPE 5B SIZE: 8"x10" NOT TO SCALE EXTERIOR FRAMELESS SIGN	

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REVISIONS		
NO.	MM-DD-YY	DESCRIPTION OF CHANGES
1	02/20/2024	ADDENDUM #1
2	02/28/2024	ADDENDUM #2

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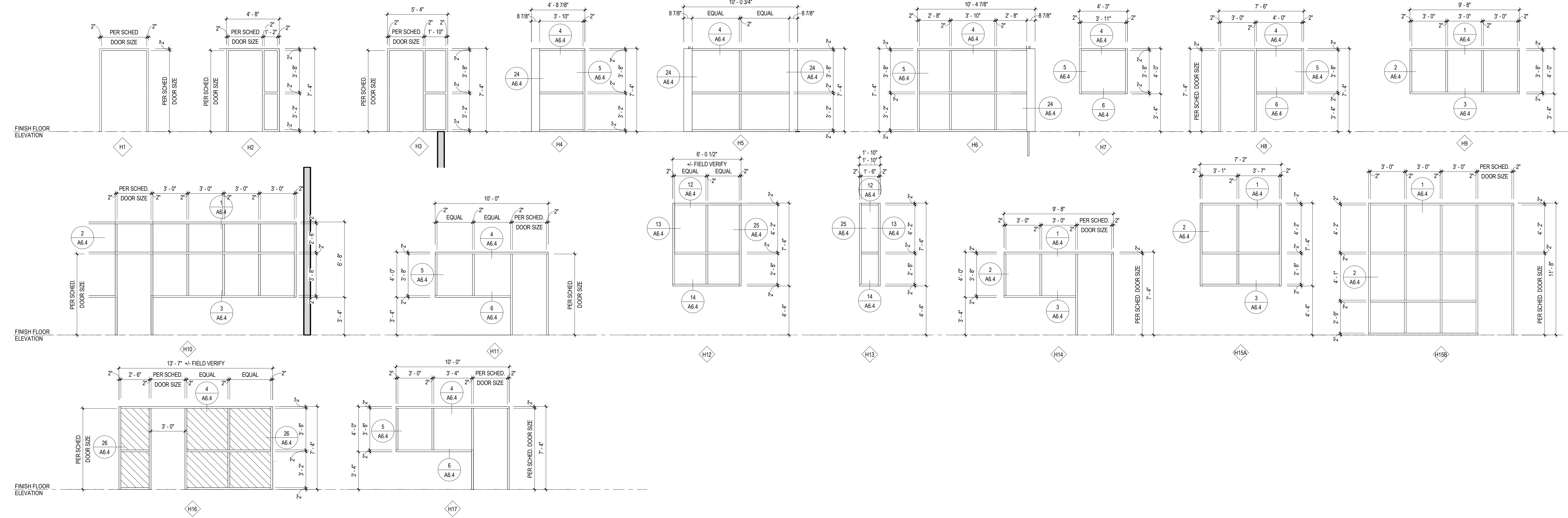
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ADDITIONS AND RENOVATIONS
SHELburne MIDDLE SCHOOL
SCHOOL BOARD OF THE CITY OF STAUNTON, VA
300 GRUBERT AVENUE, STAUNTON, VIRGINIA

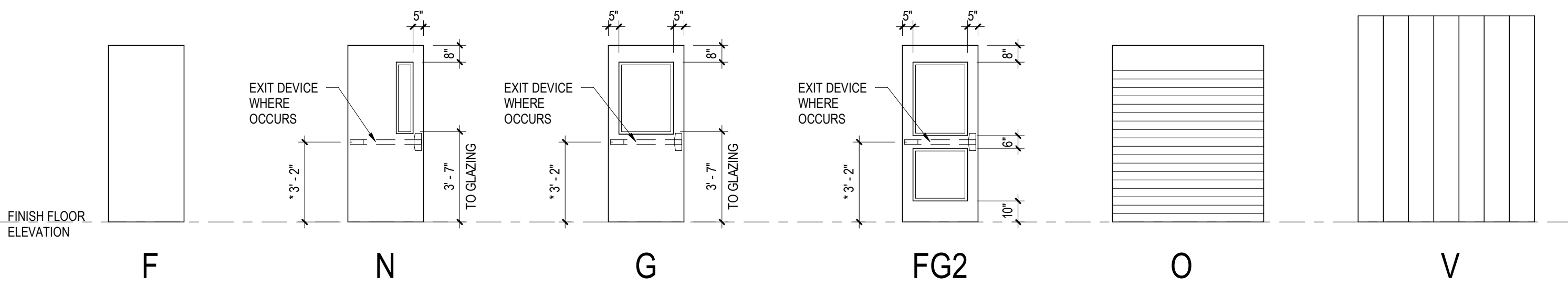
SIGNAGE SCHEDULE		PROJECT 3636
PLOT SCALE: 1/2" = 1'-0"		A6.2
FILENAME:		
DATE: 01/24/2023		

DOOR SCHEDULE																
OPENING NUMBER	DOOR & FRAME UL RATING	DOOR							FRAME				HARDWARE SET	SPECIAL DETAIL	REMARKS	
		DOOR TYPE	DOOR MATERIAL	GLAZING TYPE	DIMENSIONS				FRAME TYPE	FRAME MATERIAL	DETAILS					
					LEAF 1	LEAF 2	HEIGHT	THICKNESS			HEAD	JAMB				
001	--	FG2	HM	INSUL, LAM	3'-0"		7'-2"	13/4"		H1	HM	11/A6.4	12/A6.4	--	--	
002A	--	FG	WD	TG	3'-0"		7'-2"	13/4"		H10	HM	--	5/A6.4	--	--	
002B	--	F	WD	--	3'-0"		7'-2"	13/4"		H14	HM	1/A6.4	2/A6.4	--	--	
002C	--	FG2	ALUM	INSUL, LAM.	3'-0"	3'-0"	7'-2"	13/4"		W9-R	ALUM	--	--	--	--	
002D	--	O	STL	--	12'-0"		8'-0"			--	STL	18/A6.4	20/A6.4	--	19/A6.4	INSULATED OH MOTORIZED COILING DOOR
003	1 HR	F	HM	--	3'-0"		7'-2"	13/4"		H1	HM	9/A6.4	14/A6.4	--	--	ELECTRONIC CARD ACCESS CONTROL
004	--	F	WD	TG	3'-0"		7'-2"	13/4"		H15	HM	1/A6.4	2/A6.4	--	3/A6.4	
004A	--		STAINLESS STL	--	5'-6"		5'-8"			--	STAINLESS STL	32/A6.4	33/A6.4	--	34/A6.4	STAINLESS STEEL COILING COUNTER DOOR W/ CYLINDER LOCK
004B	--		STAINLESS STL	--	5'-6"		5'-8"			--	STAINLESS STL	32/A6.4	33/A6.4	--	34/A6.4	STAINLESS STEEL COILING COUNTER DOOR W/ CYLINDER LOCK
004C	--		STAINLESS STL	--	5'-6"		5'-8"			--	STAINLESS STL	32/A6.4	33/A6.4	--	34/A6.4	STAINLESS STEEL COILING COUNTER DOOR W/ CYLINDER LOCK
005A	--	F	WD	--	3'-0"	3'-0"	7'-2"	13/4"		H1-R	HM	4/A6.4	5/A6.4	--	--	
005B	--	F	WD	--	3'-0"		7'-2"	13/4"		H1-R	HM	4/A6.4	5/A6.4	--	--	
006	--	F	WD	TG	3'-0"		7'-2"	13/4"		H3	HM	1/A6.4	2/A6.4	--	--	
007	--	F	WD	--	3'-0"		7'-2"	13/4"		H1	HM	7/A6.4	8/A6.4	--	--	
100	--	F	WD	--	3'-0"		7'-2"	13/4"		H1	HM	4/A6.4	5/A6.4	--	--	
103	--	F	HM	--	4'-0"		7'-2"	13/4"		H1	HM	9/A6.4	10/A6.4	--	--	
106	--	F	WD	TG	3'-0"		7'-2"	13/4"		H8-R	HM	4/A6.4	5/A6.4	--	--	
107A	--	F	WD	TG	3'-0"		7'-2"	13/4"		H11	HM	1/A6.4	2/A6.4	--	3/A6.4	
107B	--	FG2	ALUM	INSUL, LAM.	3'-0"	3'-0"	7'-2"	13/4"		W1-R	ALUM	1/A6.5	2/A6.5	--	7/A6.6	ELECTRONIC CARD ACCESS CONTROL
108A	--	G	WD	TG	3'-0"		7'-2"	13/4"		H1	HM	13/A6.4	14/A6.4	--	--	
108B	--	G	WD	--	3'-0"		7'-2"	13/4"		H1	HM	4/A6.4	5/A6.4	--	--	
109A	--	F	WD	TG	3'-0"		7'-2"	13/4"		H3	HM	13/A6.4	14/A6.4	--	--	
109B	--	FG2	ALUM	INSUL, LAM.	3'-0"	3'-0"	7'-2"	13/4"		W1-R	ALUM	1/A6.5	2/A6.5	--	7/A6.6	ELECTRONIC CARD ACCESS CONTROL
111	--	F	WD	TG	3'-0"		7'-2"	13/4"		H2	HM	4/A6.4	5/A6.4	--	--	
114A	--	FG2	ALUM	INSUL, LAM.	3'-0"	3'-0"	7'-2"	13/4"		A2	ALUM	2/A6.9	6/A6.9, 8/A6.9	--	13/A6.8	
114B	--	FG2	ALUM	INSUL, LAM.	3'-0"	3'-0"	7'-2"	13/4"		A2	ALUM	2/A6.9	6/A6.9, 8/A6.9	--	13/A6.8	
114C	--	FG2	ALUM	TG	3'-0"	3'-0"	7'-2"	13/4"		A4	ALUM	2/A6.9 SIM	7/A6.9	--	--	
114D	--	FG2	ALUM	TG	3'-0"	3'-0"	7'-2"	13/4"		A4	ALUM	--	--	--	--	
117	--	N	WD	TG	3'-0"	3'-0"	7'-2"	13/4"		H1	HM	7/A6.4	8/A6.4	--	--	
118	--	F	WD	--	3'-0"		7'-2"	13/4"		H1	HM	7/A6.4	8/A6.4	--	--	3/4" DOOR UNDERCUT
120	--		--	--	3'-6"		7'-2"	2"		H1	HM	7/A6.4 SIM	8/A6.4 SIM	--	--	HM FRAMED OPENING
121	--		--	--	3'-6"		7'-2"	2"		H1	HM	7/A6.4 SIM	8/A6.4 SIM	--	--	HM FRAMED OPENING
122	--	F	WD	--	3'-0"		7'-2"	13/4"		H1	HM	7/A6.4	8/A6.4	--	--	3/4" DOOR UNDERCUT
124	--	N	WD	TG	3'-0"	3'-0"	7'-2"	13/4"		H1	HM	7/A6.4	8/A6.4	--	--	
125	--	F	WD	--	3'-0"		7'-2"	13/4"		H1	HM	31/A6.4	30/A6.4	--	--	
126A	--	F	WD	--	3'-0"		7'-2"	13/4"		H1	HM	7/A6.4	8/A6.4	--	--	
126B	--	O	STAINLESS STL	--	6'-0"		4'-6"			--	STAINLESS STL	27/A6.4	28/A6.4	--	29/A6.4	STAINLESS STEEL COILING COUNTER DOOR
127	--	F	WD	--	3'-0"	3'-0"	7'-2"	13/4"		H1	HM	13/A6.4	10/A6.4, 14/A6.4	--	--	
130A	45 MIN.	F	WD	--	3'-0"	3'-0"	7'-2"	13/4"		H1	HM			--	--	
130B	--	F	WD	--	3'-0"	3'-0"	7'-2"	13/4"		H1	HM	7/A6.4	8/A6.4	--	--	
131	--	F	WD	--	3'-0"		7'-2"	13/4"		H1	HM	21/A6.4	22/A6.4	--	--	3/4" DOOR UNDERCUT
132	--	F	WD	--	3'-0"		7'-2"	13/4"		H1	HM	7/A6.4	8/A6.4	--	--	3/4" DOOR UNDERCUT
133	--	F	WD	--	3'-0"		7'-2"	13/4"		H1	HM	7/A6.4	8/A6.4	--	--	3/4" DOOR UNDERCUT
134	--	F	WD	--	3'-0"		7'-2"	13/4"		H1	HM	21/A6.4	22/A6.4	--	--	3/4" DOOR UNDERCUT
135	--	F	WD	--	2'-6"	2'-6"	7'-2"	13/4"		H1	HM	7/A6.4	8/A6.4	--	--	
136	--	FG2	HM	INSUL, LAM.	3'-0"	3'-0"	7'-2"	13/4"		H1	HM	15/A6.4	16/A6.4	--	17/A6.4	ELECTRONIC CARD ACCESS CONTROL
141A	--	FG2	WD	LAM.	3'-0"		7'-2"	13/4"		H16	HM	4/A6.4	26/A6.4 SIM	--	--	ELECTRONIC CARD ACCESS CONTROL
141B	--	F	WD	TG	3'-0"		7'-2"	13/4"		H3	HM	13/A6.4 SIM	10/A6.4	--	--	
142	--	F	WD	--	3'-0"		7'-2"	13/4"		H1-R	HM	4/A6.4	5/A6.4	--	--	
143	--	F	WD	--	3'-0"		7'-2"	13/4"		H1	HM	4/A6.4	5/A6.4	--	--	
144	--	N	WD	TG	3'-0"		7'-2"	13/4"		H1	HM	4/A6.4	5/A6.4	--	--	
148	--	F	WD	--	3'-0"		7'-2"	13/4"		H1-R	HM	4/A6.4	5/A6.4	--	--	
149	--	FG2	WD	--	3'-0"		7'-2"	13/4"		H1-R	HM	4/A6.4	5/A6.4	--	--	
150	--	N	WD	TG	3'-0"		7'-2"	13/4"		H1	HM	13/A6.4	14/A6.4	--	--	ELECTRONIC CARD ACCESS CONTROL, FIELD VERIFY EXISTING WALL THICKNESS
150	--	F	WD	--	3'-0"		7'-2"	13/4"		H1	HM	4/A6.4	5/A6.4	--	--	
151	--	N	WD	TG	3'-0"		7'-2"	13/4"		H1	HM	4/A6.4	5/A6.4	--	--	
152	--	F	WD	--	3'-0"		7'-2"	13/4"		H1	HM	4/A6.4	5/A6.4	--	--	



DOOR TYPES

* - RECOMMENDED MOUNTING HEIGHT FROM FINISHED FLOOR TO CENTER LINE OF FIRE EXIT DEVICE
** - COORDINATE WITH DOOR MANUFACTURE REQUIREMENTS



2

HOLLOW METAL FRAME ELEVATIONS

NOTE: 1. ALL GLASS TO BE TEMPERED ADJACENT TO A DOOR WHERE THE NEAREST EXPOSED EDGE OF THE GLAZING IS WITHIN A 24 INCH ARC OR EITHER VERTICAL EDGE OF THE DOOR IN A CLOSED POSITION.
2. GLASS LITES GREATER THAN 9 SQUARE FEET WHERE THE BOTTOM EDGE IS WITHIN 18 INCHES OF THE FINISHED FLOOR AND THE TOP EDGE EXTENDS ABOVE 36 INCHES AFF SHALL BE TEMPERED.
3. GLASS WHERE THE FINISHED FLOOR OR GRADE ON THE OPPOSING SIDE OF GLASS IS GREATER THAN 30 INCHES SHALL BE TEMPERED TO A HEIGHT OF 42 INCHES AFF.
4. ANY PORTION OF GLASS WITHIN CONSTRAINTS OF ABOVE REQUIREMENTS THE ENTIRE PANEL SHALL BE TEMPERED.

CRABTREE ROHRBAUGH & ASSOCIATES - ARCHITECTS

MECHANICSBURG, PENNSYLVANIA

TOWSON, MARYLAND

WHITE SULPHUR SPRINGS, WEST VIRGINIA

250 WEST MAIN STREET, SUITE 200

CHARLOTTESVILLE VA 22902

434-975-7262

ADDITIONS AND RENOVATIONS

SHELburne MIDDLE SCHOOL

SCHOOL BOARD OF THE CITY OF STAUNTON, VA

300 GRUBERT AVENUE, STAUNTON, VIRGINIA



DOOR SCHEDULE, DOOR TYPES AND HM FRAME ELEVATIONS

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

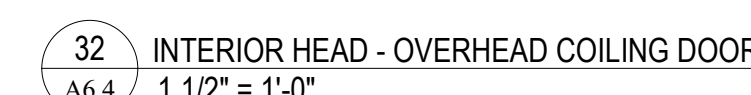
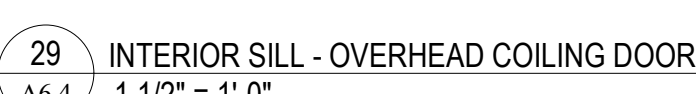
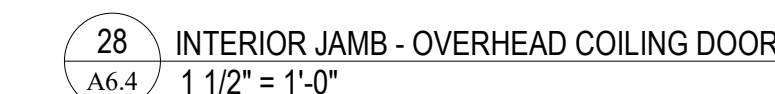
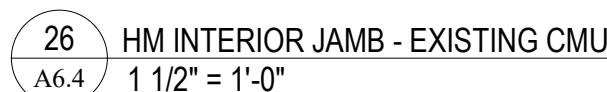
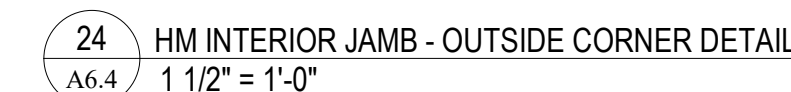
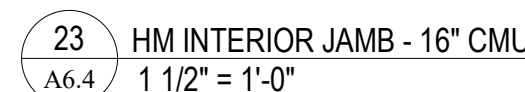
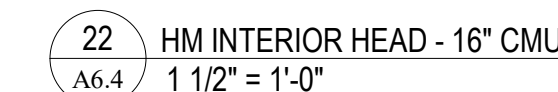
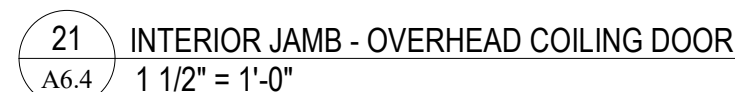
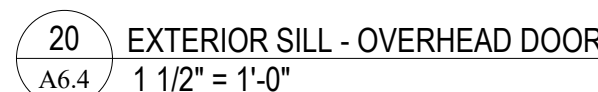
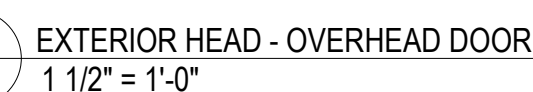
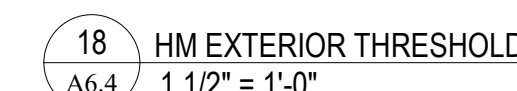
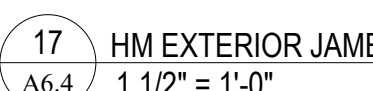
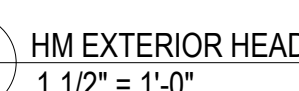
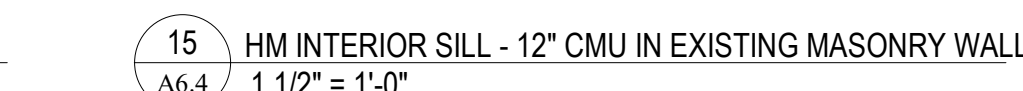
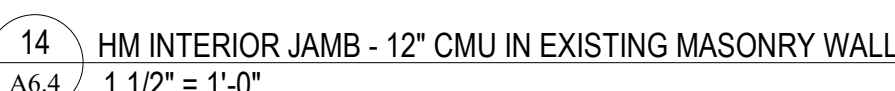
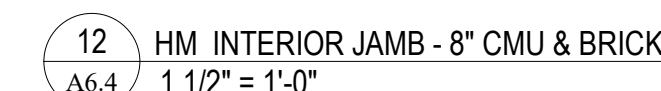
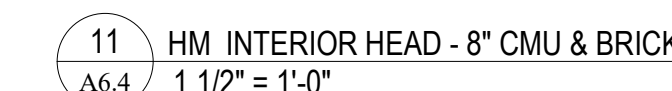
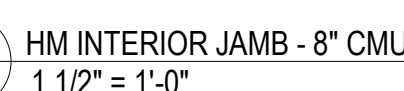
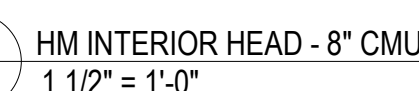
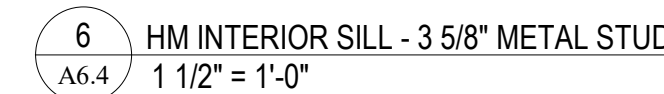
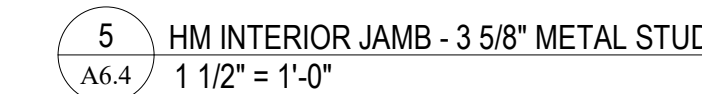
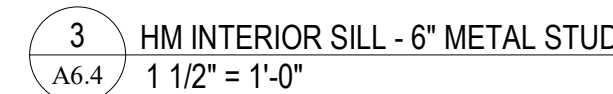
FILENAME:

DATE: 01/24/2023

PROJECT 3636

A6.3

NOTE: 1. CONCRETE MASONRY UNITS INDICATED ARE DIAGRAMATIC IN NATURE AND ARE NOT SPECIFIC TO ANY MANUFACTURER.
MASONRY CONTRACTOR SHALL INCORPORATE SHAPES AND OR CUT UNITS AS REQUIRED TO MEET DETAIL REQUIREMENTS.
2. LINTELS INDICATED TO BE COORDINATED WITH STRUCTURAL DRAWINGS.

[illegible]

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MECHANICSBURG, PENNSYLVANIA

WHITE SULPHUR SPRINGS, WEST VIRGINIA

ADDITIONS AND RENOVATIONS
SHELburnE MIDDLE SCHOOL
SCHOOL BOARD OF THE CITY OF STAUNTON, VA
300 GRUBERT AVENUE, STAUNTON, VIRGINIA

