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ADDENDUM NO. 3 (BP 2)

DATE OF ISSUANCE:	**March 1, 2024**
PROJECT:	**Portage Public Schools Bid Package 2: District Wide Access Control** **8107 Mustang Drive** **Portage, MI 49002**
OWNER:	**Portage Public Schools**
ARCHITECT'S PROJECT NO.:	**23-214**
ORIGINAL BID ISSUE DATE:	**February 16, 2024**

SCOPE OF WORK

This Addendum includes changes to, or clarifications of, the original Bidding Documents and any previously issued addenda, and shall be included in the Bid. All of these Addendum items form a part of the Contract Documents. The Bidder shall acknowledge receipt of this Addendum in the appropriate space provided on the Bid Form. Failure to do so may result in disqualification of the Bid.

DOCUMENTS INCLUDED IN THIS ADDENDUM

This Addendum includes **two (2)** pages of text and the following documents:

- Bidding Documents: **None**
- Contract Conditions: **None**
- **Pre-Bid RFI(s)**
- Specification Sections: **08 1416, 08 7100**
- Drawings: **PCHS A101, PNHS A101, PWMS A101**

CHANGES TO PREVIOUSLY ISSUED ADDENDA

None.

CHANGES TO BIDDING REQUIREMENTS

None.

CHANGES TO CONTRACT CONDITIONS

None.

CHANGES TO SPECIFICATIONS

ADD-3 Item No. S-1 - Flush Wood Door Specification Added

Refer to Specification Section: 08 1416 – Flush Wood Doors

Add the attached new specification section. This specification applies to the SR0 door for Alternate No. 1 at Northern High School.

ADD-3 Item No. S-2 - Door Hardware

Refer to Specification Section: 08 7100 – Door Hardware

Added Hardware Sets

Changed noted in Addendum have been set to standard text and strikeouts removed. Other changes noted.

Added Items **Black Bold**
Revised Items **Red Bold**
Deleted Items ~~Red Strikeout~~

CHANGES TO DRAWINGS

PCHS – Central High School, PNHS – Northern High School, PWMS – West Middle School

ADD-3 Item No. D-1 - Door Hardware

Refer to Sheet(s): PCHS A101, PNHS A101, PWMS A101

Added hardware sets to door schedules.

ADD-3 Item No. D-2 - Frame Material

Refer to Sheet(s): PNHS A101

Added material callout for BL1 and BL2

END OF ADDENDUM.

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Kayla Mielke <kayla.mielke@towerpinkster.com>

Fwd: Request for Information - Portage PS District Wide Access Control Upgrades

5 messages

Douglas L. Milburn <dmilburn@towerpinkster.com> Tue, Feb 27, 2024 at 2:09 PM
To: Andres Carmona <acarmona@towerpinkster.com>, Michele Rossio <mrossio@towerpinkster.com>, Nathan Withers <nathan.withers@towerpinkster.com>
Cc: Kayla Mielke <kayla.mielke@towerpinkster.com>

FYI

Douglas L. Milburn
AIA, NCARB
Project Manager

o 269.492.6724
c 269.350.0942

---------- Forwarded message ---------
From: **Tom Roberts** <troberts@samorman.com>
Date: Tue, Feb 27, 2024 at 1:45 PM
Subject: Request for Information - Portage PS District Wide Access Control Upgrades
To: dmilburn@towerpinkster.com <dmilburn@towerpinkster.com>

Date: February 27, 2024

Project Name: Portage Public Schools District Wide Access Control Upgrades

At this time with so much missing information, it is unlikely that we will be able to submit a quote unless all of the items below are fully answered by Thursday February 29th.

FRP Skin Doors are specified in section 08 4113, Aluminum Frame Entrances and Storefronts, para. 2.4.B

<u>Central High School</u>

- FRP Doors/Aluminum Frames at Four (4) Openings will be by others.
- No Specifications provided for FRP Doors.
- ***Complete Hardware Sets are required ASAP***.

Section 08 1416 Flush Wood Doors will be added in Addendum No. 3

<u>Northern High School</u>

- Opening SRO is noted on Door Schedule as Wood. ***No Wood Door Specifications provided. Full Specifications are required.*** Note that this Opening is an Alternate.
- Aluminum Doors/Aluminum Frames at Three (3) Openings will be by others.
- ***Complete Hardware Sets are required ASAP.***
- ***Please clarify Material (i.e. Hollow Metal, Aluminum, etc.) for Borrowed Lite 1 and Borrowed Lite 2.***

HM Frames - refer to Addendum 3

<u>Moorsbridge Elementary School</u>

- No Work within our Scope

West Middle School

- Six (6) Hollow Metal Doors and Frames.
- ***Complete Hardware Sets are required ASAP.***

Section 08 7100 will be updated in Addendum No. 3, along with associated drawings

We cannot proceed without clarification on each point stated above. I will need response from you at your very earliest convenience in order to meet your Bid Date.

Thank you!

S.A. Morman & Co.

Tom Roberts

4510 Commercial Avenue

Portage, MI 49002

269-383-0500 x1586 (direct)

troberts@samorman.com

SECTION 08 1416 - FLUSH WOOD DOORS

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Five-ply flush wood veneer-faced doors for transparent finish.
2. Factory finishing flush wood doors.
3. Factory fitting flush wood doors to frames and factory machining for hardware.

1.2 ACTION SUBMITTALS

A. Product Data: For each type of product, including the following:

1. Door core materials and construction.
2. Door edge construction
3. Door face type and characteristics.
4. Door trim for openings.
5. Door frame construction.
6. Factory-machining criteria.
7. Factory-finishing specifications.

B. Shop Drawings: Indicate location, size, and hand of each door; elevation of each type of door; construction details not covered in Product Data; and the following:

1. Door schedule indicating door location, type, size, fire protection rating, and swing.
2. Door elevations, dimension and locations of hardware, lite and louver cutouts, and glazing thicknesses.
3. Details of frame for each frame type, including dimensions and profile.
4. Details of electrical raceway and preparation for electrified hardware, access control systems, and security systems.
5. Dimensions and locations of blocking for hardware attachment.
6. Dimensions and locations of mortises and holes for hardware.
7. Clearances and undercuts.
8. Requirements for veneer matching.
9. Doors to be factory finished and application requirements.

C. Samples for Initial Selection: For factory-finished doors.

D. Samples for Verification:

1. Factory finishes applied to actual door face materials, approximately 8 by 10 inches, for each material and finish. For each wood species and transparent finish, provide set of three Samples showing typical range of color and grain to be expected in finished Work.

1.3 DELIVERY, STORAGE, AND HANDLING

A. Comply with requirements of referenced standard and manufacturer's written instructions.

B. Package doors individually in cardboard cartons, and wrap bundles of doors in plastic sheeting.

1.4 FIELD CONDITIONS

A. Environmental Limitations: Do not deliver or install doors until spaces are enclosed and weathertight, wet-work in spaces is complete and dry, and HVAC system is operating and maintaining temperature and relative humidity at levels designed for building occupants for the remainder of construction period.

1.5 WARRANTY

A. Special Warranty: Manufacturer agrees to repair or replace doors that fail in materials or workmanship within specified warranty period.

1. Failures include, but are not limited to, the following:

a. Delamination of veneer.
b. Warping (bow, cup, or twist) more than 1/4 inch in a 42-by-84-inch section.
c. Telegraphing of core construction in face veneers exceeding 0.01 inch in a 3-inch span.

2. Warranty shall also include installation and finishing that may be required due to repair or replacement of defective doors.
3. Warranty Period for Solid-Core Interior Doors: Life of installation.

PART 2 - PRODUCTS

2.1 FLUSH WOOD DOORS, GENERAL

A. Quality Standard: In addition to requirements specified, comply with ANSI/WDMA I.S. 1A.

2.2 SOLID-CORE FIVE-PLY FLUSH WOOD VENEER-FACED DOORS FOR TRANSPARENT FINISH

A. Interior Doors:

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

a. Eggers Industries.
b. Masonite Architectural.
c. Oshkosh Door Company.
d. VT Industries Inc.

2. Performance Grade: ANSI/WDMA I.S. 1A Extra Heavy Duty.
3. Door Thickness: 1-3/4 inches unless indicated otherwise.
4. ANSI/WDMA I.S. 1A Grade: Premium.

5. Faces: Single-ply wood veneer not less than 1/50 inch thick.

    a. Species: Select white birch, verify. Match newer existing doors.
    b. Veneer Face Grade: A.
    c. Cut: Rotary cut.
    d. Match between Veneer Leaves: Book match.
    e. Assembly of Veneer Leaves on Door Faces: Running match.
    f. Pair and Set Match: Provide for doors hung in same opening or separated only by mullions.

6. Exposed Vertical and Top Edges: Applied wood edges of same species as faces and covering edges of crossbands - Architectural Woodwork Standards edge Type D.
7. Core for Non-Fire-Rated Doors:

    a. ANSI A208.1, Grade LD-2 particleboard.

        1) Blocking: Provide wood blocking in particleboard-core doors as follows:

            a) 5-inch top-rail blocking, in doors indicated to have closers.
            b) 5-inch bottom-rail blocking, in exterior doors and doors indicated to have kick, mop, or armor plates.

        2) Provide doors with WDMA I.S. 10 structural-composite-lumber cores instead of particleboard cores for doors scheduled to receive exit devices in Section 08 7100 "Door Hardware."

    b. WDMA I.S. 10 structural composite lumber.

        1) Screw Withdrawal, Door Face: 550 lbf.
        2) Screw Withdrawal, Vertical Door Edge: 550 lbf.

8. Construction: Five plies, hot-pressed bonded (vertical and horizontal edging is bonded to core), with entire unit abrasive planed before veneering.
9. Adhesives: Type I in accordance with WDMA T.M. 6.

2.3 FABRICATION

A. Factory fit doors to suit frame-opening sizes indicated.

1. Comply with clearance requirements of referenced quality standard for fitting unless otherwise indicated.
2. Comply with NFPA 80 requirements for fire-rated doors.

B. Factory machine doors for hardware that is not surface applied.

1. Locate hardware to comply with DHI-WDHS-3.
2. Comply with final hardware schedules, door frame Shop Drawings, BHMA-156.115-W, and hardware templates.
3. Coordinate with hardware mortises in metal frames, to verify dimensions and alignment before factory machining.
4. For doors scheduled to receive electrified locksets, provide factory-installed raceway and wiring to accommodate specified hardware.

2.4 FACTORY FINISHING

A. Comply with referenced quality standard for factory finishing.

1. Complete fabrication, including fitting doors for openings and machining for hardware that is not surface applied, before finishing.
2. Finish faces, all four edges, edges of cutouts, and mortises.
3. Stains and fillers may be omitted on top and bottom edges, edges of cutouts, and mortises.

