ADDENDUM NO. 01

Issued: 12.08.23

Project: Ridgeview Elementary School
701 Thornton Street, Liberty, Missouri 64068

Project No. 23026

Owner: Liberty Public Schools
8 Victory Lane
Liberty, MO 64068

Bidding Documents Issued: 11.30.23

This Addendum includes these 2 page(s) and the following attachments:

Project Manual:
Reissued Section 000105 “Certifications Page” consisting of 2 pages.
Reissued Section 000110 “Table of Contents” consisting of 4 pages.
Reissued Section 087100 “Door Hardware” consisting of 10 pages.

Drawings:
Revised Architectural Sheets: A001, DA120, DA121, A120, A121, A121a, A121b, A121c
Refer to Henderson Engineers, MEP Addendum No. 1
Added Technology drawings missing from bid set
PROJECT MANUAL REVISIONS

A1 SECTION 000005 – CERTIFICATIONS PAGE
A1.1 REPLACE existing Section 000005 “Certifications Page” with the attached revised Section 000005 “Certifications Page”, dated December 08, 2023.

A2 SECTION 000110 - TABLE OF CONTENTS
A2.1 REPLACE existing Section 000110 “Table of Contents” with the attached revised Section 000110 “Table of Contents”, dated December 08, 2023.

A3 SECTION 087100– DOOR HARDWARE
A3.1 REPLACE existing Section 087100 “Door Hardware” with the attached revised Section 087100 “Door Hardware,” December 08, 2023.

DRAWINGS REVISIONS

A4 SHEET DA120– DEMOLITION REFLECTED CEILING PLAN – OVERALL LEVEL 1
A4.1 REVISED location of ACT removal scope of work for mechanical scope

A5 SHEET DA121 – DEMOLITION REFLECTED CEILING PLAN – OVERALL LEVEL 2
A5.1 REVISED location of ACT removal scope of work for mechanical scope

A6 SHEET A001 – GENERAL ARCHITECTURAL INFORMATION
A6.1 REVISED Detail P7 Door Type E10 to read keynote 08 41 13 .A11

A7 SHEET A120 – REFLECTED CEILING PLAN – OVERALL – LEVEL 1
A7.1 REVISED location of new CLG1 scope of work for mechanical scope

A8 SHEET A121 REFLECTED CEILING PLAN – OVERALL – LEVEL 2
A8.1 REVISED location of new CLG1 scope of work for mechanical scope

A9 SHEET A121A REFLECTED CEILING PLAN – OVERALL – AREA A
A9.1 REVISED location of new CLG1 scope of work for mechanical scope

A10 SHEET A121B REFLECTED CEILING PLAN – OVERALL – AREA B
A10.1 REVISED location of new CLG1 scope of work for mechanical scope

A11 SHEET A121C REFLECTED CEILING PLAN – OVERALL – AREA C
A11.1 REVISED location of new CLG1 scope of work for mechanical scope

M1 REFERENCE ATTACHED MEP ADDENDUM NO. 1
E1 REFERENCE ATTACHED MEP ADDENDUM NO. 1
P1 REFERENCE ATTACHED MEP ADDENDUM NO. 1

END OF ADDENDUM NO. 1
ADDENDUM NO 01

December 8, 2023

ISSUED BY
Henderson Engineers, Inc.
8345 Lenexa Dr.
Lenexa, KS 66214

ISSUED FOR
Hollis + Miller
1828 Walnut Street Suite 922
Kansas City, MO 64108

NOTICE TO ALL BIDDERS FOR THE
Liberty Public Schools Ridgeview Elementary School

You are instructed to read and to note the following described changes, corrections, clarifications, omissions, deletions, additions, approvals, and statements pertinent to the Contract Bid and Construction Documents.

This addendum is part of the Contract Bid and Construction Documents and shall govern in the performance of the Work.

DRAWINGS

MECHANICAL

1. Sheet M-101A – HVAC LEVEL 1 PLAN – AREA A
   A. Revised ductwork and diffuser layout for DOAS unit.
   B. Added plan note M40.
2. Sheet M-101B – HVAC LEVEL 1 PLAN – AREA B
   A. Revised ductwork and diffuser layout for DOAS unit.
3. Sheet M-101C – HVAC LEVEL 1 PLAN – AREA C
   A. Revised ductwork and diffuser layout for DOAS unit.
   B. Added plan note M40.
4. Sheet M-102A – HVAC LEVEL 2 PLAN – AREA A
   A. Revised ductwork and diffuser layout for DOAS unit.
   B. Added plan note M40.
5. Sheet M-102B – HVAC LEVEL 2 PLAN – AREA B
   A. Revised ductwork and diffuser layout for DOAS unit.
   A. Revised ductwork and diffuser layout for DOAS unit.
   B. Added plan note M40.
7. Sheet M-400 – MECHANICAL SCHEDULES
   A. Added Schedule Note H. to Grille, Register, and Diffuser Schedule for SD-1.
   B. Added EG-2 and EG-3 to Grille, Register, and Diffuser Schedule.
SECTION 000105 - CERTIFICATIONS PAGE

ARCHITECT

I HEREBY, PURSUANT TO RSMO 327.411, STATE THAT THE SPECIFICATIONS INTENDED TO BE AUTHENTICATED BY MY SEAL ARE LIMITED TO SPECIFICATIONS LISTED BELOW:

