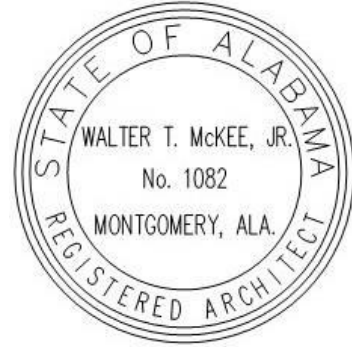


**Addendum No. 4**  
**Date: December 11, 2023**



Project:

**Additions To Robertsdale High School  
For The Baldwin County Board of Education  
Robertsdale, Alabama**

**MCKEE PROJECT NO. 23-195**  
**ALABAMA DIVISION OF CONSTRUCTION MANAGEMENT NO. 2023533**

The following changes and/or substitutions to the plans and specifications are hereby made a part of same and are incorporated in full force as part of the contract.

Bidders shall acknowledge receipt of this Addendum in writing on their Proposal Form.

**A4.1 GENERAL MODIFICATIONS:**

- A. Refer to **09999 Table of Contents VOL 2 of 2 (Revised 12.08.23)**, herein.

**A4.2 SPECIFICATIONS MODIFICATIONS:**

- A. Refer to **Section 01011 Contingency Allowance (Revised 12.11.23)**, herein. ("Indoor Turf" removed from allowances)
- B. Refer to **Section 08220 FRP Doors (Revised 12.11.23)**, herein.
- C. Refer to **Section 08345 Sound Control Door Assemblies (Revised 12-11-23)**, herein.
- D. Refer to **Section 08410 Aluminum Storefronts (Revised 12-11-23)**, herein.
- E. Refer to **Section 10350 Flagpole** and **DELETE** in its entirety. No new flagpole is required.
- F. Refer to **Section 11200 Batting Cages (Revised 12.08.23)**, herein. Quantity is on the drawings.
- G. Refer to **Section 15400 Plumbing (Revised 12.11.23)**, herein. See revision to fixture P-7 Handicap Shower.
- H. The following manufacturers are hereby approved subject to the plans and specifications:
  - a. Section 08700, Alabama Door and Hardware, Vance, AL; Ph. 205-553-0700

**A4.3 DRAWING MODIFICATIONS:**

- A. See the attached Revised Drawings as follows:
  - 1. Sheets **C-2.0, C-3.0, C-5.0 (Revised 12-8-2023)**, herein. (Showing existing flagpole to remain.)
  - 2. Sheets **A1.1, A1.10, A2.1, A8.1, A9.1 (Revised 12-8-2023)**, herein.

**A4.4 CLARIFICATIONS & RESPONSES: None**

**END OF ADDENDUM**

## SECTION 01011 - CONTINGENCY ALLOWANCE

### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS AND GENERAL INFORMATION

- A. Drawings and general provisions of the Contract including General and Supplementary Conditions and other Division 1 specification sections apply to the work of this section.

### PART 2 - CONTINGENCY ALLOWANCES

#### 2.1 BASE BID PROPOSAL

- A. The General Contractor shall include the following sums:
1. **One Hundred Fifty Thousand Dollars (\$150,000.00)** as a contingency to cover unforeseen conditions or minor changes that are necessary to correct or supplement the work as detailed in the Contract Documents.
  2. **Twenty-Five Thousand Dollars (\$25,000.00)** as a contingency to cover Custom Logo and/or Signage as directed by the Owner.
  3. **Three Hundred Thousand Dollars (\$300,000)** as a contingency to cover Furnishings (other than those specified in Division 12), Appliances, Weight Room Equipment, and Weight Room Flooring.
  4. **Thirty Thousand Dollars (\$30,000.00)** as a contingency to cover Electrical Aid-to-Construction. (Also indicated as Keynote 4 on Sheet E4.1).
  5. **Four Thousand Five Hundred Dollars (\$4,500.00)** as a contingency to cover ERCC testing as stated on the Electrical Drawings. (Also indicated as Keynote 24 on Sheet E3.1).
  6. **One-Hundred Fifty Thousand Dollars (\$150,000.00)** as a contingency to cover the design and Installation of a complete Emergency Communication Enhancement System as stated on the Electrical Drawings. (Also indicated as Keynote 25 on Sheet E3.1).
  7. **One Hundred Thousand Dollars (\$100,000)** as a contingency for the furnishing and installation of the Synthetic Sports Flooring in the Gymnasium.

### PART 3 – AUTHORIZATION OF CONTINGENCY ALLOWANCES

- 3.1 After unknown conditions are identified and examined and the scope of work and method of repair determined, or request for a proposal to cover additional work has been issued by the Owner, the Contractor shall submit a proposal for such work to the Architect for the Owner's approval. If the Owner approves of such proposal, he will issue written authorization to the Contractor to perform the work and charge the related costs to the Contingency Allowance. At the Owner's option, work performed under this provision may be ordered done on a time and material basis, in which case; the Contractor shall keep accurate records of all time and materials used and submit such records to the Architect for his approval at the end of each day's work.
- 3.2 An accounting of the costs charged against this Contingency Allowance shall be mutually maintained by the Contractor, Architect, and Owner throughout the course of the project. Any of this Contingency Allowance not spent shall be credited to the Owner by Change Order at close out of the project. Refer to Contingency Allowance Form attached to this Section.
- 3.3 Provide for payment.
- A. The Contractor shall include a line item in the *Schedule of Values* entitled "Contingency Allowance". The estimated value of work completed pursuant to fully executed Contingency Allowance Authorizations may be included in the Contractor's monthly Applications for Payment. Payments under this Contingency Allowance shall not exceed the net, total of fully executed Contingency Allowance Authorizations:

CONTINGENCY ALLOWANCE

01011-1

Revised 11.27.23

REVISED 12-11-23

Additions to Robertsdale  
High School for the  
Baldwin County Board of Education  
Bay Minette, Alabama

### 3.4 CONTINGENCY ALLOWANCE AUTHORIZATION FORM

Form to be filled in its entirety.

To: McKee & Associates, Architects From: \_\_\_\_\_  
Project: \_\_\_\_\_ Company \_\_\_\_\_  
\_\_\_\_\_ Address \_\_\_\_\_  
\_\_\_\_\_ Contact and Email \_\_\_\_\_  
Project Number \_\_\_\_\_ Date: \_\_\_\_\_  
Building Commission Number: \_\_\_\_\_ Authorization Number: \_\_\_\_\_

In accordance with Specification Section 01011 – CONTINGENCY ALLOWANCE, the Contractor [ ] is hereby authorized to proceed with the changes in Work as are described below and is to be paid for the performance of these changes as provided in Specification Section 01011. This Authorization shall become effective when it is signed by the Contractor and the Owner's representative and it is understood and agreed that the amount(s) stipulated below constitute full compensation for these changes in Work.

TOTAL AMOUNT OF THIS AUTHORIZATION \$

ORIGINAL AMOUNT OF THE CONTINGENCY ALLOWANCE \$

NET TOTAL OF PREVIOUS AUTHORIZATIONS \$

PREVIOUS REMAINING CONTINGENCY ALLOWANCE \$

TOTAL AMOUNT OF THIS AUTHORIZATION \$

CONTINGENCY ALLOWANCE REMAINING  
AFTER THIS CONTINGENCY \$

Recommended By: \_\_\_\_\_ Authorized By: \_\_\_\_\_ Accepted By: \_\_\_\_\_  
Architect \_\_\_\_\_ Owner \_\_\_\_\_ Contractor \_\_\_\_\_

END OF SECTION

Additions to Robertsedale  
High School for the  
Baldwin County Board of Education  
Bay Minette, Alabama

MCKEE PROJECT NO. 23.195

CONTINGENCY ALLOWANCE  
01011-2  
Revised 11.27.23  
REVISED 12-11-23

## **SECTION 08220 - FRP DOORS**

### **PART 1 - GENERAL**

#### **1.1 RELATED DOCUMENTS**

- A. Drawings and general provisions of Contract including General and Supplementary Conditions and Division 1 Specification sections apply to work of this section.

#### **1.2 DESCRIPTION OF WORK**

- A. The extent of each type of door is shown on the drawings and schedules. The following types of doors are required:
  - 1. Fiberglass Reinforced Plastic (FRP) Doors.

#### **1.3 QUALITY ASSURANCE**

- A. Manufacturer's Certification: Manufacturer is to have a minimum of 25 years experience in the production of pre-hardwood and pre-assembled door systems, using the type of materials specified for this project.
- B. Installer's Qualifications: For the installation of the entrance systems, use only mechanics who are thoroughly trained and experienced in the skills required and who are completely familiar with the manufacturer's recommended methods of installation plus the requirements of this work.

#### **1.4 WARRANTY**

- A. Warranty all fiberglass doors for a period of 10 years against failure due to corrosion. Additionally, warranty all fiberglass doors on materials and workmanship for a period of 10 years, including warp, separation or delaminating and expansion of the core.

#### **1.5 TEST REPORTS AND PERFORMANCE REQUIREMENTS FOR ALUMINUM HYBRID FRP NARROW STILE DOORS – HURRICANE RATED**

- A. Entrance systems must comply with requirements for system performance characteristics as determined by the testing methods that follow:
  - 1. Two copies of current test reports covering the test procedures as listed are to be included with the submittals.
- B. Complete System Requirements Test: Complete system units that include door, frame and hardware are to meet the following criteria:
  - 1. FBC Protocol for TAS 201; TAS 202; TAS 203 – Pass, and the following additional minimum criteria in conjunction with the qualifications as outlined by previously referenced standards:
    - a. Thermal Transmittance Tests:
      - 1) U-factors expressed in Btu/ hr-ft (2)-F - AAMA 1503-98 - 0.58
      - 2) R-value expressed in hr-ft (2)-F/Btu - ASTM 1503-98 - 1.73
    - b. Structural Performance Tests:
      - 1) Air Infiltration –  
ASTM E283 @ 1.56 psf (25 mph) - 0.41 cfm/ft (2)  
ASTM E283 @ 6.24 psf (50 mph) – 1.06 cfm/ft (2)
      - 2) Water Penetration –  
ASTM E331 - 15 Min Cycle - NO ENTRY
      - 3) Uniform Static Load for single door- ASTM E330 - (+) - 195.0
    - c. Structural Integrity Tests:

- 1) Exit Bar Pull Off Test - 1300 lbs. minimum load resistance before exit bar disengages from door.
- 2) Closer Pull Off - 1638 lbs. minimum load resistance before closer disengages from door.
- d. Windborne Debris Resistance Tests:
  - 1) Large Missile Impact Test - SFBC PA 201 - 94 – PASSED
  - 2) Cyclic Wind Pressure Test - SFBC PA 203 - 94 - 65PSF
  - 3) Forced Entry Test - SFBC 3603.2 - 300 lbs. – PASSED
- e. Indoor Air Quality Test: ASTM D 6670-01: GREENGUARD Environmental Institute Certified including GREENGUARD for Children and Schools Certification.
- C. Face Sheet Requirements Test: FRP material and FRP face sheets with core material are to meet the following criteria:
  1. Center Door Section (face sheet/core/face sheet) Gardner Impact Test – Nominal Value, ASTM D 3029 120 in-lb.
  2. FRP Material (MR85)
    - a. Flexural Strength Test – ASTM D790 - 22,600 psi (inward) 24,400 psi(outward)
    - b. Izod Impact Strength Test – ASTM D256 - 15.36 ft-lb./in thickness
    - c. Barcol Hardness – ASTM D2583 – 50

## 1.6 SUBMITTALS

- A. Product Technical Data Including:
  1. Acknowledgment that products submitted meet requirements of standards referenced.
  2. Manufacturer shall provide certificate of compliance with current local and federal regulations as it applies to the manufacturing process.
  3. Manufacturer's installation instructions.
  4. Schedule of doors indicating the specific reference numbers used on the owner's project documents, noting door type, frame type, size, handing and applicable hardware.
  5. Details of core and edge construction, including factory construction specifications.
  6. Certification of manufacturer's qualifications.
- B. Submittal Drawings for approval shall be submitted prior to manufacture and shall include the following Information and formatting:
  1. Summary door schedule indicating the specific reference numbers as used on owner's drawings, with columns noting door type, frame type, size, handing, accessories and hardware.
  2. A drawing depicting front and rear door elevations showing hardware with bill of material for each door.
  3. Drawing showing dimensional location of each hardware item and size of each door.
  4. Individual part drawing and specifications for each hardware item and FRP part or product.
  5. Construction and mounting detail for each frame type.

## 1.7 DELIVERY, STORAGE AND HANDLING

- A. Each door shall be delivered individually crated for protection from damage in cardboard containers, clearly marked with project information, door location, specific reference number as shown on drawings, and shipping information. Each crate shall contain all fasteners necessary for installation as well as complete installation instructions.

1. Doors shall be stored in the original container on edge, out of inclement weather for protection against the elements.
2. Handle doors pursuant to the manufacturer's recommendations as posted on outside of crate.

## **PART 2 - PRODUCTS**

### **2.1 MANUFACTURER**

- A. The following manufacturers' products have been used to establish minimum standards for materials, workmanship and function:
  1. Special-Lite - SL-17 HR Series, FRP/Aluminum Hybrid
- B. Equal products of other manufacturers may be used in the work provided such products have been approved by the Architect, not less than Ten (10) days prior to scheduled bid opening.
- C. NOTE: Manufacturer must meet all technical requirements listed herein.
- D. Door Systems Classifications: Door systems for this project are based on criteria as cited for Systems meeting FBC Protocols TAS 201, 202, 203. Doors were tested as a unit and as such, to meet specified criteria all specifications regarding frame and door size must be met and testing documentation outlining the unit specifics as tested must be provided.

### **2.2 MATERIALS**

- A. Aluminum Members:
  1. Doors, frames, miscellaneous components and entrance systems accessories are to be from the same manufacturer. Splitting the source for these items will not be permitted.
  2. Provide alloy and temper as recommended for resistance to corrosion and color control. Aluminum member references are ASTM B 221 for extrusions and ASTM B 209 for sheets.

### **2.3 ALUMINUM FRAMES**

- A. Standard Closed Back Frames shall be of extruded aluminum 6063-T5 alloy and a wall thickness of .125".
  1. Vertical Members: All vertical frame jambs and mullions will be full height of opening.
  2. Sections: Tube sections will be 2" x 6" with joints connected by use of reinforcing clips and machine screws.
  3. Finish to be determined by architect after the bid.
  4. Closed Back Frames shall be SL-260.

### **2.4 FIBERGLASS NARROW STILE HURRICANE RATED ALUMINUM HYBRID (FRP) DOORS**

- A. Structural Main Frame: Doors have an aluminum main frame constructed from extruded aluminum 6063 - T5 alloy. Doors are 1 3/4" thick. Main-frame tube is to be a single extruded unit measuring 1 1/2" x 2 1/2" (O.D.) on Sides; Bottom and top rail with a 6" (O.D.) tube.
- B. Main Frame Stile Wall Thickness:
  1. Side Stiles Minimum 1/8" thick hinge edge wall.
  2. Side Stiles Minimum 1/8" thick face walls.
  3. Bottom Rail Minimum 1/8" thick face walls.
  4. Top Rail Minimum 1/8" thick all walls.
- C. Main Frame Joinery: Assembly for the meeting joints of the Rails and Stiles on the main-frame are to include the following:

1. Tie rods inserted into top and bottom rails.
  2. Mortise & Tenon with four-point connect fasteners (per joint).
  3. **\*\*WELDED JOINTS WILL NOT BE ACCEPTED\*\***
- D. Face Sheets: Face sheets will be fiberglass reinforced polyester, .120" thick, and have a pebble-like embossed finish. Face sheet color will be selected from manufacturer's standard color chart.
- E. FRP face sheets are MR85 HIGH IMPACT FRP MATERIAL that has been tested by ASTM S5420 Gardner Impact Test with "Mean Failure Energy" rating no lower than 411.84 in-lb. (or equal).
- F. Core Material: Core material will be 5-lb. density polyurethane with a flame spread rating of no more than 25.
1. URETHANE CORE DOORS will require a letter from the manufacturer offering a special guarantee that the FRP face sheets will not delaminate (bubble) for a period of 25 years, AND that the manufacturer will cover ALL replacement costs if delamination does occur.
- G. Edge Trim: Stile Edge Trim is an INTEGRAL part of the main frame and interlocks with the panel. Top and bottom edge trim is removable.
1. Snap on edge trim will not be accepted.
- H. Weather Stripping: Weather stripping package as provided by door manufacturer as tested and passed with unit.
- I. Hardware Reinforcing: Closer reinforcing to be 1/8" minimum aluminum plate or channel. Surface Applied Exit Device reinforcing to be 1/8" aluminum channel.
- J. Narrow Stile Hurricane (FRP) Doors are by one of the following:
1. Basis of Design: Commercial Door Systems F200-HR
  2. Approved Manufacturer: SPECIAL LITE, Hurricane Rated Model SL-17 (must provide proof of test reports to confirm hardware configuration for each set of specified hardware passes TAS protocol 201, 202, 203)
- K. Vision Lites:
1. Vision lite trim moldings will be aluminum extrusion - 6063-T5 alloy and removable from the inside only.
  2. Door Vision Lites will be Factory glazed with hurricane tested glass size
  3. Hurricane Rated Vision Lite not to exceed 22" x 32" inches
  4. Door Vision Lite Kits are by THE DOOR MANUFACTURER ONLY.

## **2.5 HARDWARE**

- A. Hardware locations to be templated as tested for Hurricane approval.
- B. Refer to specification section 08700 for hardware requirements.

## **PART 3 - EXECUTION**

### **3.1 VERIFICATION**

- A. Verification of Conditions:
  1. Verify openings are correctly prepared to receive doors and frames.
  2. Verify openings are correct size and depth in accordance with submittal drawings.
- B. Installer's Examination:

1. Door installer shall examine conditions under which construction activities of this section are to be performed and submit a written report to general contractor if conditions are unacceptable.
2. General Contractor shall submit two copies of the installer's report to the architect within 24 hours of receipt.
3. Installer shall not proceed with installation until all unacceptable conditions have been corrected.

### **3.2 INSTALLATION**

- A. Doors shall be delivered at job site individually crated. Each crate to be clearly marked with the specific opening information for quick and easy identification.
- B. All single doors to be shipped completely assembled in the frame with hardware installed. Double doors to be prehung at the factory to ensure a proper fit and that hardware functions properly, then disassembled for shipping purposes.
- C. Install door opening assemblies in accordance with shop drawings and manufacturer's printed installation instructions, using installation methods and materials specified in installation instructions.
- D. Field alteration of doors or frames to accommodate field conditions is strictly prohibited. Site tolerances: Maintain plumb and level tolerance specified in manufacturer's printed installation instructions.
- E. Fire labeled doors, frames and any associated hardware must be installed by qualified professional installers in strict accordance with manufacturer's instructions and the latest revision of NFPA 80.

### **3.3 ADJUSTING**

- A. Adjust doors in accordance with the door manufacturer's maintenance instructions to swing open and shut without binding and to remain in place at any angle without being moved by gravitational influence.
- B. Adjust door hardware to operate correctly in accordance with hardware manufacturer's maintenance instruction.

### **3.4 CLEANING**

- A. Clean surfaces of door opening assemblies and exposed door hardware in accordance with respective manufacturer's maintenance instructions.

### **3.5 PROTECTION OF INSTALLED PRODUCTS**

- A. Protect door opening assemblies and door hardware from damage by subsequent construction activities until final inspection.

**END OF SECTION**

## SECTION 08345 – SOUND CONTROL DOOR ASSEMBLIES

### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of Contract including General and Supplementary Conditions and Division 1 Specification sections apply to work of this section.

#### 1.2 DESCRIPTION OF WORK

- A. Extent and location of each type of steel acoustical pre-hung door assemblies is shown on drawings and in schedules.
- B. Types of doors required include the following:
  - 1. Integrated sound transmission class (STC)-rated sound control door, frame, and hardware assemblies, fire-rated where indicated.

#### 1.3 RELATED SECTIONS

- A. Section 08700 - Door Hardware
- B. Section 08800 - Glazing
- C. Section 09900 - Painting

#### 1.4 REFERENCES

- A. ASTM A 366 - Standard Specification for Steel, Carbon, Cold-Rolled Sheet, Commercial Quality
- B. ASTM A 569 - Standard Specification for Steel, Carbon, (0.15 Maximum Percent), Hot-Rolled Sheet and Strip, Commercial Quality
- C. ASTM A 653/A 653M - Standard Specification for Steel Sheet, Zinc Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot Dip Process
- D. ASTM B 117 - Standard Method of Salt Spray (Fog) Testing
- E. ASTM D 1735 - Standard Practice for Testing Water Resistance of Coating Using Water Fog Apparatus
- F. ASTM E 90 - Standard Test Method for Laboratory Measurement of Airborne-Sound Transmission Loss of Building Partitions
- G. ASTM E 336 - Standard Test Method for Measurement of Airborne Sound Insulation in Buildings
- H. ASTM E 413 - Classification for Determination of Sound Transmission Class
- I. HMMA 840 - Installation and Storage of Hollow Metal Doors and Frames; Hollow Metal Manufacturers Association

#### 1.5 SYSTEM DESCRIPTION

- A. Design requirements: Pre-hung acoustical door assemblies to include doors, frames, and door hardware to include gasketing systems, retainers and retainer covers, automatic or fixed door bottoms, cam-lift hinges, thresholds, and sills, required to achieve specified performance requirements.
- B. **Performance requirements: Sound Transmission Coefficient rating shall be no less than as noted in the Door Schedule, for the installed assembly, when tested as an operable door assembly in accordance with ASTM E 90 and ASTM E 413.**

#### 1.6 SUBMITTALS

- A. Submit under provisions of Section 01300
- B. Product data: Indicate door materials and construction
- C. Shop drawings: Indicate door opening criteria, elevations, sizes, types, swings; identify and detail cutouts

D. Quality assurance submittals:

1. Test Reports:

- a. Certified laboratory reports, performed in accordance with ASTM E90 and ASTM E 413, from independent testing laboratory qualified under the National Voluntary Laboratory Accreditation Program (NVLAP) supporting compliance of assemblies to specified requirements.
- b. Minimum five (5) field tests, performed in accordance with ASTM E 336 and ASTM E 413 by five separate independent testing agencies, substantiating acoustical performance when installed at no less than seven (7) FSTC ratings below the specified STC rating

2. Certificates:

a. Contractor's certification that:

- i. Products of this section, as provided, meet or exceed specified requirements
- ii. Manufacturer of products of this section meet specified qualifications

3. Manufacturer's instructions: Printed installation instructions for each component

4. Closeout submittals:

- a. Warranty documents, executed by manufacturer in Owner's name
- b. Operation and maintenance data for assembly components
- c. Certified statement of manufacturer's authorized representative, as specified in FIELD QUALITY CONTROL Article of PART 3 of this section
- d. Certified test reports of independent testing agency, as specified in FIELD QUALITY CONTROL Article of PART 3 of this section

**1.7 QUALITY ASSURANCE**

A. Qualifications:

1. Manufacturer: Minimum five (5) years documented experience producing systems specified in this section
2. Installer: Minimum five (5) years documented experience installing systems specified in this section, and approved by manufacturer

**1.8 DELIVERY, STORAGE, AND HANDLING**

- A. Store frames in accordance with requirements of HMMA 840
- B. Store steel doors in accordance with requirements of HMMA 840
- C. Remove wraps or covers from doors and frames upon delivery at the building site; clean and touch-up scratches or disfigurement caused by shipping or handling promptly with rust inhibitive primer
- D. Store units on planks or dunnage in a dry location; store doors in a vertical position spaced by blocking
- E. Store units covered to protect them from damage, but permitting air circulation

**1.9 SCHEDULING**

- A. Furnish manufacturer's mounting templates for door hardware specified in Section 08700 to manufacturer of products of this section in time for factory preparation for door hardware.

## **PART 2 – PRODUCTS**

### **2.1 MANUFACTURERS**

- A. Manufacturers: The following manufacturers' products have been used to establish minimum standards for materials, workmanship and function:
  - 1. Krieger Specialty Products,
  - 2. Noise Barriers
  - 3. Wenger
  - 4. Industrial Acoustics
  - 5. Jamison
- B. Equal products of other manufacturers may be used in the work provided such products have been approved by the Architect, not less than Ten (10) days prior to scheduled bid opening.

### **2.2 MATERIALS**

- A. Steel Sheet: One of the following:
  - 1. Cold-rolled steel sheet conforming to ASTM A 366, commercial quality.
  - 2. Hot-rolled steel sheet conforming to ASTM A 569, pickled and oiled, commercial quality.
- B. Galvanized Steel Sheet: ASTM A 653/A 653M, commercial quality, minimum G60 zinc coating.
- C. Acoustical Material: Manufacturer's standard for required STC rating.
- D. Primer: Meeting ASTM B 117 salt spray for 150 hours, and ASTM D 1735 water fog test for organic coatings for 200 hours.
- E. Glazing: Specified in Section 08800

### **2.3 COMPONENTS**

- A. Steel Doors: Fabricate in accordance with Architect-approved shop drawings, 1-3/4 inches minimum thickness, and as follows:
  - 1. Face Sheets:
    - a. Doors for interior use: Steel sheet, minimum 16 gage sheet thickness.
    - b. Doors for exterior use: Galvanized steel sheet, minimum 16 gage sheet thickness.
    - c. Visible seams on face sheets not permitted.
  - 2. Core:
    - a. Stiffen face sheets with continuous vertical steel sections.
    - b. Fill spaces between stiffeners with acoustical material.
  - 3. Vertical Edges:
    - a. Join face sheets at vertical edges by continuous welding:
      - i. Join door faces by continuous weld on each edge, extending full door height.
      - ii. Grind, fill, and dress welds to provide smooth flush surface.
    - b. Form edge profiles both vertical edges of doors with 1/8 inch in 2 inches bevel.
    - c. Visible seams on vertical edges not permitted.
  - 4. Horizontal Edges:
    - a. Close top and bottom edges of doors with continuous steel channels, 16 gage minimum, spot-weld channels to both door faces.
    - b. Provide openings in bottom closure of exterior doors to permit escape of entrapped moisture.

