

FORM BF-1

State of Michigan  
Department of Military and Veterans Affairs  
Construction & Facilities Office  
Reserve Forces Service Center  
3423 N. Martin Luther King Blvd. Rm. 321  
Lansing, Michigan 48906-2934

DATE ISSUED: August 25, 2023  
INDEX CODE NO: 1630  
Project: 26C6722008  
State Unit: Dept. of Military Affairs

SUBJECT: Renovate Armory - Taylor  
BID OPENING: August 30, 2023, 2:00PM EST

**ADDENDUM NO. 1**

TO: All Bidders

SUBJECT: This Addendum is issued to revise and clarify the following items:

- 2 toilet stalls added & 2 showers were removed.
- Revisions to drawing sheets and specifications.
- Lead & asbestos surveys

REVISED SHEETS:

1. Sheet AD1.0 is replaced in its entirety.
2. Sheet A1.0 is replaced in its entirety.
3. Sheet A2.0 is replaced in its entirety.
4. Sheet A2.1 is replaced in its entirety.
5. Sheet A3.0 is added.
6. Sheet A6.0 is replaced in its entirety.
7. Sheet A6.1 is replaced in its entirety.
8. Sheet E2.0 is replaced in its entirety.
9. Sheet E4.0 is replaced in its entirety.
10. Sheet M3.0 is replaced in its entirety.
11. Sheet P1.1 is replaced in its entirety.
12. Sheet P1.2 is replaced in its entirety.
13. Sheet P1.3 is replaced in its entirety.

ADDITIONS TO SPECIFICATIONS

SPECIFICATIONS SECTION 087100 DOOR HARDWARE 22008: REVISED  
SPECIFICATIONS SECTION 088733 DECORATIVE FILMS 22008: ADDED  
SPECIFICATIONS SECTION 093013 CERAMIC TILING 22012: REVISED  
SPECIFICATIONS SECTION 105113 METAL LOCKERS 22008: ADDED  
SPECIFICATIONS SECTION 102113 TOILET COMPARTMENT PLASTIC 130926M: REVISED

## **QUESTIONS/ANSWERS & CLARIFICATIONS:**

- Question #1:** Drawing A2.0 indicates to install wire mesh in Existing Food Receiving, what is the ceiling height in Room #101  
**Answer #1:** Existing ceiling height in Room #101 is 10'-0"
- Question #2:** Drawing A2.1 indicates new CMU Walls Men's Toilet #158, Women's Toilet #159, Men's Locker #164, Women's Locker #165. Are these new masonry walls to be installed on a thickened slab? Nothing is indicated.  
**Answer #2:** Please see locations of a thickened slab now shown on sheet A2.1 & in detail 1/A6.0.
- Item #3:** Drawing A4.1 indicates new lockers, please provide a specification for the lockers.  
**Answer #3:** Please find the locker specification section included in the addendum.
- Item #4:** Is there an Asbestos and a Lead Paint Report for this Project?  
**Answer #4:** Please find included environmental survey information in the addendum.
- Item #5:** Do you have a Hardware Set for Door #129 & Door #130?  
**Answer #5:** Doors #129 & #130 are existing to be modified as per keyed note 6 at 2/A2.2
- Item #6:** Please provide a list of approved manufactures for spec section 070150.74 Rehabilitation of Single Ply Roofing.  
**Answer #6:** Specification is a performance spec, Products that meet or exceed warranty requirements and performance requirements are acceptable.
- Item #7:** Please provide a specification for the 2' Floor Mounted Bench  
**Answer #7:** The floor mounted bench has been removed.
- Item #8:** The electrical pages show voltage but not amperage. Please provide amperage.  
**Answer #8:** Please find revised electrical documents. All 120v circuits use existing 20A breaker or an existing spare 20A breaker. Sheet E1, note 6 and 7 should be 2 pole 20A breakers added to panel.
- Item #9:** Drawing A2.2 Note #3- Please provide Hardware set for Door #136B.  
**Answer #9:** Please find hardware information for door #136B in the revised door hardware specification.
- Item #10:** Drawing A2.1. Are we to assume that the General Partitions 40 Polymer (HDPE) Plastic Toilet Compartments to use for the dressing areas outside the shower?  
**Answer #10:** Yes, please see included a revised specification for Toilet Compartments used also at shower changing stalls.
- Item #11:** There's a signage specification – what's required?  
**Answer #11:** The contractors are to hold a \$750.00 line item for signage on this project.

ACKNOWLEDGEMENT: Two copies of this Addendum, properly signed in the space provided below, shall be returned with the Bidder's proposal.

\_\_\_\_\_  
FIRM NAME

\_\_\_\_\_  
BIDDER'S SIGNATURE

Brian Bushnell  
Design Manager  
Construction & Facilities  
Management Office

# BULK SAMPLE ANALYTICAL REPORT

Fibertec IHS Project #34272-1  
NVLAP Accreditation #101510-0

Client Name: Asbestos Abatement, Inc.  
Project Name: Taylor Armory  
Summary: 1 Submitted Bulk Sample, 2 Sample Layers Analyzed.

Date Sampled: 10/30/2013 Client P.O. #: N/A  
Date Submitted: 10/30/2013 C.O.C. #: 131340  
Date Analyzed: 10/30/2013

| Fibertec<br>Sample<br>No. | Client I.D.<br>No. | Description / Location                                      | Asbestos Type | Non-Asbestos Containing<br>Portion              | Analyst |
|---------------------------|--------------------|---|---------------|---|---------|
| 1                         | 1                  | White tabular material, floor tile.<br>Layer 1 of 2.        | NAD           | Non-fibrous material 98%<br>Cellulose fibers 2% | JKC     |
| 1                         | 1                  | Black brittle material, floor tile<br>mastic. Layer 2 of 2. | NAD           | Non-fibrous material 98%<br>Cellulose fibers 2% | JKC     |
|                           |                    |   |               |   |         |
|                           |                    |   |               |   |         |
|                           |                    |   |               |   |         |
|                           |                    |   |               |   |         |
|                           |                    |   |               |   |         |
|                           |                    |   |               |   |         |

**Comments**

Bulk samples are analyzed using the USEPA Test Method EPA/600/R-93/116. The constituent percent reported represents an estimate of the area percent of the component. The test report relates only to items tested. This report is not intended to be used as a product endorsement by NVLAP or any agency of the U.S. Government. Fine fibers like those in floor tile may not be discernible by this method. This report shall not be reproduced, except in full, without the written approval of the laboratory. Individual sample layers are homogeneous, unless otherwise noted. Test items were received in acceptable condition. Revision 4.0 dated 12/8/2010.

If no asbestos was/were detected in the sample/samples the acronym NAD (no asbestos detected) will appear in the Asbestos Type column of the report.



Approved Signatory: \_\_\_\_\_

Date: 10/30/2013



## **SECTION 087100 - DOOR HARDWARE**

### **PART ONE - GENERAL**

#### **1.01 SUMMARY**

- A. Section includes:
  - 1. Furnish hardware required to complete the work as shown on the drawings and as specified herein;
  - 2. Furnish trim attachments and fastenings, specified or otherwise required, for proper and complete installation.
  - 3. Furnish all items of Finish Hardware specified, scheduled, shown or required herein except those items specifically excluded from this section of the specification.

#### **1.02 CODES AND REFERENCES**

- A. Comply with the version year adopted by the Authority Having Jurisdiction:
  - 1. ANSI A117.1 - Accessible and Usable Buildings and Facilities.
  - 2. ICC/IBC - International Building Code.
  - 3. NFPA 80 - Fire Doors and Windows.
  - 4. NFPA 101 - Life Safety Code.
  - 5. NFPA 105 - Installation of Smoke Door Assemblies.
  - 6. Current State Building Codes including Local Amendments.
- B. Standards: All hardware specified herein shall comply with the following industry standards:
  - 1. ANSI/BHMA Certified Product Standards - A156 Series.
  - 2. UL10C – Positive Pressure Fire Tests of Door Assemblies.

#### **1.03 DEFINITIONS**

- A. "Finish Hardware": Items required for swinging, sliding and folding doors, except special types of unique and non-matching hardware specified under door and frame Sections of these Specifications.

#### **1.04 SYSTEM DESCRIPTION**

- A. Design requirements:
  - 1. Review of hardware requirements:
    - a. It is imperative that the hardware supplier understands the full hardware requirements of this project. Many of the doors will be re-used on this project. All doors that will be reused must be verified for size, hand and hardware configuration / application. All doors that are being reused must be patched, filled, repaired and re-prepped for the new hardware items as required for hardware operation.
    - b. Hardware supplier shall verify all existing field conditions & existing door conditions and notify architect immediately if that which exists differs from that which is shown on drawings.
    - c. These specifications are prepared in accordance with the limited services for which the hardware specification writer was contracted. The hardware specification writer makes no representation that the interpretation of these documents will result in complete harmony of salvage door / hardware.
    - d. All doors required to be labeled shall be set in labeled frames and identified with UL label and be provided with approved self-closing devices and positive latching hardware.
    - e. All designated exit doors shall be equipped with the required egress hardware.
    - f. Furnish hardware as scheduled without substitution, only alternates listed in part 2 products will be approved as equal.
    - g. Thoroughly review finish hardware schedule, comparing it with the floor plan, door schedule, and door details to verify hardware requirements, quantities, door swings, finishes, and sizes.

- h. If an inconsistency or error in the proposed construction documents is suspected, the hardware supplier is to bring it immediately to the attention of the Architect. If the quantity of items is questioned, for bidding purposes, assume the higher quantity is required and price accordingly.
- i. Architect's review of Submittals is for design concept only, and does not relieve the Contractor of the responsibility to furnish sufficient material and functions required for a complete and code-worthy installation. Determination of all quantities is the responsibility of the Contractor.

**B. Performance requirements:**

- 1. Furnish finish hardware complying with the requirements of laws, codes, ordinances and guidelines of governmental authorities having jurisdiction:
  - a. ANSI A117.1 - Accessible and Usable Buildings and Facilities.
  - b. ICC/IBC - International Building Code.
  - c. NFPA 80 - Fire Doors and Windows.
  - d. NFPA 101 - Life Safety Code.
  - e. NFPA 105 - Installation of Smoke Door Assemblies.
  - f. Current State Building Codes, Local Amendments.

**C. Keys and Final Cylinder locks:**

- 1. Final keys and cylinder key cores will be furnished and installed by the owner. Any and all construction keys and cores will be furnished and installed by the contractor. Upon completion, the contractor will coordinate with the DMVA Key Coordinator and Project Manager in regards to switching the cores over to insure that the building is secured at all times.

## 1.05 SUBMITTALS

**A. Hardware Schedule:**

- 1. Submit number of Hardware Schedules as directed in Division 1.
- 2. Follow guidelines established in Door & Hardware Institute Handbook (DHI) Sequence and Format for the Hardware Schedule unless noted otherwise.
- 3. Schedule will include the following:
  - a. Door Index including opening numbers and the assigned Finish Hardware set.
  - b. Preface sheet listing category only and manufacturer's names of items being furnished as follows:

| <b>CATEGORY</b> | <b>SPECIFIED</b> | <b>SCHEDULED</b> |
|-----------------|------------------|------------------|
| Hinges          | Manufacturer A   | Manufacturer B   |
| Lock sets       | Manufacturer X   | Manufacturer X   |
| Kick Plates     | Open             | Manufacturer Z   |

- c. Hardware Locations: Refer DHI to Article 3.1 B.2 Locations.
- d. Opening Description: Single or pair, number, room locations, hand, active leaf, degree of swing, size, door material, frame material, and UL listing.
- e. Hardware Description: Quantity, category, product number, fasteners, and finish.
- f. Headings that refer to the specified Hardware Set Numbers.
- g. Scheduling Sequence shown in Hardware Sets.
- h. Product data of each hardware item, and shop drawings where required, for special conditions and specialty hardware.
- i. Electrified Hardware system operation description.
- j. "Vertical" scheduling format only. "Horizontal" schedules will be returned "Not Approved."
- k. Typed Copy.
- l. Double-Spacing.
- m. 8 1/2 x 11 inch sheets.
- n. U.S. Standard Finish symbols or BHMA Finish symbols.

**B. Product Data:**

1. Submit, in booklet form Manufacturers Catalog cut sheets of scheduled hardware.
  2. Submit product data with hardware schedule.
- C. Samples:
1. Prior to submittal of the final hardware schedule and prior to final ordering of finish hardware, submit one sample, if required, of each type of exposed hardware unit, finished as required and tagged with full description for coordination with schedule.
  2. Samples will be returned to the supplier. Units, which are acceptable and remain undamaged through submittal, review and field comparison procedures, may, after final check of operation, be used in the work, within limitations of keying coordination requirements.
- D. Submit to General Contractor/Construction Manager, the factory order acknowledgement numbers for the various hardware items to be used on the project. The factory order acknowledgement numbers shall help to facilitate and expedite any service that may be required on a particular hardware item. General Contractor/Construction Manager shall keep these order acknowledgement numbers on file in the construction trailer.

## 1.06 QUALITY ASSURANCE

- A. Use adequate numbers of skilled workmen who are thoroughly trained and experienced in the necessary crafts and who are completely familiar with the requirements and the methods needed for proper performance of the work of this Section.
- B. Supplier qualifications:
1. A recognized architectural finish hardware supplier.
  2. Continuously in business of finish hardware supply for not less than 5 years.
- C. Provide the service of an Architectural Hardware Consultant to:
1. Be available for consultation with the Architect at no additional cost to the Owner during progress of construction, and:
    - a. Inspect installation of all finish hardware items;
    - b. Make all minor adjustments required; and
    - c. Report to the Architect on completeness of the installation.
- D. Installer qualifications: Employ a competent hardware installer with at least five (5) years experience installing commercial grade hardware similar to that proposed for the Work.

## 1.07 DELIVERY, STORAGE, AND HANDLING

- A. Inventory door hardware on receipt and provide secure lock-up for door hardware delivered to Project site.
- B. Tag each item or package separately with identification coordinated with the final door hardware schedule, and include installation instructions, templates, and necessary fasteners with each item or package.

## 1.08 COORDINATION

- A. Coordinate layout and installation of floor-recessed door hardware with floor construction. Cast anchoring inserts into concrete.
- B. Installation Templates: Distribute for doors, frames, and other work specified to be factory prepared. Check Shop Drawings of other work to confirm that adequate provisions are made for locating and installing door hardware to comply with indicated requirements.

- C. Existing Openings: Where hardware components are scheduled for application to existing construction or where modifications to existing door hardware are required, field verify existing conditions and coordinate installation of door hardware to suit opening conditions and to provide proper door operation.
- D. Hardware Conference: Upon owner's review and acceptance of hardware schedule, the contractor shall schedule a hardware conference with the Owner, Installer and the Contractor's Site Supervisor. The attendees will review the complete hardware schedule, discuss installation procedures and clarify purchasing and delivery of keys and cores to the owner. Also discuss:
  - 1. Function of building, flow of traffic, purpose of each area, degree of security required during construction.
  - 2. Requirements for access control.
  - 3. Address for delivery of keys.

## 1.09 WARRANTY

- A. Special Warranty: Manufacturer's standard form in which manufacturer agrees to repair or replace components of door hardware that fail in materials or workmanship for one year at no additional cost to owner.
  - 1. Structural failures including excessive deflection, cracking, or breakage.
  - 2. Faulty operation of doors and door hardware.
  - 3. Deterioration of metals, metal finishes, and other materials beyond normal weathering and use.
- B. Extended Warranty Periods, extend the above warranty on certain items of finish hardware as follows:
  - 1. Door Closers – 10 years
  - 2. Continuous Hinges – 10 years
  - 3. Exit Devices – 5 years
  - 4. Locks and Latch Sets – 5 years
  - 5. Manufacturer agrees to promptly replace (including installation by a factory representative) defective products at no additional cost to the Owner, for the duration of the warranty period. The terms of such warranties extend from the Date of Substantial Completion as that date is defined by the General Conditions. Failures due to defective materials or workmanship is deemed to include, but not to be limited to:
    - a. Failures in operation of any operating component;
    - b. Defects which contribute to unsightly appearance, potential safety hazard, or potential untimely failure of the products furnished under this Section.

## PART TWO - PRODUCTS

### 2.01 SCHEDULED DOOR HARDWARE

- A. Provide door hardware for each door as scheduled in Part 3 "Door Hardware Schedule" Article to comply with requirements in this Section.
  - 1. Door Hardware Sets: Provide quantity, item, size, finish or color indicated, and products equivalent in function and comparable in quality to named products. If dimension requirements are not included or implied by the product number selected as basis of design, then the dimensions will be supplied based on manufacturer's written literature for recommended product sizing for heavy use.

### 2.02 GENERAL

- A. Requirements for design, grade, function, finish, size, and other distinctive qualities of each finish hardware item is indicated in the Finish Hardware Schedule at the end of this Section.
- B. Product designations:

1. One or more manufacturers are listed for each hardware type required. Product listed is for basis of design. Only products listed in part 2 product descriptions will be allowed for substitution.
- C. ANSI/BHMA designations:
1. Used to describe hardware items, or to define quality or function. Provide products complying with these standards in addition to additional requirements of this Section.
- D. Hand of door: Drawings show direction of slide, swing ("hand") of door leafs.
- E. Hardware: Use hardware manufactured to conform to published templates and, generally, prepared for machine screw installation. Do not provide hardware which has been prepared for self-tapping sheet metal screws, except as specifically indicated.

## 2.03 MATERIALS

- A. Base metals:
1. Manufacturer's standard metal alloy, composition, temper and hardness, but in no case of lesser (commercially-recognized) quality than that specified for applicable hardware units by applicable ANSI A156 series standard for each type hardware item and with ANSI A156.18 for finish designations indicated.
  2. Do not furnish "optional" materials for those indicated, except as otherwise specified.
- B. Fasteners:
1. Furnish Phillips flat-head screws with each hardware item, unless otherwise indicated.
  2. Exposed screws: Match finish of hardware (even where noted to be "prepared for paint").
  3. Use concealed fasteners for hardware units which are exposed when door is closed, except where no standard units of type specified are available with concealed fasteners.
  4. Do not use thru-bolts where bolt head or nut on opposite face would be exposed.
  5. Where adequate reinforcement is not feasible, thru-bolting would only be acceptable if through sleeves, or if sex-screw fasteners are used.
- C. Furnish a complete set of specialized tools and maintenance instructions as needed for Owner's continued adjustment, maintenance, and removal and replacement of finish hardware.

## 2.04 MANUFACTURED UNITS, GENERAL

- A. Reference standards:
1. Comply with ANSI A156 current series for each product type.
- B. Hardware finishes:
1. Materials and Finishes Standard: Comply with ANSI A156.18 Finish designations used in schedules are listed, therein.
  2. Provide matching finishes for hardware units at each door, unless otherwise indicated.
  3. Match the color and texture of hardware items to manufacturer's standard finish for the latchset, lockset, or push-pull unit.
  4. Provide quality of finish, including thickness of plating or coating, composition, hardness, and other qualities complying with manufacturer's standards, but in no case less than that specified or described by referenced standards.
- C. Hardware for fire-rated openings:
1. Comply with NFPA 80.
  2. Tested and listed by Underwriters Laboratory (UL), or Factory Mutual (FM) for type, size and use of door, and complying with requirements of door and door frame label.
  3. Provide UL or FM label on door indicating "Fire door to be equipped with fire-exit hardware".
  4. Provide UL or FM label on exit device indicating "Fire Exit Hardware".

## 2.05 PRODUCTS

### A. Hinges:

1. Butt Hinges:
  - a. ANSI A156.1 - for commercial quality.
  - b. Provide only template-produced units.
  - c. All butt hinges to be ball bearing-5 knuckle type as specified.
  - d. Hinges at exterior doors shall be of non-ferrous material.
  - e. All hinges to be provided with Non-removable (NRP).
  - f. Size hinges as specified; otherwise according to hinge manufacturer's recommendation for door size and weight.
  - g. Provide number of hinges indicated but not less than 3 hinges per door.
  - h. Acceptable products: Bommer, Hager, PDQ.

### B. Lock Cylinders and Keying:

1. General:
  - a. Provide SFIC cylinders as required for each locking device. Owner will provide final SFIC cores.
2. Cylinders:
  - a. Type: SFIC Mortise or rim-type as required by function of locking device.
  - b. Provide screw on cams or tail piece as required.
  - c. Construct lock cylinder parts from brass/bronze, stainless steel or nickel silver.
  - d. Provide solid machined cylinder rings with tension spring to resist wrenching of cylinder. Length, finish and size as required.
  - e. Provide cylinder(s) and core(s) as required by function for each locking device.
3. System:
  - a. Provide temporary brass construction cores for each cylinder provided.
4. Keying:
  - a. Owner to provide final SFIC cores.

### C. Flushbolts:

1. ANSI/BHMA A156
2. Fire-rating: "WHI-listed" and "UL-listed" as necessary
3. Provide flushbolts with size top bolt and bottom bolt as specified.
  - a. Use extended length bolts as specified or required.
  - b. Use the appropriate type of bolt for wood or hollow metal as required.
4. Use dust proof strike as specified with each set of flushbolts.
5. Acceptable manufacturer's: IVES, PDQ, Hiawatha.

### D. Locksets:

1. Cylindrical Locks:
  - a. Comply with ANSI A156.2 –Series 4000, Grade 1 criteria for products supplied.
  - b. Mechanical and Battery Powered functions indicated in the hardware sets.
  - c. Lock shall be assembled in the USA.
  - d. Rose liners to be threaded with thru-bolt lugs for positive engagement.
  - e. Trim: PHL lever-type, SFIC prep, equal to Skilcraft / PDQ.
  - f. Acceptable products: Best, PDQ GT.
2. Mortise Locks:
  - a. Comply with ANSI A156.13 - 1987, Grade 1 criteria for products supplied.
  - b. Function: Indicated in the hardware sets.
  - c. Lockset case shall to be non-handed.
  - d. Lock shall be assembled in the USA.
  - e. Trim: Stainless Steel, PJEV lever-type equal to Skilcraft / PDQ .
  - f. Acceptable products: Best, PDQ MR.

E. Exit devices:

1. General:
  - a. Comply with ANSI A156.3, Grade 1, Types 1, 4, and 28.
  - b. At fire doors:
    - (i) Provide UL or FM label on exit device indicating "Fire Exit Hardware", where appropriate.
    - (ii) Mount exit device using sex-bolts on labeled wood doors.
2. Type: Flat, push-bar type with noise deadening.
  - a. Provide dead-locking latch bolts.
  - b. Provide operational trim as specified.
  - c. Function indicated in the hardware sets.
  - d. Provide strike and brackets as required for the frame application.
  - e. Acceptable products: Stanley Precision, PDQ.

F. Push / Pull bars & Grips:

1. General:
  - a. ANSI A156.16 - 1989 Grade 1 criteria for products supplied.
2. Description:
  - a. Offset pull bar 1" in diameter x 10" center to center.
  - b. Straight push and/or pull bar 1" in diameter x size to door width.
3. Mounting:
  - a. Mount push-pull bars back to back with thru-bolts and A thru flow mount at free ends.
  - b. Mount pull bars with thru-bolts and N thru flow mount at free ends.
  - c. Mount offset pulls so as to avoid conflict with vertical rod, when used in conjunction with vertical rod exit devices.
  - d. Mount back to back pulls with appropriate fasteners accounting on door thickness and type.
4. Acceptable products: Rockwood, PDQ, Hiawatha.

G. Push Plates & Pull Plates:

1. General:
  - a. ANSI A156.6 Grade 1 criteria for products supplied.
2. Description:
  - a. Pull Plate: Pull Diameter: 1", CTC: 8", Projection: 3", Plate: 4" x 16" x .050
  - b. Push Plate 8" x 34" x .050
  - c. Base Metal: Solid Stainless Steel
  - d. Prep Push and Pull Plates, as required, with function holes for deadbolts where specified.
3. Mounting:
  - a. Mount Pull Plate prior to Push Plate –Pull fasteners shall be concealed under Push Plate.
4. Acceptable Manufacture: Rockwood, PDQ, Hiawatha.

H. Door closers:

1. General:
  - a. ANSI A156.4 - 1986 Grade 1 criteria for products supplied.
  - b. All closers shall be the products of one manufacturer.
2. Description:
  - a. Full rack-and-pinion type
  - b. Cast Iron Body.
  - c. Hydraulic fluid: Non-gumming and non-freezing.
  - d. Closer body: Non-handed, multi-size spring power.
  - e. With three non-critical V valves and hex key adjustment to independently regulate sweep latch speed and backcheck.
  - f. Provide mounting brackets necessary to clear sound seals and weatherstrip.
  - g. Enclose in a full, molded cover.
  - h. Provide drop plates or special brackets for proper mounting.
  - i. Pressure Relief Valves will NOT be accepted on Door Closers.

- j. Provide Barrier Free power setting as required by ANSI A117.1.
- 3. Acceptable products: LCN, Rockwood, PDQ.
- I. Stops and Holders:
  - 1. General:
    - a. ANSI A156.16 - 1989 Grade 1 criteria for products supplied.
    - b. Provide stops where scheduled, wall or floor as opening conditions dictate utilizing wall stops wherever possible.
  - 2. Description:
    - a. Wall stops: Cast or wrought brass, bronze or stainless steel. Concave wall stop to have standard stainless steel fastener washer imbedded in rubber stop.
    - b. Floor stops: Cast brass or bronze, and plated as required. Floor stop height shall be universal for all floor conditions and door undercut.
    - c. Overhead stops shall be surface mounted, model as specified.
  - 3. Fasteners:
    - a. Provide universal fastener pack to accommodate masonry, steel stud, wood, tile and drywall mounting.
  - 4. Acceptable products: Rockwood, IVES, PDQ, Hiawatha.
- J. Thresholds:
  - 1. General:
    - a. ANSI A156.21 - 1989, Grade 1 criteria for products supplied.
    - b. Comply with A.D.A. requirements, unless otherwise scheduled.
  - 2. Description:
    - a. Flat profile.
    - b. Installation locations are scheduled.
    - c. Provide templates for thresholds to related door suppliers to coordinate proper undercut.
  - 3. Acceptable products: National Guard Products, Reese, IDC, KN Crowder.
- K. Door Seal:
  - 1. General:
    - a. ANSI A156.21 - 1989, Grade 1 criteria for products supplied.
  - 2. Description:
    - a. Flat profile.
    - b. Dimensions: Appropriate to door opening size.
    - c. Installation locations are scheduled.
    - d. Provide templates for thresholds to related door suppliers to coordinate proper undercut.
  - 3. Mounting:
    - a. Apply related hardware (closer, foot bracket, strike, etc.) on top of weatherstrip.
    - b. Do not notch or splice weather strip.
    - c. Adjust related template hardware locations, as required.
  - 4. Acceptable products: National Guard Products, Reese, IDC, KN Crowder.
- L. Sweeps and strips:
  - 1. General:
    - a. ANSI A156.21 - 1989, Grade 1 criteria for products supplied.
  - 2. Description:
    - a. Flat profile.
    - b. Dimensions: Appropriate to door opening size.
    - c. Installation locations are scheduled.
  - 3. Acceptable products: National Guard Products, Reese, IDC, KN Crowder.
- M. Miscellaneous Hardware Equipment and Material:
  - 1. General:



- a. Provide items and types as specified.

## 2.06 OTHER MATERIALS

- A. Provide other materials, not specifically described but required for a complete and proper installation, as selected by the Contractor subject to the approval of the Architect.

## 2.07 HARDWARE FINISHES

### A. General:

1. Provide matching finishes for hardware units at each door or opening, to the greatest extent possible and except as otherwise indicated.
2. Reduce differences in color and textures as much as commercially possible where the base metal or metal forming process is different for individual units of hardware exposed at the same door or opening.
3. In general, match items to the manufacturer's standard finish for the latch and lock set (or push/pull units if no latch/lock sets) for color and texture.
4. Provide finishes matching those established by BHMA or, if none established, match the Architect's sample.
5. Provide quality of finish, including thickness of plating or coating (if any), composition, hardness and other qualities complying with manufacturer's standards, but in no case less than that specified for the applicable units of hardware by referenced standards.
6. Finish designations used in schedules and elsewhere listed in ANSI A156.18 "Materials and Finishes Standard", including coordination with the traditional U.S. finishes shown by certain manufacturers for their products.

### B. Provide the following hardware finishes, unless otherwise scheduled:

1. Dull Chrome, Stainless Steel, and Aluminum color pallet.

### C. Base material: Manufacturer's standard high-carbon steel, brass, or bronze.

## PART THREE – EXECUTION

### 3.01 EXAMINATION

- A. Examine doors and frames, with Installer present, for compliance with requirements for installation tolerances, labeled fire-rated door assembly construction, wall and floor construction, and other conditions affecting performance.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

### 3.02 PREPARATION

- A. Steel Doors and Frames: For surface applied door hardware, drill and tap doors and frames according to ANSI/SDI A250.6.

### 3.03 INSTALLATION

- A. Mounting Heights: Mount door hardware units at heights to comply with the following unless otherwise indicated or required to comply with governing regulations.
  1. Standard Steel Doors and Frames: ANSI/SDI A250.8.
  2. Custom Steel Doors and Frames: HMMA 831.

- B. Install each door hardware item to comply with manufacturer's written instructions. Where cutting and fitting are required to install door hardware onto or into surfaces that are later to be painted or finished in another way, coordinate removal, storage, and reinstallation of surface protective trim units with finishing. Do not install surface-mounted items until finishes have been completed on substrates involved.
  - 1. Set units level, plumb, and true to line and location. Adjust and reinforce attachment substrates as necessary for proper installation and operation.
  - 2. Use Manufacturer's Templates.
  - 3. Drill and countersink units that are not factory prepared for anchorage fasteners. Space fasteners and anchors according to industry standards.
  - 4. Reinforce substrate where necessary to assure proper attachment.
- C. Hinges: Install types and in quantities indicated in door hardware schedule but not fewer than the number recommended by manufacturer for application indicated or one hinge for every 30 inches of door height, whichever is more stringent, unless other equivalent means of support for door, such as spring hinges or pivots, are provided.
- D. Lock Cylinders: Notify owner per Part Two above and install construction cores to secure building and areas during construction period.
- E. Thresholds: Set thresholds for exterior doors and other doors indicated in full bed of butyl rubber or polyisobutylene mastic sealant.
- F. Stops:
  - 1. Provide floor stops for doors unless wall or other type stops are indicated in door hardware schedule. Do not mount floor stops where they will impede traffic.
  - 2. Install wall stops 80" above finished floor into reinforced wall or stud, with sloped portion of the stop facing up and flat side down.
- G. Closers: Mount per manufactures' template and verify installation with Design Professional, prior to mounting. Contractor shall replace doors which have improperly mounted closers at no additional cost to Owner. Repair or patching of doors will be unacceptable.
- H. Installing weatherstrip: Install weatherstrip prior to installing closers, OH Stops or panic hardware. Template closers and panic devices from weatherstrip and install all closer / OH Stop shoe brackets and panic device strikes onto the weatherstrip without notching or cutting the weatherstrip.
- I. Meeting Stile Gasketing: Fasten to meeting stiles, forming seal when doors are closed.
- J. Door Sweeps: Apply to bottom of door on exterior side, forming seal with threshold when door is closed.
- K. Installing Astragals: Install all single piece flat astragals on the exterior side of the opening and meeting astragals on the interior of the opening.

