UNIONCOUNTY
north carolina

Invitation for Bid No. 2023-018

Patton Avenue Warehouse Renovations

ADDENDUM No. 1

ISSUE DATE: 3-14-2023

Responding Offerors on this project are hereby notified that this Addendum shall be made a part of the above named IFB document.

The following items add to, modify, and/or clarify the IFB documents and shall have the full force and effect of the original Documents. This Addendum shall be acknowledged by the Offeror in the IFB document.

GENERAL:

Planholders are requested to insert this Addendum in the front of their Project Manual. Inform all concerned that the Bidding Documents are modified by this Addendum.

The following modifications and clarifications are hereby made a part of the Bidding Documents and supersede or otherwise modify the provisions of the published *Project Manual* and *Drawings*, dated 1-17-2023;

Refer to the Drawings, Specification Sections, or other Documents, if any, attached to this Addendum, which are hereby made a part of this Addendum.

A Pre-Bid Conference was held on 2-22-2023. A copy of the sign-in log has been posted to www.moseleyarchitects.com/bidding *for information only* and is not considered a part of the Bidding Documents.

MODIFICATIONS TO THE PROJECT MANUAL AND DRAWINGS:

ADD new Documents in their entirety, noted as Addendum 01, dated 3-14-2023.

SECTION 004203 – E-Verify Affidavit

DELETE the previously issued Documents indicated below in their entirety and SUBSTITUTE the revised Documents in their entirety, noted as Addendum 01, dated 3-14-2023.

SECTION 011000 – SUMMARY

SECTION 102800 – TOILET AND BATH ACCESSORIES

SECTION 224000 –PLUMBING FIXTURES

DRAWING A2.1

DRAWING A2.2

DRAWING E0.1

DRAWING E2.1

REFER TO DRAWINGS ATTACHED TO THE END OF THIS ADDENDUM

REFER TO SPECIFICATION SECTIONSS ATTACHED TO THE END OF THIS ADDENDUM

END OF ADDENDUM NO 01

STATE OF NORTH CAROLINA

E-VERIFY AFFIDAVIT

UNION COUNTY

NOW COMES Affiant, first being sworn, deposes and says as follows:

1. I, being duly authorized by and on behalf of_____ [Company/Business Name], have submitted a Bid for _____ [Name of Project];

2. As part of my duties and responsibilities pursuant to said Bid, I attest that I am aware of and in compliance with the requirements of E-Verify, Article 2 of Chapter 64 of the North Carolina General Statutes, to include (mark which applies):

___ After hiring an employee to work in the United States I verify the work authorization of said employee through E-Verify and retain the record of the verification of work authorization while the employee is employed and for one year thereafter; or

___ I employ fewer than twenty-five (25) employees in the State of North Carolina.

3. As part of my duties and responsibilities pursuant to said agreement, I attest that to the best of my knowledge any subcontractors employed as a part of this agreement are in compliance with the requirements of E-Verify, Article 2 of Chapter 64 of the North Carolina General Statutes, to include (mark which applies):

___ After hiring an employee to work in the United States the subcontractor verifies the work authorization of said employee through E-Verify and retains the record of the verification of work authorization while the employee is employed and for one year thereafter; or

___ The subcontractor employs fewer than twenty-five (25) employees in the State of North Carolina. Specify subcontractor: _____

This the _____ day of _____, 20___

_____
Affiant

_____
Printed Name

Sworn to and subscribed before me, this the _____ day of _____, 20_.

[OFFICIAL SEAL]

_____
_____, Notary Public

My Commission Expires: _____

SECTION 011000 – SUMMARY – **Addendum 01**

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Provisions of the Contract and of the Contract Documents apply to this Section.

1.2 SUMMARY

A. Section Includes:

1. Project information.
2. Work covered by Contract Documents.
3. Phased construction.
4. Work by Owner.
5. Work under separate contracts.
6. Future work.
7. Purchase contracts.
8. Owner-furnished products.
9. Contractor-furnished, Owner-installed products.
10. Access to site.
11. Coordination with occupants.
12. Work restrictions.
13. Miscellaneous provisions.

1.3 PROJECT INFORMATION

A. Project Identification: Progress Building - Renovations.

1. Project Location: 610 Patton Ave, Monroe NC 28110

B. Owner: Union County.

1. Owner's Representative: **Francisco Soto**

C. Architect: Moseley Architects of Charlotte, NC.

1.4 WORK COVERED BY CONTRACT DOCUMENTS

A. The Work of Project is defined by the Contract Documents and consists of the following:

1. Renovating an existing Warehouse Building and adding HVAC

B. Type of Contract:

1. Project will be constructed under a single prime contract.

C. Use of Professional Seals on Bidding, Procurement, and Contract Documents: For the purposes of this paragraph, the term "Regulant" refers to the individual who signs and seals parts of the Contract Documents (e.g. the Drawings and Specifications). Certain information has been excerpted verbatim from a source or sources (e.g., UL Assemblies, SMACNA details, IBC code text) which was considered or used by Regulant in preparing parts of the Contract Documents, as follows:

1. The excerpted information was neither prepared under the direct control nor personal supervision nor created by the Regulant, as it was prepared by the source and owner of the excerpted information.

2. For purposes of bidding, procuring, and performance of the Work, and in any event of conflicts or ambiguities between the excerpted information in the Contract Documents and the requirements of applicable codes and standards, provide the better quality or greater quantity of Work which, at a minimum, complies with the requirements of the applicable codes and standards.
3. Advise Architect immediately upon becoming aware of requirements of the Work which are not consistent with the requirements of the excerpted information.
4. Attribution is acknowledged for information obtained and included herein verbatim from other source or sources.
5. Regulant has taken into consideration and used certain excerpted information from other sources which are applicable to the Contract Documents, and the Regulant indicates by its seal that it is assuming responsibility for its services in use and application of the excerpted information to the requirements of Work, but not for the excerpted information itself which was prepared by others. Regulant does not indicate by its seal that it is responsible for use or application of other information in such source or sources which was not included herein.

1.5 WORK BY OWNER

A. General: Cooperate fully with Owner so work may be carried out smoothly, without interfering with or delaying work under this Contract or work by Owner. Coordinate the Work of this Contract with work performed by Owner.

B. Preceding Work: Owner will perform the following construction operations at Project site. Those operations are scheduled to be substantially complete before work under this Contract begins.

1.6 CONTRACTOR-FURNISHED, OWNER-INSTALLED PRODUCTS

A. Contractor shall furnish products indicated. The Work includes unloading, handling, storing, and protecting Contractor-furnished products as directed and turning them over to Owner at Project closeout.

1.7 ACCESS TO SITE

A. General: Contractor shall have limited use of Project site for construction operations as indicated on Drawings by the Contract limits and as indicated by requirements of this Section.

B. Use of Site: Limit use of Project site to areas within the Contract limits indicated. Do not disturb portions of Project site beyond areas in which the Work is indicated.

1. <u>Limits: Site as needed and warehouse.</u>

2. Driveways, Walkways and Entrances: Keep driveways 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 by construction operations.
   b. Schedule deliveries to minimize space and time requirements for storage of materials and equipment on-site.

C. Condition of Existing Building: Maintain portions of existing building affected by construction operations in a weathertight condition throughout construction period. Repair damage caused by construction operations.

1.8 COORDINATION WITH OCCUPANTS

A. Full Owner Occupancy: Owner will **occupy site and Other Buildings on site** during entire construction period. Cooperate with Owner during construction operations to minimize conflicts and facilitate Owner usage. Perform the Work so as not to interfere with Owner's day-to-day operations. Maintain existing exits unless otherwise indicated.

1. 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 approval of authorities having jurisdiction.
2. Notify Owner not less than 72 hours in advance of activities that will affect Owner's operations.
3. Protect occupants from materials producing dust (e.g., silica) and other by-products as regulated by OSHA, federal, state, and local regulations.

1.9 WORK RESTRICTIONS

A. Work Restrictions, General: Comply with restrictions on construction operations.

1. Comply with limitations on use of public streets and with other requirements of authorities having jurisdiction.

B. On-Site Work Hours: Limit work in the existing building to normal business working hours of **7 a.m. to 5 p.m**., Monday through Friday, unless otherwise indicated.

1. Weekend Hours: as approved.
2. Early Morning Hours: as approved.
3. Hours for Utility Shutdowns: As approved with 72 hour notice.
4. Hours for Structural demolition; as approved with 48 hour notice.

C. Existing Utility Interruptions: Do not interrupt utilities serving facilities occupied by Owner or others unless permitted under the following conditions and then only after providing temporary utility services according to requirements indicated:

1. Notify Owner not less than two days in advance of proposed utility interruptions.
2. Obtain Owner's written permission before proceeding with utility interruptions.

D. Noise, Vibration, and Odors: Coordinate operations that may result in high levels of noise and vibration, odors, or other disruption to Owner occupancy with Owner.

1. Notify Owner not less than two days in advance of proposed disruptive operations.
2. Obtain Owner's written permission before proceeding with disruptive operations.

E. Controlled Substances: Use of tobacco products and other controlled substances on Project site is not permitted.

F. Employee Identification: Provide identification tags for Contractor personnel working on Project site. Require personnel to use identification tags at all times.

G. Employee Screening: Comply with Owner's requirements for drug and background screening of Contractor personnel working on Project site.

1. Maintain list of approved screened personnel with Owner's representative.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 011000

SECTION 102800 - TOILET AND BATH ACCESSORIES – **ADDENDUM 01**

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Provisions of the Contract and of the Contract Documents apply to this Section.

1.2 SUBMITTALS

A. Product Data: For each type of product indicated. Include the following:
   1. Construction details and dimensions.
   2. Anchoring and mounting requirements, including requirements for cutouts in other work and substrate preparation.
   3. Material and finish descriptions.
   4. Features that will be included for Project.
   5. Manufacturer's warranty.

B. Setting Drawings: For cutouts required in other work; include templates, substrate preparation instructions, and directions for preparing cutouts and installing anchoring devices.

C. Product Schedule: Indicating types, quantities, sizes, and installation locations by room of each accessory required.
   1. Identify locations using room designations indicated.
   2. Identify products using designations indicated.

D. Maintenance Data: For accessories to include in maintenance manuals specified in Division 1. Provide lists of replacement parts and service recommendations.

1.3 QUALITY ASSURANCE

A. Source Limitations: Provide products of same manufacturer for each type of accessory unit and for units exposed to view in same areas, unless otherwise approved by Architect.
   1. All grab bars are considered one "type" and shall be of similar design.

B. Product Options: Accessory requirements, including those for materials, finishes, dimensions, capacities, and performance, are established by specific products indicated in the Toilet and Bath Accessory Schedule.
   1. Products of other manufacturers with equal characteristics, as judged solely by Architect, may be provided.
   2. Do not modify aesthetic effects, as judged solely by Architect, except with Architect's approval. Where modifications are proposed, submit comprehensive explanatory data to Architect for review.

C. Accessibility Requirements: Comply with applicable provisions in the Department of Justice 2010 ADA Standards for Accessible Design.

1.4 COORDINATION

A. Coordinate accessory locations with other work to prevent interference with clearances required for access by disabled persons, proper installation, adjustment, operation, cleaning, and servicing of accessories.

B. Deliver inserts and anchoring devices set into concrete or masonry as required to prevent delaying the Work.

C. Coordinate type and location of blocking required for wall-mounted accessories.

1.5 WARRANTY

A. General Warranty: Special warranty specified in this Article shall not deprive Owner of other rights Owner may have under other provisions of the Contract Documents and shall be in addition to, and run concurrent with, other warranties made by Contractor under requirements of the Contract Documents.

B. Special Mirror Warranty: Manufacturer's standard form in which manufacturer agrees to replace mirrors that develop visible silver spoilage defects and that fail in materials or workmanship within specified warranty period.

1. Minimum Warranty Period: 15 years from date of Substantial Completion.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. In other Part 2 and Part 3 articles where titles below introduce lists, the following requirements apply to product selection:

1. Products: Subject to compliance with requirements, available products include, but are not limited to, those listed.

B. Available Manufacturers: Subject to compliance with requirements, manufacturers offering accessories that may be incorporated into the Work include, but are not limited to, the following:

1. Toilet and Bath Accessories:
   a. A & J Washroom Accessories, Inc.
   b. American Specialties, Inc.
   c. Bobrick Washroom Equipment, Inc.
   d. Bradley Corporation.
2. Underlavatory Guards:
   a. Truebro, Inc.
   b. IPS Corporation.

2.2 MATERIALS

A. Stainless Steel: ASTM A 666, Type 304, with No. 4 finish (satin), in 0.031-inch (0.8-mm) minimum nominal thickness, unless otherwise indicated.

B. Brass: ASTM B 19, flat products; ASTM B 16/B 16M, rods, shapes, forgings, and flat products with finished edges; or ASTM B 30, castings.

