## **ADDENDUM NO. 3**

TO

# **CONTRACT DOCUMENTS**

AND

**TECHNICAL SPECIFICATIONS** 

**FOR** 

**REFERENDUM PROJECTS Y2022-2028** 

ΑT

**ULSTER COUNTY BOCES** 

ADMIN/MHRIC (NEW PALTZ CAMPUS)

NYSED #62-90-00-00-1-003-016

Ulster County BOCES 175 Route 32 North New Paltz, NY 12561

Contact: Ms. Amanda Stokes, Director of School Business

**LAN Job #4.1342.24** December 27, 2023

Vlad Potiyevsky, RA NYS #030220 1.0 <u>General:</u> The original contract documents dated <u>March 1, 2023</u> issued to the New York State Education Department for this project are hereby amended as noted in this addendum which shall become part of said contract documents, as if originally included therein. Bidders must acknowledge receipt of this addendum and all other addenda on the proposal form when submitting proposals. In case any bidder fails to acknowledge receipt of addenda, his proposal will nevertheless be construed as though it has been received, acknowledged, and the submission of his proposal shall constitute acknowledgment by the bidder of the receipt of same.

# 2.0 <u>Amendments to Specifications:</u>

Section No.	Page No.	Addendum Requirements
тос	ALL	Table of Contents revised to reflect additional specification sections that were added.
004102	ALL	Add Alternate 1a included for General Construction for Furniture Protection.
010100	ALL	Entire specification was revised. Revised sections are highlighted.
011100	ALL	Specification was added.
012900	ALL	Specification was added.
017320	ALL	Specification was added.
083113	ALL	Specification was added.
084313	3	Section 2.2 C; Specification reference section changed.
230000	1-3	Mechanical summary of work was revised to clarify owner procurement of Trane equipment and DDC system through cooperative purchase contract.

# 3.0 <u>Amendments to Drawings:</u>

Drawing No.	Addendum Requirements
CA2.01	Egress plan was revised in Office Area 107 to reflect changes.
A1.00	Revised layout in Office Area 107 and adjacent rooms to match existing conditions.
A1.01	Revised layout in Office Area 107 and adjacent rooms to match existing conditions.

Drawing No.	Addendum Requirements
A1.02	Revised demolition plan showing the removal/salvaging of existing exterior staircase, concrete pad, asphalt surface, etc. on west side of MHRIC Building. New Demolition Key Notes and keynotes to include information about staircase demolition. Revised location of windows on the west side of the MHRIC building as well as showing revising Office Area 204 to show existing conditions. North and East exterior wall of MHRIC was revised to show the removal of existing louvers.
A1.31	Revised layout of RCP in Office Area 107 and adjacent rooms to match existing conditions.
A1.32	Windows on the West exterior wall were revised to match existing conditions. The RCP also shows the location of existing glass partitions.
A2.01	Revised layout in Office Area 107 and adjacent rooms to match existing conditions and painting area adjusted as a result.
A2.02	The plan was revised to show a new concrete pad and new location of the salvaged staircase. Additional Construction Key Notes and tags were added to reflect the exterior work on the west side of the building. A new infill detail was added along with the locations of infill areas. Windows on the north and west side were revised to match existing locations. Glass partitions were added to Office Area 204 to match existing conditions.
A2.03	Note revised to include product information on 2/A2.03. Door Control Detail was added.
A2.04	Construction Key Note 13 was added and tagged in the plan to show locations of new pipe portals.
A5.01	Revised layout in Office Area 107 and adjacent rooms to match existing conditions and the proposed lighting layout was changed.
A5.02	Windows on the West exterior wall was revised to match existing conditions. The RCP also shows the location of existing glass partitions.
A6.02	Details 1/A6.02 and 7-11/A6.02 were added. Notes in details 2-6/A6.02 were updated to add more information.
E0.02	Note added.
E1.01	Modification made to CH-1.
E1.31	Modification to notes.
E1.32	Modification to notes.

Drawing				
No.		Addendum Requirements		
E2.01		Electrification of mechanical units updated to reflect the mechanical changes in addendum #2.		
E2.02		Electrification of mechanical units updated to reflect the mechanical changes in addendum #2.		
E5.01		Lighting plan updated based up existing conditions modifications by Owner.		
E5.02		Lighting plan updated based up existing conditions modifications by Owner.		
E6.02		Panel schedules updated.		
4.0	Requests for Information (RFI's):			
No.	Comment / Response			
1	Comment:	Will the vinyl wall base be replaced at walls to be painted?		
	Response:	No. However, contractor shall keep the existing wall base clean and free of paint. If the wall base does get damaged and/or painted and cannot be cleaned and returned to the manner in which it was found, the contractor shall be responsible for replacing the wall base in like and kind and color to match existing.		
2	Comment:	Are colors for paint determined?		
	Response:	No. Paint colors to be determined by Owner during construction.		
3	Comment:	Plans say to prime and then 1 coat of paint. Should note direct 2 coats of paint only without prime coat?		
	Response:	All materials to receive paint shall receive one (1) primer coat and two (2) finish coats of paint. Colors are to be selected by the Owner during construction.		
4	Comment:	Please provide a specification for casement window hardware replacement.		
	Response:	No hardware spec will be issued. Replace hardware in like and kind to match existing and maintain functionality.		
5	Comment:	As stated at the site visit, please provide a bid assumption for number of locations for furniture protection. Alternatively, provide a furniture plan showing existing furniture to be protected.		
	Response:	Furniture protection language was added to the Summary of Work specification 010100. See included Furniture Plans for reference.		

No.	Comment / Response		
6	Comment:	Please provide a phasing plan / schedule indicating which spaces will be unoccupied for which periods of the construction schedule.	
	Response:	Specification 011100 Milestone Schedule has been added.	
7	Comment:	Will Stanley M Force Electro-Mechanical operators be accepted as an alternate auto operator?	
	Response:	Since a proper comparison was not submitted with the request as indicated in the specifications, the alternate is not approved prior to bid. A substitution can be submitted post bid for review and approval, however the contractor shall note that approval is not guaranteed and the specified product will have to be furnished at no additional cost.	
8	Comment:	Section 090561 - Water Vapor Emission Control System for Concrete Slabs - please indicate where this material is to be applied.	
	Response:	Proposed vestibule foundation in Admin Building. See detail 1/A2.03 of the attached.	
9	Comment:	Please provide roofing-related specifications including polyiso board insulation, fluid applied flashings, and single ply cold applied EPDM, and existing roof warranty information.	
	Response:	There is no large-scale roofing in this project other than areas of minor infill as related to the mechanical work. Infill should be provided per the details in the contract documents.	
10	Comment:	Spec 084313 section 2.2 ALUMINUM TUBE FRAME SYSTEMS – C Doors – States "As specified in 081200". Please provide this section, was not included.	
	Response:	This section should read Spec Section 081116 which has been provided as part of the bid documents. Specification section 084313 has been updated to reflect this.	
11	Comment:	Spec 087100 DOOR HARDWARE does not list a hardware finish. Please clarify.	
	Response:	626/US26D – Satin Chrome	
12	Comment:	Will there be any more opportunities to visit the site?	
	Response:	No.	

No.	Comment / Response		
13	Comment:	What is the engineers estimate on this project? Need it for our bid bond value?	
	Response:	Bid bond value is to be 10% of the amount of the contractor's bid, but not in excess or \$20,000.	
14	Comment:	Addendum 1 shows power source not on logistic plans, are we responsible to bring power to trailers, if so how many, what amperage?	
	Response:	Specification 010100 Summary of Work was revised to indicate no office trailers will be permitted and therefore no power will be required to any office trailers.	
15	Comment:	Provide light fixture type E specs/model, not shown on schedule but it appears on floor plans.	
	Response:	See lighting fixture schedule on attached drawings E5.02.	
16	Comment:	Specs call for notifier NFS-303 but notes on plans call for Edwards panel, which is it, which manufacturer can we use for this project, or is it open to everyone?	
	Response:	Fire alarm system is to be purchased under state contract and is not part of this bid. Contractor shall coordinate all work with District's fire alarm vendor.	
17	Comment:	Drawing A5.01 and A5.02 call out ceiling types CT-1 thru CT-4. The Spec. Section 095113 Part 2.02 D and 2.03 A says to refer to Drawing A5.01 for ceiling types. No specific tile has been selected for these types.	
	Response:	Unless otherwise noted to match existing ceiling tiles, new ceiling tiles are to be Armstrong Ultima beveled tegular acoustical ceiling tile.	
18	Comment:	Spec. Section 095113 Part 2.04 D says to refer to Drawing A5.01 for Metal Suspension Type. 2.04 calls for 15/16" Exposed Tee and 2.04 F calls for 9/16" Exposed Tee. Please clarify.	
	Response:	New suspension grid to be 9/16" Suprafine exposed tee grid by Armstrong.	
19	Comment:	Drawing E2.02 note 10 calls for a new panel WP1. Are we re-using the feeder for this panel?	
	Response:	Existing WP1 panel is being replaced with a new, higher rated panel. New feeder required. See updated drawing E2.02.	

# No. Comment / Response Comment: E2.02 n

E2.02 note 9 calls for a new panel P-1 in the computer room. There is an (E) next to this panel. Please confirm it is being replaced with a new panel and if we are

re-using the feeder.

Response: Panel P-1 is being replaced with a new panel. Reuse existing feeder. Panel

symbol is changed to solid and (E) changed to (N) for clarity. See updated

drawing E2.02.

21 Comment: Drawing E2.02 shows a 200A panel B in the electrical room. Is this a new panel

being installed? There is no note next to it. If so, are we re-using the feeder?

Response: Panel B is being replaced with a new panel. Reuse existing feeder.

# 5.0 <u>Clarifications</u>:

## No. Clarification

# 1. N/A

## END OF ADDENDUM NO. 3

Attachments: #1 - Specification Sections 010100, 011100, 012900, 017320, 083113, 084313,

230000.

#2 - Furniture Plans

Enclosure: #1 – Drawings A0.01, A1.01, A1.02, A1.31, A1.32, A2.01, A2.02, A2.03, A2.04, A5.01,

A5.02, CA2.01, E0.02, E1.01, E1.31, E1.32, E2.01, E2.02, E5.01, E5.02, E6.02, FA0.02,

FA2.01 (Revised 12/27/2023)

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# **BID PROPOSAL FORM**

<u>ADMINISTRATION BUILDING RENOVATIONS FOR ULSTER COUNTY BOCES:</u> The BID includes the cost of all work shown and required by the Contract Documents for the Capital Improvements at Ulster County BOCES - Administration Building.

# MULTIPLE PRIME CONTRACTS - RENOVATIONS AT ADMINISTRATION BUILDING

Contract #		<u>\$ (Lump Sum)</u>	
1	General Construction	\$	
1a	General Construction- Add Alternate Furniture Protection	e (Add) + <u>\$</u>	
2	Mechanical Construction	<u>\$</u>	
3	Electrical Construction	\$	
			_
<u>ACKNOWL</u>	EDGEMENT OF ADDENDA:		
NO	DATE	INITIAL	

# SECTION 01 01 00 – SUMMARY OF WORK – MULTIPLE PRIME CONTRACTS

# PART 1 - GENERAL

# 1.1 RELATED DOCUMENTS

A. Drawings and general provisions of Contract, including General Conditions and Division 0 & 1 Specification Sections, apply to this Section.

# 1.2 SUMMARY

- A. Project site address: 175 N CHESTNUT STREET, NEW PALTZ, NY 12561
- B. Owner: ULSTER COUNTY BOCES
- C. Architect Identification: LAN ASSOCIATES, 252 MAINSTREET, GOSHEN, NEW YORK 10924
- D. Construction Manager: The Palombo Group, 22 Noxon Street, Poughkeepsie, NY 12601.
  - 1. Construction Manager Representative: Luis Rodriguez, President.
  - 2. Construction Manager has been engaged for this Project to serve as an advisor to Owner and to provide assistance in administering the Contract for Construction between Owner and each Contractor, according to a separate contract between Owner and Construction Manager.
- E. Project Identification: Project consists of but is not limited to the removal and replacement of HVAC equipment, Ceiling and Lighting replacement, and Bathroom Toilet Partition replacement within MHRIC and ADMIN Buildings. Specific HVAC Equipment and Controls to be purchased /provided by the Owner. Fire Alarm replacement to be provided by the owner.

# 1.3 SUMMARY OF WORK

- A. The work will be constructed under multiple prime contracts. One set of contract documents is issued covering multiple contracts. Each Prime Contract is defined as:
  - 1. CONTRACT 1 GENERAL CONSTRUCTION CONTRACT
  - 2. CONTRACT 2 MECHANICAL CONSTRUCTION CONTRACT
  - 3. CONTRACT 3 ELECTRICAL CONSTRUCTION CONTRACT
  - 4. STATE CONTRACT FIRE ALARM

## 1.4 WORK UNDER SEPARATE CONTRACTS

- A. The project will be constructed under a multiple-prime contracting arrangement.
- B. One set of documents is issued covering all multiple prime contracts. Each prime contractor is to review ALL drawings and specifications for complete understanding and knowledge of the work.
- C. The following Contract Documents are specifically included and defined as integral to each Prime Contract.
  - 1. Bidding Requirements
  - 2. Performance and Payment Bonds
  - 3. Conditions of the Contract, including
    - 1. General Conditions & Supplementary Conditions
    - 2. **NYSIR** Insurance Requirements
    - 3. NYS Prevailing Wage Rates.
- D. Extent of Contract: Unless the Contract Documents contain a more specific description of the Work, names and terminology on Drawings and in Specification Sections determine which contract includes a specific element of Project.
  - 1. Unless otherwise indicated, the Work described in this Section for each contract shall be complete systems and assemblies, including products, components, accessories, and installation required by the Contract Documents.
  - 2. Concrete for the Work of each contract shall be provided by each contract for its own Work, unless specifically assigned to another Contract.
  - 3. Cutting and patching for the Work of each contract shall be provided by each contract for its own Work.
  - 4. Firestopping for the Work of each contract shall be provided by each contract for its own Work. Firestopping shall comply with Division 7 Sections "Penetration Firestopping."
  - 5. Access doors not shown on Architectural drawings and required for access to junction boxes, valves and similar equipment for the Work of each contract shall be furnished by each contract for its own Work to the General Construction Contractor for installation within new finishes.
  - 6. Lead Based Paint precautions for the Work of each contract shall be provided by each contract for its own Work.
  - 7. Each Prime Contractor shall designate a full-time superintendent to supervise the work of the Prime Contractor, who shall always be present on the job site when work is being performed; this person shall be familiar with Project and authorized to conclude matters relating to progress.
  - 8. Termination and removal of its temporary facilities shall be provided by each contract for its own Work.
  - 9. Each Prime Contractor shall provide procedures for OSHA Lead precautions.
- E. Temporary Facilities and Controls: In addition to specific responsibilities for temporary facilities and controls indicated in this Section and in Division 1 Section 01 50 00 " Construction Facilities and Temporary Controls" each Contract is responsible for the following:
  - 1. Installation, operation, maintenance, and removal of each temporary facility is usually considered as its own normal construction activity, and costs and use charges associated with each facility.

- 2. Plug-in electric power cords and extension cords, supplementary plug-in task lighting, and special lighting necessary exclusively for its own activities.
- 3. Its own field office, complete with necessary furniture, utilities, and telephone service.
- 4. Its own storage and fabrication sheds.
- 5. Temporary heat for construction at isolated work areas.
- 6. Temporary enclosures for its own construction activities.
- 7. Hoisting requirements for its own construction activities. All lifting operations will require a written lift plan submitted for record 2 weeks in advance of the lift date.
- 8. Each Prime Contractor is to stockpile his debris on a daily basis and place it in the dumpster.
- 9. Dumpsters will be provided by each prime contractor for their own work.
- 10. Secure lockup of its own tools, materials, and equipment.
- 11. Provide Fire Prevention Materials and equipment for Fire Protection related to the work of their own contract. Provide fire extinguishers, fire blankets, and fire watch during all cutting and welding operation as required by OSHA regulations.
- 12. Contractor to identify dedicated person for Fire Watch if they require the fire alarm to be disabled to complete their work. Protected smoke heads will need to have protection removed at the end of each work day to restore the fire alarm system.
- 13. Construction aids and miscellaneous services and facilities necessary exclusively for its own construction activities.
- 14. Provide protection of it's own finished work after installation and until accepted by the owner.
- 15. Safety procedures as dictated by OSHA and the NYS Department of Labor.
- 16. Labor for daily clean-up.

# 1.5 CONTRACT 1 - GENERAL CONSTRUCTION WORK:

- A. The Work of the General Construction Work Contract includes but is not limited to, the following descriptions:
  - 1. Includes Architectural, Structural, Masonry, Flooring, Ceilings, Casework, plus other construction operations traditionally recognized as General Work Construction. This includes, but is not limited to, *all work shown* on the following:
    - 1. Drawings:
      - a. Titel Sheet T0.01
      - **b.** All "CA" series Drawings CODE COMPLIANCE
      - c. All "S" series Drawings STRUCTURAL WITH ROOFING
      - **d.** All "A" series Drawings ARCHITECTURAL
      - e. All "M", "E", & "FA" drawings as it pertains to the work of this contract.

# 2. Coordination:

- 1. General Construction Work Contractor and Mechanical Contractor are to pay particular attention to coordination of work regarding finishes and patching around new and removed equipment.
- 2. Coordination with the work of all the other prime contractors.
- 3. Provide Master Project Schedule in adherence to Contract Milestone Schedule using professional construction scheduling software (Ghant Style), receive input on items and durations from other Prime Contractors and construct based off coordinated input from other trades, owner, CM.

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- **a.** Project Schedule is to be updated at each monthly billing period for any changes.
- **b.** Schedule to be reviewed by Construction Manager for Compliance with Milestone schedule and any other Project Requirements.
- 4. Provide 2 week look ahead schedules each week, provide level of detail needed to be used for coordination with other trades.
- 5. GC to provide Shop Drawings and field layout of its own work to the MC for coordination purposes. Auto Cad is an acceptable standard, other software may be allowed if agreed by all parties.
- 6. GC is responsible for providing field investigation and coordinating the new work of this contract (Ceilings, Soffits, Chase Walls, partitions, etc.) with existing conditions to confirm there are no conflicts. If a conflict is identified, then an RFI is to be submitted to receive directions on how to resolve conflict.

# 3. Demolition:

- 1. Contractor is asked to make every effort to visit the site to review existing conditions prior to bidding the project. A sign in sheet will be kept to verify compliance with this request.
- 2. Contractor is to Provide Preconstruction Photos prior to start of any work to document the existing finishes of the building / site. Contractor to be responsible for any damage as a result of this contract.
- **3.** Removal of finishes noted on plans.
- 4. Removal and disposal of miscellaneous equipment including all existing wall mounted specialty items and/or equipment not shown if impacting work to be demolished.
- 5. All cutting and patching necessary for work of this contract, including layout, sleeves, coring, debris removal, sawcuts, providing lintels, drywall work, plaster work, grouting, painting, ceiling removal and replacement, etc.
- 6. Provide all openings AS INDICATED ON "A" or "S" series DRAWINGS.

# 4. Temporary Facilities

- 1. There are existing interior glass partitions and modular furniture that have recently been installed. The contractor shall provide either of the following:
  - a. Complete removal, protection, storage & reinstallation.
  - b. Plywood Protection built up over furniture or covering partitions. This protection is intended to keep falling ceiling debris from causing damage NOT as scaffolding for workers.
- 2. Provide dust protection.
- 3. Provide continuous exits.
- 4. Install Roof Protection as needed for the work of this contract, document any damage to the existing roofs.
- 5. Provide temporary plywood protection at all existing openings to be replaced and new openings that are to be performed by the General Work Contractor. Ensure the interior of the building is not exposed to the outside elements.

6. Provide Temporary Facilities indicated as Work of this Contract in Division 1 Section 01 50 00, "Temporary Facilities and Controls" and <u>as indicated on staging logistics plans</u>. Provide Construction, Maintenance, removal, restoration of staging area shown on Staging Area/Logistics Plan.

# 7. NO OFFICE TRAILERS WILL BE PERMITTED FOR THIS PROJECT.

#### 5. New Construction:

- 1. Provide concrete and masonry related work including proposed frost wall for vestibule and exterior equipment pad for MHRIC DOAS unit. Coordinate with Mechanical Contractor.
- 2. Provide roof penetration and infill work as indicated within the documents. The process for roof openings and or penetrations will be as follows;
  - **a.** MC to provide layout of all penetrations needed.
  - **b.** GC to make penetrations and install equipment curbs furnished by the MC.
  - **c.** GC to flash curbs and seal roof to maintain warranty. If penetrations are made and equipment is not set, the GC shall furnish temporary measures over the opening.
  - **d.** GC shall infill existing penetrations per details indicated within documents.
- 3. Each Prime Contractor is to provide their own rough opening in walls and floors, including lintels and any required structural framing for penetrations as part of their own Prime Contract unless noted otherwise on the architectural or structural drawings which is to be provided by the General Construction contractor. All lintels and / or framing are to be sized in accordance with the lintel schedules and standard details within the contract documents. Installation is to be performed by a mechanic qualified and experienced with the materials and finishes being altered or installed. Submit to the Construction Manager the name and qualification of the subcontractor performing the installation prior to starting the work.
- 4. Mechanical Contractor to **furnish** all HVAC Equipment Roof Curbs, Pipe Portals, Condenser Rails, Pipe Supports; to be **installed** by the GC.
- 5. Provide all structural reinforcement as required and indicated within the construction documents.
- 6. Provide doors frames and hardware. Power for electrical hardware is to be provided by the Electrical Contractor. GC to provide start up / commissioning of all ADA Electrified Door Hardware. Owner to provide card reader tie in, GC to supply system with provision for Card Reader / ADA Operator Control sequence including any specialty components/relays to meet design operation. GC to provide raceways/pull string within doors/frames to be used by EC.
- 7. Provide finishes including but not limited to flooring resilient vinyl tile, painting, high performance coatings, suspended acoustical ceilings, and acoustic wall treatments as shown.
- 8. All exterior site work and mechanical pads as shown on Architectural or Mechanical Drawings.
- 9. Provide all painting as shown on Architectural Drawings.
- 10. Provide all flooring/patching as shown on the Architectural Drawings
- 11. Provide new scheduled ceilings & soffits as indicated.
- 12. Provide partition work as shown on Architectural Drawings.

- 13. In addition to cleaning provided by other Contractors for their own work, provide professional cleaning services to clean any remaining surfaces that may have been disturbed from construction of this contract **AND other contractors**. Schedule this final cleaning prior to Owner turnover.\
- 6. Provide multiple shift work as needed to complete work as shown on milestone schedule.

The Work of the General Construction Contract includes the Work that is specified in the Project Manual(s) and as shown on the drawings that form the contract plans. The Contractor is directed to examine all drawings since certain details and/or notes may appear anywhere therein that apply to his/her particular work. This prime contract is defined as, and includes, all Sections in the Divisions indicated by reference, and specific Sections noted:

- 7. Division 0 Procurement and Contracting Requirement, all Sections.
- 8. Division 1 –General Requirements, all Sections, including Temporary Facilities indicated.
- 9. Division 2 As it pertains to this contract
- 10. Division 3 Concrete, all Sections.
- 11. Division 4 Masonry, all Sections.
- 12. Division 5 Metals, all sections. Includes Structural Steel Reinforcement.
- 13. Division 6 Woods, Plastics, and Composites.
- 14. Division 7 Thermal and Moisture Protection.
- 15. Division 8 Openings, all Sections
- 16. Division 9 Finishes, all Sections.
- 17. Division 10 Specialties
- 18. Division 12 Furnishings, all sections

# 1.6 CONTRACT 2 – MECHANICAL CONSTRUCTION CONTRACT

- A. Work of this Contract includes, but is not limited to, the following descriptions:
  - 1. Includes HVAC Equipment, Piping, ductwork, control systems, plus other construction operations traditionally recognized as heating, ventilating, and cooling work. This includes, but is not limited *to*, all work shown on the "M" drawings, and applicable information shown on the "A" drawings, unless noted otherwise. It also includes Administrative and coordination responsibilities.
    - 1. Drawings:
      - a. Titel Sheet T0.01
      - b. All "CA" series Drawings CODE COMPLIANCE
      - c. All "M" Series Drawings.
      - d. All "S", "A", "E" & "FA" as it pertains to the work of this contract.
    - 2. The owner will be procuring Trane equipment and controls under a cooperative contract. The owner will provide storage containers on the site in the large north parking lot of the campus outside of the conference center. The Mechanical contractor will be responsible for handling all equipment and control material when it's delivered. These items will be stored or installed in areas that are ready to accept equipment. Installation of equipment and control valves will be by the Mechanical Contractor. Trane will provide start up of all equipment and installation of all controls wiring and programming. A detailed explanation of all Trane provided items has been issued within Addendum #2.

The Mechanical contractor will be responsible to provide the THREE (3) Bard units associated with the server room 109 which are **EXCLUDED** by Trane. These units are to include stand alone controls so that they are fully functional.

#### 2. Coordination:

- 1. Coordination with the work of all of the other contractors.
- 2. Provide items, durations, sequencing, and predecessors from other Prime Contractors to General Contractor for all activities. Provide monthly updates to schedule as needed.
- Provide 2 week look ahead schedules each week, provide level of detail needed to 3. be used for coordination with other trades.
- Provide shop drawings for piping & duct work to formulate the start of coordination drawings. The Mechanical contractor will be the lead on creating and updating coordination drawings and will incorporate other trades coordination drawings into the coordinated set and be responsible for identifying conflicts/hits of any of the components shown by the other trades. If a conflict is identified, then an RFI is to be submitted to receive directions on how to resolve conflict. Auto Cad is an acceptable standard, other software may be allowed if agreed by all parties.
- Provide layout of rooftop equipment for structural steel reinforcement and corresponding roof openings.
- Provide Coordinated Shop Drawings that include Above Ceiling Layout Drawings provided by other trades. MC is required to incorporate other trades coordination drawings into the coordinated set and be responsible for identifying conflicts/hits of any of the components shown by the other trades. If a conflict is identified, then an RFI is to be submitted to receive directions on how to resolve conflict. Auto Cad is an acceptable standard, other software may be allowed if agreed by all parties.
- 7. MC is responsible for providing field investigation and coordinating the new work of this contract with existing conditions to confirm there are no conflicts. If a conflict is identified, then an RFI is to be submitted to receive directions on how to resolve conflict.

#### 3. Demolition

- Provide General work contractor with assistance on all required shutdowns of 1. mechanical equipment scheduled for demolition in existing structure. All to be coordinated in the field.
- 2. All cutting and patching necessary for work of this contract, including layout, sleeves, coring, debris removal, sawcuts, lintels (furnish and install), drywall work, plaster work, grouting, painting, ceiling removal and replacement, if needed out of sequence.

#### 4. **Temporary Facilities**

Provide Temporary Facilities indicated as Work of this Contract in Division 1 1. Section 01 50 00, "Temporary Facilities and Controls".

# NO OFFICE TRAILERS WILL BE PERMITTED FOR THIS PROJECT.

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#### 5. Construction:

- 1. Provide new HWS/R and refrigeration piping as shown.
- 2. Provide Fin Tube Radiation as indicated within the documents.
- 3. Provide new duct work above ceilings and on roof as shown.
- 4. Provide condensate drains as needed for all new HVAC equipment.
- 5. Provide final replacement filters and final duct cleaning.
- 6. Provide and install all insulation, and labeling of new and modified piping, ductwork and equipment.
- 7. Provide all HVAC Equipment Pads as shown on "M" Drawings unless noted to be done by the GC.
- 8. Provide touch up paint on exposed duct work to ensure final ductwork is finished without damage/scuff marks.
- 9. Provide all testing, adjusting, and balancing of all new and existing modified HVAC systems.
- 10. All fees required for inspections and permits.
- 11. All Roof Openings shown on the Mechanical/Architectural Roof Plans to be provided by the GC, layout to be provided by Mechanical Construction Contract. All other rough openings to be provided per note "k." below.
- 12. Each Prime Contractor is to provide their own rough opening in walls, and floors, including lintels and any required structural framing for penetrations as part of their own Prime Contract unless otherwise noted by Architectural or Structural Drawings which be completed by the GC. All lintels and / or framing are to be sized in accordance with the lintel schedules and standard details within the contract documents. Installation is to be performed by a mechanic qualified and experienced with the materials and finishes being altered or installed. Submit to the Construction Manager the name and qualification of the subcontractor performing the installation prior to starting the work.
- 13. Mechanical Contractor to **furnish** all HVAC Equipment Roof Curbs (unless provided by Trane), Pipe Portals, Condenser Rails, Pipe Supports; to be **installed** by the GC.
- 14. Furnish access doors for HVAC access as indicated. Install access doors in existing finishes. If access doors is to be installed in new finishes, then this Contract will furnish the access door and the GC will install.
- 15. Provide and install all louvers.
- 16. Provide all Control Valves and Automatic Dampers
- 17. Provide firestopping and sealing all HVAC penetrations.
- 18. Furnish motor controllers/disconnects not provided with Trane equipment to Electrical Contract for installation and wiring.
- 19. Provide owner training / of all equipment installed.
- 20. Startup / Commissioning of equipment will be by Trane, this contractor shall coordinate and work with Trane to accomplish this task.
- 21. Provide final cleaning of corridors/rooms after scheduled mechanical work has been completed to remove dust/debris.
- 6. General Requirements, including but not limited to, additional items specifically indicated as the Work of this Contract.
- 7. Provide multiple shift work as needed to complete work as shown on milestone schedule.
- B. The Work of the HVAC Work Contract includes but is not limited to the Work that is specified in the Project Manual(s) and as shown on the drawings that form the contract plans. The

Contractor is directed to examine all plan drawings since certain details and/or notes may appear anywhere therein that apply to his/her particular work. This prime contract is defined as, and includes, all Sections in the Divisions indicated by reference, and specific Sections noted:

- 1. Division 0 – Procurement and Contracting Requirement, all Sections.
- 2. Division 1 -General Requirements all Sections, including Temporary Facilities indicated
- Division  $3 03\ 30\ 00$  for equipment pads shown on M Drawings. 3.
- Section 07 84 13, Penetration Firestopping, as required for the Work of this Contract 4.
- Section 07 92 00, Joint Sealants, as required for the Work of this Contract 5.
- Division 7 for Associated Roof Curbs and Pipe Portals 6.
- Division 23 Mechanical, Ventilating and Air Conditioning, all Sections. 7.

#### **1.7 CONTRACT 3 - ELECTRICAL WORK CONTRACT**

- A. Work of this Contract includes, but is not limited to, the following descriptions:
  - This prime contract is defined as, and includes, Drawings and Specifications as indicated 1. by reference, and any other construction operations traditionally recognized as Electrical Construction work.

# Drawings:

- Titel Sheet T0.01 a.
- b. All "CA" series Drawings CODE COMPLIANCE
- c. c. All "M" Series Drawings.
- All "S", "A", "M" & "FA" as it pertains to the work of this contract.

#### 2. Coordination:

- Coordination with the work of all of the other contractors.
- Provide items, durations, sequencing, and predecessors from other Prime 2. Contractors to General Contractor for all activities. Provide monthly updates to schedule as needed.
- Provide 2 week look ahead schedules each week, provide level of detail needed to 3. be used for coordination with other trades.
- 4. EC to provide Shop Drawings and field layout of its own work (Lighting, Large Conduits, etc.) to the MC for coordination purposes. Auto Cad is an acceptable standard, other software may be allowed if agreed by all parties.

#### 3. Demolition:

- Demolition / removal of all existing electrical items as shown and/or required. 1.
- Coordinate with the HVAC work contractor for necessary shutdowns and removal 2. of existing switchgear.
- All cutting and patching necessary for work of this contract, including layout, 3. sleeves, coring, debris removal, sawcuts, lintels (furnish and install), drywall work, plaster work, grouting, painting, ceiling removal and replacement, etc.

#### 4. **Temporary Facilities**

- Provide Temporary Facilities indicated as Work of this Contract in Division 1 Section 01 50 00, "Temporary Facilities and Controls" and as shown on Phasing / Logistics Plan.
- NO OFFICE TRAILERS WILL BE PERMITTED FOR THIS PROJECT.

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# 3. No temporary power to staging area will be required.

# 5. Construction:

- 1. Provide all wiring to all HVAC equipment. (Install motor controllers/disconnects supplied by HVAC Contract). Review HVAC equipment schedule for equipment requiring electrical connections.
- 2. Provide verification of equipment power requirements per approved submittals prior to ordering/installing material.
- 3. Provide field verification of existing conditions prior to ordering/installing material.
- 4. Provide power to all ADA hardware and electric hardware shown in the door hardware schedule. Provide control wiring and connection for electrified door hardware. Electrical contractor to run all wiring and make all final connections for electrified hardware. Hardware supplier shall be responsible to furnish all wiring diagrams to operate electrified hardware. Access control material and electrified hardware to interface at junction boxes.
- 5. Provide all interior and exterior lighting including lighting control.
- 6. Provide all cutting and patching required installing all electrical fixtures, devices, wire and conduit.
- 7. Provide all fees required for inspections and permits.
- 8. Each Prime Contractor is to provide their own rough opening in walls, and floors, including lintels and any required structural framing for penetrations as part of their own Prime Contract. All lintels and / or framing are to be sized in accordance with the lintel schedules and standard details within the contract documents. Installation is to be performed by a mechanic qualified and experienced with the materials and finishes being altered or installed. Submit to the Construction Manager the name and qualification of the subcontractor performing the installation prior to starting the work.
- 9. Provide support framing for Electrical equipment and conduits.
- 10. Furnish access doors for electrical access as indicated (to be installed by GC)
- 11. Provide firestopping and sealing all electrical penetrations.
- 12. Provide owner training on all newly installed electrical systems.
- 13. The owner will procure a complete fire alarm system under NY State contract. Coordination with this contractor will be required during the course of the work.
- 6. General Requirements, including but not limited to, additional items specifically indicated as the Work of this Contract.
- 7. Provide second shift work as needed for any work that will disrupt the occupied building (Building power shut downs, etc.)
- B. The Work of the Electrical Work Contract includes but is not limited to the Work that is specified in the Project Manual(s) and as shown on the drawings that form the contract plans. The Contractor is directed to examine all plan drawings since certain details and/or notes may appear anywhere therein that apply to his/her particular work. This prime contract is defined as, and includes, all Sections in the Divisions indicated by reference, and specific Sections noted:
  - 1. Division 0 Procurement and Contracting Requirement, all Sections.
  - 2. Division 1 –General Requirements all Sections, including Temporary Facilities indicated
  - 3. Section 07 84 13, Penetration Firestopping, as required for the Work of this Contract

- 4. Section 07 92 00, Joint Sealants, as required for the Work of this Contract
- 5. Division 8 Openings, Review of Section 087100 Door Hardware as required for the Work of this Contract
- 6. Division 26 Electrical All Sections

#### ADDITIONAL SCOPING

- C. Definition of Extent of Prime Contract Work; Additional Prime Contract Work not previously described.
  - 1. All Prime Contractors are responsible for reviewing plans and specs as it pertains to their scope of work mentioned in the contract documents. Scopes of work referenced may be found in multiple locations throughout the plans and specifications.
  - 2. Local custom and trade union jurisdictional settlements do not control the scope of work included in each prime contract. When a potential jurisdictional dispute or similar interruption of work is first identified or threatened, the affected prime contracts shall promptly negotiate a reasonable settlement to avoid or minimize the pending interruption and delays.
  - 3. All OSHA safety and hazardous materials regulations will be enforced on this project. All Contractors must submit a safety program, a hazardous materials program, (all required data must be maintained at the job site) and attend safety meetings. Toolbox talks will be required from each prime contractor.
  - 4. All Contractors are responsible for any debris caused by their work. A daily clean-up and disposal is required by each Contractor for the periods which that Contractor is performing work on site, on a day selected by the Construction Manager. Each trade will assign at least one person to the weekly clean-up; the name of this person is to be submitted to the Construction Manager. Any Contractor not providing personnel will be charged for labor provided by the Construction Manager.
  - 5. All Contractors are responsible for cutting/patching required to complete their work. All exposed finishes must be ready to receive paint, etc.; all concealed openings (piping, ductwork, conduit, etc.) must be repaired to comply with specified wall or deck conditions.
  - 6. Multiple Crews: To maintain the project schedule, each Prime Contractor is to provide multiple crews. Each crew is to be furnished with its own supervision, cranes, scaffold and other means necessary to maintain the Project Schedule.
  - 7. Supervision: The proposed project manager and field superintendent for the project is to have at least five years experience in the proposed position. Each successful bidder shall submit resumes to the Construction Manager for the proposed project manager and field superintendent for the project. This information will be reviewed with the Owner, Architect and Construction Manager for approval. Should the Project Managers and/or Superintendent prove unqualified for the position at any point in the project, the Construction Manager shall issue a letter stating that the person is to be removed from involvement in the project. Action by the contractor must be made within seven working days of receipt of such letter.
  - 8. When selective demolition or cutting and patching (all demolition necessary for work of their contract, including layout, sleeves, coring, debris removal, sawcuts, drywall work, plaster work, grouting, painting, ceiling removal, etc) is required solely by another prime contract to perform their work it shall be by the Prime Contractor requiring the work to achieve the result indicated. Under this condition, the prime contractor needing the demolition to perform the work will accomplish the demolition and the cutting and patching as indicated in Subparagraph 5 above.

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- 9. Each prime contractor shall return areas disturbed by their work activities to condition prior to start of work.
- 10. Each prime contractor shall maintain within its field office a complete and current set of Contract Documents (including any Addenda, Change Orders, and Modifications thereto), approved shop drawings, samples, color schedules and other data pertinent to the Project.
- 11. Each prime contractor is to survey existing work and submit to the Construction Manager a list of damaged areas prior to commencing work. Any damaged areas not identified prior to the work shall be the responsibility of the contractor/ Contractors working in that area.
- 12. Clean up: Each Prime Contractor is to stockpile his debris on a daily basis, and place it in the dumpster. Dumpsters for non-asbestos containing materials will be provided by the Owner for use by the prime contractors, recycling of materials will be instituted daily. Construction Manager shall monitor progress and have dumpsters delivered and removed.
- 13. Unless a specific item or material is noted as to remain the Owner's property or to become the Contractor's property (or similar words), any material having salvage or reuse value shall be inspected by the Owner. If the Owner wishes to retain this material, it shall be turned over to him on the site where directed. If the Owner designates the material as scrap, it shall become the Construction Manager's property and removed from the site. Material having salvage value shall be carefully removed. If the Construction Manager designates the material as scrap, it shall become the contractor's property and removed from the site. Material having salvage value shall be carefully removed.
- 14. When the building is occupied and fire alarm and safety system work is in progress, the Fire Alarm Contractor shall continuously maintain the existing building's fire alarm and detection system
- 15. Disrupted Exit and Emergency lighting system or provisions must be made by the Electrical Contractor to provide equivalent safety.
- 16. All personnel required to be on site shall at all times have all required personnel protective equipment on at all times.
- 17. All personnel on site shall at all times have a photo ID displayed where visible. Those without will be removed from site at once. If the same individual fails to have the ID a second time they will be removed from site and not be allowed back on site.
- 18. Provide all cleaning of dust/debris created by each contractor's own work.
- 19. Electrical Power/Pedestal/Panel to be provided by Electric Contractor to the Staging area location for the purpose of providing power to each Prime Contractor's Trailer. Each Prime Contractor will then be responsible for hookup of their own project trailers to temporary electric pedestal/panel. EC to provide connection to CM Trailer if required. If abused, power from temporary service will be disconnected. The Electric Contractor shall erect poles safely sufficient for site power and telephone service. All installations shall conform to strictest standards. The E.C. shall disconnect and remove all items upon project completion.

# 1.8 TESTING

- A. Required testing and test procedures are indicated under each Division of the Technical Specifications. Other testing shall be performed per generally accepted standards.
- B. The Architect shall reserve the right to require additional information as is deemed necessary to fully evaluate testing results.
- C. The Owner shall employ and pay for an independent testing and inspection agency for testing requirements of their work as assigned by this scope of work (Structural Steel). All testing shall be per technical specification requirements. The Prime Contractor requiring testing will notify the

Construction Manager 1 week in advance of the required testing to allow for coordination and scheduling. Failure to give sufficient notice will require the prime contractor to pay for alternate testing to satisfy the specification.

# 1.9 WORK SEQUENCE

- A. The Work will be conducted to provide the least possible interference to the activities of the Owner's personnel.
- B. All contract scopes of work is currently scheduled for performed weekdays from 7:00 AM to 3:30 PM unless otherwise noted. A Construction Manager Superintendent must be on site at all times that work is being performed. If a contractor fails to maintain the progress as indicated by the milestone schedule by no other fault but its own, and requires overtime to complete the work; the contractor shall make arrangements with the Construction Manager 24 hours in advance and pay for a Construction Manager's superintendent at \$125.00 per hour. In the event that the cause for delay is multi-contract, then the costs shall be distributed evenly among contracts. Advise the Construction Manager 48 hours prior to commencing work inside the building. See phasing plan for how work is to proceed.
- C. Coordination of any utility and/or power interruption must be done with the Construction Manager. Shutdowns must occur during off-hours and on days when the building is not occupied by the owner.
- D. Construction access to the site shall be limited to those designated for contractor's personnel, equipment and deliveries by the Owner. Contractors' staging, parking and storage shall be coordinated by the Construction Manager.
- E. Each Contractor shall inspect the site and review the AHERA report on file for the presence of asbestos. Unless otherwise noted, there will be asbestos containing material in place that will require work to take place in the vicinity of, around and/or next to. Each prime contractor that will be working above ceilings, demolishing, in crawl spaces, boiler rooms and all other areas that may contain asbestos per the AHERA report, shall employ "Allied Trades: certified/licensed tradesman as part of the onsite workforce".

## 1.10 OCCUPANCY REQUIREMENTS

- A. The GENERAL CONTRACTOR (Contract #1) shall provide indoor air quality management as specified by the Department of Labor and OSHA for the building, when the building is enclosed, as determined by the Construction Manager.
  - 1. Provide an exhaust air system for the project indoor areas that could produce fumes, VOC's off-gasses, gasses, dusts, mists, or other emissions.
  - 2. Exhaust air system for the project areas that could produce emissions listed in Paragraph 1 shall be utilized.
  - 3. Provide temporary partitions and air seals to prevent the migration of airborne contaminants from unoccupied areas to occupied areas when applicable.
- B. Quality assurance:

- 1. Maintain a negative pressure between the work area and the space surrounding the work area.
- 2. Before start of work, submit a design for the exhaust air system. Do not begin work until approval from the Owner is obtained.
  - 1. The number of machines required.
  - 2. Location of the machines in the work space.
  - 3. Description of the methods used to test air flow and pressure differential.
- 3. Work will be occurring adjacent to properties that conduct business daily. Care must be taken to limit interaction and exposure to construction activities.

# C. System operation:

- 1. A sufficient quantity of exhaust fans in existing window openings or other approved locations shall be operated in accordance with the following applicable standards.
- 2. Exhaust air system shall operate for a minimum of 72 hours after work is completed, or until all materials have cured sufficiently as to stop out gassing of fumes or odors and area has been ventilated to remove all detectable traces of odors and fumes.
- **3.** Maintain twenty-five (25) feet clearance from all temporary exhaust outlets to all active building outdoor air intakes.

END OF SECTION 01 12 00

## SECTION 011100 - MILESTONE SCHEDULE

## PART 1 - GENERAL

#### 1.01 MASTER SCHEDULE

The following milestone schedule serves as a basis for bidding. A Master Construction Schedule will be developed by the prime contractors within 10 days of the Contract Award. This Master Schedule will provide specific details of each prime contractors work and must incorporate the milestones listed below.

## 1.02 SUBSTANTIAL COMPLETION & MILESTONE DATES

- A. Award Contracts on or about January / February 2024.
- B. Project Commencement Kick-off will follow Notice of Award.
- C. Milestone Dates
  - 1. Construction Start: April 2024
  - 2. Substantial Completion: December 2024
  - 3. Final Closeout: January 2024

#### D. Final Close-out of all Contract

- a. Final Close-out of Contract
  - i. Final close out of all contracts shall be within 30 days of the substantial completion dates established above. All work including, but not limited to punch lists, project closeout, testing, balancing, owner training / operation, O&M manuals, as-builts, warranties, etc. shall be complete.
  - ii. All work required by the Construction Manager to execute final closeout of contracts after dates noted established above, if determined to be caused by contractor, shall result in payment to the Construction Manager in the form of a change order deduct to the base contract.

## F. School Operations & Contractor Work Hours

This project will be phased to allow the owner to relocate to alternate spaces thereby vacating the work areas allowing contractors access during normal hours of 7:00 am and 4:00 pm. Any contract work not completed within the durations listed above shall be performed on an afterhours schedule, weekends or school holidays.

All deliveries MUST be coordinated with the owner and Construction Manager 48 hours in advance.

# 1.03 SCHOOL DISTRICT HOLIDAYS

A. Coordinate with owner & construction manager for access to work during school holidays as listed in the District Calendars. Hours of work to be from 7:00am to 4:00pm.

#### 1.04 SCHOOL DISTRICT EVENTS

A. NOT APPLICABLE.

# 1.05 EXAM / TESTING SCHEDULE

#### A. NOT APPLICABLE

#### 1.06 DISTRICT CALENDARS

## A. TBD

# 2.01 PHASING SCHEDULE

- A. Phase 1 MHRIC building April 1st to June 28th, 2024 (3 month overall duration)
  - 1) Work should progress from 2<sup>nd</sup> floor to first floor.
  - 2) Server Room 109 must always remain active. Replacement of units must be completed one at a time, so that (2) units are always in operation. Any work inside this room must be completed in a clean and careful manner.
- B. Phase 2 NO WORK SUMMER 2024 July 1st to August 30th 2024
- C. Phase 3 Administration building September 3<sup>rd</sup> to November 29<sup>th</sup>,2024 (3 month overall duration)
  - 1) This phase includes Vestibule work.
- D. Phase 4 Conference Center November 18th to December 31st, 2024 (1.5 months overall duration)
  - 1) This phase includes work in the corridor outside the conference center.
- E. Phase 5 Project Close out January 1st to January 31st, 2025.

