ADDENDUM NO. 5
FEBRUARY 23, 2026

PREPARED BY SCHMIDT ASSOCIATES FOR:
HAZELDEN ESTATE RESTORATION
NEWTON COUNTY BOARD OF COMMISSIONERS

This Addendum consists of 1 Addendum page and 20 attachment pages totaling 21 pages.

Acknowledge receipt of this Addendum by inserting its number on the Bid Form. Failure to do so may subject the Bid to disqualification. This Addendum is part of the Contract Documents.

Bidder is encouraged to verify with reprographer of record all Addenda issued (do not rely exclusively on third party plan room services).

PART 1 - CHANGES TO PRIOR ADDENDA (NOT APPLICABLE)

PART 2 - CHANGES TO THE PROJECT MANUAL

Modifications described herein shall be incorporated in the Project Manual. All other Work shall remain unchanged.

2.1 DIVISION 08 – OPENINGS

A. **Section 087100 "DOOR HARDWARE"**

1. ADD Section 087100 per the attached.

PART 3 - CHANGES TO THE DRAWINGS (NOT APPLICABLE)

END OF ADDENDUM 5

SECTION 08 71 00 DOOR HARDWARE

PART 1 – GENERAL

1.01 SUMMARY

A. Section Includes:
   1. Finish hardware supplier to:
      a. Provide door hardware for wood and hollow metal doors.
      b. Furnish door hardware for aluminum doors.
      c. Provide automatic operators and accessories.
      d. Provide card access system including:
         1) Low voltage wiring.
         2) Initial card access software set-up, including all initial users, access groups, door schedules, credential assignment, opening names and automatically generated email reports.
         3) Four (4) hours of Owner training for card access software after project completion.
      e. Provide material and labor for an integrated turnkey solution.
      f. Install hollow metal and wood doors, hardware for hollow metal and wood doors, automatic operators and actuators on all doors specified with auto operators and complete card access system for all doors specified with card access.

B. Section Excludes:
   1. Cabinet hardware.
   2. Computer to host access control software.
   3. Hollow metal frame installation.
   4. Aluminum door, frame, and hardware installation.

C. Related Sections:
   1. Finish Carpentry, Section 06200
   2. Standard steel doors and frames, Section 08100
   3. Custom steel doors and frames, Section 08150
   4. Flush wood doors, Section 08200
   5. Aluminum doors and frames, Section 08120
   6. Painting, Section 08900
   7. Low voltage electrical, Section 16400
   8. Security Access and surveillance, Section 13700
   9. Fire alarm system, Section 28000

D. Definitions:
   1. Provide: to furnish and install item for final use.
   2. Furnish: to supply material only.

1.02 REFERENCES

A. DHI Sequence and Format for Hardware Schedule
B. DHI Keying Systems and Nomenclature
C. DHI Installation Guide for Doors and Hardware
D. ANSI/BHMA A156.13 Mortise Locks and Latch Series 1000
E. ANSI/BHMA 156.2 Bored and Preassembled Locks and Latch Series 4000
F. ANSI/BHMA A156.4 – 2000 Door Controls – Closers

G. NFPA 80 Standard for Fire Doors and Other Opening Protectives
H. BHMA – Builders Hardware Manufacturers Association

1.03 SUBMITTALS

A. General Requirements: In accordance with Section 01330 Submittal Procedures and Requirements.

B. Schedules:
1. Hardware submittal shall be in vertical format with door numbers matching Architect's opening number.
2. Hardware submittal shall be in conformance with DHI Sequence and Format for Hardware Schedule.
3. Provide card access security system elevation drawings.
4. Horizontal schedules will be rejected without review.

C. Product Data: One set of manufacturers catalog and technical data with function, accessories, options and fasteners highlighted or bubbled to facilitate review.

D. Samples: Submit one sample of each item as directed by Architect. Approved samples shall be returned to supplier for use on the project.

E. Templates: After finish hardware approval, furnish manufacturer templates to frame and door manufacturers.

F. Keying Schedule: Upon receipt of approved hardware schedule, conduct meeting with Owner and finish hardware supplier to determine requirements for key system.
1. Document who was in attendance by way of a sign in sheet at the meeting. Include the following information:
a. Date and location of meeting.
b. Printed name, signature, title and company/organization for each attendee.
2. During this initial meeting a rough schematic diagram chart shall be drawn by supplier.
3. Following this meeting, provide final keying schedule and final schematic diagram to Owner for approval.
4. Key schedule shall follow requirements in DHI Keying System and Nomenclature.

G. Wiring Diagrams: Furnish elevation drawings with submittals on 11 x 17 inch paper. Drawing shall include number and gauge of wire, location and type of products used, opening number, hardware set, operational description, project name and drawing date. Once finish hardware is approved, furnish 3 sets risers and point to point diagrams for field use on 11 x 17 inch paper.

H. Operations and Maintenance Manuals:
1. Comply with requirements in Section 01780.
2. Furnish final wiring diagrams and point to point diagrams.
3. Approved hardware schedule.
4. Warranty information.
5. Product catalog and technical data sheets.
6. All information shall be on 8-1/2 x 11 inch paper, 3-hole punched and placed in a binder. Label binder with distributor name and contact information. Tab each section within binder for easy reference.

1.04 QUALITY ASSURANCE

A. Supplier & Installer Qualifications: Supplier must have office and warehouse within 75 miles of project site set up for pre-dressing doors with hardware prior to delivery. Supplier shall employ a factory authorized access control integrator. Minimum 5 years documented experience installing card access systems. Submit certification of qualifications or documentation of experience upon request.