B. Factory finish doors.

C. Transparent Finish:

1. WDMA I.S. 1A Grade: Premium.
2. Finish: WDMA I.S. 1A TR-6 Catalyzed Polyurethane.
3. Staining: As selected by Architect from manufacturer's full range. Match newer existing doors, similar to Library hallway entrance doors.
4. Sheen: Satin.

PART 3 - EXECUTION

3.1 INSTALLATION

A. Hardware: For installation, see Section 08 7100 "Door Hardware."

B. Install doors to comply with manufacturer's written instructions and referenced quality standard, and as indicated.

C. Factory-Fitted Doors: Align in frames for uniform clearance at each edge.

D. Factory-Finished Doors: Restore finish before installation if fitting or machining is required at Project site.

END OF SECTION 08 1416

SECTION 08 7100 - DOOR HARDWARE

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

A. This Section includes commercial door hardware for the following:

1. Swinging doors.
2. Other doors to the extent indicated.

B. Door hardware includes, but is not necessarily limited to, the following:

1. Mechanical door hardware.
2. Electromechanical door hardware.
3. Automatic operators.
4. Cylinders specified for doors in other sections.

C. Related Sections:

1. Division 08 Section “Hollow Metal Doors and Frames”.
2. Division 08 Section “Aluminum-Framed Entrances and Storefronts”.
3. Division 28 Section “Access Control”, see Bid Package 1.

D. Codes and References: Comply with the version year adopted by the Authority Having Jurisdiction.

1. ANSI A117.1 - Accessible and Usable Buildings and Facilities.
2. ICC/IBC - International Building Code.
3. NFPA 70 - National Electrical Code.
4. NFPA 80 - Fire Doors and Windows.
5. NFPA 101 - Life Safety Code.
6. NFPA 105 - Installation of Smoke Door Assemblies.
7. UL/ULC and CSA C22.2 - Standards for Automatic Door Operators Used on Fire and Smoke Barrier Doors and Systems of Doors.
8. Michigan Building Code 2015, Local Amendments.

E. Standards: All hardware specified herein shall comply with the following industry standards as applicable. Any undated reference to a standard shall be interpreted as referring to the latest edition of that standard:

1. ANSI/BHMA Certified Product Standards - A156 Series.

2. UL10C - Positive Pressure Fire Tests of Door Assemblies.
3. ANSI/UL 294 - Access Control System Units.
4. UL 305 - Panic Hardware.
5. ANSI/UL 437- Key Locks.

1.3 SUBMITTALS

A. Product Data: Manufacturer's product data sheets including installation details, material descriptions, dimensions of individual components and profiles, operational descriptions and finishes.

B. Door Hardware Schedule: Prepared by or under the supervision of supplier, detailing, fabrication and assembly of door hardware, as well as procedures and diagrams. Coordinate the final Door Hardware Schedule with doors, frames, and related work to ensure proper size, thickness, hand, function, and finish of door hardware.

1. Format: Comply with scheduling sequence and vertical format in DHI's "Sequence and Format for the Hardware Schedule."
2. Organization: Organize the Door Hardware Schedule into door hardware sets indicating complete designations of every item required for each door or opening. Organize door hardware sets in same order as in the Door Hardware Sets at the end of Part 3. Submittals that do not follow the same format and order as the Door Hardware Sets will be rejected and subject to resubmission.
3. Content: Include the following information:
    a. Type, style, function, size, label, hand, and finish of each door hardware item.
    b. Manufacturer of each item.
    c. Fastenings and other pertinent information.
    d. Location of door hardware set, cross-referenced to Drawings, both on floor plans and in door and frame schedule.
    e. Explanation of abbreviations, symbols, and codes contained in schedule.
    f. Mounting locations for door hardware.
    g. Door and frame sizes and materials.
    h. Warranty information for each product.

4. Submittal Sequence: Submit the final Door Hardware Schedule at earliest possible date, particularly where approval of the Door Hardware Schedule must precede fabrication of other work that is critical in the Project construction schedule. Include Product Data, Samples, Shop Drawings of other work affected by door hardware, and other information essential to the coordinated review of the Door Hardware Schedule.

C. Shop Drawings: Details of electrified access control hardware indicating the following:

1. Wiring Diagrams: Upon receipt of approved schedules, submit detailed system wiring diagrams for power, signaling, monitoring, communication, and control of the access control system electrified hardware. Differentiate between manufacturer-installed and field-installed wiring. Include the following:

a. Elevation diagram of each unique access controlled opening showing location and interconnection of major system components with respect to their placement in the respective door openings.
b. Complete (risers, point-to-point) access control system block wiring diagrams.
c. Wiring instructions for each electronic component scheduled herein.

2. Electrical Coordination: Coordinate with related sections the voltages and wiring details required at electrically controlled and operated hardware openings.

D. Keying Schedule: After a keying meeting with the owner has taken place prepare a separate keying schedule detailing final instructions. Submit the keying schedule in electronic format. Include keying system explanation, door numbers, key set symbols, hardware set numbers and special instructions. Owner must approve submitted keying schedule prior to the ordering of permanent cylinders/cores.

E. Informational Submittals:

1. Product Test Reports: Indicating compliance with cycle testing requirements, based on evaluation of comprehensive tests performed by manufacturer and witnessed by a qualified independent testing agency.

F. Operating and Maintenance Manuals: Provide manufacturers operating and maintenance manuals for each item comprising the complete door hardware installation in quantity as required in Division 01, Closeout Procedures.

1.4 QUALITY ASSURANCE

A. Manufacturers Qualifications: Engage qualified manufacturers with a minimum 5 years of documented experience in producing hardware and equipment similar to that indicated for this Project and that have a proven record of successful in-service performance.

B. Certified Products: Where specified, products must maintain a current listing in the Builders Hardware Manufacturers Association (BHMA) Certified Products Directory (CPD).

C. Installer Qualifications: A minimum 3 years documented experience installing both standard and electrified door hardware similar in material, design, and extent to that indicated for this Project and whose work has resulted in construction with a record of successful in-service performance.

D. Door Hardware Supplier Qualifications: Experienced commercial door hardware distributors with a minimum 5 years documented experience supplying both mechanical and electromechanical hardware installations comparable in material, design, and extent to that indicated for this Project. Supplier recognized as a factory direct distributor by the manufacturers of the primary materials with a warehousing facility in Project's vicinity. Supplier to have on staff a certified Architectural Hardware Consultant (AHC) available during the course of the Work to consult with Contractor, Architect, and Owner concerning both standard and electromechanical door hardware and keying.

E. Automatic Operator Supplier Qualifications: Power operator products and accessories are required to be supplied and installed through the Norton Preferred Installer (NPI) program. Suppliers are to be factory trained, certified, and a direct purchaser of the specified power operators and be responsible for the installation and maintenance of the units and accessories indicated for the Project.

F. Source Limitations: Obtain each type and variety of door hardware specified in this section from a single source unless otherwise indicated.

1. Electrified modifications or enhancements made to a source manufacturer's product line by a secondary or third party source will not be accepted.
2. Provide electromechanical door hardware from the same manufacturer as mechanical door hardware, unless otherwise indicated.

G. Each unit to bear third party permanent label indicating compliance with the referenced testing standards.

H. Keying Conference: Conduct conference to comply with requirements in Division 01 Section "Project Meetings." Keying conference to incorporate the following criteria into the final keying schedule document:

1. Function of building, purpose of each area and degree of security required.
2. Plans for existing and future key system expansion.
3. Requirements for key control storage and software.
4. Installation of permanent keys, cylinder cores and software.
5. Address and requirements for delivery of keys.

I. Pre-Submittal Conference: Conduct coordination conference in compliance with requirements in Division 01 Section "Project Meetings" with attendance by representatives of Supplier(s), Installer(s), and Contractor(s) to review proper methods and the procedures for receiving, handling, and installing door hardware.

1. Prior to installation of door hardware, conduct a project specific training meeting to instruct the installing contractors' personnel on the proper installation and adjustment of their respective products. Product training to be attended by installers of door hardware (including electromechanical hardware) for aluminum, hollow metal and wood doors. Training will include the use of installation manuals, hardware schedules, templates and physical product samples as required.
2. Inspect and discuss electrical roughing-in, power supply connections, and other preparatory work performed by other trades.
3. Review sequence of operation narratives for each unique access controlled opening.
4. Review and finalize construction schedule and verify availability of materials.
5. Review the required inspecting, testing, commissioning, and demonstration procedures

J. At completion of installation, provide written documentation that components were applied according to manufacturer's instructions and recommendations and according to approved schedule.

1.5 DELIVERY, STORAGE, AND HANDLING

A. Inventory door hardware on receipt and provide secure lock-up and shelving for door hardware delivered to Project site. Do not store electronic access control hardware, software or accessories at Project site without prior authorization.

B. Tag each item or package separately with identification related to the final Door Hardware Schedule, and include basic installation instructions with each item or package.

C. Deliver, as applicable, permanent keys, cylinders, cores, access control credentials, software and related accessories directly to Owner via registered mail or overnight package service. Instructions for delivery to the Owner shall be established at the "Keying Conference".

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 standard and electrified hardware. Check Shop Drawings of other work to confirm that adequate provisions are made for locating and installing hardware to comply with indicated requirements.

B. Door and Frame Preparation: Doors and corresponding frames are to be prepared, reinforced and pre-wired (if applicable) to receive the installation of the specified electrified, monitoring, signaling and access control system hardware without additional in-field modifications.

1.7 WARRANTY

A. General Warranty: Reference Division 01, General Requirements. Special warranties specified in this Article shall not deprive Owner of other rights Owner may have under other provisions of the Contract Documents and shall be in addition to, and run concurrent with, other warranties made by Contractor under requirements of the Contract Documents.

B. Warranty Period: Written warranty, executed by manufacturer(s), agreeing to repair or replace components of standard and electrified door hardware that fails in materials or workmanship within specified warranty period after final acceptance by the Owner. Failures include, but are not limited to, the following:

1. Structural failures including excessive deflection, cracking, or breakage.
2. Faulty operation of the hardware.
3. Deterioration of metals, metal finishes, and other materials beyond normal weathering.
4. Electrical component defects and failures within the systems operation.

C. Warranty Period: Unless otherwise indicated, warranty shall be one year from date of Substantial Completion.

PART 2 - PRODUCTS

2.1 SCHEDULED DOOR HARDWARE

A. General: Provide door hardware for each door to comply with requirements in Door Hardware Sets and each referenced section that products are to be supplied under.

B. Designations: Requirements for quantity, item, size, finish or color, grade, function, and other distinctive qualities of each type of door hardware are indicated in the Door Hardware Sets at the end of Part 3. Products are identified by using door hardware designations, as follows:

1. Named Manufacturer's Products: Product designation and manufacturer are listed for each door hardware type required for the purpose of establishing requirements. Manufacturers' names are abbreviated in the Door Hardware Schedule.