# 2.02 WORK INCLUDED

- A. Various items of work required in each phase listed above include but is not limited to the following;
  - 1) Install protection as required.
  - 2) Complete demolition activities.
  - 3) Provide structural reinforcement for equipment as required.
  - 4) Install new power, equipment & duct work.
  - 5) Roofing related penetrations and or infill.
  - 6) Fire Alarm rough in by state contract vendor.
  - 7) Install new ceilings & paint walls.
  - 8) Misc window hardware, caulking, sealing & toilet partitions.
  - 9) Startup & commission new HVAC system(s).
  - 10) Final Cleaning.

**END OF SECTION 011100** 

## **SECTION 012900 - PAYMENT PROCEDURES**

#### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

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

## 1.2 SUMMARY

A. This Section specifies administrative and procedural requirements necessary to prepare and process Applications for Payment.

## 1.3 DEFINITIONS

A. Schedule of Values: A statement furnished by Contractor allocating portions of the Contract Sum to various portions of the Work and used as the basis for reviewing Contractor's Applications for Payment.

# 1.4 SCHEDULE OF VALUES

- A. Use the approved Schedule of Values form for each Application for Payment.
- B. Schedule of values requirements.
  - i. Submit the Schedule of Values no later than 14 days before the date scheduled for submittal of initial Application for Payment.
  - ii. Submit the Schedule of Values as a PDF and Microsoft Excel File.
  - iii. Provide separate sets of Schedules of Values for each separate building.
  - iv. Character limit of Schedule of Value Descriptions is 64 Characters, abbreviate descriptions as needed.
  - v. List the following items as separate items in the front end of the Schedule of Values:
  - 1. Insurance Actual Invoice Amount.
  - 2. Bonds Actual Invoice Amount.
  - 3. Mobilization.
  - 4. Temporary Facilities and Controls Break out into sub items as needed.
  - 5. Submittals Minimum of 1% of Contract Sum.
  - 6. Supervision Minimum of 3% of Contract Sum.

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- 7. Safety and Field Reports Minimum of 3% of Contract Sum Weekly Toolbox Talks required to be submitted for payment.
- 8. Coordination / Coordination Drawings Minimum of 1% of Contract Sum.
- 9. Meetings Minimum of 1% of Contract Sum.
- 10. Testing and Balancing (if included in Contract) Minimum of 2% of Contract Sum.
- 11. Punchlist Minimum of 2% of Contract Sum Not to be paid until the Substantial Completion Inspection Report is issued and Punchlist Work is being completed.
- 12. Final Demobilization
- 13. Final Cleaning (separated by phase if applicable)
- 14. Project Closeout Total Value to be not less than 1% of Contract Sum
- a. Operation and Maintenance Manuals
- b. Warranties
- c. Project Record Documents
- d. Demonstration and Training
- 15. Allowance to be listed as last item on Schedule of Values
- vi. Provide breakdown of the Contract Sum in enough detail to facilitate continued evaluation of Applications for Payment.
- 1. Separate Sections of Schedule of Values Area/Floor Level/Phase.
- 2. Separate items by Labor and Material

# 1.5 APPLICATIONS FOR PAYMENT

- A. Submit Applications for Payment only after Schedule of Values have been approved.
- B. The first application for payment will not be made until the following conditions are met.
  - 1. P&P Bonds and Insurance are approved and Contract has been executed.
  - 2. Project specific safety plan has been submitted.
  - 3. Submittal schedule has been provided.
  - 4. Construction schedule has been provided.
- C. Preparation: Complete every entry to the CM through Procore.
  - 1. Entries shall match data of the approved Schedule of Values.
  - 2. Provide updated Prime Contractor Construction Schedule with each application, or as otherwise required per the Construction Documents.
  - 3. Include only amounts of fully executed Change Orders issued before last day of construction period covered by application.
  - 4. When Architect requires additional substantiating data, Prime Contractor shall

promptly submit suitable information, to avoid delays in processing.

- D. Initial Application for Payment: Administrative actions and submittals that must precede or coincide with submittal of first Application for Payment include the following:
  - 1. Approved Schedule of Values.
  - 2. List of Contractor's staff assignments and contact information.
  - 3. List of subcontractors.
  - 4. Contractor's 60-Day Construction Schedule.
  - 5. Schedule of submittals / data input into web-based submittal software.
  - 6. Certificates of insurance.
  - 7. Procurement of Performance and Payment bonds.
  - 8. Initial settlement survey and damage report if required.
- E. Each Application for Payment shall be consistent with previous applications and payments as certified by the Architect and Construction Manager as to the actual value of the Work, which is completed by the end of the covered period.
  - 1. Initial Application for Payment, Application for Payment at time of Substantial Completion, and final Application for Payment involve additional requirements.
- F. Application for Payment Times: By default, the date for each Application for Payment is the last business day of each month.
  - Provided that a complete and fully executed Application for Payment package is submitted on the (TBD) day of each month, the Owner will receive Applications certified by the CSArch by the (TBD) day of the next month.
  - 2. This date is a basis of cycle time and shall be confirmed and/or adjusted at the Pre-Construction Conference, based on the Owner's requirements for processing Applications for Payment.
  - 3. Payment by the Owner will be made no later than the end of following month, "net 30 days."
- G. DRAFT ("pencil") copies shall be submitted electronically to the Construction Site Representative and the Architect, the same day of each month, for the duration of the project. This day shall be established at the Pre-Construction Conference and updated monthly, based on the owner's requirements for processing Applications for Payment. This day may be modified from time to time to accommodate the owner's schedule of making payments.
  - 1. Reflect an accurate accounting of the Work completed and material stored at the time of the pencil copy submission. Projections of work anticipated to be completed or to be stored are not allowed.
  - 2. Based on review communication between the CM and Architect, each Prime

- Contractor shall adjust based on requested markups within three (3) business days.
- 3. Failure to comply with routine administrative requirements including but not limited to, submission of Contractor's Daily Reports, Weekly Toolbox Safety Talk Reports, monthly updating of Record Documents, or submitting T&M documentation within ten (10) days of occurrence, shall be grounds for refusal to review DRAFT Applications for Payment, until outstanding items are made current, to the satisfaction of the CM and/or Architect.
  - a. Any delays in review and processing of Applications for Payment for referenced reasons are the absolute responsibility of the Prime Contractor. Neither the Owner, CM or AE shall be burdened with additional/special efforts on behalf of the Prime Contractor's failure to follow protocols and may be required to submit the following month if window of opportunity is Lost.
- H. Final copies and all related supporting information shall be submitted electronically to CM through Procore, inclusive of the following documents:
  - 1. Application for Payment Voucher
    - a. Application for Payment (corrected per directions given).
    - b. Partial Waiver of Lien for previous cumulative payment(s) to Prime Contractor.
    - c. Partial and/or final Waivers of Lien for all subcontractors for whom work has been invoiced for on previous Application(s).
    - d. Partial and/or final Waivers of Lien for all major materials vendors, for whom materials have been invoiced for on previous Application(s).
    - e. Certified Payroll Reports and corresponding OSHA 10 training certification (running list) for all Prime Contractor's <u>and</u> subcontractor's employees of the Project, for the construction period covered by the previous Application.
- I. Application for Payment at Substantial Completion: After issuance of the Certificate of Substantial Completion, submit an Application for Payment showing 100 percent completion for portion of the Work claimed as substantially complete.
  - 1. Include documentation supporting claim that the Work is substantially complete and a statement showing an accounting of changes to the Contract Sum.
  - 2. This application shall reflect Certificates of Partial Substantial Completion issued previously for Owner occupancy of designated portions of the Work.
- 1. Final Application for Payment: Submit final Application for Payment with executed Waivers and supporting documentation not previously submitted and accepted,

including, but not limited, to the following:

- 1. Evidence of completion of Project closeout requirements.
- 2. Insurance certificates for products and completed operations where required and proof that taxes, fees, and similar obligations were paid.
- 3. Updated final statement, accounting for final changes to the Contract Sum.
- 4. AIA Document G706, "Contractor's Affidavit of Payment of Debts and Claims."
- 5. AIA Document G706A, "Contractor's Affidavit of Release of Liens."
- 6. AIA Document G707, "Consent of Surety to Final Payment."
- 7. Evidence that any claims have been settled.
- J. Full and Final Payment will not be made until the following have been supplied, approved, and accepted by the Owner and Architect.
  - 1. The required number of copies of all written guarantees, warranties, bonds, operating and maintenance manuals, and test results.
  - 2. Documentation that all verbal and written instructions and training sessions required by the Contract have been completed.
  - 3. The required number of copies of all Project Record ("as-built") Documents have been administered and/or received.
  - 4. All materials and equipment required as stock is delivered.
  - 5. Any other requirement of the Contract Documents which remains outstanding.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

# END OF SECTION 012900

## SECTION 017320 - SELECTIVE DEMOLITION

#### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

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

## 1.2 SUMMARY

- A. This Section includes the following:
  - 1. Demolition and removal of selected portions of building or structure.
  - 2. Demolition and removal of selected Site elements.
  - 3. Salvage of existing items to be reused or recycled.
- B. Related Sections include the following:
  - Division 01 Section 010000 General Conditions §1.18 for requirements on use of premises and Owner-occupancy requirements.
  - 2. Division 01 Section 013233 Photographic Documentation for preconstruction photographs taken before selective demolition operations.
  - Division 01 Section 010000 General Conditions §§1.4.3, 1.16, and 1.45, for disposal of demolished materials.
  - 4. Division 01 Section 010000 General Conditions §1.32 for cutting and patching procedures.

#### 1.3 DEFINITIONS

- A. Remove: Detach items from existing construction and legally dispose of them off-Site, unless indicated to be removed and salvaged or removed and reinstalled.
- B. Remove and Salvage: Detach items from existing construction and deliver them to Owner.
- C. Remove and Reinstall: Detach items from existing construction, prepare them for reuse, and reinstall them where indicated.
- D. Existing to Remain: Existing items of construction that are not to be removed and that are not otherwise indicated to be removed, removed and salvaged, or removed and reinstalled.

# 1.4 MATERIALS OWNERSHIP

A. Historic items, relics, and similar objects including, but not limited to, cornerstones and their contents, commemorative plaques and tablets, appliances, antiques, and other

items of interest or value to Owner that may be encountered during selective demolition shall remain Owner's property. Contractor shall carefully remove and salvage each item or object in a manner to prevent damage and deliver promptly to Owner.

1. Contractor shall coordinate with Architect/Engineer and Owner's consultants, if any, who will establish special procedures for removal and salvage.

## 1.5 SUBMITTALS

- A. Schedule of Selective Demolition Activities: Contractor shall indicate the following:
  - 1. Detailed sequence of selective demolition and removal Work, with starting and ending dates for each activity.
  - 2. Interruption of utility services. Indicate how long utility services will be interrupted.
  - 3. Coordination for shutoff, capping, and continuation of utility services.
  - 4. Use of elevator and stairs.
  - 5. Locations of proposed dust- and noise-control temporary partitions and means of egress.
  - 6. Coordination of Owner's continuing occupancy of portions of existing building and of Owner's partial occupancy of completed Work.
  - 7. Means of protection for items to remain and items in path of waste removal from building.
- B. Inventory: After selective demolition is complete, Contractor shall submit a list of items that have been removed and salvaged.
- C. Predemolition Photographs: Contractor shall show existing conditions of adjoining construction and Site improvements, including finish surfaces, that might be misconstrued as damage caused by selective demolition operations. Comply with Division 01 Section 013233 Photographic Documentation. Submit before Work begins.
  - 1. Disposal Records: Contractor shall provide:
    - a. Records of Donations: Indicate receipt and acceptance of salvageable waste donated to individuals and organizations. Indicate whether organization is tax exempt.
    - b. Records of Sales: Indicate receipt and acceptance of salvageable waste sold to individuals and organizations. Indicate whether organization is tax exempt.
    - c. Recycling and Processing Facility Records: Indicate receipt and acceptance of recyclable waste by recycling and processing facilities licensed to accept them. Include manifests, weight tickets, receipts, and invoices.
    - d. Landfill and Incinerator Disposal Records: Indicate receipt and acceptance of waste, including but not limited to hazardous waste, by landfills and incinerator facilities licensed to accept them. Include manifests, weight tickets, receipts, and invoices.
    - e. Statement of Refrigerant Recovery: Signed by refrigerant recovery technician responsible for recovering refrigerant, stating that all refrigerant that was present was recovered and that recovery was performed according

to EPA regulations. Include name and address of technician and date refrigerant was recovered.

## 1.6 QUALITY ASSURANCE

- A. Demolition Firm Qualifications: An experienced firm that has specialized in demolition Work similar in material and extent to that indicated for this Project.
- B. Refrigerant Recovery Technician Qualifications: Certified by an EPA-approved certification program.
- C. Regulatory Requirements: Comply with governing EPA notification regulations before beginning selective demolition. Comply with hauling and disposal regulations of authorities having jurisdiction.
- D. Standards: Comply with current versions of ANSI A10.6 and NFPA 241.
- E. Predemolition Conference: Conduct conference at Project Site to comply with requirements in Division 01 Section 013100 Project Management and Coordination.
- F. Predemolition Conference: Conduct conference at Project Site to comply with requirements in Division 01 Section 013100 Project Management and Coordination. Review methods and procedures related to selective demolition including, but not limited to, the following:
  - 1. Inspect and discuss condition of construction to be selectively demolished.
  - 2. Review structural load limitations of existing structure.
  - Review and finalize selective demolition schedule and verify availability of materials, demolition personnel, equipment, and facilities needed to make progress and avoid delays.
  - 4. Review requirements of Work performed by other trades that rely on substrates exposed by selective demolition operations.
  - 5. Review areas where existing construction is to remain and requires protection.

## 1.7 PROJECT CONDITIONS

- A. Owner will occupy portions of building immediately adjacent to selective demolition area. Conduct selective demolition so Owner's operations will not be disrupted.
  - 1. Comply with requirements specified in Division 01 Section 011000 Summary of Work.
- B. Conditions existing at time of inspection for bidding purpose will be maintained by Owner as far as practical.
  - 1. Before selective demolition, Owner will remove the following items, if present:
    - a. Furniture
    - b. Office Equipment
    - c. Safe
    - d. Food Service Equipment
    - e. ATM (Automatic Teller Machine)

- C. Contractor shall notify Architect/Engineer of discrepancies between existing conditions and Drawings before proceeding with selective demolition.
- D. Hazardous Materials: Hazardous materials are present in construction to be selectively demolished. A report on the presence of hazardous materials is on file for review and use. Contractor shall examine report to become aware of locations where hazardous materials are present.
  - 1. Hazardous material remediation is specified elsewhere in the Contract Documents.
  - 2. Do not disturb hazardous materials or items suspected of containing hazardous materials except under procedures specified elsewhere in the Contract Documents.
- E. Contractor's storage or sale of removed items or materials on-Site is not permitted.
- F. Utility Service: Contractor shall maintain existing utilities indicated to remain in service and protect them against damage during selective demolition operations.
  - 1. Maintain fire-protection facilities in service during selective demolition operations.

#### 1.8 WARRANTY

A. Existing Warranties: Contractor shall remove, replace, patch, and repair materials and surfaces cut or damaged during selective demolition, by methods and with materials so as not to void existing warranties.

PART 2 - PRODUCTS (Not Used)

#### PART 3 - EXECUTION

#### 3.1 EXAMINATION

- A. Contractor shall verify that utilities have been disconnected and capped.
- B. Contractor shall survey existing conditions and correlate with requirements indicated to determine extent of selective demolition required.
- C. Contractor shall inventory and record the condition of items to be removed and reinstalled and items to be removed and salvaged.
- D. When unanticipated mechanical, electrical, or structural elements that conflict with intended function or design are encountered, Contractor shall investigate and measure the nature and extent of conflict. Promptly submit a written report to Architect/Engineer.
- E. Contractor shall engage a professional engineer to survey condition of building to determine whether removing any element might result in structural deficiency or unplanned collapse of any portion of structure or adjacent structures during selective demolition operations.

- F. Survey of Existing Conditions: Contractor shall record existing conditions by use of preconstruction photographs.
  - Comply with requirements specified in Division 01 Section 013233 Photographic Documentation.
  - 2. Before selective demolition or removal of existing building elements that will be reproduced or duplicated in final Work, make permanent record of measurements, materials, and construction details required to make exact reproduction.
- G. Contractor shall perform surveys as the Work progresses to detect hazards resulting from selective demolition activities.

#### 3.2 UTILITY SERVICES AND MECHANICAL/ELECTRICAL SYSTEMS

- A. Existing Services/Systems: Contractor shall maintain services/systems indicated to remain and protect them against damage during selective demolition operations.
  - 1. Comply with requirements for existing services/systems interruptions specified in Division 01 Section 010100 Summary of Work.
- B. Service/System Requirements: Contractor shall locate, identify, disconnect, and seal or cap off indicated utility services and mechanical/electrical systems serving areas to be selectively demolished.
  - 1. Owner will arrange to shut off indicated services/systems when requested by Contractor.
  - 2. Arrange to shut off indicated utilities with utility companies.
  - If services/systems are required to be removed, relocated, or abandoned, before
    proceeding with selective demolition provide temporary services/systems that bypass
    area of selective demolition and that maintain continuity of services/systems to other
    parts of building.
  - 4. Cut off pipe or conduit in walls or partitions to be removed. Cap, valve, or plug and seal remaining portion of pipe or conduit after bypassing.
    - a. Where entire wall is to be removed, existing services/systems may be removed with removal of the wall.

#### 3.3 PREPARATION

- A. Site Access and Temporary Controls: Contractor shall conduct selective demolition and debrisremoval operations to ensure minimum interference with roads, streets, walks, walkways, and other adjacent occupied and used facilities.
  - Comply with requirements for access and protection specified in Division 01 Section 015000 - Temporary Facilities and Controls.
- B. Temporary Facilities: Contractor shall provide temporary barricades and other protection required to prevent injury to people and damage to adjacent buildings and facilities to remain.

- 1. Provide protection to ensure safe passage of people around selective demolition area and to and from occupied portions of building.
- 2. Provide temporary weather protection, during interval between selective demolition of existing construction on exterior surfaces and new construction, to prevent water leakage and damage to structure and interior areas.
- 3. Protect walls, ceilings, floors, and other existing finish Work that are to remain or that are exposed during selective demolition operations.
- 4. Cover and protect furniture, furnishings, and equipment that have not been removed.
- 5. Comply with requirements for temporary enclosures, dust control, heating, and cooling specified in Division 01 Section 015000 Temporary Facilities and Controls.
- C. Temporary Shoring: Contractor shall provide and maintain shoring, bracing, and structural supports as required to preserve stability and prevent movement, settlement, or collapse of construction and finishes to remain, and to prevent unexpected or uncontrolled movement or collapse of construction being demolished.
  - Strengthen or add new supports when required during progress of selective demolition.

#### 3.4 SELECTIVE DEMOLITION, GENERAL

- A. General: Contractor shall demolish and remove existing construction only to the extent required by new construction and as indicated. Use methods required to complete the Work within limitations of governing regulations and as follows:
  - 1. Proceed with selective demolition systematically, from higher to lower level. Complete selective demolition operations above each floor or tier before disturbing supporting members on the next lower level.
  - Neatly cut openings and holes plumb, square, and true to dimensions required. Use cutting methods least likely to damage construction to remain or adjoining construction. Use hand tools or small power tools designed for sawing or grinding, not hammering and chopping, to minimize disturbance of adjacent surfaces. Temporarily cover openings to remain.
  - 3. Cut or drill from the exposed or finished side into concealed surfaces to avoid marring existing finished surfaces.
  - 4. Do not use cutting torches until Work area is cleared of flammable materials. At concealed spaces, such as duct and pipe interiors, verify condition and contents of hidden space before starting flame-cutting operations. Maintain fire watch and portable fire-suppression devices during flame-cutting operations.
  - 5. Maintain adequate ventilation when using cutting torches.
  - 6. Remove decayed, vermin-infested, or otherwise dangerous or unsuitable materials and promptly dispose of off-Site.
  - 7. Remove structural framing members and lower to ground by method suitable to avoid free fall and to prevent ground impact or dust generation.

- 8. Locate selective demolition equipment and remove debris and materials so as not to impose excessive loads on supporting walls, floors, or framing.
- 9. Dispose of demolished items and materials promptly.
- B. Reuse of Building Elements: Project has been designed to result in end-of-Project rates for reuse of building elements as follows. Do not demolish building elements beyond what is indicated on Drawings without Architect/Engineer's approval.
  - 1. Building Structure and Shell: N/A.
  - 2. Nonshell Elements: 50 percent.
- C. For Removed and Salvaged Items, Contractor shall:
  - 1. Clean salvaged items.
  - 2. Pack or crate items after cleaning. Identify contents of containers.
  - 3. Store items in a secure area until delivery to Owner.
- D. For Removed and Reinstalled Items, Contractor shall:
  - 1. Clean and repair items to functional condition adequate for intended reuse. Paint equipment to match new equipment.
  - 2. Pack or crate items after cleaning and repairing. Identify contents of containers.
  - 3. Protect items from damage during transport and storage.
  - 4. Reinstall items in locations indicated. Comply with installation requirements for new materials and equipment. Provide connections, supports, and miscellaneous materials necessary to make item functional for use indicated.
- E. For Existing Items to Remain: Contractor shall protect construction indicated to remain against damage and soiling during selective demolition. When permitted by Architect/Engineer, items may be removed to a suitable, protected storage location during selective demolition and cleaned and reinstalled in their original locations after selective demolition operations are complete.

#### 3.5 SELECTIVE DEMOLITION PROCEDURES FOR SPECIFIC MATERIALS

- A. Concrete: Demolish in small sections. Cut concrete to a depth of at least 3/4 inch (19 mm) at junctures with construction to remain, using power-driven saw. Dislodge concrete from reinforcement at perimeter of areas being demolished, cut reinforcement, and then remove remainder of concrete indicated for selective demolition. Neatly trim openings to dimensions indicated.
- B. Concrete: Demolish in sections. Cut concrete full depth at junctures with construction to remain and at regular intervals, using power-driven saw, then remove concrete between saw cuts.
- C. Masonry: Demolish in small sections. Cut masonry at junctures with construction to remain, using power-driven saw, then remove masonry between saw cuts.
- D. Concrete Slabs-on-Grade: Saw-cut perimeter of area to be demolished, then break up and remove.

- E. Resilient Floor Coverings: Remove floor coverings and adhesive according to recommendations in RFCI-WP and its Addendum.
  - Remove residual adhesive and prepare substrate for new floor coverings by one of the methods recommended by RFCI.
- F. Air-Conditioning Equipment: Remove equipment without releasing refrigerants.

#### 3.6 DISPOSAL OF DEMOLISHED MATERIALS

- A. General: Except for items or materials indicated to be recycled, reused, salvaged, reinstalled, or otherwise indicated to remain Owner's property, Contractor shall remove demolished materials from Project Site and legally dispose of them in an EPA-approved landfill.
  - 1. Do not allow demolished materials to accumulate on-Site.
  - Remove and transport debris in a manner that will prevent spillage on adjacent surfaces and areas.
  - 3. Remove debris from elevated portions of building by chute, hoist, or other device that will convey debris to grade level in a controlled descent.
  - 4. Comply with requirements specified in Division 01 Section 010000 General Conditions §§1.4.3, 1.16, and 1.45, for disposal of demolished materials.
- B. Burning: Contractor shall not burn demolished materials.
- C. Disposal on Owner's property: At Owner's sole discretion and instruction, Contractor shall transport demolished materials and legally dispose of at designated spoil areas on Owner's property.
- D. Off-Site Disposal: Contractor shall transport demolished materials off Owner's property and legally dispose of them.

#### 3.7 CLEANING

A. Contractor shall clean adjacent structures and improvements of dust, dirt, and debris caused by selective demolition operations. Return adjacent areas to condition existing before selective demolition operations began.

#### 3.8 SELECTIVE DEMOLITION SCHEDULE

A. Refer to Drawings.

END OF SECTION 017320

#### SECTION 083113 - ACCESS DOORS AND FRAMES

#### PART 1 - GENERAL

#### 1.01 SUMMARY

- A. Flush access doors and frames for plumbing chase walls.
- B. Recessed drywall panel access doors for ceilings.

#### 1.02 SUBMITTALS

- A. Product Data: For each type of access door and frame indicated.
- B. Shop Drawings: Include plans, elevations, sections, details, and attachments to other work.
- C. Samples: For each door face material in specified finish.
- D. Schedule: Types, locations, sizes, latching or locking provisions, and other data pertinent to installation.

#### 1.03 QUALITY ASSURANCE

- A. Fire-Rated Access Doors and Frames: Units complying with NFPA 80 that are identical to assemblies tested for fire-test-response characteristics per the following test method and that are listed and labeled by UL or another testing and inspecting agency acceptable to authorities having jurisdiction:
  - 1. UL 10B for vertical access doors and frames.

#### 1.04 COORDINATION

- A. If retaining this Article, also retain "Schedule" Paragraph in "Submittals" Article.
- B. Verification: Determine specific locations and sizes for access doors needed to gain access to concealed plumbing, mechanical, or other concealed work, and indicate in the schedule specified in "Submittals" Article.

#### PART 2 - PRODUCTS

#### 2.01 STEEL MATERIALS

A. Manufacturer's standard finish – No. 4 Stainless Steel Satin Finish.

#### 2.02 ACCESS DOORS AND FRAMES FOR WALLS AND CEILINGS

- A. Available Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
- B. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
  - 1. Acudor Products, Inc.
  - 2. Babcock-Davis; A Cierra Products Co.
  - 3. Karp Associates, Inc.
  - 4. Larsen's Manufacturing Company.
  - 5. MIFAB, Inc.
- Flush Access Doors and Frames with Exposed Trim: Fabricated from metallic-coated steel sheet.
  - 1. Locations: Plumbing chase walls.
  - 2. Door: Minimum 14 gage thick sheet metal.
  - 3. Frame: Minimum 16 gage.
  - 4. Hinges: Continuous concealed hinge.
  - 5. Latch: Stainless steel screwdriver operated cam latch.
  - 6. Lock: Cylinder.
  - 7. Basis of Design: Acudor UF-5000 10" x 10".
- D. Recessed 5/8" Drywall panel access door
  - 1. Locations: Ceiling access doors.
  - 2. Door: Minimum 22 gage with satin coat.
  - 3. Frame: Minimum 22 gage with satin coat.
  - 4. Hinges: Concealed hinge.
  - 5. Latch: Slotted screwdriver operated cam latch.
  - 6. Lock: Cylinder lock and key.
  - 7. Door Recess: 5/8" to accept 5/8" drywall
  - 8. Basis of Design: Acudor DW-5015 10" x 10" recessed access door.

#### 2.03 FABRICATION

- A. General: Provide access door and frame assemblies manufactured as integral units ready for installation.
- B. Metal Surfaces: For metal surfaces exposed to view, provide materials with smooth, flat surfaces without blemishes.

- C. Doors and Frames: Grind exposed welds smooth and flush with adjacent surfaces. Furnish attachment devices and fasteners of type required to secure access panels to types of supports indicated.
- D. Recessed Access Doors: Form face of panel to provide recess for application of applied finish. Reinforce panel as required to prevent buckling.
- E. Latching Mechanisms: Furnish number required to hold doors in flush, smooth plane when closed.
  - 1. For cylinder lock, furnish two keys per lock and key all locks alike.
  - 2. For recessed panel doors, provide access sleeves for each locking device. Furnish plastic grommets and install in holes cut through finish.
- F. Extruded Aluminum: After fabrication, apply manufacturer's standard protective coating on aluminum that will come in contact with concrete.

#### PART 3 - EXECUTION

#### 3.01 INSTALLATION

- A. Comply with manufacturer's written instructions for installing access doors and frames.
- B. Set frames accurately in position and attach securely to supports with plane of face panels aligned with adjacent finish surfaces.
- C. Install doors flush with adjacent finish surfaces or recessed to receive finish material.

#### 3.02 ADJUSTING AND CLEANING

- A. Adjust doors and hardware after installation for proper operation.
- B. Remove and replace doors and frames that are warped, bowed, or otherwise damaged.

#### END OF SECTION 083113

#### SECTION 084313 - HEAVY WALL TUBE ALUMINUM-FRAMED STOREFRONTS

#### PART 1- GENERAL

#### 1.1 SECTION INCLUDES

A. Heavy wall tube aluminum-framed storefront systems.

#### 1.2 RELATED SECTIONS

- A. Section 079000 Joint Sealers (Joint Protection).
- B. Section 088000 Glazing.

#### 1.3 REFERENCES

- A. ASTM B 221 Aluminum-Alloy Extruded Bars, Rods, Wire, Profiles, and Tubes.
- B. ASTM D 1667 Flexible Cellular Materials Vinyl Chloride Polymers and Copolymers (Closed-Cell Form).
- C. ASTM D 2000 Classification System for Rubber Products in Automotive Applications.
- D. ASTM D 6670-01 Standard Practice for Full-Scale Chamber Determination of Volatile Organic Emissions from Indoor Materials/Products.

#### 1.4 DESIGN AND PERFORMANCE REQUIREMENTS

- A. General: Provide framing systems that comply with specified design and performance requirements, based on testing of current products.
- B. Thermal Movement: Design framing systems to provide for expansion and contraction of component materials.
- C. Indoor air quality testing per ASTM D 6670-01: GREENGUARD Environmental Institute Certified including GREENGUARD for Children and Schools Certification.

#### 1.5 SUBMITTALS

- A. Comply with Division 1 Submittal Procedures.
- B. Product Data: Submit manufacturer's product data, including description of materials, components, fabrication, finish, and installation.
- C. Shop Drawings: Submit manufacturer's shop drawings, including elevations, sections, and details, indicating dimensions, tolerances, materials, fabrication, framing, glazing,

and finish.

#### D. Samples:

- Submit manufacturer's samples of storefront systems showing framing, glazing, and finish.
- 2. Color: Submit manufacturer's samples of standard finishes for framing.
- E. Manufacturer's Project References: Submit list of successfully completed entrance system projects, including project name and location, name of architect, and type and quantity of entrance systems installed.
- F. Maintenance Manual: Submit manufacturer's maintenance and cleaning instructions for storefront systems.
- G. Warranty: Submit manufacturer's standard warranty.

#### 1.6 QUALITY ASSURANCE

- A. Manufacturer's Qualifications:
  - 1. Continuously engaged in manufacturing of doors of similar type to that specified, with a minimum of 25 years successful experience.
  - 2. Door and frame components from same manufacturer.
  - 3. Evidence of a compliant documented quality management system.

#### 1.7 DELIVERY, STORAGE, AND HANDLING

- A. Delivery: Deliver materials to site in manufacturer's original, unopened containers and packaging, with labels clearly identifying model and manufacturer.
- B. Storage:
  - 1. Store materials in clean, dry area indoors in accordance with manufacturer's instructions.
  - 2. Stack framing members to prevent bending and other damage.
- C. Handling: Protect materials and finish from damage during handling and installation.

#### 1.8 WARRANTY

- A. Warrant framing against failure in materials and workmanship, including excessive deflection and deterioration of finish or construction in excess of normal weathering.
- B. Warranty Period: Ten years starting on date of shipment.

#### PART 2- PRODUCTS

#### 2.1 MANUFACTURER

A. Special-Lite, Inc., PO Box 6, Decatur, Michigan 49045. Toll Free (800) 821-6531. Phone (269) 423-7068. Fax (800) 423-7610. Web Site www.special-lite.com. E-Mail info@special-lite.com.

#### 2.2 ALUMINUM TUBE FRAME SYSTEMS

- A. Model: SL-260 aluminum framing system.
- B. Framing:
  - 1. Size: 2 inches by 6 inches.
  - 2. Material: Aluminum extrusions, ASTM B 221, Alloy 6063-T5.
  - 3. Jambs, Mullions, Sills, Horizontal Intermediates, and Headers: 0.125-inch wall thickness.
  - 4. Lock Jambs, Hinge Jambs, and Door Headers: 0.125-inch wall thickness.
- C. Doors: As specified in Section 081116.
- D. Fasteners:
  - 1. Material: Aluminum, 18-8 stainless steel, or other noncorrosive metal.
  - 2. Compatibility: Compatible with items to be fastened.
  - 3. Exposed Fasteners: Screws with finish matching items to be fastened.
- E. Glazing Gaskets: Gaskets installed in captive assembly of glazing stops.
  - 1. EPDM: ASTM D 2000.
  - Closed-Cell Foam: ASTM D 1667.

#### 2.3 DOOR PERIMETER FRAMING

- A. Tubular Framing:
  - 1. Size and Type: As indicated on the Drawings.
  - 2. Material: Aluminum Alloy 6063-T5, 0.125-inch minimum wall thickness tube.
  - 3. Perimeter Frame Members:
    - a. Box type with 4 enclosed sides.

- b. Factory fabricated.
- c. Open-back framing is not acceptable.

#### 4. Applied Door Stops:

- a. 0.625-inch high, with screws and weatherstripping.
- b. Pressure gasketing for weathering seal.
- c. Counterpunch fastener holes in door stop to preserve full-metal thickness under fastener head.
- 5. Caulking: Caulk joints before assembling frame members.
- 6. Joints:
  - a. Secure joints with fasteners.
  - b. Provide hairline butt joint appearance.

#### 7. Hardware:

- a. Premachine and reinforce frame members for hardware in accordance with manufacturer's standards and door hardware schedule.
- b. Factory install door hardware.

#### 8. Anchors:

- a. Anchors appropriate for wall conditions to anchor framing to wall materials.
- b. Door Jamb and Header Mounting Holes: Maximum of 24-inch centers.
- c. Secure head and sill members of transom, side lites, and similar conditions.

#### 2.4 FABRICATION

- A. Sizes and Profiles: Required sizes for frame units and profile requirements shall be as specified and as indicated on the Drawings.
- B. Coordination of Fabrication: Field measure before fabrication and show recorded measurements on shop drawings.
- C. Assembly:
  - 1. Complete cutting, fitting, forming, drilling, and grinding of metal before assembly.
  - 2. Remove burrs from cut edges.
- D. Welding: Welding of framing is not acceptable.

#### E. Fit:

- 1. Maintain continuity of line and accurate relation of planes and angles.
- 2. Secure attachments and support at mechanical joints with hairline fit at

contacting members.

- F. Fasteners: Conceal fasteners wherever possible.
- G. Sealant: Silicone sealant as specified in Section 07900 (07 90 00).

#### 2.5 ALUMINUM FINISHES

A. Anodized Finish: To be selected by Owner from manufacturer's standard range.

#### PART 3- EXECUTION

#### 3.1 EXAMINATION

A. Examine areas to receive framing systems. Notify Architect of conditions that would adversely affect installation or subsequent use. Do not proceed with installation until unsatisfactory conditions are corrected.

#### 3.2 PREPARATION

A. Ensure openings to receive framing systems are plumb, level, square, and in tolerance.

#### 3.3 INSTALLATION

- A. Install framing systems in accordance with manufacturer's instructions.
- B. Install framing systems plumb, level, square, true to line, and weathertight, without warp or rack.
- C. Install doors as specified in Section 081116.
- D. Anchor framing securely in place.
- E. Tolerances: Install framing systems in accordance with the following tolerances:
  - 1. Variation from Plane: Do not exceed 1/8 inch in 12 feet of length or 1/4 inch in any total length.
  - 2. Offset from Alignment: Maximum offset from true alignment between 2 identical members abutting end to end in line shall not exceed 1/16 inch.
  - 3. Diagonal Measurements: Maximum difference in diagonal measurements shall not exceed 1/8 inch.
  - 4. Offset at Corners: Maximum out-of-plane offset of framing at corners shall not exceed 1/32 inch.
- F. Separate aluminum from other metal surfaces with bituminous coatings or other means

approved by Architect.

- G. Set sills, door thresholds, and other members in bed of sealant or with joint fillers or gaskets to provide weathertight construction. Comply with Section 079000.
- H. Install sill flashing to make frame watertight at sill.
- Glass: Install glass indicated to be glazed into framing, and not preglazed, as specified in Section 088000.
- J. Repair minor damages to finish in accordance with manufacturer's instructions and as approved by Architect.
- K. Remove and replace damaged components that cannot be successfully repaired as determined by Architect.

#### 3.4 FIELD QUALITY CONTROL

A. Manufacturer's Field Services: Manufacturer's representative shall provide technical assistance and guidance for installation of framing systems.

#### 3.5 CLEANING

- A. Clean framing systems promptly after installation in accordance with manufacturer's instructions.
- B. Do not use harsh cleaning materials or methods that would damage glazing or finish.

#### 3.6 PROTECTION

A. Protect installed framing systems to ensure that, except for normal weathering, framing systems will be without damage or deterioration at time of substantial completion.

**END OF SECTION 084313** 

#### SECTION 230000 - MECHANICAL SUMMARY OF WORK

#### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

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

#### 1.2 SUMMARY

- A. This Section includes the following:
  - a. Work covered under Mechanical Contract.
  - b. Work under other contracts.
  - c. Use of premises.
  - d. Owner's occupancy requirements.
  - e. Specification formats and conventions.
- B. Related Sections include the following:
  - a. Division 23 Sections.
  - b. 010100 Summary of Work.

#### 1.3 WORK COVERED UNDER MECHANICAL CONTRACT

A. Provide all labor, materials, tools, machinery, equipment, and services necessary to complete the mechanical work under this contract. The mechanical units and DDC system will be procured by the owner through a Trane cooperative contract. All systems and equipment shall be complete in every aspect and all items of material, equipment, and labor shall be provided for a fully operational system. Coordinate the work with work of other trades so as to resolve conflicts without impeding job progress. The mechanical work includes the following:

#### B. MECHANICAL

- 1. The mechanical contractor shall furnish all labor, materials, rigging, appliances, tools and accessories required for providing, installing, connecting and testing the new mechanical system, associated work, controls, etc., in accordance with these specifications and the applicable drawings. The mechanical contractor shall install and connect the owner provided mechanical units, through the Trane cooperative contract, completely including ductwork, dampers, valves, etc. The work includes:
  - a. Remove existing HV/HVAC mechanical equipment as shown on the drawings, complete with associated ductwork, air inlets/outlets, dampers, louvers, piping, valves, insulation, supports, thermostats, electricals, controls, etc.
  - b. Remove existing HVAC units, complete with existing insulation, ductwork, outlets, supports, electrical, controls, thermostats, etc.

- c. Remove existing exhaust fans, roof vents, etc., complete with existing roof curbs, ductwork, air inlets/outlets, supports, electrical, controls, etc.
- d. Remove existing ductwork and air inlets/outlets as called out on plans, complete existing dampers, insulation, supports, etc.
- e. Remove existing piping as called out on the drawings, complete with existing insulation, valves, supports, etc.
- f. Removed all existing controls and wiring associated with demolished mechanical equipment, thermostats, etc.
- g. Remove existing controls on existing mechanical/HV/HVAC units throughout entire school as indicated on the drawings, complete with associated controls, control valves, actuators, thermostats, sensors, etc.
- h. Remove all demolished equipment and debris from the site in accordance with all State and Local regulations.
- Coordinate all removals as further scheduled on the drawings so as not to interfere with Owner's use of the building.
- j. Install new DOAS packaged rooftop unit as scheduled on the drawings, complete with spring vibration isolation roof curb, supports, VFD's, ductwork, gas piping, insulation of all ductwork, air outlets/ inlets, dampers, DDC controllers, etc. for a complete and operational system
- k. Install new HV/HVAC mechanical equipment as scheduled on the plans, complete with new ductwork, piping, insulation, DDC controllers, electrical, etc. for a complete and operational system.
- I. Furnish and install the three (3) BARD units associated with the server room 109. These units shall include standalone controls per the contract documents, and be connected to the new BMS for monitoring.
- m. Install new DX split/heat pump DOAS system with indoor/outdoor units as scheduled on the drawings, complete with roof support curbs, supports, fresh air intake ductwork (where indicated on the drawings), refrigerant piping, condensate drain piping, condensate pumps, insulation of all piping/ductwork, valves, gauges, controls, sensors, etc. for a complete and operational system.
- n. Contractor to note that, hoisting/rigging work needs to be performed after school hours or on a weekend. Coordinate schedule with Owner.
- o. Install new HVAC equipment, complete with piping, valves, insulation, supports, wiring, thermostats, electrical, DDC controllers, etc. for a complete and operational system. Unit color to be selected by the owner.
- Install exhaust fans complete with supports, vibration isolators, acoustical housing, fan switch, interlock wiring, backdraft dampers, etc. for a complete and operational system

- q. Furnish and install new fin-tube radiator, complete with piping, valves, insulation, supports, wiring, thermostats, disconnect switches, DDC controls, etc. for a complete and operational system. Color to be selected by the owner.
- r. Install new exhaust fans complete with supports, vibration isolators, fan switch, interlock wiring, backdraft dampers, etc. for a complete and operational system.
- s. All electrical work associated with new HV/HVAC system shall be performed by the Electrical Subcontractor. Refer to electrical drawings and Division 26 specification sections for information.
- t. Refer to specification section 010100 Summary of Work for DDC system contract work.
- u. All electrical power supply work required for new DDC system shall be performed by the Electrical subcontractor. All low-voltage power supply and wiring work required for new DDC system shall be performed by the DDC control subcontractor.
- v. Furnish and install new supply, return, exhaust and outdoor air ductwork as indicated on the drawings. All ductwork shall be galvanized steel construction.
- w. All new supply, return, exhaust and outdoor air ductwork shall be internally or externally insulated as indicated on drawings. All internally lined ductwork shall be provided with IAQ liner.
- x. Provide high-efficiency electric motors for all new units.
- y. Furnish and install motorized dampers, volume dampers.
- z. Furnish and install fire dampers of suitable rating at all duct penetrations through all rated partitions (walls/slab), whether indicated on the drawings or not. Furnish and install smoke and fire/smoke damper of suitable rating where required. EC shall power the detector and FA contractor shall connect to the fire alarm system.
- Furnish and install flexible duct connectors at all duct connections to all HV/HVAC units.
- bb. Provide fire stopping for all duct and piping penetrations through rated walls/slabs with pipe escutcheons
- cc. Furnish and install supply and return piping, complete with manual shut-off/temperature balancing valves, check valves, control valves, temperature gauges, union connections, insulation, etc. for a complete operating system. Provide manual isolation valve (on supply) and manual balancing valve (on return) for each terminal unit connection.
- dd. Provide automatic and manual air vents at the top of piping risers/headers, at high points in the system.
- ee. All cutting, patching and alteration work shall be performed.

- ff. Furnish and install all ancillary equipment needed for a complete and proper installation including, but not limited to anchors, hangers, expansion loops, fittings, strainers, valves, unions, etc.
- gg. All ductwork shall be properly fabricated, installed and supported as per SMACNA and ASHRAE guidelines
- hh. Contractor to perform testing, adjusting and balancing (TAB) of the entire HV/HVAC system shown on the drawings, including all new HV/HVAC units, air and water side distributions, air outlets/inlets, etc. **Submit four (4) sets of air and unit TAB reports for review.**
- ii. Provide testing, commissioning and start-up reports for all new mechanical/HV system installed in this project.
- jj. The entire new piping system shall be hydrostatically tested for a minimum of two (2) hours at a minimum of 150 psig or 1.5 times the working pressure, whichever is higher. Submit four (4) sets of pressure testing report for review.
- kk. Submit six (6) sets of shop drawings of all equipments, sheet metal standards, piping standards, equipment layout, detailed duct and piping layouts, air inlets, supports, DDC controls, electrical, wiring diagram, etc.
- II. Contractor to prepare as-built drawings of the entire mechanical/HV system. Submit four (4) sets of Operation and Maintenance Manuals.
- mm. Contractor to perform testing, adjusting and balancing (TAB) of the entire HVAC/HV/Mechanical system, including all new rooftop units, air side distribution, air outlets/inlets, water side distribution, finned tube elements/baseboards, etc. TAB on new rooftop units shall include detailed performance verification (cooling capacity, heating capacity, individual pressure drops, amp readings, CFM's, etc.) which will need to be done during respective cooling, heating, and transitional seasons. Submit four (4) sets of air, water and unit TAB reports for review.
- nn. Detailed Performance Testing, Adjusting and Balancing (TAB) shall be done during the respective season for the units, during the summer season for cooling mode, during winter for heating mode, and during fall/spring for free cooling mode.
- oo. Provide color coded identification tags, identification markers and equipment tags for all equipment including RTU, HVAC units, fans, ductwork, piping, valves, control valves, etc.
- pp. Warranty: The entire system shall be warranted for a period of <u>two (2)</u> complete years from the date of acceptance by the owner, including all materials and labor components.
- qq. **Commissioning:** The following is the commissioning scope of work for this project:
  - There will not be a separate commissioning agent on this project. The engineer will oversee the commissioning process. The mechanical contractor shall compile all the below reports and data and submit to the engineer for review.
  - 2. Submittals/Shop Drawings shall include detailed start up procedures.

- 3. All equipment shall be factory tested before being shipped to project site.
- 4. Perform functional performance test (FPT) of all HV/HVAC systems and equipment. Submit FPT Reports.
- 5. Provide detailed Start-Up Reports.
- 6. Trending: The building control system/energy management system, shall be monitored for the first year by the Controls Contractor, as well as by the Owner/Owner designated team for proper operation to optimize energy performance without compromising the comfort conditions.
- 7. The contractor shall certify in writing that the entire work was completed and systems are operational according to the contract documents, including calibration of instrumentation and controls.
- 8. Schedule, witness and document tests, inspections and systems startup. Inform architect/engineer sufficiently in advance to enable them to witness startup.
- 9. Perform testing, adjusting and balancing of all airside, waterside, and units/systems.
- 10. Compile test data, inspection reports and certificates and include them in the Systems Manual and Commissioning Report.
- 11. Certify date of acceptance and startup for each item of equipment for start of warranty periods.
- 12. Prepare as-built drawings. Submit four (4) sets of each, along with two (2) CD's (for drawings).
- 13. Conduct Operation and Maintenance Training Programs, to be provided by qualified instructors for all HV/HVAC systems and equipment. Videotape and edit training sessions. Submit two (2) videotapes for Owners future use and reference.
- 14. Submit six (6) sets of all documents.

#### 1.4 WORK UNDER OTHER CONTRACTS

A. General: Cooperate fully with separate contractors so work on those contracts may be carried out smoothly, without interfering with or delaying work under this Contract. Coordinate the Work of this Contract with work performed under separate contracts.

#### 1.5 USE OF PREMISES

- A. General: Each Contractor shall have limited use of premises for construction operations as indicated on Drawings by the Contract limits.
- B. Use of Site: Limit use of premises to work in areas indicated. Do not disturb portions of Project site beyond areas in which the Work is indicated.