300 GRUBERT AVENUE, STAUNTON, VIRGINIA

HOLLOW METAL FRAM
DETAILS

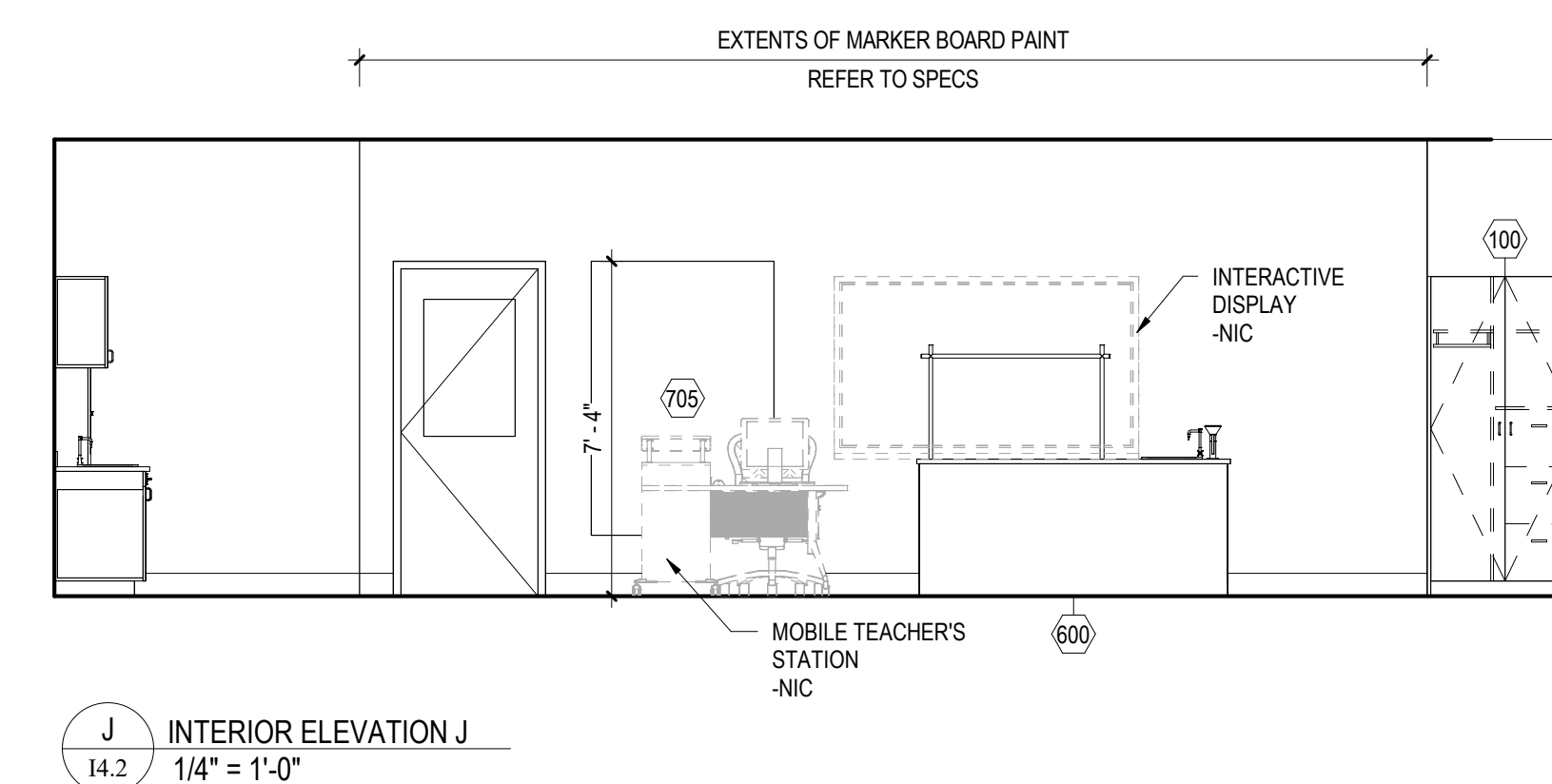
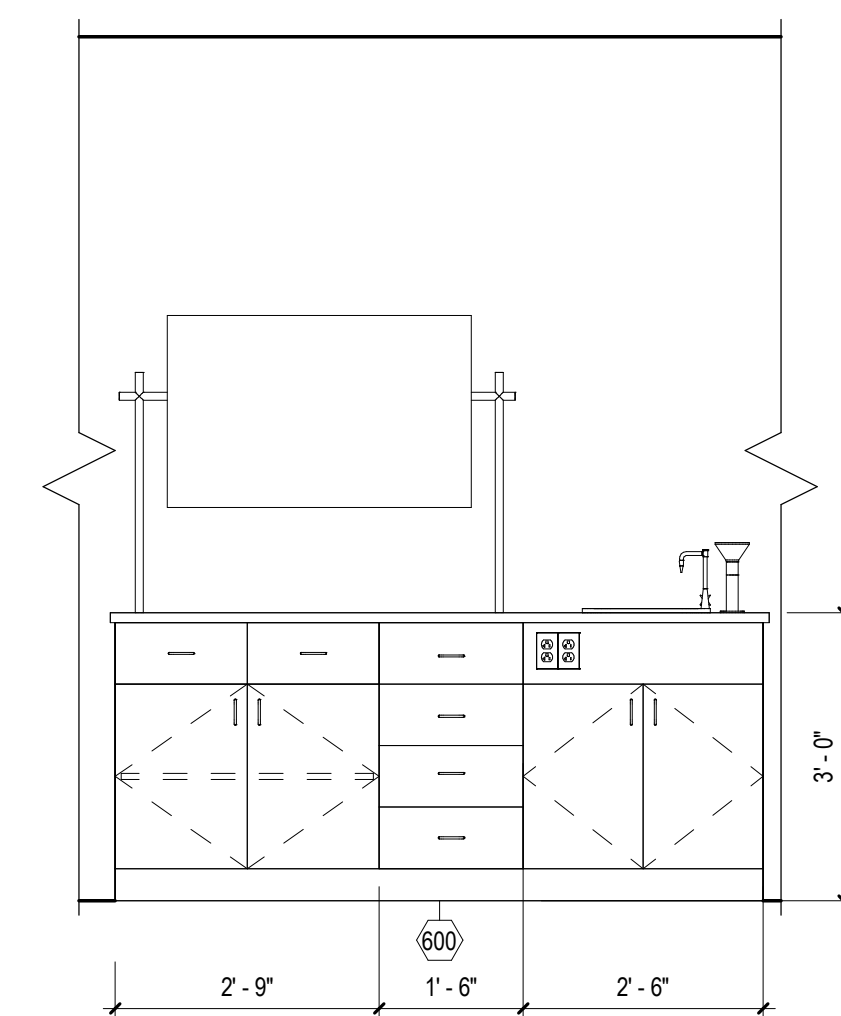
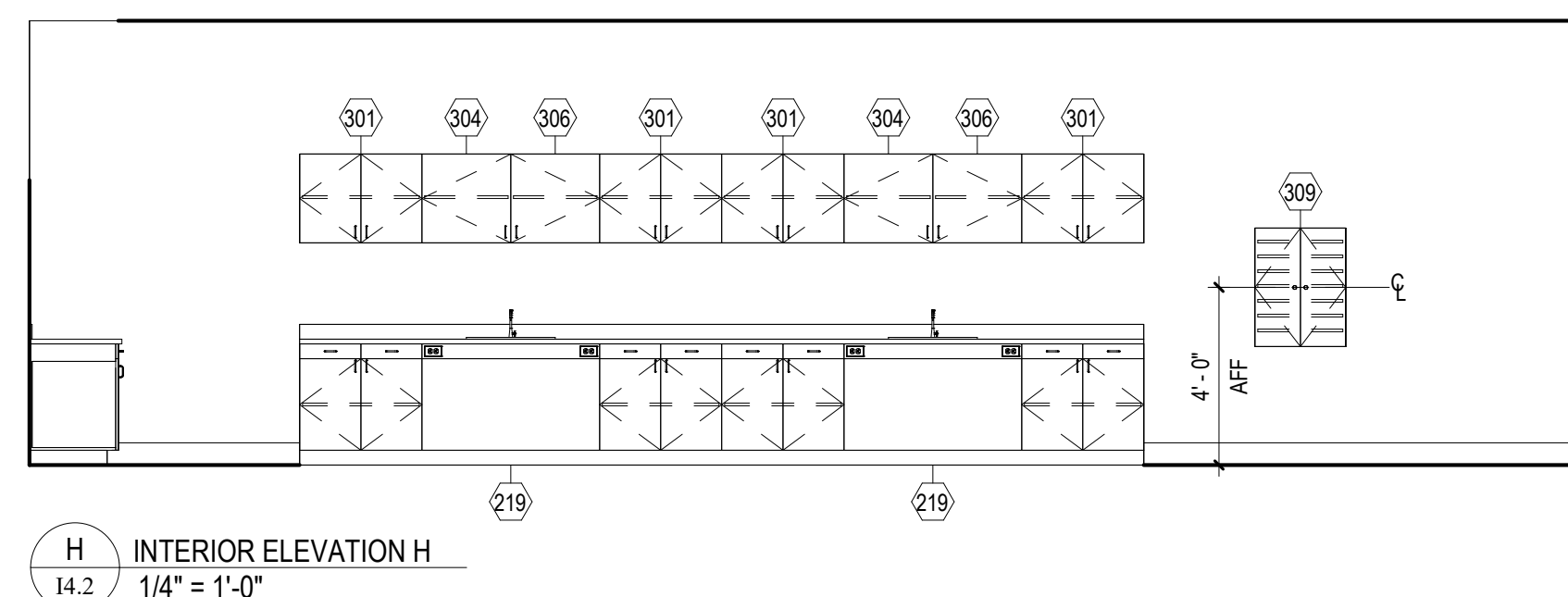
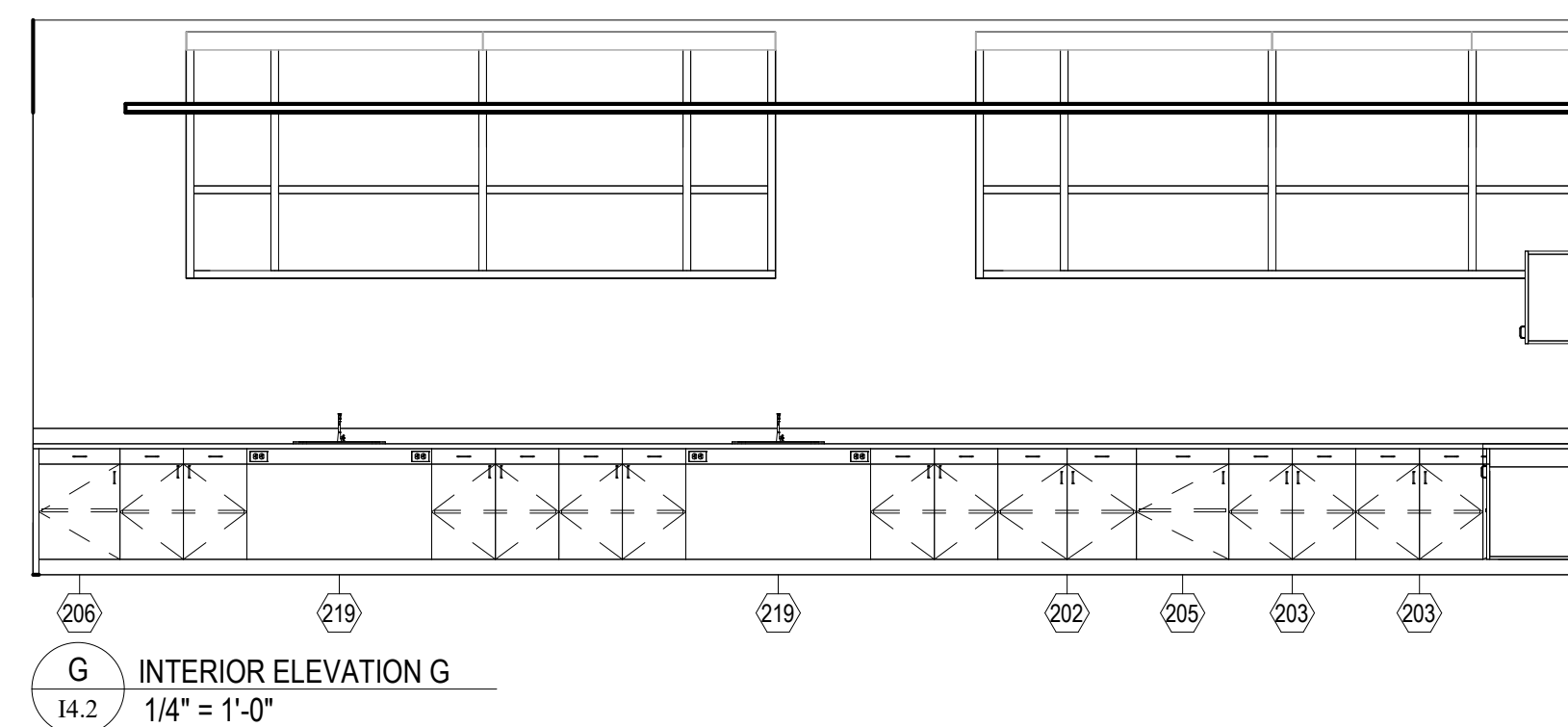
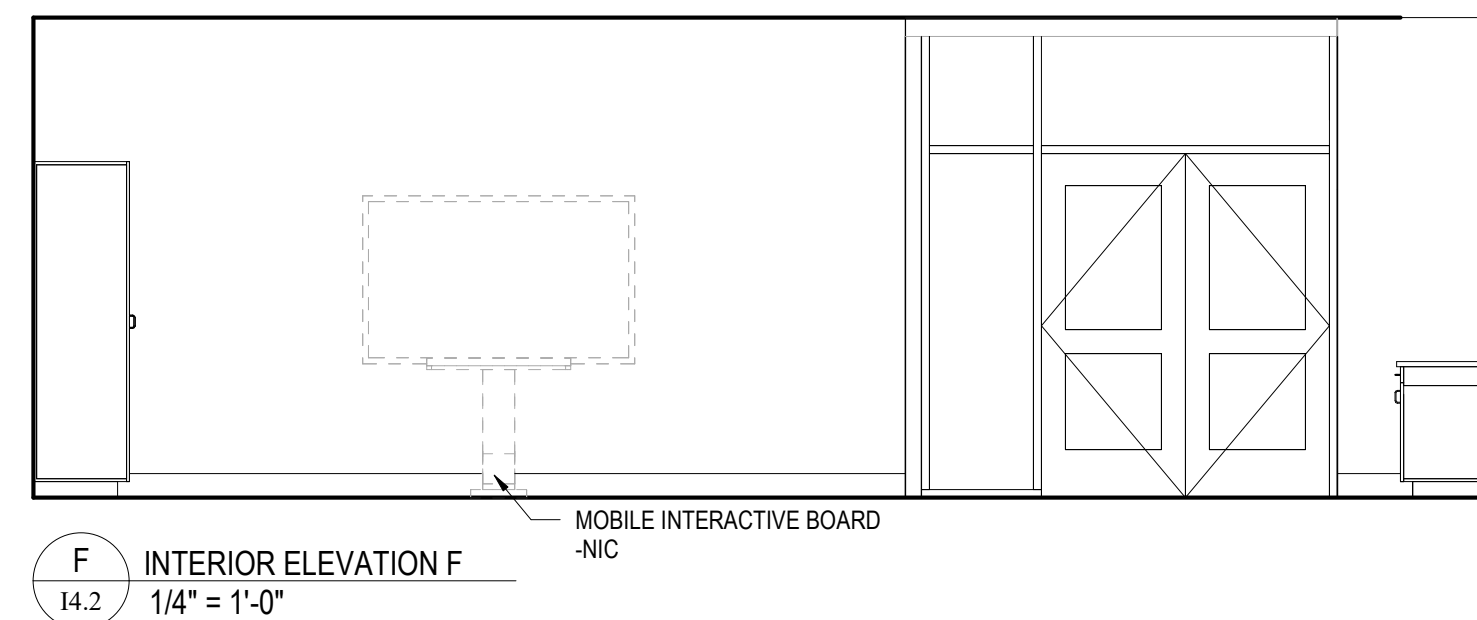
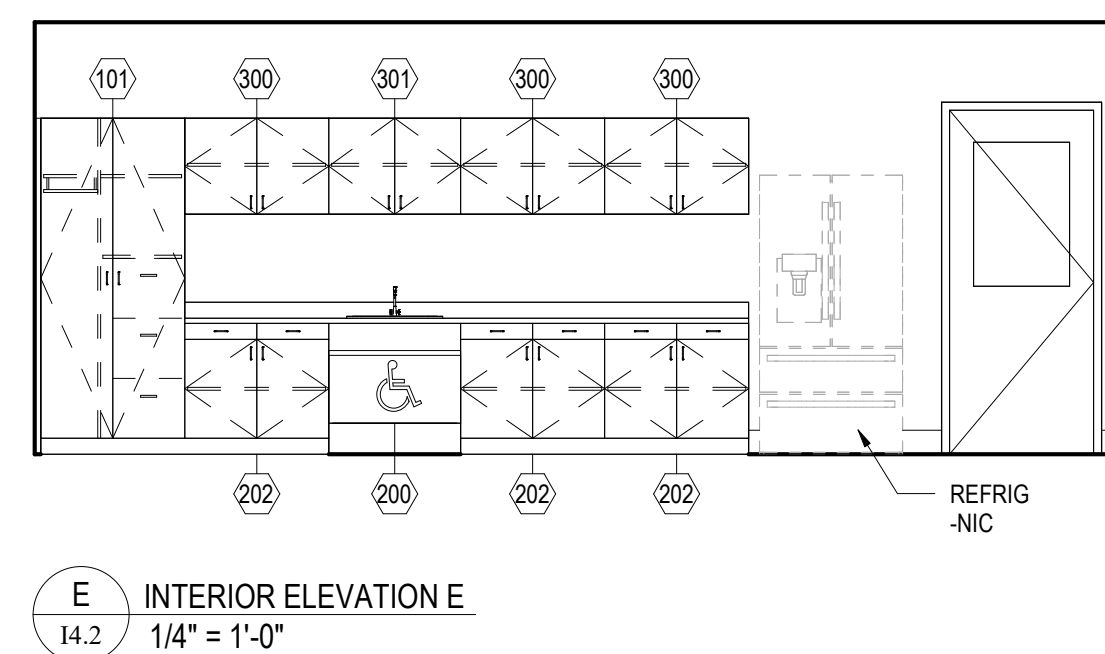
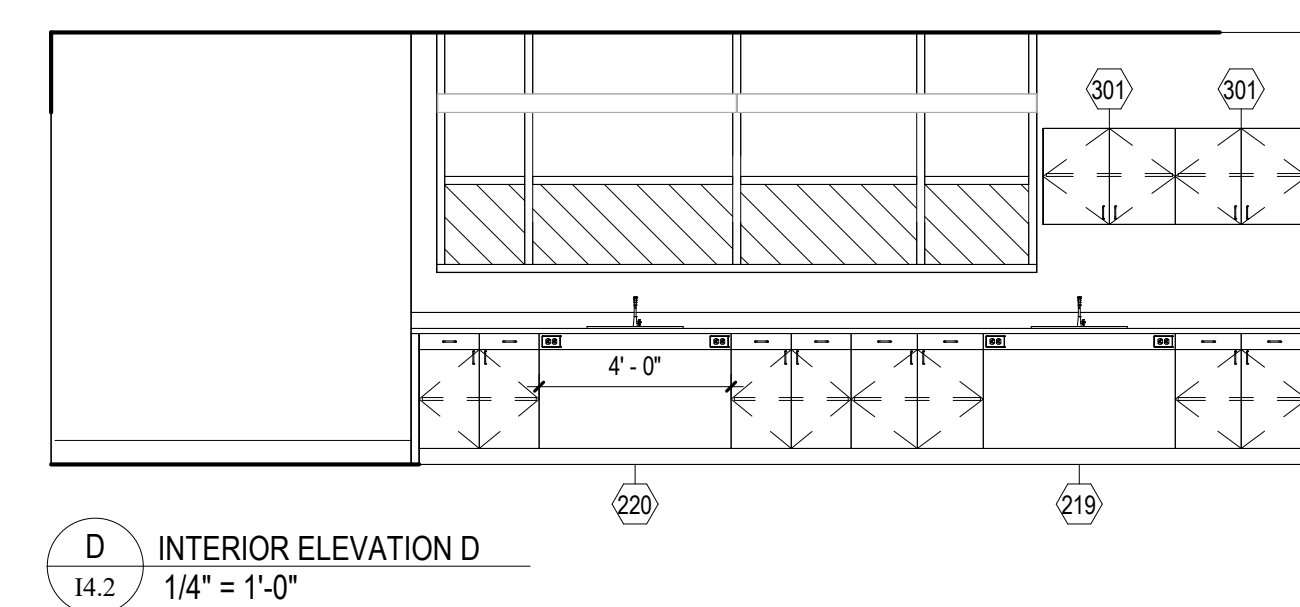
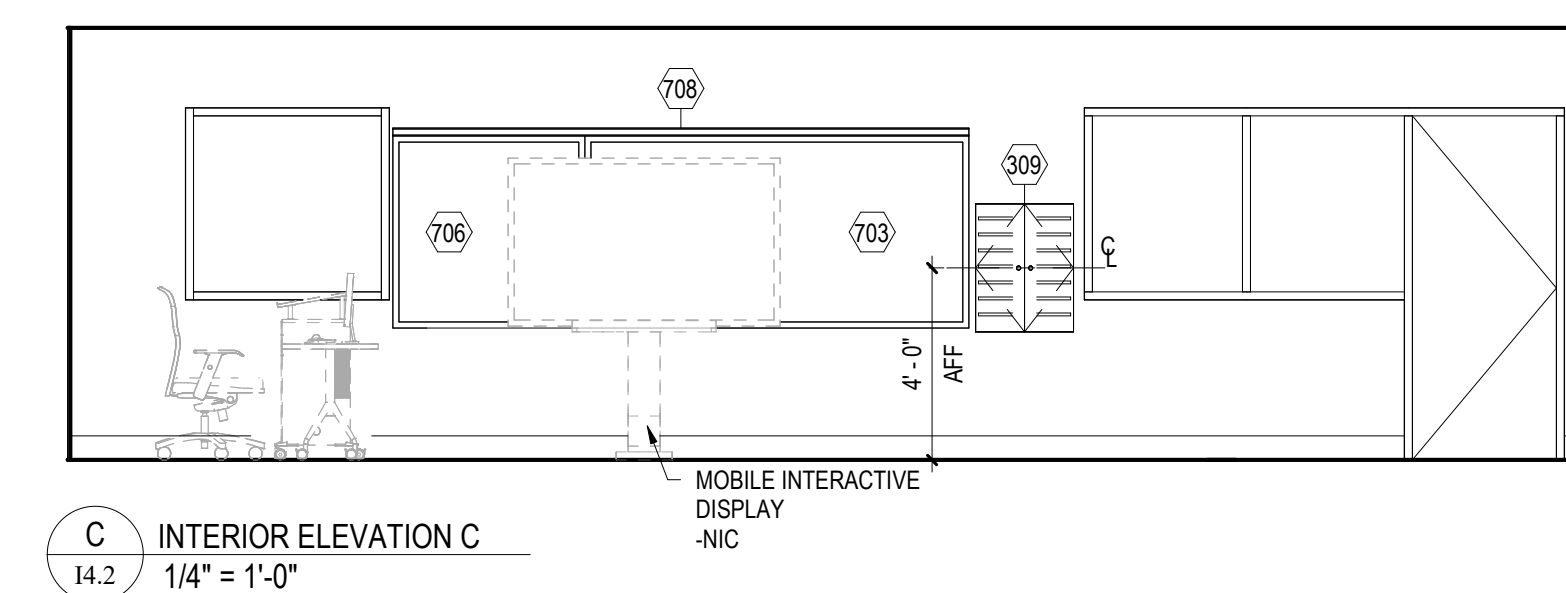
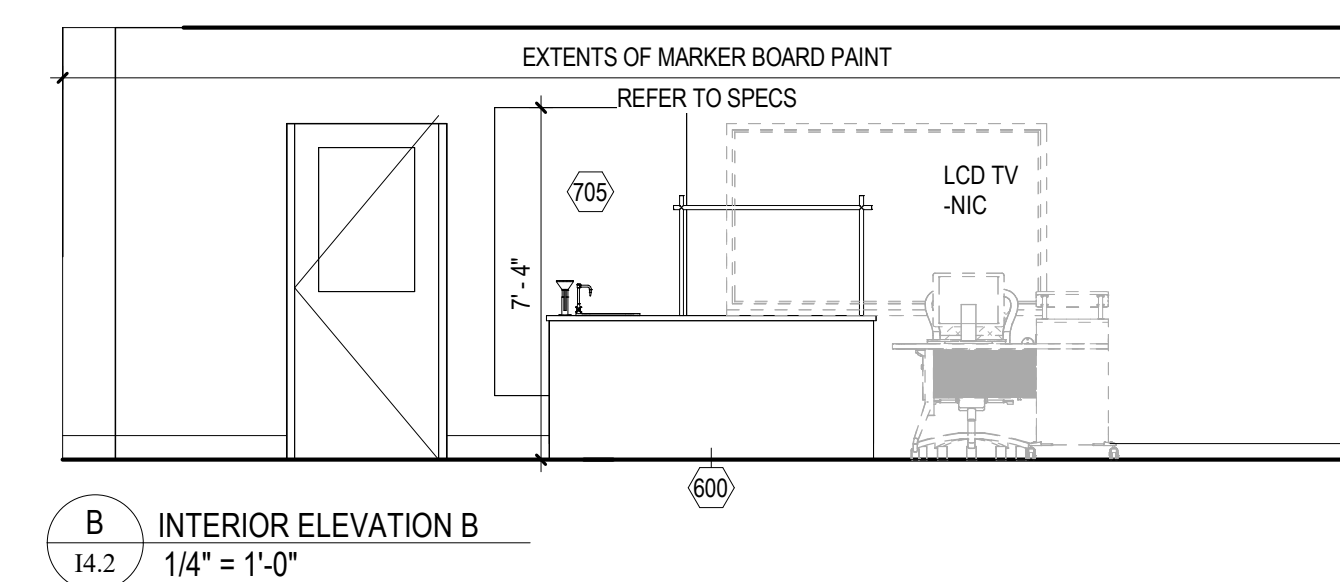
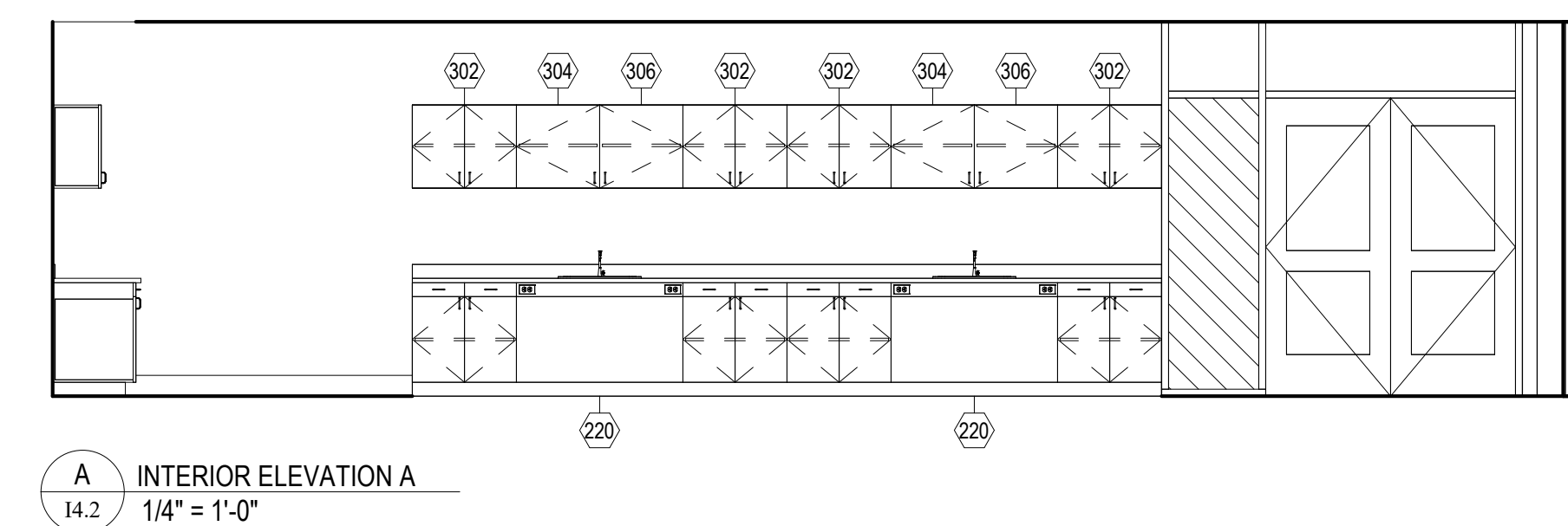
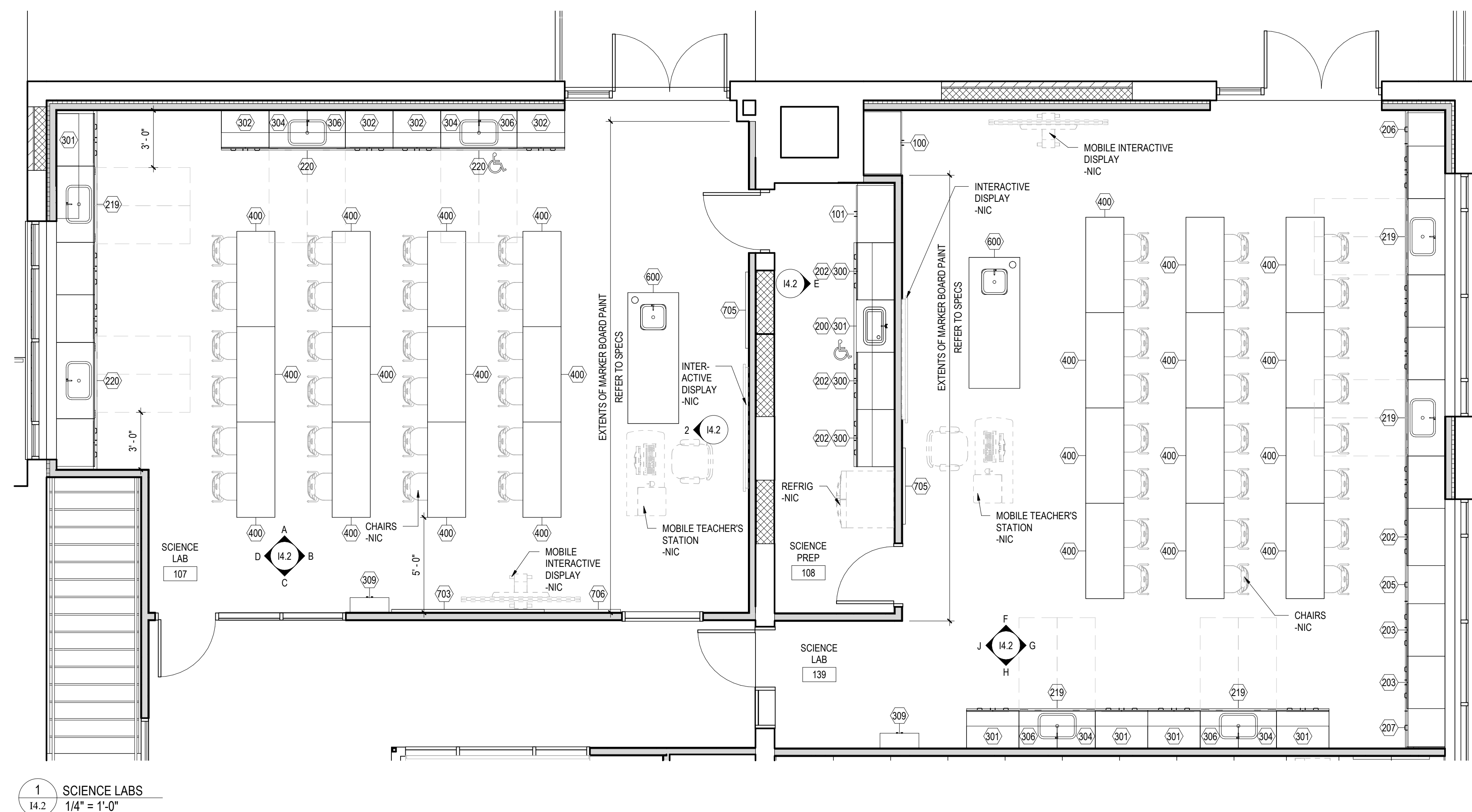
PLOT SCALE:
 $1\ 1/2'' = 1' \cdot 0''$