B. Fire rated door assemblies:
1. Comply with NFPA 80.
2. Fasteners shall comply with manufacturer's tested and recommended method of attaching hardware.

3. UL listed assemblies shall be labeled by approved testing facility.

C. Pre-installation meeting:
1. Before access control installation begins, a pre-installation meeting shall be held to address the installation of the mechanical and electrical hardware, including automatic operators and the access control system.
2. This meeting shall address proper coordination and installation of equipment per approved finish hardware schedule. Riser diagrams, point to point diagrams, approved hardware schedule and access control blueprints for this project shall be reviewed in this meeting.
3. This meeting shall include representatives from the Architect, General Contractor, electrician, aluminum supplier and finish hardware/card access supplier.
4. Convene one week or more prior to commencing the work of this section.
5. The hardware supplier shall include the cost of this meeting in their proposal.

1.05 DELIVERY, STORAGE AND HANDLING

A. Marking and packaging:
1. Hardware: In original manufacturer's package and labeled with opening number and hardware set.
2. Cylinders: Marked with door number and keyset symbol on non-visible surface when installed.
3. Immediately remove and replace any packaging that becomes wet or damaged.

B. Delivery: Inventory items with hardware supplier immediately upon delivery. Note all damages and shortages at that time and replace items. Packing lists marked as received but not checked in or verified for accuracy shall be assumed to be complete and any damages or shortages will be the responsibility of the Contractor, not the supplier.

C. Storage:
1. Have secure, locked, temperature controlled room to store all hardware.
2. Utilize shelving to store hardware off of floor.
3. Hardware shall not be delivered until secure storage area is prepared.
4. Ensure that adhesive gasketing is stored within manufacturer's recommended temperature range.

1.06 WARRANTY:

A. Minimum warranty period as required by Section 01780 Product Warranty. Additional requirements:
1. Continuous hinges: lifetime of opening
2. Locks: 3 years
3. Mechanical closers: 10 years
4. Automatic Operators: 2 years
5. Panic and Fire exit devices: 3 years

1.07 MAINTENANCE

A. Extra materials: Installer to deliver all special tools included in manufacturer's packaging to Owner upon completion of installation.

PART 2 – PRODUCTS

2.01 MANUFACTURERS:

* Denotes manufacturer used in hardware sets

A. ACCEPTABLE MANUFACTURERS

1.	Hinges:	Ives*, Hager, McKinney
2.	Bolts:	Ives*, Hager, McKinney

3.	Locks:	Schlage*, Sargent, Best
4.	Cylinders:	Schlage, Sargent, Best*
5.	Auxiliary locks:	Schlage*, Sargent, Best
6.	Exit devices:	Von Duprin, Sargent
7.	Closers:	LCN*, Sargent
8.	Auto operators:	LCN (No substitute)
9.	Door trim and protection:	Ives*, Hager, Rockwood, McKinney
10.	Overhead stops:	Glynn Johnson*, ABH, Rixson
11.	Wall stops:	Ives*, Hager, Rockwood
12.	Thresholds and weatherstrip:	Zero*, National Guard, Pemko
13.	Door position switches:	Schlage Electronics*, Sentrol
14.	Electric strikes:	Von Duprin*, HES
15.	Power supplies:	Von Duprin*, Securitron
16.	Actuators and accessories:	LCN, MS Sedco, WIKK*
17.	Software:	Keyscan Aurora (No substitute)
18.	Access control:	Keyscan (No substitute)
19.	Proximity reader:	Keyscan (No substitute)
20.	Credentials:	Keyscan (No substitute)

B. SUBSTITUTIONS: No substitutions from approved manufacturers listed above.

2.02 MATERIALS

A. SCREWS AND FASTENERS:
1. Provide manufacturer's recommended fasteners for application and door and frame material.
2. Provide sex nut bolts for doors not specified with reinforcement or blocking.
3. Thresholds: Stainless steel machine screws with lead anchors.
4. Exposed fasteners shall match hardware finish.

B. HINGES:
1. Butt Hinges: Full mortise, 5 knuckle, ball bearing
   a. Height: 4 inches up to 36 inch wide door, 4.5 inches over 36 inches wide.
   b. Width: 4 inch typical. Where existing wood trim does not allow for 4 inch, size hinge to minimally clear trim.
   c. Quantity:
      1) 3 hinges up to 90 inches
      2) 1 additional hinge for every 30 inches or fraction thereof over 90 inches.
   d. Exterior: Standard weight stainless steel with non-removable stainless steel pin.
   e. Interior: Standard weight with steel base material.
      1) Non-removable pin at outswinging doors with locking trim.
      2) Base material shall be stainless steel in humid areas such as kitchen areas, restrooms, shower areas, locker rooms.