- a. Owner Occupancy: Allow for Owner occupancy of Project site and use by the public.
- b. Driveways and Entrances: Keep driveways parking garage, loading areas, and entrances serving premises clear and available to Owner, Owner's employees, and emergency vehicles at all times. Do not use these areas for parking or storage of materials.
  - a. Schedule deliveries to minimize use of driveways and entrances.
  - b. Schedule deliveries to minimize space and time requirements for storage of materials and equipment on-site.
- C. Use of Existing Building: Maintain existing building in a weather tight condition throughout construction period. Repair damage caused by construction operations. Protect building and its occupants during construction period.

#### 1.6 OWNER'S OCCUPANCY REQUIREMENTS

- A. Partial Owner Occupancy: Owner will occupy the premises during entire construction period, with the exception of areas under construction. Cooperate with Owner during construction operations to minimize conflicts and facilitate Owner usage. Perform the Work so as not to interfere with Owner's operations. Maintain existing exits, unless otherwise indicated.
  - a. Maintain access to existing walkways, corridors, and other adjacent occupied or used facilities. Do not close or obstruct walkways, corridors, or other occupied or used facilities without written permission from Owner and authorities having jurisdiction.
  - b. Provide not less than 72 hours' notice to Owner of activities that will affect Owner's operations.
- B. Owner Occupancy of Completed Areas of Construction: Owner reserves the right to occupy and to place and install equipment in completed areas of building, before Substantial Completion, provided such occupancy does not interfere with completion of the Work. Such placement of equipment and partial occupancy shall not constitute acceptance of the total Work.
  - a. Architect will prepare a Certificate of Substantial Completion for each specific portion of the Work to be occupied before Owner occupancy.
  - b. Obtain a Certificate of Occupancy from authorities having jurisdiction before Owner occupancy.
  - c. Before partial Owner occupancy, mechanical and electrical systems shall be fully operational, and required tests and inspections shall be successfully completed.

#### 1.7 SPECIFICATION FORMATS AND CONVENTIONS

- A. Specification Format: The Specifications are organized into Divisions and Sections using the CSI/CSC's "MasterFormat" numbering system.
  - a. Section Identification: The Specifications use Section numbers and titles to help cross-referencing in the Contract Documents. Sections in the Project Manual are in numeric sequence; however, the sequence is incomplete because all available Section numbers are not used. Consult the table of contents at the beginning of the Project Manual to determine numbers and names of Sections in the Contract Documents.
  - b. Division 1: Sections in Division 1 govern the execution of the Work of all Sections in the Specifications.

- B. Specification Content: The Specifications use certain conventions for the style of language and the intended meaning of certain terms, words, and phrases when used in particular situations. These conventions are as follows:
  - a. Abbreviated Language: Language used in the Specifications and other Contract Documents is abbreviated. Words and meanings shall be interpreted as appropriate. Words implied, but not stated, shall be inferred as the sense requires. Singular words shall be interpreted as plural, and plural words shall be interpreted as singular where applicable as the context of the Contract Documents indicates.
  - b. Imperative mood and streamlined language are generally used in the Specifications. Requirements expressed in the imperative mood are to be performed by Contractor. Occasionally, the indicative or subjunctive mood may be used in the Section Text for clarity to describe responsibilities that must be fulfilled indirectly by Contractor or by others when so noted.
    - a. The words "shall," "shall be," or "shall comply with," depending on the context, are implied where a colon (:) is used within a sentence or phrase.
- 1.8 MISCELLANEOUS PROVISIONS

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

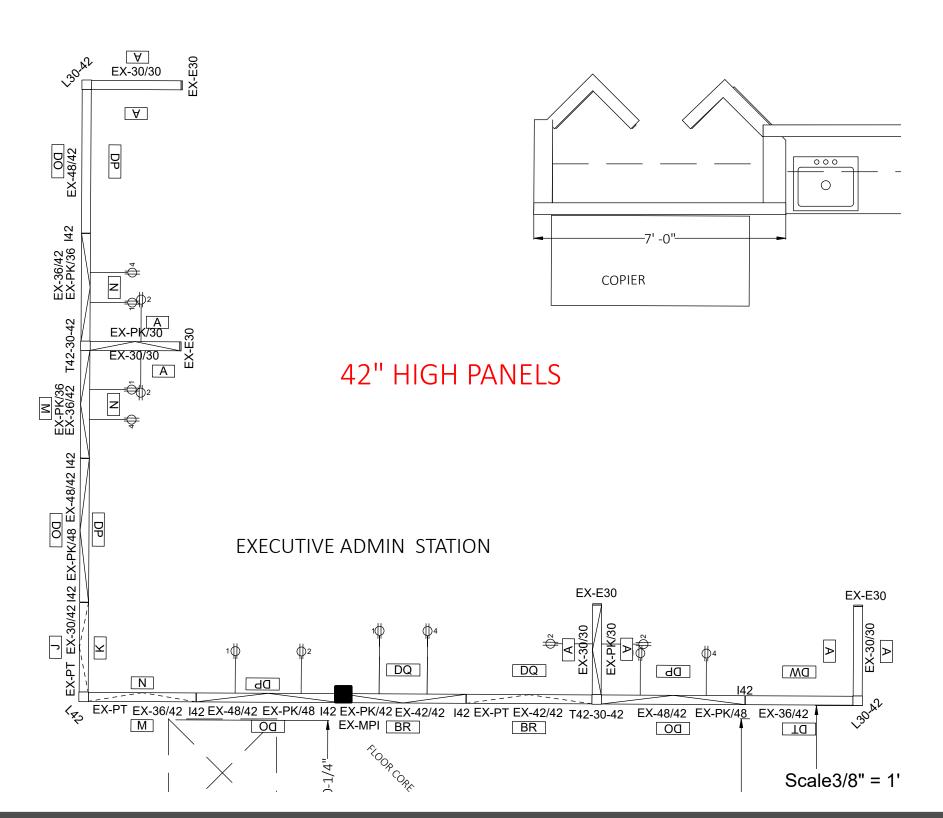
END OF SECTION 230000

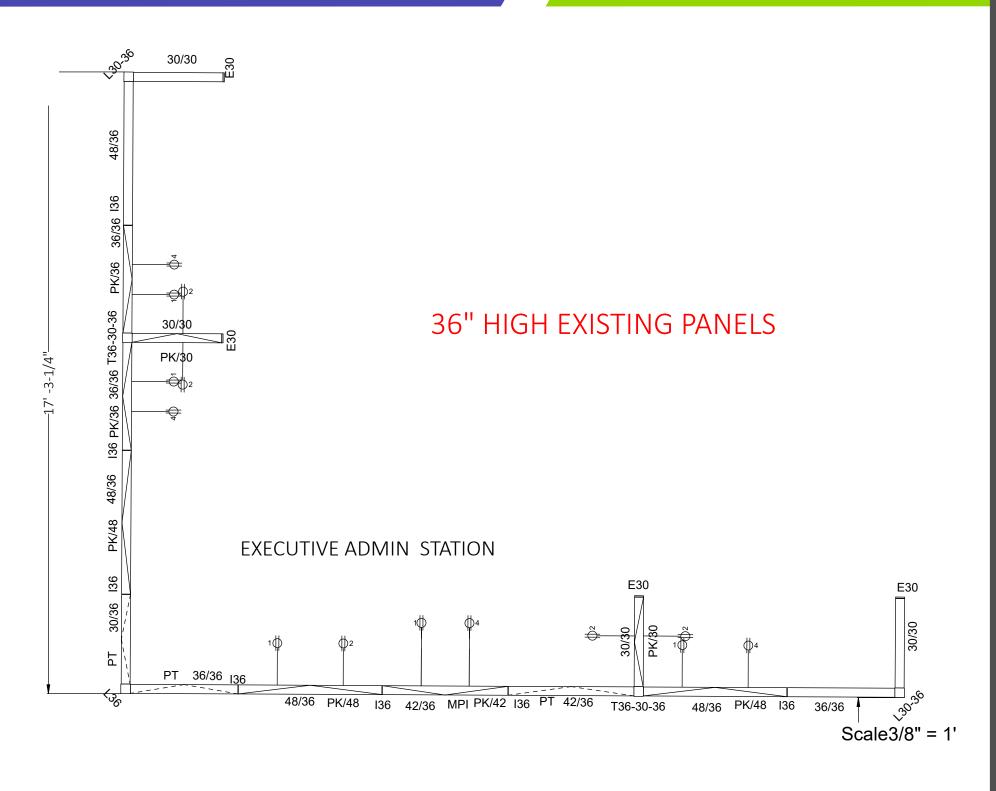
#### ADMIN BUILDING

#### **INSTALL NOTES:**

CONVERTING 36" H ANSWER PANELS TO 42" ANSWER HIGH PANELS -REUSING ALL HORIZONTALS, END OF RUN TRIM & POWER COMPONETS AND TRANSACTION COUNTER









everything office / anything but ordinary

- ALBANY - NYC - ROCHESTER - SYRACUSE -

#### PROJECT NUMBER:

INTA23-103

#### QUOTE/ORDER NUMBER:

161391

#### **CUSTOMER CONTACT:**

Amanda Stokes astokes@ulsterboces.org 845.255.3010

#### **CUSTOMER LOCATION:**

175 Route 32 North ADMIN & INSTRUCTIONAL SERVICES FL-01

#### **DESIGNER CONTACT:**

CAROLYN POSTELL 315.362.4140 CPOSTELL@INTIVITY.COM

#### SALES CONTACT:

PAUL BRANIGAN 585.273.9359 PBRANIGAN@INTIVITY.COM

#### **REVISION DATE:**

7/11/2023

#### PLOT SIZE:

18X24

#### SITE VERIFIED:

YES NO

#### COPYRIGHT:

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## ADMINISTATION BUILDING: OVERVIEW: EVERWALL/PRIVACY WALL GLASS-FRONT OFFICES

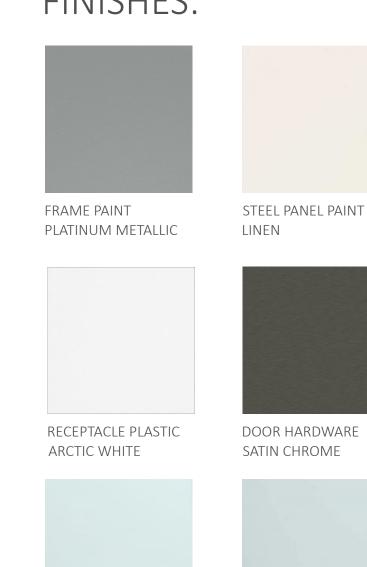
SECTION A-A IN PRIVACY WALL 13'-10<mark>3</mark>" — PROJECT OVERVIEW: — GWB SOFFIT HEIGHT 8'-2 1/2" A.F.F. PRODUCTS MINI END/ PRIVACY WALL DIVIDED GLASS FRONTS PRODUCT DETAILS: - ACT CEILING HEIGHT 9'-0" A.F.F. CONNECTING TO CEILING GRID @ 9'-0" HEIGHT PRIVACY WALL DIVIDED GLASS FRONTS: CONNECTING TO SOFFIT AT 8'-3" (99") HEIGHT PIVOT DOOR HARDWARE- MORTISE PASSAGE SET DOME FLOOR STOP NOTE TO CUSTOMER: • MINI END @ 9'-0" HIGH IN NOTED INSTANCE SHOWN IN YELLOW, CAN WE CUT THE CONDUIT FLUSH WITH THE FLOOR AS THERE IS A JUNCTION NEEDED IN THIS EXACT SPOT? OR - WE CAN DO WHAT WE HAVE TO DO TO BURY IT IN THE JUNCTION/FRAME, BUT SOLUTION WON'T BE KNOW UNTIL INSTALLATION OF 9'-9<u>1</u>" **INSTALL NOTES:** 9'-6" PARTIAL FLOOR PLAN SECTION A-A EXISTING FLOOR PRIVACY WALL BASE TO SIT ON TOP OF THE EXISTING CONDUIT. - CONDUITS (TYP) CAD EXTRA HORIZONTAL BRACE FOR EACH WALL FOR WALL-MOUNTING SUPPORT FIELD CUTOUTS REQUIRED FOR 8 DUPLEXS WITHIN STEEL SKINS. =EXISTING CONDUIT LOCATIONS =MULTIPURPOSE INFEED LOCATIONS • =SEE NOTE ABOVE MEM<u>FM</u>ELF W30/99-3E W24/99-3E SPOL: W7 D61 SPCL: W10/99-3E POWER TYPE:



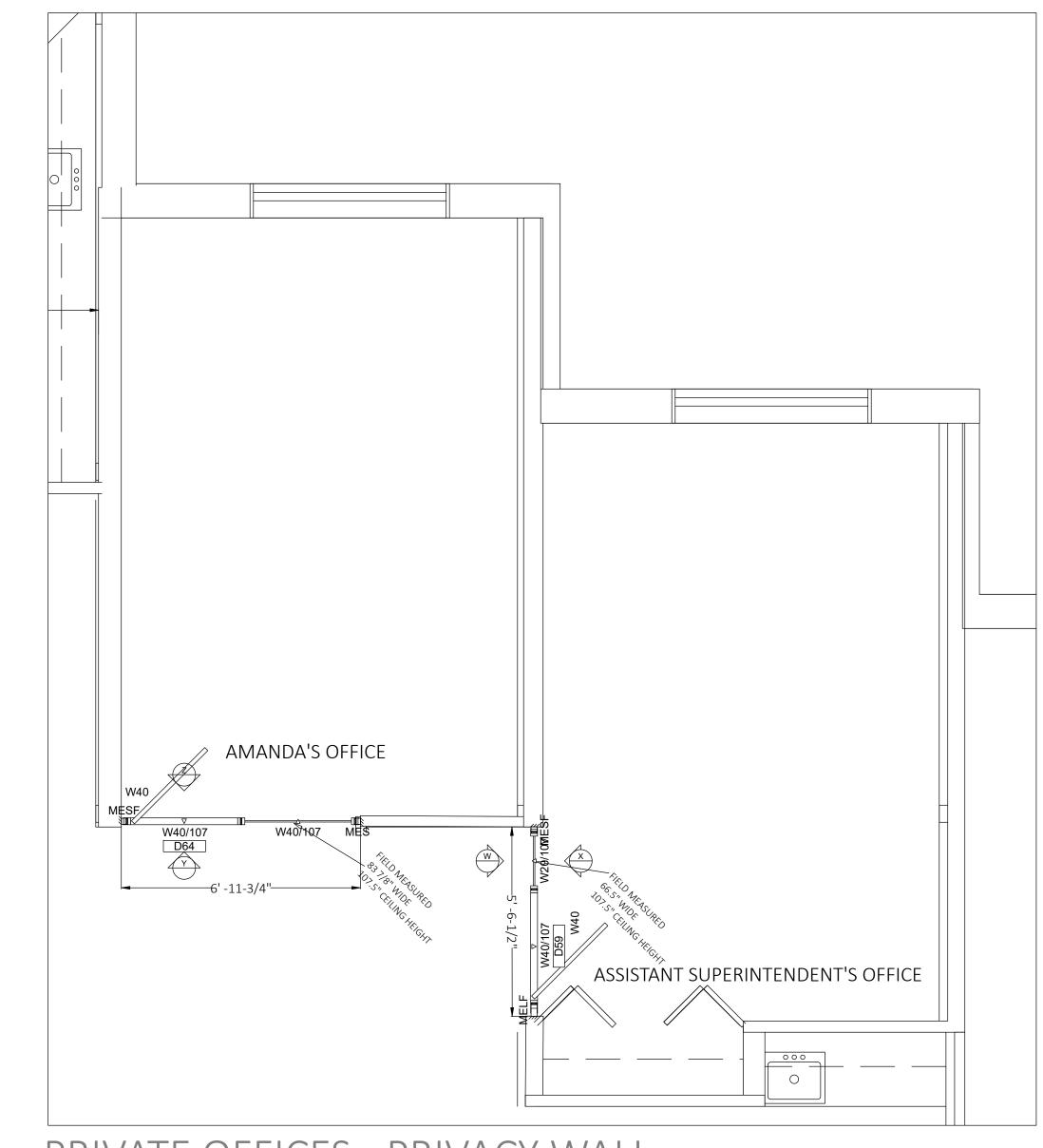
2+2, 20 AMP MULTIPURPOSE INFEEDS FOR EACH DEMISING WALL

HARDWIRE CONNECTION TO THE BUILDING

### FINISHES:



GLASS TIERS 1 & 2 WHITE LAMINATED

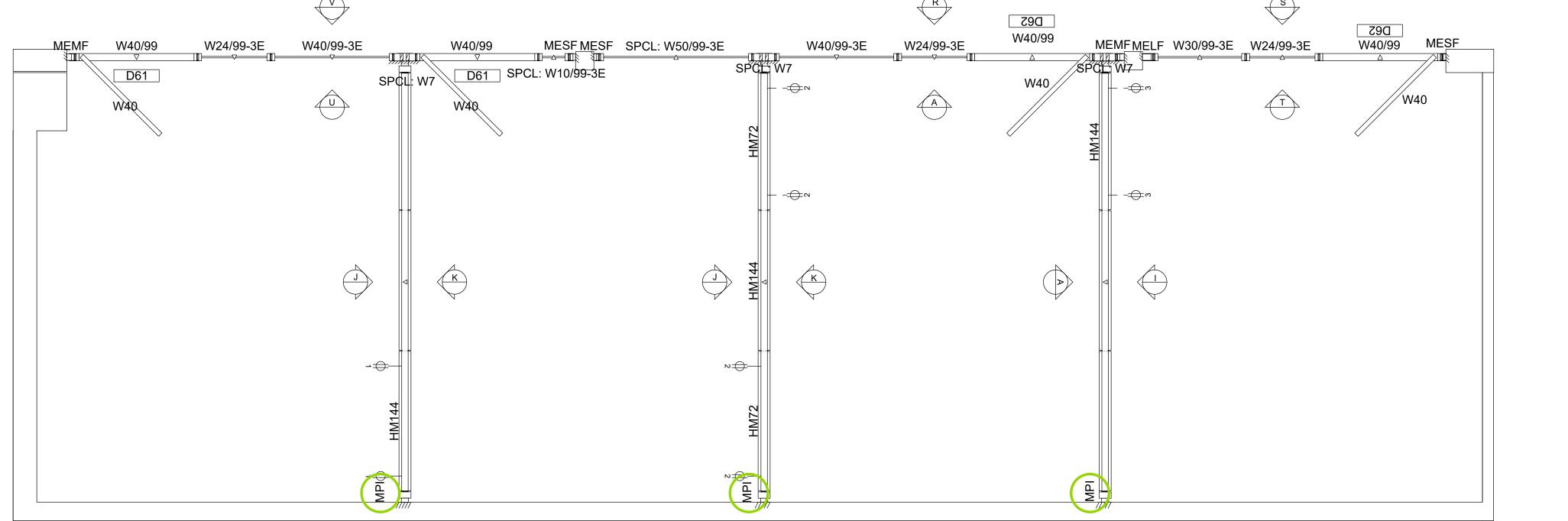


PRIVATE OFFICES - PRIVACY WALL

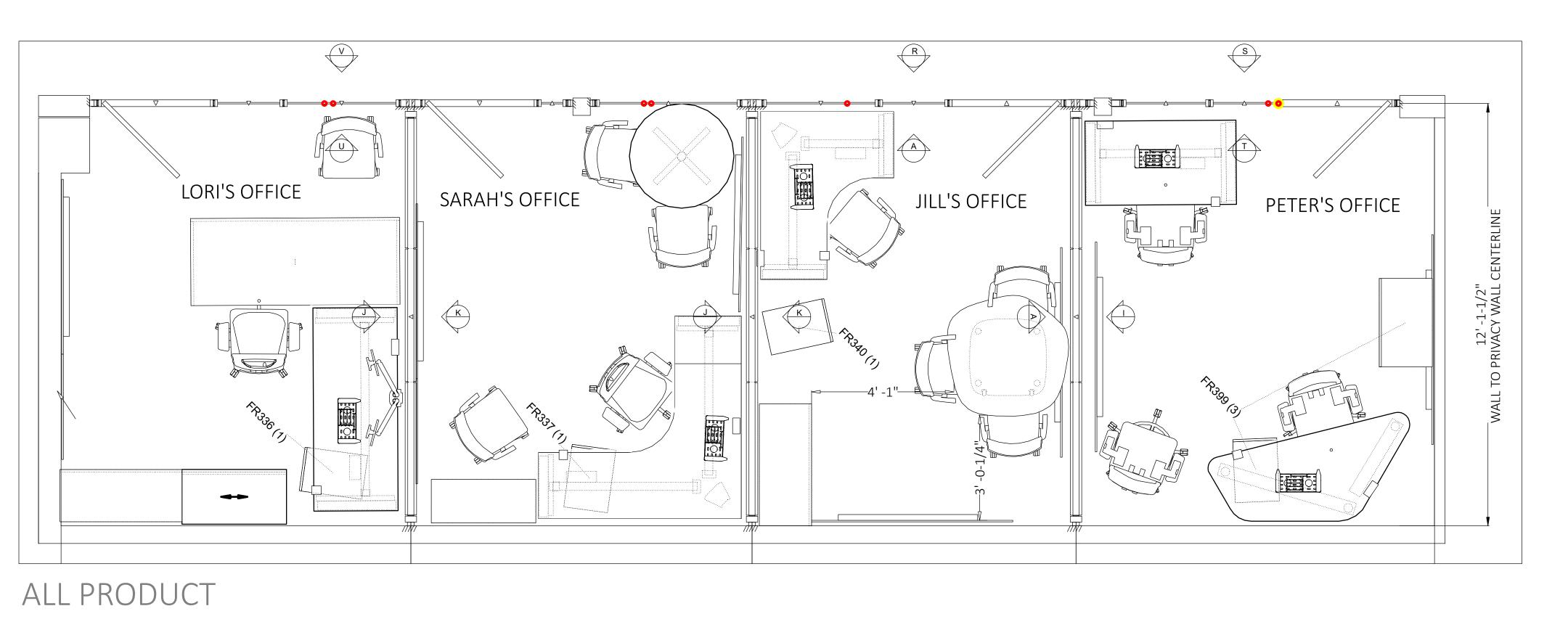
### — CLIENT ACCEPTANCE:

All finishes, furniture layouts, product details and field requirements, including electrical details, have been reviewed and approved to be in alignment with the customer expectations and requirements by the client representative.

Client representative hereby approves the items as represented above and on corresponding quote to be ordered on their behalf in conjunction with required P.O. and deposit.



EVERWALL DEMISING WALLS AND PRIVACY WALL FRONTS





everything office / anything but ordinary

- ALBANY - NYC - ROCHESTER - SYRACUSE -

PROJECT NUMBER:

INTA23-103

QUOTE/ORDER NUMBER:

CUSTOMER CONTACT:

Amanda Stokes astokes@ulsterboces.org 845.255.3010

**CUSTOMER LOCATION:** 

175 Route 32 North ADMIN & INSTRUCTIONAL SERVICES FL-01

**DESIGNER CONTACT:** 

JENNIFER MULBERGER 585.238.2849 JMULBERGER@INTIVITY.COM

SALES CONTACT:

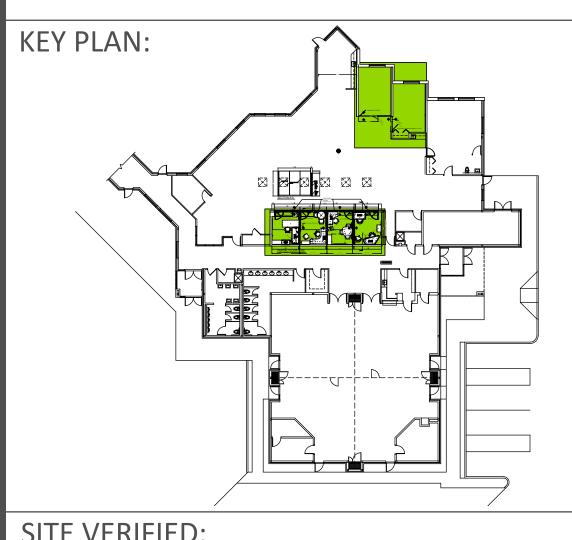
PAUL BRANIGAN 585.273.9359 PBRANIGAN@INTIVITY.COM

REVISION DATE:

PLOT SIZE:

5/11/2023

36X48



SITE VERIFIED:

NO

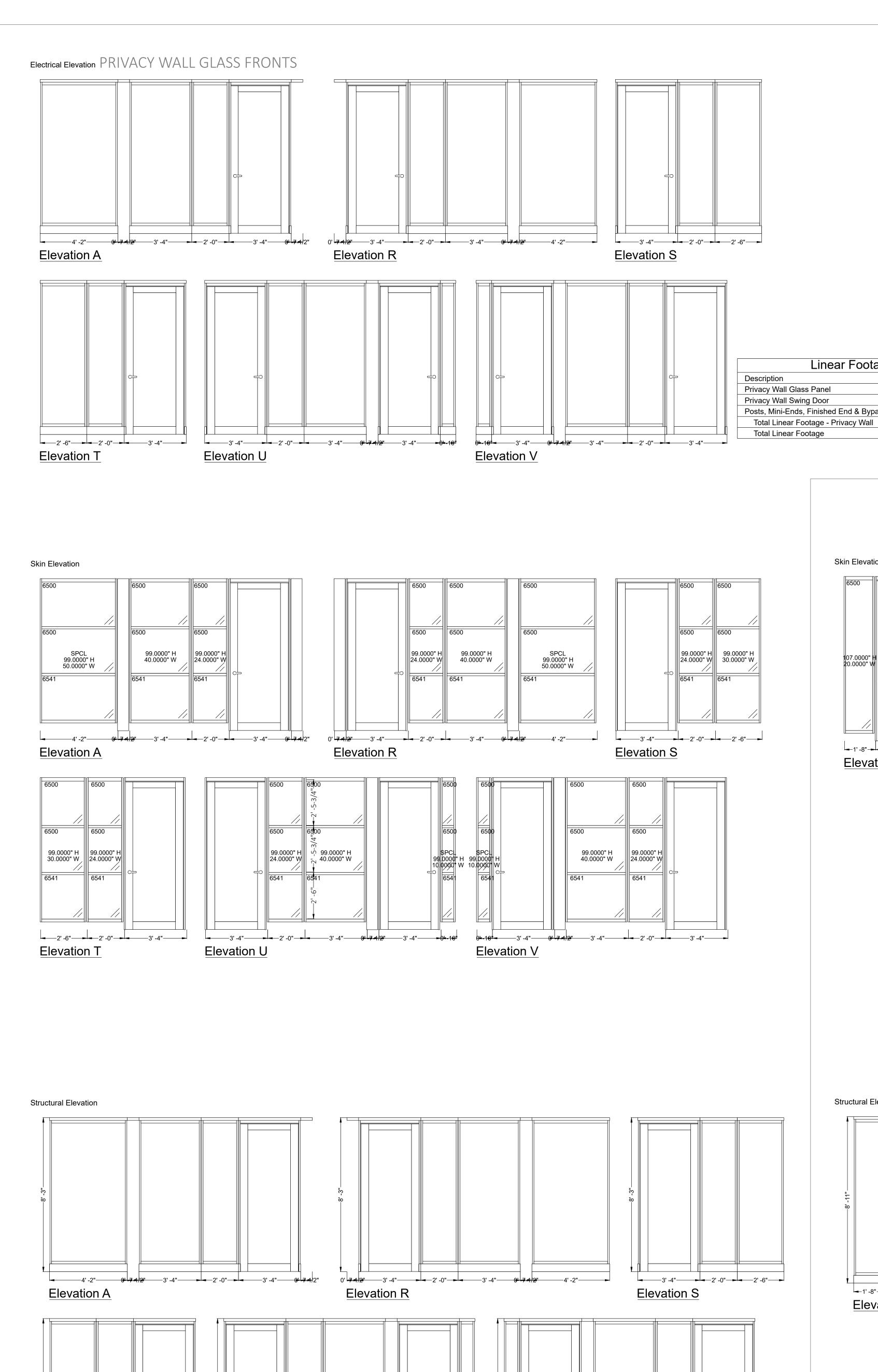
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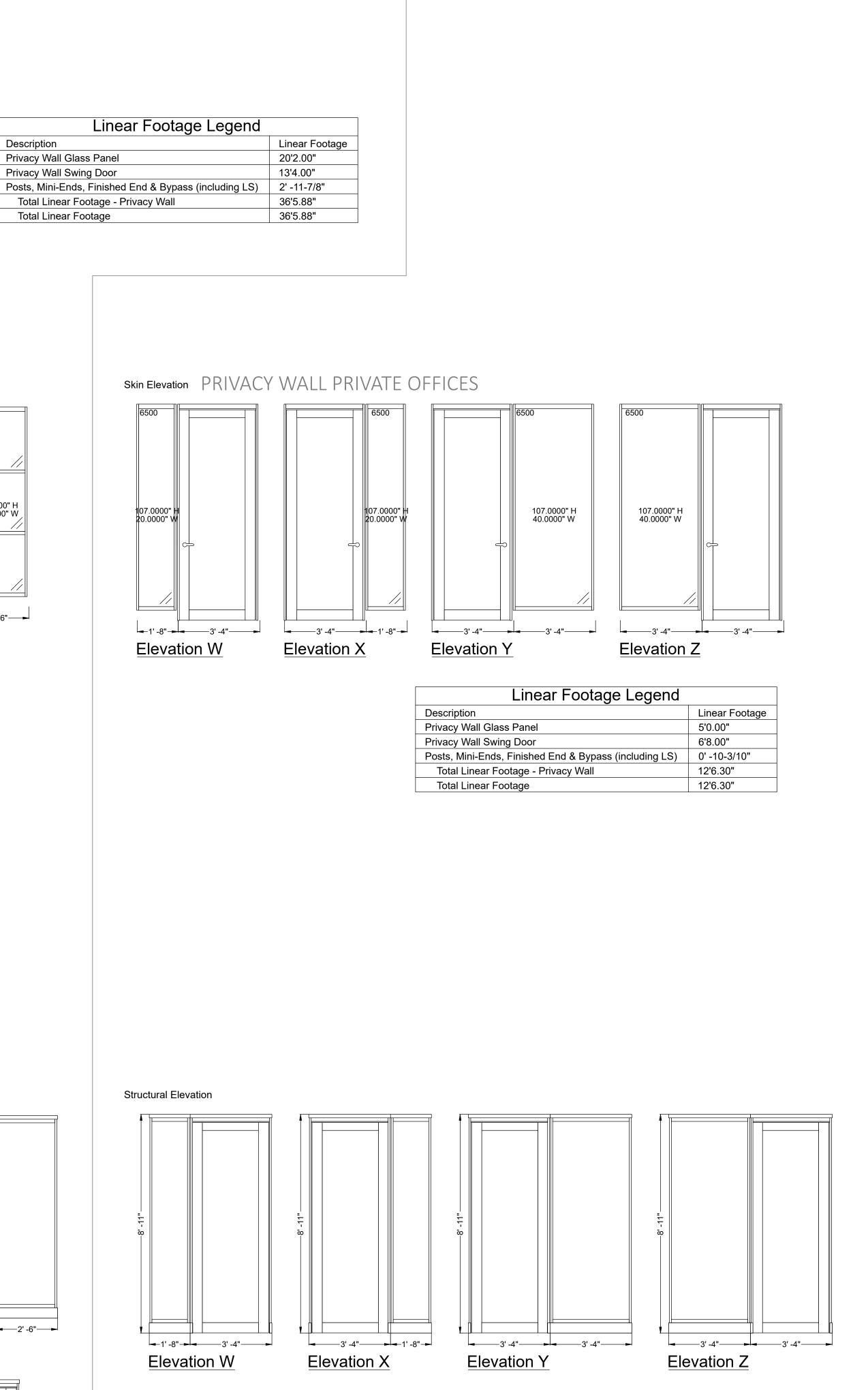
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Signature of Client | Representative

Date

## ADMINISTATION BUILDING: ELEVATIONS



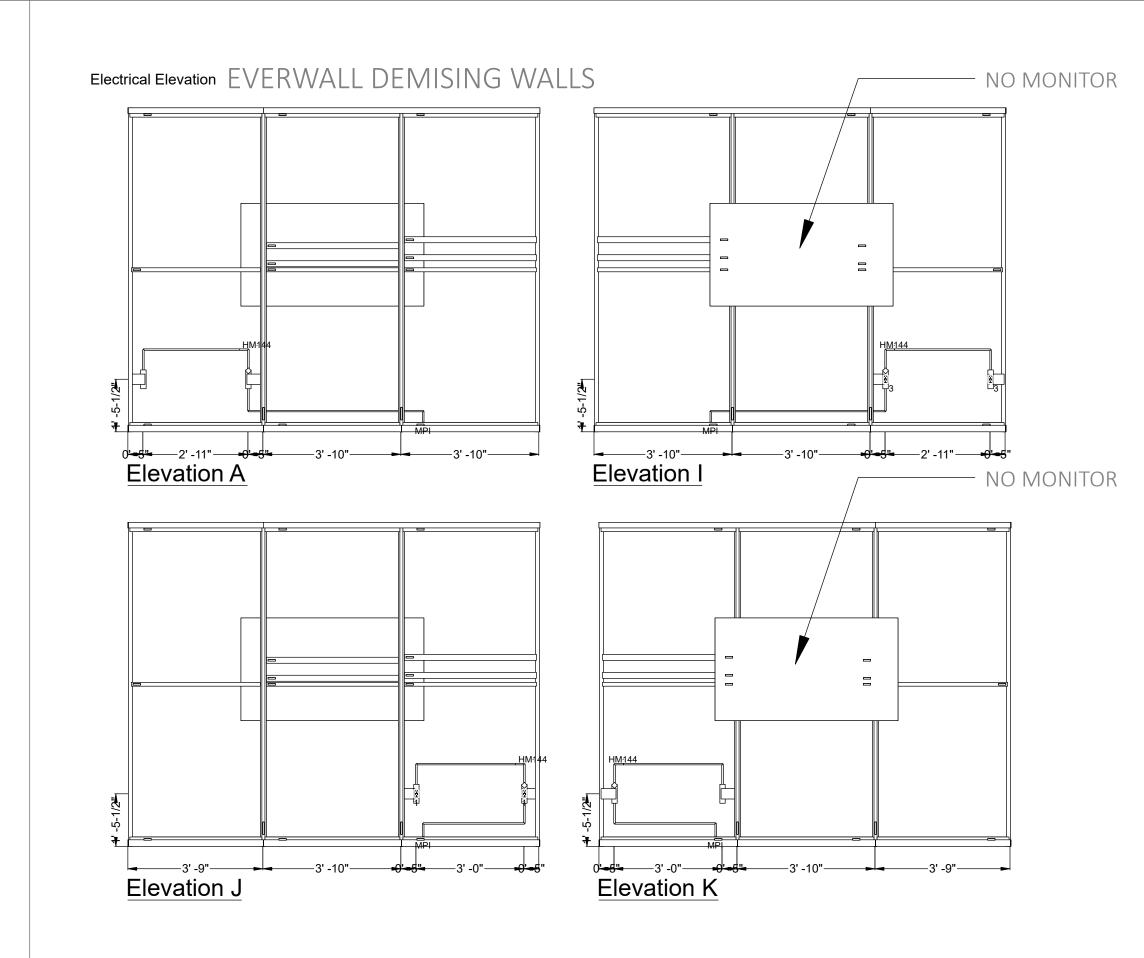


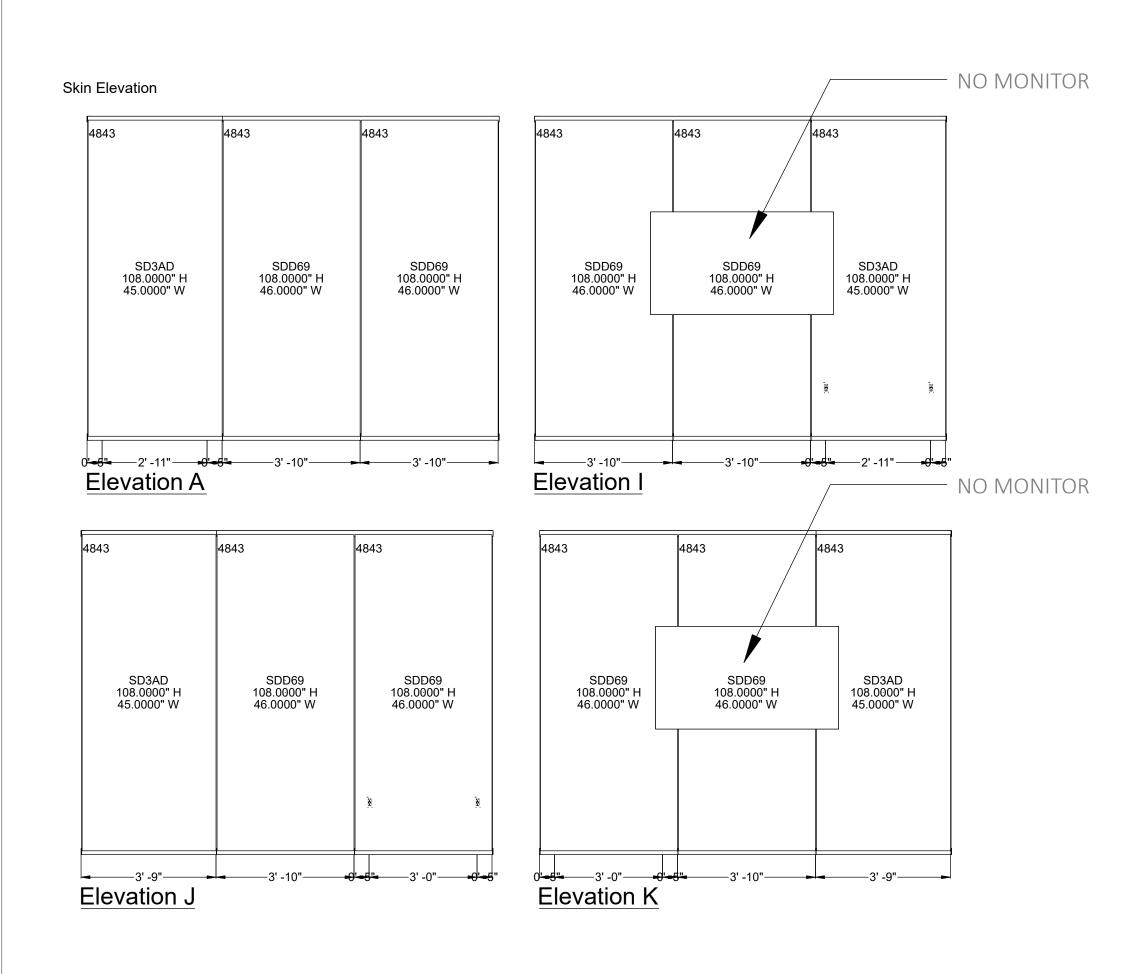
Linear Footage Legend

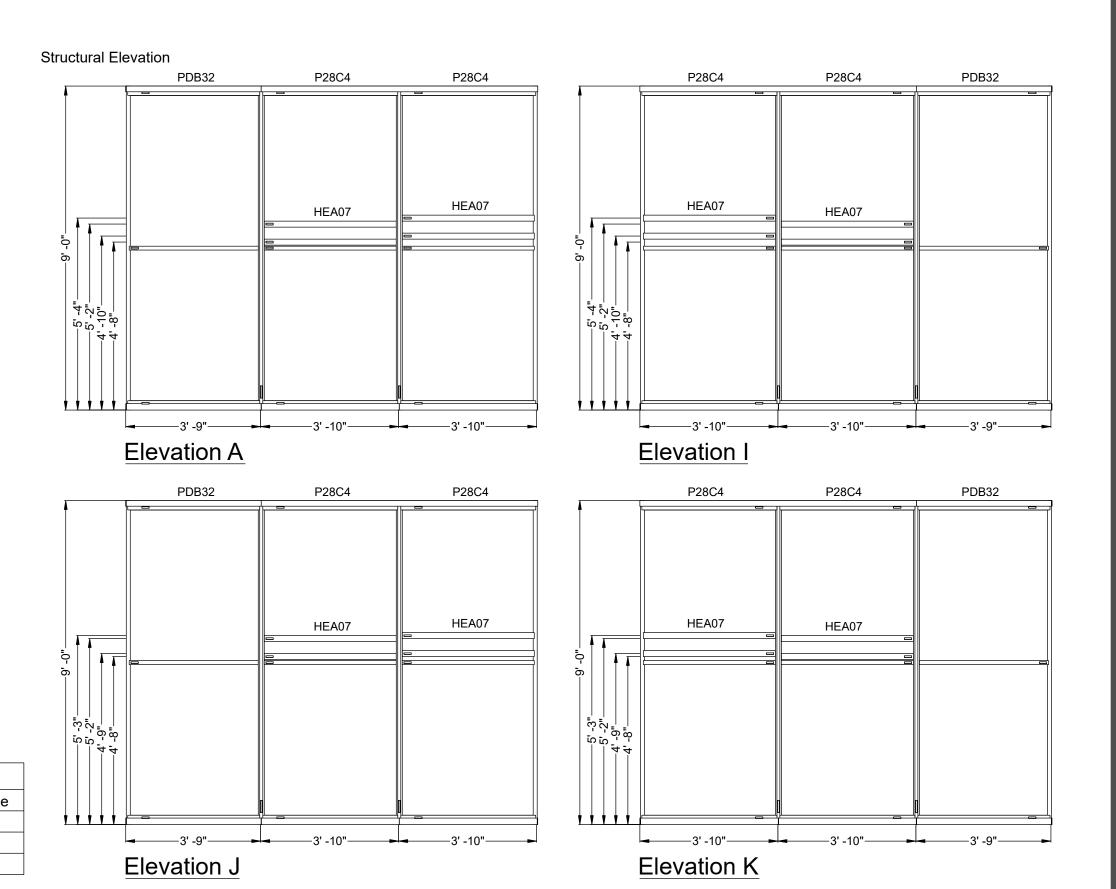
Total Linear Footage - Everwall 36'1.19"

Everwall Solid Wall

Total Linear Footage









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- ALBANY - NYC - ROCHESTER - SYRACUSE -

PROJECT NUMBER:

INTA23-103

QUOTE/ORDER NUMBER:

CUSTOMER CONTACT:

Amanda Stokes astokes@ulsterboces.org 845.255.3010

CUSTOMER LOCATION:

175 Route 32 North
ADMIN & INSTRUCTIONAL SERVICES FL-01

DESIGNER CONTACT:

JENNIFER MULBERGER
585.238.2849

JMULBERGER@INTIVITY.COM

SALES CONTACT:

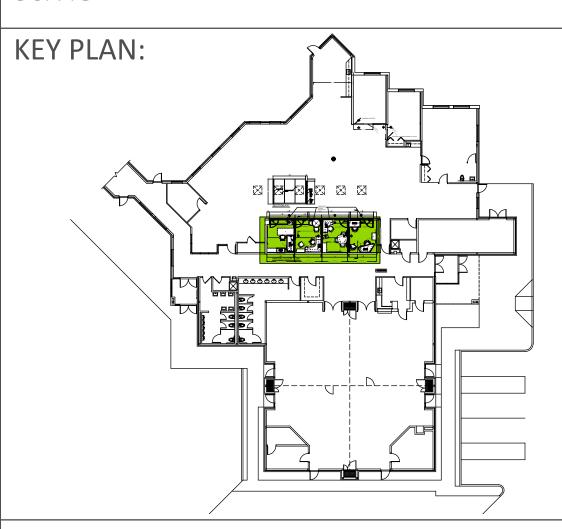
PAUL BRANIGAN 585.273.9359 PBRANIGAN@INTIVITY.COM

REVISION DATE:

PLOT SIZE:

5/11/2023

36X48



SITE VERIFIED:

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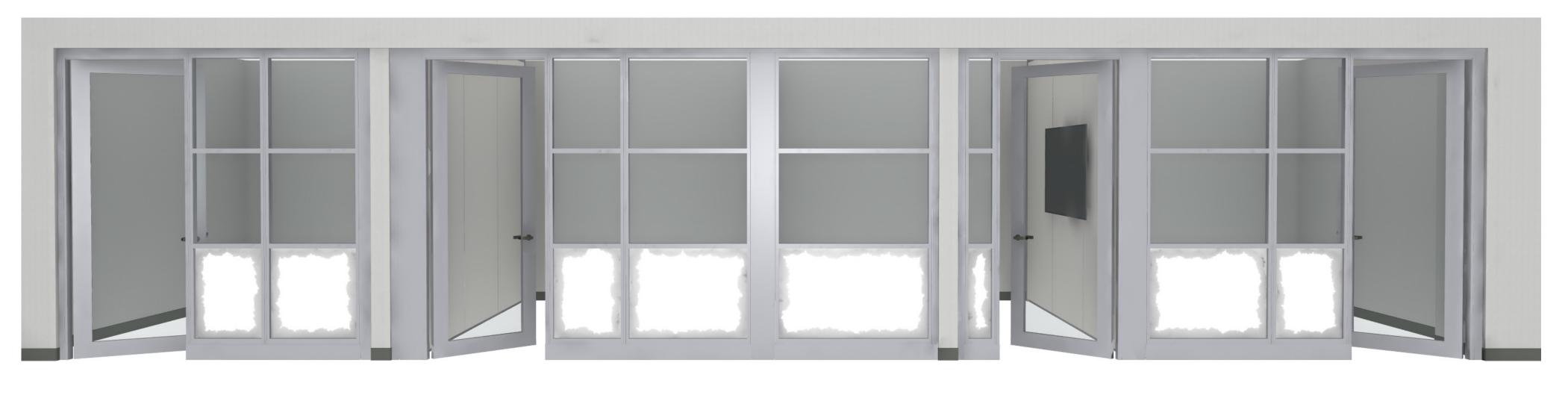
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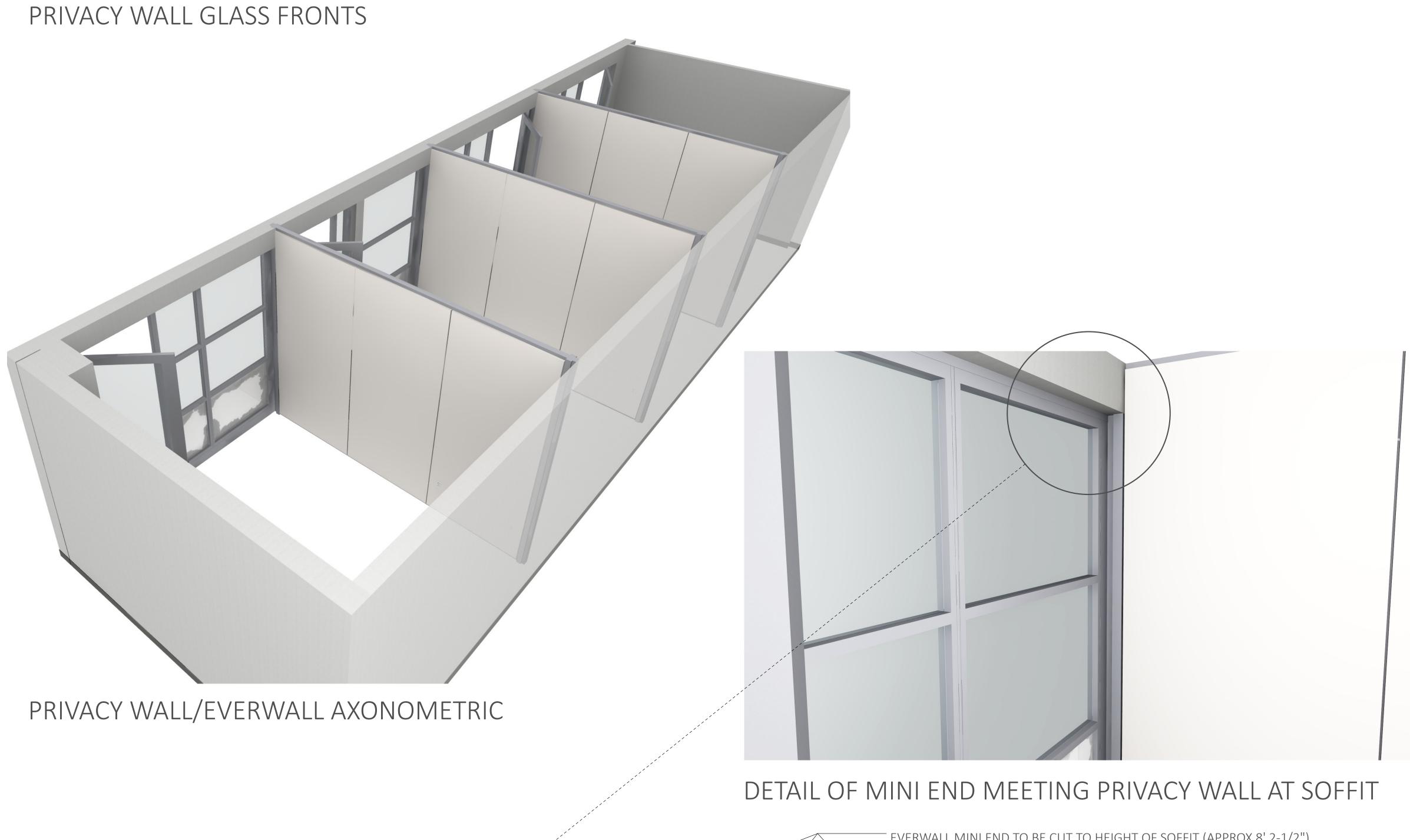
Elevation U

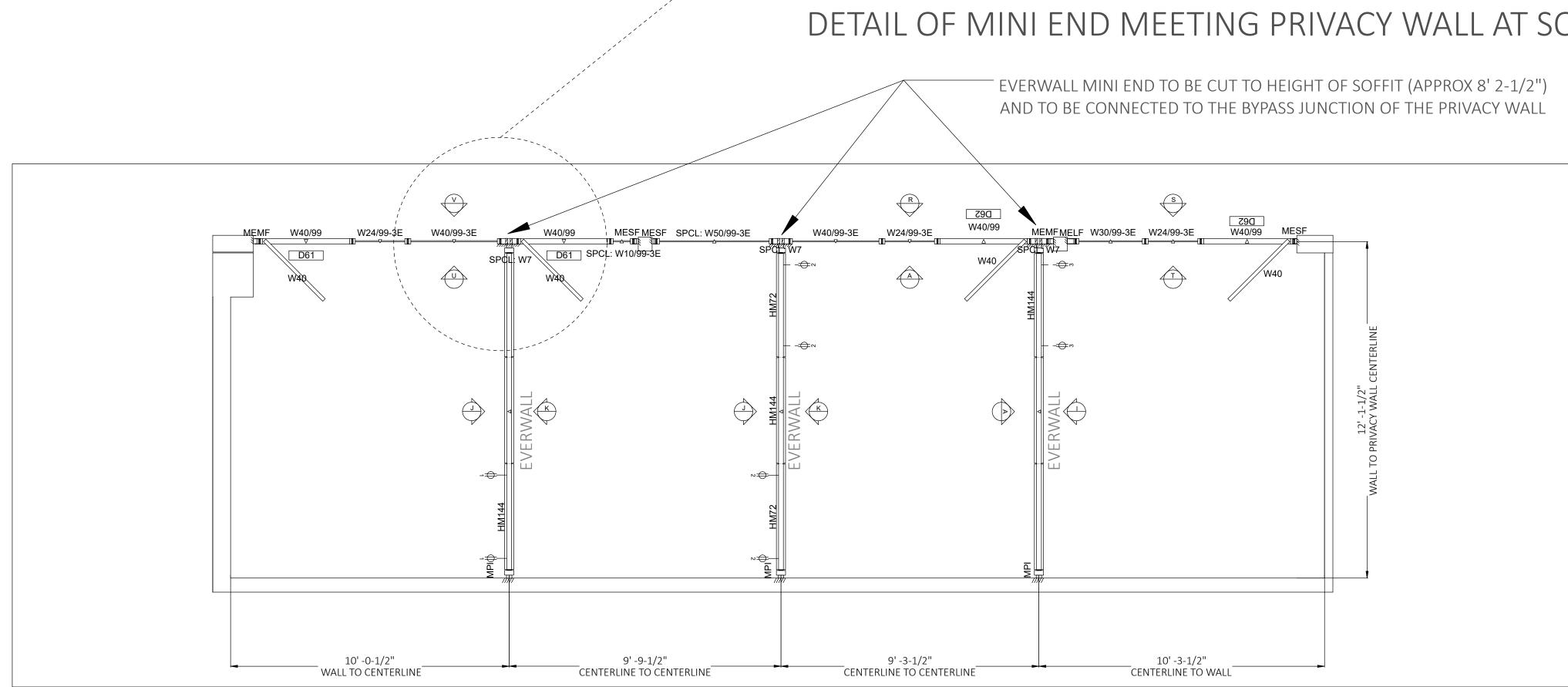
Elevation T

Elevation V

## ADMINISTATION BUILDING: ARCHITECTURAL WALLS FLOORPLAN

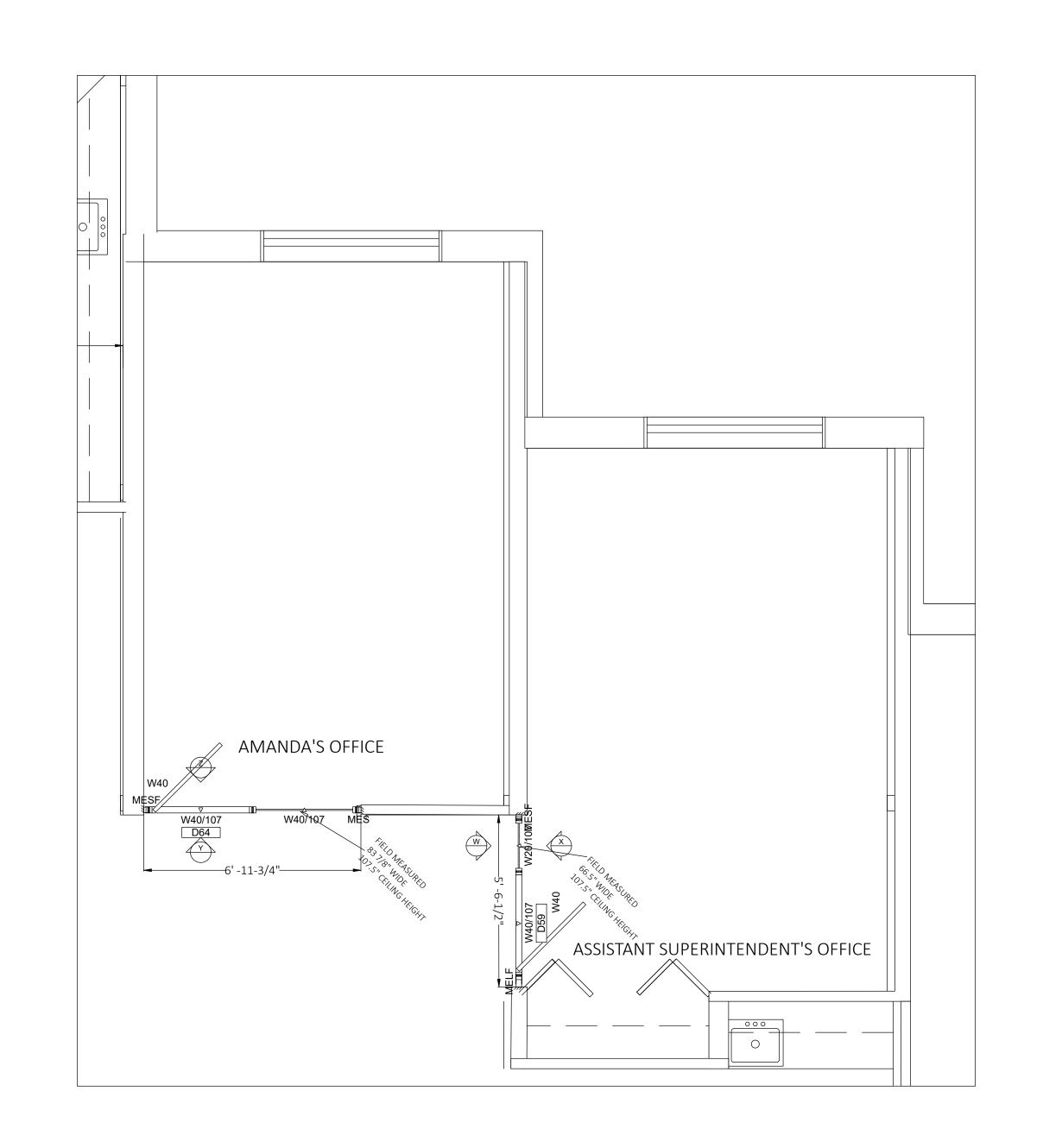








PRIVATE OFFICE PRIVACY WALL DOORS





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- ALBANY - NYC - ROCHESTER - SYRACUSE -

PROJECT NUMBER:

INTA23-103

QUOTE/ORDER NUMBER:

113508

CUSTOMER CONTACT:

Amanda Stokes astokes@ulsterboces.org 845.255.3010

CUSTOMER LOCATION:

175 Route 32 North
ADMIN & INSTRUCTIONAL SERVICES FL-01

DESIGNER CONTACT:

JENNIFER MULBERGER 585.238.2849

JMULBERGER@INTIVITY.COM

SALES CONTACT:

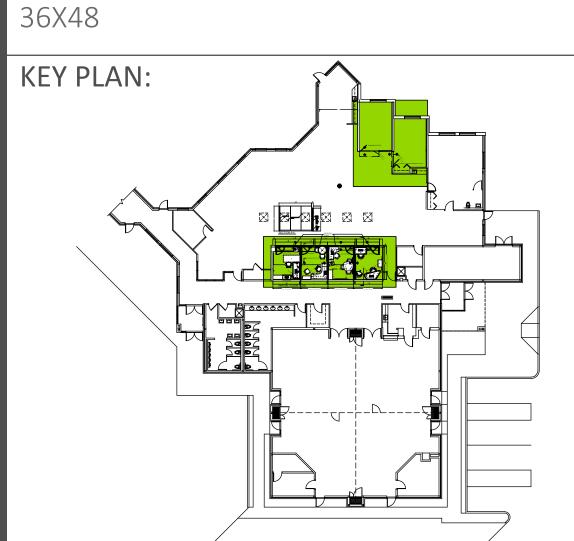
PAUL BRANIGAN 585.273.9359

PBRANIGAN@INTIVITY.COM

REVISION DATE:

5/11/2023

PLOT SIZE:



SITE VERIFIED:



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COMPANY.

ALB-NYC\A B C D\B\BOCES\BOCES\_ULSTER COUNTY\INTA23-103\_ULSTER CTY BOCES ADMIN\_BUILDING\CET FILE\INTA23-103 ULSTER CTY BOCES ADMIN BUILDING - WALLS ONLY.cmdrw

## MHRIC BUILDING

### PROJECT OVERVIEW

ANSWER PANELS WITH POWER, MARKER BOARD, FABRIC & LAMINATE SKINS

PRIVACY WALL

MIGRATION SE HEIGHT ADJUSTABLE DESK

CAMP FIRE STAND HEIGHT TABLES VERLAY RECTANGLE TABLE W/POWER STERLING TASK CHAIRS

#### ANSWER FENCE FLEX 120 DEGREE HEIGHT ADJUSTABLE

- **CURRENCY BOOKCASES** UNIVERSAL LATERAL FILES TS MOBILE BOX/FILE W/PENCIL TRAY
- UNIVERSAL STORAGE CABINET TS MOBILE FILE CENTERW/ PENCIL TRAY KINEX BENCHING AMQ SCREENS
- GROUP WORK ROUND TABLE SHORT CUT TASK CHAIRS SIT ON IT: FOCUS

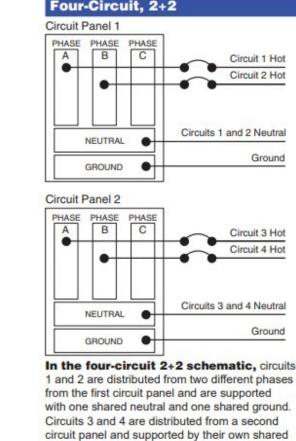
### **INSTALL NOTES:**

ALL NEW FURNITURE

### POWER TYPE:

ANSWER PANELS ANSWER FENCE

20 AMP RECEPTACLES



neutral and ground.

PROJECT NUMBER:

VINTIVITY.

at work

everything office /

anything but ordinary

- ALBANY - NYC - ROCHESTER - SYRACUSE

INTA22-574

QUOTE NUMBER

ORDER NUMBER:

**CUSTOMER CONTACT:** Amanda Stokes

845.255.3010

Astokes@ulsterboces.org

**CUSTOMER LOCATION:** 

175 Route 32 North New Paltz, NY 12561/FL01

DESIGNER CONTACT:

CAROLYN POSTELL 315.362.4140

CPOSTELL@INTIVITY.COM

**SALES CONTACT:** 

PAUL BRANIGAN

585.273.9359

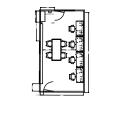
PBRANIGAN@INTIVITY.COM

**REVISION DATE:** 

3/17/2023

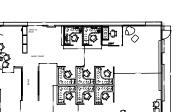
36X48

KEY PLAN:



















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### PRODUCTS

ELBROOK TABLES STANDING & SEATED HEIGHT SHORT CUT STOOLS AND CHAIRS FLEX MOBILE BATTERY CART

GREENPOINT SHELVING

INTRO POWER STRIPS

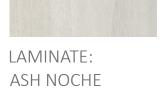
BOB CHAIR & STOOL OLOGY L SHAPED HEIGHT ADJUSTABLE

POTRERO 415 RECTANGLE TABLE SEATED & STANDING HEIGHT

## UPSTAIRS FRONT

### FINISHES:

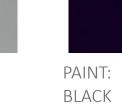


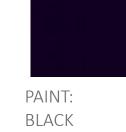


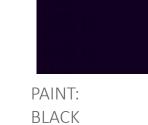


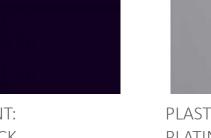
























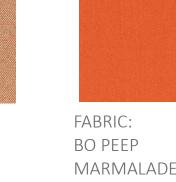






































CLEAR MAPLE

**UPSTAIRS BACK** 







MERLE



LAGOON







**BUZZ GREY** 

PLASTIC:









FABRIC:

ORIGIN JET







ORIGIN JET

METALLIC

## FINISHES:









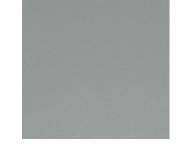


PLATINUM

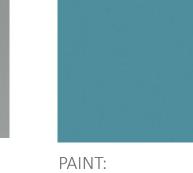
PAINT:

PLATINUM

METALLIC







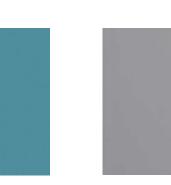
LAGOON

PAINT:

LAGOON









PLATINUM SOLID

**BUZZ TORNADO** 





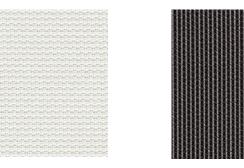
PLATINUM SOLID ONYX

MESH:

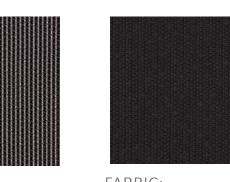


CHARM - SPARKLE











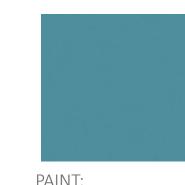
## METALLIC



PAIRAINT:

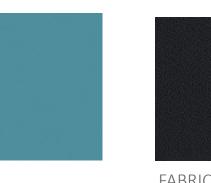
Signature of Client Representative

























Date



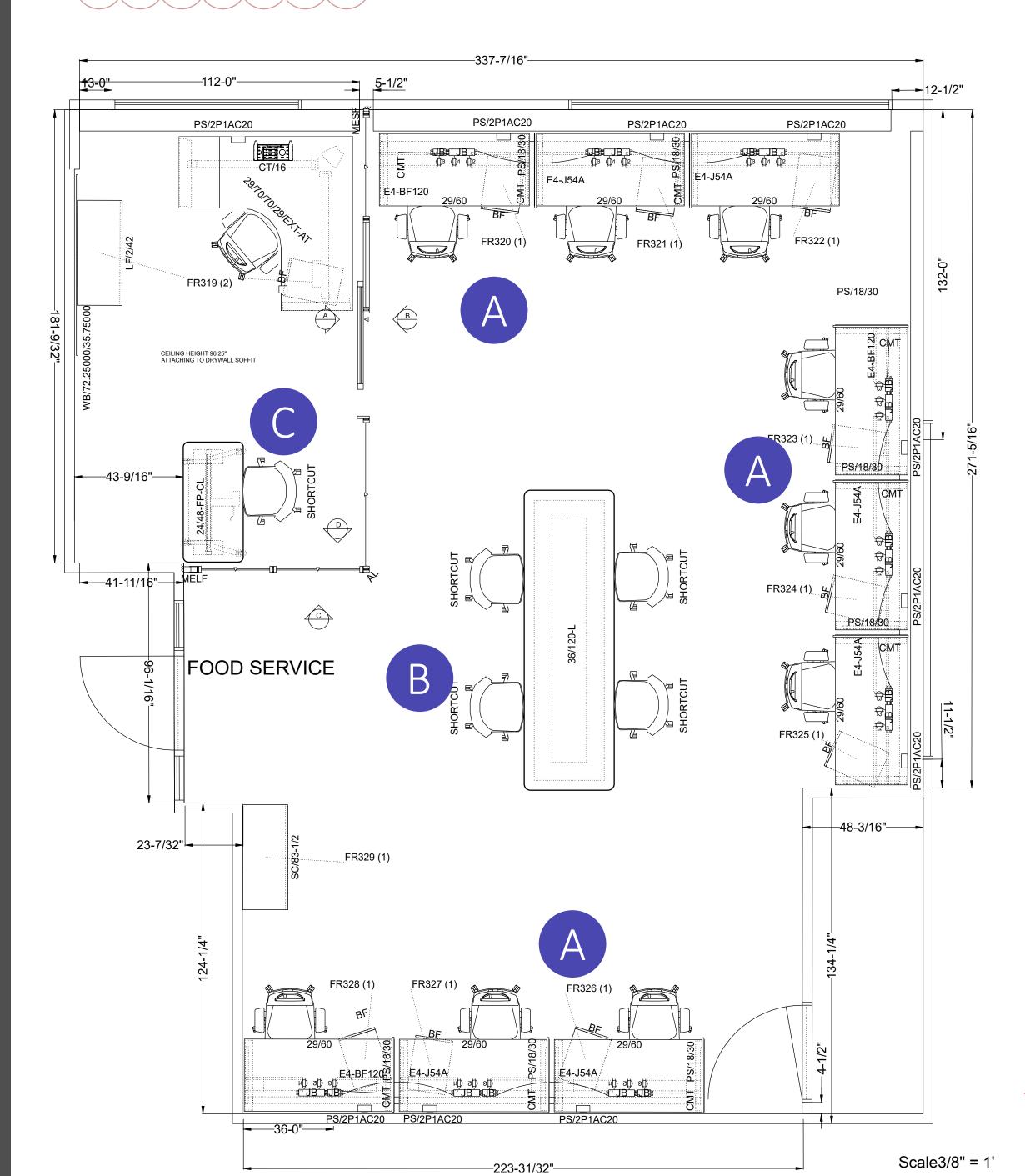
All finishes, furniture layouts, product details and field requirements, including electrical details, have been reviewed and approved to be in alignment with the customer expectations and requirements by the client representative.

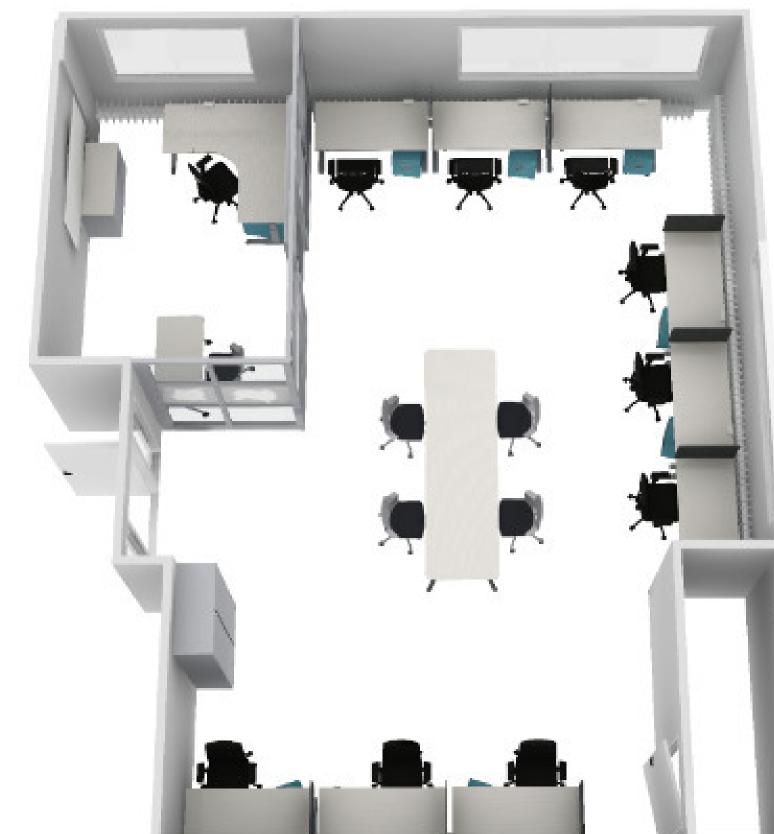
Due to color reproduction process the furniture, fabric and finish images & renderings in this document are representational only and do not reflect true color, tone or texture of the actual samples.

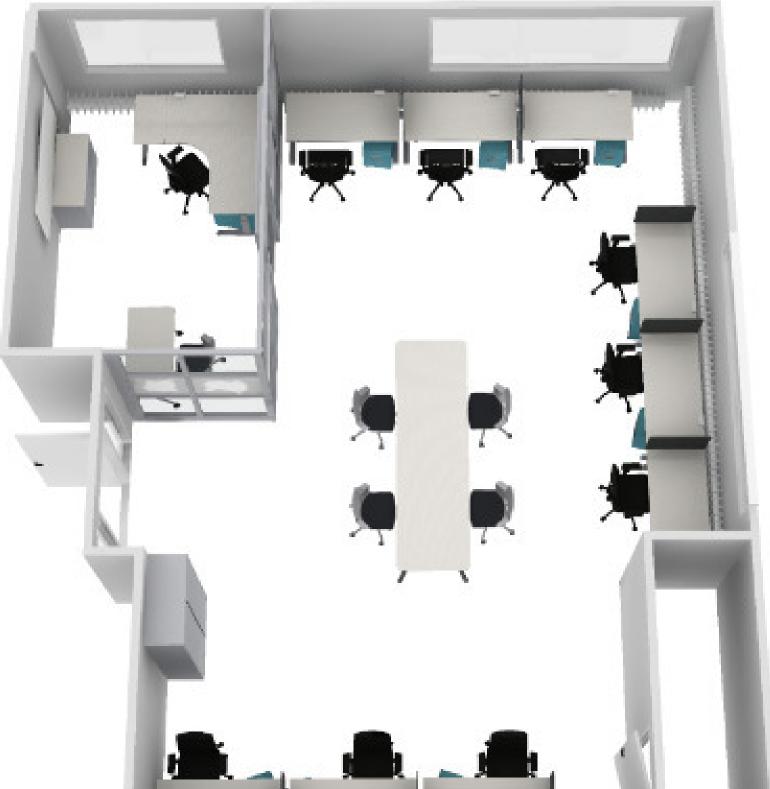
When blending existing and new all new product. US COPYRIGHT LAWS THESE

## MHRIC - FOOD TECH

MHRIC - LAB











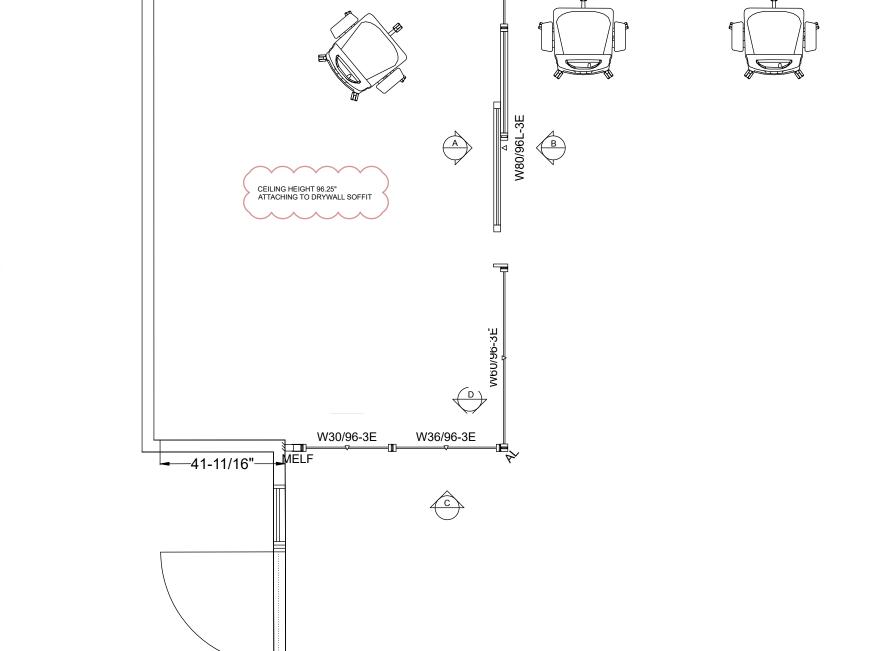
PRIVACY WALL
OLOGY L SHAPED HEIGHT DESK
UNIVERSAL LATERAL
TS MOBILE BOX/FILE
FOCUS TASK CHAIR GROUP WORK ROUND TABLE SHORTCUT TASK CHAIRS

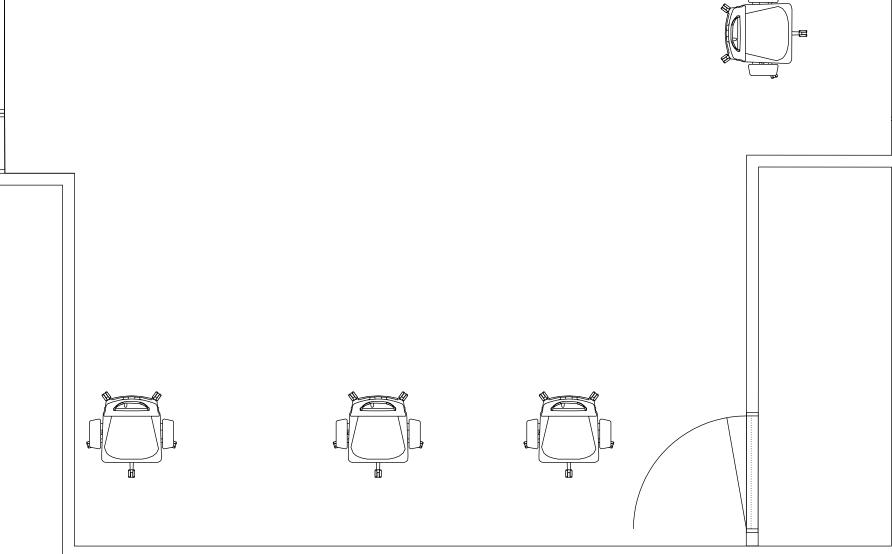


KINEX BENCHING FOCUS TASK CHAIR UNIVERSAL MOBILE BOX/FILE

INTRO POWER STRIP 2 POWER/1USB-A/1USB-C

UNIVERSAL STORAGE CABINET



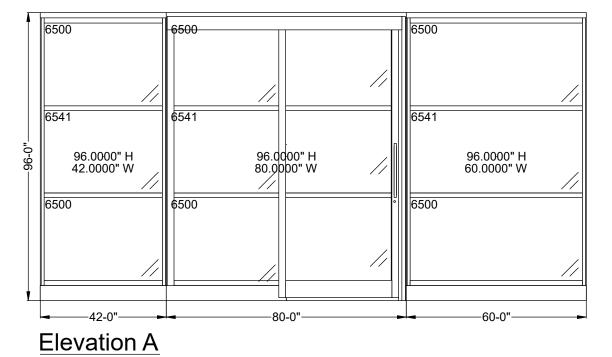


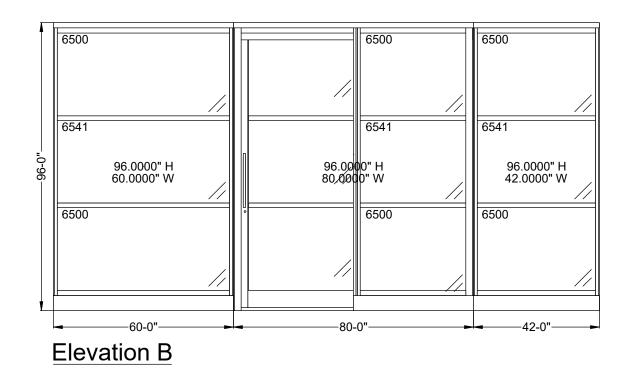
Scale3/8" = 1'

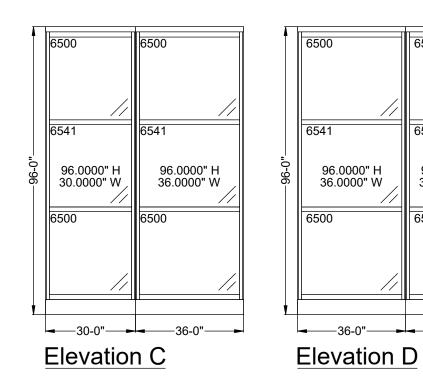


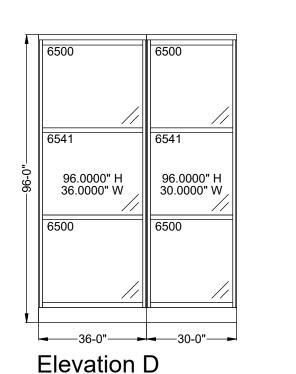
POTRERO RECTANGLE TABLE STANDING HEIGHT SHORTCUT STOOLS

Scale3/8" = 1'









TINTIVITY. at work everything office / anything but ordinary

- ALBANY - NYC - ROCHESTER - SYRACUSE -

PROJECT NUMBER:

INTA22-574

QUOTE NUMBER:

ORDER NUMBER:

**CUSTOMER CONTACT:** 

Amanda Stokes 845.255.3010

Astokes@ulsterboces.org

**CUSTOMER LOCATION:** 

175 Route 32 North New Paltz, NY 12561/ FL01

**DESIGNER CONTACT:** 

CAROLYN POSTELL 315.362.4140 CPOSTELL@INTIVITY.COM

SALES CONTACT:

PAUL BRANIGAN 585.273.9359

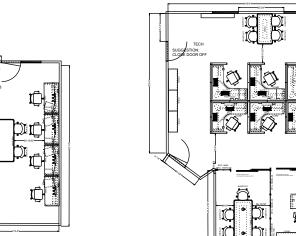
PBRANIGAN@INTIVITY.COM

**REVISION DATE:** 

3/17/2023

PLOT SIZE: 36X48

KEY PLAN:





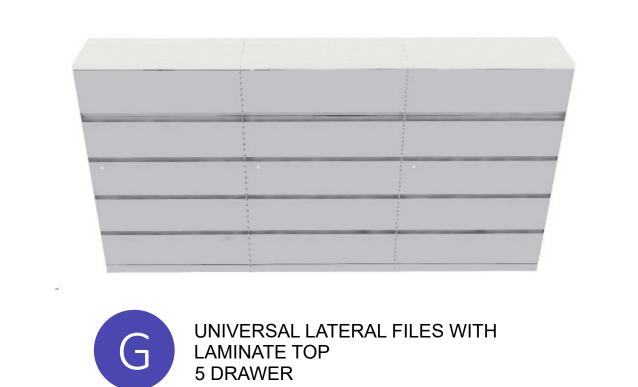
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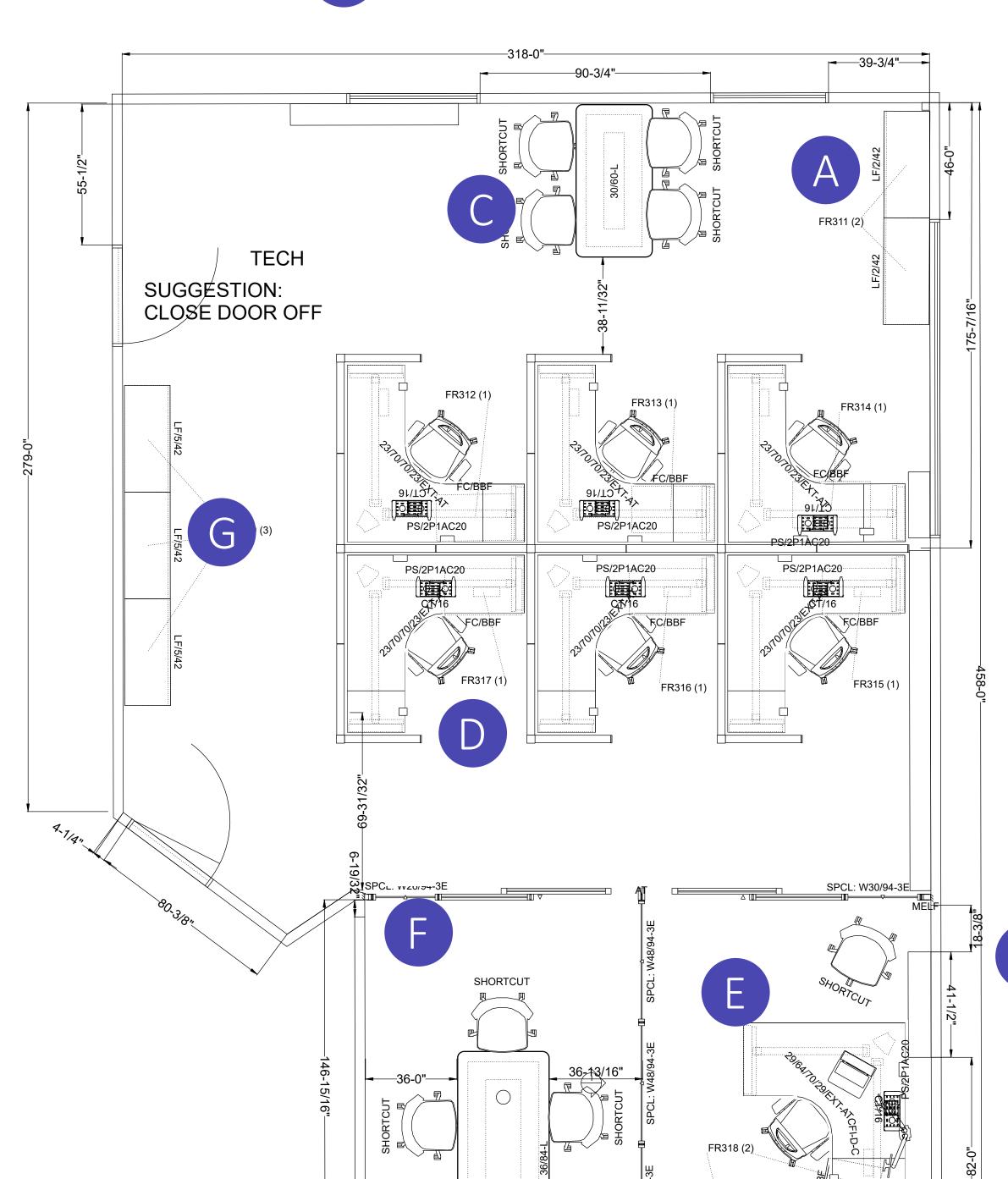
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NOTE: FOCUS 2.0 TASK CHAIR MESH CHANGED TO ONYX

MHRIC - TECH







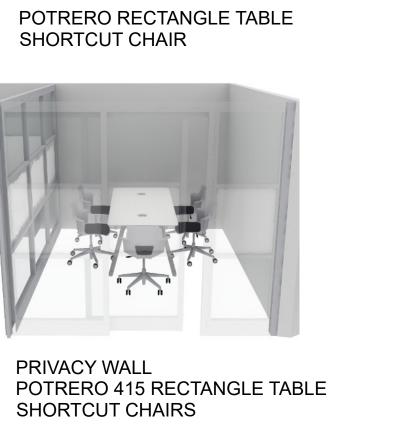


OLOGY L SHAPED HEIGHT ADJUSTABLE FOCUS TASK CHAIR UNIVERSAL MOBILE PEDESTAL 54" HIGH ANSWER PANELS INTRO POWER STRIP 2 POWER/1USB-A/1USB-C

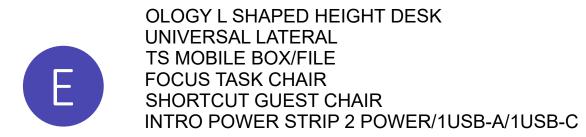


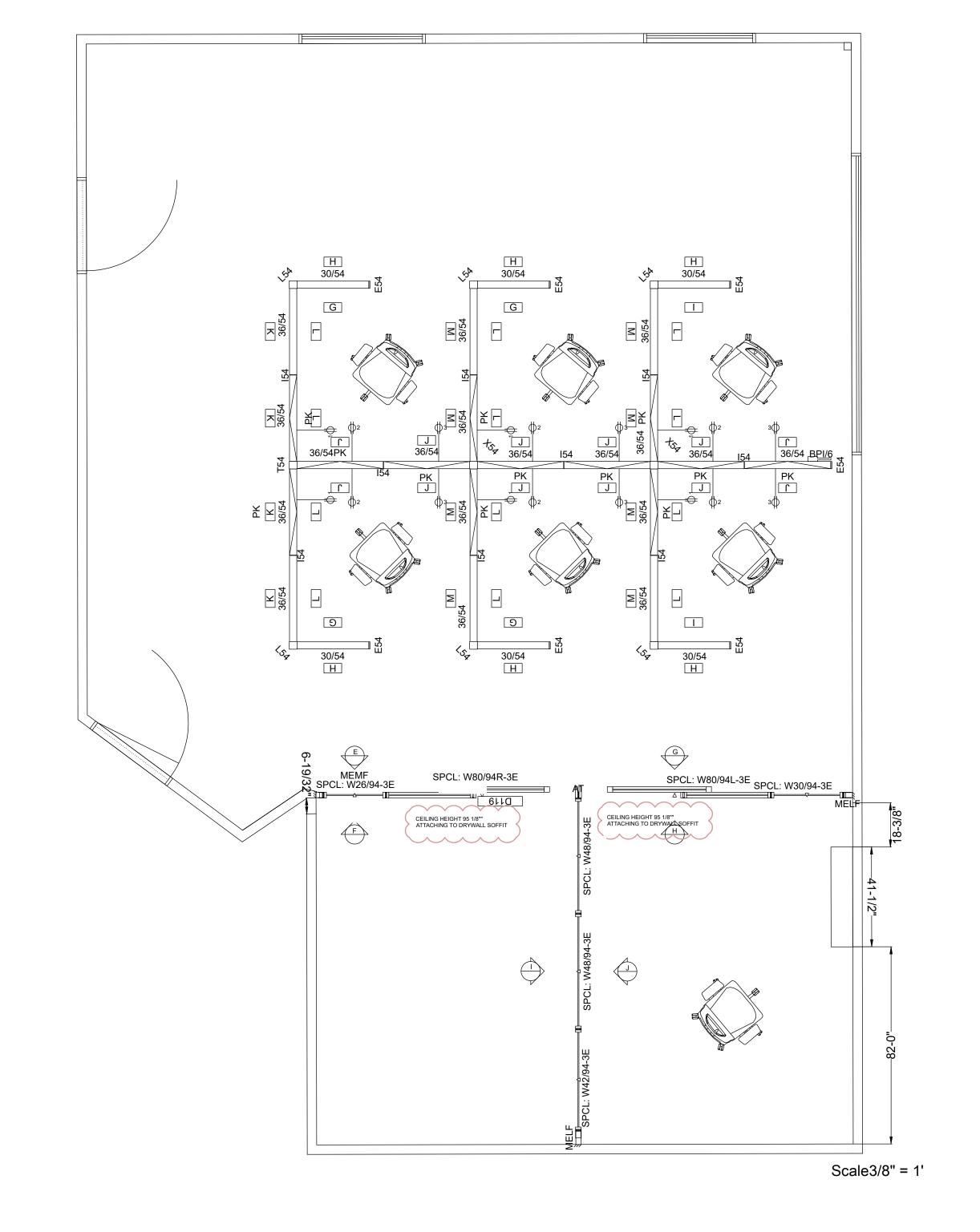
Scale3/8" = 1'

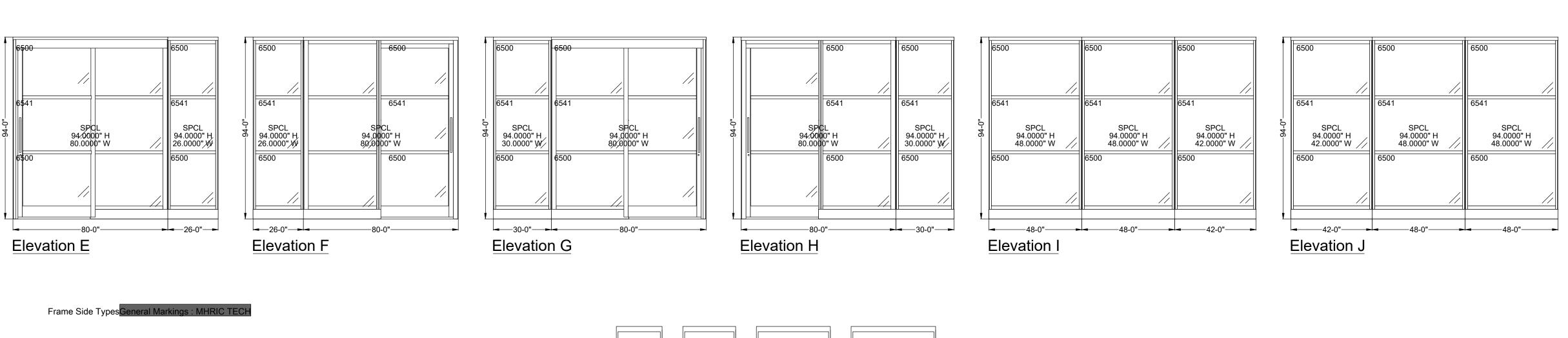


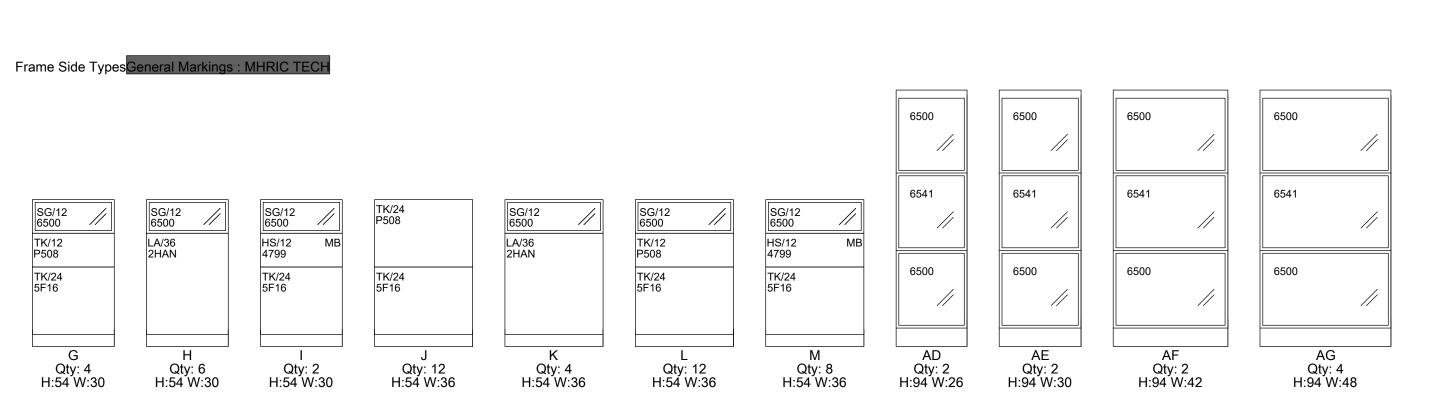
















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- ALBANY - NYC - ROCHESTER - SYRACUSE -