### 3.04 FIELD QUALITY CONTROL

- A. Inspection of final hardware installation: The Contractor, hardware suppliers, and Architectural Hardware Specialist shall thoroughly check the quality of the installation and the functionality of each unit of finish hardware at all openings in the Work. The Hardware Supplier shall forward a detailed written report of all operational or installation deficiencies to the Architect and Contractor.

### 3.05 ADJUSTING

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

### 3.06 CLEANING AND PROTECTION

- A. Clean adjacent surfaces soiled by door hardware installation.
- B. Clean operating items as necessary to restore proper function and finish.
- C. Provide final protection and maintain conditions that ensure that door hardware is without damage or deterioration at time of Substantial Completion.

### 3.07 DOOR HARDWARE SCHEDULE

#### **Hardware Set 1 –Push Pull Trim [Always Unlocked] + Closer** **Door 158, 159, 164, 164B, 165, 165B, 166, 166B**

|   |     |   |     |
|---|-----|---|-----|
| 3 | ea. | Hinges 35STBB 4545 NRP                          | 26D |
| 1 | ea. | Best T Series Deadbolt                          | 626 |
| 1 | ea. | Best IC 7-pin                                   | SS  |
| 1 | ea. | Pull Plate 863-2C (mount prior to push plate)   | 32D |
| 1 | ea. | Kickplate IVES 12"x34" as Push Plate (vertical) | 32D |
| 1 | ea. | Closer 7101 BC PA Regular Arm (pull side mount) | AL  |
| 1 | ea. | Wall Stop 115                                   | 26D |
| 1 | ea. | Kickplate IVES 12"x34"                          | 32D |

#### **Hardware Set 2 –Privacy with Deadbolt w/Indicator [Lock / Unlock] + Closer** **Door 136B**

Replace mortise lock with Schlage L9040 L283-722 06A Privacy Mortise Lock w/ VACANT/OCCUPIED Indicator, 06 Lever

- See Decorative Films Specification Section for window film information at Door 136B

**END OF SECTION 087100**

## **SECTION 088733 – DECORATIVE FILMS**

### **PART 1 - GENERAL**

#### **1.1 SUMMARY**

- A. Section includes:
  - 1. Decorative films.

#### **1.2 REFERENCES**

- A. ASTM International (ASTM):
  - 1. ASTM D882 - Standard Test Method for Tensile Properties of Thin Plastic Sheeting.
  - 2. ASTM E84 - Test Method for Surface Burning Characteristics of Building Materials.
  - 3. ASTM E903 - Test Method for Solar Absorptance, Reflectance, and Transmittance of Materials Using Integrating Spheres.

#### **1.3 DEFINITIONS**

- A. Visible Light Transmittance: The ratio of the amount of visible light (380-780 nm) that is allowed to pass through a glazing system to the amount of visible light falling on the glazing system. The value is expressed as a percentage.
- B. Diffuse Visible Light Reflectance (exterior): The percentage of visible light falling on a flat, non-mirrored surface that is neither transmitted nor absorbed but scattered backwardly at random angles from that surface. This value is also known as “non-specular reflectance”.
- C. Privacy Film Rating: This number, between 0 (clear) and 10 (opaque), represents the relative difficulty an observer has in identifying the nature and character of an object located on the opposite side of the window, with the observer and the object both located at least 2 feet from the pane upon which the product has been installed.
- D. Frost Series: These films have frosted and translucent finishes that ensure privacy without sacrificing natural light. They are ideal for commercial interior glazing applications such as office partitions or to meet interior design goals at a fraction of the cost of etched glass.
- E. Gradient Series: These films are intended to give graduated privacy while still allowing for a sense of openness. Partially block out views, selectively hide unattractive areas or add a fresh design element easily with this versatile series.
- F. Pattern Series: These films are scratch-resistant and offer a wide range of aesthetic solutions through varying levels of translucent and opaque whites with a simulated acid-etched appearance. These films also include a broad range of classic patterns.
- G. Texture Series: These films refract light and simulate the sparkle and clarity of a textured glass window. These translucent, flexible films are the perfect solution for hard-to-cover specialty windows.

- H. Specialty Series: These films mask light, add privacy, or give a pop of color to any space. Bold, graphic hues and distinctive designs enliven retail spaces and commercial properties. Unique combinations of specialty films allow for endless customizable possibilities.

#### 1.4 PERFORMANCE REQUIREMENTS

- A. Scratch Resistance: Decorative films shall average less than 12 percent increase in haze when tested according to ASTM D1044 using a Teledyne Taber Abrader using CS10F Type III wheels each loaded to 0.5 kg for 100 cycles in a 70 percent vacuum.
- B. Surface Burning Characteristics: Provide films that have Flame Spread Index of 0 and Smoke Developed Index of 30 or less when tested in accordance with ASTM E84.
- C. Provide Decorative films that do not have a masking sheet.

#### 1.5 SUBMITTALS

- A. Product Data: For each type of product.
- B. Samples: For each type of decorative film specified, two (2) samples, 12 inches square.
- C. Operation and Maintenance Data: Submit for decorative film to include in maintenance manuals.
- D. Warranty: Submit sample special warranty specified in this section.

#### 1.6 QUALITY ASSURANCE

- A. Manufacturer Qualifications: A qualified manufacturer that has a minimum of 5 years of documented experience manufacturing decorative films similar to that used for this project.
- B. Installer Qualifications: A firm that is authorized by decorative film manufacturer to install film in accordance with guidelines set forth by the manufacturer.
- C. Source Limitations: Obtain each type of decorative film from same manufacturer.
- D. Mock-ups: Build mock-ups to verify selections made under sample submittals and to evaluate surface preparation techniques and application workmanship.
  - 1. Approved mock-ups may become part of the completed work if undisturbed at time of Substantial Completion.

#### 1.7 DELIVERY, STORAGE AND HANDLING

- A. Deliver, store, and handle materials in manufacturer's protective packaging.
- B. Store and protect materials according to manufacturer's written recommendations to prevent damage from condensation, temperature changes, direct exposure to sun, or other causes.

## 1.8 WARRANTY

- A. Manufacturer's Warranty: Manufacturer's standard form in which manufacturer agrees to replace films that fail within specified warranty period.
  - 1. Warranty Period: 5 years from date of substantial completion.

## PART 2 - PRODUCTS

### 2.1 MANUFACTURERS

- A. Basis-of-Design Product: The design for decorative films is based on LLumar® Decorative Films manufactured by Eastman Chemical Company: Performance Films, 575 Maryville Centre Drive, St. Louis, Missouri 63141; Telephone: 800-255-8627; Email address: [commercialalerts@eastman.com](mailto:commercialalerts@eastman.com); Web Site: [www.llumar.com](http://www.llumar.com).

### 2.2 DECORATIVE FILMS

- A. Decorative Film: LLumar® NRM55PS4 Decorative Frost Film with the following performance characteristics when applied to the interior surface of single-pane, 1/8-inch clear glass:
  - 1. % Visible Light Transmission: 62.
  - 2. % Diffuse Visible Light Reflectance (exterior): 36.
  - 3. Privacy Film Rating: 9.
  - 4. Thickness without Liner: 0.004 inches.
  - 5. Film Color: Glacier.

### 2.3 DECORATIVE FILM ACCESSORIES

- A. General: Provide accessories either manufactured by or acceptable to Decorative film manufacturer for application indicated, and with a proven record of compatibility with surfaces contacted in installation.
- B. Pressure sensitive adhesive: This adhesive is activated by pressure and water. It is characterized by its permanently tacky nature and its installation ease.
- C. Cleaners, Primers, and Sealers: Types recommended by film manufacturer..

## PART 3 - EXECUTION

### 3.1 EXAMINATION

- A. Examine substrates for compliance with requirements and for conditions affecting performance of Decorative film including glass that is broken, chipped, cracked, abraded, or damaged in any way.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

### 3.2 PREPARATION

- A. Comply with manufacturer's written instructions for surface preparation.
- B. Clean substrates thoroughly prior to installation.

- C. Prepare substrates using methods recommended by film manufacturer to achieve the best results for the substrate under project conditions.
- D. Protect window frames and surrounding surfaces to prevent damage during installation.

### 3.3 INSTALLATION

- A. Install in accordance with manufacturer's written instructions.
- B. Install film continuously, but not necessarily in one (1) continuous length. Install with no gaps or overlaps.
- C. If seamed, make seams non-overlapping.
- D. Do not remove release liner from film until just before each piece of film is cut and ready for installation.
- E. Custom cut to the glass with neat, square corners and edges to within 1/8-inch of the window frame.
- F. Remove air bubbles, blisters, and other defects. Be careful to remove "fingers" to eliminate any contamination or excess water pockets. It is crucial to remove as much water as possible during installation.
- G. A final squeegee pass over the entire pane using a Blue Max Blade™ with an extended handle design (or Thor's Hammer™) is recommended.

### 3.4 FIELD QUALITY CONTROL

- A. After installation, view film from a distance of 10 feet against a bright uniform sky or background. Film shall appear uniform in appearance with no visible streaks, wrinkles, banding, thin spots or pinholes.
- B. If installed film does not meet these criteria, remove and replace with new film.

### 3.5 CLEANING AND PROTECTION

- A. Remove excess mounting solution at finished seams, perimeter edges, and adjacent surfaces.
- B. Use cleaning methods recommended by film manufacturer.
- C. Replace films that cannot be cleaned.
- D. Protect installed products until completion of project.
- E. Touch-up, repair or replace damaged products before substantial completion.

**END OF SECTION 088733**



## **SECTION 093013 - CERAMIC TILING**

### **PART 1 - GENERAL**

#### **1.1 SUMMARY**

- A. Section Includes:
  - 1. Porcelain tile.
  - 2. Tile backing panels.
  - 3. Waterproof membrane.
  - 4. Crack isolation membrane.

#### **1.2 SUBMITTALS**

- A. Product Data: For each type of product.
- B. Samples:
  - 1. Each type and composition of tile and for each color and finish required.
- C. Qualification Data: For Installer.

#### **1.3 MAINTENANCE MATERIAL SUBMITTALS**

- A. Furnish extra materials that match and are from same production runs as products installed and that are packaged with protective covering for storage and identified with labels describing contents.
  - 1. Tile and Trim Units: Furnish quantity of full-size units equal to 3 percent of amount installed for each type, composition, color, pattern, and size indicated.

#### **1.4 QUALITY ASSURANCE**

- A. Installer Qualifications:
  - 1. Installer employs Ceramic Tile Education Foundation Certified Installers.

### **PART 2 - PRODUCTS**

#### **2.1 PRODUCTS, GENERAL**

- A. ANSI Ceramic Tile Standard: Provide Standard-grade tile that complies with ANSI A137.1 for types, compositions, and other characteristics indicated.
- B. ANSI Standards for Tile Installation Materials: Provide materials complying with ANSI A108.02, ANSI standards referenced in other Part 2 articles, ANSI standards referenced by TCNA installation methods specified in tile installation schedules, and other requirements specified.
- C. Source Limitations for Other Products: Obtain each of the following products specified in this Section from a single manufacturer:
  - 1. Waterproof membrane.
  - 2. Crack isolation membrane.

## 2.2 TILE PRODUCTS

- A. Ceramic Tile Type: Unglazed porcelain tile.
  - 1. Basis-of-Design Product: Subject to compliance with requirements, provide **Virginia tile Owen Sone Bunny Matte wall (TILE-2), Virginia tile mood wood grey (FLOOR TILE), Crossville Owen Stone bunny cove base (TILE-1), porcelain tile** or comparable product.
  - 2. Certification: Tile certified by the Porcelain Tile Certification Agency.
  - 3. Face Size: 12 by 24 inches (wall), 6 by 12 inches (cove base), 6 by 36 inches (floor).
  - 4. Face Size Variation: Rectified.
  - 5. Thickness: 3/8 inch.
  - 6. Face: Plain with square or cushion edges.
  - 7. Dynamic Coefficient of Friction: Not less than 0.42.
  - 8. Tile Color, Glaze, and Pattern: As selected by DMVA from manufacturer's full range.
  - 9. Grout Color: As selected by DMVA from manufacturer's full range.
  - 10. Trim Units: Coordinated with sizes and coursing of adjoining flat tile where applicable and matching characteristics of adjoining flat tile. Provide shapes as follows, selected from manufacturer's standard shapes:
    - a. At wall corners (inside & outside) Basis-of-design is: Schluter Quadec
    - b. At floor transitions (thresholds) Basis-of-design is: Schluter Schiene

## 2.3 TILE BACKING PANELS

- A. Cementitious Backer Units: ANSI A118.9 or ASTM C 1325, Type A.
  - 1. Products: Subject to compliance with requirements, available products that may be incorporated into the Work include, but are not limited to, the following:
    - a. C-Cure; C-Cure Board 990.
    - b. Custom Building Products; Wonderboard.
    - c. FinPan, Inc.; ProTEC Concrete Backer Board.
    - d. USG Corporation; DUROCK Cement Board.
  - 2. Thickness: 1/2 inch.

## 2.1 WATERPROOF MEMBRANE

- A. General: Manufacturer's standard product that complies with ANSI A118.10 and is recommended by the manufacturer for the application indicated. Include reinforcement and accessories recommended by manufacturer.
- B. Waterproof Membrane, Polyethylene Sheet: Polyethylene faced on both sides with fleece webbing: 0.0008-inch (0.2-mm) nominal thickness.
  - 1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
    - a. Custom Building Products.
    - b. Schluter Systems L.P.
    - c. Schonox: HPS North America, Inc.

## 2.2 CRACK ISOLATION MEMBRANE

- A. General: Manufacturer's standard product that complies with ANSI A118.12 for high performance and is recommended by the manufacturer for the application indicated. Include reinforcement and accessories recommended by manufacturer.

B. Corrugated Polyethylene: Corrugated polyethylene with dovetail-shaped corrugations and with anchoring webbing on the underside; 3/16-inch (4-mm) nominal thickness.

1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:

- a. ARDEX Americas.
- b. Schluter Systems L.P.

## 2.3 SETTING MATERIALS

A. Improved Modified Dry-Set Mortar (Thinset): ANSI A118.15.

1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:

- a. ARDEX Americas.
- b. Custom Building Products.
- c. Laticrete International, Inc.
- d. MAPEI Corporation.

2. Provide prepackaged, dry-mortar mix containing dry, redispersible, vinyl acetate or acrylic additive to which only water must be added at Project site.

3. Provide prepackaged, dry-mortar mix combined with acrylic resin or styrenebutadiene-rubber liquid-latex additive at Project site.

4. For wall applications, provide mortar that complies with requirements for nonsagging mortar in addition to the other requirements in ANSI A118.15.

## 2.4 GROUT MATERIALS

A. Sand-Portland Cement Grout: ANSI A108.10, consisting of white or gray cement and white or colored aggregate as required to produce color indicated.

B. High-Performance Tile Grout: ANSI A118.7.

1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:

- a. ARDEX Americas.
- b. C-Cure.
- c. Custom Building Products.
- d. Laticrete International, Inc.
- e. MAPEI Corporation.

2. Polymer Type:

- a. Ethylene vinyl acetate or acrylic additive, in dry, redispersible form, prepackaged with other dry ingredients.

C. Water-Cleanable Epoxy Grout: ANSI A118.3.

1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:

- a. ARDEX Americas.
- b. Custom Building Products.
- c. H.B. Fuller Construction Products Inc. / TEC.
- d. Laticrete International, Inc.
- e. MAPEI Corporation.

2. Provide product capable of withstanding continuous and intermittent exposure to temperatures of up to 140 and 212 deg F (60 and 100 deg C), respectively, and certified by manufacturer for intended use.

D. Grout for Pregrouted Tile Sheets: Same product used in factory to pregrout tile sheets.

## 2.4 MISCELLANEOUS MATERIALS

- A. Trowelable Underlayments and Patching Compounds: Latex-modified, portland cement-based formulation provided or approved by manufacturer of tile-setting materials for installations indicated.
- B. Metal Edge Strips: Angle or L-shape, height to match tile and setting-bed thickness, metallic or combination of metal and PVC or neoprene base, designed specifically for flooring applications; stainless-steel, ASTM A 666, 300 Series exposed-edge material.
  - 1. At wall corners (inside & outside) Basis-of-design is: Schluter Quadec
  - 2. At floor transitions (thresholds) Basis-of-design is: Schluter Schiene
- C. Floor Sealer: Manufacturer's standard product for sealing grout joints and that does not change color or appearance of grout.

## PART 3 - EXECUTION

### 3.1 EXAMINATION

- A. Examine substrates, areas, and conditions where tile will be installed, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance of the Work.
  - 1. Verify that substrates for setting tile are firm; dry; clean; free of coatings that are incompatible with tile-setting materials, including curing compounds and other substances that contain soap, wax, oil, or silicone; and comply with flatness tolerances required by ANSI A108.01 for installations indicated.
  - 2. Verify that concrete substrates for tile floors installed with thinset mortar comply with surface finish requirements in ANSI A108.01 for installations indicated.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

### 3.2 PREPARATION

- A. Fill cracks, holes, and depressions in concrete substrates for tile floors installed with adhesives or thinset mortar with trowelable leveling and patching compound specifically recommended by tile-setting material manufacturer.
- B. Where indicated, prepare substrates to receive waterproofing by applying a reinforced mortar bed that complies with ANSI A108.1A and is sloped 1/4 inch per foot toward drains.
- C. Blending: For tile exhibiting color variations, verify that tile has been factory blended and packaged so tile units taken from one package show same range of colors as those taken from other packages and match approved Samples. If not factory blended, either return to manufacturer or blend tiles at Project site before installing.

### 3.3 CERAMIC TILE INSTALLATION

- A. Comply with TCNA's "Handbook for Ceramic, Glass, and Stone Tile Installation" for TCNA installation methods specified in tile installation schedules. Comply with parts of the ANSI A108 series "Specifications for Installation of Ceramic Tile" that are referenced in TCNA installation

methods, specified in tile installation schedules, and apply to types of setting and grouting materials used.

1. For the following installations, follow procedures in the ANSI A108 series of tile installation standards for providing 95 percent mortar coverage:
  - a. Tile floors in wet areas.
  - b. Tile floors in laundries.
  - c. Tile floors consisting of tiles 8 by 8 inches or larger.
  - d. Tile floors consisting of rib-backed tiles.
- B. Extend tile work into recesses and under or behind equipment and fixtures to form complete covering without interruptions unless otherwise indicated. Terminate work neatly at obstructions, edges, and corners without disrupting pattern or joint alignments.
- C. Accurately form intersections and returns. Perform cutting and drilling of tile without marring visible surfaces. Carefully grind cut edges of tile abutting trim, finish, or built-in items for straight aligned joints. Fit tile closely to electrical outlets, piping, fixtures, and other penetrations so plates, collars, or covers overlap tile.
- D. Provide manufacturer's standard trim shapes where necessary to eliminate exposed tile edges.
- E. Where accent tile differs in thickness from field tile, vary setting bed thickness so that tiles are flush.
- F. Jointing Pattern: Lay tile in grid pattern unless otherwise indicated. Lay out tile work and center tile fields in both directions in each space or on each wall area. Lay out tile work to minimize the use of pieces that are less than half of a tile. Provide uniform joint widths unless otherwise indicated.
- G. Joint Widths: Unless otherwise indicated, install tile with the following joint widths:
  1. Quarry Tile: 1/4 inch.
  2. Glazed Wall Tile: 1/16 inch.
  3. Porcelain Tile: 1/4 inch.
- H. Expansion Joints: Provide expansion joints and other sealant-filled joints, including control, contraction, and isolation joints, where indicated. Form joints during installation of setting materials, mortar beds, and tile. Do not saw-cut joints after installing tiles.
  1. Where joints occur in concrete substrates, locate joints in tile surfaces directly above them.
- I. Metal Edge Strips: Install where exposed edge of tile flooring meets carpet, wood, or other flooring that finishes flush with or below top of tile and no threshold is indicated.
- J. Floor Sealer: Apply floor sealer to grout joints in tile floors according to floor-sealer manufacturer's written instructions. As soon as floor sealer has penetrated grout joints, remove excess sealer and sealer from tile faces by wiping with soft cloth.

### 3.4 INSTALLATION OF TILE BACKING PANELS

- A. Install panels and treat joints according to ANSI A108.11 and manufacturer's written instructions for type of application indicated. Use modified dry-set mortar for bonding material unless otherwise directed in manufacturer's written instructions.

### 3.5 INSTALLATION OF WATERPROOF MEMBRANES

- A. Install waterproof membrane to comply with ANSI A108.13 and manufacturer's written instructions to produce waterproof membrane of uniform thickness that is bonded securely to substrate.
- B. Allow waterproof membrane to cure and verify by testing that it is watertight before installing tile or setting materials over it.

### 3.6 INSTALLATION OF CRACK ISOLATION MEMBRANES

- A. Install crack isolation membrane to comply with ANSI A108.17 and manufacturer's written instructions to produce membrane of uniform thickness that is bonded securely to substrate.
- B. Allow crack isolation membrane to cure before installing tile or setting materials over it.

### 3.7 ADJUSTING AND CLEANING

- A. Remove and replace tile that is damaged or that does not match adjoining tile. Provide new matching units, installed as specified and in a manner to eliminate evidence of replacement.
- B. Cleaning: On completion of placement and grouting, clean all ceramic tile surfaces so they are free of foreign matter.
  - 1. Remove grout residue from tile as soon as possible.
  - 2. Clean grout smears and haze from tile according to tile and grout manufacturer's written instructions but no sooner than 10 days after installation. Use only cleaners recommended by tile and grout manufacturers and only after determining that cleaners are safe to use by testing on samples of tile and other surfaces to be cleaned. Protect metal surfaces and plumbing fixtures from effects of cleaning. Flush surfaces with clean water before and after cleaning.

### 3.8 PROTECTION

- A. Protect installed tile work with kraft paper or other heavy covering during construction period to prevent staining, damage, and wear. If recommended by tile manufacturer, apply coat of neutral protective cleaner to completed tile walls and floors.
- B. Prohibit foot and wheel traffic from tiled floors for at least seven days after grouting is completed.
- C. Before final inspection, remove protective coverings and rinse neutral protective cleaner from tile surfaces.

### 3.9 INTERIOR CERAMIC TILE INSTALLATION SCHEDULE

- A. Interior Floor Installations, Concrete Subfloor:
  - 1. TCNA F125-Full: Thinset mortar on crack isolation membrane.
    - a. Ceramic Tile Type: Reference the Master Color Schedule.
    - b. Uncoupling membrane: Schluter Systems L.P. Schluter-DITRA.
    - c. Floor waterproofing material system in shower area: Schluter Systems L.P. -KERDI system.
    - d. Thinset Mortar: Improved modified dry-set mortar.
    - e. Grout: Water-cleanable epoxy grout.
- B. Interior Wall Installations, Metal Studs or Furring:
  - 1. TCNA W245 or TCNA W248: Thinset mortar on glass-mat, water-resistant gypsum backer board.
    - a. Ceramic Tile Type: Reference the Master Color Schedule.
    - b. Thinset Mortar: Improved modified dry-set mortar.
    - c. Grout: High-performance sanded grout.
- C. Shower Receptor and Wall Installations:

1. TCNA B420: Thinset mortar on waterproof membrane over coated glass-mat, water-resistant gypsum backer board.
  - a. Ceramic Tile Type: Reference the Master Color Schedule.
  - b. Wall waterproofing material system: Schluter System L.P. - KERDI system.
  - c. Thinset Mortar: Improved modified dry-set mortar.
  - d. Grout: Water-cleanable epoxy grout.

**END OF SECTION 093013**

## **102113 TOILET COMPARTMENTS**

### **PART ONE - GENERAL**

#### **1.01 SUMMARY**

- A. Provide plastic urinal screens, toilet and shower compartments indicated.

#### **1.02 SUBMITTALS**

- A. Product data for materials, fabrication, and installation including catalog cuts of anchors, hardware, fastenings, and accessories.
- B. Color and Finish Samples.
- C. Shop drawings for fabrication and erection of toilet compartment assemblies not fully described by product drawings, templates, and instructions for installations of anchorage devices built into other work.

#### **1.03 QUALITY ASSURANCE**

- A. Comply with requirements in CID-A-A-60003, "Partitions, Toilets, Complete."

#### **1.04 PROJECT CONDITIONS**

- A. Field Measurements - Verify actual locations of walls, columns, ceilings, and other construction contiguous with toilet compartments by field measurements before fabrication and indicate measurements on Shop Drawings.
- B. Established Dimensions - Where field measurements cannot be made without delaying the Work, establish dimensions and proceed with fabricating toilet compartments without field measurements. Coordinate supports, adjacent construction, and fixture locations to ensure actual dimensions correspond to established dimensions.

### **PART TWO - PRODUCTS**

#### **2.01 MANUFACTURER'S**

- A. Basis-of-Design Product: Subject to compliance with requirements provide; **Global Partitions – Polymer(HDPE) Floor Anchored/Overhead Braced Toilet Compartments**, or comparable product by one of the following:
  - 1. Scranton Products
  - 2. General Partitions.
- B. Finish and color shall be integral with panel construction; color to be selected from manufacturer's standard colors furnished with Shop Drawings.
- C. Overall system should be No-Sight, for integral privacy

#### **2.02 MATERIALS**

- A. Doors, panels and pilasters to be 1" thick with homogeneous color throughout, constructed from high density polyethylene (HDPE) resins, which are, waterproof non-absorbent and have a self-lubricating surface that resists markings from pens, pencils and other writing instruments.



## B. FABRICATION

1. Doors, panels and pilasters shall be 1" thick with uniformly machined edges.
2. Doors and panels shall be 55" high and mounted at 14" above the finished floor.
3. Doors and panels to have an extruded aluminum heat sink strip attached to the lower edge.
4. Urinal screens to be min 60" x 16".
5. Pilasters shall be 81-1/2" high. Pilasters shall include a mounting system comprised of 1/4" x 1" stainless steel mounting bar attached to the pilaster, having 3/8" zinc plated steel lag bolts. Each mounting bar shall be secured to the building structure with 3/8" zinc plated steel studs. A shoe shall conceal each floor mounting, having an internal cross section conforming to the pilaster.
6. Pilasters are overhead braced with an extruded anti-grip aluminum headrail.

## C. HARDWARE

1. Heavy-duty diecast (vault) zamac hinge shall have gravity-acting cams and are fabricated from a die cast aluminum alloy with a brushed finish and wrap around flanges. The cam is constructed from a 3/4" diameter nylon rod and a 3/8" stainless steel pin. Slide latch, strike/keeper and hinges are through-bolted onto doors and pilasters using stainless steel vandal-resistant through bolts. Hinges are easily adjusted at the jobsite to a full close or partially open position, as required. Keeper provides for emergency access into the stall by lifting up on the bottom of the door.
2. Panel and pilaster brackets shall be as noted:
  - a. Continuous Aluminum brackets shall be made of heavy-duty anodized extruded aluminum (6063-T5 Alloy). Stirrup brackets shall be 1/8" thick and mounted with stainless steel, vandal-resistant screws. Panels shall be attached with stainless steel, vandal-resistant through bolts. The attachment of brackets to the adjacent wall construction shall be accomplished with 2 1/2" stainless steel vandal-resistant screws and plastic anchors.
3. Pilaster shoes shall be stainless steel 5" high with a #4 satin finish. Pilaster shoes are anchored to the pilaster with #10 stainless steel, vandal-resistant screws. Optional: Plastic pilaster shoes shall be 5" high.
4. Headrail shall be made of heavy-duty anodized extruded aluminum (6063-T5 alloy). Headrail is anti-grip and attaches to the top of the pilaster with stainless steel, tamper-resistant screws. Headrail is attached to the adjacent wall construction with a headrail bracket.
5. Headrail brackets shall be made from a die cast aluminum alloy and shall be attached to the adjacent wall construction with 2 1/2" stainless steel, tamper-resistant screws and plastic anchors.
6. Coat Hooks - Manufacturer's standard unit, combination hook and rubber-tipped bumper, sized to prevent door hitting mounted accessories.

## PART THREE - EXECUTION

### 3.01 INSTALLATION, TOILET PARTITIONS

- A. Comply with manufacturer's recommended procedures and installation sequence.
- B. Install compartment units rigid, straight, plumb, level, and true-to-line.
- C. Components shall be secured as detailed on approved shop drawings. Secure panels to walls with continuous stirrup brackets. Locate wall brackets so holes for wall anchorages occur in masonry or tile joints.
- D. Secure panels to pilasters with continuous stirrup brackets located to align with stirrup brackets at wall. Secure panels in position with manufacturer's recommended anchoring devices.
- E. Secure pilasters to floor and level, plumb, and tighten installation with devices furnished. Secure overhead brace to each pilaster with not less than 2 fasteners.

- F. Hang doors and adjust so tops of doors are parallel with overhead brace with doors closed.
- G. Provide clearances of not more than 1/2" between pilasters and panels, not more than 1" between panels and walls, not more than a uniform 3/16" at vertical edges of doors and pilasters.

### 3.02 ADJUSTING AND CLEANING

- A. Hardware Adjustment - adjust and lubricate hardware for proper operation. Set hinges on in-swinging doors to hold open approximately 30 degrees from closed position when unlatched. Set hinges on out-swinging doors to return to fully closed position.
- B. Clean exposed surfaces of partition systems using materials and methods recommended by manufacturer, and provide protection as necessary to prevent damage during remainder of construction period.

**END OF SECTION 102113**

## **SECTION 105113 – METAL LOCKERS**

### **PART ONE GENERAL**

#### **1.01 DESCRIPTION**

- A. Provide metal lockers indicated.
  - 1. Standard metal lockers.
  - 2. Benches.

#### **1.02 SUBMITTALS**

- A. Product Data- Include construction details, material descriptions, dimensions of individual components and profiles, and finishes for each type of metal locker
- B. Shop Drawings – Include plans, elevations, sections, details, and attachments to other work.
  - 1. Show base, sloping tops, filler panels, recess trim, and other accessories.
  - 2. Include locker identification system.
- C. Qualification Data – For Installer.
- D. Maintenance Data – For adjusting, repairing, and replacing locker doors and latching mechanisms.
- E. Warranty – Special warranty specified in this Section.

#### **1.03 QUALITY ASSURANCE**

- A. Installer Qualifications – An authorized representative of metal locker manufacturer for installation and maintenance of units required for this Project.
- B. Source Limitations – Obtain metal lockers and accessories through one source from a single manufacturer.
- C. Product Options – Drawings indicate size, profiles, and dimensional requirements of metal lockers and are based on the specific system indicated. See INSTRUCTIONS TO BIDDERS paragraph “Substitutions”.
  - 1. Do not modify intended aesthetic effects, except with DMVA’s approval. If modifications are proposed, submit comprehensive explanatory data to DMVA Designer for review.

#### **1.04 DELIVERY, STORAGE, AND HANDLING**

- A. Do not deliver metal lockers until spaces to receive them are clean, dry, and ready for metal locker installation.