C. Please note that ASSA ABLOY is transitioning the Yale Commercial brand to Arrow. This affects only the brand name; the products and product numbers will remain unchanged. The brand transition is expected to be complete in or about May of 2024, and products shipping after that time will be branded Arrow.

D. Substitutions: Requests for substitution and product approval for inclusive mechanical and electromechanical door hardware in compliance with the specifications must be submitted in writing and in accordance with the procedures and time frames outlined in Division 01, Substitution Procedures. Approval of requests is at the discretion of the architect, owner, and their designated consultants.

2.2 HANGING DEVICES

A. Hinges: ANSI/BHMA A156.1 butt hinges with number of hinge knuckles and other options as specified in the Door Hardware Sets.

1. Quantity: Provide the following hinge quantity:
   a. Two Hinges: For doors with heights up to 60 inchesThree Hinges: For doors with heights 61 to 90 inchesFour Hinges: For doors with heights 91 to 120 inchesFor doors with heights more than 120 inchesprovide 4 hinges, plus 1 hinge for every 30 inchesof door height greater than 120 inchesHinge Size: Provide the following, unless otherwise indicated, with hinge widths sized for door thickness and clearances required:
   a. Widths up to 3’0”: 4-1/2” standard or heavy weight as specified.
   b. Sizes from 3’1” to 4’0”: 5” standard or heavy weight as specified.

3. Hinge Weight and Base Material: Unless otherwise indicated, provide the following:
   a. Exterior Doors: Heavy weight, non-ferrous, ball bearing or oil impregnated bearing hinges unless Hardware Sets indicate standard weight.
   b. Interior Doors: Standard weight, steel, ball bearing or oil impregnated bearing hinges unless Hardware Sets indicate heavy weight.

4. Hinge Options: Comply with the following:

a. Non-removable Pins: With the exception of electric through wire hinges, provide set screw in hinge barrel that, when tightened into a groove in hinge pin, prevents removal of pin while door is closed; for the all out-swinging lockable doors.

5. Manufacturers:

a. McKinney (MK) - TA/T4A Series, 5 knuckle.

B. Continuous Geared Hinges: ANSI/BHMA A156.26 Grade 1-600 continuous geared hinge. with minimum 0.120-inch thick extruded 6063-T6 aluminum alloy hinge leaves and a minimum overall width of 4 inches. Hinges are non-handed, reversible and fabricated to template screw locations. Factory trim hinges to suit door height and prepare for electrical cut-outs.

1. Where specified, provide modular continuous geared hinges that ship in two or three pieces and form a single continuous hinge upon installation.
2. Manufacturers:.

a. Pemko (PE).

2.3 POWER TRANSFER DEVICES

A. Electrified Quick Connect Transfer Hinges: Provide electrified transfer hinges with Molex™ standardized plug connectors and sufficient number of concealed wires (up to 12) to accommodate the electrified functions specified in the Door Hardware Sets with a 1-year warranty. Connectors plug directly to through-door wiring harnesses for connection to electric locking devices and power supplies. Wire nut connections are not acceptable.

1. Manufacturers:

a. McKinney (MK) - QC (# wires) Option.

B. Electrified Quick Connect Continuous Geared Transfer Hinges: Provide electrified transfer continuous geared hinges with a removable service panel cutout accessible without de-mounting door from the frame. Furnish with Molex™ standardized plug connectors with sufficient number of concealed wires (up to 12) to accommodate the electrified functions specified in the Door Hardware Sets. Connectors plug directly to through-door wiring harnesses for connection to electric locking devices and power supplies. Wire nut connections are not acceptable.

1. Manufacturers:

a. Pemko (PE) - SER-QC (# wires) Option.

C. Concealed Quick Connect Electric Power Transfers: Provide concealed wiring pathway housing mortised into the door and frame for low voltage electrified door hardware. Furnish with Molex™ standardized plug connectors and sufficient number of concealed wires (up to 12) to accommodate the electrified functions

specified in the Door Hardware Sets. Connectors plug directly to through-door wiring harnesses for connection to electric locking devices and power supplies. Wire nut connections are not acceptable.

1. Manufacturers:

    a. Securitron (SU) - EL-CEPT Series.

D. Electric Door Wire Harnesses: Provide electric/data transfer wiring harnesses with standardized plug connectors to accommodate up to twelve (12) wires. Connectors plug directly to through-door wiring harnesses for connection to electric locking devices and power supplies. Provide sufficient number and type of concealed wires to accommodate electric function of specified hardware. Provide a connector for through-door electronic locking devices and from hinge to junction box above the opening. Wire nut connections are not acceptable. Determine the length required for each electrified hardware component for the door type, size and construction, minimum of two per electrified opening.

1. Manufacturers:

    a. McKinney (MK) - QC-C Series.

2.4 DOOR OPERATING TRIM

A. Flush Bolts and Surface Bolts: Provide products conforming to ANSI/BHMA A156.3 and A156.16, Grade 1.

1. Flush bolts to be furnished with top rod of sufficient length to allow bolt retraction device location approximately six feet from the floor.
2. Furnish dust proof strikes for bottom bolts.
3. Surface bolts to be minimum 8” in length and U.L. listed for labeled fire doors and U.L. listed for windstorm components where applicable.
4. Provide related accessories (mounting brackets, strikes, coordinators, etc.) as required for appropriate installation and operation.
5. Manufacturers:

    a. Rockwood (RO).

B. Coordinators: ANSI/BHMA A156.3 door coordinators consisting of active-leaf, hold-open lever and inactive-leaf release trigger. Model as indicated in hardware sets.

1. Manufacturers:

    a. Rockwood (RO).

C. Door Push Plates and Pulls: ANSI/BHMA A156.6 door pushes and pull units of type and design specified in the Hardware Sets. Coordinate and provide proper width and height as required where conflicting hardware dictates.

1. Push/Pull Plates: Minimum .050 inchthick, size as indicated in hardware sets,with beveled edges, secured with exposed screws unless otherwise indicated.
2. Door Pull and Push Bar Design: Size, shape, and material as indicated in the hardware sets. Minimum clearance of 2 1/2-inches from face of door unless otherwise indicated.
3. Offset Pull Design: Size, shape, and material as indicated in the hardware sets. Minimum clearance of 2 1/2-inches from face of door and offset of 90 degrees unless otherwise indicated.
4. Pulls, where applicable, shall be provided with a 10” clearance from the finished floor on the push side to accommodate wheelchair accessibility.
5. Fasteners: Provide manufacturer's designated fastener type as indicated in Hardware Sets.
6. Manufacturers:

    a. Rockwood (RO).

2.5 CYLINDERS AND KEYING

A. General: Cylinder manufacturer to have minimum (10) years experience designing secured master key systems and have on record a published security keying system policy.

B. Cylinder Types: Original manufacturer cylinders able to supply the following cylinder formats and types:

1. Threaded mortise cylinders with rings and cams to suit hardware application.
2. Rim cylinders with back plate, flat-type vertical or horizontal tailpiece, and raised trim ring.
3. Bored or cylindrical lock cylinders with tailpieces as required to suit locks.
4. Tubular deadlocks and other auxiliary locks.
5. Mortise and rim cylinder collars to be solid and recessed to allow the cylinder face to be flush and be free spinning with matching finishes.
6. Keyway: Match Facility Restricted Keyway.

C. Cylinders for exterior doors: ASSA cylinders provided by Portage Public Schools.

D. Cylinders for interior doors: ANSI/BHMA A156.5, Grade 1 Certified Products Directory (CPD) listed cylinders. Cylinders are to be factory keyed with owner having the ability for on-site original key cutting.

1. Manufacturers:

    a. Sargent (SA) - XC.
    b. No Substitution.

E. Keying System: Each type of lock and cylinders to be factory keyed.

1. Supplier shall conduct a "Keying Conference" to define and document keying system instructions and requirements.
2. Furnish factory cut, nickel-silver large bow permanently inscribed with a visual key control number as directed by Owner.
3. New System: Key locks to a new key system as directed by the Owner.

F. Key Quantity: Provide the following minimum number of keys:

1. Change Keys per Cylinder: Two (2)
2. Master Keys (per Master Key Level/Group): Five (5).
3. Construction Keys (where required): Ten (10).

G. Construction Keying: Provide construction master keyed cylinders.

H. Key Registration List (Bitting List):

1. Provide keying transcript list to Owner's representative in the proper format for importing into key control software.
2. Provide transcript list in writing or electronic file as directed by the Owner.

2.6 KEY CONTROL

A. Key Control Cabinet: Provide a key control system including envelopes, labels, and tags with self-locking key clips, receipt forms, 3-way visible card index, temporary markers, permanent markers, and standard metal cabinet. Key control cabinet shall have expansion capacity of 150% of the number of locks required for the project.

1. Manufacturers:

a. Lund Equipment (LU).
b. MMF Industries (MM).
c. Telkee (TK).

2.7 MECHANICAL LOCKS AND LATCHING DEVICES

A. Mortise Locksets, Grade 1 (Heavy Duty): ANSI/BHMA A156.13, Series 1000, Operational Grade 1 Certified Products Directory (CPD) listed. Locksets are to be manufactured with a corrosion resistant steel case and be field-reversible for handing without disassembly of the lock body.

1. Where specified, provide status indicators with highly reflective color and wording for “locked/unlocked” or “vacant/occupied” with custom wording options if required. Indicator to be located above the cylinder with the inside thumb-turn not blocking the visibility of the indicator status. Indicator window size to be a minimum of 2.1” x 0.6” with a curved design allowing a 180-degree viewing angle with protective covering to prevent tampering.
2. Manufacturers:

a. Sargent Manufacturing (SA) - 8200 Series.
b. No Substitution.

2.8 ELECTROMECHANICAL LOCKING DEVICES

A. Electromechanical Mortise Locksets, Grade 1 (Heavy Duty): ANSI/BHMA A156.13, Series 1000, Operational Grade 1 Certified Products Directory (CPD) listed, subject to same compliance standards and requirements as mechanical mortise locksets, electrified locksets to be of type and design as specified below and in the hardware sets.

1. Electrified Lock Options: Where indicated in the Hardware Sets, provide electrified options including: outside door lock/unlock trim control, latchbolt and lock/unlock status monitoring, deadbolt monitoring, and request-to-exit signaling. Support end-of-line resistors contained within the lock case. Unless otherwise indicated, provide electrified locksets standard as fail secure.
2. Energy Efficient Design: Provide lock bodies which have a holding current draw of 15mA maximum, and can operate on either 12 or 24 volts. Locks are to be field configurable for fail safe or fail secure operation.
3. Manufacturers:

    a. Sargent Manufacturing (SA) - 8200 Series.
    b. No Substitution.