C. Steel Sheet: ASTM A 1008/A 1008M, Designation CS (cold rolled, commercial steel), 0.036-inch (0.9-mm) minimum nominal thickness.

D. Galvanized-Steel Sheet: ASTM A 653/A 653M, with G60 (Z180) hot-dip zinc coating.

E. Galvanized-Steel Mounting Devices: ASTM A 153/A 153M, hot-dip galvanized after fabrication.

F. Fasteners: Screws, bolts, and other devices of same material as accessory unit and tamper-and-theft resistant where exposed, and of galvanized steel where concealed.

G. Chrome Plating: ASTM B 456, Service Condition Number SC 2 (moderate service).

H. Baked-Enamel Finish: Factory-applied, gloss-white, baked-acrylic-enamel coating.

I. Mirrors: ASTM C 1503, Mirror Glazing Quality, clear-glass mirrors, nominal 6.0 mm thick.

J. ABS Plastic: Acrylonitrile-butadiene-styrene resin formulation.

2.3 FABRICATION

A. General: Fabricate units with tight seams and joints, and exposed edges rolled. Hang doors and access panels with full-length, continuous hinges. Equip units for concealed anchorage and with corrosion-resistant backing plates.

B. Keys: Provide universal keys for internal access to accessories for servicing and resupplying. Provide minimum of six keys to Owner's representative.

PART 3 - EXECUTION

3.1 INSTALLATION

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

B. Grab Bars: Install to withstand a downward load of at least 250 lbf (1112 N), when tested according to method in ASTM F 446.

3.2 ADJUSTING AND CLEANING

A. Adjust accessories for unencumbered, smooth operation and verify that mechanisms function properly. Replace damaged or defective items.

B. Remove temporary labels and protective coatings.

C. Clean and polish exposed surfaces according to manufacturer's written recommendations.

3.3 TOILET AND BATH ACCESSORY SCHEDULE

A. The following products make reference to the Toilet Accessories Schedule in the drawings, herein designated as "TBA."

B. Grab Bar TBA-[A, B, C, **N**]: Where these designations are indicated, provide stainless-steel grab bar complying with the following:

1. Products: Available products include the following:
   a. UG2 Series; A & J Washroom Accessories, Inc.
   b. 3700 Series; American Specialties, Inc.
   c. B-5806 Series; Bobrick Washroom Equipment, Inc.
   d. 832 Series; Bradley Corporation.
2. Stainless-Steel Nominal Thickness: Minimum 0.05 inch (1.3 mm).
3. Mounting: Concealed with manufacturer's standard flanges and anchors.
4. Gripping Surfaces: Smooth, satin finish.

5. Outside Diameter: 1-1/4 inches (32 mm) for medium-duty applications

C. Toilet Tissue (Single Roll) Dispenser TBA-[D]: Where this designation is indicated, provide toilet tissue dispenser complying with the following:

1. Products: Available products include the following:
   a. Model 7305-S; American Specialties, Inc.
   b. Model B-76857; Bobrick Washroom Equipment, Inc.
   c. Model 5084; Bradley Corporation.
2. Type: Single-roll dispenser.
3. Mounting: Surface mounted with concealed anchorage.
4. Material: Stainless steel, satin finish.
5. Operation: Non-controlled delivery with manufacturer's standard spindle.
6. Capacity: Designed for up to 5 1/2-inch- (140-mm-) diameter-core tissue rolls.

D. Sanitary Napkin Disposal Unit (Flip Lid) TBA-[E]: Where this designation is indicated, provide stainless-steel sanitary napkin disposal unit complying with the following:

1. Products: Available products include the following:
   a. Model B-270 Contura; Bobrick Washroom Equipment, Inc.
   b. Model U591; A & J Washroom Accessories, Inc.
   c. Model 20852; American Specialties, Inc.
   d. Model 4781-15; Bradley Corporation.
2. Surface-Mounted Type: With seamless exposed walls; self-closing top cover; locking bottom panel with stainless-steel, continuous hinge; and removable, reusable receptacle.

E. Soap Dispenser (Surface Tank) TBA-[F]: Where this designation is indicated, provide soap dispenser complying with the following:

1. Products: Available products include the following:
   a. Model U126; A & J Washroom Accessories, Inc.
   b. Model 0347; American Specialties, Inc.
   c. Model B-2111; Bobrick Washroom Equipment, Inc.
   d. Model 6562; Bradley Corporation.
2. Liquid Soap Dispenser, Vertical-Tank Type: Surface-mounted type, minimum 40-oz. (1182.9-mL) capacity tank with stainless-steel piston, springs, and internal parts designed to dispense soap in measured quantity by pump action; and stainless-steel cover with unbreakable window-type refill indicator.
   a. Soap Valve: Designed for dispensing soap in liquid form.

F. Mirror Unit TBA-[G]: Where this designation is indicated, provide polished stainless steel mirror unit complying with the following:

1. Products: Available products include the following:
   a. U7018B; A & J Washroom Accessories, Inc.
   b. Model 8026; American Specialties, Inc.
   c. Model B-1556; Bobrick Washroom Equipment, Inc.
   d. Model 748; Bradley Corporation.
2. Frameless, Stainless-Steel Mirror: Minimum nominal 0.0312-inch- thick, Type 430 stainless steel with bright finish and 1/4-inch return at edges; bonded to 1/4-inch thick, tempered hardboard backing and secured with tamper-resistant, stainless-steel fasteners.

G. Paper Towel Dispenser TBA-[Q]: Where this designation is indicated, provide stainless-steel paper towel dispenser complying with the following:

1. Products: Available products include the following:
   a. Model U180; A & J Washroom Accessories, Inc.
   b. Model 0210; American Specialties, Inc.
   c. Model B-262; Bobrick Washroom Equipment, Inc.
   d. Model 250-15; Bradley Corporation.
2. Surface-Mounted Type: Sized for minimum of 400 C-fold or 575 multifold paper towels without using special adapters; with hinged front equipped with tumbler lockset; and with refill indicators that are pierced slots at sides or front. Unit shall project no more than 4 inches from wall surface.

H. Underlavatory Guard: Where piping is exposed and not otherwise protected at all accessible sinks, complying with the following:

1. Products: Available products include the following:
   a. Series "Lav Guard 2;" Truebro, IPS Corporation.
   b. Series "Trap Gear;" Plumberex Specialty Products, Inc.
2. Description: Insulating pipe covering for supply and drain piping assemblies that prevent direct contact with and burns from piping; allow service access without removing coverings.
3. Material and Finish: Antimicrobial, molded plastic, white.

I. Rectangular Folding Shower Seat TBA-[V]: Where this designation is indicated, provide heavy-duty hinged seat designed to fold up against wall when not in use with stainless-steel support braces, hinges, frame, and fasteners; of all-welded construction; and complying with the following:

1. Products: Available products include the following:
   a. Model 9562; Bradley Corporation.
   b. SSB-280150-PW; Seachrome Corp.
   c. B-5190 Series, Custom; Bobrick Washroom Equipment, Inc.
2. Configuration: Rectangular seat.
3. Seat Size: 26 inches long minimum, 29 inches long maximum.
4. Seat Material: Solid phenolic or polymeric composite of slat-type or one-piece construction.
   a. Color: Manufacturer's standard ivory or white. For phenolic, provide black core.

J. Shower Curtain [and] Rod TBA-[L]: Where this designation is indicated, provide stainless-steel shower curtain rod with 3-inch (75-mm) stainless-steel flanges designed for exposed fasteners, in length required for shower opening indicated, and complying with the following[, along with curtain and hooks]:

1. Products: Available products include the following:
   a. Model UX2-C; A & J Washroom Accessories, Inc.
   b. Model 1204; American Specialties, Inc.
   c. Model B-6047; Bobrick Washroom Equipment, Inc.
   d. Model 9539; Bradley Corporation.

2. **Heavy-Duty Rod: 1-1/4-inch (32-mm) OD; fabricated from nominal 0.05-inch (1.3-mm)-thick stainless steel.**
3. **Antibacterial Shower Curtain: Minimum 10-oz. (284-g), nylon-reinforced vinyl or 0.008-inch- (0.2-mm-) thick vinyl material with integral antibacterial agent and corrosion-resistant grommets at minimum 6 inches (152 mm) o.c. through top hem.**
   a. **Width: Minimum 6 inches (152 mm) wider than opening for openings less than 48 inches (1219 mm).**
      1) **Provide minimum 12 inches (305 mm) wider than opening for openings 48 inches (1219 mm) wide and wider.**
   b. **Height: Minimum 78 inches (1981 mm) [high. 6'-7" or so rod height recommended if shower head is at recommended +6'-6"**
   c. **Color: [White] [As selected by Architect from manufacturer's full range].**
4. **Shower Curtain Hooks: Chrome-plated or stainless-steel, spring wire curtain hooks with [cylindrical or ball non-friction rollers and] snap fasteners, sized to accommodate specified curtain rod. Provide one hook per curtain grommet.**

END OF SECTION 102800

SECTION 224000 - PLUMBING FIXTURES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Provisions of the Contract and of the Contract Documents apply to this Section.

1.2 DEFINITIONS

A. ABS: Acrylonitrile-butadiene-styrene plastic.

B. FRP: Fiberglass-reinforced plastic.

C. PMMA: Polymethyl methacrylate (acrylic) plastic.

D. PVC: Polyvinyl chloride plastic.

E. RFI:Request for information.

F. Accessible Fixture: Plumbing fixture that can be approached, entered, and used by people with disabilities.

G. Cast Polymer: Cast-filled-polymer-plastic material. This material includes cultured-marble and solid-surface materials.

H. Cultured Marble: Cast-filled-polymer-plastic material with surface coating.

I. Fitting: Device that controls flow of water into or out of plumbing fixture. Fittings specified in this Section include supplies and stops, faucets and spouts, showerheads and tub spouts, drains and tailpieces, and traps and waste pipes.

J. Solid Surface: Nonporous, homogeneous, cast-polymer-plastic material with heat-, impact-, scratch-, and stain-resistance qualities.

K. Other Manufacturers: Use one of those listed.

1.3 SUBMITTALS

A. Product Data: For each type of product.

1. Include construction details, material descriptions, dimensions of individual components and profiles, finishes, and security anchors for security plumbing fixtures.
2. Include rated capacities, operating characteristics, and furnished specialties and accessories.

B. Maintenance Data: For security plumbing fixtures and components to include in maintenance manuals.

C. Faucet Cartridges, washers, aerators and O-Rings: Equal to five percent (5%) of amount of each type and size installed but not less than five (5) of each type and size.

D. Flushometer Valve Repair Kits: Equal to ten percent (10%) of quantity of each type installed, or six (6), whichever is less.

E. Provide Minimum number of key operators (wrenches/tools)for loose key stops, wall hydrants, aerators, security fasteners and any fixture where a key, security fastener, or special tool is required:

1. One (1) for ten percent (10%) of each size or ten (10), whichever is less.

1.4 QUALITY ASSURANCE

A. Source Limitations: Obtain plumbing fixtures, faucets, and other components of each category through one source from a single manufacturer.

1. Exception: If fixtures, faucets, or other components are not available from a single manufacturer, obtain similar products from other manufacturers specified for that category.

B. Electrical Components, Devices, and Accessories: Electrical components, devices, and accessories shall be listed and labeled as defined in NFPA 70, Article 100, by a testing agency acceptable to authorities having jurisdiction, and marked for intended use.

C. Regulatory Requirements: Comply with requirements in ICC A117.1, "Accessible and Usable Buildings and Facilities"; Public Law 90-480, "Architectural Barriers Act"; and Public Law 101-336, "Americans with Disabilities Act"; for plumbing fixtures for people with disabilities. Comply with requirements in Public Law 102-486, "Energy Policy Act," regarding water flow and consumption rates for plumbing fixtures.

D. NSF Standard: Comply with NSF 61, "Drinking Water System Components--Health Effects," for fixture materials that will be in contact with potable water.

E. Select combinations of fixtures and trim, faucets, fittings, and other components that are compatible.

F. Comply with the following standards and other requirements where applicable:

1. Enameled, Cast-Iron Fixtures: ASME A112.19.1M.
2. Porcelain-Enameled, Formed-Steel Fixtures: ASME A112.19.4M.
3. Slip-Resistant Bathing Surfaces: ASTM F 462.
4. Vitreous-China Fixtures: ASME A112.19.2M.
5. Water-Closet, Flush Valve, Tank Trim: ASME A112.19.5.
6. Water-Closet, Flushometer Tank Trim: ASSE 1037.
7. Backflow Protection Devices for Faucets with Side Spray: ASME A112.18.3M.
8. Backflow Protection Devices for Faucets with Hose-Thread Outlet: ASME A112.18.3M.
9. Diverter Valves for Faucets with Hose Spray: ASSE 1025.
10. Faucets: ASME A112.18.1.
11. Hose-Connection Vacuum Breakers: ASSE 1011.
12. Hose-Coupling Threads: ASME B1.20.7.
13. Integral, Atmospheric Vacuum Breakers: ASSE 1001.
14. NSF Potable-Water Materials: NSF 61.

