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# Letter of Transmittal

**TO: Plan Holders**

**FROM: Keith Barrett**

**DATE: December 24, 2024**

**SUBJECT:** Addendum 1  
High School Addition To  
Echols K-8 School  
For  
Echols County Schools

**WE ARE SENDING YOU:**

- Enclosed
- Prints
- Change order

**39 Pages via EMAIL (including cover)**

- Specifications

**ENCLOSED:**

<u>COPIES</u>	<u>DATE</u>	<u>DESCRIPTION</u>
1	12/24/2024	Addendum 1

**Transmitted as checked below:**

- For your use**
- As requested
- For your information
- For review & comment
- No exceptions taken
- Exceptions noted
- Resubmit

**REMARKS:**

**COPY :** A+B File 23030 / A-1



**ECHOLS COUNTY SCHOOLS**

**HIGH SCHOOL ADDITION TO  
ECHOLS K-8 SCHOOL  
For  
Echols County Schools**

**ADDENDUM NO. 1  
December 24, 2024**

**REVISIONS TO THE SPECIFICATIONS:**

- 1) Section 001117 Proposal Evaluation Criteria: 1.02 Response Format and Contents E. Delete “seven (7)” and replace with “four (4)”.
- 2) Section 004323 Alternates Form: Delete spec in its entirety and replace with attached Section 004323R Alternates Form.
- 3) Section 012300 Alternates: Delete spec in its entirety and replace with attached Section 012300R Alternates Form.
- 4) Section 051200 Structural Steel Framing: Part 2, Products 2.12 Source Quality Control A. Add “ All manufactures that are not AISC certified shall hire an independent testing agency to provide Quality Control task in Chapter N of ANSI/AICS 360”.
- 5) Section 074113 Standing-Seam Metal Roof Panels: Part 2 Products 2.2 B.1. Approved Manufacturers. Add” f. APEC.”
- 6) Section 074215 Concealed Fastener Metal Wall Panel System: Part 2 Products 2.2 A.1. Approved Manufacturers. Add” 5. APEC must match listed profile.”
- 7) Section 074293 Soffit Panel: Part 2 Products 2.02 B.1. Acceptable Manufacturers. Add” d). APEC must match listed profile.”
- 8) Section 077200 Roof Accessories: Add Section 077200 Roof Accessories spec in its entirety.
- 9) Section 083323 Overhead Coiling Insulated Service Doors: Add Section 083323 Overhead Coiling Insulated Service Doors spec in its entirety.
- 10) Section 087100 Door Hardware: Delete spec in its entirety and replace with attached Section 087100R Door Hardware.
- 11) Section 11400 Food Service Equipment: Part 2 Products 2.10 Products Item 3. Delete “Propane” unit shall be 480V electric.

- 12) Section 281300 Access Control and DataBase Management System: Part 3 Execution 3.7 Acceptable vendors. Change “75 miles” to “200 miles” and change “Douglas” to “Statenville, GA.”.

**REVISIONS TO THE DRAWINGS:**

- 13) Sheet A2001:
- a) Mechanical Courtyard outside of Mech. Room. 273, Boys 248 and Girls 252 shall have concrete slab as shown on Civil drawing.
  - b) Add attached drawing AD-1-A2001A Typical Stair Section dated 12.10.24.
  - c) Add attached drawing AD-1-A2001B Mechanical Screen Wall plan and section dated 12.10.24.
  - d) Add attached drawing AD-1-A2001C Mechanical Screen Wall elevations dated 12.10.24.
- 14) Sheet A2002:
- a) At four windows between Art Lab 337 and Art Classroom 340 add “H” symbol for Hollow Metal Frame Type shown on Sheet A4111.
- 15) Sheet A2300: Add “36”x36” roof access Hatch with steel wall mounted ladder with Safety Post. Locate in Closet 233.
- 16) Sheet A3200: Add Typical Window Sill Detail on attached drawing AD1-A3200A dated 12.13.2024.
- 17) Sheet A3202: At Wall Sections 1 & 2/A3202, at Metal Soffit Panels note add “Concealed fastened panels typical everywhere.”
- 18) Sheet A4110: Delete Sheet A4110 in its entirety and replace with attached Sheet A4110 with revision 2 date 12.12.24.
- 19) Sheet A4111: Delete Sheet A4111 in its entirety and replace with attached Sheet A4111 with revision 2 date 12.12.24.
- 20) Sheet A5100: At Detail 3/A5100, Delete “1 3/8” “ and replace with “1 3/4” “ .
- 21) Sheet A5110: At Detail 17/A5110, Delete “FIRE RATED GLAZING IN HOLLOW METAL FRAME “. Replace with “9/16 laminated glass in Aluminum frame”.
- 22) Sheet A5111: At Detail 16/A5111, Delete “FIRE RATED GLAZING IN HOLLOW METAL FRAME “. Replace with “9/16 laminated glass in Aluminum frame”.
- 23) Sheet D0000: At INTERIOR DESIGN FINISH LISTING, At T1 “delete tile and provide accent paint.”

**END**

SECTION 004323  
ALTERNATES FORM

PART 1 - BID INFORMATION

- 1.01 Bidder: \_\_\_\_\_.
- 1.02 Project Name: **High School Addition to Echols K-8 School.**
- 1.03 Project Location: Wildcat Circle, Statenville, GA 31648.
- 1.04 Owner: Echols County Schools
- 1.05 Architect: Altman + Barrett Architects, P.C.
- 1.06 Architect Project Number: 23030.

PART 2 - BID FORM SUPPLEMENT

- 2.01 This form is required to be attached to the Bid Form.

PART 3 - DESCRIPTION

- 3.01 The undersigned Bidder proposes the amount below be added to or deducted from the Base Bid if particular alternates are accepted by Owner. Amounts listed for each alternate include costs of related coordination, modification, or adjustment.
- 3.02 If the alternate does not affect the Contract Sum, the Bidder shall indicate "NO CHANGE."
- 3.03 If the alternate does not affect the Work of this Contract, the Bidder shall indicate "NOT APPLICABLE."
- 3.04 The Bidder shall be responsible for determining from the Contract Documents the affects of each alternate on the Contract Time and the Contract Sum.
- 3.05 Owner reserves the right to accept or reject any alternate, in any order, and to award or amend the Contract accordingly within [60] days of the Notice of Award unless otherwise indicated in the Contract Documents.
- 3.06 Acceptance or non-acceptance of any alternates by the Owner shall have no affect on the Contract Time unless the "Schedule of Alternates" Article below provides a formatted space for the adjustment of the Contract Time.

PART 4 - SCHEDULE OF ALTERNATES

4.01 Alternate No. 1 Provide Kitchen Equipment Manufacturer and Model Listed on Sheet A4100 KITCHEN EQUIPMENT SCHEDULE and list in Bold and underlined in Specification 114000.

A. ADD \_\_\_ DEDUCT \_\_\_ NO CHANGE \_\_\_ NOT APPLICABLE \_\_\_\_.  
\_\_\_\_\_ Dollars (\$\_\_\_\_\_).

4.02 Alternate No. 2 Install the control system shall be integrated seamlessly into the county's existing Siemens building automation system without the need of an additional front end or translation. Add Alt #1 Sheet M0002 Controls for New Addition.

A. ADD \_\_\_ DEDUCT \_\_\_ NO CHANGE \_\_\_ NOT APPLICABLE \_\_\_\_.  
\_\_\_\_\_ Dollars (\$\_\_\_\_\_).

4.03 Alternate No. 3 Install the control system shall be integrated seamlessly into the county's existing Siemens building automation system without the need of an additional front end or translation. Add Alt #2 Sheet M0002 Controls for Existing Building.

A. ADD \_\_\_ DEDUCT \_\_\_ NO CHANGE \_\_\_ NOT APPLICABLE \_\_\_\_.  
\_\_\_\_\_ Dollars (\$\_\_\_\_\_).

4.04 Alternate No. 4. Provide Paxton locks and required equipment for complete working system.

A. ADD \_\_\_ DEDUCT \_\_\_ NO CHANGE \_\_\_ NOT APPLICABLE \_\_\_\_.  
\_\_\_\_\_ Dollars (\$\_\_\_\_\_).

4.05 Alternate No. 5. Provide Sargent cores for all locks listed in door hardware.

A. ADD \_\_\_ DEDUCT \_\_\_ NO CHANGE \_\_\_ NOT APPLICABLE \_\_\_\_.  
\_\_\_\_\_ Dollars (\$\_\_\_\_\_).

4.06 Alternate No. 6. Provide Kloud-12 for SIP Bells, Paging, and Intercom System.

A. ADD \_\_\_ DEDUCT \_\_\_ NO CHANGE \_\_\_ NOT APPLICABLE \_\_\_\_.  
\_\_\_\_\_ Dollars (\$\_\_\_\_\_).

4.07 Alternate No. 7. Provide OpenEye Video Surveillance (CCTV) System.

A. ADD \_\_\_ DEDUCT \_\_\_ NO CHANGE \_\_\_ NOT APPLICABLE \_\_\_\_.  
\_\_\_\_\_ Dollars (\$\_\_\_\_\_).

PART 5 - SUBMISSION OF BID SUPPLEMENT

- 5.01 Respectfully submitted this \_\_\_\_ day of \_\_\_\_\_, 2024.
- 5.02 Submitted By: \_\_\_\_\_ (Insert name of bidding firm or corporation).
- 5.03 Authorized Signature: \_\_\_\_\_ (Handwritten signature).
- 5.04 Signed By: \_\_\_\_\_ (Type or print name).
- 5.05 Title: \_\_\_\_\_ (Owner/Partner/President/Vice President).

END OF DOCUMENT 004323R

## SECTION 012300

### ALTERNATES

#### PART 1 - GENERAL

##### 1.01 RELATED DOCUMENTS

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

##### 1.02 SUMMARY

- A. Section includes administrative and procedural requirements for alternates.

##### 1.03 DEFINITIONS

- A. Alternate: An amount proposed by bidders and stated on the Bid Form for certain work defined in the bidding requirements that may be added to or deducted from the base bid amount if the Owner decides to accept a corresponding change either in the amount of construction to be completed or in the products, materials, equipment, systems, or installation methods described in the Contract Documents.
  - 1. Alternates described in this Section are part of the Work only if enumerated in the Agreement.
  - 2. The cost or credit for each alternate is the net addition to or deduction from the Contract Sum to incorporate alternates into the Work. No other adjustments are made to the Contract Sum.

##### 1.04 PROCEDURES

- A. Coordination: Revise or adjust affected adjacent work as necessary to completely integrate work of the alternate into Project.
  - 1. Include as part of each alternate, miscellaneous devices, accessory objects, and similar items incidental to or required for a complete installation whether or not indicated as part of alternate.
- B. Execute accepted alternates under the same conditions as other work of the Contract.
- C. Schedule: A schedule of alternates is included at the end of this Section. Specification Sections referenced in schedule contain requirements for materials necessary to achieve the work described under each alternate.

#### PART 2 - PRODUCTS (Not Used)

#### PART 3 - EXECUTION

##### 3.01 SCHEDULE OF ALTERNATES

- A. Alternate 1. Base Bid: provide Food equipment by manufacturers listed in specifications 11400.

Add Alternate: **provide manufacturer in bold print and underlined in specifications and listed on Sheet A4100 KITCHEN EQUIPMENT SCHEDULE.**

- B. Alternate 2. **Provide Siemens building automation system without the need of an additional front end or translation. Shall tie into existing K-8 Schools Siemens system. See Add Alternate #1 Sheet M0002 Controls for New Addition.**

C. Alternate 3. **Provide Siemens building automation system without the need of an additional front end or translation. Shall tie into existing K-8 Schools Siemens system. See Add Alternate #2 Sheet M0002 Controls for Existing Building.**

D. Alternate 4. **Base Bid: Under the Base bid, Door hardware and the Access Control and Database Management System shall be one of the manufacturers listed in and meeting all qualifications as noted in Specification Section 281300 - Access Control and Database Management System and as shown on the drawings.**

Add Alternate: **Provide Paxton electric locks and required hardware, software and equipment for complete working system and 281300 - Access Control and Database Management System shall be as manufactured by Paxton Net2 Professional Platform (to integrate to the existing Echols County Schools Access Control system).**

E. Alternate 5. Base Bid: Under the Base bid provide one of the manufacturers listed in Specification Section 87100.

Add Alternate: **Provide Sargent cores for all locks listed in door hardware. Key to Echols County Schools current Key system.**

F. Alternate 6. Base Bid: Under the Base bid, the SIP Bells, Paging, and Intercom System shall be one of the manufacturers listed in and meeting all qualifications as noted in Specification Section 275123 – SIP Bells, Paging, and Intercom System and as shown on the drawings.

Add Alternate: **Under this alternate, 275123 – SIP Bells, Paging, and Intercom System shall be manufactured by Kloud-12.**

G. Alternate 7. Base Bid: Under the Base bid, the Video Surveillance (CCTV) System shall be one of the manufacturers listed in and meeting all qualifications as noted in Specification Section 281830 - Video Surveillance (CCTV) System and as shown on the drawings.

Add Alternate: **Under this alternate, 281830 - Video Surveillance (CCTV) System shall be as manufactured by OpenEye (to integrate to the existing Echols County Schools CCTV System).**

END OF SECTION 012300



SECTION 077200

ROOF ACCESSORIES

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

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

1.02 SUMMARY

- A. Section Includes:
1. Roof hatches.
  2. Pipe and duct supports.

1.03 COORDINATION

- A. Coordinate layout and installation of roof accessories with interfacing and adjoining construction to provide a leakproof, weathertight, secure, and noncorrosive installation.
- B. Coordinate dimensions with rough-in information or Shop Drawings of equipment to be supported.

1.04 ACTION SUBMITTALS

- A. Product Data: For each type of roof accessory.
1. Include construction details, material descriptions, dimensions of individual components and profiles, and finishes.
- B. Shop Drawings: For roof accessories.
1. Include plans, elevations, keyed details, and attachments to other work. Indicate dimensions, loadings, and special conditions. Distinguish between plant- and field-assembled work.

1.05 INFORMATIONAL SUBMITTALS

- A. Coordination Drawings: Roof plans, drawn to scale, and coordinating penetrations and roof-mounted items. Show the following:
1. Size and location of roof accessories specified in this Section.
  2. Method of attaching roof accessories to roof or building structure.
  3. Other roof-mounted items including mechanical and electrical equipment, ductwork, piping, and conduit.
  4. Required clearances.
- B. Sample Warranties: For manufacturer's special warranties.

1.06 CLOSEOUT SUBMITTALS

- A. Operation and Maintenance Data: For roof accessories to include in operation and maintenance manuals.

