

**SPECIFICATIONS / SCOPE OF SERVICES FOR LOCKS/DOORS/DOOR HARDWARE REPLACEMENT
WORCESTER PUBLIC SCHOOLS - DEPT. OF FACILITIES MGMT.**

The City of Worcester is soliciting bids on behalf of Worcester Public Schools (WPS) for a project involving the integration of various safety features across their facilities.

This includes the installation of:

- 107 New Classroom Lockset w/ Indication,
- 70 New Office lockset
- 195 New Panic Hardware/ Exit Device
- 4 New Solid Wood Interior Door.

The project's primary objective is to upgrade the doors and door hardware at various Worcester Public School sites, encompassing multiple building locations, with the aim of standardized products system wide.

The quantities listed are the quantities planned, and bidders shall provide a total lump sum price for all items/materials and installation services required herein.

SPECIFICATIONS**INTERIOR DOORS AND HARDWARE REPLACEMENT AT MULTIPLE SCHOOL BUILDINGS****PART 1 – GENERAL****1.1 SUMMARY**

Replace specified hardware on identified doors at the following sites:

Panic Hardware

Chandler Elementary Community School, 114 Chandler Street, Worcester, MA. 01609
22 New Panic Hardware/ Exit Device

City View Discovery School, 80 Prospect Street, Worcester, MA. 01605
6 New Panic Hardware/ Exit Device

Elm Park Community School, 23 North Ashland, Worcester, MA. 01609
16 New Panic Hardware/ Exit Device

Flagg Street School, 115 Flagg Street, Worcester, MA. 01602
4 New Panic Hardware/ Exit Device

Goddard School of Science & Technology, 14 Richards Street, Worcester, MA. 01603
Building 1
26 New Panic Hardware/ Exit Device

Building 2
18 New Panic Hardware/ Exit Device

Grafton Street School, 311 Grafton Street, Worcester, MA. 01604

3 New Panic Hardware/Exit Device

May Street School, 265 May Street, Worcester, MA. 01602

5 New Panic Hardware/Exit Device

2 New Solid Wood Interior Door

Francis J McGrath Elementary School, 493 Grove Street, Worcester, MA. 01605

14 New Panic Hardware/Exit Device

Tatnuck Magnet School, 1083 Pleasant Street, Worcester, MA. 01602

1 New Panic Hardware/Exit Device

Union Hill School, 1 Chapin Street, Worcester, MA. 01604

Building 2

2 New Panic Hardware/ Exit Device

Vernon Hill School, 211 Providence Street, Worcester, MA. 01607

28 New Panic Hardware/ Exit Device

Building(s)

Worcester East Middle School, 420 Grafton Street, Worcester, MA. 01604

107 New Classroom Lockset w/ Indication,

70 New Office lockset

50 New Panic Hardware/ Exit Device

4 New Solid Wood Interior Door.

1.2 ACTION SUBMITTALS

1.2.1 Permits:

Installer responsible for acquiring and payment for all required permitting necessary to complete the scope of work defined in these documents.

1.2.2 Mandatory Pre-Bid Conference:

A **mandatory** Pre-Bid walkthrough will be held on February 27, 2025 @ 9:30 A.M. Contractors planning to bid this project **MUST** attend this conference.

The Pre-Bid Conference will be held at:

Worcester East Middle School, 420 Grafton Street, Worcester, MA. 01604.

No other school sites will be visited.

The walkthrough will take approximately 3-4 hours.

All Bidders or their representatives are to meet at the site in the front office and document attendance on the conference "sign-in" sheet. Attendees and District Representatives will inspect the site. Questions will not be entertained at the site. Questions must be submitted via email to the City's Purchasing Department contact as noted elsewhere in these specifications. Bids will be accepted and evaluated only from those bidders that have signed in and are present at the walk-thru for all sites. Failure to attend the pre-bid conference will result in disqualification and rejection of the bid.

1.2.3 Door Hardware Schedule:

Prepared by or under the supervision of Installer, detailing fabrication and assembly of door hardware, as well as installation procedures and diagrams. Coordinate final door hardware schedule with doors, frames, and related work to ensure proper size, thickness, handing, function, and finish of door hardware.