15. Pipe Threads: ASME B1.20.1.
16. Sensor-Actuated Faucets and Electrical Devices: UL 1951.
17. Supply Fittings: ASME A112.18.1.
18. Brass Waste Fittings: ASME A112.18.2.
19. Backflow Protection Devices for Hand-Held Showers: ASME A112.18.3M.
20. Combination, Pressure-Equalizing and Thermostatic-Control Antiscald Faucets: ASSE 1016.
21. Hand-Held Showers: ASSE 1014.
22. High-Temperature-Limit Controls for Thermal-Shock-Preventing Devices: ASTM F 445.
23. Manual-Control Antiscald Faucets: ASTM F 444.
24. Pressure-Equalizing-Control Antiscald Faucets: ASTM F 444 and ASSE 1016.
25. Thermostatic-Control Antiscald Faucets: ASTM F 444 and ASSE 1016.
26. Atmospheric Vacuum Breakers: ASSE 1001.
27. Brass and Copper Supplies: ASME A112.18.1.
28. Brass Waste Fittings: ASME A112.18.2.
29. Sensor-Operation Flushometers: ASSE 1037 and UL 1951.
30. Floor Drains: ASME A112.6.3.
31. Grab Bars: ASTM F 446.
32. Plastic Shower Receptors: ANSI Z124.2.
33. Plastic Toilet Seats: ANSI Z124.5.
34. Supply and Drain Protective Shielding Guards: ICC A117.1.

1.5 COORDINATION

A. Coordinate all accessories. Ensure items fit and work together as an assembly.

B. Coordinate roughing-in and final plumbing fixture locations, and verify that fixtures can be installed to comply with design.

C. Model numbers are intended to identify families of fixtures and may be incomplete. Refer to other contract documents for hand.

1.6 EXTRA MATERIALS

A. Furnish extra materials described below that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.

1. Faucet Cartridges, washers, aerators and O-Rings: Equal to 5 percent of amount of each type and size installed but not less than 5 of each type and size.
2. Flushometer Valve, Repair Kits: 5 of each type.

PART 2 - PRODUCTS

2.1 WC-1 (FLOOR MOUNTED WATER CLOSET (ACCESSIBLE)) WITH FLUSH TANK

A. Manufacturer & Model Number: Kohler No. K-3427 (1.6 Gallon Flush)

B. Handle: Polished, chrome plated, mounted on wide side of access.

C. Material: Vitreous china

D. Color: White

E. Seat: Church 9500SSCT (White)

1. Elongated extra heavy weight seat with stainless steel self-sustaining check hinge.

F. Supplies: McGuire Part Number 2166-N3-F

1. ½" IPS x 3/8" OD
2. ½" IPS x 3" chrome plated brass nipple.
3. Heavy brass chrome plated wall flange with set-screw
4. Contractor shall coordinate supply connection to faucet

G. Manufacturers:

1. Water Closet
   a. American Standard
   b. Eljer
   c. Crane
   d. Gerber
2. Seat
   a. Olsonite
   b. Centoco

2.2 LA-1 WALL MOUNTED LAVATORY (ACCESSIBLE)

A. Manufacturer & Model Number: Kohler No. K-1728

B. Material: Vitreous China

C. Color: White

D. Faucet: Moen Model Number 8215

1. 4" Spout
2. 0.5 GPM Maximum Flow
3. Chrome plate
4. All Brass Body
5. Renewable Seat and Washers
6. Wrist Blade Handles

E. Drain: McGuire Part Number 155A

F. Trap: McGuire Part Number 8902C-F

1. 1-1/4"x 1-1/2" cast brass polished chrome trap with cleanout plug and brass slip nuts.
2. 17-gauge seamless tubular chrome plated brass wall bend.
3. Forged brass chrome plated wall flange with setscrew.

G. Supplies: McGuire Part Number 2165-N3-F

1. ½" IPS x 3/8" OD
2. ½" x 3" chrome plated brass nipple.
3. Heavy brass chrome plated wall flange with set-screw
4. Contractor shall coordinate supply connection to back-check tee and shall provide required additional pipe.

H. Insulation: Tru-Bro Lav Guard #102

1. Color: White

2. Insulate P-trap, hot and cold angle valves, hot and cold risers.

I. Carrier: Josam Series 17100

1. Floor mounted with rectangular uprights.

J. Manufacturers: Provide products, features, and accessories equal to those specified above.

1. Lavatory
   a. American Standard
   b. Eljer
   c. Sloan
   d. Zurn
2. Faucet:
   a. Zurn
   b. Speakman
   c. Cambridge Brass
   d. T&S Brass
3. Drain:
   a. Kohler
   b. Cambridge Brass
   c. Chicago
4. Trap:
   a. Kohler
   b. Cambridge Brass
5. Supplies:
   a. Cambridge Brass
   b. Kohler
6. Insulation:
   a. McGuire
7. Carrier:
   a. JR Smith

K. SINK – SINGLE BASIN - ACCESIBLE **(SK-1)**:

1. Manufacturer & Model Number: Elkay LRAD2219
   a. 6 ” bowl depth
   b. Punched for 4” centerset faucet
2. Material: 18 Gauge Stainless Steel
3. Faucet: Zurn model Z82300-XL-cp8
   a. 10.0” Swing Gooseneck Spout
   b. 1.5 GPM pressure compensating aerator
   c. Handles: 4” wristblade
   d. Renewable Ceramic disc cartridges
   e. Meets ADA requirements: Yes
   f. Polished chrome finish
   g. All brass body
4. Basket Strainer & Tail Piece: McGuire Part Number 151
   a. Forged brass basket strainer
   b. 1-1/2” x 4” 20 gauge tailpiece
   c. Cast brass lock and coupling nuts
5. Trap: McGuire Part Number 8912-C-F

a. 1-1/2"x 1-1/2" cast brass polished chrome trap with cleanout plug and brass slip nuts.
b. 17-gauge seamless tubular chrome plated brass wall bend.
c. Forged brass chrome plated wall flange with setscrew.

6. Supplies: McGuire Part Number 2165-N3-F
   a. ½" IPS x 3/8" OD
   b. ½" x 3" chrome plated brass nipple.
   c. Heavy brass chrome plated wall flange with set-screw
   d. Contractor shall coordinate supply connection to faucet.
   e. Wheel Handle
7. Other Manufacturers: Provide products, features, and accessories equal to those specified above.
   a. Sink
      1) Just
      2) Kohler
   b. Faucet:
      1) T&S
      2) Speakman
      3) Chicago
      4) Moen
   c. Basket Strainer & Tail Piece:
      1) Kohler
      2) Cambridge Brass
   d. Trap:
      1) Kohler
      2) Cambridge Brass
   e. Supplies:
      1) Cambridge Brass
      2) Kohler

2.3 SH-1 (INDIVIDUAL SHOWER (TRANSFER TYPE ACCESSIBLE)) **(*ADD-01)**

A. Shower Valve: Acorn Controls Model: SV16

1. Temperature/Pressure compensating valve
2. Fixed shower head (1.5gpm)
3. Hand held shower set with 60" flex hose
4. 30" Slide bar for hand held shower mounted with stainless steel plates and bolts
5. In-line diverting valve
6. Integral service stops

B. Basin:

1. Manufacturer & Model Number: Stern Williams 'Parian' WDA-3620
2. Material: Terrazzo
3. Color: Manufacturer's standard.
4. Drain: Cast brass with stainless steel strainer or approved equal, furnished with basin. Provide drain type with matching accessories and components necessary for final and proper installation.

5. Trap: 2” (Provide additional pipe and material transition as required make connection to basin)
6. Other Accessories
   a. 1. 6” stainless steel cap with tiling flange on 3 sides

C. Provide one (1) outside white cotton shower curtain and one (1) inside vinyl curtain liner.

D. Provide chrome plated brass curtain rod and flanges.

E. Provide two (2) sets of rollerball type shower curtain hooks.

F. Provide self-sealing brass drain and strainer.

G. Other Manufacturers: Provide products, features, and accessories equal to those specified above.

1. Shower Valve
   a. Leonard
   b. Bradley
   c. Symmons
2. Basin
   a. Crane
   b. Fiat

2.4 HR-1 - HOSE REEL – COMPRESSED AIR

A. Manufacturer & Model Number: COXREELS, Model TSH-N-575

B. General: all-steel construction, hose ½” I.D, pressure - 300 psi max, stainless flexible hose connection, ball valve, corrosion resistant premium duty, durable and compact, guide arm adjusts to two positions.

1. Spring driven reel
2. Standard quick disconnect air connector.
3. Permanently lubricated block bearings.
4. Inlet: Brass NPT
5. Mounting Bracket
6. Hose Guide
7. Hose: 75’-0”

2.5 WALL SUPPLY BOX - ICE MAKER (WSB-1)

A. Manufacturer: Oatey

B. General: Recessed-mounting, 20 gauge steel, outlet box& faceplate with supply fitting complying with ASME A112.18.1M. Include box with faceplate, supply valve, and reinforcement

C. Supply valve: ½” IPS (or copper sweat) x 3/8” OD

D. Available Manufacturers

1. Guy Gray
2. Water-tite
3. LSP Products Group.

2.6 WALL HYDRANT (WH-1)

A. Manufacturer & Model Number: Josam Hydrasan 71000 non-freeze w/box.

B. General: Cast bronze, non-freeze, wall hydrant with cast bronze box, satin finish face, hinged latching cover, control key,and integral vacuum breaker/backflow preventer. Pressure rating shall be 125 psig. Comply with ASME A112.21.3M, ASSE 1011, and ASSE 1019. Provide self-draining integral non-removable hose-connection, and wall clamp.

1. Inlet: threaded or solder joint.
2. Outlet: ASME B1.20.7, garden-hose threads.
3. Operating Keys: One with each hydrant.

C. Other Manufacturers:

1. Smith
2. Woodford
3. Zurn

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine roughing-in for water soil and for waste piping systems and supports to verify actual locations and sizes of piping connections and that locations and types of supports match those indicated, before plumbing fixture installation. Manufacturer's roughing-in data overrides all other indicated data.

B. Examine walls, floors, and cabinets for suitable conditions where fixtures are to be installed.

C. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 FIXTURE INSTALLATION

A. Assemble fixtures, trim, fittings, and other components according to manufacturers' written instructions.

B. For wall-hanging fixtures, install off-floor supports affixed to building substrate.

C. Install back-outlet, wall hanging fixtures onto waste fitting seals and attach to supports.

D. Install floor-mounting fixtures on closet flanges or other attachments to piping or building substrate.

E. Install wall-hanging fixtures with tubular waste piping attached to supports.

F. Install floor-mounting, back-outlet water closets attached to building floor substrate and wall bracket and onto waste fitting seals.

G. Install counter-mounted fixtures in and attached to casework.

H. Install fixtures level and plumb according to manufacturers' written instructions and roughing-in drawings.

I. Install water-supply piping with stop on each supply to each fixture to be connected to water distribution piping. Attach supplies to supports or substrate within pipe spaces behind fixtures. Install stops in locations where they can be easily reached for operation.

1. Exception: Use ball valve if stops are not specified with fixture. Refer to Section "Valves".

J. Install trap and waste piping on drain outlet of each fixture to be directly connected to sanitary drainage system.

K. Install waste piping on drain outlet of each fixture to be indirectly connected to drainage system.

L. Install flushometer valves for accessible water closets and urinals with handle mounted on wide side of compartment. Install other actuators in locations that are easy for people with disabilities to reach.

M. Install tanks for accessible, tank-type water closets with lever handle mounted on wide side of compartment.

N. Install toilet seats on water closets.

O. Install faucet-spout fittings with specified flow rates and patterns in faucet spouts if faucets are not available with required rates and patterns. Include adapters if required.

P. Install water supply, flow-control fittings with specified flow rates in fixture supplies at stop valves.

Q. Install faucet, flow-control fittings with specified flow rates and patterns in faucet spouts if faucets are not available with required rates and patterns. Include adapters if required.

R. Install shower, flow-control fittings with specified maximum flow rates in shower arms.

S. Install traps on fixture outlets.

1. Exception: Omit trap on fixtures with integral traps.
2. Exception: Omit trap on indirect wastes, unless otherwise indicated.

T. Install disposer in outlet of sinks indicated to have disposer. Install switch where indicated or in wall adjacent to sink if location is not indicated.

U. Install hot-water dispensers in back top surface of sink or in counter with spout over sink.

V. Install escutcheons at piping wall-ceiling penetrations in exposed, finished locations and within cabinets and millwork. Use deep-pattern escutcheons if required to conceal protruding fittings. Refer to Division 22 Section “Common Work Results For Plumbing" for escutcheons.