PROJECT NUMBER:

INTA22-574

QUOTE NUMBER:

111890

ORDER NUMBER:

159827

CUSTOMER CONTACT:

Amanda Stokes 845.255.3010

Astokes@ulsterboces.org

CUSTOMER LOCATION:

175 Route 32 North New Paltz, NY 12561/ FL01

DESIGNER CONTACT:

CAROLYN POSTELL
315.362.4140
CPOSTELL@INTIVITY.COM

SALES CONTACT:

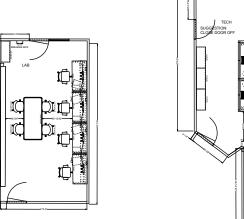
PAUL BRANIGAN
585.273.9359
PBRANIGAN@INTIVITY.COM

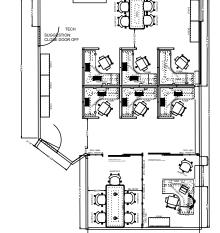
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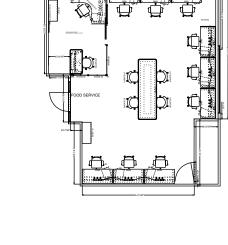
3/17/2023

PLOT SIZE: 36X48

KEY PLAN:







SITE VERIFIED:



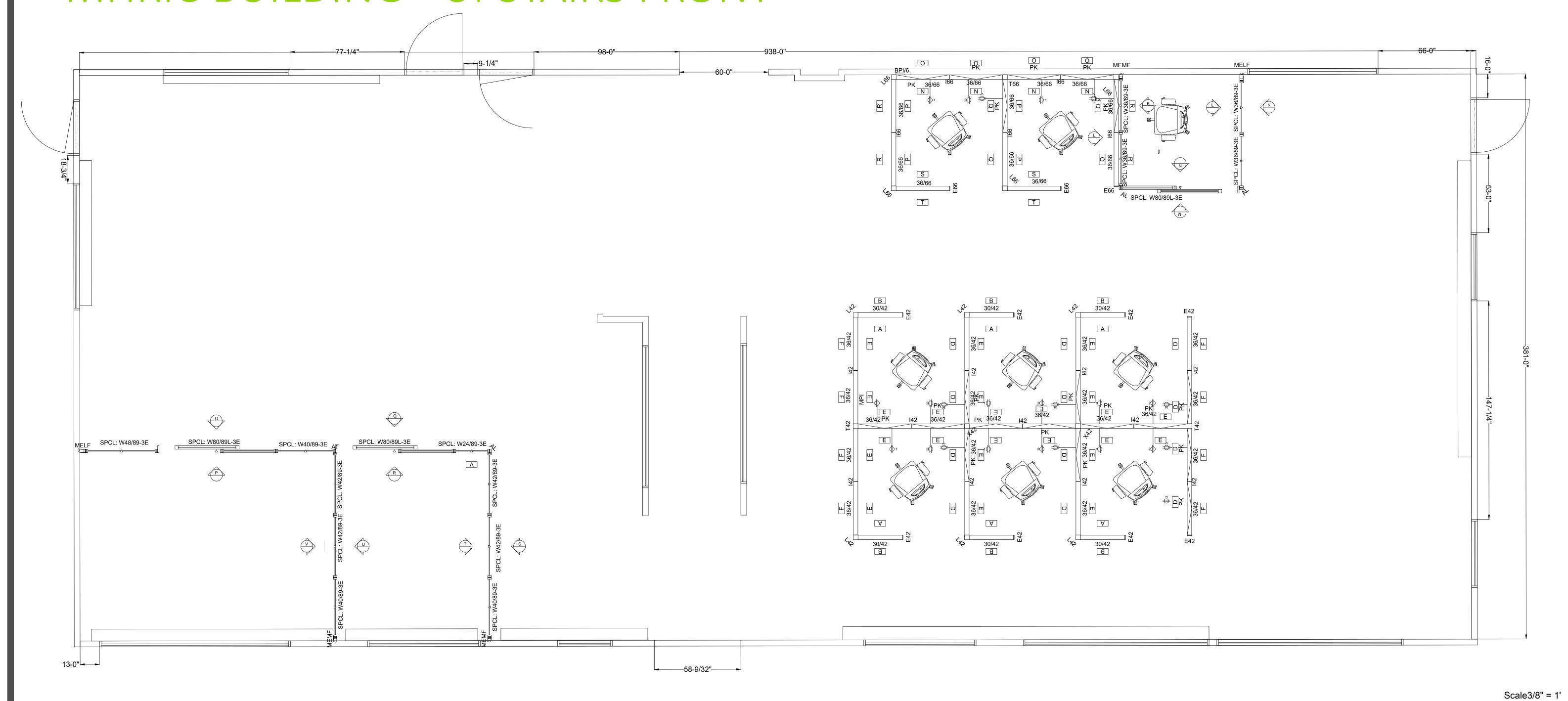
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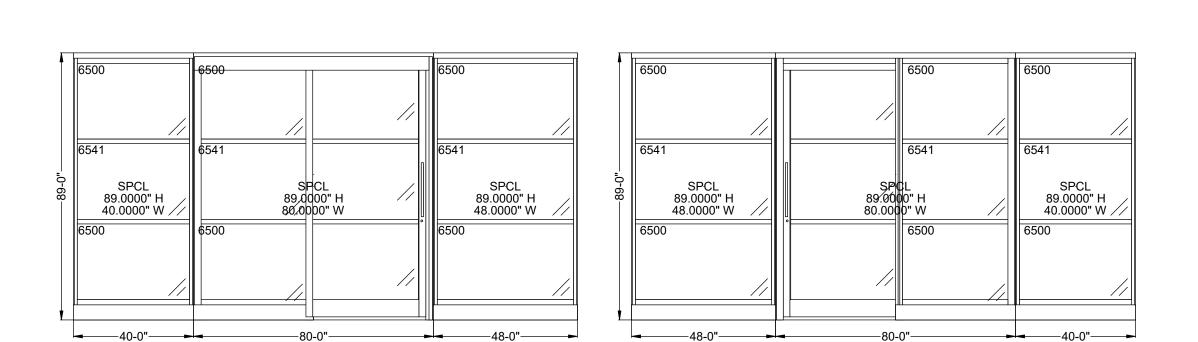
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Z ALB-NYC\A B C D\B\BOCES\BOCES\_ULSTER COUNTY\INTA22-574\_ULSTER CTY BOCES MHRIC BUILDING\CET FILE\INTA22-574\_BOCES\_ULSTER CTY MHRIC BULDING.cmdrw

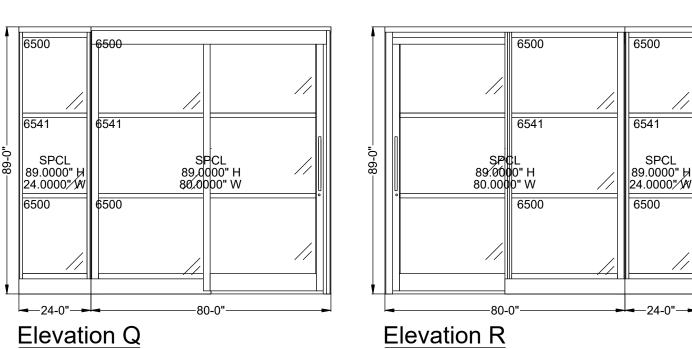
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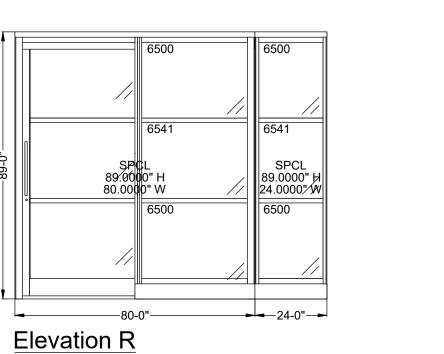
## MHRIC BUILDING - UPSTAIRS FRONT

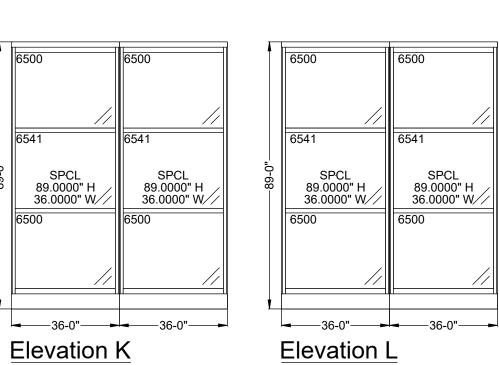


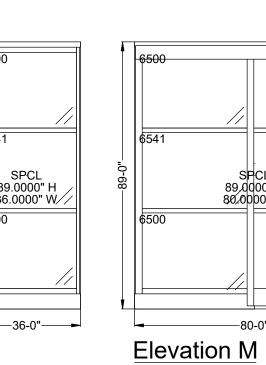


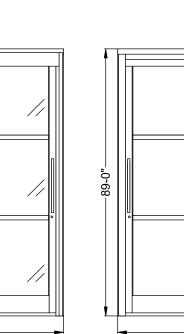
Elevation P

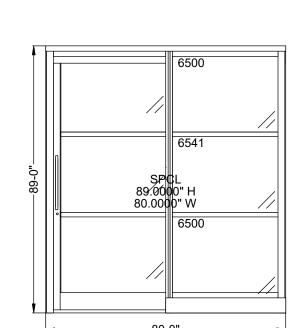




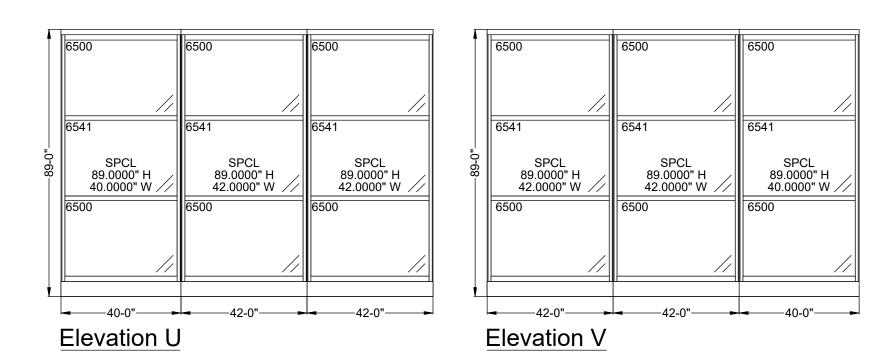






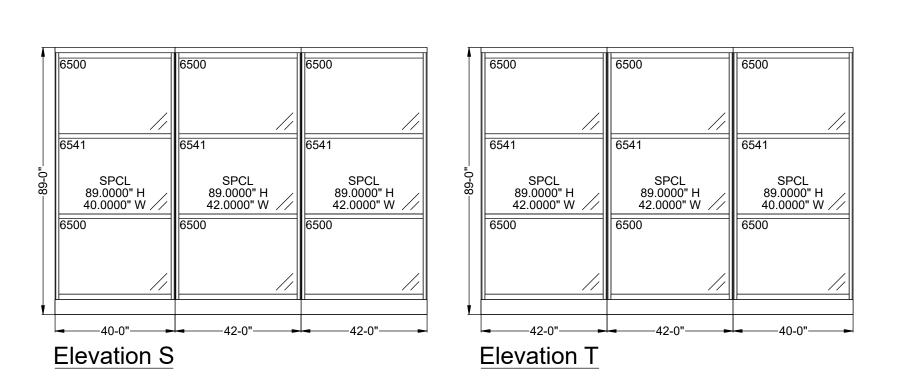


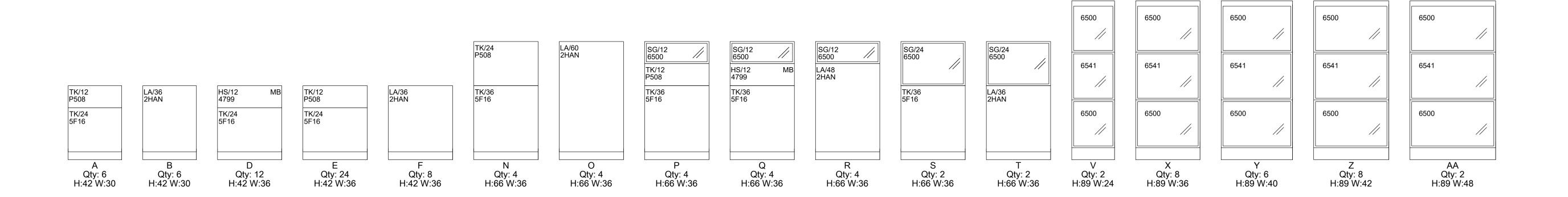
Elevation N



Frame Side Types General Markings: UPSTAIRS FRONT

Elevation O





NOTE: FOCUS 2.0 TASK CHAIR MESH CHANGED TO ONYX



everything office / anything but ordinary

- ALBANY - NYC - ROCHESTER - SYRACUSE -

PROJECT NUMBER:

INTA22-574

QUOTE NUMBER:

ORDER NUMBER:

**CUSTOMER CONTACT:** 

Amanda Stokes 845.255.3010

Astokes@ulsterboces.org

CUSTOMER LOCATION:

175 Route 32 North New Paltz, NY 12561/ FL01

DESIGNER CONTACT:

CAROLYN POSTELL 315.362.4140 CPOSTELL@INTIVITY.COM

SALES CONTACT:

PAUL BRANIGAN 585.273.9359 PBRANIGAN@INTIVITY.COM

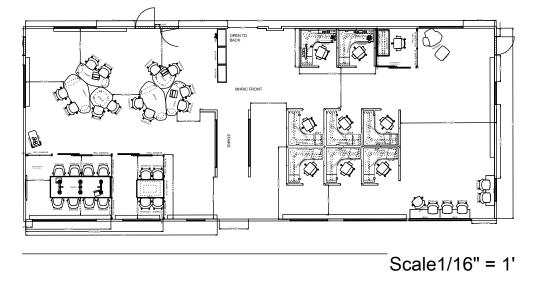
**REVISION DATE:** 

3/17/2023

PLOT SIZE:

36X48

KEY PLAN:



SITE VERIFIED:



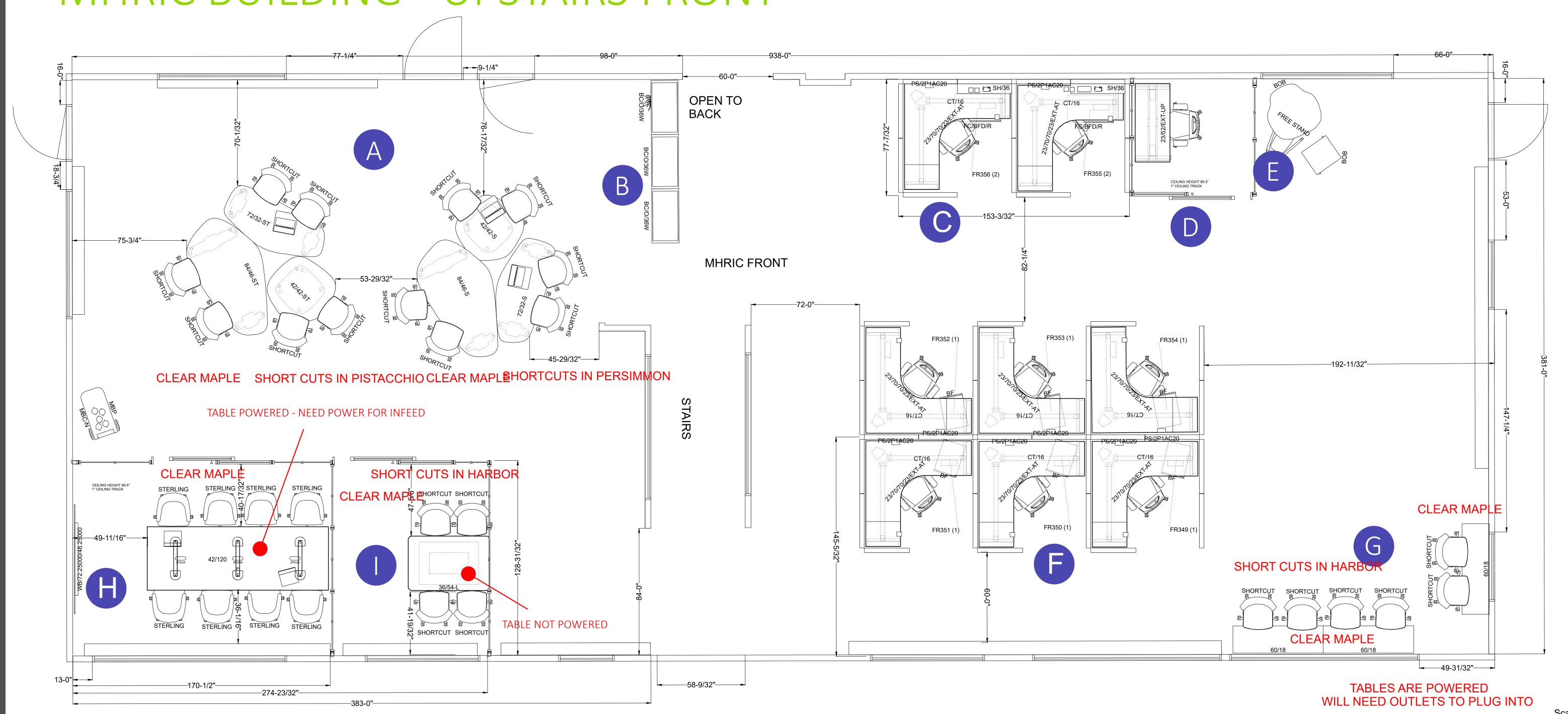
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PAGE: 4/7

## MHRIC BUILDING - UPSTAIRS FRONT



NOTE: FOCUS 2.0 TASK CHAIR MESH CHANGED TO ONYX





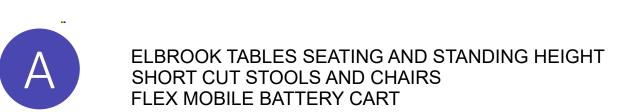


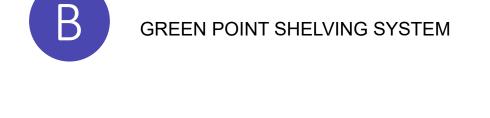






MIGRATION SE HEIGHT ADJUTSABLE AMIA TASK CHAIR







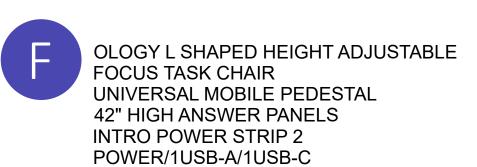
OLOGY L SHAPED HEIGHT ADJUSTABLE DESK TS MOBILE STORAGE AMIA TASK CHAIRS ANSWER PANELS WITH POWER, MARKER BOARD, FABRIC AND LAMINATE SKINS INTRO POWER STRIP- 2 POWER/1USB-A/1USB-C



BOB CHAIR AND OTTOMAN WITH

FREE STAND TABLE















PRIVACY WALL POTRERO 415 RECTANGLE TABLE (NOT POWERED) SHORTCUT CHAIRS



everything office / anything but ordinary

- ALBANY - NYC - ROCHESTER - SYRA

PROJECT NUMBER:

INTA22-574

QUOTE NUMBER:

ORDER NUMBER:

**CUSTOMER CONTACT:** 

Amanda Stokes

845.255.3010

Astokes@ulsterboces.org

**CUSTOMER LOCATION:** 

175 Route 32 North New Paltz, NY 12561/ FL01

**DESIGNER CONTACT:** 

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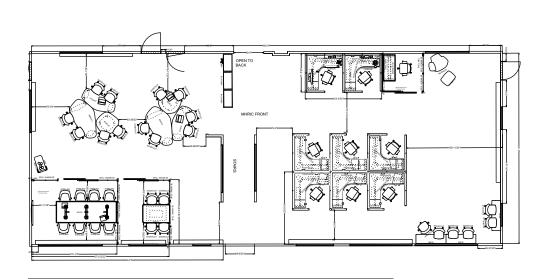
SALES CONTACT: PAUL BRANIGAN 585.273.9359 PBRANIGAN@INTIVITY.COM

**REVISION DATE:** 3/17/2023

PLOT SIZE:

36X48

**KEY PLAN:** 



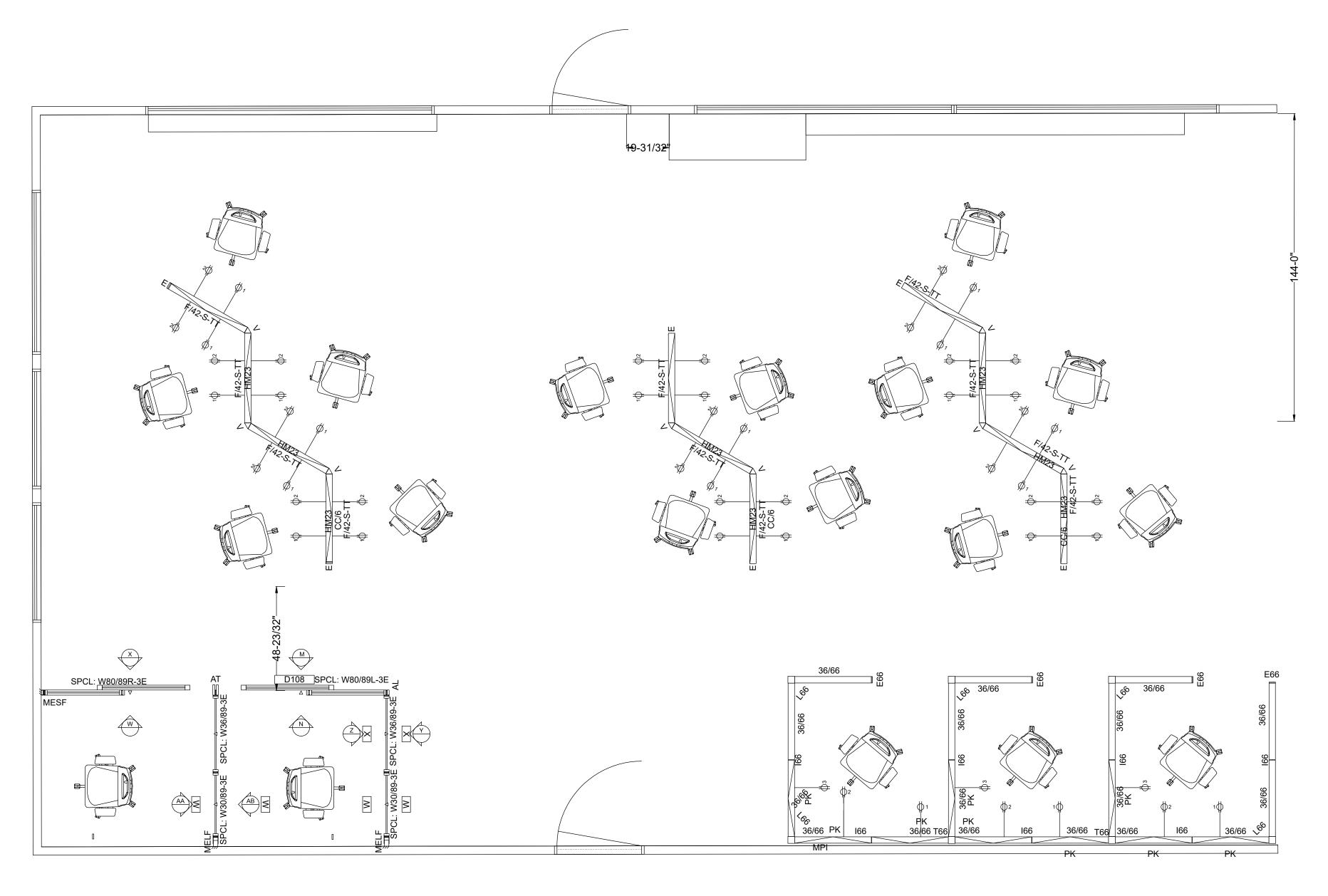
\_\_Scale1/16" = 1'

SITE VERIFIED:

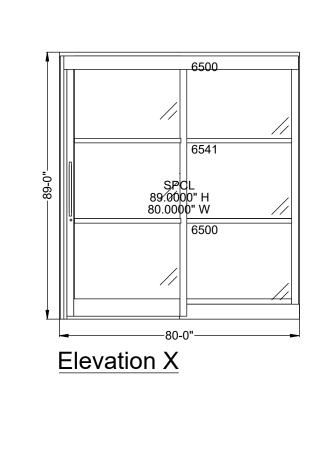
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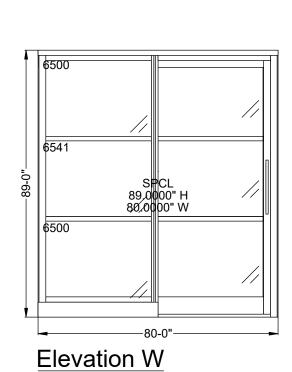
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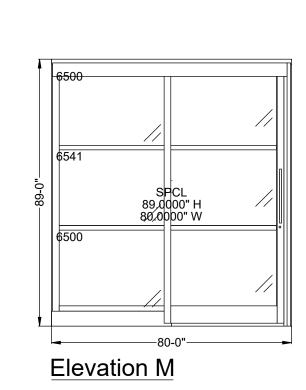
## MHRIC BUILDING - UPSTAIRS BACK

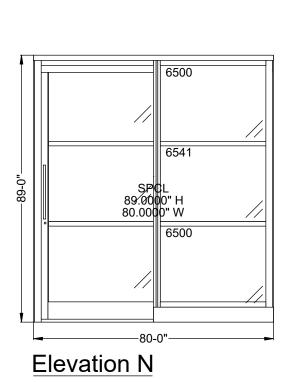


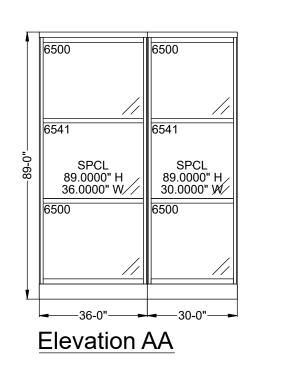
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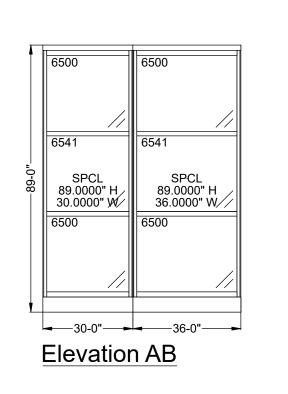


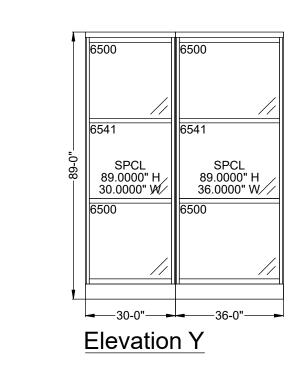


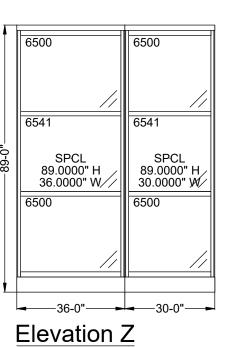




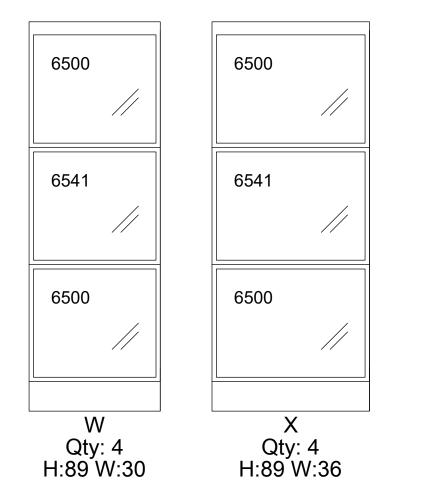








### Frame Side Types General Markings: UPSTAIRS BACK



NOTE: FOCUS 2.0 TASK CHAIR MESH CHANGED TO ONYX



everything office / anything but ordinary

- ALBANY - NYC - ROCHESTER - SYRACUSE -

PROJECT NUMBER:

INTA22-574

QUOTE NUMBER:

ORDER NUMBER:

CUSTOMER CONTACT:

845.255.3010

Astokes@ulsterboces.org

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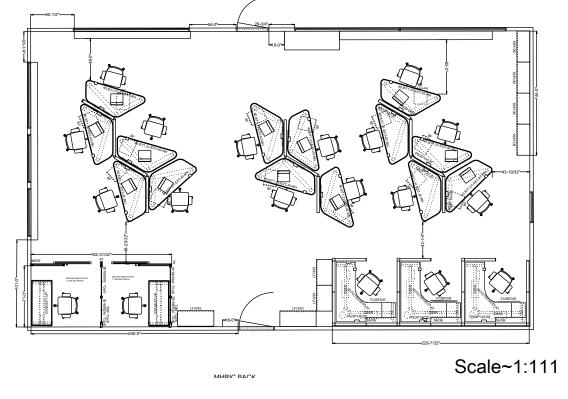
PAUL BRANIGAN 585.273.9359 PBRANIGAN@INTIVITY.COM

REVISION DATE:

3/17/2023

PLOT SIZE: 36X48

KEY PLAN:



SITE VERIFIED:

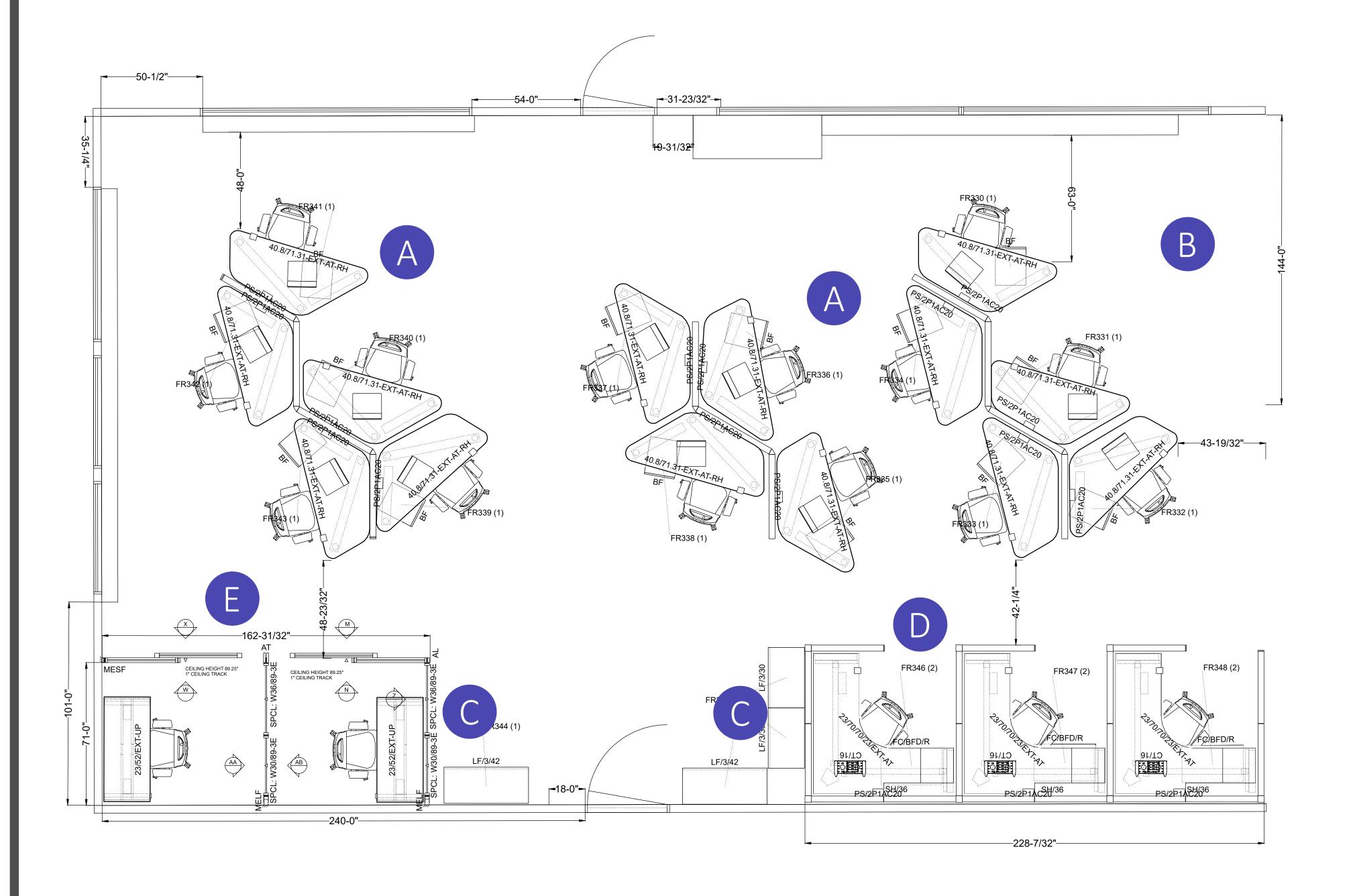


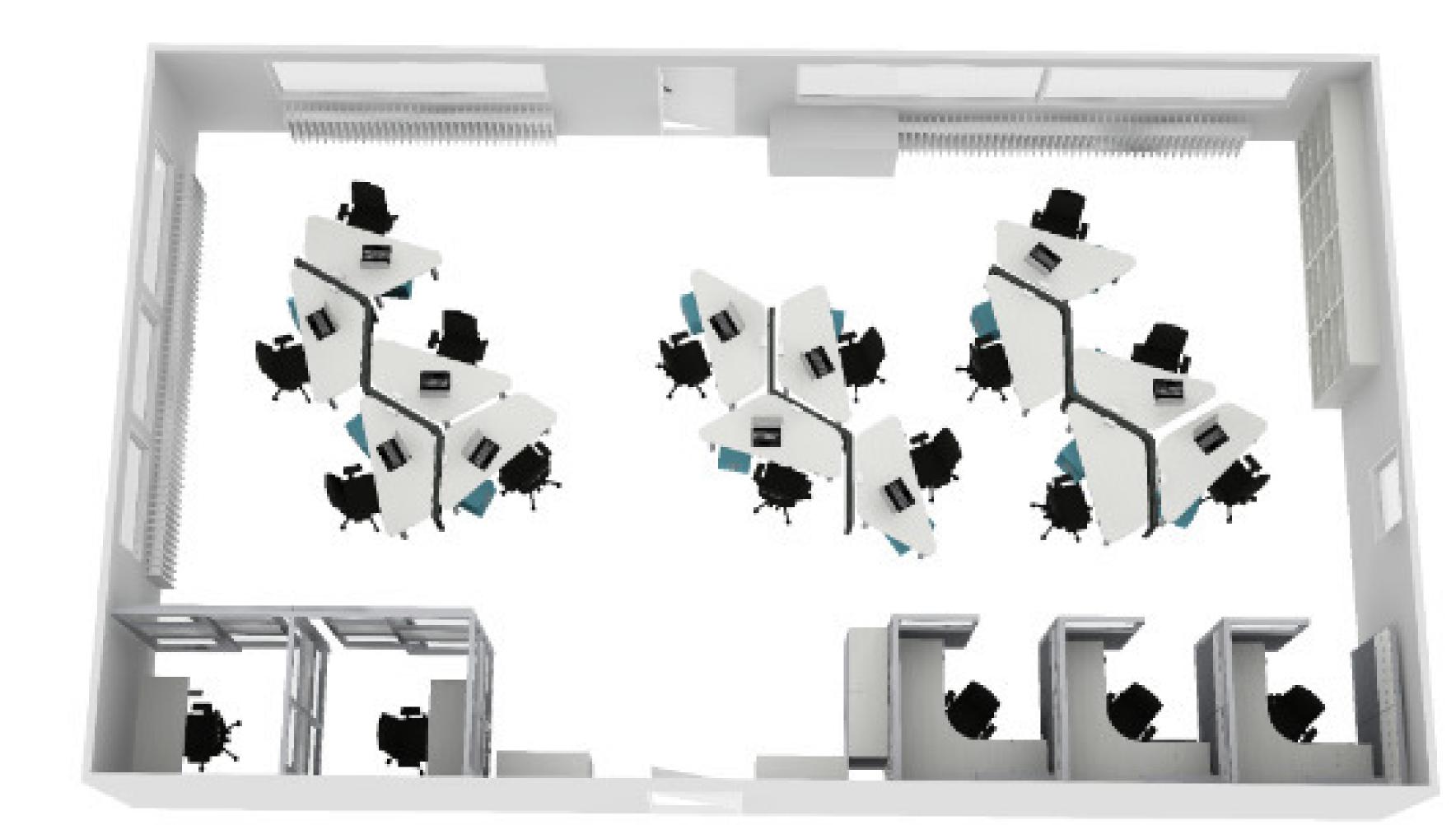
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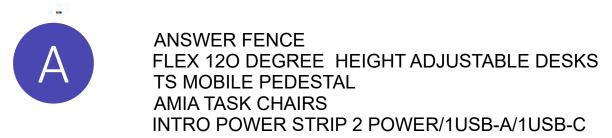
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## MHRIC BUILDING - UPSTAIRS BACK

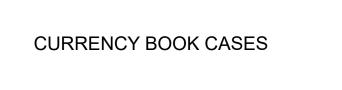


















OLOGY L SHAPED HEIGHT ADJUSTABLE DESK TS MOBILE STORAGE FOCUS TASK CHAIRS ANSWER PANELS WITH
MARKERBOARD AND LAMINATE SKINS INTRO POWER STRIP 2 POWER/1USB-A/1USB-C



PRIVACY WALL MIGRATION SE HEIGHT ADJUSTABLE DESKS AMIA TASK CHAIR



everything office / anything but ordinary

- ALBANY - NYC - ROCHESTER - SYRACUSE -

PROJECT NUMBER:

INTA22-574

QUOTE NUMBER:

ORDER NUMBER:

**CUSTOMER CONTACT:** 

Amanda Stokes 845.255.3010

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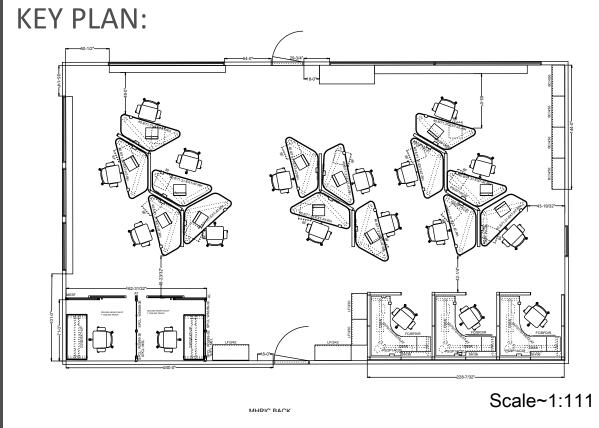
PBRANIGAN@INTIVITY.COM

REVISION DATE:

3/17/2023

PLOT SIZE:

36X48



SITE VERIFIED:



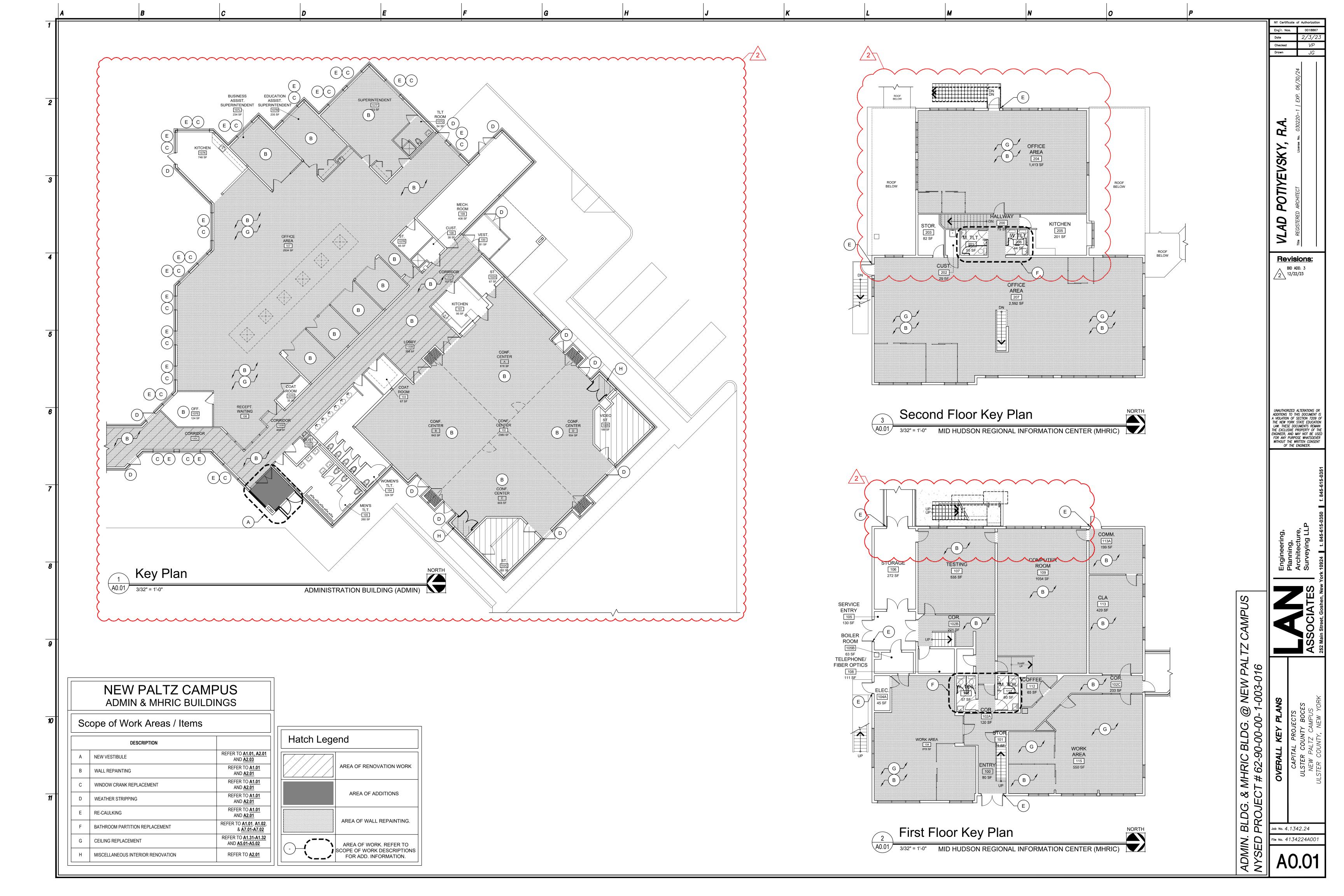
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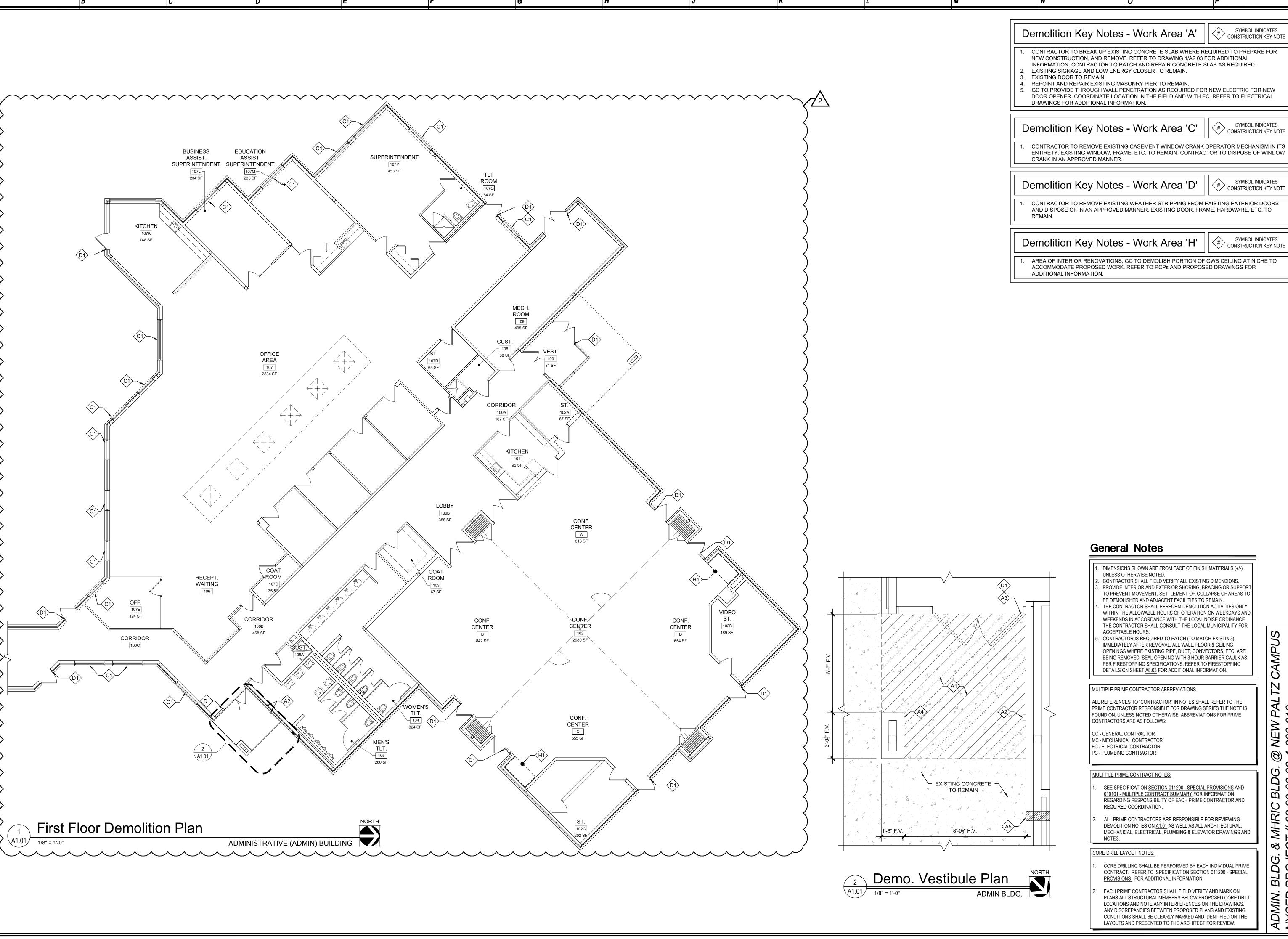
NOTE: FOCUS 2.0 TASK CHAIR

MESH CHANGED TO ONYX

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# SYMBOL INDICATES
CONSTRUCTION KEY NOTE

AD

**Revisions:** 

BID ADD. 3 12/22/23

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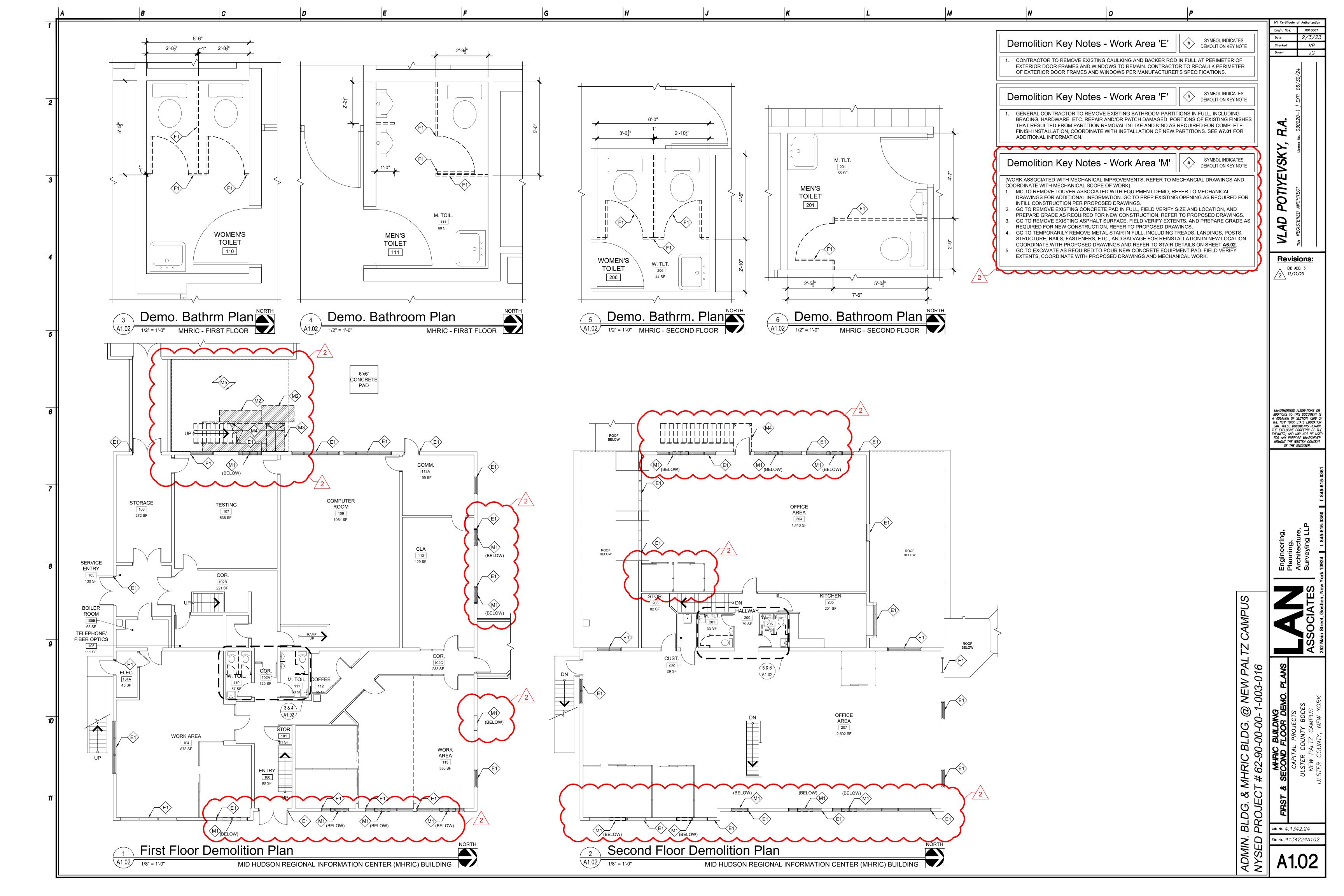
INE EXCLUSIVE PROPERTY OF THE ENGINEER, AND MAY NOT BE USE FOR ANY PURPOSE WHATSOEVER WITHOUT THE WRITTEN CONSENT OF THE ENGINEER.