DIVISION 1 SECTIONS: 011000, 012100, 012200, 012300, 012500, 013100, 013200, 013233, 013300, 014000, 014200, 014529, 016000, 017310, 017419, 017419, 017700, 017823, 017839, 017900.
DIVISION 2 SECTION: 024119.
DIVISION 6 SECTIONS: 061000, 061600, 064023.
DIVISION 7 SECTIONS: 072500, 076200, 078413, 078446, 079200.
DIVISION 8 SECTIONS: 081113, 081416, 083113, 084113, 085613, 087100, 088000.
DIVISION 9 SECTIONS: 092116, 092900, 093000, 095113, 096513, 096519, 096723, 096813, 099123, 099600.
DIVISION 10 SECTIONS: 101423, 102113, 102123, 102600, 102800.
DIVISION 12 SECTIONS: 123200, 123666.

I HEREBY DISCLAIM ANY RESPONSIBILITY FOR ALL OTHER SPECIFICATIONS, DRAWINGS, ESTIMATES, REPORTS, OR OTHER DOCUMENTS OR INSTRUMENTS RELATING TO OR INTENDED TO BE USED FOR ANY PART OR PARTS OF THE ARCHITECTURAL OR ENGINEERING PROJECT OR SURVEY.

KEVIN NELSON

DECEMBER 08, 2023

ARCHITECT

DATE

STATE OF MISSOURI
KEVIN E. NELSON
A-2019015618

ARCHITECT

DECEMBER 8, 2023
## Project Information

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Project No.: 23026  
Site Address: 701 Thornton Street, Liberty, Missouri 64068  
City, State Zip: Liberty, Missouri 64068

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### Introductory Information

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### Bidding Requirements

(Refer to Construction Manager's Front End Manual for additional Bidding Requirements)

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078413 Penetration Firestopping 11.22.2023
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095113 Acoustical Panel Ceilings 11.22.2023
096513 Resilient Base and Accessories 11.22.2023
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SECTION 087100 – DOOR HARDWARE

PART 1 - GENERAL

1.1 SUMMARY

A. Intent: The intent of this Section is to provide finish hardware for the proper operation and control of all wood, hollow metal, and aluminum doors in the Project. Prior to bidding, notify the Architect of any doors that do not have hardware meeting this intention.

B. This Section includes items known commercially as finish or door hardware that are required for swinging doors, except special types of unique hardware specified in the same sections as the doors and door frames on which they are installed. This Section includes, but is not necessarily limited to furnishing and installing complete, the following:
   1. Finish hardware for proper operation and control of all wood, aluminum, and hollow metal doors, including hinges, locks, and latch sets, closers, panic devices, auto-flushbolts, electric strikes, magnetic holders, removable Mullions, cylinders, keys, miscellaneous stops, flat goods, weatherstripping, and thresholds as required.
   2. Cylinder for access doors where specified.

C. Related work in other sections:
   1. Hollow metal doors, frames and silencers: Section 081113.
   2. Wood doors: Section 081416.
   3. Aluminum doors: Section 084113.

1.2 DEFINITIONS

A. “Finish Hardware” includes items known commercially as finish hardware which are required for swing, folding doors, except special types of unique and non-matching hardware specified in the same section as the door and door frame.

1.3 ACTION SUBMITTALS

A. Product Data: Submit manufacturer's technical product data for each hardware item. Include information necessary to show compliance with requirements and include instructions for installation and for maintenance of operating parts and finishes.
   1. Manufacturer shall submit written certification confirming closers compliance with U.L. 10C.

B. Hardware Schedule: Submit a hardware schedule in a vertical format (horizontal format not acceptable), organized into sets, including the information below. Designations for door numbers and hardware sets in the schedule shall match those used in the Construction Documents for each opening.
   1. Hardware Schedule shall be coordinated with doors, frames, and related work to ensure proper size, thickness, hand function, and finish of door hardware.
   2. Catalog cuts of each type of exposed hardware unit, highlighted in color to indicate compliance with the Hardware Schedule.
   3. Type, style, function, size and finish of each hardware item.
   4. Name and manufacturer of each item.
   5. Fastenings and other pertinent information.
   6. Explanation of all abbreviations, symbols, codes, etc., contained in schedule.
   7. Mounting locations for hardware.
   8. Door and frame sizes and materials.
   9. Deviations from Specifications shall be noted in cover letter.

C. Submittal Sequence: Submit schedule at earliest possible date particularly where acceptance of hardware schedule must precede fabrication of other work (e.g., hollow metal frames) which is critical in the project construction schedule. Include with schedule the product data, samples, shop drawings of other work affected by finish hardware, and other information essential to the coordinated review of hardware schedule.

D. Keying Schedule: Submit separate detailed schedule, at the same time as the Hardware Schedule, indicating keying for all locks and how Owner’s instructions, on keying of locks has been fulfilled. Keying schedule must be approved before ordering any locks.
E. Pinning Transcript: Submit detailed schedule indicating each lock cylinder and core.

F. Templates: Furnish hardware templates to each fabricator of doors, frames and other work to be factory-prepared for the installation of hardware. Upon request, check shop drawings of such other work, to confirm that adequate provisions are made for proper location and installation of hardware.