1.07 WARRANTY

- A. Special Warranty on Painted Finishes: Manufacturer's standard form in which manufacturer agrees to repair finishes or replace roof accessories that show evidence of deterioration of factory-applied finishes within specified warranty period.
1. Fluoropolymer Finish: Deterioration includes, but is not limited to, the following:
    - a) Color fading more than 5 Hunter units when tested according to ASTM D 2244.
    - b) Chalking in excess of a No. 8 rating when tested according to ASTM D 4214.

- c) Cracking, checking, peeling, or failure of paint to adhere to bare metal.
- 2. Finish Warranty Period: 20 years from date of Substantial Completion.

## PART 2 - PRODUCTS

### 2.01 PERFORMANCE REQUIREMENTS

- A. General Performance: Roof accessories shall withstand exposure to weather and resist thermally induced movement without failure, rattling, leaking, or fastener disengagement due to defective manufacture, fabrication, installation, or other defects in construction.

### 2.02 ROOF HATCH

- A. Roof Hatches: Metal roof-hatch units with lids and insulated double-walled curbs, welded or mechanically fastened and sealed corner joints, continuous lid-to-curb counterflashing and weathertight perimeter gasketing, straight sides, and integrally formed deck-mounting flange at perimeter bottom.
- B. Type and Size: Single-leaf lid, 36" X 36"
- C. Loads: Minimum [40-lbf/sq. ft. (1.9-kPa)] external live load and [20-lbf/sq. ft. (0.95-kPa)] internal uplift load.
- D. Hatch Material: Zinc-coated (galvanized) steel sheet.
  - 1. Thickness: Manufacturer's standard thickness for hatch size indicated
  - 2. Finish: Two-coat fluoropolymer.
  - 3. Color: As selected by Architect from manufacturer's full range.
- E. Construction:
  - 1. Insulation: Polyisocyanurate board.
    - a) R-Value: 12.0 according to ASTM C 1363.
  - 2. Nailer: Factory-installed wood nailer continuous around hatch perimeter.
  - 3. Hatch Lid: Opaque, insulated, and double walled, with manufacturer's standard metal liner of same material and finish as outer metal lid.
  - 4. Curb Liner: Manufacturer's standard, of same material and finish as metal curb.
  - 5. On ribbed or fluted metal roofs, form flange at perimeter bottom to conform to roof profile.
  - 6. Fabricate curbs to minimum height of 12 inches (305 mm) above roofing surface unless otherwise indicated.
  - 7. Sloping Roofs: Where slope or roof deck exceeds 1:48, fabricate curb with perimeter curb height that is tapered to accommodate roof slope so that top surfaces of perimeter curb are level. Equip hatch with water diverter or cricket on side that obstructs water flow.
- F. Hardware: Spring operators, hold-open arm, galvanized-steel spring latch with turn handles, galvanized-steel butt- or pintle-type hinge system, and padlock hasps inside and outside.
  - 1. Provide two-point latch on lids larger than 84 inches (2130 mm).

### 2.03 PIPE AND DUCT SUPPORTS

- A. Fixed-Height Cradle-Type Pipe Supports: Polycarbonate pipe stand accommodating up to [1-1/2-inch- (38-mm-)] <Insert dimension> diameter pipe or conduit; with provision for pipe retainer and with manufacturer's support pad or deck plate as recommended for penetration-free installation over roof membrane type; as required for quantity of pipe runs and sizes.

### 2.04 METAL MATERIALS

- A. Zinc-Coated (Galvanized) Steel Sheet: ASTM A 653/A 653M, G90 (Z275) coating designation.

1. Exposed Coil-Coated Finish: Prepainted by the coil-coating process to comply with ASTM A 755/A 755M. Prepare, pretreat, and apply coating to exposed metal surfaces to comply with coating and resin manufacturers' written instructions.
  - a) Two-Coat Fluoropolymer Finish: AAMA 621. System consisting of primer and fluoropolymer color topcoat containing not less than 70 percent PVDF resin by weight.
2. Concealed Finish: Pretreat with manufacturer's standard white or light-colored acrylic or polyester-backer finish consisting of prime coat and wash coat, with a minimum total dry film thickness of **0.5 mil (0.013 mm)**.

## 2.05 MISCELLANEOUS MATERIALS

- A. General: Provide materials and types of fasteners, protective coatings, sealants, and other miscellaneous items required by manufacturer for a complete installation.
- B. Polyisocyanurate Board Insulation: ASTM C 1289, thickness and thermal resistivity as indicated.
- C. Wood Nailers: Softwood lumber, pressure treated with waterborne preservatives for aboveground use, acceptable to authorities having jurisdiction, [**containing no arsenic or chromium,**] and complying with AWPA C2; not less than **1-1/2 inches (38 mm)** thick.
- D. Bituminous Coating: Cold-applied asphalt emulsion complying with ASTM D 1187/D 1187M.
- E. Underlayment:
  1. Fasteners: Roof accessory manufacturer's recommended fasteners suitable for application and metals being fastened. Match finish of exposed fasteners with finish of material being fastened. Provide nonremovable fastener heads to exterior exposed fasteners. Furnish the following unless otherwise indicated:
- F. Gaskets: Manufacturer's standard tubular or fingered design of neoprene, EPDM, PVC, or silicone or a flat design of foam rubber, sponge neoprene, or cork.
- G. Elastomeric Sealant: ASTM C 920, elastomeric polyurethane polymer sealant as recommended by roof accessory manufacturer for installation indicated; low modulus; of type, grade, class, and use classifications required to seal joints and remain watertight.
- H. Butyl Sealant: ASTM C 1311, single-component, solvent-release butyl rubber sealant; polyisobutylene plasticized; heavy bodied for expansion joints with limited movement.
- I. Asphalt Roofing Cement: ASTM D 4586/D 4586M, asbestos free, of consistency required for application.

## 2.06 GENERAL FINISH REQUIREMENTS

- A. Comply with NAAMM's "Metal Finishes Manual for Architectural and Metal Products" for recommendations for applying and designating finishes.
- B. Appearance of Finished Work: Noticeable variations in same piece are not acceptable. Variations in appearance of adjoining components are acceptable if they are within the range of approved Samples and are assembled or installed to minimize contrast.

## PART 3 - EXECUTION

### 3.01 EXAMINATION

- A. Examine substrates, areas, and conditions, with Installer present, to verify actual locations, dimensions, and other conditions affecting performance of the Work.
- B. Verify that substrate is sound, dry, smooth, clean, sloped for drainage, and securely anchored.

- C. Verify dimensions of roof openings for roof accessories.
- D. Proceed with installation only after unsatisfactory conditions have been corrected.

### 3.02 INSTALLATION

- A. General: Install roof accessories according to manufacturer's written instructions.
  - 1. Install roof accessories level; plumb; true to line and elevation; and without warping, jogs in alignment, buckling, or tool marks.
  - 2. Anchor roof accessories securely in place so they are capable of resisting indicated loads.
  - 3. Use fasteners, separators, sealants, and other miscellaneous items as required to complete installation of roof accessories and fit them to substrates.
  - 4. Install roof accessories to resist exposure to weather without failing, rattling, leaking, or loosening of fasteners and seals.
- B. Roof Curb Installation: Install each roof curb so top surface is level.
- C. Roof-Hatch Installation:
  - 1. Verify that roof hatch operates properly. Clean, lubricate, and adjust operating mechanism and hardware.
- D. Seal joints with elastomeric sealant as required by roof accessory manufacturer.

### 3.03 REPAIR AND CLEANING

- A. Galvanized Surfaces: Clean field welds, bolted connections, and abraded areas and repair galvanizing according to ASTM A 780/A 780M.
- B. Clean exposed surfaces according to manufacturer's written instructions.
- C. Clean off excess sealants.
- D. Replace roof accessories that have been damaged or that cannot be successfully repaired by finish touchup or similar minor repair procedures.

END OF SECTION

SECTION 083323

OVERHEAD COILING INSULATED SERVICE DOORS

PART 1 GENERAL

1.01 SUMMARY

1. Overhead coiling insulated doors. Indicated with OHD on door types and door schedule located on the Drawings.

1.02 RELATED SECTIONS

1. Section 087100 - Door Hardware: Product Requirements for cylinder core and keys.
2. Section 087340 Commercial Door Operators.
3. Section 260533 - Raceway and Boxes: Conduit from electric circuit to door operator and from door operator to control station.
4. Section 262726 - Wiring Connections: Power to disconnect.

1.03 REFERENCES

1. [NFRC 102](#) - Test Procedure for Measuring the Steady-State Thermal Transmittance of Fenestration Systems.
2. [ASTM A 653](#) – Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc Iron Alloy Coated (Galvannealed) by the Hot-Dip Process
3. [ASTM E 90](#) - Standard Test Method for Laboratory Measurement of Airborne Sound Transmission Loss of Building Partitions and Element.
4. [ASTM E 330](#) - Standard Test Method for Structural Performance of Exterior Windows, Doors, Skylights and Curtain Walls by Uniform Static Air Pressure Difference.
5. [ASTM A 653](#) - Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process.
6. [ASTM A 666](#) - Standard Specification for Austenitic Stainless Steel Sheet, Strip, Plate, and Flat Bar.
7. [ASTM A 924](#) - Standard Specification for General Requirements for Steel Sheet, Metallic-Coated by the Hot-Dip Process.
8. [ASTM B 221](#) - Standard Specification for Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Profiles, and Tubes.
9. [NEMA 250](#) - Enclosures for Electrical Equipment (1000 Volts Maximum).
10. [NEMA MG 1](#) - Motors and Generators.

1.04 DESIGN / PERFORMANCE REQUIREMENTS

1. Overhead coiling service doors:
  - a. Wind Loads: Design door assembly to withstand wind/suction load of 20 psf (958 Pa) without damage to door or assembly components in conformance with ASTM E 330.
  - b. Operation: Design door assembly, including operator, to operate for not less than 20,000 cycles.
2. Single-Source Responsibility: Provide doors, tracks, motors, and accessories from one manufacturer for each type of door. Provide secondary components from source acceptable to manufacturer of primary components.
3. Products Requiring Electrical Connection: Listed and classified by Underwriters Laboratories, Inc. acceptable to authority having jurisdiction as suitable for purpose specified.

1.05 SUBMITTALS

1. Submit under provisions of Section 013300.
2. Product Data: Manufacturer's data sheets on each product to be used, including:
  - a. Preparation instructions and recommendations.
  - b. Storage and handling requirements and recommendations.

- c. Details of construction and fabrication.
- d. Installation instructions.
- 3. Shop Drawings: Include detailed plans, elevations, details of framing members, anchoring methods, required clearances, hardware, and accessories. Include relationship with adjacent construction.
- 4. Selection Samples: For each finish product specified, two complete sets of color chips representing manufacturer's full range of available colors and patterns.
- 5. Verification Samples: For each finish product specified, two samples, minimum size 6 inches (150 mm) long, representing actual product, color, and patterns.
- 6. Manufacturer's Certificates: Certify products meet or exceed specified requirements.
- 7. Operation and Maintenance Data: Submit lubrication requirements and frequency, and periodic adjustments required.

#### 1.06 QUALITY ASSURANCE

- 1. Manufacturer Qualifications: Company specializing in performing Work of this section with a minimum of five years experience in the fabrication and installation of security closures.
- 2. Installer Qualifications: Company specializing in performing Work of this section with minimum three years and approved by manufacturer.
- 3. Mock-Up: Provide a mock-up for evaluation of surface preparation techniques and application workmanship.
  - a. Finish areas designated by Architect.
  - b. Do not proceed with remaining work until workmanship, color, and sheen are approved by Architect.
  - c. Refinish mock-up area as required to produce acceptable work.

#### 1.07 DELIVERY, STORAGE, AND HANDLING

- 1. Store products in manufacturer's unopened packaging until ready for installation.
- 2. Protect materials from exposure to moisture. Do not deliver until after wet work is complete and dry.
- 3. Store materials in a dry, warm, ventilated weathertight location.

#### 1.08 PROJECT CONDITIONS

- 1. Maintain environmental conditions (temperature, humidity, and ventilation) within limits recommended by manufacturer for optimum results. Do not install products under environmental conditions outside manufacturer's absolute limits.

#### 1.09 COORDINATION

- 1. Coordinate Work with other operations and installation of adjacent materials to avoid damage to installed materials.

#### 1.10 WARRANTY

- 1. Warranty: Manufacturer's limited door and operator system, except the counterbalance spring and finish, to be free from defects in materials and workmanship for 3 years or 20,000 cycles, whichever occurs first.

## PART 2 PRODUCTS

### MANUFACTURER

- 1. Acceptable Manufacturers:
  - a. Overhead Door Corporation (Basis of Design)  
2501 S. State Hwy. 121, Suite 200, Lewisville, TX 75067  
Tel.: (800) 275-3290  
Web Site: [www.overheaddoor.com](http://www.overheaddoor.com)
  - b. The Cookson Company, Inc.  
1901 South Litchfield Road, Goodyear, AZ 85338

Tel.: (800) 294-4358

Web Site: [www.cooksondoor.com](http://www.cooksondoor.com)

- c. C.H.I. Overhead Doors  
Arthur, IL  
Web Site: [www.chiohd.com](http://www.chiohd.com)
- d. Requests for substitutions will be considered in accordance with provisions of Section 012500.

## 1.02 OVERHEAD INSULATED COILING SERVICE DOORS

- 1. Insulated Service Doors: Overhead Door Corporation Model 625.
  - a. Curtain: Interlocking roll-formed slats as specified following. Endlocks shall be attached to each end of alternate slats to prevent lateral movement.
  - b. Flat profile type F-265i for doors up to 40 feet (12.19 m) wide.
  - c. Front slat fabricated of:
    - 1) 20 gauge galvanized steel.
  - d. Back slat fabricated of:
    - 1) 24 gauge galvanized steel.
      - (a) 24 gauge stainless steel.
      - (b) Aluminum .024 inch (.06 mm).
    - 2) Slat cavity filled with CFC-free foamed-in-place, polyurethane insulation.
      - (a) R-Value: 7.7, U-Value: 0.13.
      - (b) Sound Rating: STC-21.
  - e. Performance:
    - 1) Through Curtain Sound Rating: Sound Rating: STC-28 (STC-30+ with HZ noise generator) as per ASTM E 90.
    - 2) Installed System Sound Rating: STC-21 as per ASTM E 90.
    - 3) U-factor: 0.91 NFRC test report, maximum U-factor of no higher than 1.00.
  - f. Finish:
    - 1) Galvanized Steel: Slats and hood galvanized in accordance with ASTM A 653 and receive rust-inhibitive, roll coating process, including 0.2 mils thick baked-on prime paint, and 0.6 mils thick baked-on polyester top coat.
      - (a) Polyester Top Coat.
        - (1) Gray polyester.
        - (2) Tan polyester.
        - (3) White polyester.
        - (4) Brown polyester.
    - 2) Non-galvanized exposed ferrous surfaces shall receive one coat of rust-inhibitive primer.
    - 3) Aluminum: Slats and hood shall be aluminum finished as follows.
      - (a) Finish: Bronze anodized finish.
  - g. Weatherseals:
    - 1) Vinyl bottom seal, exterior guide and internal hood seals.
    - 2) Interior guide weatherseal on exterior doors only
    - 3) Lintel weatherseal on exterior doors only.
  - h. Bottom Bar:
    - 1) Two prime painted steel angles minimum thickness 1/8 inch (3 mm) bolted back to back to reinforce curtain in the guides.
    - 2) Two galvanized steel angles minimum thickness 1/8 inch (3 mm) bolted back to back to reinforce curtain in the guides.
    - 3) Two stainless steel angles minimum thickness 1/8 inch (3 mm) bolted back to back to reinforce curtain in the guides.
  - i. Extruded aluminum angle minimum thickness 1/8 inch (3 mm) bolted back to back to reinforce curtain in the guides.