2.9 ELECTRIC STRIKES

A. Standard Electric Strikes: Electric strikes conforming to ANSI/BHMA A156.31, Grade 1, for use on non-rated or fire rated openings. Strikes shall be of stainless steel construction tested to a minimum of 1500 pounds of static strength and 70 foot-pounds of dynamic strength with a minimum endurance of 1 million operating cycles. Provide strikes with 12 or 24 VDC capability, fail-secure unless otherwise specified. Where specified provide latchbolt and latchbolt strike monitoring indicating both the position of the latchbolt and locked condition of the strike.

1. Manufacturers:

    a. HES (HS) - 1500/1600 Series.

B. Surface Mounted Rim Electric Strikes: Surface mounted rim exit device electric strikes conforming to ANSI/BHMA A156.31, Grade 1, and UL Listed for both Burglary Resistance and for use on fire rated door assemblies. Construction includes internally mounted solenoid with two heavy-duty, stainless steel locking mechanisms operating independently to provide tamper resistance. Strikes tested for a minimum of 500,000 operating cycles. Provide strikes with 12 or 24 VDC capability supplied standard as fail-secure unless otherwise specified. Option available for latchbolt and latchbolt strike monitoring indicating both the position of the latchbolt and locked condition of the strike. Strike requires no cutting to the jamb prior to installation.

1. Manufacturers:

    a. HES (HS) - 9400/9500/9600/9700/9800 Series.

C. Provide electric strikes with in-line power controller and surge suppressor by the same manufacturer as the strike with the combined products having a five year warranty.

2.10 CONVENTIONAL EXIT DEVICES

A. General Requirements: All exit devices specified herein shall meet or exceed the following criteria:

1. At doors not requiring a fire rating, provide devices complying with NFPA 101 and listed and labeled for "Panic Hardware" according to UL305. Provide proper fasteners as required by manufacturer including sex nuts and bolts at openings specified in the Hardware Sets.
2. Where exit devices are required on fire rated doors, provide devices complying with NFPA 80 and with UL labeling indicating "Fire Exit Hardware". Provide devices with the proper fasteners for installation as tested and listed by UL. Consult manufacturer's catalog and template book for specific requirements.
3. Except on fire rated doors, provide exit devices with hex key dogging device to hold the pushbar and latch in a retracted position. Provide optional keyed cylinder dogging on devices where specified in Hardware Sets.
4. Devices must fit flat against the door face with no gap that permits unauthorized dogging of the push bar. The addition of filler strips is required in any case where the door light extends behind the device as in a full glass configuration.
5. Flush End Caps: Provide flush end caps made of architectural metal in the same finish as the devices as in the Hardware Sets. Plastic end caps will not be acceptable.
6. Lever Operating Trim: Where exit devices require lever trim, furnish manufacturer's heavy duty escutcheon trim with threaded studs for thru-bolts.
    a. Lock Trim Design: As indicated in Hardware Sets, provide finishes and designs to match that of the specified locksets.
    b. Where function of exit device requires a cylinder, provide a cylinder (Rim or Mortise) as specified in Hardware Sets.
7. Vertical Rod Exit Devices: Where surface or concealed vertical rod exit devices are used at interior openings, provide as less bottom rod (LBR) unless otherwise indicated. Provide dust proof strikes where thermal pins are required to project into the floor.
8. Narrow Stile Applications: At doors constructed with narrow stiles, or as specified in Hardware Sets, provide devices designed for maximum 2" wide stiles.
9. Dummy Push Bar: Nonfunctioning push bar matching functional push bar.
10. Rail Sizing: Provide exit device rails factory sized for proper door width application.
11. Through Bolt Installation: For exit devices and trim as indicated in Door Hardware Sets.

B. Conventional Push Rail Exit Devices (Heavy Duty): ANSI/BHMA A156.3, Grade 1 Certified Products Directory (CPD) listed panic and fire exit hardware devices furnished in the functions specified in the Hardware Sets.

1. Exit devices shall have no catch points.
2. Exit devices shall have no visible plastic.
3. Exit devices shall have concealed hex key dogging.

4. Exit devices shall have dogging and chassis indicators as specified in the hardware sets. Chassis indicator to show locked/unlocked status of exterior trim, dogging indicator to have both passive and active options.
5. Exit Devices shall be constructed of all stainless steel.
6. Exit device latch to be stainless steel, pullman type, with deadlock feature and a 10-year warranty.
7. Exit devices shall have narrow or wide style exterior trim as specified in the hardware sets.
8. Concealed vertical rod exit devices shall have center case adjustability.
9. Exit devices shall not require wire routing through the door for electromechanical functions.
10. Manufacturers:

    a. Corbin Russwin Hardware (RU) - PED4000 / PED5000 Series.
    b. No Substitution.

C. Electromechanical Push Rail Exit Devices (Heavy Duty): ANSI/BHMA A156.3, Grade 1 Certified Products Directory (CPD) listed panic and fire exit hardware devices subject to same compliance standards and requirements as mechanical exit devices. Electrified exit devices to be of type and design as specified below and in the hardware sets.

1. Energy Efficient Design: Provide devices which have a holding current draw of 15mA maximum, and can operate on either 12 or 24 volts. Locks are to be field configurable for fail safe or fail secure operation.
2. Where conventional power supplies are not sufficient, include any specific controllers required to provide the proper inrush current.
3. Motorized Electric Latch Retraction: Devices with an electric latch retraction feature must use motors which have a maximum current draw of 600mA. Solenoid driven latch retraction is not acceptable.
4. Manufacturers:

    a. Corbin Russwin Hardware (RU) - PED4000 / PED5000 Series.
    b. No Substitution.

2.11 DOOR CLOSERS

A. All door closers specified herein shall meet or exceed the following criteria:

1. General: Door closers to be from one manufacturer, matching in design and style, with the same type door preparations and templates regardless of application or spring size. Closers to be non-handed with full sized covers.
2. Standards: Closers to comply with UL-10C for Positive Pressure Fire Test and be U.L. listed for use of fire rated doors.
3. Cycle Testing: Provide closers which have surpassed 15 million cycles.
4. Size of Units: Comply with manufacturer's written recommendations for sizing of door closers depending on size of door, exposure to weather, and anticipated frequency of use. Where closers are indicated for doors required to be accessible to the Americans with Disabilities Act, provide units complying with ANSI ICC/A117.1.

5. Closer Arms: Provide heavy duty, forged steel closer arms unless otherwise indicated in Hardware Sets.
6. Closers shall not be installed on exterior or corridor side of doors; where possible install closers on door for optimum aesthetics.
7. Closer Accessories: Provide door closer accessories including custom templates, special mounting brackets, spacers and drop plates as required for proper installation. Provide through-bolt and security type fasteners as specified in the hardware sets.

B. Door Closers, Surface Mounted (Heavy Duty): ANSI/BHMA A156.4, Grade 1 Certified Products Directory (CPD) listed surface mounted, heavy duty door closers with complete spring power adjustment, sizes 1 thru 6; and fully operational adjustable according to door size, frequency of use, and opening force. Closers to be rack and pinion type, one piece cast iron or aluminum alloy body construction, with adjustable backcheck and separate non-critical valves for closing sweep and latch speed control. Provide non-handed units standard..

1. Manufacturers:

a. Norton Rixson (NO) - 7500 Series.
b. No Substitution.

2.12 SURFACE MOUNTED CLOSER HOLDERS

A. Electromagnetic Door Holders: ANSI A156.15 electromagnetic door holder/releases with a minimum 20 to 40 pounds holding power and single coil construction able to accommodate.12VDC, 24VAC, 24VDC and 120VAC. Coils to be independently wound, employing an integral fuse and armatures to include a positive release button.

1. Manufacturers:

a. Norton Rixson (RF) - 980/990 Series.

2.13 ARCHITECTURAL TRIM

A. Door Protective Trim

1. General: Door protective trim units to be of type and design as specified below or in the Hardware Sets.
2. Size: Fabricate protection plates (kick, armor, or mop) not more than 2" less than door width (LDW) on stop side of single doors and 1” LDW on stop side of pairs of doors, and not more than 1" less than door width on pull side. Coordinate and provide proper width and height as required where conflicting hardware dictates. Height to be as specified in the Hardware Sets.
3. Where plates are applied to fire rated doors with the top of the plate more than 16” above the bottom of the door, provide plates complying with NFPA 80. Consult manufacturer’s catalog and template book for specific requirements for size and applications.

4. Protection Plates: ANSI/BHMA A156.6 protection plates (kick, armor, or mop), fabricated from the following:

    a. Stainless Steel: 300 grade, 050-inchthick.

5. Options and fasteners: Provide manufacturer's designated fastener type as specified in the Hardware Sets. Provide countersunk screw holes.
6. Manufacturers:

    a. Rockwood (RO).

2.14 DOOR STOPS AND HOLDERS

A. General: Door stops and holders to be of type and design as specified below or in the Hardware Sets.

B. Door Stops and Bumpers: ANSI/BHMA A156.16, Grade 1 door stops and wall bumpers. Provide wall bumpers, either convex or concave types with anchorage as indicated, unless floor or other types of door stops are specified in Hardware Sets. Do not mount floor stops where they will impede traffic. Where floor or wall bumpers are not appropriate, provide overhead type stops and holders.

1. Manufacturers:

    a. Rockwood (RO).

C. Overhead Door Stops and Holders: ANSI/BHMA A156.8, Grade 1 Certified Products Directory (CPD) listed overhead stops and holders to be surface or concealed types as indicated in Hardware Sets. Track, slide, arm and jamb bracket to be constructed of extruded bronze and shock absorber spring of heavy tempered steel. Provide non-handed design with mounting brackets as required for proper operation and function.

1. Manufacturers:

    a. Norton Rixson (RF).

2.15 ARCHITECTURAL SEALS

A. General: Thresholds, weatherstripping, and gasket seals to be of type and design as specified below or in the Hardware Sets. Provide continuous weatherstrip gasketing on exterior doors and provide smoke, light, or sound gasketing on interior doors where indicated. At exterior applications provide non-corrosive fasteners and elsewhere where indicated.

B. Smoke Labeled Gasketing: Assemblies complying with NFPA 105 that are listed and labeled by a testing and inspecting agency acceptable to authorities having jurisdiction, for smoke control ratings indicated, based on testing according to UL 1784.

1. Provide smoke labeled perimeter gasketing at all smoke labeled openings.

C. Fire Labeled Gasketing: Assemblies complying with NFPA 80 that are listed and labeled by a testing and inspecting agency acceptable to authorities having jurisdiction, for fire ratings indicated, based on testing according to UL-10C.

1. Provide intumescent seals as indicated to meet UL10C Standard for Positive Pressure Fire Tests of Door Assemblies, and NPFA 252, Standard Methods of Fire Tests of Door Assemblies.