1.4 QUALITY ASSURANCE

A. Manufacturer: Obtain each type of hardware (latch and lock sets, hinges, closers, etc.) from a single manufacturer, although several may be indicated as offering products complying with requirements.

B. Product/Material Qualifications: Manufacturer's product numbers are indicated for convenience in identifying finish hardware items. Unless otherwise indicated, manufacturer's description for indicated product number constitutes minimum standards of quality, design, function and performance required for each item to be incorporated into the Project.
   1. It will be the responsibility of the Bidder to furnish with his Bid a list clarifying any deviations from these specifications written or implied, in order that a fair and proper evaluation be made. Those Bidders not submitting a list of deviations will be presumed to have Bid as specified.

C. Supplier Qualifications: A recognized Architectural Finish Hardware Supplier, with warehousing facilities, who has been furnishing hardware in the project's vicinity for a period of not less than 2 years. Supplier shall be or employ an experienced Architectural Hardware Consultant (AHC) who is certified by and member of the Door and Hardware Institute. The Architectural Hardware Consultant shall be available, at reasonable times during the course of the work, for consultation about project's hardware requirements, to Owner, Architect and Contractor.
   1. Supplier shall meet with the Owner to finalize keying requirements and obtain final instructions in writing.

D. Fire-Rated Openings: Provide hardware for fire-rated openings in compliance with NFPA Pamphlets No. 80, No. 101 and of authorities having jurisdiction requirements. Provide only hardware which has been tested and listed by UL, FM or Warnock Hersey for types and sizes of doors required and complies with requirements of door and door frame labels.
   1. Where emergency exit devices are required on fire-rated doors, (with supplementary marking on doors' UL or FM labels indicating "Fire Door to be Equipped with Fire Exit Hardware") provide UL or FM label on exit devices indicating "Fire Exit Hardware".

E. Standards: Comply with the requirements of the latest edition of the following standards, unless indicated otherwise:
   1. American National Standards Institute (ANSI) Publications:
      1. A115 Series - Door and Frame Preparation.
      2. A156 Series - Hardware.
   2. Builders Hardware Manufacturers Association (BHMA) Publications:
      1. 1201 - Auxiliary Hardware.
      2. 1301 - Materials and Finishes.
   3. Door and Hardware Institute (DHI) Publications:
      2. Abbreviations and Symbols.
      3. Hardware for Labeled Fire Doors.
      4. Recommended Locations for Builder's Hardware for Standard and Custom Steel Doors and Frames.
   4. National Fire Protection Association (NFPA) Publications:
      1. NFPA Pamphlet No. 80 - Standards for Fire Doors and Windows.
   6. Americans with Disabilities Act (ADA).

F. Keying Conference: Conduct conference in accordance with Section 013100. In addition to Owner, Construction Manager, and Architect, conference participants shall also include Installer's Architectural Hardware Consultant. Incorporate keying conference decisions into final keying schedule after reviewing door hardware keying system including, but not limited to, the following:
   1. Function of building, flow of traffic, purpose of each area, degree of security required, and plans for future expansion.
   2. Preliminary key system schematic diagram.
   3. Requirements for key control system.
4. Address for delivery of keys.

G. Preinstallation Conference: Conduct conference at Project site to comply with requirements of Section 13100 as follows:
   1. Architectural Finish Hardware supplier (AFHS) shall conduct the preinstallation conference at the site. The AFHS shall instruct finish hardware installer on proper installation, adjustment and troubleshooting for each operable item of finish hardware specified. The AFHS shall observe the installation and adjustment of the first three locksets, closers and exit devices.

1.5 DELIVERY, STORAGE AND HANDLING

A. Package each hardware item in separate containers with all screws, wrenches, installation instructions and installation templates. Mark or tag each box with hardware heading and door number according to approved hardware schedule.

B. Packaging of door hardware is responsibility of supplier. As material is received by hardware supplier from various manufacturers, sort and repack in containers clearly marked with appropriate hardware set number to match set numbers of approved hardware schedule. Two or more identical sets may be packed in same container.

C. Deliver individually packaged hardware items at the proper times to the proper locations (shop or project site) for installation. Provide a complete packing list showing items, door numbers and hardware headings with each shipment.

D. Store hardware in shipping cartons above ground and under cover to prevent damage.
   1. Provide secure lockup for door hardware delivered to the Project, but not yet installed. Control handling and installation of hardware items that are not immediately replaceable so that completion of the Work will not be delayed by hardware losses both before and after installation.

E. Aluminum Door Hardware: If required by door manufacturer deliver hardware for aluminum doors as directed by the door supplier for factory installation.

1.6 COORDINATION

A. Templates: Obtain and distribute to the parties involved templates for doors, frames, and other work specified to be factory prepared for installing door hardware. Check Shop Drawings of other work to confirm that adequate provisions are made for locating and installing door hardware to comply with indicated requirements.

B. Electrical System Roughing-in: Coordinate layout and installation of electrified door hardware with connections to power supplies, fire alarm system and detection devices, access control system, security system, and building control system, as applicable.

1.7 MAINTENANCE

A. Maintenance Tools and Instructions: Furnish a complete set of specialized tools and maintenance instructions as needed for Owner’s continued adjustment, maintenance, and removal and replacement of door hardware.

