

**UNION COUNTY PUBLIC LIBRARY
LIBRARY RENOVATIONS AND ADDITION**

LWC Commission No. 22110.00

**ADDENDUM #07
DECEMBER 13, 2023**

LWC, Inc.
712 EAST MAIN ST
RICHMOND, IN 47374

To Prospective Bidders:

This addendum is a modification of the Contract Documents for the above referenced project and is hereby incorporated into and becomes a part of said Contract Documents. Acknowledge receipt of this Addendum in the space provided on the Bid Form. Failure to do so may subject the Bidder to disqualification. It is to be considered in the Proposals and covers additions to or changes in the Contract Documents as indicated below.

This addendum consists of the following:

General Items:

- **Bids due Friday December 15, 2023, at 3:00 PM**

Attachments:

- **General:**
 - RFI Log – Addendum #07

- **Specifications:**
 - 096568 – Resilient Athletic Flooring – Multipurpose
 - 096766 – Synthetic Athletic Flooring
 - 230549 – Vibration Control For HVAC
 - 233400 - HVAC Fans
 - 233700 - AIR Outlets and Inlets

- **Drawings:**
 - G001 – LEGEND, ABBREVIATIONS, AND LIFE SAFETY PLANS & DATA
 - AS100 – ARCHITECTURAL SITE PLAN
 - A103 – ROOF PLAN
 - A103.1 – ALTERNATE ROOF PLAN
 - A301 – EXTERIOR BUILDING ELEVATIONS
 - A401 – VERTICAL CIRCULATION PLANS, SECTIONS, AND DETAILS
 - M101 – LOWER LEVEL MECHANICAL FLOOR PLAN – BASE BID
 - M601 - MECHANICAL SCHEDULES
 - M701 - ATC LEGEND
 - ED102.1 – ELECTRICAL LIGHTING - ALTERNATE LOCATIONS ENLARGED VIEWS - ALTERNATE DEMOLITION
 - E102.1 - ELECTRICAL LIGHTING - ALTERNATE LOCATIONS ENLARGED VIEWS - ALTERNATE STAFF AND TRACK - NEW WORK

- E201 - ELECTRICAL POWER AND SYSTEMS - LOWER LEVEL - NEW WORK
- E202.1 - ELECTRICAL POWER AND SYSTEMS - ALTERNATE LOCATIONS ENLARGED VIEWS - ALTERNATE STAFF AND TRACK - NEW WORK
- E501 - ELECTRICAL SCHEDULES
- E601 - ELECTRICAL SINGLE-LINE DIAGRAM & PANELBOARD SCHEDULES

SPECIFICATIONS

ITEM NO.1 – 096568 - Resilient Athletic Flooring - Multipurpose

- Added Tarkett to Manufacturers list

ITEM NO.2 – 096766 – Synthetic Athletic Flooring

- Added Tarkett to Manufacturers list

ITEM NO.3 – 230549 – Vibration Control For HVAC

- Remove previous revision of specification and replace specification with attached.

ITEM NO.4 – 233400 - HVAC Fans

- Remove previous revision of specification and replace specification with attached

ITEM NO.5 – 233700 - AIR Outlets and Inlets

- Remove previous revision of specification and replace specification with attached

DRAWINGS

ITEM NO.1 – G001 – Legend, Abbreviations, and Life Safety Plans & Data

- Added travel distances

ITEM NO.2 – A103 – Roof Plan

- Added location of downspouts

ITEM NO.3 – A103.1 – Alternate Roof Plan

- Added location of downspouts

ITEM NO.4 – A301 – Exterior Building Elevations

- Added louver over Door 130A
- Added Downspouts to elevations views

ITEM NO.5 – A401 – Vertical Circulation Plans, Sections, and Details

- Revised stair detail

ITEM NO.6 – M101 – Lower Level Mechanical Floor Plan - Base Bid

- See sheet for changes

ITEM NO.7 – M601 – Mechanical Schedules

- See sheet for changes

ITEM NO.8 – M701 – ATC Legend

- See sheet for changes

ITEM NO.9 – ED102.1 – Electrical Lighting – Alternate Locations Enlarged Views – Alternate Demolition

- Revised existing lighting in staff room. See sheet for changes

ITEM NO.10 – E102.1 – Electrical Lighting – Alternate Locations Enlarged Views – Alternate Staff and Track – New Work

- Revised existing lighting in staff room. See sheet for changes

ITEM NO.11 – E201 - Electrical Power and Systems - Lower Level – New Work

- Added exhaust fan EF-2 and junction box for range hood. See sheet for changes

ITEM NO.12 – E202.1 - Electrical Power and Systems – Alternate Locations Enlarged Views – Alternate Staff and Track – New Work

- Revised power receptacles in staff room. See sheet for changes

ITEM NO.13 – E501 – Electrical Schedules

- Updated Motors, Starters, Disconnects & Control Schedule, and Luminaire Schedule. See sheet for changes

ITEM NO.14 – E601 – Electrical Single-Line Diagram & Panelboards Schedules

- Updated panel schedule L1C. See sheet for change

ITEM NO.15 – AS100 – Architectural Site Plan

- Added dimensions.

BIDDER QUESTIONS:

- Question: Do you know if this is retrofit to or a new panel? If retrofit do we have any info on what type of FA system they have now?
 - Response: Fire alarm would be a new panel. However, there would still be a tying back to the existing building systems. The area of refuge call box will be located in the new addition.
- Question: Do you know the type and color of paint for the 4 poles that need painted. On sheet ed100 note number 8?
 - Response: This would be to "Match Existing" exterior grade paint and color.
- Question: The material schedule notates for AF-1 to be "Tarkett Omnisports Multi use Color Classic Oak". I want to confirm this is the correct flooring to be used as it is not one of the listed manufactures/materials in the Specifications section 096568 Resilient Athletic Flooring Multipurpose?
 - Response: Tarkett is being added as a manufacturer.
- Question: If we are to use the Tarkett material shown on the material finish schedule, which installation method are we to price? There are 5 installation methods of the product: Multi-set, HS Sport Spray, Greenlay, Multi-Poxy, Tarkolay With Multi-Poxy.
 - Response: Multi-set or Multi-Poxy. Whichever is more cost effective.

- Question: Do we know if the existing section of the upper portion of the building is wood, concrete, or gypsum substrate?
 - Response: Existing Upper floors have wood substrate.
- Question: Please advise what percent our bid bond should be?
 - Response: A701 – 2018 Instruction to Bidders - A310 – 2010 Bid Bond - 5% Bid Security.
- Question: Please confirm what type of material ACT-1 is. The finish schedule calls out to match existing?
 - Response: The existing ceiling tile is a 2x2 Angled Tegular, mineral fiber tile. No manufactured labeling was found.

END OF ADDENDUM #07



Addendum 007 RFI Log

Commission Number: 22106.00

Project Name: Union County Public Library - Library Addition and Renovation

RFI Number	Date IN	Date OUT	Due Date	Description/Response	Sheet/Spec Reference	PCO Number	CO Number
001	12/11/23	12/13/23					
Poole Group				Do you know if this is retrofit to or a new panel? If retrofit do we have any info on what type of FA system they have now			
LWC				Response: The Fire alarm would be a new panel. However, there would still be a tying back to the existing building systems. The area of refuge call box will be located in the new addition			
002	12/11/23	12/13/23					
Thor				Do you know the type and color of paint for the 4 poles that need painted. On sheet ed100 note number 8			
LWC				Response: Poles are to match existing paint color.			
003	12/12/23	12/13/23					
Thor				The material schedule notates for AF-1 to be "Tarkett Omnisports Multi use Color Classic Oak". I want to confirm this is the correct flooring to be used as it is not one of the listed manufactures/materials in the Specifications section 096568 Resilient Athletic Flooring Multipurpose			
LWC				Response: Tarkett is being added as a manufacturer			
004	12/12/23	12/13/23					
Thor				If we are to use the Tarkett material shown on the material finish schedule, which installation method are we to price? There are 5 installation methods of the product: Multi-set, HS Sport Spray, Greenlay, Multi-Poxy, Tarkolay With Multi-Poxy. Please see the attachment that references this			
LWC				Response: Multi-set or Multi-Poxy. Which ever is more cost effective.			
005	12/12/23	12/13/23					
Thor				Do we know if the existing section of the upper portion of the building is wood, concrete, or gypsum substrate?			
LWC				Response: Existing Upper floors have wood substrate			
006	12/12/23	12/13/23					
Mattcon				Please advise what percent our bid bond should be?			
LWC				Response: A701 – 2018 Instruction to Bidders - A310 – 2010 Bid Bond - 5% Bid Security			
007	12/5/23	12/13/23					
Poole Group				Please confirm what type of material ACT-1 is. The finish schedule calls out to match existing			
LWC				Response: The existing ceiling tile is a 2x2 Angled Tegular, mineral fiber tile. No manufactured labeling was found.			

SECTION 096568 - RESILIENT ATHLETIC FLOORING – MULTIPURPOSE (ADD 07)

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

- A. Section Includes:
 - 1. Sheet vinyl athletic flooring.
- B. Related Requirements:
 - 1. Section 096513 "Resilient Base and Accessories" for wall base and accessories installed with resilient athletic flooring.

1.3 COORDINATION

- A. Coordinate layout and installation of flooring with floor inserts for gymnasium equipment.

1.4 ACTION SUBMITTALS

- A. Product Data: For each type of product.
- B. Shop Drawings: Show installation details and locations of the following:
 - 1. Layout, colors, widths, and dimensions of game lines and markers.
 - 2. Locations of floor inserts for athletic equipment installed through flooring.
 - 3. Seam locations for sheet flooring.
- C. Samples: For each exposed product and for each type, color, and pattern specified 6" x 6" square in size and of the same thickness indicated for the Work.
 - 1. Game-Line- and Marker-Paint Samples: Include Sample sets showing game-line- and marker-paint colors applied to flooring.
 - 2. Seam Samples: For each vinyl sheet flooring color and pattern required; with seam running lengthwise and in center of 6" x 12" Sample applied to a rigid backing and prepared by Installer for this Project.
- D. Samples for Initial Selection: For each type of resilient athletic flooring.

1. Game-Line and Marker Paint: Include charts showing available colors and glosses.

1.5 INFORMATIONAL SUBMITTALS

- A. Qualification Data: For sheet vinyl flooring Installer.

1.6 CLOSEOUT SUBMITTALS

- A. Maintenance Data: For resilient athletic flooring to include in maintenance manuals.

1.7 MAINTENANCE MATERIAL SUBMITTALS

- A. Furnish extra materials, from the same product run, that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.
 1. Sheet Flooring: Furnish full-width rolls of not less than 10 linear feet for each 500 linear feet or fraction thereof, of each type, color, and pattern of flooring installed.

1.8 QUALITY ASSURANCE

- A. Sheet Vinyl Flooring Installer Qualifications: An experienced installer who has completed sheet vinyl flooring installations using seaming methods indicated for this Project and similar in material, design, and extent to that indicated for this Project; who is acceptable to manufacturer; and whose work has resulted in installations with a record of successful in-service performance.

1.9 DELIVERY, STORAGE, AND HANDLING

- A. Deliver materials in original packages and containers, with seals unbroken, bearing manufacturer's labels indicating brand name and directions for storing.

1.10 FIELD CONDITIONS

- A. Adhesively Applied Products:
 1. Maintain temperatures during installation within range recommended in writing by manufacturer, in spaces to receive flooring 48 hours before installation, during installation, and 48 hours after installation unless longer period is recommended in writing by manufacturer.
 2. After post installation period, maintain temperatures within range recommended in writing by manufacturer.
 3. Close spaces to traffic for 48 hours after flooring installation unless manufacturer recommends longer period in writing.

- B. Install flooring after other finishing operations, including painting, have been completed.

PART 2 - PRODUCTS

2.1 SHEET VINYL FLOORING

- A. Description: Sheet vinyl flooring specifically designed for adhered athletic flooring applications.
 - 1. Multi-component sheet consisting of a dual-durometer, closed cell foam backing layer, reinforcement, secondary non-woven fiberglass interlayer and a wear layer for fully adhered installation
- B. Manufacturers:
 - 1. Acer – MP Court
 - 2. Action Floor Systems – Action V-Sport
 - 3. Taraflex – Multi-Use (Design Standard)
 - 4. **Tarkett – Omnisports – Multi purpose (ADD 07)**
- C. Sheet Vinyl Flooring with Backing:
 - 1. Wear-Layer Thickness: .08 inch / 2.1mm
 - 2. Overall Thickness: .244 inch / 6.2mm
 - 3. Class 2 – 22% to 33% Shock absorption – F2772
 - 4. Backing – Fiberglass
- D. Seaming Method: Heat Welded
- E. Applied Finish: Factory-applied UV urethane
- F. Roll Size: 5.9 feet / 1.8m wide by 85 feet / 26m long. No cross seams.
- G. Color and Pattern: Primary color / pattern – Wood Grain. Secondary color to be determined.

2.2 ACCESSORIES

- A. Trowelable Leveling and Patching Compound: Latex-modified, hydraulic-cement-based formulation approved by flooring manufacturer.
- B. Adhesives: Water-resistant type recommended in writing by manufacturer for substrate and conditions indicated.
- C. Game-Line and Marker Paint: Complete system including primer, if any, compatible with flooring and recommended in writing by flooring and paint manufacturers for use indicated.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine substrates, with Installer present, for compliance with requirements for installation tolerances, moisture content, and other conditions affecting performance of the Work.
 - 1. Verify that finishes of substrates comply with tolerances and other requirements specified in other Sections and that substrates are free of cracks, ridges, depressions, scale, and foreign deposits that might interfere with adhesion of resilient products.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

- A. Prepare substrates according to manufacturer's written instructions to ensure adhesion of flooring.
- B. Concrete Substrates: Prepare according to ASTM F710.
 - 1. Verify that substrates are dry and free of curing compounds, sealers, and hardeners.
 - 2. Alkalinity Testing: Perform pH testing according to ASTM F710. Proceed with installation if within acceptable range as required by flooring manufacturer.
 - 3. Moisture Testing: Perform tests so that each test area does not exceed 200 sf in area and perform no fewer than three tests in each installation area and with test areas evenly spaced in installation areas.
 - a. Relative Humidity Test: Using in-situ probes, ASTM F2170. Proceed with installation only after substrates meet manufacturer's requirements.
- C. Remove substrate coatings and other substances that are incompatible with adhesives and that contain soap, wax, oil, or silicone, using mechanical methods recommended in writing by manufacturer. Do not use solvents.
- D. Use trowelable leveling and patching compound to fill cracks, holes, and depressions in substrates.
- E. Move flooring and installation materials into spaces where they will be installed at least 48 hours in advance of installation unless manufacturer recommends a longer period in writing.
 - 1. Do not install flooring until it is the same temperature as space where it is to be installed.
- F. Sweep and vacuum clean substrates to be covered by flooring immediately before installation. After cleaning, examine substrates for moisture, alkaline salts, carbonation, and dust. Proceed with installation only after unsatisfactory conditions have been corrected.

3.3 FLOORING INSTALLATION, GENERAL

- A. Comply with manufacturer's written installation instructions.
- B. Scribe, cut, and fit flooring to butt neatly and tightly to vertical surfaces, equipment anchors, floor outlets, and other interruptions of floor surface.
- C. Maintain reference markers, holes, and openings that are in place or marked for future cutting by repeating subfloor markings on flooring. Use nonpermanent, nonstaining marking device.

3.4 SHEET FLOORING INSTALLATION

- A. Unroll sheet flooring and allow it to stabilize before cutting and fitting. Follow manufacturer
- B. Lay out sheet flooring as follows:
 - 1. Maintain uniformity of flooring direction.
 - 2. Minimize number of seams; place seams in inconspicuous and low-traffic areas, at least 6 inches (150 mm) away from parallel joints in flooring substrates.
 - 3. Match edges of flooring for color shading at seams.
 - 4. Locate seams according to approved Shop Drawings.
- C. Adhere products to substrates using a full spread of adhesive applied to substrate to comply with adhesive and flooring manufacturers' written instructions, including those for trowel notching, adhesive mixing, and adhesive open and working times.
 - 1. Provide completed installation without open cracks, voids, raising and puckering at joints, telegraphing of adhesive spreader marks, and other surface imperfections.
- D. Vinyl Sheet Flooring Seams: Prepare and finish seams to produce surfaces flush with adjoining flooring surfaces.
 - 1. Heat-Welded Seams: Comply with ASTM F1516. Rout joints and use welding bead to permanently fuse sections into a seamless flooring.
 - 2. Chemically Bonded Seams: Comply with ASTM F693. Seal seams to prevent openings from forming between cut edges and to prevent penetration of dirt, liquids, and other substances into seams.

3.5 GAME LINES AND MARKERS

- A. Mask flooring at game lines and markers, and apply paint to produce sharp edges. Where crossing, break minor game line at intersection; do not overlap lines.
- B. Apply game lines and markers in widths and colors according to requirements indicated on Drawings.

3.6 CLEANING AND PROTECTION

- A. Perform the following operations immediately after completing flooring installation:
 - 1. Remove adhesive and other blemishes from flooring surfaces.
 - 2. Sweep and vacuum flooring thoroughly.
 - 3. Damp-mop flooring to remove marks and soil after time period recommended in writing by manufacturer.

- B. Protect flooring from mars, marks, indentations, and other damage from construction operations and placement of equipment and fixtures during remainder of construction period. Use protection methods recommended in writing by manufacturer.
 - 1. Do not move heavy and sharp objects directly over flooring. Protect flooring with plywood or hardboard panels to prevent damage from storing or moving objects over flooring.

END OF SECTION 096566

SECTION 096766 - SYNTHETIC ATHLETIC FLOORING – TRACK (ADD 07)

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

- A. Section includes:
 - 1. Polyurethane flooring synthetic over base mats for use at running track surfaces.
- B. Related Sections:
 - 1. Section 096513 "Resilient Base and Accessories" for wall base and accessories installed with synthetic athletic flooring.

1.3 ACTION SUBMITTALS

- A. Product Data: For each type of product indicated.
- B. Shop Drawings: Show installation details for flooring including layout, colors, widths, and dimensions of game lines and markers and locations of athletic equipment floor inserts.
- C. Samples for Initial Selection: Manufacturer's color charts showing colors and glosses available for flooring and game-line and marker paints.
- D. Samples for Verification: For each color, gloss, and texture of flooring required, 12 inches square, applied to a rigid backing. Include sample sets showing the game-line and marker paint colors applied to the flooring.

1.4 INFORMATIONAL SUBMITTALS

- A. Qualification Data: For qualified Installer.

1.5 CLOSEOUT SUBMITTALS

- A. Maintenance Data: For synthetic athletic flooring to include in maintenance manuals.

1.6 QUALITY ASSURANCE

- A. Installer Qualifications: An Installer (Applicator) who is approved, trained, or certified by synthetic athletic flooring manufacturer.

1.7 FIELD CONDITIONS

- A. Environmental Limitations: Comply with flooring manufacturer's written instructions for substrate temperature, ambient temperature, humidity, ventilation, and other conditions affecting flooring application.
1. Do not apply flooring until spaces are enclosed and weatherproof; wet work in spaces is complete and dry; and overhead work, including installing mechanical systems, lighting, and athletic equipment, is complete.
 2. Maintain temperatures during installation within range recommended in writing by manufacturer, but not less than 70 deg F or more than 95 deg F, in spaces to receive flooring 48 hours before installation, during installation, and 48 hours after installation unless longer period is recommended in writing by manufacturer.
 3. After installation period, maintain temperatures within range recommended in writing by manufacturer, but not less than 55 deg F or more than 95 deg F.
 4. Close spaces to traffic during flooring installation.

1.8 COORDINATION

- A. Coordinate layout and installation of flooring with floor inserts for gymnasium equipment.

PART 2 - PRODUCTS

2.1 FLOORING APPLIED OVER BASE MATS

- A. Products: Subject to compliance with requirements, available products that may be incorporated into the Work include, but are not limited to, the following:
1. Aacer Flooring, LLC; MP Sport.
 2. Action Floor Systems, LLC; Herculan MF
 3. Robbins Pulastic SP 140
 4. **Tarkett - PolyTurf Plus 9+2 Pad and Pour (Design Standard) (ADD 07)**
- B. Description: Synthetic athletic flooring system consisting of resilient base mat adhered to substrate, base mat sealer, and synthetic polyurethane body and top coats.
- C. Performance:
1. Low-Emitting Materials: Products shall comply with the following limits for VOC content when calculated according to 40 CFR 59, Subpart D (EPA Method 24).

- a. Base Mat Adhesive: VOC content of not more than 60 g/L.
- b. Base Mat Sealer: VOC content of not more than 200 g/L.
- c. Body and Topcoats: VOC content of not more than 100 g/L.

D. Materials:

1. Base Mat: Manufacturer's standard base mats of granulated recycled rubber in polyurethane binder.
 - a. Thickness: .354 inch / 9 mm.
2. Base-Mat Adhesive: Manufacturer's standard two-component polyurethane.
3. Base-Mat Sealer: Manufacturer's standard two-component polyurethane compound formulated for sealing base mat.
4. Body Coat(s): Two-component, self-leveling, pigmented, polyurethane containing no rubber fillers and no mercury.
5. Topcoat (Finish Coat): Manufacturer's standard pigmented polyurethane.
6. Topcoat thickness: .0787 inch / 2 mm
7. Total system thickness: .432 inch / 11 mm

E. Finishes:

1. Color: As selected by Architect from manufacturer's full range. Multiple colors will be selected as field colors, accent colors and border colors. Three colors / patterns will be selected.
2. Surface Texture: Manufacturer's standard, smooth surface.

2.2 ACCESSORIES

- A. Trowelable Leveling and Patching Compound: Latex-modified, hydraulic-cement-based formulation approved by flooring manufacturer.
- B. Game-Line and Marker Paint: Complete system including primer, if any, compatible with flooring and recommended in writing by flooring and paint manufacturers for use indicated.
 1. VOC Content: Not more than 150 g/L when calculated according to 40 CFR 59, Subpart D (EPA Method 24).

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine substrates, with Installer present, for compliance with requirements for installation tolerances, moisture content, and other conditions affecting performance.

1. Verify that finishes of substrates comply with tolerances and other requirements specified in other Sections and that substrates are free of cracks, ridges, depressions, scale, and foreign deposits that might interfere with adhesion of resilient products.
2. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

- A. Concrete Substrates: Prepare substrates according to manufacturer's written instructions to ensure adhesion of flooring.
1. Verify that substrates are dry and free of curing compounds, sealers, and hardeners. Remove contaminants using mechanical means.
 2. Alkalinity Testing: Perform pH testing according to ASTM F 710. Proceed with installation only if pH readings are not less than 7.0 and not greater than 8.5.
 3. Moisture Testing:
 - a. Perform anhydrous calcium chloride test, ASTM F 1869. Proceed with installation only after substrates have maximum moisture-vapor-emission rate of 3 lb of water/1000 sq. ft. in 24 hours.
 - 1) Perform tests so that each test area does not exceed 200 sq. ft., and perform not less than 2 tests in each installation area and with test areas evenly spaced in installation areas.
- B. Remove substrate coatings and other substances that are incompatible with flooring adhesives and that contain soap, wax, oil, or silicone, using mechanical methods recommended in writing by manufacturer. Do not use solvents.
- C. Use trowelable leveling and patching compound to fill cracks, holes, and depressions in substrates.
- D. Contractor / installer shall provide concrete leveling compound recommended by manufacturer to treat concrete surfaces and mitigate moisture issues to meet flooring manufacturers requirements prior to installation.
- E. Treat nonmoving substrate cracks and control joints to prevent cracks from telegraphing (reflecting) through flooring according to manufacturer's written instructions.
- F. Protect substrate voids and joints to prevent flooring resins from flowing into or leaking through them.
- G. Move flooring and installation materials into spaces where they will be installed at least 48 hours in advance of installation unless manufacturer recommends a longer period in writing.
1. Do not install flooring until it is same temperature as space where it is to be installed.

- H. Sweep and vacuum clean substrates to be covered by flooring immediately before installation. After cleaning, examine substrates for moisture, alkaline salts, carbonation, and dust.
- I. Proceed with installation only after unsatisfactory conditions have been corrected.
- J. Protect walls, floor openings, athletic equipment inserts, electrical openings, door frames, and other obstructions during installation. Cover floor and wall areas at mixing stations.

3.3 FLOORING INSTALLATION, GENERAL

- A. General: Mix and apply flooring components according to manufacturer's written instructions.
 - 1. At substrate expansion, isolation, and other moving joints, install continuous joint of same width through flooring.

3.4 INSTALLATION OF FLOORING APPLIED OVER BASE MATS

- A. Adhesively apply resilient base mats to substrate according to manufacturer's written instructions.
 - 1. Do not compress mats when fitting into place. Leave gap of width recommended in writing by manufacturer at butted base-mat sheets, walls, floor openings, athletic equipment inserts, electrical openings, door frames, and other obstructions.
 - 2. Roll base mats to set them into adhesive and eliminate air pockets.
 - 3. Repair ridges at seams, loose areas, and air pockets according to manufacturer's written instructions.
- B. Apply seal coat to base mats before applying body coat(s).
- C. Smooth ridges and high spots in seal coat before applying body coat(s).
- D. Apply body coat(s) and topcoat to produce a uniform surface and finish.

3.5 GAME LINES AND MARKERS

- A. Mask flooring at game lines and markers, and apply paint to produce sharp edges. Where crossing, break minor game line at intersection; do not overlap lines.
- B. Lay out game lines and markers to comply with rules and diagrams published by National Federation of State High School Associations for athletic activities indicated.

3.6 PROTECTION

- A. Close spaces to traffic for 5 days after flooring installation unless manufacturer recommends longer period in writing.

- B. Protect flooring from mars, marks, indentations, and other damage from construction operations and placement of equipment and fixtures during remainder of construction period. Use protection methods recommended in writing by manufacturer.
 - 1. Do not move heavy and sharp objects directly over flooring. Protect flooring with plywood or hardboard panels to prevent damage from storing or moving objects over flooring.