C. DOOR BOLTS:
1. Flush Bolts: Type as specified in hardware sets for door material and fire rating.
   a. Manual flush bolt: 1/2 inch bolt head with 3/4 inch bolt throw, UL listed, top and bottom bolt set.
      1) Hager 282D
      2) Ives FB458
      3) McKinney FB01M

2. Dust proof strikes:
   a. Provide at pairs of doors with bottom flush bolts.
   b. Manufacturers and model numbers:
      1) Ives DP2
      2) Hager 280X

3) McKinney DPS3

D. LOCKS & LATCHES:
1. Acceptable Manufacturer:
   a. TBD – match existing.
2. Bored locks: ANSI A156.2, Grade 1.
   a. Comply with UL10C and UBC7-2 positive pressure requirements.
   b. Backset: 2-3/4 inches.
   c. Strike: 4-7/8 inch ANSI strike with curved lip sized to minimally clear trim. 7/8” strike at paired openings with overlapping astragals. Include dust box.
   d. Lock trim: Equal to Schlage Sparta.
   e. Functions as noted in hardware sets.
   f. Manufacturers and model numbers:
      1) Schlage ND series
      2) No substitute

3. Mortise locks: ANSI A153.13, Series 1000, Grade 1.
   a. Comply with UL10C and UBC7-2 positive pressure requirements.
   b. Backset: 2-3/4 inches.
   c. Strike: 4-7/8 inch ANSI strike with curved lip sized to minimally clear trim. 7/8” strike at paired openings with overlapping astragals. Include dust box.
   d. Lock trim: Equal to Schlage 17A
   e. Functions as noted in hardware sets.
   f. Throw: 3/4 inch latchbolt throw.
   g. Thumb turns: ADA thumb turns shall be used at all locksets with thumb turns.
   h. Manufacturers and model numbers:
      1) Schlage L9000
      2) No substitute

4. Auxiliary locks:
   a. Bored deadbolts: Grade 1.
      1) Backset: 2-3/4 inch.
      2) Throw: 1 inch, hardened steel.
      3) Strike: 4-7/8 inch ANSI strike.
      4) Manufacturers and model numbers:
         a) Schlage B600
         b) No substitute

5. Cylinders:
   a. Finish to match locks and exit devices.
   b. Seven pin small format interchangeable core (SFIC).
   c. Provide blocking rings, trim rings, cams and spacers as required for proper operation.
   d. Provide cylinders for all hardware components capable of being locked. Including but not limited to locks, exit devices, mullions, key switches and overhead doors with locking functions.
   e. Key material: nickel silver.
   f. Furnish cylinder housings and cores separately.

E. EXIT DEVICES
1. Grade 1.
2. Fire exit devices shall be UL labeled at fire assemblies, UL listed for panic at non-rated openings.
3. Electrified devices to be UL approved for Class II circuit applications.
4. Provide center case to function with door stile width specified.
5. Provide glazing shim kits, extended rods and accessories to ensure properly functioning opening.
6. Exit device options and functions as specified in hardware sets.

7. Size exit devices for height and width of door.
8. Levers: match locksets except where vandal resistant trim or optional pulls are scheduled in sets.
9. Mullions: Keyed removable.
10. Manufacturers and model numbers:
    a. Von Duprin 98/99 series
    b. No substitute

F. DOOR CLOSERS:
1. ANSI A156.4 grade 1, cast aluminum cylinder with forged steel arm.
2. Opening pressure: Interior doors 5 lb., exterior and labeled fire doors minimum required to achieve proper closing of door.
3. Closer shall have adjustment screws for latch speed, general speed and back check. Pressure relief valves not permitted.
4. Refer to frame and door details and provide required brackets, drop plates, spacers, supports, special templates and other accessories to ensure proper functioning of closer for application.

5. Manufacturers and model numbers:
    a. LCN 1450 series
    b. No substitute

G. DOOR CLOSERS:
1. ANSI A156.4 grade 1, cast iron cylinder with forged steel arm.
2. Opening pressure: Interior doors 5 lb., exterior and labeled fire doors minimum required to achieve proper closing of door.
3. Closer shall have adjustment screws for latch speed, general speed and back check. Pressure relief valves not permitted.
4. Refer to frame and door details and provide required brackets, drop plates, spacers, supports, special templates and other accessories to ensure proper functioning of closer for application.
5. Manufacturers and model numbers:
    a. LCN 4040XP series
    b. No substitute

H. AUTOMATIC OPERATORS AND ACCESSORIES:
1. Low Energy ADA Special Closers
    a. Where “Low Energy Power Operated Door” as defined by ANSI Standard A156.19 is indicated for doors required to be accessible to the disabled, provide electrically powered operators complying with the ADA requirements for opening force and time to close standards.
    b. Full closing force shall be provided when the power or assist cycle ends.
    c. Modular design, adjustments easily accessible from the front, UL listed for use on labeled doors.
    d. Shall have “Second Chance” function to accommodate momentary resistance, “Breakaway” function in the electronically controlled clutch, “Soft Start” motor control function and “Maintain Hold-Open Switch” to hold the door open at 90 degree.
    e. Shall have built in 12V and 24V power supply for actuators, card readers, electric strikes and magnetic door locks, inputs for both swing and stop side sensors and available to accept either 120VAC or 220VAC input power. All wiring connections between operator modules made by easy-to-handle electrical connectors. Shall comply with both UL and NEC requirements for Class 1 and Class 2 wiring by providing separate conduits for each.
    f. Shall have seven independent electronic adjustments to tailor the operator for specific site conditions. Opening speed, holding force at 90 deg., sequential trigger and time delay, hold-open time at 90 deg., opening force, clutch “breakaway” force setting, electric strike trigger and time delay.
    g. Shall have separate and independent adjustments for back check, main speed and latch speed.
    h. Furnish actuators and other controls as shown in Hardware Sets.
    i. Manufacturers:
        1) LCN; an Allegion Company, 4600 series (LCN).
        2) No substitute

2. Accessories:
   a. Stainless steel actuators, hard wired, square for mounting in single or double gang electrical boxes. Basis of design: WIKK S-4x4-3
   b. Actuators shall be hardwired.