- j. Guides: Three Structural steel angles
  - 1) Finish: PowderGuard Weathered finish with iron/black powder.
- k. Brackets:
  - 1) Hot rolled prime painted steel to support counterbalance, curtain and hood.
  - 2) Galvanized steel to support counterbalance, curtain and hood.
  - 3) Stainless steel to support counterbalance, curtain and hood.
- l. Counterbalance:
  - 1) Helical torsion spring type housed in a steel tube or pipe barrel, supporting the curtain with deflection limited to 0.03 inch per foot of span. Counterbalance is adjustable by means of an adjusting tension wheel.
- m. Hood: Provide with internal hood baffle weatherseal.
  - 1) 24 gauge galvanized steel with intermediate supports as required
  - 2) Stainless steel, 24 gauge hood with intermediate supports as required.
  - 3) Aluminum hood with intermediate supports as required.
- n. Manual Operation:
  - 1) Chain operation.
- o. Electric Motor Operation: Provide UL listed electric operator, size as recommended by manufacturer to move door in either direction at not less than 2/3 foot nor more than 1 foot per second.
  - 1) Sensing Edge Protection:
    - (a) Electric sensing edge.
  - 2) Operator Controls:
    - (a) Key operation with open, close, and stop controls.
    - (b) Controls flush mounted.
- p. Motor Voltage: 115/230 single phase, 60 Hz.
- q. Windload Design:
  - 1) Standard windload shall be 20 PSF.
- r. Locking:
  - 1) Chain keeper locks for chain hoist operation.
  - 2) Cylinder lock for electric operation with interlock switch.
- s. Wall Mounting Condition:
  - 1) Face-of-wall mounting.
- t. Insulated Vision Lites: Provide with uniformly spaced openings.
  - 1) Size: 10 inch by 1 inch (254 mm by 25.4 mm)
  - 2) Provide with dual wall polycarbonate lites.

### **PART 3 EXECUTION**

#### **1.01 EXAMINATION**

1. Verify opening sizes, tolerances and conditions are acceptable.
2. Examine conditions of substrates, supports, and other conditions under which this work is to be performed.
3. If substrate preparation is the responsibility of another installer, notify Architect of unsatisfactory preparation before proceeding.

#### **1.02 PREPARATION**

1. Clean surfaces thoroughly prior to installation.
2. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.

#### **1.03 INSTALLATION**

1. Install in accordance with manufacturer's instructions.
2. Use anchorage devices to securely fasten assembly to wall construction and building framing without distortion or stress.
3. Securely and rigidly brace components suspended from structure. Secure guides to structural members only.



4. Fit and align assembly including hardware; level and plumb, to provide smooth operation.
5. Coordinate installation of electrical service with Section 16150. Complete wiring from disconnect to unit components.
6. Coordinate installation of sealants and backing materials at frame perimeter as specified in Section 07900.
7. Install perimeter trim and closures.
8. Instruct Owner's personnel in proper operating procedures and maintenance schedule.

1.04 ADJUSTING

1. Test for proper operation and adjust as necessary to provide proper operation without binding or distortion.
2. Adjust hardware and operating assemblies for smooth and noiseless operation.

1.05 CLEANING

1. Clean curtain and components using non-abrasive materials and methods recommended by manufacturer.
2. Remove labels and visible markings.
3. Touch-up, repair or replace damaged products before Substantial Completion.

1.06 PROTECTION

1. Protect installed products until completion of project.

END OF SECTION

SECTION 087100

DOOR HARDWARE

PART 1 - GENERAL

1.1 SUMMARY:

- A. Section Includes: Finish Hardware for door openings, except as otherwise specified herein.
  - 1. Door hardware for steel (hollow metal) doors.
  - 2. Door hardware for aluminum doors.
  - 3. Door hardware for wood doors.
  - 4. Door hardware for other doors indicated.
  - 5. Keyed cylinders as indicated.
- B. Related Sections:
  - 1. Division 06: Rough Carpentry.
  - 2. Division 08: Aluminum Doors and Frames
  - 3. Division 08: Hollow Metal Doors and Frames.
  - 4. Division 08: Wood Doors.
  - 5. Division 26 Electrical
  - 6. Division 28: Electronic Security
- C. References: Comply with applicable requirements of the following standards. Where these standards conflict with other specific requirements, the most restrictive shall govern.
  - 1. Builders Hardware Manufacturing Association (BHMA)
  - 2. NFPA 101 Life Safety Code, 2010
  - 3. NFPA 80 – Standard for Fire Doors and Other Opening Protectives, 2013
  - 4. ANSI-A156.xx- Various Performance Standards for Finish Hardware
  - 5. UL10C – Positive Pressure Fire Test of Door Assemblies
  - 6. ANSI-A117.1 – Accessible and Usable Buildings and Facilities
  - 7. DHI /ANSI A115.IG – Installation Guide for Doors and Hardware
  - 8. ICC / International Building Code (IBC) 2012
- D. Intent of Hardware Groups
  - 1. Should items of hardware not definitely specified be required for completion of the Work, furnish such items of type and quality comparable to adjacent hardware and appropriate for service required.
  - 2. Where items of hardware are not definitely or correctly specified, but are required for completion of the Work, a written statement of such omission, error, or other discrepancy must be submitted to Architect prior to date specified for receipt of bids for clarification by addendum. Otherwise, furnish such items in the type and quality established by this specification, and appropriate to the service intended.
- E. Allowances
  - 1. Refer to Division 01 for allowance amount and procedures.
- F. Alternates
  - 1. Refer to Division 01 for Alternates and procedures.

1.2 SUBSTITUTIONS:

- A. Comply with Division 01.

1.3 SUBMITTALS:

- A. Comply with Division 01.
- B. Special Submittal Requirements: Combine submittals of this Section with Sections listed below to ensure the "design intent" of the system/assembly is understood and can be reviewed together.
- C. Product Data: Manufacturer's specifications and technical data including the following:
  - 1. Detailed specification of construction and fabrication.
  - 2. Manufacturer's installation instructions.
  - 3. Wiring diagrams for each electric product specified. Coordinate voltage with electrical before submitting.
  - 4. Submit 6 copies of catalog cuts with hardware schedule.

5. Provide 9001-Quality Management and 14001-Environmental Management for products listed in Materials Section 2.2
- D. Shop Drawings - Hardware Schedule: Submit 6 complete reproducible copy of detailed hardware schedule in a vertical format.
1. List groups and suffixes in proper sequence.
  2. Completely describe door and list architectural door number.
  3. Manufacturer, product name, and catalog number.
  4. Function, type, and style.
  5. Size and finish of each item.
  6. Mounting heights.
  7. Explanation of abbreviations and symbols used within schedule.
  8. Detailed wiring diagrams, specially developed for each opening, indicating all electric hardware, security equipment and access control equipment, and door and frame rough-ins required for specific opening.
- E. Templates: Submit templates and "reviewed Hardware Schedule" to door and frame supplier and others as applicable to enable proper and accurate sizing and locations of cutouts and reinforcing.
1. Templates, wiring diagrams and "reviewed Hardware Schedule" of electrical terms to electrical for coordination and verification of voltages and locations.
- F. Samples: (If requested by the Architect)
1. 1 sample of Lever and Rose/Escutcheon design, (pair).
  2. 3 samples of metal finishes
- G. Contract Closeout Submittals: Comply with Division 01 including specific requirements indicated.
1. Operating and maintenance manuals: Submit 3 sets containing the following.
    - a. Complete information in care, maintenance, and adjustment, and data on repair and replacement parts, and information on preservation of finishes.
    - b. Catalog pages for each product.
    - c. Name, address, and phone number of local representatives for each manufacturer.
    - d. Parts list for each product.
  2. Copy of final hardware schedule, edited to reflect, "As installed".
  3. Copy of final keying schedule
  4. As installed "Wiring Diagrams" for each piece of hardware connected to power, both low voltage and 110 volts.
  5. One set of special tools required for maintenance and adjustment of hardware, including changing of cylinders.

#### 1.4 QUALITY ASSURANCE

- A. Comply with Division 01.
1. Statement of qualification for distributor and installers.
  2. Statement of compliance with regulatory requirements and single source responsibility.
  3. Distributor's Qualifications: Firm with 3 years of experience in the distribution of commercial hardware.
    - a. Distributor to employ full time Architectural Hardware Consultants (AHC) for the purpose of scheduling and coordinating hardware and establishing keying schedule.
    - b. Hardware Schedule shall be prepared and signed by an AHC.
  4. Installer's Qualifications: Firm with 3 years of experience in installation of similar hardware to that required for this Project, including specific requirements indicated.
  5. Regulatory Label Requirements: Provide testing agency label or stamp on hardware for labeled openings.
    - a. Provide UL listed hardware for labeled and 20-minute openings in conformance with requirements for class of opening scheduled.
    - b. Underwriters Laboratories requirements have precedence over this specification where conflict exists.
  6. Single Source Responsibility: Except where specified in hardware schedule, furnish products of only one manufacturer for each type of hardware.

- B. Review Project for extent of finish hardware required to complete the Work. Where there is a conflict between these Specifications and the existing hardware, notify the Architect in writing and furnish hardware in compliance with the Specification unless otherwise directed in writing by the Architect.

1.5 DELIVERY, STORAGE, AND HANDLING

- A. Packing and Shipping: Comply with Division 01.
  1. Deliver products in original unopened packaging with legible manufacturer's identification.
  2. Package hardware to prevent damage during transit and storage.
  3. Mark hardware to correspond with "reviewed hardware schedule".
  4. Deliver hardware to door and frame manufacturer upon request.
- B. Storage and Protection: Comply with manufacturer's recommendations.

1.6 PROJECT CONDITIONS:

- A. Coordinate hardware with other work. Furnish hardware items of proper design for use on doors and frames of the thickness, profile, swing, security and similar requirements indicated, as necessary for the proper installation and function, regardless of omissions or conflicts in the information on the Contract Documents.
- B. Review Shop Drawings for doors and entrances to confirm that adequate provisions will be made for the proper installation of hardware.

1.7 WARRANTY:

- A. Refer to Conditions of the Contract
- B. Manufacturer's Warranty:
  1. Closers: Ten years
  2. Exit Devices: Thirty Years
  3. Locksets & Cylinders: Three years
  4. All other Hardware: Two years.

1.8 OWNER'S INSTRUCTION:

- A. Instruct Owner's personnel in operation and maintenance of hardware units.

1.9 MAINTENANCE:

- A. Extra Service Materials: Deliver to Owner extra materials from same production run as products installed. Package products with protective covering and identify with descriptive labels. Comply with Division 01 Closeout Submittals Section.
  1. Special Tools: Provide special wrenches and tools applicable to each different or special hardware component.
  2. Maintenance Tools: Provide maintenance tools and accessories supplied by hardware component manufacturer.
  3. Delivery, Storage and Protection: Comply with Owner's requirements for delivery, storage and protection of extra service materials.
- B. Maintenance Service: Submit for Owner's consideration maintenance service agreement for electronic products installed.

PART 2 - PRODUCTS

2.1 MANUFACTURERS:

- A. The following manufacturers are approved subject to compliance with requirements of the Contract Documents. Approval of manufacturers other than those listed shall be in accordance with Division 01.

<u>Item:</u>	<u>Manufacturer:</u>	<u>Approved:</u>
Hinges	Stanley	Bommer, McKinney
Continuous Hinges	Stanley	Select, ABH
Locksets	Best 45H(W), 9K(W)	Campus Standard
Cylinders	Best 1E, 12E Series (w/ CORMAX)	Campus Standard
Exit Devices	Precision Apex 2000 Series	Von Duprin 98, Sargent 80

Closers	HD8000 Series	Dorma 8900, Norton 7500
Access Control System	By Access Control Provider	
Automatic Operator	Dorma ED900	Stanley MagicForce
Push/Pull Plates	Trimco	Burns, Rockwood
Push/Pull Bars	Trimco	Burns, Rockwood
Protection Plates	Trimco	Burns, Rockwood
Overhead Stops	Dorma	ABH, Rixson
Door Stops	Trimco	Burns, Rockwood
Flush Bolts	Trimco	ABH, Burns
Coordinator & Brackets	Trimco	ABH, Burns
Threshold & Gasketing	National Guard	Reese, K.N. Crowder

2.2 MATERIALS:

- A. Hinges: Shall be Five Knuckle Ball bearing hinges
1. Template screw hole locations
  2. Bearings are to be fully hardened.
  3. Bearing shell is to be consistent shape with barrel.
  4. Minimum of 2 permanently lubricated non-detachable bearings on standard weight hinge and 4 permanently lubricated bearing on heavy weight hinges.
  5. Equip with easily seated, non-rising pins.
  6. Non-Removable Pin (NRP) screws shall be slotted stainless steel screws.
  7. Hinges shall be full polished, front, back and barrel.
  8. Hinge pin is to be fully plated.
  9. Bearing assembly is to be installed after plating.
  10. Sufficiently sized to allow 180-degree swing of door
  11. Furnish five knuckles with flush ball bearings
  12. Provide hinge type as listed in schedule.
  13. Furnish 3 hinges per leaf to 7-foot, 6-inch height. Add one for each additional 30 inches in height or fraction thereof.
  14. Tested and approved by BHMA for all applicable ANSI Standards for type, size, function and finish
  15. UL10C listed for Fire rated doors.
- B. Geared Continuous Hinges:
1. Tested and approved by BHMA for ANSI A156.26-1996 Grade 1
  2. Anti-spinning through fastener
  3. UL10C listed for 3-hour fire rating
  4. Non-handed
  5. Lifetime warranty
  6. Provide Fire Pins for 3-hour fire ratings
  7. Sufficiently sized to permit door to swing 180 degrees
- C. Mortise Type Locks and Latches:
1. Tested and approved by BHMA for ANSI A156.13, Series 1000, Operational Grade 1, Extra-Heavy Duty, Security Grade 2 and be UL10C.
  2. Furnish UL or recognized independent laboratory certified mechanical operational testing to 4 million cycles minimum.
  3. Provide 9001-Quality Management and 14001-Environmental Management.
  4. Fit ANSI A115.1 door preparation
  5. Functions and design as indicated in the hardware groups
  6. Solid, one-piece, 3/4-inch (19mm) throw, anti-friction latch bolt made of self-lubricating stainless steel
  7. Deadbolt functions shall have 1 inch (25mm) throw bolt made of hardened stainless steel
  8. Latch bolt and Deadbolt are to extend into the case a minimum of 3/8 inch (9.5mm) when fully extended
  9. Auxiliary deadlatch to be made of one-piece stainless steel, permanently lubricated
  10. Provide sufficiently curved strike lip to protect door trim
  11. Lever handles must be of forged or cast brass, bronze or stainless-steel construction and conform to ANSI A117.1. Levers that contain a hollow cavity are not acceptable
  12. Lock shall have self-aligning, thru-bolted trim