PART 2 - PRODUCTS

2.1 HARDWARE - GENERAL

A. Provide the materials or products indicated by trade names, manufacturer’s name, or catalog number.

B. Provide manufacturer’s standard products meeting the design intent of this Specifications, free of imperfections affecting appearance or serviceability.
   1. Base Metals: Produce hardware units of basic metal and forming method indicated using manufacturer’s standard metal alloy, composition, temper, and hardness, but in no case of lesser (commercially recognized) quality than specified for applicable hardware units for finish designations indicated.
2. Provide hardware complete with all fasteners, anchors, instructions, layout templates, and any specialized tools as required for satisfactory installation and adjustment.

3. Hand of door: Drawings show direction of slide, swing or hand of each door leaf. Furnish each item of hardware for proper installation and operation of door movement as shown.

4. Furnish screws for installation, with each hardware item. Provide Phillips flat-head screws except as otherwise indicated or approved. Finish screws exposed under any condition to match hardware finish or, if exposed in surfaces of other work, to match finish of such other work as closely as possible.

5. Finish all other hardware in accordance with the BHMA finish as follows, unless otherwise indicated in manufacturers' screws to secure hardware.

6. Provide concealed fasteners for hardware units which are exposed when door is closed, except to extent no standard units of type specified are available with concealed fasteners. Do not use thru-bolts for installation where bolt head or nut on opposite face is exposed in other work, except where indicated otherwise or where it is not feasible to adequately reinforce the work. In such cases, provide sleeves for each thru-bolt or use sex bolt fasteners.

7. Provide factory pinned cylinders and cores.

C. Hardware is specified in the hardware schedule by set, type, and functions which have been selected as best meeting the application requirements. Acceptable products for each category are specified under PART 2 of this Specification.

2.2 SPECIAL REQUIREMENTS

A. Hinges:
1. Provide non-removable pins for all exterior doors and out-swinging corridor doors. Use nonrising pins for all other doors.
2. Pre-drill pilot holes for hinge fasteners at factory to suit hinge type.
3. Provide continuous hinges where specified.

B. Locksets:
1. Locksets shall meet or exceed ANSI A156.13-94, Grade 1 requirements.

C. Panic Devices:
1. All panic devices shall have touchbars made of stainless steel, provide devices in stainless finish where specified.
2. All latchbolts are to be deadlatching.
3. Panic devices shall be through-bolted, using sex bolt fasteners.
4. Exit devices are to incorporate a flush and tapered end cap.
5. Hardware mullions are to be of the same manufacturer as the panic device. Provide keyed mullions unless otherwise specified. Provide mullion storage kits where specified.
6. Except on fire-rated doors, or unless specified otherwise, provide panic devices with hex key dogging device to hold latch bolt open on doors with closers.
7. Devices incorporating plastic dogging components will not be allowed.
8. Provide electrical options as specified.

D. Closers:
1. Comply with manufacturer's recommendations for unit size based on door size, weather exposure and usage.
2. Through-bolt all closer units, using sex bolt fasteners.
3. Provide parallel arms for all overhead closers, except as otherwise indicated.
4. All surface closers shall exceed ANSI A156.4 Grade 1 requirements in all aspects as called for below. All closers shall have certification by an independent testing laboratory of 10,000,000 cycles without failure. Provide special rust inhibitive primer (SRI) where specified.
5. Furnish all brackets, drop plates and any other necessary hardware required to insure proper installation.

E. Stops
1. Provide heavy duty and concealed or surface mounted overhead stop or holder for interior doors as specified. Provide overhead stop for interior doors that swing more than opens against equipment, casework, sidelights, and where conditions do not allow wall stop.

F. Thresholds and Gasketing
1. Provide thresholds, weatherstripping (including door sweeps, seals, astragals) and gasketing systems (including smoke, sound, and light) as specified and per architectural details. Match finish of other items.
2. Provide door sweeps, seals, astragals, and auto door bottoms only of type where resilient or flexible seal strip is easily replaceable and readily available.
3. Gasketing and astragals on aluminum frames by door manufacturer.

G. Silencers
1. Provide "push-in" type silencers for hollow metal or wood frames.
2. Provide one silencer per 30 inches of height on each single frame, and two for each pair frame.
3. Omit where gasketing is specified.

2.3 KEYING
A. Standard Lock Cylinders: BHMA A156.5; Grade 1 cylinders; face finished to match lockset.
B. Key all locks separately, or alike, as directed by the Owner’s representative and Architect. Provide keys as follows:
   1. Change Keys: Two (2) per lock.
   2. Master Keys: Six (6) required (per system).
C. Existing Key System: Key cylinders to Owners existing master key system.
D. All exterior doors to be keyed to Schlage Primus, interior doors to match existing keyway.
E. Provide Schlage cylinders with large format interchangeable construction cores on all exterior openings.

2.4 KEY CONTROL SYSTEM
A. Fire Department Access Boxes:
   1. Provide key lock boxes designed for storage of 2-5 keys. Manufactured by Knox Company or equal.
   2. Provide one lock box at exterior and provide one near elevators, if applicable.
   3. Locate in accordance with architectural detail. Where not specifically indicated, locate as directed by Architect.
   4. Provide surface mounted or recessed based on direction from Architect.