#### **1.05 PROJECT CONDITIONS**

- A. Field Measurements – Verify the following by field measurements before fabrication and indicate measurements on Shop Drawings:
  - 1. Concealed framing, blocking, and reinforcements that support metal lockers before they are enclosed.
  - 2. Recessed openings.
  - 3. Established Dimensions – Where field measurements cannot be made without delaying the Work, establish recessed opening dimensions and proceed with fabricating metal lockers without field

measurements. Coordinate wall and floor construction to ensure that actual recessed opening dimensions correspond to established dimensions.

#### 1.06 COORDINATION

- A. Coordinate size and location of concrete bases for metal lockers.
- B. Coordinate sizes and locations of framing, blocking, furring, reinforcements, and other related units of Work specified in other Sections to ensure that metal lockers can be supported and installed as indicated.

#### 1.07 WARRANTY

- A. Special Warranty – Manufacturer’s standard form in which manufacturer agrees to repair or replace components of metal lockers that fail in materials or workmanship, excluding finish, within specified warranty period.
  - 1. Failures include, but are not limited to, the following:
    - a. Structural failures.
    - b. Faulty operation of latches and other door hardware.
  - 2. Damage from deliberate destruction and vandalism is excluded.
  - 3. Warranty Period for Knocked-Down Metal Lockers – Two years from date of Acceptance.

### PART TWO - PRODUCTS

#### 2.01 MATERIALS

- A. Cold-rolled Steel Sheet – ASTM A 1008, Commercial Steel (CS) Type B, suitable for exposed applications.
- B. Expanded Metal – ASTM F 1267, Type II (flattened), Class I, ¾” steel mesh, with at least 70% open area.
- C. Fasteners – Zinc- or nickel-plated steel, slotless-type exposed bolt heads, and self-locking nuts or lock washers for nuts on moving parts.
- D. Anchors – Select material, type, size, and finish required for secure anchorage to each substrate.
  - 1. Provide nonferrous-metal or hot-dip galvanized anchors and inserts on inside face of exterior walls and elsewhere as required for corrosion resistance.
  - 2. Provide toothed-steel or lead expansion sleeves for drilled-in-place anchors.

#### 2.02 KNOCKED-DOWN STANDARD METAL LOCKERS

- A. Basis-of-Design Product – **Republic Storage System Company; Lockers** or a comparable product of one of the following:
- B. Available Products:
  - 1. Lyon Workspace Products; Standard Lockers.
  - 2. Penco Products Inc., subsidiary of Vesper Corp.
  - 3. Republic Storage Systems Company; Standard Lockers.
- C. Locker Arrangement – **Single tier, 12”w x 18”d x 60” h, As indicated on Drawings.**
- D. Body – Assembled by riveting or bolting body components together. Fabricate from unperforated, cold-rolled steel sheet with thickness as follows:
  - 1. Tops, Bottoms, and Intermediate Dividers – 0.0209”, with single bend at sides.
  - 2. Backs and Sides – 0.0209” thick, with full-height, double-flanged connections.

3. Shelves – 0.0209” thick, with double bend at front and single bend at sides and back.
- E. Frames – Channel formed; fabricated from 0.0528” thick, cold-rolled steel sheet; lapped and factory welded at corners; with top and bottom main frames factory welded into vertical main frames. Form continuous, integral door strike full height on vertical main frames.
  1. Cross Frames between Tiers – Channel formed and fabricated from same material as main frames; welded to vertical frame members.
- F. Doors – One-piece; fabricated from 0.0528” thick, cold-rolled steel sheet; formed into channel shape with double bend at vertical edges, and with right-angle single bend at horizontal edges.
  1. Reinforcement – Manufacturer’s standard reinforcing angles, channels, or stiffeners for doors more than 15” wide; welded to inner face of doors.
  2. Stiffeners – Manufacturer’s standard full-height stiffener fabricated from 0.0428” thick, cold-rolled steel sheet; welded to inner face of doors.
  3. Door Style – Vented panel; louvered vents, not less than three louver openings at top and bottom for double-tier lockers.
  4. Knuckle Hinges: Steel, full loop, five or seven knuckles, tight pin; minimum 2 inches high.
- G. Projecting Door Handle and Latch – Manufacturer’s standard, finger-lift latch control designed for use with padlocks; positive automatic, prelocking, pry resistant; chromium-plated, vandal-resistant, lift-up handle.
  1. Latch Hooks – Equip door 48” and higher with 3 latch hooks and door less than 48” with 2 latch hooks; fabricated from minimum 0.0966” thick steel; welded or riveted to full-height door strikes; with resilient silencer on each latch hook.
  2. Latching Mechanism – Manufacturer’s standard rattle-free latching mechanism and moving components isolated to prevent metal-to-metal contact, and incorporating a prelocking device that allows locker door to be locked while door is open and then closed without unlocking or damaging lock or latching mechanism.
- H. Equipment – Equip each metal locker with identification plate and the following, unless otherwise indicated:
  1. One double-prong ceiling hook, and three single-prong wall hooks.
- I. Accessories
  1. Continuous Base – Fabricated from cold-rolled steel sheet, manufacturer’s standard thickness, but not less than 0.0528” thick.
    - a. Height – 4”.
  2. Individual Sloping tops – Fabricated from cold-rolled steel sheet, manufacturer’s standard thickness, but not less than 0.0329” thick.
    - a. Closures – Vertical-end type.
    - b. Sloped top corner fillers, mitered.
  3. Filler Panels – Fabricated from cold-rolled steel sheet, manufacturer’s standard thickness, but not less than 0.0329” thick.
  4. Finished End Panels – Fabricated from 0.0209” thick, cold-rolled steel sheet.
- J. Finish – Baked enamel or powder coat.
  1. Color – As selected by DMVA from manufacturer’s full range.

## 2.03 LOCKER BENCHES

- A. General – Provide locker benches fabricated by same manufacturer as metal lockers.
- B. Bench Tops – Manufacturer’s standard 1-piece units, of the following material, minimum 12” wide by 1 ¼” thick, with rounded corners and edges.

1. Laminated clear hardwood with one coat of clear sealer on all surfaces, and one coat of clear lacquer on top and sides.
- C. Fixed Pedestals: Manufacturer's standard tubular steel supports, with predrilled fastener holes for attaching bench top and anchoring to floor, complete with fasteners and anchors.
  1. Color: As selected by DMVA from manufacturer's full range.

## 2.04 FABRICATION

- A. General – Fabricate metal lockers square, rigid, and without warp; with metal faces flat and free of dents or distortion. Make exposed metal edges free of sharp edges and burrs, and safe to touch.
  1. Form body panels, doors, shelves, and accessories from one-piece steel sheet, unless otherwise indicated.
  2. Provide fasteners, filler plates, supports, clips, and closures as required for a complete installation.
- B. Unit Principle – Fabricate each metal locker with an individual door and frame; individual top, bottom, and back; and common intermediate uprights separating compartments.
- C. Knocked-Down Construction – Fabricate metal lockers for nominal assembly at Project site using nuts, bolts, screws, or rivets. Factory weld frame members together to form a rigid, one piece assembly.
- D. Hooks – Manufacturer's standard ball-pointed, aluminum or steel; zinc plated.
- E. Identification Plates – Manufacturer's standard etched, embossed, or stamped aluminum or plastic plates; with numbers and letters at least 3/8" high.
- F. Continuous Base – Formed into channel or Z profile for stiffness, and fabricated in lengths as long as practicable to enclose base and base ends of metal lockers; finished to match lockers.
- G. Continuous Sloping Tops – Fabricated in lengths as long as practicable, without visible fasteners at splice locations; finished to match lockers.
  1. Sloped top corner fillers, mitered.
- H. Filler Panels – Fabricated in an unequal leg angle shape; finished to match lockers. Provide slip joint filler angle formed to receive filler panel.
- I. Finished End Panels – Designed for concealing unused penetrations and fasteners, except for perimeter fasteners, at exposed ends of nonrecessed metal lockers; finished to match lockers.
  1. Provide one-piece panels for double-row (back-to-back) locker ends.

## 2.05 STEEL SHEET FINISHES

- A. General – Comply with NAAMM's "Metal Finishes Manual for Architectural and Metal Products" for recommendations for applying and designating finishes.
- B. Factory finish steel surfaces and accessories except stainless-steel and chrome-plated surfaces.
- C. Surface Preparation – Clean surfaces of dirt, oil, grease, mill scale, rust, and other contaminants that could impair paint bond. Use manufacturer's standard methods.
- D. Baked-Enamel Finish – Immediately after cleaning, pretreating, and phosphatizing, apply manufacturer's standard thermosetting baked-enamel finish. Comply with paint manufacturer's written instructions for application, baking, and minimum dry film thickness.

- E. Powder-Coat Finish – Immediately after cleaning and pretreating, electrostatically apply manufacturer’s standard baked-polymer thermosetting powder finish. Comply with resin manufacturer’s written instructions for application, baking, and minimum dry film thickness.

## **PART THREE - EXECUTION**

### **3.01 EXAMINATION**

- A. Examine walls, floors, and support bases, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance of work.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

### **3.02 INSTALLATION**

- A. General – Install level, plumb, and true; shim as required, using concealed shims.
  - 1. Anchor locker runs at ends and at intervals recommended by manufacturer, but not more than 36” o.c. Install anchors through backup reinforcing plates, channels, or blocking as required to prevent metal distortion, using concealed fasteners.
  - 2. Anchor single rows of metal lockers to walls near top and bottom of lockers or top of lockers and to floor.
  - 3. Anchor back-to-back metal lockers to floor.
- B. Knocked-Down Metal Lockers – Assemble knocked-down metal lockers with standard fasteners, with no exposed fasteners on door faces or face frames.
- C. All-Welded metal Lockers – Connect groups of all-welded metal lockers together with standard fasteners, with no exposed fasteners on face frames.
- D. Equipment and Accessories – Fit exposed connections of trim, fillers, and closures accurately together to form tight, hairline joints, with concealed fasteners and splice plates.
  - 1. Attach hooks with at least two fasteners.
  - 2. Attach door locks on doors using security fasteners.
  - 3. Identification Plates – Identify metal lockers with identification indicated on Drawings.
    - a. Attach plates to each locker door, near top, centered, with at least two aluminum rivets.
  - 4. Attach recess trim to recessed metal lockers with concealed clips.
  - 5. Attach filler panels with concealed fasteners. Locate filler panels where indicated on Drawings.
  - 6. Attach sloping top units to metal lockers, with closures at exposed ends.
  - 7. Attach finished end panels with fasteners only at perimeter to conceal exposed ends of nonrecessed metal lockers.
- E. Fixed Locker Benches – Provide not less than 2 supports for each bench, uniformly spaced not more than 24” apart. Provide Blocking in walls for wall hung supports.

### **3.03 CLEANING**

- A. Clean, lubricate, and adjust hardware. Adjust doors and latches to operate easily without binding.
- B. Protect metal lockers from damage, abuse, dust, dirt, stain, or paint. Do not permit metal locker use during construction.
- C. Touch up marred finishes, or replace metal lockers that cannot be restored to factory-finished appearance. Use only material and procedures recommended or furnished by metal locker manufacturer.

## **END OF SECTION 105113**

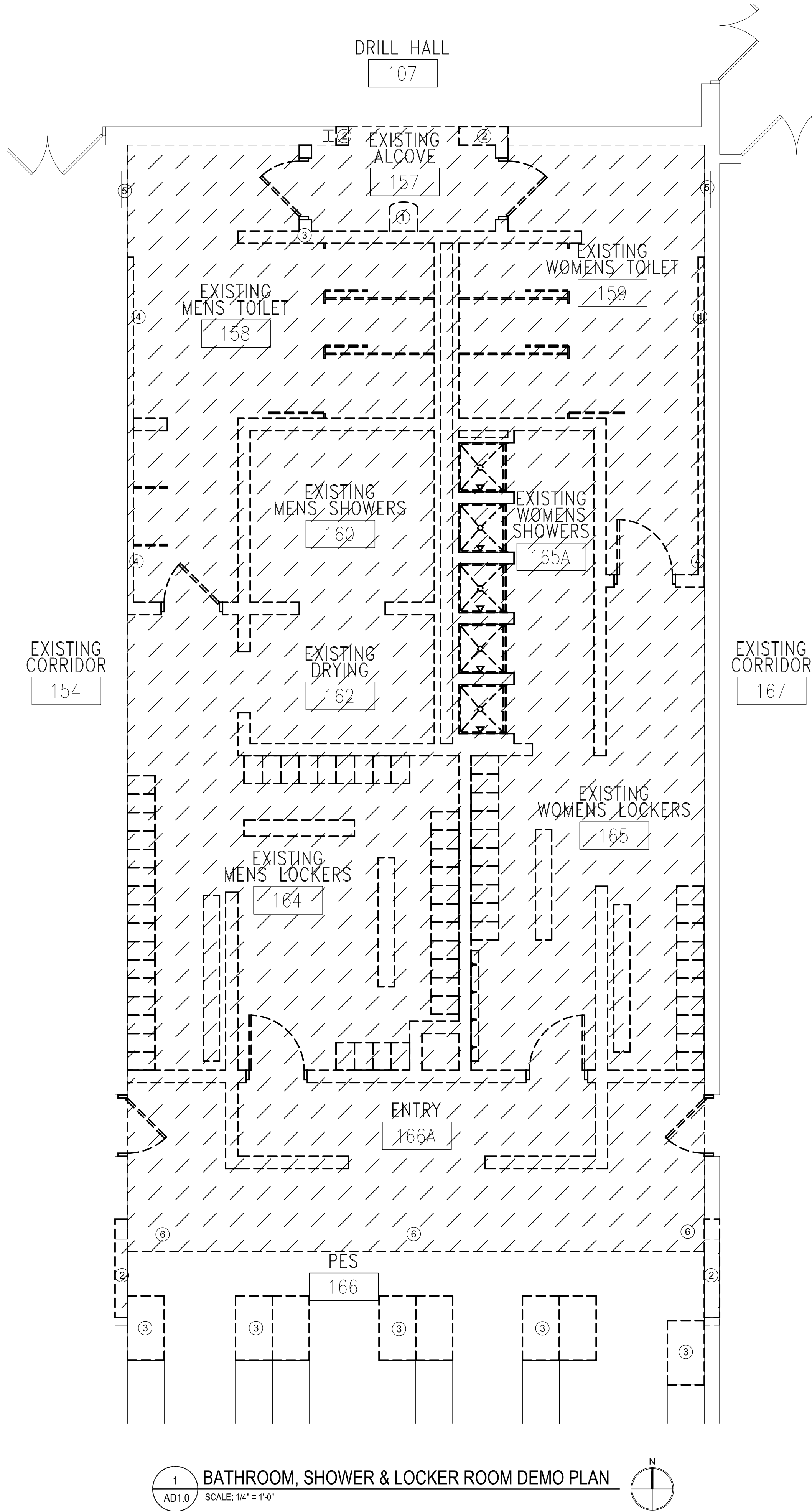
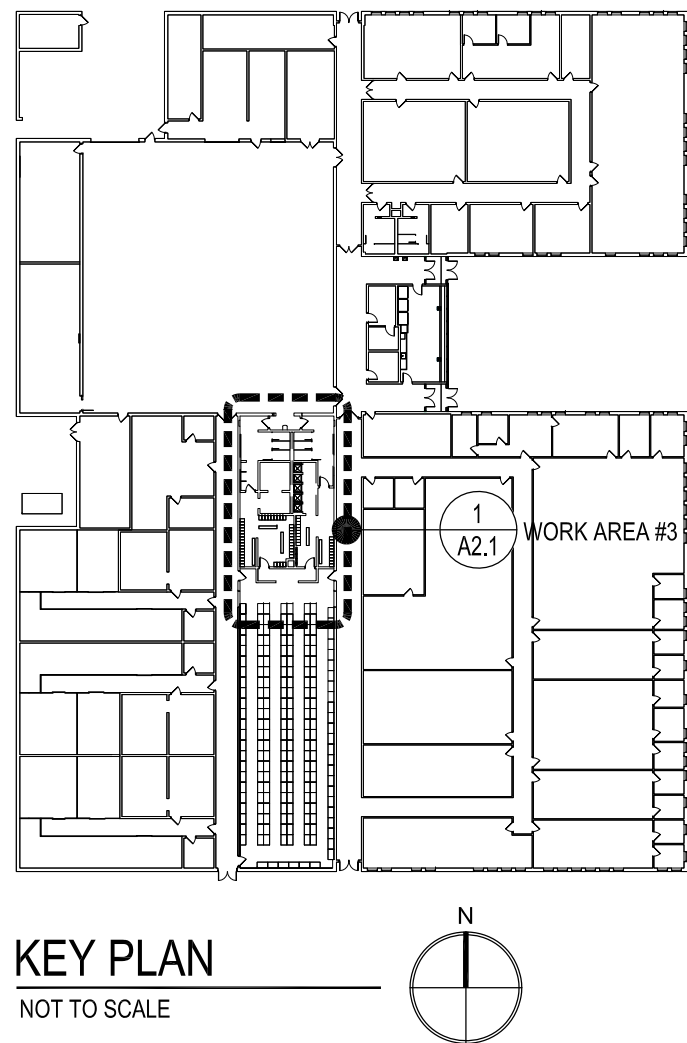
## **METAL LOCKERS**

DEMOLITION NOTES AT BATHROOMS:

1. AT PERIMETER WALLS TO REMAIN, DEMO WALL TILE AND PREPARE WALLS FOR NEW TILE
2. WITHIN THE WORK AREA, DEMO ALL EXISTING PLUMBING FIXTURES, HANGERS AND SUPPORTS INCLUDING TOILET PARTITIONS, SOAP DISPENSERS, AIR FRESHENERS, TOILET PAPER HOLDERS, AND MIRRORS
3. REMOVE EXISTING PLUMBING PIPING AND VALVES, ABOVE AND BELOW FLOOR LINE, TO COMPLETE THE WORK
4. REMOVE ALL PLUMBING SEWER PIPING BELOW / INSIDE THE FLOOR AND ABOVE THE CEILING - INCLUDING ANY VENT AND RE-VENT PIPING THAT WON'T BE REUSED
5. WITHIN THE WORK AREA, DEMO ALL ELECTRICAL LIGHTING, SWITCHES, RECEPTACLES, EMERGENCY LIGHTING FIXTURES, AND ALL CONDUIT & WIRING TO ALLOW FOR THE NEW WORK TO BE COMPLETED. SEE ELECTRICAL FOR EXTENT OF WORK.
6. DEMO CEILING IN WORK AREA INCLUDING ALL LIGHTING, ACCESS PANELS AND MECHANICAL DIFFUSERS
7. WITHIN THE WORK AREA, DEMO INTERIOR DOORS, FRAMES AND DOOR HARDWARE. TURN OVER ANY DOOR CORES TO DMVA
8. WITHIN THE WORK AREA, DEMO CMU WALLS AND FOOTINGS AS REQUIRED TO COMPLETE THE WORK
9. WITHIN THE WORK AREA SAWCUT AND REMOVE THE ENTIRE CONCRETE FLOOR SLAB, INCLUDING PARTITION FOOTINGS
10. REMOVE MASONRY BLOCK AT NEW OPENINGS AS NEEDED. TOOTH IN NEW MASONRY WITH EXISTING ADJACENT TO THE DRILL HALL
- 11.EXCAVATE EXISTING SOILS AS NEEDED TO INSTALL THE NEW SANITARY, COMPACT AND INSTALL NEW CONCRETE FOOTING, SLAB AND FLOOR TILE THROUGHOUT THE WORK AREA

DEMOLITION NOTES AT SHOWERS & LOCKER ROOMS:

1. AT PERIMETER WALLS TO REMAIN, DEMO WALL TILE AND PREPARE WALLS FOR NEW TILE
2. WITHIN THE WORK AREA, DEMO ALL EXISTING SHOWER COMPARTMENTS, SHOWER HEADS, SHOWER CONTROLS & VALVES, SOAP DISPENSERS, AIR FRESHENERS, WALL HOOKS, MIRRORS, AND ANY OTHER ITEMS ON THE WALLS
3. DEMO BENCHES AND LOCKERS
4. REMOVE EXISTING PLUMBING PIPING, ABOVE AND BELOW FLOOR LINE
4. REMOVE ALL PLUMBING SEWER PIPING BELOW / INSIDE THE FLOOR AND ABOVE THE CEILING - INCLUDING ANY VENT AND REVENT PIPING THAT WON'T BE REUSED
4. WITHIN THE WORK AREA, DEMO ALL ELECTRICAL LIGHTING, SWITCHES, RECEPTACLES, EMERGENCY LIGHTING FIXTURES, AND ALL CONDUIT & WIRING TO ALLOW FOR THE NEW WORK TO BE COMPLETED. SEE ELECTRICAL FOR EXTENT OF NEW WORK.
5. DEMO CEILING IN WORK AREA INCLUDING ACCESS PANELS AND MECHANICAL DIFFUSERS
6. WITHIN THE WORK AREA, DEMO INTERIOR DOORS, FRAMES AND HARDWARE
7. WITHIN THE WORK AREA DEMO CMU WALLS AND FOOTINGS AS REQUIRED TO COMPLETE THE WORK
8. WITHIN THE WORK AREA SAWCUT AND REMOVE THE ENTIRE CONCRETE FLOOR SLAB, INCLUDING PARTITION FOOTINGS
9. REMOVE MASONRY BLOCK AT NEW OPENINGS AS NEEDED. TOOTH IN NEW MASONRY WITH EXISTING AT NEW WALL ADJACENT TO PES
10. EXCAVATE EXISTING SOILS AS NEEDED TO INSTALL THE NEW SANITARY, COMPACT AND INSTALL NEW CONCRETE FOOTING, SLAB AND FLOOR TILE THROUGHOUT THE WORK AREA



1 BATHROOM, SHOWER & LOCKER ROOM DEMO PLAN  
AD1.0 SCALE: 1/4" = 1'-0"

LEGEND:

- AREA OF CONCRETE SLAB AND FOOTING TO BE REMOVED
- EXISTING WALLS & FOOTINGS TO BE DEMOLISHED

KEYED NOTES:

- 1 SALVAGE DRINKING FOUNTAIN
- 2 SEE SHEET A2.1 FOR LOCATIONS OF NEW OPENINGS IN EXISTING WALLS
- 3 SALVAGE & REMOVE PES LOCKERS THAT NEED TO BE MOVED TO MAKE ROOM FOR THE WORK. PROVIDE ANY PES LOCKERS TO DMVA THAT AREN'T RE-USED
- 4 THESE WALLS ARE ALREADY FURRED OUT. CONTRACTOR TO DEMO CONCRETE BLOCK AS NECESSARY TO COMPLETE THE WORK. SEE PLAN A2.1 FOR ADD'L INFO.
- 5 PROTECT EXISTING WALL UNIT HEATER. CONTRACTOR TO HAVE THE METAL COVER CLEANED & PAINTED TO MATCH NEW WALL TILE
- 6 SEE SHEET A2.1 TO DETERMINE EXTENT OF FLOOR REMOVAL

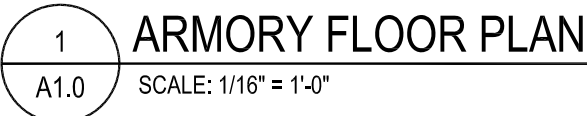
SALVAGE NOTES:

- 1.THE DRINKING FOUNTAIN IS TO BE SALVAGED AS WELL AS A COUPLE OF THE DOORS. SEE DOOR SCHEDULE FOR ADD'L INFO.
- 2.TAYLOR MAINTENANCE PERSONNEL WILL REMOVE LOOSE ITEMS THEY WISH TO KEEP IN ADVANCE OF THE CONTRACTOR BEING ONSITE. COORDINATE WITH DOUG SHILLING SPECIFIC ITEMS.
- 3.DMVA DOES NOT WANT ANY OF THE OTHER BUILDING MATERIALS BEING DEMOLISHED. THESE MATERIALS WILL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE REMOVED FROM THE SITE.
- 4.CONTRACTOR TO REMOVE AND HAND OVER BATHROOM ACCESSORIES: PAPER TOWEL DISPENSERS & HAND SOAP DISPENSERS.
- 5.REMOVE AND SALVAGE BUILDING SIGNAGE. HAND OVER TO DMVA

GENERAL NOTES:

1. SEE SHEETS A1.0, A2.0-A2.3 FOR ADDITIONAL DEMO INFO. AT THE OTHER WORK AREAS
2. CONTRACTOR TO CHECK AND VERIFY EXISTING CONDITIONS AND PROMPTLY NOTIFY DMVA OF ANY DISCREPANCIES
3. OWNER SHALL HAVE FIRST RIGHT OF REFUSAL FOR ALL ITEMS REMOVED.
4. CONTRACTOR SHALL MAINTAIN THE STRUCTURAL INTEGRITY OF THE BUILDING AT ALL TIMES.
5. CONTRACTOR TO KEEP EXITS AND EGRESS PATH OF TRAVEL CLEAR OF DEBRIS AT ALL TIMES.
6. FILL OPENINGS IN SURFACES THAT REMAIN. PATCH ALL REMAINING ADJACENT SURFACES TO MATCH EXISTING CONDITIONS.

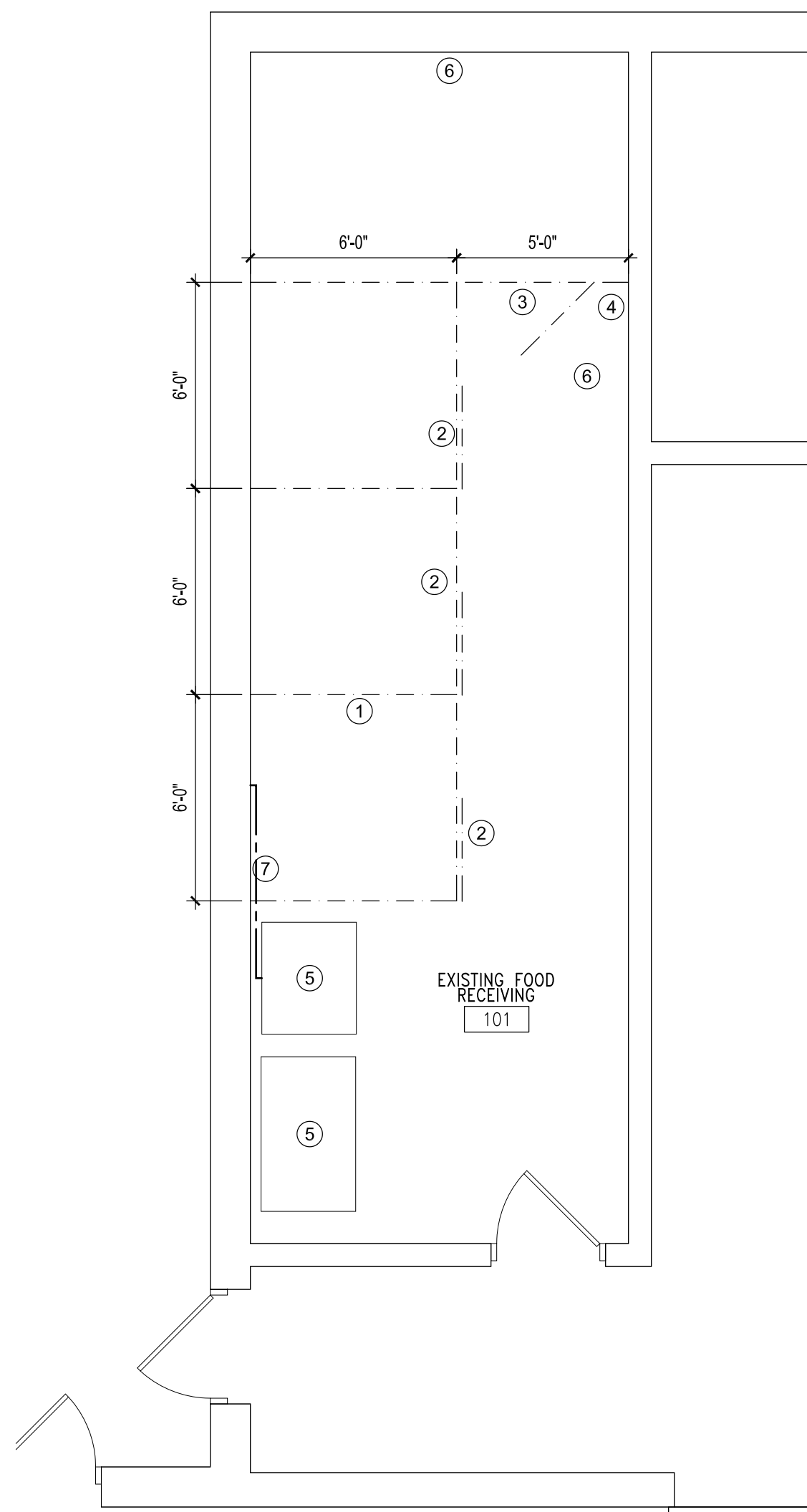




AREA OF LEVEL 3 CONCRETE POLISHING

KEYED NOTE

- ① APPROXIMATELY 6,000SF OF CORRIDOR AREA TO HAVE VCT FLOOR TILE REMOVED AND THE CONCRETE SUBSTRATE POLISHED TO A LEVEL 3 FINISH. THE CONTRACTOR IS TO PROTECT THE UNAFFECTED AND OCCUPIED AREAS OF THE BUILDING FROM THE DUST. SEE SPECIFICATIONS FOR ADD'L INFORMATION.
- ② CONTRACTOR TO MOVE, SAFELY STORE, AND /REPLACE VENDING MACHINES, FRIDGE, FURNITURE AND OTHER ITEMS FOR FLOOR POLISHING.
- ③ PROVIDE AND INSTALL NEW DOOR SEALS ON ALL EXISTING EXTERIOR DOORS
- ④ SEE SHEET A3.0:EXTERIOR ELEVATIONS FOR BRICK REPOINTING AND ADDITIONAL EXTERIOR WORK



2 FOOD RECEIVING ROOM PLAN  
A2.0 SCALE: 1/4" = 1'-0" N

LEGEND:

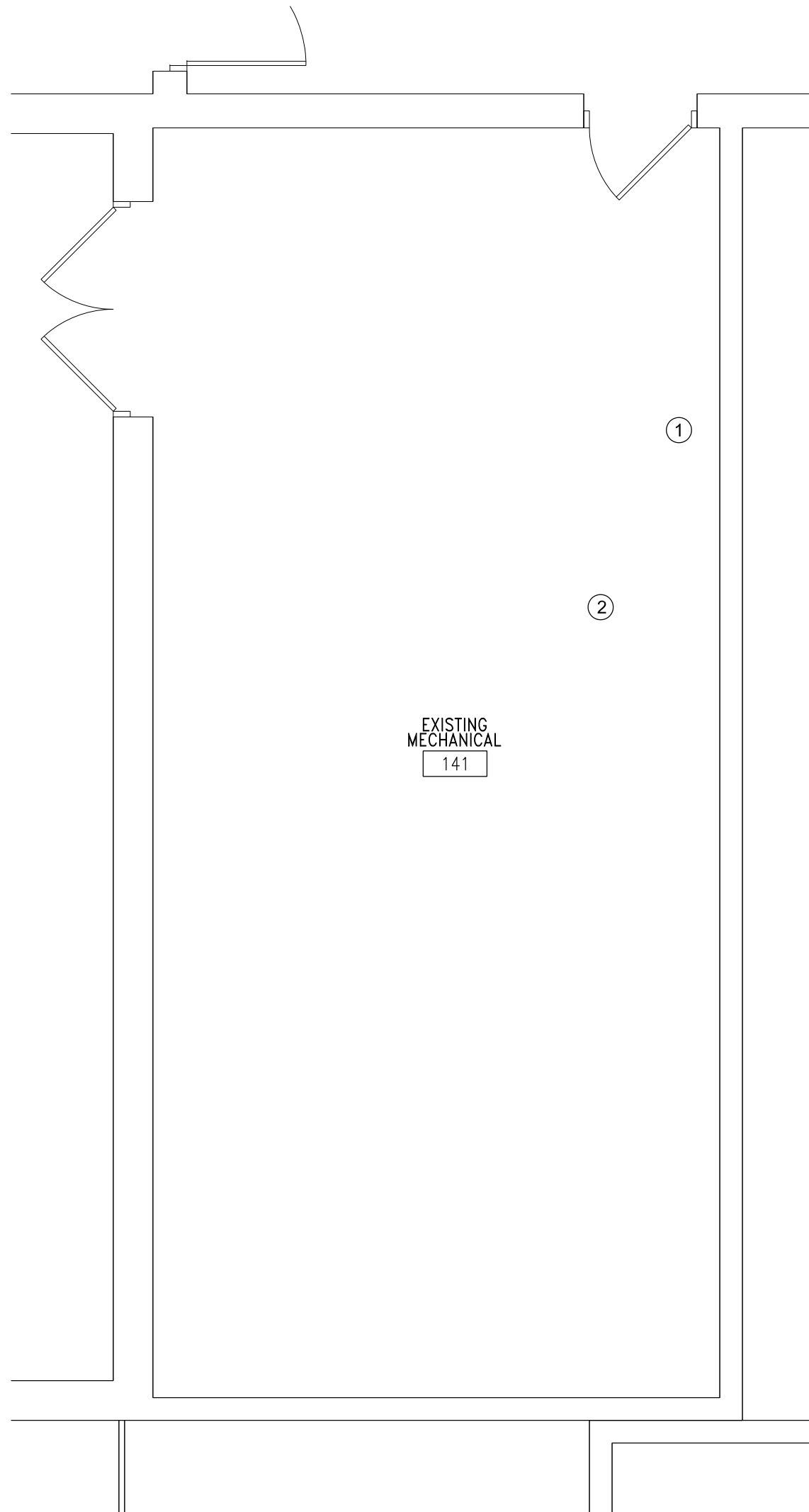
- METAL CAGING  
# KEYED NOTE  
--- COPPER WATERLINE

KEYED NOTES:

- 1 WIRE CAGING. SEE SPECIFICATIONS  
2 3' X 7' SLIDING DOOR. PREPARE FOR PADLOCK  
3 3' X 7' HINGED DOOR. PREPARE FOR PADLOCK  
4 MODIFY METAL CAGING PANEL TO ALLOW FOR VENTING AND PIPING AT WATER HEATER(S)  
5 EXISTING REFRIGERATOR & ICE MAKER  
6 SEE M2.0 FOR ADDITIONAL WORK REQUIRED  
7 COPPER WATERLINE TO ICE MAKER TO BE MODIFIED FOR NEW LOCATION. LOCATE THE WATER FILTER AND A SHUT-OFF OUTSIDE OF THE CAGED STORAGE AND PROVIDE SUPPORT FASTENERS. DRAIN ICE MAKER CONDENSATE WITH COPPER PIPE TO THE NEAREST EXISTING FLOOR DRAIN.