13. Levers to operate a roller bearing spindle hub mechanism
  14. Mortise cylinders of lock shall have a concealed internal setscrew for securing the cylinder to the lockset. The internal setscrew will be accessible only by removing the core, with the control key, from the cylinder body.
  15. Spindle to be designed to prevent forced entry from attacking of lever
  16. Provide locksets with 7-pin removable and interchangeable core cylinders
  17. Each lever to have independent spring mechanism controlling it
  18. Core face must be the same finish as the lockset.
  19. Provide electrical features as shown in hardware sets.
- D. Cylindrical Type Locks and Latch sets:
1. Provide locksets tested and approved by BHMA/ANSI A156.2, Series 4000, Operational Grade 1, Extra-Heavy Duty.
  2. Provide locksets listed by Underwriters Laboratories for use on fire rated single or double swinging doors.
  3. Provide locksets that meet the design and operation of the cylindrical lock to meet the accessible requirements of ANSI A117.1 and ADA–Americans with Disabilities Act.
  4. Provide locksets made in a manufacturing facility to compliant with ISO 9001-Quality Management and ISO 14001-Environmental Management.
  5. Provide locksets that meet or exceed 20 Million cycle test verified by third party testing agency.
  6. Provide locksets with the following mechanical features
    - a. Locksets outside locked lever must withstand minimum 1400 inch-pounds of torque. In excess of that, a replaceable part will shear. Key from outside and/or inside lever will still operate lockset.
    - b. Locksets shall fit modified ANSI A115.2 door preparation.
    - c. 2-3/4 inch (70 mm) backset, standard.
    - d. Door thickness – Available for 1 3/8" to 2-1/4" doors.
    - e. 9/16 inch (14 mm) throw latch bolt.
    - f. Latch to have single piece tail-piece construction.
    - g. Chassis – Critical latch and chassis components to be brass or corrosion-treated steel.
    - h. Lock shall allow the lever handle to move 45 degrees from parallel to the horizontal plane without engaging the latch bolt assembly.
    - i. Hub, side plate, shrouded rose, locking pin to be a one-piece casting with a shrouded locking lug.
    - j. Locksets to have anti-rotational studs that are thru-bolted.
    - k. Provide sufficiently curved strike lip to protect door trim at single doors. At pairs of doors, provide 7/8" Lip to Center Strike.
    - l. Each lever to have independent spring mechanism.
    - m. Lever springs to be contained in the main lock hub.
    - n. Outside lever sleeve to be seamless, of one-piece construction made of a hardened steel alloy.
    - o. Keyed lever to be removable only after core is removed, by authorized control key.
  7. Locksets to have the capability of supporting manufacturers' conventional core as well as large and small interchangeable cores.
  8. Provide core face with the same finish as the lockset.
  9. Provide mechanical and electrical functions and design as indicated in the hardware groups.
- E. Cylindrical Grade 2 Type Locks and Latch sets:
1. Certified by BHMA for ANSI A156.3, Series 4000, Operational Grade 2.
  2. Fit modified ANSI A115.3 door preparation
  3. Locksets and cores to be of the same manufacturer to maintain complete lockset warranty
  4. 2-3/4 inch (70mm) backset, or 2-3/8 inch backset as needed
  5. ½ inch (14mm) throw latch bolt
  6. Provide locksets with 7-pin core.
  7. Functions and design as indicated in the hardware groups
- F. Exit Devices:
1. Exit devices to meet or exceed BHMA for ANSI 156.3, Grade 1.

2. Exit devices to be tested and certified by UL or by a recognized independent laboratory for mechanical operational testing to 10 million cycles minimum with inspection confirming Grade 1 Loaded Forces have been maintained.
  3. Exit devices chassis to be investment cast steel, zinc dichromate.
  4. Exit devices to have stainless steel deadlocking  $\frac{3}{4}$ " through latch bolt.
  5. Exit devices to be equipped with sound dampening on touch bar.
  6. Non-fire rated exit devices to have cylinder dogging.
  7. Non-fire rated exit devices to have  $\frac{1}{4}$ " minimum turn hex key dogging.
  8. Touchpad to be "T" style constructed of architectural metal with matching metal end caps.
  9. Touch bar assembly on wide style exit devices to have a  $\frac{1}{4}$ " clearance to allow for vision frames.
  10. All exposed exit device components to be of architectural metals and "true" architectural finishes.
  11. Provide strikes as required by application.
  12. Fire exit hardware to conform to UL10C and UBC 7-2. UL tested for Accident Hazard.
  13. The strike is to be black powder coated finish.
  14. Exit devices to have field reversible handing.
  15. Provide heavy duty vandal resistant lever trim with heavy duty investment cast stainless steel components and extra strength shock absorbing overload springs. Lever shall not require resetting. Lever design to match locksets and latch sets.
  16. Provide 9001-Quality Management and 14001-Environmental Management.
  17. Vertical Latch Assemblies to have gravity operation, no springs.
  18. Exit Device Intruder Function Visual Indicator is to be used in conjunction with the ANSI "10" Function, which allows the outside lever trim to be locked from the inside while the door remains closed. Rim cylinder on the exterior/trim side retracts the latch from the outside.
    - a. Indicator to be actuated by a rim cylinder equipped with a keyed core or thumb-turn.
    - b. Directional indicator feature shall have a large status indicator window with directional pointer embossed into the active case cover to indicate key turn direction to lock and unlock outside lever trim. Labels or stickers are not acceptable.
    - c. The status indicator window shall be integrated into the housing of the exit device and is to contain bright reflective material that may be seen in low light conditions.
    - d. Indicator window to be protected by impact resistant lens cover.
    - e. The action to lock down/unlock shall require a quarter turn (90°) of key or thumb turn.
      - 1) Locked status shall be indicated by a red indicator that will appear under the lens cover with an image of a locked padlock.
      - 2) Unlocked status shall be indicated by a green indicator that will appear under the lens of the cover with an image of an unlocked padlock.
- G. Surface Door Closers
1. Rack and Pinion Aluminum Surface Closers (Heavy Duty)
    - a. Provide Full Rack and Pinion type closer constructed of R14 High Silicon Aluminum Alloy, or equal, to exceed the ANSI/BHMA A156.4 Grade 1 requirements.
    - b. Provide closers tested and approved for UL10C for positive pressure; UL228 & CAN/ULC-S133.
    - c. Provide closers that conform to ANSI/ICC A117.1 and ADA requirements for barrier-free accessibility.
    - d. Closer shall be available with heavy-duty arms and knuckles/elbows
    - e. Closer shall have maximum 2-7/16 inch case projection with non-ferrous cover.
      - 1) Closer cover to be:
        - a) Plastic (default)
      - 2) Closer cover finish to be:
        - a) Painted
    - f. Provide closers with all-weather hydraulic fluid.
    - g. Provide closers with separate adjusting valves for closing and latching speeds, as well as advanced backcheck and delayed action.
    - h. Provide closers with Delayed Action and/or Advanced Backcheck where noted in hardware sets.
    - i. Provide adapter plates, shim spacers and blade stop spacers as required by frame and door conditions.

- j. Mount closers on non-public side of door and stair side of stair doors, unless otherwise noted in hardware sets.
  - k. Closers shall be non-handed and multi-sized as noted in hardware sets.
- H. Automatic Operators shall:
  - 1. Be listed under UL10C and UL325.
  - 2. Be capable of functioning on doors weighing up to 350 lb.
  - 3. Conform to ANSI A156.10 and A156.19 and be suitable for use in both full energy and low energy applications.
  - 4. Be non-handed.
  - 5. Incorporate the following adjustment capabilities: opening force, closing force, open speed, close speed, and open check speed.
  - 6. Incorporate a non-ferrous cover not exceeding 6 inches square in section.
  - 7. Incorporate a separate On-Off-Hold Open switch.
  - 8. Be microprocessor controlled and incorporate a position encoder.
  - 9. Readily function with standard activation and safety sensors, provide activation devices as required.
  - 10. Function as a manual door closer without power applied and shall power open/ spring close with power applied.
  - 11. Function with 115 VAC electrical service for operator and standard low voltage connections for activation.
- I. Low Energy Operators shall:
  - 1. Conform to ANSI/BHMA A156.19 as a low energy power opening device.
  - 2. Be listed under UL228, UL325, UL10B, UL10C, UBC 7.2 and FCC listed.
  - 3. Shall be non-handed.
  - 4. Be rated for door panels weighing up to 350 lbs. (160 kg).
  - 5. The manual door closer within the Low Energy Operator shall be adjusted to meet Americans with Disabilities Act (ADA) 5 lbs. opening force [Push-Side applications only]
  - 6. Operator shall be isolated from mounting plate with rubber mounts to mitigate the transmission of forces between the door and the operator.
  - 7. Shall have a position encoder to communicate with microprocessor.
  - 8. Incorporate a resettable powered operation counter that tracks both powered and non-powered cycling of the Operator.
  - 9. Incorporate the following adjustable settings:
    - i. Hold Open Timer, to 28 seconds
    - ii. Open Speed
    - iii. Backcheck Speed
    - iv. Vestibule Sequence Timer
  - 10. Include DIP switch controls for:
    - i. On board diagnostics
    - ii. Power close
    - iii. Push and Go operation
    - iv. Time delay logic for electrified hardware components
  - 11. Include terminals for auxiliary controls including:
    - i. Activation devices; provide two discrete inputs
    - ii. Vestibule sequencing
  - 12. Control switches including:
    - i. Day/Night open (illuminated)
    - ii. Power On-Off
  - 13. Includes adhesive Low Energy Operator mounting templates.
  - 14. R-14 Aluminum Allow Materials
  - 15. For non-powered operation, the unit shall function as a standard door closer with adjustable spring force size 1 thru 6.
- J. Door Stops: Provide a dome floor or wall stop for every opening as listed in the hardware sets.
  - 1. Wall stop and floor stop shall be wrought bronze, brass or stainless steel.



2. Provide fastener suitable for wall construction.
  3. Coordinate reinforcement of walls where wall stop is specified.
  4. Provide dome stops where wall stops are not practical. Provide spacers or carpet riser for floor conditions encountered
- K. Over Head Stops: Provide a Surface mounted or concealed overhead when a floor or wall stop cannot be used or when listed in the hardware set.
1. Concealed overhead stops shall be heavy duty bronze or stainless steel.
  2. Surface overhead stops shall be heavy duty bronze or stainless steel.
- L. Push Plates: Provide with four beveled edges ANSI J301, .050 thickness, size as indicated in hardware set. Furnish oval-head countersunk screws to match finish.
- M. Pulls with plates: Provide with four beveled edges ANSI J301, .050 thickness Plates with ANSI J401 Pull as listed in hardware set. Provide proper fasteners for door construction.
- N. Push Pull Bars: Provide ANSI J504, .1" Dia. Pull and push bar model and series as listed in hardware set. Provide proper fasteners for door construction.
- O. Kickplates: Provide with four beveled edges ANSI J102, 10 inches high by width less 2 inches on single doors and 1 inch on pairs of doors. Furnish oval-head countersunk screws to match finish.
- P. Mop plates: Provide with four beveled edges ANSI J103, 4 inches high by width less 1 inch on single doors and 1 inch on pairs of doors. Furnish oval-head countersunk screws to match finish.
- Q. Armor Plates: Provide ANSI J101 with four beveled edges, 40 inches high by width less 1 inch on single or pairs of doors. Furnish oval-head countersunk screws to match finish.
1. Provide cutouts for hardware as listed in the hardware sets.
  2. Provide Warnock Hersey labeled plates for 3-hour metal fire doors where allowed by local authority.
- R. Door Bolts: Flush bolts for wood or metal doors.
1. Provide a set of Automatic bolts, Certified ANSI/BHMA 156.3 Type 25 for hollow metal label doors.
  2. Provide a set of Automatic bolts, Certified ANSI/BHMA 156.3 Type 27 at wood label doors.
  3. Manual flush bolts, Certified ANSI/BHMA 156.16 at openings where allowed local authority.
  4. Provide Dust Proof Strike, Certified ANSI/BHMA 156.16 at doors with flush bolts without thresholds.
- S. Coordinator and Brackets: Provide a surface mounted coordinator when automatic bolts are used in the hardware set.
1. Coordinator, Certified ANSI/BHMA A1156.3 Type 21A for full width of the opening.
  2. Provide mounting brackets for soffit applied hardware.
  3. Provide hardware preparation (cutouts) for latches as necessary.
- T. Quick Connect Power Transfer: Power transfer device shall be a steel housing and flexible tube. Secure and inconspicuous channel is to bring power from the frame to the door.
1. Precision EPT-12C
  2. Tube shall contain 12 Wire bundle with Stanley Quick Connect Connectors one 4 wire connector consisting of two 18AWG wires and 2 24AWG wires and one 8 wire connector with 8 24AWG wires.
- U. Electromagnetic Locks: Certified by BHMA for A156.23; electrically powered, of strength and configuration indicated; with electromagnet attached to frame and armature plate attached to door
1. Type: Full exterior or full interior, as required by application indicated.
  2. Strength Ranking: 1500 lbf.
- V. Power Supply: UL Listed, Field Selectable 12VDC or 24VDC output. The power supply will be specifically designed to support electric locks and access controls. The power supply uses 115 VAC at 800mA input. The power shall be able to be expanded to four station controls. The filtered and regulated output power is field selectable for 12 or 24 VDC.
1. Fire Alarm/Life Safety emergency release included in power supply.
  2. Available options for multiple door options four or more control stations, Adjustable Time delay relay, Battery charging, Battery Backup.
- W. Electric Door Strike: Certified by ANSI/BHMA 156.31, Grade 1. And listed for Burglary Protection ANSI/UL1034 Grade 1.
1. For General use provide fail-secure electric strike and with fire-rated device.
  2. Listed UL10C for Fire Door assemblies
  3. Latch bolt monitor switch option when specified in hardware sets.