- A. Submit concurrent with submissions of Product Data, Samples, and Shop Drawings. Coordinate submission of door hardware schedule with scheduling requirements of other work to facilitate fabrication of other work critical in Project construction schedule.
- B. Submit under direct supervision of a Door Hardware Institute (DHI) certified Architectural Hardware Consultant (AHC) or Door Hardware Consultant (DHC) with hardware sets in vertical format as illustrated by Sequence of Format for the Hardware Schedule published by DHI.
- C. Indicate complete designations of each item required for each opening, include:
 - a. Door Index: door number, heading number, and Architect's hardware set number.
 - b. Quantity, type, style, function, size, and finish of each hardware item.
 - c. Name and manufacturer of each item.
 - d. Fastenings and other pertinent information.
 - e. Location of each hardware set cross-referenced to indications on Drawings.
 - f. Explanation of all abbreviations, symbols, and codes contained in schedule.
 - g. Mounting locations for hardware.
 - h. Door and frame sizes and materials.
 - i. Degree of door swing and handing.

1.2.4 Key Schedule:

- A. After Keying Conference, provide keying schedule that includes levels of keying, explanations of key system's function, key symbols used, and door numbers controlled.
- B. Use ANSI/BHMA A156.28 "Recommended Practices for Keying Systems" as guideline for nomenclature, definitions, and approach for selecting optimal keying system.
- C. Provide 3 copies of keying schedule for review prepared and detailed in accordance with referenced DHI publication. Include schematic keying diagram and index each key to unique door designations.
- D. Index keying schedule by door number, keyset, hardware heading number, cross keying instructions, and special key stamping instructions.
- E. Provide one complete biting list of key cuts and one key system schematic illustrating system usage and expansion. Forward biting list, key cuts and key system schematic directly to Owner, by means as directed by Owner.
- F. Prepare key schedule by or under supervision of supplier, detailing Owner's final keying instructions for locks.

1.3 DCAMM CERTIFICATION

A copy of the contractor's DCAMM Certificate of Eligibility Forms Q7 and Update Form CQ3 must accompany this bid. Only contractors holding a Certificate of Eligibility from DCAMM in the category (ies) called for, and in a single project amount higher than the estimated project cost will be able to file a bid.

THE PROJECT CLASSIFICATION IS: GENERAL BUILDING CONSTRUCTION OR
DOORS & WINDOWS

1.4 INFORMATIONAL SUBMITTALS

- A. Provide Qualification Data for Supplier, Installer and Architectural Hardware Consultant.
- B. Provide Product Data:
 - a. Certify that door hardware approved for use on types and sizes of labeled fire-rated doors complies with listed fire-rated door assemblies.
 - b. Include warranties for specified door hardware.

1.5 CLOSEOUT SUBMITTALS

- A. Operations and Maintenance Data: Provide in accordance with Division 01 and include:
 - a. Complete information on care, maintenance, and adjustment; data on repair and replacement parts, and information on preservation of finishes.
 - b. Catalog pages for each product.
 - c. Final approved hardware schedule edited to reflect conditions as installed.
 - d. Final keying schedule
 - e. Copy of warranties including appropriate reference numbers for manufacturers to identify project.
 - f. All materials will be provided on a flash drive.

1.6 QUALITY ASSURANCE

- A. Qualifications & Responsibilities
 - a. Supplier: Recognized architectural hardware supplier with a minimum of 5 years documented experience supplying both mechanical and electromechanical door hardware similar in quantity, type, and quality to that indicated for this Project. Supplier to be recognized as a factory direct distributor by the manufacturer of the primary materials with a warehousing facility in the Project's vicinity. Supplier to have on staff, a certified Architectural Hardware Consultant (AHC) or Door Hardware Consultant (DHC) available to Owner, Architect, and Contractor, at reasonable times during the Work for consultation.
 - b. Installer: Qualified tradesperson skilled in the application of commercial grade hardware with experience installing door hardware similar in quantity, type, and quality as indicated for this Project.
 - c. Architectural Hardware Consultant: Person who is experienced in providing consulting services for door hardware installations that are comparable in material, design, and extent to that indicated for this Project and meets these requirements: a. For door hardware: DHI certified AHC or DHC. b. Can provide installation and technical data to Architect and other related subcontractors. c. Can inspect and verify components are in working order upon completion of installation.
 - d. Source Limitations: Obtain each type of door hardware within each category (Classroom Locksets w/ Indication, Office Locksets, Panic Hardware/Exits Devices, or interior solid wood doors) from a single manufacturer. For example, all Schlage ND Series locks or approved equal, across all buildings, shall be furnished by the same manufacturer. Because of the differing applications of each style lock/hardware category, different manufacturers will be expected and is allowable.
- B. Certifications
 - a. 1. Fire-Rated Door Openings:
 - i. Provide door hardware for fire-rated openings that complies with NFPA 80 and requirements of authorities having jurisdiction.
 - ii. Provide only items of door hardware that are listed products tested by UL LLC, Intertek Testing Services, or other testing and inspecting organizations acceptable to authorities having jurisdiction for use on types and sizes of doors indicated, based on testing at positive pressure and according to NFPA 252 or UL10C and in compliance with requirements of fire-rated door and door frame labels.
- C. Pre-Installation Meetings
 - a. Keying Conference
 - i. Incorporate keying conference decisions into final keying schedule after reviewing door hardware keying system including:
 - 1. Function of building, flow of traffic, purpose of each area, degree of security