2.5 HARDWARE FINISHES
A. Provide matching finishes for hardware units at each door to the greatest extent possible, unless otherwise indicated. In general, match items to the finish for the latch, lock or push-pull unit for color and texture.
   1. Product description or schedule:
      1) 626 satin chrome-plated.
      2) 630 satin stainless steel.

2.6 HARDWARE PRODUCTS
A. Hinges:
   1. Specified manufacturer: IVES Hardware; an Allegion Company.
   2. Acceptable substitutions:
      1. Hager Companies.
      2. McKinney Products Company; an ASSA ABLOY Group company.
      3. Stanley Commercial Hardware; Div. of The Stanley Works.
B. Continuous Gear-Type Hinges:
   1. Specified manufacturer: IVES Hardware; an Allegion Company.
   2. Acceptable substitutions:
      1. Hager Companies.
      2. McKinney Products Company; an ASSA ABLOY Group company.
      3. Select Products Limited.
C. Locksets:
   1. Specified manufacturer: Schlage Commercial Lock Division; an Allegion Company.
D. Exit Devices:
   1. Specified manufacturer: Von Duprin; an Allegion Company

E. Closers:
1. Specified manufacturer: LCN Closers; an Allegion Company.

F. Flatgoods:
1. Specified manufacturer: Ives Hardware; an Allegion Company.
2. Acceptable substitutions:
   1. Burns.
   2. Rockwood.

G. Stops:
1. Specified manufacturer: Ives Hardware; an Allegion Company.
2. Acceptable substitutions:
   2. Hager Companies.
   4. Trimco

H. Overhead stops:
1. Specified manufacturer: Glynn-Johnson; an Allegion Company.
2. Acceptable substitutions:
   1. Architectural Builders Hardware Mfg., Inc.
   2. Door Controls International.
   3. Ives Hardware; an Allegion Company.
   4. Rixson Specialty Door Controls; an ASSA ABLOY Group.

I. Thresholds:
1. Specified manufacturer: Zero International
2. Acceptable substitutions:
   1. Pemko Manufacturing Co.
   2. Reese Enterprises.
   3. National Guard Products.

J. Door Gasketing/Weatherstripping:
1. Specified manufacturer: Zero International
2. Acceptable substitutions:
   1. Pemko Manufacturing Co.
   2. Reese Enterprises.
   3. National Guard Products.

PART 3 - EXECUTION

3.1 PREPARATION
A. Carefully inspect doors, frames, and conditions under which hardware will be installed. Notify the Architect of any conditions that would adversely affect the installation or subsequent door operations. Do not proceed until unsatisfactory conditions are corrected.
   1. Frames shall be verified, inspected, and confirmed by General Contractor as being plumb and true.

B. Refer to Sections 081113, 081416, and 084113 for additional installation requirements.

C. Prior to hardware installation, the Hardware Supplier shall meet with the Owner's Representative, Architect, and Hardware Installer to ensure the Installer has and understands the manufacturers' installation requirements for all hardware items.
   1. The Supplier shall observe the installation of the first lockset, closer and panic device.

3.2 INSTALLATION
A. Mount Hardware units at heights indicated in respective DHI Standards, except as specifically indicated or required to comply with governing regulations, and except as may be otherwise directed by Architect.
B. Install each hardware item in compliance with the manufacturer's instructions and written recommendations. Wherever cutting and fitting is required to install hardware onto or into surfaces which are later to be field finished, coordinate removal, storage and reinstallation or application of surface protections with finishing work. Do not install surface-mounted items until finishes have been completed on the substrate.

C. Set units level, plumb and true to line and location. Adjust and reinforce the attachment substrate as necessary for proper installation and operation.
   1. Special care shall be taken to avoid damaging surrounding surfaces.

D. Provide fasteners and anchoring devices of suitable size, quantity, and type to secure hardware in proper position for heavy use and long life.
   1. Drill and countersink units which are not factory-prepared for anchorage fasteners. Space fasteners and anchors in accordance with industry standards.

E. Adjust door closers immediately upon installation. Adjust in exact conformance with manufacturer's printed instructions. Advance backcheck to eliminate shock at dead stop. Set latching speed to assure unassisted positive latching.
   1. Degrees of swing of doors for self-limiting closers shall be maximum available.

F. Install each protection plate with a thinly-spread spot of mastic at its center to assure even contact before fastening with screws. Install all such plates on visual centers of closed doors. Set bottom edges of all such plates flush with door bottom.

G. Cut and fit thresholds to door frame profiles. Prepare thresholds for the attachment of strikes and clearance for spindles as required. Set thresholds in a continuously laid bed of polyisobutylene mastic sealant to completely fill voids and exclude moisture from every source.

H. Seal weather protection components attached to the exterior sides of doors and frames, such as drip caps and weatherstripping, in place with clear silicone caulk in such a manner as to ensure a continuously filled seam throughout the joinery.

I. Cut and fit weatherstripping accurately to provide the greatest possible continuity of the contact element. Adjust closer templating as required.

J. At exterior doors, obtain satisfactory operation of the installation, then apply a thin layer of clear silicone caulk under hinge leaves, and outside lock trim. Remove excess caulk after torqueing fasteners.