- c. Provide additional flush closing channel at top edge of doors; spot-weld channel to both door faces.
- 5. Hardware Preparation:
  - a. Mortise, reinforce, drill, and tap doors at factory for fully templated mortised hardware only, in accordance with approved hardware schedule and supplied templates.
  - b. Provide reinforcing plates at surface-mounted or non-templated hardware locations.
- B. Frames: Fabricate in accordance with Architect-approved shop drawings, and as follows:
  - 1. Frames for interior use: Fabricate from steel sheet, minimum 14-gage thickness.
  - 2. Frames for exterior use: Fabricate from galvanized steel sheet, minimum 14-gage thickness.
  - 3. Form frame members straight, and of uniform profile through lengths, as welded units with integral trim, of sizes and profiles indicated.
    - a. Weld contact edges of joints closed tight.
    - b. Miter perimeter trim faces and weld continuously.
  - 4. When shipping limitations so dictate, fabricate frames for large openings in sections designed for assembly in the field; install alignment plates or angles, of same material and gage as frame, at each joint.
  - 5. Hardware Preparation:
    - a. Mortise, reinforce, drill, and tap frames at factory for fully templated mortised hardware only, in accordance with Architect-approved shop drawings and supplied templates.
    - b. Provide reinforcing plates at surface-mounted or non-templated hardware locations.
  - 6. Floor Anchors:
    - a. Fabricate of same material as frame material; minimum 14 gage.
    - b. Weld anchors inside each jamb for floor anchorage.
  - 7. Jamb Anchors:
    - a. Fabricate of same material as frame material; weld anchors inside each jamb for wall anchorage.
    - b. Provide anchor types for indicated adjacent wall construction:
      - i. Frames for installation in masonry walls: Adjustable jamb anchors, 16 gage, T-shape type.
      - ii. Frames for installation in stud partitions: Continuous 16 gage steel channel to surround stud, welded inside each jamb.
  - 8. Plaster Guards: Fabricate from minimum 22 gage steel; weld in place at hardware mortises on frames to be set in plaster, masonry, or concrete openings.
  - 9. Provide welded frames with temporary steel spreader welded to jamb feet for bracing during shipping and handling.
- C. Vision Lites:
  - 1. Factory-assemble lites in doors indicated to have lites, using glazing materials and assembly methods indicated on approved shop drawings for required STC rating; field assembly not permitted.
  - 2. Fabricate dual-glazed lites permitting individual removal of each glazing pane.
- D. Loose Stops:
  - 1. Fabricate of minimum 12 gage steel, with factory-drilled and countersunk holes for fasteners.
  - 2. Form stops for mitered corner joints.

3. Supply cadmium-coated or zinc-coated fasteners, size and quantity required for fastener holes.

E. Door Hardware:

1. Supply gasketing systems, retainers, retainer covers, fixed door bottoms, cam-lift hinges, thresholds, and sills as indicated on Architect-approved shop drawings, or specified in manufacturer's product data for project conditions, to achieve specified performance requirements.
2. All other door hardware is specified in Section 08710

## **2.4 SILL CONDITION**

- A. Where indicated on the drawings, furnish a smooth flush stainless steel or aluminum threshold for the door bottom to seal against when the door is in the closed position. The minimum width of the threshold shall be door thickness plus 4" to allow the threshold to extend a minimum of 1 ½" beyond the face of the door on both sides of the opening. For openings where carpet extends through the opening, the threshold height shall be 1/8" greater in height than the carpet thickness.

## **2.5 FINISH**

- A. Finish: All tool marks and surface imperfections shall be removed and exposed faces of all welded joints shall be dressed smooth. Assemblies shall be treated and shall be coated on all accessible surfaces with a rust-inhibitive primer which meets ASTM B117 salt spray for 150 hours, and ASTM D1735 water fog test for organic coatings for 200 hours, and which is fully cured prior to shipment.

## **2.6 SOURCE QUALITY CONTROL**

- A. Hardware location on doors and frames:
1. Hinges:
    - a. Top: 5 inches from head of frame to top of hinge.
    - b. Bottom: 10 inches from finished floor to bottom of hinge.
  2. Unit and integral type locks and latches: 38 inches from finished floor to centerline of knob.
  3. Deadlocks: 48 inches from finished floor to centerline of strike.
  4. Panic Hardware: 38 inches from finished floor to centerline of cross bar, or as indicated on hardware template.

# **PART 3 – EXECUTION**

## **3.1 EXAMINATION**

- A. Verification of conditions:
1. Prior to installation, check and correct frames for size, swing, squareness, alignment, twist and plumb.
  2. Verify openings are in accordance with approved shop drawings.
- B. Installer's Examination:
1. Have installer of this section examine conditions under which construction activities of this section are to be performed, then submit written notification if such conditions are unacceptable.
  2. Transmit two copies of installer's report to Architect within 24 hours of receipt.
  3. Beginning construction activities of this section before unacceptable conditions have been corrected is prohibited.
  4. Beginning construction activities of this section indicates installer's acceptance of conditions.

### **3.2 PREPARATION**

- A. Remove steel spreaders from welded frames prior to installation; use of spreaders for installation purposes not permitted.

### **3.3 INSTALLATION**

- A. Install units in accordance with approved shop drawings and manufacturer's printed installation instructions; in addition, install steel components in accordance with HMMA 840.
- B. Oversize Assemblies:
  - 1. Weld field joints in accordance with AWS D1.1 and approved shop drawings.
  - 2. Finish exposed field welds smooth. Touch-up with rust inhibitive primer.
  - 3. Ship Knock down to the jobsite prepared for field attachment by others.
  - 4. Fill voids between concealed side of frame and adjacent wall construction with lightweight gypsum plaster in accordance with approved shop drawings or manufacturer's printed installation instructions.
  - 5. Finish surfaces having abrasion damage smooth; touch-up with rust inhibitive primer.
- C. Install gasketing systems, retainers, retainer covers, automatic door bottoms, fixed door bottoms, cam-lift hinges, thresholds, and sills in accordance with manufacturer's printed instructions.
  - 1. All perimeter gaskets shall be properly installed and adjusted to be light-tight and essentially air-tight, with door operating normally.
- D. Installation of all other door hardware is specified in Section 08700
- E. Field painting is specified in Section 09900
- F. Site Tolerances: Do not exceed the following installation tolerances:
  - 1. Squareness: Plus or minus 1/16 inch measured on a line, 90 degrees from one jamb, at the upper corner of the frame at the other jamb.
  - 2. Alignment: Plus or minus 1/16 inch measured on jambs on a horizontal line parallel to the plane of the wall.
  - 3. Twist: Plus or minus 1/16 inch measured at face corners of jambs on parallel lines perpendicular to the plane of the wall.
  - 4. Plumb: Plus or minus 1/16 inch measured on the jamb at the floor.

### **3.4 FIELD QUALITY CONTROL**

- A. The owner may pay an independent testing agency to perform tests on the acoustical door assemblies.
- B. Each door shall provide acoustical isolation equal to a Noise Isolation Class (NIC) which is no less than seven (7) points below the specified STC rating, when measured in accordance with ASTM E 336 and ASTM E 413.
- C. Any door assemblies that do not meet acoustical performance requirements will be fixed and retested at the Contractor's expense.

**END OF SECTION**

## **SECTION 08410 - ALUMINUM STOREFRONTS**

### **PART 1 - GENERAL**

#### **1.1 RELATED DOCUMENTS**

- A. Drawings and general provisions of Contract including General and Supplementary Conditions and Division 1 Specification sections apply to work of this section.

#### **1.2 DESCRIPTION OF WORK**

- A. Extent of aluminum entrances and storefronts is indicated on drawings and schedules.
- B. Types of aluminum entrances required include the following:
  - 1. Storefront type framing system for exterior applications.
  - 2. Impact Resistant Exterior Storefront Door Frames.
- C. Glazing: Refer to "Glass and Glazing" section of Division 8 for glazing requirements for aluminum entrances and storefronts specified herein to be factory pre-glazed.

#### **1.3 SYSTEM PERFORMANCES**

- A. General: Provide exterior entrance and storefront assemblies that have been designed and fabricated to comply with requirements for system performance characteristics listed below as demonstrated by testing manufacturer's corresponding stock systems according to test methods designated. System shall be of design styles indicated. System components and accessories shall be from the same manufacturer to the maximum extent possible.
- B. Thermal Movement: Allow for expansion and contraction resulting from ambient temperature range of 120-degree F.
- C. Wind Loading: Provide capacity to withstand loading indicated below, tested per ASTM E 330.
  - 1. Uniform pressure of 20 psf inward and 20 psf outward.
- D. Transmission Characteristics of Fixed Framing: Comply with requirements indicated below for transmission characteristics and test methods.
  - 1. Air and Water Leakages: Air infiltration of not more than 0.06 CFM per sq. ft. of fixed area per ASTM E 283 and no uncontrolled water penetration per ASTM E 331 at pressure differential of 6.24 psf (excluding operable door edges).
  - 2. Condensation Resistance: Not less than 51 CRF per AAMA 1502.7.
  - 3. Thermal Transmittance: U-value of not more than 0.65 Btu/(hr x sf x degree F) per AAMA 1503.1.
- E. Transmission Characteristics of Entrances: Provide entrance doors with jamb and head frames which comply with requirements indicated below for transmission characteristics and test methods.
  - 1. Air Leakage: Air infiltration per linear foot of perimeter crack of not more than 0.50 CFM for single doors and 1.0 CFM for pairs of doors per ASTM E 283 at pressure differential of 1.567 psf.
  - 2. Condensation Resistance: Not less than 48 CRF per AAMA 1502.7.
  - 3. Thermal Transmittance: U-value of not more than 0.93 Btu/(hr x sf x degree F) per AAMA 1503.1.

#### **1.4 QUALITY ASSURANCE**

- A. Drawings: Plans, elevations and details show spacings of members as well as profile and similar dimensional requirements of aluminum entrances and storefront work. Minor deviations will be accepted in order to utilize manufacturer's standard products when, in Architect's sole judgment, such deviations do not materially detract from design concept or intended performances.

## **1.5 SUBMITTALS**

- A. Product Data: Submit manufacturer's specifications, standard details, and installation recommendations for components of aluminum entrances and storefronts required for project, including test reports certifying that products have been tested and comply with performance requirements.
- B. Samples: Submit samples of each type and color of aluminum finish on 12" long sections of extrusions or formed shapes and on 6" square sheets. Where normal color and texture variations are to be expected, include 2 or more units in each set of samples showing limits of such variations.

## **PART 2 - PRODUCTS**

### **2.1 ALUMINUM DOORS, FRAMES & STOREFRONTS**

- A. Manufacturers: The following manufacturers' products have been used to establish minimum standards for materials, workmanship and function:
  - 1. Kawneer North America
  - 2. Tubelite, Inc.
  - 3. Coral Industries, Inc./Coral Architectural Products
  - 4. YKK AP America, Inc.
  - 5. Oldcastle
  - 6. Record
- B. Equal products of other manufacturers may be used in the work, provided such products have been approved by the Architect, not less than Ten (10) days prior to scheduled bid opening.

### **2.2 MATERIALS AND ACCESSORIES**

- A. Aluminum Members: Alloy and temper recommended by manufacturer for strength, corrosion resistance, and application of required finish; ASTM B 221 for extrusion, ASTM B 209 for sheet/plate.
- B. Fasteners: Aluminum, non-magnetic stainless steel, or other materials warranted by manufacturer to be noncorrosive and compatible with aluminum components.
  - 1. Do not use exposed fasteners except where unavoidable for application of hardware. Match finish of adjoining metal.
  - 2. Provide Phillips flat-head machine screws for exposed fasteners.
- C. Concealed Flashing: Dead-soft stainless steel, 26 gauge minimum, or extruded aluminum, 0.062" minimum, of an alloy and type selected by manufacturer for compatibility with other components.
- D. Brackets and Reinforcements: Manufacturer's high-strength aluminum units where feasible; otherwise, non-magnetic stainless steel or hot-dip galvanized steel complying with ASTM A 386.
- E. Concrete/Masonry Inserts: Cast-iron, malleable iron, or hot-dip galvanized steel complying with ASTM A 386.
- F. Bituminous Coatings: Cold-applied asphalt mastic complying with SSPC-PS 12, compounded for 30-mil thickness per coat.
- G. Compression Weatherstripping: Manufacturer's standard replaceable stripping of either molded neoprene gaskets complying with ASTM D 2000 or molded PVC gaskets complying with ASTM D 2287.
- H. Sliding Weatherstripping: Manufacturer's standard replaceable stripping of wool, polypropylene, or nylon woven pile, with nylon fabric or aluminum strip backing, complying with AAMA 701.2.

- I. Glass and Glazing Materials: Provide glass and glazing materials which comply with requirements of "Glass and Glazing" section of these specifications.

## **2.3 HARDWARE**

- A. General: Hardware shall comply with requirements of the "Americans with Disabilities Act". Refer to hardware section of Division 8 for requirements for hardware items other than those indicated herein to be provided by manufacturer of aluminum entrances.
  - 1. Push/Pull Handles: CO-9 design, by Kawneer. Finish as per the Door Schedule.
  - 2. All other hardware shall be as per Section 08700, Finish Hardware.

## **2.4 FRAMING**

- A. Types:
  - 1. Storefront type framing system for non-insulated interior applications:
    - a. Framing system shall be equal to TriFab Versaglaze 450, by Kawneer.
  - 2. Impact Resistant Exterior Storefront Frames:
    - a. Framing system shall be equal to IR 501, by Kawneer, Impact Resistant Storefront Framing Systems, Insulated.
- B. General:
  - 1. Support Members: Extruded aluminum alloy 6063-T6 or 6061-T6 complying with ASTM B-221.
  - 2. Flashing/Closures: Formed aluminum 5005-H34 alloy, min. thickness .040", complying with ASTM B-209.
  - 3. Cap System: Manufacturer's standard cap glazing system consisting of rectangular (rafter) and beveled (horizontal) glazing gaps which will secure all sides of each light of glass against negative and positive loads.
  - 4. Fasteners: A300 stainless steel.
  - 5. Sealant: Silicone (FS TT-S-0015 43A and TT-S-0023 o.c.)

## **2.5 FABRICATION**

- A. Sizes and Profiles: Required sizes for door and frame units, including profile requirements, are indicated on drawings. Any variable dimensions are indicated, together with maximum and minimum dimensions required to achieve design requirements and coordination with other work.
- B. Prefabrication: To greatest extent possible, complete fabrication, assembly, finishing, hardware application, and other work before shipment to project site. Disassemble components only as necessary for shipment and installation.
  - 1. Preglaze door and frame units to greatest extent possible, in coordination with installation and hardware requirements.
  - 2. Do not drill and tap for surface-mounted hardware items until time of installation at project site.
  - 3. Perform fabrication operations, including cutting, fitting, forming, drilling and grinding of metal work in manner which prevents damage to exposed finish surfaces. For hardware, perform these operations prior to application of finishes.
- C. Welding: Comply with AWS recommendations to avoid discoloration; grind exposed welds smooth and restore mechanical finish.
- D. Reinforcing: Install reinforcing as necessary for performance requirements; separate dissimilar metals with bituminous paint or other separator which will prevent corrosion.
- E. Continuity: Maintain accurate relation of planes and angles, with hairline fit of contacting members.

- F. Fasteners: Conceal fasteners wherever possible.
- G. Weatherstripping: For exterior doors, provide compression weatherstripping against fixed stops; at other edges, provide sliding weatherstripping retained in adjustable strip mortised into door edge.
  - 1. Provide EPDM/vinyl blade gasket weatherstripping in bottom door rail, adjustable for contact with threshold.

## **2.6 STOREFRONT FRAMING SYSTEM**

- A. General: Provide inside-outside matched center glazed system with provisions for glass replacement. Shop-fabricate and preassemble frame components where possible.

## **2.7 FINISHES**

- A. Baked Enamel Finish: Premium color selection equal to Kawneer #22 Stock Permafluor Architectural Coating (Hylar 5000 or Kynar 500), factory applied, and oven baked for a topcoat thickness of 1.0 - 1.3 mils.
  - 1. Color to be selected by Architect after bid date from manufacturer's standards.
  - 2. Color selections MUST include "White".

# **PART 3 - EXECUTION**

## **3.1 PREPARATION**

- A. Field Measurement: Wherever possible, take field measurements prior to preparation of shop drawings and fabrication, to ensure proper fitting of work.

## **3.2 INSTALLATION**

- A. Comply with manufacturer's instructions and recommendations for installation of aluminum entrances.
- B. Set units plumb, level, and true to line, without warp or rack of framing members, doors, or panels. Anchor securely in place, separating aluminum and other corrodible metal surfaces from sources of corrosion or electrolytic action at points of contact with other materials.
- C. Drill and tap frames and apply surface-mounted hardware items, complying with hardware manufacturer's instructions and template requirements. Use concealed fasteners wherever possible.
- D. Set sill members and other members in bed of sealant as indicated, or with joint fillers or gaskets as indicated to provide weathertight construction. Comply with requirements of Division 7 for sealants, fillers, and gaskets.
- E. Refer to "Glass and Glazing" section of Division 8 for installation of glass and spandrel panels indicated to be glazed into framing, and not preglazed by manufacturer.

## **3.3 ADJUST AND CLEAN:**

- A. Adjust operating hardware to function properly, without binding, and to prevent tight fit at contact points and weatherstripping.
- B. Clean completed systems, inside and out, promptly after erection and installation of glass and sealants. Remove excess glazing and joint sealants, dirt, and other substances from aluminum surfaces.
- C. Institute protective measures and other precautions required to assure that aluminum entrances and storefronts will be without damage or deterioration, other than normal weathering, at time of acceptance.

## **END OF SECTION**

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# Additions to Robertsdale High School

for the  
Baldwin County Board of Education  
Bay Minette, Alabama

**MCKEE PROJECT NO. 23.195**

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**END OF TABLE OF CONTENTS – VOLUME 2 OF 2**

## SECTION 11200 - BATTING CAGES

### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of Contract including General and Supplementary Conditions and Division 1 Specification sections apply to work of this section.

#### 1.2 DESCRIPTION OF WORK

- A. Extent of batting cages equipment is shown on drawings.
- B. General Scope: Provide system complete and ready for use, including standards, nets, cable, hooks, ropes, etc.
- C. Equipment shall be unloaded from transporters and installed by equipment manufacturers or their authorized agent.

#### 1.3 SUBMITTALS

- A. Product Data: Submit manufacturer's product data, specifications, installation, and maintenance instructions for each type of equipment required.
  - 1. Provide templates for anchor bolts and other items encased in concrete or below finished surfaces in time to not delay work.

### PART 2 - PRODUCTS

#### 2.1 MANUFACTURERS

- A. The following manufacturers' products have been used to establish minimum standards for materials, workmanship and function:
  - 1. PSS Performance Sports Systems./Gared Holdings, LLC.; 9200 E. 146<sup>th</sup> St., Noblesville, IN 46060; p. 800-757-6081; [www.perfsports.com](http://www.perfsports.com)
- B. Equal products of other manufacturers may be used in the work provided such products have been approved by the Architect, not less than Ten (10) days prior to scheduled bid opening.

#### 2.2 MATERIALS

- A. BATTING CAGE
  - 1. 4080-70 – Indoor Multi-Sport Cage Model 4080 Multi Sport Cage: Electrically operated cage including motor, cables, controls, clamps for attachment to building structure, threaded rod supports, and other components required for complete functional installation
- B. Components:
  - 1. OVERHEAD SUPERSTRUCTURE:
    - a. The batting cage is supported from the roof structure by directly attaching to the underneath side of the roof truss or by attaching to Uni-strut, 4/O Chain, or 3 ½" O.D. horizontal and 2 3/8" O.D. vertical structural tubing supplied by the manufacture. Bridge pipe will be required when truss spans exceed 14'. Superstructure shall be furnished with standard black finish.
  - 2. NET MATERIAL
    - a. Cage net shall be model 4087, 12'-0" [3.66 m] high x 12'-0" [3.66 m] wide by 70' [21.3 m] long. An additional 12" [3.66 m] of net shall drape on the floor preventing balls from going under the cage. Net shall be constructed with #252 black knotted nylon with 3/4" [19 mm] square mesh and shall be capable of stopping a baseball, softball and golf ball. Entrance shall be through an overlapping net opening on each end. This feature shall allow one sidewall to be opened for use as a golf cage. Contact factory for special sizes

and materials.

### 3. DRIVE / SUPPORT STRUCTURE

- a. The model 4080-70 Multi-Sport Cage shall be operated by an electric curtain hoist, model 4102. Hoist is available in various voltages and frequencies. Hoist shall be driven by an instant reversing,  $\frac{3}{4}$  horsepower, electric gear-motor that is controlled with a key switch and integral limit switches.
- b. Curtain hoist shall drive a continuous 2-3/8"[60 mm] O.D. drive shaft. The cage shall be lifted by means of 1/8" [3 mm] galvanized aircraft cable rated at 2000 lbs [907 kg] breaking strength. Lift cables shall be spaced at no greater than 12'-0" [3.66 m] center to center. Each cable shall be taken up on individual aluminum spools located on the drive shaft.
- c. The drive shaft shall be supported by a carrier assembly spaced no greater than 12'-0" [3.66 m] center to center. The carrier shall consist of a formed bracket with two rubber wheels on which the drive shall rotate.
- d. Cage support frame shall be constructed of 1.9" O.D. steel tubing. Support frame shall be furnished with standard black powder coat finish. Optional colors available. The support frame may be lowered to the floor while placing the four sides of netting on top of the frame to allow for compact storage.
- e. The top of the cage net shall be suspended approximately 6" [152 mm] below the cage support frame.

### 4. CONTROLS

- a. Provide key lock, 3-position, momentary contact wall control switch to lower, raise, and stop gymnasium practice cage. Provide with switch box and stainless steel polished cover plate.
- b. Safety delay: Provide safety delay for motor such that when key is turned in opposite direction of curtain travel, motor shut offs momentarily and then reverses to opposite direction.

## 2.3 WARRANTY

- A. Warranted against defects in material and/or fabrication for 12 months from the date of delivery.

## PART 3 - EXECUTION

### 3.1 INSTALLATION

- A. General: Install equipment in accordance with manufacturer's instructions and placement drawings.
- B. Coordinate placement of anchors and accessories.

### END OF SECTION

# MECHANICAL SPECIFICATIONS 15000



## SECTION 15400 - PLUMBING

### PART 1 - GENERAL

#### SCOPE OF WORK

The work to be performed under this section of the Specification shall include all labor, materials, equipment, transportation, construction, facilities, and incidentals necessary for the proper execution and completion of all Plumbing work as shown and indicated on the Contract Drawings, and/or specified herein with the intent that the installation shall be complete in every respect and ready for use. The work required under this section of the specification shall include specifically, but is not limited to the following:

Cold water piping and connections to new fixtures as shown or indicated on the drawings.

Hot water supply piping, including connections to new fixtures, as shown or indicated on the drawings.

A system of sanitary soil, waste, and vent piping including connections to existing services, and new fixtures as shown or indicated on the drawings.

A system of thermal insulation for all new potable water piping.

All fixtures and equipment as hereinafter specified, completely installed and operational.

All necessary cutting and/or core drilling to install plumbing systems in this section.

#### RELATED DOCUMENTS

Drawings and general provision of the Contract, including General and Supplementary Conditions and Division 1 specification sections apply to work specified in this section.

#### GUARANTEE

All materials and equipment provided and/or installed under this section of the specifications shall be guaranteed for a period of one year from the date of acceptance of the work by the Owner. Should any trouble develop during this period due to defective materials or faulty workmanship, the Contractor shall furnish all necessary labor and materials to correct the trouble without any cost to the Owner. Any defective materials or inferior workmanship noticed at the time of installation and/or during the guarantee period shall be corrected immediately to the satisfaction of the architect.

#### CODES AND REGULATIONS

All work performed under this section shall conform with all local governing regulations, and in case of conflicting requirements, the most stringent shall apply. Minimum requirements shall be the International Building Code. All electrically operated equipment specified in this section shall comply with the National Electrical Code.

Should it be found that any part of the work shown or specified is not in accordance with

local regulations, the Architect shall be so advised at the time of bidding and all work installed as required to meet the local codes.

The Contractor shall comply with the latest revisions of all county, district, municipal, or local building codes, interpretations, buildings permits to include but not be limited to:

2021 International Building Code  
2021 International Fuel Gas Code  
2021 International Fire Code  
2021 International Mechanical Code  
2021 International Plumbing Code  
2010 ADA Standards for Accessible Design  
NFPA-101 - Life Safety Code  
Local Municipal Codes  
National Electrical Code (NFPA 70)

### FEES AND PERMITS

The Plumbing Subcontractor shall obtain and pay for all permits, fees for inspection, and other charges that may be necessary for fully completing the work. The Plumbing Subcontractor shall make all necessary tests required by City, County, or State authorities, legal regulations, and/or the Architect, and return to the Architect any certificates of approval issued in this district for plumbing work, etc. signed by the inspector in charge of each particular part of the work.