FILENAME:

DATE: 01/24/

PROJECT
3636

A6.4



GENERAL NOTE IN REFERENCE TO I4.2	
1. ALL CASEWORK IN SCIENCE ROOMS SHALL RECEIVE LOCKS.	
GRADE 6-8 MOUNTING HEIGHT SCHEDULE	
MARKER BOARD	2'-9" AFF TO BOTTOM EDGE
TACK BOARD	2'-9" AFF TO BOTTOM EDGE (UNO)
BASE CABINETS	2'-10" AFF TO TOP OF CABINET
WALL CABINETS	7'-0" AFF TO TOP OF CABINET
INTERACTIVE MONITOR/ TV	VERIFY BRACKET LOCATION/TYPE W/OWNER & PER BRACKET MANUFACTURER'S RECOMMENDATIONS PRIOR TO INSTALLATION OF ROUGH-INS
*UNO = UNLESS NOTED OTHERWISE	

I4.2 - GENERAL CASEWORK AND EQUIPMENT SCHEDULE				
NO	DESCRIPTION	MANUFACTURER	MODEL	DIMENSIONS
100	2-DOOR TEACHER'S WARDROBE - FIXED SHELF, ROD, & MIRROR. MODIFIED TO INCLUDE LOCK, (3) FILE DRAWERS, & (2) ADJ. SHELVES	CASE SYSTEMS	T2780M	39"W x 24"D x 84"H
101	2-DOOR TEACHER'S WARDROBE - FIXED SHELF, ROD, & MIRROR. MODIFIED TO INCLUDE LOCK, (3) FILE DRAWERS, & (2) ADJ. SHELVES	CASE SYSTEMS	T2780M	36"W x 24"D x 84"H
200	ADA VANITY SINK BASE CABINET	CASE SYSTEMS	D1000M	33"W x 24"D x 34"H
202	2-DOOR/2-DRAWER BASE CABINET	CASE SYSTEMS	B3100	36"W x 24"D x 34"H
203	2-DOOR/2-DRAWER BASE CABINET	CASE SYSTEMS	B3100	33"W x 24"D x 34"H
205	1-DOOR/1-DRAWER BASE CABINET - LEFT HINGED	CASE SYSTEMS	B3110	24"W x 24"D x 34"H
206	1-DOOR/1-DRAWER BASE CABINET - LEFT HINGED	CASE SYSTEMS	B3110	21"W x 24"D x 34"H
207	1-DOOR/1-DRAWER BASE CABINET - RIGHT HINGED	CASE SYSTEMS	B3120	24"W x 24"D x 34"H
219	STUDENT LAB STATION - (2) 33"V 1-DOOR/1-DRAWER BASE CABINET W/(1) 48"W KNEE SPACE PANEL W/APRON & (2) GFI DUPLEX OUTLETS, (1)24"x21"x8" EPOXY SINK & DISC STRAINER, (1)COLD WATER GOOSENECK FAUCET.	CASE SYSTEMS	CUSTOM	108"W x 24"D x 34"H
220	STUDENT LAB STATION - (2) 30"W 2-DOOR/2-DRAWER BASE CABINET W/(1) 48"W KNEE SPACE PANEL W/APRON & (2) GFI DUPLEX OUTLETS, (1)24"x16"x8" EPOXY SINK & DISC STRAINER, (1)COLD WATER GOOSENECK FAUCET.	CASE SYSTEMS	CUSTOM	108"W x 24"D x 34"H
300	2-DOOR WALL CABINET	CASE SYSTEMS	W0100	36"W x 14"D x 24"H
301	2-DOOR WALL CABINET	CASE SYSTEMS	W0100	33"W x 14"D x 24"H
302	2-DOOR WALL CABINET	CASE SYSTEMS	W0100	30"W x 14"D x 24"H
304	1-DOOR WALL CABINET - LEFT HINGED	CASE SYSTEMS	W0110	24"W x 14"D x 24"H
306	1-DOOR WALL CABINET - RIGHT HINGED	CASE SYSTEMS	W0120	24"W x 14"D x 24"H
309	GOOGLE CABINET	KERKAU	H-75	24.5"W x 9.5"D x 32"H
400	PLAIN APRON TABLE W/WOOD LEGS, PHENOLIC TOP, LEG BRACES, STRETCHER & CASTERS.	DIVERSIFIED WOODCRAFTS	P7604K30SC	60"W x 24"D x 30"H
600	TEACHER'S DEMO UNIT MODIFIED TO INCLUDE (1)HOT/COLD MIXING FAUCET, (2)BURETTE SOCKETS, (1)ROD/CROSSBAR PACKAGE, (1) DEMONSTRATION MIRROR PACKAGE, (1) QUAD OUTLET, (1)16"x12"x8" EPOXY SINK & EMERGENCY EYE/FACE & BODY SPRAY.	CASE SYSTEMS/WATER SAVER	SW640M/SW641M/EW1020	81"W x 32"D x 36"H
703	MARKERBOARD	REFER TO SPECIFICATIONS	REFER TO SPECIFICATIONS	8'-0"W x 4'-0"H
705	FRAMELESS TACK BOARD W/XOREL FABRIC	REFER TO SPECIFICATIONS	REFER TO SPECIFICATIONS	4'-0"W x 6'-0"H
706	TACK BOARD	REFER TO SPECIFICATIONS	REFER TO SPECIFICATIONS	4'-0"W x 4'-0"H
708	TACK STRIP	REFER TO SPECIFICATIONS	REFER TO SPECIFICATIONS	WIDTH AS SHOWN x 2"H

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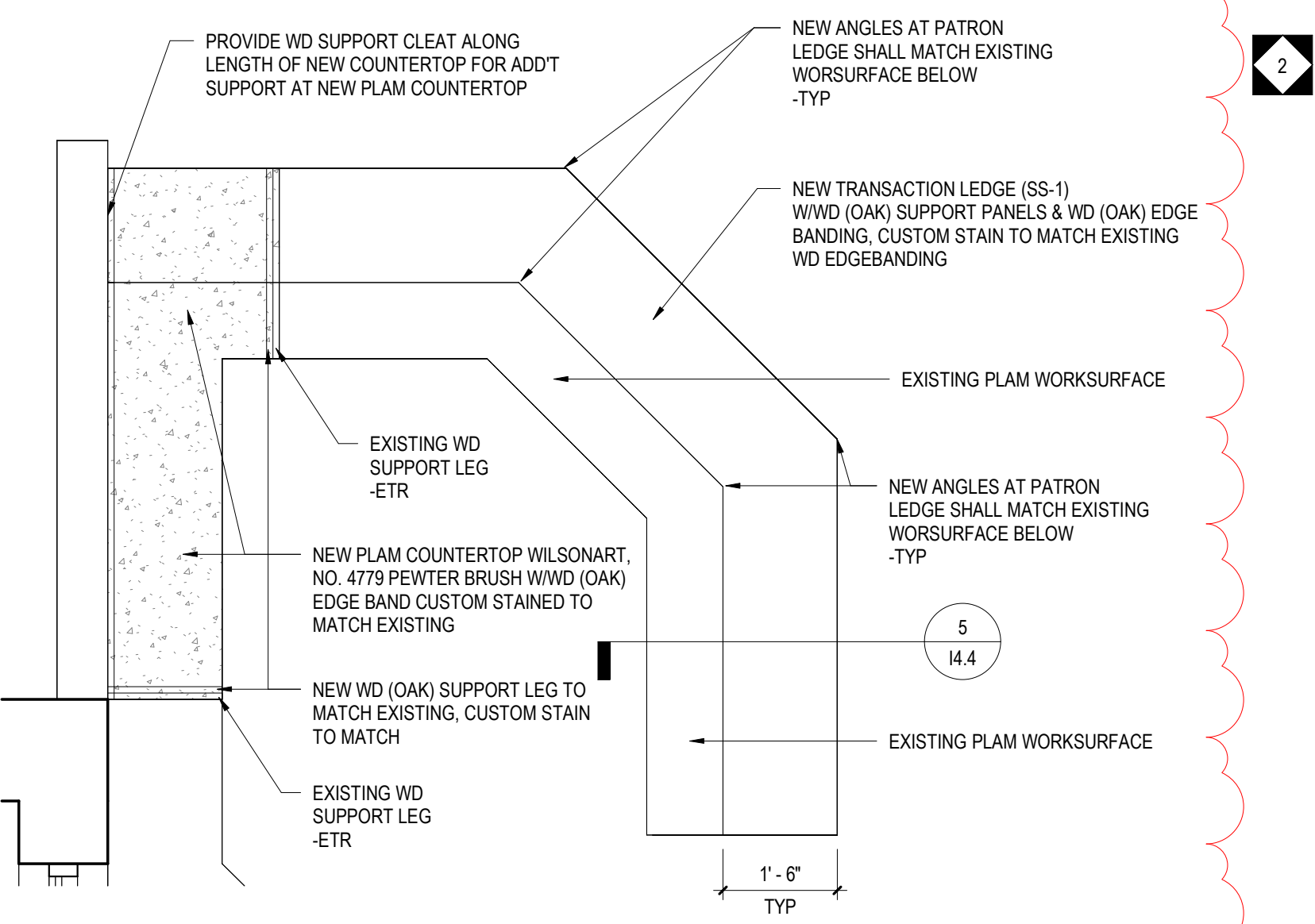
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ADDITIONS AND RENOVATIONS
SHELburnE MIDDLE SCHOOL
SCHOOL BOARD OF THE CITY OF STAUNTON, VA
300 GRUBERT AVENUE, STAUNTON, VIRGINIA



LARGE SCALE LAYOUTS - SCIENCE LABS	
PLOT SCALE:	As indicated
FILENAME:	
DATE:	01/24/2023

PROJECT
3636
I4.2



2

NEW TRANSACTION EDGE (G.S. EDGE BAND W/ CUSTOM STAIN)

PLAM END PANEL (BEYOND)

EXISTING PLAM COUNTERTOP W/ WD (CAR) EDGE BAND

EXISTING RECEPTION STATION -ETR

5 RECEPTION STATION - SECTION

1/4" 1 1/2" = 1'-0"

U/Ic REFRIG -NIC

303 305 307 301

206 217 200

H
14.4

INTERIOR ELEVATION
1/4" = 1'-0"

GENERAL NOTE IN REFERENCE TO I4.4	
1. ALL CASEWORK IN ADMINISTRATION, GUIDANCE AND NURSE'S AREA SHALL RECEIVE LOCKS.	

4 RECEPTION STATION DETAIL
14.4 1/2" = 1'-0"

ADMINISTRATION MOUNTING HEIGHT SCHEDULE	
MARKER BOARD	3'-0" AFF TO BOTTOM EDGE
TACK BOARD	3'-0" AFF TO BOTTOM EDGE
BASE CABINETS	2'-10" AFF TO TOP OF CABINET
WALL CABINETS	7'-0" AFF TO TOP OF CABINET
INTERACTIVE MONITOR / TV	VERIFY BRACKET LOCATION/TYPE W/OWNER & PER BRACKET MANUFACTURER'S RECOMMENDATIONS PRIOR TO INSTALLATION OF ROUGH-INS
ADMINISTRATION MOUNTING HEIGHT SCHEDULE SHALL BE APPLIED TO ALL ROOMS IN THE ADMINISTRATION, GUIDANCE, AND NURSE AREAS.	

I.4.4 - GENERAL CASEWORK AND EQUIPMENT SCHEDULE				
NO	DESCRIPTION	MANUFACTURER	MODEL	DIMENSIONS
102	2-DOOR TALL STORAGE	CASE SYSTEMS	T0100	36"W x 24"D x 84"H
106	OPEN TALL STORAGE	CASE SYSTEMS	T0000	24"W x 14"D x 84"H
200	ADA VANITY SINK BASE CABINET	CASE SYSTEMS	T000M	33"W x 24"D x 34"H
202	2-DOOR/2-DRAWER BASE CABINET	CASE SYSTEMS	B3100	36"W x 24"D x 34"H
203	2-DOOR/2-DRAWER BASE CABINET	CASE SYSTEMS	B3100	33"W x 24"D x 34"H
205	1-DOOR/1-DRAWER BASE CABINET - LEFT HINGED	CASE SYSTEMS	B3110	24"W x 24"D x 34"H
206	1-DOOR/1-DRAWER BASE CABINET - LEFT HINGED	CASE SYSTEMS	B3110	21"W x 24"D x 34"H
212	4-DRAWER LATERAL FILE BASE CABINET	CASE SYSTEMS	B7580	36"W x 24"D x 56"H
213	4-DRAWER LATERAL FILE BASE CABINET	CASE SYSTEMS	B7580	30"W x 24"D x 56"H
216	4-EQUAL DRAWER BASE CABINET	CASE SYSTEMS	B4040	24"W x 24"D x 34"H
217	4-EQUAL DRAWER BASE CABINET	CASE SYSTEMS	B4040	21"W x 24"D x 34"H
218	BOX/BOX/FILE CABINET	CASE SYSTEMS	B4540	16"W x 24"D x 30"H
221	4-EQUAL DRAWER BASE CABINET	CASE SYSTEMS	B4040	15"W x 24"D x 34"H
300	2-DOOR WALL CABINET	CASE SYSTEMS	W0100	36"W x 14"D x 24"H
301	2-DOOR WALL CABINET	CASE SYSTEMS	W0100	33"W x 14"D x 24"H
302	2-DOOR WALL CABINET	CASE SYSTEMS	W0100	30"W x 14"D x 24"H
303	2-DOOR WALL CABINET	CASE SYSTEMS	W0100	27"W x 14"D x 24"H
304	1-DOOR WALL CABINET - LEFT HINGED	CASE SYSTEMS	W0110	24"W x 14"D x 24"H
305	1-DOOR WALL CABINET - LEFT HINGED	CASE SYSTEMS	W0110	21"W x 14"D x 24"H
307	1-DOOR WALL CABINET - RIGHT HINGED	CASE SYSTEMS	W0120	21"W x 14"D x 24"H
308	1-DOOR CORNER WALL CABINET - RIGHT HINGED	CASE SYSTEMS	Y1220	24"W x 24"D x 24"H
335	1-DOOR WALL CABINET - RIGHT HINGED	CASE SYSTEMS	W0120	15"W x 14"D x 24"H
401	BUILT-IN RECEPTION DESK TO INCLUDE PLASTIC LAMINATE COUNTERTOP WITH (1) BOX/BOXFILES W/CASTERS, ANGLED SUPPORTS AS REQ. WIRE MANAGEMENT, (1) GROMMET & FINISHED FULL HEIGHT PLAM FRONT & END PANELS.	CASE SYSTEMS	CUSTOM#B4540	REFER TO DRAWINGS x 30"H
704	MARKERBOARD	REFER TO SPECIFICATIONS	REFER TO SPECIFICATIONS	10'-0"W x 4'-0"H
710	MARKERBOARD	REFER TO SPECIFICATIONS	REFER TO SPECIFICATIONS	6'-0"W x 4'-0"H
800	10-POCKET VERTICAL LITERATURE RACK	PETER REPPER	606	19.5"W x 31"D x 38"H

PROJECT
3636
I4.4

RATED WALL LEGEND

- 1 HOUR RATED FIRE BARRIER,
PART OF SHAFT
- 2 HOUR RATED FIRE BARRIER,
PART OF HORIZONTAL EXIT
- 2 HOUR RATED FIRE WALL,
PART OF HORIZONTAL EXIT
- SMOKE PARTITION

PLUMBING - SANITARY/STORM GENERAL NOTES

- A. REFER TO SHEET **P0.0** FOR PLUMBING SYMBOLS & LEGEND.
- B. REFER TO PROJECT MANUAL FOR PLUMBING SPECIFICATIONS.
- C. REFER TO **P3.0** SERIES SHEETS FOR PLUMBING DETAILS.
- D. REFER TO **P4.1** FOR PLUMBING SCHEDULES.
- E. REFER TO **P5.0** SERIES SHEETS FOR PLUMBING RISER DIAGRAMS.
- F. PROVIDE THE REQUIRED AMOUNT OF SLOPE TO HORIZONTAL PIPING AS OUTLINED IN THE VIRGINIA PLUMBING CODE.
- G. ALL STORM PIPING SHALL BE COORDINATED WITH STRUCTURAL MEMBERS PRIOR TO INSTALLATION.
- H. CONTRACTOR SHALL REPLACE ANY EXISTING EXPOSED PIPE INSULATION TO REMAIN WITH NEW.

KEYNOTES

- P12 ENSURE 10 FOOT CLEARANCE FROM ALL MECHANICAL EQUIPMENT INTAKES.
- P63 UP TO ROOF HYDRANT.
- P66 USE FIXTURE CARRIER WATTS ISCA-101-LR-AUX OR SIMILAR.
- P67 USE FIXTURE CARRIER WATTS ISCA-101-LR OR SIMILAR.
- P71 PROVIDE CHECK VALVE AND BALANCING VALVE ON DHWR SYSTEM.

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REVISIONS

NO.	MM-DD-YY	NAME	DESCRIPTION OF CHANGES
2	02/28/24		ADDENDUM #2

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ADDITIONS AND RENOVATIONS
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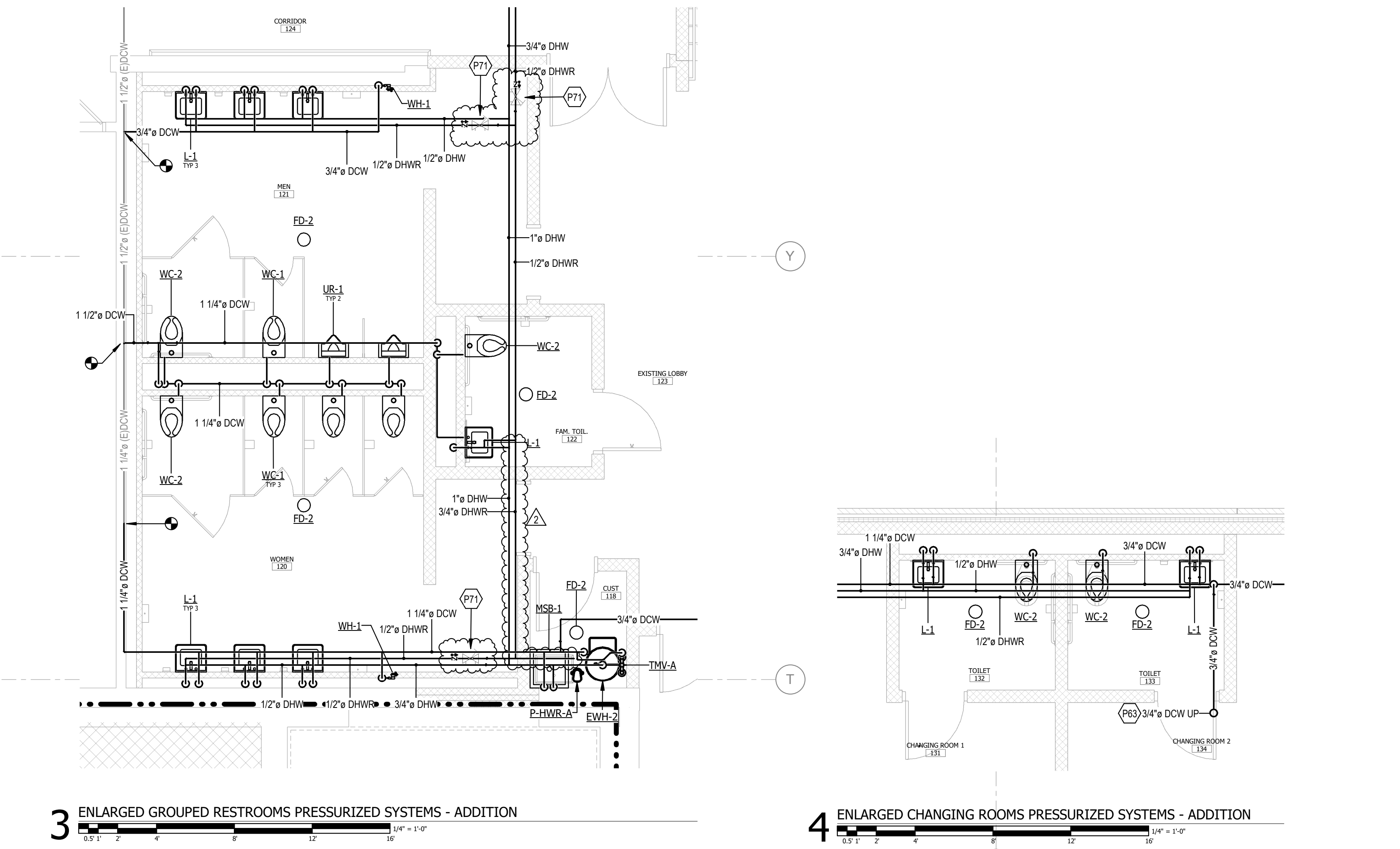
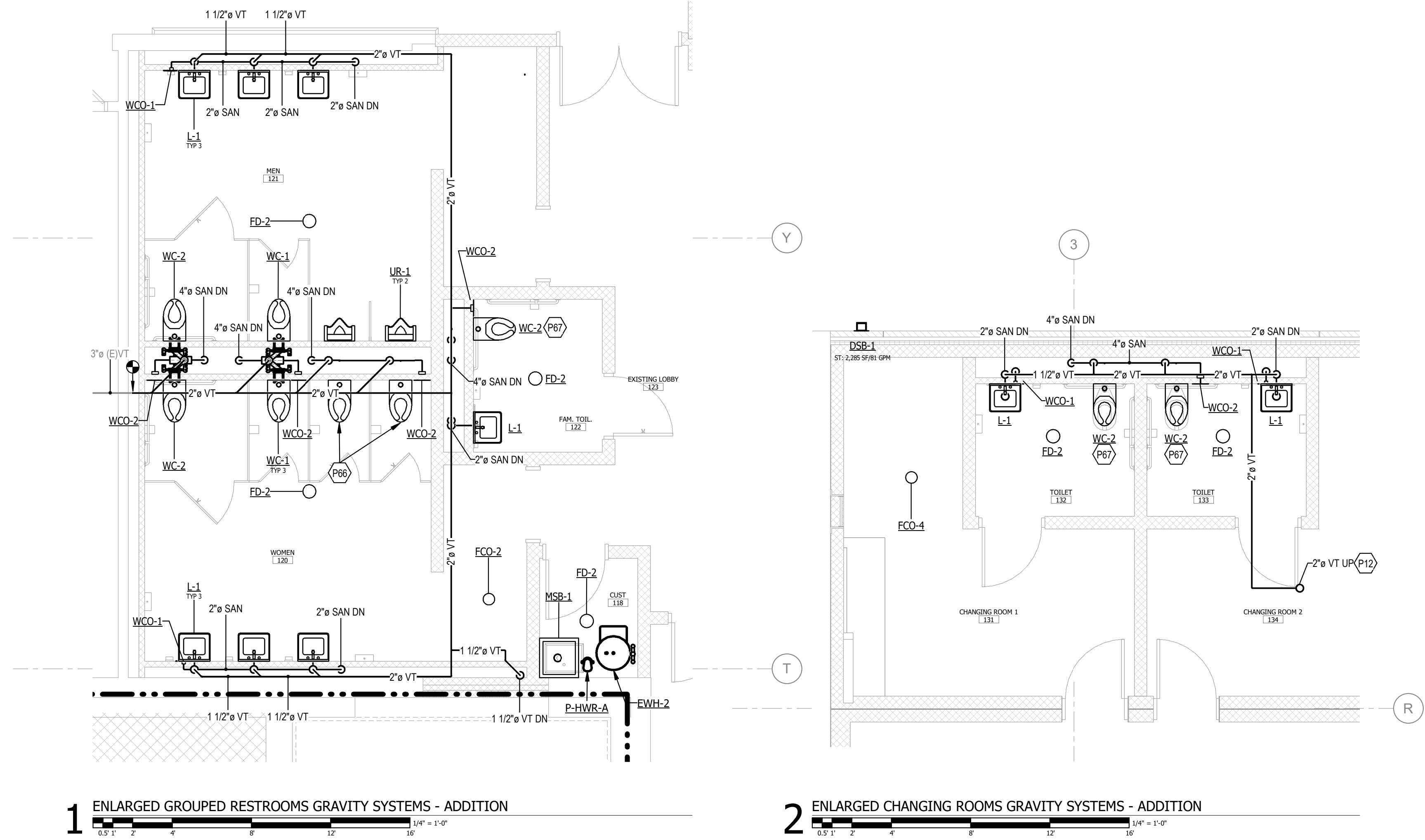
PLUMBING ENLARGED NEW WORK
PLAN

PLOT SCALE:
As indicated

FILENAME:
RSMR22

DATE:
01/24/2024

PROJECT
3636
P2.1



ALL SCOPE OF WORK SHOWN WITHIN DASHED BOX SHALL BE PRICED AS PART OF ALTERNATE #1. CONTRACTOR IS RESPONSIBLE FOR DETERMINING WHICH NOTES, SCHEDULES AND DETAILS ARE APPLICABLE TO THE SCOPE OF WORK IN THIS AREA.

GENERAL NOTES (POWER):

- A. REFER TO THE ARCHITECT'S REFLECTED CEILING PLANS, ELEVATIONS, AND CASEWORK DETAILS FOR EXACT LOCATIONS OF ALL WALL AND CEILING MOUNTED ELECTRICAL DEVICES.
- B. CONTRACTOR SHALL FOLLOW BRANCH CIRCUITING LAY-OUT, AS INDICATED ON THE FLOOR PLANS, WITH A MAXIMUM OF THREE (3) BRANCH CIRCUITS PER HOMERUN. EACH BRANCH CIRCUIT SHALL BE PROVIDED WITH A DEDICATED NEUTRAL CONDUCTOR. DEDICATED NEUTRAL CONDUCTORS SHALL BE CONSIDERED CURRENT CARRYING. IF ADDITIONAL CONDUCTORS ARE RAN IN THE SAME CONDUIT WITH THOSE INDICATED, CONDUCTOR SHALL DERATE ALL CURRENT CARRYING CONDUCTORS PER NEC 310.15(B)(3), AND UPSIZE CONDUIT AS REQUIRED PER NEC 300.17 AND ANNEX C. MULTIWIRE BRANCH CIRCUITS AS DEFINED IN NEC 100.1/210.4 (CIRCUITS SHARING A COMMON NEUTRAL CONDUCTOR) SHALL NOT BE PERMITTED.
- C. IDENTIFY THE PANEL AND CIRCUIT NUMBER FOR ALL RECEPTACLES, SWITCHES, ETC. IN AREA OF CONSTRUCTION. PROVIDE CLEAR ADHESIVE LABELS WITH BLACK LETTERING, IN HEALTHCARE FACILITIES, ENGRAVE EMERGENCY DEVICE COVERPLATES IN PATIENT CARE AREAS. MARK INSIDES OF ALL DEVICE BOXES WITH PANEL AND CIRCUIT NUMBER.
- D. RECEPTACLES THAT ARE CONTROLLED BY AN AUTOMATIC MEANS SUCH AS OCCUPANCY SENSOR OR ENERGY MANAGEMENT SYSTEM SHALL BE MARKED IN ACCORDANCE WITH NEC 406.3(E).
- E. LOCATIONS OF ELECTRICAL CONNECTIONS AND LOCAL DISCONNECTS SHALL BE COORDINATED WITH MECHANICAL AND PLUMBING CONTRACTORS TO ENSURE ACCESS AND WORKING CLEARANCE IS MAINTAINED PER NEC. NOTIFY OTHER TRADES OF REQUIRED CLEARANCE AREAS TO AVOID ROUTING OF OTHER SYSTEMS IN THESE AREAS. DO NOT INSTALL ELECTRICAL EQUIPMENT OVER EQUIPMENT NAMEPLATES OR ACCESS PANELS OR THROUGH ACCESS/MAINTENANCE CLEARANCES OF EQUIPMENT BY OTHER TRADES.