D. Sound-Rated Gasketing: Assemblies that are listed and labeled by a testing and inspecting agency, for sound ratings indicated.

E. Replaceable Seal Strips: Provide only those units where resilient or flexible seal strips are easily replaceable and readily available from stocks maintained by manufacturer.

F. Manufacturers:

1. Pemko (PE).

2.16 FABRICATION

A. Fasteners: Provide door hardware manufactured to comply with published templates generally prepared for machine, wood, and sheet metal screws. Provide screws according to manufacturers recognized installation standards for application intended.

2.17 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.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine scheduled openings, with Installer present, for compliance with requirements for installation tolerances, labeled fire door assembly construction, wall and floor construction, and other conditions affecting performance.

B. Notify architect of any discrepancies or conflicts between the door schedule, door types, drawings and scheduled hardware. Proceed only after such discrepancies or conflicts have been resolved in writing.

3.2 PREPARATION

A. Hollow Metal Doors and Frames: Comply with ANSI/DHI A115 series.

B. Wood Doors: Comply with ANSI/DHI A115-W series.

3.3 INSTALLATION

A. Install each item of mechanical and electromechanical hardware and access control equipment to comply with manufacturer's written instructions and according to specifications.

1. Installers are to be trained and certified by the manufacturer on the proper installation and adjustment of fire, life safety, and security products including: hanging devices; locking devices; closing devices; and seals.

B. Mounting Heights: Mount door hardware units at heights indicated in following applicable publications, unless specifically indicated or required to comply with governing regulations:

1. Standard Steel Doors and Frames: DHI's "Recommended Locations for Architectural Hardware for Standard Steel Doors and Frames."
2. DHI TDH-007-20: Installation Guide for Doors and Hardware.
3. Where indicated to comply with accessibility requirements, comply with ANSI A117.1 "Accessibility Guidelines for Buildings and Facilities."
4. Provide blocking in drywall partitions where wall stops or other wall mounted hardware is located.

C. Retrofitting: Install door hardware to comply with manufacturer's published templates and written instructions. Where cutting and fitting are required to install door hardware onto or into surfaces that are later to be painted or finished in another way, coordinate removal, storage, and reinstallation of surface protective trim units with finishing work specified in Division 9 Sections. Do not install surface-mounted items until finishes have been completed on substrates involved.

D. Thresholds: Set thresholds for exterior and acoustical doors in full bed of sealant complying with requirements specified in Division 7 Section "Joint Sealants."

E. Storage: Provide a secure lock up for hardware delivered to the project but not yet installed. Control the handling and installation of hardware items so that the completion of the work will not be delayed by hardware losses before and after installation.

3.4 FIELD QUALITY CONTROL

A. Field Inspection (Punch Report): Reference Division 01 Sections “Closeout Procedures”. Produce project punch report for each installed door opening indicating compliance with approved submittals and verification hardware is properly installed, operating and adjusted. Include list of items to be completed and corrected, indicating the reasons or deficiencies causing the Work to be incomplete or rejected.

1. Organization of List: Include separate Door Opening and Deficiencies and Corrective Action Lists organized by Mark, Opening Remarks and Comments, and related Opening Images and Video Recordings.

3.5 ADJUSTING

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

3.6 CLEANING AND PROTECTION

A. Protect all hardware stored on construction site in a covered and dry place. Protect exposed hardware installed on doors during the construction phase. Install any and all hardware at the latest possible time frame.

B. Clean adjacent surfaces soiled by door hardware installation.

C. Clean operating items as necessary to restore proper finish. Provide final protection and maintain conditions that ensure door hardware is without damage or deterioration at time of owner occupancy.

3.7 DEMONSTRATION

A. Instruct Owner's maintenance personnel to adjust, operate, and maintain mechanical and electromechanical door hardware.

3.8 DOOR HARDWARE SETS

A. The hardware sets represent the design intent and direction of the owner and architect. They are a guideline only and should not be considered a detailed hardware schedule. Discrepancies, conflicting hardware and missing items should be brought to the attention of the architect with corrections made prior to the bidding process. Omitted items not included in a hardware set should be scheduled with the appropriate additional hardware required for proper application and functionality.

1. Quantities listed are for each pair of doors, or for each single door.
2. The supplier is responsible for handing and sizing all products.

3. Where multiple options for a piece of hardware are given in a single line item, the supplier shall provide the appropriate application for the opening.
4. At existing openings with new hardware the supplier shall field inspect existing conditions prior to the submittal stage to verify the specified hardware will work as required. Provide alternate solutions and proposals as needed.

B. Manufacturer's Abbreviations:

1. MK - McKinney
2. PE - Pemko
3. OT - Other
4. RO - Rockwood
5. RU - Corbin Russwin
6. SA - SARGENT
7. AD - Adams Rite
8. AA - ASSA High Security Locks
9. HS - HES
10. RF - Rixson
11. NO - Norton
12. SU - Securitron

Hardware Sets

Set: 1.0

Doors: B1502, B1502A, B1502B, B1502C

1	Continuous Hinge	CFM__SLF-HD1 PT	630	PE	
1	Rim Exit Device, Nightlatch	PED5247 K157ET M91 MELR M48 M52		RU	
1	Mortise Cylinder	- Provided by Owner		AA	
1	Rim Cylinder	- Provided by Owner		AA	
1	Vandal Resistant Trim	VRT22 C	US32D	RO	
1	Conc Overhead Stop	6-X36	630	RF	
1	Automatic Opener (single)	6021 (D) - confirm head detail	689	NO	
1	ElectroLynx Harness	QC-C1500P (power transfer to j-box)		MK	
1	ElectroLynx Harness	QC-C (power transfer to exit device rail)		MK	
2	Door Switch (jamb mount)	503		NO	
1	Electric Power Transfer	EL-CEPT	630	SU	
1	Power Supply	- Provided by Security Contractor		SU	
1	Card Reader	- Provided by Security Contractor		00	

Notes: Operation Description:
Door normally closed and locked. Valid use of card reader in vestibule shall unlock exit device permitting entry. Dogging of latch bolt controlled by use of key inside. Door may be unlocked and used as push / pull door as programmed by access control system and then relocked at scheduled times.
Activating actuator switch in corridor retracts the latch bolt of the exit device, if locked, and initiates automatic operator cycle.
Activating actuator switch in vestibule will initiate cycle of automatic operator if the latch bolt is in the retracted position (push /pull operation). Utilize latch bolt monitor in exit device for this function.
After hours - access by valid use of card reader in vestibule / automatic operator will only operate if card reader is authorized first.

Automatic operator and exit device shall be connected to smoke alarm system. Upon activation of smoke alarm, the door shall unlock and the automatic operator shall cycle open immediately. Door shall remain open until system is manually reset.

Set: 2.0

Doors: B.L.401, B.L.401A, B.L.401B

2	Continuous Hinge	CFM__SLF-HD1 PT		PE	
1	Fixed Mullion	In Frame		OT	
1	Rim Exit Device, Exit Only	PED5201 EO MELR M48 M52	630	RU	
1	Mortise Cylinder	- Provided by Owner		AA	
1	Vandal Resistant Trim	VRT22	US32D	RO	
1	Conc Overhead Stop	6-X36	630	RF	
1	Automatic Opener (single)	6021 (D) - confirm head detail	689	NO	
1	ElectroLynx Harness	QC-C1500P (power transfer to j-box)		MK	
1	ElectroLynx Harness	QC-C (power transfer to exit device rail)		MK	
1	Electric Power Transfer	EL-CEPT	630	SU	
1	Power Supply	- Provided by Security Contractor		SU	

Notes: ** Fixed mullion in frame.

Doors normally closed and locked. Key inside controls manual dogging of latch bolt for push / pull operation. Doors shall unlock upon schedule as determined in access control system.
Free egress always permitted.

Automatic operators and exit devices shall be connected to smoke alarm system. Upon activation of smoke

alarm, the doors shall unlock and the automatic operators shall cycle open immediately. Doors shall remain open until system is manually reset.

Set: 3.0

Doors: SRO

3	Hinge, Full Mortise	TA2714 (NRP)	US26D	MK	
1	Office Lock	11 V01 8205 LNL GGMK x LB thumb turn	US26D	SA	
1	Wall Stop	406	US32D	RO	
3	Silencer	608 / 609		RO	

Notes: Latch operated by lever either side, unless outside lever is locked or unlocked by key outside or thumb turn inside. Outside lever is unlocked by key outside or thumb turn inside. Latch is retracted by key outside when outside lever is locked. Inside lever always free.

Set: 4.0

Doors: 100, 200B, 300

1	Continuous Hinge	CFM__HD1		PE	
1	Continuous Hinge	CFM__HD1 x PT		PE	
1	Fire Rated CVR, EO	PED5801B EO M55 MD	630	RU	
1	Fire Rated CVR, NL	PED5859A N9CV59PT M55 MD MELR	630	RU	⚡
1	Rim Cylinder	11 34 GGMK	US15	SA	
2	Surface Closer	7500 - pull side mount	689	NO	
2	Kick Plate	K1050 10" high CSK BEV	US32D	RO	
2	Electromagnetic Holder	994M	689	RF	⚡
1	Smoke / Sound Seal	S88BL - head and jambs		PE	
1	Meeting Edge Seal	S772C x height of door		PE	
1	ElectroLynx Harness	QC-C1500P (power transfer to j-box)		MK	⚡
1	ElectroLynx Harness	QC-C (power transfer to exit device lever trim)		MK	⚡
1	Power Supply	- Provided by Security Contractor		SU	⚡
1	Card Reader	- Provided by Security Contractor		00	
1	Electric Power Transfer	EL-CEPT	630	SU	⚡

Notes: Operation Description: Doors normally closed and locked. Key override outside retracts latch bolt of active leaf. Valid use of card reader outside temporarily retracts latch bolt of active leaf permitting entry. Free egress always permitted.

Doors held open by electromagnetic door holders on adjacent walls. Power for electromagnetic holders shall be connected to fire alarm system in order that doors close immediately upon activation of fire alarm.

Set: 5.0

Doors: 190A, 190B

2	Continuous Hinge	CFM__HD1-M		PE	
1	Removable Mullion	CR908BKM		RU	
2	Rim Exit (Classroom)	PED5255A N955PT	630	RU	
1	Mortise Cylinder	11 41 GGMK	US15	SA	
2	Rim Cylinder	11 34 GGMK	US15	SA	
2	Surface Closer	CPS7500	689	NO	
2	Arm Support Bracket	6890	689	NO	
2	Kick Plate	K1050 10" high CSK BEV	US32D	RO	
1	Smoke / Sound Seal	S88BL - head and jambs		PE	
1	Removable Mullion Seal	5110BL x height of mullion		PE	

Notes: Key outside locks or unlocks lever trim. Free egress always permitted.