- required, and plans for future expansion.
- 2. Preliminary key system schematic diagram.
- 3. Requirements for key control system.
- 4. Address for delivery of keys.

D. Regulatory Requirements

- a. Floor stops: Do not locate in path of travel. Locate no more than 4 inches from walls, per DSA Policy #99-08 (Access).
- b. Handles, pull, latches, locks, other operable parts:
 - i. Panic hardware: locate between 36 inches to 44 inches above the finished floor.
- c. Adjust door closer sweep periods so that from an open position of 90 degrees, the door will take at least 5 seconds to move to a point 12 degrees from the latch, measured to the landing side of the door.

1.7 DELIVERY, STORAGE AND HANDLING

- A. Inventory door hardware on receipt and provide secure lock-up for hardware delivered to Project site. Promptly replace products damaged during shipping.
- B. Tag each item or package separately with identification coordinated with final door hardware schedule, and include installation instructions, templates, and necessary fasteners with each item or package. Deliver each article of hardware in manufacturer's original packaging.
- C. Maintain manufacturer-recommended environmental conditions throughout storage and installation periods.
- D. Provide secure lock-up for door hardware delivered to Project. Control handling and installation of hardware items so that completion of Work will not be delayed by hardware losses both before and after installation.
- E. Handle hardware in manner to avoid damage, marring, or scratching. Correct, replace or repair products damaged during Work. Protect products against malfunction due to paint, solvent, cleanser, or any chemical agent.
- F. Deliver keys to Owner.

1.8 COORDINATION

Existing Openings: Where hardware components are scheduled for application to existing construction or where modifications to existing door hardware are required, field verify existing conditions and coordinate installation of door hardware to suit opening conditions and to provide proper door operation.

1.9 ENVIRONMENTAL CONDITIONS

WPS Environmental Health & Safety Department will be responsible for testing and remediation of an area that is impacted by this project.

1.10 WARRANTY

- A. Manufacturer's standard form in which manufacturer agrees to repair or replace components of door hardware that fail in materials or workmanship within published warranty period.
 - 1. Warranty does not cover damage or faulty operation due to improper installation, improper use or abuse.
 - 2. Warranty Period: Beginning from date of Substantial Completion, for durations indicated in manufacturer's published listings.
 - a. Mechanical Warranty
 - 1) Locks
 - a) Schlage ND Series: 10 years

- 2) Exit Devices
 - a) Von Duprin: 3 years
- 3) Closers a) LCN 4000 Series: 30 years

1.11 MAINTENANCE & SERVICE

- A. Furnish a complete set of specialized tools and maintenance instructions for Owner's continued adjustment, maintenance, and removal and replacement of door hardware.

PART 2 – PRODUCTS

2.1 MATERIALS

- A. Fabrication
 - 1. Provide door hardware manufactured to comply with published templates generally prepared for machine, wood, and sheet metal screws. Provide screws according to manufacturer's recognized installation standards for application intended.
 - 2. Finish exposed screws to match hardware finish, or, if exposed in surfaces of other work, to match finish of this other work including prepared for paint surfaces to receive painted finish.
- B. Modification and Preparation of Existing Doors: Where existing door hardware is indicated to be removed and reinstalled.
 - 1. Provide necessary fillers, Dutchmen, reinforcements, and fasteners, compatible with existing materials, as required for mounting new opening hardware and to cover existing door and frame preparations.
 - 2. Use materials which match materials of adjacent modified areas.
 - 3. When modifying existing fire-rated openings, provide materials permitted by NFPA 80 as required to maintain fire-rating.
- C. Provide screws, bolts, expansion shields, drop plates and other devices necessary for hardware installation.
 - 1. Where fasteners are exposed to view: Finish to match adjacent door hardware material.