I. DOOR TRIM
1. Push/Pulls
   a. Stainless steel pulls and push plates, sized as specified in hardware sets.
   b. Manufacturer's standard mounting for straight pulls. Offset pulls shall have heavy duty mounting.

J. PROTECTION PLATES: .050 Stainless steel, screw applied, countersunk for screws, beveled four edges.
1. Kick plates: 8 inches x 2 inches less door width at singles, 1 inch less door width at pairs.
2. Mop plates: 4 inches x 2 inches less door width at singles, 1 inch less door width at pairs.
3. Where bottom rail of door will not allow specified heights, supply height equal to bottom rail less 1 inch.
4. Armor plates: 34 inches x 2 inches less door width at singles, 1 inch less door width at pairs.
   A. UL listing: Armor plates on fire rated openings shall have embossed UL listing and be adhered per the door manufacturer's requirements and testing. If door manufacturer is approved for both screw applied and adhesive applied protection plates, fastening method shall be screw applied.

K. DOOR STOPS AND HOLDERS:
1. Wall stops:
   a. Cast with convex bumper. Concealed tamper-proof mounting.
   b. Substitute concave bumper for cylindrical locks with pushbuttons.
      1) Ives WS406/407
      2) Hager 232W or 236W (as needed)
      3) Rockwood 406 or 409 (as needed)

2. Floor stops:
   a. Interior use: Heavy duty cast dome stop. Provide risers as needed for floor conditions.
      1) Ives FS438
      2) Hager 241F
      3) Rockwood 441

   b. Exterior use: Heavy duty cast construction.
      1) Ives FS444
      2) Hager 267F
      3) Rockwood 471

3. Overhead stops and holders: Stainless steel, heavy duty. Concealed or surface mounted as specified in hardware sets, sized correctly for door width. Use overhead stop wherever a wall stop will not stop and protect the door thoroughly.
   a. Manufacturers and model numbers:
      1) Glynn-Johnson 90 and 100 series.
      2) ABH 9000 and 1000 series.
      3) Rixson 9 and 1 series.

L. THRESHOLDS AND GASKETING:
1. Thresholds:
   a. Saddle style threshold, 5 inches wide x full width of frame (brick to brick), cut and notched in the field by installer. Basis of design: Zero 655A.

2. Gasketing:
   a. Smoke seal:

1) Perimeter: One row of adhesive backed 3/8 inch x 1/4 inch smoke seal at all rated openings and additional non-rated doors as specified in sets. Basis of design: Zero 188S.

b. Perimeter gasketing: Solid 1/4 inch bar stock with replaceable silicone seal full width of head and jambs. Adjust backset on exit devices as required. Basis of design: Zero 429D

c. Astragals:
1) Brush astragal: Clear aluminum retainer with 3/8 nylon brush. Basis of design: Zero 8193D
2) Silicone astragal: Clear aluminum retainer with 1/4 inch silicone. Basis of design: Zero 8303D

M. ELECTRIFIED HARDWARE
1. Electric strikes:
a. 24 volt DC, grade 1 for type of hardware specified.
b. Fail secure unless noted otherwise in hardware sets.

2. Door position switches: Concealed magnetic switch for door material specified. Basis of design: Schlage Electronics 679-05 HM/WD.

3. Power supplies: Regulated 24 volt DC output.
a. Provide all required circuit boards, options and accessories required for proper function of opening per hardware specified and as directed by Owner/Architect.
b. Power supplies shared with multiple hardware sets shall have sufficient amperage to operate all connected hardware simultaneously.
c. Power supply must be approved for use by the manufacturer of the product it will integrate with.

4. Power transfers: Concealed transfer device, UL listed.
a. Manufacturers and model numbers:
1) Von Duprin EPT-10
2) Securitron CEPT-10

5. Access control: Keyscan Aurora Software Suite that includes Aurora software, photo badging, CCTV integration, Security Command, Visitor Management and DSC Alarm Integration modules. Two concurrent user licenses and software manual.
a. Proximity reader is Keyscan K-PROX3 contactless prox card reader with HID 125kHz. Use with Keyscan or HID 125kHz credentials.
b. System access control unit is Keyscan CA-8500E. Provide 12V 7AH battery backup.
c. Access control unit communications: Keyscan CIM with one board for each access control unit. Cat6 between boards.
d. Network communication board: Keyscan NETCOM2P.
e. Proximity credential: HID-T1345 HID proximity key tag Keyscan 36 bit weigand format.
f. Computer to host the access control software shall be provided by the Owner. Minimum computer specification and network requirements shall be provided to Owner by supplier.

N. MISCELLANEOUS HARDWARE:
1. Silencers: 2 per pair of doors, 3 for single doors. Use silencer compatible with frame material. Adhesive mounted silencers unacceptable.

2.03 FINISHES

A. Standard: Designations used in the Hardware Sets and elsewhere indicate hardware finishes complying with ANSI/BHMA A156.18, including coordination with traditional U.S. finishes indicated by certain manufacturers for their products.

B. Provide quality of finish, including thickness of plating or coating (if any), composition, hardness, and other qualities complying with manufacturer's standards, but in no case less than specified by referenced standards for the applicable units of hardware
C. Protect mechanical finishes on exposed surfaces from damage by applying a strippable, temporary protective covering before shipping.

2.04 KEYING

A. Seven pin small format interchangeable core (SFIC).

B. Keying shall be as directed by Owner.

C. Design system for 200 percent expansion.

D. Provide temporary construction core for each keyed hardware item at all exterior openings plus 5 additional cores for interior use. Provide two control keys and 10 operating keys. All temporary cores to be keyed alike. Return temporary cores to supplier upon installation of permanent cores.