Set: 6.0

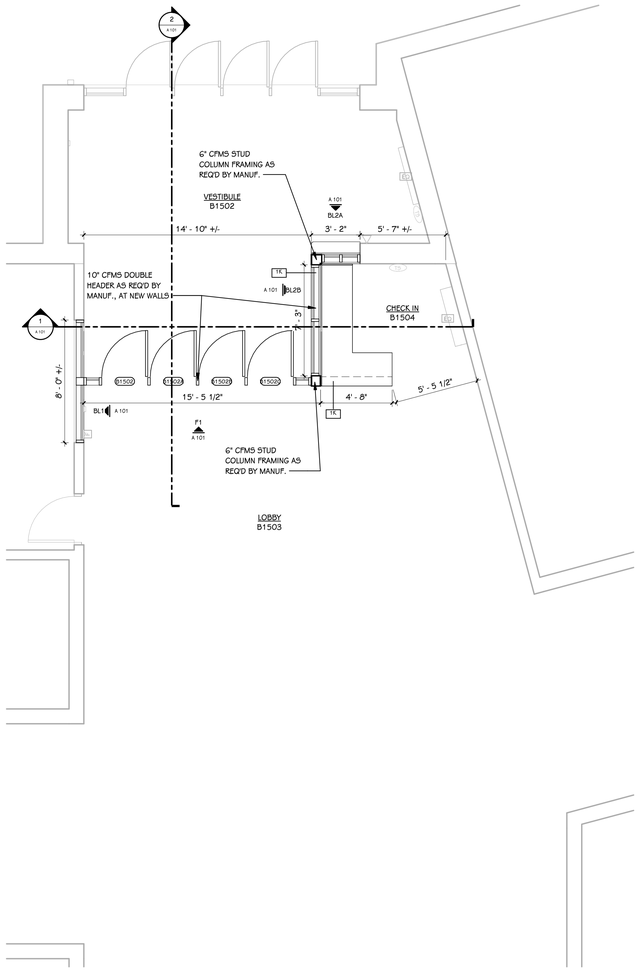
Doors: 200A

1	Continuous Hinge	CFM__HD1 x PT		PE	
1	Fire Rated CVR, NL	PED5859A N9CV59PT M55 MD MELR	630	RU	ϟ
1	Rim Cylinder	11 34 GGMK	US15	SA	
1	Surface Closer	7500 - pull side mount	689	NO	
1	Kick Plate	K1050 10" high CSK BEV	US32D	RO	
1	Electromagnetic Holder	994M	689	RF	ϟ
1	Smoke / Sound Seal	S88BL - head and jambs		PE	
1	ElectroLynx Harness	QC-C1500P (power transfer to j-box)		MK	ϟ
1	ElectroLynx Harness	QC-C (power transfer to exit device lever trim)		MK	ϟ
1	Power Supply	- Provided by Security Contractor		SU	ϟ
1	Card Reader	- Provided by Security Contractor		00	
1	Electric Power Transfer	EL-CEPT	630	SU	ϟ

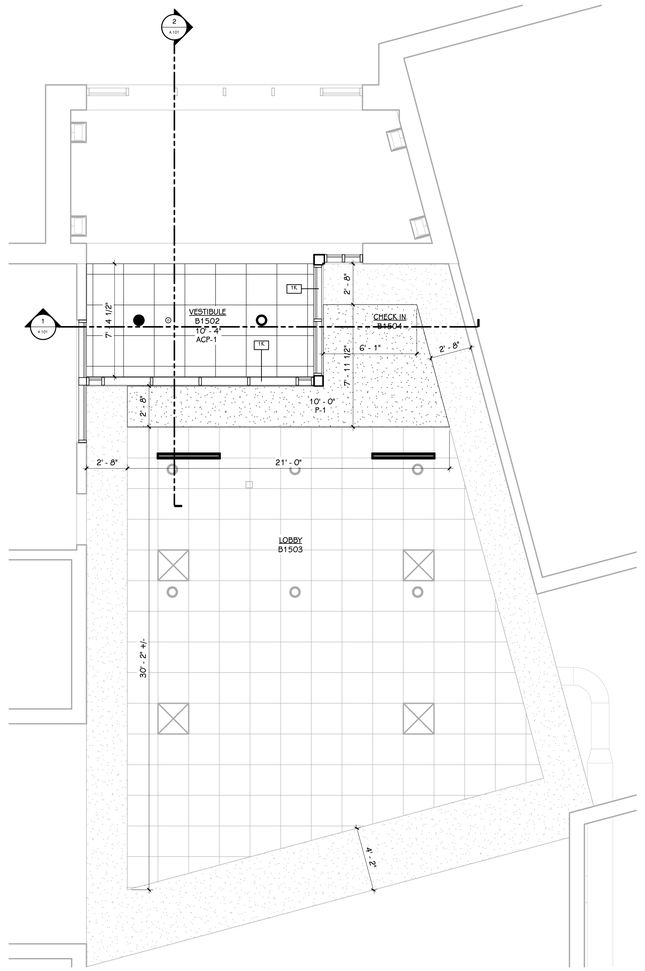
Notes: Operation Description: Doors normally closed and locked. Key override outside retracts latch bolt. Valid use of card reader outside temporarily retracts latch bolt of active leaf permitting entry. Free egress always permitted.

Doors held open by electromagnetic door holders on adjacent walls. Power for electromagnetic holders shall be connected to fire alarm system in order that doors close immediately upon activation of fire alarm.

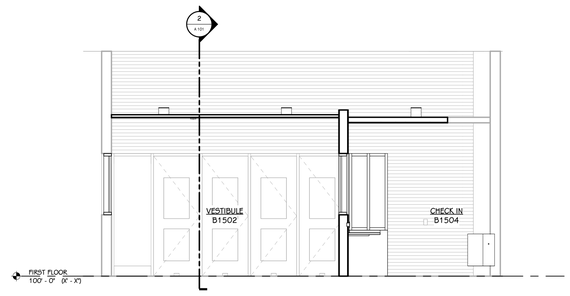
END OF SECTION 08 7100



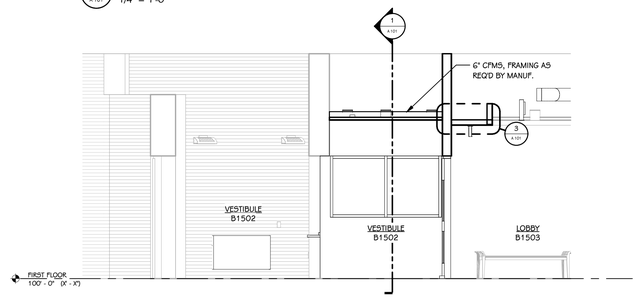
FIRST FLOOR PLAN - PARTIAL UNIT B
1/4" = 1'-0"



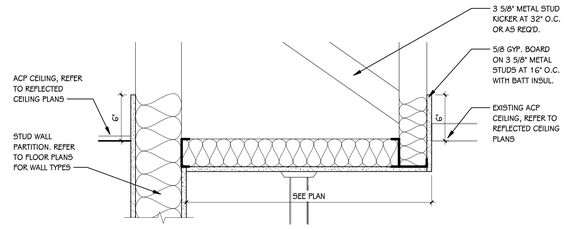
FIRST FLOOR REFLECTED CEILING PLAN - PARTIAL UNIT B
1/4" = 1'-0"



1 A 101 BUILDING SECTION
1/4" = 1'-0"



2 A 101 BUILDING SECTION
1/4" = 1'-0"



3 A 101 BULKHEAD DETAIL
1 1/2" = 1'-0"

KEY - REFLECTED CEILING

- GYPSUM BOARD
- LAY-IN ACOUSTICAL TILE GRID
- OR — LIGHTING - REFER TO ELECTRICAL LIGHTING PLAN
- MECHANICAL - REFER TO MECHANICAL SHEET METAL PLAN

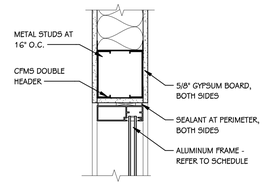
GENERAL NOTES - REFLECTED CEILINGS

1. WHERE CEILING TILE IS LESS THAN 3" AT PERIMETER OF ROOM PROVIDE A CUT 2x4 TILE IN LIEU OF FULL 2x2 TILE AND SMALL PIECE OF TILE OR DOUBLE GRID - MATCH 2x2 FOR STYLE AND COLOR.
2. AT AREAS OF EXPOSED CEILING PAINT ALL STRUCTURE, DUCTWORK, PIPING, CONDUIT, HANGERS ETC., COORDINATE WITH MECHANICAL, ELECTRICAL AND PLUMBING SPECIFICATIONS. REFER TO THE REFLECTED CEILING PLANS FOR PAINT COLORS.

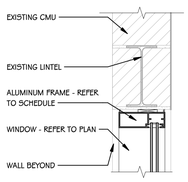
FIRST FLOOR DOOR SCHEDULE

NUMBER			FIRE RATING		DOOR			SIZE		FRAME			DETAILS				ACCESS CONTROLS						
DOOR	ROOM	ROOM NAME	DOOR	FRAME	TYPE	MAT	FIN	WIDTH	HEIGHT	ELEV	MAT	FIN	HEAD	JAMB	SILL	GLASS	A-PHONE	BARRIER-FREE	CARD READER	ELEC. LOCK HDWR.	MAG HOLD	HDWR. SET	REMARKS
B1502	B1503	LOBBY	-	-	FG2	FRP	ANOD	3' - 0"	7' - 10"	1	AL	ANOD	H-1	-	-	SG-1	No	Yes	Yes	Yes	No	1	
B1502A	B1503	LOBBY	-	-	FG2	FRP	ANOD	3' - 0"	7' - 10"	1	AL	ANOD	H-1	-	-	SG-1	No	No	No	Yes	No	1	
B1502B	B1503	LOBBY	-	-	FG2	FRP	ANOD	3' - 0"	7' - 10"	1	AL	ANOD	H-1	-	-	SG-1	No	No	No	Yes	No	1	
B1502C	B1503	LOBBY	-	-	FG2	FRP	ANOD	3' - 0"	7' - 10"	1	AL	ANOD	H-1	-	-	SG-1	No	No	No	Yes	No	1	

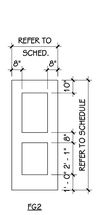
A3



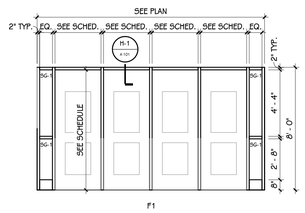
H-1 A 101 HEAD DETAIL (DOOR)
1 1/2" = 1'-0"