KEYNOTES

- E2 PROVIDE KH INDUSTRIES RTB3L-WDD520-112F CORD REEL MOUNTED TO CEILING/STRUCTURE. TERMINATE 1H, 1N, 1G INTO DEVICE. COORDINATE FINAL LOCATION WITH ARCHITECT AND OWNER PRIOR TO INSTALL.
- E48 CONNECT NEW RECEPTACLE TO CIRCUIT SERVING EXISTING-TO-REMAIN RECEPTACLE(S) IN SPACE.
- E49 PROVIDE NEMA 1, 240V, 30A/1P RATED DISCONNECT FOR SHOP EQUIPMENT. COORDINATE FINAL LOCATION WITH OWNER PRIOR TO INSTALL.
- E50 INSTALL DUPLEX RECEPTACLE ORIENTED HORIZONTALLY IN BACKSLASH OF CASEWORK.
- E51 PROVIDE NEMA 1, 240V, 30A/3P RATED DISCONNECT FOR MOTORIZED LIFT. COORDINATE FINAL LOCATION WITH OWNER PRIOR TO INSTALL.
- E53 PROVIDE GENERAL PURPOSE RECEPTACLE 18" BELOW SLAB OPENING.
- E54 PROVIDE DEDICATED RECEPTACLE FOR SUMP PUMP.
- E55 PROVIDE 20A ENCLOSED CIRCUIT BREAKER FOR ELEVATOR SWITCH ON WALL.
- E56 COORDINATE EXACT LOCATION OF ELEVATOR MOTOR WITH MANUFACTURER. FOR BIDDING PURPOSES, ASSUME MOTOR IS LOCATED AT TOP OF SHAFT.
- E57 PROVIDE NEW 600A MCB L/HNE STYLE DISTRIBUTION PANELBOARD. CONNECT TO EXISTING FEEDERS WHICH PREVIOUSLY SERVED DEMOLISHED PANELBOARD "SHOPBOILERS". EXTEND CONDUCTORS/CONDUITS AS NECESSARY.

KEYNOTES

- E58 OWNER TO RELOCATE EXISTING PROMETHEAN BOARD TO THIS APPROXIMATE LOCATION IN NEW SPACE.
- E59 PROVIDE NEW 150A/3P SHUNT TRIP BREAKER IN EXISTING SWITCHBOARD FOR CIRCUIT FEEDING NEW ELEVATOR.
- E62 PROVIDE WITH ADJUSTABLE TRIP SETTING DOWN TO 90A. UTILIZE EXISTING CIRCUIT SERVING PREVIOUS SPACE TO FEED NEW ELECTRICAL DEVICES. EXTEND CONDUCTORS/CONDUITS AS REQUIRED.
- E85 PROVIDE 120V CONNECTION FOR SINK STATION. COORDINATE FINAL POWER REQUIREMENTS WITH MANUFACTURER PRIOR TO ROUTING CONDUIT/CONDUCTORS.
- E103 PROVIDE NEW 150A/3P BREAKER IN EXISTING SWITCHBOARD FOR FEEDER TO NEW PANEL "HP1".
- E120 PROVIDE 120V CONNECTION TO SINK FAUCET. COORDINATE FINAL POWER REQUIREMENTS WITH MANUFACTURER PRIOR TO INSTALL.
- E121 PROVIDE 208V/2P ELECTRICAL CONNECTION TO COILING DOOR AND EXTEND CONDUCTORS AS REQUIRED TO THREE BUTTON SWITCH ON WALL.
- E122 PROVIDE KH INDUSTRIES RTFM4L-WW-K6K CORD REEL MOUNTED TO CEILING/STRUCTURE TO SERVE WELDING STATION. FIELD INSTALL NEMA 6-50 RECEPTACLE AND BACKBOX TO CORD REEL. TERMINATE 2H, 1N, 1G INTO DEVICE AT CEILING. COORDINATE FINAL LOCATION WITH ARCHITECT AND OWNER PRIOR TO INSTALL.

KEYNOTES

- E123 INSTALL RECEPTACLE SERVING GOGGLE CABINET AT APPROXIMATELY 4' SO AS TO CONCEAL OUTLET AND POWER CORD BEHIND CABINET ONCE INSTALLED.
- E125 APPROXIMATE CONDUIT PATH FOR FEEDER FROM EXISTING SWITCHBOARD TO NEW PANEL "HP1". REFER TO ONE-LINE DIAGRAM FOR CONDUCTOR AND CONDUIT SIZING.
- E126 PATCH WALL AS REQUIRED TO MAINTAIN CURRENT FIRE/SMOKE RATING.
- E133 OWNER TO REMOVE ANY/ALL OBSTRUCTIONS AS REQUIRED TO ESTABLISH AND MAINTAIN REQUIRED CLEARANCE FOR NEW PANELBOARD.
- E149 UTILIZE SPARE 20A BREAKER IN EXISTING PANELBOARD "LB" TO PROVIDE DEDICATED CIRCUIT FOR NEW DUPLEX RECEPTACLE SERVING PRINTER. EXTEND 2#10, 1#10 IN 3/4" CONDUIT FROM BREAKER TO OUTLET. NOTIFY ENGINEER IF NO SPARE BREAKER IS AVAILABLE.
- E152 PROVIDE 120V CONNECTION TO NEW PAGING INTERCOM ROOM AMPLIFIER. COORDINATE FINAL LOCATION WITH OWNER PRIOR TO ROUGH-IN.
- E153 RECONNECT EXISTING CIRCUIT FOR DOOR ACCESS HARDWARE AT NEW DOOR LOCATION. EXTEND CONDUCTORS/CONDUIT AS REQUIRED.
- E154 PROVIDE 120V CONNECTION FOR NEW DOOR ACCESS HARDWARE. COORDINATE FINAL POWER REQUIREMENTS WITH MANUFACTURER PRIOR TO ROUTING CIRCUIT.

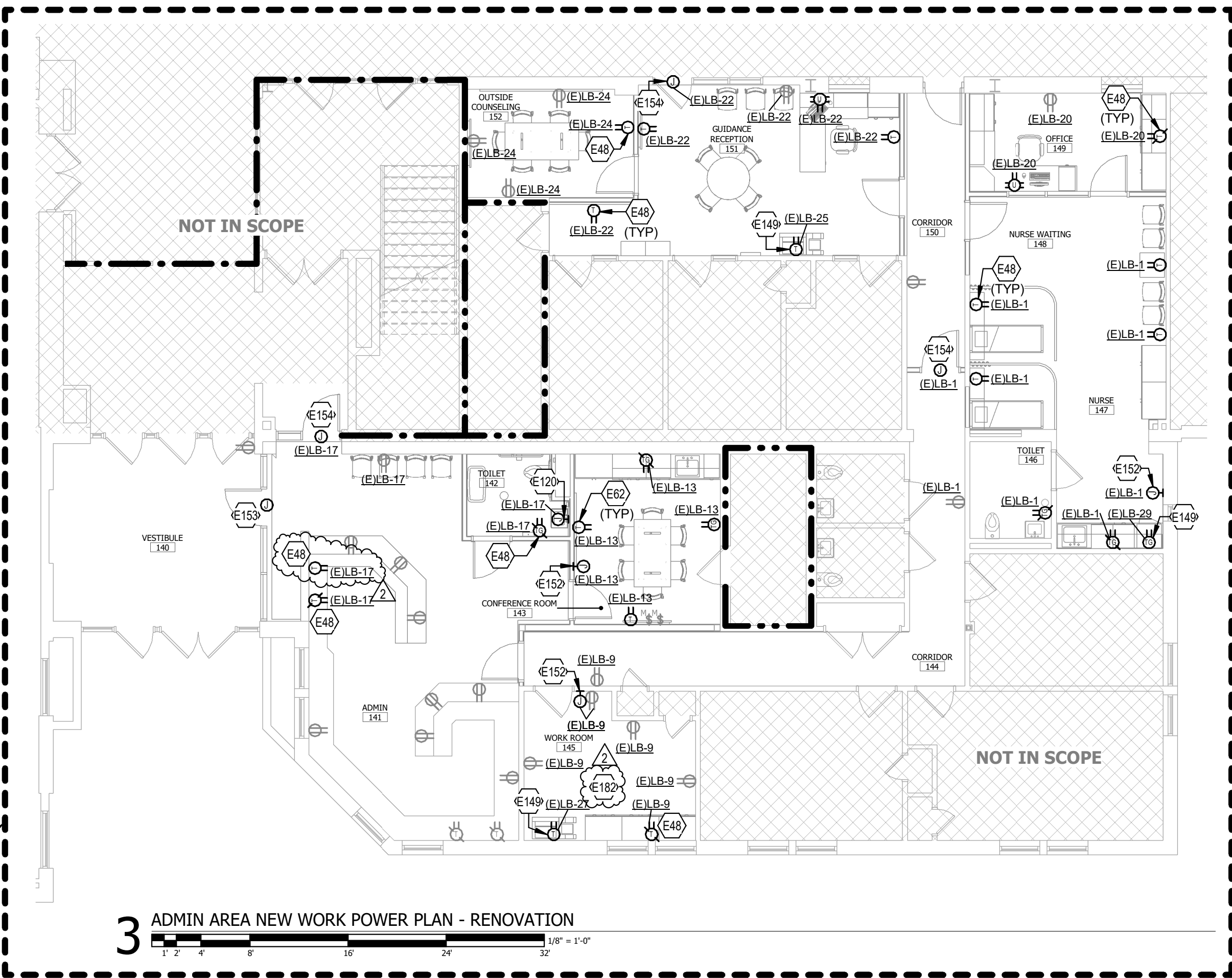
KEYNOTES

- E157 INSTALL THREE BUTTON SWITCH FURNISHED BY COILING DOOR MANUFACTURER AT THIS LOCATION. EXTEND CONDUCTORS IN 3/4" CONDUIT AS REQUIRED BETWEEN CONTROL STATION AND MOTOR. COORDINATE FINAL LOCATION WITH OWNER PRIOR TO ROUGH-IN.
- E158 PROVIDE ROUGH-IN FOR MOTORIZED LIFT CONTROL STATION AT THIS LOCATION. PROVIDE 3/4" CONDUIT FROM DRIVE UNIT TO CONTROL STATION LOCATION. INSTALL CONTROL STATION FURNISHED BY MANUFACTURER. REFER TO MANUFACTURER SHOP DRAWINGS FOR WIRING SCHEMATIC OF CONTROL STATIONS.
- E159 PROVIDE ROUGH-IN AS REQUIRED FOR ALARMS AND OTHER MISC. DEVICES ASSOCIATED WITH CHAIR LIFT. PROVIDE 3/4" CONDUIT FROM DRIVE UNIT TO ALL DEVICES AND COMPLETELY INSTALL DEVICES FURNISHED BY MANUFACTURER. REFER TO SHOP DRAWINGS FOR WIRING SCHEMATIC.
- E164 PROVIDE 120V CONNECTION TO ROLLER SHADE. COORDINATE EXACT CONNECTION POINT AND POWER REQUIREMENTS WITH MANUFACTURER PRIOR TO INSTALLATION.
- E166 PROVIDE 120V CONNECTION TO ALL SMOKE DAMPERS IN THIS AREA OF THE BUILDING. REFER TO FIRE ALARM DRAWINGS FOR ALL LOCATIONS.
- E174 PROVIDE QUADRUPEX RECEPTACLE WITH GREEN OUTLET COVERS AND GREEN FACEPLATE TO MATCH COLOR OF BACKDROP.
- E182 INSTALL WIRE MOLD AS REQUIRED TO INSTALL NEW DEVICES ON EXISTING-TO-REMAIN CMU WALLS IN THIS AREA. PROVIDE WIRE MOLD WITH COLOR TO MATCH WALL.

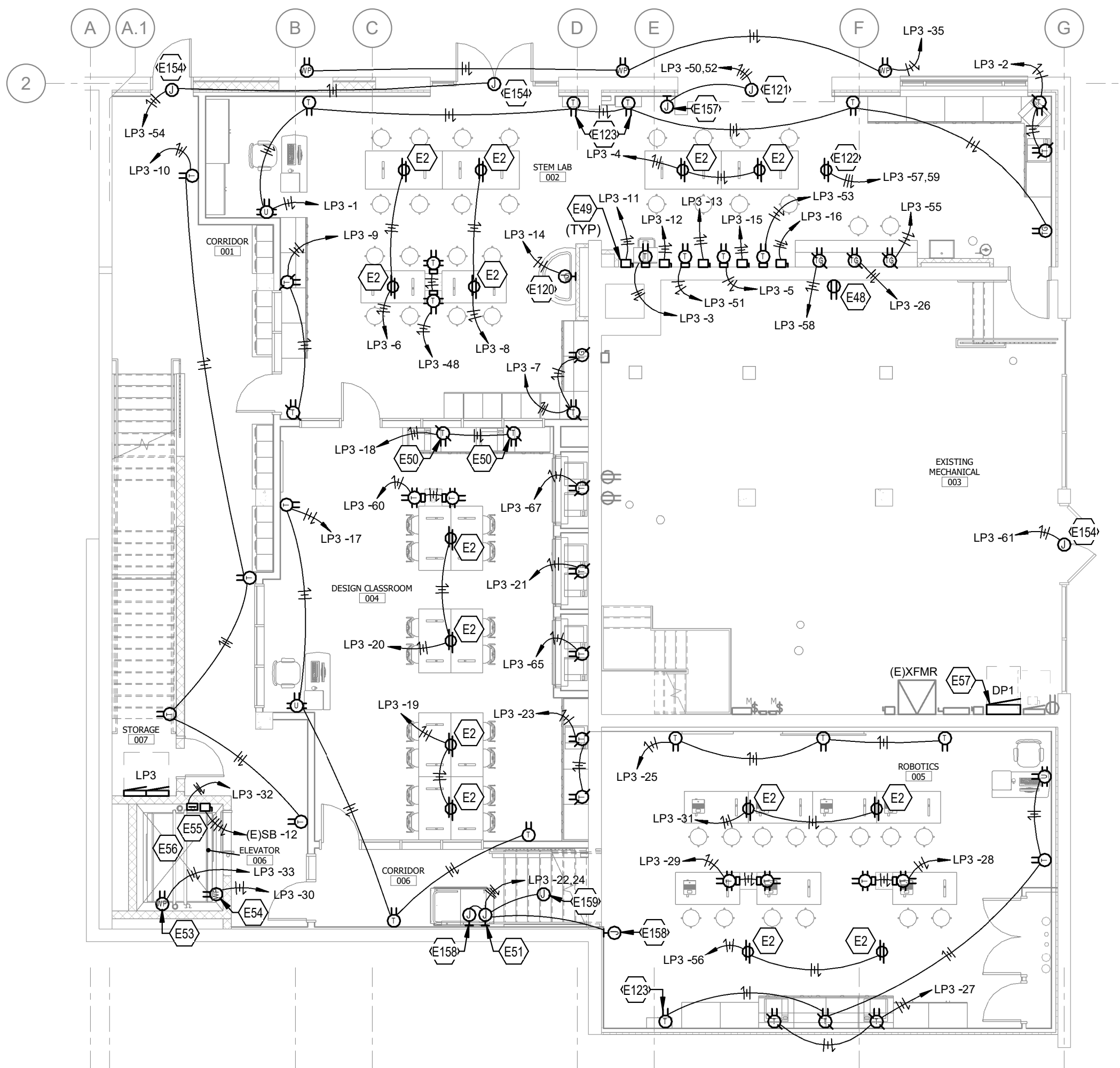
RATED WALL LEGEND

- 1 HOUR RATED FIRE BARRIER, PART OF SHAFT
- 2 HOUR RATED FIRE BARRIER, PART OF HORIZONTAL EXIT
- 2 HOUR RATED FIRE WALL, PART OF HORIZONTAL EXIT
- SMOKE PARTITION

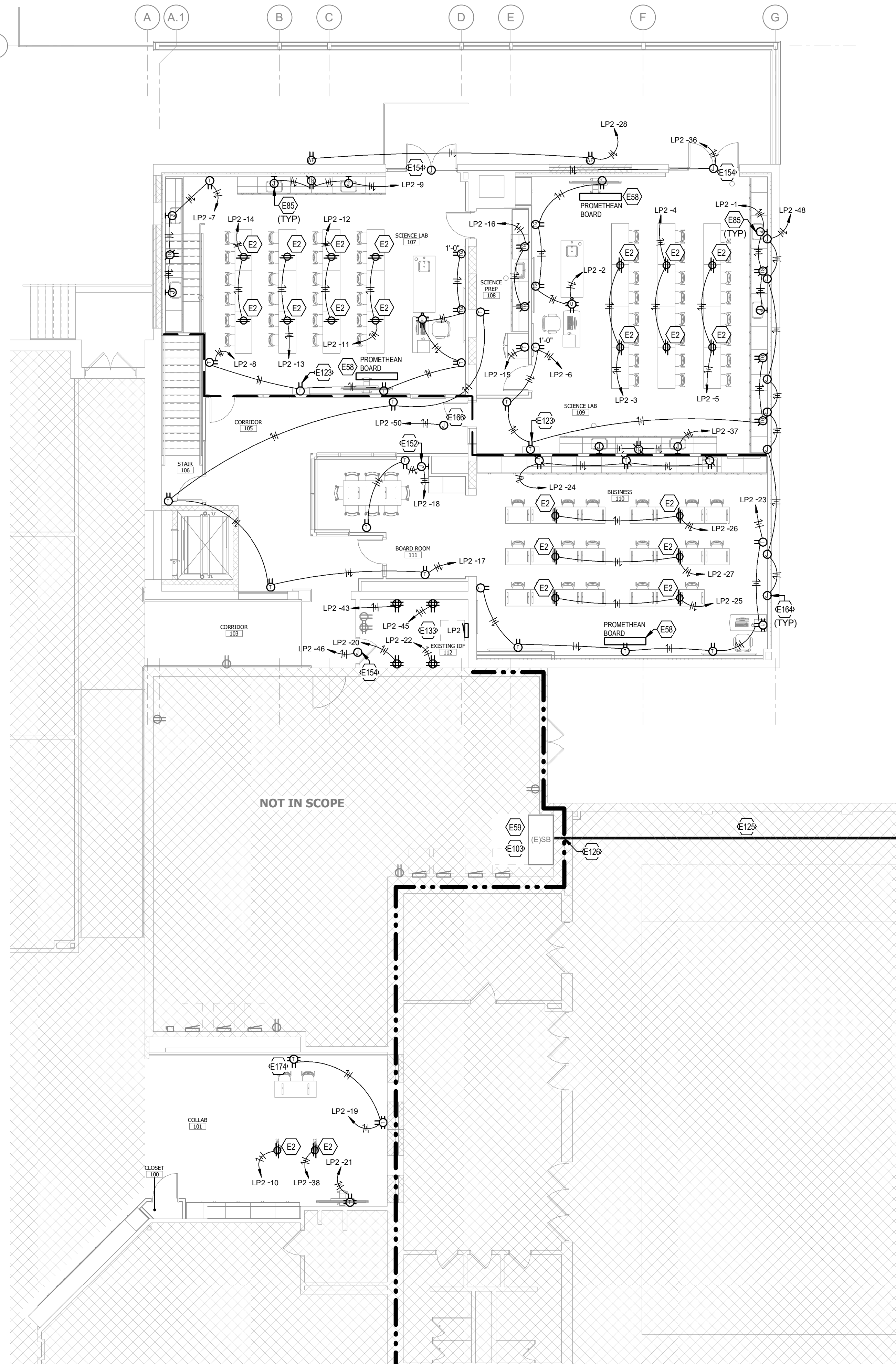
ALL SCOPE OF WORK SHOWN WITHIN DASHED BOX SHALL BE PRICED AS PART OF ALTERNATE #2. CONTRACTOR IS RESPONSIBLE FOR DETERMINING WHICH NOTES, SCHEDULES, DETAILS AND CONTROLS ARE APPLICABLE TO THE SCOPE OF WORK IN THIS AREA.



3 ADMIN AREA NEW WORK POWER PLAN - RENOVATION



1 LOWER LEVEL NEW WORK POWER PLAN - RENOVATION



2 FIRST FLOOR NEW WORK POWER PLAN - RENOVATION

REVISIONS

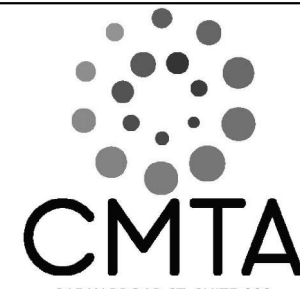
NO.	DATE	NAME	DESCRIPTION OF CHANGES
1	02/20/24		ADDENDUM #1
2	02/29/24		ADDENDUM #2

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POWER PARTIAL LOWER LEVEL
AND FIRST FLOOR NEW WORK -
RENOVATION

PLOT SCALE:
1/8" = 1'-0"
FILENAME:
RSMR22
DATE:
01/24/2024

PROJECT
3636

E1.1

A. REFER TO THE ARCHITECT'S REFLECTED CEILING PLANS, ELEVATIONS, AND CASEWORK DETAILS FOR EXACT LOCATIONS OF ALL WALL AND CEILING MOUNTED ELECTRICAL DEVICES.	E. LOCATE EIGHT SIGNS FOR MAXIMUM VIEWING AREA TO IDENTIFY EGRESS PATHS AS INDICATED ON PLANS. COORDINATE LOCATIONS SUCH THAT ARCHITECTURAL FEATURES OR EQUIPMENT FROM OTHER TRADES DO NOT OBSTRUCT VIEW.
B. CONTRACTOR SHALL FOLLOW BRANCH CIRCUITING LAY-OUT, AS INDICATED ON THE FLOOR PLANS, WITH A MAXIMUM OF THREE (3) BRANCH CIRCUITS PER HOMERUN. EACH BRANCH CIRCUIT SHALL BE PROVIDED WITH A DEDICATED NEUTRAL CONDUCTOR. DEDICATED NEUTRAL CONDUCTORS SHALL BE CONSIDERED CURRENT CARRYING CONDUCTORS. IF ADDITIONAL BRANCH CIRCUITS ARE NAME CONDUIT WITH THOSE INDICATED, CONTRACTOR SHALL DERATE ALL CURRENT CARRYING CONDUCTORS PER N.E.C. #310.15(B)(3). AND AMPERE CONDUIT SHALL BE DERATED PER N.E.C. #310.15(C) AND ANNEX C. MULTIWIRE BRANCH CIRCUITS AS DEFINED IN N.E.C. #410.210.4 (CIRCUITS SHARING A COMMON NEUTRAL CONDUCTOR) SHALL NOT BE PERMITTED.	F. LUMINAIRES INDICATED WITH MULTI-LEVEL SWITCHING SHALL HAVE SIMILAR LAMPS CONTROLLED TOGETHER, I.E. INBOARD AND OUTBOARD LAMPS OR RIGHT AND LEFT HAND LAMPS.
C. IDENTIFY THE PANEL AND CIRCUIT NUMBER FOR ALL RECEPTILES, SWITCHES, ETC. IN AREA OF CONSTRUCTION. PROVIDE CLEAR ADHESIVE LABELS WITH BLACK LETTERING, IN HEALTHCARE FACILITIES, ENGRAVE EMERGENCY DEVICE COVERSPLATES IN PATIENT CARE AREAS. ALSO, MARK INSIDES OF ALL DEVICE BOXES WITH PANEL AND CIRCUIT NUMBER.	G. ALL LIGHTING FIXTURE LENSES, PARABOLIC LOUVERS, DOWNLIGHTING ALZAK CONES AND "PARACUBE" LOUVERS SHALL BE HANDLED WITH COTTON GLOVES DURING INSTALLATION AND LAMPING TO AVOID FINGER PRINTS OR OILS ON LENSES OR LOUVERS. IF LAMPS ARE SHIPPED AND INSTALLED WITH CLEAR PLASTIC BAGS TO PROTECT LAMPS, AT CLOSE OF PROJECT, AND AFTER CONSTRUCTION AREA IS TURNED OVER TO OWNER, CONTRACTOR SHALL REMOVE BAGS SHOWING DIRT OR FINGER PRINTS SHALL BE CLEANED WITH SOLVENT RECOMMENDED BY THE MANUFACTURER, OR REPLACED AS NECESSARY IN ORDER TO TURN OVER TO THE OWNER NEW FIXTURES AT OCCUPANCY.
D. LOCATE CHAIN-HUNG INDUSTRIAL FIXTURES IN MECHANICAL ROOMS TO AVOID DUCTWORK AND PIPING, TO MAXIMIZE AVAILABLE LIGHT. SPACE AROUND EQUIPMENT, AIR HANDLERS, ETC. TO PROVIDE ADEQUATE CLEARING TO ALL AREAS OF THE PROJECT. PROVIDE ALL FIXTURES OF SAME TYPE AS NEEDED TO FULFILL THIS REQUIREMENT.	H. RECESSED LUMINAIRES SHALL BE SECURED SUCH THAT THE DOOR FRAME DOES NOT SHIFT HOUSING. ALL TRIMS SHALL BE COMPLETELY FLUSH WITH FINISHED CEILINGS AT COMPLETION OF CONSTRUCTION.
	I. CONTRACTOR SHALL PROVIDE UNSWITCHED CONDUIT TO ALL EXISTING LIGHTING TO PROVIDE INVERTER BATTERY PACKS, AND NIGHT LIGHTS REQUIRED.