END OF SECTION 096766

23 05 49 VIBRATION CONTROL FOR HVAC

PART 1 - GENERAL

- 1.1 Vibration isolators shall be provided at equipment as shown on the drawings and as herein specified.
- 1.2 The supplier of isolation equipment shall study the application, the equipment to be isolated and the structure. The supplier shall assume responsibility to determine required minimum deflections and optimum deflection characteristics accounting for dynamic and static forces.

PART 2 - PRODUCTS

- 2.1 Following is a description of the various types of isolators, bases and rails required. Catalog designations are those of Mason Industries.

Type A1
Ribbed or waffled neoprene pad. Series W.

Type J1
Hanger rod vibration isolator with combination steel spring and neoprene-in-shear isolators. Series 30N.

PART 3 - EXECUTION

- 3.1 Manufacturer's instructions shall be followed carefully in setting and adjusting vibration isolators. Ensure that no direct hard surface to surface contact exists. Fasten to the building structure as recommended by the isolation supplier.
- 3.2 Where electrical connections are made to equipment mounted on isolators, caution the Electrical Contractor to connect thru flexible conduits.
- 3.3 Refer to Section 23 05 29 Hangers and Supports for HVAC Piping for spring isolator sections in pipe hanger rods.

END OF SECTION

23 34 00 HVAC FANS

PART 1 - GENERAL

- 1.1 Fans shall be provided as specified below and shown on the drawings, complete with motors, drives and associated devices.
- 1.2 Fans shall be constructed, rated and labeled in accordance with AMCA Standard 210 67 and AMCA 300. Fans shall be statically and dynamically balanced throughout the operating range. Submittals shall include fan curves showing operating point(s), system curves, and surge lines.
- 1.3 Fans with Electronically Commutated Motors (ECM's) shall be selected such that the maximum available motor RPM shall at minimum accommodate 10% additional fan CFM at a 21% increase in fan static pressure, over what is specified as the duty point. This elevated performance point shall also not exceed the motor's Hp limitations or the fan's construction class. Shop drawing information shall reflect these requirements. Motor speeds shall be adjustable in the field, and any hard programmed limitations of motor speed or fan performance shall be based on the required elevated performance stated above.
- 1.4 Classification for Spark Resistant Construction shall conform with AMCA 99.
- 1.5 Refer to Section 23 05 13 Electrical Requirements for HVAC Equipment and Section 23 05 31 HVAC Equipment Drives for required provisions.
- 1.6 Refer to Section 23 05 49 Vibration Control for HVAC for vibration isolator types.
- 1.7 Provide dimensional drawings and product data on each exhaust fan assembly. Provide fan curves for each fan at the specified operation point with the flow, static pressure, and horsepower clearly plotted. For multiple fan assemblies, fan curves shall be adjusted to show assembly operation.
- 1.8 Dampers shall be tested and licensed for air performance and leakage in accordance with ANSI/AMCA standard 500-D and AMCA publication 511.
- 1.9 Equipment shall carry an all-inclusive manufacturer's parts and labor warranty for a period of one (1) year(s) from date of final acceptance or date of beneficial use, as agreed to between Contractor and Construction Manager. The all-inclusive parts and labor warranty for ECM's and associated controllers shall be for a period of 5 years. Any materials, equipment, or controls found to be defective during this warranty period shall be made good without expense to the Owner, including any required replacement of fluids, glycol, or refrigerant. The warranty shall include a delayed start-up provision such that the warranty does not begin at time of delivery. The labor for the warranty shall be performed by the manufacturer's authorized service agent.
- 1.10 Mechanical equipment, appliances and supports that are exposed to wind shall be designed and installed to resist the wind pressure determined in accordance with the building and mechanical code. Refer to specification 23 05 30 Bases and Supports for HVAC Equipment for additional requirements.

PART 2 - PRODUCTS

- 2.1 Electronically Commutated Motors (ECM's) shall be maximum 1750 rpm unless specifically noted otherwise. Refer to 1.3 above and Section 23 05 13 Electrical Requirements for HVAC Equipment. ECM's shall be variable speed motors with motor-mounted interface with manual potentiometer that allows minimum 5:1 turn down of motor speed, setting of minimum motor speed, and can accept a 0-10VDC signal from an external source to vary the motor speed.

2.2 The following lists types of fans, related construction features and manufacturers. All fans of any one listed type shall be of the same manufacturer.

A. Type D1 – Direct Drive Power Roof Ventilator

Power roof ventilator shall consist of a spun aluminum weather hood, counterflashing base, vertical shaft open centrifugal wheel, ECM, motor disconnecting means in the motor compartment, motorized backdraft damper and bird screen.

A metal roof curb with straight sides and wood nailer on top shall be provided with each fan. Provide wood cant strips around the curb only if recommended for the roofing system. Curb shall be insulated type. Curb height shall be such that top of curb extends 12" above the finished roof surface. For sloped roofs, the curb shall have a built-in slope to match roof slope so that top of curb is level.

Fans shall be manufactured by Greenheck, PennBarry, Twin City, Cook.

B. Type C2 - In Line Centrifugal

In line centrifugal fan shall consist of a backwardly inclined fan wheel, ECM motor, motor disconnecting means, inlet cone, motorized backdraft damper, square sheet metal housing with 1 inch acoustical lining, and mounting brackets for suspension mounting. Housing shall be galvanized or prime coated and finished with enamel paint.

Direct drive units shall be provided with a solid state speed controller with off position, and cover plate. Coordinate installation with Division 26.

Vibration isolators shall be type as indicated on the drawings.

Fans shall be manufactured by Greenheck, PennBarry, Twin City, Cook..

2.3 Motorized backdraft dampers, where specified, shall be furnished with an electronic damper actuator with voltage compatible with the fan motor voltage and electric service to the fan. If not compatible, a transformer shall be provided with the fan and damper actuator to afford the appropriate voltage. Where the fan motor is fed from a Variable Frequency Drive controller (VFD) provide a control contactor or relay and extend the control from the VFD damper control output relay to open/close the damper when associated fan motor is started/stopped.

2.4 Motorized backdraft dampers shall be insulated damper with extruded aluminum thermally broken airfoil blades with an AMCA air leakage class rating of class 1A at 1 in. wg and class 1 at 4 in. wg. Damper shall be parallel blade configuration with the motor actuator mounted outside of the airstream. Dampers shall be Greenheck ICD-44, Ruskin TED50, Tamco 9000 SC, equal by Pottroff or approved equal.

2.5 Gravity backdraft dampers shall be non-motorized dampers that open and remain open under low velocity conditions. Dampers shall be tested in accordance with AMCA standard 500 and at 1 in. wg have a maximum leakage rating of 20 cfm/ft², except dampers where the largest dimension is smaller than 24" air leakage shall be a maximum of 40 cfm/ft². Damper provided shall be appropriate for the mounting (vertical or horizontal) and application (exhaust or intake) and shall be parallel blade configuration. Dampers shall be Greenheck WD series, Ruskin BD2 or equal by Tamco 7000 CW, equal by Pottroff, or approved equal.

PART 3 - EXECUTION

3.1 Install fans and roof curbs level and plumb, in accordance with manufacturer's written instructions. Support units as described below using the vibration control devices specified in Section 23 05 49 Vibration Control for HVAC.

- A. Roof curb mounted units: Set unit on the curb and fasten the fan base to the curb. Roof support curbs shall be installed and leveled and secured to the roof deck/structure. Roof insulation and roofing shall be installed at the curbs by the roofing Contractor. Provide wood cant strips around the curb only if recommended for the roofing system.
- 3.2 Arrange installation of fans to provide access space around fans for service and maintenance.
 - 3.3 Adjust damper linkages for proper damper operation. Motorized backdraft dampers are to be wired to open when the fan operates. Coordinate with Division 26.
 - 3.4 Fans with E.C. Motors shall be commissioned and set-up by a factory authorized technician to meet project requirements, and interface coordinated with the B.A.S.
 - 3.5 Factory furnished devices which are not installed and wired in the factory shall be field installed and wired by Division 23, complete and ready for operation.
 - 3.6 Perform the following operations and checks before start-up.
 - A. Remove shipping blocking and bracing.
 - B. Verify unit is secure on mountings and supporting devices and that connections for piping, ductwork and electrical are complete. Verify proper thermal overload protection is installed in motor starters and disconnects.
 - C. Verify proper motor rotation direction and verify fan wheel free rotation and smooth bearing operation. Align belts and reinstall belt guards.
 - D. Lubricate bearings, pulleys, belts and other moving parts with factory-recommended lubricants.
 - E. Verify manual and automatic volume control, and fire and smoke dampers in connected ductwork systems are in the full-open position.

END OF SECTION

23 37 00 AIR OUTLETS AND INLETS

PART 1 - GENERAL

- 1.1 Air outlet and inlet devices include grilles, registers, diffusers, and louvers.
- 1.2 Refer to the schedule on the drawings for description, catalog numbers, materials, finishes, accessories, mounting and other details of the devices required.
- 1.3 Supply air devices in ceilings shall have their backsides externally insulated for condensation control. This external insulation shall be factory installed, minimum R-4.2 mineral fiber with foil jacket.

PART 2 - PRODUCTS

- 2.1 Air distribution devices other than louvers and specialty products shall be Titus, Tuttle & Bailey, Kreuger, Price, Metal Aire. All devices of a common type shall be by the same manufacturer.
- 2.2 Air outlet and inlet devices shall be equal to those specified by catalog number and description in the schedule on the drawings. Dampers shall be galvanized steel, unless otherwise noted, opposed blade configuration. Damper operators shall be concealed screw type. An auxiliary mounting frame shall be furnished with each grille and register except those mounted on exposed ducts or in lay in application.
- 2.3 Louvers shall be exterior weatherproof drainable type equal to scheduled and shown on the drawings. Louvers shall be assembled entirely by welded, withstand uniform wind loading pressure from a wind speed of 115 MPH, and shall have its beginning point of water penetrating at no lower than 900 fpm thru the Free Area (.01 ounces / sq. ft.), and its pressure drop no greater than .15 inches w.c. at 900 fpm thru the Free Area. Performance data indicating pressure loss and water penetration, derived from AMCA 550 testing, shall be included with submittals.
 - A. Aluminum louvers shall be minimum 12 ga. extruded aluminum with R1 caustic etch and finished with Kynar 500 fluoropolymer finish. Color is to be selected by the Architect from the manufacturer's standard colors.
 - B. Bird screen shall 0.50 inch mesh aluminum wire on the interior face of the louver attached at 12 inches centers on the perimeter.
 - C. Louvers shall be Ruskin, Greenheck, Airolite, or American Warming.

PART 3 - EXECUTION

- 3.1 Verify & ensure compatibility of ceiling mounted devices with the ceilings and suspension systems (lay in, concealed spline, plaster, drywall, etc.). Verify with the architectural drawings.
- 3.2 Carefully align square and rectangular devices with the vertical and horizontal building lines. Diffusers shall be attached rigidly to the ductwork. Where connected by flexible ducts, special supports shall be provided as required, either from the ceiling suspension system or by independent suspension wires or rods from the building structure.
- 3.3 Externally insulate the backsides of supply air devices that are mounted in ceilings and not internally insulated. Insulation shall comply with 23 07 13 DUCT INSULATION.
- 3.4 Factory insulation on supply diffusers that is damaged prior to or during installing shall be repaired.

- 3.5 Inside of ducts behind grilles, registers and diffusers shall be painted flat black, as needed, to eliminate the sight of shiny surfaces.
- 3.6 Louver assemblies shall be installed in strict accordance with manufacturer's recommendations. Louvers to be installed plumb, square, level and true. Blank off all unused portions of the louver with 14 ga. aluminum and insulate blank off with 1 inch rigid foil faced insulation. Seal blank off areas air tight.

END OF SECTION

Note: Existing building is permitted a B-occupancy. In areas where no changes are being made to walls, no changes to A-3 will be made. All new construction will comply with current A-3 occupancy requirements.

CHAPTER 3 - CLASSIFICATION OF FACILITIES

Section 302 - Classification
Single Use Occupancy
Type VB construction
Type VB construction

CHAPTER 5 - HEIGHT AND AREA

Note: The addition has been separated from the existing building by a 2-hour fire wall. Building #1 is the existing building. Building #2 is the new addition. Refer to plans below for extents.

BUILDING #1 (Existing)

Table 503
A3 Assembly Use
Type VB construction
Allowable Building Area, per Floor = 6,000 SF

Table 503.3 - Fire Extinguishers for Class A Fire Hazards, Light Hazard
None of the conditions under Section 909.2.1.3 groups A-3 is met, therefore as required Fire Extinguisher is not required.

Table 503.2 - Gelling height
All ceilings in the Means of Egress shall have a minimum gelling height of 7'-6"

Table 503.1 - Minimum required egress width
1009.2.1 - Stairs. The capacity, in inches, of means of egress stairs shall be calculated by multiplying the occupant load served by such stairway by a mean of egress capacity factor of 0.3 inch per occupant.

Table 601 - Fire Resistance Rating Requirements for Building Elements
Primary Structural Frame
Bearing Walls, Exterior
Bearing Walls, Interior

Table 602 - Fire Resistance Rating Requirements, Group A Occupancy
1-hour
5' x 10' = 1-hour
10' x 10' = 0-hour

Table 705.2 - Maximum area of exterior wall openings
5 to less than 10, unprotected, Non-sprinklered = 10%
20 to less than 25, unprotected, Non-sprinklered = 48%

Table 705.1 - Corridor Fire-Resistance Rating
A Occupancy required 1-hour fire-resistance rating without sprinkler system

Table 705.3 - Exterior Walls
The exterior walls on both sides of the fire wall shall have a 1-hour fire-resistance rating with 3/4-hour protection where opening protection is required by Section 705.2.

Table 706 - Vertical Continuity
Exception 4: In buildings of Type II, IV, and V construction walls shall be permitted to terminate at the underside of combustible roof or decks, provided:

Table 718.5 - Fire Floor and Fire Stair Protection Ratings
2-hour fire wall/barrier
1-hour fire barrier
1-hour shaft fire barrier
1-hour corridor walls

CHAPTER 8 - INTERIOR FINISHES

Table 803.1 - Interior wall and ceiling finish requirements by occupancy
The following wall and ceiling finish requirements shall be provided for the project location is Non-sprinklered:

Table 803.3 - Fire Extinguishers for Class A Fire Hazards, Light Hazard
Minimum Rated Single Extinguisher: 2-A
Maximum Floor Area Per Unit of A: 3,000 square feet

Table 803.2 - Gelling height
All ceilings in the Means of Egress shall have a minimum gelling height of 7'-6"

Table 803.1 - Minimum required egress width
1009.2.1 - Stairs. The capacity, in inches, of means of egress stairs shall be calculated by multiplying the occupant load served by such stairway by a mean of egress capacity factor of 0.3 inch per occupant.

Table 601 - Fire Resistance Rating Requirements for Building Elements
Primary Structural Frame
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Bearing Walls, Interior

Table 602 - Fire Resistance Rating Requirements, Group A Occupancy
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Table 718.5 - Fire Floor and Fire Stair Protection Ratings
2-hour fire wall/barrier
1-hour fire barrier
1-hour shaft fire barrier
1-hour corridor walls

CHAPTER 10 - MEANS OF EGRESS

Floor Area per Occupant (Indiana Building Code, Table 1004.1.2)
Library Reading function = 30sf/person
Library Stack function = 100sf/person
Business function = 100sf/person
Education Classroom function = 20sf/person
Assembly function = Actual occupancy or 15 sf/person (see notes)

Table 1009.2.1 - Minimum critical radiant flux
Class I floor coverings are permitted in Group A Occupancy.

Table 1009.2.2 - Sprinkler Systems
None of the conditions under Section 909.2.1.3 groups A-3 is met, therefore as required Fire Extinguisher is not required.

Table 1009.2.1 - Minimum required egress width
1009.2.1 - Stairs. The capacity, in inches, of means of egress stairs shall be calculated by multiplying the occupant load served by such stairway by a mean of egress capacity factor of 0.3 inch per occupant.

Table 601 - Fire Resistance Rating Requirements for Building Elements
Primary Structural Frame
Bearing Walls, Exterior
Bearing Walls, Interior

Table 602 - Fire Resistance Rating Requirements, Group A Occupancy
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Table 706 - Vertical Continuity
Exception 4: In buildings of Type II, IV, and V construction walls shall be permitted to terminate at the underside of combustible roof or decks, provided:

Table 718.5 - Fire Floor and Fire Stair Protection Ratings
2-hour fire wall/barrier
1-hour fire barrier
1-hour shaft fire barrier
1-hour corridor walls

CHAPTER 11 - ACCESSIBILITY FOR PHYSICALLY DISABLED PERSONS

Section 1101 - Accessibility
CG A111.1 clearances and requirements are indicated on the drawings.

CHAPTER 12 - INTERIOR ENVIRONMENT

Section 1202.1 - Floors and wall base finish materials
Toilet, bathing and shower rooms shall have a nonabsorbent surface, including a 4" high base at the wall/floor transition.

CHAPTER 24 - PLUMBING FIXTURES

Table 2402.1 - Minimum Number of Required Plumbing Fixtures
Total Occupants = 494

Table 2402.2 - Plumbing Fixtures
Men - 241 total
Women - 241 total

Table 2402.3 - Plumbing Fixtures
Men - 241 total
Women - 241 total

Table 2402.4 - Plumbing Fixtures
Men - 241 total
Women - 241 total

Table 2402.5 - Plumbing Fixtures
Men - 241 total
Women - 241 total

Table 2402.6 - Plumbing Fixtures
Men - 241 total
Women - 241 total

Table 2402.7 - Plumbing Fixtures
Men - 241 total
Women - 241 total

Table 2402.8 - Plumbing Fixtures
Men - 241 total
Women - 241 total

Table 2402.9 - Plumbing Fixtures
Men - 241 total
Women - 241 total

Table 2402.10 - Plumbing Fixtures
Men - 241 total
Women - 241 total

Table 2402.11 - Plumbing Fixtures
Men - 241 total
Women - 241 total

Table 2402.12 - Plumbing Fixtures
Men - 241 total
Women - 241 total

Table 2402.13 - Plumbing Fixtures
Men - 241 total
Women - 241 total

Table 2402.14 - Plumbing Fixtures
Men - 241 total
Women - 241 total

Table 2402.15 - Plumbing Fixtures
Men - 241 total
Women - 241 total

Table 2402.16 - Plumbing Fixtures
Men - 241 total
Women - 241 total

Table 2402.17 - Plumbing Fixtures
Men - 241 total
Women - 241 total

Table 2402.18 - Plumbing Fixtures
Men - 241 total
Women - 241 total

Table 2402.19 - Plumbing Fixtures
Men - 241 total
Women - 241 total

Table 2402.20 - Plumbing Fixtures
Men - 241 total
Women - 241 total

Table 2402.21 - Plumbing Fixtures
Men - 241 total
Women - 241 total

Table 2402.22 - Plumbing Fixtures
Men - 241 total
Women - 241 total

Table 2402.23 - Plumbing Fixtures
Men - 241 total
Women - 241 total

Table 2402.24 - Plumbing Fixtures
Men - 241 total
Women - 241 total

Table 2402.25 - Plumbing Fixtures
Men - 241 total
Women - 241 total

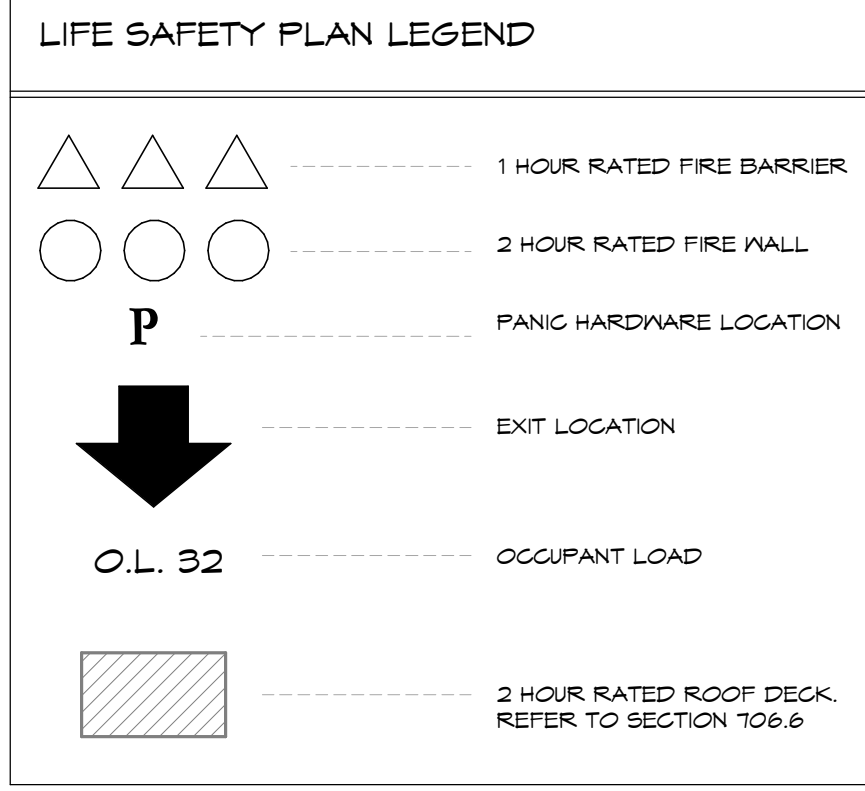
Table 2402.26 - Plumbing Fixtures
Men - 241 total
Women - 241 total

Table 2402.27 - Plumbing Fixtures
Men - 241 total
Women - 241 total

Table 2402.28 - Plumbing Fixtures
Men - 241 total
Women - 241 total

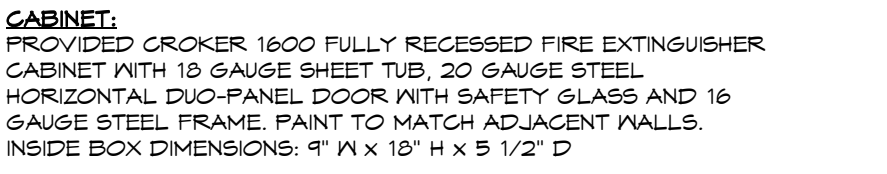
Table 2402.29 - Plumbing Fixtures
Men - 241 total
Women - 241 total

Table 2402.30 - Plumbing Fixtures
Men - 241 total
Women - 241 total

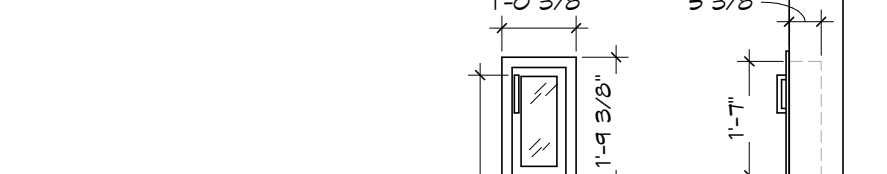


VIEW TITLE table with columns for SYMBOL NAME, SYMBOL MARK, and SYMBOL MARK. Includes symbols for WALL TAG, WINDOW TAG, CEILING TAG, INTERIOR FINISH, SPECIALTY EQUIPMENT TAG, PLUMBING FIXTURE TAG, CASEWORK TAG, FURNITURE TAG, DOOR TAG, ROOM TAG, LEVEL REFERENCE, EXISTING GRIDLINE, NEW GRIDLINE, KEYED NOTE, MATCHLINE, REVISION, and ELEVATION (KEYPLAN ONLY).

4 SYMBOL LEGEND

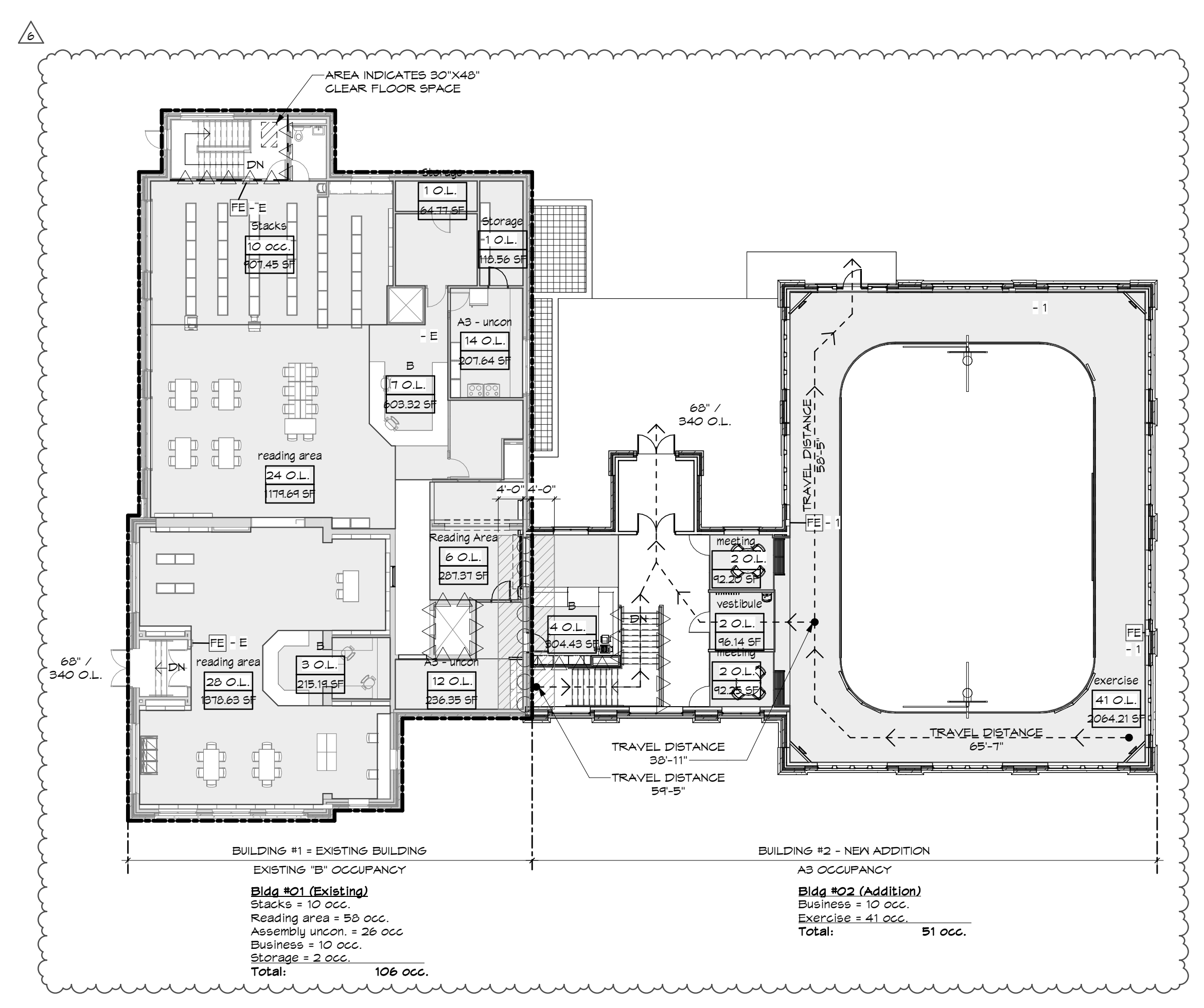


NOTE: FOR FIRE-RESISTANCE-RATED WALLS, ONLY SURFACE-MOUNTED CABINETS OR LISTED FIRE-RATED CABINETS SHALL BE INSTALLED.