4. Provide the electric strike in the appropriate model that will accept a 5/8" or 3/4" latch bolt.
- X. Door Position Switch: Provide door position switch for door status monitoring as indicated in hardware sets.
  1. At all fired rated doors the door and frames, position switch preparation will be provided by the door and frame manufacturer or by an authorized label service agent.
- Y. Quick Connect Wire Harnesses: The Quick Connect wire harness shall have of one four wire connector and one eight wire connector. The four-wire connector has two 18AWG and two 24AWG wires. The eight wire connector has eight 24AWG wires Stanley quick connect wire harnesses are available in various length's, 3" (76mm), 6" (152mm), 12" (304mm), 26" (660mm) 32" (812mm) 38" (965mm), 44" (1117mm), 50" (1270mm) and 192" (4876mm).
 

Note: The Wire Harnesses with suffix "E" has brae wire ends, is used to connect the quick connect harness to a hardwired connection. Wire harnesses of different lengths may be combined to form a desired length. The maximum size hole needed to pass through the quick connect plug is 1" (25MM).
- Z. Magnetic Door Holders: Provide magnetic door holders with Tri-Voltage that can be wired 12VDC, 24V AC/DC or 120V AC
  1. Wall magnetic door holders shall be Recessed.
  2. Armature shall be thru-bolted and can be provided with any projection required.
  3. Models will be available in US28, sprayed finishes and US32D.
  4. Floor mounted shall be provided for a single door or double door hold open application.
- AA. Seals: All seals shall be finished to match adjacent frame color. Seals shall be furnished as listed in schedule. Material shall be UL listed for labeled openings.
- BB. Weatherstripping: Provide at head and jambs only those units where resilient or flexible seal strip is easily replaceable. Where bar-type weather strip is used with parallel arm mounted closers install weather strip first.
  1. Weather strip shall be resilient seal of (Neoprene, Polyurethane, Vinyl, Pile, Nylon Brush, Silicone)
  2. UL10C Positive Pressure rated seal set when required.
- CC. Door Bottoms/Sweeps: Surface mounted or concealed door bottom where listed in the hardware sets.
  1. Door seal shall be resilient seal of (Neoprene, Polyurethane, Nylon Brush, Silicone)
  2. UL10C Positive Pressure rated seal set when required.
- DD. Thresholds: Thresholds shall be aluminum beveled type with maximum height of 1/2" for conformance with ADA requirements. Furnish as specified and per details. Provide fasteners and screws suitable for floor conditions.
- EE. Silencers: Furnish silencers on all interior frames, 3 for single doors, 2 for pairs.

### 2.3 FINISH:

- A. Designations used in Schedule of Finish Hardware – 3.05, and elsewhere to indicate hardware finishes are those listed in ANSI/BHMA A156.18 including coordination with traditional U.S. finishes shown by certain manufacturers for their products
- B. Powder coat door closers to match other hardware, unless otherwise noted.
- C. Aluminum items shall be finished to match predominant adjacent material. Seals to coordinate with frame color.

### 2.4 KEYS AND KEYING:

- A. Provide keyed brass construction cores and keys during the construction period. Construction control and operating keys and core shall not be part of the Owner's permanent keying system or furnished in the same keyway (or key section) as the Owner's permanent keying system. Permanent cores and keys (prepared according to the accepted keying schedule) will be furnished to the Owner.
- B. Cylinders, removable and interchangeable core system: Best CORMAX™ Patented 7-pin.
- C. Permanent keys and cores: Stamped with the applicable key mark for identification. These visual key control marks or codes will not include the actual key cuts. Permanent keys will also be stamped "Do Not Duplicate."
- D. Transmit Grand Master keys, Master keys and other Security keys to Owner by Registered Mail, return receipt requested.
- E. Furnish keys in the following quantities:
  1. 1 each Grand Master keys
  2. 4 each Master keys
  3. 2 each Change keys each keyed core

4. 15 each Construction master keys
  5. 1 each Control keys
- F. The Owner, or the Owner's agent, will install permanent cores and return the construction cores to the Hardware Supplier. Construction cores and keys remain the property of the Hardware Supplier.
- G. Keying Schedule: Arrange for a keying meeting, and programming meeting with Architect Owner and hardware supplier, and other involved parties to ensure locksets and locking hardware, are functionally correct and keying and programming complies with project requirements. Furnish 3 typed copies of keying and programming schedule to Architect.

### PART 3 - EXECUTION

#### 3.1 EXAMINATION

- A. Verification of conditions: Examine doors, frames, related items and conditions under which Work is to be performed and identify conditions detrimental to proper and or timely completion.
1. Do not proceed until unsatisfactory conditions have been corrected.

#### 3.2 HARDWARE LOCATIONS:

- A. Mount hardware units at heights indicated in the following publications except as specifically indicated or required to comply with the governing regulations.
1. Recommended Locations for Builder's Hardware for Standard Steel Doors and Frames, by the Door and Hardware Institute (DHI).
  2. Recommended locations for Architectural Hardware for flush wood doors (DHI).
  3. WDMA Industry Standard I.S.-1A-04, Industry Standard for Architectural wood flush doors.

#### 3.3 INSTALLATION:

- A. Install each hardware item per manufacturer's instructions and recommendations. Do not install surface mounted items until finishes have been completed on the substrate. Set units level, plumb and true to line and location. Adjust and reinforce the attachment substrate as necessary for proper installation and operation.
- B. Conform to local governing agency security ordinance.
- C. Install Conforming to ICC/ANSI A117.1 Accessible and Usable Building and Facilities.
1. Adjust door closer sweep periods so that from the open position of 70 degrees, the door will take at least 3 seconds to move to a point 3 inches from the latch, measured to the landing side of the door.
- D. Installed hardware using the manufacturers fasteners provided. Drill and tap all screw holes located in metallic materials. Do not use "Riv-Nuts" or similar products.

#### 3.4 FIELD QUALITY CONTROL AND FINAL ADJUSTMENT

- A. Contractor/Installers, Field Services: After installation is complete, contractor shall inspect the completed door openings on site to verify installation of hardware is complete and properly adjusted, in accordance with both the Contract Documents and final shop drawings.
1. Check and adjust closers to ensure proper operation.
  2. Check latch set, lockset, and exit devices are properly installed and adjusted to ensure proper operation.
    - a. Verify levers are free from binding.
    - b. Ensure latch bolts and dead bolts are engaged into strike and hardware is functioning.
  3. Report findings, in writing, to architect indicating that all hardware is installed and functioning properly. Include recommendations outlining corrective actions for improperly functioning hardware if required.

#### 3.5 SCHEDULE OF FINISH HARDWARE:

## Hardware Set 1

Doors: 2011-270A

Each to receive:

1	EA	Continuous Hinge	DFM83HD1	Pemko
1	EA	Continuous Hinge	DFM83HD1 SER4	Pemko
1	EA	Mullion	L980S 86" PC	Sargent
1	EA	Rim Exit Device	16 56 8804 862 US32D	Sargent
1	EA	Rim Exit Device	16 8810 862 US32D	Sargent
1	EA	Cylinder	980C1 US26D	Sargent
2	EA	Surface Closer	TB 351 CPSH EN	Sargent
2	EA	Drop Plate	351D EN	Sargent
1	EA	Digital Entry	DK-16	Securitron
1	EA	Battery	B-24-5	Securitron
1	EA	Power Supply	AQD2	Securitron
1	EA	Balance OF HDW BY DOOR SUPPLIER	BALANCE OF HDW BY DR SUPP	Alum. Door Supplier

**Add alternate #4 Provide Paxton TDS-1014-US reader**  
**Add alternate #5 Provide Sargent #44 cylinder with cam**

## Hardware Set 2

Doors: 2011-202A, 2011-203B, 2011-219B, 2011-232B, 2011-232C, 2011-235A, 2011-273A

Each to receive:

1	EA	Continuous Hinge	CFM83HD1	Pemko
1	EA	Continuous Hinge	CFM83HD1 SER4	Pemko
1	EA	Mullion	L980S 86" PC	Sargent
1	EA	Rim Exit Device	16 56 8804 PSB US32D	Sargent
1	EA	Rim Exit Device	16 8810 EO US32D	Sargent
1	EA	Cylinder	980C1 US26D	Sargent
2	EA	Surface Closer	TB 351 CPSH EN	Sargent
2	EA	Kick Plate	K1050 10" x 34" US32D	Rockwood
	EA	Threshold	171A x 72"	Pemko
1	EA	Gasketing	303AV x 72" x 84" TKSP	Pemko
1	EA	Rain Guard	346C x 76" TKSP	Pemko
2	EA	Sweep	345AV x 36" TKSP	Pemko
2	EA	Silencer	608-RKW	Rockwood
1	EA	Digital Entry	DK-16	Securitron
1	EA	Battery	B-24-5	Securitron
1	EA	Power Supply	AQD2	Securitron

**Add alternate #4 Provide Paxton TDS-1014-US reader**  
**Add alternate #5 Provide Sargent #44 cylinder with cam**

### Hardware Set 3

Doors: 2011-202B, 2011-203A, 2011-203C, 2011-219A, 2011-219C, 2011-232A

Each to receive:

2	EA	Continuous Hinge	CFM83HD1	Pemko
1	EA	Mullion	12-L980 120" PC	Sargent
2	EA	Rim Exit Device	12 8815 ETL US32D	Sargent
1	EA	Cylinder	980C1 US26D	Sargent
2	EA	Surface Closer	TB 351 P10 EN	Sargent
2	EA	Kick Plate	K1050 10" x 46" US32D	Rockwod
2	EA	Electromagnetic Holder	998M 689	Rixson
2	EA	Silencer	608-RKW	Rockwod

**Add alternate #5 Provide Sargent #44 cylinder with cam**

### Hardware Set 4

Doors: 2011-214B, 2011-220B, 2011-224B, 2011-240B, 2011-254B

Each to receive:

1	EA	Continuous Hinge	CFM83HD1	Pemko
1	EA	Rim Exit Device	16 56 8804 PSB US32D	Sargent
1	EA	Surface Closer	TB 351 CPSH EN	Sargent
1	EA	Kick Plate	K1050 10" x 34" US32D	Rockwod
1	EA	Threshold	171A x 36"	Pemko
1	EA	Gasketing	303AV x 36" x 84" TKSP	Pemko
1	EA	Rain Guard	346C x 40" TKSP	Pemko
3	EA	Silencer	608-RKW	Rockwod
1	EA	Digital Entry	DK-16	Securitrn
1	EA	Battery	B-24-5	Securitrn
1	EA	Power Supply	AQD2	Securitrn

**Add alternate #4 Provide Paxton TDS-1014-US reader**

**Add alternate #5 Provide Sargent #44 cylinder with cam**

### Hardware Set 5

Doors: 2011-270B

Each to receive:

1	EA	Continuous Hinge	CFM83HD1	Pemko
1	EA	Mortise Lock	8237 LNL US26D	Sargent
1	EA	Electric Strike	4500C 630	HES
1	EA	Surface Closer	TB 351 P10 EN	Sargent
1	EA	Kick Plate	K1050 10" x 34" US32D	Rockwod
3	EA	Silencer	608-RKW	Rockwod

23030 Echols HS Addition  
Altman + Barrett Architects

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087100R-12

1	EA	Push Button	PB	Securitrn
1	EA	Battery	B-24-5	Securitrn
1	EA	Power Supply	AQD2	Securitrn

**Add alternate #4 Provide Paxton TDS-1014-US reader**  
**Add alternate #5 Provide Sargent #44 cylinder with cam**

### Hardware Set 6

Doors: 2011-204A, 2011-209A, 2011-209B, 2011-212A, 2011-214A, 2011-218A, 2011-223A, 2011-233A, 2011-240A, 2011-259A, 2011-260A, 2011-261A, 2011-262A, 2011-263A, 2011-265A, 2011-266B, 2011-268A, 2011-268B, 2011-302A, 2011-305A, 2011-307A, 2011-309A, 2011-311A, 2011-312A, 2011-313A, 2011-315A, 2011-318A, 2011-320A, 2011-321A, 2011-323A, 2011-325A, 2011-337A, 2011-337B, 2011-340A

Each to receive:

3	EA	Hinge, Full Mortise	TA2714 4-1/2" x 4-1/2" US26D	McKinney
1	EA	Mortise Lock	8238 LNL US26D	Sargent
1	EA	Kick Plate	K1050 10" x 34" US32D	Rockwood
1	EA	Wall Stop	406 US32D	Rockwood
3	EA	Silencer	608-RKW	Rockwood

**Add alter #4 Provide Paxlocks TDS-1088-US Mortise locks with TDS-1086-US trim.**  
**Add alter #5 Provide Sargent #44 cylinder with cam to operate PaxLocks.**

### Hardware Set 7

Doors: 2011-211A, 2011-211B, 2011-254A, 2011-266A, 2011-267B

Each to receive:

3	EA	Hinge, Full Mortise	TA2714 4-1/2" x 4-1/2" US26D	McKinney
1	EA	Mortise Lock	8238 LNL US26D	Sargent
1	EA	Surface Closer	TB 351 O EN	Sargent
1	EA	Kick Plate	K1050 10" x 34" US32D	Rockwood
1	EA	Wall Stop	406 US32D	Rockwood
3	EA	Silencer	608-RKW	Rockwood

**Add alter #4 Provide Paxlocks TDS-1088-US Mortise locks with TDS-1086-US trim.**  
**Add alter #5 Provide Sargent #44 cylinder with cam to operate PaxLocks.**

### Hardware Set 8

Doors: 2011-220A, 2011-312B

Each to receive:

6	EA	Hinge, Full Mortise	TA2714 4-1/2" x 4-1/2" US26D	McKinney
2	EA	Flush Bolt	555 US26D	Rockwood
1	EA	Mortise Lock	8238 LNL US26D	Sargent
2	EA	Kick Plate	K1050 10" x 34" US32D	Rockwood
2	EA	Wall Stop	406 US32D	Rockwood
2	EA	Silencer	608-RKW	Rockwood

**Add alter #4 Provide Paxlocks TDS-1088-US Mortise locks with TDS-1086-US trim.**  
**Add alter #5 Provide Sargent #44 cylinder with cam to operate PaxLocks.**

### Hardware Set 9

Doors: 2011-224A, 2011-228A, 2011-228B, 2011-229A, 2011-267A, 2011-334A

Each to receive:

3	EA	Hinge, Full Mortise	TA2714 4-1/2" x 4-1/2" US26D	McKinney
1	EA	Mortise Lock	8238 LNL US26D	Sargent
1	EA	Surface Closer	TB 351 P10 EN	Sargent
1	EA	Kick Plate	K1050 10" x 34" US32D	Rockwood
1	EA	Wall Stop	406 US32D	Rockwood
3	EA	Silencer	608-RKW	Rockwood

**Add alter #4 Provide Paxlocks TDS-1088-US Mortise locks with TDS-1086-US trim.**

**Add alter #5 Provide Sargent #44 cylinder with cam to operate PaxLocks.**

### Hardware Set 10

Doors: 2011-205A, 2011-216A, 2011-217A, 2011-221A, 2011-222A, 2011-225A, 2011-226A, 2011-237A, 2011-238A, 2011-241A, 2011-242A, 2011-243A, 2011-249A, 2011-317A, 2011-329A, 2011-338A

Each to receive:

3	EA	Hinge, Full Mortise	TA2714 4-1/2" x 4-1/2" US26D	McKinney
1	EA	Mortise Lock	76 8204 LNL US26D	Sargent
1	EA	Surface Closer	TB 351 O EN	Sargent
1	EA	Kick Plate	K1050 10" x 34" US32D	Rockwood
3	EA	Silencer	608-RKW	Rockwood

**Add alter #4 Provide Paxlocks TDS-1088-US Mortise locks with TDS-1086-US trim.**

**Add alter #5 Provide Sargent #44 cylinder with cam to operate PaxLocks.**

### Hardware Set 11

Doors: 2011-230A, 2011-250A, 2011-255A, 2011-316A, 2011-330A, 2011-333A

Each to receive:

3	EA	Hinge, Full Mortise	TA2714 4-1/2" x 4-1/2" US26D	McKinney
1	EA	Mortise Lock	76 8204 LNL US26D	Sargent
1	EA	Surface Closer	TB 351 P10 EN	Sargent
1	EA	Kick Plate	K1050 10" x 34" US32D	Rockwood
3	EA	Silencer	608-RKW	Rockwood

**Add alter #5 Provide Sargent #44 cylinder with cam.**

### Hardware Set 12

Doors: 2011-206A, 2011-207A

Each to receive:

3	EA	Hinge, Full Mortise	TA2714 4-1/2" x 4-1/2" US26D	McKinney
1	EA	Mortise Lock	49 8265 LNL US26D	Sargent
1	EA	Kick Plate	K1050 10" x 34" US32D	Rockwood
1	EA	Wall Stop	406 US32D	Rockwood
3	EA	Silencer	608-RKW	Rockwood

**Add alter #4 Provide Paxlocks TDS-1088-US Mortise locks with TDS-1086-US trim.  
 Add alter #5 Provide Sargent #44 cylinder with cam to operate PaxLocks.**

**Hardware Set 13**

Doors: 2011-269A, 2011-272A

Each to receive:

3	EA	Hinge, Full Mortise	TA2714 4-1/2" x 4-1/2" US26D	McKinney
1	EA	Mortise Lock	49 8265 LNL US26D	Sargent
1	EA	Surface Closer	TB 351 P10 EN	Sargent
1	EA	Kick Plate	K1050 10" x 34" US32D	Rockwood
3	EA	Silencer	608-RKW	Rockwood

**Hardware Set 14**

Doors: 2011-256A, 2011-257A, 2011-335A, 2011-336A

Each to receive:

3	EA	Hinge, Full Mortise	TA2714 4-1/2" x 4-1/2" US26D	McKinney
1	EA	Mortise Lock	49 8265 LNL US26D	Sargent
1	EA	Surface Closer	TB 351 O EN	Sargent
1	EA	Kick Plate	K1050 10" x 34" US32D	Rockwood
3	EA	Silencer	608-RKW	Rockwood

**Add alter #5 Provide Sargent #44 cylinder with cam**

**Hardware Set 15**

Doors: 2011-208A, 2011-210A, 2011-213A, 2011-215A, 2011-234A, 2011-245A, 2011-264A, 2011-303A, 2011-304A, 2011-306A, 2011-308A, 2011-310A, 2011-314A, 2011-319A, 2011-322A, 2011-324A, 2011-326A, 2011-339A, 2011-341A, 2011-342A

Each to receive:

3	EA	Hinge, Full Mortise	TA2714 4-1/2" x 4-1/2" US26D	McKinney
1	EA	Mortise Lock	76 8204 LNL US26D	Sargent
1	EA	Surface Overhead Holder/Stop	10-336 652	Rixson
3	EA	Silencer	608-RKW	Rockwood

**Hardware Set 16**

Doors: 2011-239A, 2011-251A, 2011-331A

Each to receive:

3	EA	Hinge, Full Mortise	TA2714 4-1/2" x 4-1/2" US26D	McKinney
1	EA	Mortise Lock	V21 8204 LNL US26D	Sargent
1	EA	Kick Plate	K1050 10" x 34" US32D	Rockwood
3	EA	Silencer	608-RKW	Rockwood

**Add alter #4 Provide Paxlocks TDS-1088-US Mortise locks with TDS-1086-US trim.  
 Add alter #5 Provide Sargent #44 cylinder with cam to operate PaxLocks.**



### **Hardware Set 17**

Doors: 2011-246A, 2011-247A, 2011-327A

Each to receive:

6	EA	Hinge, Full Mortise	TA2714 4-1/2" x 4-1/2" US26D	McKinney
2	EA	Flush Bolt	555 US26D	Rockwood
1	EA	Mortise Lock	76 8204 LNL US26D	Sargent
2	EA	Surface Closer	TB 351 P10 EN	Sargent
2	EA	Silencer 608-RKW	Rockwood	

**Add alter #4 Provide Paxlocks TDS-1088-US Mortise locks with TDS-1086-US trim.**

**Add alter #5 Provide Sargent #44 cylinder with cam to operate PaxLocks.**

### **Hardware Set 18**

Doors: 2011-248A, 2011-248B, 2011-248C, 2011-252A, 2011-252B, 2011-252C, 2011-252D, 2011-252E, 2011-328A, 2011-328B, 2011-328C, 2011-332A, 2011-332B, 2011-332C, 2011-332D

Each to receive:

3	EA	Hinge, Full Mortise	TA2314 NRP 4-1/2" x 4-1/2" US32D	McKinney
1	EA	Privacy Lock	10XU65 LL US26D	Sargent
1	EA	Wall Stop 409 US32D	Rockwood	
3	EA	Silencer 608-RKW	Rockwood	

### **Hardware Set 19 TEACHERS/STORAGE CABINET EACH DOOR TO RECEIVE**

Doors: TEACHER/STORAGE CABINET

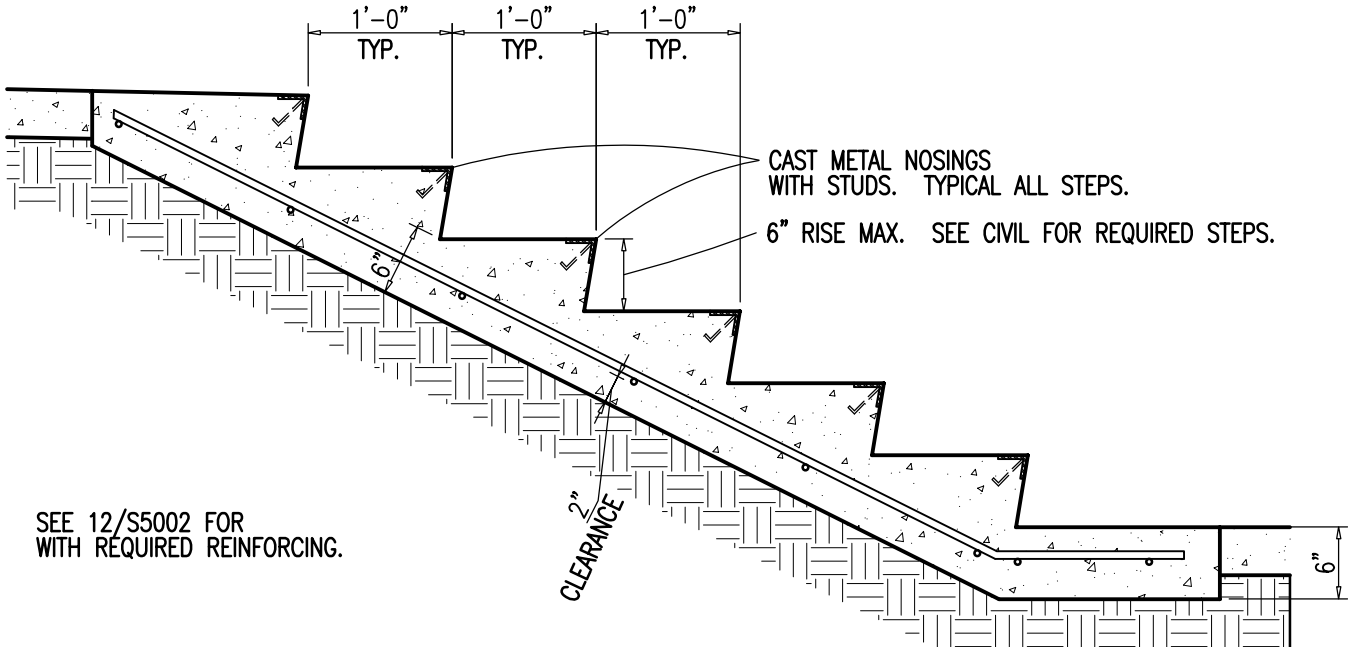
Each to receive:

3	EA	Hinge, Full Mortise	TA2714 4-1/2" x 4-1/2" US26D	McKinney
1	EA	Classroom Lock	10XG37 LL US26D	Sargent

**Add alter #5 Provide Sargent #44 cylinder with cam**

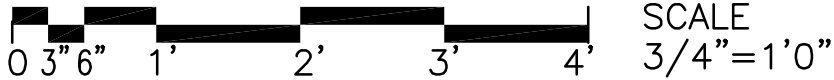
END OF SECTION 087100

STAIR SIDES ARE CAST IN PLACE  
WITH SMOOTH FINISH.  
SEE 2/S3002 FOR STRUCTURAL DETAILS.



SEE 12/S5002 FOR  
WITH REQUIRED REINFORCING.

# TYPICAL STAIR SECTION



**Altman + Barrett**  
HIGH SCHOOL ADDITION  
TO ECHOLS K-8 SCHOOL  
100 WILDCAT CIRCLE  
STATENVILLE, GA 31648



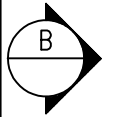
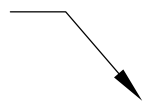
**Altman + Barrett**  
architects  
P.O. BOX 665 - 117 WEST MAIN ST.  
HAHIRA, GEORGIA 31632  
PHONE # (229) 585-9018

**AD1-A2100A**  
PROJECT NO. 23030  
DATE: 12.10.24  
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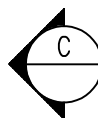
# FLOOR PLAN

SCALE 1/4" = 1'0"

CONCRETE SLAB

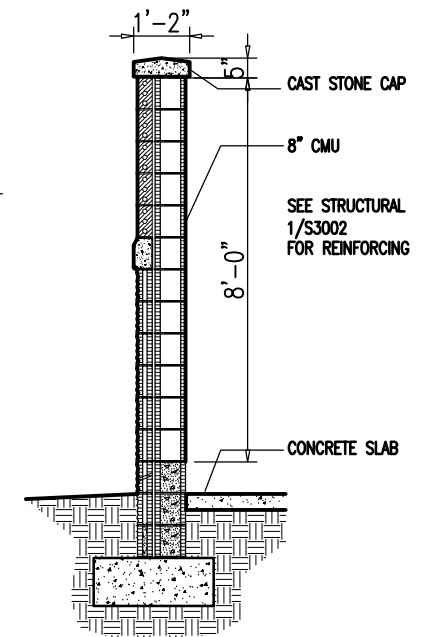
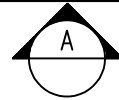


12'-0"