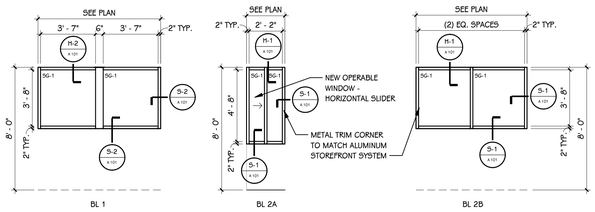
H-2 A 101 HEAD DETAIL (WINDOW)
1 1/2" = 1'-0"



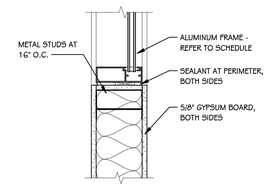
DOOR TYPES
1/4" = 1'-0"



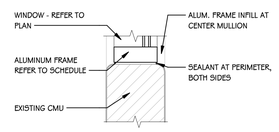
FRAME ELEVATION
1/4" = 1'-0"



BORROWED LITE ELVATIONS
1/4" = 1'-0"

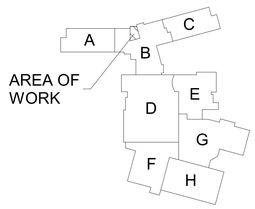


S-1 A 101 JAMB/SILL DETAIL (WINDOW)
1 1/2" = 1'-0"



S-2 A 101 JAMB/SILL DETAIL (WINDOW)
1 1/2" = 1'-0"

PORTAGE CENTRAL HIGHSCHOOL



KEY PLAN
SCALE: NO SCALE

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ISSUED FOR	DATE
ADDENDUM 3	03/01/2024

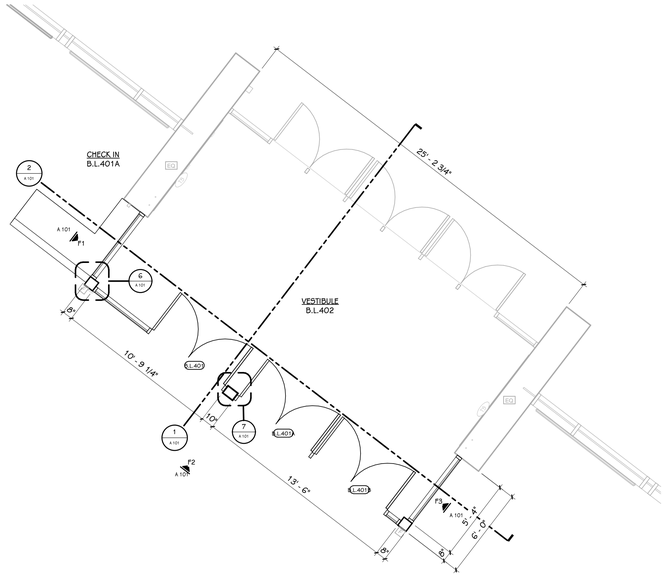
PROJECT TITLE
CENTRAL HIGH SCHOOL - BID PACKAGE 2:
DISTRICT WIDE ACCESS CONTROL

OWNER
PORTAGE PUBLIC SCHOOLS
Portage, Michigan

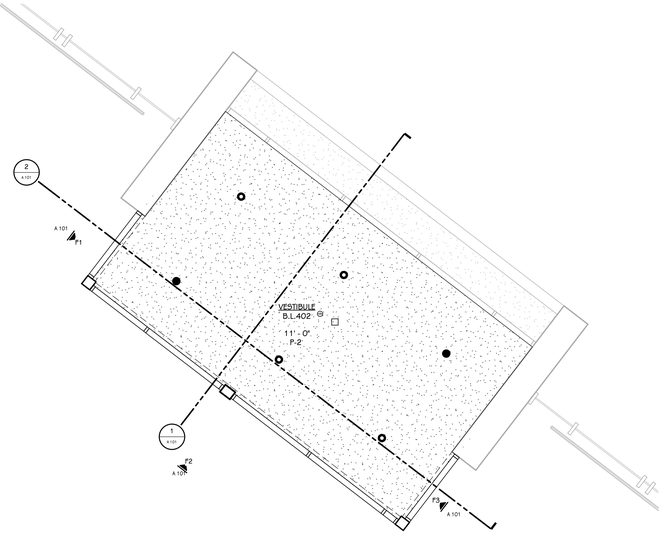
DATE
FEBRUARY 16, 2024

SHEET TITLE
FIRST FLOOR PLAN & REFLECTED CEILING PLAN

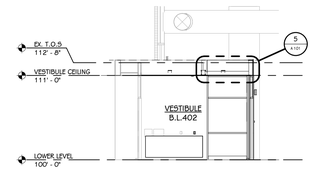
SHEET NUMBER
A 101
23-214.10



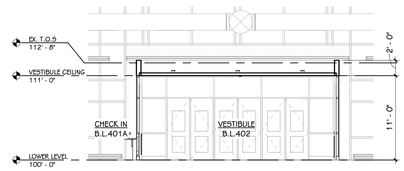
LOWER LEVEL FLOOR PLAN - PARTIAL UNIT B
1/4" = 1'-0"



LOWER LEVEL REFLECTED CEILING PLAN - PARTIAL UNIT B
1/4" = 1'-0"



BUILDING SECTION
1/8" = 1'-0"



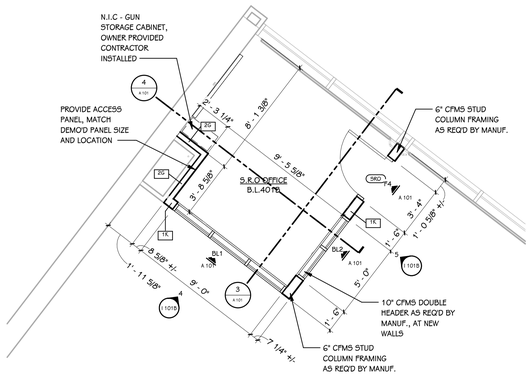
BUILDING SECTION
1/8" = 1'-0"

KEY - REFLECTED CEILING

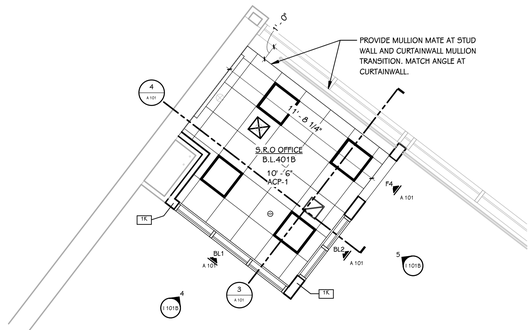
- GYPSUM BOARD
- LAY-IN ACOUSTICAL TILE GRID
- OR — LIGHTING - REFER TO ELECTRICAL LIGHTING PLAN
- MECHANICAL - REFER TO MECHANICAL SHEET METAL PLAN

GENERAL NOTES - REFLECTED CEILINGS

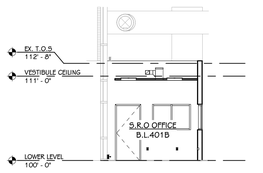
1. WHERE CEILING TILE IS LESS THAN 3" AT PERIMETER OF ROOM PROVIDE A CUT 2x4 TILE IN LIEU OF FULL 2x2 TILE AND SMALL PIECE OF TILE OR DOUBLE GRID - MATCH 2x2 FOR STYLE AND COLOR.
2. AT AREAS OF EXPOSED CEILING PAINT ALL STRUCTURE, DUCTWORK, PIPING, CONDUIT, HANGERS ETC., COORDINATE WITH MECHANICAL, ELECTRICAL AND PLUMBING SPECIFICATIONS. REFER TO THE REFLECTED CEILING PLANS FOR PAINT COLORS.



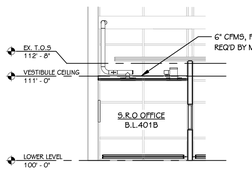
LOWER LEVEL FLOOR PLAN - PARTIAL UNIT B - ALTERNATE 1
1/4" = 1'-0"



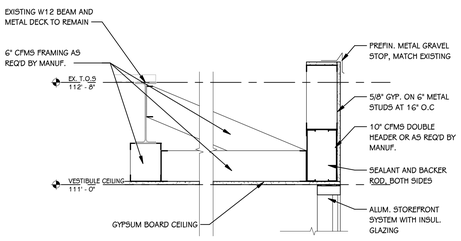
LOWER LEVEL REFLECTED CEILING PLAN - PARTIAL UNIT B - ALTERNATE 1
1/4" = 1'-0"



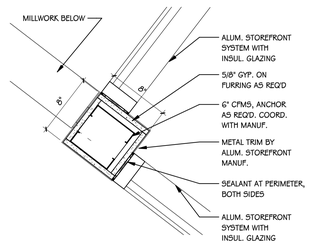
BUILDING SECTION
1/8" = 1'-0"



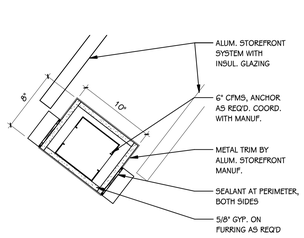
BUILDING SECTION
1/8" = 1'-0"



HEADER - DETAIL
1" = 1'-0"



FLOOR PLAN - DETAIL
1 1/2" = 1'-0"

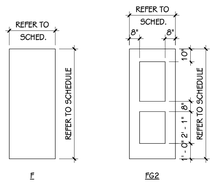


FLOOR PLAN - DETAIL
1 1/2" = 1'-0"

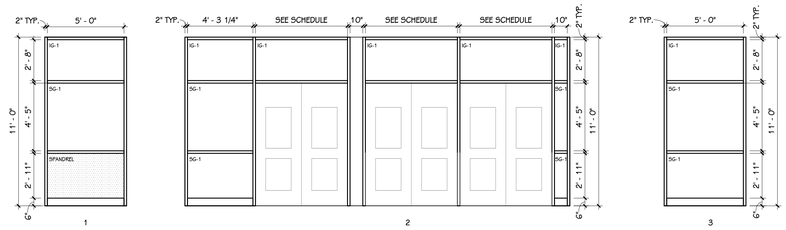
FIRST FLOOR DOOR SCHEDULE

NUMBER		ROOM NAME	FIRE RATING		DOOR			SIZE		FRAME			DETAILS			GLASS	ACCESS CONTROLS					HDWR. SET	REMARKS
DOOR	ROOM		DOOR	FRAME	TYPE	MAT	FIN	WIDTH	HEIGHT	ELEV	MAT	FIN	HEAD	JAMB	SILL		A-PHONE	BARRIER-FREE	CARD READER	ELEC. LOCK HDWR.	MAG HOLD		
SRO	B.L.401B	S.R.O OFFICE	-	-	F	WD	PREFIN	3' - 0"	7' - 2"	4	HM	P-3	-	-	-	-	No	No	No	No	No	3	ALTERNATE 1
B.L.401	B.L.402	VESTIBULE	-	-	FG2	AL	ANOD	6' - 0"	8' - 0"	2	AL	ANOD	-	-	-	-	No	Yes	No	Yes	No	2	-
B.L.401A	B.L.402	VESTIBULE	-	-	FG2	AL	ANOD	6' - 0"	8' - 0"	2	AL	ANOD	-	-	-	-	No	No	No	Yes	No	2	-
B.L.401B	B.L.402	VESTIBULE	-	-	FG2	AL	ANOD	6' - 0"	8' - 0"	2	AL	ANOD	-	-	-	-	No	No	No	Yes	No	2	-