W. Set [bathtubs,] [shower receptors,] [and] [service basins] in leveling bed of cement grout. Refer to Division 22 Section “Common Work Results For Plumbing" for grout.

X. Refer to Section "Joint Sealants" for sealant and installation requirements.

Y. Provide connection to automatic lavatories & flush valves as required via low-voltage transformer(s). Mount transformer(s) above accessible ceiling. Connect to local 120V receptacle circuit with disconnect switch adjacent to transformer. All circuitry (including low voltage) shall be run concealed & in conduit. Coordinate connection requirements.

3.3 CONNECTIONS

A. Drawings indicate general arrangement of piping, fittings, and specialties.

B. Connect water supplies from water distribution piping to fixtures.

C. Connect drain piping from fixtures to drainage piping.

D. Supply and Waste Connections to Plumbing Fixtures: Connect fixtures with water supplies, stops, risers, traps, and waste piping. Use sizes required to match fixtures. Connect to plumbing piping.

E. Supply and Waste Connections to Fixtures and Equipment Specified in Other Sections: Connect fixtures and equipment with water supplies, stops, risers, traps, and waste piping. Use size fittings required to match fixtures and equipment. Connect to plumbing piping.

F. Ground equipment: Tighten electrical connectors and terminals according to manufacturer's published torque-tightening values. If manufacturer's torque values are not indicated, use those specified in UL 486A and UL 486B.

3.4 FIELD QUALITY CONTROL

A. Verify that installed fixtures are categories and types specified for locations where installed.

B. Check that fixtures are complete with trim, faucets, fittings, and other specified components.

C. Inspect installed fixtures for damage. Replace damaged fixtures and components.

D. Test installed fixtures after water systems are pressurized for proper operation. Replace malfunctioning fixtures and components, then retest. Repeat procedure until units operate properly.

E. Install fresh batteries in sensor-operated mechanisms.

3.5 ADJUSTING

A. Replace washers and seals or cartridges of leaking and dripping faucets, stops, and valves.

3.6 CLEANING

A. Clean fixtures, faucets, and other fittings with manufacturers' recommended cleaning methods and materials. Do the following:

1. Remove faucet spouts and strainers, remove sediment and debris, and reinstall strainers and spouts.
2. Remove sediment and debris from drains.

3.7 PROTECTION

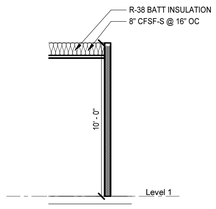
A. Provide protective covering for installed fixtures and fittings.

B. Do not allow use of fixtures for temporary facilities unless approved in writing by Owner.

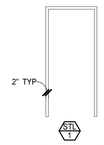
END OF SECTION 224000

FINISH SCHEDULE

NUMBER	NAME	FLOOR	BASE	WALLS				CEILING	NOTES
				NORTH	EAST	SOUTH	WEST		
1	TECHNICIAN OFFICE	STATIC TILE	RB	PT	PT	PT	PT	ACP	
1A	STORAGE	STATIC TILE	RB	PT	PT	PT	PT	ACP	
2	SHOP	EXISTING CONCRETE							RB AND PT ON ALL NEW WALLS
3	BREAK ROOM	EXISTING CONCRETE	RB	PT	PT	PT	PT	ACP	
4	RESTROOM / SHOWER	EXISTING CONCRETE	RB	PT	PT	PT	PT	ACP	
5	WATER HEATER	EXISTING CONCRETE	-	-	-	-	-	-	



1 A2.1 A2.1 **TYPICAL WALL DETAIL**
1/4" = 1'-0"



FRAME TYPES

DOOR AND FRAME DETAIL KEYNOTES

REPRESENTED BY n

APPLIES TO DRAWINGS A3.2.1 - A3.2.n

1 ANCHORAGES, REINFORCING, SPECIFIC PARTITION CONSTRUCTION AND/OR LINTELS ARE NOT SHOWN FOR CLARITY.

2 REFER TO FRAME SECTION IN DOOR SCHEDULE FOR TYPE.

3 SEALANT, ALL SIDES - TOOL TO 90°.

4 BACKBEND RETURN @ GB LOCATIONS ONLY.

5 9/16" @ MAS; 1/2" @ GB.

6 1/4" @ JAMBS, UNO; DIMENSION @ HEAD & SILL VARIES.

7 BULLNOSE @ CMU JAMBS & SILLS.

8 0" @ GB LOCATIONS; 1/16" @ MAS LOCATIONS.

DOOR SCHEDULE

NUMBER	DOOR TYPE	DOOR SIZE (NOMINAL)	DOOR MATL	DOOR UC	DOOR GLAZING TYPE	FRAME TYPE	FRAME NUMBER	FRAME SECTIONS	FRAME HEAD DETAIL	FRAME JAMB DETAIL	FRAME JAMB DETAIL	FRAME SILL DETAIL	HDWR	SIGNAGE	NOTES
1	G	3'-0"x7'-0"x1-3/4"	STL		1	STL	1	A					01		
1A	G	3'-0"x7'-0"x1-3/4"						A					01		EXISTING DOOR, RELOCATED
2	G	3'-0"x7'-0"x1-3/4"	STL		1	STL	1	A	6/A2.2	6/A2.2	6/A2.2				
3	G	3'-0"x7'-0"x1-3/4"	STL		1	STL	1	A					01		
4	F	3'-0"x7'-0"x1-3/4"	STL			STL	1	A					02		
4A	F	2'-0"x7'-0"x1-3/4"	STL			STL	1						03		
OH1	OH	16'-0" X 15'-0"	STL			STL			2/A2.2						
OH2	OH	16'-0" X 15'-0"	STL			STL			2/A2.2						

REFLECTED CEILING PLAN LEGEND

APPLIES TO DRAWINGS A2.1

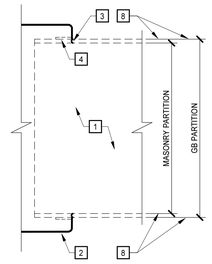
REFER TO M, E & FP DRAWINGS FOR REFLECTED CEILING PLAN SYMBOLS NOT INDICATED BELOW

A101 / nn'-nn" — SPACE NUMBER; CEILING HEIGHT, AFF UNO

INTERIOR APPLICATIONS: GYPSUM BOARD CEILING

EXTERIOR APPLICATIONS: GYPSUM SOFFIT BOARD OR GYPSUM SHEATHING

2'-0" x 2'-0" LAY-IN ACOUSTICAL CEILING PANELS IN SUSPENDED GRID



INTERIOR WRAP HEAD/JAMB/SILL

GLAZING TYPES

REPRESENTED BY n

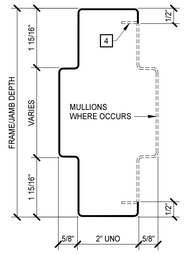
1. 1/4" CLEAR

NOTES:
1. ALL GLAZING IN INTERIOR FRAMES SHALL BE TYPE 1, UNO
2. ALL GLAZING SHALL BE SAFETY GLASS UNLESS INDICATED OTHERWISE

PANEL WALL/PARTITION TYPES

REPRESENTED BY Xnn

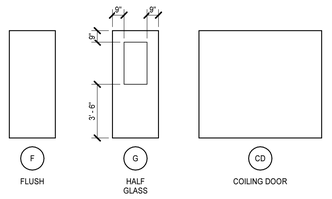
MARK	FIRE RATED ASSEMBLY	REMARKS	INFORMATION
P1	--	--	5/8" GYPSUM WALL BOARD; 3 5/8" CFSF-S @ 16" OC; R-13 BATT INSULATION
P2	--	--	5/8" GYPSUM WALL BOARD; 3 5/8" CFSF-S @ 16" OC; R-13 BATT INSULATION



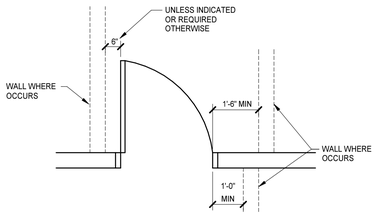
DBL RABBET

A

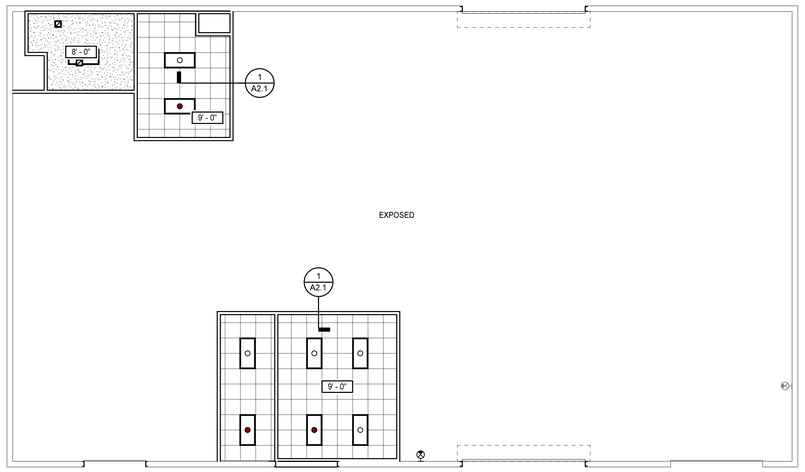
STEEL FRAME SECTIONS



DOOR TYPES

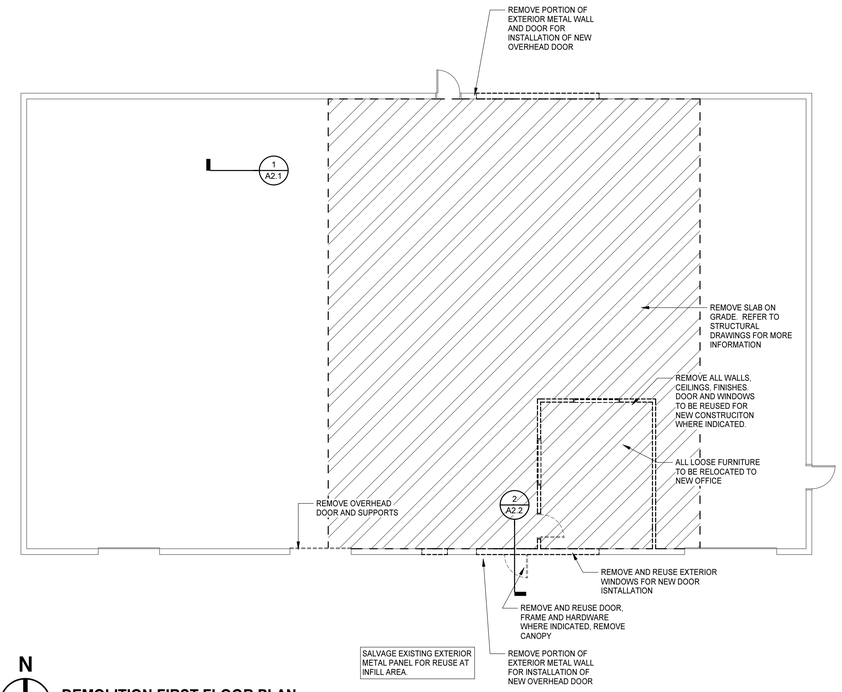


MANEUVERING CLEARANCE AT DOORS



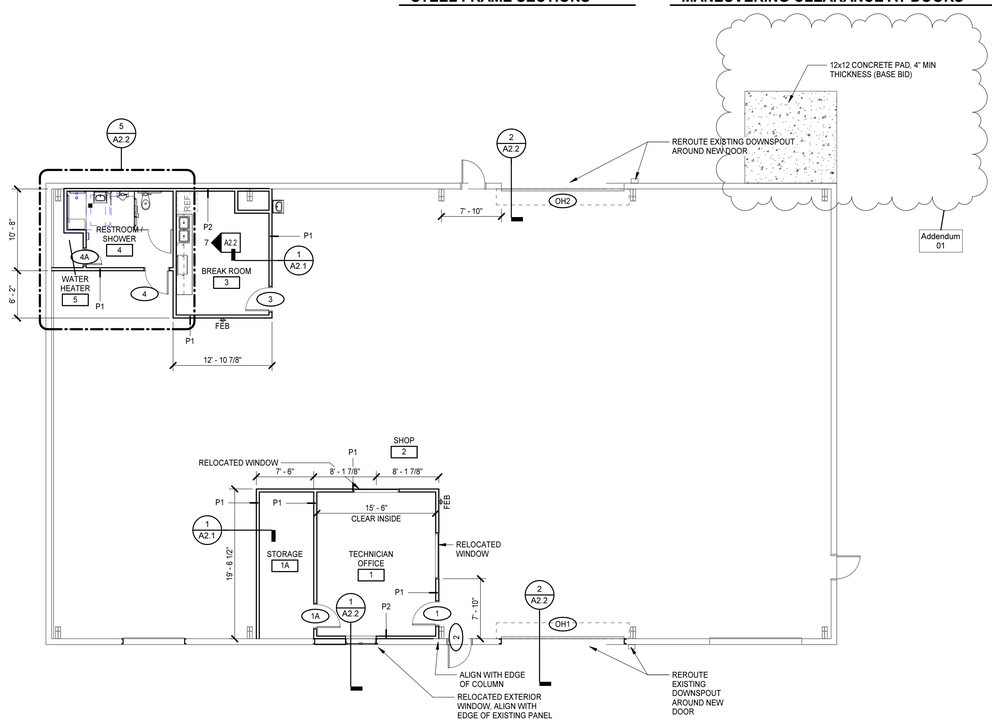
N

FIRST FLOOR PLAN
1/8" = 1'-0"