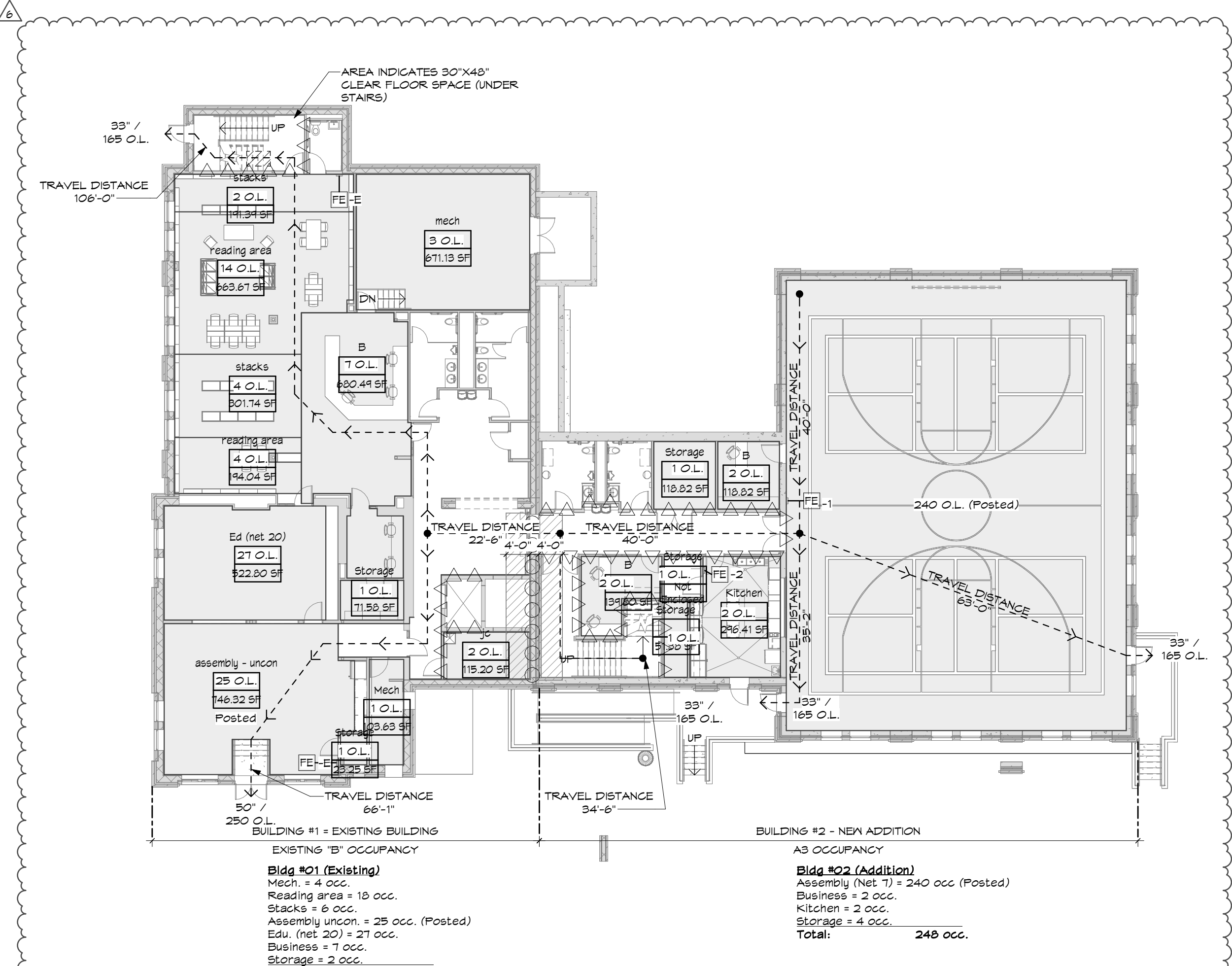


NOTE: FE-1 = EXISTING FIRE EXTINGUISHER
FE-2 = NEW FULLY RECESSED FIRE EXTINGUISHER
FE-3 = NEW SEMI-RECESSED FIRE EXTINGUISHER

3 FIRE EXTINGUISHER CABINET (FE-1)



1 UPPER LEVEL LIFE SAFETY PLAN SCALE: 1/16" = 1'-0"



2 LOWER LEVEL LIFE SAFETY PLAN SCALE: 1/16" = 1'-0"

ABBREVIATIONS table listing various symbols and their corresponding names, such as LVR, LWB, LWT, LXD, etc.

BID DOCUMENTS table with columns for No., Revisions / Submissions, and Date.

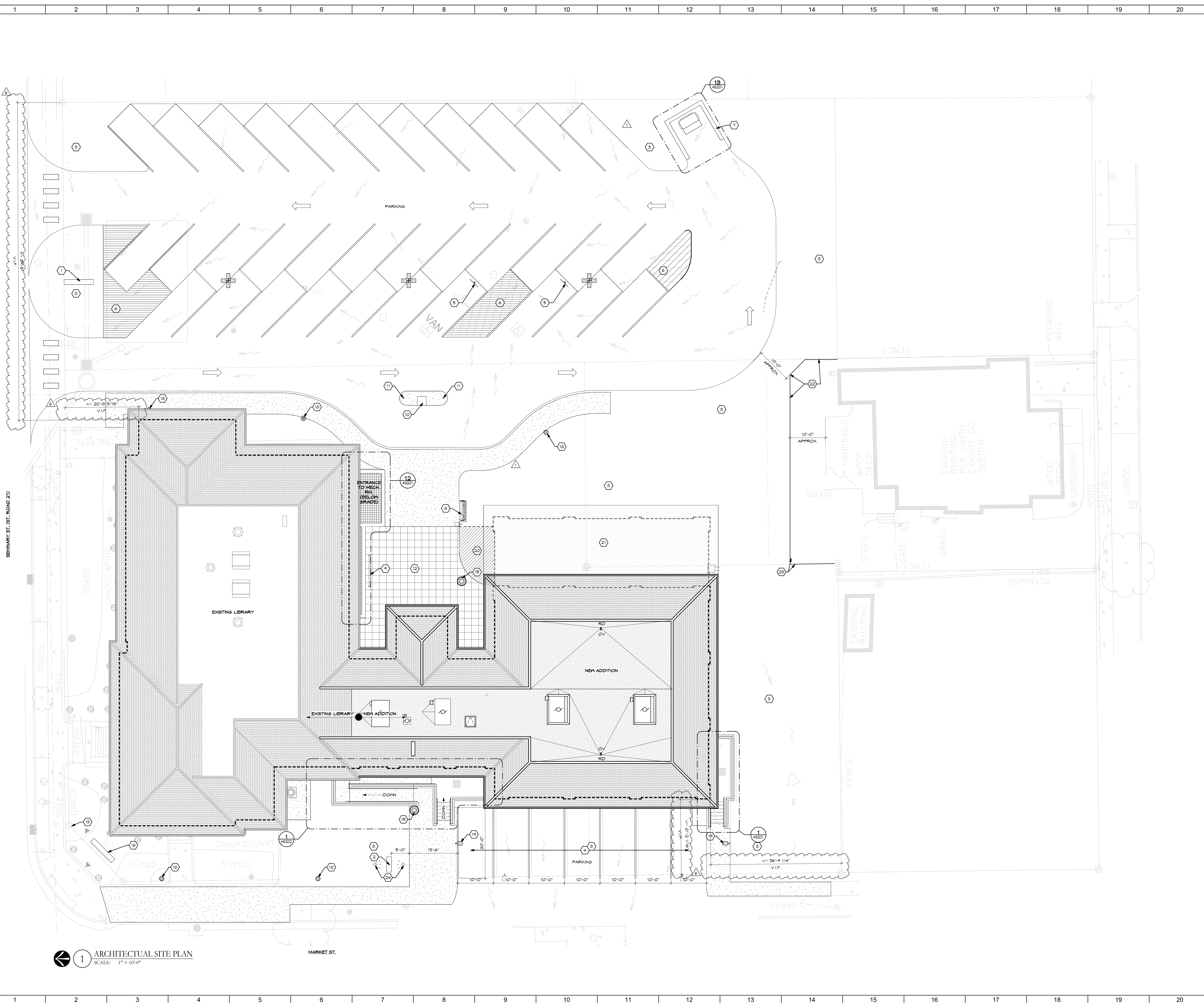
LWC INCORPORATED logo and contact information: 434 East First Street, Dayton, OH 45402, 937.223.6500.

Union County Public Library logo and address: 2 EAST SEMINARY STREET, LIBERTY, IN 47353.

LEGEND, ABBREVIATIONS, AND LIFE SAFETY PLANS & DATA table with columns for Comm. No., Date, and Drawing No.

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SHEET NOTES: (SITE NOTES ONLY.)

1. MONUMENT SIGN AT MAIN PARKING AREA - SEE DETAILS. SEE ELECTRICAL FOR LIGHTING.
2. MONUMENT SIGN AT WEST PARKING AREA - SEE DETAILS. SEE ELECTRICAL FOR LIGHTING.
3. SEEDBED GRASS AREA AS PART OF BASE BID.
4. PARKING AREA AS PART OF ALTERNATE #02 SHOWN AS REFERENCE. NOT PART OF BASE BID.
5. HANDICAP PARKING STALLS WITH SIGNAGE. SEE CIVIL FOR SYMBOL DIMENSIONS.
6. PAINTED STRIPES.
7. DUMPSTER ENCLOSURE - SEE DETAILS.
8. BENCH.
9. BIKE RACK.
10. BOOK DROP WITH CARD READER.
11. PIPE BOLLARDS.
12. PAVERS.
13. EXISTING FLAG POLE TO REMAIN.
14. CONCRETE PAVERS.
15. TRASH CAN.
16. EXISTING MONUMENT SIGN TO REMAIN.
17. MAIN PARKING LIGHTING - SEE ELECTRICAL.
18. PEDESTRIAN POLE LIGHTS - SEE ELECTRICAL.
19. WEST PARKING LIGHTING AS PART OF ALTERNATE #02 - NOT PART OF BASE BID.
20. PAVERS TO EXTEND TO BUILDING EDGE AS PART OF ALTERNATE #01.
21. INDICATES ROOF AREA AS PART OF ALTERNATE #01.
22. RELOCATE VINYL FENCING.
23. SALVAGE VINYL FENCING TO EXISTING POST SUCH THAT DISTANCE BETWEEN RELOCATED VINYL FENCING & WOOD DECKING TO REMAIN IS APPROXIMATELY 10'-0".
24. SIGN LIGHTING - SEE ELECTRICAL.

GENERAL NOTES: (SITE NOTES ONLY.)

- A. ALL DIMENSIONS ARE APPROXIMATE AND THE G.C. SHALL FIELD VERIFY.
- B. CONFIRM LOCATION OF ALL TREES, UTILITIES, AND OTHER SITE DEVELOPMENT IN THE LOCATION OF THE CONSTRUCTION LIMITS. NOTIFY ARCHITECT IMMEDIATELY IF A DISCREPANCY BETWEEN THE DRAWINGS AND EXISTING SITE CONDITIONS.
- C. NEW GRADES SHALL BLEND SMOOTHLY INTO EXISTING GRADES.
- D. PROVIDE PERMANENT SEEDINGS FOR ALL LOCATIONS WITHIN THE CONSTRUCTION LIMITS EXCEPT ASPHALT, CONCRETE, AND LANDSCAPING AREAS. SEED ALL DISTURBED AREAS OUTSIDE OF CONSTRUCTION LIMITS.
- E. ALL WORK SHALL COMPLY WITH APPLICABLE REQUIREMENTS OF ALL STATE AND LOCAL GOVERNING AGENCIES.
- F. PRIOR TO BEGINNING ANY PROPOSED WORK, ALL PERMITS FOR SITE WORK SHALL BE OBTAINED BY CONTRACTOR FROM REGULATING AUTHORITIES.
- G. REMOVE ALL EXCAVATED SOLIDS OVER SIX (6) INCHES IN ANY DIMENSION.
- H. CLEAN ALL DIRT, MUD, AND DEBRIS TRACKED ONTO ADJACENT ROADWAYS IMMEDIATELY.
- I. DO NOT DISTURB ANY PROPERTY LINE IRON PINS, SURVEY MONUMENTS, OR ESTABLISHED BENCHMARKS. IF DISTURBED, THESE ITEMS SHALL BE RESET BY A PROFESSIONAL LICENSED SURVEYOR AT THE DISTURBED CONTRACTORS EXPENSE.
- J. ALL AREAS SHALL RECEIVE TOPSOIL TO A MINIMUM DEPTH OF THREE AND A HALF (3 1/2) INCHES. THIS TOPSOIL MAY BE STOCKPILED FROM ON-SITE EARTHWORK ACTIVITY AND REDISTRIBUTED AS REQUIRED ONCE EARTHWORK ACTIVITIES ARE COMPLETE. CONFIRM LOCATION FOR STOCKPILED SOIL WITH OWNER BEFORE PROCEEDINGS WITH ANY EARTHMOVING WORK.
- K. COORDINATE WORK & TOWN SIDEWALKS WITH TOWN OF LIBERTY. ALL ROAD AND CURB REPAIRS SHALL CONFORM TO TOWN OF LIBERTY STANDARDS FOR MATERIALS AND CONSTRUCTION.
- L. THE CONTRACTOR SHALL SAFELY SHORE EXISTING CONSTRUCTION WHEREVER EXISTING SUPPORTS ARE REMOVED TO ALLOW THE INSTALLATION OF NEW WORK. ALL SHORING METHODS AND SEQUENCING OF DEMOLISH SHALL BE SPECIFIED BY A LICENSED PROFESSIONAL ENGINEER LICENSED IN THE STATE WHERE THIS PROJECT IS LOCATED, TO BE RETAINED BY THE CONTRACTOR.
- M. THE CONTRACTOR SHALL REPAIR ALL DAMAGE CAUSED DURING CONSTRUCTION WITH SIMILAR MATERIALS AND WORKMANSHIP TO RESTORE CONDITIONS TO LEVELS ACCEPTABLE TO THE ARCHITECT.

BID DOCUMENTS	
1	ADDENDUM #02
2	ADDENDUM #03
3	ADDENDUM #07

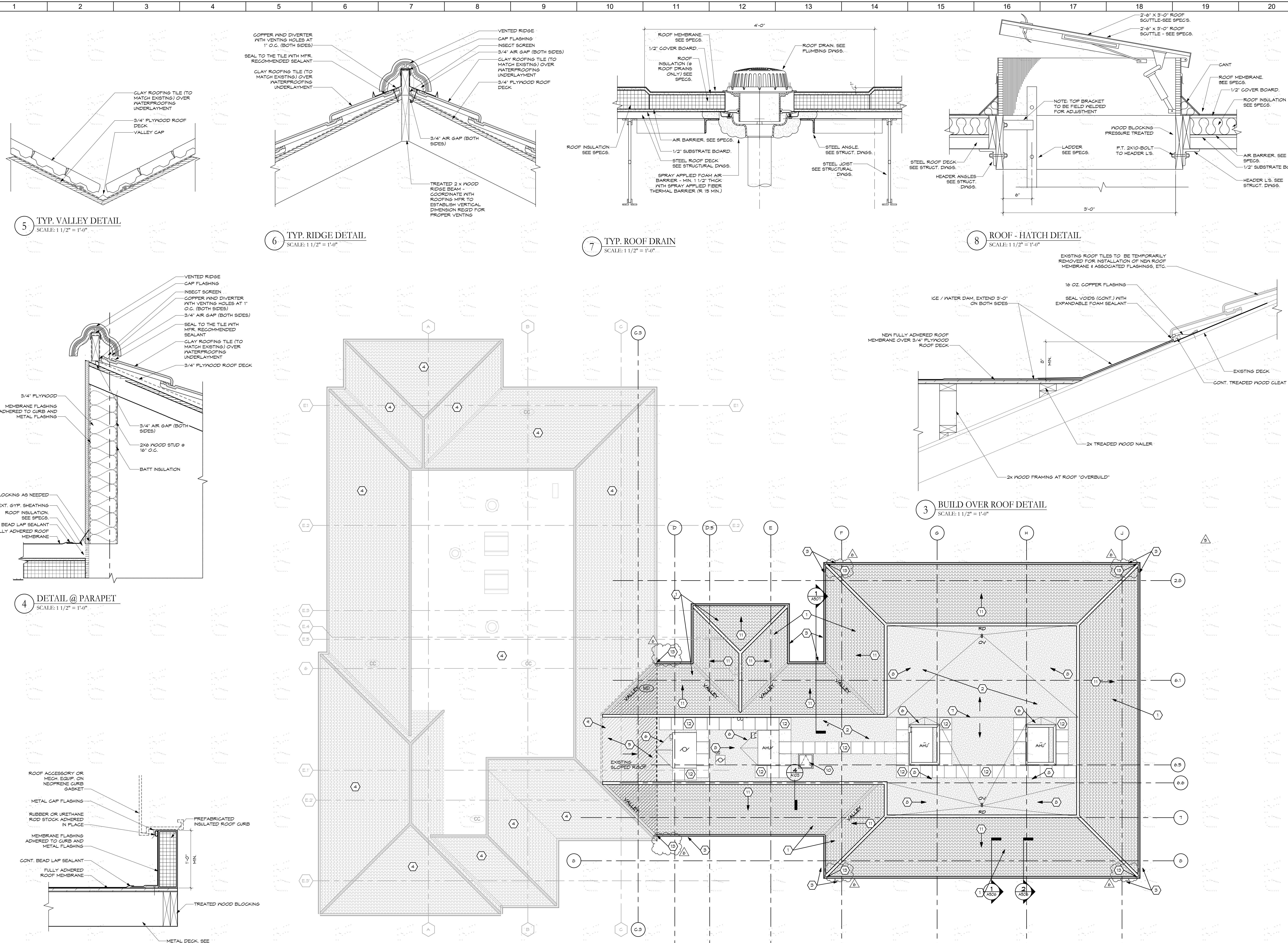
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712 East Main Street Richmond, IN 47374 765.966.3546

Union County Public Library
UNION COUNTY PUBLIC LIBRARY
LIBRARY ADDITION AND RENOVATION
2 EAST SEMINARY STREET
LIBERTY, IN 47353

ARCHITECTURAL SITE PLAN

	Comm. No.	Date
	22106.00	11.10.2023
Drawn	TOD	Drawing No.
Checked	KRM	AS100

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5 TYP. VALLEY DETAIL
SCALE: 1 1/2" = 1'-0"

6 TYP. RIDGE DETAIL
SCALE: 1 1/2" = 1'-0"

7 TYP. ROOF DRAIN
SCALE: 1 1/2" = 1'-0"

8 ROOF - HATCH DETAIL
SCALE: 1 1/2" = 1'-0"

4 DETAIL @ PARAPET
SCALE: 1 1/2" = 1'-0"

3 BUILD OVER ROOF DETAIL
SCALE: 1 1/2" = 1'-0"

1 TYP. ROOF CURB DETAIL
SCALE: 1 1/2" = 1'-0"

2 ROOF PLAN
SCALE: 1/8" = 1'-0"

- SHEET NOTES: (ROOF SHEET NOTES ONLY)**
- GLAY TILE ROOFING SYSTEM TO MATCH EXISTING OVER WATERPROOFING UNDERLAYMENT AND 3/4" PLYWOOD ROOF DECK.
 - SINGLE PLY ROOFING SYSTEM OVER TAPERED RIGID INSULATION.
 - COPPER GUTTER AND DOWNSPOUTS TO MATCH EXISTING IN SIZE AND PROFILE.
 - EXISTING TO REMAIN.
 - CRICKET AS REQUIRED.
 - CRICKET AS REQUIRED.
 - CRICKET AS REQUIRED.
 - CRICKET AS REQUIRED.
 - TAPERED INSULATION SLOPED TOWARDS ROOF DRAIN.
 - HATCHED AREA INDICATES - REMOVE EXISTING GLAY TILE ROOFING, GUTTERS, DOWNSPOUTS AT OVERBUILD AREA, RETAIN ROOFING TILES FOR OWNER STOCK.
 - ROOF HATCH - SEE DETAILS.
 - GLAY TILE ROOFING SYSTEM, ROOF SLOPE TO MATCH EXISTING TYP. MATCH EXISTING COLOR, STYLE AND SHAPE.
 - ROOF HATCH - SEE DETAILS.
 - COOPER DOWNSPOUT (MATCH EXISTING TYP. CAST IRON BASE)

- GENERAL NOTES:**
- SEE PLUMBING, MECHANICAL, AND ELECTRICAL DRAWINGS FOR ALL ASSOCIATED ITEMS.
 - DIMENSIONS ARE FROM FACE OF FRAMING TO FACE OF FRAMING UNLESS NOTED OTHERWISE.
 - PROTECT ALL EXISTING CONSTRUCTION TO REMAIN. PATCH ALL GNB TO REMAIN WHERE ADJACENT WALLS HAVE BEEN REMOVED TO LEVEL 5 FINISH FRAME AND (2) COATS FINISH PAINT TO COLOR INDICATED ON FINISH PLANS.
 - THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ALL FIRE-RATINGS AT EXISTING WALLS & CEILINGS.
 - SEE FINISH PLANS FOR NEW FLOOR AND WALL FINISHES.
 - ALL DIMENSIONS ARE TO FACE OF FRAMING, UNLESS NOTED OTHERWISE.
 - ALL INTERIOR WALLS SHALL RECEIVE FULL-THICK BATT SOUND INSULATION, UNLESS NOTED OTHERWISE.
 - ALL INTERIOR WALLS SHALL EXTEND TO STRUCTURE ABOVE AND SEAL THERE TO, UNLESS NOTED OTHERWISE.
 - ALL WALLS ARE TYPE "R2" UNLESS NOTED OTHERWISE.
 - ALL ITEMS PASSING THROUGH RATED WALLS MUST BE SEALED (WITH MATERIALS APPROVED BY ARCHITECT/ENGINEER) BY THE CONTRACTOR INSTALLING THE ITEMS.
 - POSSIBLE "DRIFT" AREAS INDICATE AREAS OF NO WORK. THERE MAY BE SOME OVERLAP OF NEW WORK WITH EXISTING CONDITIONS. CONTRACTOR IS RESPONSIBLE TO COORDINATE AREAS WHERE OVERLAP OCCUR.
 - PROVIDE TAPERED RIGID INSULATION ROOF CRICKETS AT THE HIGH SIDE OF ALL MECHANICAL CURBS.
 - PROVIDE APPROPRIATE CORROSION PROTECTION WHERE EVER DISSIMILAR MATERIALS COME IN CONTACT WITH ONE ANOTHER.
 - NEW GLAY TILE ROOF SHALL MATCH SLOPE OF EXISTING ROOF (TYP.)
 - PROVIDE GUTTER EXPANSION JOINTS AS RECOMMENDED BY SMACNA.