### RECORD DRAWINGS

Contractor shall keep a set of reproducible drawings on site at all times and log all changes made during construction period. No deviations from the drawings and specifications shall be made without full knowledge and consent of the Architect. Record drawings shall show dimensions, locations, and depth of all buried and concealed piping, plugged outlets, and equipment, and shall keep up-to-date. No plumbing progress payments will be approved unless as-built drawings are up-to-date. Upon completion of work, sepias shall be turned over to the Architect.

### COOPERATION

The Contractor shall lay out and proceed with his work so that this work will be executed in harmony with all other contractors and trades on the job.

### VISITING THE PREMISES

The Contractor, before submitting his bid on the work, must visit the site and familiarize himself with all existing conditions. As a result of having visited the premises, the Contractor shall be responsible for the installation of the work as it relates to such existing conditions. The submission of a bid will be considered an acknowledgment on the part of the bidder of his visitation to the site.

### VERIFICATION OF CONTRACT DRAWINGS

Additions to Robertsedale High School  
for the Baldwin County B.O.E.

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**REVISED 12-11-2023**

The drawings and specifications are intended to cooperate. Any materials, equipment, or systems related to this section and exhibited on the architectural and plumbing drawings, but not mentioned in the specifications are to be executed to the intent and meaning thereof, as if it were both mentioned in the specification and set forth on the drawings. Where the Contractor finds the specification and/or drawings to be in conflict or where they are not clear, same shall be brought to the attention of the Architect prior to submitting a bid.

The plans indicate the general arrangement of the existing utilities. The locations of piping are approximate for clarity. Exact locations shall be determined in the field by the Contractor. In the event it should become necessary to change the locations of any work due to building construction, etc., the Contractor shall secure the approval of the Architect before making the changes. Any changes approved by the Architect shall be made without added cost to the Owner. Under no circumstances shall the sizes indicated on the drawings be changed without securing written approval of the Architect.

The drawings are diagrammatic and do not necessarily show or indicate all fittings, offsets, and accessories which may be required. The Contractor shall carefully investigate the structural and finish conditions affecting all his work as well as the operational requirements of each system and shall arrange such work accordingly, furnishing such fittings, etc., as may be required for the proper and efficient functioning of each system. No unnecessary or unauthorized offsets will be permitted.

#### WORKMANSHIP

All workmanship performed under this section shall be executed in a first class manner in accordance with the best practices of the trade. The Architect reserves the right to accept or reject workmanship and determine when the Contractor has complied with the requirements herein specified. Only competent mechanics skilled in their respective trades shall be employed by the Contractor.

#### RESPONSIBILITY OF BIDDER

Each bidder shall visit the site of the proposed work and fully acquaint himself with conditions relating to the construction requirements so that he may fully understand the facilities, difficulties and restrictions contingent upon the execution of the work under this contract. The failure or omission of any bidder to receive or examine any form, instrument, addendum or other document shall in no way relieve any bidder from his obligations with respect to his bid or the contract. The submission of a bid shall be taken as prima facie evidence of compliance with this paragraph and that he has included in his proposal every item of cost necessary for a complete installation of air conditioning, heating and ventilation operations strictly as planned, specified, and intended.

#### NOISE AND VIBRATION

This Contractor shall be held responsible for elimination of all noises or vibrations transmitted to occupied areas from equipment which he may install. This applies particularly to vibration and noises in piping. He shall furnish and install water hammer arrestors, flexible connectors for piping, etc., as may be necessary.

## SUBMITTAL DATA

Materials and equipment schedules shall be submitted as soon as practicable, but not later than 30 days after the date of award of contract, and before commencement of installation of any material or equipment. A complete schedule of the material and equipment proposed for installation shall be submitted in proper binders (3-ring or fastener type), properly marked for approval by the Architect. The schedule shall include catalogs, cuts, diagrams, drawings, specifications and such other descriptive data as may be required by the Architect. The schedule and supplementary data shall be submitted in six (6) copies, and approval obtained. All materials required to be submitted for approval under this section shall be submitted at one time.

Partial submittals will not be considered. Each item submitted shall be identified by its applicable drawing number.

Where equipment named as equivalent or approved equal are proposed for use by the Contractor, he shall be responsible to coordinate any changes with all trades affected.

The following equipment and material shall be submitted for approval:

- Valves
- Cleanouts
- Access Panels
- Piping and materials
- Insulation
- Pumps
- Plumbing fixtures, including traps, supplies, and carriers
- Grease Traps
- Water Hammer Arrestors
- Floor Drains
- Trap Primers
- Water Heaters

## START-UP SERVICE

The Contractor shall put all items installed under this section into operation and shall instruct the Owner's maintenance personnel in all points requiring service and maintenance. Further, the Contractor shall make all adjustments and/or service requirements to said equipment during the first 60 days of actual occupancy.

## PIPING

Provide pipe sleeves through masonry construction, and install escutcheon plates around exposed piping in all rooms.

Soil, waste and vent lines shall be Schedule 40 PVC-DWV in accordance with Commercial Standards CS272-65 or ASTM Standards D2665-68. Soil, waste, and vent lines penetrating a fire rated wall or floor shall be service weight cast iron at the point of penetration only.

All plastic pipe shall bear the NSF Seal of Approval, and such other markings as required by the aforementioned standards.

Above slab cold water and hot water piping shall be Type "L" hard copper with sweated joints, using wrought fittings and non-corrosive flux. Below slab cold water piping shall be type "K" soft copper tubing.

Waste piping serving within the first thirty feet of areas where temperatures may be expected to exceed 140 degrees F shall be Spears® LabWaste™ CPVC piping or equal. Soil, waste, and vent systems penetrating a fire rated wall or floor shall be cast iron soil pipe. Below grade installation of thermoplastic pipe shall be installed in accordance to the ASTM D 2321\* standard. \* most current edition

Where pipes pass through firewalls, fire partitions, or fire rated floors, an approved UL Fire Seal shall be provided. System employed shall be assigned an approval number in accordance with 1990 Fire Resistance Directory published by Underwriters' Laboratories.

### PIPE SUPPORT

Hangers: Support all suspended piping with clevis type hangers equal to Piping Technology and Products Fig. 83, 5'-0" o.c. When attached to open-web bar joists, the hanger shall be supported from both chords at the same time. The hanger is preferred to pass between the chords, not attached to the webbing member, and supported on top of the chords. This is a concentric application. Architect shall approve all methods of attachment of hangers to construction. Hangers in contact with copper piping shall be copper, or copper plated. Within the storm shelter area, hangers shall be installed at 2'-6" o.c and piping shall be appropriately braced.

Vertical Support: Steel bar base clamped to pipe or grip strut channel with offset clamps. Support members to be of same material as supported material where possible.

All anchorage shall be to studs or solid blocking built into the wall. No plumbing straps shall be used.

### PIPING PLACEMENT

Place in most direct manner permitted by construction, free of unnecessary offsets, making changes in direction by means of standard fittings.

Grade 2" waste lines 1/4" per foot and 3" and 4" waste lines 1/8" per foot for positive flow. Secure all piping to structure.

Changes in direction of drainage pipe shall be made by means of suitable bends and branches of Y's and long sweeps. Short radius quarter bends are prohibited. Make no change in direction of flow greater than 90°. Where different sizes of drainage pipes or fittings are connected, use standard increasers and reducers of proper size. Do not reduce size of drainage piping in direction of flow. Drilling and tapping of house drains, soil waste or vent pipes, and use of saddle hubs and bands are prohibited.

### Waste Arms

Type "K" copper or IPS brass pipe typical; Alloy steel or IPS brass pipe at urinals.

### Test Fittings

Not shown on the drawings; provide where required for partial tests. Provide test tees at base of all stacks.

Hand holes with brass ferrules and brass trap screws for cleanouts shall be placed at ends of soil and waste pipe and where otherwise shown on plans or as required on job. Cleanouts to be brought flush with face of walls. All threaded plugs shall be full size of pipe on which placed up to 4".

### Soil Pipe

Support to firm earth below floor slabs.

Changes in direction of drainage pipe shall be made by means of suitable bends and branches of Y's and long sweeps. Short radius quarter bends are prohibited.

Connections of vertical soil pipe to all connections in horizontal soil pipe to be made by "Y" fittings.

### Vent Pipes

Main soil pipe stacks to be extended up through the building full size with increaser through roof per code.

Connect branch vents into main stacks with connections not less than 4 feet above the highest fixture.

All vent stacks shall be connected at the bottom to main drainage system and all horizontal runs shall be graded so as to discharge all water or condensation.

### Water Piping

Place supply pipes as shown or as directed in neat arrangement and parallel or at right angles to walls, joists, etc.

Place shock absorbers at each fixture group as recommended by manufacturer. Shock absorbers shall be PDI certified.

Place valves on all water pipe risers and branch lines at point where risers and branch lines connect to main water lines.

## PART 2 – PRODUCTS

### WATER PIPING

All water piping, unless otherwise shown or specified shall be copper pipe Type L or K as specified having a wall thickness of not less than .035 inches. It shall be clean, round, straight, and true to size, free from flaws and other defects.

All fittings on copper pipe shall be copper. The pipe and fittings shall be thoroughly

cleaned before inserting into the joint and then soldered with lead free solder.

## GAS PIPING

All piping above grade shall be Schedule 40 black steel ASTM 120. Fittings shall be 150 pound black malleable screw pattern for all sizes 2" and smaller.

Piping below slab shall be vented and encased in a sleeve of polyethylene, or other approved water resistant material. This can be accomplished using the pre-sleeved TracPipe PS-II system (or equal).

All piping shall be installed in accordance with NFPA recommendations and the National Fuel Gas Code complete with all necessary appurtenances.

Horizontal piping shall grade with a slope of 1" on 40 feet-0" to drip legs at all low points as required. Drips shall be provided at all low points and at bottom of risers. Drips shall be same size as the piping where installed and shall be a minimum of 12" long.

Use ground joint unions in all screw piping joints.

Piping shall be painted with yellow enamel and labelled with service and flow direction. Labels shall be secured to piping at spacings of no more than 15'-0".

## UNIONS

Unions shall be provided on inlet and outlet of all apparatus and equipment. Where valves are adjacent to equipment, unions shall be between valves and equipment.

Unions in copper pipe shall be cast bronze, WOG pattern, ground joint, 150 psi type.

Unions in steel pipe shall be malleable iron, WOG female pattern brass seat, ground joint, 150 psi type.

Unions connecting dissimilar metals shall be dielectric type.

## TRAP PRIMER DISTRIBUTION UNIT

A trap primer distribution system shall be equal to Precision Plumbing Products DU-4 to serve no more than four fixtures off one primer distribution unit. Unit shall be installed per manufacturer's instructions.

## VALVES AND COCKS

Valves and cocks shall be installed where shown on the drawings, and/or where found to be necessary for proper operation of the system. All branches from risers, all branches from mains, and all fixtures or equipment not having stops shall be provided with valves whether shown or not.

Angle or straightway chromium plated stops on the supplies to all fixtures accessible from the same room in which the fixtures are located.

All valves shall be the product of one manufacturer as cataloged by Milwaukee, Stockham, Crane, or Nibco.

For water piping, valves shall be equal to 125 psi SWP/200 psi WOG Nibco as follows:

Gate valves 1/2" to 3" = S-111.

Ball valves 1/2" to 2" = S-585.

Check valves 1/2" to 3" = S-413W.

### WALL HYDRANTS

Interior wall hydrants shall be encased, anti-siphon, automatic draining, keyed with nickel bronze face plate. Mount flush with wall. Wall hydrant shall be equal to Zurn Z-1325. Coordinate wall thickness at installation location. Adjust location as necessary to enclose piping within the wall.

Exterior wall hydrants shall be encased, anti-siphon, automatic draining, non-freeze, with nickel bronze faceplate, keyed hinged cover. Wall hydrant shall be equal to Zurn Z-1322-EZ. Coordinate wall thickness at installation location. Adjust location as necessary to enclose piping within the wall.

### THERMAL INSULATION WORK

All insulation work shall be performed by experienced insulation application mechanics thoroughly familiar with and experienced in the application of insulation materials. All insulation materials shall be applied in accordance with manufacturer's published recommended methods. Installation and finish of insulation materials shall meet with complete data for approval of materials and application methods as proposed for use. All piping shall be pressure tested and all surfaces shall be thoroughly cleaned before covering is applied. Insulation materials, including sealer, adhesive, finished, etc., shall meet NFPA Standards with regard to flame spread and support of combustion.

All domestic cold water piping and all hot domestic water piping less than 1-1/2" in diameter shall be covered with 1" thick heavy density fiberglass sectional pipe insulation equal to Owens Corning Fiberglass 25 ASJ/SSL, excluding piping below grade or chromium plated fixture connections. All hot domestic water piping 1-1/2" in diameter or larger shall be covered with 1-1/2" thick heavy density fiberglass sectional pipe insulation equal to Owens Corning Fiberglass 25 ASJ/SSL, excluding piping below grade or chromium plated fixture connections. All piping inside masonry walls shall be insulated; no exceptions. Armaflex type insulation shall be allowed only before building is dried-in in those locations which will be inaccessible for the installation of the aforementioned fiberglass insulation. All exposed hot and cold water piping shall be labelled as required by ASME A13.1.

Fittings for the above shall be insulated with premolded fitting insulation of the same material and thickness as the adjacent insulation and shall be covered with a premolded plastic (PVC) vapor barrier and sealed with vapor barrier lagging adhesive. Covering adjacent to unions and other points of termination shall be finished with the plastic material neatly beveled.

It shall be the responsibility of the insulation subcontractor to coordinate hanger locations

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and prevent crushing or breaking finishes. Provide saddles with blocking as necessary.

Contractor shall insulate hot water supply assembly and P-Trap assembly with insulation kit equal to Brocar or Trubro on handicapped lavatories.

### FLOOR, WALL, AND CEILING PLATES

Nickel plated floor, wall, and ceiling plates shall be provided on all pipes passing through floor, ceiling, or partition. Nickel or chromium plated escutcheons shall be provided on all fixture supplies.

### PLUMBING FIXTURES AND EQUIPMENT

Provide roughing-in for and connect to supply lines, waste and vent lines, all equipment, fixtures, drains, etc., specified herein or in other sections of the specifications which require such connections.

Provide stops in hot and cold water upstream of connections to each fixture, equipment items, etc. Where not otherwise specified, stops shall be same as specified hereinbefore for ball valves. Provide deep escutcheon on all sinks and lavatories where waste pipe goes into wall. Anchor all supplies from wall securely within wall construction.

Provide stops for all fixtures. Traps for all fixtures shall be 17- gauge chromium plated brass.

Plumbing fixtures shall be equal to American Standard, Crane, Kohler, Just, Elkay or Eljer. Faucets and valves shall be equal to Sloan, Zurn, Delta, American Standard, Kohler, Just or T&S Brass. No others will be accepted.

Plumbing fixtures shall be as follows:

- P-1      WATER CLOSET: Kohler K-4406 elongated bowl, floor mounted, floor outlet, flush valve type with Sloan Royal 111 flush valve. Provide Olsonite 10SSC white open front seat (less cover) and two bolt caps.
- P-1A     HANDICAP WATER CLOSET: Kohler K-4368, 17-1/2" high elongated bowl, floor mounted, floor outlet, flush valve type with Sloan Royal 111 flush valve. Provide Olsonite 10SSC white open front seat (less cover) and two bolt caps. Install per ADA requirements.
- P-2      URINAL: Kohler K-4960-ET, wall hung, vitreous china with Sloan Royal 186 -1.0 flush valve and Zurn Z1222 wall carrier.
- P-2A     HANDICAP URINAL: Kohler K-4960-ET, wall hung, vitreous china with Sloan Royal 186-1.0 flush valve and Zurn Z1222 wall carrier. Mount fixture in compliance with ADA for handicap use.
- P-3      LAVATORY: Kohler K-2005, 20" x 18" wall hung vitreous china with Delta 505 single lever faucet and grid waste. Bowl depth not to exceed 5-1/2". Provide 1-1/4", 17-gauge P-Trap, flexible supplies equal to Brasscraft, stops, Leonard

model 170 thermostatic mixing valve, and Zurn Z1231 concealed arm carrier. Provide insulation kit on all exposed piping.

- P-3A HANDICAP LAVATORY: Kohler K-2005, 20" x 18" wall hung vitreous china with Delta 505 single lever faucet and grid waste. Bowl depth not to exceed 5-1/2". Provide 1-1/4", 17-gauge P-Trap, flexible supplies equal to Brasscraft, stops, Leonard model 170 thermostatic mixing valve, and Zurn Z1231 concealed arm carrier. Install per ADA requirements. Provide insulation kit on all exposed piping.
- P-4 WATER COOLER: Dual type, wall mounted, barrier free, Elkay LZSTL8WSSP with 17-gauge P-Trap and rough brass stop. Provide with Zurn Z-1225-BL floor-supported plate carrier and mount in compliance with ADA for handicap use. Unit to have bottle-filling station on lower side.
- P-5 LAUNDRY SINK: Mustee 1RLN7 24" x 20" x 13" deep polypropylene utility sink. Provide with deck-mounted gooseneck faucet. wrist blades and basket strainer. Provide 1-1/2", 17-gauge P-Trap, continuous waste, and flexible supplies.
- P-6 TRAINERS ROOM SINK: Elkay LRAD172265 Stainless steel, counter mounted, single-compartment, 6-1/2" deep. Provide T&S B-2866-04 gooseneck faucet (minimum 5" clearance from deck to spray) with wrist blade handles and cup strainer. Bowl depth to be 6-1/2". Provide 1-1/2", 17-gauge P-Trap, continuous waste, and flexible supplies with stops. Provide insulation kit and Leonard model 170 thermostatic mixing valve.
- P-7 HANDICAP SHOWER: Aqua Bath C4136BF-FUS 3/4" shower with seat, "U" bar, and curtain rod. Provide with curtain, single handle, pressure balanced shower valve with hand held shower head and 24" vertical slide bar and 2" IPS drain with 5" diameter chrome plated strainer Zurn ZN-415.
- P-8 FIXTURE NUMBER NOT USED
- P-9 ICE MAKER BOX: Guy Gray BIM875 fully recessed, with 1/2" FIP inlet and 1/4"O.D. outlet compression valve.
- P-10 WASHER BOX: Guy Gray B-200TS with 2" center set drain and top supply 1/2" angle valves.
- P-11 MOP SINK: 24" x 24" x 12", terrazzo, Fiat TSBC-1610 with Fiat 830-AA wall mounted faucet with hose, 889CC bracket, vacuum breaker, stainless steel bumper guard, and stainless steel wall splash guards. Unit shall be provided with 3" drain.
- P-12 COUNTER SINK: Elkay LRAD221965 Stainless steel, counter mounted, single-compartment, 19-1/2" x 22" x 6-1/2" deep. Provide T&S B-2866-04 gooseneck faucet (minimum 5" clearance from deck to spray) with wrist blade handles and cup strainer. Bowl depth to be 6-1/2". Provide 1-1/2", 17-gauge P-Trap, continuous waste, and flexible supplies. Provide insulation kit and Leonard model 170 thermostatic mixing valve.

- P-13 WHIRLPOOL: Whitehall Manufacturing S-110-S (or equal) stationary 110-gallon whirlpool of 304 stainless steel seamless construction. Plumbing contractor to provide necessary fittings to make all connections to provide a fully functional installation.

Floor Drains (Typical locations) Zurn ZN-415S Series with polished nickel bronze, square heel-proof strainer and adjustable collar. Floor drains shall be provided with trap primer tap as indicated on plans. (for AHU drainage) Zurn ZN-415I Series with nickel bronze top and "Type I" polished nickel bronze strainer with raised flange. Floor drains shall be provided with trap guard device, (or equal), as indicated on plans. Floor drains shall be provided with trap primer tap or trap guard device where indicated on plans.

### CLEANOUTS

Provide in cast iron sanitary piping at all changes in direction at ends of branches, at intervals not exceeding 40' on straight runs, and elsewhere as shown. Cleanouts shall be full opening type completely accessible. Size same as lines in which they occur, but not larger than 4". Tees and extensions shall be of same weight as pipe. Plugs shall be countersunk type. Catalog numbers from Josam or approved equal.

Outside cleanouts to grade shall be brought up flush with finished grade and installed in 18" x 18" x 6" concrete pad, cleanout plug shall be countersunk.

In Tile Floors: 56030-2, adjustable, cast iron body with ABS plug and satin finished square scoriated Nikaloy top; where soft tile occurs, provide 56030-12-2 recessed square Nikaloy cover.

In Concrete Floors: 58190, adjustable head, cast iron head and ferrule with ABS plug, round loose set scoriated tractor cover.

In Outside Line: 58190 cast iron head and ferrule with ABS plug. Terminate at grade or pavement in 18" x 18" x 6" concrete pad with tooled edges.

In Finished Walls: 58790 cast iron cleanout tee with ABS plug and stainless steel wall plate cover. Where distance from plug to finish wall will exceed 4", provide 58710 extend cover from sanitary tee to bring plug within 4".

In Quarry Tile Floors: 56040-13-1, adjustable cast iron head and ferrule, ABS plug and round brass terrazzo cover and rim.

### ELECTRIC TANK-TYPE WATER HEATERS

Provide electric water heater with high efficiency stainless steel sheathed elements which comply with ASHRAE Standard 90-75. Water heaters shall have capacity as scheduled and shall be equal in all respects to Rheem. Provide with 3" diameter thermometer gauge on discharge line, auxiliary drain pan, T&P relief valve, expansion tank, and vacuum breaker.

Provide Watts 100XL temperature and pressure relief valve, Watts N36 vacuum relief

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for the Baldwin County B.O.E.

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valve, galvanized drain pan, and 5-year warranty on tank. See schedule for electrical characteristics.

If the water heater has a storage capacity over 120 gallons or a heating rate of 56kW or greater, a boiler installation permit must be obtained from the State of Alabama Department of Labor. The heater installation and piping must also be inspected and approved by the State of Alabama Department of Labor.

### ELECTRIC TANKLESS WATER HEATERS

The water heater shall meet the minimum values as scheduled based on the design model indicated.

### GAS TANKLESS WATER HEATERS

Each tankless water heater shall produce 56°F temperature increase. Each unit shall have a maximum gas consumption of 1,194,000 BTU/H, set discharge temperature for 125°F. Provide MC-601-BK controller and coordinate final location with architect/owner. Tankless water heater shall be equal to Rinnai CU199e. Install per specific manufacturer's recommendation.

Provide Watts's 100XL temperature and pressure relief valve, Watts N36 vacuum relief valve. See schedule for electrical characteristics.

### HOT WATER CIRCULATION PUMPS

Shall be all bronze construction with one piece impeller, stainless steel shaft and 3/4" flanges. 120 volt single phase, control with strap-on aquastat set at 110°F. Unit shall be Rinnai Grundfos GTK15 or equal.

## PART 3 - EXECUTION

### COMPLETION OF WORK

This Contractor shall arrange for the installation of all equipment in order that it progresses along with the general construction of the building, and in no case shall be hold up other phases of the work due to the fact his equipment is not properly installed.

### TESTING

General: Perform all tests in the presence of the Architect or his representative. Test shall conform to local code requirements. File copies of all test reports in duplicate to physical plant.

Soil, Waste, and Vent Systems: Plug all openings, fill entire system with water to point of overflow and hold for at least one hour before inspection. System must remain full during the test without leakage. Each vertical stack with its branches may be tested separately, but any portion tested must have a 10' head. Provide test tees and plugs for all tests as required.

Drainage and Vent Systems final test. Fill all traps with water and then introduce into the entire system a pungent, thick smoke produced by one or more smoke machines. When the smoke appears at stack openings on the roof, the stack openings shall be closed and a pressure equivalent to a one-inch water column shall be held for a test period of not less than 15 minutes. The plumbing contractor shall provide all materials, equipment and labor to perform this testing.

Water Supply System: Test and secure acceptance of entire system before the piping or hot water heaters are otherwise concealed. Test as follows: Disconnect and cap all outlets to plumbing fixtures and all other equipment not designed for the full test pressure. Fill the system with water; apply 150 psi hydrostatic pressure and hold until inspection is completed. All piping throughout shall be tight under test. Water piping shall remain under normal water pressure during construction where freezing conditions do not exist.

### DISINFECTION

Disinfect all domestic water piping in accordance with local health department guidelines.

### ATTACHMENTS

General: Contractor to execute originals of attached copies.