N

DEMOLITION FIRST FLOOR PLAN
1/8" = 1'-0"



N

FIRST FLOOR PLAN
1/8" = 1'-0"

MOSELEYARCHITECTS
6210 ARDREY KELL ROAD • THE HUB AT WAVERLY, SUITE 425 • CHARLOTTE, NC 28277
PHONE (704) 540-3755 FAX (704) 540-3754
MOSELEYARCHITECTS.COM

MOSELEY ARCHITECTS — REGISTERED ARCHITECT — REGISTRATION NO. 50149 — NORTH CAROLINA — CHARLOTTE, NC

DANIEL R. MOSELEY — REGISTERED ARCHITECT — 18712 — NORTH CAROLINA — CHARLOTTE, NC

1-17-23

PATTON AVENUE WAREHOUSE RENOVATIONS

UNION COUNTY FACILITIES
610 PATTON AVENUE, MONROE, NC 28110

PROJECT NO: 601193
DATE: 1-17-2023

REVISIONS

DATE	DESCRIPTION
3-3-23	Addendum 01

FLOOR PLAN

A2.1

3/2/2023 2:26:20 PM

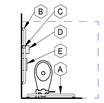
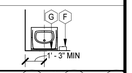
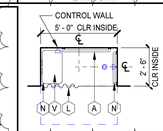
TOILET ACCESSORIES SCHEDULE

MARK	DESCRIPTION	MOUNTING HEIGHT	REMARKS
A	36" HORIZONTAL GRAB BAR	REFER TO WATER CLOSET ELEVATIONS	
B	42" HORIZONTAL GRAB BAR	REFER TO WATER CLOSET ELEVATIONS	
C	18" VERTICAL GRAB BAR	REFER TO WATER CLOSET ELEVATIONS	
D	TOILET TISSUE DISPENSER	REFER TO WATER CLOSET ELEVATIONS	
E	SANITARY NAPKIN DISPOSAL	REFER TO WATER CLOSET ELEVATIONS	
F	SOAP DISPENSER	3'-4" AFF TO DISPENSING OUTLET	
G	MIRROR (18" x 36"), OVER LAV AND CONTERTOP	3'-4" AFF TO BOTTOM OF REFLECTIVE SURFACE	
L	SHOWER CURTAIN, ROD AND HOOKS	6'-8" AFF TO ROD	
N	24" HORIZONTAL GRAB BAR	REFER TO TUB & SHOWER ELEVATIONS	
Q	PAPER TOWEL DISPENSER	3'-8" AFF TO DISPENSING OUTLET	
V	FOLDING SHOWER SEAT	1'-6" TO SEAT SURFACE	

Addendum 01

TOILET ASSEMBLIES

APPLIES TO DRAWINGS A2.2
REPRESENTED BY TAn

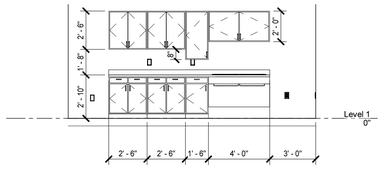
MARK	REMARKS	PLAN
BARRIER FREE **TA7**		
TA11	CENTER G OVER LAVATORY	 LAVATORY
BARRIER FREE **TA14**	Addendum 01	 SHOWER - ROLL-IN STYLE

LEGEND NOTES:

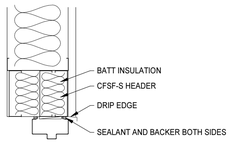
A. HANDING/ORIENTATION MAY VARY. REFER TO PLANS FOR PROPER ORIENTATION.

B. PLUMBING FIXTURE GRAPHICS IN THIS LEGEND ARE REPRESENTATIVE ONLY. ACTUAL PLUMBING FIXTURES MAY VARY.

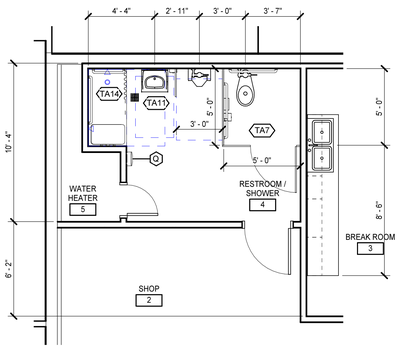
C. COAT/ROBE HOOKS INDICATED ON THE BACK OF TOILET COMPARTMENT DOORS ARE PART OF THE TOILET COMPARTMENT ASSEMBLY AND ARE NOT CONSIDERED A TOILET ACCESSORY.



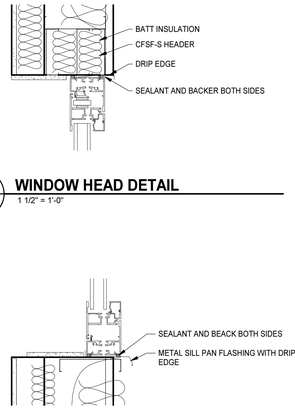
7 CASEWORK ELEVATION
1/4" = 1'-0"



6 DOOR HEAD / JAMB DETAIL (A2.2)
1 1/2" = 1'-0"

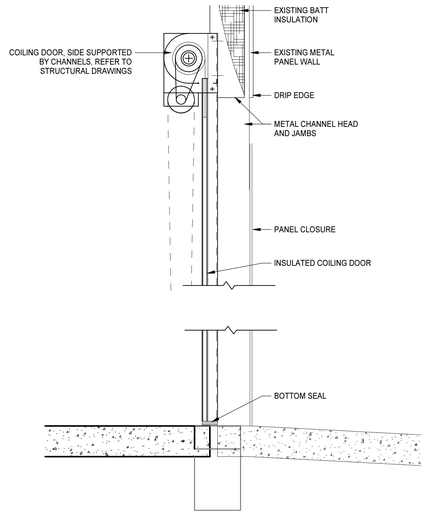


5 ENLARGED PLAN (A2.1 A2.2)
1/4" = 1'-0"

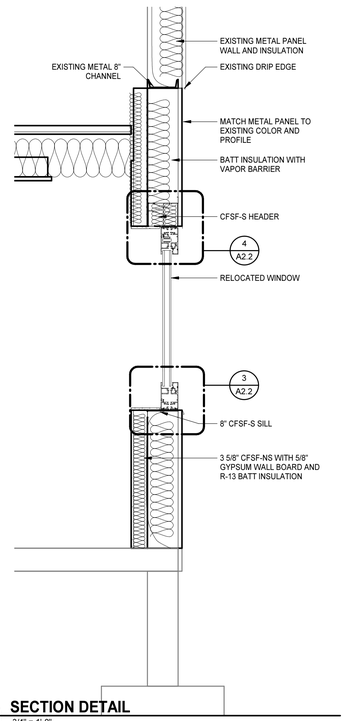


4 WINDOW HEAD DETAIL (A2.2 A2.2)
1 1/2" = 1'-0"

3 WINDOW SILL DETAIL (A2.2 A2.2)
1 1/2" = 1'-0"



2 COILING DOOR DETAIL (A2.1 A2.2)
3/4" = 1'-0"



1 SECTION DETAIL (A2.1 A2.2)
3/4" = 1'-0"

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1-17-23

PATTON AVENUE WAREHOUSE RENOVATIONS

UNION COUNTY FACILITIES
610 PATTON AVENUE, MONROE, NC 28110

PROJECT NO: 601193
DATE: 1-17-2023

REVISIONS	
DATE	DESCRIPTION
3-3-23	Addendum 01

DETAILS

A2.2

3/10/2023 2:38:45 PM

PANELBOARD SCHEDULE MDP

LOCATION: SHOP 2 — FED FROM: UTILITY

400 AMP MCB SE RATED — 120/208 Wye — 3 PH 4 W — MOUNT: SURFACE — PANEL ASSEMBLY RATED (KAIC): 10 KAIC

CKT	BRKR	POLE	LOAD	A		B		C		LOAD	POLE	BRKR	CKT
1	20 A	1	REC BREAK RM	1.3	0.5					ROLL UP DOOR (ML)	1	20 A	2
3	20 A	1	REC BREAK RM			0.5	0.5			ROLL UP DOOR (ML)	1	20 A	4
5	20 A	1	REC BREAK RM					0.5	0.5	EXT REC	1	20 A	6
7	20 A	1	REF BREAK RM	0.7	0.7					REC SHOP (GP)	1	20 A	8
9	20 A	1	EWC (GP)			0.7	1.1			REC SHOP (GP)	1	20 A	10
11	20 A	1	SPARE					0.0	0.7	REC SHOP (GP)	1	20 A	12
13	20 A	1	SPARE	0.0	1.5					COIL REELS - SHOP	1	20 A	14
15	20 A	1	SPARE			0.0	1.5			COIL REELS - SHOP	1	20 A	16
17	20 A	1	SPARE					0.0	0.0	SPACE ONLY	--	--	18
19	20 A	1	SPARE	0.0	0.0					SPACE ONLY	--	--	20
21	20 A	1	SPARE			0.0	0.0			SPACE ONLY	--	--	22
23	20 A	1	SPARE					0.0	0.0	SPACE ONLY	--	--	24
25	--	--	SPACE ONLY	0.0	0.0					SPACE ONLY	--	--	26
27	--	--	SPACE ONLY			0.0	0.0			SPACE ONLY	--	--	28
29	--	--	SPACE ONLY					0.0	3.5	AHU-1 (ML)	2	60 A	30
31	15 A	2	CU-1/DSS-1 (ML)	1.1	3.5								32
33						1.1	0.0			SPACE ONLY	--	--	34
35	50 A	2	COMPRESSOR (ML)					3.0	3.5	AHU-2 (ML)	2	60 A	36
37				3.0	3.5								38
39	200 A	2	PANEL A			15.3	3.0			RANGE	2	50 A	40
41								11.8	3.0				42
				15 kVA		24 kVA		26 kVA					
				126 A		208 A		224 A					

(GE) = PROVIDE GFCI BREAKER FOR EQUIPMENT, 6-50mA PER NEC 427.22 DED. NEUTRAL.
(GP) = PROVIDE GFCI BREAKER FOR PERSONNEL, 4-6mA PER NEC 210.8. DED. NEUTRAL.
(L) = PROVIDE LOCKOUT BREAKER TO PREVENT UNAUTHORIZED SWITCHING.
(LC) = ROUTE TO LOAD VIA LIGHTING CONTACTOR, REF DETAIL ON DWG E4.X.
(ML) = PROVIDE BREAKER WITH MAINTENANCE LOCKOUT, LOCKABLE OFF.