BID DOCUMENTS		11.10.2023
5	ADDENDUM #06	12.08.2023
6	ADDENDUM #07	12.15.2023
No.	Revisions / Submissions	Date

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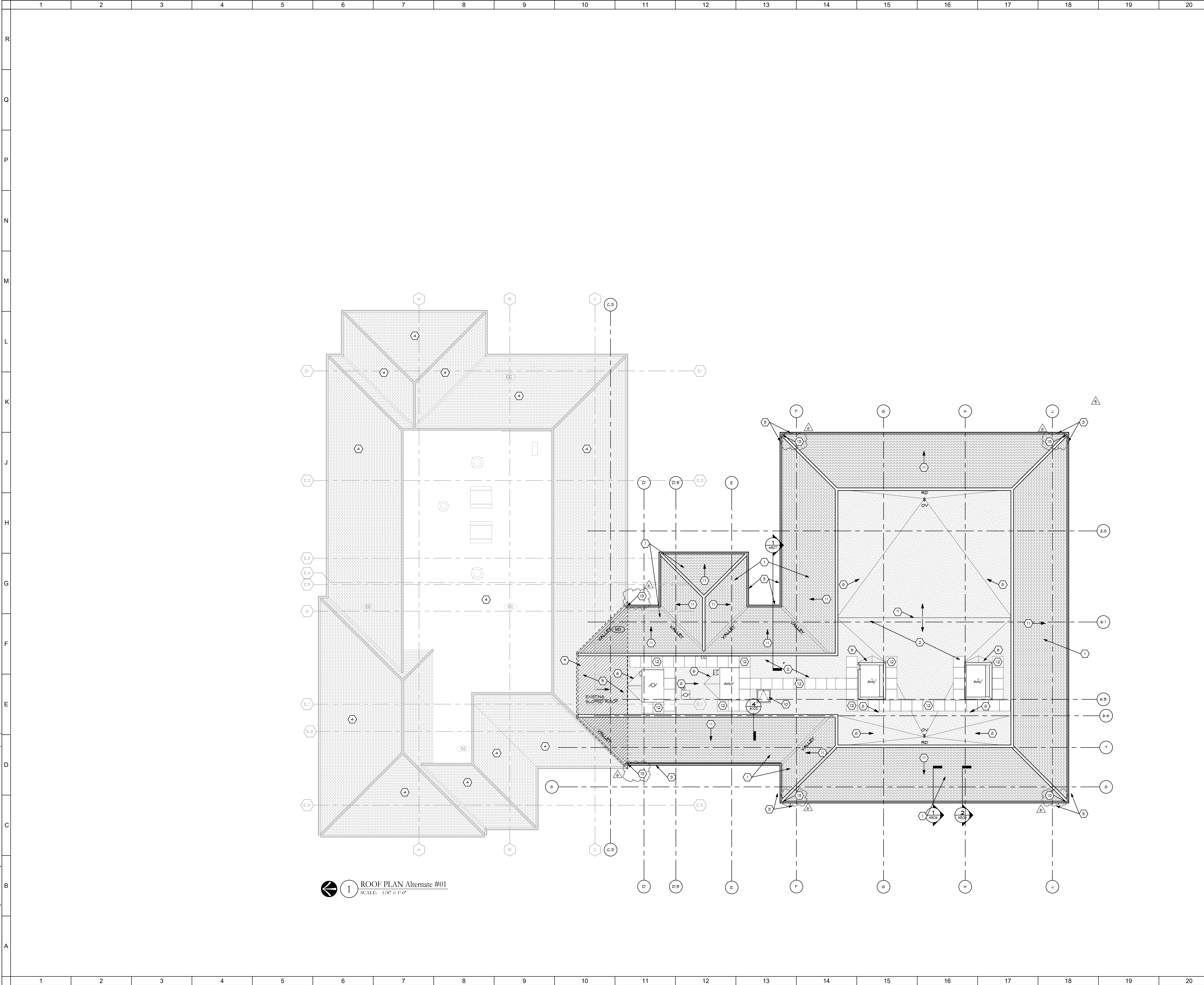
ROOF PLAN

Comm. No.	22106.00	Date	11.10.2023
Drawn	TOD	Drawing No.	A103
Checked	KRM		

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1 ROOF PLAN Alternate #01
SCALE: 1/8" = 1'-0"

SHEET NOTES: (ROOF SHEET NOTES ONLY.)

1. GLAY TILE ROOFING SYSTEM TO MATCH EXISTING OVER WATERPROOFING UNDERLAYMENT AND 3/4" PLYWOOD ROOF DECK.
2. SINGLE PLY ROOFING SYSTEM OVER TAPERED RIGID INSULATION.
3. COPPER GUTTER AND DOWNSPOUTS TO MATCH EXISTING IN SIZE AND PROFILE.
4. EXISTING TO REMAIN.
5. ROOF MEMBRANE SYSTEM TO COVER EXISTING ROOF SHEATHING.
6. CRICKET AS REQUIRED.
7. RIDGE OF TAPERED INSULATION.
8. TAPERED INSULATION SLOPED TOWARDS ROOF DRAIN.
9. HATCHED AREA INDICATES - REMOVE EXISTING GLAY TILE ROOFING, GUTTERS, DOWNSPOUTS AT OVERBUILD AREA. RETAIN ROOFING TILES FOR OWNER STOCK.
10. ROOF HATCH - SEE DETAILS.
11. GLAY TILE ROOFING SYSTEM, ROOF SLOPE TO MATCH EXISTING TYP. MATCH EXISTING COLOR, STYLE AND SHAPE.
12. ROOF VALLEY RAKE.
13. ROOF VALLEY RAKE.
14. ROOF VALLEY RAKE.
15. COPPER DOWNSPOUT (MATCH EXISTING) WITH CAST-IRON SIZES.

GENERAL NOTES:

- A. SEE PLUMBING, MECHANICAL, AND ELECTRICAL DRAWINGS FOR ALL ASSOCIATED ITEMS.
- B. DIMENSIONS ARE FROM FACE OF FRAMING TO FACE OF FRAMING UNLESS NOTED OTHERWISE.
- C. PROTECT ALL EXISTING CONSTRUCTION TO REMAIN. PATCH ALL GNB TO REMAIN WHERE ADJACENT WALLS HAVE BEEN REMOVED TO LEVEL 5 FINISH FRAME AND (2) COATS FINISH PAINT TO COLOR INDICATED ON FINISH PLANS.
- D. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ALL FIRE-RATINGS AT EXISTING WALLS & CEILING.
- E. SEE FINISH PLANS FOR NEW FLOOR AND WALL FINISHES.
- F. ALL DIMENSIONS ARE TO FACE OF FRAMING, UNLESS NOTED OTHERWISE.
- G. ALL INTERIOR WALLS SHALL RECEIVE FULL-THICK BATT SOUND INSULATION, UNLESS NOTED OTHERWISE.
- H. ALL INTERIOR WALLS SHALL EXTEND TO STRUCTURE ABOVE AND SEAL THERE TO, UNLESS NOTED OTHERWISE.
- I. ALL WALLS ARE TYPE "R2" UNLESS NOTED OTHERWISE.
- J. ALL ITEMS PASSING THROUGH RATED WALLS MUST BE SEALED (WITH MATERIALS APPROVED BY ARCHITECT/ENGINEER) BY THE CONTRACTOR, INSTALLING THE ITEMS.
- K. FICHE GRAFITY AREAS INDICATE AREAS OF NO WORK. THERE MAY BE SOME OVERLAP OF NEW WORK WITH EXISTING CONDITIONS. CONTRACTOR IS RESPONSIBLE TO COORDINATE AREAS WHERE OVERLAP OCCUR.
- L. PROVIDE TAPERED RIGID INSULATION ROOF CRICKETS AT THE HIGH SIDE OF ALL MECHANICAL CURBS.
- M. PROVIDE APPROPRIATE CORROSION PROTECTION WHERE EVER DISSIMILAR MATERIALS COME IN CONTACT WITH ONE ANOTHER.
- N. NEW GLAY TILE ROOF SHALL MATCH SLOPE OF EXISTING ROOF (TYP).
- O. PROVIDE GUTTER EXPANSION JOINTS AS RECOMMENDED BY SMACNA.

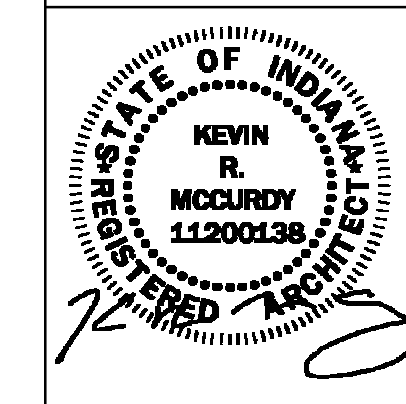
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5. ADDENDUM #06	12.08.2023
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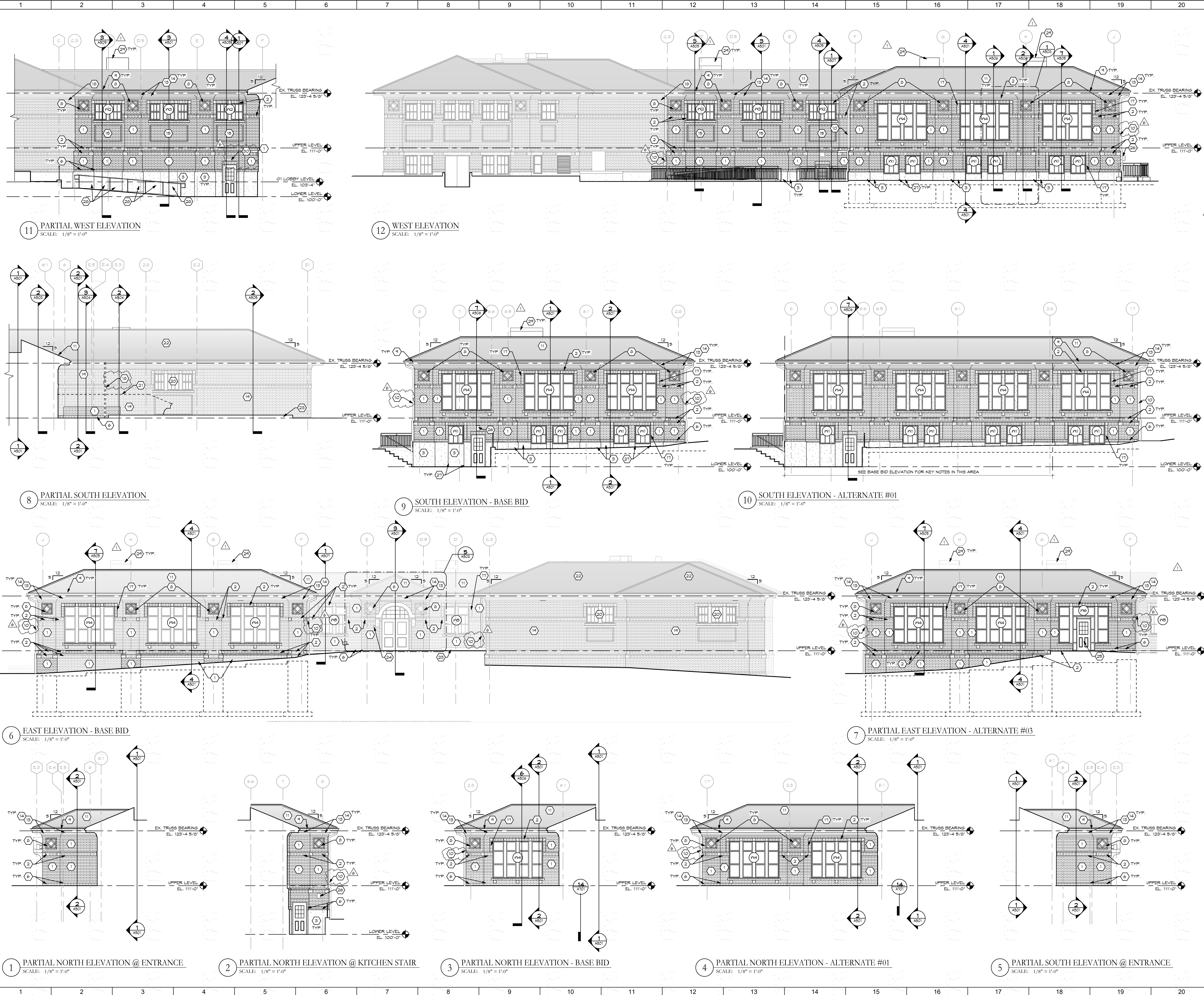
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ALTERNATE ROOF PLAN

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- SHEET NOTES:**
- 4" FACE BRICK - MODULAR SIZE - MATCH EXISTING COLOR, TEXTURE. ADJUST HORIZONTAL GROUT JOINTS AS REQUIRED TO MATCH GOURING OF EXISTING ORIGINAL (1915 GARNESE) BUILDING.
 - BRICK SOLDIER COURSE TO MATCH EXISTING (1915 GARNESE) BUILDING.
 - STONE PANEL - SEE SECTIONS.
 - CAST-IN-PLACE FORMED CONCRETE FOUNDATION WALL WITH CHAMFER - MATCH EXISTING - SEE WALL SECTIONS AND STRUCT. FOR FURTHER INFORMATION.
 - PROJECTED RUNNING BRICK BAND TO MATCH DETAIL AT EXISTING - SEE WALL SECTIONS.
 - SPECIAL CUT "SOLDIER" WITH STACK BOND DETAIL AT CORNERS - SEE WALL SECTIONS.
 - WINDOW AS SCHEDULED.
 - FACE BRICK BASKETWEAVE DETAIL WITH CUT STONE CENTER TO MATCH EXISTING. PROVIDE SHOP DRAWINGS SHOWING LAYOUT.
 - COPPER GUTTER - MATCH EXISTING - SEE ROOF PLAN.
 - COPPER DOWNSPOUT (MATCH EXISTING) WITH GAST-RICH SHOE. SEE ROOF PLAN.
 - CLAY TILE ROOFING SYSTEM TO MATCH EXISTING. 5/12 ROOF SLOPE. TYP. - VERIFY - MATCH EXISTING.
 - EXISTING GLAY TILE TO REMAIN.
 - WOOD FASCIA - PAINTED TO MATCH EXISTING.
 - WOOD MOLDINGS - PAINTED TO MATCH EXISTING.
 - BRICK PANEL BENEATH WINDOW WITH RUNNING CUT BRICK AT TOP & BOTTOM. CUT VERTICAL RUN BRICK AT SIDES TO MATCH EXISTING.
 - PAINTED WOOD FASCIA, SOFFIT, MOULDING - SEE WALL SECTIONS.
 - STACK BOND AT SIDE OF WINDOW. DOOR OPENING TO MATCH EXISTING. JOINT BETWEEN NEW AND EXISTING CONSTRUCTION.
 - EXISTING TO REMAIN.
 - EXISTING WINDOW TO REMAIN.
 - EXTENTS OF DEMOLISHED FRONT ENTRANCE.
 - EXISTING GLAY TILE ROOF TO REMAIN.
 - TOP OF CONCRETE AREA MAY VARY. SEE PLANS.
 - EMERGENCY KNIX BOX - SEE SPECS.
 - EXIT DOOR IN P1-6 IS ONLY USED IF ALTERNATE #03 IS CHOSEN.
 - LIGHT FIXTURE - SEE ELECTRICAL.
 - STONE PANEL JOINT - TYP.
 - STONE PANEL - STOP 1/4" ALONG RAMP.
 - ROOF TOP UNIT - SEE MECHANICAL.
 - EXHAUST LOUVER - SEE MECHANICAL.

GENERAL NOTES:

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1	ADDENDUM #02	11.21.2023
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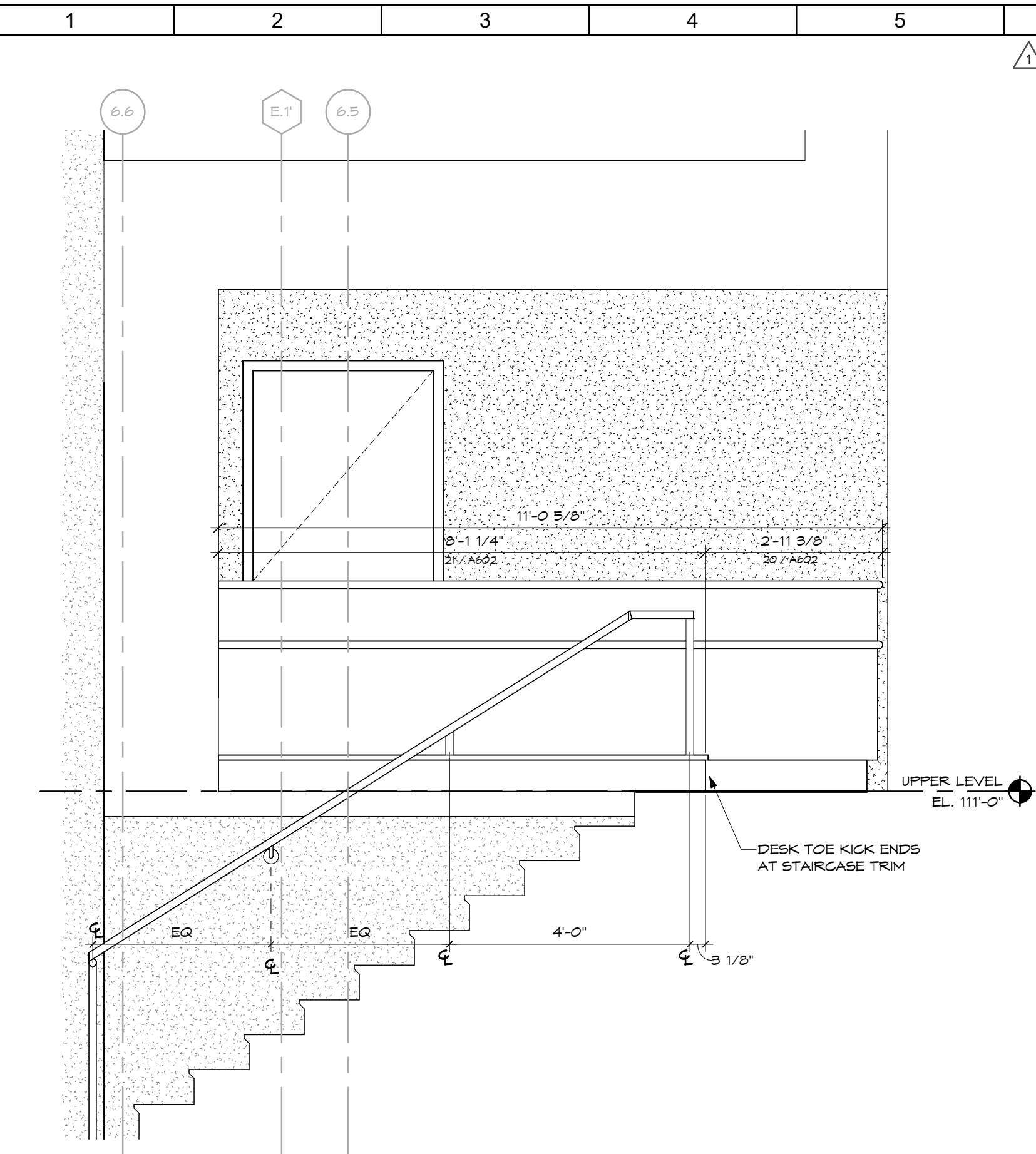
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EXTERIOR BUILDING ELEVATIONS

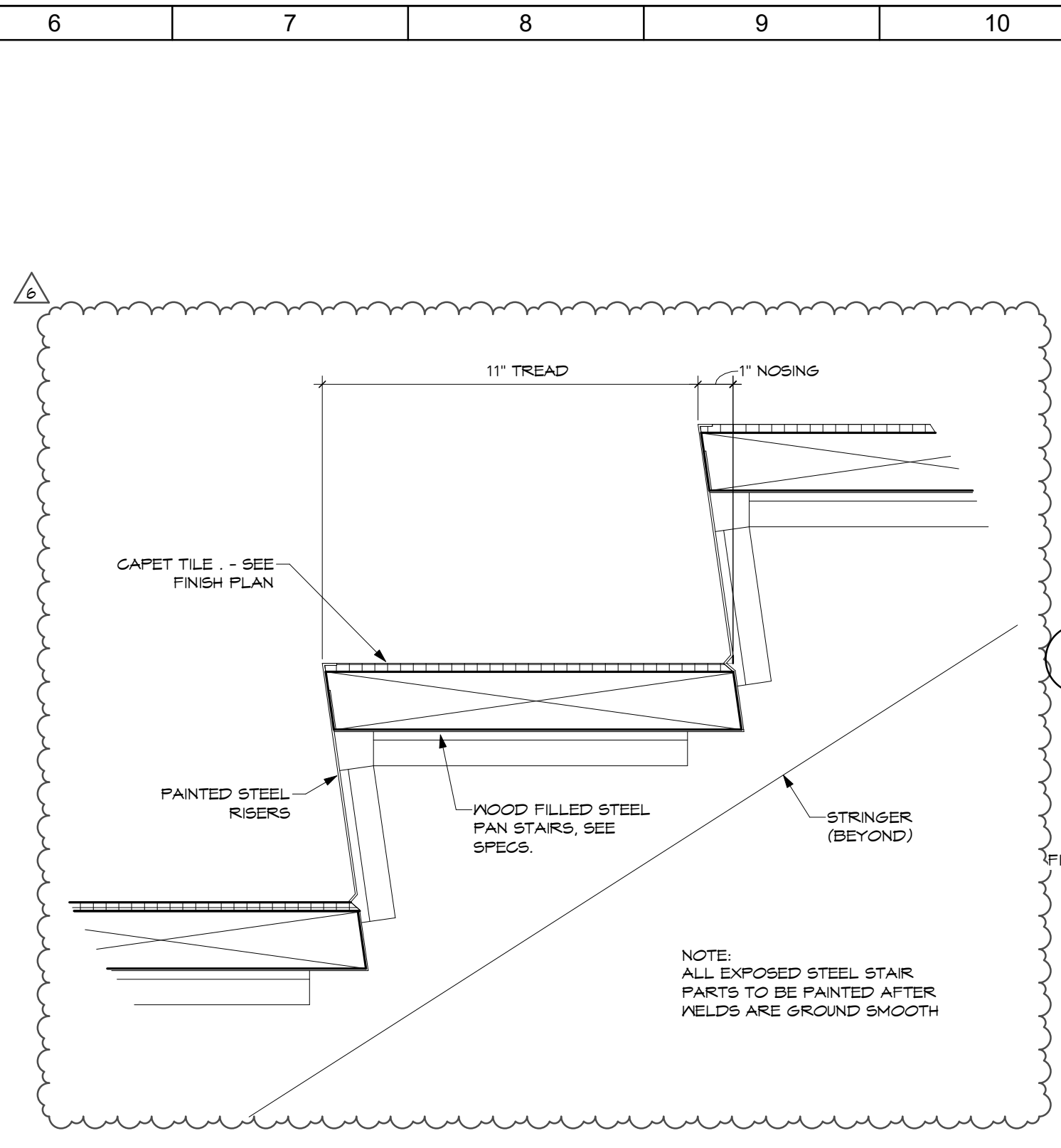
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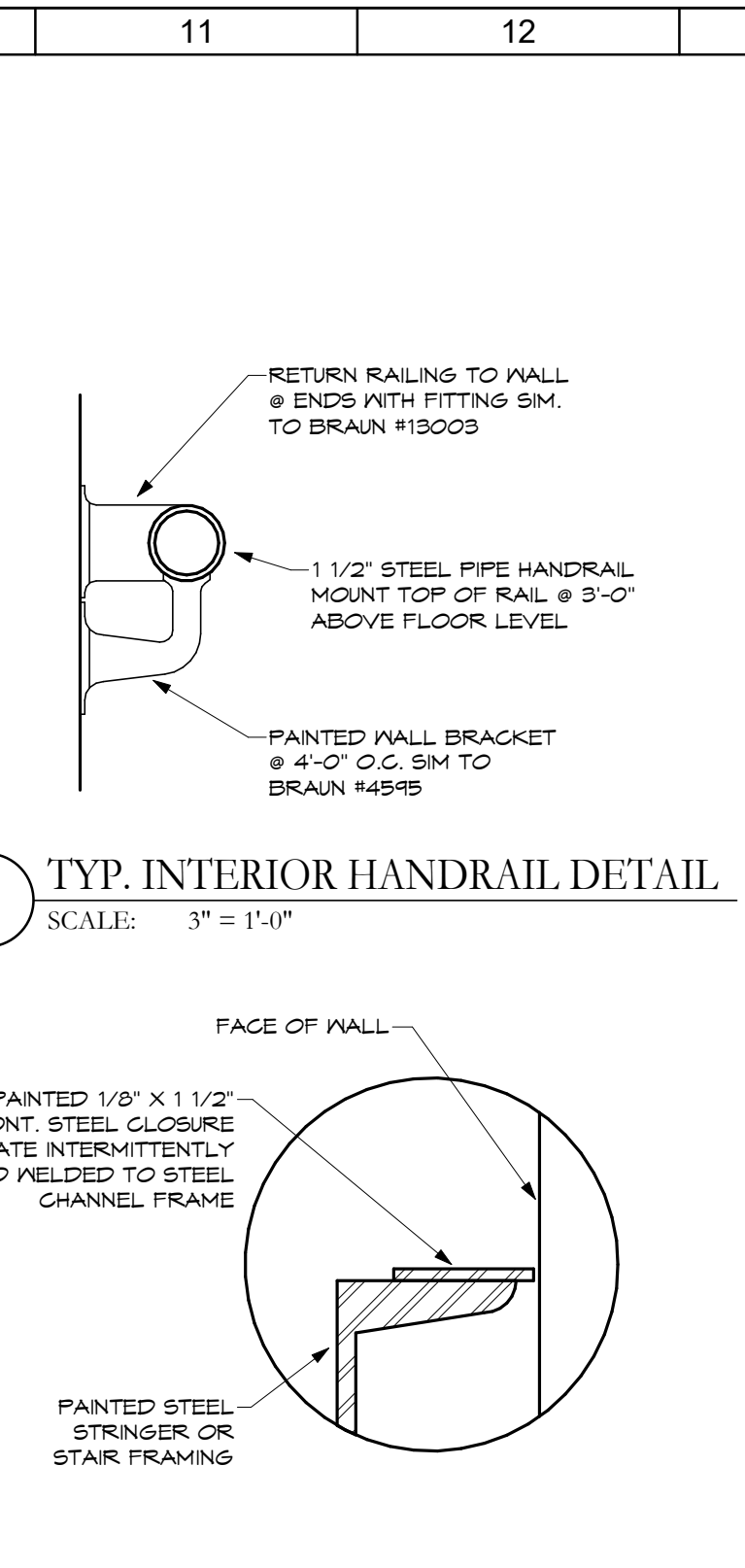
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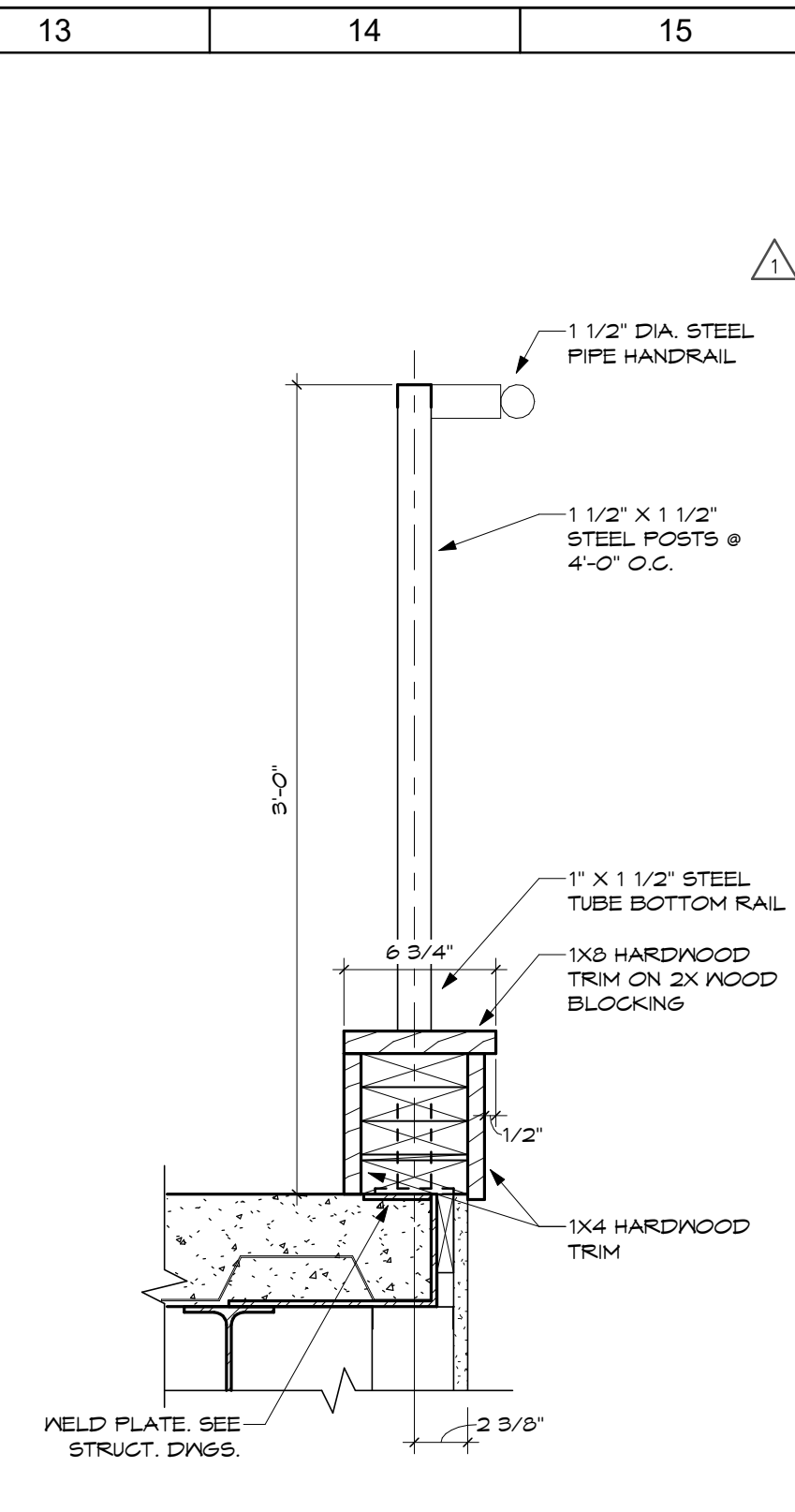
4 INTERIOR STAIR - UPPER SECTION @ CIRCULATION DESK
SCALE: 1/2" = 1'-0"