NOTES AT FOOD RECEIVING ROOM:

1. SEE METAL CAGING TO EXTEND FLOOR-TO-CEILING WITH A MAX. GAP AT WALLS, FLOOR, AND CEILING NOT TO EXCEED 3"  
2. EXISTING CEILING HEIGHT IS 10'-0"  
3. THE EXISTING FLOOR TILE & GLAZED CMU WALLS ARE TO BE POWER-SCRUBBED AND CLEANED. PATCH & REPAIR ANY DAMAGED TILE ON FLOORS & WALLS, TYPICAL



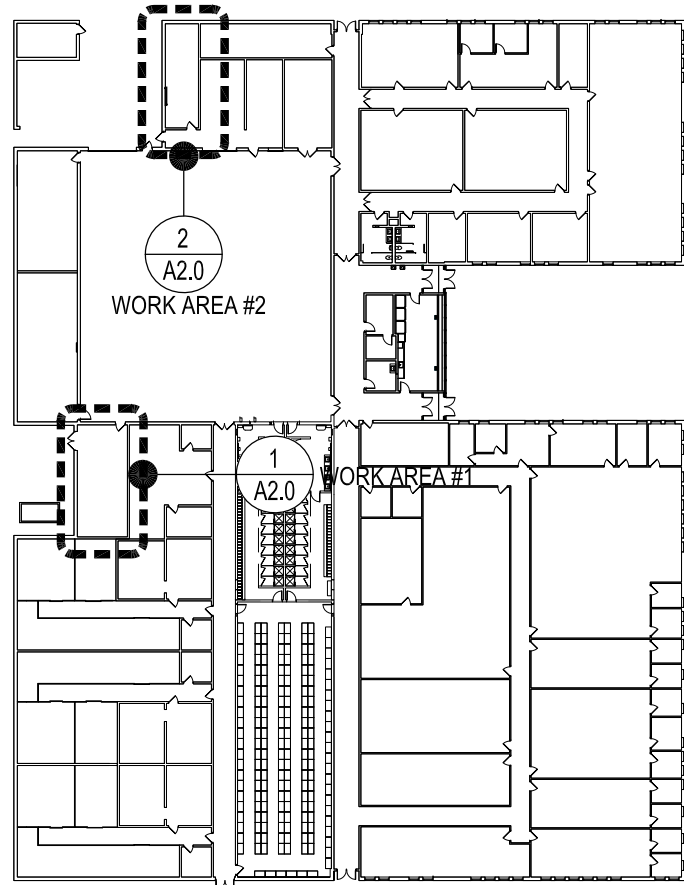
1 MECHANICAL ROOM PLAN  
A2.0 SCALE: 1/4" = 1'-0" N

KEYED NOTES:

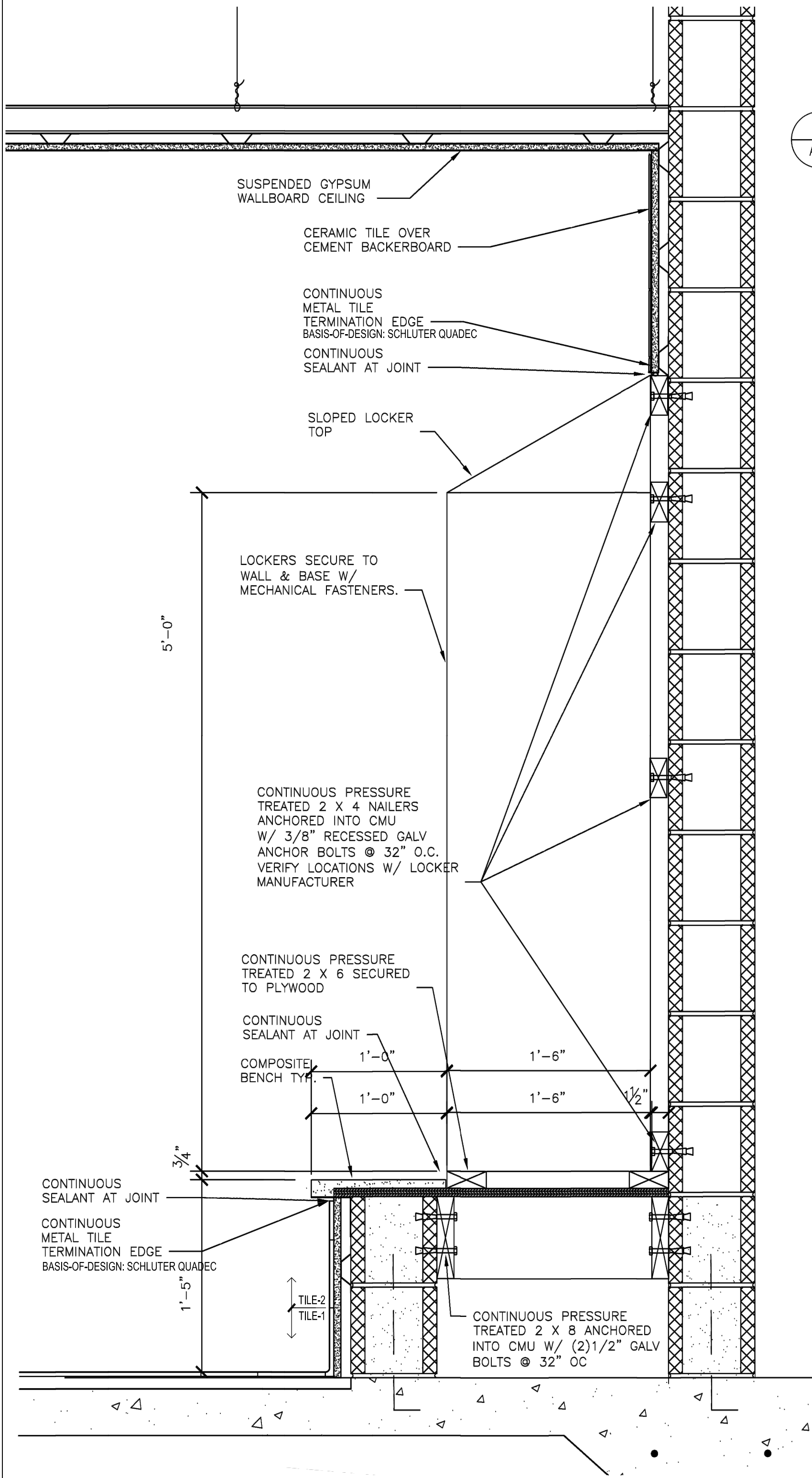
- 1 CONTRACTOR TO PROVIDE AND INSTALL NEW FALL PROTECTION AT EXISTING ROOF HATCH  
2 SEE MECHANICAL AND ELECTRICAL FOR ADDITIONAL WORK

NOTES AT MECHANICAL ROOM:

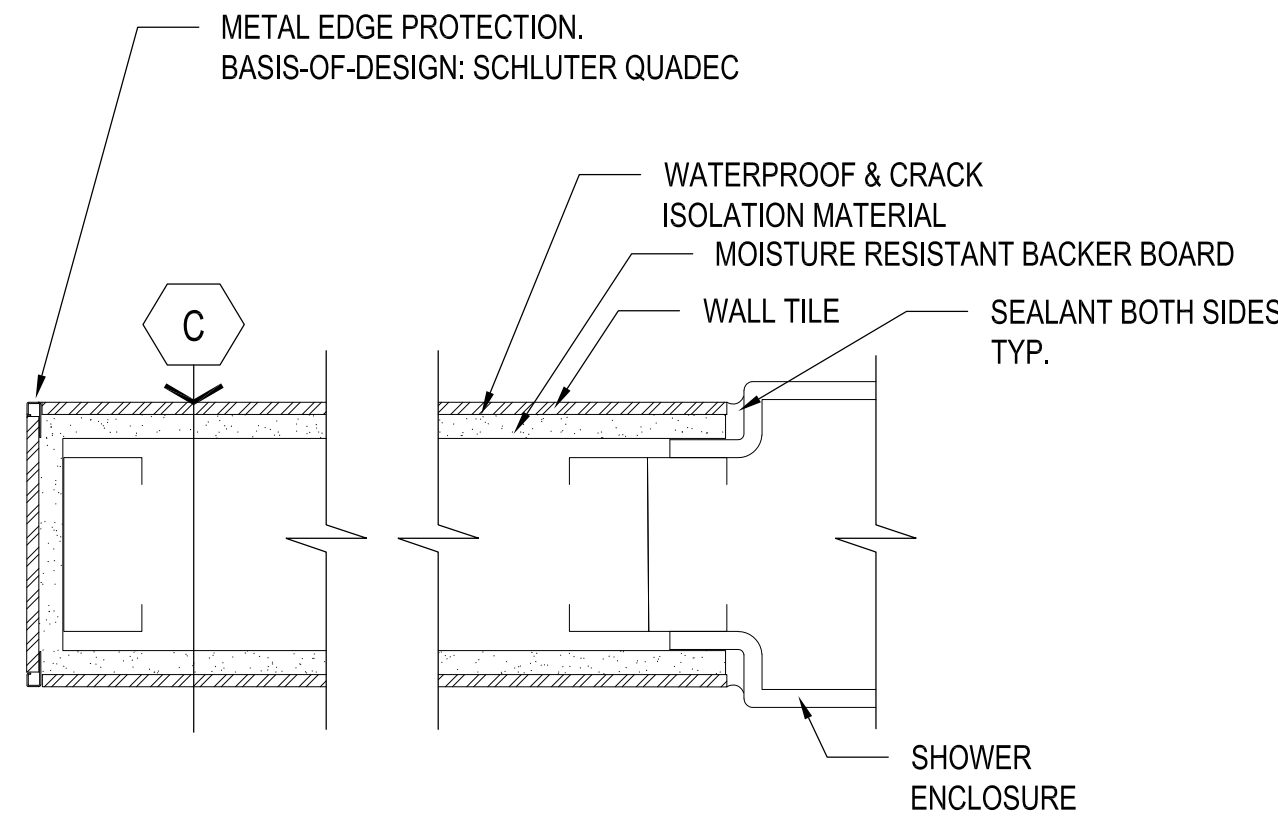
1. EMPTY



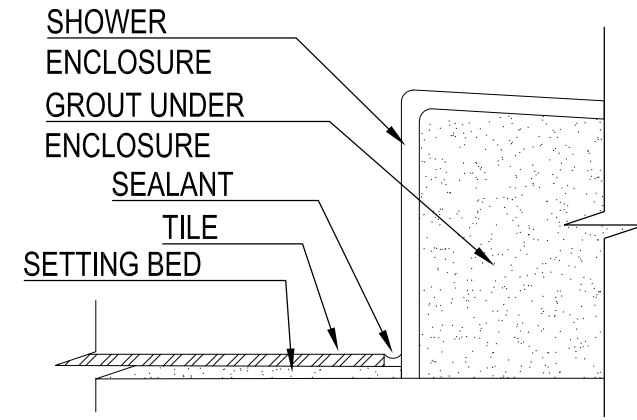
KEY PLAN  
NOT TO SCALE N



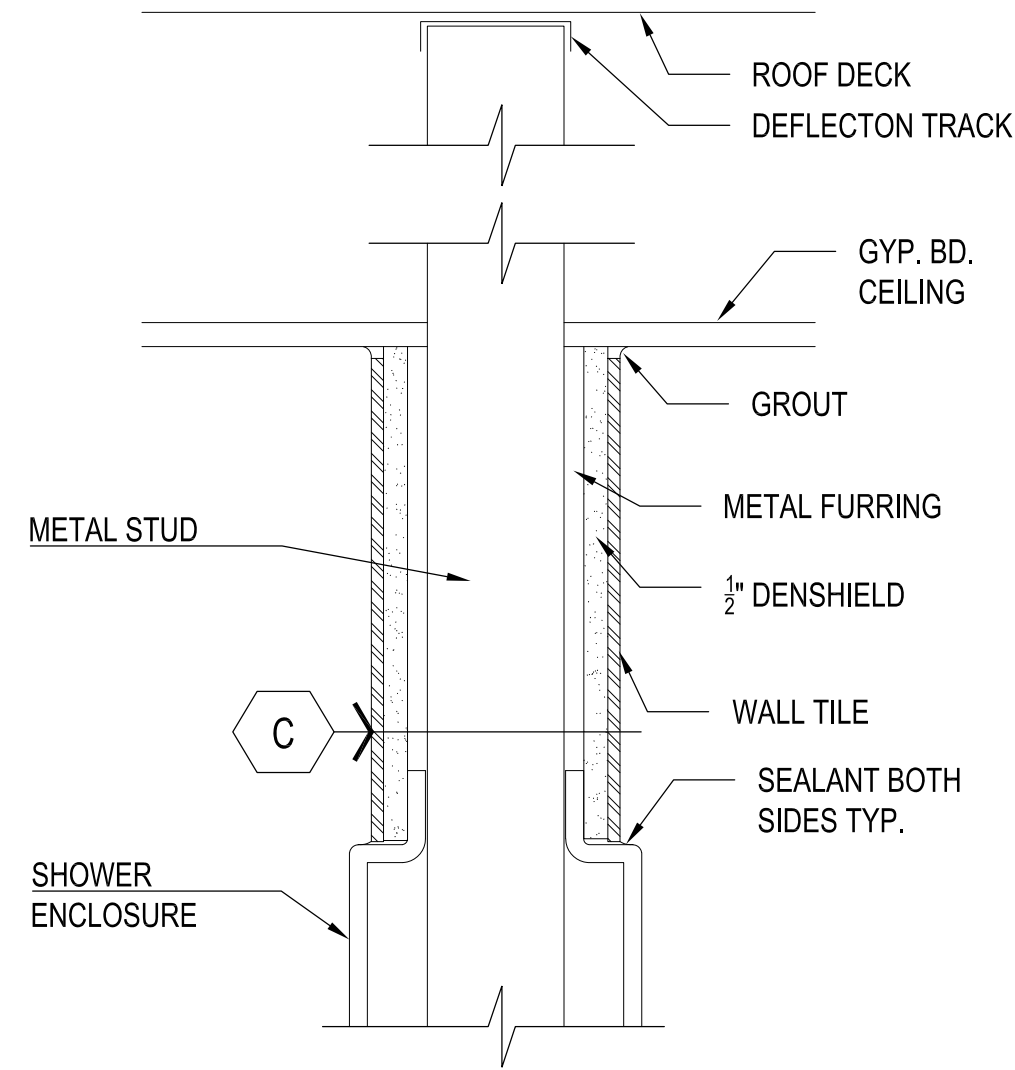
3 LOCKER ROOM SECTION DETAIL AT BENCH / LOCKER  
A6.0 SCALE: 1 1/2" = 1'-0" DTLS.DWG



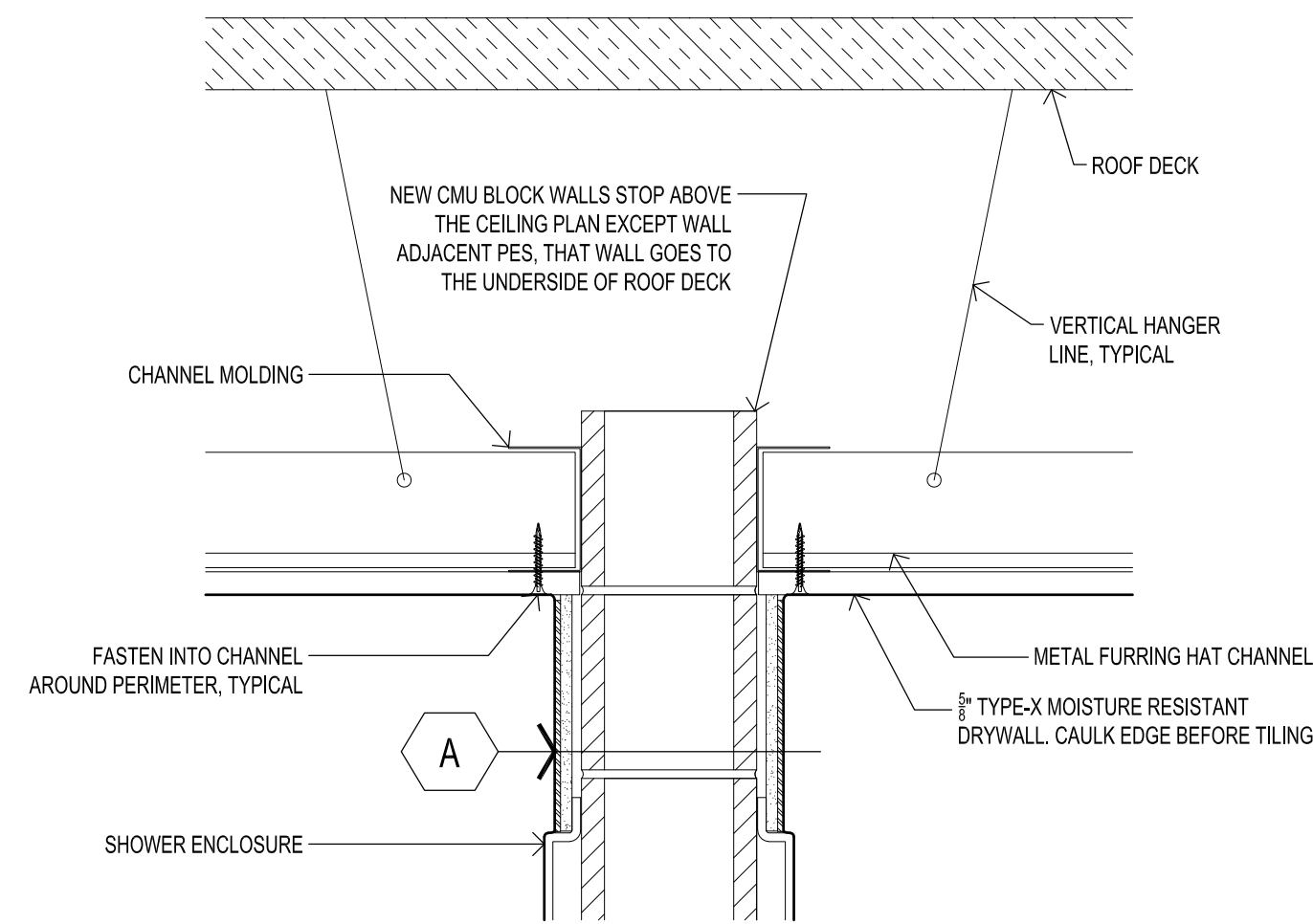
4 SHOWER ENCLOSURE: WALL DETAIL  
A6.0 SCALE: 3" = 1'-0"



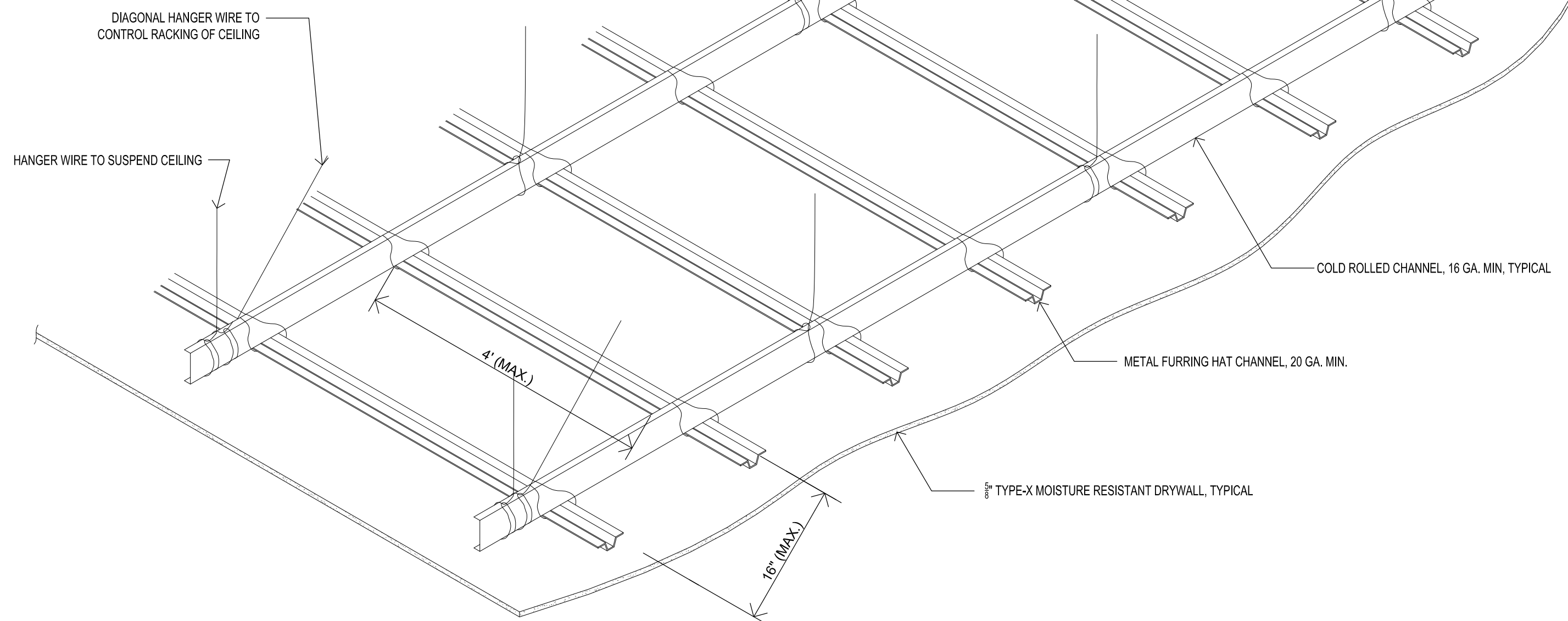
5 SHOWER ENCLOSURE: FLOOR DETAIL  
A6.0 SCALE: 3" = 1'-0"



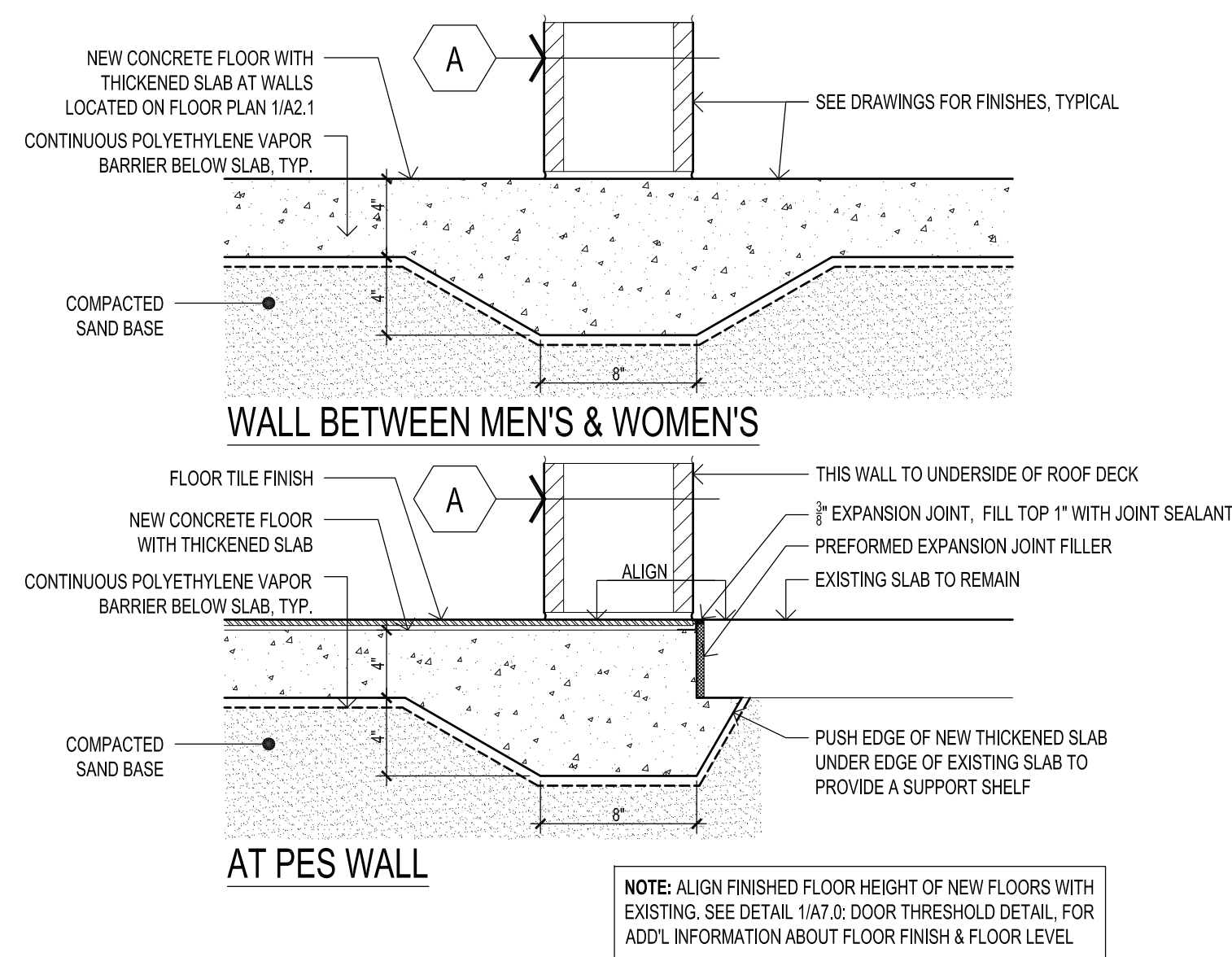
6 SHOWER ENCLOSURE: WALL & CEILING DETAIL  
A6.0 SCALE: 3" = 1'-0"