- A. LOCATE EIGHT SIGNS FOR MAXIMUM VIEWING AREA TO IDENTIFY EGRESS PATHS AS INDICATED ON PLANS. COORDINATE LOCATIONS SUCH THAT ARCHITECTURAL FEATURES OR EQUIPMENT FROM OTHER TRADES DO NOT OBSCURE ANY VIEW.**
- B. LUMINAIRES INDICATED WITH MULTI-LEVEL SWITCHING SHALL HAVE SIMILAR LAMPS CONTROLLED TOGETHER, I.E. INBOARD AND OUTBOARD LAMPS OR RIGHT AND LEFT HAND LAMPS.**
- G. ALL LIGHTING FIXTURE LENSES, PARABOLIC LOUVERS, DOWNLIGHT ALIKING FIXTURES AND "PARABUC" LOUVERS SHALL BE HANDLED WITH COTTON GLOVES DURING INSTALLATION AND LAMPING TO AVOID FINGER PRINTS OR HAND MARKS. PARABOLIC LOUVER OR CONE FIXTURES BE SHIPPED AND INSTALLED WITH CLEAR PLASTIC BAGS TO PROTECT LOUVERS. AT CLOSE OF PROJECT, AND AFTER CONSTRUCTION AREA IS TIGHTLY CLEANED, PARABOLIC LOUVER OR CONE FIXTURES SHOWING DIRT OR FINGER PRINTS SHALL BE CLEANED WITH SOLVENT RECOMMENDED BY THE MANUFACTURER, OR REPLACED AS NECESSARY IN ORDER TO TURN OVER TO THE OWNER NEW FIXTURES AT OCCUPANCY.**
- H. RECESSED LUMINAIRES SHALL BE SECURED SUCH THAT THE FORCE REQUIRED INSERTING LAMPS, TRIMS, LENSES, LOUVERS, OR DOOR FLAMES DOES NOT SHIT HOUSING. ALL TRIMS SHALL BE COMPLETELY COVERED WITH FINISHED CEILING AT COMPLETION OF CONSTRUCTION.**
- I. CONTRACTOR SHALL PROVIDE UNSWITCHED CONDUCTOR TO ALL EXIT LIGHTS. EMERGENCY INVERTER BATTERY PACKS, AND NIGHT LIGHTS WILL BE REQUIRED.**

E9 RECURIT ALL EXISTING LIGHTS IN THIS SPACE AS REQUIRED
TO BE CONTROLLED BY NEW SWITCHES. CONNECT NEW EXIST
SIGN WITH UNSWITCHED HOT FROM EXISTING LIGHTING CIRCUIT

E68 PROVIDE DEDICATED LIGHTING CIRCUIT FOR ELEVATOR PIT
LIGHTING.

E69 MOUNT ALL LIGHT FIXTURES (EXCEPT EXIST SIGNS) AND
SENSORS IN THIS SPACE AT 12' AFF.

E71 ALL LIGHTING SHOWN WITHIN BOUNDARY SHALL BE
CONNECTED TO DESIGNATED CIRCUIT BREAKER UNLESS
OTHERWISE NOTED.

E100 RENSTALL EXISTING EXIST SIGN AND RECONNECT TO EXISTING
LIGHTING CIRCUIT. EXTEND CONDUCTORS/CONDUIT AS
REQUIRED. PROVIDE FIXTURE WITH NEW WARE GUARD.

E101 UTILIZE EXISTING LIGHTING FIXTURES TO FEED EXISTING
FIXTURES SHOWN WITHIN THIS BOUNDARY. EXTEND
CONDUCTORS/CONDUIT AS REQUIRED.

E127 ROUTE CIRCUIT THROUGH BUILDING MOUNTED PHOTOCELL
TO EXISTING LIGHTING FIXTURES.

E128 PROVIDE BUILDING MOUNTED PHOTOCELL AT THIS LOCATION
FOR ON/OFF CONTROL OF NEW EXISTER FIXTURES.
COORDINATE FINAL LOCATION PRIOR TO INSTALLATION.

E151 COORDINATE FINAL SWITCH LOCATION WITH OWNER PRIOR TO
INSTALLATION.

	1 HOUR RATED FIRE BARRIER PART OF SHAFT
	2 HOUR RATED FIRE BARRIER PART OF HORIZONTAL EXIT
	2 HOUR RATED FIRE WALL, PART OF HORIZONTAL EXIT
	SMOKE PARTITION

3 ADMIN AREA NEW WORK LIGHTING PLAN - RENOVATION

1 LOWER LEVEL NEW WORK LIGHTING PLAN - RENOVATION

2

—

FIRST FLOOR NEW WORK LIGHTING PLAN - RENOVATION

[illegible]

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MECHANICSBURG, PENNSYLVANIA

250 WEST MAIN STREET, SUITE 200

WHITE SULPHUR SPRINGS, WEST VIRGINIA

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300 Grubert Ave, Staunton, VA 24401

300 Grubert Ave, Staunton, VA 24401



LIGHTING PARTIAL LOWER LEVEL
AND FIRST FLOOR NEW WORK -
RENOVATION

PLOT SCALE:

FILENAME:
DEM022

DATE: 01/24/2024



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PROJECT
3636

E1.3

E73 ADD JACKS AS REQUIRED FOR UNSUPPORTED CABLEING IN THIS SPACE.

E74 PROVIDE EXISTING-TO-REMAIN CAMERA FROM NETWORK SWITCH IN EXISTING IDF 112 PRIOR TO START OF DEMOLITION. REMOVE EXISTING CAMERA DURING.

E75 RECONSTRUCT EXISTING PAGING INTERCOM AT SAME APPROXIMATE LOCATION WITH CURRENT LINES DIRECTION ON NEW EXTERIOR CANOPY. COORDINATE FINAL LOCATION WITH OWNER AND ARCHITECT TO MINIMIZE TIME DURING WHICH CANOPY IS NON-OPERATIONAL.

E76 REINSTALL EXISTING PAGING INTERCOM AMPLIFIER AND CALL BUTTON PROVIDE CAT6 CABLE FROM NETWORK SWITCH IN EXISTING IDF 114 AND TERMINATE INTO AMPLIFIER.

E77 PROVIDE NETWORK CONNECTION TO EXISTING 100 AMP CONNECT DEVICES TO EXISTING AUDIO ENHANCEMENT EPIC PAGING INTERCOM SYSTEM. COORDINATE FINAL LOCATION WITH ARCHITECT AND OWNER PRIOR TO INSTALLATION.

E78 INSTALL DATA OUTLET ORIENTED HORIZONTALLY IN REAR BACKLOG OF CASEWORK.

E79 PROVIDE ANALOG LINE FOR PHONE IN ELEVATOR CAR DISCONNECT EXISTING CABLE WITH ELEVATOR CONTRACTOR PRIOR TO ROUGH-IN.

E80 REINSTALL DATA OUTLET AT APPROXIMATELY 5' AFF FOR CORRIDOR 153. COORDINATE FINAL LOCATION WITH ARCHITECT AND OWNER PRIOR TO ROUGH-IN.

E81 REINSTALL EXISTING PAGING INTERCOM SPEAKER IN NEW CEILING RECONNECT TO EXISTING CABLE CLOCK SYSTEM. PROVIDE AMPLIFIER. EXTEND/FREEFEE CABLE CABLEING AS REQUIRED. COORDINATE FINAL LOCATION WITH ARCHITECT AND OWNER PRIOR TO INSTALLATION.

E82 REINSTALL EXISTING CAMERA IN NEW CEILING AT THIS LOCATION. PROVIDE CAT6 CABLE FROM NETWORK SWITCH IN EXISTING IDF 114 AND TERMINATE INTO CEILING. COORDINATE FINAL LOCATION WITH OWNER TO RECONNECT CABLE TO EXISTING CCTV SYSTEM. COORDINATE FINAL LOCATION WITH ARCHITECT AND OWNER PRIOR TO INSTALLATION.

E83 REINSTALL EXISTING CARD READER IN WALL OF NEW HALL AND RECONNECT TO EXISTING CARD ACCESS SYSTEM. REINSTALL ALL ASSOCIATED CORD HARDWARE.

E84 EXTEND/FREEFEE CABLE CABLEING AS REQUIRED. COORDINATE FINAL LOCATION WITH ARCHITECT AND OWNER PRIOR TO INSTALLATION.

E85 REINSTALL EXISTING AUDIO ENHANCEMENT EPIC SYSTEM VOLUME CONTROL DIAL AT THIS LOCATION. PROVIDE CAT6 CABLE FROM NETWORK SWITCH IN EXISTING DATA CLOSET ON PLANN NORTH SIDE OF CORRIDOR 153 AND TERMINATE AT 4' AFF. COORDINATE CONNECTION WITH OWNER TO RECONNECT DIAL TO EXISTING PAGING INTERCOM SYSTEM. COORDINATE FINAL LOCATION WITH ARCHITECT AND OWNER PRIOR TO INSTALLATION.

E86 REINSTALL EXISTING PAGING INTERCOM CALL BUTTON AT THIS LOCATION. PROVIDE CAT6 CABLE FROM NETWORK SWITCH IN EXISTING DATA CLOSET ON PLANN NORTH SIDE OF CORRIDOR 153 AND TERMINATE AT 4' AFF. COORDINATE CONNECTION WITH OWNER TO RECONNECT CABLE TO EXISTING TIME CLOCK SYSTEM. COORDINATE FINAL LOCATION WITH ARCHITECT AND OWNER PRIOR TO INSTALLATION.

E87 PROVIDE NEW CALL BUTTON; MATCH DEVICES OF EXISTING PAGING INTERCOM SYSTEM AND CONNECT NEW CALL BUTTON TO EXISTING PAGING INTERCOM SYSTEM. COORDINATE FINAL LOCATION WITH ARCHITECT AND OWNER PRIOR TO INSTALLATION.

E112 PROVIDE ROUGH-IN FOR ALL DOOR HARDWARE DEVICES TO BE PROVIDED BY ACCESS CONTROL, AND/OR DOOR HARDWARE CONTRACTORS.

E129 REINSTALL EXISTING SIGNALING FIRE ALARM ANNUNCIATOR PANEL AT THIS LOCATION AND RECONNECT TO EXISTING FIRE ALARM SYSTEM. COORDINATE FINAL LOCATION WITH ARCHITECT AND OWNER PRIOR TO INSTALLATION.

E136 REINSTALL EXISTING CAMERA IN NEW CEILING AT THIS LOCATION AND RECONNECT TO EXISTING CCTV SYSTEM. EXTEND/FREEFEE CABLE CABLEING AS REQUIRED. COORDINATE FINAL LOCATION WITH ARCHITECT AND OWNER PRIOR TO INSTALLATION.

E137 REINSTALL EXISTING DIGITAL CLOCK AT THIS LOCATION. PROVIDE CAT6 CABLE FROM NETWORK SWITCH IN EXISTING DATA CLOSET ON PLANN NORTH SIDE OF CORRIDOR 153 AND TERMINATE AT 7' AFF. COORDINATE CONNECTION WITH OWNER TO RECONNECT CABLE TO EXISTING TIME CLOCK SYSTEM. COORDINATE FINAL LOCATION WITH ARCHITECT AND OWNER PRIOR TO INSTALLATION.

E138 REINSTALL EXISTING CAMERA IN NEW CEILING AT THIS LOCATION. PROVIDE CAT6 CABLE FROM NETWORK SWITCH IN EXISTING DATA CLOSET ON PLANN NORTH SIDE OF CORRIDOR 153 AND TERMINATE INTO CEILING. COORDINATE CONNECTION WITH OWNER TO RECONNECT CABLE TO EXISTING CCTV SYSTEM. COORDINATE FINAL LOCATION WITH ARCHITECT AND OWNER PRIOR TO INSTALLATION.

E139 REINSTALL EXISTING PAGING INTERCOM SPEAKER IN NEW CEILING AT THIS LOCATION. PROVIDE CAT6 CABLE FROM NETWORK SWITCH IN EXISTING DATA CLOSET ON PLANN NORTH SIDE OF CORRIDOR 153 AND TERMINATE INTO CEILING. COORDINATE FINAL LOCATION WITH ARCHITECT AND OWNER PRIOR TO INSTALLATION.

E140 OWNER TO PROVIDE NEW PAGING INTERCOM ROOM AMPLIFIER AND CALL BUTTON. PROVIDE CAT6 CABLE FROM NETWORK SWITCH IN EXISTING DATA CLOSET ON PLANN NORTH SIDE OF CORRIDOR 153 AND TERMINATE AT 7' AFF. COORDINATE CONNECTION WITH OWNER TO RECONNECT CABLE TO EXISTING PAGING INTERCOM SYSTEM. COORDINATE FINAL LOCATION WITH ARCHITECT AND OWNER PRIOR TO INSTALLATION.

E141 REPROGRAM EXISTING PAGING INTERCOM VOLUME DIAL AS REQUIRED TO CONTROL VOLUME OF PAGING INTERCOM SPEAKERS IN OFFICE 148 AND NURSE 147.

E142 STUDY DATA DROP FOR CASEWORK.

E143 OWNER TO PROVIDE NEW PAGING INTERCOM ROOM AMPLIFIER AT THIS LOCATION. PROVIDE CAT6 CABLE FROM NETWORK SWITCH IN EXISTING IDF 112 AND TERMINATE AT 7' AFF. COORDINATE CONNECTION WITH OWNER TO RECONNECT CABLE TO EXISTING PAGING INTERCOM SYSTEM WITH OWNER. COORDINATE FINAL LOCATION WITH ARCHITECT AND OWNER PRIOR TO INSTALLATION.

E145 PROVIDE BACKLUTER FOR EXISTING TIME CLOCK CABINET COORDINATE WITH OWNER FOR ORGANIZATION OF NETWORK SWITCHES WITHIN CABINET AND ORGANIZATION OF CABLEING WITHIN CABINET. COORDINATE FINAL LOCATION WITH OWNER PRIOR TO INSTALLATION.

E146 EXTEND 6-STRAND MULTIMODE FIBER CABLE FROM EXISTING IDF 112 TO NEW IT RACK IN STORAGE 130. PROVIDE IN 30' CLOSURE. PROVIDE 10' CLOSURE IN AREAS THAT ARE EXPOSED TO STRUCTURE.

E148 PROVIDE CORNELL EMERGENCY RESPONSE SYSTEMS KE-114 AND KE-115. COORDINATE FINAL LOCATION OF DEVICES WITH OWNER PRIOR TO INSTALL.

E150 TEMPORARILY REMOVE CEILING TILE IN THIS SPACE AS REQUIRED FOR ROUTING OF CABLES TO EXISTING CASEWORK. REQUEST TO ADMIN SITE. CONTRACTOR RESPONSIBLE FOR REPLACING ANY DAMAGED TILING DURING CONSTRUCTION.

E156 OWNER TO PROVIDE REMOVE RELEASE BUTTON FOR CONTROL SYSTEM. PROVIDE 10' CLOSURE HARDWARE FOR EXISTING KE-153. PROVIDE ALL NECESSARY WIRING/CONNECTIONS FROM REMOVE RELEASE BUTTON TO DOOR ACCESS HARDWARE. COORDINATE FINAL LOCATION WITH OWNER PRIOR TO ROUGH-IN.

E162 INSTALL WIRE MOLD AS REQUIRED TO INSTALL NEW DEVICES ON EXISTING CASEWORK. PROVIDE WIRE MOLD IN AREA. PROVIDE WIRE MOLD WITH COLOR TO MATCH WALL.

[illegible][illegible]

1 LOWER LEVEL NEW WORK SYSTEMS PLAN - RENOVATION

UNLESS OTHERWISE NOTED, ALL NEW CARMERS, DIGITAL CLOCKS, PAGING INTERCOM DEVICES, WAPs, CARD READERS, PUSH PLATES, DOOR POSITION SWITCHES AND MOTION SENSORS ARE TO BE PROVIDED BY OWNER. FOR EACH OF THESE DEVICES, ELECTRICAL CONTRACTOR SHALL PROVIDE A CAT6 DATA DROP IN 1" CONDUIT FROM NEAREST AVAILABLE NETWORK SWITCH AND TERMINATE NEATLY INTO CEILING/WALL AT LOCATION WHERE DEVICE IS SHOWN. ELECTRICAL CONTRACTOR SHALL COORDINATE FINAL LOCATION AND CONNECTION REQUIREMENTS FOR ALL DEVICES PRIOR TO ROUTING CAT6 CABLE.

- A. REFER TO THE ARCHITECT'S REFLECTED CEILING PLANS, ELEVATIONS, AND CASEWORK DETAILS FOR EXACT LOCATIONS OF ALL WALL AND CEILING MOUNTED ELECTRICAL DEVICES.
- B. CONTRACTOR SHALL FOLLOW BRANCH CIRCUITS LAYOUT-AS INDICATED ON THE FLOOR PLAN. A MAXIMUM OF THREE (3) BRANCH CIRCUITS PER HOMERUN. EACH BRANCH CIRCUIT SHALL BE PROVIDED WITH A DEDICATED NEUTRAL CONDUIT. DEDICATED NEUTRAL CIRCUITS SHALL BE CONSIDERED GROUNDING CIRCUITS CARRYING. IF ADDITIONAL CONDUCTORS ARE RAN IN THE SAME CONDUIT WITH THOSE INDICATED, CONTRACTOR SHALL DERATE ALL CURRENT CARRYING CONDUCTORS PER NEC TABLES (90°C) AND UPSIDE CONDUIT AS REQUIRED PER NEC 300.17 AND ANEX C. MULTIWIRE BRANCH CIRCUITS AS DEFINED IN NEC 100.2(11)(4) (CIRCUITS SHARING A COMMON NEUTRAL CONDUIT SHALL NOT BE ALLOWED).
- C. IDENTIFY THE PANEL AND CIRCUIT NUMBER FOR ALL RECEPTACLES, SWITCHES, AND PANELS OF A CONSTRUCTION PROVIDED. PROVIDE ADHESIVE LABELS WITH BLACK LETTERING. IN HEALTHCARE FACILITIES ENGRAVE EMERGENCY DEVICE COVERPLATES IN PATIENT CARE AREAS. MARK INSIDES OF ALL DEVICE BOXES WITH PANEL AND CIRCUIT NUMBER.
- D. REFER TO "SYSTEM INSTALLATION MATRIX" (ON SYSTEMS LEGEND SHEET) AND SPECIFICATIONS FOR CONTRACTOR REQUIREMENTS OF EACH SYSTEM.
- E. THE CONTRACTOR SHALL ROUTE ALL "SYSTEM CONDUIT SUB-UPS" TO THE NEAREST AVAILABLE PORTABLE "FREE" (SUB-UP) DETAILS). REFER TO CABLING PATH INSTALLATION DETAIL FOR ADDITIONAL REQUIREMENTS.
- F. CONTRACTOR SHALL PAINT ALL SYSTEMS CONDUIT SUB-UPS LIGHT BLUE FOR SYSTEMS CABLING INTO THE CORRIDOR CABLING TRAYS. PROVIDE A STRIKE PLATE FOR ALL NEW CONDUIT RUNS FOR SYSTEM CABLING INSTALLATION.

	1 HOUR RATED FIRE BARRIER, PART OF SHAFT
	2 HOUR RATED FIRE BARRIER, PART OF HORIZONTAL EXIT
	2 HOUR RATED FIRE WALL, PART OF HORIZONTAL EXIT
	SMOKE PARTITION

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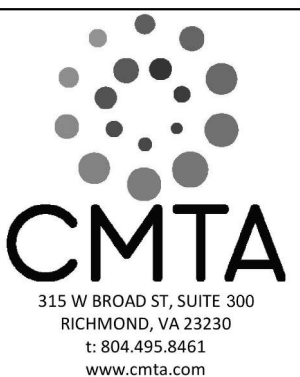
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SYSTEMS PARTIAL LOWER LEVEL AND FIRST FLOOR NEW WORK - RENOVATION
PLOT SCALE: 1/8" = 1'-0"
FILENAME: RSMR22
DATE: 01/24/2024



PROJECT
3636

E1.4

GENERAL NOTES (FIRE ALARM):

- A. THIS RISER IS PARTIAL. ALL THE DEVICES CONNECTED TO THE "FACP" UNITS ARE NOT SHOWN. THE CONTRACTOR SHALL REFER TO THE ELECTRICAL FLOOR PLANS FOR THE COMPLETE FIRE ALARM SYSTEM.
- B. THE EXTENT OF ALL FIRE ALARM SYSTEM WORK IS INDICATED OR IMPLIED ON THE CONTRACT DRAWINGS.
- C. FIELD VERIFY THE EXACT NUMBER AND LOCATIONS OF ALL MECHANICALLY RELATED ITEMS (SPRINKLER CONNECTIONS, EXTINGUISHING SYSTEMS, SMOKE DAMPERS, RANGE HOOD SUPPRESSION SYSTEMS, ETC.) AND MAKE CONNECTIONS AS REQUIRED/INDICATED.
- D. PROVIDE CONNECTIONS TO ALL FIRE PROTECTION TAMPER AND FLOW SWITCHES VIA ZONE ADDRESSABLE MODULES AS REQUIRED. CONTRACTOR SHALL VERIFY ALL LOCATIONS WITH FIRE PROTECTION SYSTEM SHOP DRAWINGS. CONTRACTOR SHALL PROVIDE A UNIT PRICE FOR COMPLETE INSTALLATION OF A CONNECTION TO EXISTING FIRE PROTECTION SWITCHES.
- E. ALL FIRE ALARM STROBE LIGHTS SHALL BE SYNCHRONIZED TO ACCOMMODATE BUILDING STANDARDS AS REQUIRED.
- F. TAP SPEAKERS TO PROVIDE SUFFICIENT AUDIBILITY FOR AREA SERVED.
- G. SMOKE DETECTORS SHALL NOT BE LOCATED CLOSER THAN 36" TO SUPPLY, RETURN OR EXHAUST AIR OPENINGS NOR CLOSER THAN 12" TO WALL/CEILING INTERSECTIONS.
- H. ADDITIONAL DUCT DETECTORS MAY BE SHOWN ON MECHANICAL DRAWINGS. PROVIDE AND CONFIGURE DUCT DETECTOR(S) FOR EITHER SHUTDOWN OF EQUIPMENT OR CLOSURE OF SMOKE DAMPER(S) AS REQUIRED BY CODE.

GENERAL NOTES (FIRE ALARM):

- I. AIR HANDLING UNITS SHALL ONLY SHUT DOWN WHEN SMOKE IS DETECTED AT THAT PARTICULAR AIR HANDLING UNIT (UON). SMOKE DAMPERS SHALL CLOSE ONLY WHEN SMOKE IS DETECTED AT THAT PARTICULAR SMOKE DAMPER BY ACTIVATION OF THE CONTROLLING SMOKE DETECTOR. REFER TO THE SPECIFICATIONS FOR FURTHER REQUIREMENTS.
- J. PROVIDE DUCT SMOKE DETECTORS WITH REMOTE TEST SWITCH/INDICATOR LIGHT AT 7'-6" AFF ON WALL IN AREA BELOW DETECTOR.
- K. RISER DIAGRAM IS FOR BID PURPOSES ONLY. SYSTEM SHALL BE INSTALLED AND CONNECTED IN ACCORDANCE WITH WIRING DIAGRAMS OBTAINED FROM MANUFACTURER. THAT HAVE BEEN APPROVED BY THE STATE FIRE MARSHAL'S OFFICE OR AUTHORITY HAVING JURISDICTION.
- L. PROVIDE FIRE ALARM MANUFACTURER WITH LOCATION DESCRIPTIONS FOR ALL FIRE ALARM DEVICES AS SOON AS POSSIBLE AFTER AWARD OF CONTRACT FOR PRE-PROGRAMMING OF FIRE ALARM SYSTEM. COORDINATE DESCRIPTIONS WITH BUILDING OWNER. UTILIZE FINAL ROOM NAMES AND NUMBERS, NOT NAMES AND NUMBERS FROM FLOOR PLANS.
- M. EACH FIRE ALARM DEVICE SHALL BE LABELED WITH SELF ADHESIVE POLYESTER COATED PRINTED LABELS INDICATING DEVICE ADDRESS AND CIRCUIT PER FIRE ALARM SHOP DRAWINGS.
- N. MODIFY AND/OR EXPAND EXISTING CONTROL PANEL(S) AND ANNUNCIATOR(S) TO ACCOMMODATE AS REQUIRED TO SUPPORT ADDITIONAL DEVICES SHOWN. FURNISH AND INSTALL ANY MODULES OR EQUIPMENT NECESSARY TO EXPAND SYSTEM. EXISTING ANNUNCIATOR(S) AND CONTROL PANEL(S) SHALL BE UPDATED TO DISPLAY TROUBLES AND ALARM LOCATIONS FOR ALL NEW ZONES.

GENERAL NOTES (FIRE ALARM):

- O. PROVIDE CONNECTIONS TO NEW ACCESS CONTROL DOORS TO ALLOW POSITIVE LATCHING AND FREE EGRESS UNDER ALARM CONDITIONS. COORDINATE EXACT REQUIREMENTS WITH SUCCESSFUL DOOR HARDWARE MANUFACTURER PRIOR TO CONSTRUCTION.
- P. PROVIDE ACCESS PANELS AS REQUIRED FOR MAINTENANCE AND TESTING FOR SMOKE DETECTORS LOCATED ABOVE INACCESSIBLE CEILINGS. COORDINATE SIZE AND LOCATIONS WITH ARCHITECT PRIOR TO INSTALLATION.
- Q. PROVIDE APPROVED TESTING AND REQUIRED CERTIFICATION OF SYSTEM COMPONENTS AND PROVE OPERATION OF SYSTEM FOR THE AREA OF WORK WHEN COMPLETE.
- R. WIRING TO ALL FIRE ALARM DEVICES SHALL BE PER NEC AND MANUFACTURER'S RECOMMENDATIONS. VERIFY ALL WIRING REQUIREMENTS WITH THE OWNER AND FIRE ALARM VENDOR.
- S. ALL NEW DEVICES INDICATED, SUCH AS SMOKE DETECTORS, NOTIFICATION APPLIANCES, ETC., SHALL MATCH AND BE COMPATIBLE WITH EXISTING BUILDING SYSTEM.
- T. ALL 120V POWER FOR NEW FIRE ALARM SYSTEM COMPONENTS SHALL BE CONNECTED TO EMERGENCY LIFE-SAFETY BRANCH PANELS AS APPLICABLE. PROVIDE ALL NEW POWER CONNECTIONS AS REQUIRED FOR SYSTEM OPERATION.
- U. PROVIDE A DEDICATED POWER CIRCUIT TO EACH FIRE ALARM EQUIPMENT PANEL OR POWER SUPPLY.
- V. FIRE ALARM OCP DEVICES SHALL HAVE NON-REMOVABLE LOCKABLE HANDLE PAINTED RED.