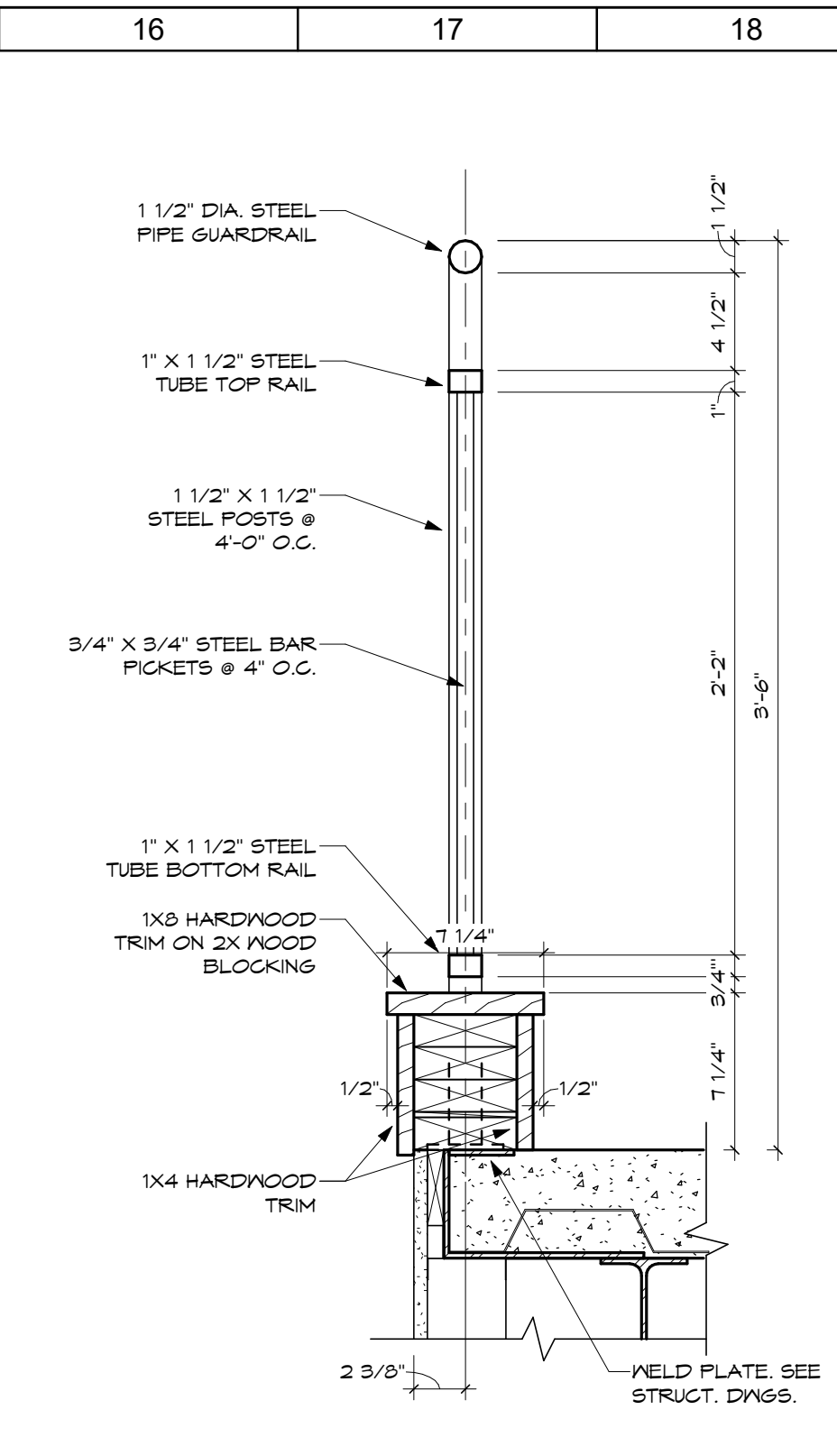
5 TYP. STAIR PAN SECTION
SCALE: 3" = 1'-0"



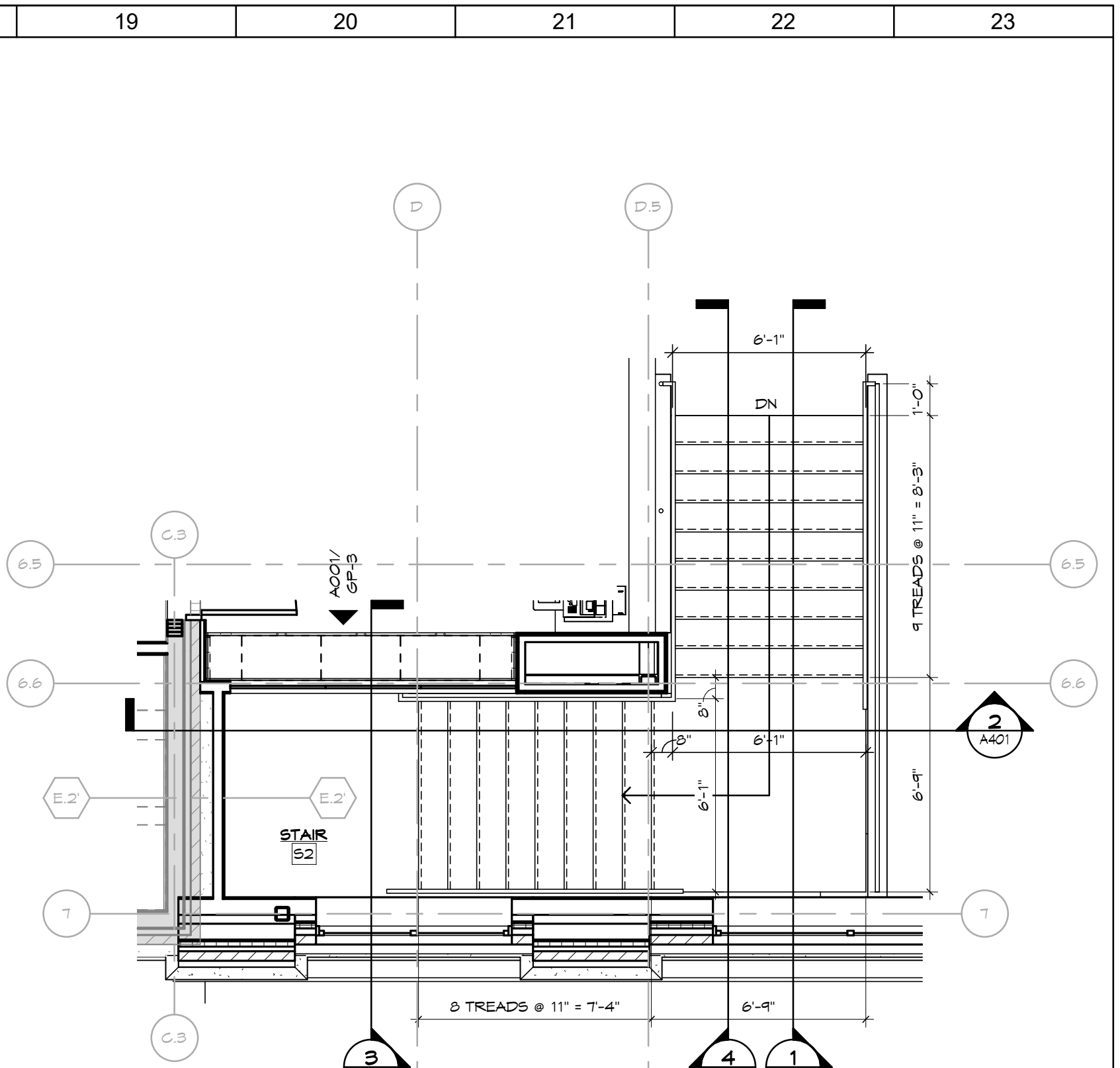
6 TYP. CLOSURE PLATE DETAIL
SCALE: 6" = 1'-0"



7 TYP. INTERIOR HANDRAIL DETAIL
SCALE: 3" = 1'-0"

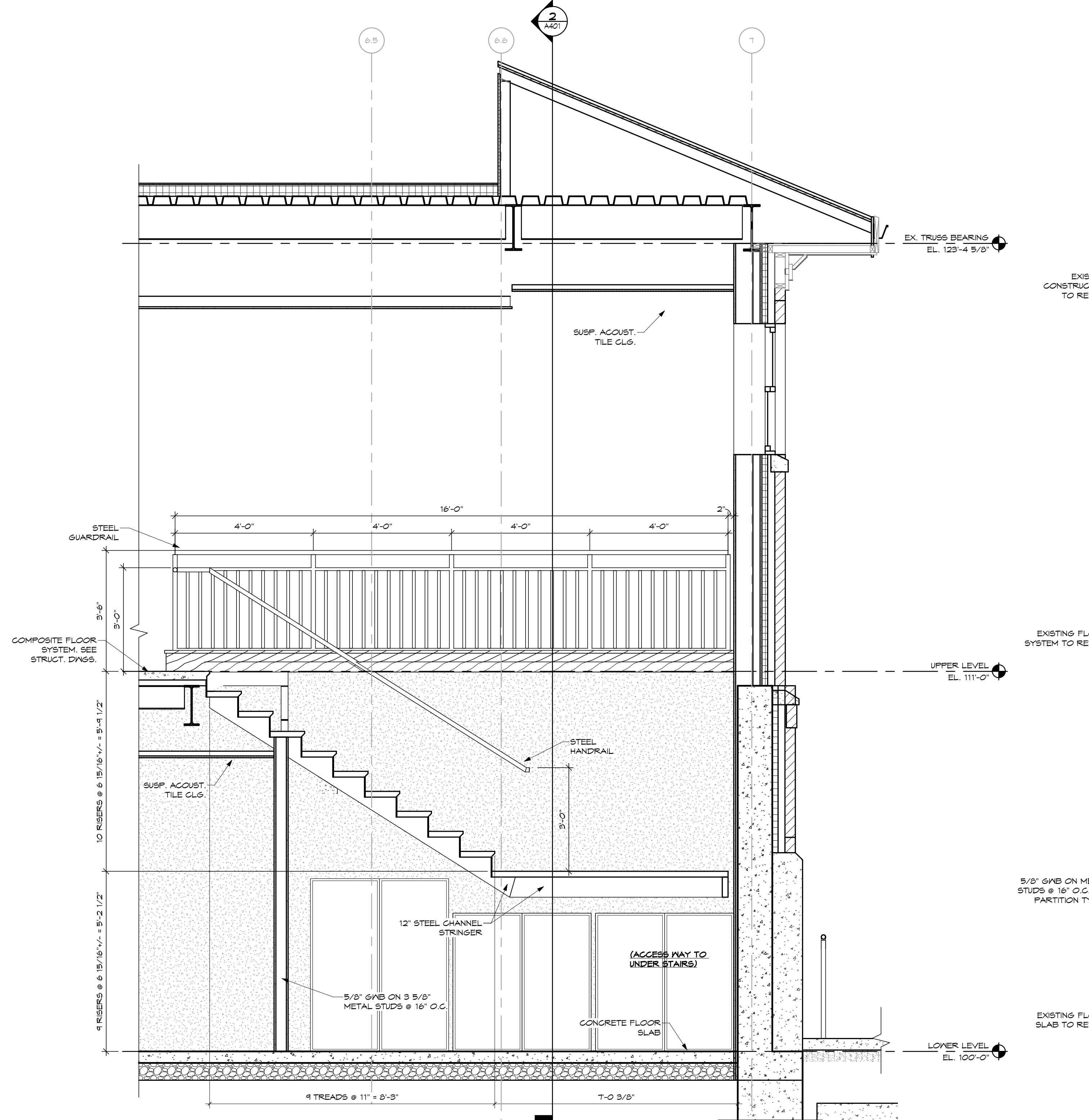


8 TYPICAL INTERIOR HANDRAIL
SCALE: 1 1/2" = 1'-0"

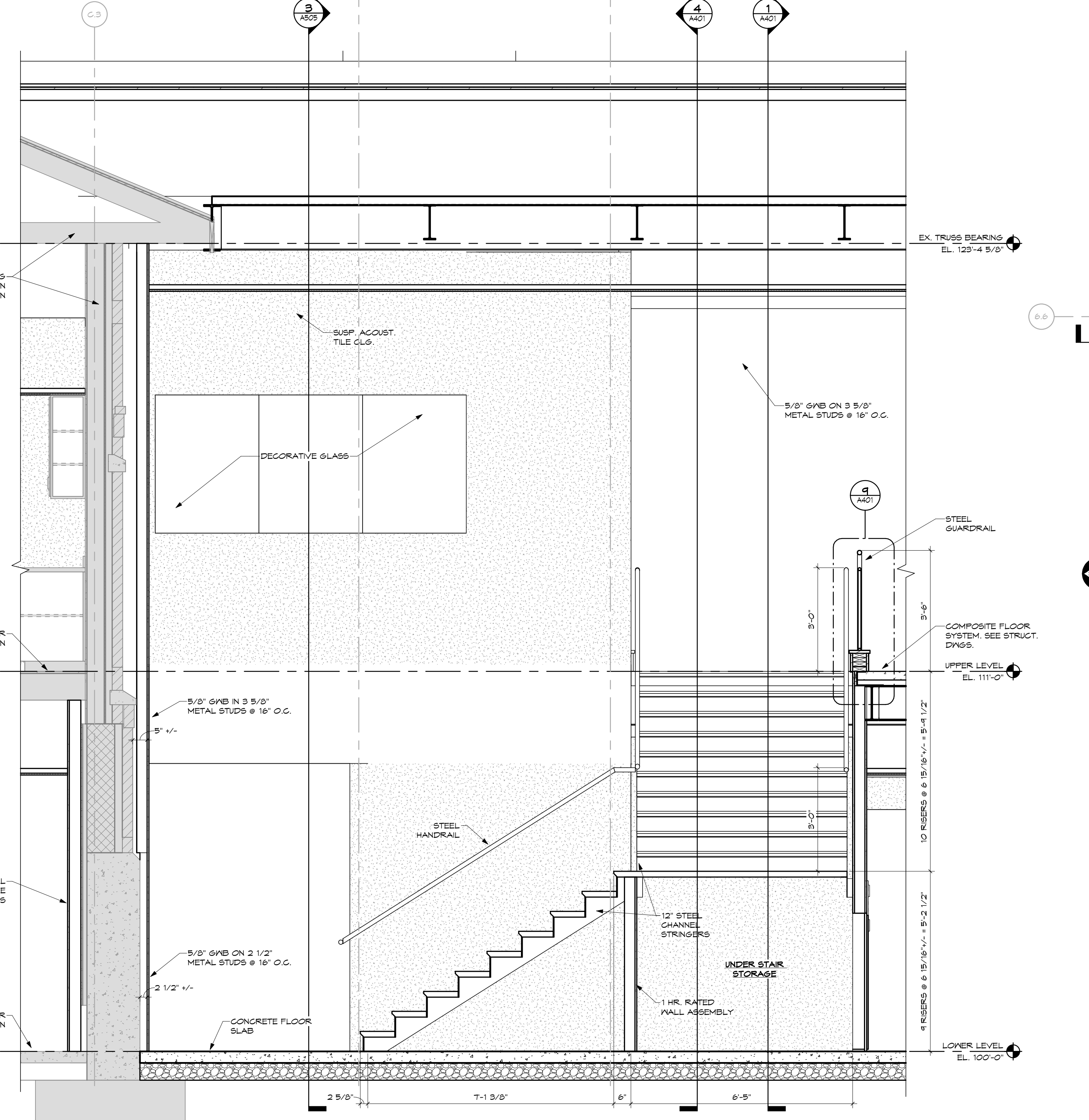


9 TYPICAL INTERIOR GUARDRAIL
SCALE: 1 1/2" = 1'-0"

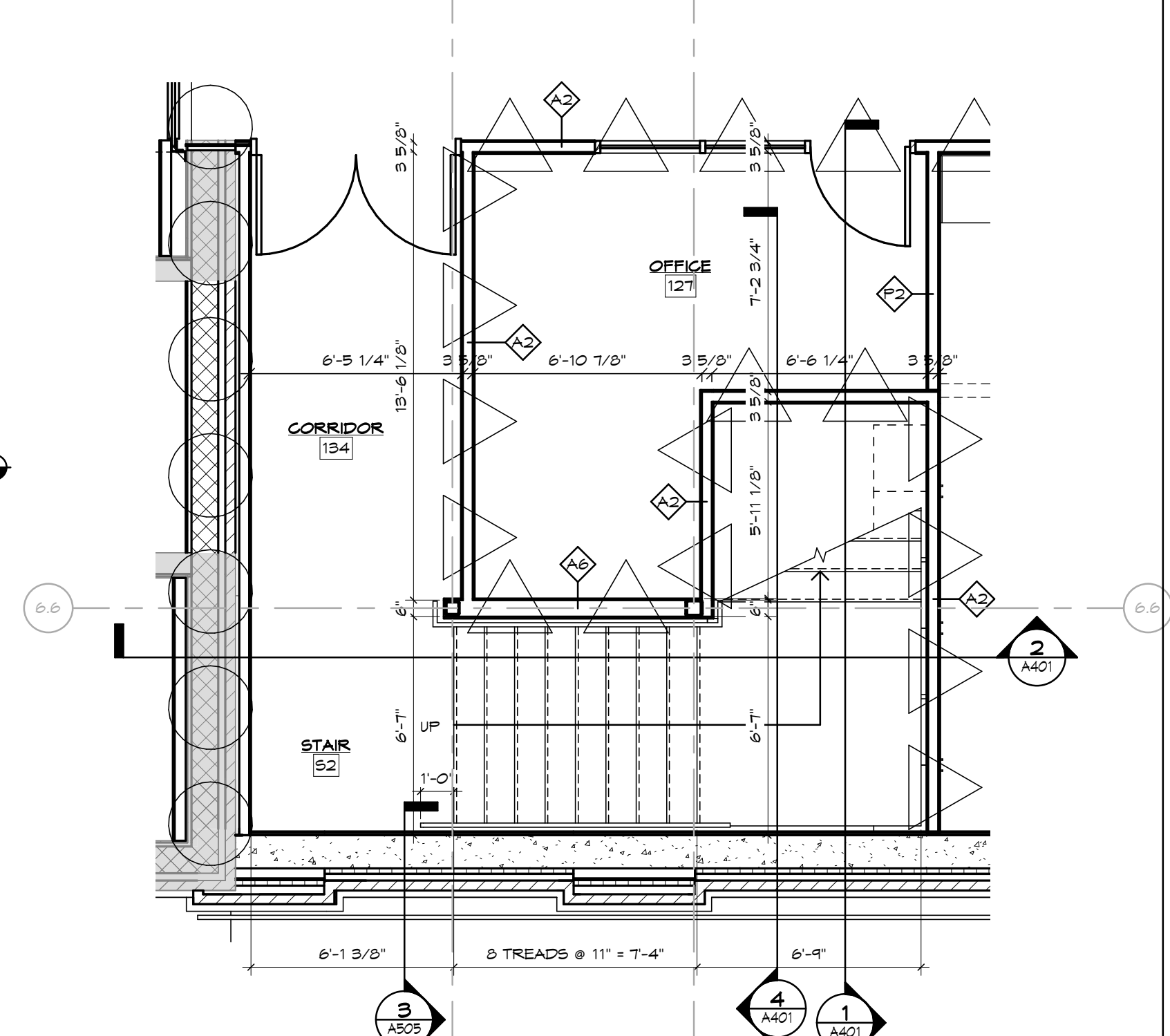
10 STAIR - UPPER LEVEL PLAN
SCALE: 1/4" = 1'-0"



1 INTERIOR STAIR - UPPER SECTION
SCALE: 1/2" = 1'-0"



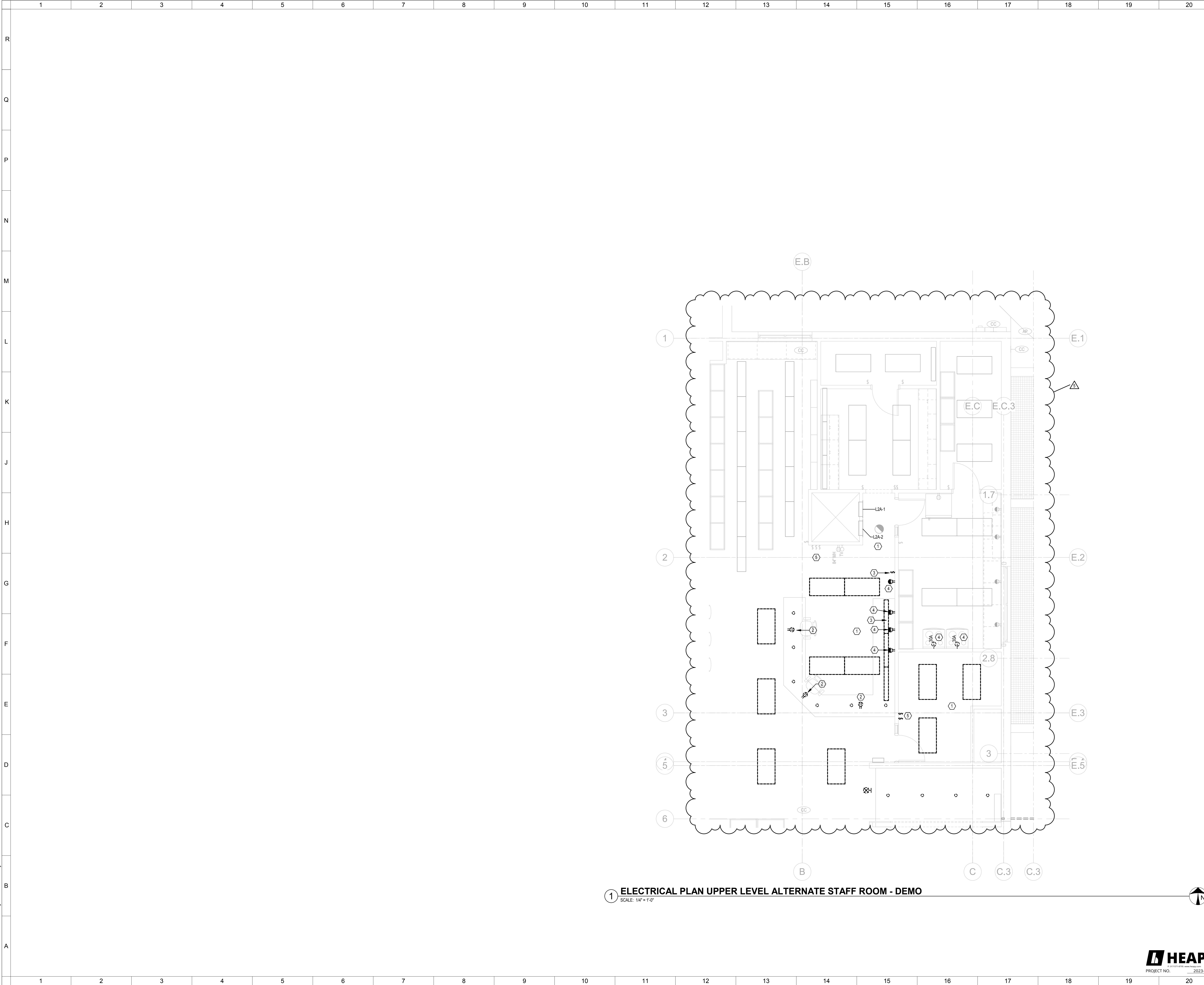
2 INTERIOR STAIR - LOWER SECTION
SCALE: 1/2" = 1'-0"



3 STAIR - LOWER LEVEL PLAN
SCALE: 1/4" = 1'-0"

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<p>UNION COUNTY PUBLIC LIBRARY LIBRARY ADDITION AND RENOVATION 2 EAST SEMINARY STREET LIBERTY, IN 47353</p>											
<p>VERTICAL CIRCULATION PLANS, SECTIONS AND DETAILS</p>											
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1 ELECTRICAL PLAN UPPER LEVEL ALTERNATE STAFF ROOM - DEMO
SCALE: 1/4" = 1'-0"

SHEET NOTES:

1. EXISTING LIGHTING CIRCUITS AND CONDUITS SERVING THE STAFF AREA SHALL REMAIN. CONDUITS AND CONDUCTORS SHALL BE EXTENDED AS REQUIRED TO NEW LIGHTING FIXTURES TO BE INSTALLED IN THIS AREA. SEE SHEET E102.1.
2. REMOVE RECEPTACLE, DEVICE BOX, AND CONDUIT EXPOSED BY CASEWORK DEMOLITION. REMOVE CIRCUIT WIRING TO NEXT DEVICE ON CIRCUIT THAT REMAINS, OR IF NO DEVICES REMAIN ON CIRCUIT, REMOVE CIRCUIT TO PANEL.
3. REMOVE UNDERCABINET LIGHT FIXTURE AND SWITCH. REMOVE CIRCUIT WIRING TO NEXT DEVICE ON CIRCUIT THAT REMAINS, OR IF NO DEVICES REMAIN ON CIRCUIT, REMOVE CIRCUIT TO PANEL.
4. REMOVE RECEPTACLE AND DEVICE PLATE. REMOVE CIRCUIT WIRING TO NEXT DEVICE ON CIRCUIT THAT REMAINS, OR IF NO DEVICES REMAIN ON CIRCUIT, REMOVE CIRCUIT TO PANEL. PROVIDE BLANK DEVICE PLATE ON DEVICE BOX THAT REMAINS.
5. REMOVE LIGHT SWITCH, DEVICE BOX, AND SWITCHLEG WIRING. DEVICE BOX SHALL REMAIN FOR NEW LIGHT SWITCH.