Copy of Permit Request to Install Boiler or Pressure Vessel, State of Alabama Department of Labor

Copy of Boiler and Pressure Vessel Inspection Report, State of Alabama Department of Labor

### ATTACHMENTS:



JIM BENNETT  
COMMISSIONER

Ralph Pate  
Chief Inspector  
Elevator/Boiler  
Safety Division

# STATE OF ALABAMA DEPARTMENT OF LABOR

100 NORTH UNION STREET-SUITE 620  
P.O. BOX 303500  
MONTGOMERY, ALABAMA  
ZIP 36130-3500

PHONE (334) 242-3460

FAX (334) 240-3417



## Boiler and Pressure Vessel Inspection Report

DATE INSPECTED	CERT. EXP DATE	CERT POSTED YES [ ] NO [ ]	INVOICE FOR INSP. YES [ ] NO [ ]	JURISDICTION # AL	Nat'l BD [ ] or Ser # [ ]
OWNER NAME			NATURE OF BUSINESS		TYPE INSP PERMIT # _____ INT [ ] EXT [ ]
OWNER STREET ADDRESS AND P.O. BOX			OWNER CITY	OWNER STATE	OWNER ZIP
LOCATION NAME			SPECIFIC LOCATION		OBJECT LOCATION COUNTY
LOCATION ADDRESS LONGITUDE _____ LATITUDE _____			LOC CITY	LOC STATE ALABAMA	LOC ZIP
TYPE BOILER FT _____ WT _____ CI _____ COIL _____ ELECT BLR _____ OTHER _____ BOILER USE: Process _____ Hws _____ St Ht _____ Hwh _____ Other _____			MAN HOLE YES _____ NO _____	MANUFACTURER	FUEL N/A _____ FIRING METHOD N/A _____
TYPE PRESSURE VESSEL Air _____ Nitrogen _____ Water _____ Autoclave _____ Hot Water _____ Oxygen _____ Heat Exchanger _____ Other _____					
PRESSURE VESSEL USE Process _____ Storage _____ Service _____ Other _____ (explain)					CONTROLS TESTED YES _____ NO _____ N/A _____
DIMENSIONS (length width height etc.) indicate in. and/or ft.			BOILER CAPACITY (indicate ht surface, lbs/h btu/h etc.)		YEAR BUILT
MAWP			NO. OF SAFETY-RELIEF VALVES	SAFETY-RELIEF VALVES SET AT	TOTAL SAFETY-RELIEF VALVE CAPACITY, lbs/h btu/h cfm etc.)
					PRESSURE GAGE TESTED? YES _____ NO _____
Special Billing Instructions: Send Invoice to: Owner [ ] Location [ ] Contact Name _____ Send Certificate to Owner [ ] Location [ ] phone number _____					

Violations / required action / compliance date(s) Fee Schedule: CERTIFICATE INSPECTION

Signature of Inspector				Inspector AL CoC #	Company Name	Contact and phone number
I certify this is a true and correct report of my inspection.						

Neither this inspection nor any provision of this inspection shall be construed to place any liability on the state of Alabama, the Inspection Agency/Company or the Inspector with respect to any claim by any person, firm, or corporation relating in any way whatsoever to Boiler Inspections and injury or damage arising there from.  
Revised 112807



JIM BENNETT  
COMMISSIONER

**STATE OF ALABAMA  
DEPARTMENT OF LABOR**

100 NORTH UNION STREET-SUITE 620  
P.O. BOX 303500  
MONTGOMERY, ALABAMA  
ZIP 36130-3500

PHONE (334) 242-3460

FAX (334) 240-3417



SAFETY DIVISION  
CHIEF  
RALPH PATE

**Permit Request to Install Boiler or Pressure Vessel**  
(ONE OBJECT PER REQUEST WITH \$ 50.00 FEE)

Type of Installation	New <input type="checkbox"/>	Used <input type="checkbox"/>
Type of Object	Boiler <input type="checkbox"/>	Water Heater <input type="checkbox"/>
		Pressure Vessel <input type="checkbox"/> (storage tanks)

Installer \_\_\_\_\_  
Address 1 \_\_\_\_\_  
City / Zip \_\_\_\_\_  
Contact Name \_\_\_\_\_  
Phone Number \_\_\_\_\_

Loc of Installation \_\_\_\_\_  
Address 1 \_\_\_\_\_  
City / Zip \_\_\_\_\_  
Contact Name \_\_\_\_\_  
Phone Number \_\_\_\_\_

<b>Purchased From</b> (Co. Name, address, contact and ph#)	
<b>Manufacturers Name</b>	
<b>National Board Registration #</b> All objects must be NB registered by the Mfg. except cast Iron or cast aluminum sectional boilers)	
<b>MAWP</b> (max allowable working pressure indicated on Mfg Data Plate)	
<b>Indicate the appropriate ASME Code Symbol Stamp as indicated on Mfg's Data Plate</b> (all boilers and Pressure vessels must be ASME code constructed, and will have one of these stamps on nameplate attached to the shell.	<b>S</b> <input type="checkbox"/> Power Boiler (over 15 psi steam) <b>HLW</b> <input type="checkbox"/> Water Heaters (over 200,000btu and/or 120 gals) <b>H</b> <input type="checkbox"/> Heating Boilers/Hot Water Supply Boilers <b>M</b> <input type="checkbox"/> Miniature Boiler (not to exceed 100 psi steam) <b>U</b> <input type="checkbox"/> Unfired pressure vessel/Storage Tank  Note: Water Heaters are classified as a boiler.
<b>Serial Number</b>	

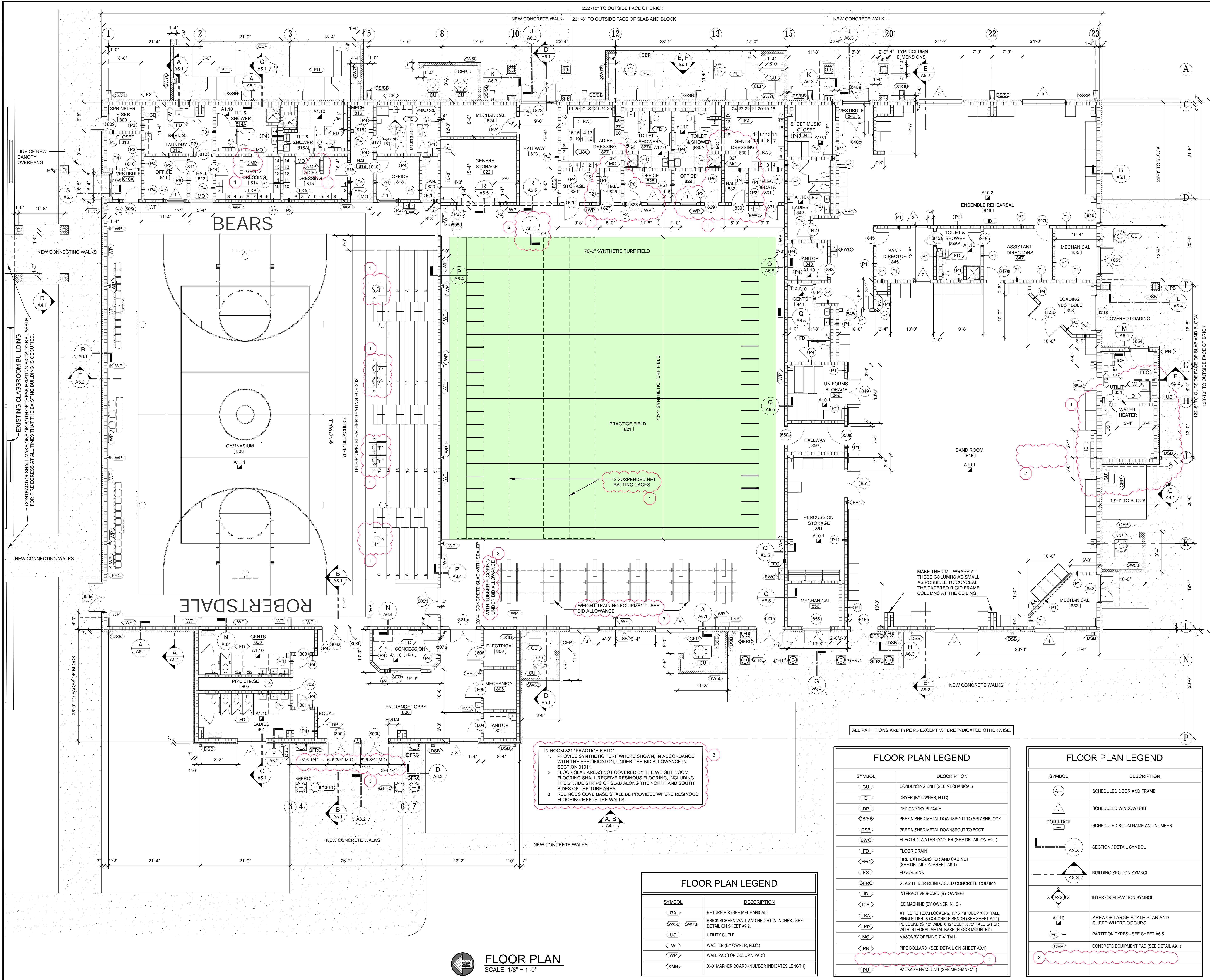
Signature of Applicant \_\_\_\_\_

<b>OFFICIAL USE ONLY</b>	
Approved by: _____	Check No. _____
Permit Number _____	Date ____/____/____
This Permit expires one year from the date signed by the Department or when installation is complete. Revised 11/28/2007	

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END OF SECTION 15400

- Z:\2023\23-195 Additions to Robertsdale High School\CAD Drawings\Architectural\A1.1 Floor Plan.dwg  
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IN ROOM 821 "PRACTICE FIELD":  
1. PROVIDE SYNTHETIC TURF WHERE SHOWN, IN ACCORDANCE WITH THE SPECIFICATION, UNDER THE BID ALLOWANCE IN SECTION 01011.  
2. FLOOR SLAB AREAS NOT COVERED BY THE WEIGHT ROOM FLOORING SHALL RECEIVE RESINOUS FLOORING, INCLUDING THE 2" WIDE STRIPS OF SLAB ALONG THE NORTH AND SOUTH SIDES OF THE TURF AREA.  
3. RESINOUS COVE BASE SHALL BE PROVIDED WHERE RESINOUS FLOORING MEETS THE WALLS.

FLOOR PLAN LEGEND	
SYMBOL	DESCRIPTION
<RA>	RETURN AIR (SEE MECHANICAL)
<SW50> <SW78>	BRICK SCREEN WALL AND HEIGHT IN INCHES. SEE DETAIL ON SHEET A9.2.
<US>	UTILITY SHELF
<W>	WASHER (BY OWNER, N.I.C.)
<WP>	WALL PADS OR COLUMN PADS
<XMB>	X-0" MARKER BOARD (NUMBER INDICATES LENGTH)

FLOOR PLAN LEGEND	
SYMBOL	DESCRIPTION
<CU>	CONDENSING UNIT (SEE MECHANICAL)
<D>	DRYER (BY OWNER, N.I.C.)
<DP>	DEDICATORY PLAQUE
<OS/SB>	PREFINISHED METAL DOWNSPOUT TO SPLASHBLOCK
<DSB>	PREFINISHED METAL DOWNSPOUT TO ROOF
<EWC>	ELECTRIC WATER COOLER (SEE DETAIL ON A8.1)
<FD>	FLOOR DRAIN
<FEC>	FIRE EXTINGUISHER AND CABINET (SEE DETAIL ON SHEET A9.1)
<FS>	FLOOR SINK
<GFRC>	GLASS FIBER REINFORCED CONCRETE COLUMN
<IB>	INTERACTIVE BOARD (BY OWNER)
<ICE>	ICE MACHINE (BY OWNER, N.I.C.)
<LKA>	ATHLETIC TEAM LOCKERS, 18" X 18" DEEP X 60" TALL, SINGLE TIER, & CONCRETE BENCH (SEE SHEET A9.1)
<LKP>	PE LOCKERS, 12" WIDE X 12" DEEP X 72" TALL, 6-TIER WITH INTEGRAL METAL BASE (FLOOR MOUNTED)
<MO>	MASONRY OPENING 7'-4" TALL
<PB>	PIPE BOLLARD (SEE DETAIL ON SHEET A8.1)
<PU>	PACKAGE HVAC UNIT (SEE MECHANICAL)

FLOOR PLAN LEGEND	
SYMBOL	DESCRIPTION
<A-->	SCHEDULED DOOR AND FRAME
<A-->	SCHEDULED WINDOW UNIT
<CORRIDOR>	SCHEDULED ROOM NAME AND NUMBER
<AX.X>	SECTION / DETAIL SYMBOL
<AX.X>	BUILDING SECTION SYMBOL
<AX.X>	INTERIOR ELEVATION SYMBOL
A1.10	AREA OF LARGE-SCALE PLAN AND SHEET WHERE OCCURS
<P5>	PARTITION TYPES - SEE SHEET A6.5
<CEP>	CONCRETE EQUIPMENT PAD (SEE DETAIL A9.1)

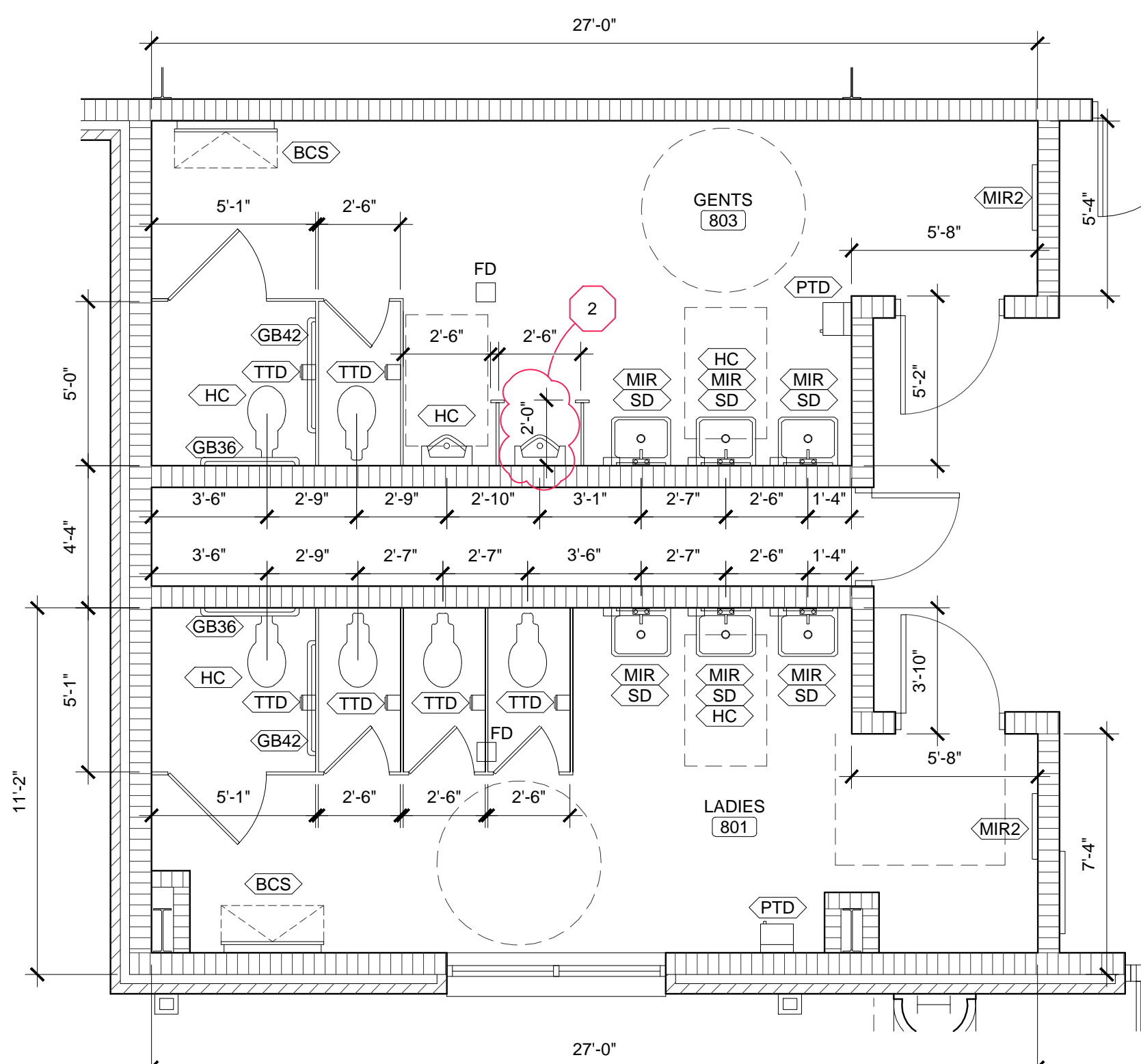
FLOOR PLAN  
SCALE: 1/8" = 1'-0"

ADDITIONS  
TO  
ROBERTSDALE HIGH SCHOOL  
FOR THE  
BALDWIN COUNTY BOARD OF EDUCATION  
ROBERTSDALE, ALABAMA

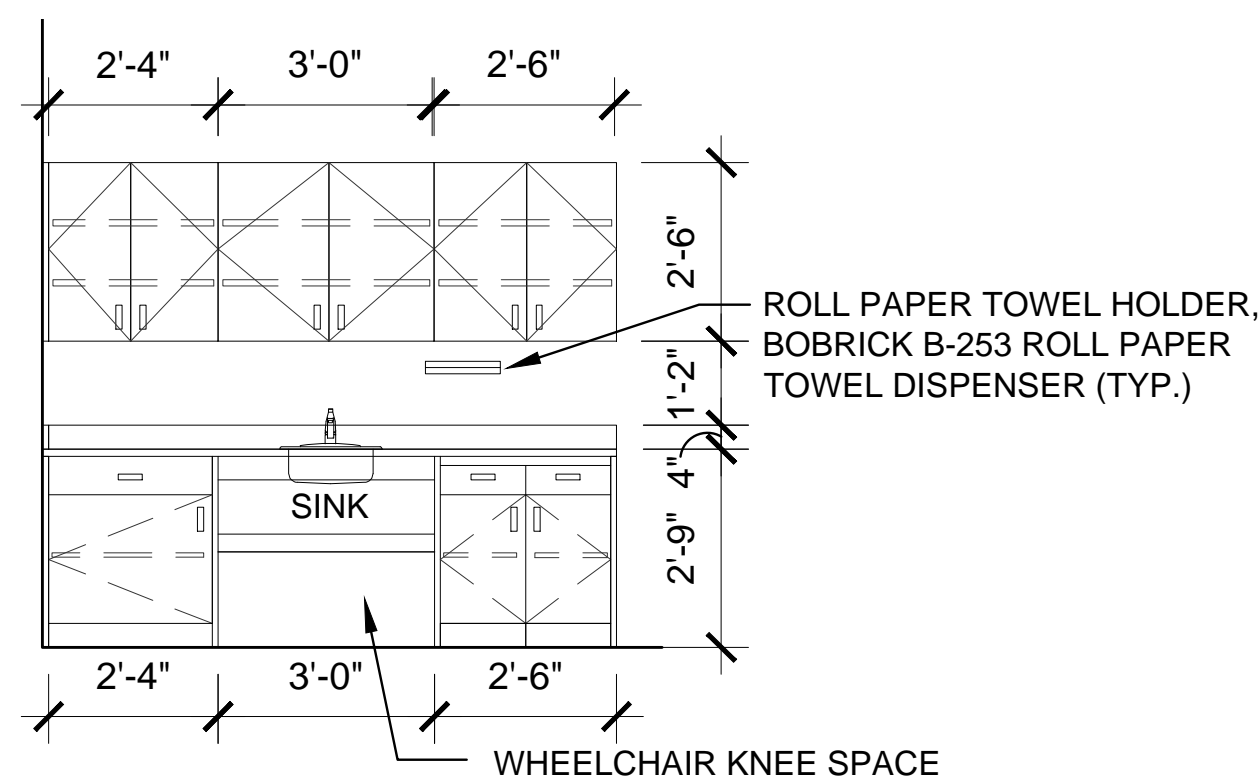
MCKEE & ASSOCIATES  
ARCHITECTS, INC.  
631 SOUTH HILL STREET, MONTGOMERY, ALABAMA 36104 (334) 834-9933

SHEET TITLE : FLOOR PLAN  
MCKEE JOB # : 23-195  
DRAWN BY : VH  
DATE: 10-11-2023  
REVISED DATE: 1 11-17-2023  
REVISED DATE: 2 11-29-2023  
REVISED DATE: 3 12-8-2023  
SHEET NO. : A1.1

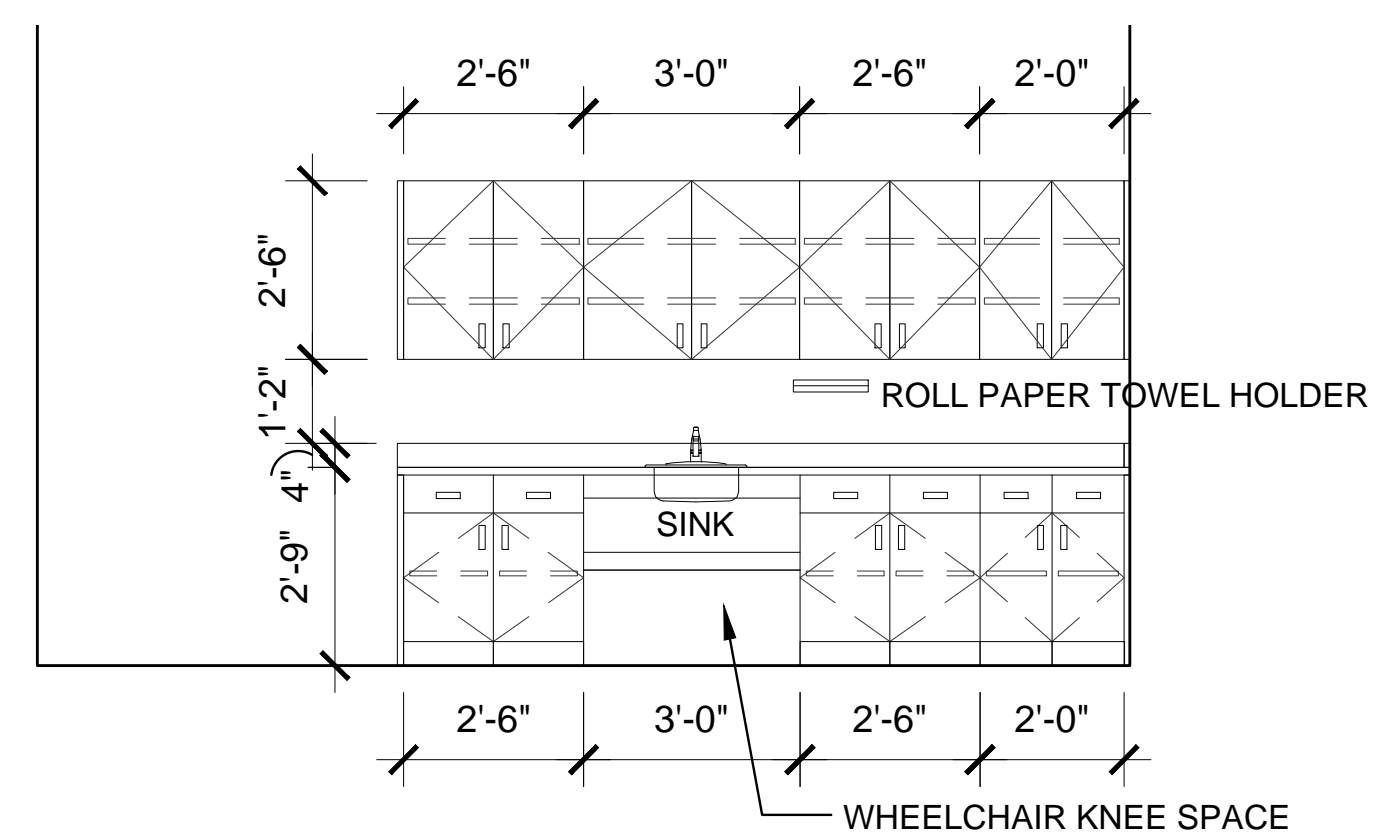
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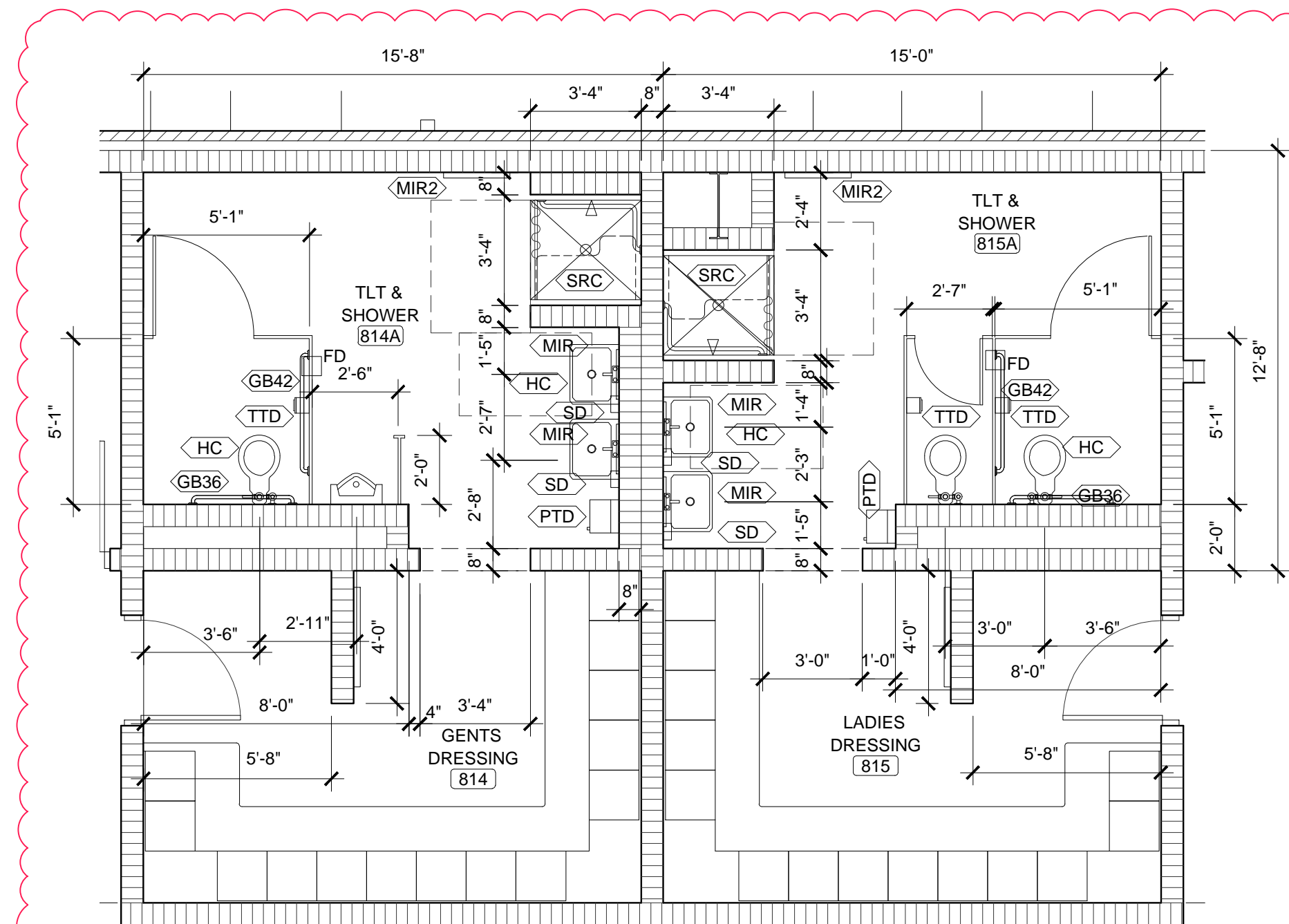
1 ENLARGED PLAN - LOBBY RESTROOMS  
SCALE: 1/4" = 1'-0"