7 HARD CEILING PERIMETER DETAIL  
A6.0 SCALE: 1 1/2" = 1'-0" DTLS.DWG

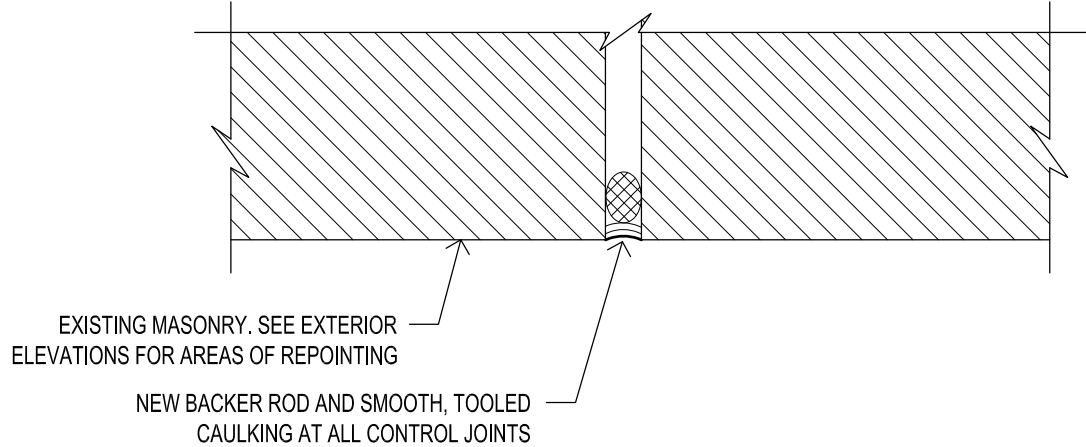


2 HARD CEILING DETAIL  
A6.0 SCALE: 1 1/2" = 1'-0" DTLS.DWG



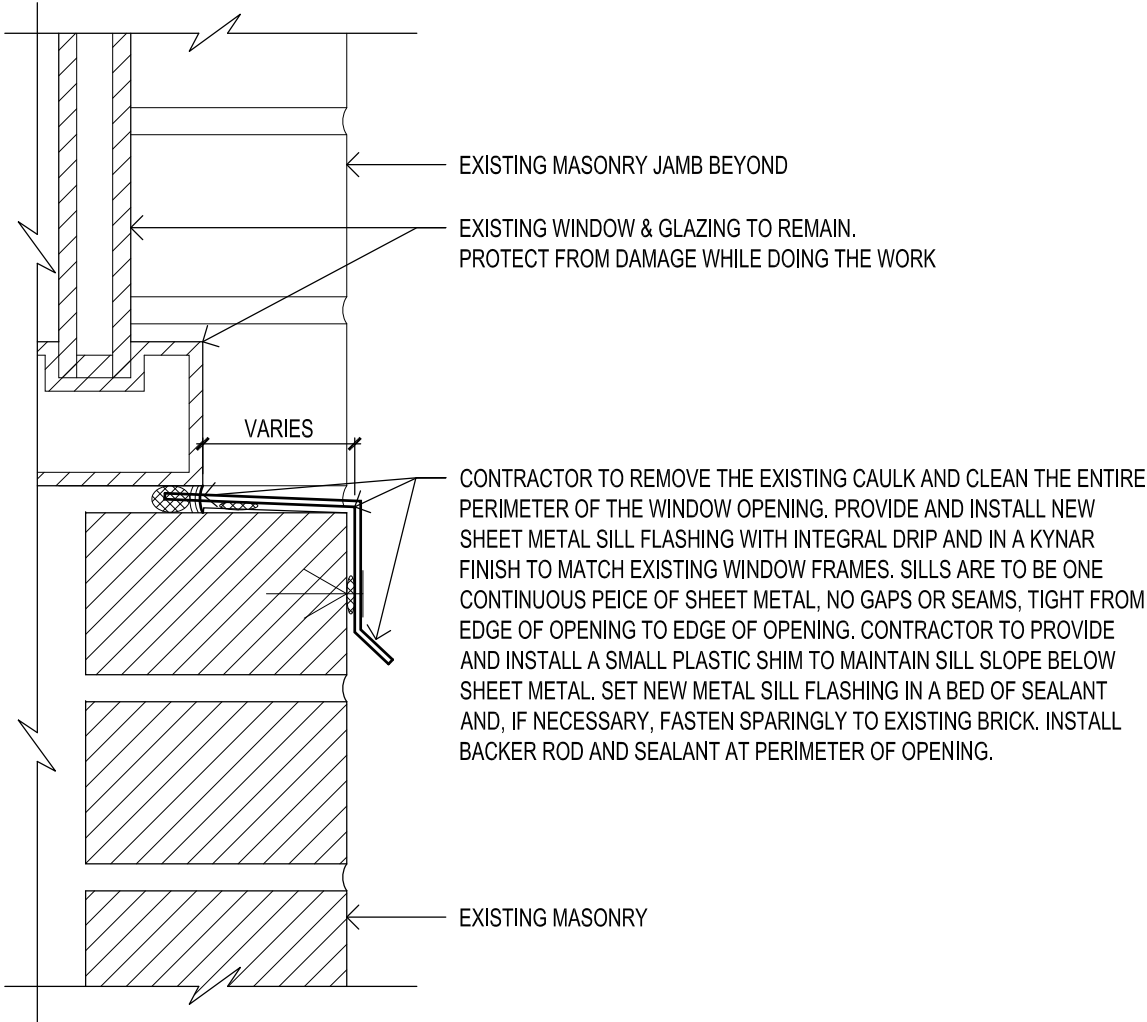
1 TYPICAL FLOOR SLAB & THICKENED FOOTING DETAILS  
A6.0 SCALE: 1 1/2" = 1'-0" DTLS.DWG



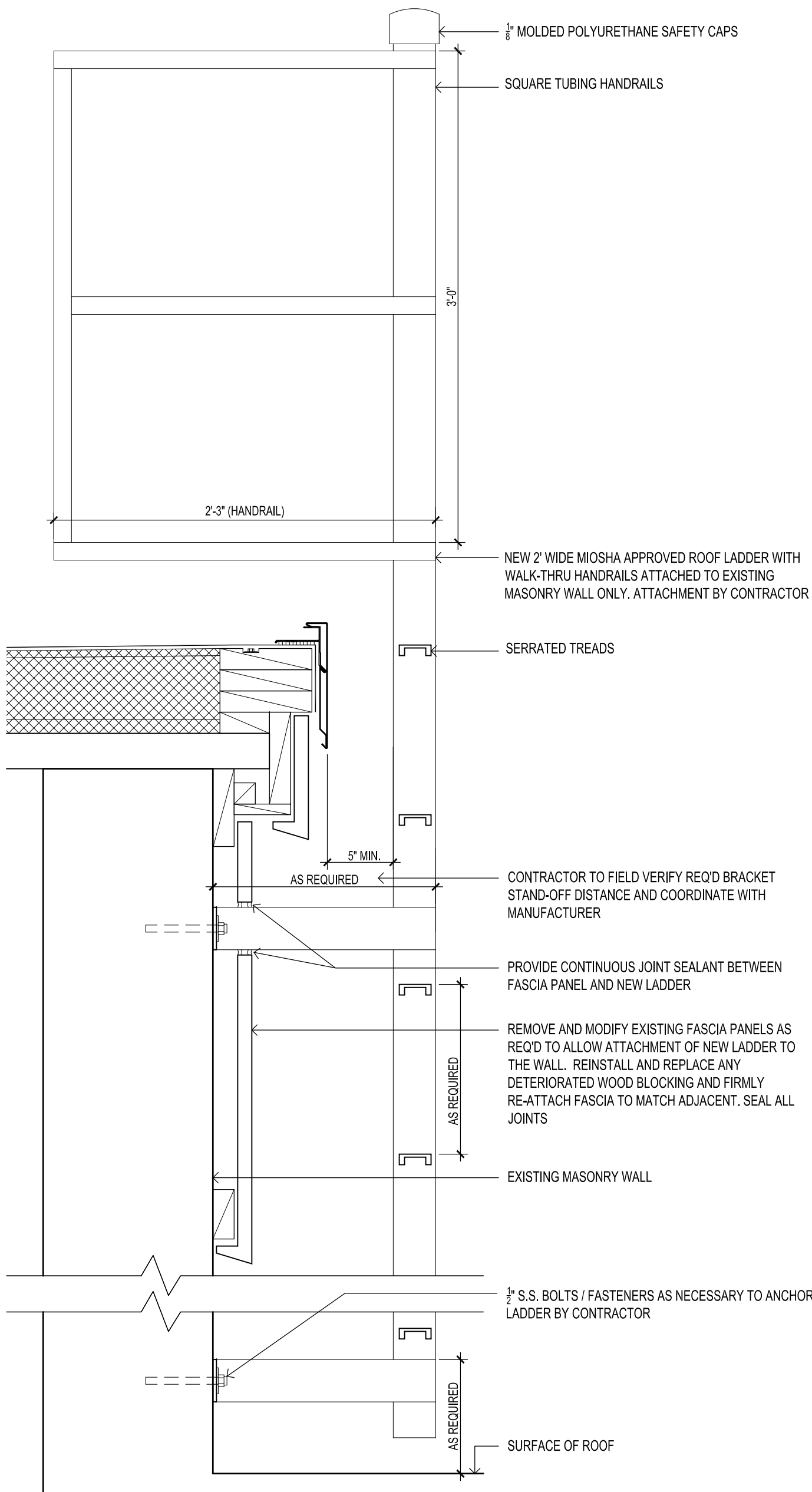


NOTES:  
- POWER-WASH AND CLEAN EXISTING MASONRY  
- REMOVE OLD CAULKING, BACKER ROD AND CLEAN ALL CONTROL JOINTS IN PREPARATION FOR NEW

3 TYPICAL CONTROL JOINT DETAIL  
A6.1 SCALE: 3" = 1'-0"



2 TYPICAL WINDOW SILL DETAIL  
A6.1 SCALE: 3" = 1'-0"



1 SECTION DETAIL AT ROOF LADDER  
A6.1 SCALE: 1 1/2\"/>

DOOR SCHEDULE

| LOCATION |               |               | QTY. | HAND | LABEL | FRAMES |       |        |           | DETAILS |        |        | DOORS |      |               |      |        | HARDWARE |     | REMARKS                           |  |
|----------|---------------|---------------|------|------|-------|--------|-------|--------|-----------|---------|--------|--------|-------|------|---------------|------|--------|----------|-----|-----------------------------------|--|
| NUMBER   | FROM          | TO            |      |      |       | GAUGE  | ELEV  | DEPTH  | WALL TYPE | HEAD    | JAMB   | SILL   | GAUGE | TYPE | SIZE          | CORE | FINISH | HDWE.    | GRP |                                   |  |
| 136B     | CORRIDOR      | LACTATION     | -    | -    | -     | -      | -     | -      | -         | -       | -      | -      | -     | -    | -             | -    | -      | 2        | -   | NEW MORTISE LOCK IN EXISTING DOOR |  |
| 158      | DRILL HALL    | MENS BATHRM   | 1    | L.H. | 3/4HR | 16     | 7'-4" | 6"     | CMU       | 2/A7.0  | 2/A7.0 | 1/A7.0 | 16    | F    | 3'-0" X 7'-0" | SDC  | PTD    | 1        | -   |                                   |  |
| 159      | DRILL HALL    | WOMENS BATHRM | 1    | R.H. | 3/4HR | 16     | 7'-4" | 6"     | CMU       | 2/A7.0  | 2/A7.0 | 1/A7.0 | 16    | F    | 3'-0" X 7'-0" | SDC  | PTD    | 1        | -   |                                   |  |
| 164      | MENS BATHRM   | MENS LOCKER   | 1    | R.H. | -     | 16     | 7'-4" | 7 3/4" | CMU       | 4/A7.0  | 4/A7.0 | 3/A7.0 | 16    | F    | 3'-0" X 7'-0" | SDC  | PTD    | 1        | -   |                                   |  |
| 164B     | PES           | MENS LOCKER   | 1    | R.H. | -     | 16     | 7'-4" | 6"     | CMU       | 2/A7.0  | 2/A7.0 | 1/A7.0 | 16    | L    | 3'-0" X 7'-0" | SDC  | PTD    | 1        | -   |                                   |  |
| 165      | WOMENS BATHRM | WOMENS LOCKER | 1    | L.H. | -     | 16     | 7'-4" | 7 3/4" | CMU       | 4/A7.0  | 4/A7.0 | 3/A7.0 | 16    | F    | 3'-0" X 7'-0" | SDC  | PTD    | 1        | -   |                                   |  |
| 165B     | PES           | WOMENS LOCKER | 1    | L.H. | -     | 16     | 7'-4" | 6"     | CMU       | 2/A7.0  | 2/A7.0 | 1/A7.0 | 16    | L    | 3'-0" X 7'-0" | SDC  | PTD    | 1        | -   |                                   |  |
| 166      | CORRIDOR      | PES           | 1    | L.H. | 3/4HR | 16     | 7'-4" | 5 5/8" | CMU       | 6/A7.0  | 6/A7.0 | 5/A7.0 | 16    | F    | 3'-0" X 7'-0" | SDC  | PTD    | 1        | -   |                                   |  |
| 166B     | CORRIDOR      | PES           | 1    | R.H. | 3/4HR | 16     | 7'-4" | 5 5/8" | CMU       | 6/A7.0  | 6/A7.0 | 5/A7.0 | 16    | F    | 3'-0" X 7'-0" | SDC  | PTD    | 1        | -   |                                   |  |

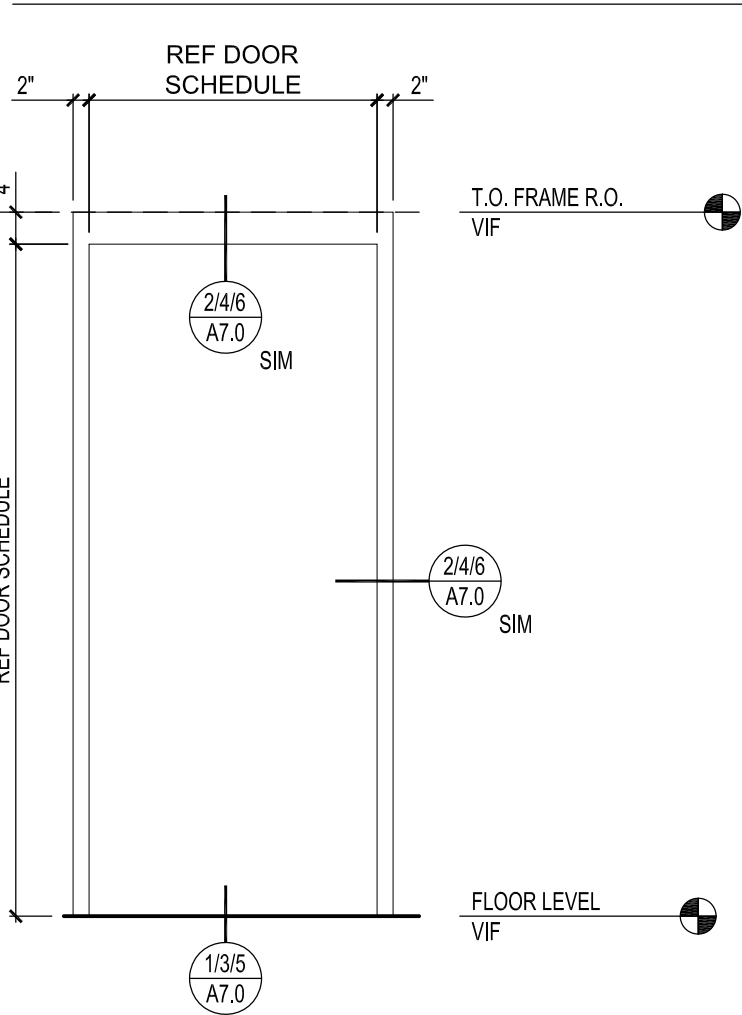
**LEGEND**

|           |                      |
|-----------|----------------------|
| ALUM      | ALUMINUM             |
| CLR       | CLEAR                |
| PTD       | PAINT                |
| STL       | STEEL                |
| WD        | WOOD                 |
| GLASS     | GLASS                |
| SDC       | SOUND DEADENING CORE |
| NA        | NOT APPLICABLE       |
| SS        | STAINLESS STEEL      |
| PR        | PAIR (DOUBLE DOOR)   |
| HDWE. GRP | HARDWARE GROUP       |

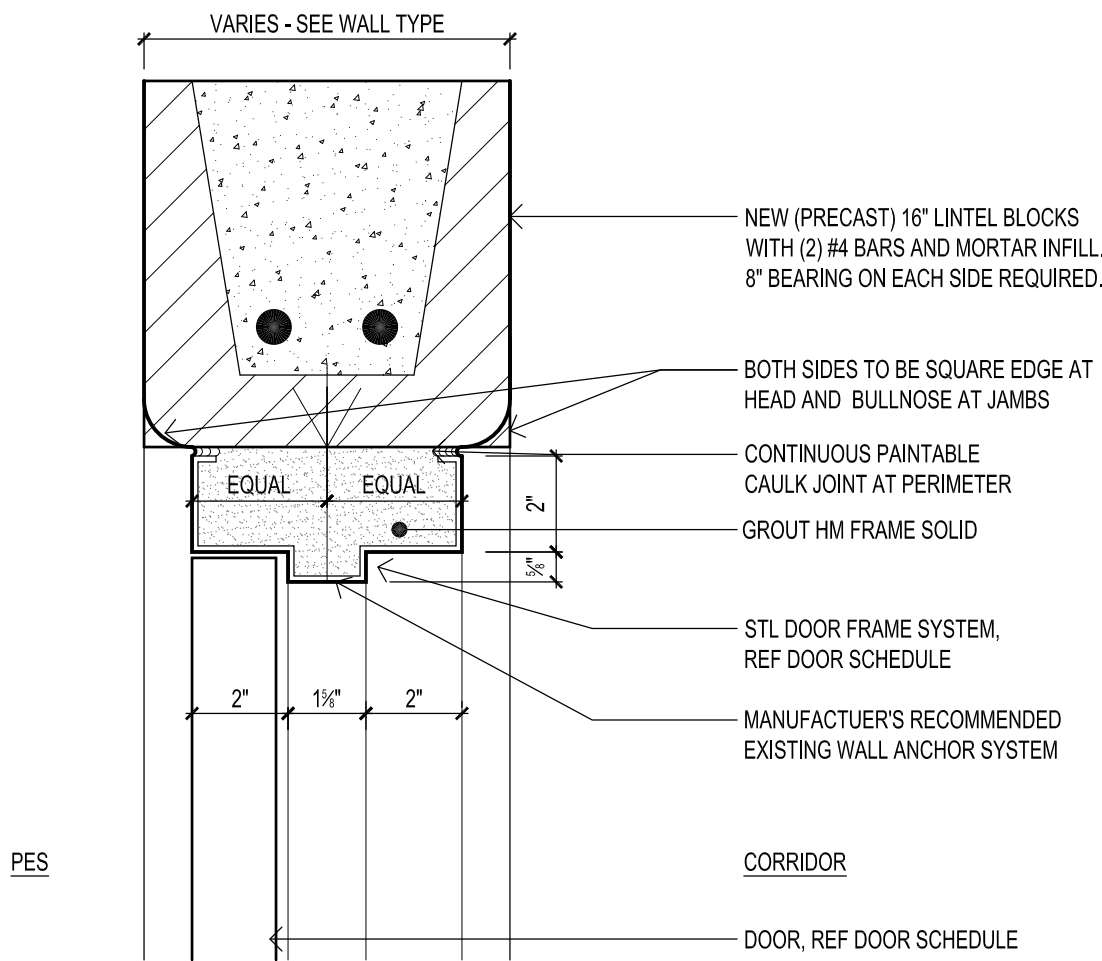
**GENERAL NOTES**

1. DOOR UNDERCUTS TO BE 1/4" MINIMUM TO 1/2" MAXIMUM ABOVE SURFACE OF FINISH MATERIAL U.N.O., GENERAL CONTRACTOR TO COORDINATE