GENERAL NOTES:

- A. COORDINATE DEMOLITION WORK WITH ALL OTHER TRADES. REFER TO MECHANICAL, PLUMBING & ARCHITECTURAL DEMOLITION PLANS FOR COORDINATION OF ELECTRICAL DEMOLITION. THIS MAY INCLUDE DISCONNECTION AND RECONNECTION OF RELOCATED EQUIPMENT AND/OR DISCONNECTION AND REMOVAL OF EQUIPMENT AND DEVICES RENDERED UNUSED BY THIS PROJECT.
- B. MAINTAIN POWER TO ALL FEEDERS AND BRANCH CIRCUITS NOT AFFECTED BY THIS PROJECT AND TO BRANCH CIRCUITS CUT OFF BY REMOVALS. VERIFY CIRCUITS PRIOR TO REMOVAL.
- C. ALL EXISTING FLUORESCENT LAMPS AND BALLASTS REMOVED UNDER THIS CONTRACT ARE TO BE PUT INTO CONTAINERS AND DISPOSED OF BY A QUALIFIED CONTRACTOR AT AN APPROVED DISPOSAL FACILITY.
- D. DEVICES, EQUIPMENT, ETC. INDICATED BOLD AND DASHED SHALL BE DISCONNECTED AND REMOVED BY THIS PROJECT, UNLESS OTHERWISE NOTED. REMOVAL OF ELECTRICAL ITEMS INCLUDE REMOVAL BACK TO THE PANELBOARD OR POINT OF COMMON USE, UNLESS OTHERWISE NOTED. REUSE OF EXISTING CONDUIT IN PLACE IS PERMITTED WHERE IT IS WITHIN THE LIMITS OF THE N.E.C.

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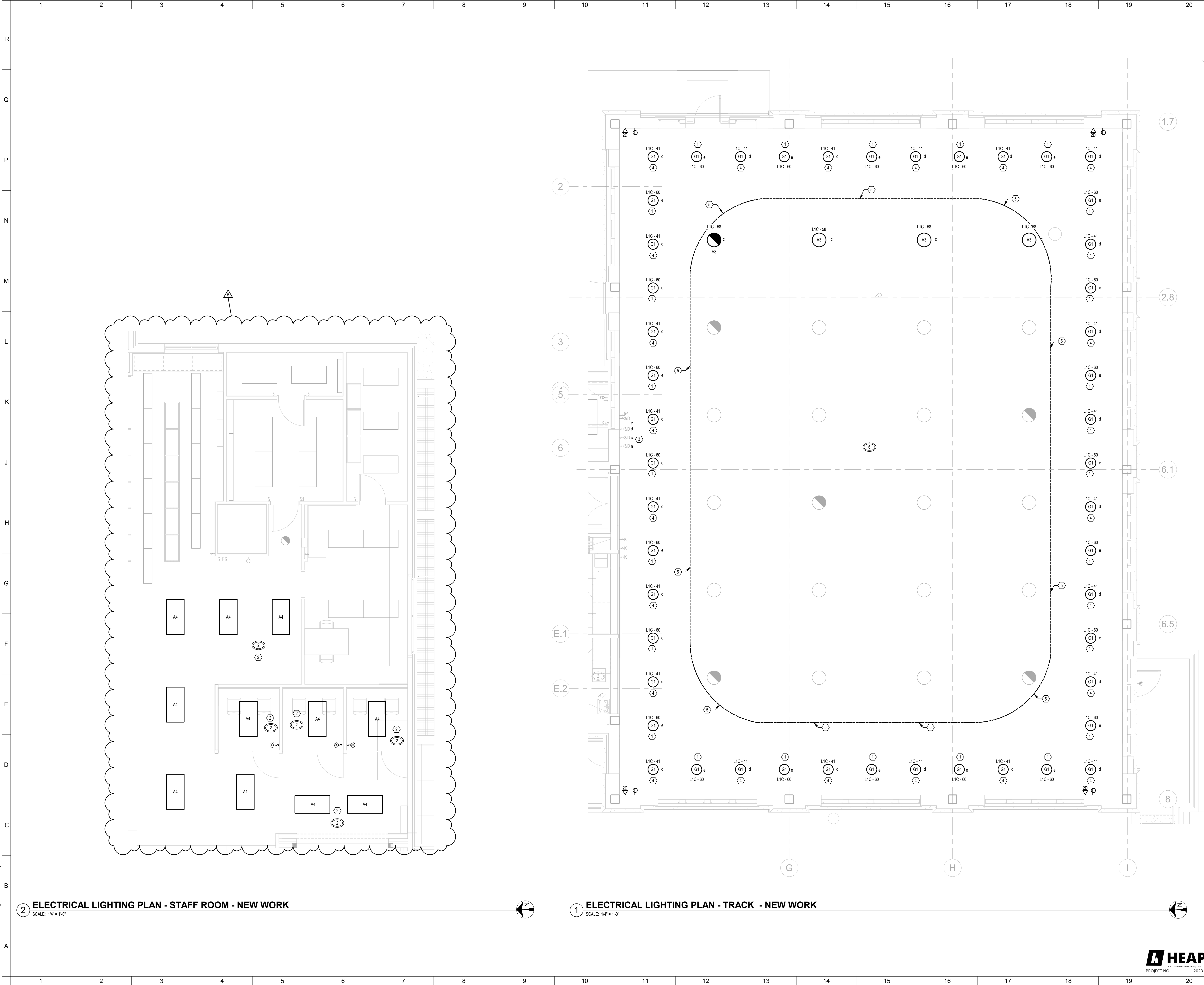
**ELECTRICAL LIGHTING - ALTERNATE LOCATIONS
ENLARGED VIEWS - ALTERNATE DEMOLITION**

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- SHEET NOTES:**
1. MOUNTED TO BOTTOM OF TRACK.
 2. CONNECT EXISTING LIGHTING CIRCUIT THAT SERVED REMOVED LIGHTS IN THIS ROOM TO NEW LIGHT FIXTURES. EXTEND CONDUIT AND CONDUCTORS AS REQUIRED.
 3. PROVIDE SECONDARY SWITCHES TO CONTROL COMMUNITY AREA.
 4. PENDANT LIGHTS MOUNTED ABOVE TRACK. MOUNTING HEIGHT 20' AFF.
 5. OUTLINE OF TRACK.

- GENERAL NOTES:**
- A. REFER TO ARCHITECTURAL ELEVATIONS AND CASEWORK DRAWINGS FOR DEVICE MOUNTING HEIGHTS PRIOR TO ROUGH-IN. REFER TO ARCHITECTURAL PLANS FOR LUMINAIRE LOCATIONS.
 - B. ALL "EXIT" SIGNS AND NITE LIGHTS "NL" ARE TO BE CIRCUITED TO THE LIGHTING CIRCUIT IN THE SPACE / ROOM AHEAD OF ANY LIGHTING CONTROL DEVICES, UNLESS NOTED OTHERWISE.
 - C. COORDINATE OCCUPANCY SENSOR AIMING AND PLACEMENT WITH MANUFACTURER OR SUPPLIER PRIOR TO INSTALLATION.
 - D. OCCUPANCY SENSOR MANUFACTURERS' COVERAGE PATTERNS VARY. THIS MANUFACTURER SHALL SUBMIT 18-INCH SCALE FLOOR PLANS SHOWING PROPOSED LAYOUT WITH DEVICES CLEARLY IDENTIFIED DURING THE SHOP DRAWING REVIEW PHASE. SHOP DRAWINGS MISSING INFORMATION WILL BE REJECTED. REQUEST AUTOCAD FLOOR PLANS IN ADVANCE OF SHOP DRAWING SUBMITTAL TO ENSURE ON TIME DELIVERY.
 - E. IN ROOMS WITH EXPOSED CEILINGS CONTRACTORS SHALL COORDINATE LIGHTING LAYOUT WITH DUCTWORK AND PIPING ROUTING PRIOR TO INSTALLATION BEGINNING. PROVIDE ALL NECESSARY SUPPORTS FOR LIGHTS OR PORTIONS OF LIGHTS THAT MAY BE LOCATED BELOW DUCTWORK.

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1	ADDENDUM #02	11.21.2023
1	ADDENDUM #7	12.13.2023
No.	Revisions / Submissions	Date

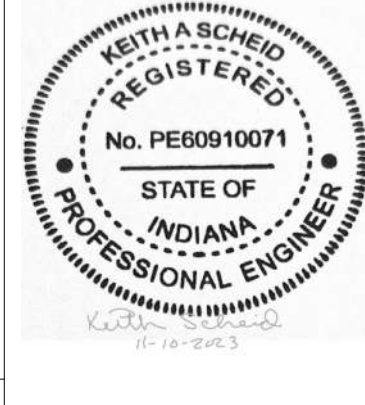
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**ELECTRICAL LIGHTING - ALTERNATE LOCATIONS
ENLARGED VIEWS - ALTERNATE STAFF AND TRACK -
NEW WORK**

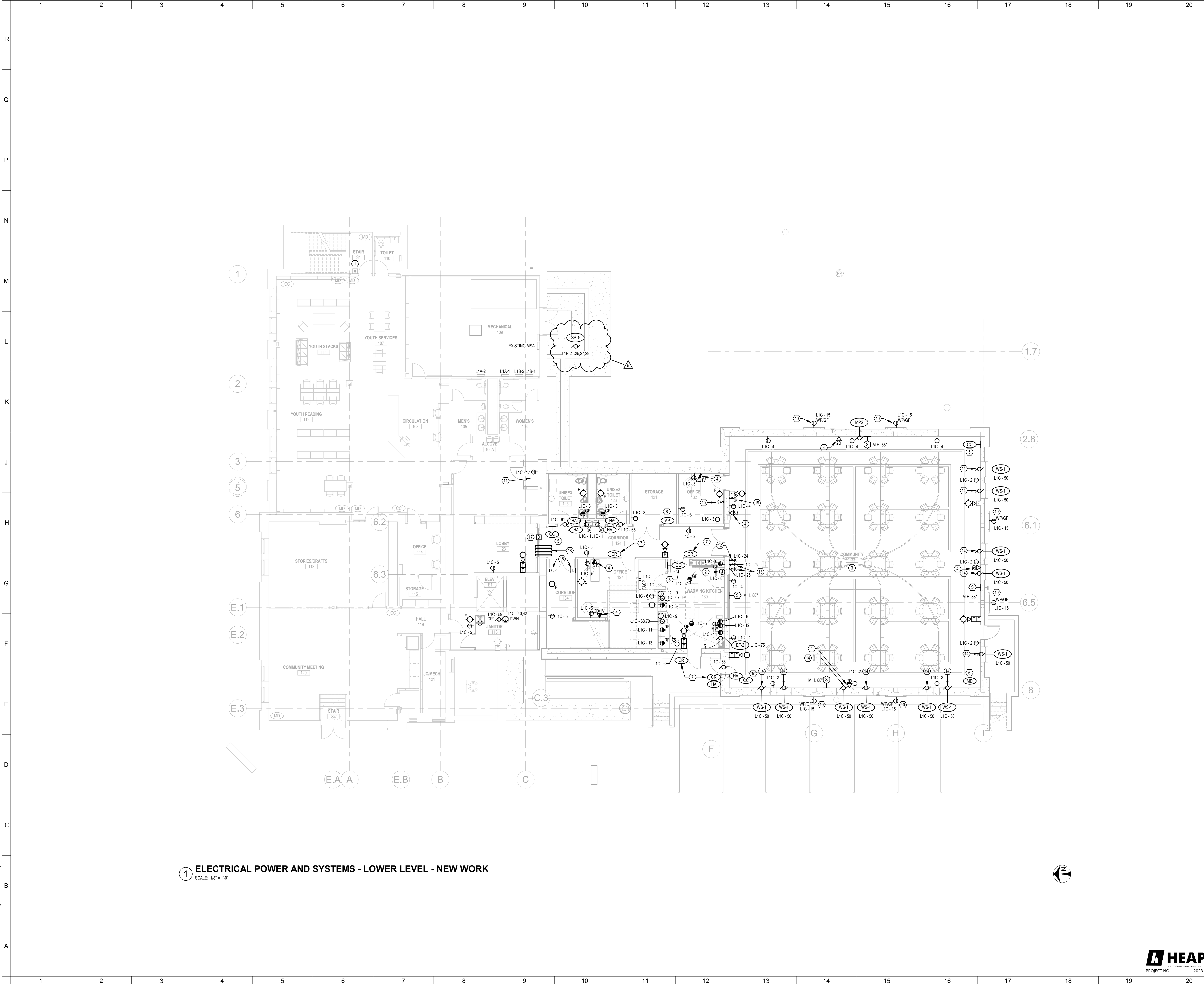
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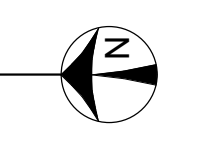
2 ELECTRICAL LIGHTING PLAN - STAFF ROOM - NEW WORK
SCALE: 1/4"=1'-0"

1 ELECTRICAL LIGHTING PLAN - TRACK - NEW WORK
SCALE: 1/4"=1'-0"

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1 ELECTRICAL POWER AND SYSTEMS - LOWER LEVEL - NEW WORK
SCALE: 1/8" = 1'-0"



SHEET NOTES:

- EXISTING AREA OF REFUGE CALL BUTTON. EXTEND WIRING TO RELOCATED CONTROL PANEL.
- 20 AMP, 120V CIRCUIT TO DISHWASHER.
- ALL CONDUIT IN COMMUNITY ROOM SHALL BE CONCEALED IN CONCRETE WALLS. SURFACE MOUNTED CONDUIT ON WALLS IS NOT ALLOWED IN COMMUNITY ROOM. COORDINATE ROUTING OF CONDUIT PRIOR TO POURING OF CONCRETE WALLS.
- PROVIDE ROUGH-IN (BOX & CONDUIT) FOR OWNER PROVIDED DATA JACKS AND CABLING. STUB CONDUIT INTO ACCESSIBLE CEILING SPACE. OWNERS LOW VOLTAGE CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING AND TERMINATING JACKS & CABLES AT EACH END.
- PROVIDE ROUGH-IN (BOX AND CONDUIT) FOR OWNER PROVIDED SECURITY CAMERA. STUB CONDUIT INTO ACCESSIBLE CEILING SPACE. OWNERS LOW VOLTAGE CONTRACTOR SHALL PROVIDE AND INSTALL CAMERA AND CABLING AND TERMINATE CABLING AT EACH END.
- PROVIDE ROUGH-IN (BOX AND CONDUIT) FOR OWNER PROVIDED MOTION DETECTOR. STUB CONDUIT INTO ACCESSIBLE CEILING SPACE. OWNERS LOW VOLTAGE CONTRACTOR SHALL PROVIDE SECURITY DEVICE AND CABLING AND TERMINATE CABLING AT EACH END.
- PROVIDE CABLING TO DOOR FOR ACCESS CONTROLS. COORDINATE WITH DOOR HARDWARE MANUFACTURER.
- PROVIDE ROUGH-IN (BOX AND CONDUIT) FOR OWNER PROVIDED WIRELESS ACCESS POINT. STUB CONDUIT INTO ACCESSIBLE CEILING SPACE. OWNERS LOW VOLTAGE CONTRACTOR SHALL PROVIDE AND INSTALL WAP AND CABLING AND TERMINATE CABLING AT EACH END.
- PROVIDE ROUGH-IN (BOX AND CONDUIT) FOR OWNER PROVIDED SOFFIT MOUNTED WIRELESS ACCESS POINT. STUB CONDUIT INTO ACCESSIBLE CEILING SPACE. OWNERS LOW VOLTAGE CONTRACTOR SHALL PROVIDE AND INSTALL WAP AND CABLING AND TERMINATE CABLING AT EACH END.
- INSTALL 24" ABOVE FINISH GRADE. COORDINATE EXACT MOUNTING HEIGHT WITH FINISH GRADE AND CONDUIT ROUTING PRIOR TO POURING OF EXTERIOR CONCRETE WALL.
- LOCATION OF OWNER PROVIDED DATA RACK THAT SERVES ALL OWNER PROVIDED DATA CABLING IN NEW ADDITION.
- KEY SWITCH FOR DIVIDER CURTAIN. SWITCH FURNISHED BY CURTAIN MANUFACTURER.
- KEY SWITCH FOR BASKETBALL MOTOR CONTROL.
- 120V, 20A AMP CIRCUIT TO MOTORIZED WINDOW SHADE. COORDINATE EXACT ROUGH-IN AND WIRING REQUIREMENTS WITH WINDOW SHADE MANUFACTURER.
- CONTROL SWITCH FOR MOTORIZED WINDOW SHADES (OPEN/AV MODE). COORDINATE EXACT ROUGH-IN AND WIRING REQUIREMENTS WITH WINDOW SHADE MANUFACTURER.
- DOOR HOLD OPEN DEVICE CONNECTED TO FIRE ALARM SYSTEM. DOORS SHALL CLOSE ON ACTIVATION OF FIRE ALARM SYSTEM.
- CONNECT FIRE SHUTTER TO FIRE ALARM SYSTEM. FIRE SHUTTER SHALL RELEASE UPON ACTIVATION FROM FIRE ALARM SYSTEM.
- PROVIDE FOUR 4" FIRE RATED SLEEVES THROUGH WALL FOR FUTURE OWNER PROVIDED CABLING.
- CONTROL SWITCH FOR MPS (MOTORIZED PROJECTION SCREEN). COORDINATE MOUNTING HEIGHT WITH PHYSICAL LOCATION OF MPS.

GENERAL NOTES:

- A REFER TO ARCHITECTURAL ELEVATIONS AND CASEWORK DRAWINGS FOR DEVICE MOUNTING HEIGHTS PRIOR TO ROUGH-IN.
 - B COORDINATE ELECTRICAL REQUIREMENTS WITH OTHER TRADES' SHOP DRAWINGS FOR ELECTRICAL CONNECTIONS TO EQUIPMENT FURNISHED BY OTHER TRADES AND/OR THE OWNER.
 - C ALL IT / DATA ROUGH-INS ARE TO BE AT THE SAME ELEVATION AS THE ADJACENT RECEPTACLE, UNLESS OTHERWISE NOTED.
 - D BRANCH CIRCUIT WIRE SIZING CHART TO BE UTILIZED AS A GUIDELINE FOR VOLTAGE DROP COMPENSATION. INCREASE CONDUIT AND WIRING AS REQUIRED.
- | 20A - 120V CIRCUITS | 20A - 277V CIRCUITS |
|---------------------|---------------------|
| #12 WIRE 75' MAX | #12 WIRE 175' MAX |
| #10 WIRE 125' MAX | #10 WIRE 300' MAX |
| #8 WIRE 200' MAX | #8 WIRE 450' MAX |
- E STAGGER RECEPTACLES AND OTHER RECESSED DEVICES WHEN LOCATED ON OPPOSITE SIDES OF A PARTITION / WALL TO ELIMINATE SOUND TRANSMISSION FROM ONE SPACE TO THE OTHER.
 - F NEW WIRE AND CONDUITS SHALL NOT BE RUN EXPOSED UNLESS APPROVED BY THE OWNER, ARCHITECT OR THE ENGINEER.
 - G ALL RECEPTACLES IN PUBLIC ACCESSIBLE SPACES ARE TO BE OF THE TAMPER-RESISTANT DESIGN.
 - H RECEPTACLES FOR WATER COOLERS ARE TO BE GFCI PROTECTED.

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LIBRARY ADDITION AND RENOVATION
2 EAST SEMINARY STREET
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ELECTRICAL POWER AND SYSTEMS - LOWER LEVEL - NEW WORK

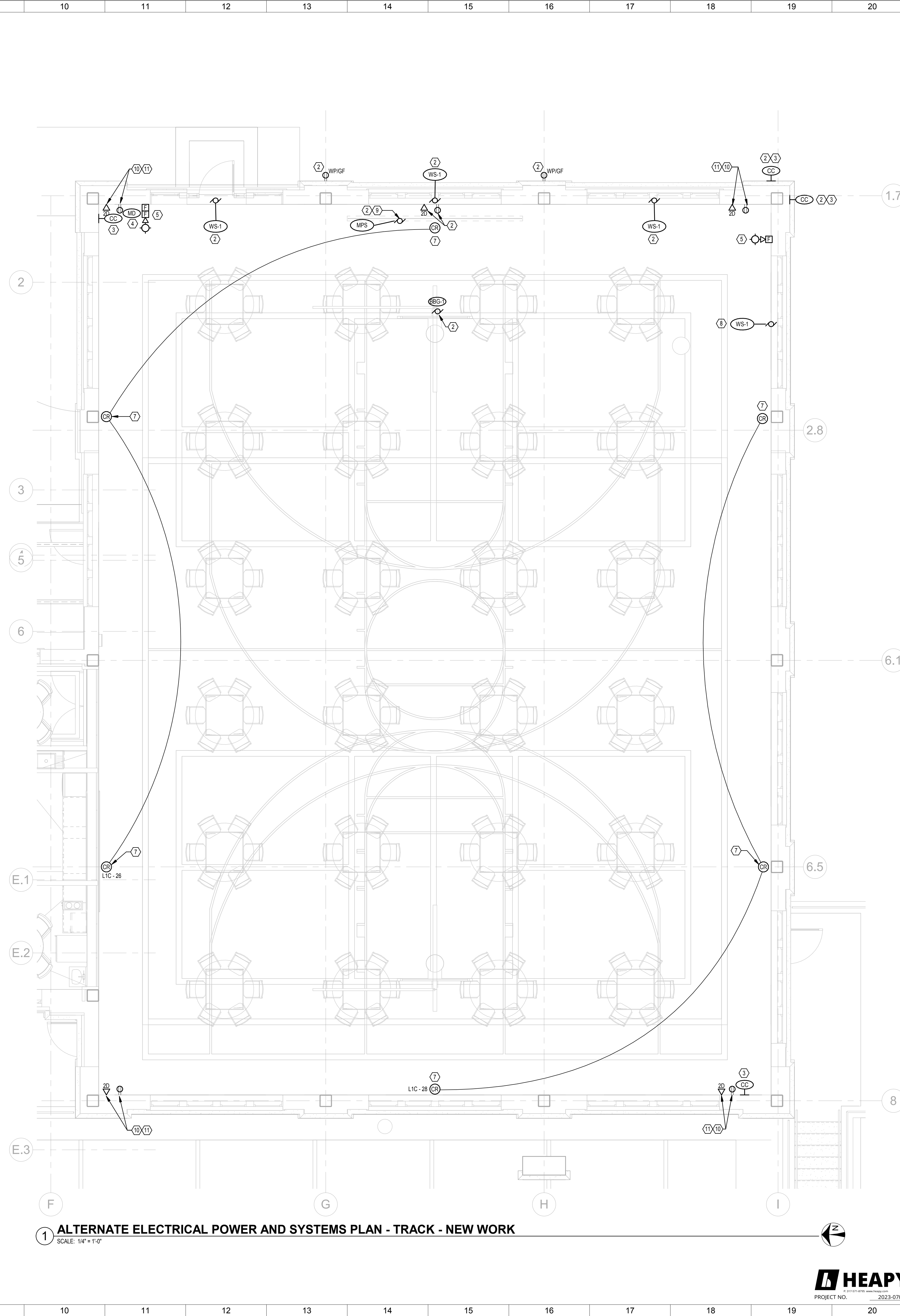
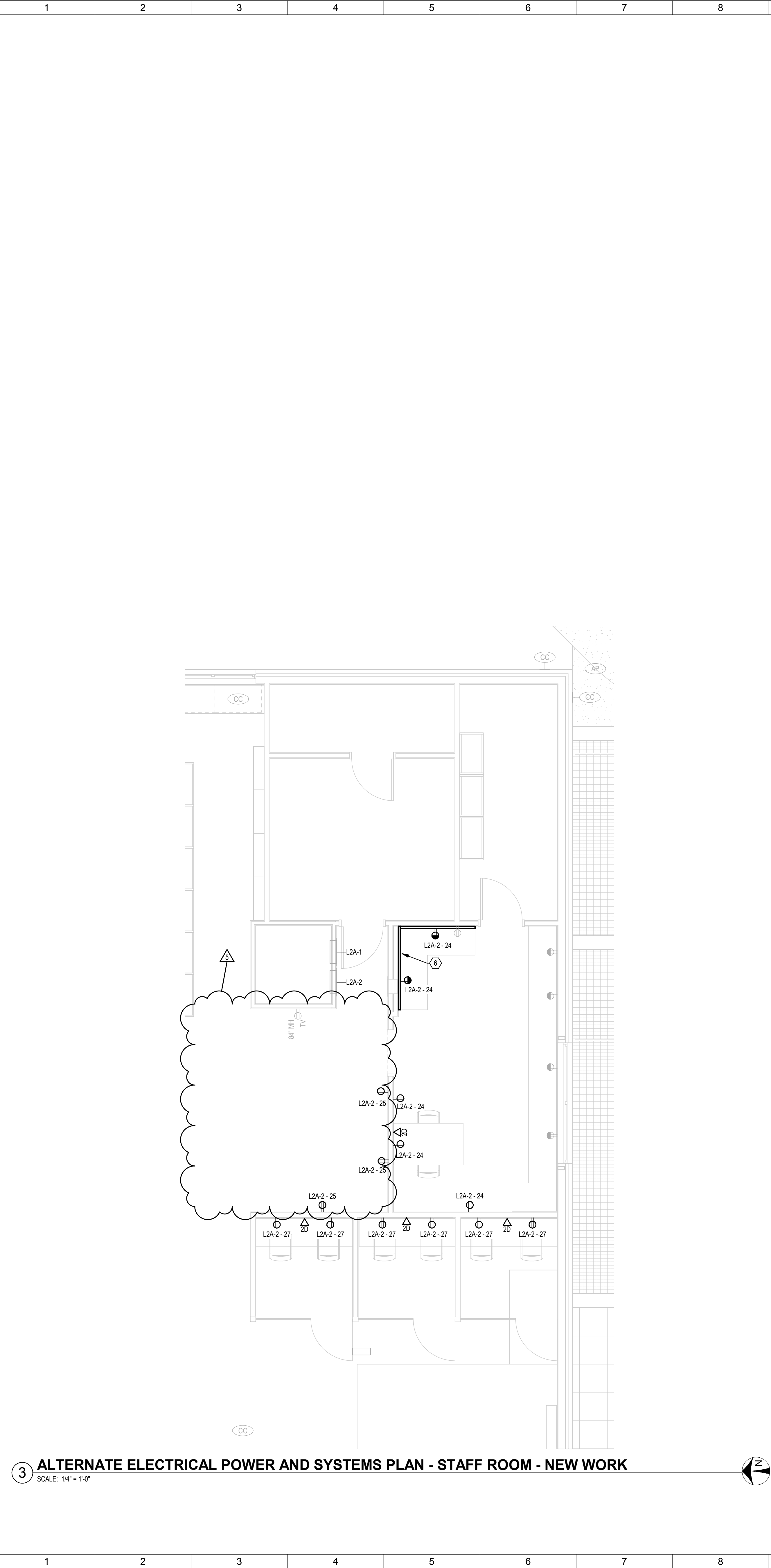
	Comm. No.	Date
	22106.00	2023/11/10
	Drawn	Drawing No.
Checked	WXT	E201
	KAS	