GENERAL NOTES (FIRE ALARM):

- W. THIS CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL BUILDING PERMITS, ELECTRICAL APPROVALS, AND APPROVALS FROM THE STATE OFFICE OF FIRE SAFETY OR AUTHORITY HAVING JURISDICTION (AHJ). THIS INCLUDES PREPARING DRAWINGS, CUTSHEETS, AND OTHER DOCUMENTATION REQUIRED BY THE AHJ OR FIRE ALARM EQUIPMENT MANUFACTURER. A COPY OF THESE REQUIREMENTS SHALL BE OBTAINED FROM AHJ. THE DRAWINGS SHALL BE PREPARED AS A FINAL SUBMITTAL AS OUTLINED IN THE SUBMITTAL REQUIREMENTS. ELECTRONIC COPIES OF THESE PLANS REQUIRED FOR THIS PURPOSE MAY BE OBTAINED FROM THE ENGINEER. DRAWINGS THAT ARE REQUIRED FOR APPROVAL SHALL BE FINISHED WITHIN 7 WORKING DAYS OF AWARD OF CONTRACT.
- X. WRITTEN CERTIFICATION OF ENTIRE FIRE ALARM SYSTEM SHALL BE SUBMITTED TO OWNER & ENGINEER AT CLOSE OF PROJECT.
- Y. A TECHNICAL REPRESENTATIVE OF FIRE ALARM MANUFACTURER SHALL BE PRESENT AT ALL TIMES DURING FIRE ALARM CERTIFICATION.
- Z. CONTRACTOR SHALL MONITOR TROUBLES ON EXISTING PANEL EQUIPMENT ON A DAILY BASIS. WHERE A TROUBLE IS INDICATED, IT SHALL BE REPORTED TO THE OWNER AND CONSTRUCTION SHALL STOP UNTIL TROUBLE IS RESOLVED UNLESS OTHERWISE INDICATED BY OWNER.
- AA. INITIATING DEVICE CIRCUITS AND NOTIFICATION APPLIANCE CIRCUITS SHALL BE IN SEPARATE RACEWAYS. FIRE ALARM SYSTEM JUNCTION BOXES, BACK BOXES, AND PULL BOXES SHALL BE PAINTED RED.
- BB. PROVIDE QUANTITY OF POWER SUPPLIES AND NAC PANELS BASED UPON FINAL SYSTEM DESIGN AND REQUIRED SPARE CAPACITY. LOCATE ADDITIONAL PANELS ADJACENT TO THOSE SHOWN ON PLANS. DO NOT INSTALL ADDITIONAL EQUIPMENT IN OTHER AREAS OF THE PROJECT WITHOUT WRITTEN CONSENT BY THE ENGINEER.

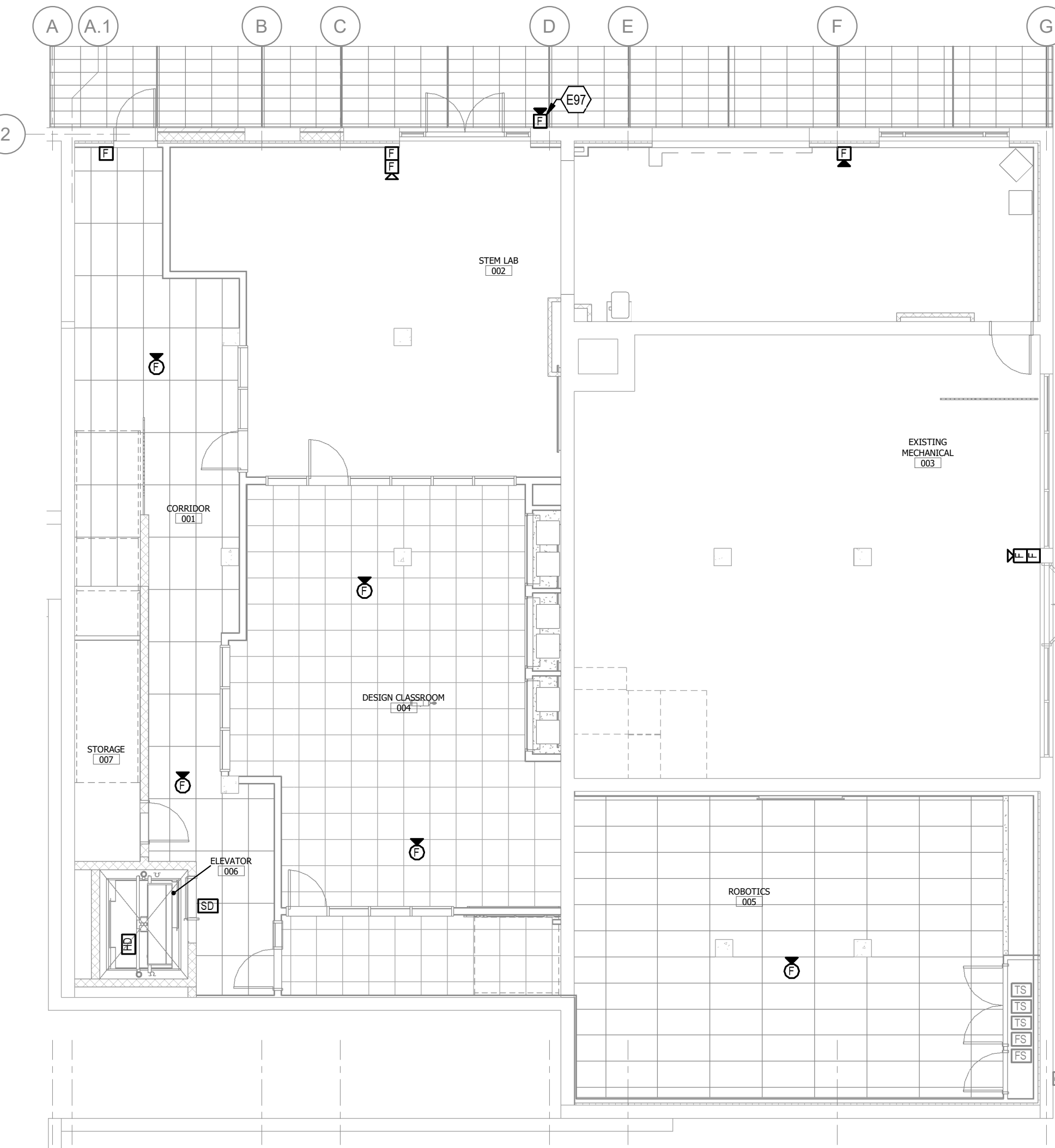
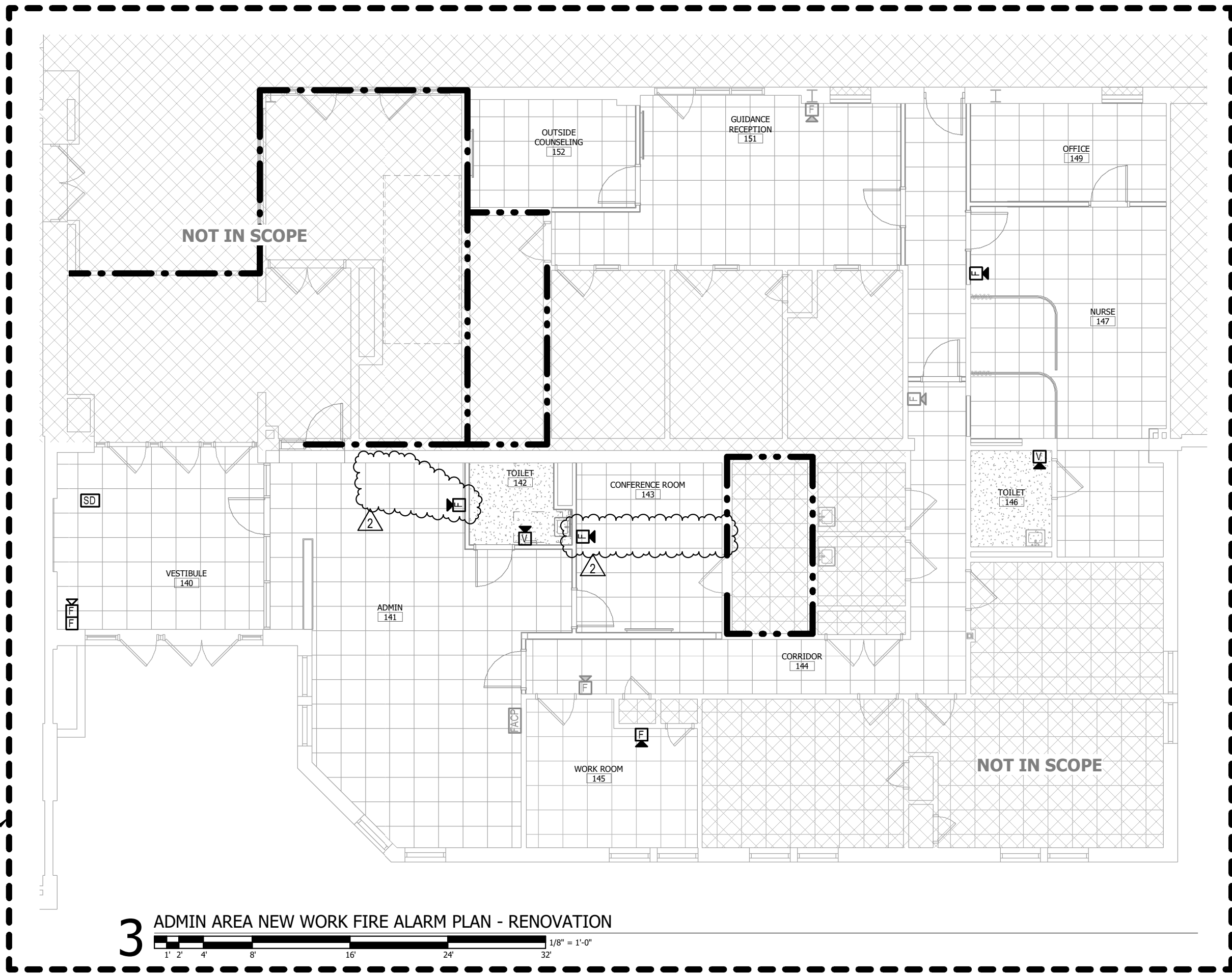
KEYNOTES

- E97 PROVIDE WET RATED FIRE ALARM NOTIFICATION DEVICE.
- E165 PROVIDE FIRE ALARM CONNECTION TO SMOKE DAMPER. COORDINATE EXACT LOCATION AND CONNECTION REQUIREMENTS WITH MECHANICAL CONTRACTOR.
- E167 PROVIDE DUCT-MOUNTED SMOKE DETECTOR. PROVIDE FIRE ALARM CONNECTION TO DETECTOR. COORDINATE EXACT LOCATION AND CONNECTION REQUIREMENTS WITH MECHANICAL CONTRACTOR.

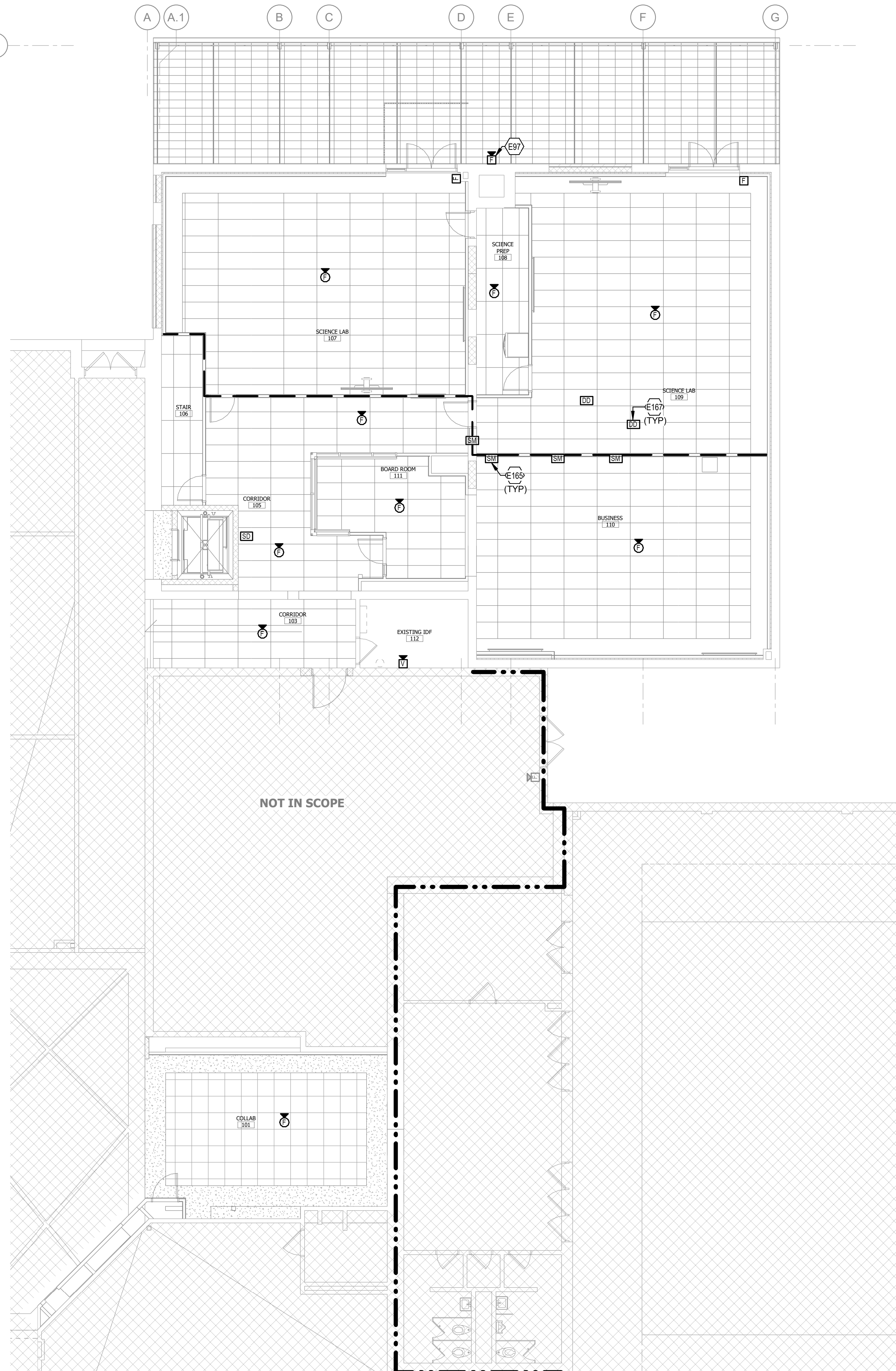
RATED WALL LEGEND

- 1 HOUR RATED FIRE BARRIER, PART OF SHAFT
- 2 HOUR RATED FIRE BARRIER, PART OF HORIZONTAL EXIT
- 2 HOUR RATED FIRE WALL, PART OF HORIZONTAL EXIT
- SMOKE PARTITION

ALL SCOPE OF WORK SHOWN WITHIN DASHED BOX SHALL BE PRICED AS PART OF ALTERNATE #2. CONTRACTOR IS RESPONSIBLE FOR DETERMINING WHICH NOTES, SCHEDULES, DETAILS, AND CONTROLS ARE APPLICABLE TO THE SCOPE OF WORK IN THIS AREA.



1 LOWER LEVEL NEW WORK FIRE ALARM PLAN - RENOVATION



2 FIRST FLOOR NEW WORK FIRE ALARM PLAN - RENOVATION

REVISIONS

NO.	DATE	NAME	DESCRIPTION OF CHANGES
2	02/28/24		ADDENDUM #2

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ADDITIONS AND RENOVATIONS

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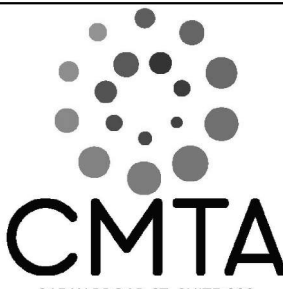


FIRE ALARM PARTIAL LOWER LEVEL
AND FIRST FLOOR NEW WORK -
RENOVATION

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

FILENAME:
RSMR22

DATE:
01/24/2024



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PROJECT
3636

E1.5

GENERAL NOTES (LIGHTING):

- A. REFER TO THE ARCHITECT'S REFLECTED CEILING PLANS, ELEVATIONS, AND CASEWORK DETAILS FOR EXACT LOCATIONS OF ALL WALL AND CEILING MOUNTED ELECTRICAL DEVICES.
- B. CONTRACTOR SHALL FOLLOW BRANCH CIRCUITING LAY-OUT, AS INDICATED ON THE FLOOR PLANS, WITH A MAXIMUM OF THREE (3) BRANCH CIRCUITS PER HOMERUN. EACH BRANCH CIRCUIT SHALL BE PROVIDED WITH A DEDICATED NEUTRAL CONDUCTOR. DEDICATED NEUTRAL CONDUCTORS SHALL BE CONSIDERED CURRENT CARRYING. IF ADDITIONAL CONDUCTORS ARE RUN IN THE SAME CONDUIT WITH THOSE INDICATED, CONTRACTOR SHALL DERATE ALL CURRENT CARRYING CONDUCTORS PER N.E.C. #310.15(B)(3), AND UPSIZE CONDUIT AS REQUIRED PER N.E.C. #300.17 AND ANNEX C. MULTIWIRE BRANCH CIRCUITS AS DEFINED IN N.E.C. #100 / 210.4 (CIRCUITS SHARING A COMMON NEUTRAL CONDUCTOR) SHALL NOT BE PERMITTED.
- C. IDENTIFY THE PANEL AND CIRCUIT NUMBER FOR ALL RECEPTACLES, SWITCHES, ETC. IN AREA OF CONSTRUCTION. PROVIDE CLEAR ADHESIVE LABELS WITH BLACK LETTERING. IN HEALTHCARE FACILITIES, ENGRAVE EMERGENCY DEVICE COVERPLATES IN PATIENT CARE AREAS. ALSO, MARK INSIDES OF ALL DEVICE BOXES WITH PANEL AND CIRCUIT NUMBER.
- D. LOCATE CHAIN-HUNG INDUSTRIAL FIXTURES IN MECHANICAL ROOMS TO AVOID DUCTWORK AND PIPING. TO MAXIMIZE AVAILABLE LIGHT. SPACE AROUND EQUIPMENT, AIR HANDLERS, ETC. TO PROVIDE ADEQUATE LIGHTING TO ALL AREAS OF ROOM. PROVIDE ADDITIONAL FIXTURES OF SAME TYPE AS NEEDED TO FULFILL THIS REQUIREMENT.

GENERAL NOTES (LIGHTING):

- E. LOCATE EXIT SIGNS FOR MAXIMUM VIEWING AREA TO IDENTIFY EGRESS PATHS AS INDICATED ON PLANS. COORDINATE LOCATIONS SUCH THAT ARCHITECTURAL FEATURES OR EQUIPMENT FROM OTHER TRADES DO NOT OBSTRUCT VIEW.
- F. LUMINAIRES INDICATED WITH MULTI-LEVEL SWITCHING SHALL HAVE SIMILAR LAMPS CONTROLLED TOGETHER, I.E. INBOARD AND OUTBOARD LAMPS OR RIGHT AND LEFT HAND LAMPS.
- G. ALL LIGHTING FIXTURE LENSES, PARABOLIC LOUVERS, DOWNLIGHTING ALZAK CONES AND "PARACUBE" LOUVERS SHALL BE HANDLED WITH COTTON GLOVES DURING INSTALLATION AND LAMPING TO AVOID FINGERPRINTS OR DIRT DEPOSITS. IT IS PREFERRED THAT FIXTURES BE SHIPPED AND INSTALLED WITH CLEAR PLASTIC BAGS TO PROTECT LOUVERS. AT CLOSE OF PROJECT, AND AFTER CONSTRUCTION AIR FILTERS ARE CHANGED, REMOVE BAGS. ANY LOUVER OR CONE SHOWING DIRT OR FINGER PRINTS SHALL BE CLEANED WITH SOLVENT RECOMMENDED BY THE MANUFACTURER, OR REPLACED AS NECESSARY IN ORDER TO TURN OVER TO THE OWNER NEW FIXTURES AT OCCUPANCY.
- H. RECESSED LUMINAIRES SHALL BE SECURED SUCH THAT THE FORCE REQUIRED INSERTING LAMPS, TRIMS, LENSES, LOUVERS, OR DOOR FRAMES DOES NOT SHIFT HOUSING. ALL TRIMS SHALL BE COMPLETELY FLUSH WITH FINISHED CEILINGS AT COMPLETION OF CONSTRUCTION.
- I. CONTRACTOR SHALL PROVIDE UNSWITCHED CONDUCTOR TO ALL EXIT SIGNS, EMERGENCY INVERTER BATTERY PACKS, AND NIGHT LIGHTS AS REQUIRED.

KEYNOTES

- E71 ALL LIGHTING SHOWN WITHIN BOUNDARY SHALL BE CONNECTED TO DESIGNATED CIRCUIT BREAKER UNLESS OTHERWISE NOTED.
- E100 REINSTALL EXISTING EXIT SIGN AND RECONNECT TO EXISTING LIGHTING CIRCUIT. EXTEND CONDUCTORS/CONDUIT AS REQUIRED. PROVIDE FIXTURE WITH NEW GAGE GUARD.
- E127 ROUTE CIRCUIT THROUGH BUILDING MOUNTED PHOTOCELL FOR ON/OFF CONTROL OF EXTERIOR FIXTURES.
- E151 COORDINATE FINAL SWITCH LOCATION WITH OWNER PRIOR TO INSTALLATION.
- E163 MOUNT ALL LIGHT FIXTURES AND OCCUPANCY SENSORS IN THIS SPACE SUCH THAT THE BOTTOM SURFACE IS LEVEL WITH ACoustICAL TILES. IF FIXTURE/SENSOR IS LOCATED BETWEEN TWO TILES OF DIFFERING HEIGHTS, MOUNT AT HEIGHT OF HIGHER TILE.
- E169 REINSTALL EXISTING LIGHT FIXTURE AFTER COMPLETION OF CEILING CUTTING/PATCHING. RECONNECT TO EXISTING CIRCUIT AND VALIDATE SWITCHING FUNCTIONALITY IS PROPERLY REESTABLISHED.
- E171 REINSTALL EXISTING LIGHT SWITCH AFTER COMPLETION OF CEILING CUTTING/PATCHING. RECONNECT TO EXISTING CIRCUIT AND VALIDATE SWITCHING FUNCTIONALITY IS PROPERLY REESTABLISHED.
- E173 REINSTALL EXISTING EXIT SIGN AFTER COMPLETION OF CEILING CUTTING/PATCHING. RECONNECT TO EXISTING CIRCUIT.
- E175 MOUNT EXIT SIGN TO TOP OF MULLION ABOVE DOOR FRAME. COORDINATE FINAL LOCATION WITH ARCHITECT AND OWNER PRIOR TO INSTALL.

REVISIONS

NO.	MM-DD-YY	NAME	DESCRIPTION OF CHANGES
1	02/20/24		ADDENDUM #1
2	02/29/24		ADDENDUM #2

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LIGHTING FIRST FLOOR NEW
WORK - ADDITION

PLT SCALE

As indicated

FILENAME:

RSNR22

DATE:

01/24/2024

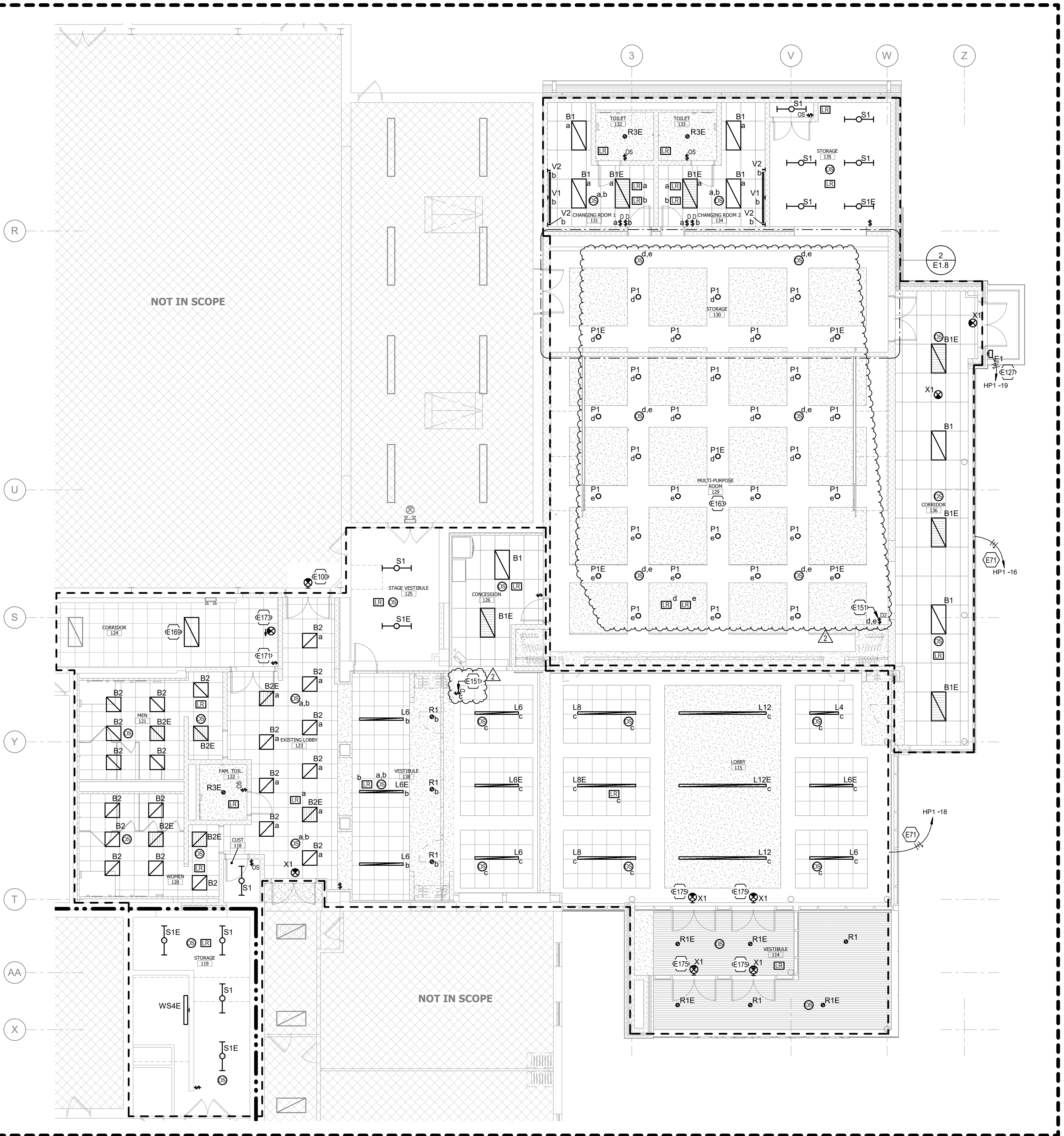
PROJECT

3636

E1.8

ADDITIONS AND RENOVATIONS
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ALL SCOPE OF WORK SHOWN WITHIN DASHED BOUNDARY
SHALL BE PRICED AS PART OF ALTERNATE #1.
CONTRACTOR IS RESPONSIBLE FOR DETERMINING WHICH
NOTES, SCHEDULES, DETAILS, AND CONTROLS ARE
APPLICABLE TO THE SCOPE OF WORK IN THIS AREA.



1 FIRST FLOOR NEW WORK LIGHTING PLAN - ADDITION

2 CALLOUT VIEW - STORAGE 130 LIGHTING

1/8" = 1'-0"

DOTTED LINES INDICATE ITEMS FOR REMOVAL (U)ON) AND GRAY SOLID LINES INDICATE EXISTING ITEMS TO REMAIN.

B. DEVICES INDICATED WITH AN "R" SHALL BE RELOCATED. REMOVE, PROTECT, AND REINSTALL IN NEW LOCATION INDICATED ON NEW WORK. "PLAN AND RELOCATE" SHALL BE USED TO INDICATE DEVICES TO BE MOVED TO NEW LOCATION. CLEAN AND RE-LAMP RELOCATED LUMINAIRES.