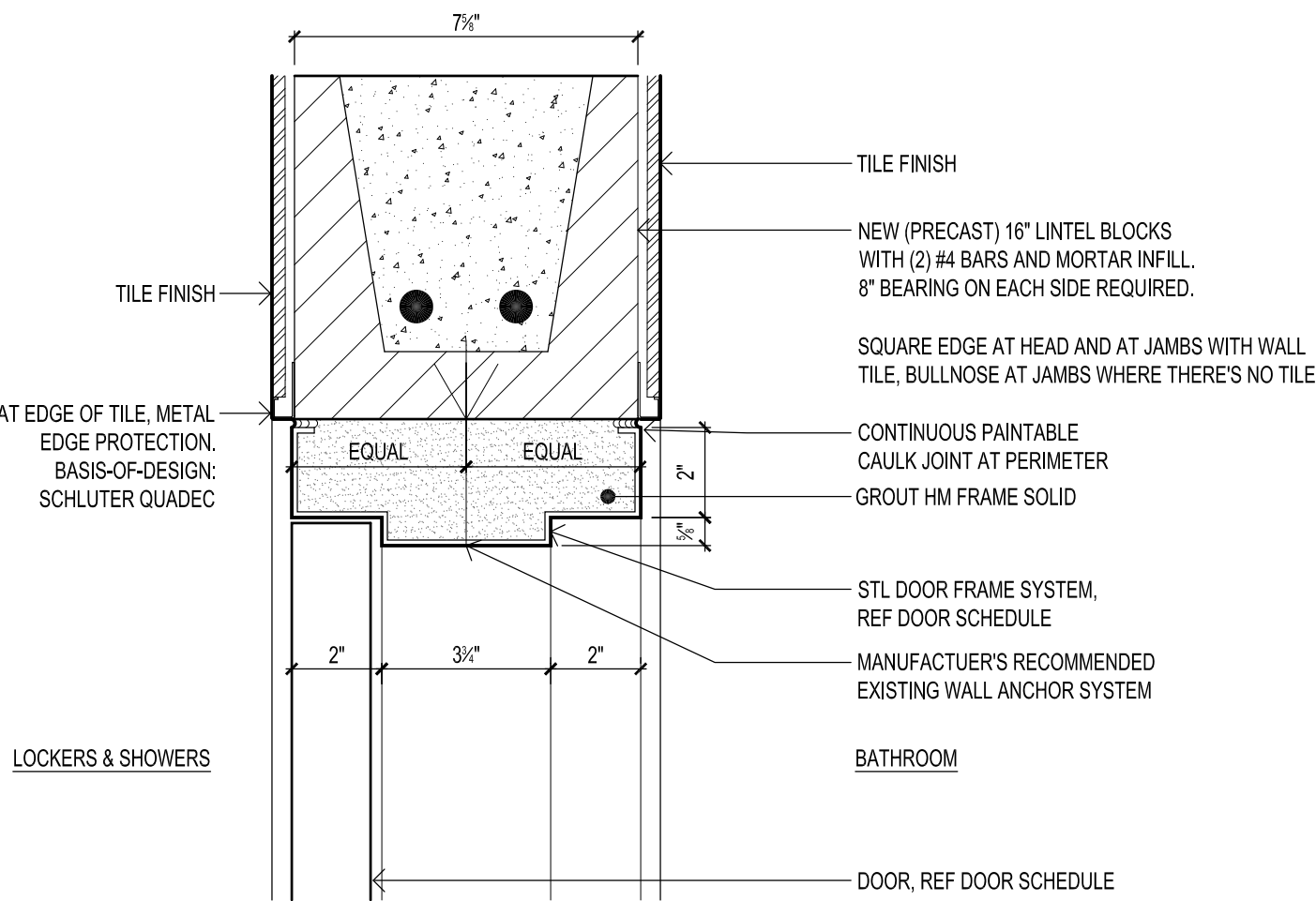
DOOR FRAME TYPES



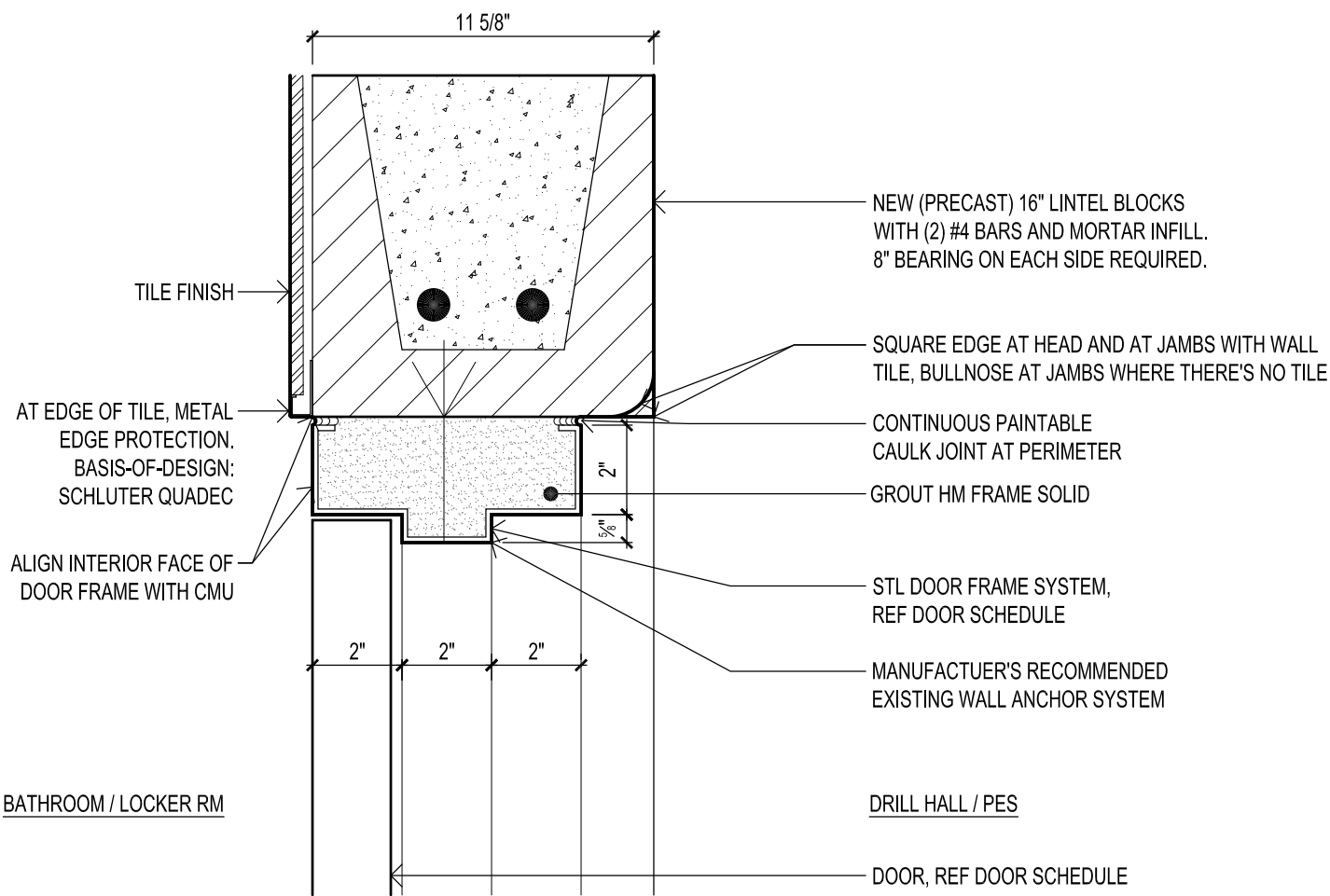
FA



6  
A7.0  
SCALE: 3" = 1'-0"  
DTLS.DWG

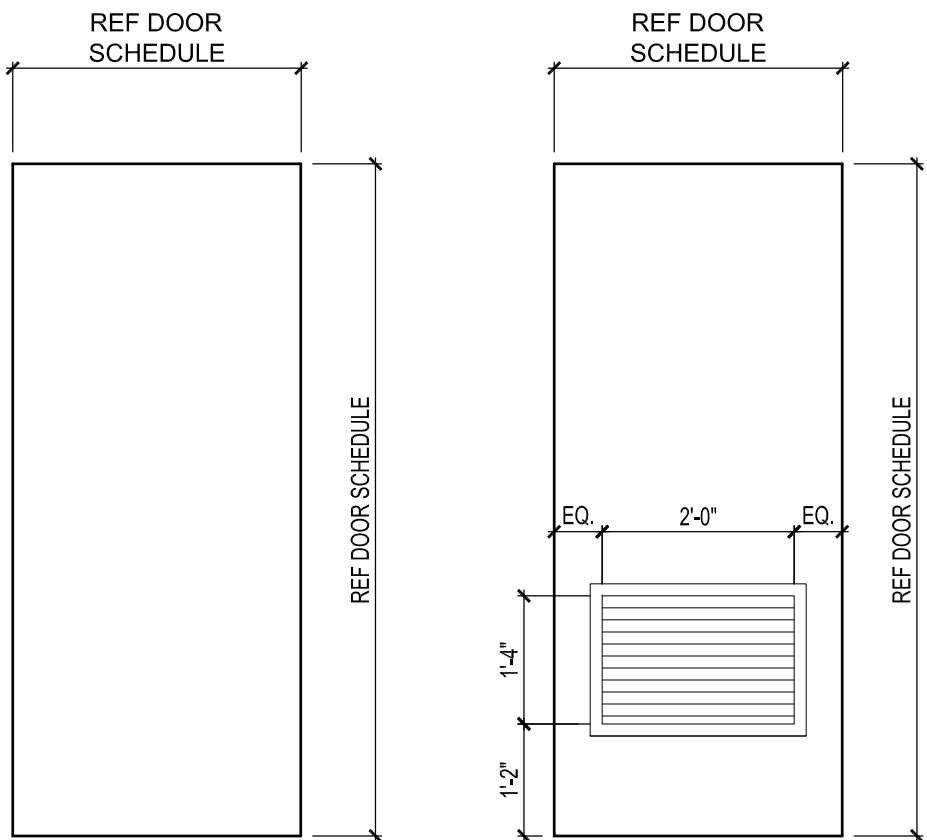


4  
A7.0  
SCALE: 3" = 1'-0"  
DTLS.DWG



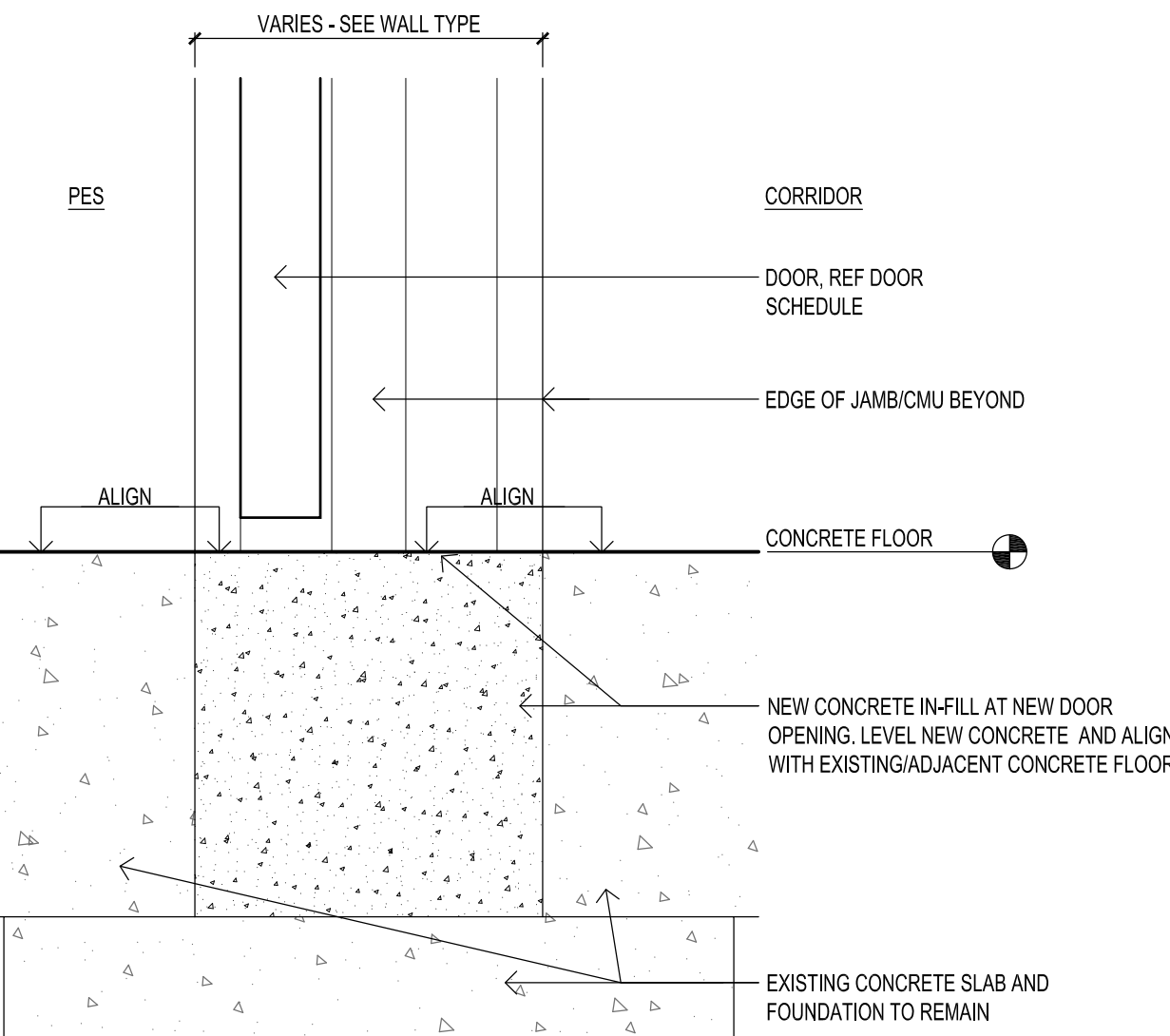
2  
A7.0  
SCALE: 3" = 1'-0"  
DTLS.DWG

DOOR TYPES

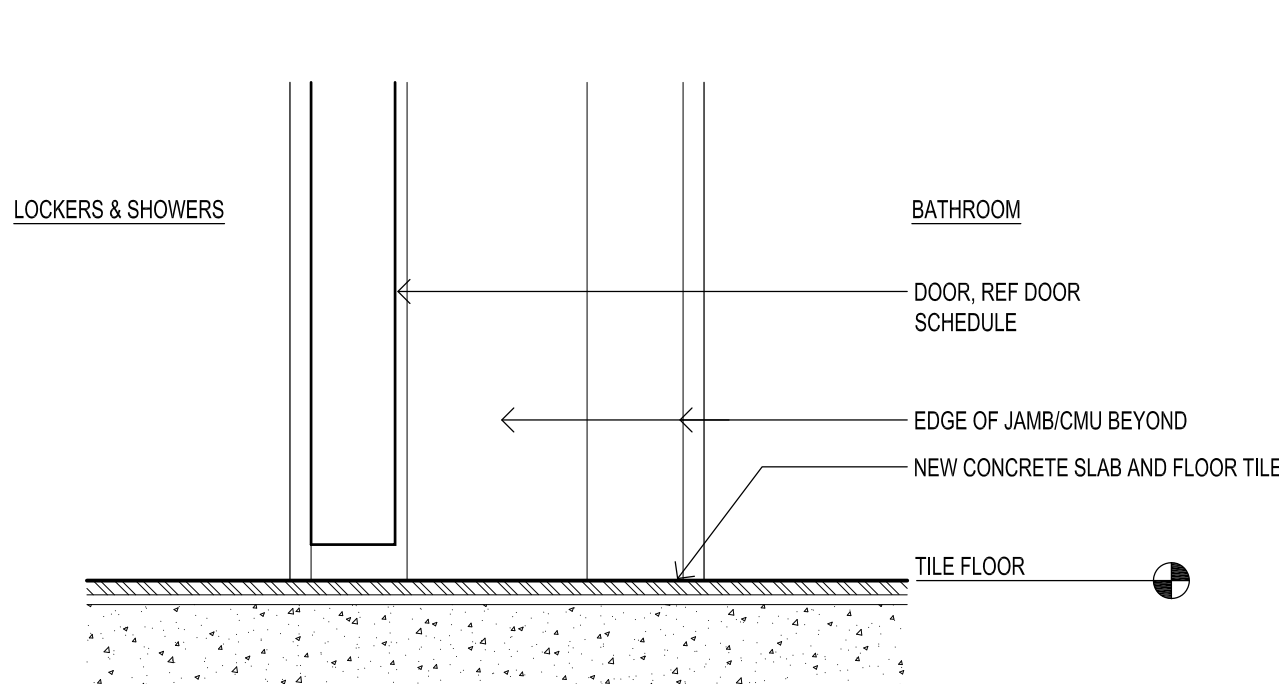


F

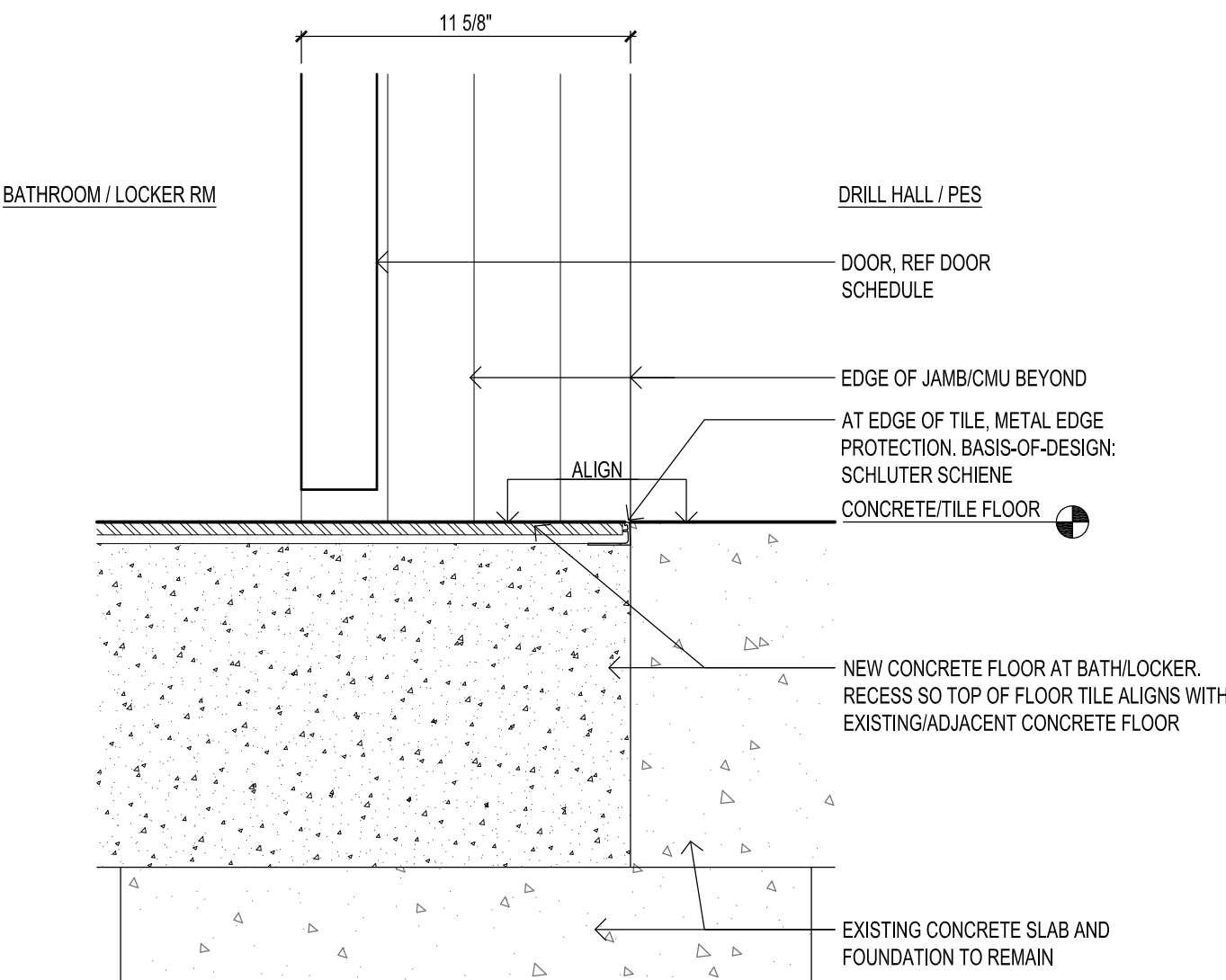
L



5  
A7.0  
SCALE: 3" = 1'-0"  
DTLS.DWG



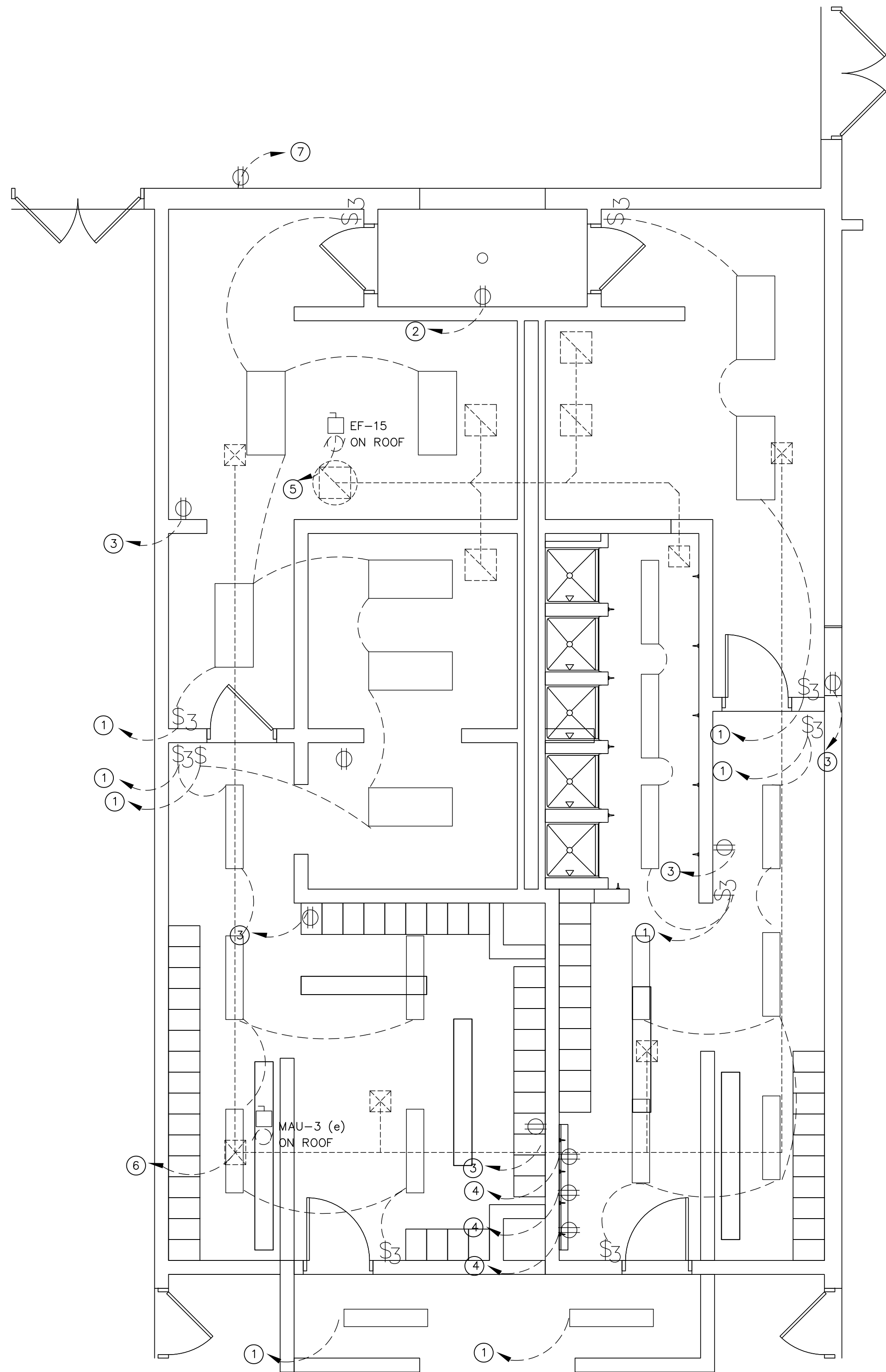
3  
A7.0  
SCALE: 3" = 1'-0"  
DTLS.DWG



1  
A7.0  
SCALE: 3" = 1'-0"  
DTLS.DWG

DOORS & DOOR FRAME NOTES:

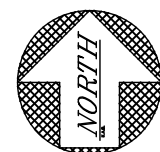
1. ALL DOOR FRAMES AND DOORS ARE TO BE PAINTED EXCEPT DOOR 136B WHICH IS WOOD AND IS TO REMAIN. PAINT ALL OTHER DOOR FRAMES AND DOORS TO MATCH THE REMAINDER OF THE BUILDING.
2. DOORS 129, 130, 136B, 158, 159, 164, 164B, 165, 165B, 166, & 166B ARE TO RECEIVE NEW DOOR SIGNAGE
3. ALL EXISTING EXTERIOR DOORS ARE TO RECEIVE NEW DOOR SEALS COMPARABLE & COMPATIBLE FOR USE ON THE EXISTING DOORS.



LATRINE ELECTRICAL DEMO

AREA OF WORK #3

SCALE 1/4" = 1'-0"



AREA OF WORK #3-ELECTRICAL DEMO

- 1 EXISTING 277V CIRCUIT TO PANEL L1-5 IN BOILER ROOM
- 2 EXISTING 120V CIRCUIT TO PANEL R1-24 IN BOILER ROOM
- 3 EXISTING 120V CIRCUIT TO PANEL R1-25 IN BOILER ROOM
- 4 EXISTING 120V CIRCUIT TO PANEL R1-21 IN BOILER ROOM
- 5 EXISTING 120V CIRCUIT TO PANEL P1-5 IN BOILER ROOM
- DISCONNECT EXISTING EF-15, REUSE CIRCUIT FOR NEW FAN

NEW AREA OF WORK #3-ELECTRICAL

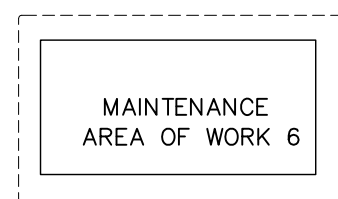
- 1 REUSE EXISTING LIGHTING CIRCUIT L1-5
- 2 EXISTING OUTLET TO R2-11, CHANGE TO G.F.I. RECEPTACLE
- 3 REUSE EXISTING CIRCUIT R1-21, OUTLETS TO BE G.F.I., 42"
- 4 REUSE EXISTING CIRCUIT P1-17, HAND DRYER AT 45" A.F.F.
- 5 REUSE EXISTING CIRCUIT R1-25, OUTLETS TO BE G.F.I. ABOVE COUNTER (42")
- 6 EXISTING MAU TO REMAIN
- 7 REUSE DEMOLISHED FIXTURES (W/OCC SENSORS) CIRCUIT L1-5
- 8 REUSE EXISTING CIRCUIT R1-24, OUTLETS TO BE G.F.I., 42"
- 9 INSTALL NEW CIRCUIT TO P1-15, HAND DRYER AT 45" A.F.F.
- 10 INSTALL NEW CIRCUIT TO R1-26, G.F.I. RECEPT 16" A.F.F.
- 11 INSTALL L4 LIGHTS AT 7'-6" A.F.F., CENTER ON SINKS
- 12 INSTALL L4 LIGHT AT 7'-6" A.F.F., CENTER ON COUNTER

SEE AREA OF WORK #1 FOR PANEL LOCATIONS

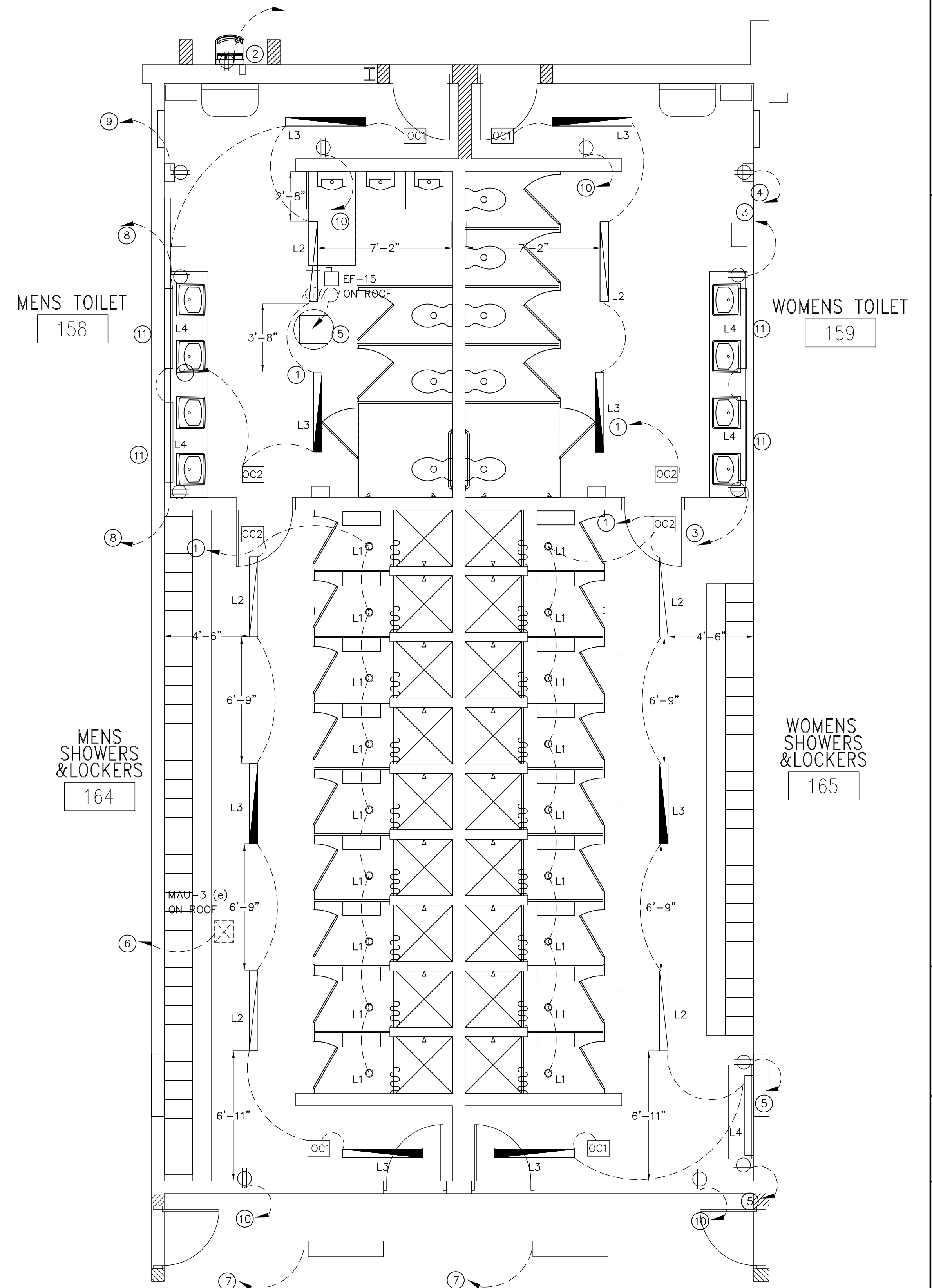
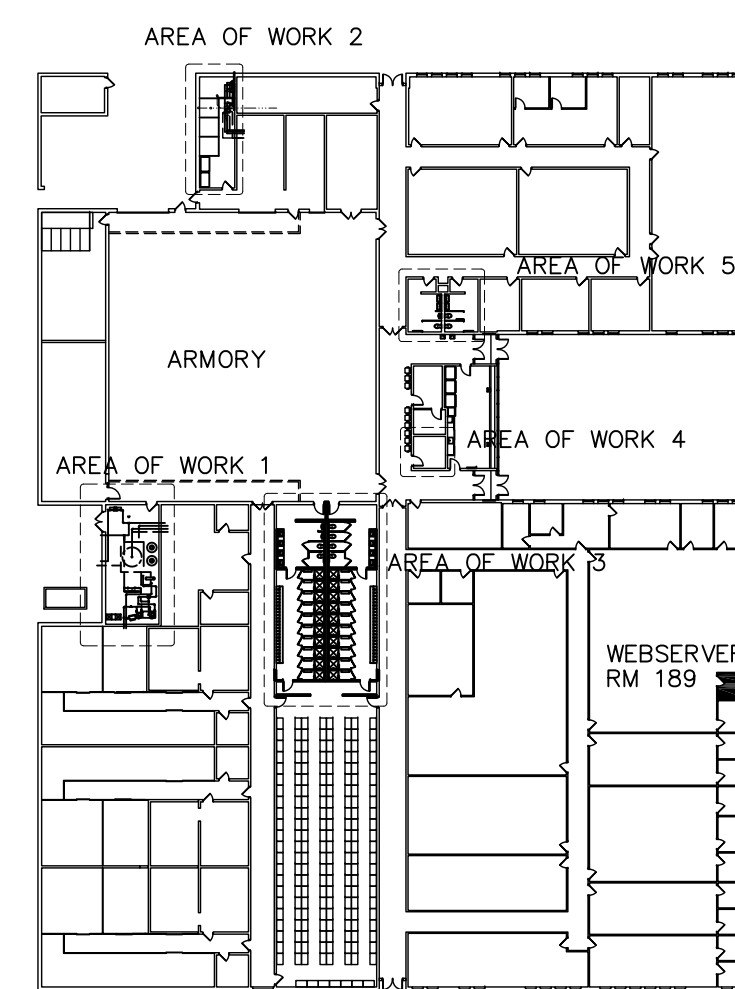
SEE SHEET E4 FOR LIGHT SCHEDULE

OC1 DUAL TECHNOLOGY OCCUPANCY SENSOR, 500 SQ FT COVERAGE, 24VDC  
2 SETS OF CONTACTS, 1 FOR LIGHTING, 1 FOR MECHANICAL

OC2 DUAL TECHNOLOGY OCCUPANCY SENSOR, 500 SQ FT COVERAGE, 24VDC



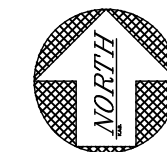
AREAS OF WORK

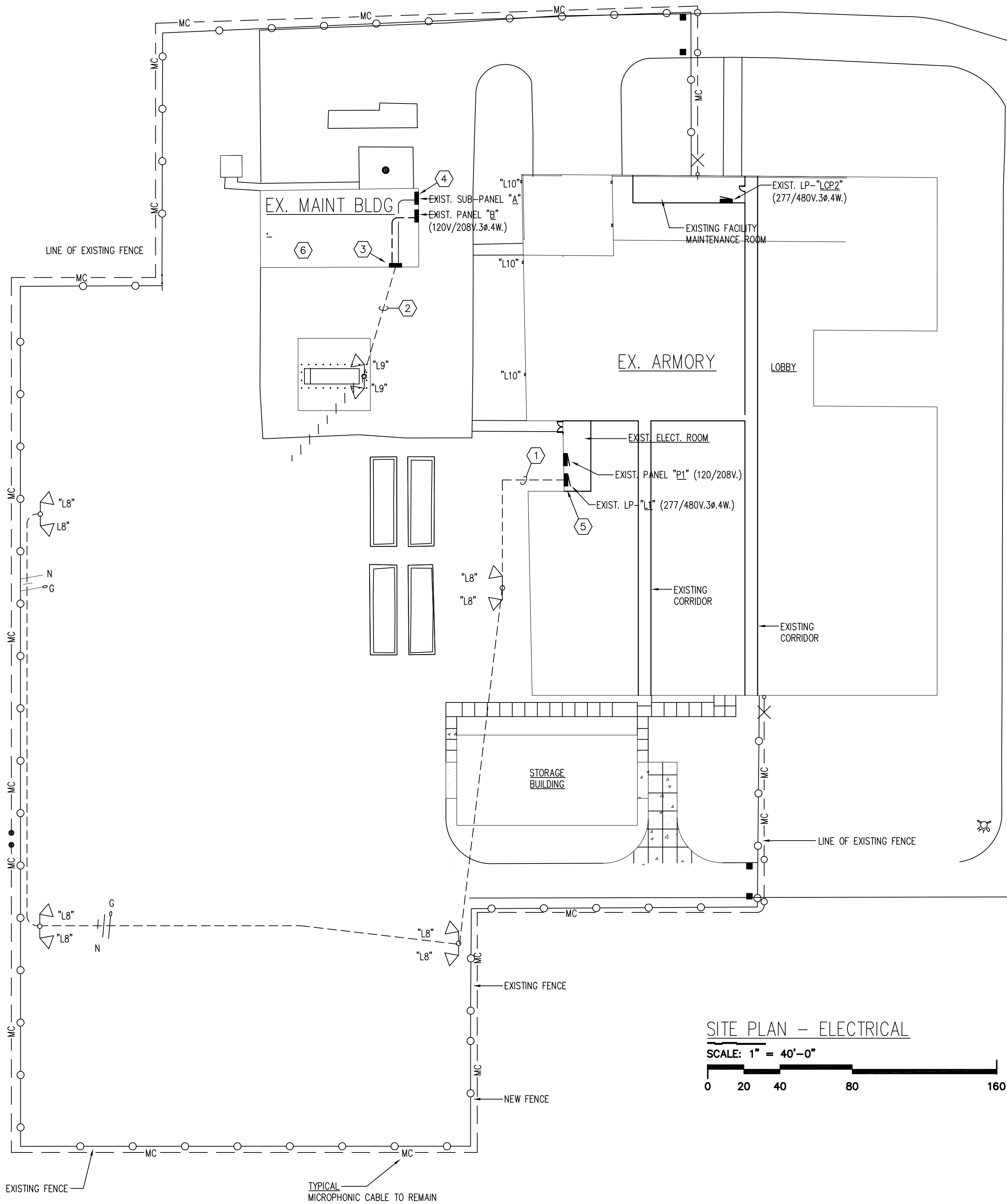


LATRINE ELECTRICAL PLAN

AREA OF WORK #3

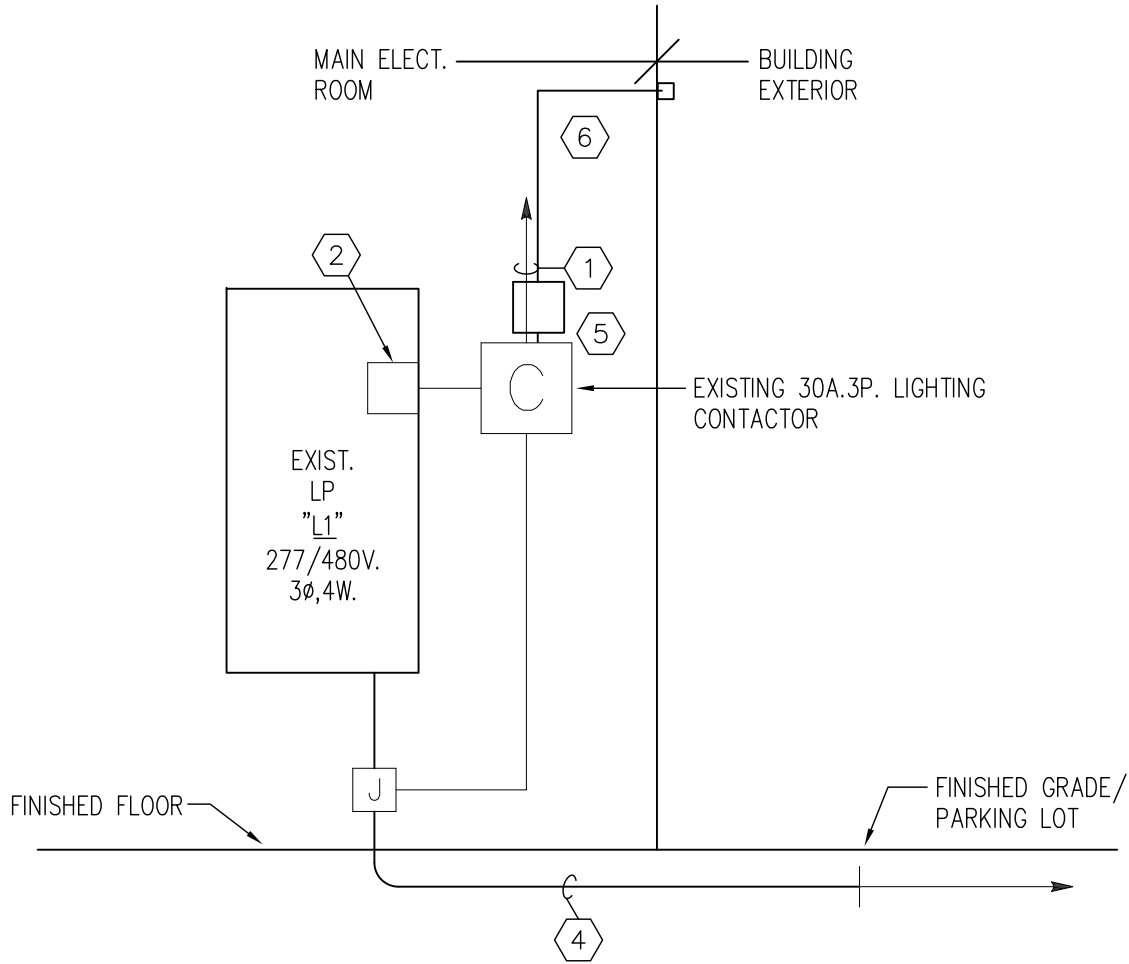
SCALE 1/4" = 1'-0"





KEY NOTES:

- 1 EXISTING 3#8 & 1#8GRD., 1" C. (2-277V.30A. BRANCH CIRCUITS) RUN THRU NEW 30A.3P. ELECTRICALLY OPERATED/ELECTRICALLY HELD LIGHTING CONTACTOR TO NEW 30A.2P. CIRCUIT BREAKER IN EXISTING LP--"L1".
- 2 EXISTING UNDERGROUND POWER & DATA/SIGNAL CONDUITS TO FUEL DISPENSING STATION
- 3 LOCATION OF EXISTING UNDERGROUND FUEL TANK LEAK DETECTION SYSTEM ALARM PANEL AND 30A.208V. DISC.
- 4 EXISTING CIRCUIT FOR LIGHT TYPE "L9" AT FUEL ISLAND
- 5 EXISTING SECURITY PANEL TO REMAIN WIRE AROUND PANEL FOR NEW UPDATED LIGHTING
- 6 SEE MAINTENANCE BUILDING ELECTRICAL PLAN FOR NEW BUILDING MOUNTED LIGHTS "



MODIFIED LOT LIGHTING CONTROL DIAGRAM

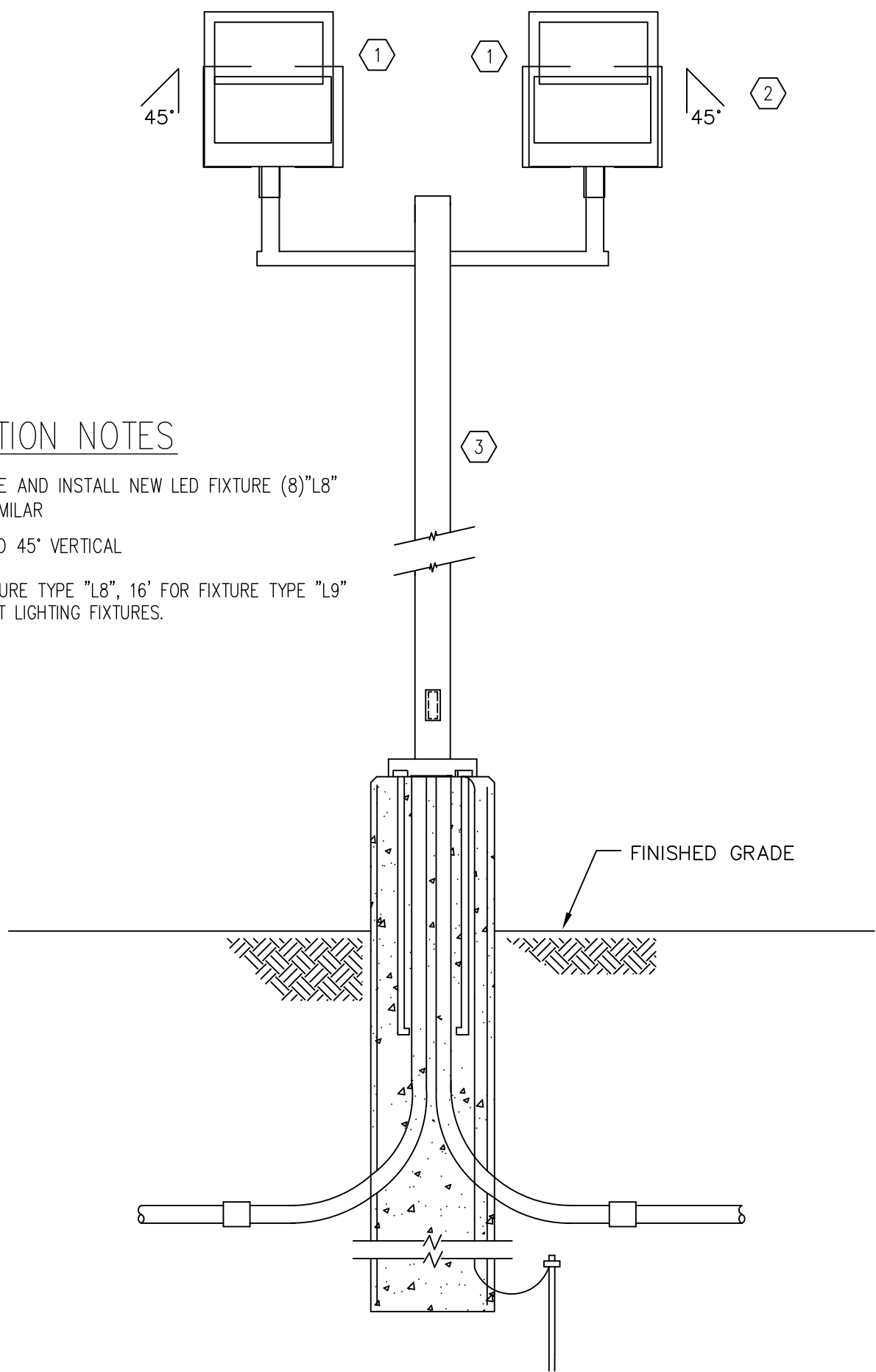
NO SCALE

DIAGRAM KEY NOTES:

- 1 EXISTING "DARK" LIGHTING CONTROL PANEL, LEAVE IN PLACE
- 2 EXISTING 30A.2P. BRANCH CIRCUIT BREAKER IN EXISTING PANEL .
- 3 EXISTING BELOW GRADE CONDUIT WITH EXISTING LIGHTING CONDUCTORS
- 4 EXISTING 3#8 & 1#8 GRD., 1" C. (2-277V.30A. CKTS.)
- 5 "ON"/"OFF" OVERRIDE

LITE POLE MODIFICATION NOTES

- 1 REMOVE EXISTING QUARTZ FIXTURE AND INSTALL NEW LED FIXTURE (8)"L8" FIXTURE TYPE (2)"L9" MOUNTS SIMILAR
- 2 TILT LIGHTING 45° HORIZONTAL AND 45° VERTICAL
- 3 EXISTING ROUND POLE, 30' FOR FIXTURE TYPE "L8", 16' FOR FIXTURE TYPE "L9" EXISTING CONDUITS TO PARKING LOT LIGHTING FIXTURES.