Load Classification	Connected Load	Demand Factor	Estimated Demand
INTERIOR LIGHTING	2.8 kVA	125.00%	3.4 kVA
EXTERIOR LIGHTING	0.7 kVA	125.00%	0.9 kVA
RECEPTACLES	8.4 kVA	100.00%	8.4 kVA
AC / HEAT PUMP	16.0 kVA	100.00%	16.0 kVA
ELECTRIC HEAT	0.0 kVA	0.00%	0.0 kVA
KITCHEN	0.0 kVA	0.00%	0.0 kVA
MISCELLANEOUS	18.1 kVA	100.00%	18.1 kVA

Panel Totals

Total Conn. Load: 63.9 kVA
Total Est. Demand: 64.8 kVA
Total Conn. Current: 177 A
Total Est. Demand... 180 A

EXISTING PANELBOARD A

LOCATION: SHOP 2 — FED FROM: MDP

200 AMP MCB — 120/208 Single — 1 PH 3 W — MOUNT: SURFACE — PANEL ASSEMBLY RATED (KAIC): 10 KAIC

CKT	BRKR	POLE	LOAD	A		B		LOAD	POLE	BRKR	CKT
1	20 A	2	EF	1.3	4.8			PANEL B	2	60 A	2
3						1.3	3.4				4
5	15 A	1	INDOOR UNIT	1.1	0.3			HEATER #1	1	20 A	6
7	15 A	1	OUTDOOR UNIT			0.0	0.3	HEATER #2	1	20 A	8
9	20 A	1	LOUVERS	0.7	0.6			TRAILER BAY LTG	1	20 A	10
11	20 A	1	LOUVERS			0.3	0.0	SPD	2	20 A	12
13	20 A	1	EX LOAD	1.5	0.0						14
15	20 A	1	REC IN FILTER BOX			0.0	1.5	EX LOAD	1	20 A	16
17	15 A	1	SPARE	0.0	0.0			SPARE	1	20 A	18
19	15 A	1	SPARE			0.0	0.0	SPARE	1	20 A	20
21	--	--	SPACE ONLY	0.0	0.0			SPACE ONLY	--	--	22
23	--	--	SPACE ONLY			0.0	0.0	SPACE ONLY	--	--	24
25	--	--	SPACE ONLY	0.0	0.0			SPACE ONLY	--	--	26
27	--	--	SPACE ONLY			0.0	0.0	SPACE ONLY	--	--	28
29	--	--	SPACE ONLY	0.0	0.0			SPACE ONLY	--	--	30
31	--	--	SPACE ONLY			0.0	0.0	SPACE ONLY	--	--	32
33	--	--	SPACE ONLY	0.0	0.0			SPACE ONLY	--	--	34
35	--	--	SPACE ONLY			0.0	3.0	EX LOAD	2	50 A	36
37	--	--	SPACE ONLY	0.0	3.0						38
39	--	--	SPACE ONLY			0.0	2.0	EX LOAD	2	30 A	40
41	--	--	SPACE ONLY	0.0	2.0						42
				15 kVA		12 kVA					
				143 A		114 A					

(GE) = PROVIDE GFCI BREAKER FOR EQUIPMENT, 6-50mA PER 2008 NEC 427.22. DED. NEUTRAL.
(GP) = PROVIDE GFCI BREAKER FOR PERSONNEL, 4-6mA PER 2008 NEC 210.8. DED. NEUTRAL.
(L) = PROVIDE LOCKOUT BREAKER TO PREVENT UNAUTHORIZED SWITCHING.
(LC) = ROUTE TO LOAD VIA LIGHTING CONTACTOR, REF DETAIL ON DWG E4.X.
(ML) = PROVIDE BREAKER WITH MAINTENANCE LOCKOUT, LOCKABLE OFF.

(EB) = EXISTING BREAKER
(RB) = REPLACE BREAKER WITH SIZE INDICATED
(PB) = PROVIDE BREAKER IN EXISTING SPACE

LOADS FOR EXISTING CIRCUITS ARE ASSUMED

Load Classification	Connected Load	Demand Factor	Estimated Demand
INTERIOR LIGHTING	2.8 kVA	125.00%	3.4 kVA
EXTERIOR LIGHTING	0.7 kVA	125.00%	0.9 kVA
RECEPTACLES	3.8 kVA	100.00%	3.8 kVA
AC / HEAT PUMP	0.0 kVA	0.00%	0.0 kVA
ELECTRIC HEAT	0.0 kVA	0.00%	0.0 kVA
KITCHEN	0.0 kVA	0.00%	0.0 kVA
MISCELLANEOUS	0.0 kVA	0.00%	0.0 kVA

Panel Totals

Total Conn. Load: 27.1 kVA
Total Est. Demand: 28.0 kVA
Total Conn. Current: 130 A
Total Est. Demand... 135 A

PANELBOARD SCHEDULE B

LOCATION: TECHNITIAN OFFICE 1 — FED FROM: A

100 AMP MCB — 120/240 Single — 1 PH 3 W — MOUNT: SURFACE — PANEL ASSEMBLY RATED (KAIC): 10 KAIC

CKT	BRKR	POLE	LOAD	A		B		LOAD	POLE	BRKR	CKT
1	20 A	1	EX REC	0.7	1.3			INTERIOR LIGHTING	1	20 A	2
3	20 A	1	EX REC			0.2	1.5	INTERIOR LIGHTING	1	20 A	4
5	20 A	1	EX REC	1.1	0.5			EX LOAD	1	20 A	6
7	20 A	1	EX LOAD			0.5	0.7	EXTERIOR LIGHTING	1	20 A	8
9	20 A	1	REC OFFICE	0.6	0.0			SPARE	1	20 A	10
11	20 A	1	REC OFFICE			0.4	0.0	SPARE	1	20 A	12
13	20 A	1	REC OFFICE	0.6	0.0			SPARE	1	20 A	14
15	20 A	1	RECEPTACLES			0.2	0.0	SPARE	1	20 A	16
17	20 A	1	SPARE	0.0	0.0			SPARE	1	20 A	18
19	20 A	1	SPARE			0.0	0.0	SPACE ONLY	--	--	20
21	20 A	1	SPARE	0.0	0.0			SPACE ONLY	--	--	22
23	20 A	1	SPARE			0.0	0.0	SPACE ONLY	--	--	24
25	--	--	SPACE ONLY	0.0	0.0			SPACE ONLY	--	--	26
27	--	--	SPACE ONLY			0.0	0.0	SPACE ONLY	--	--	28
29	--	--	SPACE ONLY	0.0	0.0			SPACE ONLY	--	--	30
31	--	--	SPACE ONLY			0.0	0.0	SPACE ONLY	--	--	32
33	--	--	SPACE ONLY	0.0	0.0			SPACE ONLY	--	--	34
35	--	--	SPACE ONLY			0.0	0.0	SPACE ONLY	--	--	36
37	--	--	SPACE ONLY	0.0	0.0			SPACE ONLY	--	--	38
39	--	--	SPACE ONLY			0.0	0.0	SPACE ONLY	--	--	40
41	--	--	SPACE ONLY	0.0	0.0			SPACE ONLY	--	--	42
				5 kVA		3 kVA					
				40 A		29 A					

(GE) = PROVIDE GFCI BREAKER FOR EQUIPMENT, 6-50mA PER NEC 427.22 DED. NEUTRAL.
(GP) = PROVIDE GFCI BREAKER FOR PERSONNEL, 4-6mA PER NEC 210.8. DED. NEUTRAL.
(L) = PROVIDE LOCKOUT BREAKER TO PREVENT UNAUTHORIZED SWITCHING.
(LC) = ROUTE TO LOAD VIA LIGHTING CONTACTOR, REF DETAIL ON DWG E4.X.
(ML) = PROVIDE BREAKER WITH MAINTENANCE LOCKOUT, LOCKABLE OFF.

Load Classification	Connected Load	Demand Factor	Estimated Demand
INTERIOR LIGHTING	2.8 kVA	125.00%	3.4 kVA
EXTERIOR LIGHTING	0.7 kVA	125.00%	0.9 kVA
RECEPTACLES	3.8 kVA	100.00%	3.8 kVA
AC / HEAT PUMP	0.0 kVA	0.00%	0.0 kVA
ELECTRIC HEAT	0.0 kVA	0.00%	0.0 kVA
KITCHEN	0.0 kVA	0.00%	0.0 kVA
MISCELLANEOUS	0.0 kVA	0.00%	0.0 kVA

Panel Totals

Total Conn. Load: 8.2 kVA
Total Est. Demand: 9.1 kVA
Total Conn. Current: 34 A
Total Est. Demand... 38 A

COMMUNICATIONS LEGEND

SYMBOL DESCRIPTION

- TELECOMMUNICATIONS OUTLET, MOUNT AT +3'-10"AFF. 4x4 BOX WITH PLASTER RING WITH TWO CAT 6 DATA CABLES IN 1-1/4"C TO DATA RACK.
- TELECOMMUNICATIONS OUTLET, MOUNT AT +1'-6"AFF. 4x4 BOX WITH PLASTER RING WITH TWO CAT 6 DATA CABLES IN 1-1/4"C TO DATA RACK.

POWER LEGEND

SYMBOL DESCRIPTION

- APPLIANCE RECEPTACLE, MOUNT AT +1'-6" AFF. PROVIDE NEMA CONFIGURATION TO MATCH PLUG FOR EQUIPMENT SERVED.
- DUPLEX RECEPTACLE, NEMA 5-20R, MOUNT AT +1'-6"AFF.
- DUPLEX RECEPTACLE, NEMA 5-20R, MOUNT AT +3'-10"AFF.
- DUPLEX RECEPTACLE, NEMA 5-20R, MOUNT AT +7'-6"AFF.
- GFCI DUPLEX RECEPTACLE, NEMA 5-20R, MOUNT AT +1'-6"AFF. PROVIDE NEMA 3R "WHILE IN USE" ENCLOSURE.
- GFCI DUPLEX RECEPTACLE, NEMA 5-20R, MOUNT AT +1'-6"AFF.
- GFCI DUPLEX RECEPTACLE, NEMA 5-20R, MOUNT AT +3'-10"AFF.
- DOUBLE DUPLEX RECEPTACLE, NEMA 5-20R, MOUNT AT +1'-6"AFF.
- DOUBLE DUPLEX RECEPTACLE, NEMA 5-20R, MOUNT AT +3'-10"AFF.
- DOUBLE DUPLEX RECEPTACLE, NEMA 5-20R, RECESS FLOOR MOUNT.
- CORD REEL OUTLET, CEILING MOUNT.
- (J) JUNCTION BOX, CONCEALED ABOVE CEILING, UNO.
- MUSHROOM SWITCH, HEAVY DUTY WITH LEGEND PLATE. MOUNT W/HANDLE AT +3'-10" AFF, UNO.
- MANUAL MOTOR STARTER, OVERLOAD PROTECTION AS REQUIRED PER NAME PLATE RATINGS, WITH 'ON' INDICATOR PILOT LIGHT. FLUSH MOUNT W/HANDLE AT +3'-10"AFF, UNO.
- DISCONNECT SWITCH, FUSIBLE OR NON-FUSIBLE AS INDICATED. MOUNT W/HANDLE AT +4'-6"AFF, UNO.
- MAGNETIC MOTOR STARTER, WITH OVERLOAD RELAYS AS REQUIRED TO SERVE MANUFACTURER REQUIREMENTS OF EQUIPMENT SERVED. PROVIDE WITH HAND-OFF-AUTOMATIC SELECTOR SWITCH AND INDICATOR LIGHTS.. MOUNT W/HANDLE AT +4'-6"AFF, UNO.
- COMBINATION MAGNETIC STARTER AND DISCONNECT SWITCH. WITH OVERLOAD ELEMENTS AND FUSING AS REQUIRED TO SERVE MANUFACTURER REQUIREMENTS OF EQUIPMENT SERVED. PROVIDE WITH HAND-OFF-AUTOMATIC SELECTOR SWITCH AND INDICATOR LIGHTS.. MOUNT W/HANDLE AT + 4'-6"AFF, UNO.
- (E) EQUIPMENT POWER CONNECTION.
- MOTOR CONNECTION.
- BRANCH CIRCUIT RUN CONCEALED, UNO. DASHED INDICATES CIRCUITRY REQUIRED TO BE RUN BELOW SLAB.
- BRANCH CIRCUIT HOME RUN TO PANELBOARD AND CIRCUIT INDICATED.
- PANELBOARD.
- (XXX) FEEDER TAG. REFER TO FEEDER SCHEDULE ON DWG E5.1.

LIGHTING LEGEND

SYMBOL DESCRIPTION

- S — LIGHT SWITCH, RATED 120/277 VOLTS, 20-AMPS, MOUNT AT +3'-10"AFF. SUBSCRIPT/SUPERSCRIPT LETTERS, NUMBERS, AND SYMBOLS INDICATES SWITCH TYPE AS FOLLOWS:
  - S^3 INDICATES 3-WAY LIGHT SWITCH
  - S^4 INDICATES 4-WAY LIGHT SWITCH
  - S^D INDICATES DIMMER SWITCH
  - S^{OS} INDICATES SWITCH WITH INTEGRAL OCCUPANCY SENSOR
  - S^{OD} INDICATES DIMMER SWITCH WITH INTEGRAL OCCUPANCY SENSOR

  LOWER CASE LETTER INDICATES LIGHT FIXTURE CONTROL DESIGNATION
- S^S INDICATES SWITCHES WIRED FOR INBOARD/OUTBOARD SWITCHING. REFER TO SUBSCRIPT/SUPERSCRIPT LETTERS, NUMBERS, AND SYMBOLS INDICATES SWITCH TYPE ABOVE:
- LIGHT FIXTURE, CEILING MOUNT.
- LIGHT FIXTURE ON EMERGENCY POWER, CEILING MOUNT.
- EMERGENCY EGRESS LIGHTING FIXTURE, WITH BATTERY PACK, WALL MOUNT AT +8'-0"AFF.
- EXIT SIGN, CEILING MOUNT. DIRECTIONAL ARROWS AS INDICATED. SHADING INDICATES FACE(S) OF SIGN.
- EXIT SIGN, WALL MOUNT. DIRECTIONAL ARROWS AS INDICATED. SHADING INDICATES FACE(S) OF SIGN.