C. THE CONTRACTOR SHALL MAINTAIN THE CONTINUITY OF EXISTING CIRCUITS THAT CONTAIN DEVICES OR EQUIPMENT THAT ARE TO REMAIN. WHEN DEMOLITION OF AN ELECTRICAL DEVICE (OR CIRCUIT) IS REQUIRED, THE CONTRACTOR SHALL REWIRE OR REPAIR THE CIRCUIT. OTHER DEVICES OR EQUIPMENT "UPSTREAM" OR "DOWNSTREAM" OF THE CIRCUITS SHALL REMAIN IN "PRE-DEMOLITION" WORKING ORDER. WHEN CIRCUIT BREAKERS SHALL REMAIN, BE SWITCHED TO OFF POSITION, AND BE LABELED AS SPARES IN THEIR PANELS. PROVIDE NEW TYPEWRITTEN DIRECTORIES FOR ALL PANELS AFFECTED.

D. LOCATIONS OF DEVICES, CONNECTIONS, ETC., INDICATED ON THIS DRAWINGS WERE TAKEN FROM VARIOUS SOURCES. ETC., INDICATED ON THIS DRAWINGS ARE NOT TO BE TAKEN AS VARIATION FROM EXISTING CONDITIONS. CERTAIN EXISTING ELEMENTS MAY NOT BE WORKED AT. THE CONTRACTOR PROPOSING TO DO ANY PART OF THE WORK SHALL THEREFOR SHALL VISIT THIS SITE AND DETERMINE TO HIS SATISFACTION THAT THEY MAY COMPLETE ALL WORK REQUIRED FOR THE BID WHICH HE PROPOSES.

E. REMOVE ALL ASSOCIATED BACKBOXES, CONDUIT AND CONDUCTORS OR DISBURS (FUSES) ETC. BEING REMOVED BACK TO SOURCE, WHETHER INDICATED OR NOT (U)ON. CONTRACTOR SHALL PATCH AND REPAIR ANY EXISTING WALLS, FLOORS OR CEILINGS WHERE DEVICES ARE BEING REMOVED. CONTRACTOR SHALL REPAIR TO RECEIVE NEW FINISHES - SEE ARCHITECTURAL PLANS.)

F. COORDINATE DISPOSAL OF ALL FIXTURES, DEVICES, ETC. (INDICATED FOR DEMOLITION) WITH OWNER. TURN OVER ITEMS REMOVED TO OWNER AT THEIR OPTION.

G. COORDINATE WITH OTHER TRADES FOR THE REMOVAL AND/OR RELOCATION OF ELECTRICAL DEVICES AND CONNECTIONS ASSOCIATED WITH THE WORK.

H. PROVIDE TEMPORARY EMERGENCY LIGHTS AT CONSTRUCTION BARRIERS AS REQUIRED.

I. CONTRACTOR SHALL PATCH AND REPAIR ALL EXISTING WALLS / CEILINGS AS REQUIRED WHERE DEVICES ARE BEING REMOVED OR INSTALLED.

J. UNUSED/ABANDONED CONDUITS DISCOVERED ABOVE ACCESSIBLE CEILINGS SHALL BE REMOVED IN ACCORDANCE WITH NEC REQUIREMENTS.

K. EXISTING ELECTRICAL SYSTEMS IN CONFLICT WITH CONSTRUCTION SHALL BE REMOVED PRIOR TO INSTALLATION OF DEVICES AND EQUIPMENT SHOWN ON PLANS.

L. CONTRACTOR SHALL SEAL ALL EXISTING AND NEW PENETRATIONS OF BUILDING ENVELOPE (EXTERIOR WALLS, ROOF, ETC.) WATER-TIGHT AND AS APPROVED BY ARCHITECT AND ENGINEER. ROOFING SHALL BE PROVIDED BY THE OWNER. ALL WORK SHALL BE DONE IN ACCORDANCE WITH WRITTEN INSTRUCTIONS AND DETAILS FROM ROOFING MANUFACTURER AS REQUIRED. THE CONTRACTOR SHALL PROVIDE THE NECESSARY MATERIAL AND ENGINEERING PLANS AND SPECIFICATIONS FOR FURTHER REQUIREMENTS.

M. ALL EXISTING PANELS AFFECTED BY THIS CONTRACTOR'S WORK SHALL BE PROVIDED WITH NEW TYPEWRITTEN PANEL DIRECTORIES AND NEW CIRCUIT BREAKERS. THE PANELS SHALL SHOW ROOM NUMBERS OR NUMBERS FROM THESE DRAWINGS. DIRECTORIES SHALL BE DETAILED, AND COORDINATED WITH OWNERS SUITE NUMBERS, FINAL FLOOR PLANS, AND ALL OTHER ROOM DESIGNATIONS, ETC. ANY UNUSED BREAKERS SHALL BE IN OFF POSITION.

E4	EXISTING LIFTERMASTER SYSTEM SHALL BE DEMOLISHED IN ITS ENTIRETY. EXISTING PRIMARY FOR 112.5 KVA TRANSFORMER IN BOILER ROOM TO REMAIN.
E6	SALVAGE 20A ENCLOSED CIRCUIT BREAKER DURING DEMOLITION AND TURN OVER TO OWNER.
E7	DEMOLISH EXISTING LOAD CENTER. DEMOLISH FEEDER. DEMOLISH/CONDUIT BACK TO SOURCE. DEMOLISH ASSOCIATED BREAKERS IN SOURCE PANEL AND REPLACE WITH SPARE COVER. RELOCATE ALL CIRCUITS SERVING EXISTING-TO-REMAIN LOADS TO NEW BRANCH PANEL "LP3" FOR BIDDING PURPOSES. ASSUME RELOCATION OF (8) 1/2" MP CIRCUIT.
E8	DEMOLISH EXISTING PANELBOARD. DEMOLISH FEEDER. DEMOLISH/CONDUIT BACK TO SOURCE. RELOCATE ALL CIRCUITS SERVING EXISTING-TO-REMAIN LOADS TO NEW BRANCH PANEL "LP3" FOR BIDDING PURPOSES. ASSUME RELOCATION OF (1) 100A/2P CIRCUIT, (1) 35A/2P CIRCUIT, (1) 20A/2P CIRCUIT, AND (1) 20A/1P CIRCUIT.
E11	DEMOLISH EXISTING PLYGUMD STRIP.
E12	DEMOLISH/RELOCATE EXISTING 1/2" R/CV SYSTEM CONDENSATE PUMP.
E13	COORDINATE WITH OWNER FOR REMOVAL/RELOCATION OF NETWORK SWITCH. REFERRED ALL EXISTING-TO-REMAIN DEVICES FROM NETWORK SWITCH TO EXISTING.
E14	OWNER TO REMOVE EXISTING PROMETHEAN BOARD PRIOR TO DEMOLITION/CONSTRUCTION AND REINSTALL AT NEW LOCATION AS SHOWN ON WORK PLAN.
E15	COORDINATE WITH OWNER FOR REMOVAL/RELOCATION OF STANDING TOUCHSCREEN DISPLAY.
E16	REMOVE EXISTING PAGET INTERCOM ROOM CONTROLLER AND ASSOCIATED CALL BUTTON DURING DEMOLITION/CONSTRUCTION AND REINSTALL IN NEW SPARE ROOM. REFER TO NEW WORK PLANS FOR ASSOCIATED NETWORK SWITCH. REFER TO NEW WORK PLANS FOR NEW LOCATION.
E17	DEMOLISH EXISTING CEILING-MOUNTED DUPE RECEPTACLE AND CORD REEL ASSEMBLY.

E18 SALVAGE RING CAMERA/DOORBELL FOR THIS SPACE. AS WELL AS ANY ASSOCIATED DEVICES WITH SPACE, AND TURN OVER TO OWNER.

E19 COORDINATE WITH ARCHITECT ON REMOVAL/RELOCATION OF SMART BOARD

E20 COORDINATE WITH OWNER FOR REMOVAL/RELOCATION OF SMART BOARD

E21 OWNERS TO REMOVE SD PRINTER AND RELOCATE TO NEW LOCATION AS SHOWN ON WORK PLAN.

E22 LIGHT FIXTURE MOUNTED ABOVE PLATFORM STRUCTURE.

E23 EXISTING INCANDESCENT LIGHT FIXTURE TO REMAIN.

E24 DEMOLISH EXISTING INCANDESCENT LIGHT FIXTURE.

E25 REMOVE EXISTING CAMERA DURING DEMOLITION/CONSTRUCTION AND REINSTALL AT SAME APPROXIMATE LOCATION IN NEW CILING

E26 COORDINATE WITH OWNER FOR REMOVAL/RELOCATION OF LCD DISPLAY.

E27 REFUSE EXISTING-TO-REMAIN CAMERA FROM NETWORK SWITCH IN ROOM #112 PRIOR TO DEMOLITION/CONSTRUCTION.

E28 EXISTING CAMERA DURING DEMOLITION/CONSTRUCTION AND REINSTALL AT SAME APPROXIMATE LOCATION IN NEW CILING.

E29 COORDINATE WITH ARCHITECT ON REMOVAL/RELOCATION OF SMART BOARD EXTERIOR CANOPY. COORDINATE FINAL LOCATION WITH ARCHITECT AND OWNER PRIOR TO INSTALLATION. COORDINATE TIMING OF REMOVAL AND REINSTALLATION WITH ARCHITECT TO MINIMIZE TIME DURING WHICH CAMERAS ARE NON-OPERATIONAL.

E30 EXISTING AUDIO ENHANCEMENT EPIC SYSTEM KIOSK TO REMAIN.

E31 REMOVE KIOSK AS NECESSARY TO PROTECT DURING DEMOLITION AND CONSTRUCTION.

E32 EXISTING AUDIO ENHANCEMENT EPIC SYSTEM VOLUME CONTROL DIAL TO REMAIN.

E33 REMOVE VOLUME CONTROL DIAL AS NECESSARY TO PROTECT DURING DEMOLITION AND CONSTRUCTION.

E34 EXISTING TIME PROGRAMMING PANEL TO REMAIN.

E35 REMOVE COVER AS NECESSARY TO PROTECT DURING DEMOLITION AND CONSTRUCTION.

E38 EXISTING TELECOR CONSOLE DISPLAY TO REMAIN. REMOVE/COVER AS NECESSARY TO PROTECT DURING DEMOLITION AND CONSTRUCTION.

E39 EXISTING FIRE ALARM SYSTEM TO REMAIN. REMOVE/COVER AS NECESSARY TO PROTECT DURING DEMOLITION AND CONSTRUCTION.

E40 REMOVE EXISTING INTERCOM SPEAKER DURING DEMOLITION.

E41 DEMOLISH EXISTING SIGN AND REINSTALL AT SAME APPROXIMATE LOCATION IN NEW CEILING.

E42 REMOVE EXISTING INTERCOM SPEAKER DURING DEMOLITION/CONSTRUCTION. REINSTALL AT NEW LOCATION AS ASSOCIATED NEW WORK PLAN REMOVE EXISTING CAT6 CABLE BACK TO DETECTION NETWORK SWITCH.

E43 REMOVE EXISTING CAMERA DURING DEMOLITION/CONSTRUCTION AND REINSTALL AT NEW LOCATION AS SHOWN ON NEW WORK PLAN. REMOVE EXISTING CAT6 CABLE BACK TO ASSOCIATED NETWORK SWITCH. COORDINATE WITH OWNER FOR REMOVAL/RELOCATION OF PHONE.

E44 REMOVE EXISTING SIGN AND REINSTALL AT NEW LOCATION AS ASSOCIATED NEW WORK PLAN. REINSTALL ANNUNCIATOR PANEL. REFER TO NEW WORK PLAN FOR NEW LOCATION.

E45 COORDINATE WITH OWNER FOR REMOVAL/RELOCATION OF SIGN AND ASSOCIATED ACCESSORIES.

E46 DEMOLISH EXISTING DATA CABLEING AND WIREMOLD.

E47 DEMOLISH EXISTING PANELEBOARD. RELOCATE ALL CIRCUITS SERVING EXISTING MAIN ELECTRICAL PANEL TO NEW MAIN ELECTRICAL PANEL FOR BIDDING PURPOSES. ASSUME RELOCATION OF 01 30-04/3 CIRCUITS, 2 30-03/3 CIRCUITS, 1 100-03/3 CIRCUIT, 1 70-03/3 CIRCUIT, 1 30-03/3 CIRCUIT, 1 70-02/3 CIRCUIT AND 1 30-02/3 CIRCUIT.

E48 COORDINATE WITH OWNER FOR REMOVAL/RELOCATION OF 1 30-03/3 CIRCUIT EXISTING DIGITAL CLOCK TO REMAIN. REMOVE/COVER AS NECESSARY TO PROTECT DURING DEMOLITION/CONSTRUCTION.

E49 REMOVE EXISTING CARD READER AND ALL ASSOCIATED DOOR HARDWARE DURING DEMOLITION/CONSTRUCTION. REINSTALL AT NEW LOCATION AS SHOWN ON NEW WORK PLAN. REINSTALL AT NEW LOCATION. REFER TO NEW WORK PLAN FOR EXACT NEW LOCATION.

E90 REMOVE EXISTING PAGING INTERCOM VOLUME CONTROL DIAL DURING DEMOLITION/CONSTRUCTION AND REINSTALL AT NEW LOCATION AS SHOWN ON NEW WORK PLAN. REMOVE EXISTING CABLE BACK TO ASSOCIATED NETWORK SWITCH.

E91 REMOVE EXISTING PAGING INTERCOM CALL BUTTON DURING DEMOLITION/CONSTRUCTION AND REINSTALL AT NEW LOCATION AS SHOWN ON NEW WORK PLAN. REMOVE EXISTING CABLE BACK TO ASSOCIATED NETWORK SWITCH.

E93 REMOVE EXISTING DIGITAL CLOCK DURING DEMOLITION/CONSTRUCTION AND REINSTALL AT NEW LOCATION AS SHOWN ON NEW WORK PLAN. REMOVE EXISTING CABLE BACK TO ASSOCIATED NETWORK SWITCH.

E99 REMOVE EXISTING EXIT SIGN DURING DEMOLITION/CONSTRUCTION AND REINSTALL AT NEW LOCATION AS SHOWN ON NEW WORK PLAN.

E117 DEMONISH EXISTING SWITCH TO REMAIN. REMOVE SWITCH TO DEMOLITION AND REINSTALL AT SAME LOCATION AS SHOWN ON NEW WORK PLAN SPACE.

E118 DEMONISH EXISTING PANELBOARD. REMOVE FEEDER CONDUCTORS/CONDUIT BACK TO SOURCE.

E119 DEMONISH EXISTING PANELBOARD. DEMOLISH FEEDER CONDUCTORS/CONDUIT BACK TO SOURCE. RELOCATE ALL CIRCUITS SERVING EXISTING TO-REMAIN LOADS TO NEW BRANCH PANEL "LP2" FOR BIDDING PURPOSES. ASSUME RELOCATION OF 4(20A)P CIRCUITS.

E134 EXISTING TO-REMAIN FEEDER TO EXISTING 120V/208V SWITCH IN EXISTING IDF 112 PRIOR TO START OF DEMOLITION.

E135 COORDINATE WITH OWNER FOR REMOVAL OF ANY MOTION DETECTION SECURITY DEVICES THAT EXIST IN THIS SPACE.

E144 COORDINATE WITH OWNER FOR REMOVAL OF NEW WORK. COORDINATE WITH OWNER FOR REMOVAL/RELOCATION OF EXISTING RACK AND MANAGEMENT OF EXISTING CABLEING IN PREPARATION FOR NEW WORK.

E180 EXISTING TO-REMAIN PASS-THROUGH DRAWER PRIOR TO DEMOLITION WORK.

E181 REMOVE ALL EXISTING WIRE MOLD FEEDING DEMOLISHED DEVICES IN THIS SPACE. REFEED POWERDATA TO EXISTING-TO-REMAIN DEVICES AS REQUIRED.

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MECHANICSBURG, PENNSYLVANIA

WHITE SULPHUR SPRINGS, WEST VIRGINIA

ADDITIONS AND RENOVATIONS

SHELburne MIDDLE SCHOOL

300 Grubert Ave, Staunton, VA 24401



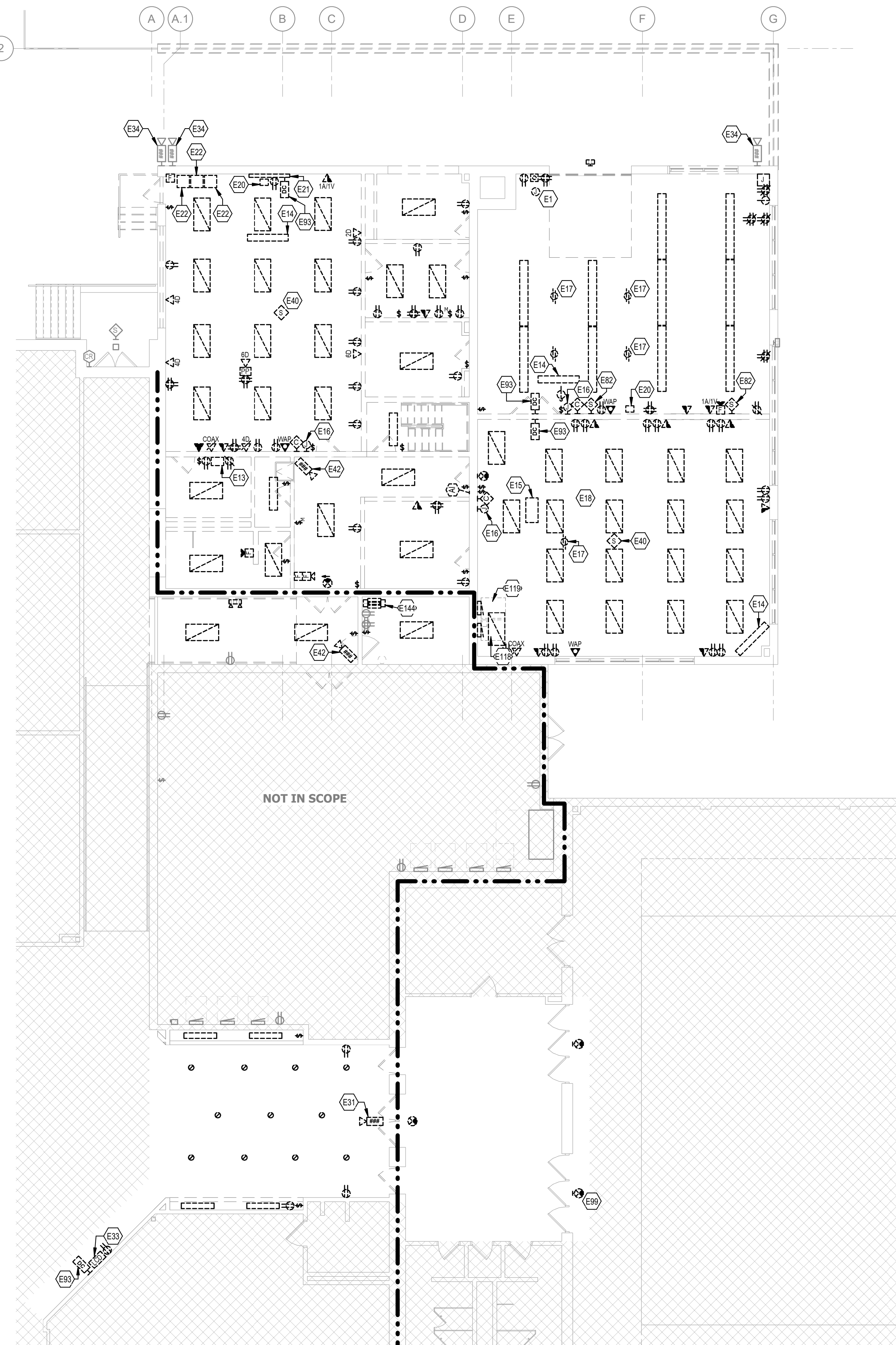
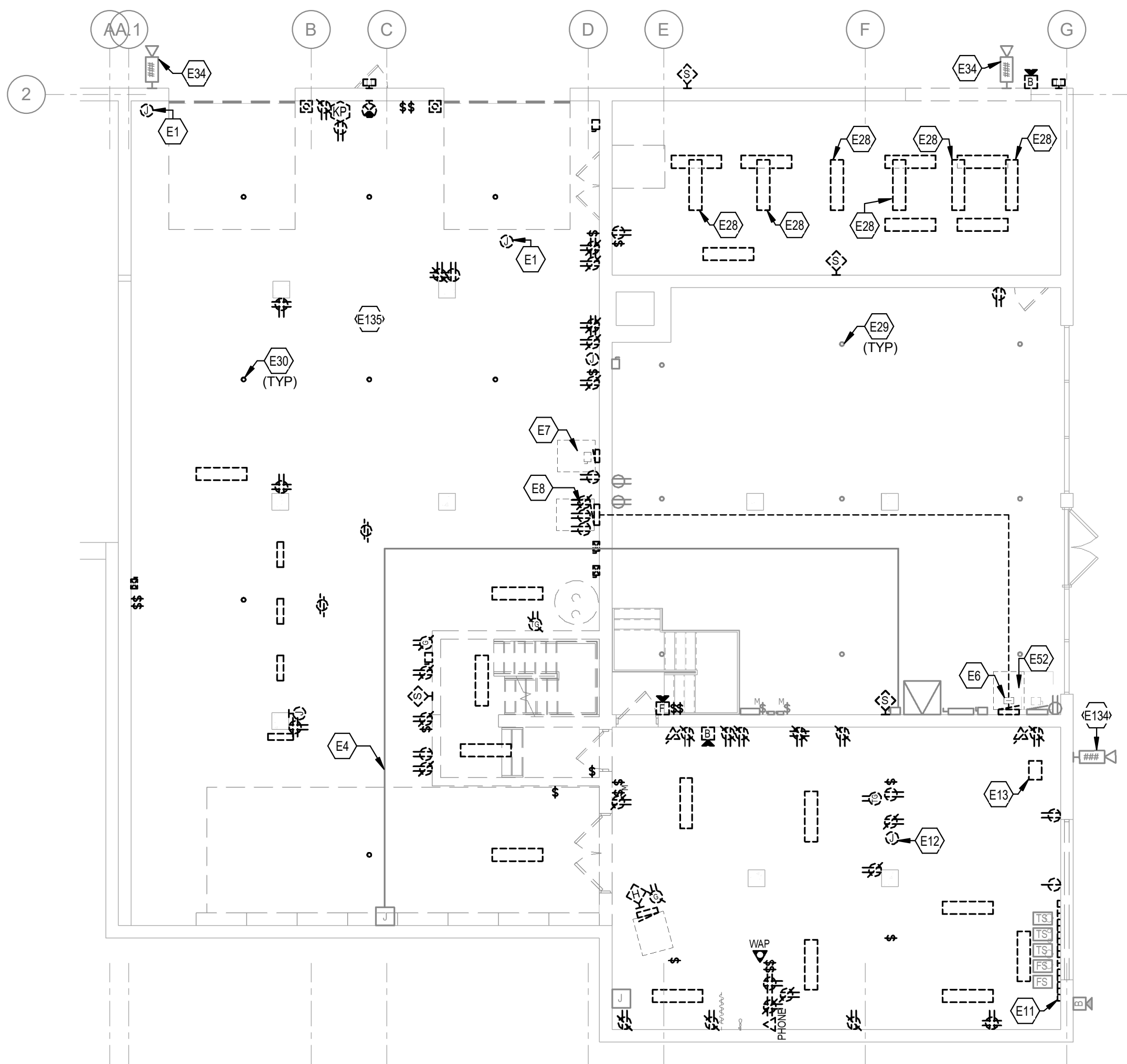
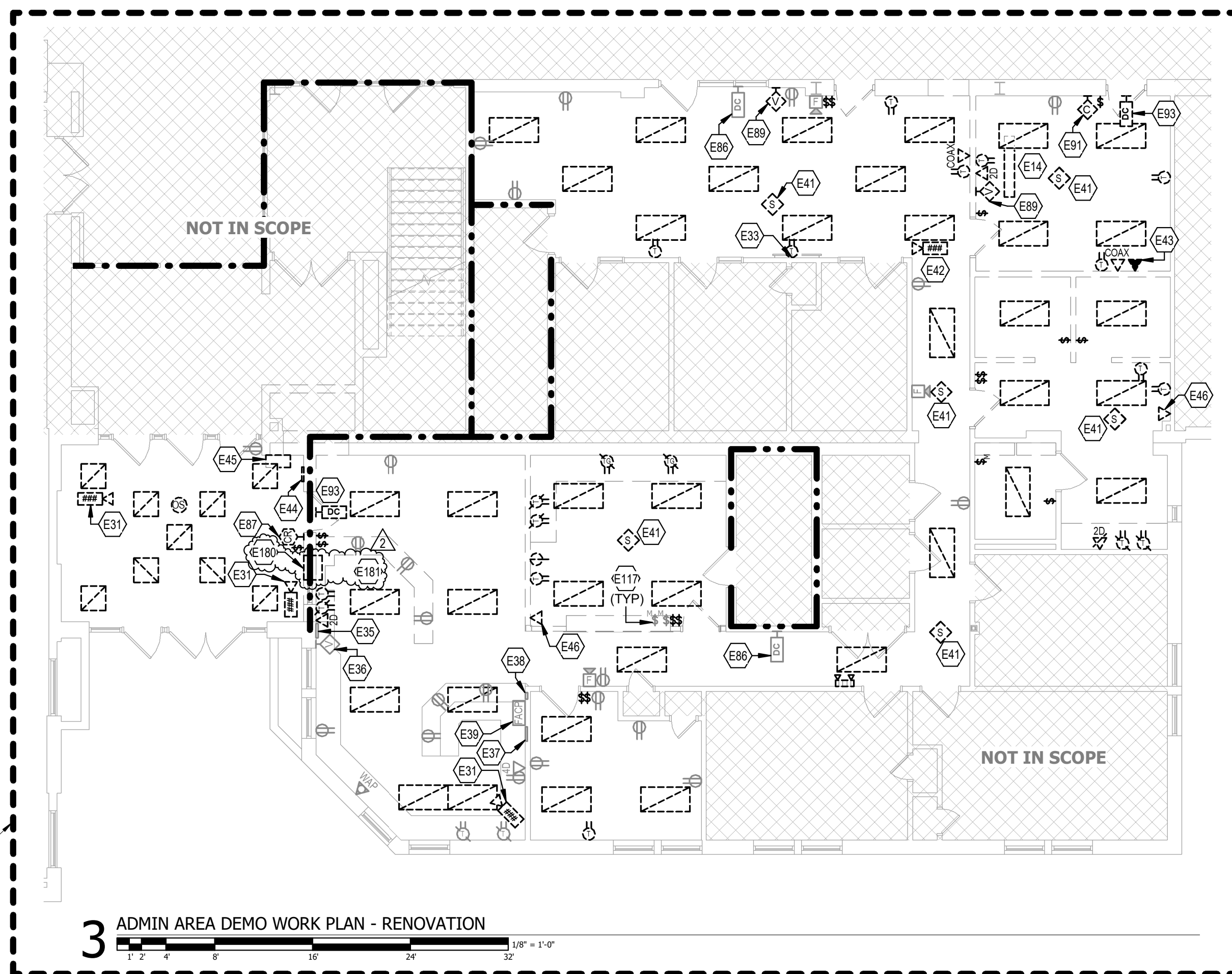
ELECTRICAL PARTIAL LOWER LEVEL
AND FIRST FLOOR DEMO PLANS -
RENOVATION

PLOT SCALE: $1/8" = 1'-0"$
FILENAME: RSMR22
DATE: 01/



PROJECT
3636

ED1.1



	1 HOUR RATED FIRE BARRIER PART OF SHAFT
	2 HOUR RATED FIRE BARRIER PART OF HORIZONTAL EXIT
	2 HOUR RATED FIRE WALL, PART OF HORIZONTAL EXIT
	SMOKE PARTITION

ALL SCOPE OF WORK SHOWN WITHIN DASHED BOX SHALL BE PRICED AS PART OF ALTERNATE #2. CONTRACTOR IS RESPONSIBLE FOR DETERMINING WHICH NOTES, SCHEDULES, DETAILS, AND CONTROLS ARE APPLICABLE TO THE SCOPE OF WORK IN THIS AREA.