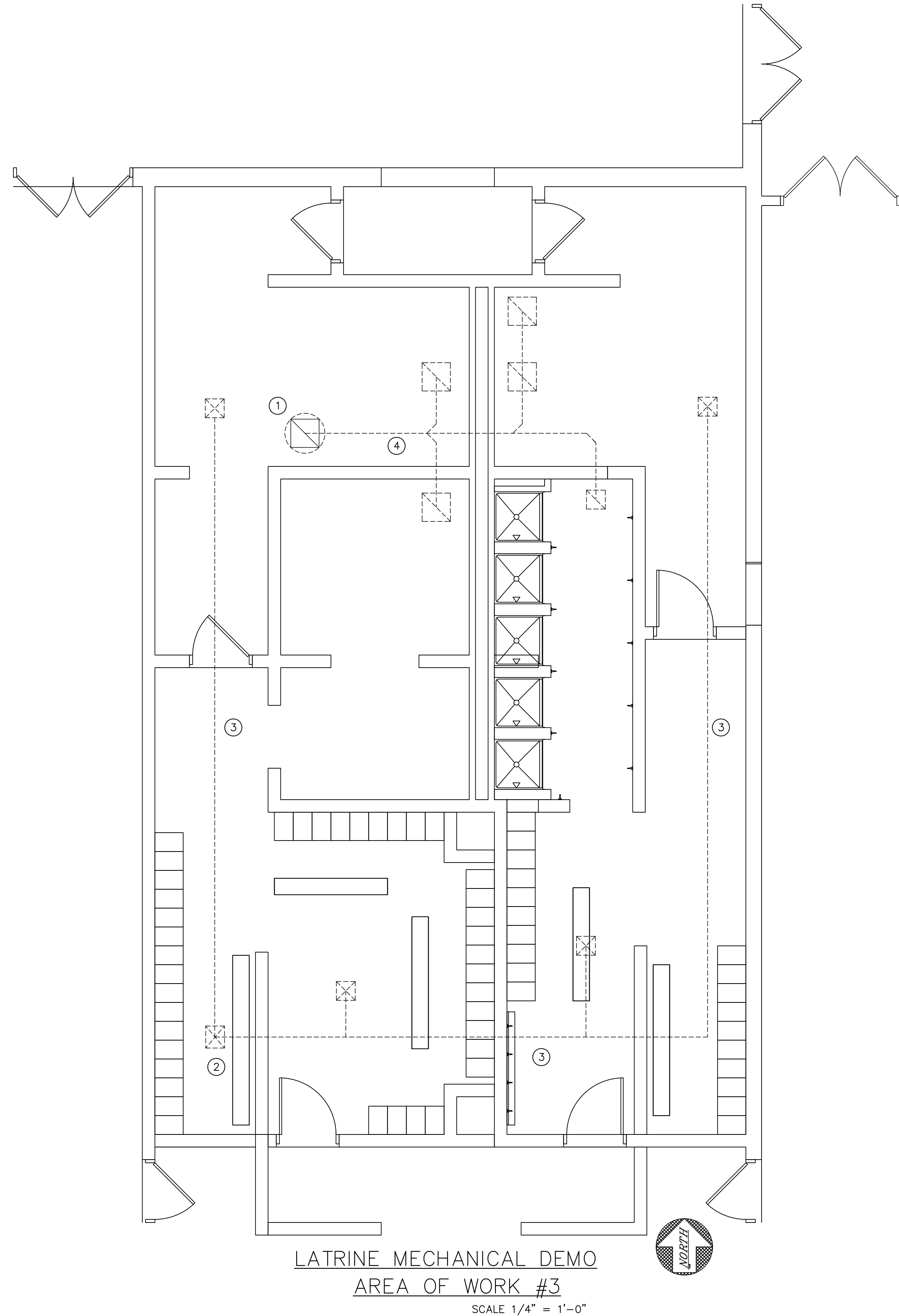


DETAIL OF LIGHTING FIXTURE TYPE "L8"  
(TYPE "L9" SIMILAR)  
NOT TO SCALE

LIGHTING FIXTURE SCHEDULE

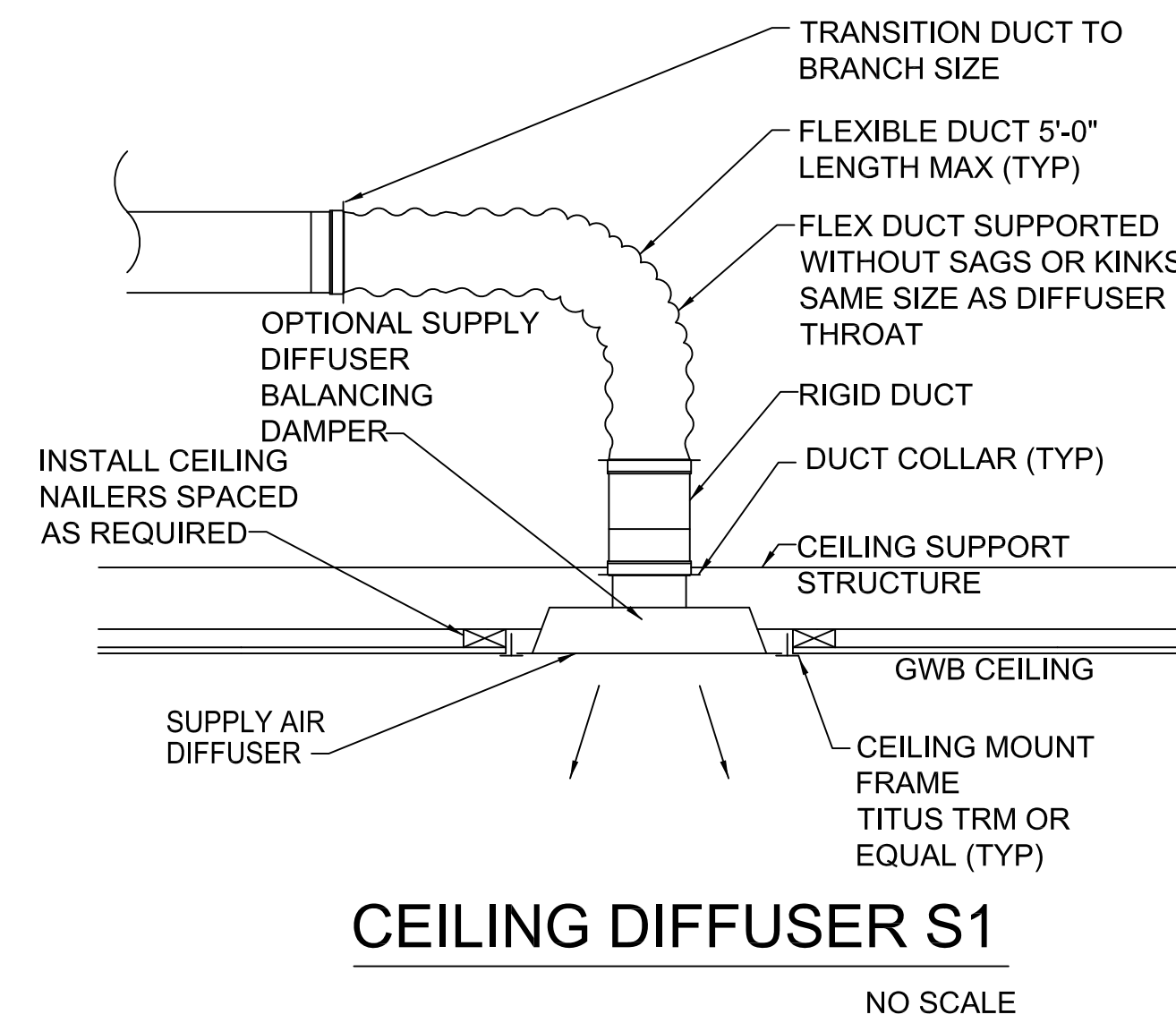
| MARK | DESCRIPTION                    | LUMENS | WATTS | DISTRIBUTION      | COLOR | VOLTS   | FUSE   | MOUNT                 | FIXTURE COLOR | MFG NUMBER <sup>1</sup>                                 | OPTIONS | MFG      |
|------|--------------------------------|--------|-------|-------------------|-------|---------|--------|-----------------------|---------------|---|---------|----------|
| L1   | LED ROUND                      | 850    | 11    | DOWNLIGHT         | 5000K | 120     | SINGLE | CEILING               | WHITE         | WF4C RD TUWH MW M6                                      |         | JUNO     |
| L2   | LED STRIP-RECESSED             | 3199   | 25    | DOWNLIGHT         | 5000K | 120-277 | SINGLE | CEILING               | WHITE         | LSIX 4FT 3000LM 80CRI 50K FFR SWL MVOLT MW              |         | LITHONIA |
| L3   | LED STRIP-RECESSED-EMERGENCY   | 3199   | 25    | DOWNLIGHT         | 5000K | 120-277 | SINGLE | CEILING               | WHITE         | LSIX 4FT 3000LM 80CRI 50K FFR SWL MVOLT E10WLCP MW      |         | LITHONIA |
| L4   | LED WALL                       | 2410   | 19    | DOWNLIGHT         | 5000K | 120-277 | SINGLE | WALL/WALL BRACKET     | WHITE         | WL4 20L MVOLT LP850                                     |         | LITHONIA |
| L5   | LED STRIP-LOW BAY 4'           | 4082   | 31    | DOWNLIGHT         | 5000K | 120-277 | SINGLE | WALL W/SWIVEL HANGAR  | WHITE         | UFIT L48 4000LM SEF MVOLT 50K 80CRI WH SQ               |         | LITHONIA |
| L6   | LED STRIP-LOW BAY 4'-EMERGENCY | 4082   | 31    | DOWNLIGHT         | 5000K | 120-277 | SINGLE | WALL W/SWIVEL HANGAR  | WHITE         | UFIT L48 4000LM SEF MVOLT 50K 80CRI WH SQ ILB-CP10-HE-A |         | LITHONIA |
| L7   | LED STRIP-LOW BAY 8'           | 8163   | 61    | DOWNLIGHT         | 5000K | 120-277 | SINGLE | WALL W/SWIVEL HANGAR  | WHITE         | UFIT L96 8000LM SEF MVOLT 50K 80CRI WH SQ               |         | LITHONIA |
| L8   | LED FLOOD                      | 63,900 | 483   | AREA WIDE FORWARD | 5000K | 120-277 | SINGLE | ADJUSTABLE SLIPFITTER | DARK BRONZE   | RSXF4 LED P5 50K AWFV MVOLT IS SF DOBXD                 |         | LITHONIA |
| L9   | LED FLOOD                      | 9843   | 72    | R3                | 5000K | 120-277 | SINGLE | ADJUSTABLE SLIPFITTER | DARK BRONZE   | RSX1 LED P2 50K R3 MVOLT IS SF DOBXD                    |         | LITHONIA |
| L10  | LED WALL                       | 9214   | 78    | R3                | 5000K | 120-277 | SINGLE | WALL                  | DARK BRONZE   | TWH LED AL0 50K   |         | LITHONIA |

1. MANUFACTURER NUMBERS SHOWN ARE LITHONIA, AN EQUAL PRODUCT CAN BE USED.



AREA OF WORK #3-MECHANICAL DEMO

- 1 REMOVE EXISTING EF-15
- 2 EXISTING MAU-3 TO BE REUSED FOR NEW EXHAUST SYSTEM
- 3 REMOVE EXISTING SUPPLY AIR DUCTING
- 4 REMOVE EXISTING EXHAUST DUCTING



AREA OF WORK #3-MECHANICAL

- 1 INSTALL NEW EF-15, MODIFY CURB AS REQUIRED
- 2 EXISTING MAU-3 TO BE REUSED FOR NEW EXHAUST SYSTEM
- 3 NEW SUPPLY DUCT SIZING
- 4 NEW EXHAUST DUCT SIZING
- 5 INSTALL INSULATION WRAP FIRST 10' IN BOTH DIRECTIONS AT MAU-3

**S1**  
xxx  
NEW SUPPLY DIFFUSER, 12" X 12", 6" ROUND NECK, WHITE, ALUMINUM, WITH DAMPER AND DRYWALL FRAME. EQUAL TO TITUS TMS-AA  
SUPPLY QUANTITY IN CFM

**S2**  
xxx  
NEW SUPPLY DIFFUSER, 12" X 12", 8" ROUND NECK, WHITE, ALUMINUM, WITH DAMPER AND DRYWALL FRAME. EQUAL TO TITUS TMS-AA  
SUPPLY QUANTITY IN CFM

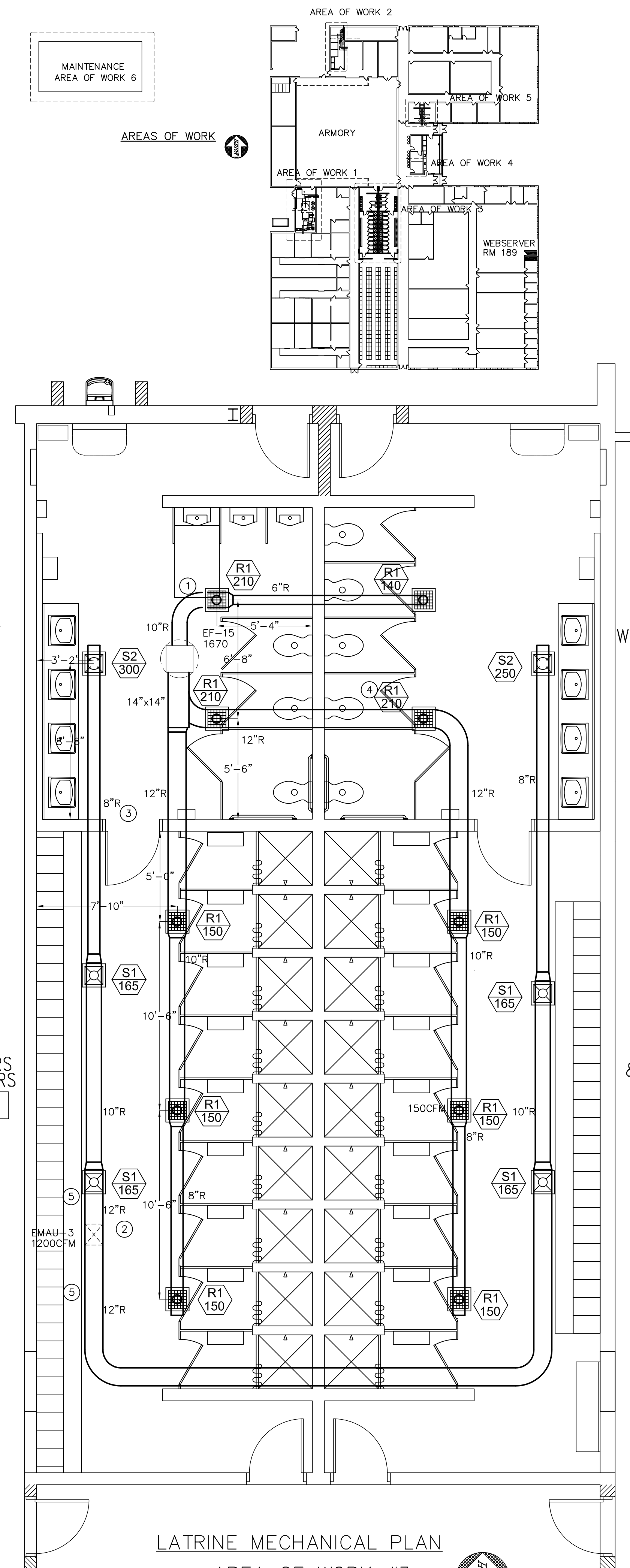
**R1**  
xxx  
NEW RETURN GRILLE, 12" X 12" W/ 1/2"X1/2"X1/2" GRILLE, SQUARE TO ROUND ADAPTOR, WHITE, ALUMINUM. EQUAL TO TITUS 50P  
RETURN QUANTITY IN CFM

MENS TOILET  
158

MENS SHOWERS & LOCKERS  
164

WOMENS TOILET  
159

WOMENS SHOWERS & LOCKERS  
165



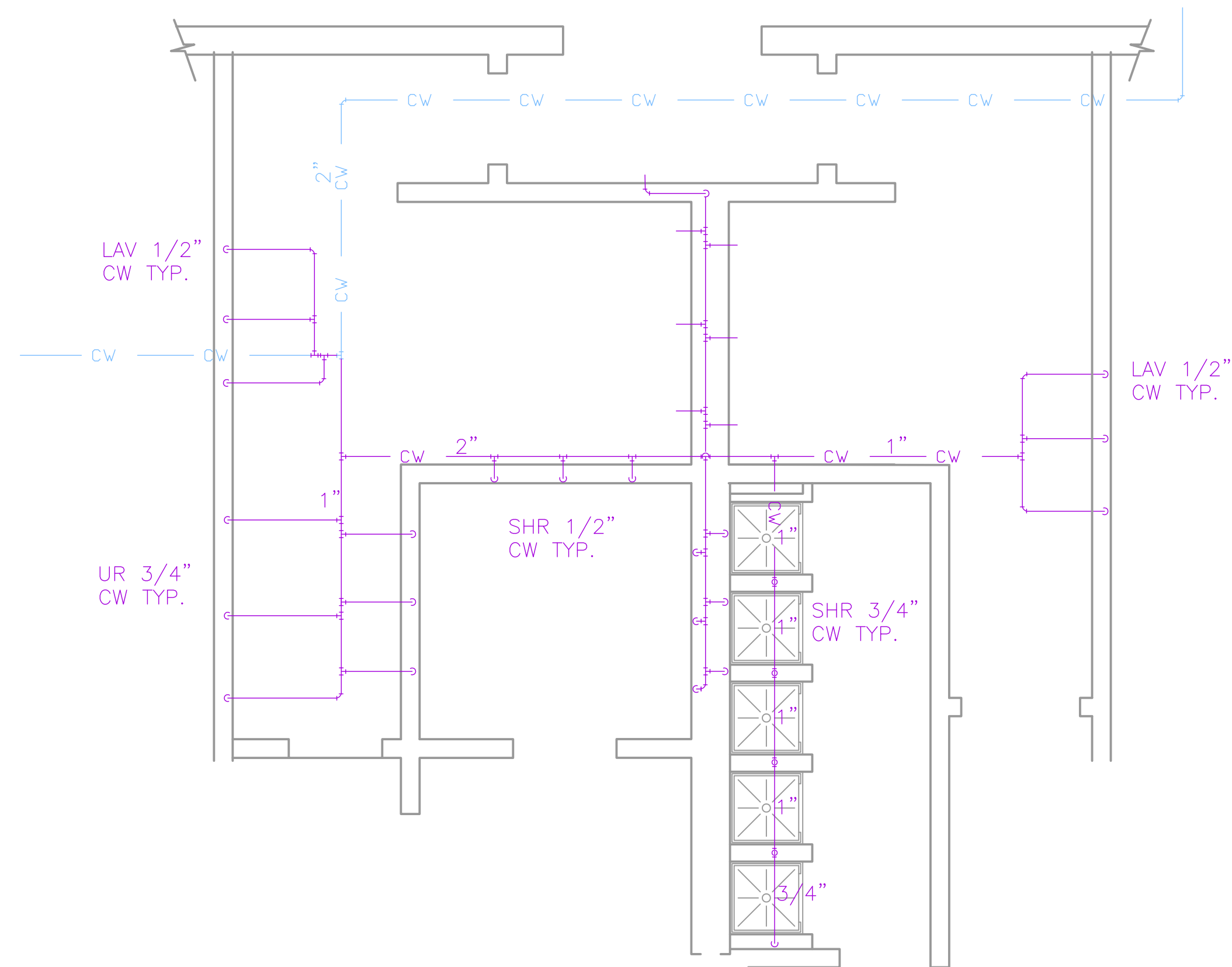
LATRINE MECHANICAL PLAN

AREA OF WORK #3

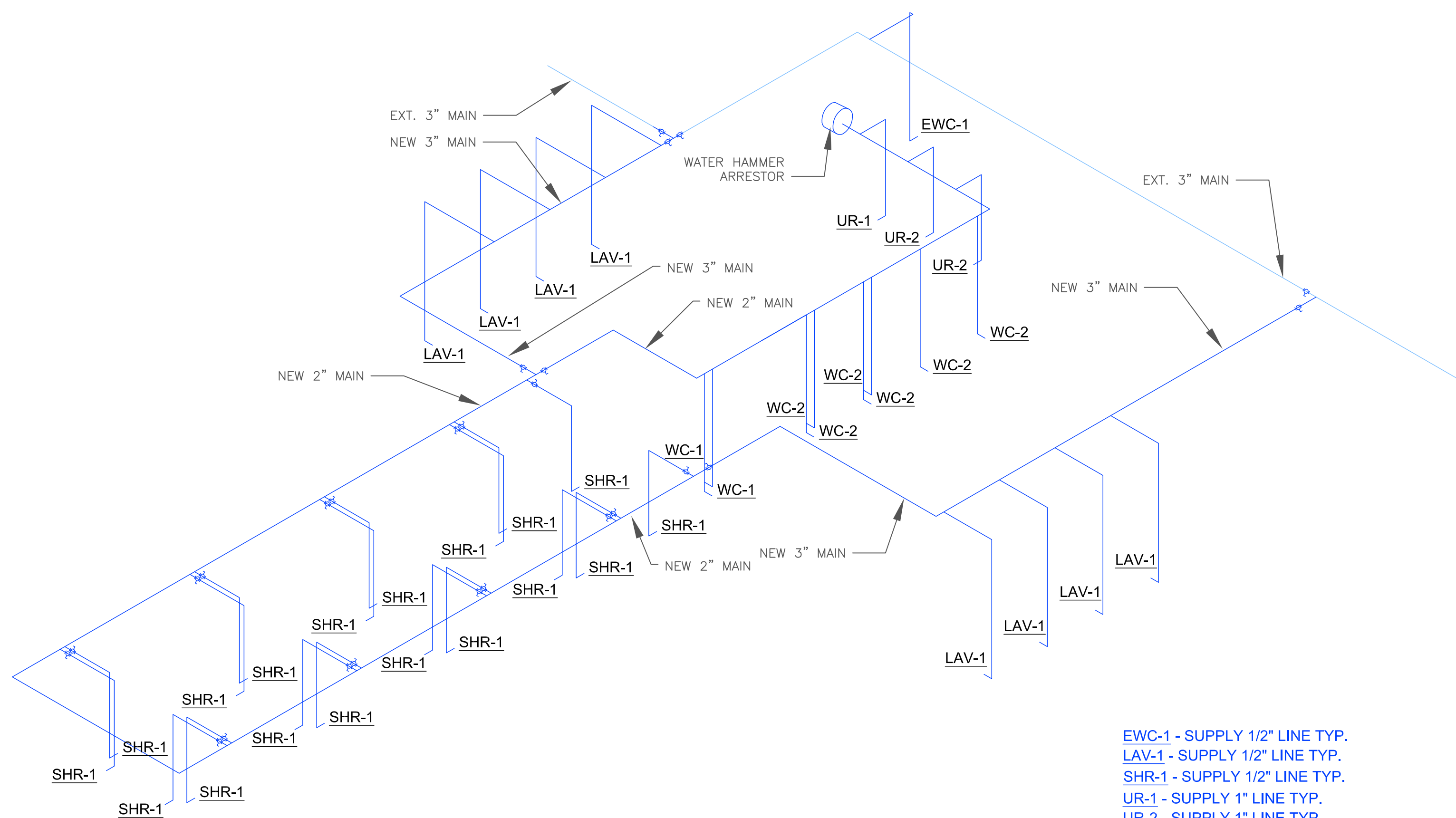
SCALE 1/4" = 1'-0"