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SHEET NOTES:

- ALL CONDUIT IN COMMUNITY ROOM SHALL BE CONCEALED IN CONCRETE WALLS. SURFACE MOUNTED CONDUIT ON WALLS IS NOT ALLOWED IN COMMUNITY ROOM. COORDINATE ROUTING OF CONDUIT PRIOR TO POURING OF CONCRETE WALLS.
- ADJUST LOCATION OF BASE BID DEVICE AND WIRING TO LOCATION INDICATED. CIRCUIT NUMBERING SHALL REMAIN AS INDICATED ON BASE BID PLAN.
- PROVIDE ROUGH-IN (BOX AND CONDUIT) FOR OWNER PROVIDED SECURITY CAMERA. STUB CONDUIT INTO ACCESSIBLE CEILING SPACE. OWNERS LOW VOLTAGE CONTRACTOR SHALL PROVIDE AND INSTALL CAMERA AND CABLING AND TERMINATE CABLING AT EACH END.
- PROVIDE ROUGH-IN (BOX AND CONDUIT) FOR OWNER PROVIDED MOTION DETECTOR. STUB CONDUIT INTO ACCESSIBLE CEILING SPACE. OWNERS LOW VOLTAGE CONTRACTOR SHALL PROVIDE SECURITY DEVICE AND CABLING AND TERMINATE CABLING AT EACH END.
- PROVIDE ADDITIONAL FIRE ALARM DEVICES AND WIRING.
- INSTALL SURFACE MOUNTED RACEWAY AND RECEPTACLES 4" ABOVE COUNTER BACKSPASH!
- INSTALL CORD REEL ON UNDERSIDE OF TRACK. REFER TO DETAIL 9E502. COORDINATE EXACT LOCATION PRIOR TO ROUGH-IN.
- ADDITIONAL MOTORIZED WINDOW SHADES. CONNECT TO MOTORIZED WINDOW SHADE CIRCUIT INDICATED ON BASE BID DRAWINGS.
- INSTALL MPS ON UNDERSIDE OF TRACK.
- PROVIDE ROUGH-IN (BOX AND CONDUIT) FOR DISPLAY MONITOR. STUB CONDUIT INTO ACCESSIBLE CEILING SPACE. OWNERS LOW VOLTAGE CONTRACTOR SHALL PROVIDE AND INSTALL CAMERA AND CABLING AND TERMINATE CABLING AT EACH END.
- COORDINATE MOUNTING HEIGHT OF DATA PORT AND RECEPTACLE WITH DISPLAY MOUNTING HEIGHT.

GENERAL NOTES:

- REFER TO ARCHITECTURAL ELEVATIONS AND CASEWORK DRAWINGS FOR DEVICE MOUNTING HEIGHTS PRIOR TO ROUGH-IN.
- COORDINATE ELECTRICAL REQUIREMENTS WITH OTHER TRADES' SHOP DRAWINGS FOR ELECTRICAL CONNECTIONS TO EQUIPMENT FURNISHED BY OTHER TRADES AND/OR THE OWNER.
- ALL IT / DATA ROUGH-INS ARE TO BE AT THE SAME ELEVATION AS THE ADJACENT RECEPTACLE, UNLESS OTHERWISE NOTED.
- BRANCH CIRCUIT WIRE SIZING CHART TO BE UTILIZED AS A GUIDELINE FOR VOLTAGE DROP COMPENSATION. INCREASE CONDUIT AND WIRING AS REQUIRED.

20A - 120V CIRCUITS		20A - 277V CIRCUITS	
#12 WIRE	75' MAX	#12 WIRE	175' MAX
#10 WIRE	125' MAX	#10 WIRE	300' MAX
#8 WIRE	200' MAX	#8 WIRE	450' MAX

- STAGGER RECEPTACLES AND OTHER RECESSED DEVICES WHEN LOCATED ON OPPOSITE SIDES OF A PARTITION / WALL TO ELIMINATE SOUND TRANSMISSION FROM ONE SPACE TO THE OTHER.
- NEW WIRE AND CONDUITS SHALL NOT BE RUN EXPOSED UNLESS APPROVED BY THE OWNER, ARCHITECT OR THE ENGINEER.
- ALL RECEPTACLES IN PUBLIC ACCESSIBLE SPACES ARE TO BE OF THE TAMPER-RESISTANT DESIGN.
- RECEPTACLES FOR WATER COOLERS ARE TO BE GFCI PROTECTED.

BID DOCUMENTS	DATE
1	11.10.2023
4	12.04.2023
7	12.13.2023

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ELECTRICAL POWER AND SYSTEMS - ALTERNATE LOCATIONS ENLARGED VIEWS - ALTERNATE STAFF AND TRACK - NEW WORK

Comm. No.	Date
22106.00	2023/11/10

Drawn	Drawing No.
WXT	E202.1

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HEAPY
REGISTERED PROFESSIONAL ENGINEER
No. PE60910071
STATE OF INDIANA
PROJECT NO. 2023-07083

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SHEET NOTES:

GENERAL NOTES:

BID DOCUMENTS	11.10.2023
1 ADDENDUM #02	11.21.2023
2 ADDENDUM #7	12.13.2023
No. Revisions / Submissions	Date

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ELECTRICAL SCHEDULES

Comm. No.	22106.00	Date	2023/11/10
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Checked	KAS		



MOTORS, STARTERS, DISCONNECTS & CONTROLS

NOTES:
1. PROVIDE COMBINATION STARTER/DISCONNECT WITH HAND/OFF/AUTO
2. DISCONNECT INTEGRAL TO VFD
3. IF ALTERNATE FOR ENLARGE COMMUNITY ROOM IS ACCEPTED FEEDER SHALL BE 3 #3, #8G, 1/2" C.

MARK	HORSEPOWER (HP)	MOTOR CHARACTERISTICS				STARTER				DISCONNECT MEANS				CONTROL		FEEDER	
		LOAD (KVA)	120V/1PH	208V/1PH	240V/1PH	TYPE	LOCATION	TYPE	LOCATION	TYPE	LOCATION	NUMBER OF CONDUCTORS	WIRE SIZE	GROUND SIZE	CONDUIT SIZE	SEE NOTE	
ACCU-1	50.8										3	3/0	6	2.5			
BBG-1	1.18										2	12	12	0.75	1		
CP1	0										2	12	12	0.75	1		
CUH-1	2										2	12	12	0.75	1		
DC-1	1.66										2	12	12	0.75	1		
DWH	0.58										2	12	12	0.75	1		
EF-1	0.32										2	12	12	0.75	1		
MFS	0.34										2	12	12	0.75	1		
RTU-1	17.29										3	6	10	1	2, 3		
RTU-2	17.29										3	6	10	1	2, 3		
SP-1	8.65										3	6	10	1	2		
WS-1	0.06										3	6	10	1	2		

LUMINAIRES

NOTES:
1. WHERE INDICATED ON PLANS, PROVIDE REMOTE BATTERY INVERTER FOR 90 MINUTES OF EGRESS ILLUMINATION.
2. VERIFY COLOR OF EXISTING POLE MOUNTED SITE FIXTURES. COLOR TEMP SHALL MATCH EXISTING SITE FIXTURES.
3. REFER TO BASE DETAIL 1/E502
4. REFER TO BASE DETAIL 2/E502

MARK	QUANTITY	LAMPS				FIXTURE VOLTAGE	MANUFACTURER	CATALOG NO.	DESCRIPTION	OTHER ACCEPTABLE MANUFACTURERS	DIFFUSING MEDIA	TRIM COLOR			MOUNTING	SIZE			SEE NOTE
		DELIVERED LUMENS	COLOR	LOAD (VA)	FIXTURE VOLTAGE							WHITE	BLACK	ALUMINUM		DIAMETER	WIDTH	LENGTH	
A1	X	4077	3500K	38	120	LITHONIA	SERIES "CPANL"	2X4 RECESSED FLAT PANEL, ALUMINUM HOUSING	COLUMBIA, METALUX	FLUSH			R		24"	48"	6"		
A2	X	6083	3500K	47	120	LITHONIA	SERIES "BLT"	1X4 RECESSED PANEL	COLUMBIA, METALUX	EXTRUDED ACRYLIC			R		12"	48"	6"		
A3	X	9731	3500K	74	120	LUMINIS	SERIES "HC1600"	19" PENDANT DOWNLIGHT, 0-10V DIMMING		SEMI OPAQUE POLYETHYLENE LENS			SM	19"			11"	1	
A4	X	4197	3500K	23	120	LITHONIA	SERIES "BLT"	2X4 RECESSED TROFFER, 0-10V DIMMING	COLUMBIA, METALUX	EXTRUDED ACRYLIC			R		24"	48"	6"	1	
F1	X	3007	3500K	32	120	LITHONIA	SERIES "LDN4"	4" DOWNLIGHT, CLEAR TRIM, SEMI-SPECULAR FINISH, 0-10V DIMMING	PRESCOLITE, PORTFOLIO	CLEAR			R	4"			8.75"		
FL1	X	3327	4000K	26	208	KIM LIGHTING	SERIES "RFL2"	SIGN FLOOD LIGHT, GRADE MOUNTED, 8X6 DISTRIBUTION, PROVIDE BARN DOORS FOR GLARE CONTROL.	LITHONIA SERIES "DSX1"	HIGH IMPACT ACRYLIC LENS			KNUCKLE	4.313"			3.25"		
S2		4190	3500K	36	120	LITHONIA	SERIES "ZL1D"	2FT PENDANT STRIP, 0-10V DIMMING.	COLUMBIA, METALUX	CLEAR			C		12"	48"	3.75"		
SL1	X	8000	3500K	105	208	STERNBERG LIGHTING	SERIES "A850"	16.5" DIAMETER X 39" TALL, ACORN STYLE, SYMMETRIC DISTRIBUTION, SINGLE LIGHT ON 12'-0" POLE. POLE TO BE 2500 LINCOLN SERIES BY STERNBERG LIGHTING WITH 15 AMP, GFCI DUPLEX RECEPTACLE WITH IN USE COVER MOUNTED IN POLE.	LITHONIA SERIES "SL4"	TEXTURED ACRYLIC GLOBE			POLE	12"	17.12 5"	6"	4		
SL4	X	7000	4000K	106	208	KIM LIGHTING	SERIES "UR20"	20" DIAMETER, LOW PROFILE, ARM MOUNTED, AREA LIGHT MOUNTED TO 12' POLE, TYPE IV DISTRIBUTION, 50-0% DARK BRONZE FINISH, TEXTURED FINISH.	LITHONIA SERIES "SL4"	CLEAR POLYCARBONATE LENS			POLE	12"	17.12 5"	6"	3		
W1	X	2320	3500K	49	120	STERNBERG LIGHTING	SERIES "0630LED"	"PRAIRIE II" PRAIRIE STYLE WALL MOUNTED SCENCE, CAST ALUMINUM HOUSING, ARM MOUNT (H) SERIES ARM, TYPE IV DISTRIBUTION, 22" TALL, 16" WIDE, DARK BRONZE FINISH		VANDAL RESISTANT ACRYLIC			WM	16"		22"	1.2		
W2	X	2320	3500K	49	120	STERNBERG LIGHTING	SERIES "0630LED"	"PRAIRIE II" PRAIRIE STYLE CHAIN SCENCE, CAST ALUMINUM HOUSING, TYPE IV DISTRIBUTION, 22" TALL, 16" WIDE, DARK BRONZE FINISH		VANDAL RESISTANT ACRYLIC			C	16"		22"	1.2		
X1	X		RED	3	120	LITHONIA	SERIES "LQM"	EMERGENCY EXIT SIGN, SINGLE SIDED, RED LETTERS	DUAL LITE, EVENLITE	RED LETTERS			WM	9"	13"	2.375"	1		
X2	X		RED	3	120	LITHONIA	SERIES "LQM"	EMERGENCY EXIT SIGN, DOUBLE SIDED, RED LETTERS	DUAL LITE, EVENLITE	RED LETTERS			CM	9"	13"	2.375"	1		

LUMINAIRES - ALTERNATE BID

NOTES:
1. WHERE INDICATED ON PLANS, PROVIDE REMOTE BATTERY INVERTER FOR 90 MINUTES OF EGRESS ILLUMINATION.
2. VERIFY COLOR OF EXISTING POLE MOUNTED SITE FIXTURES. COLOR TEMP SHALL MATCH EXISTING SITE FIXTURES.

MARK	QUANTITY	LAMPS				FIXTURE VOLTAGE	MANUFACTURER	CATALOG NO.	DESCRIPTION	OTHER ACCEPTABLE MANUFACTURERS	DIFFUSING MEDIA	TRIM COLOR			MOUNTING	SIZE			SEE NOTE
		DELIVERED LUMENS	COLOR	LOAD (VA)	FIXTURE VOLTAGE							WHITE	BLACK	ALUMINUM		DIAMETER	WIDTH	LENGTH	
A1	X	4077	3500K	38	120	LITHONIA	SERIES "CPANL"	2X4 RECESSED FLAT PANEL, ALUMINUM HOUSING	COLUMBIA, METALUX	FLUSH			R		24"	48"	6"		
A3	X	9731	3500K	74	120	LUMINIS	SERIES "HC1600"	19" PENDANT DOWNLIGHT, 0-10V DIMMING		SEMI OPAQUE POLYETHYLENE LENS			SM	19"			11"	1	
A4	X	4197	3500K	23	120	LITHONIA	SERIES "BLT"	2X4 RECESSED TROFFER, 0-10V DIMMING	COLUMBIA, METALUX	EXTRUDED ACRYLIC			R		24"	48"	6"	1	
G1	X	6000	3500K	32	120	LITHONIA	SERIES "LDN8CYL"	8" CYLINDER DOWNLIGHT, WHITE TRIM, 0-10V DIMMING.	PRESCOLITE, PORTFOLIO	EXTRUDED ACRYLIC			AC		14.12 5"		13.5"		

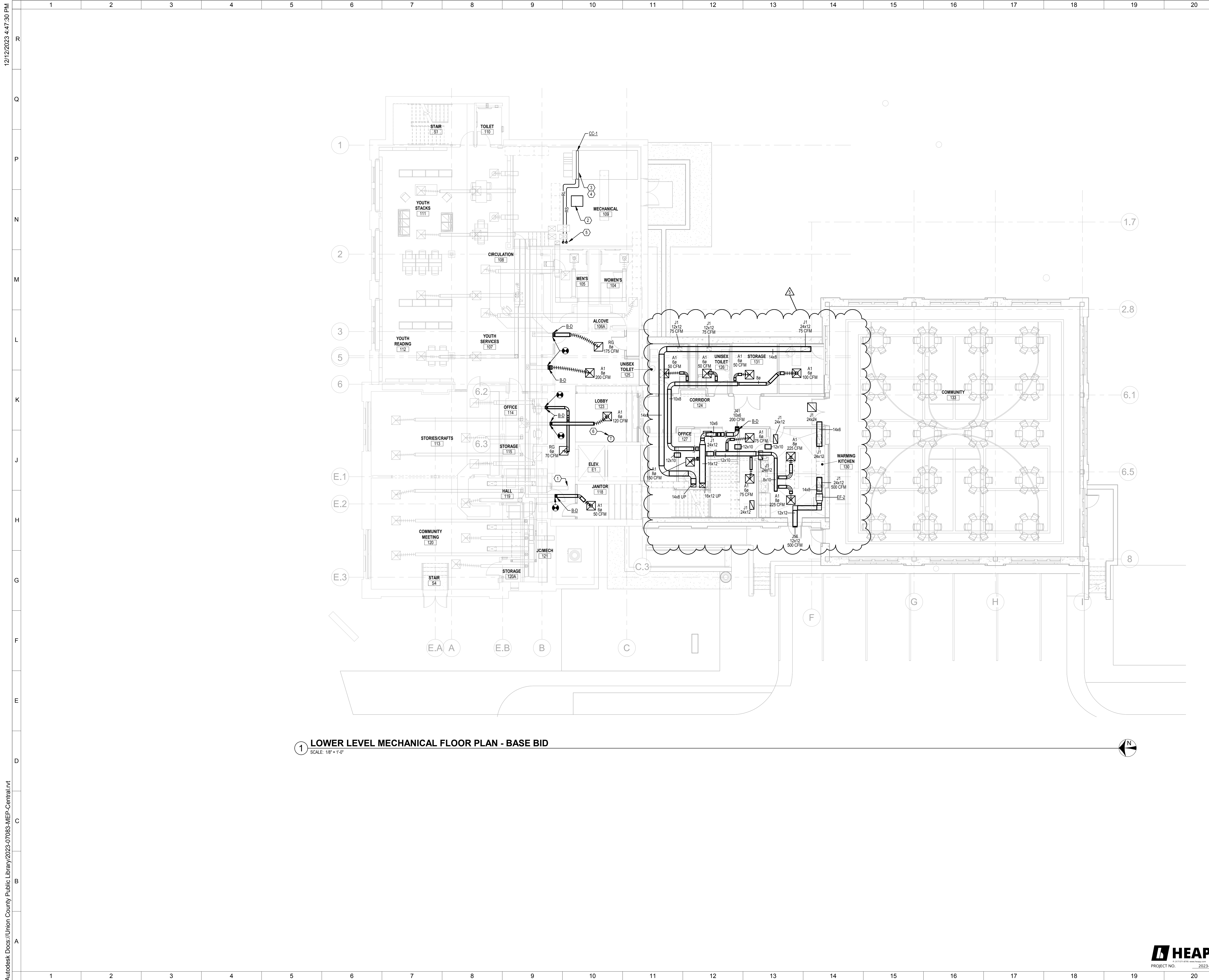
LIGHTING CONTROL SEQUENCE OF OPERATIONS

NOTES:
1. CEILING MOUNTED SENSOR
2. ON/OFF VIA PHOTOCELL AT EXISTING SCHEDULED TIMES
3. OCCUPANCY SENSOR INTEGRAL TO SWITCH.

CONTROL NUMBER	TYPICAL CONTROL NAME	OCCUPANCY SENSOR		TIME CLOCK				WALL SWITCH				DETAIL NUMBER		
		VACANCY MODE (MANUAL ON)	OCCUPANCY MODE (AUTO ON)	SCHEDULED ON AT	SCHEDULED OFF AT	OCCUPIED TIME START	UNOCCUPIED TIME START	AFTER HOURS OVERRIDE SWITCH (2 HOURS)	ON / OFF ONLY	DIMMER SWITCH	KEY SWITCH		SCENE SWITCH	GRAPHICAL WALL STATION
1	LINE-VOLTAGE SWITCHING												N/A	
2	OCCUPANCY SENSOR LOCAL CONTROL		•	30									3	4/E502
3	SITE LIGHTING					EXISTING SCHEDULE							2	NA
4	GYM GENERAL LIGHTING									•			1	5/E502
6	OCCUPANCY SENSOR LOCAL CONTROL									•		•	1	5/E502

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1 LOWER LEVEL MECHANICAL FLOOR PLAN - BASE BID
SCALE: 1/8" = 1'-0"



SHEET NOTES:

- CAP AND SEAL EXISTING DUCTWORK.
- REINSTALL EXISTING BOILER AFTER THE COOLING COIL HAS BEEN INSTALLED AND IS OPERATING AS REQUIRED.
- INSTALL COOLING COIL. PROVIDE FINAL CLEAN ON INSIDE OF UNIT, AND INSTALL REQUIRED BLANKOFFS INTERNAL TO THE UNIT.
- ROUTE CONDENSATE TO NEAREST DRAIN.
- ROUTE REFRIGERANT PIPING UP IN EXISTING CHASE. SIZE REFRIGERANT PIPING PER MANUFACTURERS RECOMMENDATIONS. SUPPORT PIPING AS REQUIRED.
- RELOCATE THERMOSTAT TO NEW LOCATION. PROVIDE CONDITION IN WALL.

BID DOCUMENTS		11.10.2023
ADDENDUM #7		12.13.2023
No.	Revisions / Submissions	Date

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LOWER LEVEL MECHANICAL FLOOR PLAN - BASE BID

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	Drawn	Drawing No.
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PROJECT NO. 2023-07083

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DUCT CONSTRUCTION, SEALING, AND INSULATION

GENERAL NOTES:
 A. REFER TO SPECIFICATIONS FOR DUCT CONSTRUCTION: INSULATION, FIBERGLASS DUCTBOARD, ETC.
 B. DUCT CONSTRUCTION AND SEALING SHALL BE PER LATEST S.M.A.C.N.A. STANDARDS.

NOTES:
 1. RETURN DUCTWORK WITHIN 15' OF AIR HANDLING UNIT SHALL BE INTERNALLY LINED.
 2. FABRIC DUCTWORK CONNECTED TO SHEET METAL PLENUM OFF BOTTOM OF RTU...
 3. REFER TO DETAIL 9 ON SHEET MS01.
 4. INSULATE FROM 24" UPSTREAM OF BACKDRAFT / ISOLATION DAMPER TO PENETRATION OF WALL / ROOF.
 5. CONCEALED ROUND RUNOUT DUCTS TO AIR DEVICES MAY BE 1" S.P. CLASS.

DUCT SYSTEM	S.P. CON-STRUCT.	SEAL CLASS	S.M.A.C.N.A. CLASS		INTERNAL INSULATION	EXTERNAL INSULATION	DOUBLE WALL INSULATED	NOT INSULATED	SEE NOTE
			RECT	RND					
SUPPLY DUCTWORK DOWNSTREAM FOR SINGLE ZONE - RTU'S	+2"	A	16	8	-	-	-	-	-
SUPPLY DUCTWORK FOR GYM UNIT	+2"	A	16	8	-	-	-	-	2
RETURN DUCTWORK	-2"	A	16	8	-	-	-	-	1,5
TRANSFER/RETURN AIR SOUND BOOT	-1"	A	16	-	-	-	-	-	3
TOILET OR GENERAL EXHAUST DUCTWORK	-1"	A	16	8	-	-	-	-	-

HVAC DESIGN DATA

GENERAL NOTES:
 A. OUTDOOR DESIGN CONDITIONS: 95°F DB SUMMER, 76°F WB SUMMER, -10°F DB WINTER.
 B. DESIGN ALTITUDE: 850 FT.

NOTES:
 1. REFER TO ATC SEQUENCES FOR ACTUAL ROOM SETPOINTS.
 2. "FLOATING" MEANS THERE IS NO ACTIVE CONTROL.