E. Contractor to install permanent cores as directed by Owner.

F. Cut keys shall be delivered to Owner via registered mail.

G. No keys for permanent cores shall be given to Contractor without written permission from the Owner (including control keys).

H. Mark cores with door number and keyset symbol on a surface that is not visible once installed.

I. Stamp all keys “Do Not Duplicate.”

J. Key quantities:
1. 2 control keys
2. 2 grand master keys (if grand master system)
3. 2 master keys of each keyset
4. 2 change keys per core or cylinder

PART 3 – EXECUTION

3.01 EXAMINATION:

A. Examine conditions of doors and frames to ensure they are plumb and square, level and true before beginning hardware installation.

B. Ensure painting and staining of doors is complete and masonry work has been cleaned prior to hardware installation.

C. Do not begin hardware installation until all unsatisfactory conditions have been corrected.

3.02 INSTALLATION

A. Do not begin hardware installation without having a copy of the approved hardware schedule. One copy of the approved hardware schedule shall be given to each installer.

B. Install hardware per manufacturer's templates and instructions.

C. Installer to use DHI Installation Guide for Doors and Hardware as a reference guide during installation.

D. Install openings for maximum degree of opening allowable without damage to door or other surfaces. Minimum degree of opening shall be 90 degrees.

E. Fasteners:
   1. Use manufacturer's recommended means of fastening hardware for application.
   2. Use fasteners supplied by manufacturer per instruction manual.
   3. Exposed fasteners shall match finish hardware.
   4. Fasteners shall be installed straight and true. Crooked or stripped fasteners will be rejected.
   5. Continuous hinge screws shall be flush with continuous hinge.

F. Do not install surface mounted items until finishes have been completed on the substrates involved. Adjust and reinforce substrate as required for proper installation and operation.

G. Hardware mounting height: Mount hardware at locations below unless noted otherwise in hardware sets. All measurements above bottom of frame:
   1. Butt hinges: Manufacturer's standard.
   2. Lock: 40 inches to centerline of strike.
   3. Auxiliary lock: 32 inches to centerline of deadbolt.
   4. Hospital latches: 45 inches to centerline of paddle.
   5. Push plates: 50 inches to centerline of plate.
   6. Pulls: 43 inches to centerline of pull.
   7. Exit devices: Manufacturer's standard.
   8. Door viewers: 60 inches and 43 inches.

H. Clearances: In compliance with NFPA 80 for rated and non-rated openings.

I. Surface closers:
   1. Set for maximum degree of opening that conditions will allow without damage to door.
   2. Mount on non-corridor side except at exterior openings.
   3. Closers shall be last hardware item installed on opening.

J. Astragals: Do not notch astragal for lock strike. 7/8" strike shall be furnished for all pairs of doors with overlapping astragals.

K. Wall stops: Install blocking material in wall for all wall mounted stops and holders.
   1. Locks and exit devices: At lever height.
   2. Pulls: centerline of pull.

L. Thresholds: Set in a bed of silicone sealant and install with stainless steel machine screws and lead anchors as specified. Confirm flooring is level and door is properly undercut to utilize seal on threshold prior to installing threshold. Remove excess sealant.

M. Gasketing: Install without cuts or notching for continuous seal around door. Ensure no binding of door occurs.

N. Protection plates: Install with bottom edge of protection plate flush with bottom edge of door. Center plate on door width.

O. Access control installation: Provide all equipment, accessories, materials and wiring for a complete access control management system.
   1. Coordinate 120VAC to power supplies and access control units with electrical contractor.

2. Coordinate integration with automatic operators with aluminum door supplier.
3. Provide four (4) hours of Owner software training after project completion.
4. Provide initial software set-up, including all initial users, access groups, door schedules, credential assignment, opening names and automatically generated email reports.
5. Coordinate installation with construction manager to eliminate project delays and maintain a flow to the building construction.
6. Wire shall be tied off every 6 feet above ceilings with J-hooks or bridle rings.
7. Any exposed wire chases shall be enclosed in conduit or metallic raceway approved by the Architect.
8. All wall penetrations shall be sleeved with conduit and fire stopped.

3.03 FIELD QUALITY CONTROL

A. Verify doors are installed per NFPA 80 requirements.
B. Verify doors open and close freely and latch completely where latching hardware is specified.
C. Test all hardware tied to fire alarm to verify proper functioning and release in event of fire alarm.
D. Repair or replace defective or malfunctioning items.

3.04 ADJUSTING AND CLEANING

A. Adjust hardware as needed to ensure consistent proper operation and latching.
B. After HVAC system has been tested and is fully operational, readjust hardware as required to ensure consistent operation and latching.
C. Clean all exposed hardware per manufacturer's instructions.
D. Remove all protective material and plastic for substantial completion.

3.05 PROTECTION

A. Remove hardware before making modifications to doors and frames.
B. Cover exposed hardware with plastic or kraft paper to avoid damage and abuse prior to substantial completion.