2.2 HINGES

- A. Manufacturers and Products:
 - 1. Scheduled Manufacturer and Product:
 - a. Ives 5BB series
 - 2. Acceptable Manufacturers and Products:
 - a. Hager BB1191/1279 series
 - b. McKinney TB series
- B. Requirements:
 - 1. Provide hinges conforming to ANSI/BHMA A156.1.
 - 2. Provide five knuckle, ball bearing hinges.
 - 3. 1-3/4 inch (44 mm) thick doors:
 - a. Interior: Heavy weight, steel, 4-1/2 inches (114 mm) high
 - 4. Adjust hinge width for door, frame, and wall conditions to allow proper degree of

opening.

5. Provide three hinges per door leaf for doors 90 inches (2286 mm) or less in height, and one additional hinge for each 30 inches (762 mm) of additional door height.

6. Where new hinges are specified for existing doors or existing frames, provide new hinges of identical size to hinge preparation present in existing door or existing frame.

2.3 SURFACE BOLTS

A. Manufacturers:

1. Scheduled Manufacturer:

- a. Ives

2. Acceptable Manufacturers:

- a. Burns
- b. Trimco

3. Approved Equivalent

B. Requirements:

1. Surface bolts to have 1" throw for maximum security with concealed mounting that prevents vandalism. Units to be constructed of heavy-duty steel and UL listed up to three (3) hours when used on the inactive door of a pair up to 8' in height.

2.4 CYLINDRICAL LOCKS – GRADE 1

A. Manufacturers and Products:

1. Scheduled Manufacturer and Product:

- a. Schlage ND series

2. Acceptable Manufacturers and Products:

- a. Sargent 11-Line
- b. Best 9K series

3. Approved Equivalent

B. Requirements:

1. Provide cylindrical locks conforming to ANSI/BHMA A156.2 Series 4000, Grade 1, and UL Listed for 3-hour fire doors.

2. Indicators: Where specified, provide escutcheon with lock status indicator window on top of lockset rose:

- a. Escutcheon height (including rose) 6.05 inches high by 3.68 inches wide.
- b. Indicator window measuring a minimum 3.52-inch by .60 inch with 1.92 square inches of front facing viewing area and 180-degree visibility with a total of .236 square-inches of total viewable area.
- c. Provide snap-in serviceable window to prevent tampering. Lock must function if indicator is compromised.
- d. Provide messages color-coded with full text and symbol, as scheduled, for easy visibility.
- e. Unlocked and Unoccupied message will display on white background, and Locked and Occupied message will display on red background.

3. Cylinders: Refer to "KEYING" article, herein.
4. Provide locks with standard 2-3/4 inches (70 mm) backset, unless noted otherwise, with 1/2-inch latch throw. Provide proper latch throw for UL listing at pairs.
5. Provide locksets with separate anti-rotation thru-bolts, and no exposed screws.
6. Provide independently operating levers with two external return spring cassettes mounted under roses to prevent lever sag.
7. Provide standard ASA strikes unless extended lip strikes are necessary to protect trim.
8. Provide electrified options as scheduled in the hardware sets.
9. Lever Trim: Solid cast levers without plastic inserts and wrought roses on both sides.
 - a. Lever Design: Schlage Athens

2.5 EXIT DEVICES

A. Manufacturers and Products:

1. Scheduled Manufacturer and Product:
 - a. Von Duprin 98-series
2. Acceptable Manufacturers and Products:
 - a. Precision APEX 2000 series
 - b. Sargent 19-43-GL-80 series
3. Approved Equivalent

B. Requirements:

1. Provide exit devices tested to ANSI/BHMA A156.3 Grade 1 and UL listed for Panic Exit or Fire Exit Hardware.
2. Cylinders: Refer to "KEYING" article, herein.
3. Provide smooth touchpad type exit devices, fabricated of brass, bronze, stainless steel, or aluminum, plated to standard architectural finishes to match balance of door hardware.
4. Touchpad must extend a minimum of one half of door width. No plastic inserts are allowed in touchpads.
5. Provide exit devices with dead latching feature for security.
6. Provide exit devices with weather resistant components that can withstand harsh conditions of various climates.
7. Provide flush end caps for exit devices.
8. Provide exit devices with manufacturer's approved strikes.
9. Provide exit devices cut to door width and height. Install exit devices at height recommended by exit device manufacturer, allowable by governing building codes, and approved by Architect.
10. Mount mechanism case flush on face of doors or provide spacers to fill gaps behind devices. Where glass trim or molding projects off face of door, provide glass bead kits.
11. Provide dogging features (or less dogging) as specified at non fire-rated openings.
12. Provide exit devices with optional trim designs to match other lever and pull designs used on the project.
13. Special Options:
 - a. SI
 - 1) Provide dogging indicators for visible indication of dogging status.