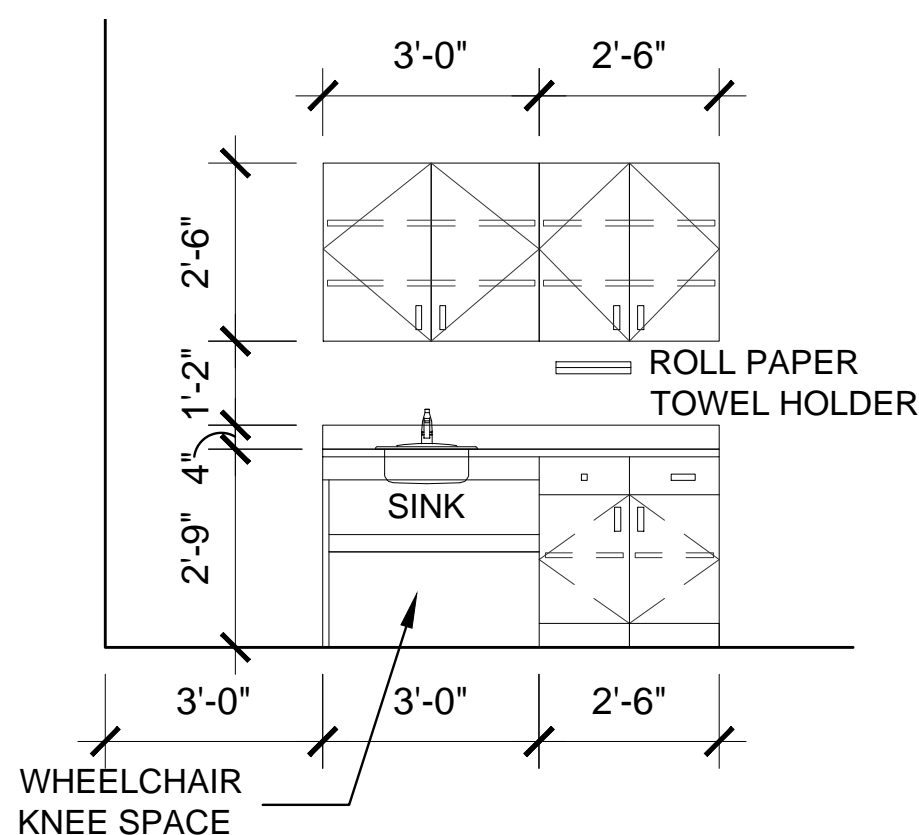
10 812 LAUNDRY  
CABINET ELEVATION  
SCALE: 3/8" = 1'-0"



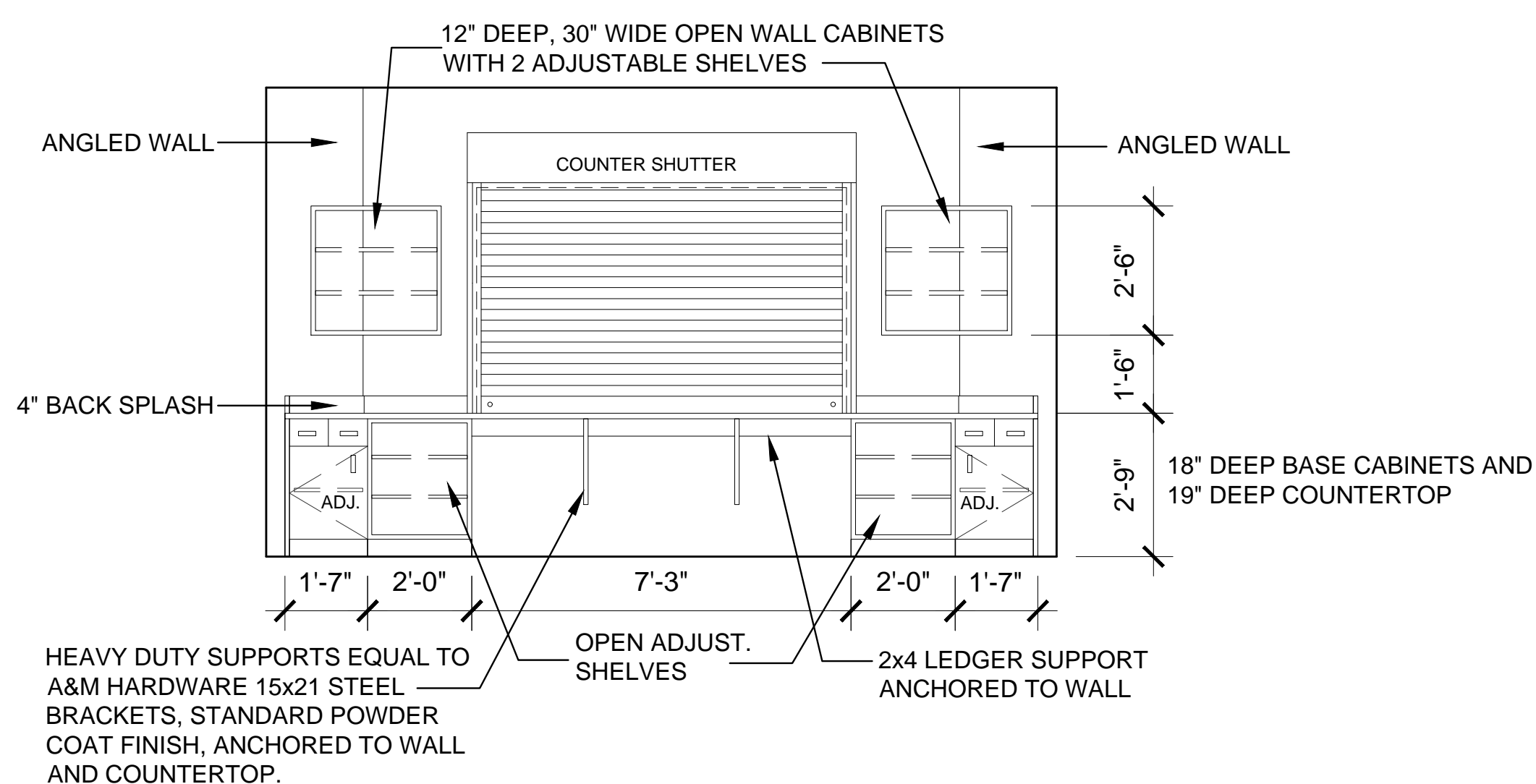
12 807 CONCESSION  
EAST CABINET ELEVATION  
SCALE: 3/8" = 1'-0"



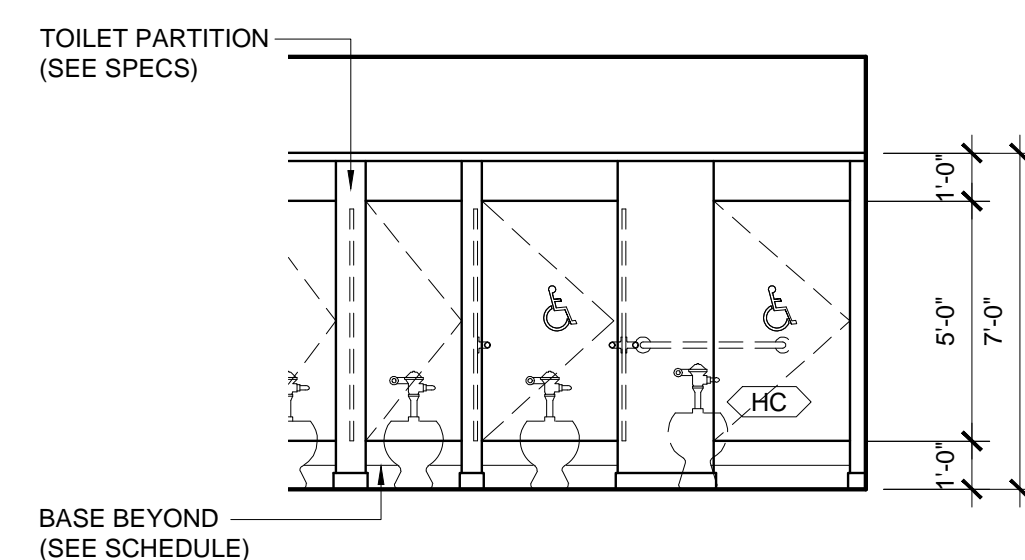
2 ENLARGED PLAN - DRESSING ROOMS  
SCALE: 1/4" = 1'-0"



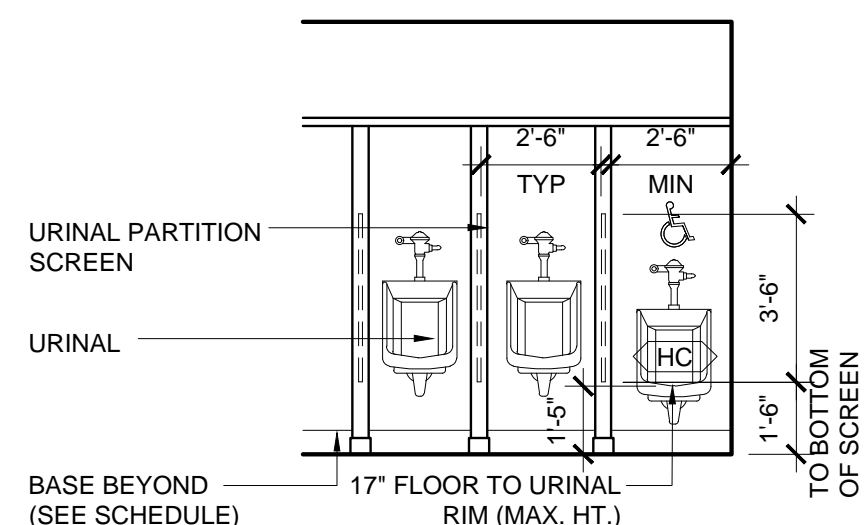
11 817 TRAINING  
CABINET ELEVATION  
SCALE: 3/8" = 1'-0"



13 807 CONCESSION  
WEST CABINET ELEVATION  
SCALE: 3/8" = 1'-0"



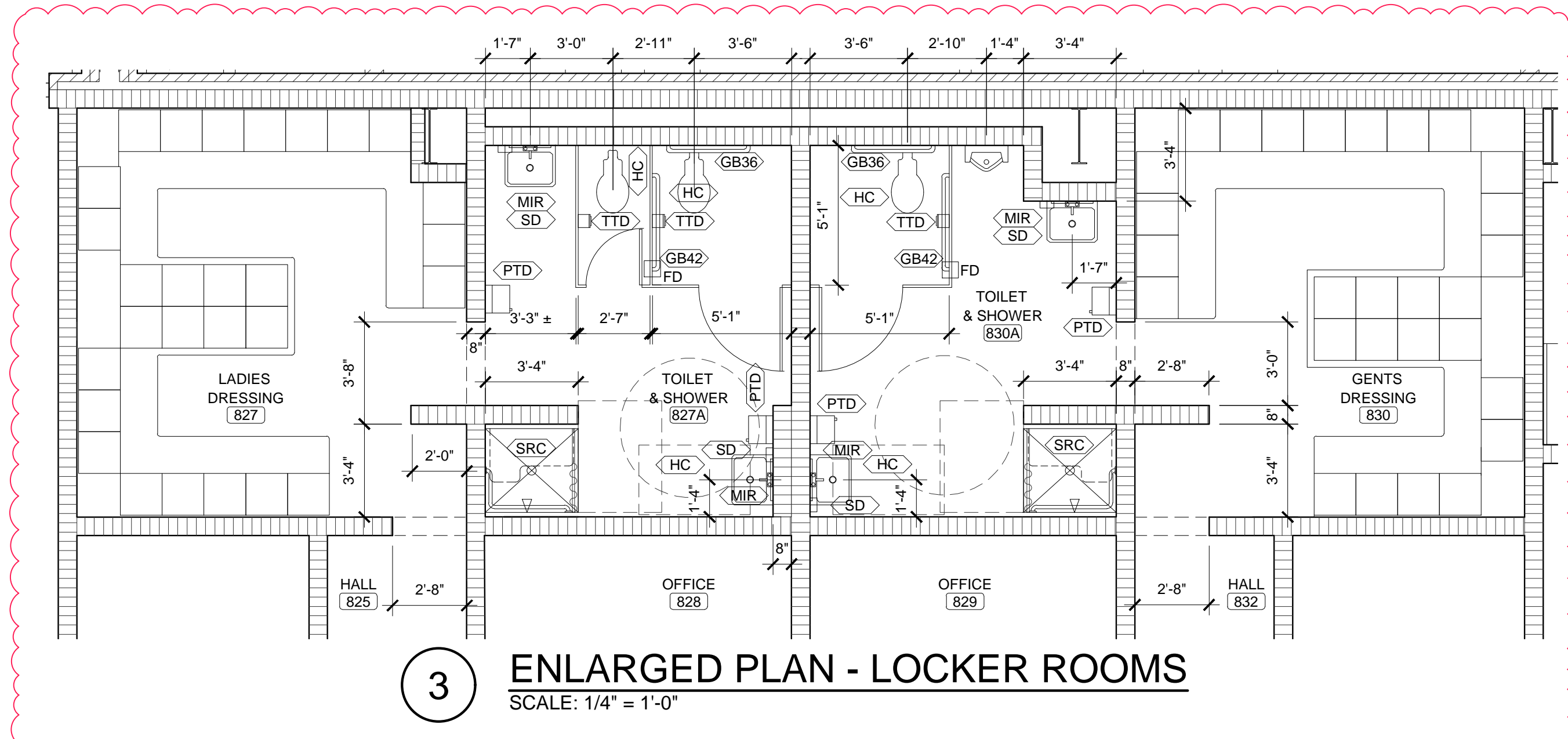
TYPICAL TOILET SCREEN  
PARTITION ELEVATION  
SCALE: 1/4" = 1'-0"



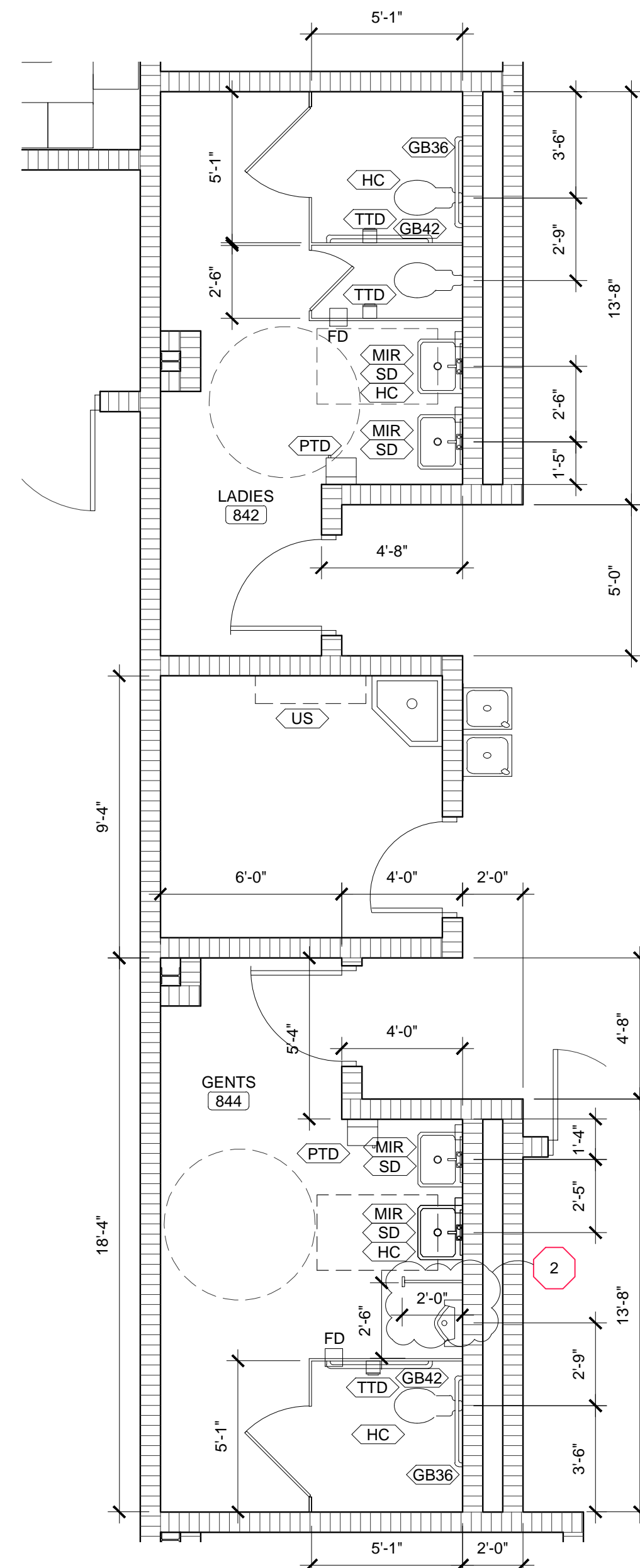
TYPICAL URINAL SCREEN  
PARTITION ELEVATION  
SCALE: 1/4" = 1'-0"

TOILET ACCESSORIES LEGEND	
KEYNOTE	DESCRIPTION
BCS	BABY CHANGING STATION
GB36	36" GRAB BAR MOUNTED WHERE CENTERLINE OF WALL MOUNT IS 6" OUT FROM CORNER OF WALL / TOILET PARTITION AND IS TO BE 33"-36" AFF (SEE SPECS)
GB42	42" GRAB BAR MOUNTED WHERE CENTERLINE OF WALL MOUNT IS 12" OUT FROM CORNER OF WALL / TOILET PARTITION AND IS TO BE 33"-36" AFF (SEE SPECS)
HC	HANDICAPPED ACCESSIBLE WATER CLOSET OR URINAL, MOUNTED WITH SEAT OR LIP AT 17" AFF
MIR	18" X 36" MIRROR WITH SHELF TO BE MOUNTED WITH THE BOTTOM EDGE 35" AFF AND THE TOP EDGE 71" AFF (SEE SPECS)
MIR2	24" X 48" MIRROR WITH THE TOP EDGE AT 76" AFF (SEE SPECS)
PTD	PAPER TOWEL DISPENSER TO BE MOUNTED WITH OUTLET AT 48" AFF (SEE SPECS)
SD	SOAP DISPENSER TO BE MOUNTED WHERE HAND CONTROLS ARE 48" AFF (SEE SPECS)
SRC	40" LONG SHOWER ROD AND CURTAIN TO BE MOUNTED 84" AFF
TTD	TOILET TISSUE DISPENSER TO BE MOUNTED 8" OC IN FRONT OF TOILET AND OUTLET OF DISPENSER MUST BE BETWEEN 15" & 48" AFF (SEE SPECS)
US	UTILITY SHELF WITH MOP RACK

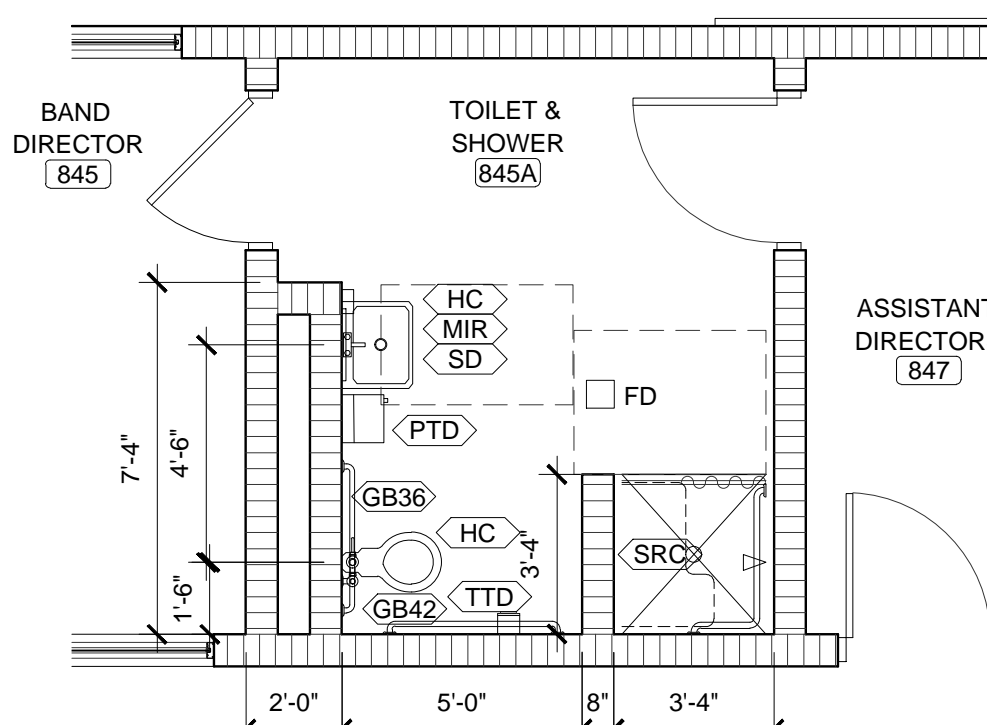
PAPER TOWEL DISPENSERS, TOILET TISSUE DISPENSERS, AND SOAP DISPENSERS SHALL BE FURNISHED BY THE OWNER AND INSTALLED BY THIS CONTRACTOR.