1 LOWER LEVEL DEMO WORK PLAN - RENOVATION

2 FIRST FLOOR DEMO WORK PLAN - RENOVATION

01/24/2024

GENERAL NOTES (SITE):

- A. DO NOT SCALE FROM MECHANICAL AND ELECTRICAL DRAWINGS. FIELD VERIFY REQUIRED DIMENSIONS AND COORDINATE WITH CIVIL DRAWINGS AND SURVEYS.
- B. REFER ALSO TO ALL OTHER PLANS AND THE SPECIFICATION, BUT ESPECIALLY TO: THE SITE SURVEY, THE ARCHITECTURAL SITE PLAN, THE SITE GRADING PLAN, THE PLANTING PLAN (WHERE AVAILABLE), FOUNDATION PLANS), APPROPRIATE MECHANICAL & ELECTRICAL FLOOR PLANS FOR SERVICE CONTINUATIONS, THE SITE UTILITY PLAN - MECHANICAL & ELECTRICAL. WHERE THERE ARE CONFLICTS AMONG THESE PLANS AND/OR RELATED SPECIFICATIONS, ADVISE THESE ENGINEERS AT LEAST TEN DAYS PRIOR TO SUBMISSION OF BIDS.
- C. ALL FEES AND ANY OTHER COSTS TO UTILITY COMPANIES, MUNICIPALITIES, INSPECTORS, REVIEWING AGENCIES, ETC. ARE TO BE INCLUDED AS A PART OF THIS CONTRACT.
- D. FEDERAL, STATE, LOCAL, MUNICIPALITY AND UTILITY COMPANY CODES, RULES, REGULATIONS AND REQUIREMENTS APPLY UNLESS EXCEEDED BY THIS DESIGN.
- E. WHEN INTERRUPTION OF AN EXISTING UTILITY OR SERVICE IS PLANNED OR OCCURS ACCIDENTALLY, THE CONTRACTOR(S) SHALL WORK CONTINUOUSLY AS NEEDED TO RESTORE SAME PROVIDING PREMIUM TIME AS NEEDED AT NO INCREASE IN THE CONTRACT PRICE.
- F. LOCATIONS, DEPTHS, MATERIAL TYPES, ELEVATIONS, ETC. OF ALL APPURTENANCES, LINES, BUILDINGS, ETC. INDICATED ON THESE DRAWINGS WERE TAKEN FROM VARIOUS SOURCES, ARE DIAGRAMMATIC ONLY AND ARE SUBJECT TO SUBSTANTIAL VARIATION FROM EXISTING CONDITIONS. EXISTING UTILITIES LOCATIONS MAY VARY. CONSEQUENTLY ALL CONTRACTORS SHALL EXERCISE EXTREME CARE IN THE COURSE OF THEIR WORK SO AS TO ENSURE THAT THEY DO NOT INTERRUPT ANY EXISTING SERVICE. FOR SAFETY PURPOSES, PAY PARTICULAR ATTENTION TO THIS PRECAUTION RELATIVE TO NATURAL GAS AND ELECTRICAL LINES. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH ALL FEDERAL, STATE, AND/OR LOCAL RULES, REGULATIONS, STANDARDS AND SAFETY REQUIREMENTS.

GENERAL NOTES (SITE):

- G. PROVIDE LONG RADIUS ELBOWS FOR UNDERGROUND CONDUIT BENDS. WHERE SERVING A UTILITY OWNED TRANSFORMER, THE UTILITY STANDARDS SHALL TAKE PRECEDENCE.
- H. UTILITIES SHALL BE INSTALLED IN ACCORDANCE WITH THE APPLICABLE MUNICIPALITY OR UTILITY COMPANY STANDARDS. IN ALL CASES, THE MOST STRINGENT REQUIREMENT SHALL APPLY. IF ANY VARIATION OCCURS, CONSULT THE ENGINEER. CONTRACTOR SHALL VISIT THE SITE AND FIELD VERIFY THE ROUTING OF ALL UTILITIES NEW AND EXISTING PRIOR TO SUBMISSION OF BIDS. SUBMISSION OF A BID PROPOSAL INDICATES THAT THE CONTRACTOR IS FULLY AWARE OF ALL OBSTRUCTIONS AND WILL INSTALL ALL OF THE NEW UTILITIES WITHOUT REQUESTS FOR ANY ADDITIONAL CHANGES.
- I. PROVIDE GALVANIZED RIGID CONDUIT FOR EXTERIOR UNDERGROUND TRANSITIONS TO ABOVE GRADE. EXTEND CONDUIT A MINIMUM OF 6" ABOVE GRADE.
- J. CONTRACTOR SHALL CONTACT ENGINEER FOR INSPECTION OF TRENCHES PRIOR TO INSTALLATION OF CONDUITS OR RACEWAYS. PROVIDE PHOTOS UPON REQUEST.
- K. CONTRACTOR SHALL CUT AND PATCH ALL PAVEMENT, CURBING, ETC. AS REQUIRED FOR WORK. CONTRACTOR SHALL REPAIR ALL LANDSCAPING THAT IS DAMAGED FOR WORK. FINISH GRADE, SEED AND STRAW ALL DISTURBED GREEN SPACES. ALL PATCH AND REPAIR WORK SHALL BE IN ACCORDANCE WITH BOTH CIVIL AND LANDSCAPE DRAWINGS AND SPECIFICATIONS.

KEYNOTES

- E127 ROUTE CIRCUIT THROUGH BUILDING MOUNTED PHOTOCELL FOR ON/OFF CONTROL OF EXTERIOR FIXTURES.
- U8 RELOCATED EXISTING BUILDING-MOUNTED SITE LIGHT. INSTALL AT APPROXIMATELY 18' ABOVE GRADE. EXTEND CONDUCTORS/CONDUIT AS REQUIRED TO MAINTAIN EXISTING CIRCUIT. COORDINATE FINAL LOCATION WITH ARCHITECT AND OWNER PRIOR TO INSTALLATION.
- U9 UNDERGROUND CIRCUIT FROM NEW DISTRIBUTION PANEL "DP1" TO FEED GREENHOUSE AT NEW LOCATION. PROVIDE 3/8" 1/8" GROUND IN 1" CONDUIT. BURY CONDUIT AT A MINIMUM OF 24" COORDINATE EXACT POWER REQUIREMENTS OF GREENHOUSE WITH OWNER PRIOR TO ROUTING CIRCUIT.
- U10 PROVIDE NEMA 3R 240V, 100A/2P RATED DISCONNECT SWITCH FOR GREENHOUSE. EXTEND CIRCUIT THROUGH DISCONNECT TO RELOCATED LOAD CENTER. COORDINATE EXACT POWER REQUIREMENTS AND FINAL LOCATION WITH OWNER PRIOR TO INSTALLATION.
- U12 RELOCATED EXISTING BUILDING-MOUNTED CAMERA. INSTALL AT APPROXIMATELY 14' ABOVE GRADE. EXTEND CABLING/CONDUIT AS REQUIRED TO MAINTAIN EXISTING CONNECTION. COORDINATE FINAL LOCATION WITH ARCHITECT AND OWNER PRIOR TO INSTALLATION.
- U14 RELOCATED EXISTING BUILDING-MOUNTED CAMERA. INSTALL UNDERNEATH NEW EXTERIOR CANOPY AT APPROXIMATELY 8' AFF. EXTEND CABLING/CONDUIT AS REQUIRED TO MAINTAIN EXISTING CONNECTION. COORDINATE FINAL LOCATION WITH ARCHITECT AND OWNER PRIOR TO INSTALLATION.
- U17 RELOCATE ALL EXISTING GREENHOUSE ELECTRICAL DEVICES/CONNECTIONS TO THIS LOCATION. RECONNECT ALL DEVICES/CIRCUITS TO RELOCATED LOAD CENTER IN SAME MANNER AS EXISTED AT PREVIOUS LOCATION. UTILIZE EXISTING CONDUITS/CONDUCTORS AS MUCH AS POSSIBLE.
- U18 RELOCATE EXISTING LOAD CENTER TO REFEED GREENHOUSE LOADS. CONNECT TO NEW FEEDER CIRCUIT AS SHOWN.

REVISIONS

NO.	MM-DD-YY	NAME	DESCRIPTION OF CHANGES
1	02/20/24		ADDENDUM #1
2	02/29/24		ADDENDUM #2

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ADDITIONS AND RENOVATIONS

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300 Grubert Ave, Staunton, VA 24401



ELECTRICAL NEW WORK PLAN - SITE

PLOT SCALE:
1" = 30'-0"

FILENAME:
RSMR22

DATE:
01/24/2024

PROJECT
3636
UE1.1

ALL SCOPE OF WORK SHOWN WITHIN DASHED BOX SHALL BE PRICED AS PART OF ALTERNATE #1. CONTRACTOR IS RESPONSIBLE FOR DETERMINING WHICH NOTES, SCHEDULES, DETAILS AND CONTROLS ARE APPLICABLE TO THE SCOPE OF WORK IN THIS AREA.

ELECTRICAL NEW WORK PLAN - SITE



GENERAL NOTES (SITE):

- A. DO NOT SCALE FROM MECHANICAL AND ELECTRICAL DRAWINGS. FIELD VERIFY REQUIRED DIMENSIONS AND COORDINATE WITH CIVIL DRAWINGS AND SURVEYS.
- B. REFER ALSO TO ALL OTHER PLANS AND THE SPECIFICATION, BUT ESPECIALLY TO: THE SITE SURVEY, THE ARCHITECTURAL SITE PLAN, THE SITE GRADING PLAN, THE PLANTING PLAN (WHERE AVAILABLE), FOUNDATION PLANS, APPROPRIATE MECHANICAL & ELECTRICAL FLOOR PLANS FOR SERVICE CONTINUATIONS, THE SITE UTILITY PLAN - MECHANICAL & ELECTRICAL. WHERE THERE ARE CONFLICTS AMONG THESE PLANS AND/OR RELATED SPECIFICATIONS, ADVISE THESE ENGINEERS AT LEAST TEN DAYS PRIOR TO SUBMISSION OF BIDS.
- C. ALL FEES AND ANY OTHER COSTS TO UTILITY COMPANIES, MUNICIPALITIES, INSPECTORS, REVIEWING AGENCIES, ETC. ARE TO BE INCLUDED AS A PART OF THIS CONTRACT.
- D. FEDERAL, STATE, LOCAL, MUNICIPALITY AND UTILITY COMPANY CODES, RULES, REGULATIONS AND REQUIREMENTS APPLY UNLESS EXCEEDED BY THIS DESIGN.
- E. WHEN INTERRUPTION OF AN EXISTING UTILITY OR SERVICE IS PLANNED OR OCCURS ACCIDENTALLY, THE CONTRACTOR(S) SHALL WORK CONTINUOUSLY AS NEEDED TO RESTORE SAME PROVIDING PREMIUM TIME AS NEEDED AT NO INCREASE IN THE CONTRACT PRICE.
- F. LOCATIONS, DEPTHS, MATERIAL TYPES, ELEVATIONS, ETC. OF ALL APPURTENANCES, LINES, BUILDINGS, ETC. INDICATED ON THESE DRAWINGS WERE TAKEN FROM VARIOUS SOURCES. ARE DIAGRAMMATIC ONLY AND ARE SUBJECT TO SUBSTANTIAL VARIATION FROM EXISTING CONDITIONS. EXISTING UTILITIES LOCATIONS MAY VARY. CONSEQUENTLY ALL CONTRACTORS SHALL EXERCISE EXTREME CARE IN THE COURSE OF THEIR WORK SO AS TO ENSURE THAT THEY DO NOT INTERRUPT ANY EXISTING SERVICE. FOR SAFETY PURPOSES, PAY PARTICULAR ATTENTION TO THIS PRECAUTION RELATIVE TO NATURAL GAS AND ELECTRICAL LINES. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH ALL FEDERAL, STATE, AND/OR LOCAL RULES, REGULATIONS, STANDARDS AND SAFETY REQUIREMENTS.

GENERAL NOTES (SITE):

- G. PROVIDE LONG RADIUS ELBOWS FOR UNDERGROUND CONDUIT BENDS. WHERE SERVING A UTILITY OWNED TRANSFORMER, THE UTILITY STANDARDS SHALL TAKE PRECEDENCE.
- H. UTILITIES SHALL BE INSTALLED IN ACCORDANCE WITH THE APPLICABLE MUNICIPALITY OR UTILITY COMPANY STANDARDS. IN ALL CASES, THE MOST STRINGENT REQUIREMENT SHALL APPLY. IF ANY VARIATION OCCURS, CONSULT THE ENGINEER. CONTRACTOR SHALL VISIT THE SITE AND FIELD VERIFY THE ROUTING OF ALL UTILITIES NEW AND EXISTING PRIOR TO SUBMISSION OF BIDS. SUBMISSION OF A BID PROPOSAL INDICATES THAT THE CONTRACTOR IS FULLY AWARE OF ALL OBSTRUCTIONS AND WILL INSTALL ALL OF THE NEW UTILITIES WITHOUT REQUESTS FOR ANY ADDITIONAL CHANGES.
- I. PROVIDE GALVANIZED RIGID CONDUIT FOR EXTERIOR UNDERGROUND TRANSITIONS TO ABOVE GRADE; EXTEND CONDUIT A MINIMUM OF 6" ABOVE GRADE.
- J. CONTRACTOR SHALL CONTACT ENGINEER FOR INSPECTION OF TRENCHES PRIOR TO INSTALLATION OF CONDUITS OR RACEWAYS. PROVIDE PHOTOS UPON REQUEST.
- K. CONTRACTOR SHALL CUT AND PATCH ALL PAVEMENT, CURBING, ETC. AS REQUIRED FOR WORK. CONTRACTOR SHALL REPAIR ALL LANDSCAPING THAT IS DAMAGED FOR WORK. FINISH GRADE, SEED AND STRAW ALL DISTURBED GREEN SPACES. ALL PATCH AND REPAIR WORK SHALL BE IN ACCORDANCE WITH BOTH CIVIL AND LANDSCAPE DRAWINGS AND SPECIFICATIONS.

GENERAL NOTES (DEMOLITION):

- A. DOTTED LINES INDICATE ITEMS FOR REMOVAL (UON) AND GRAY SOLID LINES INDICATE EXISTING ITEMS TO REMAIN.
- B. DEVICES INDICATED WITH AN "R" SHALL BE RELOCATED. REMOVE, PROTECT, AND REINSTALL IN NEW LOCATION INDICATED ON NEW WORK PLANS. INTERCEPT AND EXTEND ALL EXISTING CABLING TO NEW LOCATION. CLEAN AND RE-LAMP RELOCATED LUMINAIRES.
- C. THE CONTRACTOR SHALL MAINTAIN THE CONTINUITY OF EXISTING CIRCUITS THAT CONTAIN DEVICES OR EQUIPMENT THAT ARE TO REMAIN. WHEN DEMOLITION OF AN ELECTRICAL DEVICE (OR CIRCUIT) IS INDICATED ON THE DRAWINGS, THE CONTRACTOR SHALL ENSURE THAT OTHER DEVICES OR EQUIPMENT "UPSTREAM" OR "DOWNSTREAM" ON THE CIRCUITS SHALL REMAIN IN "PRE-DEMOLITION" WORKING ORDER. "LEFT-OVER" CIRCUIT BREAKERS SHALL REMAIN, BE SWITCHED TO OFF POSITION, AND BE LABELED AS SPARES IN THEIR PANELS. PROVIDE NEW TYPEWRITTEN DIRECTORIES FOR ALL PANELS AFFECTED.
- D. LOCATIONS OF DEVICES, CONNECTIONS, ETC., INDICATED ON THIS DRAWING WERE TAKEN FROM VARIOUS SOURCES. THEY ARE DIAGRAMMATIC ONLY AND ARE SUBJECT TO VARIATION FROM EXISTING CONDITIONS. CERTAIN EXISTING ELEMENTS MAY NOT BE INDICATED AT ALL. THE CONTRACTOR PROPOSING TO DO ANY PART OF THE WORK INDICATED HEREON SHALL VISIT THIS SITE AND DETERMINE TO HIS SATISFACTION THAT THEY MAY COMPLETE ALL WORK REQUIRED FOR THE BID WHICH HE PROPOSES.
- E. REMOVE ALL ASSOCIATED BACKBOXES, CONDUIT AND CONDUCTORS FOR DEVICES / FIXTURES (ETC. BEING REMOVED BACK TO SOURCE) WHETHER INDICATED OR NOT (UON). CONTRACTOR SHALL PATCH AND REPAIR ANY EXISTING WALLS, FLOORS OR CEILINGS WHERE DEVICES ARE SHOWN TO BE REMOVED. PATCH AND REPAIR TO RECEIVE NEW FINISHES - SEE ARCHITECTURAL PLANS).
- F. COORDINATE DISPOSAL OF ALL FIXTURES, DEVICES, ETC. (INDICATED FOR DEMOLITION) WITH OWNER. TURN OVER ITEMS REMOVED TO OWNER AT THEIR OPTION.

GENERAL NOTES (DEMOLITION):

- G. COORDINATE WITH OTHER TRADES FOR THE REMOVAL AND/OR RELOCATION OF ELECTRICAL DEVICES AND CONNECTIONS ASSOCIATED WITH THEIR EQUIPMENT.
- H. PROVIDE TEMPORARY EMERGENCY EXIT LIGHTS AT CONSTRUCTION BARRIERS AS REQUIRED.
- I. CONTRACTOR SHALL PATCH AND REPAIR ALL EXISTING WALLS / CEILINGS AS REQUIRED WHERE DEVICES ARE BEING REMOVED OR INSTALLED.
- J. UNUSED/ABANDONED CONDUCTORS DISCOVERED ABOVE ACCESSIBLE CEILINGS SHALL BE REMOVED IN ACCORDANCE WITH NEC REQUIREMENTS.
- K. EXISTING ELECTRICAL SYSTEMS IN CONFLICT WITH CONSTRUCTION SHALL BE RELOCATED TO PERMIT INSTALLATION OF DEVICES AND EQUIPMENT SHOWN ON PLANS.
- L. CONTRACTOR SHALL SEAL ALL EXISTING AND NEW PENETRATIONS OF BUILDING ENVELOPE (EXTERIOR WALLS, ROOF, ETC.) WATER-TIGHT AND AS APPROVED BY ARCHITECT AND ENGINEER. ROOFING SHALL BE RESTORED BY A LICENSED ROOFING CONTRACTOR BASED ON WRITTEN INSTRUCTIONS AND DETAILS FROM ROOFING MANUFACTURER AS REQUIRED TO MAINTAIN ROOF WARRANTY. REFER TO ARCHITECTURAL AND ENGINEERING PLANS AND SPECIFICATIONS FOR FURTHER REQUIREMENTS.
- M. ALL EXISTING PANELS AFFECTED BY THIS CONTRACTOR'S WORK SHALL BE PROVIDED WITH NEW TYPE-WRITTEN PANEL DIRECTORIES AND INSERT SLEEVES. PANEL DIRECTORIES SHALL NOT USE ROOM NAMES OR NUMBERS FROM THESE DRAWINGS. DIRECTORIES SHALL BE DETAILED AND COORDINATED WITH OWNER'S SUITE NUMBERS, FINAL ROOM NUMBERS, IT RACK NAMES, WORKSTATION DESIGNATIONS, ETC. UNUSED BREAKERS SHALL BE IN OFF POSITION.

KEYNOTES

- U1 DEMOLISH ALL EXISTING ELECTRICAL CONDITIONS WITHIN THIS BOUNDARY. COORDINATE WITH OWNER FOR DIRECTION RELATED TO EQUIPMENT/MATERIAL SALVAGE.
- U2 DEMOLISH EXISTING POLE-MOUNTED SITE LIGHT.
- U4 DEMOLISH EXISTING BUILDING-MOUNTED SITE LIGHT.
- U5 EXISTING BUILDING-MOUNTED CAMERA TO REMAIN.
- U6 RELOCATE EXISTING BUILDING-MOUNTED SITE LIGHT. REFER TO NEW WORK SITE PLAN FOR NEW LOCATION.
- U11 RELOCATE EXISTING BUILDING-MOUNTED CAMERA. REFER TO NEW WORK SITE PLAN FOR NEW LOCATION.
- U15 ALL EXISTING ELECTRICAL DEVICES/CONNECTIONS WITHIN GREENHOUSE TO BE RELOCATED TO NEW GREENHOUSE LOCATION AS SHOWN ON NEW WORK SITE PLAN, FOR BIDDING PURPOSES. ASSUME RELOCATION OF (20) WEATHERPROOF DUPLEX RECEPTACLES, (4) LIGHT FIXTURES, (3) 120V CONNECTIONS TO FANS AND (2) 120V CONNECTIONS TO UNIT HEATERS.
- U16 EXISTING LOAD CENTER FEEDING GREENHOUSE TO BE RELOCATED TO NEW GREENHOUSE LOCATION AS SHOWN ON NEW WORK SITE PLAN. DEMOLISH EXISTING FEEDER CONDUIT/CONDUCTORS BACK TO SOURCE AND MARK ASSOCIATED BREAKER(S) AS SPARE.

REVISIONS

NO.	MM-DD-YY	NAME	DESCRIPTION OF CHANGES
2	02/28/24		ADDENDUM #2

CRABTREE ROHRBAUGH & ASSOCIATES - ARCHITECTS

250 WEST MAIN STREET, SUITE 200
CHARLOTTESVILLE VA 22902
434-975-7262

MECHANICSBURG, PENNSYLVANIA
TOWSON, MARYLAND
WHITE SULPHUR SPRINGS, WEST VIRGINIA

www.cra-architects.com

ADDITIONS AND RENOVATIONS

SHELburne MIDDLE SCHOOL

SCHOOL BOARD OF THE CITY OF STAUNTON, VA

300 Grubert Ave, Staunton, VA 24401



ELECTRICAL DEMO PLAN - SITE

PLOT SCALE:
1" = 30'-0"

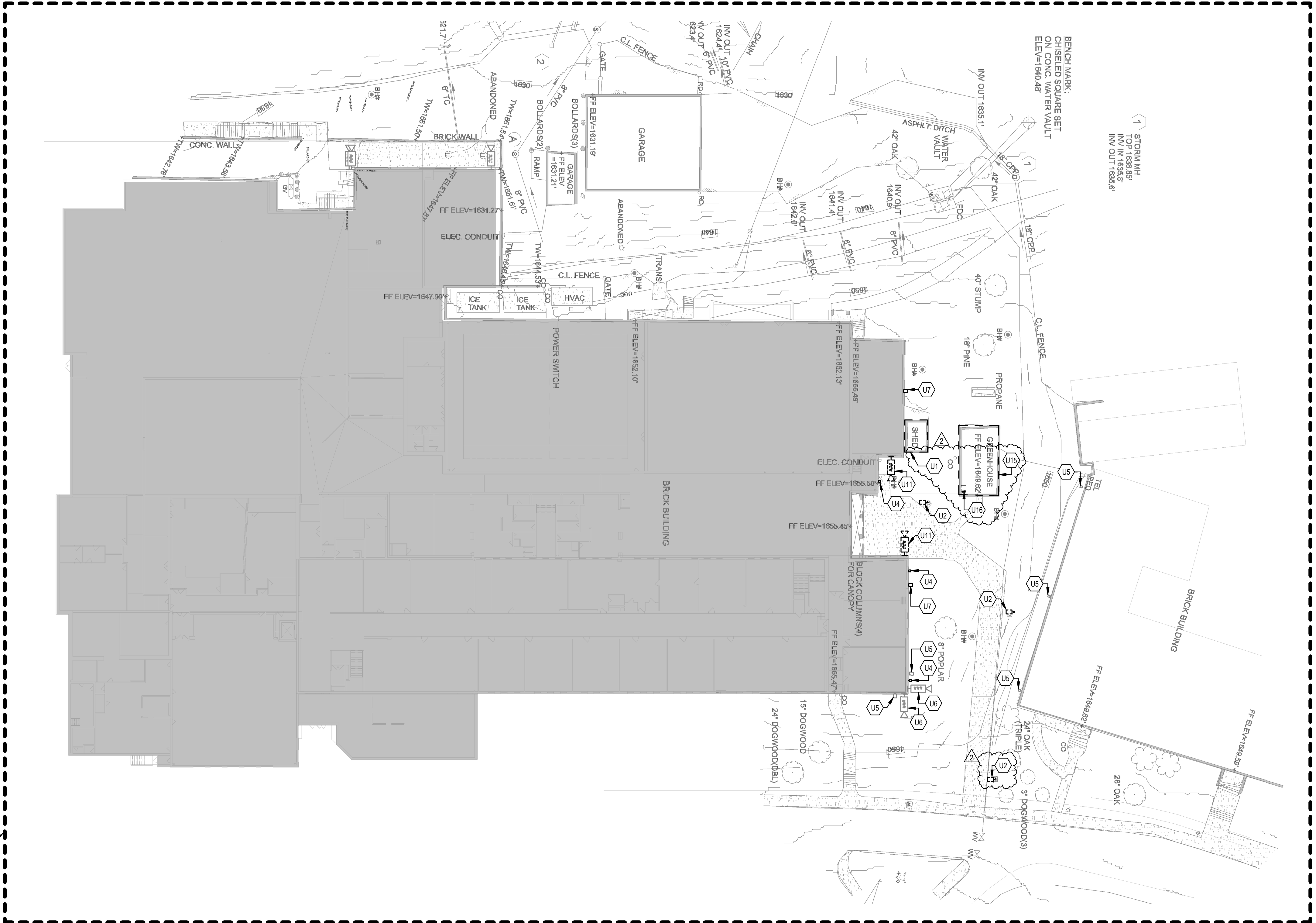
FILENAME:
RSMR22

DATE:
01/24/2024

PROJECT
3636

UED1.1

ALL SCOPE OF WORK SHOWN WITHIN DASHED BOX SHALL BE PRICED AS PART OF ALTERNATE #1. CONTRACTOR IS RESPONSIBLE FOR DETERMINING WHICH NOTES, SCHEDULES, DETAILS, AND CONTROLS ARE APPLICABLE TO THE SCOPE OF WORK IN THIS AREA.



1 ELECTRICAL DEMO PLAN - SITE