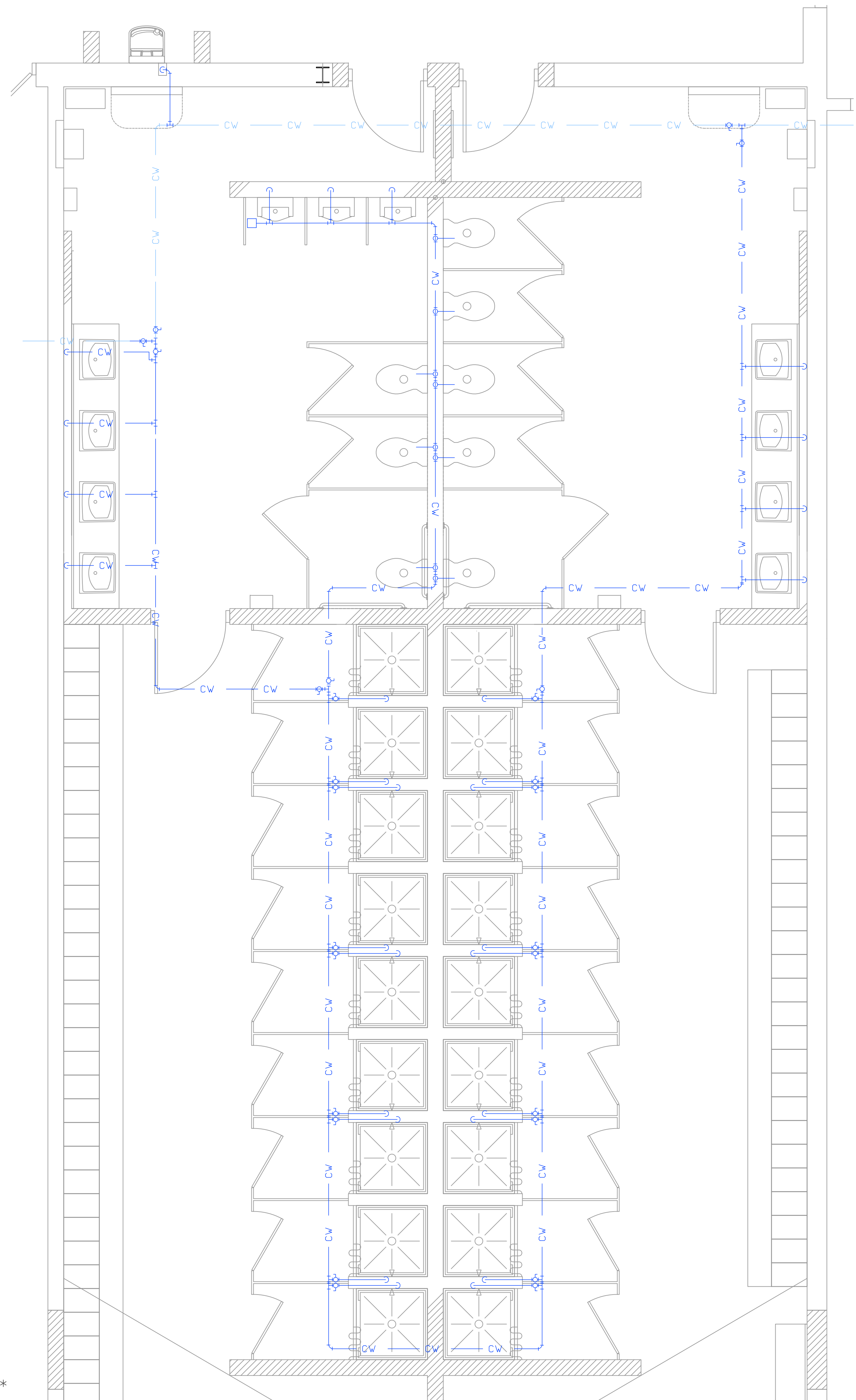


1 COLD WATER LINE DEMO PLAN  
P1.2 SCALE: 1/4" = 1'-0"



2 NEW COLD WATER LINE ISOMETRIC PLAN  
P1.2 SCALE: 1/4" = 1'-0"

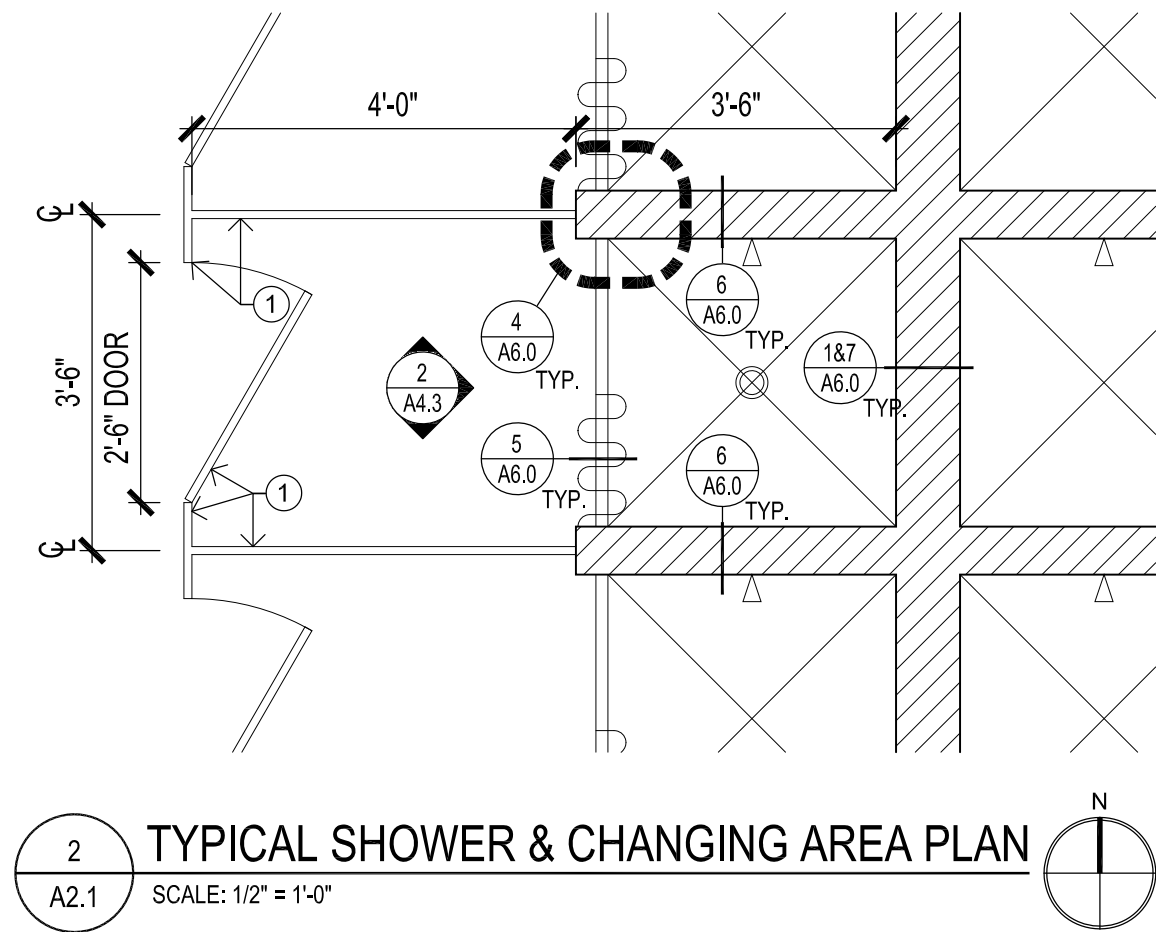
\*\*THIS SHEET IS TO BE PRINTED IN COLOR TO SEE DIFFERENT LINES\*\*



3 COLD WATER LINE PLAN  
P1.2 SCALE: 1/4" = 1'-0"

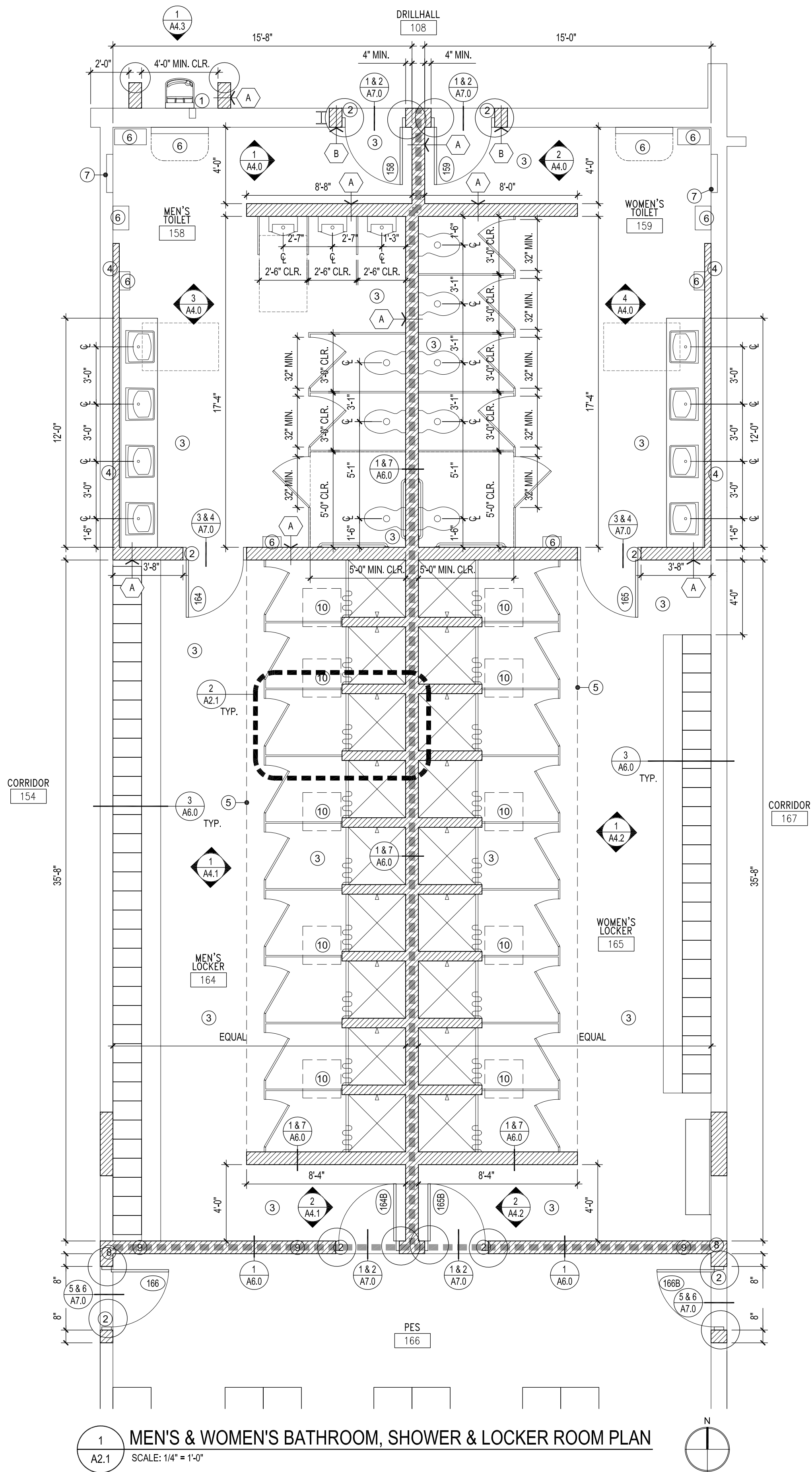
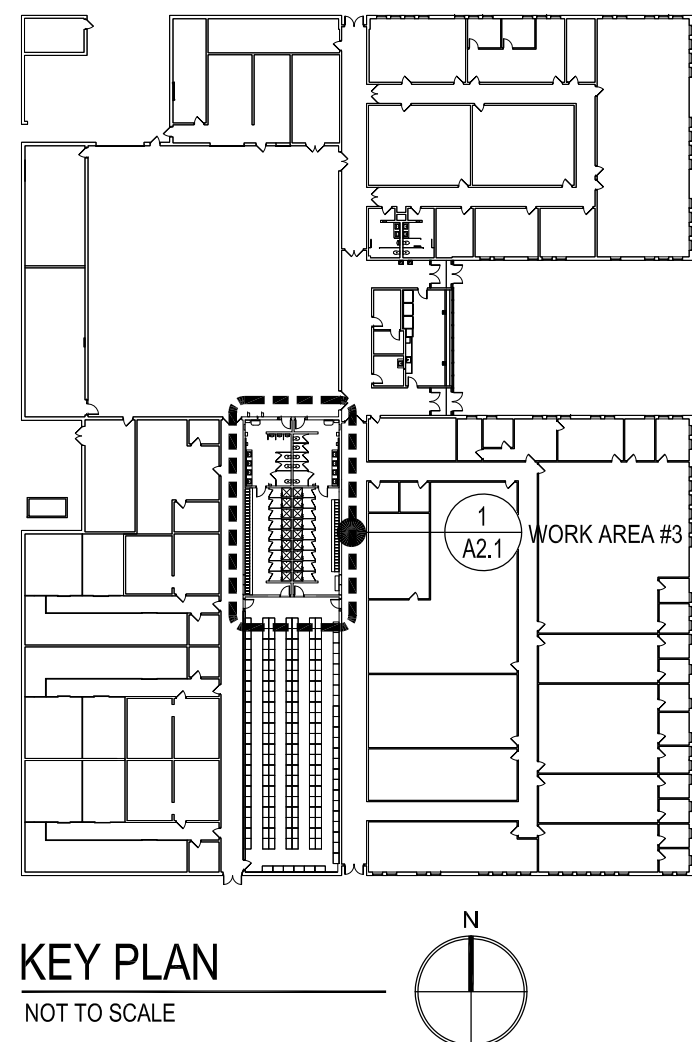






KEYED NOTES:

- 1 PLASTIC DRESSING COMPARTMENT AND CHANGING STALLS, SEE SPECIFICATIONS
- 2 EMPTY



FINISH SCHEDULE:

| RM. NUMBER | RM. NAME               | FLOOR |            | BASE* |     | WALLS** |          |       |          |     |          | CEILING |     |  | REMARKS***                            |
|------------|------------------------|-------|------------|-------|-----|---------|----------|-------|----------|-----|----------|---------|-----|--|---------------------------------------|
|            |                        | MAT'L | FIN        | MAT'L | FIN | NORTH   | EAST     | SOUTH | WEST     |     |          | MAT'L   | FIN |  |                                       |
| 158        | MEN'S BATHROOM         | CONC  | FLOOR TILE | RB    | -   | CMU     | TILE-1&2 | CMU   | TILE-1&2 | CMU | TILE-1&2 | GBD     | PT1 |  |                                       |
| 159        | WOMEN'S BATHROOM       | CONC  | FLOOR TILE | RB    | -   | CMU     | TILE-1&2 | CMU   | TILE-1&2 | CMU | TILE-1&2 | GBD     | PT1 |  |                                       |
| 164        | MEN'S LOCKER ROOM      | CONC  | FLOOR TILE | RB    | -   | CMU     | TILE-1&2 | CMU   | TILE-1&2 | CMU | TILE-1&2 | GBD     | PT1 |  |                                       |
| 165        | WOMEN'S LOCKER ROOM    | CONC  | FLOOR TILE | RB    | -   | CMU     | TILE-1&2 | CMU   | TILE-1&2 | CMU | TILE-1&2 | GBD     | PT1 |  |                                       |
| 166        | PES                    | CONC  | CONC/EPOXY | RB    | -   | CMU     | PT       | CMU   | PT       | CMU | PT       | GBD     | PT1 |  | CONTRACTOR TO PAINT AREAS OF NEW WORK |
| MATERIAL   |                        |       |            |       |     |         |          |       |          |     |          |         |     |  |                                       |
| CONC       | CONCRETE FLOOR         |       |            |       |     |         |          |       |          |     |          |         |     |  |                                       |
| CMU        | CONCRETE MASONRY UNITS |       |            |       |     |         |          |       |          |     |          |         |     |  |                                       |
| GBD        | GYPSUM BOARD           |       |            |       |     |         |          |       |          |     |          |         |     |  |                                       |
| RB         | RUBBER BASE            |       |            |       |     |         |          |       |          |     |          |         |     |  |                                       |
| FINISH     |                        |       |            |       |     |         |          |       |          |     |          |         |     |  |                                       |
| FIN #      | FINISH # (SEE SPEC)    |       |            |       |     |         |          |       |          |     |          |         |     |  |                                       |
| PT#        | PAINT # (SEE SPEC)     |       |            |       |     |         |          |       |          |     |          |         |     |  |                                       |
| EPOXY      | EPOXY ON CONC          |       |            |       |     |         |          |       |          |     |          |         |     |  |                                       |

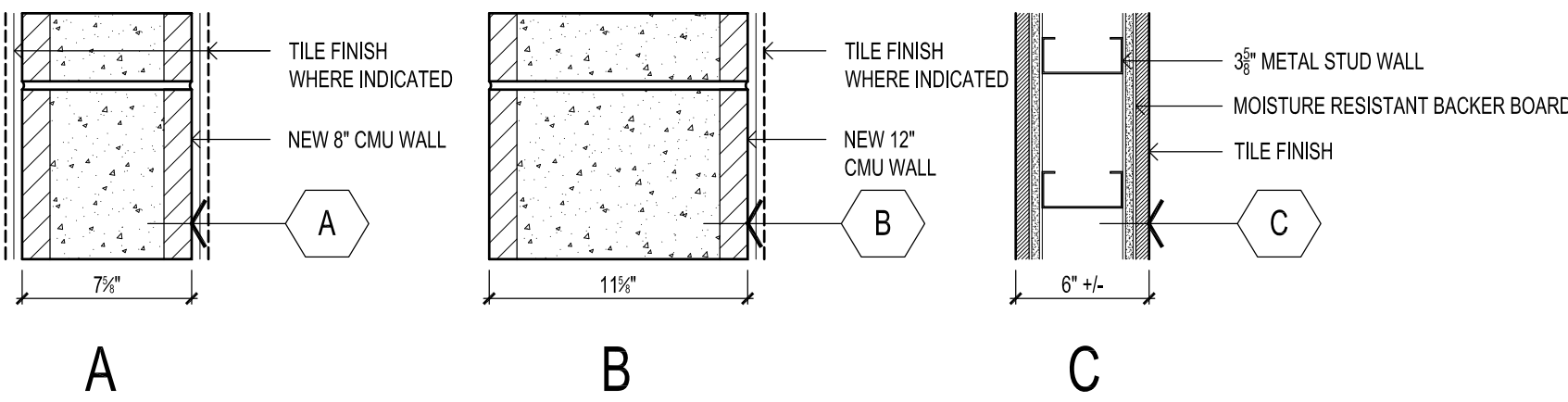
KEYED NOTES:

- 1 RELOCATED / SALVAGED DRINKING FOUNTAIN
- 2 VERTICAL CELLS ADJACENT TO OPENING SHALL BE GROUTED SOLID FROM FOUNDATION TO LINTEL, TYPICAL BOTH SIDES
- 3 NEW CONCRETE FLOOR AND FLOOR TILE THROUGHOUT BATHROOM, SHOWER & LOCKER ROOMS. SEE SPECIFICATIONS FOR ADD'L INFORMATION. SEE INTERIOR ELEVATIONS FOR EXTENT OF NEW WALL TILE
- 4 THESE WALLS ARE PARTIALLY ALREADY FURRED OUT; SOME OF IT IN GLAZED BLOCK. CONTRACTOR TO REMOVE, ADD AND IN-FILL CONCRETE BLOCK AS NECESSARY TO COMPLETE THE WORK
- 5 CEILING HEIGHT CHANGES FROM 8' TO 9'. SEE INTERIOR ELEVATIONS FOR ADD'L INFO.
- 6 BATHROOM ACCESSORIES. SEE INTERIOR ELEVATIONS AND SPECIFICATIONS FOR ADD'L INFO.
- 7 EXISTING RECESSED HEATING UNIT. CONTRACTOR TO HAVE THE METAL COVER CLEANED & PAINTED TO MATCH ADJACENT WALL TILE
- 8 TOOTH IN NEW CMU WALL ADJACENT TO THE PES WITH EXISTING
- 9 THIS WALL ONLY TO BE CONSTRUCTED TO THE UNDERSIDE OF THE ROOF DECK
- 10 ACCESS HATCH FOR SHOWER VALVES. CONTRACTOR TO COORDINATE LOCATION OF ACCESS HATCHES WITH PLUMBING WORK AND SHOWER PARTITIONS LOCATIONS TO ENSURE THEY OPEN AND PROVIDE FREE & CLEAR LADDER ACCESS

NOTES AT BATHROOMS, SHOWERS & LOCKER ROOM PLAN:

1. SEE INTERIOR ELEVATIONS FOR ADDITIONAL DIMENSIONAL REQUIREMENTS / CLEARANCES AT PLUMBING FIXTURES
2. SEE DETAILS 2/A6.0 & 7/A6.0 FOR CEILING ASSEMBLY INFORMATION
3. PLAN DIMENSIONS ARE TO FACE OF CONCRETE MASONRY UNLESS OTHERWISE NOTED
4. SEE FINISH SCHEDULE, INTERIOR ELEVATIONS, AND DETAILS

WALL TYPES:

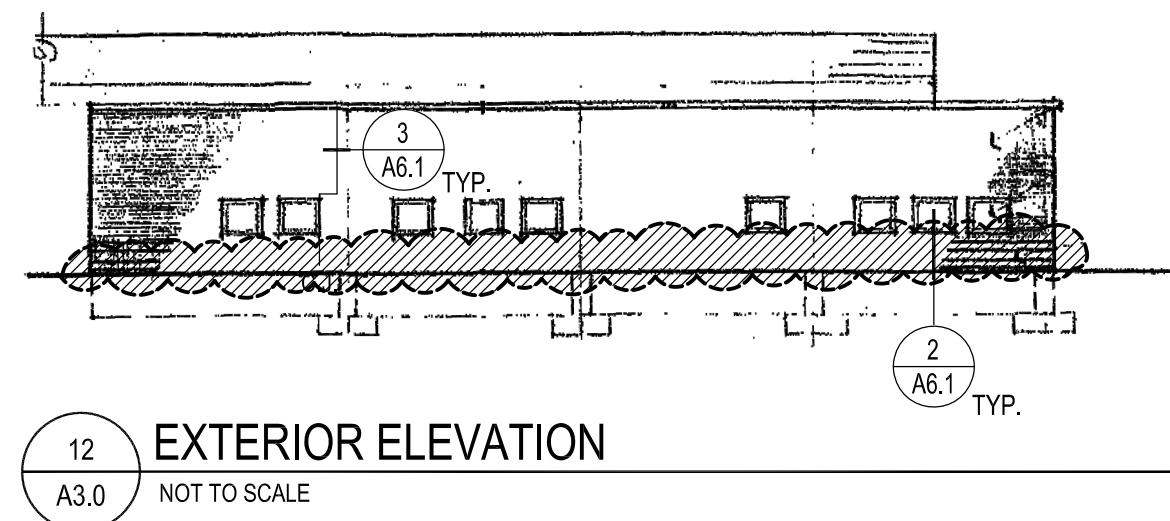


- NOTES:
1. WALL ADJACENT TO PES TO BE CONSTRUCTED CONTINUOUS TO UNDERSIDE OF ROOF DECK, AT ALL OTHER LOCATIONS, TO ABOVE THE CEILING PLANE.
  2. SEE PLANS, FINISH SCHEDULE & INTERIOR ELEVATIONS FOR ADD'L WALL FINISH INFORMATION.

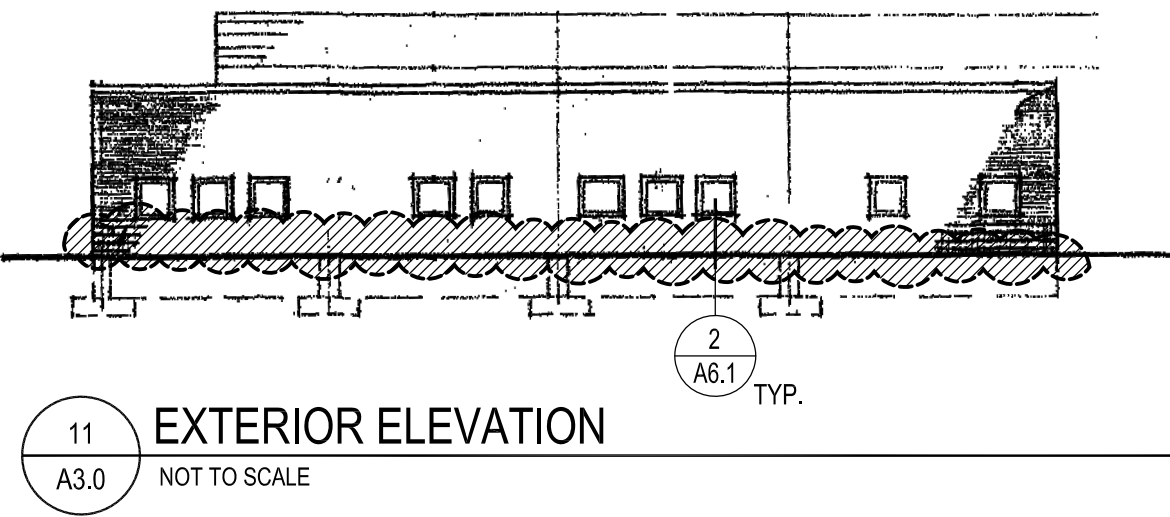
LEGEND:

- NEW WALLS. SEE WALL TYPES FOR ADD'L INFO.
- THICKENED SLAB. SEE DETAIL 1/A6.0
- LOCATION OF BULLNOSE CMU AT INTERIOR OF BUILDING. SEE DOOR SCHEDULE (A7.0) FOR LOCATIONS
- DOOR TAG. SEE DOOR SCHEDULE SHEET A7.0
- LINE OF CEILING HEIGHT CHANGE OVERHEAD
- KEYED NOTE
- WALL TYPES

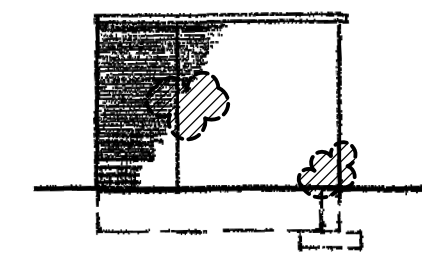




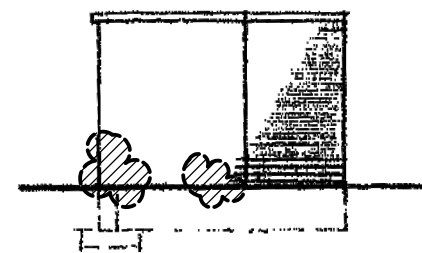
12 EXTERIOR ELEVATION  
A3.0 NOT TO SCALE



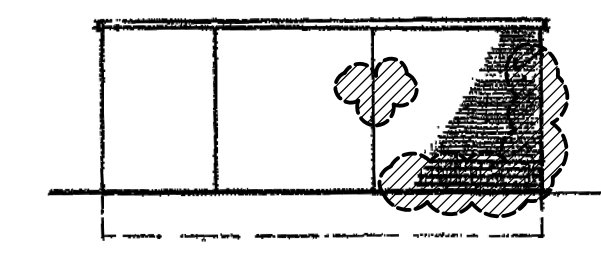
11 EXTERIOR ELEVATION  
A3.0 NOT TO SCALE



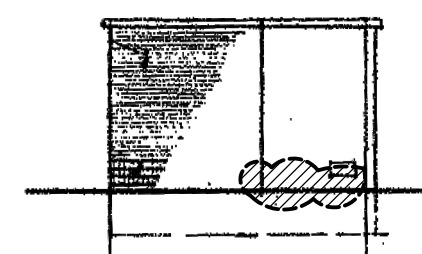
10 EXTERIOR ELEVATION  
A3.0 NOT TO SCALE



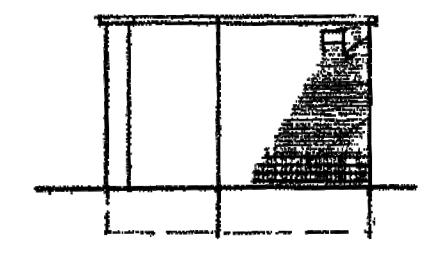
7 EXTERIOR ELEVATION  
A3.0 NOT TO SCALE



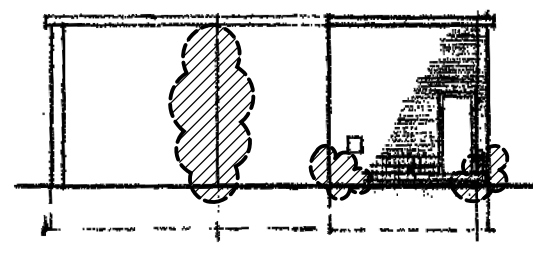
9 EXTERIOR ELEVATION  
A3.0 NOT TO SCALE



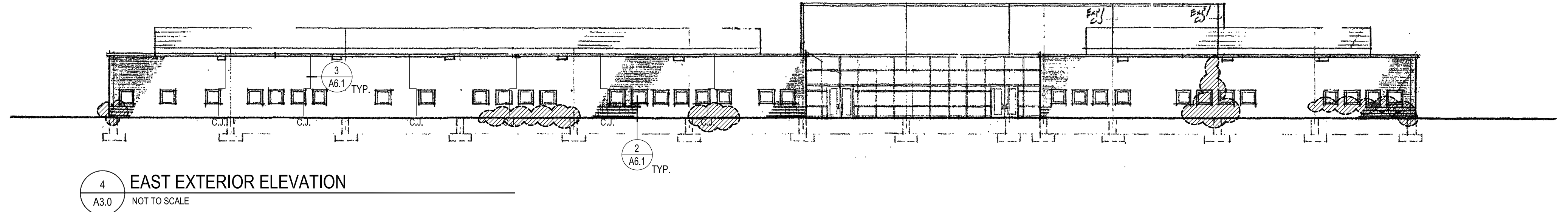
6 EXTERIOR ELEVATION  
A3.0 NOT TO SCALE



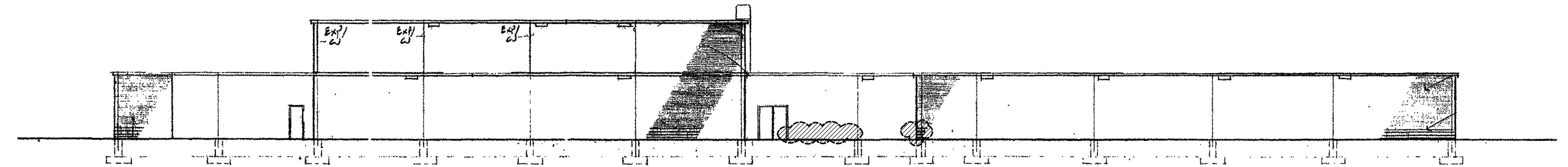
8 EXTERIOR ELEVATION  
A3.0 NOT TO SCALE



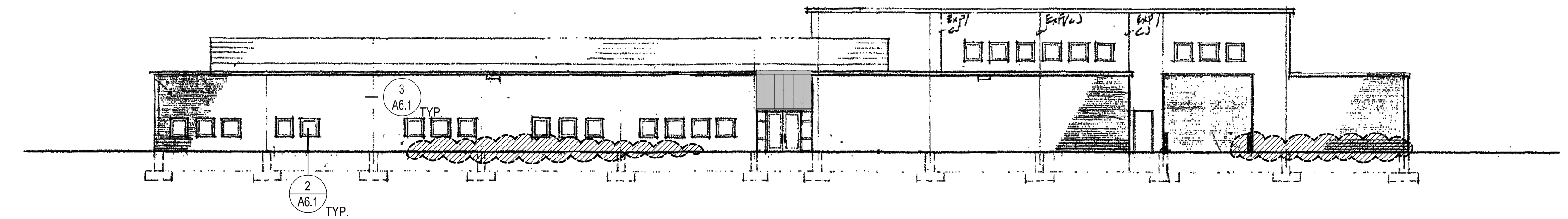
5 EXTERIOR ELEVATION  
A3.0 NOT TO SCALE



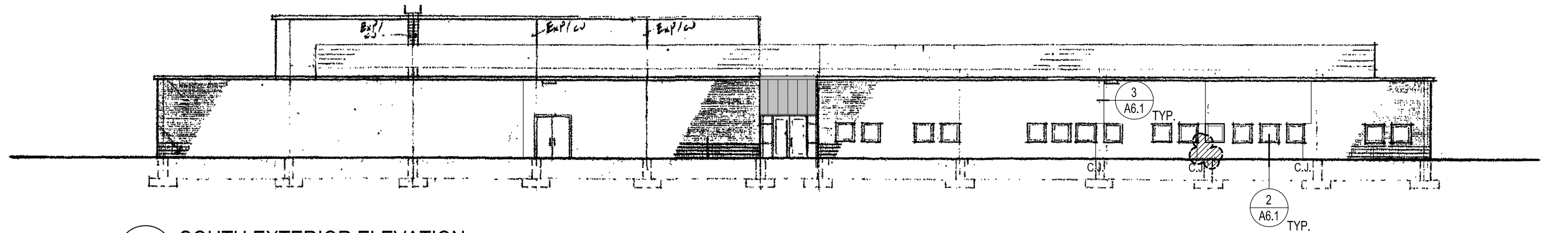
4 EAST EXTERIOR ELEVATION  
A3.0 NOT TO SCALE



3 WEST EXTERIOR ELEVATION  
A3.0 NOT TO SCALE



2 NORTH EXTERIOR ELEVATION  
A3.0 NOT TO SCALE



1 SOUTH EXTERIOR ELEVATION  
A3.0 NOT TO SCALE

EXT. ELEV. LEGEND:

- C.J. CONTROL JOINT  
AREA OF BRICK REPOINTING

NOTES AT EXTERIOR ELEVATIONS:

1. ALONG THE BUILDING PERIMETER, WHERE SOIL IS HIGHER THAN THE MASONRY WEEPS, DIG THE SOIL BACK AND MOVE TO A LOCATION ON SITE AGREED TO WITH THE CONTRACTOR, DMVA INSPECTOR & DESIGNER. MAINTAIN DRAINAGE AWAY FROM THE BUILDING.
2. ALL WINDOWS IN THE BUILDING ARE TO RECEIVE A NEW METAL WINDOW SILL AS PER DETAIL 2/6.1
3. ALL CONTROL JOINTS ARE TO BE REDONE AS PER DETAIL 3/A6.1