3.3 ADJUST AND CLEAN

A. Adjust and check each operating item of hardware and each door, to ensure proper operation or function of every unit. Replace units which cannot be adjusted to operate freely and smoothly as intended for the application made.
   1. Clean adjacent surfaces soiled by hardware installation.

B. Final Adjustment: Wherever hardware installation is made more than one month prior to acceptance or occupancy of a space or area, return to the work during the week prior to acceptance or occupancy, and make final check and adjustment of all hardware items in such space or area. Clean operating items as necessary to restore proper function and finish of hardware and doors. Adjust door control devices to compensate for final operation of heating and ventilating equipment.

3.4 INSTRUCTION AND INSPECTION

A. Instruct Owner's Personnel in proper adjustment and maintenance of hardware and hardware finishes, during the final adjustment of hardware.

B. After hardware is installed and adjusted, the Supplier shall inspect the job with the Architect and the Contractor to determine if the hardware is functioning properly.
   1. Maintain the instruction sheets, layout templates, and any supplementary literature regarding hardware in a readable condition. Transmit all such items to the Owner's Representative, together with all spare parts, specialized tools, other accessories supplied with the hardware, and a copy of the approved hardware schedule at the time of instruction.

C. Continued Maintenance Service: Approximately six months after the acceptance of hardware in each area, the installer, accompanied by the representative of the latch and lock manufacturer, shall return to the project and re-adjust every item of hardware to restore proper function of doors and hardware. Consult
with and instruct Owner's personnel in recommended additions to the maintenance procedures. Replace hardware items which have deteriorated or failed due to faulty design, materials or installation of hardware units at no cost to the Owner. Prepare a written report of current and predictable problems (of substantial nature) in the performance of the hardware.

## HARDWARE SETS

### HARDWARE SET: 1

**DOOR NUMBER:**

1B201

**EACH TO HAVE:**

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<td>626</td>
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<td>CARD READER</td>
<td>BY ACCESS CONTROL PROVIDER</td>
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**OPERATION:** DOOR NORMALLY CLOSED AND LOCKED. ACCESS VIA VALID CARD READ OR REMOTE RELEASE AT DESK. ALWAYS FREE EGRESS.

### HARDWARE SET: 2

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1B221A

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### HARDWARE SET: 3

**DOOR NUMBER:**

1B112  1B113  1B210  1B214

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NOT REMAINDERS OF HARDWARE EXISTING

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END OF SECTION 087100
1. REFER TO SHEET G000 FOR SHEET INDEX
2. REFER TO MEP AND TECHNOLOGY SHEETS FOR SPECIFIC CEILING MOUNTED DEVICES
3. ALL ACT GRID TO BE CENTERED IN ROOM UNLESS NOTED OTHERWISE
4. HALF-TONE SHADING INDICATES EXISTING CONSTRUCTION TO REMAIN

The Professional Architects seal affixed to this sheet applies only to the material and items shown on this sheet. All drawings, instruments or other documents not exhibiting this seal shall not be considered prepared by this architect, and this architect expressly disclaims any and all responsibility for such plan, drawings, or documents not exhibiting this seal.
MECHANICAL PLAN NOTES:

**M1** INSTALL NEW FAN COIL UNIT AND WALL MOUNTED TEMPERATURE SENSOR AT THE SAME LOCATIONS AS FAN COIL AND SENSOR REMOVED. REPLACE CONTROL WIRE IF NECESSARY. COORDINATE WITH THE ARCHITECT. RELOCATE PIPE PENETRATION LOCATIONS AS NECESSARY TO MATCH NEW UNIT CONNECTION LOCATIONS.

**M3** INSTALL NEW CABINET UNIT HEATER AND TEMPERATURE SENSOR IN SAME LOCATIONS AS UNIT HEATER AND SENSOR REMOVED. REPLACE CONTROL WIRE IF NECESSARY. PRIOR TO PURCHASE VERIFY LOCATION TO MATCH EXISTING. RELOCATE PIPE PENETRATION LOCATIONS AS NECESSARY TO MATCH NEW UNIT CONNECTION LOCATIONS.

**M6** DUCT UP TO FLOOR ABOVE. COORDINATE WITH ARCHITECT AND ANY EXISTING JOIST LOCATION.

**M30** EXISTING OUTSIDE AIR LOUVER TO REMAIN. PROVIDE R-13 INSULATED SHEET METAL CAP ON THE INSIDE OF THE LOUVER AND SEAL WATER TIGHT.

**M40** PROVIDE DEFLECTOR PLATE ON SUPPLY DIFFUSER AS SHOWN.

)# Description Date
1 Addendum 1 12.08.23

= Phase 2 Scope of Work (Not included in this Bid Package)
MECHANICAL PLAN NOTES:

M1 INSTALL NEW FAN COIL UNIT AND WALL MOUNTED TEMPERATURE SENSOR AT THE SAME LOCATIONS AS FAN COIL AND SENSOR REMOVED. REPLACE CONTROL WIRE IF NECESSARY. COORDINATE WITH THE ARCHITECT. RELOCATE PIPE PENETRATION LOCATIONS AS NECESSARY TO MATCH NEW UNIT CONNECTION LOCATIONS.

M6 DUCT UP TO FLOOR ABOVE. COORDINATE WITH ARCHITECT AND ANY EXISTING JOIST LOCATION.