3.06 HARDWARE SCHEDULE

A. Finish hardware supplier shall meet the requirements of the specifications and hardware sets. Omission of an item in the hardware set does not preclude the supplier from providing the item if it is covered within the specifications.
B. Hardware Sets:

HARDWARE GROUP NO.: 01

For use on Door#(s):

G-X001	C-X102.1	G- X102.1	G-X102.2	C-X102.3	G-X107.1	G-X107.2	G-X108	G-X109.1
G-X109.2	G-X111	G-X112.1	G-X112.2	G- X112A	G-X114	G-X114A	G-X115.1	G-X115.2
C-X202	G-X202	G-X202A	G-X202B	G-X203	G-X204	G-X204A	G-X204B	G-X205.1
G-X205.2	G-X205.3	G-X206.1	G-X206.2	G-X206A	G-X206B	G-X207A	G-X207B	G-X208A
G-X209	G-X210.1	G-X210.2	G-X210A	G-X210B				

Provide each OPENING with the following:

ALL HARDWARE IS EXISTING TO REMAIN.

HARDWARE GROUP NO.: 02

For use on Door#(s):

G-X101.1 G-X101.2 G-X105.2 G- X106 G-X113

Provide each OPENING with the following:

QTY		DESCRIPTION	PART NUMBER	FINISH	MFR
1	EA	DEADBOLT	B660BDC	613	SCH
1	EA	PERMANENT CORE	IC-71 7-PIN	613	BES

BALANCE OF HARDWARE EXISTING TO REMAIN. VERIFY/COORDINATE PREPS ON EXISTING DOORS AND FRAMES. PROVIDE FIELD MODIFICATIONS AND/OR FILLERS TO EXISTING DOORS AND FRAMES AS NECESSARY TO ACCEPT NEW SPECIFIED HARDWARE.

HARDWARE GROUP NO.: 03

For use on Door#(s):

G-X103

Provide each OPENING with the following:

QTY		DESCRIPTION	PART NUMBER	FINISH	MFR
1	EA	STOREROOM LOCK	ND80BDC RHO	613	SCH
1	EA	PERMANENT CORE	IC-71 7-PIN	613	BES

BALANCE OF HARDWARE EXISTING TO REMAIN. VERIFY/COORDINATE PREPS ON EXISTING DOORS AND FRAMES. PROVIDE FIELD MODIFICATIONS AND/OR FILLERS TO EXISTING DOORS AND FRAMES AS NECESSARY TO ACCEPT NEW SPECIFIED HARDWARE.

HARDWARE GROUP NO.: 04

For use on Door#(s):

G-X105.1

Provide each OPENING with the following:

QTY		DESCRIPTION	PART NUMBER	FINISH	MFR
1	EA	OFFICE LOCK	L9050BCD 41N L583-363	613	SCH
1	EA	PERMANENT CORE	IC-71 7-PIN	613	BES

BALANCE OF HARDWARE EXISTING TO REMAIN. VERIFY/COORDINATE PREPS ON EXISTING DOORS AND FRAMES. PROVIDE FIELD MODIFICATIONS AND/OR FILLERS TO EXISTING DOORS AND FRAMES AS NECESSARY TO ACCEPT NEW SPECIFIED HARDWARE.

HARDWARE GROUP NO.: 05

For use on Door#(s):

G-X208

Provide each OPENING with the following:

QTY		DESCRIPTION	PART NUMBER	FINISH	MFR
1	EA	STOREROOM LOCK	ND80BDC RHO	613	SCH
1	EA	PERMANENT CORE	IC-71 7-PIN	613	BES
1	EA	ELECTRIC STRIKE	6212WF FSE	613	VON
1	EA	SURFACE CLOSER	1450 RW/PA FC	695	LCN
1	EA	CREDENTIAL READER	BY SECURITY CONTRACTOR		
1	EA	POWER SUPPLY	PS902 120/240 VAC	LGR	VON

BALANCE OF HARDWARE EXISTING TO REMAIN. VERIFY/COORDINATE PREPS ON EXISTING DOORS AND FRAMES. PROVIDE FIELD MODIFICATIONS AND/OR FILLERS TO EXISTING DOORS AND FRAMES AS NECESSARY TO ACCEPT NEW SPECIFIED HARDWARE.

MODE OF OPERATION:
DOOR NORMALLY CLOSED, LATCHED, AND LOCKED. PRESENTING A VALID CREDENTIAL TO THE CARD READER WILL MOMENTARILY RELEASE THE ELECTRIC STRIKE ALLOWING ACCESS. DOOR SHALL REMAIN LOCKED UPON LOSS OF POWER. FREE EGRESS AVAILABLE AT ALL TIMES.

HARDWARE GROUP NO.: 06

For use on Door#(s):

G-109.3

Provide each OPENING with the following:

QTY		DESCRIPTION	PART NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 4.0 X 4.0 (NRP)	613	IVE
1	EA	POWER TRANSFER	EPT 10	SP313	VON
1	EA	STOREROOM LOCK	ND80EUBDC RHO 24V FSE	613	SCH
1	EA	PERMANENT CORE	IC-71 7-PIN	613	BES
1	EA	SURFACE CLOSER	1450 RW/PA FC	695	LCN
1	EA	WALL STOP	WS406/407CVX	US10B	IVE
1	EA	SILENCER	SR65	GRY	
1	EA	CREDENTIAL READER	BY SECURITY CONTRACTOR		
1	EA	POWER SUPPLY	PS902 120/240 VAC	LGR	VON

MODE OF OPERATION:
DOOR NORMALLY CLOSED, LATCHED, AND LOCKED. PRESENTING A VALID CREDENTIAL TO THE CARD READER WILL MOMENTARILY RELEASE THE LOCK LEVER ALLOWING ACCESS. DOOR SHALL REMAIN LOCKED UPON LOSS OF POWER. FREE EGRESS AVAILABLE AT ALL TIMES.