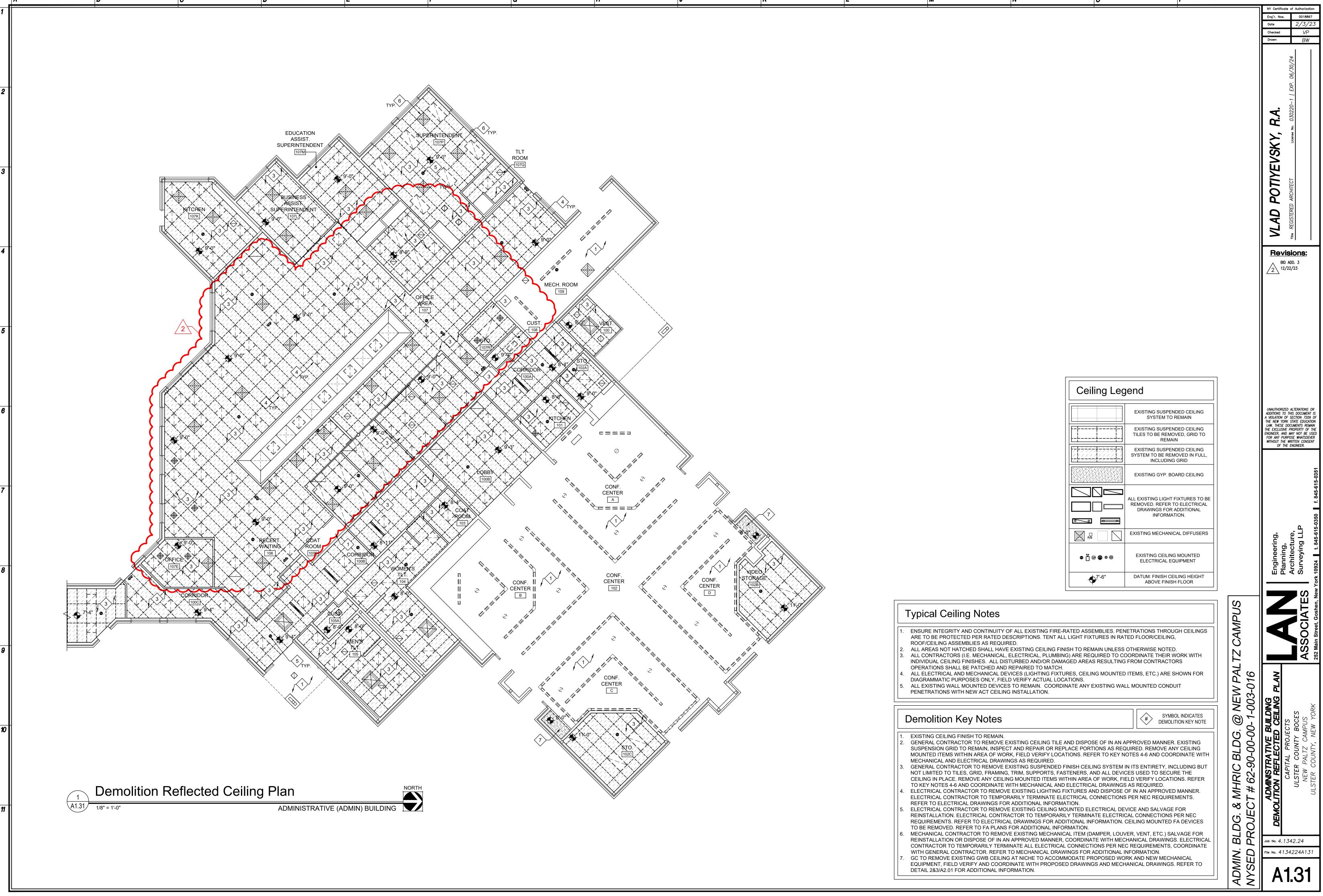
ALL REFERENCES TO "CONTRACTOR" IN NOTES SHALL REFER TO THE PRIME CONTRACTOR RESPONSIBLE FOR DRAWING SERIES THE NOTE IS FOUND ON, UNLESS NOTED OTHERWISE. ABBREVIATIONS FOR PRIME

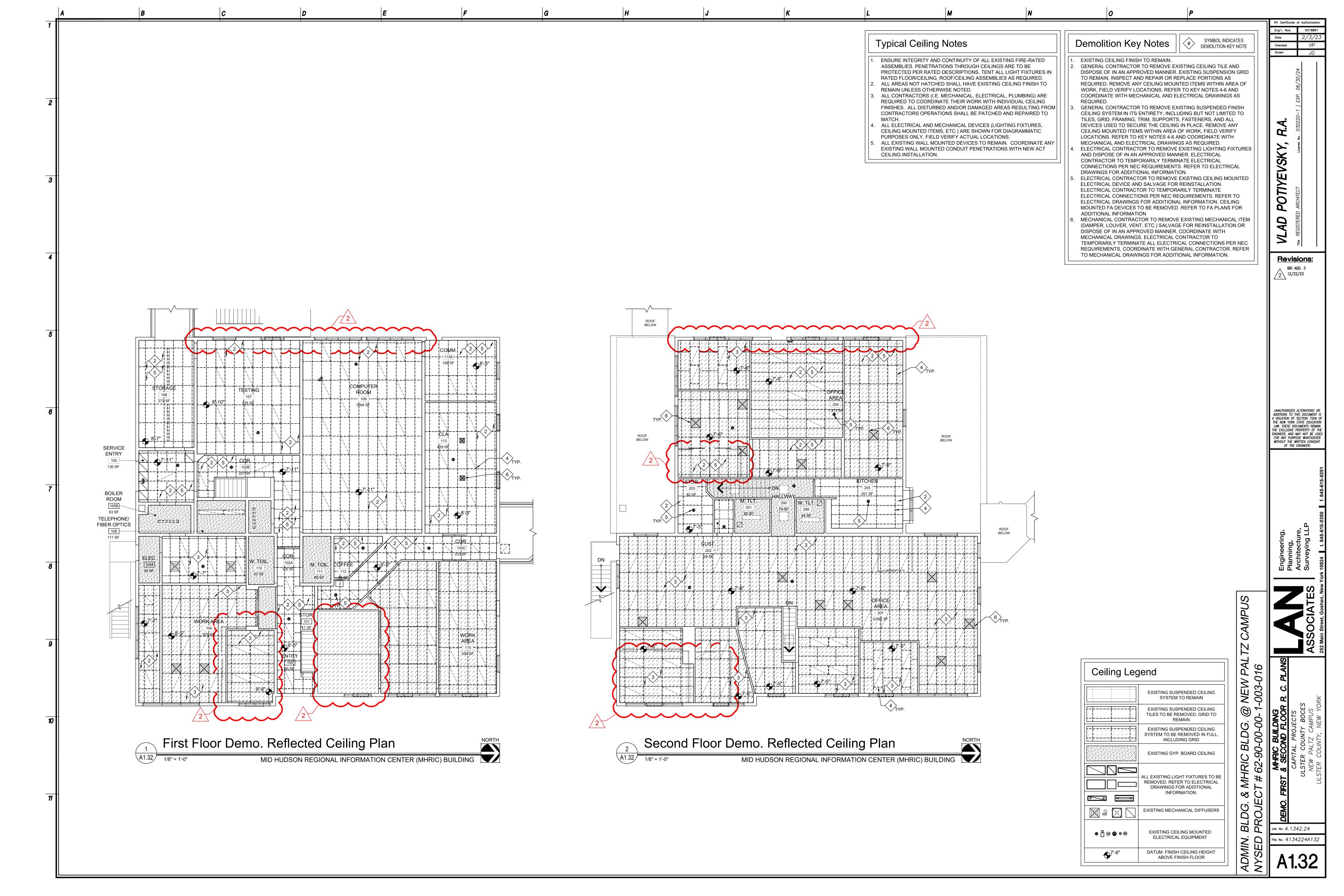
- SEE SPECIFICATION <u>SECTION 011200 SPECIAL PROVISIONS</u> AND <u>010101 MULTIPLE CONTRACT SUMMARY</u> FOR INFORMATION REGARDING RESPONSIBILITY OF EACH PRIME CONTRACTOR AND
- ALL PRIME CONTRACTORS ARE RESPONSIBLE FOR REVIEWING DEMOLITION NOTES ON A1.01 AS WELL AS ALL ARCHITECTURAL, MECHANICAL, ELECTRICAL, PLUMBING & ELEVATOR DRAWINGS AND
- CORE DRILLING SHALL BE PERFORMED BY EACH INDIVIDUAL PRIME CONTRACT. REFER TO SPECIFICATION SECTION <u>011200 - SPECIAL PROVISIONS</u> FOR ADDITIONAL INFORMATION.
- EACH PRIME CONTRACTOR SHALL FIELD VERIFY AND MARK ON PLANS ALL STRUCTURAL MEMBERS BELOW PROPOSED CORE DRILL LOCATIONS AND NOTE ANY INTERFERENCES ON THE DRAWINGS. ANY DISCREPANCIES BETWEEN PROPOSED PLANS AND EXISTING CONDITIONS SHALL BE CLEARLY MARKED AND IDENTIFIED ON THE

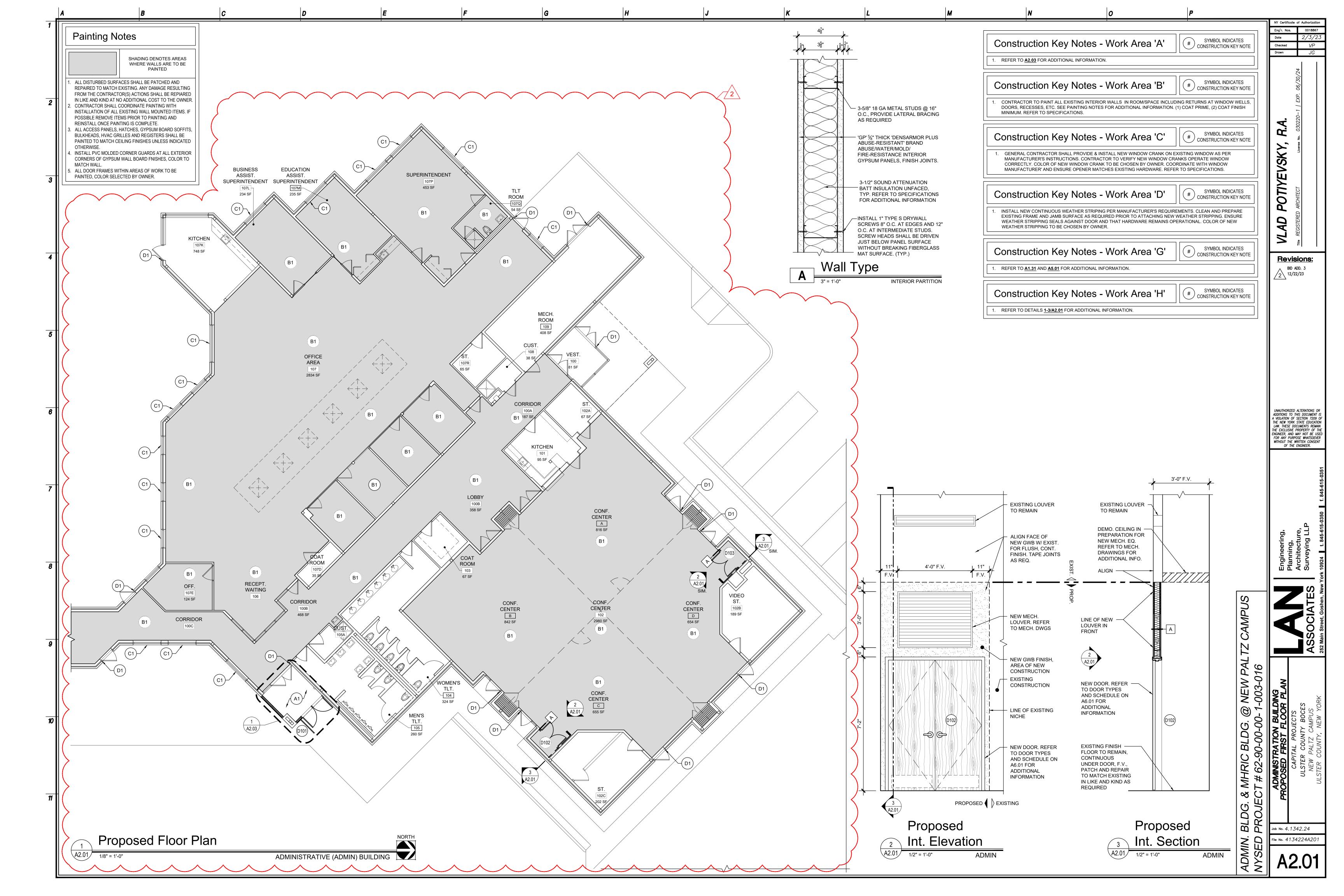
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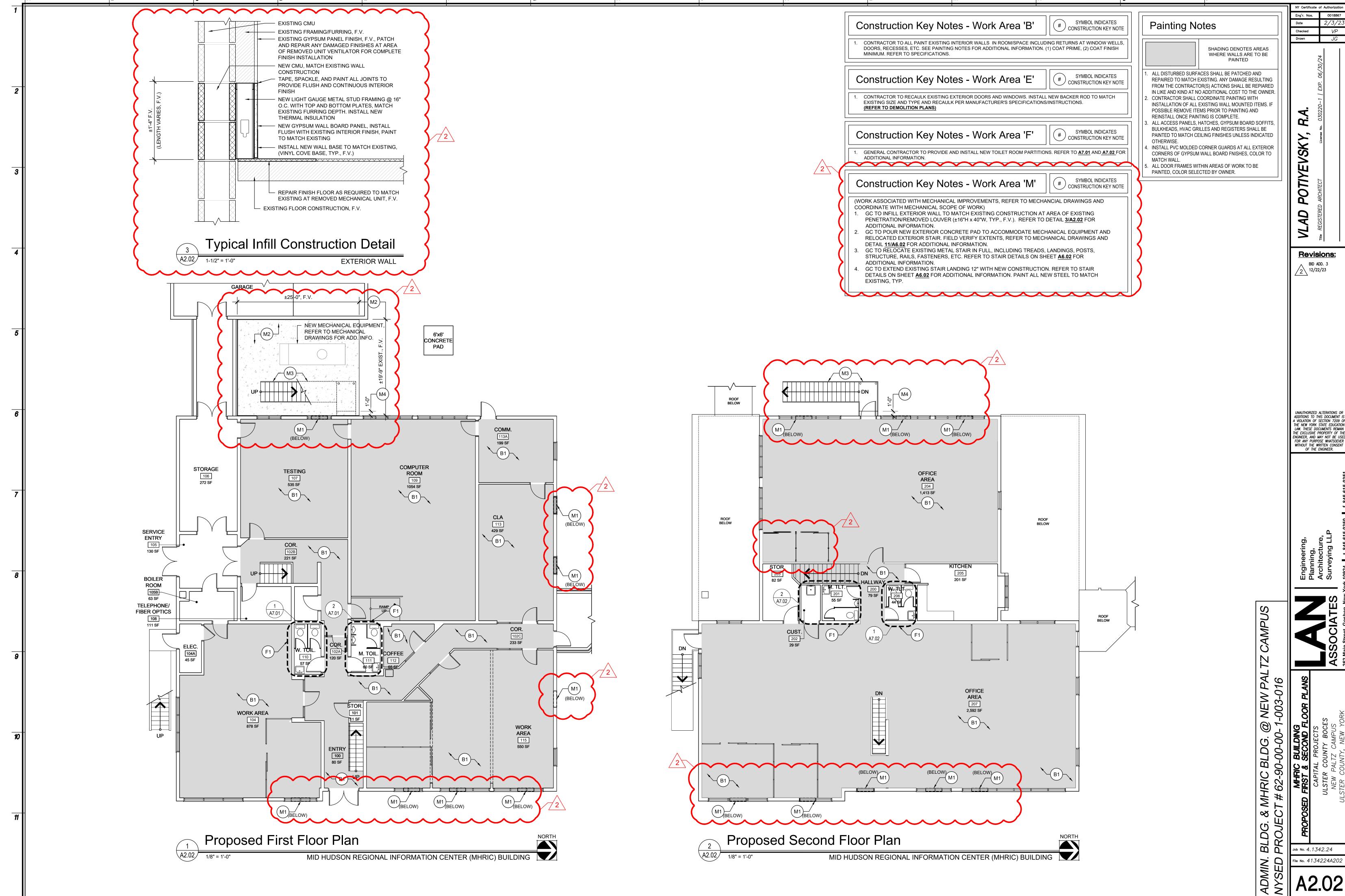
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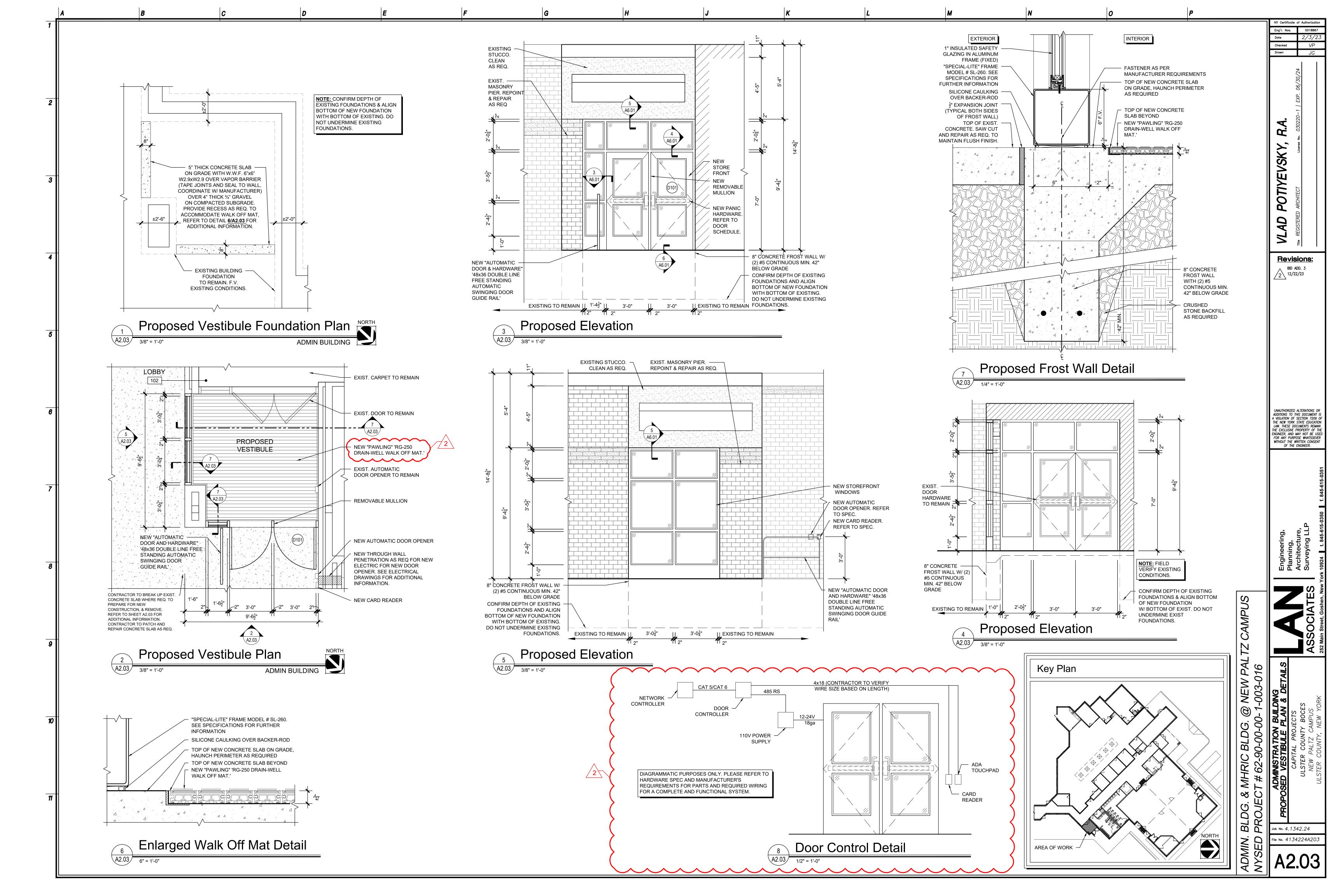


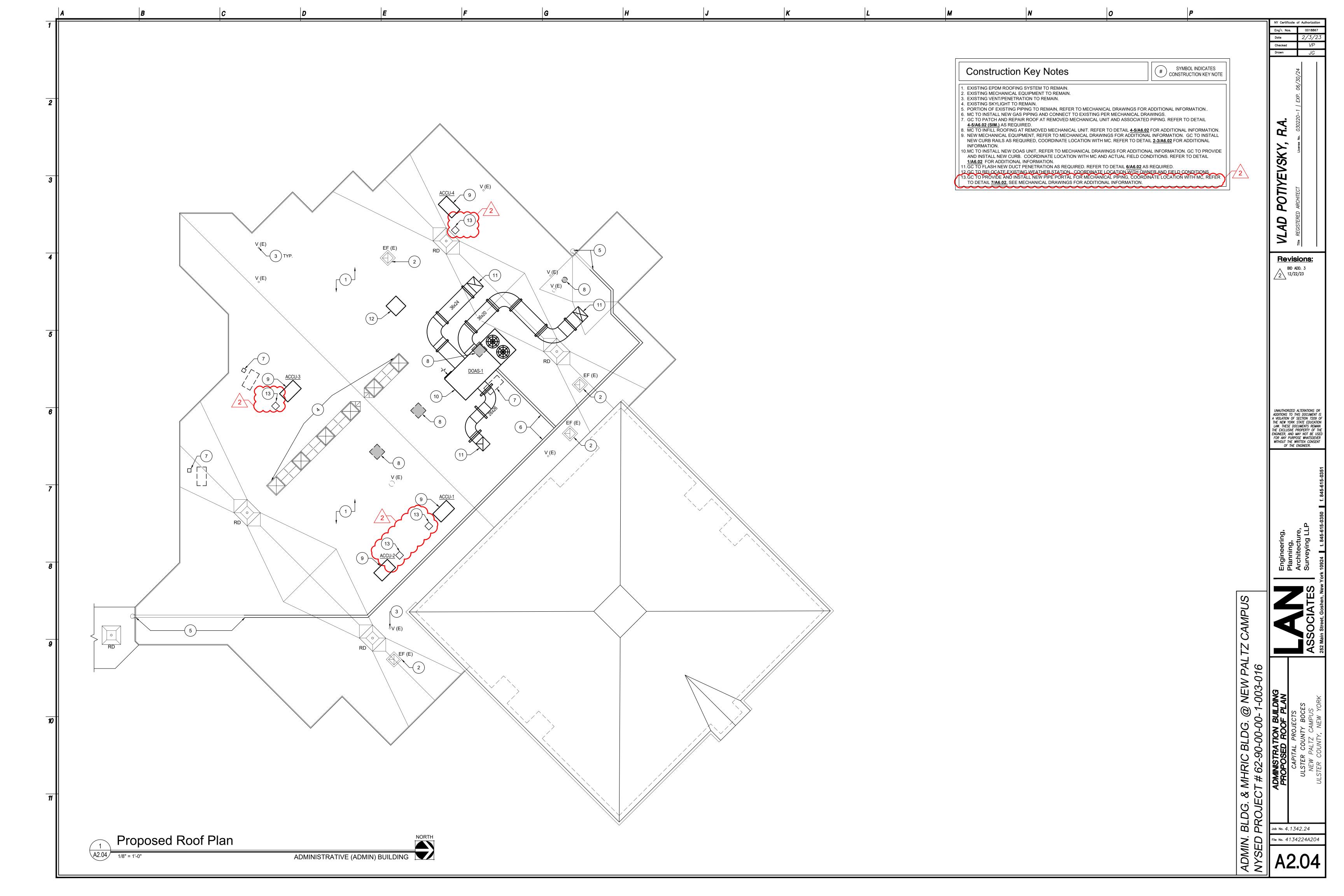


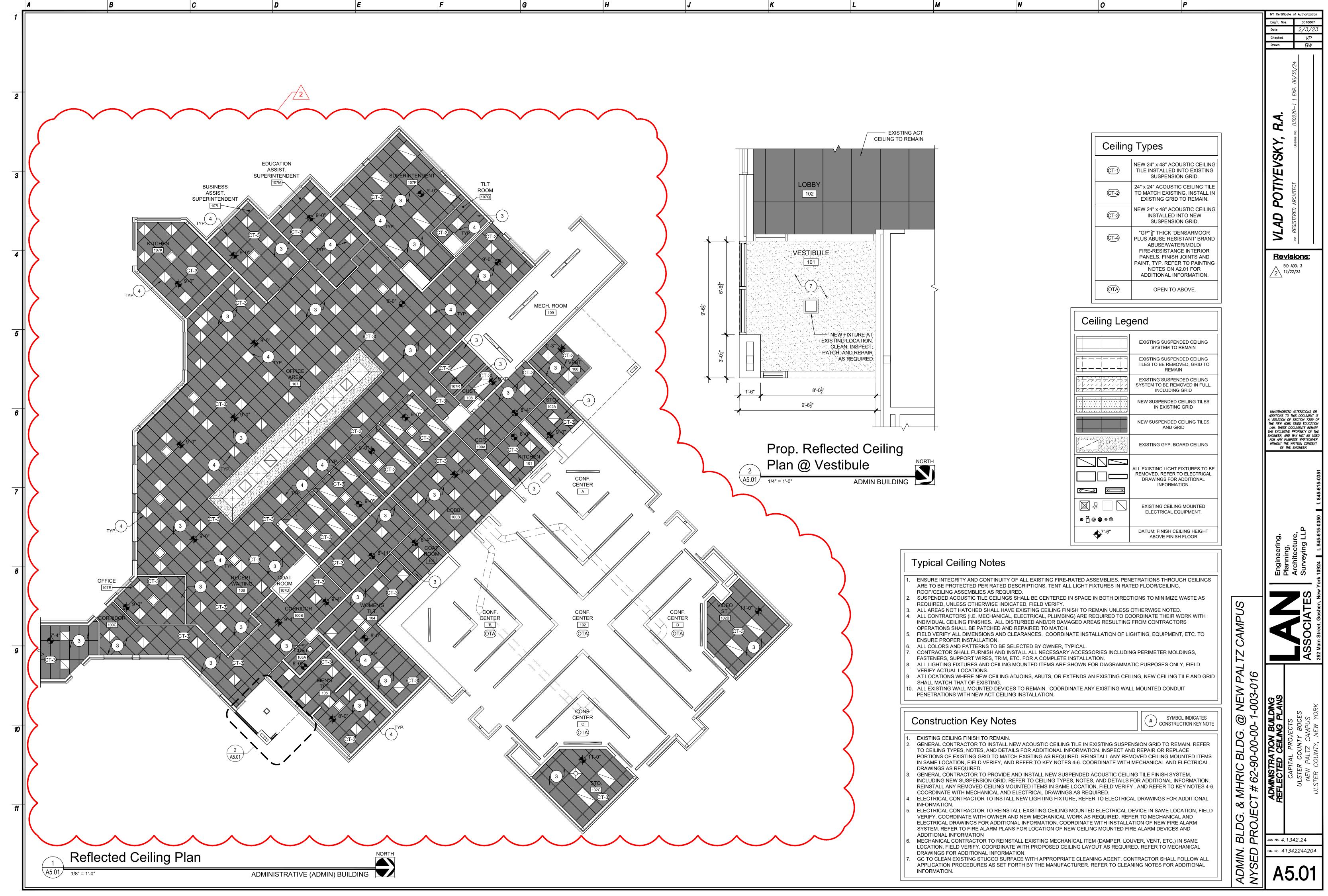


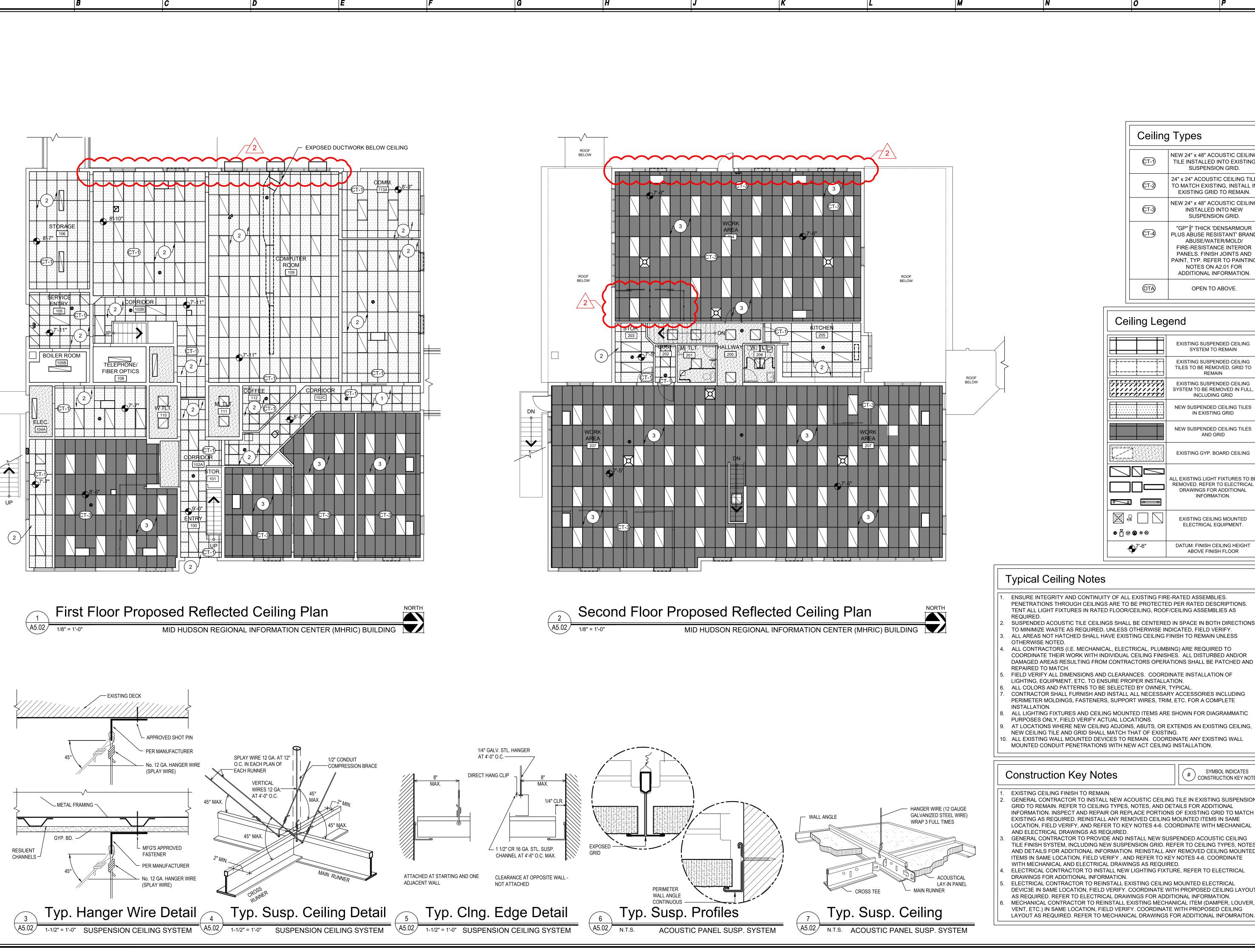




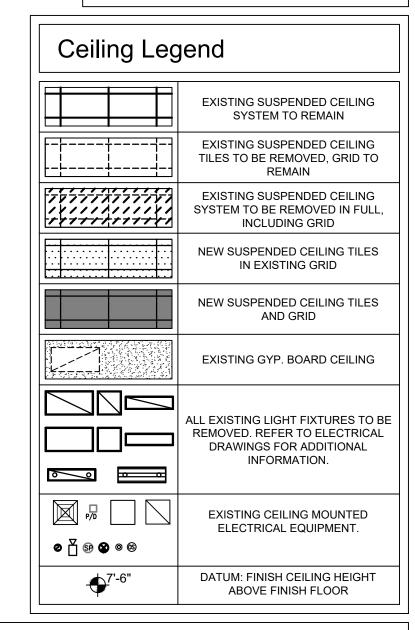








Ceiling Types NEW 24" x 48" ACOUSTIC CEILING TILE INSTALLED INTO EXISTING SUSPENSION GRID. 24" x 24" ACOUSTIC CEILING TILE TO MATCH EXISTING, INSTALL IN EXISTING GRID TO REMAIN. NEW 24" x 48" ACOUSTIC CEILING INSTALLED INTO NEW SUSPENSION GRID. "GP" §" THICK 'DENSARMOUR PLUS ABUSE RESISTANT' BRAND ABUSE/WATER/MOLD/ FIRE-RESISTANCE INTERIOR PANELS. FINISH JOINTS AND PAINT, TYP. REFER TO PAINTING NOTES ON A2.01 FOR ADDITIONAL INFORMATION. OPEN TO ABOVE.



## **Typical Ceiling Notes**

- ENSURE INTEGRITY AND CONTINUITY OF ALL EXISTING FIRE-RATED ASSEMBLIES. TENT ALL LIGHT FIXTURES IN RATED FLOOR/CEILING, ROOF/CEILING ASSEMBLIES AS
- SUSPENDED ACOUSTIC TILE CEILINGS SHALL BE CENTERED IN SPACE IN BOTH DIRECTIONS TO MINIMIZE WASTE AS REQUIRED, UNLESS OTHERWISE INDICATED, FIELD VERIFY.
- ALL CONTRACTORS (I.E. MECHANICAL, ELECTRICAL, PLUMBING) ARE REQUIRED TO COORDINATE THEIR WORK WITH INDIVIDUAL CEILING FINISHES. ALL DISTURBED AND/OR
- FIELD VERIFY ALL DIMENSIONS AND CLEARANCES. COORDINATE INSTALLATION OF LIGHTING, EQUIPMENT, ETC. TO ENSURE PROPER INSTALLATION.
- ALL COLORS AND PATTERNS TO BE SELECTED BY OWNER, TYPICAL CONTRACTOR SHALL FURNISH AND INSTALL ALL NECESSARY ACCESSORIES INCLUDING PERIMETER MOLDINGS, FASTENERS, SUPPORT WIRES, TRIM, ETC. FOR A COMPLETE
- ALL LIGHTING FIXTURES AND CEILING MOUNTED ITEMS ARE SHOWN FOR DIAGRAMMATIC PURPOSES ONLY, FIELD VERIFY ACTUAL LOCATIONS.
- AT LOCATIONS WHERE NEW CEILING ADJOINS, ABUTS, OR EXTENDS AN EXISTING CEILING,
- NEW CEILING TILE AND GRID SHALL MATCH THAT OF EXISTING.
- . ALL EXISTING WALL MOUNTED DEVICES TO REMAIN. COORDINATE ANY EXISTING WALL MOUNTED CONDUIT PENETRATIONS WITH NEW ACT CEILING INSTALLATION.

## **Construction Key Notes**

# SYMBOL INDICATES CONSTRUCTION KEY NOTE

GENERAL CONTRACTOR TO INSTALL NEW ACOUSTIC CEILING TILE IN EXISTING SUSPENSION GRID TO REMAIN. REFER TO CEILING TYPES, NOTES, AND DETAILS FOR ADDITIONAL INFORMATION. INSPECT AND REPAIR OR REPLACE PORTIONS OF EXISTING GRID TO MATCH EXISTING AS REQUIRED. REINSTALL ANY REMOVED CEILING MOUNTED ITEMS IN SAME LOCATION, FIELD VERIFY, AND REFER TO KEY NOTES 4-6. COORDINATE WITH MECHANICAL AND ELECTRICAL DRAWINGS AS REQUIRED.

GENERAL CONTRACTOR TO PROVIDE AND INSTALL NEW SUSPENDED ACOUSTIC CEILING TILE FINISH SYSTEM, INCLUDING NEW SUSPENSION GRID. REFER TO CEILING TYPES, NOTES AND DETAILS FOR ADDITIONAL INFORMATION. REINSTALL ANY REMOVED CEILING MOUNTED ITEMS IN SAME LOCATION, FIELD VERIFY, AND REFER TO KEY NOTES 4-6. COORDINATE

WITH MECHANICAL AND ELECTRICAL DRAWINGS AS REQUIRED. ELECTRICAL CONTRACTOR TO INSTALL NEW LIGHTING FIXTURE, REFER TO ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION.

ELECTRICAL CONTRACTOR TO REINSTALL EXISTING CEILING MOUNTED ELECTRICAL DEVIC3E IN SAME LOCATION, FIELD VERIFY. COORDINATE WITH PROPOSED CEILING LAYOUT AS REQUIRED. REFER TO ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION. VENT, ETC.) IN SAME LOCATION, FIELD VERIFY. COORDINATE WITH PROPOSED CEILING

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A5.02

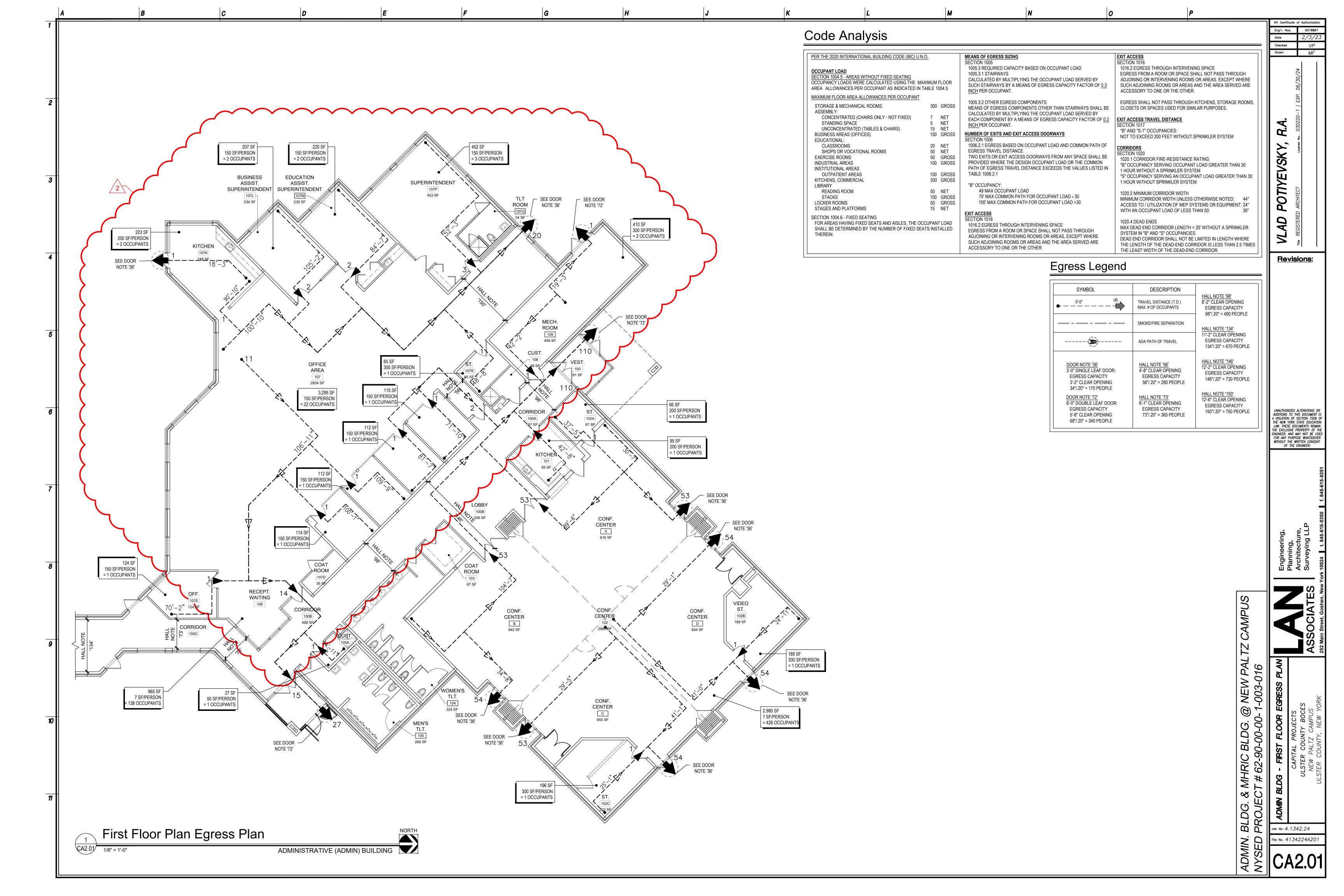
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BLDG. & MHRIC BLDG. @ PROJECT # 62-90-00-00-1

File No. 4134224A50



UNLESS SPECIFICALLY NOTED OTHERWISE, IT SHALL BE UNDERSTOOD THAT WHEN THE WORDS "ARCHITECT", "ENGINEER", OR "A/E" ARE USED IN THESE DRAWINGS THEY ARE INTERCHANGEABLE AN ALL REFER TO LAN ASSOCIATES. ENGINEERING, PLANNING, ARCHITECTURE SURVEYING ("LAN"). WHERE ANY DEVICE OR PART OF EQUIPMENT IS REFERRED TO IN THESE DRAWINGS IN THE SINGULAR NUMBER (E.G., "THE SWITCH", "THE RECEPTACLE"), THIS REFERENCE SHALL BE DEEMED TO APPLY TO AS MANY SUCH DEVICES AS ARE REQUIRED TO COMPLETE THE INSTALLATION AS SHOWN ON THE DRAWINGS.

CODE & STANDARDS COMPLIANCE:

CODE COMPLIANCE IS MANDATORY. NOTHING IN THESE DRAWINGS AND SPECIFICATIONS PERMITS WORK NOT CONFORMING TO THESE CODES. WHERE WORK IS SHOWN TO 8. ASSIGN MULTI-POLE CIRCUITS BY THE PANELBOARD EXCEED MINIMUM CODE REQUIREMENTS, COMPLY WITH DRAWINGS AND SPECIFICATIONS. WHEN DIFFERENCES IN UTILITY SPECIFICATIONS OR STANDARDS, GOVERNMENTAL ORDINANCES OR CODES OCCUR, THE MORE STRINGENT REQUIREMENTS SHALL GOVERN THE INSTALLATION.