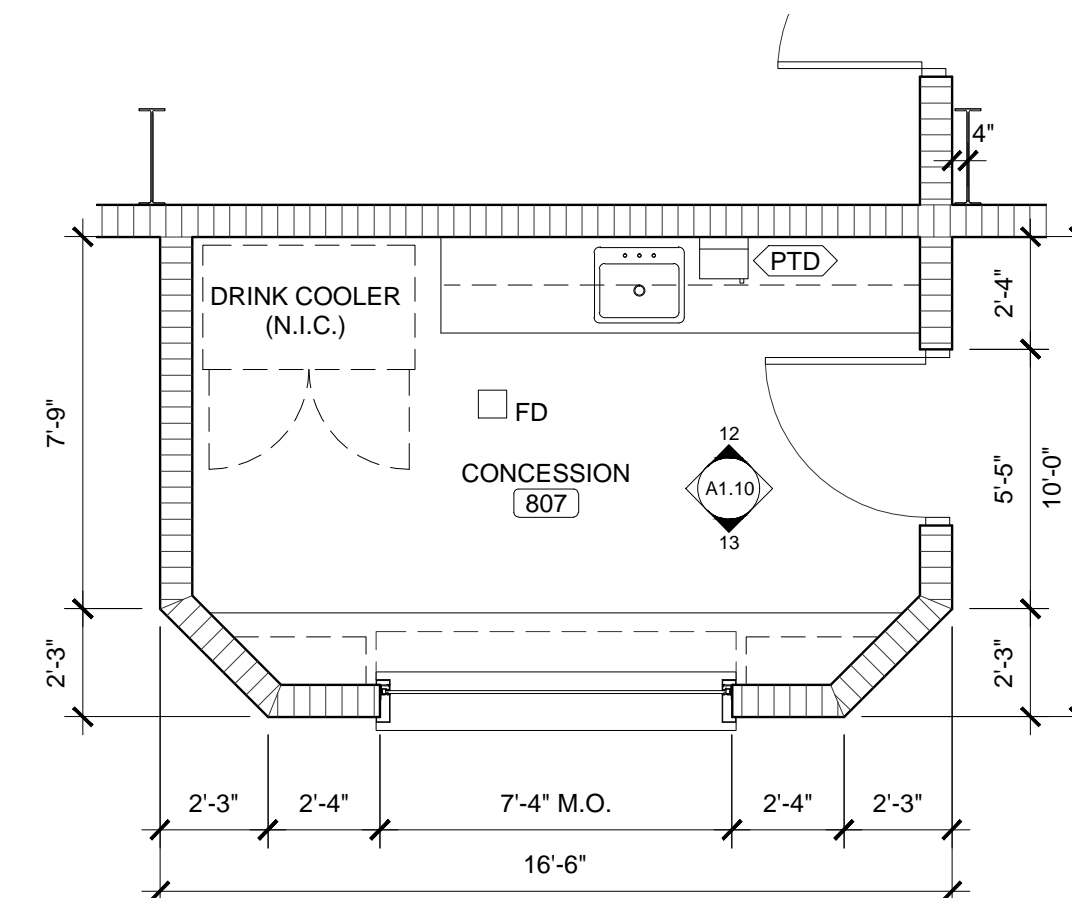
3 ENLARGED PLAN - LOCKER ROOMS  
SCALE: 1/4" = 1'-0"



4 ENLARGED PLAN - BAND RESTROOMS  
SCALE: 1/4" = 1'-0"



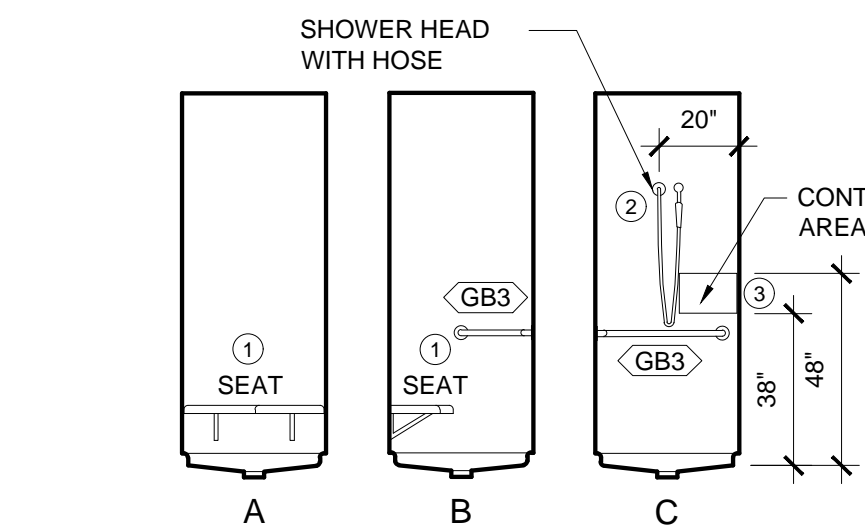
5 ENLARGED PLAN AT BAND OFFICES  
SCALE: 1/4" = 1'-0"



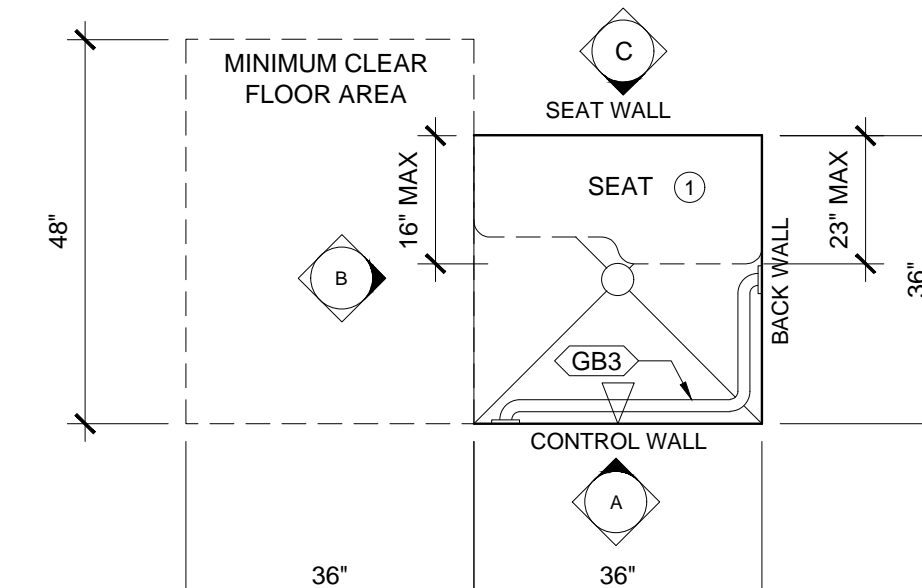
6 ENLARGED PLAN - CONCESSION  
SCALE: 1/4" = 1'-0"

#### ACCESSIBLE SHOWER NOTES

- A FOLDING SEAT SHALL BE PROVIDED IN EACH ACCESSIBLE SHOWER STALL AND SHALL BE MOUNTED 17"-19" FROM THE SHOWER FLOOR AND SHALL EXTEND THE FULL DEPTH OF THE SHOWER STALL (SEE SPECS)
- A SHOWER SPRAY UNIT WITH A HOSE AT LEAST 60" LONG THAT CAN BE USED AS A FIXED SHOWER HEAD OR AS A HAND-HELD SHOWER SHALL BE PROVIDED (SEE SPECS)
- ALL CONTROLS, SHOWER HEADS ETC SHALL BE LOCATED ON OPPOSITE WALL FROM SHOWER SEAT (SEE ELEVATIONS FOR MOUNTING HEIGHTS)



ACCESSIBLE  
SHOWER ELEVATIONS  
SCALE: 1/4" = 1'-0"



ACCESSIBLE  
SHOWER PLAN  
SCALE: 1/2" = 1'-0"

## ADDITIONS

### TO ROBERTSDALE HIGH SCHOOL

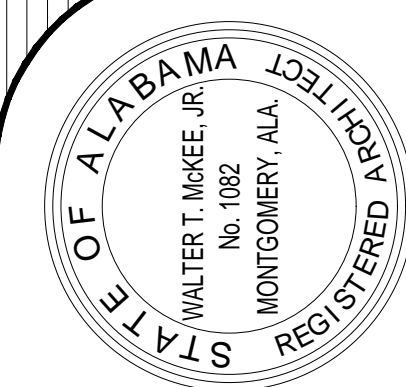
ROBERTSDALE, ALABAMA

FOR THE

### BALDWIN COUNTY BOARD OF EDUCATION

**McKEE & ASSOCIATES**  
ARCHITECTS, INC.

631 SOUTH HULL STREET, MONTGOMERY, ALABAMA 36104 (334) 834-9933



SHEET TITLE : ENLARGED PLANS  
AND DETAILS,  
CABINET ELEVATIONS

McKEE JOB # : 23-195

DRAWN BY : JL, VH

DATE: 10-11-2023

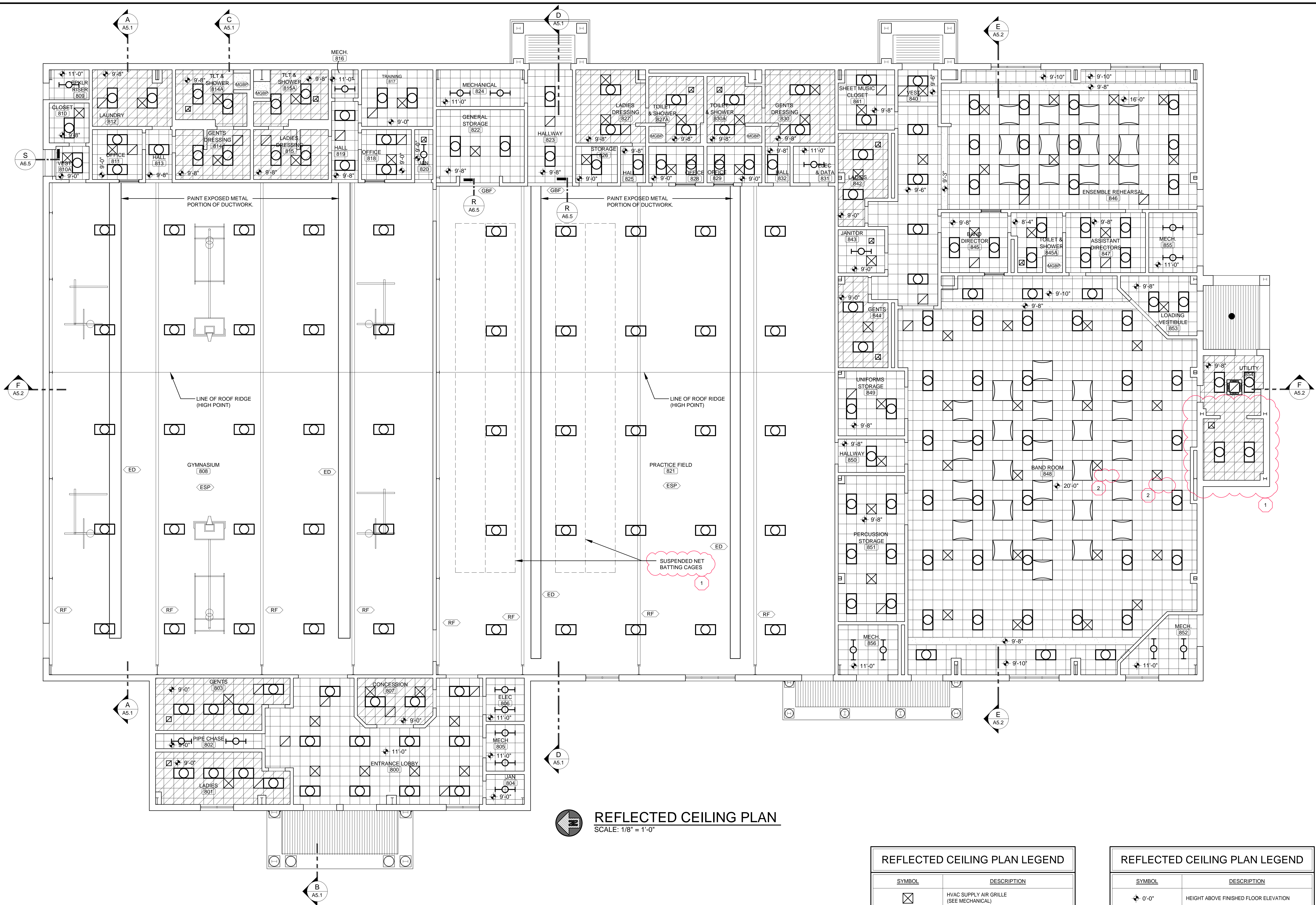
REVISED DATE: 1 11-17-2023

REVISED DATE: 2 12-8-2023

REVISED DATE:

SHEET NO. : **A1.10**

- Z:\2023\23-195 Additions to Robertsdale High School\CAD Drawings\Architectural\A2.1 RCP Plan.dwg  
- Friday, December 8, 2023 11:56:32 AM



**REFLECTED CEILING PLAN**  
SCALE: 1/8" = 1'-0"

REFLECTED CEILING PLAN LEGEND	
SYMBOL	DESCRIPTION
	HVAC SUPPLY AIR GRILLE (SEE MECHANICAL)
	HVAC RETURN AIR GRILLE (SEE MECHANICAL)
	EXHAUST FAN GRILLE (SEE MECHANICAL)
	CASSETTE HEAT PUMP (SEE MECHANICAL)
	ACOUSTICAL SOUND DIFFUSER, 4' X 4'
	EXPOSED DUCTWORK - NO PAINT
	EXPOSED DUCTWORK - PAINT
	EXPOSED STRUCTURE - PAINT
	GYPSUM BOARD FURRING
	GYPSUM BOARD - PAINT
	MOISTURE RESISTANT GYPSUM BOARD - PAINT
	METAL SOFFIT PANELS - VENTED
	EXPOSED RIGID FRAME STEEL MEMBER - PAINT
	STEEL LINTEL - PAINT

REFLECTED CEILING PLAN LEGEND	
SYMBOL	DESCRIPTION
	HEIGHT ABOVE FINISHED FLOOR ELEVATION
	2x2 LAY-IN ACOUSTICAL CEILING
	2x2 VINYL CLAY LAY-IN ACOUSTICAL CEILING
	GYPSUM BOARD (SUSPENDED AS REQUIRED)
	LINEAR CEILING
	2x4 RECESSED OR SURFACE MOUNTED LIGHT FIXTURE (SEE ELECTRICAL)
	2x2 RECESSED OR SURFACE MOUNTED LIGHT FIXTURE (SEE ELECTRICAL)
	1x4 RECESSED OR SURFACE MOUNTED LIGHT FIXTURE (SEE ELECTRICAL)
	1x4 SURFACE MOUNTED LIGHT FIXTURE (SEE ELECTRICAL)
	RECESSED ROUND LIGHT FIXTURE (SEE ELECTRICAL)

SHEET TITLE : REFLECTED  
CEILING PLAN

MCKEE JOB # : 23-195

DRAWN BY : VH, JL

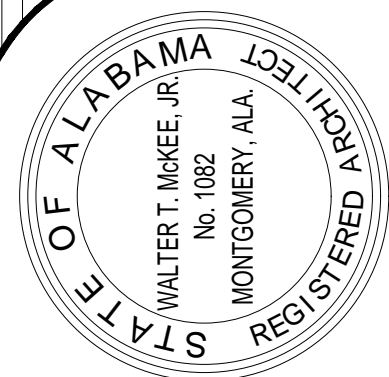
DATE: 10-11-2023

REVISED DATE: 1 11-28-2023

REVISED DATE: 2 12-8-2023

REVISED DATE:

SHEET NO. : A2.1



ADDITIONS  
TO  
**ROBERTSDALE HIGH SCHOOL**  
FOR THE  
ROBERTSDALE, ALABAMA  
**BALDWIN COUNTY BOARD OF EDUCATION**

**MCKEE & ASSOCIATES**  
ARCHITECTS, INC.  
631 SOUTH HILL STREET, MONTGOMERY, ALABAMA 36104 (204) 834-9033

- Z:\2023\23-195 Additions to Robertsdale High School\CAD Drawings\Architectural\A8.1 Finish Door Window Schedules.dwg  
- Monday, December 11, 2023 12:36:14 PM

ROOM FINISH SCHEDULE

--- NO WORK REQUIRED

AGBP - ACOUSTICAL GYPSUM BOARD - PAINT

GBP - GYPSUM BOARD - PAINT

GB - GYPSUM BOARD - NO PAINT

MBGP - MOISTURE RESISTANT GYPSUM BOARD - PAINT

MGB - MOISTURE RESISTANT GYPSUM BOARD - NO PAINT

IGBP - IMPACT RESISTANT GYPSUM BOARD - PAINT

CMUP - CONCRETE MASONRY UNIT - PAINT

CMU - CONCRETE MASONRY UNIT - NO PAINT

MLP - METAL LINER WALL PANELS

PT - PORCELAIN TILE

RF - RESINOUS FLOORING

SFS - SYNTHETIC SPORTS FLOORING SYSTEM (SEE BID ALLOWANCE)

SC - SEALED CONCRETE

RSF - RUBBER SPORTS FLOORING (UNDER BID ALLOWANCE)

VCT - VINYL COMPOSITION TILE

C - CARPET

PF - POLYMER FLOORING

RB - RUBBER BASE

RCB - RESINOUS COVE BASE

PTB - PORCELAIN TILE BASE

ROOM #	ROOM NAME	FLOOR	BASE	WALLS				CEILING		WAINS.	HEIGHT	REMARKS
				NORTH	SOUTH	EAST	WEST	TYPE	HEIGHT			
800	ENTRANCE LOBBY	RF	RCB	CMUP	CMUP	CMUP	CMUP	SEE CEILING PLAN				
801	LADIES	RF	RCB	CMUP	CMUP	PT	CMUP	SEE CEILING PLAN				
802	PIPE CHASE	SC	---	CMU	CMU	CMU	CMU	SEE CEILING PLAN				
803	GENTS	RF	RCB	CMUP	CMUP	CMUP	PT	SEE CEILING PLAN				
804	JANITOR	RF	RCB	CMUP	CMUP	CMUP	CMUP	SEE CEILING PLAN				
805	MECHANICAL	RF	RCB	CMUP	CMUP	CMUP	CMUP	SEE CEILING PLAN				
806	ELECTRICAL	RF	RCB	CMUP	CMUP	CMUP	CMUP	SEE CEILING PLAN				
807	CONCESSION	RF	RCB	CMUP	CMUP	CMUP	CMUP	SEE CEILING PLAN				
808	GYMNASIUM	SFS	SFS	CMUP	CMUP	CMUP	CMUP	SEE CEILING PLAN				
809	SPRINKLER RISER	SC	---	CMU	CMU	CMU	CMU	SEE CEILING PLAN				
810	CLOSET	RF	RCB	CMUP	CMUP	CMUP	CMUP	SEE CEILING PLAN				
810A	VESTIBULE	RF	RCB	CMUP	CMUP	CMUP	CMUP	SEE CEILING PLAN				
810B	HALL	RF	RCB	CMUP	CMUP	CMUP	CMUP	SEE CEILING PLAN				
811	OFFICE	RF	RCB	CMUP	CMUP	CMUP	CMUP	SEE CEILING PLAN				
812	LAUNDRY	RF	RCB	CMUP	CMUP	CMUP	CMUP	SEE CEILING PLAN				
813	HALL	RF	RCB	CMUP	CMUP	CMUP	---	SEE CEILING PLAN				
814	GENTS DRESSING	RF	RCB	CMUP	CMUP	CMUP	CMUP	SEE CEILING PLAN				
814A	TOILET & SHOWER	RF	RCB	CMUP	PT	CMUP	PT	SEE CEILING PLAN				
815	LADIES DRESSING	RF	RCB	CMUP	CMUP	CMUP	CMUP	SEE CEILING PLAN				
815A	TOILET & SHOWER	RF	RCB	PT	CMUP	CMUP	PT	SEE CEILING PLAN				
816	MECHANICAL	RF	RCB	CMUP	CMUP	CMUP	CMUP	SEE CEILING PLAN				
817	TRAINING	RF	RCB	CMUP	CMUP	CMUP	CMUP	SEE CEILING PLAN				
818	OFFICE	RF	RCB	CMUP	CMUP	CMUP	CMUP	SEE CEILING PLAN				
819	HALL	RF	RCB	CMUP	CMUP	CMUP	---	SEE CEILING PLAN				
820	JANITOR	RF	RCB	CMUP	CMUP	CMUP	CMUP	SEE CEILING PLAN				
821	PRACTICE FIELD	RF, RSF	RCB	CMUP	CMUP	CMUP	CMUP	SEE CEILING PLAN			SEE FLOOR PLAN FOR FLOOR FINISHES AND FIELD TURF.	
822	GENERAL STORAGE	RF	RCB	CMUP	CMUP	CMUP	CMUP	SEE CEILING PLAN				
823	HALLWAY	RF	RCB	CMUP	CMUP	CMUP	CMUP	SEE CEILING PLAN				
824	MECHANICAL	RF	RCB	CMUP	CMUP	CMUP	CMUP	SEE CEILING PLAN				
825	HALL	RF	RCB	CMUP	CMUP	CMUP	CMUP	SEE CEILING PLAN				
826	STORAGE	RF	RCB	CMUP	CMUP	CMUP	CMUP	SEE CEILING PLAN				
827	LADIES DRESSING	RF	RCB	CMUP	CMUP	CMUP	CMUP	SEE CEILING PLAN				
827A	TOILET & SHOWER	RF	RCB	CMUP	PT	CMUP	PT	SEE CEILING PLAN				
828	OFFICE	RF	RCB	CMUP	CMUP	CMUP	CMUP	SEE CEILING PLAN				
829	OFFICE	RF	RCB	CMUP	CMUP	CMUP	CMUP	SEE CEILING PLAN				
830	GENTS DRESSING	RF	RCB	CMUP	CMUP	CMUP	CMUP	SEE CEILING PLAN				
830A	TOILET & SHOWER	RF	RCB	CMUP	PT	CMUP	PT	SEE CEILING PLAN				
831	ELECTRICAL & DATA	RF	RCB	CMUP	CMUP	CMUP	CMUP	SEE CEILING PLAN				
832	HALL	RF	RCB	CMUP	CMUP	CMUP	---	SEE CEILING PLAN				
840	VESTIBULE	RF	RCB	CMUP	CMUP	CMUP	CMUP	SEE CEILING PLAN				
841	SHEET MUSIC CLOSET	RF	RCB	CMUP	CMUP	CMUP	CMUP	SEE CEILING PLAN				
842	LADIES	RF	RCB	CMUP	PT	CMUP	CMUP	SEE CEILING PLAN				
843	JANITORS	RF	RCB	CMUP	CMUP	CMUP	CMUP	SEE CEILING PLAN				
844	GENTS	RF	RCB	CMUP	PT	CMUP	CMUP	SEE CEILING PLAN				
845	BAND DIRECTOR	RF	RCB	CMUP	CMUP	CMUP	CMUP	SEE CEILING PLAN				
845A	TOILET & SHOWER	RF	RCB	PT	CMUP	CMUP	CMUP	SEE CEILING PLAN				
846	ENSEMBLE REHEARSAL	LVT	R	CMUP	CMUP	CMUP	CMUP	SEE CEILING PLAN **			** HIGH NRC LAY-IN CEILING	
847	ASSISTANT DIRECTORS	LVT	R	CMUP	CMUP	CMUP	CMUP	SEE CEILING PLAN				
848	BAND ROOM	LVT	R	CMUP	CMUP	CMUP	CMUP	SEE CEILING PLAN **			** HIGH NRC LAY-IN CEILING	
849	UNIFORMS STORAGE	RF	RCB	CMUP	CMUP	CMUP	CMUP	SEE CEILING PLAN				
850	HALLWAY	RF	RCB	CMUP	CMUP	CMUP	CMUP	SEE CEILING PLAN				
851	PERCUSSION STORAGE	RF	RCB	CMUP	CMUP	CMUP	CMUP	SEE CEILING PLAN				
852	MECHANICAL	SC	---	CMUP	CMUP	CMUP	CMUP	SEE CEILING PLAN				
853	LOADING VESTIBULE	RF	RCB	CMUP	CMUP	CMUP	CMUP	SEE CEILING PLAN				
854	UTILITY	RF	RCB	CMUP	CMUP	CMUP	CMUP	SEE CEILING PLAN				
855	MECHANICAL	SC	---	CMUP	CMUP	CMUP	CMUP	SEE CEILING PLAN				
856	MECHANICAL	SC	---	CMUP	CMUP	CMUP	CMUP	SEE CEILING PLAN				

DOOR TYPES

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

TYPE "A"

TYPE "B"

TYPE "C"

TYPE "D"

TYPE "E"

TYPE "F"

TYPE "G"

FRAME TYPES

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

HM1

HM2

HM3

AS1

AS2

AF1

AF2

GLAZING SCHEDULE

SYMBOL	DESCRIPTION
<CT>	CLEAR TEMPERED
<CTI>	CLEAR TEMPERED - IMPACT RATED
<IG>	INSULATING GLASS - EXTERIOR SHEET IMPACT RATED
<IGO>	INSULATING GLASS - OBSCURE - EXTERIOR SHEET IMPACT RATED
<TIG>	TEMPERED INSULATING GLASS - EXTERIOR SHEET IMPACT RATED