HARDWARE GROUP NO.: 07

For use on Door#(s):

G-110.1

Provide each OPENING with the following:

QTY		DESCRIPTION	PART NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 4.0 X 4.0, NRP AS REQ'D	640	IVE
1	EA	POWER TRANSFER	EPT 10	SP313	VON
1	EA	PANIC HARDWARE	RX-QEL-99-L-NL-06 24 VDC	313AN	SCH
1	EA	RIM CYLINDER	80-116	613	SCH
1	EA	PERMANENT CORE	IC-71 7-PIN	613	BES
1	EA	OVERHEAD STOP	100S	US10B	GLY
1	EA	SURF. AUTO OPERATOR	4642 WMS 120 VAC FCM	695	LCN
2	EA	ACTUATOR	S-4X4-3	US10B	WIK
2	EA	MOUNTING BOX	M-4X4-SURF	BLK	WIK
1	EA	WEATHERSTRIPPING	BY DOOR/FRAME MANUFACTURER		B/O

1	EA	DOOR SWEEP	8198D	DK BRZ	ZER
1	EA	THRESHOLD, 1/2”	655A	ALUM	ZER
1	EA	CREDENTIAL READER	BY SECURITY CONTRACTOR		
1	EA	POWER SUPPLY	PS902 900-2RS 120/240 VAC	LGR	VON

MODE OF OPERATION:
DOOR NORMALLY CLOSED, LATCHED, AND LOCKED. PRESENTING VALID CREDENTIAL TO THE CARD READER WILL MOMENTARILY RETRACTS THE PANIC DEVICE LATCH, MOMENTARILY ENABLES EXTERIOR ACTUATOR BUTTON, AND ALLOW ACCESS. INTERIOR ACTUATOR ENABLED AT ALL TIMES. PUSHING EITHER ENABLED ACTUATOR BUTTON SIGNALS AUTOMATIC OPERATOR TO MOMENTARILY OPEN DOOR. PANIC DEVICE LATCH ALSO CAPABLE OF BEING ELECTRONICALLY DOGGED DOWN (I.E. PUSH/PULL MODE) AS DESIGNATED BY ACCESS CONTROL SYSTEM SCHEDULE. DOOR SHALL REMAIN LOCKED AND LATCHED UPON LOSS OF POWER. FREE EGRESS AVAILABLE AT ALL TIMES.

HARDWARE GROUP NO.: 08

For use on Door#(s):

G-110.2

Provide each OPENING with the following:

QTY		DESCRIPTION	PART NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 4.0 X 4.0 (NRP)	640	IVE
1	EA	POWER TRANSFER	EPT 10	SP313	VON
1	EA	STOREROOM LOCK	ND80EUBDC RHO 24V FSE	613	SCH
1	EA	PERMANENT CORE	IC-71 7-PIN	613	BES
1	EA	SURFACE CLOSER	4040XP-SCUSH	695	LCN

1	EA	DROP PLATE	4040XP-18PA	695	LCN
1	EA	CUSH SUPPORT SHOE	4040XP-30	695	LCN
1	EA	BLADE STOP SPACER	4040XP-61	695	LCN
1	EA	WEATHERSTRIPPING	BY DOOR/FRAME MANUFACTURER		B/O
1	EA	DOOR SWEEP	8198D	DK BRZ	ZER
1	EA	THRESHOLD, 1/2”	655A	ALUM	ZER
1	EA	CREDENTIAL READER	BY SECURITY CONTRACTOR		
1	EA	POWER SUPPLY	PS902 120/240 VAC	LGR	VON

MODE OF OPERATION:
DOOR NORMALLY CLOSED, LATCHED, AND LOCKED. PRESENTING A VALID CREDENTIAL TO THE CARD READER WILL MOMENTARILY RELEASE THE LOCK LEVER ALLOWING ACCESS. DOOR SHALL REMAIN LOCKED UPON LOSS OF POWER. FREE EGRESS AVAILABLE AT ALL TIMES.

HARDWARE GROUP NO.: 09

For use on Door#(s):

C-X100

Provide each OPENING with the following:

QTY		DESCRIPTION	PART NUMBER	FINISH	MFR
1	EA	KEYPAD LOCK	CO-100-CY-70-KP-RHO-BDC	643E	SCE
1	EA	PERMANENT CORE	IC-71 7-PIN	613	BES
1	EA	SURFACE CLOSER	4040XP-SCUSH	695	LCN

BALANCE OF HARDWARE EXISTING TO REMAIN. VERIFY/COORDINATE PREPS ON EXISTING DOORS AND FRAMES. PROVIDE FIELD MODIFICATIONS AND/OR FILLERS TO EXISTING DOORS AND FRAMES AS NECESSARY TO ACCEPT NEW SPECIFIED HARDWARE.

MODE OF OPERATION:
DOOR NORMALLY CLOSED, LATCHED, AND LOCKED. PRESENTING A VALID CODE AT KEYPAD WILL MOMENTARILY RELEASE LOCK LEVER ALLOWING ACCESS. FREE EGRESS AVAILABLE AT ALL TIMES.