THE ELECTRIC INSTALLATION SHALL BE IN ACCORDANCE WITH THE CURRENTLY ENFORCED EDITION OF THE NATIONAL ELECTRICAL CODE (NEC), NATIONAL ELECTRICAL SAFETY CODE (NESC), AMERICAN ELECTRICIANS' HANDBOOK, INTERNATIONAL BUILDING CODE (IBC), AMERICANS WITH DISABILITIES ACT (ADA), NFPA 55 & 99 AND NEC STANDARD OF INSTALLATION. WHEREVER IN THE DOCUMENTS THE WORD "CODE" IS STATED, THE MORE STRINGENT OF THE ABOVE REFERENCED CODES IS IMPLIED.

ALL CONTRACTOR SUPPLIED MATERIALS/EQUIPMENT SHALL BE NEW AND UL LISTED OR APPROVED BY ANOTHER NATIONALLY RECOGNIZED TESTING LABORATORY (NRTL).

THE CONTRACTOR SHALL PAY FOR AND OBTAIN ALL PERMITS AND INSPECTIONS REQUIRED BY THE BUILDING AND SAFETY CODES AND ORDINANCES, AND THE RULES AND REGULATIONS OF ANY LEGAL BODY HAVING JURISDICTION. PERMIT AND INSPECTIONS SHALL BE INCLUDE IN THE BASE BID AND SHALL NOT BE CAUSE FOR AN EXTRA.

CONTRACTOR SHALL CONFIRM TO ALL SAFETY RULES AND OTHER REGULATIONS, ETC. PERTAINING TO CONSTRUCTION WORK ON THE CLIENT'S PREMISES. CONTRACTOR SHALL BE RESPONSIBLE TO ENSURE THAT ALL RULES AND REGULATIONS HAVE BEEN MET AND COORDINATE THIS WORK WITH RESPONSIBLE CLIENT'S PERSONNEL.

ALL ELECTRICAL EQUIPMENT AND RACEWAYS PERMANENTLY ATTACHED TO STRUCTURES, INCLUDING SUPPORTING STRUCTURES AND ATTACHMENTS TO NON-BUILDING STRUCTURES, SHALL BE ANCHORED FOR SEISMIC LOADING TO RESIST A HORIZONTAL FORCE ACTION IN ANY DIRECTION. CONTRACTOR SHALL PROVIDE SEISMIC RESTRAINTS FOR ALL CONDUITS LARGER THAN 21/2" TRADE DIAMETER. PROVIDE SWAY BRACES FOR CONDUIT AND EQUIPMENT SUSPENDED FROM THE OVERHEAD. PROVIDE ANCHOR BOLTS FOR FLOOR AND WALL MOUNTED EQUIPMENT. THE INSTALLATION SHALL MEET THE REQUIREMENTS OF INTERNATIONAL BUILDING CODE (IBC) SECTIONS 1614 AND 1621 AS THEY APPLY TO ELECTRICAL EQUIPMENT FOR EARTHQUAKE LOADS.

GENERAL PROCEDURES:

ALL EQUIPMENT SHALL BE AS INDICATED OR AS APPROVED BY THE ENGINEER/ARCHITECT.

THE COST INCURRED BY THE ACCEPTANCE OF SUBSTITUTIONS SHALL BE BORNE BY THE CONTRACTOR. PROOF FOR THE EQUALITY OF THE SUBSTITUTIONS SHALL BE BY THE CONTRACTOR AND DIFFERENCES SHALL BE **ENUMERATED WITH THE SUBMITTAL** 

ELECTRICAL COMPONENTS INCLUDING, BUT NOT LIMITED TO CONDUCTOR SIZE. OVERCURRENT PROTECTION DEVICE AND DISCONNECT SWITCHES ARE BASED ON THE POWER REQUIREMENTS OF THE EQUIPMENT SHOWN ON THE CONTRACT DOCUMENTS. ALL COSTS (INCLUDING ADDITIONAL DESIGN FEES IF REQUIRED) ASSOCIATED WITH CHANGES TO THESE POWER REQUIREMENTS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR MAKING THE CHANGE.

. OBTAIN SHOP DRAWINGS AND WIRING DIAGRAMS FOR THE PROPER INSTALLATION OF RELATED ELECTRICAL WORK.

CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL OF DEBRIS GENERATED BY HIS WORK AND WORKERS AT THE END OF EACH WORKING DAY AND FOR GENERAL GOOD HOUSEKEEPING BY HIS WORKERS, CONTRACTOR SHALL PROVIDE REQUIRED REFUSE CONTAINERS.

SITE CONDITIONS/DRAWING COORDINATION:

THESE DRAWINGS AND SPECIFICATIONS ILLUSTRATE THE WORK TO BE PERFORMED. THE ENGINEER IS NOT RESPONSIBLE FOR THE MEANS, METHODS, TECHNIQUES, SEQUENCES, AND PROCEDURES USED TO DO THE WORK, OR THE SAFETY ASPECTS OF CONSTRUCTIONS, AND NOTHING ON THESE DRAWINGS EXPRESSED OR IMPLIED CHANGES THIS CONDITION. PRIOR TO BIDDING AND/OR STARTING WORK THE CONTRACTOR SHALL VISIT THE PROJECT SITE TO DETERMINE THE CONDITIONS UNDER WHICH THE WORK IS TO BE PERFORMED AND SHALL BE RESPONSIBLE FOR KNOWING HOW THEY AFFECT THE WORK. SCHEDULE SITE VISIT WITH CLIENT'S REPRESENTATIVES. ADDITIONALLY, THE CONTRACTOR SHALL FIELD VERIFY ALL SITE DIMENSIONS AND ROOM LAYOUTS. SUBMISSION OF A BID TO PERFORM THIS WORK IS AN ACKNOWLEDGEMENT OF THESE RESPONSIBILITIES, AND THAT THEY HAVE BEEN FULLY CONSIDERED IN PLANNING OF THE WORK, AND THE BID PRICE. NO CLAIMS OR EXTRA CHARGES DUE TO THESE CONDITIONS

WILL BE FORTHCOMING. THE CLIENT WILL OCCUPY THE SITE AND EXISTING BUILDING DURING THE ENTIRE CONSTRUCTION PERIOD. COOPERATE WITH THE CLIENT DURING CONSTRUCTION OPERATIONS TO AVOID ANY CONFLICTS. PERFORM THE WORK SO AS NOT TO INTERFERE WITH THE CLIENT'S OPERATIONS. SCHEDULE ALL POWER OUTAGES WITH CLIENT'S APPROVAL FOR OVERTIME ON SUNDAYS AND HOLIDAYS AT NO ADDITIONAL COST TO THE

. EXISTING PROJECT CONDITIONS INDICATED ARE BASED ON FIELD OBSERVATIONS; EXISTING DESIGN/CONSTRUCTION DOCUMENTS AND EXISTING RECORD DOCUMENTS AND ARE

BY THIS PROJECT DRAWINGS SHALL NOT BE SCALED. DRAWINGS INDICATE THE GENERAL ARRANGEMENT OF SYSTEMS AND REQUIREMENTS OF THE WORK. ALTHOUGH SIZE AND LOCATION OF EQUIPMENT IS DRAWN TO SCALE WHEREVER POSSIBLE. CONTRACTOR SHALL MAKE USE OF ALL DATA IN ALL OF THE CONTRACT DOCUMENTS AND VERIFY INFORMATION AT THE PROJECT SITE.

THE CONTRACTOR SHALL MAKE HIS OWN TAKEOFF ON ALL QUANTITIES. IT SHALL BE HIS RESPONSIBILITY, AT HIS COST, TO INCLUDE ALL EQUIPMENT AND MATERIAL IN ORDER TO

COMPLY WITH THE INTENT OF THE DRAWINGS 6. THE CIRCUIT NUMBERS ARE FOR IDENTIFICATION ONLY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CORRECTLY PHASING THE CIRCUITS IN PANELS.

7. EXISTING CIRCUIT DESIGNATIONS: a. ALL REFERENCE TO EXISTING CIRCUIT DESIGNATIONS IS BASED ON PREVIOUS PROJECT DOCUMENTATION. THE CONTRACTOR SHALL CONSULT THE ENGINEER IN THE EVENT THAT ACTUAL CONDITIONS DO NOT COINCIDE WITH THE INDICATED RE-DISTRIBUTION OR OTHER USE OF EXISTING CIRCUITS AS HEREIN INDICATED.

. THE TOTAL CONNECTED LOAD FOR ANY GENERAL PURPOSE (PROTECTED AT 20A) BRANCH CIRCUIT WHICH IS RE-DISTRIBUTED AS A PART OF THIS PROJECT SHALL NOT EXCEED 13A.

c. ANY DEVIATION, AS MAY BE DIRECTED BY THE ENGINEER, FROM THE INDICATED CIRCUIT STRUCTURE SPECIFIED IN THIS DRAWING SET WILL REQUIRE BOTH VERIFICATION BY THE CONTRACTOR THAT THE TOTAL CONNECTED LOAD ON THE ASSOCIATED SUPPLY CONDUCTORS IS WITHIN THE ABOVE SPECIFIED LIMIT AND DOCUMENTATION IN THE PROJECT RECORD (AS-BUILT) DRAWINGS

LOCATION NUMBER AS FOLLOWS, UNLESS OTHERWISE SHOWN ON THE DRAWINGS. NOTE: SWITCHBOARDS POPULATED WITH ONLY MULTI-POLE CIRCUIT BREAKERS MAY HAVE A SINGLE NUMBER ASSIGNED TO EACH BREAKER POSITION, WHICH SHALL BE USED AS THE CIRCUIT NUMBER. a. 2-POLE CIRCUIT: USE THE FIRST PANELBOARD NUMBER b. 3-POLE CIRCUIT: USE THE MIDDLE PANELBOARD NUMBER

9. THE ELECTRICAL INSTALLATION SHOWN IS REPRESENTED DIAGRAMMATICALLY AND INDICATES THE GENERAL ARRANGEMENT OF SYSTEMS AND WORK. THE LOCATIONS AND ARRANGEMENTS OF EQUIPMENT, DEVICES, SWITCHBOARDS, PANELBOARDS, PARTITIONS, OPENINGS, ETC. ARE DESIGNED TO SHOW PREFERRED CONFIGURATIONS TO SUIT KNOWN CONDITIONS BUT ARE APPROXIMATE AND ARE SUBJECT TO MODIFICATIONS CAUSED BY STRUCTURAL CONDITIONS AND OTHER EXISTING OR PROPOSED EQUIPMENT. THE LOCATIONS ARE SUBJECT TO SUCH MODIFICATIONS AS MAY BE FOUND NECESSARY OR DESIRABLE AT THE TIME OF INSTALLATION IN ORDER TO ACCOMMODATE FIELD CONDITIONS AND COORDINATION REQUIREMENTS. CONTRACTOR SHALL FOLLOW THE INTENT OF THE DRAWINGS IN "LAYING OUT" THE WORK AND COORDINATE THE WORK WITH OTHER TRADES TO VERIFY SPACING CONDITIONS. CONTRACTOR SHALL DETERMINE ROUGHING LOCATIONS REQUIRED TO EFFECT SUCH COORDINATION. THE CONTRACTOR SHALL COORDINATE ALL WORK AND SHALL MAKE SUCH CHANGES WITHOUT EXTRA CHARGE.

10. THE CONTRACT DRAWINGS DEPICT THE APPROXIMATE LOCATION OF ALL REQUIRED EQUIPMENT AND IF SHOWN, THE DIAGRAMMATIC ARRANGEMENT OF PIPING, RACEWAYS. CONDUITS, FEEDERS, CABLES, ETC, HEREIN AFTER REFERRED TO AS "CONDUIT." CONDUIT RUNS, IF SHOWN HAVE BEEN DEPICTED WITH THE INTENTION OF MOST CLEARLY INDICATING THE PROPOSED ROUTING. ACTUAL RUNS MAY DIFFER IF KEPT WITHIN THE REQUIREMENTS AND PROVISIONS OF THESE SPECIFICATIONS, AND PROVIDING THAT THAT ALL MODIFICATIONS HAVE BEEN SHOWN IN THE SHOP DRAWINGS. CONTRACTOR RESPONSIBLE TO DETERMINE CONDUIT RUNS AND "CLEAR" PIPING, DUCTWORK, ACCESS DOORS, AND OTHER OBSTRUCTIONS AS APPLICABLE. CONTRACTOR SHALL COORDINATE CONDUIT WITH WORK OF 9. ALL NEW WIRING IS TO BE RUN CONCEALED WHEREVER OTHER TRADES AND ALTER WHERE NECESSARY TO AVOID INTERFERENCE. SUBMIT FOR APPROVAL, PRIOR TO SCALED INSTALLATION DRAWINGS SHOWING THE LOCATION OF ALL NEW EQUIPMENT/DEVICES TO BE INSTALLED AND INDICATING CIRCUITRY. SHOP DRAWINGS SHALL INCLUDE ALL WIRING, PULL BOXES, JUNCTION BOXES, FITTINGS, WIRING DEVICES AND DIMENSIONED CLEARANCES FROM THE STRUCTURE AND EQUIPMENT. COORDINATE SHOP DRAWINGS WITH OTHER

TRADES PRIOR TO SUBMISSION 11.BEFORE THE RELEVANT WORK PROCEEDS, THE CONTRACTOR 10. ALL OPENINGS AND PENETRATIONS SHALL BE SEALED UPON SHALL PREPARE AND SUBMIT FIVE (5) COPIES OF SHOP DRAWINGS DEPICTING THE PROPOSED CONDUIT ROUTING DIAGRAM AND EQUIPMENT LAYOUT. SPECIFICALLY DETAILED SHALL BE A LAYOUT OF THE SWITCHBOARD AND RELATED EQUIPMENT IN EACH ELECTRIC ROOM OR ELECTRIC CLOSET. ALL EQUIPMENT LAYOUTS SHALL BE DRAWN TO SCALE AND DIMENSIONED. SHOP DRAWINGS SHALL BE A MINIMUM OF 1/8" = 1'-0" AND PREFERABLY 1/4"=1'-0", DIMENSIONED, SHOWING CONSTRUCTION, SIZES, WEIGHTS, ARRANGEMENTS, OPERATING CLEARANCES, PERFORMANCE CHARACTERISTICS AND THE NECESSARY COORDINATING TRADES INVOLVED.

SHOP DRAWINGS WILL NOT BE ACCEPTED UNLESS A COMPLETE LIST OF DEVIATIONS FROM ARCHITECT'S/ENGINEER'S PROPOSED PLANS IS INCLUDED. EXACT LOCATION OF ALL EQUIPMENT WILL BE DETERMINED IN THE FIELD AND THE CONTRACTOR MUST SECURE EXACT

DIMENSIONAL DATA BEFORE THE LAYOUT OF ANY WORK. 12. ROUTING FOR FEEDERS, INSTRUMENTATION AND CONTROL CIRCUITS IS NOT NECESSARILY SHOWN ON THE PLAN DRAWINGS. IF INDICATED ON THE FLOOR PLANS, THEY EXPRESS THE INTENT OF ROUTING. FINAL LOCATION AND ROUTING SHALL BE SUITED FOR THE CONSTRUCTION OF THE BUILDING AND ESTABLISHED BY THE CONTRACTOR BASED ON THE INSTALLATION CONDITIONS AND SHALL BE VERIFIED IN THE FIELD. ALL FEEDER INFORMATION, CONDUIT TYPES AND INSTALLATION REQUIREMENTS SHALL BE IN ACCORDANCE WITH THE SPECIFICATIONS, ELECTRICAL RISER DIAGRAM AND APPROPRIATE PANEL SCHEDULES.

13. ANY CUTTING, PATCHING, OR FINISH REPAIR WORK REQUIRED FOR THE INSTALLATION IS THE RESPONSIBILITY OF THE CONTRACTOR.

14. WHERE MOUNTING HEIGHTS ARE NOT DETAILED OR DIMENSIONED, INSTALL ELECTRICAL SERVICES AND OVERHEAD EQUIPMENT TO PROVIDE MAXIMUM HEADROOM POSSIBLE. CONNECT EQUIPMENT FOR EASE OF DISCONNECTING WITH MINIMUM INTERFERENCE WITH OTHER INSTALLATIONS.

15. PROVIDE TEMPORARY POWER AND LIGHTING AS REQUIRED DURING THE ENTIRE DURATION OF DEMOLITION AND CONSTRUCTION UTILIZING THE EXISTING ELECTRICAL SYSTEM AS A SOURCE. THE CONTRACTOR SHALL REMOVE ALL TEMPORARY POWER AND LIGHTING UPON THE COMPLETION OF THE PROJECT.

16. WHERE CONFLICTS EXIST, PROVIDE IN THE BID PROPOSAL THE MORE COSTLY ALTERNATIVE.

INTENDED TO INDICATE THE SCOPE OF THE WORK AFFECTED 1. GROUNDING SHALL BE INSTALLED IN ACCORDANCE WITH THE NEC IN ACCORDANCE WITH ELECTRODE, GROUNDING AND BONDING REQUIREMENTS FOR SERVICE, EQUIPMENT AND ENCLOSURES. INSTALL AN INSULATED EQUIPMENT GROUND CONDUCTOR IN EACH RACEWAY OR CONDUIT. SIZE EQUIPMENT GROUND CONDUCTOR IN ACCORDANCE WITH NEC TABLE 250.122. BOND RACEWAYS AND THE FRAMES AND ENCLOSURES OF MOTORS, BREAKERS, SWITCHES, AND OTHER ELECTRICAL EQUIPMENT TO THE BUILDING GROUNDING SYSTEM. PRECAUTION SHALL BE TAKEN TO ENSURE ADEQUATE GROUND CONTINUITY ALONG THE CONDUIT OR RACEWAY.

2. PROVIDE A SEPARATE NEUTRAL CONDUCTOR FOR EACH CIRCUIT. INSTALL NEUTRAL CONDUCTORS AND GROUND CONDUCTORS INTO ALL SWITCH BOXES. MULTIPLE CIRCUITS SHALL NOT SHARE A COMMON NEUTRAL. NEUTRAL SHALL BE SIZED AS LARGE AS THE PHASE CONDUCTORS. NEUTRAL

CONDUCTORS SHALL NOT BE REDUCED IN SIZE. 3. ARRANGE CONNECTIONS FOR SINGLE PHASE CIRCUITS TO ACHIEVE THREE PHASE LOAD BALANCE WITHIN 20% OF THE AVERAGE PHASE LOAD CURRENT. UNGROUNDED CONDUCTORS USING A COMMON NEUTRAL MUST ORIGINATE FROM DIFFERENT PHASES.

4. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING PROPER PHASE ROTATION WITH ALL EXISTING THREE (3) PHASE ELECTRIC LOADS.

5. PHASE ROTATION CHECK: ON MULTI-PHASE EQUIPMENT PERFORM A PHASE ROTATION CHECK PRIOR TO ENERGIZING THE EQUIPMENT. USE KNOPP K-3 OR EQUIVALENT DEVICE WITH RED OR "A" LEAD CONNECTED TO PHASE A, WHITE OR "B" LEAD CONNECTED TO PHASE B, AND BLUE OR "C" LEAD CONNECTED TO PHASE C. NOTE THE PHASE ROTATION AND ANNOTATE TEST DOCUMENTATION WITH DEVICE USED, MANNER CONNECTED, ROTATION OBSERVED, DATE OF TEST, AND NAME OF CRAFTSMAN. DO NOT ENERGIZE EQUIPMENT UNLESS OBSERVED ROTATION MATCHES THE REQUIREMENTS OF THE EQUIPMENT

6. CONTRACTOR SHALL SUPPLY ALL LABOR, POWER CABLES, CONDUIT BOXES, FITTINGS, WIRING MATERIALS, HARDWARE, SUPPORTS, AND MISCELLANEOUS ITEMS FOR A COMPLETE ELECTRICAL INSTALLATION AND CONNECTION OF THE ELECTRICAL WORK REQUIRED, EXCEPT THAT THE PROVISION FOR OWNER SUPPLIED EQUIPMENT SHALL BE ONLY BE COMPLETED TO THE POINT INDICATED ELSEWHERE ON THE DRAWINGS. 7. ALL CABLES, NOT WITHIN CONDUIT (EX., MC TYPE, FIRE

ALARM, PA), ROUTED WITHIN THE CEILING CAVITY MUST BE SECURED USING BRIDLE RINGS, J-HOOKS, OR OTHER APPROPRIATE MEANS. THE CABLE MUST NOT LAY ON DROPPED CEILING PANELS, BE FASTENED TO EXISTING ELECTRICAL CONDUITS, STEAM PIPES, SPRINKLER PIPES, INSULATED PIPES, OR BE ROUTED IN SUCH A FASHION AS TO OBSTRUCT ACCESS HATCHES, DOORS, UTILITY ACCESS PANELS, MECHANICAL SERVICE WORK AREAS OR FITTINGS AND SHALL NOT BE ROUTED THROUGH FIRE DOORS, VENTILATING SHAFTS, OR GRATES.

a. UNLESS OTHERWISE PROVIDED, MC CABLES SHALL BE SECURED AT INTERVALS NOT EXCEEDING 6'. CABLES CONTAINING FOUR OR FEWER CONDUCTORS SIZED NO LARGER THAN 10 AWG SHALL BE SECURED WITHIN 12" OF EVERY BOX, CABINET, FITTING, OR OTHER CABLE TERMINATION

b. TYPE MC CABLE SHALL BE PERMITTED TO BE UNSUPPORTED WHERE THE CABLE: (A) IS FISHED BETWEEN 2. PROVIDE IDENTIFICATION TAGS FOR ALL NEW WIRING AND ACCESS POINTS THROUGH CONCEALED SPACES IN FINISHED BUILDINGS OR STRUCTURES AND SUPPORTING IS IMPRACTICAL; OR (B) IS NOT MORE THAN 6' IN LENGTH FROM THE LAST POINT OF CABLE SUPPORT TO THE POINT OF CONNECTION TO LUMINAIRES OR OTHER ELECTRICAL EQUIPMENT AND THE CABLE AND POINT OF CONNECTION ARE WITHIN AN ACCESSIBLE CEILING. TYPE MC CABLE FITTINGS SHALL BE PERMITTED AS A MEANS OF CABLE SUPPORT

8. ALL CABLE TRAYS AND ELECTRICAL CONDUITS SHALL BE INDEPENDENTLY SUPPORTED AND BRACED INDEPENDENTLY OF THE CEILING.

POSSIBLE. ALL CONDUCTORS SHALL BE IN A SURFACE MOUNTED METALLIC RACEWAY IN PUBLIC SPACES OR METALLIC CONDUIT IN UTILITY LOCATIONS WHEN NOT ROUTED CONCEALED IN THE CEILING/WALL CAVITIES. ANY LOCATIONS THAT DO NOT HAVE ACCESSIBLE OR DROPPED CEILINGS WILL REQUIRE THE USE OF SURFACE MOUNTED METALLIC RACEWAYS, PROVIDE PULL-BOXES (SIZE PER CODE) AND LOCATE IN CONDUIT RUNS AS REQUIRED. NO EXPOSED CABLE MAY BE INSTALLED.

COMPLETION OF THE ELECTRICAL INSTALLATION TO PREVENT THE SPREAD OF SMOKE AND FIRE THROUGH OPENINGS. SEAL AROUND CONDUIT AND RACEWAY PENETRATIONS THROUGH 4. ALL PANELS SHALL HAVE TYPED, COMPLETED DIRECTORIES INTERIOR WALLS AND FLOOR SEPARATING AREAS TO RESTORE ORIGINAL FIRE RATING: USE A UL CLASSIFIED FIRE SEALANT. SEAL PENETRATIONS THROUGH ROOF AND EXTERIOR WALLS TO MAKE WATERPROOF. REQUEST INSPECTION OF FIRE SEALS BY ELECTRICAL INSPECTOR FROM AUTHORITY HAVING JURISDICTION BEFORE AND AFTER PLACEMENT OF FIRE SEAL MATERIALS. ALL OPENINGS SHALL BE COORDINATED WITH THE OTHER TRADES TO LIMIT INTERFERENCE AND OBSTRUCTION

11.LIMIT THE USE OF ELECTRICAL METALLIC TUBING (EMT) TO WHERE IT WILL NOT BE SUBJECT TO PHYSICAL DAMAGE OR CORROSION. USE INTERMEDIATE METAL CONDUIT (IMC) OR RIGID GALVANIZED STEEL CONDUIT (RGS) WHERE RACEWAYS ARE EMBEDDED IN CONCRETE OR EXPOSED TO PHYSICAL DAMAGE. USE MINIMUM 3/4" CONDUIT EXCEPT AS FOLLOWS: 1/2" CONDUIT MAY BE USED FOR 20 AMP GENERAL LIGHT AND POWER CIRCUITS AND FOR CONTROL CIRCUITS; 3/8" FLEXIBLE METAL CONDUIT MAY BE USED TO CONNECT LIGHT FIXTURES IN SUSPENDED CEILINGS. USE LIQUID TIGHT FLEXIBLE METAL CONDUIT FOR FLEXIBLE CONNECTION TO EQUIPMENT IN

MECHANICAL ROOMS OR OUTDOORS. 12. WHERE RACEWAYS CONTAIN INSULATED CONDUCTORS 4 AWG AND LARGER THAT ENTER AN ENCLOSURE, THE CONDUCTORS MUST BE PROTECTED FROM ABRASION DURING AND AFTER INSTALLATION BY A FITTING THAT PROVIDES A SMOOTH, ROUNDED INSULATING SURFACE, SUCH AS AN INSULATING BUSHING AS PER NEC 300.4(G).

13. INSTALL OUTDOOR EQUIPMENT TO BE WEATHERPROOF (NEMA 3R).

14. ALL PENETRATIONS THROUGH EXTERIOR WALLS SHALL BE SEALED WATERTIGHT. PROVIDE SEALS FOR CONDUIT AND RACEWAYS AS MANUFACTURED BY OZ/GENDY TYPE CMSI OR APPROVED EQUAL.

15. UNDERGROUND CONDUITS SHALL BE PITCHED TO DRAIN AWAY FOR THEM BUILDING IN MANHOLES.

WIRE INFORMATION 1. ALL WIRING SHALL BE COPPER CONDUCTOR, 600 VOLTS IN EMT RACEWAY WITH APPROVED FITTINGS UNLESS OTHERWISE INDICATED. FEEDER AND BRANCH CIRCUIT WIRING SHALL BE MINIMUM #12 AWG UNLESS OTHERWISE INDICATED. FEEDER AND BRANCH CIRCUIT WIRING LARGER THAN #10 AWG SHALL BE STRANDED CONDUCTOR: #10 AWG AND SMALLER, SHALL BE SOLID CONDUCTOR. CONTROL WIRING SHALL BE #18 AWG THWN. TYPE OF INSULATION AS FOLLOWS UNLESS NOTED OTHERWISE:

a. THHN/THWN INSULATION FOR #4 AWG AND SMALLER b. THW OR THHN/THWN INSULATION FOR #2 AWG AND LARGER

c. THW USED FOR ALL PANEL FEEDER AND SERVICE CONDUCTORS d. XHHW-2 INSULATION TYPE SHALL BE USED WHERE

THE WEATHER. 2. USE THE FOLLOWING CONDUCTOR COLOR CODES:

CONDUCTORS ARE INSTALLED IN CONDUITS EXPOSED TO

**General Demolition Notes** 

208Y/120V 480Y/277V

BROWN

ORANGE

YELLOW

GREEN

GREEN

GRAY

1. USE 600 VAC CIRCUIT BREAKERS IN 480V AND 480Y/277V

SWITCHBOARDS, PANELBOARDS AND MOTOR CONTROL

2. PROVIDE CIRCUIT BREAKERS WITH UL LISTED INTERRUPTING

AVAILABLE FAULT CURRENT SHOWN ON THE ELECTRICAL

3. INSTALL UL LISTED CIRCUIT BREAKER PADLOCKING DEVICES

CURRENT PROTECTION DEVICES AT THE MAIN BUILDING

PANEL (MDP OR EQUIVALENT). THE DEVICE MUST HAVE

REMAIN IN PLACE AFTER THE PADLOCK IS REMOVED.

RATING (RMS SYMMETRICAL AMPERES) GREATER THAN THE

ONE-LINE DIAGRAM. "SERIES RATED" EQUIPMENT SHALL NOT

FOR SERVICE AND MAINTENANCE PERSONNEL ON ALL OVER

PROVISIONS FOR PLACEMENT OF A LOCK ON IT TO SECURE

THE DEVICE IN THE OFF POSITION. THE LOCK-OUT DEVICE

MUST BE PART OF THE DISCONNECT ASSEMBLY AND MUST

WHETHER IT IS A FUSED DISCONNECT SWITCH, A SINGLE

A DEVICE THAT IS ATTACHED TO THE CIRCUIT BREAKER

4. ALL CIRCUIT BREAKERS SHALL BE MOLDED CASE THERMAL

MAGNETIC AND RATED FOR AVAILABLE SHORT CIRCUIT

5. CIRCUIT BREAKERS USED AS SWITCHES SHALL BE UL LISTED

1. ALL SWITCHBOARDS, PANELBOARDS, INDUSTRIAL CONTROL

FOR SWITCHING DUTY AND MARKED "SWD" PER NEC 240-83(D).

PANELS AND MOTOR CONTROL CENTERS THAT ARE IN OTHER

THAN DWELLING OCCUPANCIES AND ARE LIKELY TO REQUIRE

EXAMINATION, ADJUSTMENT, SERVICING OR MAINTENANCE

QUALIFIED PERSONS OF POTENTIAL ELECTRIC ARC FLASH

HAZARDS. THE MARKING SHALL BE LOCATED SO AS TO BE

EXAMINATION, ADJUSTMENT, SERVICING OR MAINTENANCE

COMMERCIAL LABEL CONFORMING TO NEC 110.16 AND ANSI

Z535.4. ARC FLASH LABEL SHALL BE BRADY (BRADYID.COM)

PULL/JUNCTION BOXES, CABINETS, HOUSINGS, ETC. INDICATE

ON TAGS, LEGIBLY MINIMUM 1/4" HIGH LETTERS, THE POINTS

OF ORIGIN AND TERMINATION OF EACH CONDUIT AND

CONDUIT RUN. LABEL ALL RECEPTACLES AND SWITCH

COVERS WITH PANELBOARD AND CIRCUIT NUMBER. FOR

EXTERIOR EQUIPMENT, USE ALUMINUM DYMO HALF-INCH

LETTERING TO PROVIDE NECESSARY INFORMATION WITH

SEPARATELY-MOUNTED EQUIPMENT WITH FEEDER SOURCE

AND CIRCUIT NUMBER. FOR INTERIOR EQUIPMENT, PROVIDE

LETTERING. FOR EXTERIOR EQUIPMENT, PROVIDE ANODIZED

LETTERING, ATTACH TO EQUIPMENT WITH RIVETS, PLACE IN A

COVER APPROXIMATELY 66" AFF. ABBREVIATE LETTERING OR

ADJUST LETTER SIZE TO PROVIDE NECESSARY INFORMATION

CLEAR SPACE ON THE UPPER PORTION OF THE EQUIPMENT

WITH MINIMUM LABEL SIZE, (I.E., 227/480V PANEL PP1 FROM

INDICATING EQUIPMENT SERVED AND ROOM NUMBER (AS

INDIVIDUAL CIRCUIT BREAKERS, SAFETY SWITCHES AND

UPDATE DIRECTORIES AS PANELS ARE ALTERED. CIRCUIT

CHANGES SHALL BE REFLECTED ON "AS-BUILT" DRAWINGS.

5. ALL CIRCUITS AND CIRCUIT MODIFICATIONS MUST BE LEGIBLY

IDENTIFIED AS TO THEIR CLEAR, EVIDENT, AND SPECIFIC

ALL OTHERS, AND THE IDENTIFICATION MUST BE ON A

THE DOOR OF A PANELBOARD. CIRCUIT DIRECTORIES

"OUTLETS" DO NOT PROVIDE THE SUFFICIENT DETAIL

PURPOSE. THE IDENTIFICATION MUST INCLUDE SUFFICIENT

CIRCUIT DIRECTORY LOCATED ON THE FACE OR INSIDE OF

CONTAINING MULTIPLE ENTRIES WITH ONLY "LIGHTS" OR

1. NO WORK SHALL BE CONCEALED UNTIL AFTER INSPECTION

AND APPROVAL BY PROPER AUTHORITIES. IF WORK IS

CONTRACTOR SHALL BE RESPONSIBLE FOR ALL WORK

CONCEALED WITHOUT INSPECTION AND APPROVAL, THE

AREAS IN ADDITION TO ANY REQUIRED MODIFICATIONS.

SUBJECT TO ELECTRICAL BREAK DOWN DUE TO THE

PRESENCE OF FOREIGN MATERIAL. THIS SHALL INCLUDE

INSPECTION OF ALL CONNECTIONS MADE UNDER THIS

3. THE CONTRACTOR SHALL DELIVER CERTIFICATES OF

INDICATED IN THE SPECIFICATION, FROM DATE OF

COPIES TO THE ENGINEER/ARCHITECT.

REQUIRED TO BOTH OPEN AND RESTORE THE CONCEALED

THE CONTRACTOR SHALL MAKE A FINAL INSPECTION OF ALL

ELECTRICAL EQUIPMENT TO ENSURE THAT THERE ARE NO

LOOSE ELECTRICAL CONNECTIONS OR ELECTRICAL CIRCUITS

ELECTRICAL AND OTHER INSPECTIONS OR COPIES THEREOF

TO THE CLIENT AT THE COMPLETION OF THE PROJECT WITH

4. THE CONTRACTOR SHALL GUARANTEE ALL WORK IN WRITING

AND WORKMANSHIP FOR A PERIOD OF ONE YEAR, OR AS

TO THE CLIENT AGAINST ANY AND ALL DEFECTS IN MATERIAL

ACCEPTANCE AND PERFORM ALL CORRECTIVE WORK AT NO

DETAIL TO ALLOW EACH CIRCUIT TO BE DISTINGUISHED FROM

INDICATED ON THE FINAL BUILDING SIGNAGE) OF EQUIPMENT

LOCATION, OR SPARE, OR SPACE. IDENTIFY THE PURPOSE OF

MOTOR STARTERS BY MEANS OF NAMEPLATES AS INDICATED.

ALUMINUM PLATE WITH QUARTER-INCH EMBOSSED BLOCK

MINIMUM LABEL SIZE (I.E., PANELBOARD PP1, CIRCUIT 23

WHITE MICARTA PLATE WITH QUARTER-INCH BLOCK

MDP CKT 3 OR P-1 20 HP PUMP FROM PP1 CKT 3).

3. LABEL ALL SWITCHGEAR, PANELBOARDS, AND

TAPE LABEL WITH EMBOSSED LETTERING, ABBREVIATE

INTERIOR EQUIPMENT. USE BROTHER P-TOUCH 3 LABEL

MAKER WITH TC-10 LABEL CARTRIDGE OR EQUAL. FOR

ON THE EQUIPMENT. MARKING SHALL BE SELF ADHESIVE,

WHILE ENERGIZED SHALL BE FIELD MARKED TO WARN

CLEARLY VISIBLE TO QUALIFIED PERSONS BEFORE

INSTALL AT EACH END AND IN ALL INTERMEDIATE

CATALOG NO. 102308 OR EQUAL.

SHOULD READ PP1-23).

REQUIRED BY THE NEC.

NSPECTIONS/WARRANTY:

CONTRACT.

COST TO THE CLIENT.

CURRENT. UNLESS SPECIFIED ON THE DRAWING.

CIRCUIT BREAKER, OR A CIRCUIT BREAKER IN A PANELBOARD.

HANDLE BY A SET SCREW IS NOT AN ACCEPTABLE MEANS TO

SERVE AS A SAFE METHOD OF LOCKING THE DEVICE IN THE

BLACK

RED

PHASE A

PHASE B

CIRCUIT BREAKERS:

BE ACCEPTED.

OFF POSITION.

PHASE C BLUE

EQUIP. GROUND

NEUTRAL WHITE

THE DEMOLITION DRAWINGS ARE DIAGRAMMATIC AND INDICATED THE GENERAL INTENT AND SCOPE. PLANS DO NOT ATTEMPT TO SHOW ALL ELECTRICAL DEMOLITION ITEMS. UNLESS OTHERWISE NOTED, DEVICES SHOWN ARE FOR INFORMATION PURPOSES. FIELD VERIFY ALL DEMOLITION ITEMS AND THE EXTENT OF DEMOLITION WORK, CONDITIONS UNDER WHICH DEMOLITION IS TO BE ACCOMPLISHED ALONG WITH KIND AND AMOUNT OF MATERIALS BEING REMOVED AND PROVIDE FOR REMOVAL OF ALL DEVICES ACCORDINGLY PRIOR TO BID.

CONTRACTOR SHALL INCLUDE ALL LABOR AND MATERIALS IN THE BASE BID INCLUDING ALL TEMPORARY CONNECTIONS, CONDUIT AND WIRE IN ORDER TO ACCOMMODATE CONSTRUCTION AND PROVIDE CONTINUOUS SERVICE TO DEVICES. SYSTEMS THAT ARE TO REMAIN TEMPORARY OR PERMANENTLY AND REQUIRE THE SHUTDOWN OF THE BUILDING POWER SHALL BE PERFORMED DURING OVERTIME AND SHALL BE INCLUDED IN THE BASE BID.

THE CONTRACTOR IS RESPONSIBLE FOR THE SEQUENCE OF ALL WORK AND SHALL INCLUDE IN THE BASE BID ALL LABOR AND MATERIALS REQUIRED FOR THE EXTENSIONS, RE-ROUTING AND RELOCATION OF EXISTING SYSTEM COMPONENTS, EQUIPMENT, WIRING, CONDUITS AND CABLING TO MAINTAIN OPERATION OF ALL SYSTEMS THROUGHOUT THE BUILDING DURING DEMOLITION AND CONSTRUCTION PHASES.

THE CONTRACTOR SHALL REPORT TO THE CLIENT ANY AND/OR ALL CONDITIONS THAT MAY INTERFERE WITH OR OTHERWISE AFFECT OR PREVENT THE PROPER EXECUTION AND COMPLETION OF THE WORK OF THIS CONTRACT

THE CONTRACTOR SHALL EXECUTE ALL WORK WITHIN THE REGULATIONS OF THE BUILDING FOR DEMOLITION AND REMOVAL OF DEBRIS. OVERTIME WORK REQUIRED WILL BE AT NO EXTRA COST TO THE CLIENT.

ALL EQUIPMENT SHALL BE DISCONNECTED AND REMOVED BACK TO ITS POWER SOURCE OF ORIGINATION UNLESS OTHERWISE NOTED ("U.O.N.") BY EXISTING TO REMAIN ("E"). ALL DISCONNECTED AND REMOVED ITEMS THAT ARE NOT BEING REUSED SHALL BE RETURNED TO

THE OWNER OR DISPOSED OFF SITE IN AN APPROVED METHOD. THE CONTRACTOR SHALL AT ALL TIMES PROTECT THE PROPERTY OF THE CLIENT AND THE BUILDING OWNER, INCLUDING BUT NOT LIMITED TO WINDOWS, FINISHES, PUBLIC TOILETS, ELEVATORS, DOORS, BUCKS, ELECTRICAL AND AIR CONDITIONING EQUIPMENT, CONVECTOR ENCLOSURES, ETC.

UNLESS NOTED OTHERWISE, ALL OF THE EXISTING ELECTRICAL EQUIPMENT CURRENTLY LOCATED IN THE AREAS OF DEMOLITION. WHETHER SPECIFICALLY INDICATED ON THIS DRAWING OR NOT. SHALL BE DISCONNECTED AND REMOVED FROM SERVICE. THE OWNER HAS FIRST RIGHT OF REFUSAL ON ALL REMOVED ITEMS. ALL ITEMS NOT WANTED BY THE OWNER SHALL BE PROPERLY DISPOSED OF OFFSITE BY THE CONTRACTOR IN ACCORDANCE WITH THE LAW. CARE SHALL BE TAKEN TO MAINTAIN CIRCUIT CONTINUITY TO ALL EXISTING ELECTRICAL DEVICES TO REMAIN. REFER TO ARCHITECTURAL DRAWINGS FOR EXACT AREAS OF

RELOCATE OR REMOVE ALL ELECTRICAL DEVICES IN ACCORDANCE WITH THE APPLICABLE

10. DO NOT DISABLE OR DISRUPT BUILDING FIRE OR LIFE SAFETY SYSTEMS WITHOUT WRITTEN PERMISSION FROM THE OWNER. IN ALL CASES, PERMISSION SHALL HAVE BEEN GRANTED NOT LESS THAN TEN (10) WORKING DAYS PRIOR TO THE INTENDED INTERRUPTION. BEFORE THE START OF WORK, THE ELECTRICAL CONTRACTOR SHALL CHECK ALL EXISTING DEVICES, LIGHT FIXTURES, EQUIPMENT, ETC. THAT IS NOTED OR REQUIRED TO BE REUSED TO SATISFY HIMSELF THAT THEY ARE OPERATING PROPERLY. SHOULD ANY OF THE ITEMS NOT BE OPERATING PROPERLY, CONTRACTOR SHALL REPORT SAME TO THE ENGINEER AND AWAIT HIS DIRECTIONS. CONTRACTOR NOT COMPLY WITH THE ABOVE WILL BE RESPONSIBLE FOR

12. FIELD INVESTIGATE THE EXISTING ELECTRICAL & LOW VOLTAGE SYSTEMS INSTALLATIONS. ALL EXISTING INSTALLATIONS IN THE RENOVATION AREAS THAT ARE TO REMAIN BUT ARE NOT CURRENTLY IN COMPLIANCE WITH CURRENT CODES SHALL BE CORRECTED, INCLUDING BUT NOT LIMITED TO THE FOLLOWING: UN-SUPPORTED WIRE, CONDUIT AND JUNCTION BOXES LAYING ON TOP OF CEILING TILES, WIRE, CONDUIT AND/OR JUNCTION BOXES SUPPORTED ONLY BY TIE-WIRE. RAISE AND SUPPORT CONDUIT WITH STRAP PER SPECS. RAISE AND SUPPORT WIRE WITH BRIDLE RINGS, J-HOOKS, OR OTHER APPROPRIATE MEANS. PROVIDE NEW CONDUIT/WIRE AS REQUIRED. FIXTURES IMPROPERLY SUPPORTED OR INADEQUATELY SUPPORTED BY DEVICE BOXES - PROVIDE PROPER SUPPORT PER N.E.C.

WORK/TRADE COORDINATION

PROVIDING OPERATIONAL ITEMS AT HIS EXPENSE

13. ELECTRICAL CONTRACTOR SHALL COORDINATE THE MECHANICAL EQUIPMENT DEMOLITION WITH THE MECHANICAL CONTRACTOR AND MECHANICAL DEMOLITION PLANS AND GENERAL CONSTRUCTION DEMOLITION WITH THE GENERAL CONTRACTOR AND ARCHITECTURAL DEMOLITION PLANS FOR ALL EQUIPMENT TO BE DEMOLISHED AND SCHEDULE TIME FOR ELECTRICAL DEMOLITION.

14. THE CONTRACTOR SHALL REMOVE ALL ELECTRICAL EQUIPMENT LEFT AFTER WALL DEMOLITION, INCLUDING CONDUIT, SWITCH BOXES, PLATES, BRIDGES OR ANY OTHER TELEPHONE OR ELECTRIC WIRING AND EQUIPMENT. DISCONNECT ALL WIRING AT PANELS AND REMOVE OLD WIRING FROM PLENUM.

15. TEMPORARILY RELOCATE ELECTRICAL EQUIPMENT AS REQUIRED TO ACCOMMODATE THE CONSTRUCTION SCHEDULE. ALL AREAS NOT UNDER CONSTRUCTION MUST BE KEPT OPERATIONAL DURING CONSTRUCTION. TO ACCOMPLISH THIS, PROVIDE THE NECESSARY TEMPORARY ELECTRICAL SERVICES. REMOVE TEMPORARY DEVICES UPON COMPLETION OF THE PROJECT.

16. AS PART OF THE BASE BID, THE ELECTRICAL CONTRACTOR SHALL PROVIDE TEMPORARY ELECTRIC POWER REQUIRED FOR CONSTRUCTION ACTIVITIES OF ALL PROJECT DIVISIONS. ALL TEMPORARY BRANCH CIRCUITS SHALL BE SUPPLIED BY CIRCUITS PROTECTED BY GROUND FAULT CIRCUIT BREAKERS. ALL TEMPORARY BRANCH CIRCUITS SHALL BE IN ACCORDANCE WITH NEC ARTICLE 590.

a. COMPLAINTS CONCERNING POWER DISTRIBUTION OR DEVICES AVAILABLE IN A SPECIFIC AREA OR AREAS OF THE PROJECT WILL BE REVIEWED BY THE AE. IF DIRECTED BY THE AE. THE CONTRACTOR SHALL PROVIDE ADDITIONAL POWER DISTRIBUTION OR CONNECTION DEVICES REQUIRED UNDER THIS SECTION AT NO ADDITIONAL COST

AS PART OF THE BASE BID, THE ELECTRICAL CONTRACTOR SHALL PROVIDE TEMPORARY LIGHTING WITH LOCAL SWITCH FOR GENERAL ILLUMINATION AND TASK ILLUMINATION FOR THE GENERAL CONTRACTOR, OTHER PRIME CONTRACTORS, AND FOR ALL SUB-CONTRACTORS FOR THE DURATION OF THE CONSTRUCTION. LIGHTING LEVELS PROVIDED ARE TO BE IN COMPLIANCE WITH APPLICABLE WORKPLACE STANDARDS. ALL TEMPORARY LIGHTING SHALL BE SUPPLIED BY CIRCUITS PROTECTED BY GROUND FAULT CIRCUIT BREAKERS. ALL

TEMPORARY LIGHTING SHALL BE IN ACCORDANCE WITH NEC ARTICLE 590. a. COMPLAINTS CONCERNING LIGHTING LEVELS AND/OR LIGHTING QUALITY IN A SPECIFIC AREA OR AREAS OF THE PROJECT WILL BE REVIEWED BY THE AE. IF DIRECTED BY THE AE, THE CONTRACTOR SHALL PROVIDE ADDITIONAL LUMINARIES AND/OR ADDITIONAL DISTRIBUTION WIRING REQUIRED AT NO ADDITIONAL COST.