WINDOW SCHEDULE

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

1

2

3

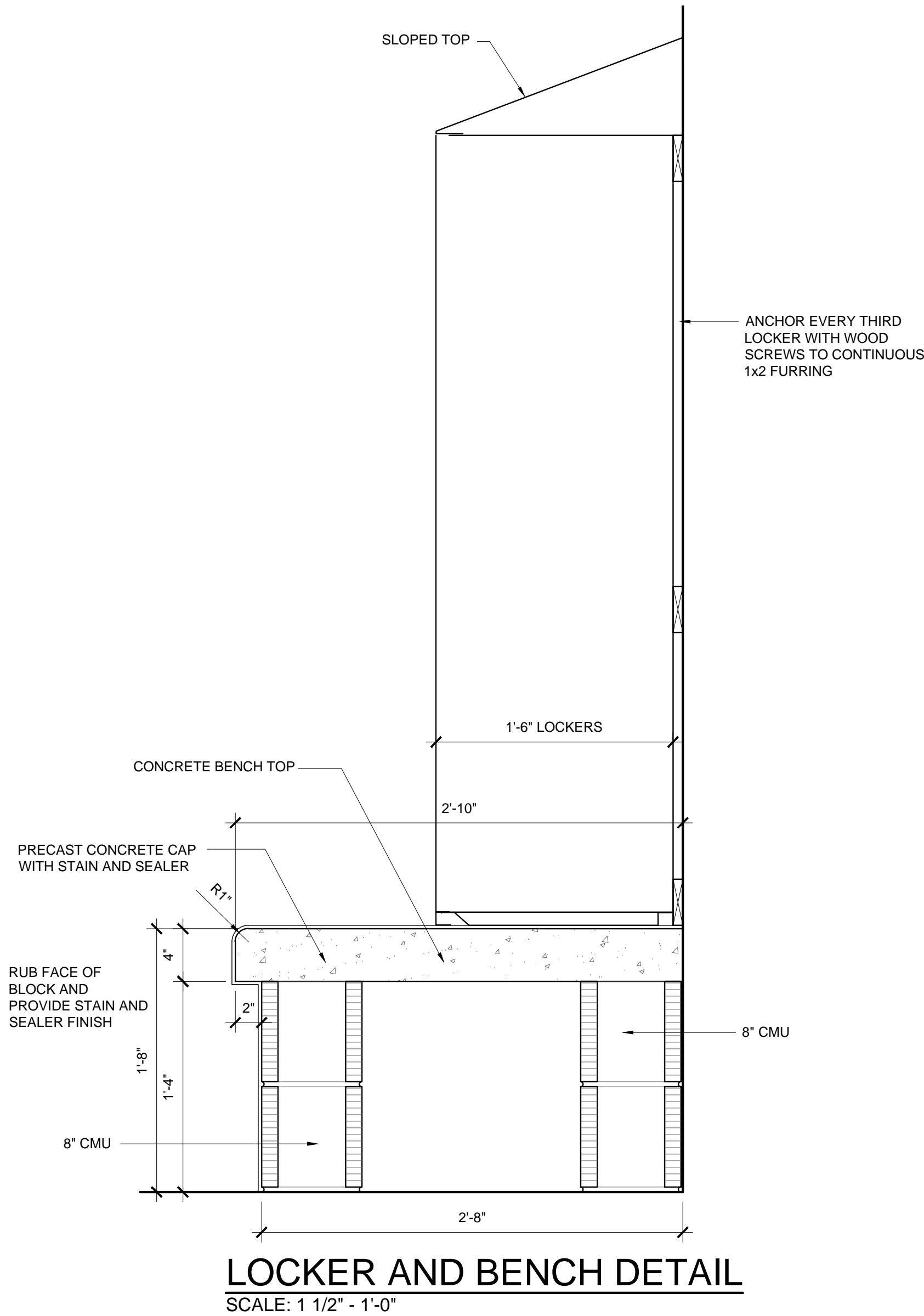
4

5

DOOR SCHEDULE

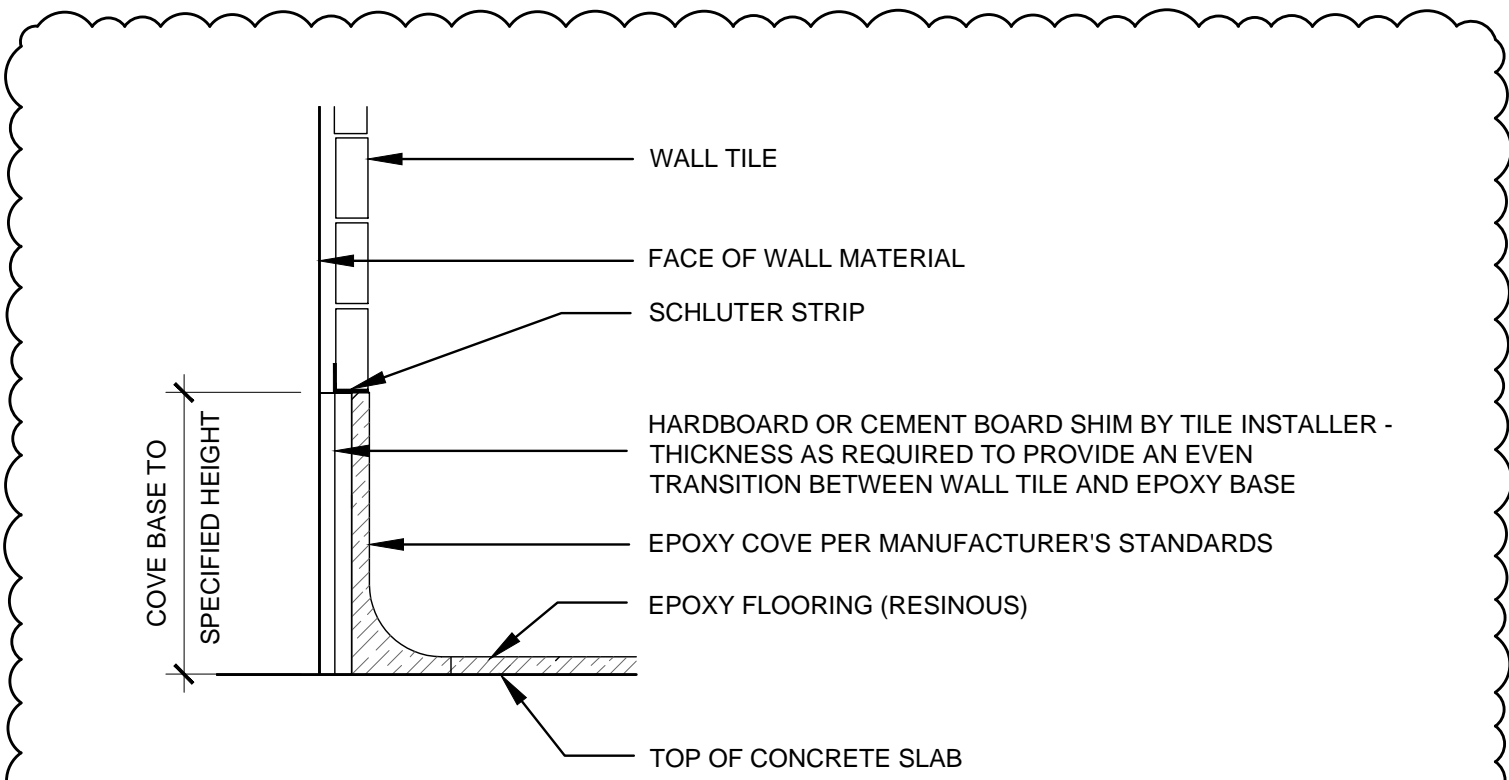
DOOR #	WIDTH	HEIGHT	THICKNESS	MATERIALS	DOOR TYPE	DOOR FINISH	FRAME TYPE	FRAME FINISH	LABEL	DETAILS		SIGNAGE	REMARKS
										HEAD	JAMB		
800a	PAIR 3'-0"	7'-0"	1 3/4"	FIBERGLASS REINF. PLASTIC	A	FACTORY	ASF1	FACTORY	---	15/A8.2	9/A8.2	---	INSULATED
800b	PAIR 3'-0"	7'-0"	1 3/4"	FIBERGLASS REINF. PLASTIC	A	FACTORY	ASF1	FACTORY	---	15/A8.2	9/A8.2	---	INSULATED
801	3'-0"	7'-0"	1 3/4"	FLUSH WOOD	D	FACTORY	HM1	PAINT	---	4/A8.2	5/A8.2	801 LADIES	---
802	2'-8"	7'-0"	1 3/4"	FLUSH WOOD	D	FACTORY	HM1	PAINT	---	4/A8.2	5/A8.2	802 PIPE CHASE	---
803	3'-0"	7'-0"	1 3/4"	FLUSH WOOD	D	FACTORY	HM1	PAINT	---	4/A8.2	5/A8.2	803 GENTLEMEN	---
804	3'-0"	7'-0"	1 3/4"	FLUSH WOOD	D	FACTORY	HM1	PAINT	---	4/A8.2	5/A8.2	804 JANITORIAL	---
805	3'-8"	7'-0"	1 3/4"	FLUSH WOOD	D	FACTORY	HM1	PAINT	---	4/A8.2	5/A8.2	805 MECHANICAL	---
806	3'-4"	7'-0"	1 3/4"	FLUSH WOOD	D	FACTORY	HM1	PAINT	---	4/A8.2	5/A8.2	806 ELECTRICAL	---
807a	3'-4"	7'-0"	1 3/4"	FLUSH WOOD	B	FACTORY	HM1	PAINT	---	4/A8.2	5/A8.2	807 CONCESSION	---
807b	7'-0"	4'-3"	---	COUNTER SHUTTER	F	FACTORY	INTEGRAL	FACTORY	---	6/A8.2	7/A8.2	---	CONFIRM SHUTTER SIZE FOR 7'-4" WIDE MASONRY OPENING
808a	PAIR 3'-0"	7'-0"	1 3/4"	FLUSH WOOD	C	FACTORY	HM2	PAINT	---	4/A8.2	5/A8.2	---	IMPACT RESISTANT GLASS
808b	3'-0"	7'-0"	1 3/4"	FLUSH WOOD	C	FACTORY	HM2	PAINT	---	4/A8.2	5/A8.2	---	IMPACT RESISTANT GLASS
808c	3'-0"	7'-0"	1 3/4"	FLUSH WOOD	E	FACTORY	HM1	PAINT	---	4/A8.2	5/A8.2	---	---
808d	PAIR 3'-0"	7'-0"	1 3/4"	FLUSH WOOD	B	FACTORY	HM1	PAINT	---	4/A8.2	5/A8.2	---	---
808e	PAIR 3'-4"	8'-0"	1 3/4"	FIBERGLASS REINF. PLASTIC	E	FACTORY	AF2	FACTORY	---	8/A8.2	9/A8.2	---	INSULATED
808f	PAIR 3'-0"	7'-0"	1 3/4"	FLUSH WOOD	B	FACTORY	HM1	PAINT	---	4/A8.2	5/A8.2	---	---
809	3'-4"	7'-0"	1 3/4"	FIBERGLASS REINF. PLASTIC	D	FACTORY	AF1	FACTORY	---	8/A8.2	9/A8.2	809 SPRINKLER RISER	INSULATED
810	3'-4"	7'-0"	1 3/4"	FLUSH WOOD	E	FACTORY	HM1	FACTORY	---	4/A8.2	5/A8.2	810 CLOSET	---
810A	3'-4"	7'-1"	1 3/4"	FIBERGLASS REINF. PLASTIC	A	FACTORY	ASF2	FACTORY	---	8/A8.2	9/A8.2	---	INSULATED
811	3'-0"	7'-0"	1 3/4"	FLUSH WOOD	C	FACTORY	HM1	PAINT	---	4/A8.2	5/A8.2	811 OFFICE	---
812	3'-4"	7'-0"	1 3/4"	FLUSH WOOD	C	FACTORY	HM1	PAINT	---	4/A8.2	5/A8.2	812 LAUNDRY	---
814	3'-0"	7'-0"	1 3/4"	FLUSH WOOD	D	FACTORY	HM1	PAINT	---	4/A8.2	5/A8.2	814 GENTLEMEN DRESSING	---
815	3'-0"	7'-0"	1 3/4"	FLUSH WOOD	D	FACTORY	HM1	PAINT	---	4/A8.2	5/A8.2	815 LADIES DRESSING	---
816	3'-4"	7'-0"	1 3/4"	FLUSH WOOD	D	FACTORY	HM1	PAINT	---	4/A8.2	5/A8.2	816 MECHANICAL	---
817	3'-4"	7'-0"	1 3/4"	FLUSH WOOD	E	FACTORY	HM1	PAINT	---	4/A8.2	5/A8.2	817 TRAINING	---
818	3'-0"	7'-0"	1 3/4"	FLUSH WOOD	C	FACTORY	HM1	PAINT	---	4/A8.2	5/A8.2	818 OFFICE	---
820	3'-0"	7'-0"	1 3/4"	FLUSH WOOD	D	FACTORY	HM1	PAINT	---	4/A8.2	5/A8.2	820 JANITORIAL	---
821a	PAIR 3'-0"	7'-0"	1 3/4"	FLUSH WOOD	B	FACTORY	HM3	PAINT	---	4/A8.2	5/A8.2	821 PRACTICE FIELD	---
821b	PAIR 3'-0"	7'-0"	1 3/4"	FIBERGLASS REINF. PLASTIC	E	FACTORY	AF1	FACTORY	---	15/A8.2	9/A8.2	---	INSULATED
823	PAIR 4'-0"	8'-0"	1 3/4"	FIBERGLASS REINF. PLASTIC	E	FACTORY	AF2	FACTORY	---	13/A8.2	9/A8.2	---	INSULATED
824	3'-8"	7'-0"	1 3/4"	FLUSH WOOD	D	FACTORY	HM1	PAINT	---	4/A8.2	5/A8.2	824 MECHANICAL	---
826	3'-4"	7'-0"	1 3/4"	FLUSH WOOD	D	FACTORY	HM1	PAINT	---	4/A8.2	5/A8.2	826 STORAGE	---
827	3'-0"	7'-0"	1 3/4"	FLUSH WOOD	D	FACTORY	HM1	PAINT	---	4/A8.2	5/A8.2	827 LADIES LOCKER ROOM	---
828	3'-0"	7'-0"	1 3/4"	FLUSH WOOD	D	FACTORY	HM1	PAINT	---	4/A8.2	5/A8.2	828 OFFICE	---
829	3'-0"	7'-0"	1 3/4"	FLUSH WOOD	D	FACTORY	HM1	PAINT	---	4/A8.2	5/A8.2	829 OFFICE	---
830	3'-0"	7'-0"	1 3/4"	FLUSH WOOD	D	FACTORY	HM1	PAINT	---	4/A8.2	5/A8.2	830 GENTS LOCKER ROOM	---
831	3'-4"	7'-0"	1 3/4"	FLUSH WOOD	D	FACTORY	HM1	PAINT	---	4/A8.2	5/A8.2	831 ELECTRICAL & DATA	---
840a	PAIR 3'-0"	7'-0"	1 3/4"	FIBERGLASS REINF. PLASTIC	A	FACTORY	AF2	FACTORY	---	13/A8.2	9/A8.2	---	INSULATED
840b	PAIR 3'-0"	7'-0"	1 3/4"	FLUSH WOOD	C	FACTORY	HM4	PAINT	---	BRACE TO STRUCTURE	5/A8.2 SIMILAR	---	---
841	3'-0"	7'-0"	1 3/4"	FLUSH WOOD	B	FACTORY	HM1	PAINT	---	4/A8.2	5/A8.2	841 MUSIC CLOSET	---
842	3'-0"	7'-0"	1 3/4"	FLUSH WOOD	D	FACTORY	HM1	PAINT	---	4/A8.2	5/A8.2	842 LADIES	---
843	3'-4"	7'-0"	1 3/4"	FLUSH WOOD	D	FACTORY	HM1	PAINT	---	4/A8.2	5/A8.2	843 JANITORIAL	---
844	3'-0"	7'-0"	1 3/4"	FLUSH WOOD	D	FACTORY	HM1	PAINT	---	4/A8.2	5/A8.2	844 GENTLEMEN	---
845	3'-0"	7'-0"	1 3/4"	FLUSH WOOD	C	FACTORY	HM1	PAINT	---	4/A8.2	5/A8.2	845 BAND DIRECTOR	---
845a	3'-0"	7'-0"	1 3/4"	FLUSH WOOD	D	FACTORY	HM1	PAINT	---	4/A8.2	5/A8.2	845A SHOWER	---
845b	3'-0"	7'-0"	1 3/4"	FLUSH WOOD	D	FACTORY	HM1	PAINT	---	4/A8.2	5/A8.2	845A SHOWER	---
846	3'-0"	7'-0"	1 3/4"	FIBERGLASS REINF. PLASTIC	D	FACTORY	AF1	FACTORY	---	8/A8.2	9/A8.2	---	INSULATED
847a	3'-0"	7'-0"	1 3/4"	FLUSH WOOD	C	FACTORY	HM1	PAINT	---	4/A8.2	5/A8.2	847 ASSISTANT DIRECTOR	---
847b	3'-0"	7'-0"	1 3/4"	FLUSH WOOD	C	FACTORY	HM1	FACTORY	---	4/A8.2	5/A8.2	---	---
848a	PAIR 3'-0"	7'-0"	1 3/4"	ACOUSTICAL METAL DOOR	E	FACTORY	HM1	PAINT	---	4/A8.2	5/A8.2	848 BAND REHEARSAL	42 STC WITH SOUND STRIPS & DROP SEAL
848b	PAIR 3'-0"	7'-0"	1 3/4"	FIBERGLASS REINF. PLASTIC	E	FACTORY	AF2	FACTORY	---	13/A8.2	9/A8.2	---	INSULATED
849	PAIR 3'-0"	7'-0"	1 3/4"	FLUSH WOOD	B	FACTORY	HM1	PAINT	---	4/A8.2	5/A8.2	849 STORAGE	---
850a	4'-0"	7'-0"	1 3/4"	FLUSH WOOD	B	FACTORY	HM1	PAINT	---	4/A8.2	5/A8.2	850 HALLWAY	---
850b	4'-0"	7'-0"	1 3/4"	FLUSH WOOD	B	FACTORY	HM1	PAINT	---	4/A8.2	5/A8.2	---	---
851	PAIR 3'-0"	7'-0"	1 3/4"	FLUSH WOOD	B	FACTORY	HM1	PAINT	---	4/A8.2	5/A8.2	851 STORAGE	---
852	PAIR 3'-0"	7'-0"	1 3/4"	FIBERGLASS REINF. PLASTIC	D	FACT							

- Z:\2023\2023-195 Additions to Robertsdale High School\CAD Drawings\Architectural\A9.1 Miscellaneous Details.dwg  
- Monday, December 11, 2023 8:27:21 AM



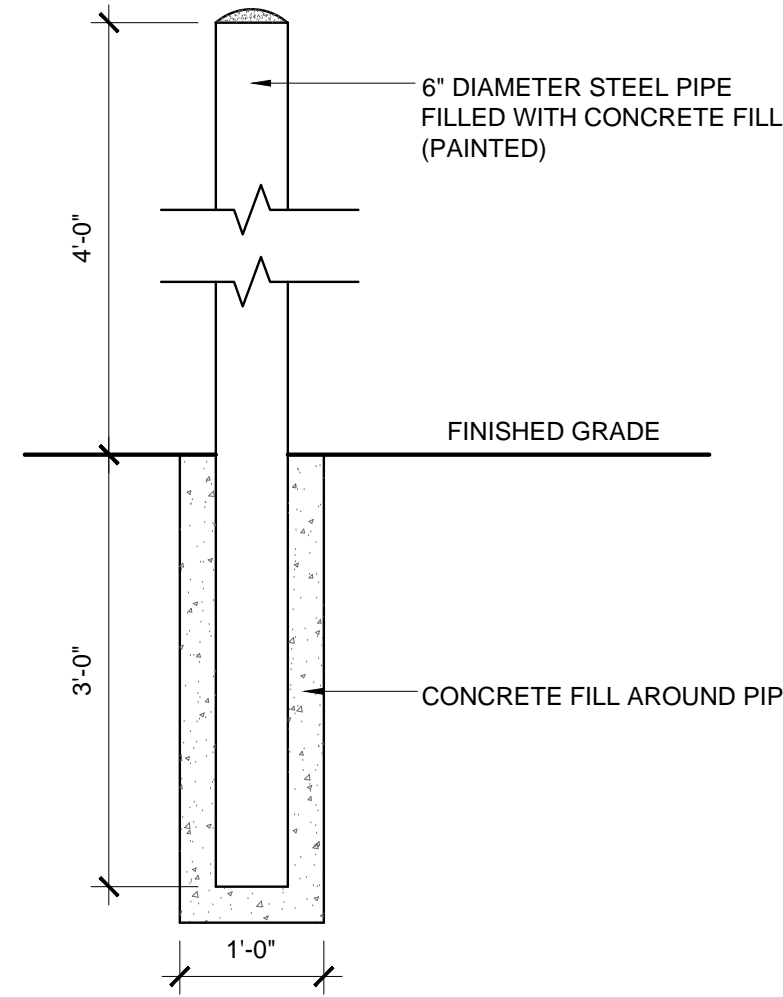
**LOCKER AND BENCH DETAIL**  
SCALE: 1 1/2" - 1'-0"

**ELECTRIC WATER COOLER (EWC)**  
SCALE: 1 1/2" - 1'-0"

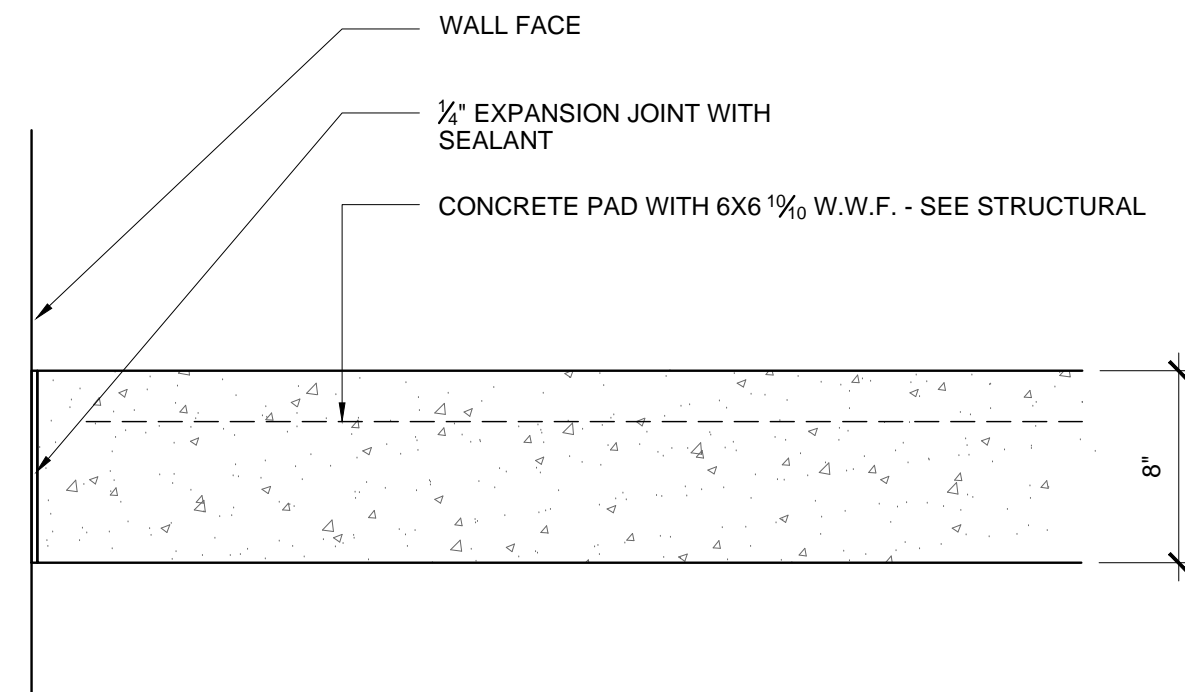


**EPOXY COVE BASE DETAIL AT WALL TILE**  
SCALE: 3" - 1'-0"

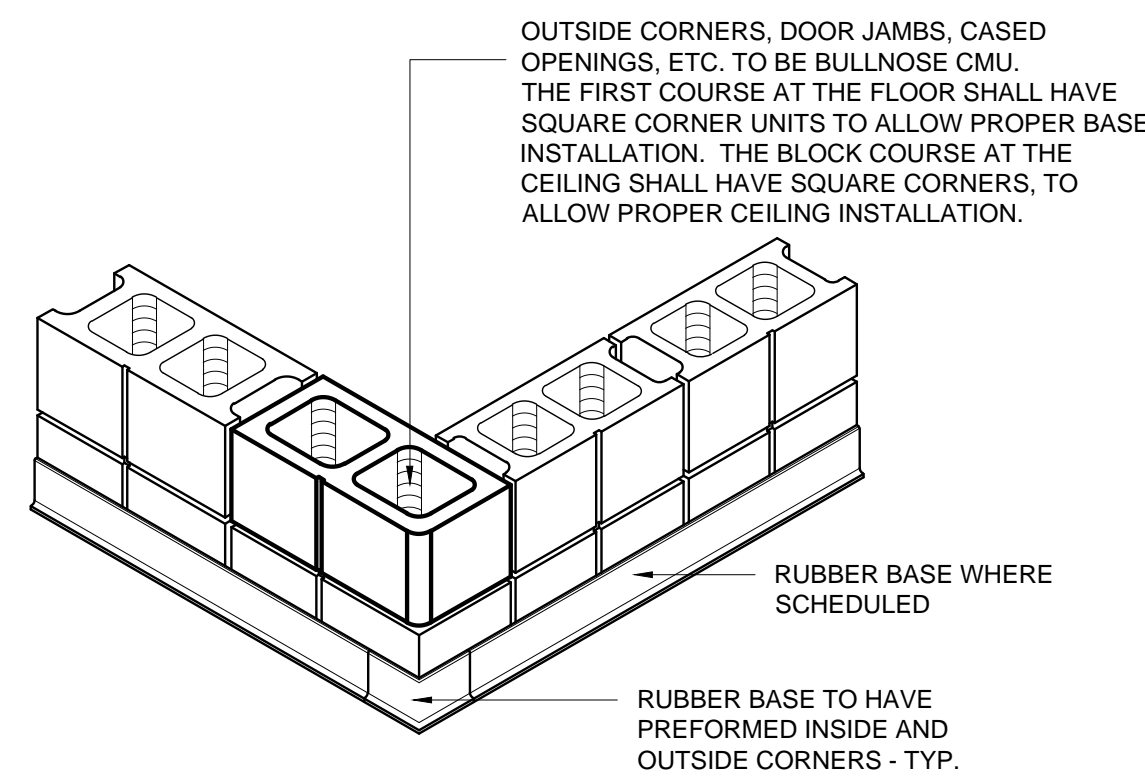
**PIPE BOLLARD (PB)**  
SCALE: 1 1/2" - 1'-0"