DEMOLITION LEGEND

SYMBOL DESCRIPTION

- REMOVE DEVICES, EQUIPMENT, IN ACCORDANCE WITH THE GENERAL DEMOLITION NOTES.
- DEVICES ARE EXISTING TO REMAIN.
- WITHIN HATCHED AREAS, DISCONNECT AND REMOVE ALL ELECTRICAL MATERIALS INCLUDING BUT NOT LIMITED TO LIGHTS, DEVICES, EQUIPMENT, SPEAKERS, FIRE ALARM, COMMUNICATIONS, AND CIRCUITRY.

GENERAL DEMOLITION NOTES

A. PROVIDE ALL ELECTRICAL DEMOLITION WORK REQUIRED TO INSTALL THE WORK INDICATED. REMOVE, REROUTE, AND RECONNECT ALL BRANCH CIRCUITS THAT WILL REMAIN IN USE BUT INTERFERES WITH THE WORK.

B. REMOVE ALL EXISTING CONDUITS THAT WILL NOT BE REUSED AND WHERE THEY WILL BE EXPOSED AFTER COMPLETION, ABANDON ALL OTHERS IN THE WALLS ONLY. DISCONNECT ALL WIRING INDICATED AND/OR REQUIRED TO BE REMOVED FROM ALL POWER SOURCES. REMOVE ALL WIRING FROM ABANDONED CONDUITS AND PROVIDE BLANK COVER PLATES FOR BOXES NOT UTILIZED FOR THE WORK.

C. MAINTAIN CONTINUITY OF ALL EXISTING CIRCUITS TO REMAIN OR PORTIONS THEREOF AFFECTED BY THE WORK.

D. BEFORE DEMOLITION, VERIFY WITH THE OWNER ALL EQUIPMENT TO BE SALVAGED TO OWNER AND NOT REMOVED FROM THE SITE. FOR ALL REMAINING EQUIPMENT INDICATED FOR REMOVAL (AND NOT RELOCATED), REMOVE AND DISPOSE IN A LEGAL MANNER.

E. EXERCISE CARE IN REMOVING DEMOLITION ITEMS. REPAIR OR REPLACE ALL DAMAGE CAUSED TO EXISTING CONSTRUCTION AND EQUIPMENT TO REMAIN.

F. DRAWINGS ARE BASED UPON EXISTING PLANS AND FIELD INVESTIGATION WITHOUT DEMOLITION. VISIT THE EXISTING BUILDING AND BECOME FAMILIAR WITH ALL EXISTING CONDITIONS AND EXAMINE ALL DRAWINGS TO AVOID CONFLICTS.

G. WHERE DEMOLITION OF TELECOMMUNICATIONS DEVICES OCCUR, REMOVE CABLING NOT INDICATED TO REMAIN BACK TO POINT OF ORIGIN.

H. DEMOLITION FLOOR PLANS ARE PROVIDED FOR REFERENCE ONLY TO AID IN DEFINING THE SCOPE OF DEMOLITION WORK.

GENERAL NOTES

A. THE CONTRACT DOCUMENTS ARE COMPLEMENTARY AND WHAT IS REQUIRED BY ONE SHALL BE AS BINDING AS IF REQUIRED BY ALL. IN THE CASE OF A CONFLICT, DISAGREEMENT, OR AMBIGUITY, PROVIDE THE BETTER QUALITY. IN THE CASE OF A CONFLICT, DISAGREEMENT, OR AMBIGUITY, PROVIDE THE GREATER QUANTITY OF WORK.

B. FOLLOW MOUNTING HEIGHTS INDICATED IN THE ELECTRICAL LEGEND UNLESS OTHERWISE INDICATED. MEASURE ALL MOUNTING HEIGHTS FROM THE DEVICE CENTER LINE UNLESS OTHERWISE INDICATED.

C. FIELD VERIFY EXACT FEEDER LOCATIONS FOR MECHANICAL EQUIPMENT PRIOR TO ROUGH-IN.

D. EQUIPMENT CONNECTIONS ARE INDICATED IN THEIR APPROXIMATE LOCATIONS. VERIFY EXACT LOCATIONS OF ALL CONNECTIONS WITH OTHER TRADES SUPPLYING EQUIPMENT TO AVOID CONFLICTS AT INSTALLATION.

E. LOCATED ALL SWITCHES FOR LOCAL CONTROL OF LIGHTING ON STRIKE SIDE OF SINGLE DOORS UNLESS OTHERWISE INDICATED.

F. PROVIDE SPECIFIC BREAKER ARRANGEMENT FOR THE PANEL BOARDS WHEREVER PHYSICALLY POSSIBLE. PROVIDE AS-BUILT DRAWINGS INDICATING ACTUAL BRANCH CIRCUIT ARRANGEMENT. PROVIDE TYPE WRITTEN PANELBOARD DIRECTORIES INDICATING ACTUAL BRANCH CIRCUIT ARRANGEMENT.

G. PROVIDE AS-BUILT DRAWINGS INDICATING ACTUAL BRANCH CIRCUIT ARRANGEMENT. PROVIDE TYPEWRITTEN PANELBOARD DIRECTORIES INDICATING ACTUAL BRANCH CIRCUIT ARRANGEMENT. HAND WRITTEN SCHEDULES ARE NOT ACCEPTABLE.

H. ALL CONDUIT RUNS INDICATED ARE DIAGRAMMATIC, COORDINATE ROUTING IN ALL SPACES WITH OTHER TRADES.

I. ALL PANELBOARDS INDICATED ARE HOUSED IN A SINGLE WIDTH ENCLOSURE, UNO. THE CONTRACTOR SHALL FIELD VERIFY ROOM LAYOUT AND ADJUST ACCORDINGLY, AT NO COST TO THE OWNER, IF PROVIDING ANY PANELBOARD ENCLOSURES.

J. WHERE POWER AND COMMUNICATION OUTLETS ARE INDICATED IN CLOSE PROXIMITY ON THE DRAWINGS, FIELD COORDINATE THE LOCATIONS TO PLACE THE OUTLETS ADJACENT TO EACH OTHER.

K. ALL EXTERIOR RECEPTACLES SHALL BE LABELED "WR" - WEATHER RESISTANT.

L. WHEN GROUPING MULTIPLE LINE TO NEUTRAL BRANCH CIRCUITS IN A CONDUIT, PROVIDE DEDICATED COLOR CODED NEUTRAL CONDUCTORS FOR EACH CIRCUIT. DO NOT USE BREAKER TIES AND SHARED NEUTRALS EVEN THOUGH PERMITTED BY NEC.

M. PROVIDE A 2" WIDE YELLOW LINE PAINTED ON THE FLOOR INDICATING THE ELECTRICAL WORKING SPACE. IN FRONT OF ALL ELECTRICAL PANELS IN ELECTRICAL ROOMS. REFER TO PLANS FOR ELECTRICAL WORKING SPACE DETAILS. STENCIL "NO STORAGE" IN 2" HIGH, YELLOW LETTERS CENTERED IN THE OUTLINED AREA.

ABBREVIATIONS

1P	SINGLE PHASE
3P	THREE PHASE
3R	WEATHERPROOF (NEMA 3R)
A	AMPS
AFF	ABOVE FINISHED FLOOR
AL	ALUMINUM
ATS	AUTOMATIC TRANSFER SWITCH
BFC	BELOW FINISHED CEILING
BFG	BELOW FINISHED GRADE
BKR	BREAKER
C	CONDUIT
CATV	COMMUNITY ANTENNA TELEVISION (CABLE)
CB	CIRCUIT BREAKER
CBL	CABLE
CCTV	CLOSED CIRCUIT TELEVISION
CKT	CIRCUIT
CLG	CEILING
CLR	CLEAR
CO.	COMPANY
COMB	COMBINATION
COMM	COMMUNICATIONS
CU	COPPER
DIA	DIAMETER
DISC	DISCONNECT
DIV	DIVISION
DWG	DRAWING
EBH	ELECTRIC BASEBOARD HEATER
EC	EMPTY CONDUIT
ECS	EMERGENCY COMMUNICATIONS STATION
ELEC	ELECTRICAL
ELEV	ELEVATOR
EPO	EMERGENCY POWER OFF
EQ	EQUIPMENT
ETR	EXISTING TO REMAIN
EWC	ELECTRIC WATER COOLER
EX	EXISTING
EXT	EXTERIOR
FA	FIRE ALARM
FAAP	FIRE ALARM ANNUNCIATOR PANEL
FACP	FIRE ALARM CONTROL PANEL
FAGP	FIRE ALARM GRAPHIC PANEL
FAXP	FIRE ALARM EXTENDER PANEL
FFSCP	FIRE FIGHTERS SMOKE CONTROL PANEL
FLA	FULL LOAD AMPS
FPMR	FUSE PER MANUFACTURERS REQUIREMENTS/RECOMMENDATIONS
FPND	FUSE PER NAMEPLATE DATA
G	GROUND
GE	GROUND FAULT PROTECTION FOR EQUIPMENT, 6-50mA PER NEC 427.22 (PROVIDE ACCESSORY FOR INDICATED BREAKER)
GFCI	GROUND FAULT CIRCUIT INTERRUPT
GFP	GROUND FAULT PROTECTION FOR PERSONNEL, 4-6mA (PROVIDE ACCESSORY FOR INDICATED BREAKER)
HKP	HOUSEKEEPING PAD
HP	HORSEPOWER
HPS	HIGH PRESSURE SODIUM
Hz	HERTZ
IAW	IN ACCORDANCE WITH
IG	ISOLATED GROUND
J-BOX	JUNCTION BOX
KHFSS	KITCHEN HOOD FIRE SUPPRESSION SYSTEM
KHz	KILOHERTZ
KVA	KILOVOLT AMPS
KW	KILOWATTS
KWH	KILOWATT HOURS
L	LOCKOUT TO PREVENT UNAUTHORIZED SWITCHING (PROVIDE ACCESSORY FOR INDICATED BREAKER)
LC	ROUTE CIRCUIT TO LOAD VIA LIGHTING CONTACTOR, REFER TO LC SCHEDULE
LED	LIGHT EMITTING DIODE
LTG	LIGHTING
LTS	LIGHTS
MAX	MAXIMUM
MCA	MINIMUM CIRCUIT AMPACITY
MCB	MAIN CIRCUIT BREAKER
MCC	MOTOR CONTROL CENTER
MH	METAL HALIDE
MHz	MEGAHERTZ
MIN	MINIMUM
ML	MAINTENANCE LOCK (PROVIDE ACCESSORY FOR INDICATED BREAKER)
MLO	MAIN LUG ONLY
MNS	MASS NOTIFICATION SYSTEM
MOCP	MAXIMUM OVER CURRENT PROTECTION.
MTD	MOUNTED
N	NEUTRAL
N/C	NORMALLY CLOSED
N/O	NORMALLY OPEN
NO.	NUMBER
OFCI	OWNER FURNISHED CONTRACTOR INSTALLED
P	PILOT LIGHT (AT THE SWITCH HANDLE)
PBD	PANELBOARD
PD	PROTECTIVE DEVICE
RCPT	RECEPTACLE
REC	RECEPTACLE
SEC	SECURITY
SPD	SURGE PROTECTIVE DEVICE
SPEC.	SPECIFICATION(S)
ST	SHUNT TRIP, 120V COIL (PROVIDE ACCESSORY FOR INDICATED BREAKER)
SW	SWITCH
SWBD	SWITCHBOARD
TBB	TELECOMMUNICATIONS BONDING BACKBONE
TC	TELECOMMUNICATIONS CLOSET
TELECOM	TELECOMMUNICATIONS
TGB	TELECOMMUNICATIONS GROUNDING BUS BAR
TMGB	TELECOMMUNICATIONS MAIN GROUNDING BUS BAR
TYP	TYPICAL
UNO	UNLESS NOTED (INDICATED) OTHERWISE
V	VOLTS
VFD	VARIABLE FREQUENCY DRIVE
W	WATTS
W/	WITH
WG	WIRE GUARD
WP	WEATHERPROOF
XFER	TRANSFER
XFMR	TRANSFORMER

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NORTH CAROLINA PROFESSIONAL SEAL 024242 ENGINEER WILLIAM J. CARY JR.