M30 EXISTING OUTSIDE AIR LOUVER TO REMAIN. PROVIDE R-13 INSULATED SHEET METAL CAP ON THE INSIDE OF THE LOUVER AND SEAL WATER TIGHT.

M40 PROVIDE DEFLECTOR PLATE ON SUPPLY DIFFUSER AS SHOWN.

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M3 INSTALL NEW CABINET UNIT HEATER AND TEMPERATURE SENSOR IN SAME LOCATIONS AS UNIT HEATER AND SENSOR REMOVED. REPLACE CONTROL WIRE IF NECESSARY. PRIOR TO PURCHASE VERIFY LOCATION TO MATCH EXISTING. RELOCATE PIPE PENETRATION LOCATIONS AS NECESSARY TO MATCH NEW UNIT CONNECTION LOCATIONS.

M6 DUCT UP TO FLOOR ABOVE. COORDINATE WITH ARCHITECT AND ANY EXISTING JOIST LOCATION.

1-3 EXISTING OUTSIDE AIR LOUVER TO REMAIN. PROVIDE R-13 INSULATED SHEET METAL CAP ON THE INSIDE OF THE LOUVER AND SEAL WATER TIGHT.

M40 PROVIDE DEFLECTOR PLATE ON SUPPLY DIFFUSER AS SHOWN.
MECHANICAL PLAN NOTES:

M1 INSTALL NEW FAN COIL UNIT AND WALL MOUNTED TEMPERATURE SENSOR AT THE SAME LOCATIONS AS FAN COIL AND SENSOR REMOVED. REPLACE CONTROL WIRE IF NECESSARY. COORDINATE WITH THE ARCHITECT. RELocate PIPE PENETRATION LOCATIONS AS NECESSARY TO MATCH NEW UNIT CONNECTION LOCATIONS.

M2 ROUTE DUCT UP TO UNIT ON ROOF. PROVIDE TRANSITION AS REQUIRED TO MATCH UNIT CONNECTION SIZE.

M3 INSTALL NEW CABINET UNIT HEATER AND TEMPERATURE SENSOR IN SAME LOCATIONS AS UNIT HEATER AND SENSOR REMOVED. REPLACE CONTROL WIRE IF NECESSARY. PRIOR TO PURCHASE VERIFY LOCATION TO MATCH EXISTING. RELocate PIPE PENETRATION LOCATIONS AS NECESSARY TO MATCH NEW UNIT CONNECTION LOCATIONS.

M5 DUCT DOWN TO FLOOR BELOW. COORDINATE WITH M8 INSTALL EXISTING GRILLES, REGISTERS AND DIFFUSERS IN SAME LOCATIONS WHEN REMOVED. CLEAN AND TOUCHUP EXISTING GRILLES, REGISTERS AND DIFFUSERS PRIOR TO INSTALLATION.

M28 REPLACE EXISTING DAMPER ACTUATOR. M30 EXISTING OUTSIDE AIR LOUVER TO REMAIN. PROVIDE R-13 INSULATED SHEET METAL CAP ON THE INSIDE OF THE LOUVER AND SEAL WATER TIGHT.

M31 VFD TO BE INSTALLED ON THE WALL ON SERVICE PLATFORM. COORDINATE LOCATION TO MAINTAIN SERVICE CLEARANCE WITH THE AIR HANDLER.

M40 PROVIDE DEFLECTOR PLATE ON SUPPLY DIFFUSER AS SHOWN.
MECHANICAL PLAN NOTES:

M1 INSTALL NEW FAN COIL UNIT AND WALL MOUNTED TEMPERATURE SENSOR AT THE SAME LOCATIONS AS FAN COIL AND SENSOR REMOVED. REPLACE CONTROL WIRE IF NECESSARY. COORDINATE WITH THE ARCHITECT. RELOCATE PIPE PENETRATION LOCATIONS AS NECESSARY TO MATCH NEW UNIT CONNECTION LOCATIONS.

M2 ROUTE DUCT UP TO UNIT ON ROOF. PROVIDE TRANSITION AS REQUIRED TO MATCH UNIT CONNECTION SIZE.

M3 INSTALL NEW CABINET UNIT HEATER AND TEMPERATURE SENSOR IN SAME LOCATIONS AS UNIT HEATER AND SENSOR REMOVED. REPLACE CONTROL WIRE IF NECESSARY. PRIOR TO PURCHASE VERIFY LOCATION TO MATCH EXISTING. RELOCATE PIPE PENETRATION LOCATIONS AS NECESSARY TO MATCH NEW UNIT CONNECTION LOCATIONS.

M4 EXISTING ABANDONED WALL HEATER SHALL REMAIN. M5 DUCT DOWN TO FLOOR BELOW. COORDINATE WITH M2.

M8 INSTALL EXISTING GRILLES, REGISTERS AND DIFFUSERS IN SAME LOCATIONS WHEN REMOVED. CLEAN AND TOUCHUP EXISTING GRILLES, REGISTERS AND DIFFUSERS PRIOR TO INSTALLATION.