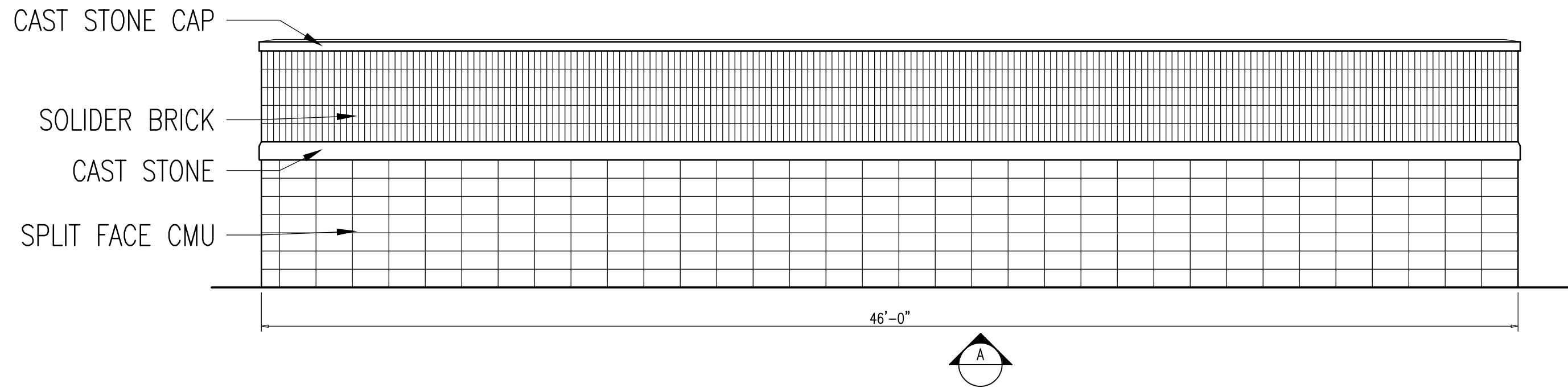
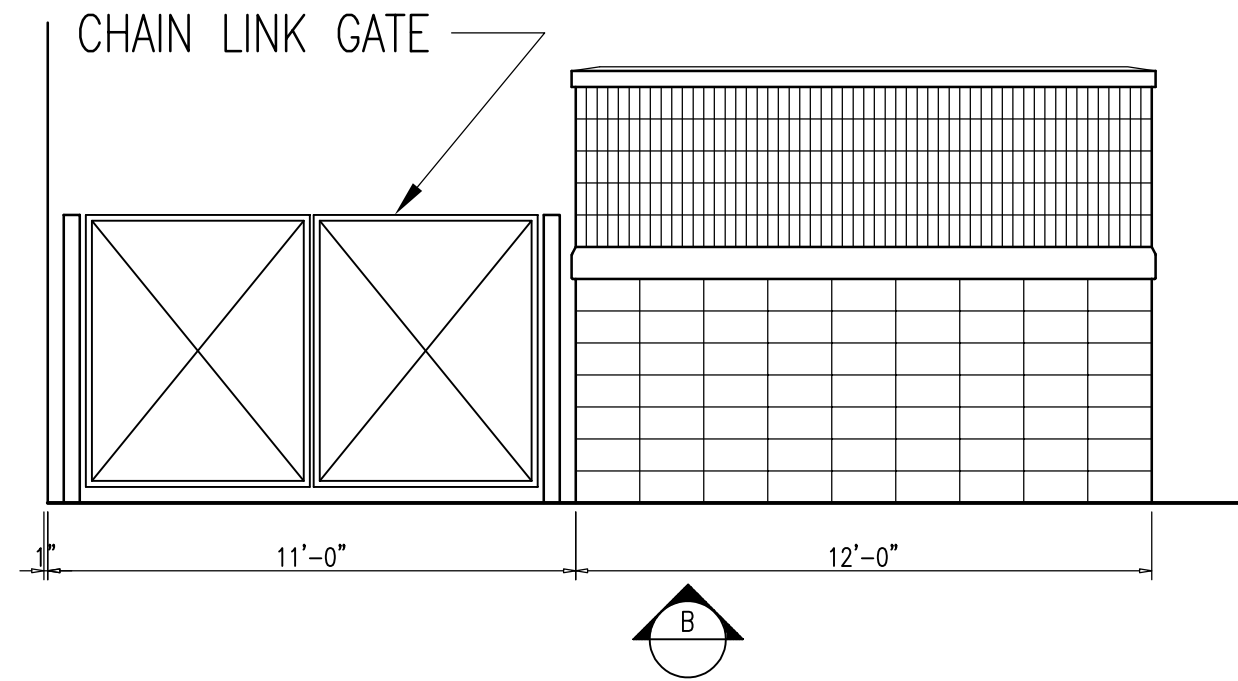
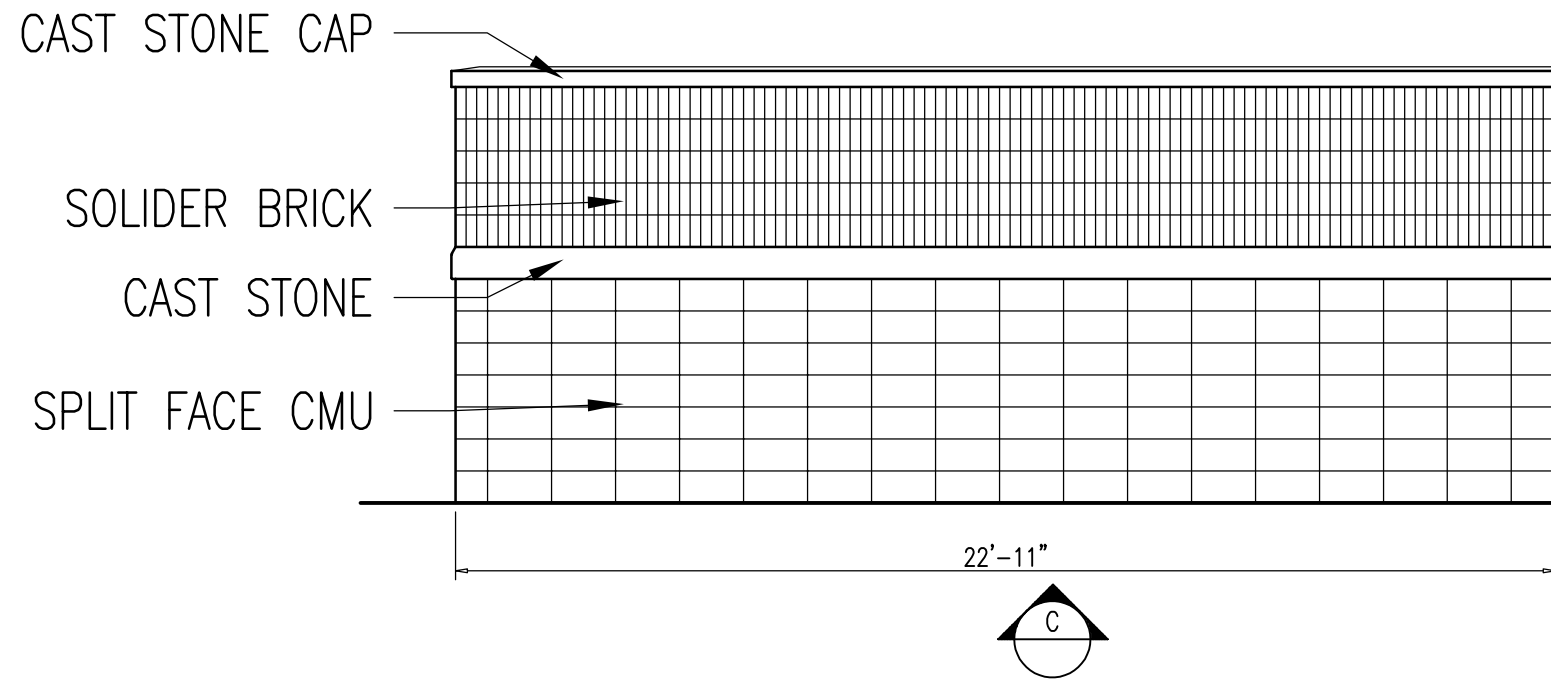
23'-0"

46'-0"

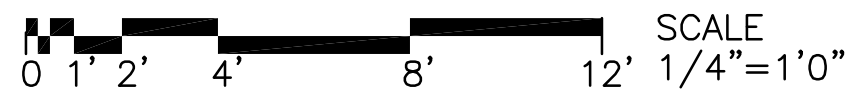


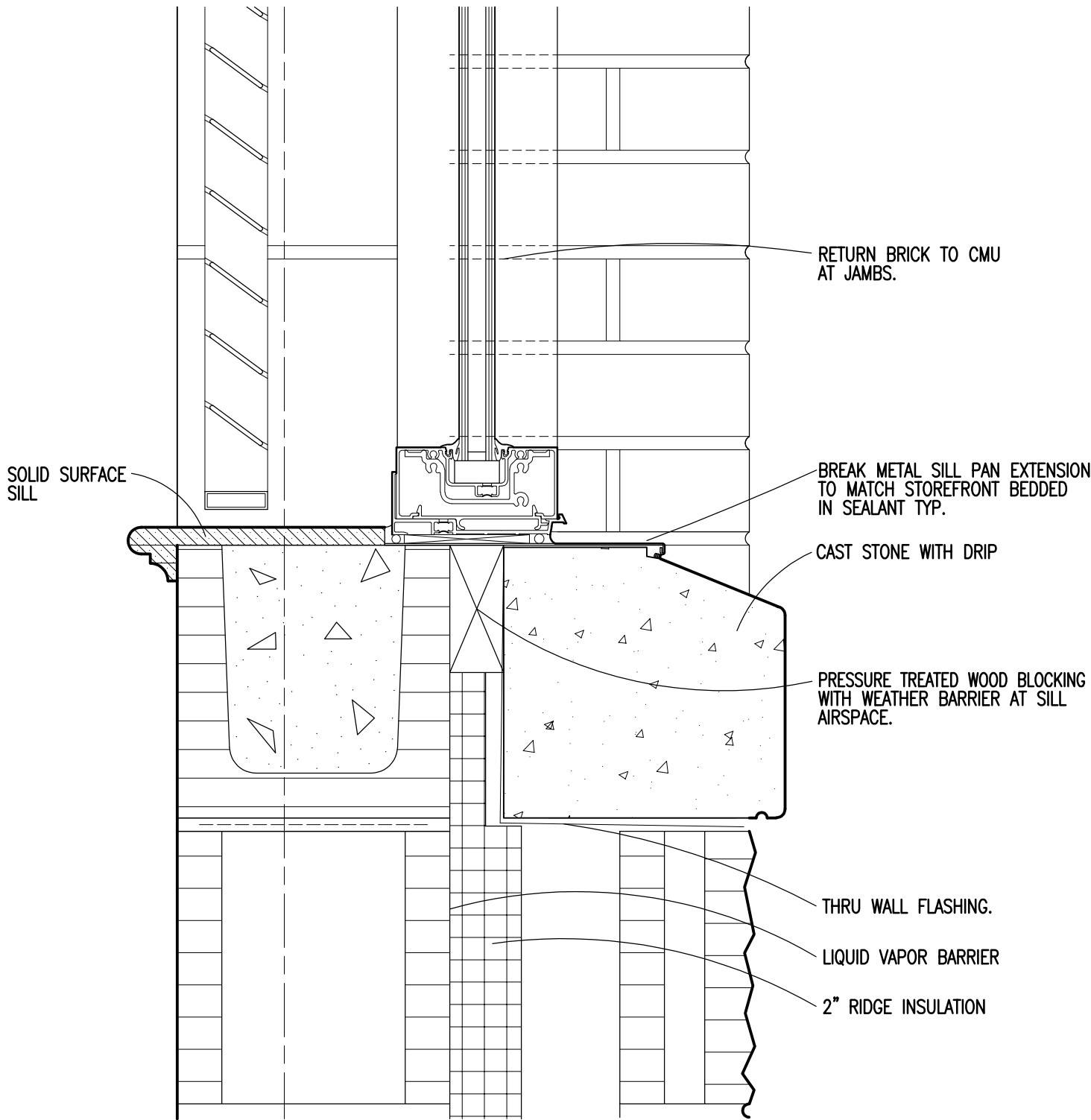
# SECTION

SCALE 1/4" = 1'0"



# ELEVATIONS





# TYPICAL WINDOW SILL DETAIL



	<p><b>HIGH SCHOOL ADDITION TO ECHOLS K-8 SCHOOL 100 WILDCAT CIRCLE STATENVILLE, GA 31648</b></p>		<p><b>Altman + Barrett</b> architects P.O. BOX 665 - 117 WEST MAIN ST. HAHIRA, GEORGIA 31632 PHONE # (229) 585-9018</p>	<p><b>AD1-A3200A</b> PROJECT NO. 23030 DATE: 12.13.24 <small>DRAWINGS ARE THE PROPERTY OF THE ARCHITECT AND SHALL NOT BE REPRODUCED OR USED WITHOUT WRITTEN PERMISSION AND CREDIT © 2024 ALTMAN + BARRETT ARCHITECTS, P.C.</small></p>
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DOOR SCHEDULE

Table with columns: BUILDING NUMBER, DOOR NUMBER, LOCATION, WIDTH, HEIGHT, THICK, DOOR TYPE, FRAME TYPE, DETAILS, HD'W NUMBER, REMARKS, IDENTIFICATION. Includes notes on wall ratings and door types.

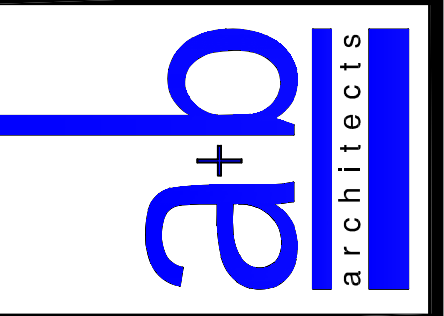
DOOR SCHEDULE

Table with columns: BUILDING NUMBER, DOOR NUMBER, LOCATION, WIDTH, HEIGHT, THICK, DOOR TYPE, FRAME TYPE, DETAILS, HD'W NUMBER, REMARKS, IDENTIFICATION. Includes notes on wall ratings and door types.

Altman + Barrett



10/18/2024



Altman + Barrett architects
4365 PLANTATION CREST ROAD
VALDOSTA, GEORGIA 31602
PHONE # (229) 244-2364

Table with columns: DATE, DRAWN, CHECKED, REVISIONS. Includes revision history for the drawing.

HIGH SCHOOL ADDITION
TO ECHOLS K-8 SCHOOL
FOR ECHOLS COUNTY SCHOOLS
100 WILDCAT CIRCLE
STATENVILLE, GEORGIA 31648

FACILITY CODE 650-1050
IU'S 18 FTE 275

A4110

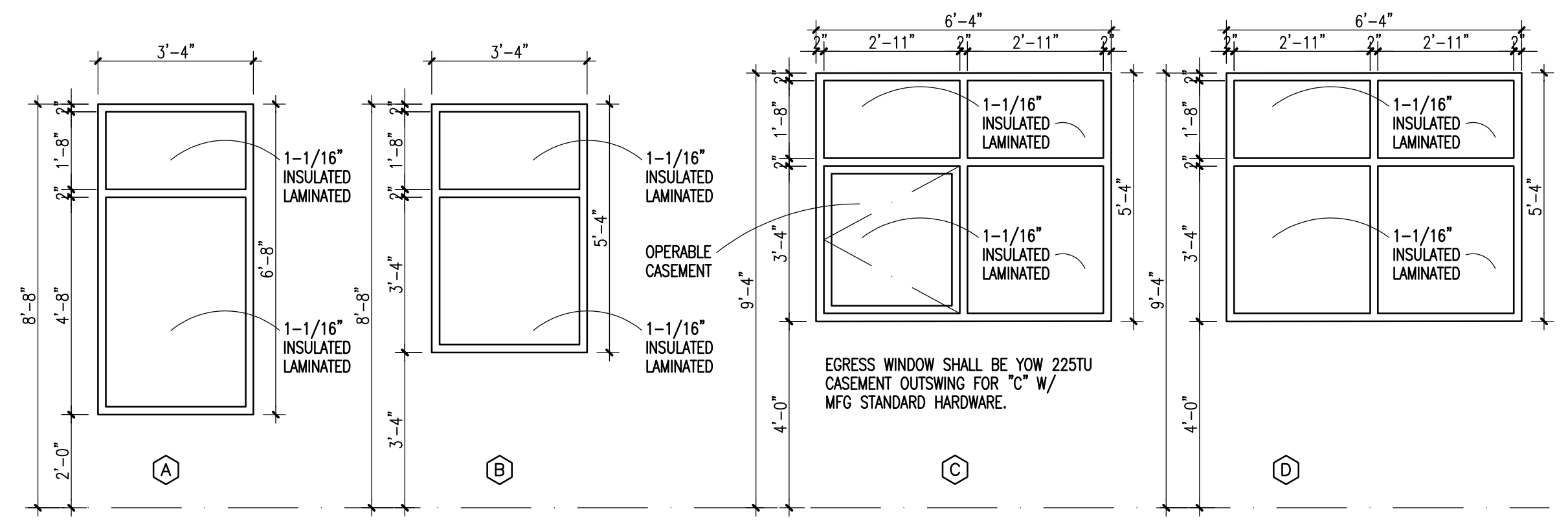
PROJECT NO: 23030

CLASSROOM STORAGE AND CLOSET HARDWARE SET 19, 24 REQUIRED.