AT THE CONCLUSION OF THE CONSTRUCTION ACTIVITIES REMOVE ALL WIRING, BOTH EXPOSED 3 AND CONCEALED, USED FOR TEMPORARY LIGHTING AND POWER DISTRIBUTION.

DEMOLITION REQUIREMENTS

REMOVE ABANDONED ELECTRICAL EQUIPMENT, DEVICES AND WIRING (I.E., DISTRIBUTION EQUIPMENT, RECEPTACLES, DATA PORTS, RACEWAY SYSTEMS) BACK TO THE SOURCE PANELBOARD, SWITCHBOARD, SWITCHGEAR, COMMUNICATIONS CLOSET, OR CABINET ABANDONED WIRING AND RACEWAYS CAN RESULT FROM ACTIONS THAT INCLUDE THE

a. EQUIPMENT IS REMOVED OR RELOCATED. b. FIXTURES ARE REMOVED OR RELOCATED. c. SYSTEM IS NO LONGER USED.

d. THERE IS NO DEMONSTRABLE NEAR TERM FUTURE USE FOR THE EXISTING CIRCUIT OR

RACEWAY SYSTEM 20. UNUSED ELECTRICAL EQUIPMENT AND MATERIAL SHOULD ONLY BE LEFT IN PLACE IF ONE OR

MORE OF THE FOLLOWING CONDITIONS EXIST:

a. THE REMOVAL REQUIRES THE DEMOLITION OF OTHER STRUCTURES OR EQUIPMENT THAT IS STILL IN USE. AN EXAMPLE IS CONDUIT EMBEDDED IN WALLS OR DUCTBANKS.

b. THE COST OF REMOVAL IS EXCESSIVE DUE TO HAZARDS, CONSTRUCTION METHODS, OR RESTRICTED ACCESS. A FINAL DETERMINATION FOR THIS CONDITION SHALL BE MADE BY THE

c. IF EITHER OF THE ABOVE TWO CASES EXIST, REMOVE THE CONDUITS, INCLUDING THOSE ABOVE ACCESSIBLE CEILINGS, TO THE POINT THAT BUILDING CONSTRUCTION, EARTH, OR PAVING COVERS THEM. CUT CONDUIT BENEATH OR FLUSH WITH BUILDING CONSTRUCTION OR PAVING. PLUG, CAP, OR SEAL THE REMAINING UNUSED CONDUITS. INSTALL BLANK COVERS FOR ABANDONED BOXES AND ENCLOSURES NOT REMOVED.

21. INVENTORY EACH PANELBOARD WHERE CIRCUITS ARE INDICATED TO BE REUSED. SEQUENTIALLY CONSOLIDATE EXISTING CIRCUITS WITHIN EACH PANELBOARD WITH REGARD TO AREA SERVED. MAXIMIZE CAPACITY FOR SERVICE TO THE PROJECT AREA BY INCLUDING EXISTING SPARES WITH THE GROUP OF CIRCUITS BREAKERS TO BE DISCONNECTED AS A RESULT OF THIS SELECTIVE DEMOLITION. PREPARE A CURRENT DIRECTORY, POST DEMOLITION, FOR EACH PANELBOARD AS THE BASE UPON WHICH THE FINAL DIRECTORIES WILL BE COMPILED.

22. ALL THERMOSTATS SHOULD REMAIN CONNECTED UNTIL SUCH TIME THAT THEY ARE RELOCATED. IF THEY ARE IN A WALL TO BE REMOVED, LEAVE THEM CONNECTED AND EITHER TUCK THEM INTO THE CEILING OR ATTACH TO ADJACENT STRUCTURE REMAINING.

23. EXTEND EXISTING EQUIPMENT CONNECTIONS USING MATERIALS AND METHODS COMPATIBLE WITH THE EXISTING ELECTRICAL INSTALLATION AND IDENTIFIED IN THE ELECTRICAL SPECIFICATIONS.

24. WHEN RELOCATION OR REMOVAL OF AN ELECTRICAL DEVICE INTERRUPTS THE CONTINUITY OF A DOWNSTREAM CIRCUIT OR DEVICE TO REMAIN, REROUTE/MODIFY THE CIRCUIT AS REQUIRED TO MAINTAIN CIRCUIT CONTINUITY. PROVIDE NEW JUNCTION BOXES, PULLBOXES, RACEWAYS, WIRING, ETC., AS REQUIRED.

25. WHEN CIRCUITS ARE INTERRUPTED BY THE REMOVAL OF A PANELBOARD, THE ELECTRICAL CONTRACTOR SHALL REWIRE DEVICES TO THE NEAREST PANELBOARD OF SAME VOLTAGE REQUIREMENTS WITH AVAILABLE SPACE. FURNISH AND INSTALL NEW CIRCUIT BREAKERS OR UTILIZE SPARE CIRCUIT BREAKERS AS REQUIRED.

26. WHERE AN EXISTING DEVICE IS REMOVED BUT THE RACEWAY AND BOX REMAINS FOR CIRCUIT CONTINUITY, PROVIDE AN APPROPRIATE BLANK COVER PLATE OF MATERIAL AND FINISH TO MATCH THE COVER PLATES OF THE DEVICES IN THAT ROOM.

27. IF THE CONTINUITY OF THE NEUTRAL CONDUCTOR OF A MULTIWIRE CIRCUIT IS INTERRUPTED (OPEN), THE RESULTANT OVER OR UNDER VOLTAGE CAN CAUSE A FIRE AND/OR DESTRUCTION OF ELECTRICAL EQUIPMENT. CONTRACTOR SHALL TAKE NECESSARY PRECAUTIONS TO PRECLUDE THE INTERRUPTION OF NEUTRAL CONDUCTOR ON A MULTIWIRE CIRCUIT.

28. NON-DEMOLITION AREAS: DEMOLITION WORKS SHALL NOT AFFECT AREAS NOT INCLUDED IN DEMOLITION. CONTRACTOR SHALL BE RESPONSIBLE FOR THE CONTINUITY OF ALL SERVICES IN NON-DEMOLITION AREAS. ALL SERVICES SHALL BE MAINTAINED AT ALL TIMES. MAINTAIN SERVICE BY EXTENDING, RE-ROUTING AND/OR RECONNECTING ANY CIRCUITS AFFECTED BY DEMOLITION. PROVIDE ADDITIONAL CONDUIT/WIRE AS REQUIRED TO MAINTAIN SERVICE. CIRCUITS IN NON-DEMOLITION AREAS THAT ARE CONNECTED TO DEMOLISHED PANELS AND/OR CIRCUITS SHALL BE RE-CIRCUITED TO THE EXISTING PANELS. PROVIDE TEMPORARY POWER AS REQUIRED DURING CHANGE-OVER TO MAINTAIN CONTINUOUS SERVICE. PROVIDE TEMPORARY POWER FOR ALL RELOCATED CIRCUITS AS REQUIRED TO MAINTAIN CONTINUOUS SERVICE.

29. WHERE EXISTING OUTLETS ARE SHOWN TO REMAIN, BUT ARE INDICATED WITH NEW CIRCUITRY PERFORM THE FOLLOWING: a. REMOVE EXISTING CIRCUITRY. PROVIDE ADDITIONAL CONDUIT, WIRING, ETC., NECESSARY TO

MAINTAIN CIRCUIT CONTINUITY TO EXISTING DEVICES ON THE SAME CIRCUIT THAT ARE NOT

TO BE RECIRCUITED. b. PROVIDE NEW WIRING DEVICE AND FACEPLATE.

c. RECIRCUIT DEVICES AS INDICATED.

30. RESTORE THE ORIGINAL FIRE RATING OF FLOORS, WALLS, AND CEILINGS AFTER ELECTRICAL

DEMOLITION USING A UL CLASSIFIED FIRE SEALANT. 31. EXCEPT FOR AREAS WHERE PARTITIONS OR CEILINGS ARE TO BE DEMOLISHED OR WHERE NEW AIR CONDITIONING OR ELECTRIC IS TO BE INSTALLED, CONTRACTOR SHALL REPLACE TO THE EXISTING CONDITION IN AREA OF DISTURBED CEILING. ANY WATER DAMAGED OR BROKEN

CEILING TILES AS THE RESULT OF CONTRACTOR'S DEMOLITION SHALL ALSO BE REPLACED. 32. UPON COMPLETION OF THE DEMOLITION WORK, THE CONTRACTOR SHALL PROVIDE THAT ALL AREAS BE LEFT BROOM CLEAN.

33. FURNISH AND INSTALL KNOCKOUT PLUGS ON ALL EXISTING PANELS, EQUIPMENT, AND OUTLET BOX OPENINGS CREATED BY THE REMOVAL OR RELOCATION OF EXISTING RACEWAYS.

34. WHERE AN EXISTING ELECTRICAL DEVICE, EQUIPMENT, ETC., IS BEING REMOVED FROM AN EXISTING WALL AND THAT WALL IS TO REMAIN CONTRACTOR SHALL PATCH EXISTING WALL TO ARCHITECTS SATISFACTION. HAZARDOUS MATERIAL DISPOSAL

DISCONNECT AND REMOVE ALL BALLASTS FROM FLUORESCENT LIGHT FIXTURES THAT DO NOT HAVE A LABELS STATING "BALLAST DOES NOT CONTAIN PCBS" OR SIMILAR LABEL (BALLAST MAY CONTAIN PCBS). PLACE PCB BALLASTS IN D.O.T. APPROVED CONTAINERS. PROPERLY DISPOSE OF CONTAINERS WITH A FEDERALLY APPROVED DISPOSAL CONTRACTOR. DISPOSAL SHALL INVOLVE SEGREGATION OF COMPONENTS FOR RECYCLING AND INCINERATION OF PCB CONTENTS. ALL DISPOSAL DOCUMENTATION SHALL BE PROVIDED TO THE OWNER UPON COMPLETION OF THE PROJECT. CONTRACTOR SHALL MAINTAIN AN OWNER APPROVED LOG SHEET FOR EACH RUN.

REMOVE ALL MERCURY-CONTAINING LAMPS, DO NOT BREAK OR CRUSH. RETAIN SERVICES OF A STATE APPROVED LAMP RECYCLING FACILITY ABLE TO ACCEPT WASTE D009. COORDINATE PACKAGING REQUIRED AND PACKAGE, SECURE, AND DELIVER LAMPS AS REQUIRED BY THE SELECTED RECYCLING FACILITY TO INSURE MINIMUM LAMP BREAKAGE. MINIMUM OF 95% OF LAMP MATERIAL MUST BE SHIPPED INTACT. CONTRACTOR MUST COMPLY WITH ALL REPORTING AND PAPERWORK REQUIREMENTS OF STATE LAWS REGARDING THE HANDLING, TRANSPORTATION, AND DISPOSAL OF HAZARDOUS WASTE INCLUDING BUT NOT LIMITED TO FILING THE REQUIRED PAPERWORK AND MANIFEST WITH THE STATE AND OWNERS AS REQUIRED BY LAW. ALL DISPOSAL DOCUMENTATION SHALL BE PROVIDED TO THE OWNER UPON COMPLETION OF THE PROJECT.

REMOVE ALL SEALED LEAD-ACID BATTERIES FROM THE SITE. RETURN TO THE BATTERY MANUFACTURER OR TO A SIMILARLY QUALIFIED BATTERY PROCESSING FACILITY FOR PROPER DISPOSAL. OBTAIN A RECEIPT FOR SUBMISSION WITH THE CLOSE OUT DOCUMENTS. 4. WHERE TRITIUM EXIT SIGNS ARE INDICATED FOR DEMOLITION, THE CONTRACTOR SHALL USE

THE FOLLOWING PROCEDURES:

a. TAKE CARE TO NOT DROP OR DAMAGE THE EXIT SIGNS IN ANY WAY. b. DOCUMENT LOCATION SIGN WAS REMOVED FROM, SERIAL NUMBER, MANUFACTURER, MODEL #, CONDITION, AND REMOVAL DATE.

c. STORE THE SIGN IN A CENTRAL LOCATION UNTIL DEMOLITION COMPLETION. d. AT THE COMPLETION OF THE DEMOLITION, TURN ALL REMOVED SIGNS OVER, IN THEIR ENTIRETY, TO THE OWNER WITH A LIST AND INVENTORY OF ALL OF THE SIGNS BOXED UP IN THE LEFT OVER PACKING MATERIAL FROM NEW SIGNS.

NOTE: ALL EXPOSED CONDUIT SHALL BE PAINTED.

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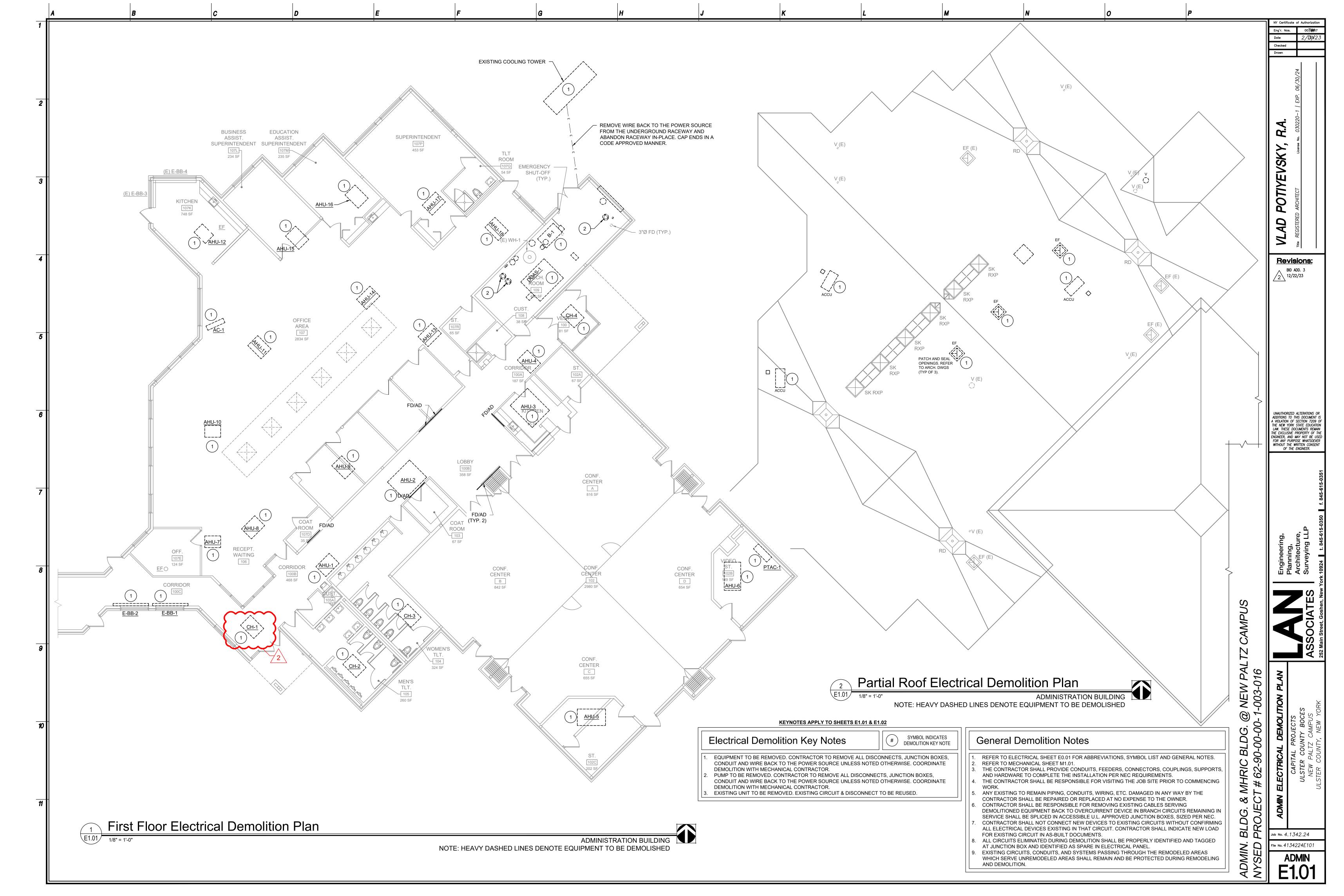
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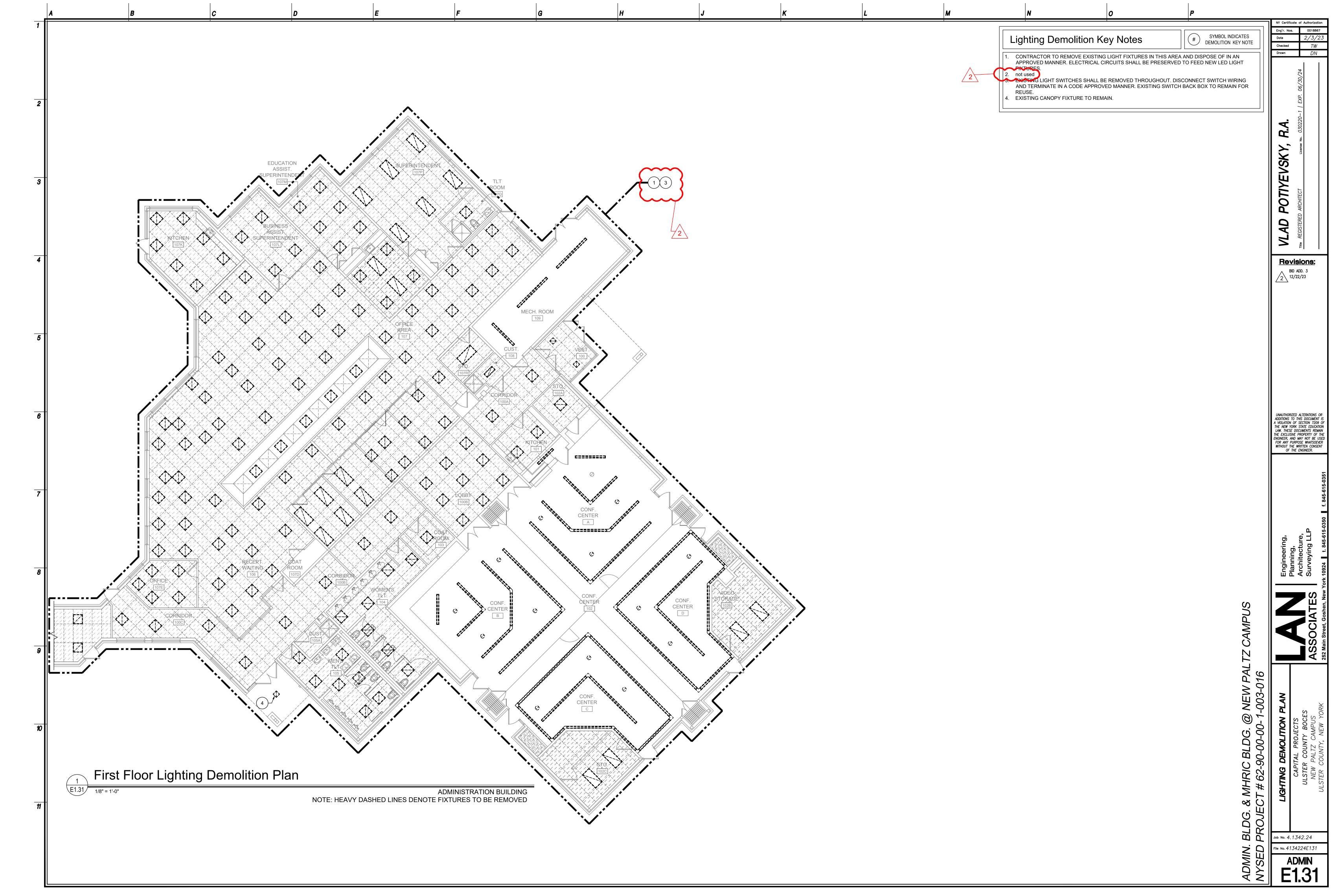
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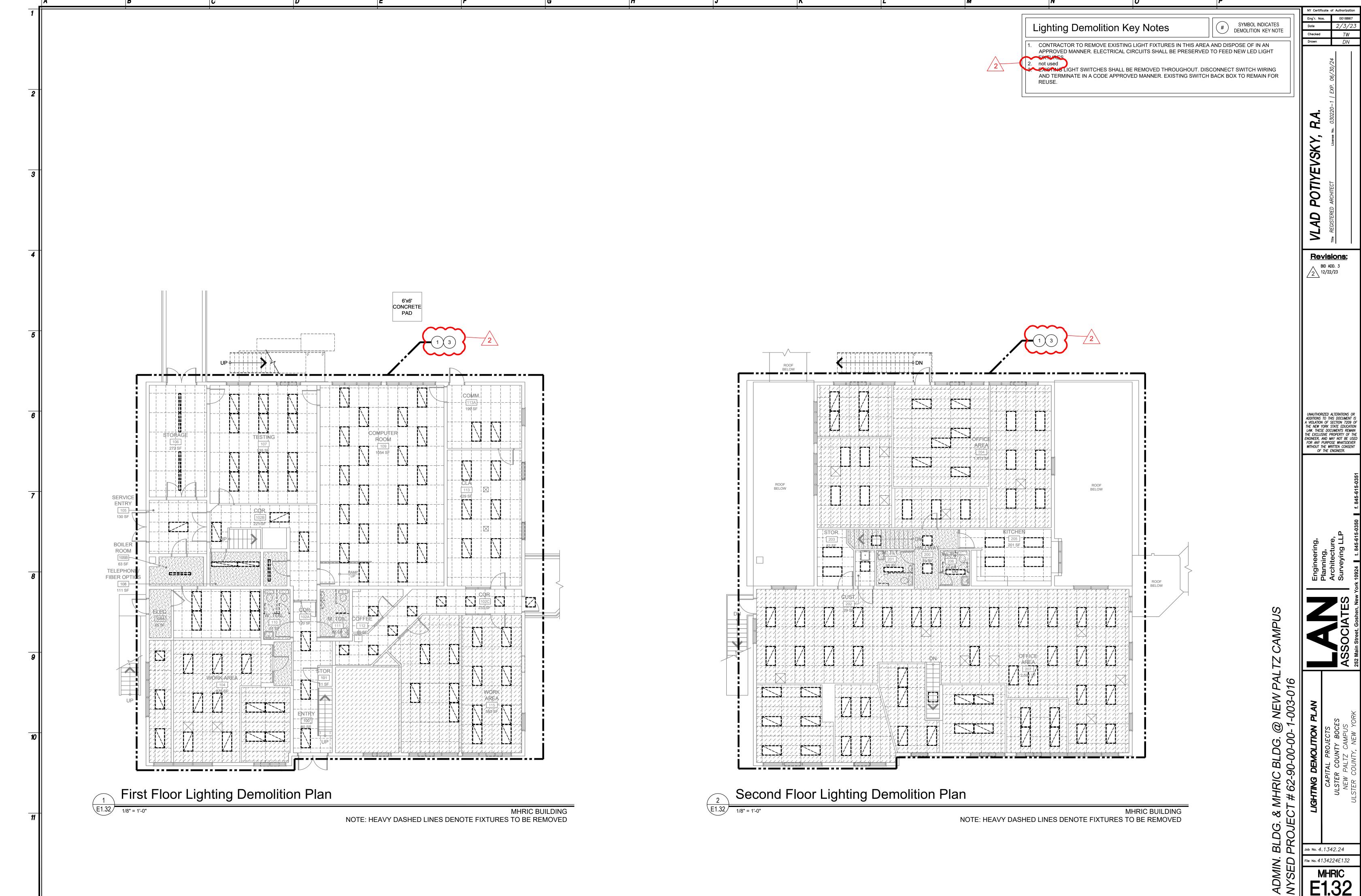
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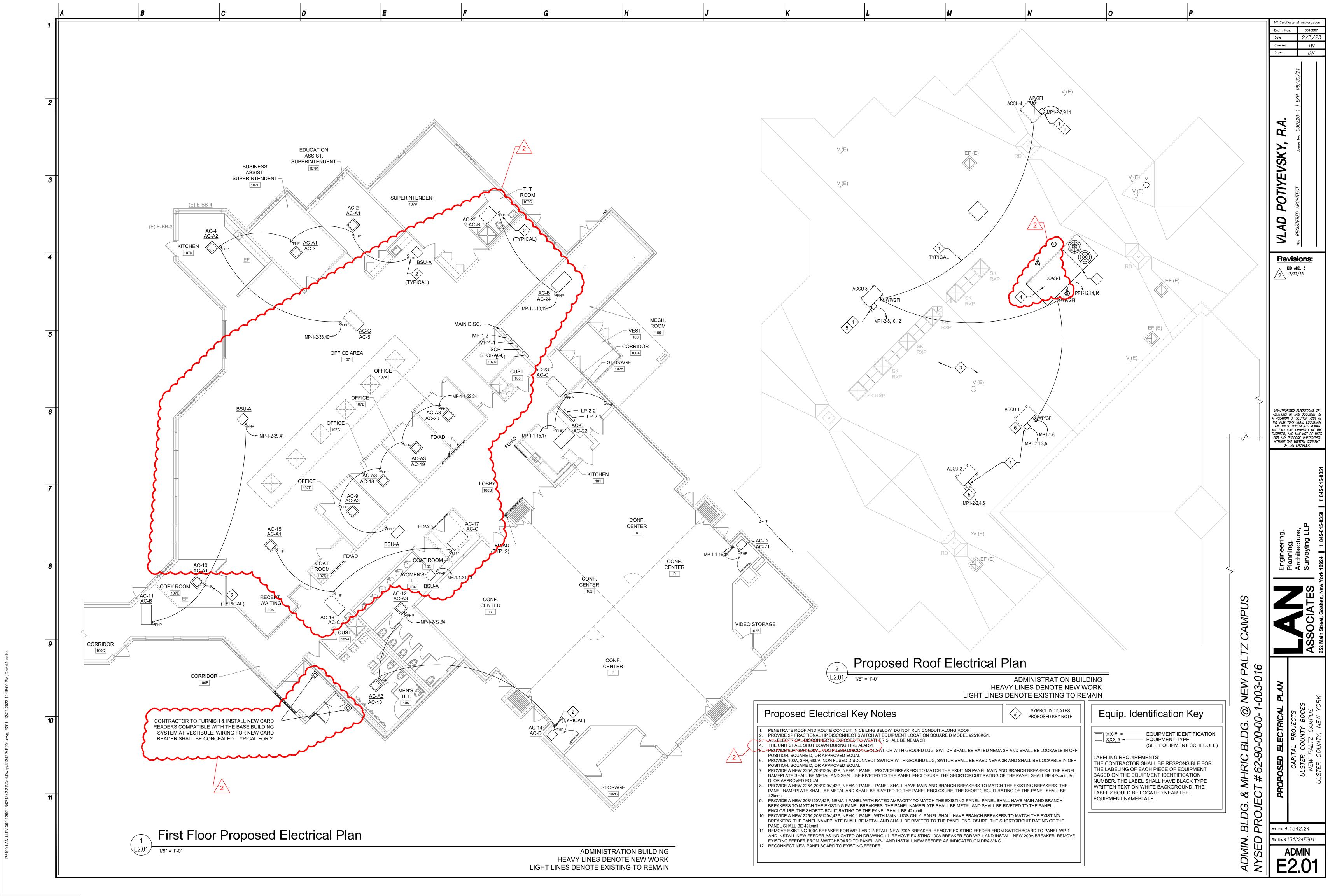


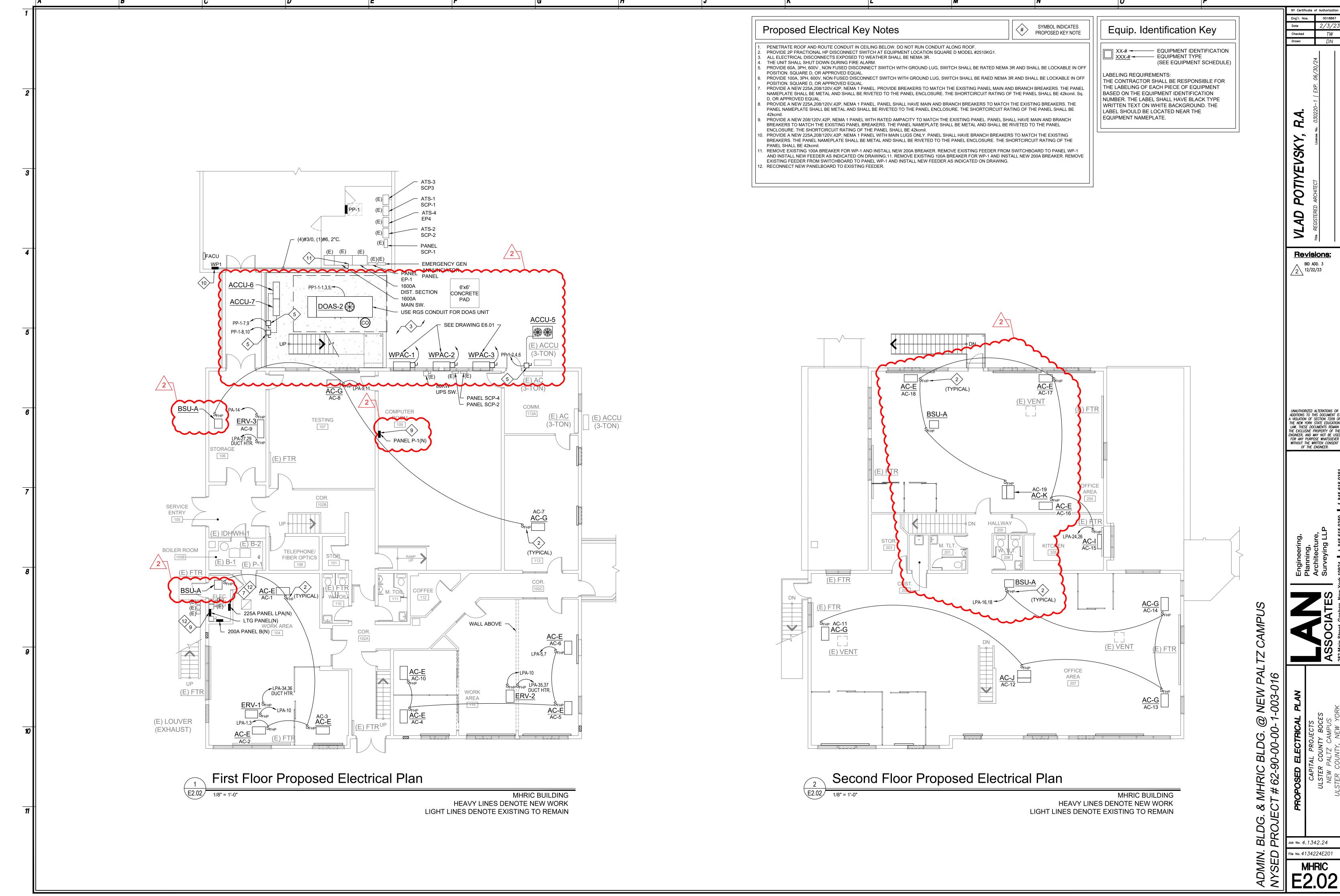
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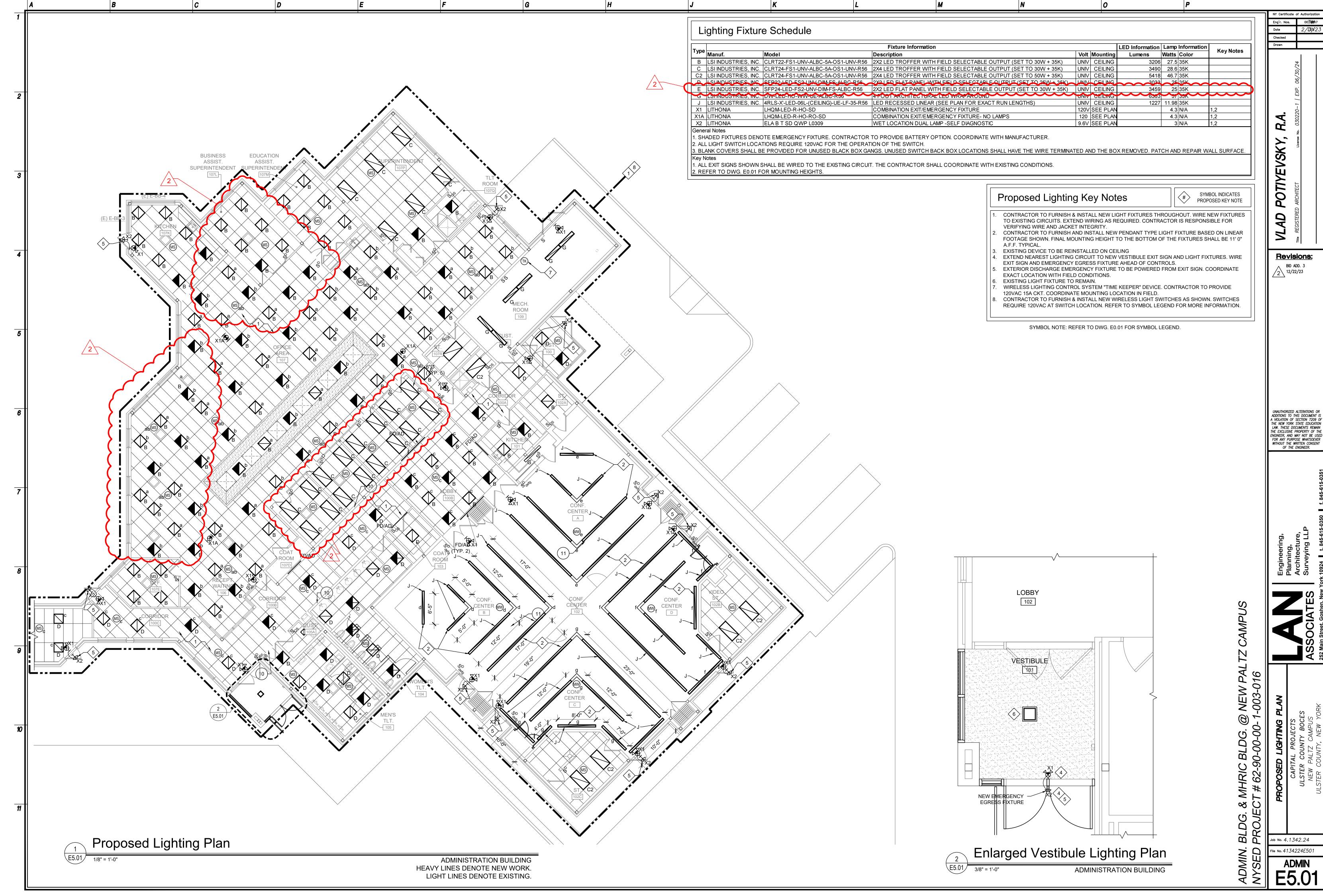


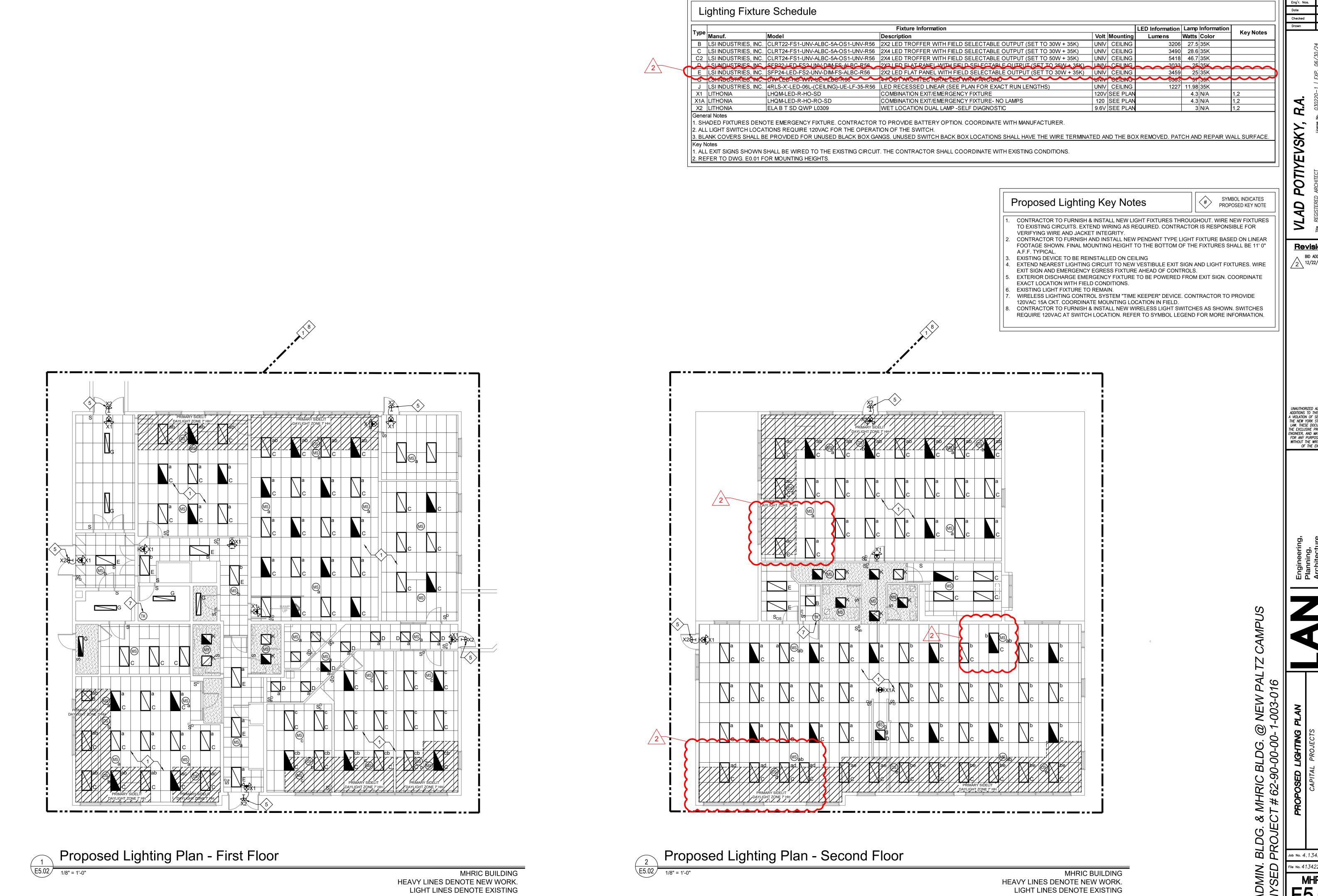
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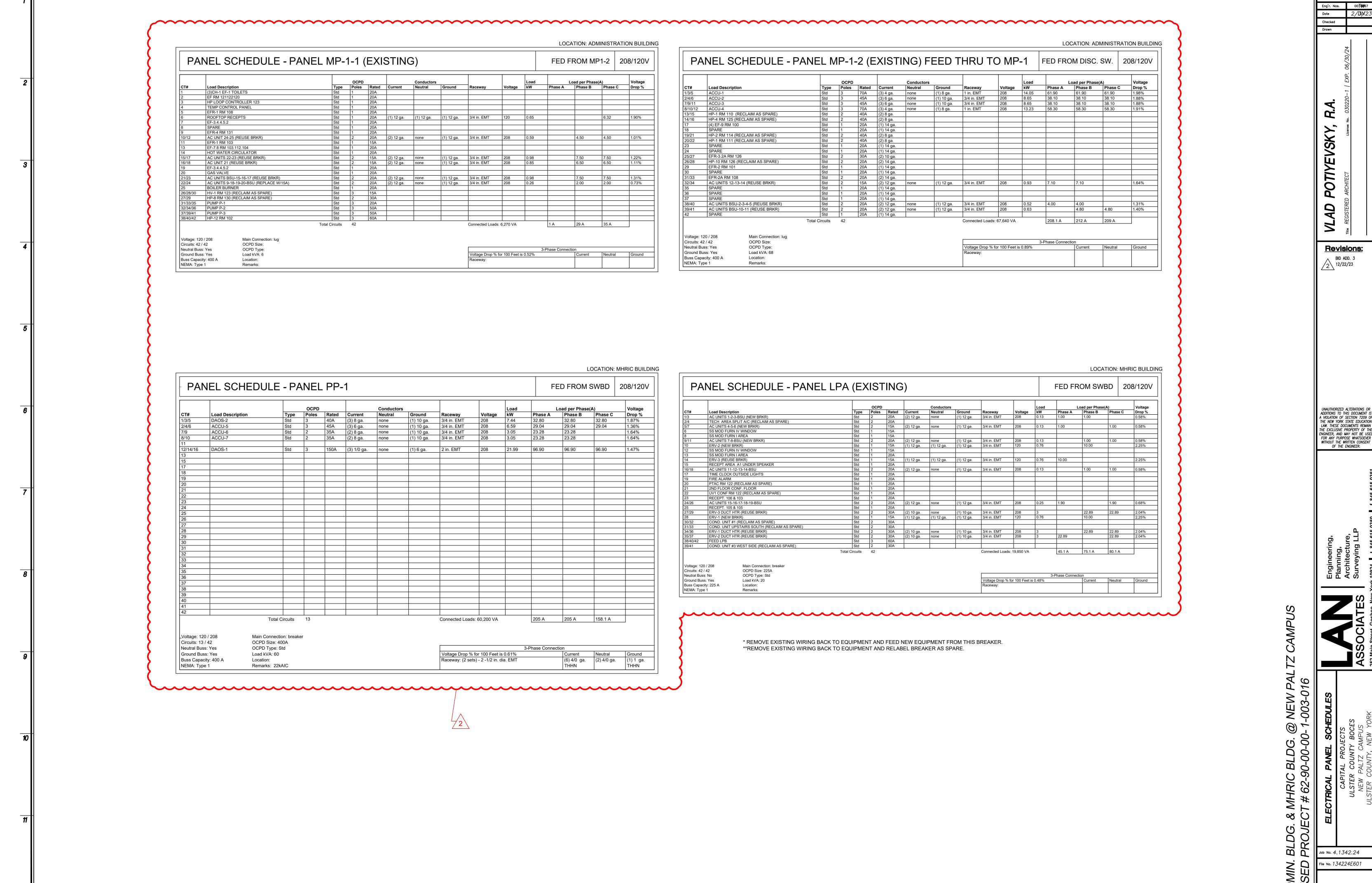
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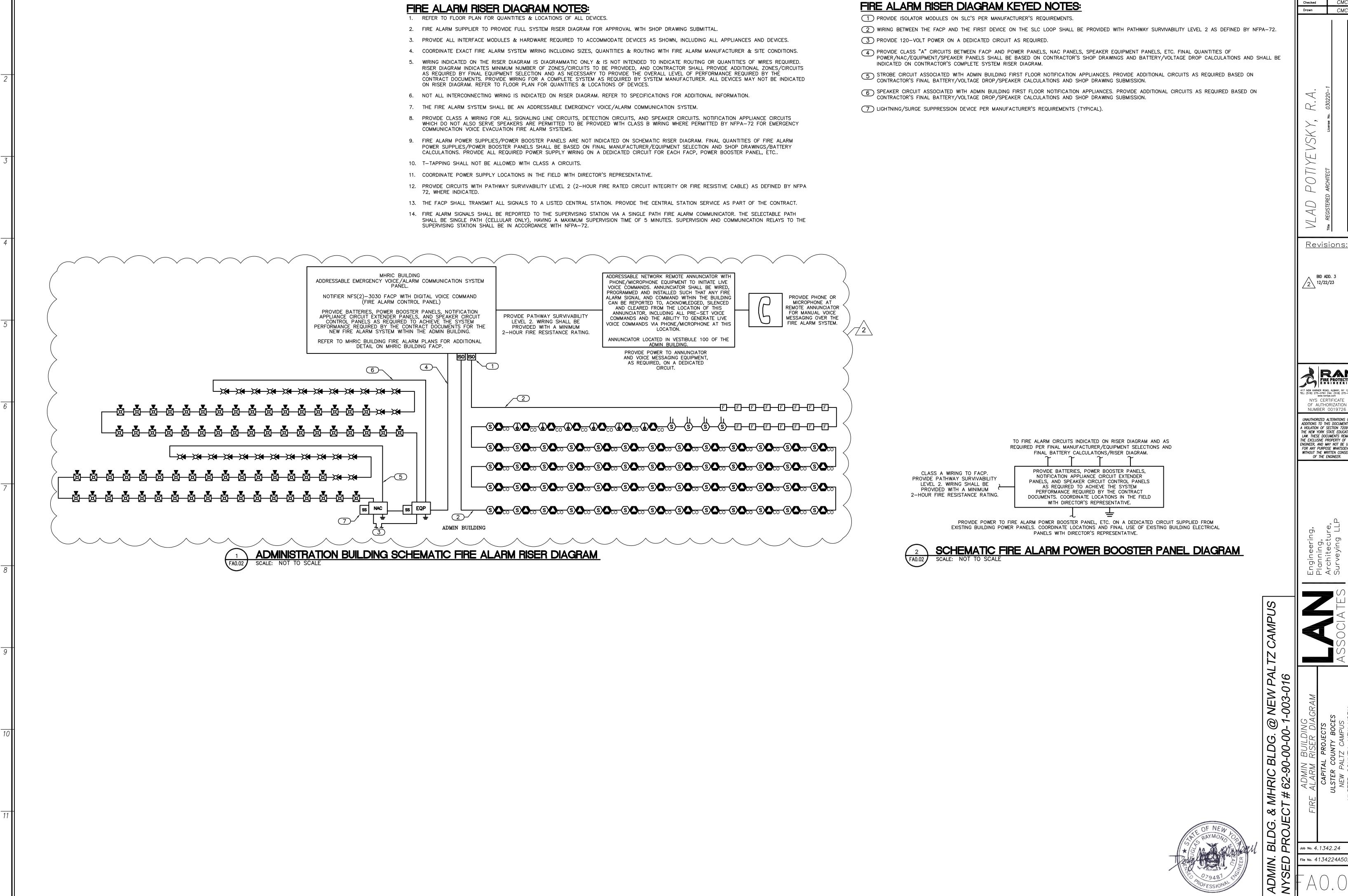
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NY Certificate of Authorization



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FIRE PROTECTION ENGINEERING NYS CERTIFICATE OF AUTHORIZATION

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