HARDWARE GROUP NO.: 10

For use on Door#(s):

C-102.2

Provide each OPENING with the following:

QTY		DESCRIPTION	PART NUMBER	FINISH	MFR
6	EA	HINGE	5BB1 4.5 X 4.5 (NRP)	640	IVE
1	EA	FLUSH BOLT, MANUAL	FB458-12	US10B	IVE

1	EA	DUST PROOF STRIKE	DP2	US10B	IVE
1	EA	ENTRY LOCK	ND50BDC RHO	613	SCH
1	EA	PERMANENT CORE	IC-71 7-PIN	613	BES
2	EA	SURFACE CLOSER	4040XP-SCUSH ST-1595	695	LCN
1	EA	GASKETING	429D	DK BRZ	ZER
2	EA	DOOR SWEEP	8198D	DK BRZ	ZER
1	EA	THRESHOLD, 1/2”	655A	ALUM	ZER
1	EA	DRIP CAP	142D	DK BRZ	ZER

HARDWARE GROUP NO.: 11

For use on Door#(s):

C-103.1 X-103.2 C-110

Provide each OPENING with the following:

QTY		DESCRIPTION	PART NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 4.0 X 4.0 (NRP)	613	IVE
1	EA	STOREROOM LOCK	ND80BDC RHO	613	SCH
1	EA	PERMANENT CORE	IC-71 7-PIN	613	BES
1	EA	WALL STOP	WS406/407CVX	US10B	IVE
1	EA	SILENCER	SR65	GRY	

HARDWARE GROUP NO.: 12

For use on Door#(s):

C-104.1 C-109

Provide each OPENING with the following:

QTY		DESCRIPTION	PART NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 4.0 X 4.0 (NRP)	613	IVE
1	EA	PASSAGE SET	ND10S RHO	613	SCH
1	EA	WALL STOP	WS406/407CVX	US10B	IVE
1	EA	SILENCER	SR65		

HARDWARE GROUP NO.: 13

For use on Door#(s):

C-104.2 C-107

Provide each OPENING with the following:

QTY		DESCRIPTION	PART NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 4.0 X 4.0 (NRP)	640	IVE
1	EA	KEYPAD LOCK	CO-100-CY-70-KP-RHO-BDC	643E	SCE
1	EA	PERMANENT CORE	IC-71 7-PIN	613	BES
1	EA	SURFACE CLOSER	4040XP-SCUSH ST-1595	695	LCN
1	EA	WEATHRSTRIPPING	429D	DK BRZ	ZER
1	EA	DOOR SWEEP	8198D	DK BRZ	ZER
1	EA	THRESHOLD, 1/2”	655A	ALUM	ZER
1	EA	RAIN DRIP	142A	DK BRZ	ZER

MODE OF OPERATION:
DOOR NORMALLY CLOSED, LATCHED, AND LOCKED. PRESENTING A VALID CODE AT KEYPAD WILL MOMENTARILY RELEASE LOCK LEVER ALLOWING ACCESS. FREE EGRESS AVAILABLE AT ALL TIMES.

HARDWARE GROUP NO.: 14

For use on Door#(s):

C-108 C-203

Provide each OPENING with the following:

QTY		DESCRIPTION	PART NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 4.0 X 4.0 (NRP)	613	IVE
1	EA	PRIVACY SET	ND40S RHO OS-OCC	613	SCH
1	EA	WALL STOP	WS406/407CVX	US10B	IVE
1	EA	SILENCER	SR65		

HARDWARE GROUP NO.: 15

For use on Door#(s):

C-206

Provide each OPENING with the following:

QTY		DESCRIPTION	PART NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 4.0 X 4.0 (NRP)	613	IVE
1	EA	CLASSROOM LOCK	ND70BDC RHO	613	SCH
1	EA	PERMANENT CORE	IC-71 7-PIN	613	BES
1	EA	WALL STOP	WS406/407CVX	US10B	IVE
1	EA	SILENCER	SR65	GRY	

HARDWARE GROUP NO.: 16

For use on Door#(s):

Provide each OPENING with the following:

QTY		DESCRIPTION	PART NUMBER	FINISH	MFR
1	EA	CLASSROOM LOCK	ND70BDC RHO	613	SCH
1	EA	PERMANENT CORE	IC-71 7-PIN	613	BES

BALANCE OF HARDWARE EXISTING TO REMAIN. VERIFY/COORDINATE PREPS ON EXISTING DOORS AND FRAMES. PROVIDE FIELD MODIFICATIONS AND/OR FILLERS TO EXISTING DOORS AND FRAMES AS NECESSARY TO ACCEPT NEW SPECIFIED HARDWARE.

HARDWARE GROUP NO.: 17

For use on Door#(s):

C-X201.2

Provide each OPENING with the following:

QTY	DESCRIPTION	PART NUMBER	FINISH	MFR
TBD	*TBD*	*TBD*	*TBD*	*TBD*

BALANCE OF HARDWARE EXISTING TO REMAIN. VERIFY/COORDINATE PREPS ON EXISTING DOORS AND FRAMES. PROVIDE FIELD MODIFICATIONS AND/OR FILLERS TO EXISTING DOORS AND FRAMES AS NECESSARY TO ACCEPT NEW SPECIFIED HARDWARE.

HARDWARE GROUP NO.: 18

For use on Door#(s):

C-X200

Provide each OPENING with the following:

DOOR IS TO BE NAILED SHUT - NO HARDWARE REQUIRED.

HARDWARE GROUP NO.: 19

For use on Door#(s):

C-105

Provide each OPENING with the following:

CASED OPENING - NO HARDWARE REQUIRED.

HARDWARE GROUP NO.: 20

For use on Door#(s):

C-106, C204

Provide each OPENING with the following:

ELEVATOR DOORS – ALL SUPPLIED BY ELEVATOR PACKAGE SUPPLIER.

END OF SECTION