2.6 CYLINDERS

- A. Manufacturers and Products:
 - 1. Scheduled Manufacturer and Product:
 - a. Schlage Everest 29 T
 - 2. Acceptable Manufacturers and Products:
 - a. No Substitute
- B. Requirements:
 - 1. Provide cylinders/cores compliant with ANSI/BHMA A156.5; latest revision; cylinder face finished to match lockset; manufacturer's series as indicated. Refer to "KEYING" article, herein.
 - 2. Provide cylinders in the below-listed configuration(s), distributed throughout the Project as indicated.
 - a. Patented Restricted: cylinder with full-size interchangeable core with patented, restricted keyway
 - 3. Patent Protection: Cylinders/cores requiring use of restricted, patented keys, patent protected.
 - 4. Nickel silver bottom pins.

2.7 KEYING

- A. Scheduled System:
 - 1. Existing factory registered system:
 - a. Provide cylinders/cores keyed into Owner's existing Schlage factory registered keying system. Comply with guidelines in ANSI/BHMA A156.28, incorporating decisions made at keying conference.
- B. Requirements:
 - 1. Permanent Keying:
 - a. Provide permanent cylinders/cores keyed by the manufacturer according to the following key system.
 - 1) Master Keying system as directed by the Owner.
 - b. Forward biting list and keys separately from cylinders, by means as directed by Owner. Failure to comply with forwarding requirements will be cause for replacement of cylinders/cores involved at no additional cost to Owner.
 - c. Provide keys with the following features:
 - 1) Material: Nickel silver; minimum thickness of .107-inch (2.3mm)
 - 2) Patent Protection: Keys and blanks protected by one or more utility patent(s).
 - d. Identification:
 - 1) Mark permanent cylinders/cores and keys with applicable blind code for identification. Do not provide blind code marks with actual key cuts.
 - 2) Identification stamping provisions must be approved by the Architect and Owner.
 - 3) Stamp cylinders/cores and keys with Owner's unique key system facility code as established by the manufacturer; key symbol and embossed or stamped with "DO NOT DUPLICATE" along with the "PATENTED" or patent number to enforce the patent protection.
 - 4) Failure to comply with stamping requirements will be cause for replacement of keys involved at no additional cost to Owner.
 - 5) Forward permanent cylinders/cores to Owner, separately from keys,

by means as directed by Owner.

e. Quantity: Furnish in the following quantities.

- 1) Permanent Control Keys: 4.
- 2) Master Keys: 4.
- 3) Change (Day) Keys: 2 per cylinder/core that is keyed differently
- 4) GGM: 4
- 5) A: 4
- 6) A"?" Worcester East Middle School designation
- 6) AKey Blanks: Quantity as determined in the keying meeting.

A new GGM Restricted Key System will be implemented, which will become the standard going forward for the WPS

6 different change keys will be required, in addition to a Great Grand Master, Grand Master, Building Masters and Control Keys

6 different change keys will be:

- Principal's Office
- Assistant Principal's/Dean's Office
- General Offices
- Classroom/Common Areas
- Mechanical/Maintenance Rooms
- Information Technology Rooms

NEW GRAND MASTER KEY SYSTEM KEYING NOTES		
KEY SYMBOL	AREA	QUANTITY
GGM	Great Grand Master	4 per school
A	Grand (Quadrant) Master	4 per school
A"?"	Building Master	4 per school
XAA10	Classrooms/Common Areas	2 keys per core
AA2	General Offices	2 keys per core
AA3	Principal	2 keys per core
AA4	Assistant Principal	2 keys per core
AA5	IT Areas	2 keys per core
AA6	Custodial/Mechanical/Storage	2 keys per core
CTRL	Control Keys	5 total

- Furnish Key System Schematic with biting information.
- All keys need to be clearly stamped with key symbol.
- All cores need to be stamped concealed.