MOSELEY ARCHITECTS C-3469 NORTH CAROLINA CHARLOTTE, NC

PATTON AVENUE WAREHOUSE RENOVATIONS

UNION COUNTY FACILITIES
610 PATTON AVENUE, MONROE, NC 28110

PROJECT NO: 601193
DATE: JANUARY 17, 2023

REVISIONS	
DATE	DESCRIPTION

LEGENDS, ABBREVIATIONS AND GENERAL NOTES

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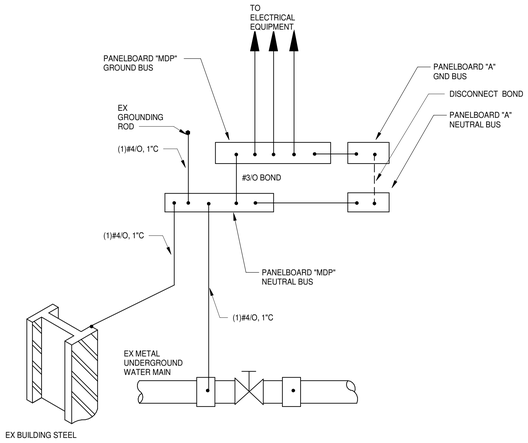
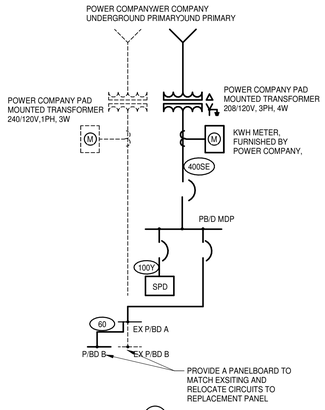
COPPER FEEDER SCHEDULE

FEEDER ID	# OF SETS	BUILDING WIRE QUANTITY & SIZE TYPE THHN - DRY TYPE THWN - WET	MINIMUM CONDUIT SIZE	FEEDER ID	# OF SETS	BUILDING WIRE QUANTITY & SIZE TYPE THHN - DRY TYPE THWN - WET	MINIMUM CONDUIT SIZE
30	1	3#10,#10 G	3/4"	30Y	1	4#10,#10 G	3/4"
35	1	3#8,#10 G	3/4"	35Y	1	4#8,#10 G	3/4"
40	1	3#8,#10 G	3/4"	40Y	1	4#8,#10 G	3/4"
45	1	3#6,#10 G	1"	45Y	1	4#6,#10 G	1"
50	1	3#6,#10 G	1"	50Y	1	4#6,#10 G	1"
60	1	3#4,#10 G	1"	60Y	1	4#4,#10 G	1"
70	1	3#4,#8 G	1 1/4"	70Y	1	4#4,#8 G	1 1/4"
80	1	3#3,#8 G	1 1/4"	80Y	1	4#3,#8 G	1 1/4"
90	1	3#2,#8 G	1 1/4"	90Y	1	4#2,#8 G	1 1/4"
100	1	3#1,#8 G	1 1/4"	100Y	1	4#1,#8 G	1 1/4"
110	1	3#2,#6 G	1 1/2"	110Y	1	4#2,#6 G	1 1/2"
125	1	3#1,#6 G	1 1/2"	125Y	1	4#1,#6 G	1 1/2"
150	1	3#1/0,#6 G	2"	150Y	1	4#1/0,#6 G	2"
175	1	3#2/0,#6 G	2"	175Y	1	4#2/0,#6 G	2"
200	1	3#3/0,#6 G	2"	200Y	1	4#3/0,#6 G	2"
225	1	3#4/0,#4 G	2 1/2"	225Y	1	4#4/0,#4 G	2 1/2"
250	1	3-250kCM,#4 G	2 1/2"	250Y	1	4-250kCM,#4 G	2 1/2"
300	1	3-350kCM,#4 G	2 1/2"	300Y	1	4-350kCM,#4 G	2 1/2"
400	1	3-500kCM,#3 G	4"	400Y	1	4-500kCM,#3 G	4"
				600SE	1	4-500kCM	4"

NOTES:
1. ELECTRICAL CONTRACTOR TO VERIFY CONDUIT SIZE REQUIRED IF WIRE TYPES OTHER THAN THOSE LISTED ABOVE ARE USED.
2. FEEDER SIZES BASED ON TABLE 310.15(B)(16), 75° C.
3. SIZES ADJUSTED PER NEC 110.14.



GROUNDING SYSTEM DIAGRAM
NO SCALE



POWER ONELINE DIAGRAM
NO SCALE

ELECTRICAL KEYNOTES
APPLIES TO THIS DRAWING ONLY
REPRESENTED BY n

1. REPLACE EXISTING DUPLEX RECEPTACLES CURRENTLY MOUNTED IN A 4"x4" BOX WITH TWO DUPLEX RECEPTACLES WITH COVER PLATE.
2. REFER TO ONE LINE DIAGRAM FOR DETAILS.

GENERAL NOTES

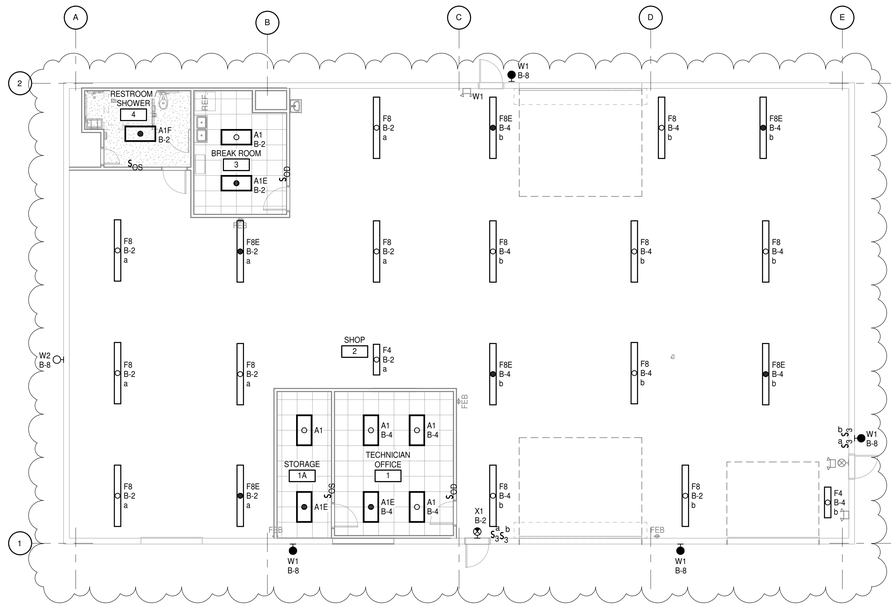
A. PROVIDE UNSWITCHED CONDUCTOR TO THE BATTERY INPUT FOR EMERGENCY FIXTURES

LIGHT FIXTURE SCHEDULE

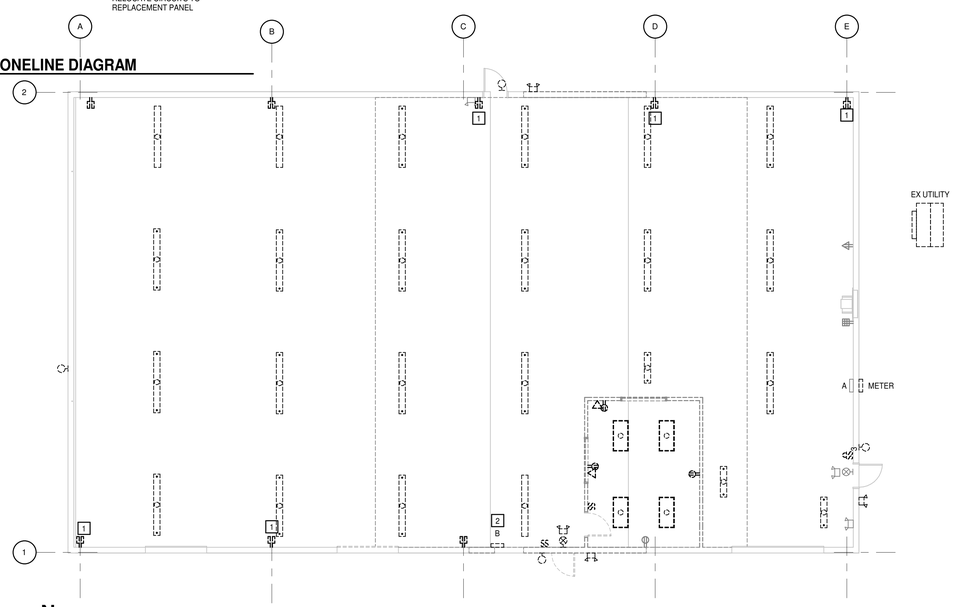
FIXTURE							LAMP				
TYPE	DESCRIPTION	MANUFACTURER	SERIES NO.	VOLTAGE	WATTAGE	LUMENS	TYPE	COLOR TEMP.	MOUNTING	OPTIONS	COMMENTS
A1	2X4 FLAT PANEL	LITHONIA	EPANL-24	120 V	50	6000 lm	LED	4000 K	GRID		
A1E	2X4 FLAT PANEL-EM	LITHONIA	EPANL-24	120 V	50	6000 lm	LED	4000 K	GRID	10W BATTERY	
A1F	2X4 FLAT PANEL-EM	LITHONIA	EPANL-24	120 V	50	6000 lm	LED	4000 K	SURFACE	10W BATTERY	
F4	4' PENDANT LOW BAY	LITHONIA	UFIT-L48	120 V	60	8000 lm	LED	4000 K	PENDANT 15'AFF		WIRE GUARD
F8	8' PENDANT LOW BAY	LITHONIA	UFIT-L96	120 V	120	16000 lm	LED	4000 K	PENDANT 15'AFF	10W BATTERY	WIRE GUARD
F8E	8' PENDANT LOW BAY-EM	LITHONIA	UFIT-L96	120 V	120	16000 lm	LED	4000 K	PENDANT 15'AFF		WIRE GUARD
W1	SMALL LED WALL PACK	LITHONIA	WDGE1	120 V	150	2000 lm	LED	4000 K	WALL	BATTERY	PHOTOCELL
W2	LARGE LED WALL PACK	LITHONIA	TWX3	120 V	97	12900 lm	LED	4000 K	WALL		PHOTOCELL
X1	EXIT SIGN	LITHONIA	LCQ-1-R	120 V	5		LED		UNIVERSAL	BATTERY	WIRE GUARD

DIV 23 ELECTRICAL CONNECTION SCHEDULE

TAG	VOLTAGE	# POLES	LOAD	PANEL	CCT#	WIRE	DISCONNECTING MEANS	REMARKS
AHU-1	208 V	2	7.1 kVA	MDP	30,32	2#4,#10G,1"C	240V,60A,2P, NEMA 3R, DISC, FPND	
AHU-2	208 V	2	7.1 kVA	MDP	36,38	2#4,#10G,1"C	240V,60A,2P, NEMA 3R, DISC, FPND	
CU-1	208 V	2	2.0 kVA	MDP	31,33	2#12,#12G,3/4"C	240V,30A,2P, NEMA 3R, DISC, FPND	
DSS-1	208 V	2	0.2 kVA	MDP	31,33	PER MANUFACTURER	PER MANUFACTURER	POWER FROM OUTDOOR UNIT
EF-2	120 V	1		B	2	2#12,#12G,3/4"C	MOTOR RATED SWITCH W/ OVERLOAD	CONTROL WITH LOCAL SWITCH



N
FLOOR PLAN - LIGHTING
1/8" = 1'-0"



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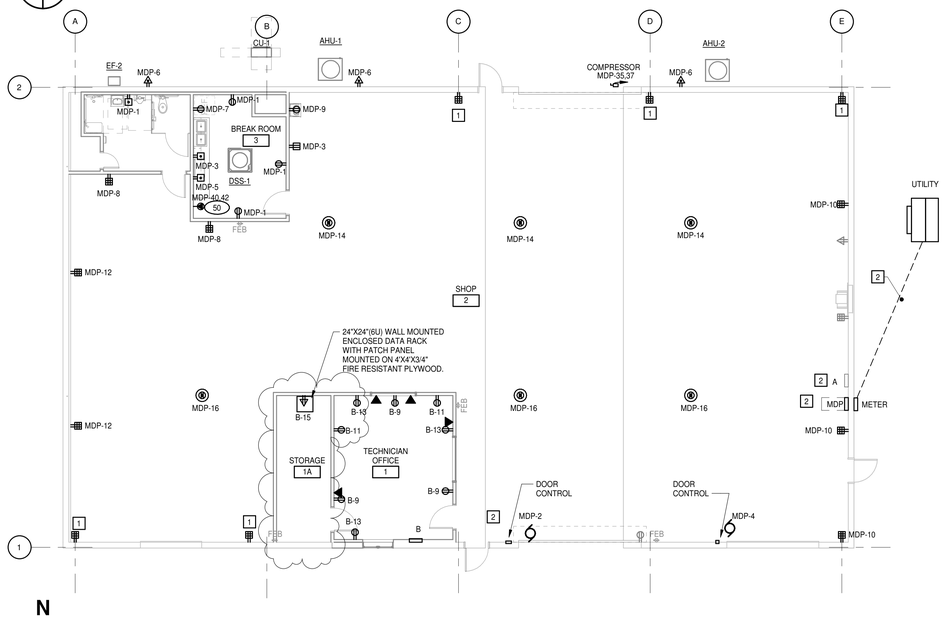
FLOOR PLAN - ELECTRICAL DEMO
1/8" = 1'-0"



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FLOOR PLAN - ELECTRICAL
1/8" = 1'-0"

MOSELEYARCHITECTS
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ELECTRICAL PLANS AND DETAILS

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