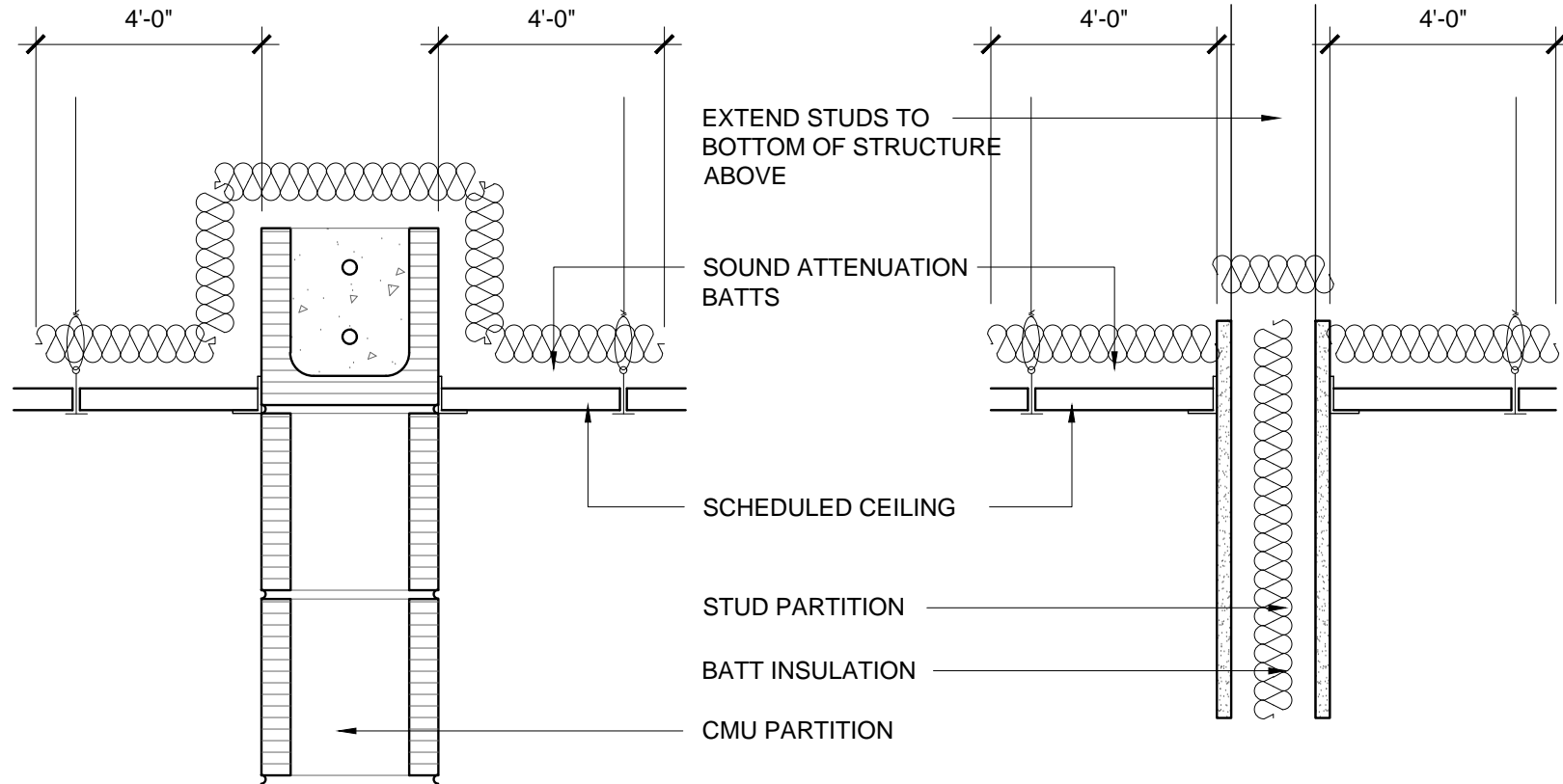
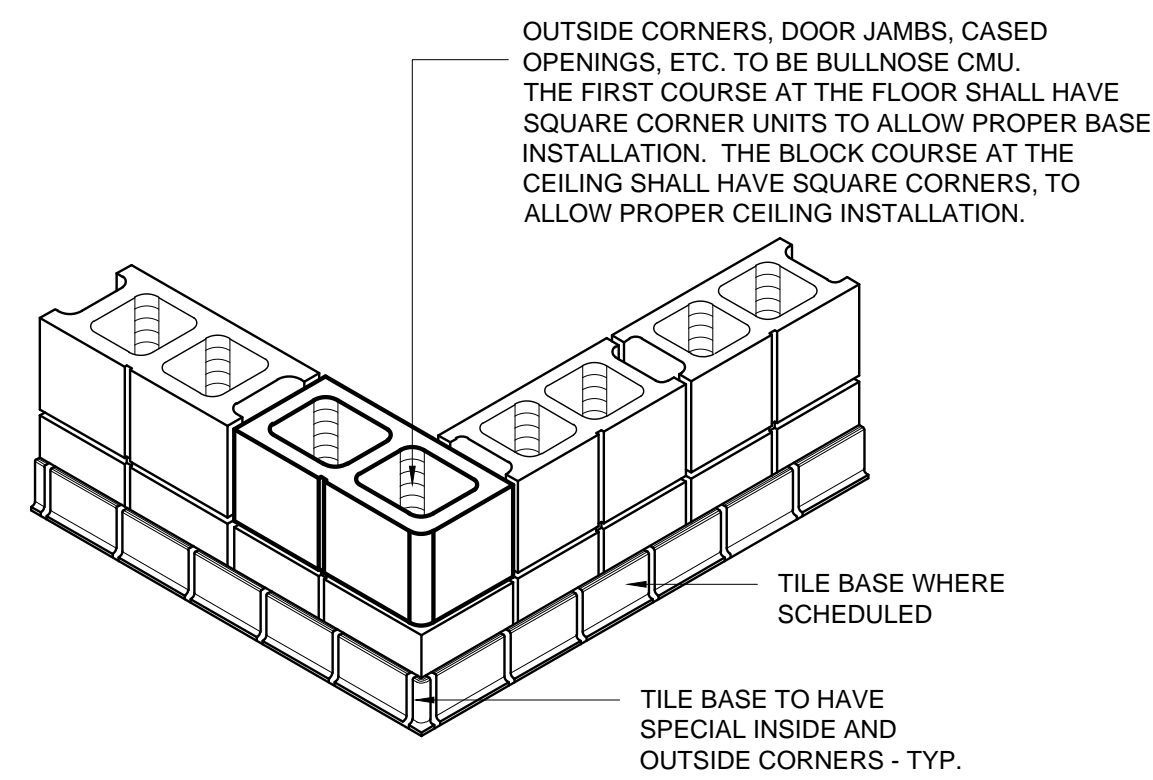
**HVAC EQUIPMENT PAD (CEP)**  
SCALE: 1 1/2" - 1'-0"



**RUBBER BASE DETAIL**  
SCALE: 3/4" - 1'-0"



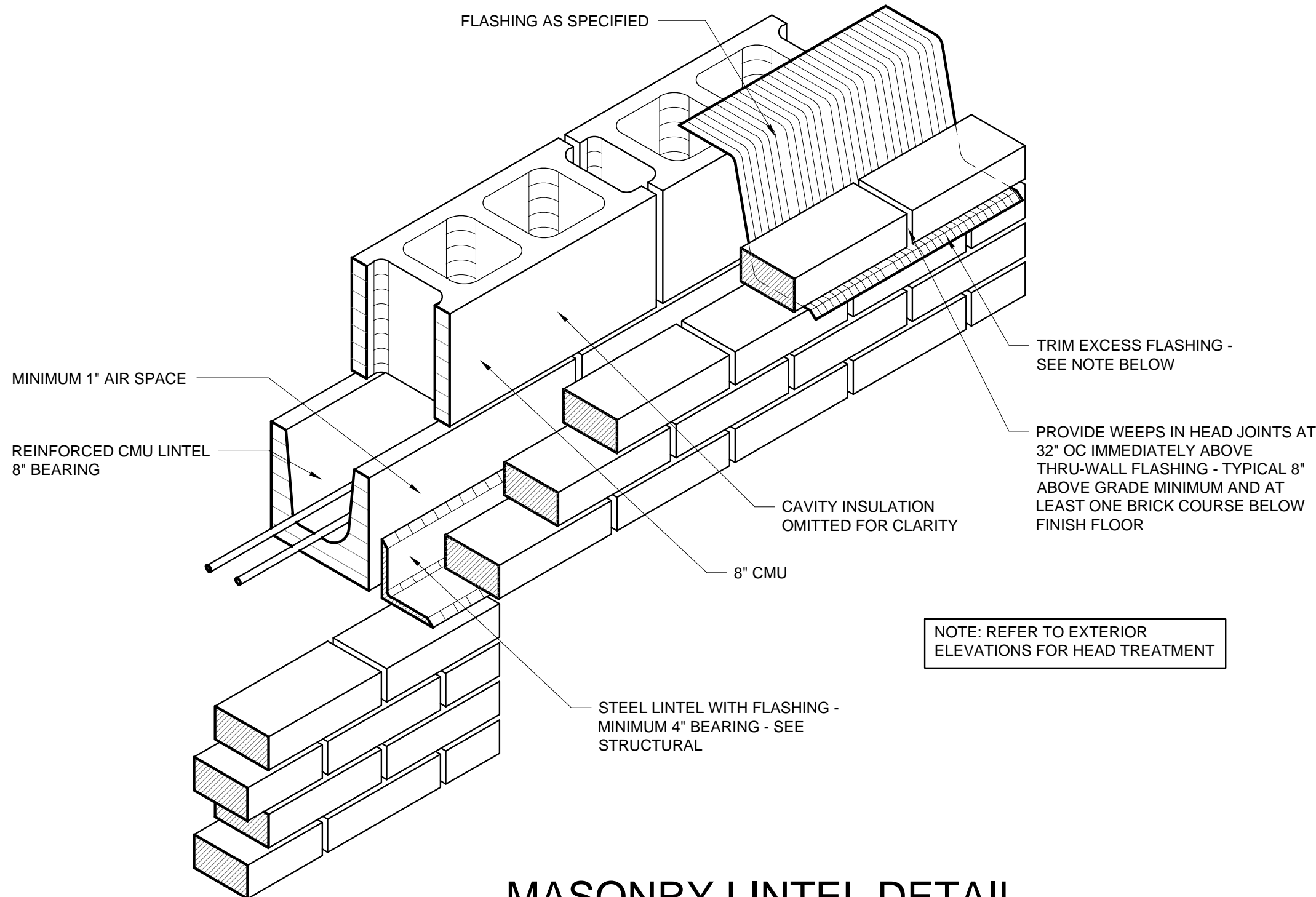
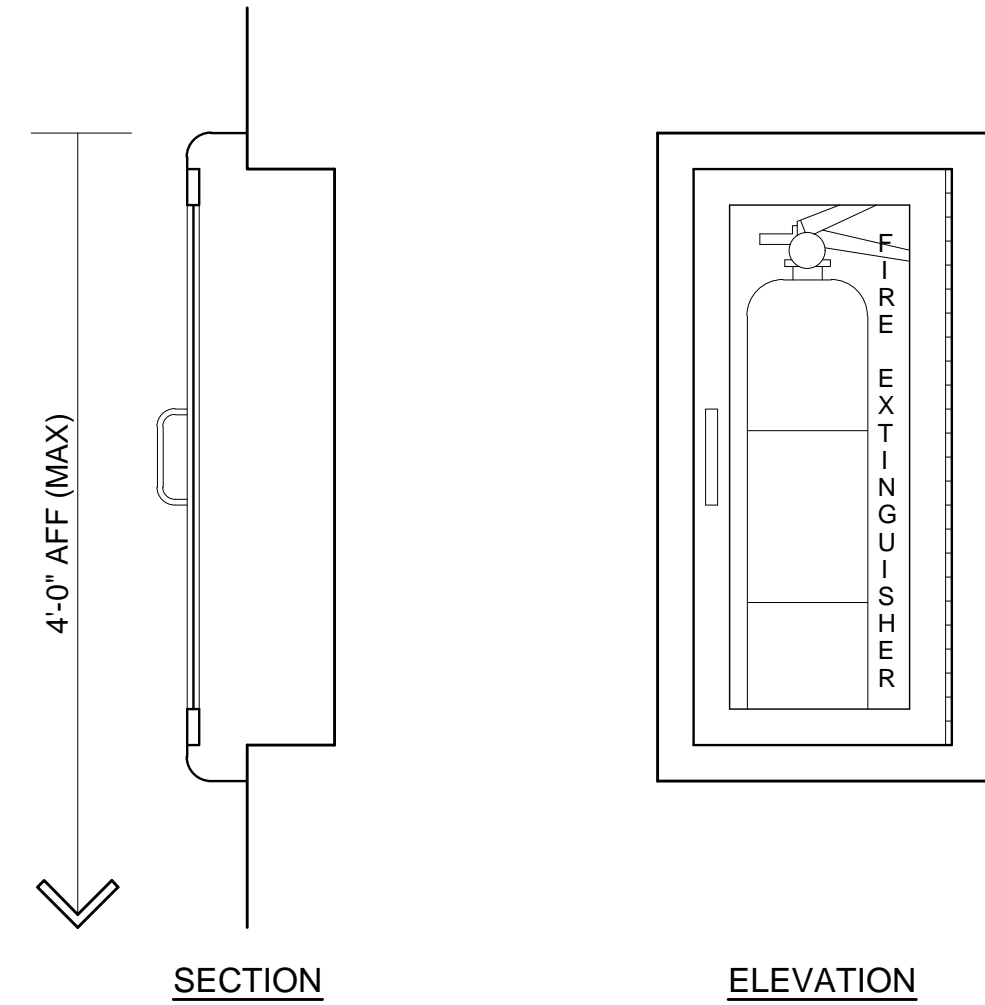
**HARD TILE DETAIL**  
SCALE: 3/4" - 1'-0"



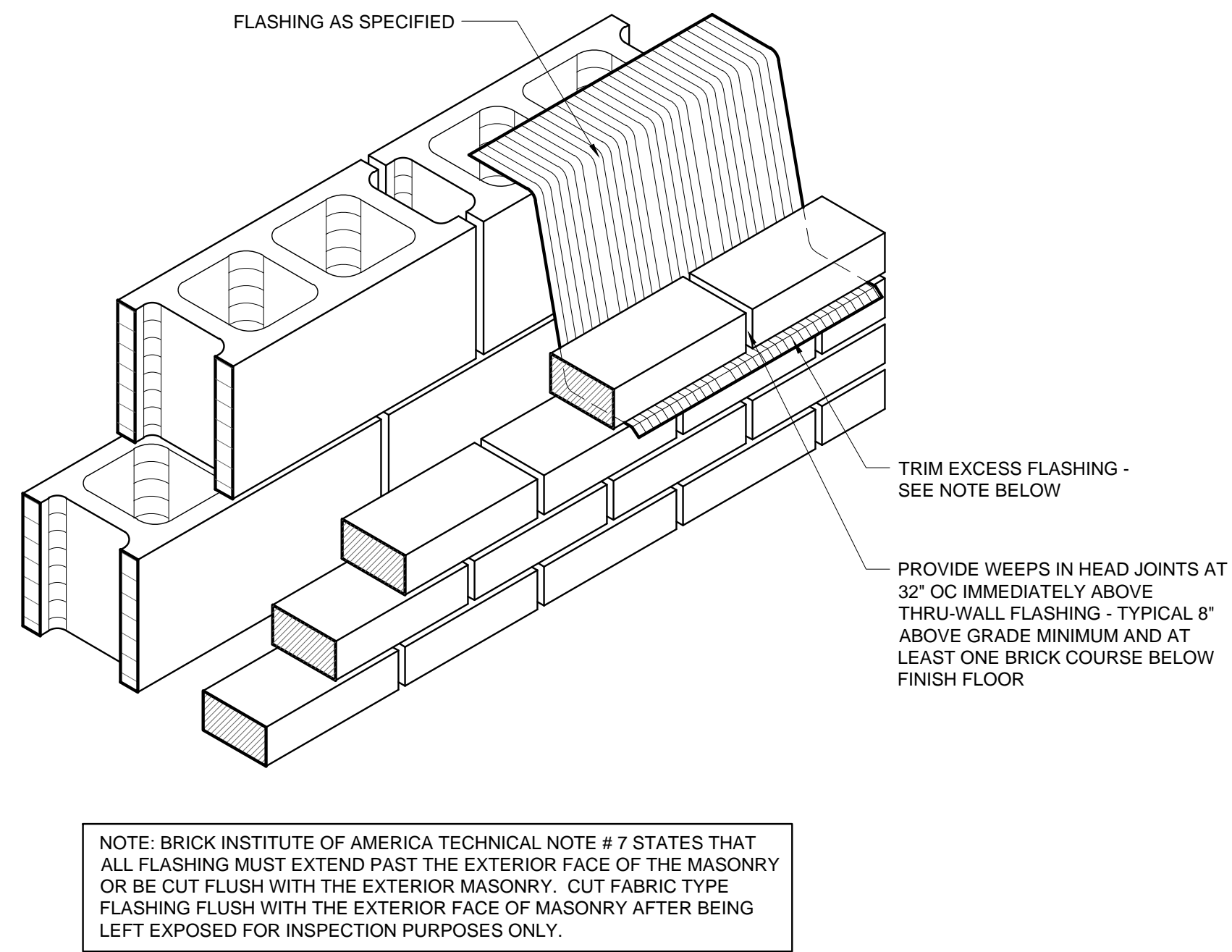
**NOTE:** SEE FLOOR PLAN SHEETS FOR INTERIOR PARTITIONS DESIGNATED TO RECEIVE BATT INSULATION FULL HEIGHT BETWEEN STUDS. ALL NON-RATED INTERIOR PARTITIONS TO HAVE SOUND BLANKETS ABOVE - TYPICAL. INSTALL SOUND ATTENUATION BLANKETS OVER CEILING PANELS. EXTEND 48 INCHES BEYOND PARTITION AND TIGHTLY FIT AROUND ALL GRILLES, HANGERS AND OTHER VERTICAL PENETRATIONS. THIS INSULATION TO BE CAREFULLY FIT AROUND (NOT OVER) RECESSED LIGHT FIXTURES.

**SOUND BATT ATTENUATION DETAIL (SA)**  
SCALE: 1 1/2" - 1'-0"

**FIRE EXTINGUISHER CABINET (FEC)**  
SCALE: 1 1/2" - 1'-0"



**MASONRY LINTEL DETAIL**  
SCALE: 1 1/2" - 1'-0"



**THRU-WALL FLASHING DETAIL**  
SCALE: 1 1/2" - 1'-0"

**ADDITIONS**  
TO  
**ROBERTSDALE HIGH SCHOOL**  
FOR THE  
**ROBERTSDALE, ALABAMA**  
**BALDWIN COUNTY BOARD OF EDUCATION**

**MCKEE & ASSOCIATES**  
ARCHITECTS, INC.  
631 SOUTH HULL STREET, MONTGOMERY, ALABAMA 36104 (334) 834-9933



SHEET TITLE : MISCELLANEOUS DETAILS

MCKEE JOB # : 23-195

DRAWN BY : VH

DATE: 10-11-2023

REVISED DATE: 12-8-2023

REVISED DATE:

REVISED DATE:

SHEET NO. : **A9.1**

SHEET TITLE :      EXIST COND & DEMO PLAN 1

MCKEE JOB # : 23-195

DRAWN BY : BAT

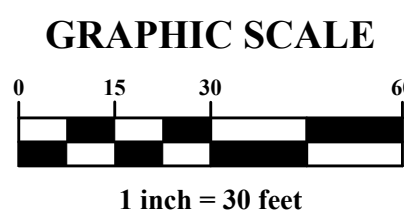
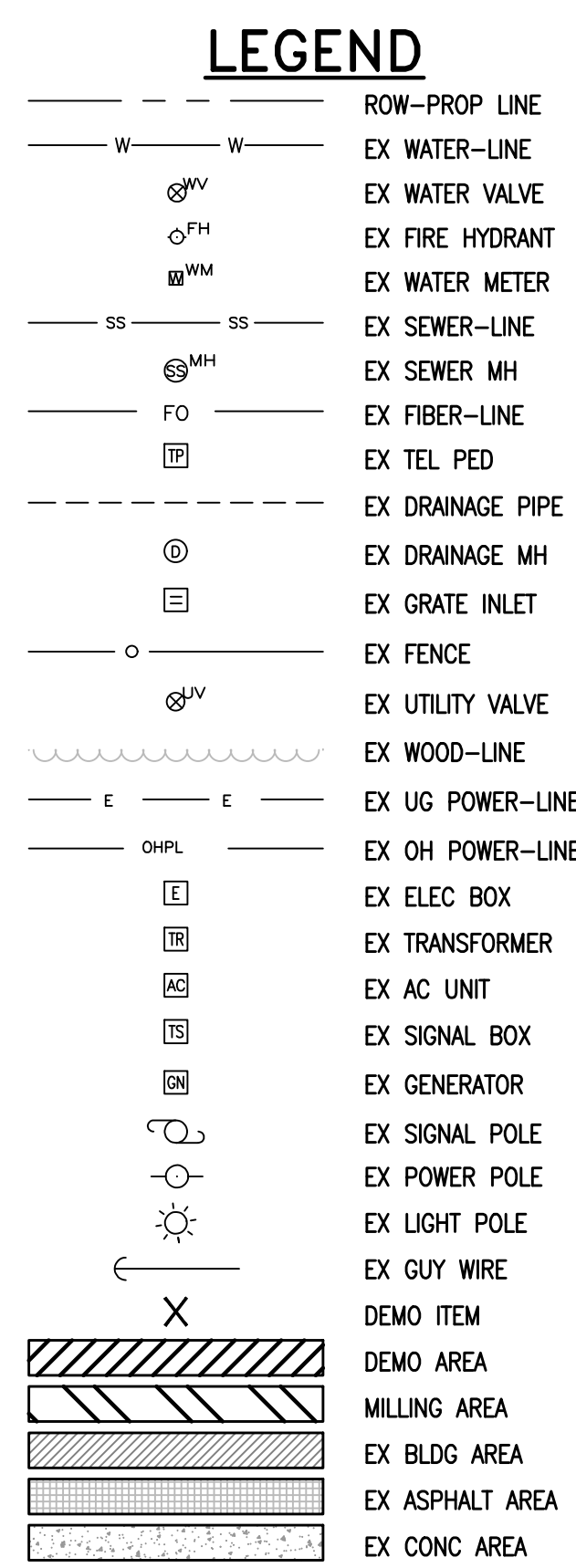
DATE: 10-11-23

REVISÉ DATE: 11-28-23

REVISÉ DATE: 12-08-23

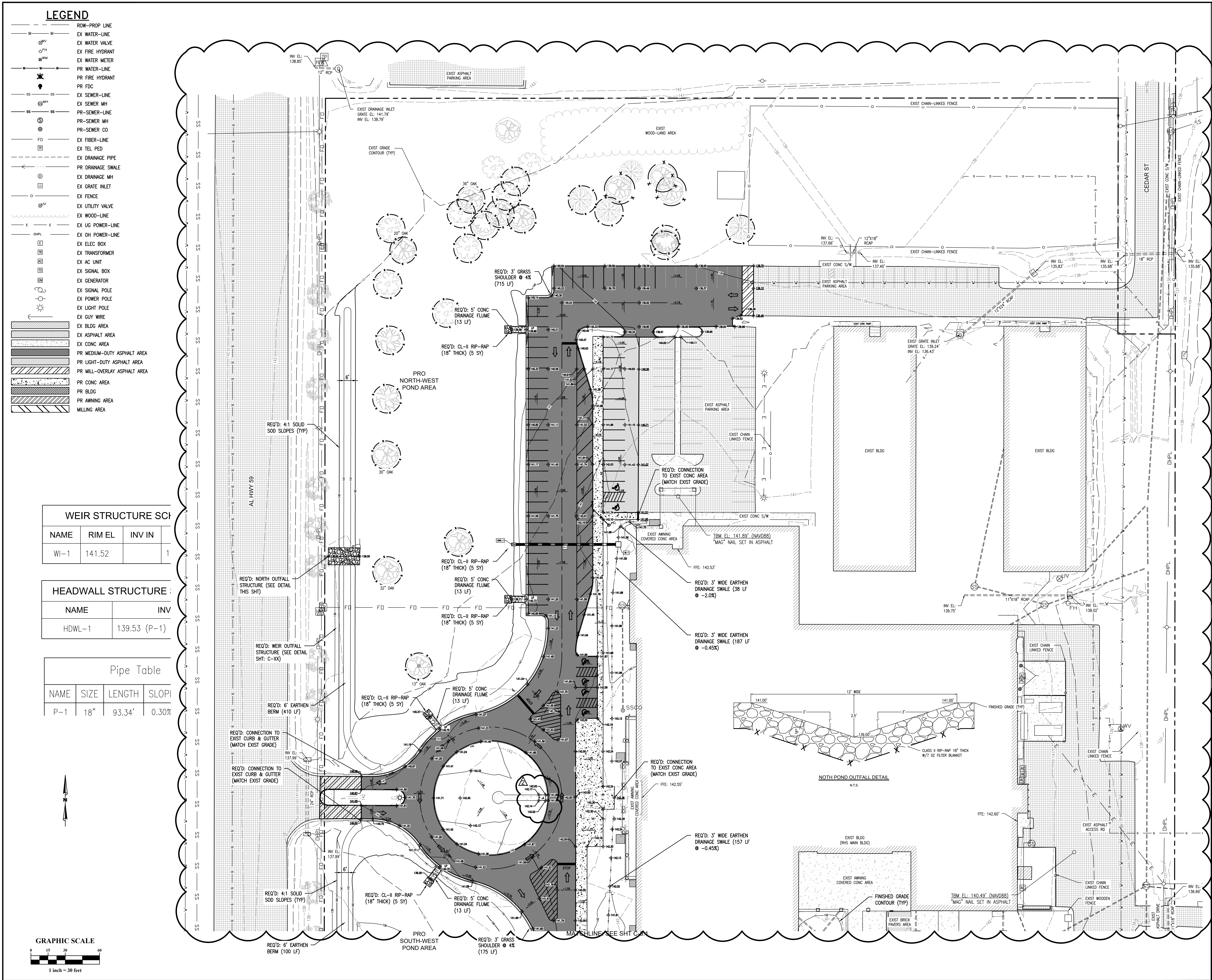
REVISÉ DATE:

SHEET NO. : C-2.0



- S:\1-Clients\23-117 '23 Additions to Robertsdale HS McKee\CIVIL ENGINEERING\PRODUCTION DWGSEXIST-DEMO PLAN.dwg  
- Friday, December 8, 2023 10:53:21 AM





SHEET TITLE : GRADING & DRAINAGE PLAN 1

MCKEE JOB # : 23-195

DRAWN BY : BAT

DATE : 10-11-23

REVISED DATE : 11-28-23

REVISED DATE : 12-08-23

REVISED DATE :

SHEET NO. : C-5.0