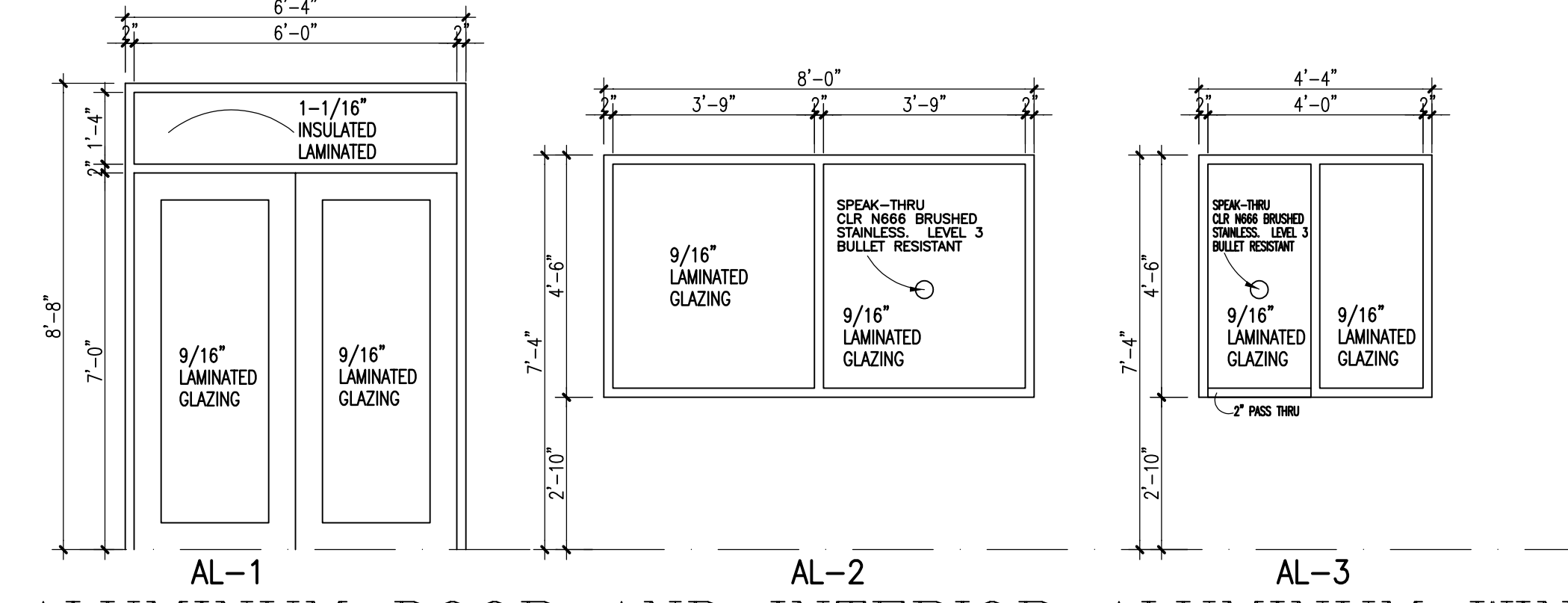
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# D O O R S C H E D U L E

BUILDING NUMBER	DOOR NUMBER	LOCATION	WIDTH	HEIGHT	THICK	DOOR TYPE	FRAME TYPE	DETAILS	HD'W NUMBER	REMARKS	IDENTIFICATION
2011	331A	TOILET	3'-0"	7'-0"	1 3/4"	WD	HM-1	---	16		TOILET
2011	332A	GIRLS	2'-6"	6'-0"	1 3/4"	HMF2	HM-3		18		
2011	332B	GIRLS	2'-6"	6'-0"	1 3/4"	HMF2	HM-3		18		
2011	332C	GIRLS	2'-6"	6'-0"	1 3/4"	HMF2	HM-3		18		
2011	332D	GIRLS	3'-0"	6'-0"	1 3/4"	HMF2	HM-3		18		
2011	333A	CLOSET	3'-0"	7'-0"	1 3/4"	WD	HM-1		11		CLOSET
2011	334A	TEACHER WORKROOM	3'-0"	7'-0"	1 3/4"	WD	HM-1		9		TEACHER WORKROOM
2011	335A	TOILET	3'-0"	7'-0"	1 3/4"	WD	HM-1		14		TOILET
2011	336A	TOILET	3'-0"	7'-0"	1 3/4"	WD	HM-1		14		TOILET
2011	337A	ART STUDIO	3'-0"	7'-0"	1 3/4"	WDG	HM-1		6		ART STUDIO
2011	337B	ART STUDIO	3'-0"	7'-0"	1 3/4"	WDG	HM-1		6		
2011	338A	SUPPLY STORAGE	3'-0"	7'-0"	1 3/4"	WD	HM-1		10	1 HOUR RATED	SUPPLY STORAGE
2011	339A	KILN	3'-0"	7'-0"	1 3/4"	HMF	HM-1		15	1 HOUR RATED	KILN
2011	340A	ART CLASSROOM	3'-0"	7'-0"	1 3/4"	WDG	HM-1		6		ART CLASSROOM
2011	341A	HVAC	3'-0"	7'-0"	1 3/4"	WD	HM-1		15		HVAC
2011	342A	HVAC	3'-0"	7'-0"	1 3/4"	HMF	HM-1		15		HVAC

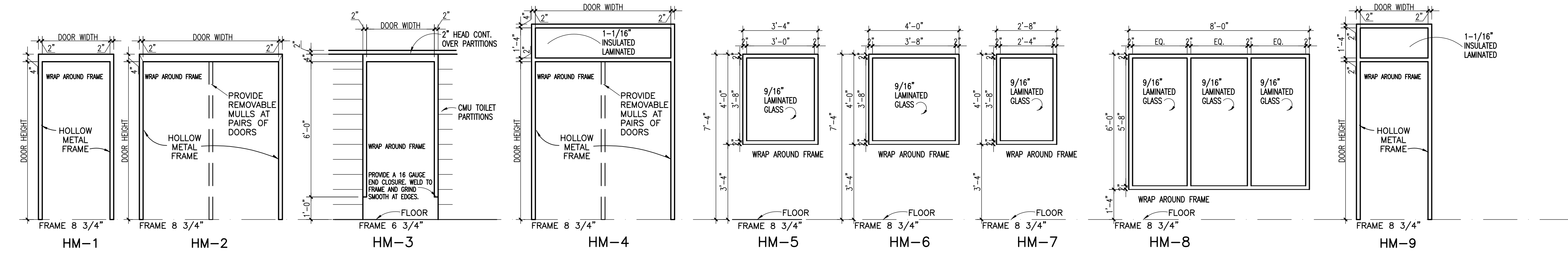


**ALUMINUM WINDOW FRAMES**  
SCALE: 3/8"=1'-0"

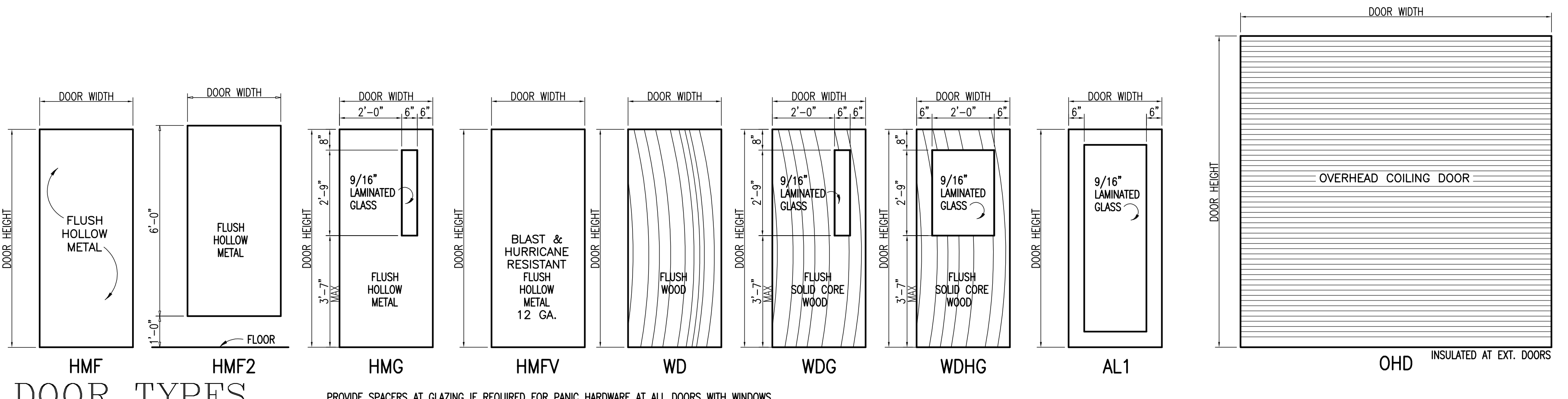


**ALUMINUM DOOR AND INTERIOR ALUMINUM WINDOW FRAMES**  
SCALE: 3/8"=1'-0"

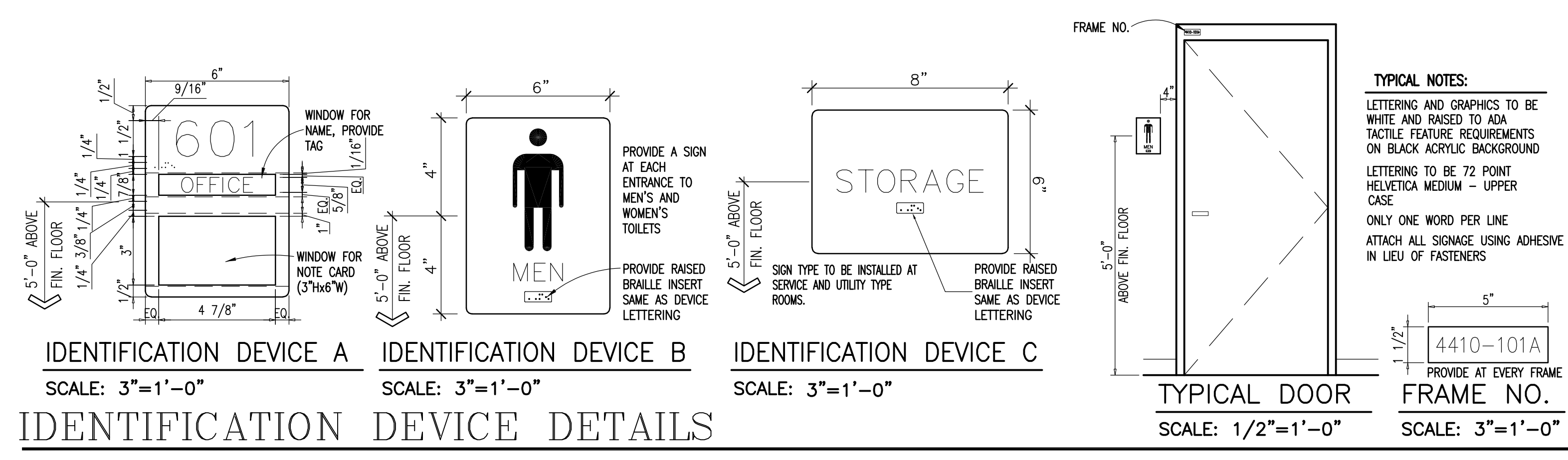
**GLAZING NOTES**  
GLAZING AT HOLLOW METAL DOORS AND FRAMES IN FIRE-RATED WALLS SHALL BE 3/16" FIRE RATED GLAZING AS SPECIFIED.  
GLAZING AT HOLLOW METAL DOORS AND FRAMES IN NON-RATED WALLS SHALL BE 1/4" TEMPERED GLASS UNLESS NOTED OTHERWISE.  
REFER TO REFLECTED CEILING PLANS FOR LOCATIONS OF FIRE-RATED WALLS.  
EXTERIOR ALUMINUM STOREFRONT, AND CURTAINWALL SHALL BE 1-1/16" LAMINATED GLAZING, 1/4" LOW E TINTED GLAZING, 3/8" AIR SPACE, 3/16" HEATSTRENGTHEND CLEAR GLASS WITH 590 PVB INTERLAYER 5/16" HEATSTRENGTHEND CLEAR GLASS INBOARD LAMINATED LITE, TOTAL THICKNESS 1-1/16".  
GLAZING AT INTERIOR ALUMINUM SF DOORS AND FRAMES IN NON-RATED WALLS SHALL BE 1/4" TEMPERED GLASS UNLESS NOTED OTHERWISE.



**HOLLOW METAL DOOR AND WINDOW FRAME TYPES**  
SCALE: 3/8"=1'-0"

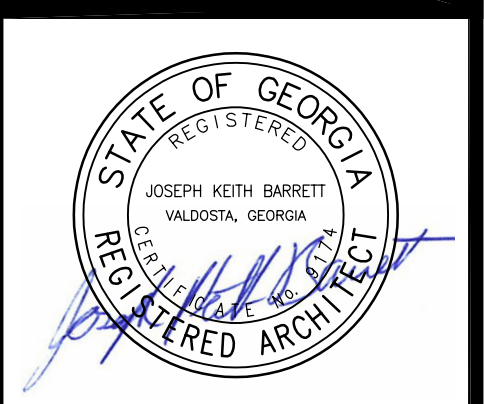


**DOOR TYPES**  
SCALE: 3/8"=1'-0"

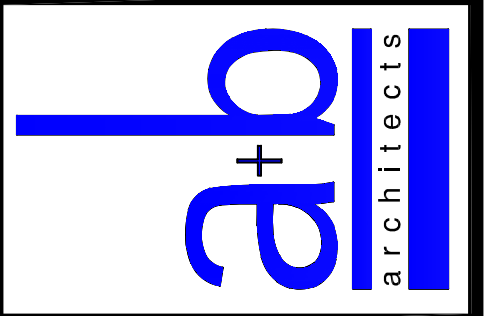


**IDENTIFICATION DEVICE DETAILS**  
SCALE: AS SHOWN

Altman + Barrett



10/18/2024



Altman + Barrett  
a r c h i t e c t s  
4365 PLANTATION CREST ROAD  
VALDOSTA, GEORGIA 31602  
PHONE # (229) 244-2364

DATE:	10.18.24
DRAWN:	K. BARRETT
CHECKED:	K. BARRETT
REVISIONS:	2, 12, 12, 24
	1, 3

HIGH SCHOOL ADDITION  
TO ECHOLS K-8 SCHOOL  
FOR ECHOLS COUNTY SCHOOLS  
100 WILDCAT CIRCLE  
STATENVILLE, GEORGIA 31648

FACILITY CODE 650-1050  
IU'S 18 FTE 275

A4111

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PROJECT NO: 23030