M11 ROUTE 8" EXHAUST DUCT UP THROUGH ROOF AND TERMINATE WITH GOOSENECK. COORDINATE PENETRATION WITH STRUCTURAL AND OTHER DISCIPLINES. MAINTAIN A MINIMUM 10' -0" FROM ANY FRESH AIR INTAKES.

RELOCATED RETURN GRILLE. M20 BALANCE DIFFUSER TO NEW LISTED AIR FLOW. M30 EXISTING OUTSIDE AIR LOUVER TO REMAIN. PROVIDE R-13 INSULATED SHEET METAL CAP ON THE INSIDE OF THE LOUVER AND SEAL WATER TIGHT.

PROVIDE DEFLECTOR PLATE ON SUPPLY DIFFUSER AS SHOWN.

Phase 2 Scope of Work (Not included in this Bid Package)
MECHANICAL PLAN NOTES:

M1 INSTALL NEW FAN COIL UNIT AND WALL MOUNTED TEMPERATURE SENSOR AT THE SAME LOCATIONS AS FAN COIL AND SENSOR REMOVED. REPLACE CONTROL WIRE IF NECESSARY. COORDINATE WITH THE ARCHITECT. RELOCATE PIPE PENETRATION LOCATIONS AS NECESSARY TO MATCH NEW UNIT CONNECTION LOCATIONS.

M2 ROUTE DUCT UP TO UNIT ON ROOF. PROVIDE TRANSITION

M3 INSTALL NEW CABINET UNIT HEATER AND TEMPERATURE SENSOR IN SAME LOCATIONS AS UNIT HEATER AND SENSOR REMOVED. REPLACE CONTROL WIRE IF NECESSARY. PRIOR TO PURCHASE VERIFY LOCATION TO MATCH EXISTING. RELOCATE PIPE PENETRATION LOCATIONS AS NECESSARY TO MATCH NEW UNIT CONNECTION LOCATIONS.

M40 PROVIDE DEFLECTOR PLATE ON SUPPLY DIFFUSER AS SHOWN.

M5 DUCT DOWN TO FLOOR BELOW. COORDINATE WITH ARCHITECT AND ANY EXISTING JOIST LOCATION.

M7 PROVIDE ACCESSIBLE BALANCE DAMPER. TYPICAL FOR ALL CLASSROOM SUPPLY AND EXHAUST TAPS.

M30 EXISTING OUTSIDE AIR LOUVER TO REMAIN. PROVIDE R-13 INSULATED SHEET METAL CAP ON THE INSIDE OF THE LOUVER AND SEAL WATER TIGHT.

CLASSROOM RESOURCE

CLASSROOM RESOURCE

CLASSROOM RESOURCE

CLASSROOM RESOURCE
### DEDICATED OUTDOOR AIR SYSTEM - ROOFTOP UNIT W/ ENERGY RECOVERY (DX COOLING, NATURAL GAS HEATING)

#### Notes:
- **MIN** RECOVERY
- **MAX** RECOVERY
- (°F)
- FAN
- ESP
- HP
- (IN) BHP
- (IN) TSP
- (IN) BHP
- (MBH)
- DOAS 2 TRANE HORIZON D017 100% OA CV PLENUM 3745 0.50 2.70 2.24 3.00 Yes PLENUM 3000 0.50 1.58 1.22 1.5 Yes 1.09 0.76 196.5 110.7 82.4 71.2 54.9 54.6 400 0.0 70.0 44.6 37.8 202.5 250.0 80 44.6 94.5 10:1 208 V / 3PH 86.4 110 NF 6000 A-W

### CABINET UNIT HEATER SCHEDULE (HYDROEIC)

#### Notes:
- **A.** PROVIDE FACTORY MOUNTED DISCONNECT INSTALLED ON SERVICE SIDE OF UNIT.
- **B.** PROVIDE WITH MANUFACTURER’S FAN SPEED CONTROLLER FOR BALANCING PURPOSES.
- **C.** PROVIDE TITUS OMNI AA GRILLE, REGISTER AND DIFFUSER SCHEDULE.
- **D.** PROVIDE MODULATING HOT GAS REHEAT COIL CAPABLE OF PROVIDING LEAVING AIR TEMPERATURE OF 75°F AT DESIGN AIRFLOW.
- **E.** EQUIV THE COMPLETE DESCRIPTION, NOTES AND SPECIFICATIONS TO DETERMINE THE EXACT MATERIAL AND ACCESSORIES TO BE ORDERED. THE MANUFACTURERS LISTED ARE THE BASIS FOR THE
- **F.** WAY CONTROL VALVE SIZED USING THE SCHEDULED CONTROL VALVE AUTHORITY FLOW COEFFICIENT (Cv).
- **G.** VALVE Cv IS BASED ON SPECIFIC GRAVITY OF PROPYLENE GLYCOL AT A CONCENTRATION OF 30% FOR CHILLED WATER.
- **H.** PROVIDE "EARLY BREAK" AUXILIARY CONTACTS IN MOTOR DISCONNECT THAT DEACTIVATES THE VFD WHEN MOTOR DISCONNECT SWITCH IS OPEN.
- **I.** EQUIV THE COMPLETE DESCRIPTION, NOTES AND SPECIFICATIONS TO DETERMINE THE EXACT MATERIAL AND ACCESSORIES TO BE ORDERED. THE MANUFACTURERS LISTED ARE THE BASIS FOR THE
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