SPACE NAME / TYPE	INTERIOR DESIGN DATA				SEE NOTE
	SUMMER		WINTER		
	°F DB	% RH (NOTE 1)	°F DB	% RH	
OFFICES	74	55	72	FLOATING	1,2
ALL OTHER SPACES	74	55	72	FLOATING	1,2

ELECTRIC UNIT HEATERS

GENERAL NOTES:
 A. HEATING CAPACITY BASED ON 80°F ENT. AIR.
 B. ELECTRIC SERVICE - SINGLE POINT POWER CONNECTION WITH INTEGRAL CONTROL TRANSFORMER. ADEQUACY OF LISTED CIRCUIT SIZE MUST BE VERIFIED BY H.C. AND UNIT SUPPLIER. COST FOR INCREASE OR CHANGE OF ELECTRIC SERVICE FOR EQUIPMENT SELECTED SHALL BE BORNE BY H.C.
 C. ELECTRICAL SERVICE TO 3-PHASE UNITS SHALL BE 3-WIRE UNLESS NOTED OTHERWISE.
 D. 3-PHASE COIL LOADS SHALL BE DIVIDED EVENLY ACROSS EACH PHASE.
 E. VERIFY COORDINATE CABINET DIMENSIONS, MOUNTING & ACCESS REQUIREMENTS PRIOR TO ORDERING.
 F. RECESS UNITS SHALL HAVE FOUR(4) SIDE OVERLAP UNLESS NOTED OTHERWISE.
 G. COORDINATE UNITS IN MASONRY WALLS FOR FULL & SEMI-RECESSED UNIT WALL OPENINGS.
 H. IF EC MOTORS ARE INDICATED OR SPECIFIED, EACH MOTOR SHALL BE PROVIDED WITH FACTORY DISCONNECTING MEANS, INTERNAL OVERLOAD PROTECTION, FIELD ADJUSTABLE SPEED CONTROL, AND REMOTE ANALOG SPEED CONTROL INPUT WHEN REMOTE CONTROL IS SPECIFIED, COORDINATED WITH THE BUILDING AUTOMATION SYSTEM.
 I. WHEN APPLICABLE, REFER TO SPECIFICATIONS FOR VIBRATION ISOLATOR TYPES AND SEISMIC RESTRAINT REQUIREMENTS.

NOTES:
 1. MOUNTING HEIGHT TO BOTTOM OF UNIT, UNLESS NOTED OTHERWISE ON FLOOR PLANS.
 2. BASIS OF DESIGN: QMARK AWH AVH4408.
 3. PROVIDE 14 GAUGE SECURITY COVER.
 4. UNIT TO BE PARTIALLY RECESSED. PROVIDE REQUIRED TRIM KIT.

MARK	MOUNTING	HEAT CAPACITY (WATTS)	VOLTAGE - PHASE	AMPS	INTEGRAL DISCONNECT	APPROX. CABINET DIMENSIONS			THERMOSTAT	SEE NOTE
						WIDTH	DEPTH	HEIGHT		
CUH-1	RECESSED	2000	208 / 1	9.6	-	27.5"	9.25"	19.25"	1-6	1,2,3,4

AIR DISTRIBUTION DEVICES

GENERAL NOTES:
 A. ALL LAY-IN AIR DEVICES SHALL FIT IN 24"x24" LAY-IN CLG SYSTEM. VERIFY GRID TYPE AND COORDINATE AIR DEVICE COMPATIBILITY.
 B. FINISH KEY: "W.B.E." - WHITE BAKED ENAMEL; "E.C.L." - ETCHED CLEAR LACQUER OR ANODIZED; "C.C.B.A." - CUSTOM COLOR SELECTED BY ARCHITECT.
 C. SUPPLY AIR DIFFUSERS SHALL BE 4-WAY BLOW, UNLESS INDICATED OTHERWISE ON DRAWINGS.
 D. PROVIDE AUX. FRAMES FOR AIR DEVICES IN PLASTER, GYPSUM BOARD, TILE OR OTHER HARD SURFACES.

NOTES:

MARK	DESCRIPTION	MOUNTING TYPE	MATERIAL	FINISH	BASIS OF DESIGN	SEE NOTE
A1	STANDARD SQ. PLAQUE CEILING DIFFUSER - ROUND NECK - 24 X 24	•	ALUMINUM	•	TITUS SPD	
J1	EGGCRATE RETURN CEILING GRILLE	•	STEEL	•	PRICE	80
J41	SIDEWALL SUPPLY GRILLE	•	ALUMINUM	•	PRICE	300
J56	EXHAUST EXTERIOR LOUVER	•	ALUMINUM	•	GREENHECK EDJ-401-12X12	
RG	EGGCRATE CEILING GRILLE	•	STEEL	•	PRICE	80

DX COOLING COIL

GENERAL NOTES:
 A. COOLING CAPACITY BASED ON 80°F / 67°F ENTERING AIR TEMPERATURE.
 B. MAXIMUM 0.84" W.C. AIR STATIC PRESSURE DROP, UNLESS NOTED OTHERWISE.
 C. COIL SIZED USING R-410A.

NOTES:
 1. PROVIDE RAWAL APR VALVES.
 2. CONTRACTOR TO VERIFY COOLING COIL SIZE.
 3. CONTRACTOR / MANUFACTURER TO VERIFY PIPE ROUTING AND SIZE.
 4. BASIS OF DESIGN: TRANE.

MARK	SERVICE	CAPACITY		DIMENSIONS		SEE NOTE
		CFM	COOLING (MBH)	FINNED WIDTH	FINNED HEIGHT	
CC-1	AHU-1 COOLING COIL	9,000	374.5	78"	36"	1,2,3,4

FANS

GENERAL NOTES:
 A. ALL FANS SHALL BE A M.C.A. 211 AND 311 PERFORMANCE CERTIFIED AND SHALL BEAR THE A.M.C.A. LABEL.
 B. SONES VALUES BASED ON A.M.C.A. 301 MEASURED AT 5 FT.
 C. MOTOR HORSEPOWERS LISTED SHALL BE CONSIDERED MINIMUM.
 D. ROOF & WALL OPENINGS ARE APPROX. VERIFY SIZE & COORDINATE.
 E. VFD'S SHALL BE CONSTRUCTED AND LABELED FOR REQUIRED SCOR (SHORT CIRCUIT CURRENT RATING). COORDINATE WITH DIVISION 26.
 F. COORDINATE STEEL FRAMING AROUND ROOF OPENING WHERE REQUIRED FOR DECK SUPPORT, AND WALL UNITS FOR WALL OPENINGS.
 G. WHEN APPLICABLE, REFER TO SPECIFICATIONS FOR VIBRATION ISOLATOR TYPES.
 H. VFD'S SHALL BE CONSTRUCTED AND LABELED FOR REQUIRED SCOR (SHORT CIRCUIT CURRENT RATING). COORDINATE WITH DIVISION 26.
 I. IF EC MOTORS ARE INDICATED OR SPECIFIED, EACH MOTOR SHALL BE PROVIDED WITH FACTORY DISCONNECTING MEANS, INTERNAL OVERLOAD PROTECTION, FIELD ADJUSTABLE SPEED CONTROL, AND REMOTE ANALOG SPEED CONTROL INPUT WHEN REMOTE CONTROL IS SPECIFIED, COORDINATED WITH THE BUILDING AUTOMATION SYSTEM.

NOTES:
 1. OPERATED BY SWITCH WITH A TIMER.
 2. FAN TO OPERATE FROM TIME OF DAY SCHEDULE.

MARK	DESCRIPTION	FAN CFM	STATIC PRESSURE (IN. W.C.)	MOTOR		APPROX. WEIGHT (LBS.)	VIBRATION ISOLATOR TYPE	BASIS OF DESIGN	SEE NOTE
				HORSEPOWER (HP)	VOLTAGE - PHASE				
EF-1	CENTRIFUGAL DOWNBLAST EXHAUST	225	0.75	1/4	120 / 1	4.8	A1	GREENHECK G-097-VG	2
EF-2	INLINE EXHAUST	500	0.4	1/10	120 / 1	2	J1	GREENHECK SQ-90-VG	1

AIR-COOLED CONDENSING UNITS

GENERAL NOTES:
 A. COOLING CAPACITY BASED ON 95°F AMBIENT AIR TEMPERATURE.
 B. REFRIGERANT PIPING - SIZES LISTED ARE APPROX. CIRCUITING, SIZING, NUMBER OF PIPES AND CIRCUITS, ARRANGEMENT, ETC. SHALL BE IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
 C. ELECTRIC SERVICE - SINGLE POINT POWER SERVICE CONNECTION. ADEQUACY OF LISTED CIRCUIT SIZES MUST BE VERIFIED BY CONTRACTOR AND UNIT SUPPLIER. COST FOR INCREASE OR CHANGE OF ELECTRIC SERVICE FOR EQUIPMENT SELECTED SHALL BE BORNE BY HVAC CONTRACTOR.
 D. PROVIDE RAWAL APR VALVES ON THE COMPRESSORS.

NOTES:
 1. REFRIGERANT LINES SIZED BY MANUFACTURER.
 2. INTEGRATE INTO EXISTING BMS.

MARK	DESCRIPTION	SERVICE	NOMINAL CAPACITY (TONS)	UNIT RATING (EER)	REFRIGERANT TYPE	MINIMUM QUANTITY	MOTOR (HP / WATTS, EACH)	CONDENSER FANS MOTORS	COMPRESSORS	ELECTRICAL SERVICE	DIMENSIONS	MISC.	BASIS OF DESIGN	SEE NOTE						
															MINIMUM SCOR (MCOCP)	MINIMUM SCOR (AMPS)	LENGTH	WIDTH	HEIGHT	LOW AMBIENT CONTROL
ACCU-1	AIR-COOLED CONDENSING UNIT	EXISTING AHU	30	11.4	R-410A	3	1	SCROLL	2	208 / 3	141	175	5K	60"	89"	74"	1	TRANE	RAUC20	1,2,3


ROOFTOP HEATING & COOLING UNITS - AIR-COOLED DX/GAS-FIRED

GENERAL NOTES:
 A. COOLING CAPACITIES BASED ON 95°F AMBIENT AIR TEMPERATURE.
 B. NATURAL GAS DELIVERY PRESSURE TO UNIT IS 14" W.C. PROVIDE SECONDARY REGULATOR IF REQ'D FOR UNIT OPERATION.
 C. ELECTRIC SERVICE - SINGLE POINT POWER SERVICE CONNECTION TO UNIT. ADEQUACY OF LISTED CIRCUIT SIZE MUST BE VERIFIED BY H.C. AND UNIT SUPPLIER. COST FOR INCREASE OR CHANGE OF ELECTRIC SERVICE FOR EQUIPMENT SELECTED SHALL BE BORNE BY H.C. THIS SHALL INCLUDE LUG SIZE AND QUANTITY REQUIREMENTS.
 D. UNIT CONFIGURATIONS (SUPPLY FAN POSITION RELATIVE TO COOLING COIL) - "HD" - HORIZONTAL DRAW THRU; "VD" - VERTICAL DRAW THRU; "HT" - HORIZONTAL BLOW THRU; "VT" - VERTICAL BLOW THRU. REFER TO DRAWINGS FOR LAYOUT.
 E. HEATING L.A.T. IS BASED ON FULL UNIT CFM AT LISTED E.A.T. AND MBH OUTPUT.
 F. IF EC MOTORS ARE INDICATED OR SPECIFIED, EACH MOTOR SHALL BE PROVIDED WITH FACTORY DISCONNECTING MEANS, INTERNAL OVERLOAD PROTECTION, FIELD ADJUSTABLE SPEED CONTROL, AND REMOTE ANALOG SPEED CONTROL INPUT WHEN REMOTE CONTROL IS SPECIFIED, COORDINATED WITH THE BUILDING AUTOMATION SYSTEM.
 G. THE LISTED MAX UNIT HEIGHT INCLUDES THE INTEGRAL UNIT BASE RAIL BUT DOES NOT INCLUDE THE SPECIFIED CURB (HEIGHT). IF THE HEIGHT OF THE SPECIFIED CURB IS REQUIRED TO BE INCREASED, SUCH AS TO ACCOMMODATE CONDENSATE TRAP HEIGHT, THEN THE LISTED MAX UNIT HEIGHT SHALL BE DECREASED BY THAT SAME AMOUNT.


NOTES:
 1.

UNIT NUMBER	NOMINAL TONS	AREA SERVED	CFM (TOTAL)	SUPPLY FAN				COOLING SECTION				HEATING SECTION				FINAL FILTERS	OUTSIDE AIR	DIMENSIONS	MISCELLANEOUS	ELECTRICAL SERVICE	BASIS OF DESIGN	SEE NOTE						
				MOTOR (HP EACH)	SPEED CONTROL	EXTERNAL / TOTAL STATIC PRESSURE (IN. W.C.)	ELECTRONICALLY COMMUTATED MOTORS	DX-COOLING COIL	HEATING CAPACITY (MBH OUTPUT)	ENTERING AIR TEMPERATURE DB (°F)	LEAVING AIR TEMPERATURE DB (°F)	REFRIGERANT TYPE	HEATING AIR TEMPERATURE DB (°F)	THICKNESS / MERV	MINIMUM MINIMUM CFM								MAXIMUM MINIMUM CFM	ECONOMIZER	BAROMETRIC RELIEF	MAX UNIT LENGTH (INCHES)	MAX UNIT WIDTH (INCHES)	MAX UNIT HEIGHT (INCHES) (NOTE 1)
RTU-1	8.5	COMMUNITY ROOM	3,000	1.25	3	-	-	102.8	77.2	79.4 / 66.2	55.3 / 54.7	R-410A	200.0	50.8	99.9	2"	MERV 13	660 / 3000	208-3	48	60	5K	TRANE	YSJ102A				
RTU-2	8.5	COMMUNITY ROOM	3,000	1.25	3	-	-	102.8	77.2	79.4 / 66.2	55.3 / 54.7	R-410A	200.0	50.8	99.9	2"	MERV 13	660 / 3000	208-3	48	60	5K	TRANE	YSJ102A				
RTU-3	8.5	CONNECTOR AREA	3,000	1.25	3	-	-	102.8	77.2	79.4 / 66.2	55.3 / 54.7	R-410A	200.0	50.8	99.9	2"	MERV 13	660 / 3000	208-3	48	60	5K	TRANE	YSJ102A				

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ADDENDUM #7		12.13.2023
No.	Revisions / Submissions	Date



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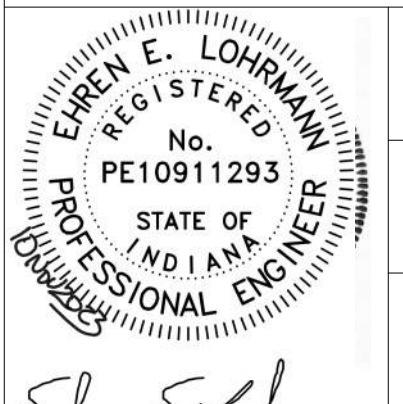
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Comm. No.	Date
22106.00	2023/11/10

Drawn	Checked	Drawing No.
JME	NH	M601



STATE OF INDIANA
PROFESSIONAL ENGINEER
No. PE10911293
E. E. LOHMEYER



HEAPY
PROJECT NO. 2023-07083

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**LEGEND-
AUTOMATIC TEMPERATURE CONTROLS**

- CONTROL POINT - SEE POINTS SCHEDULE
- AI ANALOG INPUT
- AO ANALOG OUTPUT
- BI BINARY INPUT
- BO BINARY OUTPUT
- PI PULSED INPUT
- OAT OUTSIDE AIR TEMPERATURE
- MAT MIXED AIR TEMPERATURE
- RAT RETURN AIR TEMPERATURE
- SAT SUPPLY AIR TEMPERATURE
- CCAT COOLING COIL LEAVING AIR TEMPERATURE
- HCAT HEATING COIL LEAVING AIR TEMPERATURE
- OHY OUTSIDE AIR HUMIDITY
- RAH RETURN AIR HUMIDITY
- SAH SUPPLY AIR HUMIDITY
- NC NORMALLY CLOSED (CLOSES ON LOSS OF POWER)
- NO NORMALLY OPEN (OPENS ON LOSS OF POWER)
- L LOW
- H HIGH
- C COMMON
- 2-WAY AUTOMATIC 2-POSITION CONTROL VALVE
- 3-WAY AUTOMATIC 2-POSITION CONTROL VALVE
- 2-WAY AUTOMATIC MODULATING CONTROL VALVE
- 3-WAY AUTOMATIC MODULATING CONTROL VALVE
- DIFFERENTIAL PRESSURE SENSOR
- DIFFERENTIAL PRESSURE SWITCH
- CARBON DIOXIDE SENSOR
- CARBON MONOXIDE SENSOR
- CURRENT SENSOR TRANSMITTER
- ELECTRONIC TO PNEUMATIC TRANSDUCER
- FLOW METER TRANSMITTER
- HUMIDITY SENSOR
- LEVEL CONTROLLER
- LEVEL TRANSMITTER
- PRESSURE SENSOR
- STATIC PRESSURE SENSOR
- TEMPERATURE SENSOR
- WATER FLOW SENSOR
- WATER LEVEL SENSOR
- CURRENT SWITCH
- END SWITCH
- FLOW SWITCH
- HUMIDISTAT
- OCCUPANCY SENSOR
- PRESSURE SWITCH, HIGH LIMIT
- PRESSURE SWITCH, LOW LIMIT
- TEMPERATURE LOW LIMIT (FREEZE STAT)
- ROOM THERMOSTAT
- WATER LEVEL SWITCH
- EMERGENCY SHUT-OFF STATION

**LEGEND-
AUTOMATIC TEMPERATURE CONTROLS**

- AIR FLOW MEASURING STATION
- VARIABLE FREQUENCY DRIVE (ADJUSTABLE FREQUENCY MOTOR CONTROLLER)
- MOTOR STARTER
- CONTACTOR
- LOCAL TEMPERATURE CONTROL PANEL
- PRESSURE SAFETY - HIGH
- PRESSURE SAFETY - LOW
- SMOKE DETECTOR
- DAMPER OR VALVE ACTUATOR - MODULATING
- DAMPER OR VALVE ACTUATOR - 2-POSITION
- RELAY
- UV LIGHT
- PUMP
- FAN
- COOLING COIL
- HEATING COIL
- HUMIDIFIER
- FILTER
- ENERGY RECOVERY WHEEL
- OPPOSED BLADE CONTROL DAMPER
- PARALLEL BLADE CONTROL DAMPER
- SMOKE DAMPER
- MIN OA / ECON DAMPER
- DX COIL
- WALL MOUNTED DEVICE
- DUCT INSERTION DEVICE
- PIPE INSERTION OR IMMERSION DEVICE WITH WELL
- AVERAGING SENSOR OR DEVICE
- OUTDOOR SENSOR OR DEVICE, SHIELDED
- FAN ARRAY, "X" FANS VERTICAL x "Y" FANS HORIZONTAL

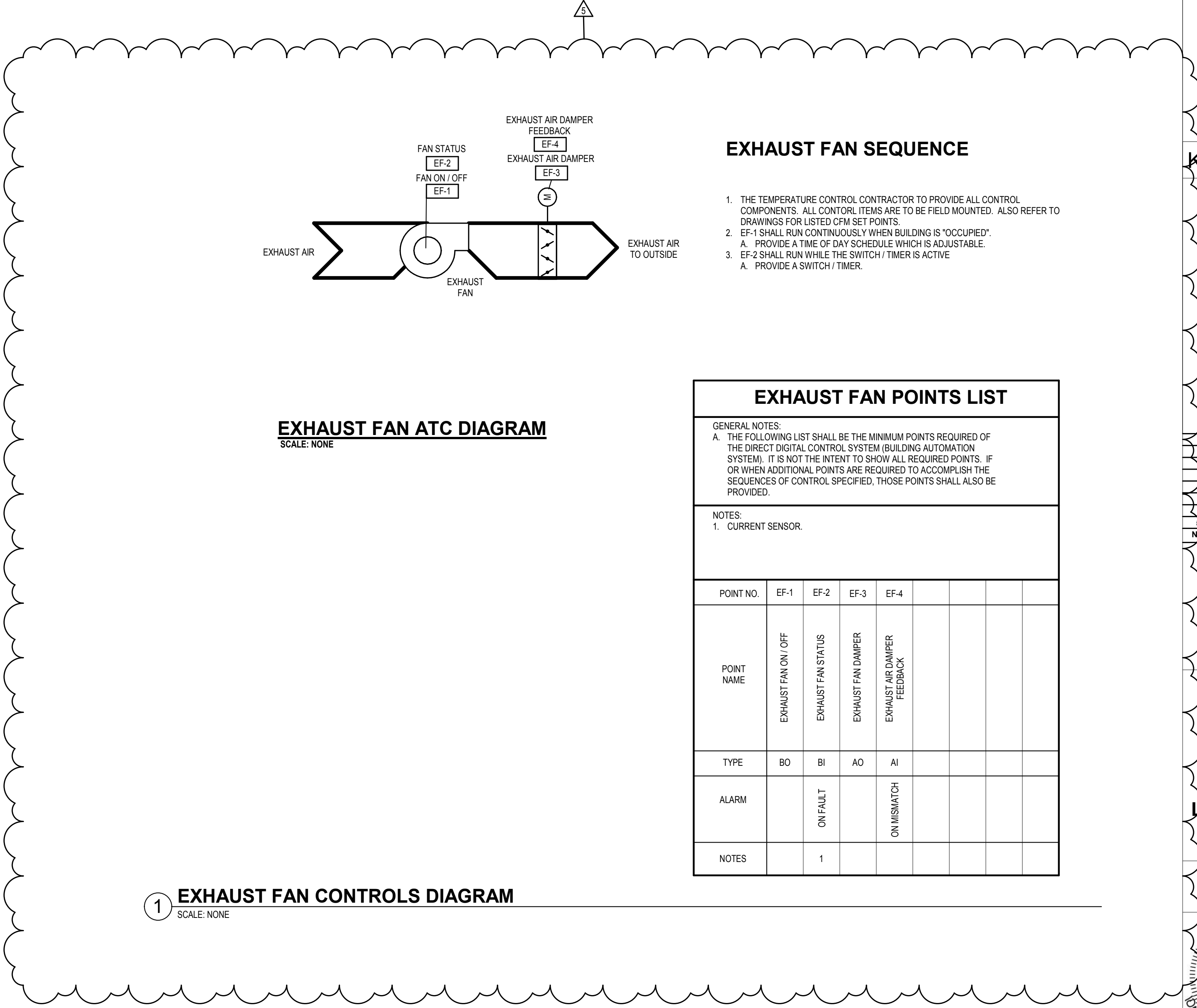
**GENERAL NOTES-
AUTOMATIC TEMPERATURE CONTROLS**

- A. A COMPLETE SYSTEM OF AUTOMATIC TEMPERATURE CONTROLS SHALL BE INSTALLED AS REQUIRED TO ACCOMPLISH THE SEQUENCE OF CONTROL FOR VARIOUS ITEMS OF EQUIPMENT AND SYSTEMS DESCRIBED HEREINAFTER. THE SYSTEM SHALL BE A DIRECT DIGITAL CONTROL SYSTEM UTILIZING ELECTRIC OR PNEUMATIC ACTUATION AS DEFINED IN THE SPECIFICATIONS.
- B. THE CONTROL DIAGRAMS AND INFORMATION CONTAINED WITHIN ARE TO SHOW DESIGN INTENT. IT IS THE CONTROL SYSTEM SUPPLIERS RESPONSIBILITY TO DEVELOP DETAILED AND COMPLETE CONTROL DIAGRAMS AND SHOP DRAWINGS TO ACCOMPLISH THE SPECIFIED SEQUENCES.
- C. THE POINTS LIST IS SHOWN AS AN AID TO THE CONTRACTOR INDICATING THE MINIMUM POINTS REQUIRED FOR CONTROL AND MONITORING. ALL INPUT AND OUTPUT POINTS, AND THEIR REQUIRED INTERFACE AND ACCESSORY HARDWARE, SHALL BE PROVIDED FOR A COMPLETE AND FUNCTIONAL CONTROL SYSTEM. IF OR WHEN ADDITIONAL POINTS ARE REQUIRED TO ACCOMPLISH THE SEQUENCES OF CONTROL, SPECIFIED, THESE POINTS, ALONG WITH ADDITIONAL DIRECT DIGITAL CONTROL PANE(S) (IF REQUIRED), SHALL ALSO BE PROVIDED.
- D. BULB WELLS FOR TEMPERATURE SENSING AS INDICATED SHALL BE PROVIDED BY THE HVAC CONTRACT. PIPING WORK SHALL INCLUDE PROPERLY SIZED WELDOLET OR THREADED FITTINGS PLACED AS DIRECTED BY THE CONTROL SYSTEM SUPPLIER.
- E. ELECTRICAL WORK INCLUDES A POWER SOURCE TO THE MOTOR STARTERS. PROVIDE ALL HVAC POWER SOURCES REQUIRED BEYOND THESE STARTERS OR BEYOND SOURCES EXPLICITLY SHOWN ON THE ELECTRICAL DRAWINGS. THIS SHALL INCLUDE BUT NOT BE LIMITED TO WIRING, CONDUIT, TRANSFORMERS, RELAYS AND FUSES.
- F. ALL NEW CONTROL DEVICES ARE TO BE INTEGRATED INTO THE EXISTING CONTROL SYSTEM AND DISPLAYED ON FRONT END.
- G. CONTROL SYSTEM FRONT END SHALL BE VISIBLE THROUGH WEB WHEN COMPLETE.

○ SHEET NOTES:

GENERAL NOTES:

KEY PLAN:



EXHAUST FAN SEQUENCE

1. THE TEMPERATURE CONTROL CONTRACTOR TO PROVIDE ALL CONTROL COMPONENTS. ALL CONTROL ITEMS ARE TO BE FIELD MOUNTED. ALSO REFER TO DRAWINGS FOR LISTED OF SET POINTS.
2. EF-1 SHALL RUN CONTINUOUSLY WHEN BUILDING IS "OCCUPIED".
 - A. PROVIDE A TIME OF DAY SCHEDULE WHICH IS ADJUSTABLE.
3. EF-2 SHALL RUN WHILE THE SWITCH / TIMER IS ACTIVE
 - A. PROVIDE A SWITCH / TIMER.

EXHAUST FAN POINTS LIST					
POINT NO.	EF-1	EF-2	EF-3	EF-4	
POINT NAME	EXHAUST FAN ON/OFF	EXHAUST FAN STATUS	EXHAUST FAN DAMPER	EXHAUST AIR DAMPER FEEDBACK	
TYPE	BO	BI	AO	AI	
ALARM		ON FAULT		ON MISMATCH	
NOTES	1				

1 EXHAUST FAN CONTROLS DIAGRAM
SCALE: NONE

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