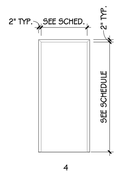
A3

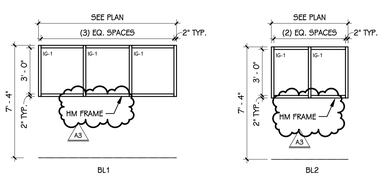


DOOR PANEL ELEVATION
1/4" = 1'-0"



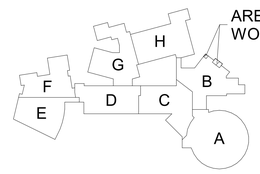
FRAME ELEVATIONS
1/4" = 1'-0"





BORROWED LITE ELEVATIONS - ALTERNATE 1
1/4" = 1'-0"

PORTAGE NORTHERN HIGH SCHOOL



KEY PLAN
SCALE: NO SCALE

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ADDENDUM 3	03/01/24
ISSUED FOR	DATE

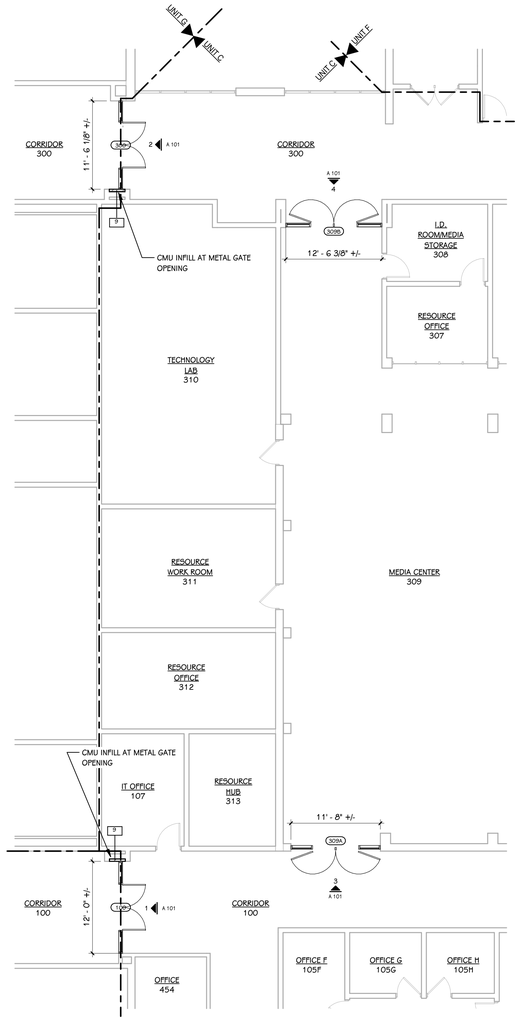
PROJECT TITLE
NORTHERN HIGH SCHOOL - BID PACKAGE
2: DISTRICT WIDE ACCESS CONTROL

OWNER
PORTAGE PUBLIC SCHOOLS
Portage, Michigan

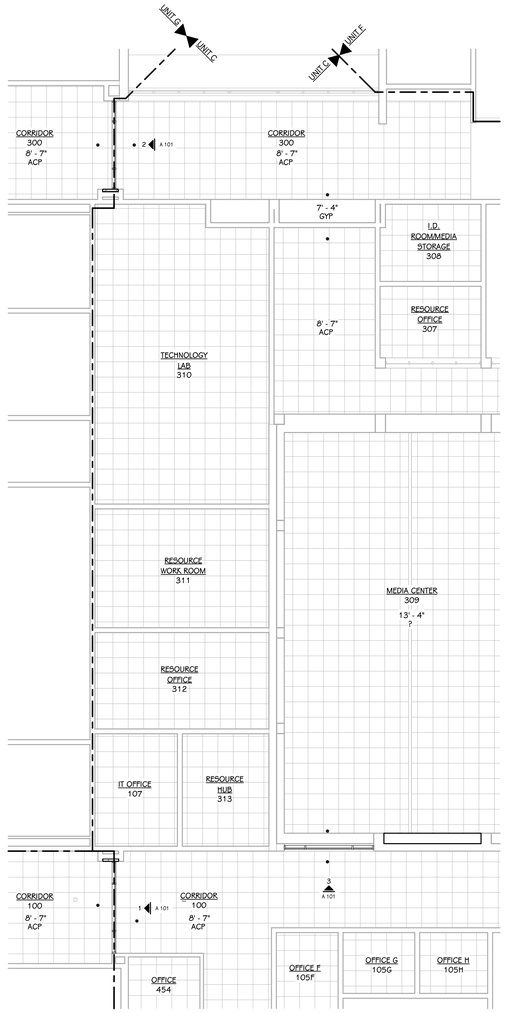
SHEET TITLE
LOWER LEVEL FLOOR PLAN &
REFLECTED CEILING PLAN

DATE
FEBRUARY 16, 2024

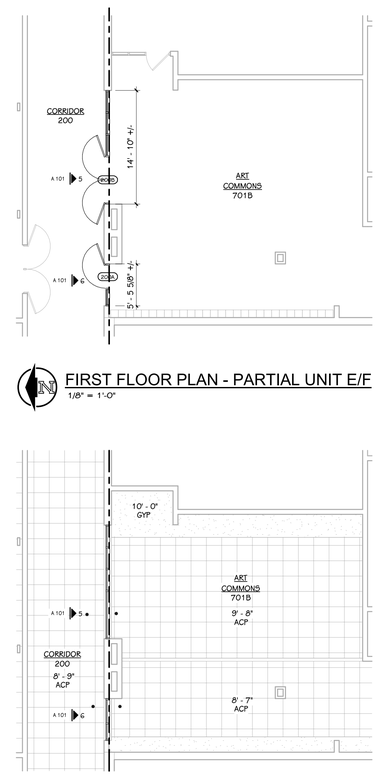
SHEET NUMBER
A 101
23-214.50



FIRST FLOOR PLAN - PARTIAL UNIT C
1/8" = 1'-0"



FIRST FLOOR REFLECTED CEILING PLAN - PARTIAL UNIT C
1/8" = 1'-0"



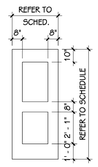
FIRST FLOOR PLAN - PARTIAL UNIT E/F
1/8" = 1'-0"

FIRST FLOOR REFLECTED CEILING PLAN - PARTIAL UNIT E/F
1/8" = 1'-0"

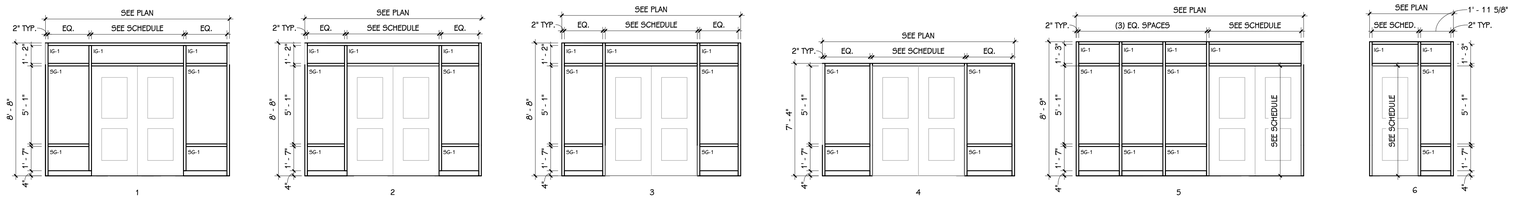
FIRST FLOOR DOOR SCHEDULE

NUMBER			FIRE RATING		DOOR			SIZE		FRAME			DETAILS				ACCESS CONTROLS						
DOOR	ROOM	ROOM NAME	DOOR	FRAME	TYPE	MAT	FIN	WIDTH	HEIGHT	ELEV	MAT	FIN	HEAD	JAMB	SILL	GLASS	A-PHONE	BARRIER-FREE	CARD READER	ELEC. LOCK HDWR.	MAG HOLD	HDWR. SET	REMARKS
100	100	CORRIDOR	-	-	FG2	HM	P-?	6' - 0"	7' - 2"	1	HM	P-?	-	-	-	-	No	No	Yes	Yes	Yes	4	-
300	300	CORRIDOR	-	-	FG2	HM	P-?	6' - 0"	7' - 2"	2	HM	P-?	-	-	-	-	No	No	Yes	Yes	Yes	4	-
309A	309	MEDIA CENTER	-	-	FG2	HM	P-?	6' - 0"	7' - 2"	3	HM	P-?	-	-	-	-	No	No	Yes	Yes	No	5	-
309B	309	MEDIA CENTER	-	-	FG2	HM	P-?	6' - 0"	7' - 2"	4	HM	P-?	-	-	-	-	No	No	Yes	Yes	No	5	-
200A	701B	ART COMMONS	-	-	FG2	HM	P-?	3' - 0"	7' - 2"	6	HM	P-?	-	-	-	-	No	No	Yes	Yes	No	6	-
200B	701B	ART COMMONS	-	-	FG2	HM	P-?	6' - 0"	7' - 2"	5	HM	P-?	-	-	-	-	No	No	Yes	Yes	No	4	-

A3

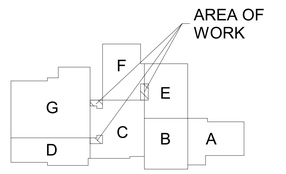


DOOR PANEL ELEVATION
1/4" = 1'-0"



FRAME ELEVATIONS
1/4" = 1'-0"

WEST MIDDLE SCHOOL



KEY PLAN
SCALE: NO SCALE

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ADDENDUM 3	3/1/24
ISSUED FOR	DATE

PROJECT TITLE
WEST MIDDLE SCHOOL - BID PACKAGE 2:
DISTRICT WIDE ACCESS CONTROL

OWNER
PORTAGE PUBLIC SCHOOLS
Portage, Michigan

DATE
FEBRUARY 16, 2024

SHEET TITLE
FIRST FLOOR PLAN & REFLECTED CEILING PLAN

SHEET NUMBER
A 101
23-214.70