2.8 DOOR CLOSERS**A. Manufacturers and Products:****1. Scheduled Manufacturer and Product:**

- a. LCN 4040XP series

2. Acceptable Manufacturers and Products:

- a. Norton 9500 series
- b. Sargent 281 series

3. Approved Equivalent**B. Requirements:**

1. Provide door closers conforming to ANSI/BHMA A156.4 Grade 1 requirements by BHMA certified independent testing laboratory. ISO 9000 certified closers. Stamp units with date of manufacture code.
2. Provide door closers with fully hydraulic, full rack and pinion action with high strength cast iron cylinder, and full complement bearings at shaft.
3. Cylinder Body: 1-1/2-inch (38 mm) diameter piston with 5/8-inch (16 mm) diameter double heat-treated pinion journal. QR code with a direct link to maintenance instructions.
4. Hydraulic Fluid: Fireproof, passing requirements of UL10C, and requiring no seasonal closer adjustment for temperatures ranging from 120 degrees F to -30 degrees F.
5. Spring Power: Continuously adjustable over full range of closer sizes, and providing reduced opening force as required by accessibility codes and standards. Provide snap-on cover clip, with plastic covers, that secures cover to spring tube.
6. Hydraulic Regulation: By tamper-proof, non-critical valves, with separate adjustment for latch speed, general speed, and backcheck. Provide graphically labelled instructions on the closer body adjacent to each adjustment valve. Provide positive stop on reg valve that prevents reg screw from being backed out.
7. Provide closers with solid forged steel main arms and factory assembled heavy-duty forged forearms for parallel arm closers.
8. Pressure Relief Valve (PRV) Technology: Not permitted.
9. Finish for Closer Cylinders, Arms, Adapter Plates, and Metal Covers: Powder coating finish which has been certified to exceed 100 hours salt spray testing as described in ANSI Standard A156.4 and ASTM B117, or has special rust inhibitor (SRI).
10. Provide special templates, drop plates, mounting brackets, or adapters for arms as required for details, overhead stops, and other door hardware items interfering with closer mounting.
11. Closers shall be capable of being upgraded by adding modular mechanical or electronic components in the field.

2.9 PROTECTION PLATES**A. Manufacturers:****1. Scheduled Manufacturer:**

- a. Ives

2. Acceptable Manufacturers:

- a. Burns

b. Trimco

3. Approved Equivalent

B. Requirements:

1. Provide protection plates with a minimum of 0.050 inch (1 mm) thick, beveled four edges as scheduled. Furnish with sheet metal or wood screws, finished to match plates.
2. Sizes plates 2 inches (51 mm) less width of door on single doors, pairs of doors with a mullion, and doors with edge guards. Size plates 1 inch (25 mm) less width of door on pairs without a mullion or edge guards.
3. At fire rated doors, provide protection plates over 16 inches high with UL label.

2.10 FINISHES

A. FINISH: BHMA 626/652 (US26D); EXCEPT:

1. Protection Plates: BHMA 630 (US32D)
2. Door Closers: Powder Coat to Match

2.11 INTERIOR DOORS

- Any Door Construction manufacturer - 3 ply or 5 ply Construction – meets or exceeds industry standards of WDMA 1.S.1a
- Measurements: Contractor required to field measure all doors for dimensions and hardware selection accuracy.
- Glass Measurements: 6" wide X 26" long; fire-rated
- Standard New Hardware: hinges, strikes, door stop (application specific)
- Color: stained to match existing doors and trim
- Door Thickness - 1-3/4" Standard
- Door Cores – 28-30 lb. particle board – Meets or exceeds requirements of ANSI A208.1 and CS236-66
- Door Undercut – ¾" Standard
- Door Sizes – Widths to 4'0" – Heights to 8'0"
- Standard Preps – Lite Cutout, Cylindrical Locks (to meet Locks and hardware referenced in the specifications) w/ cutout for latch bolt
- Fire-Rating – Non-fire rated (Optional 20-minute Fire labeled and fire glass)
- vision Lite Frame Construction – 20- or 18-gauge steel
- Vision Lite Frame Brands – Air Louvers, National Guard, Rockwood or approved equivalent
- Vision Lite Frame Finish – Bronze, Gray, Black or Primed Gray
- Glass Types – 1/4" Clear Tempered, ¼" Fire-Rated Wire, 3/16" Fire-rated Pyran Platinum F
- Mfg. Hinge/Lock Locations – Steelcraft, Timely, Western Integrated, or custom locations as required.

NOTES:

Hinges: The expectation is that new hinges are used on all new door installations.

Door Closers: WPS will furnish door closers and overhead stops as needed/identified by the Vendor awarded the contract for specific locations.

2.12 CORES/KEYS

- Keyed-alike with interchangeable cores
- Schlage Core Satin Chrome or approved equivalent.
- Owner to provide a key schedule

2.13 SCHEDULED DOOR HARDWARE

Provide door hardware for each door as scheduled in the Door Hardware Schedule to comply with requirements in this Section.

Door Hardware Sets: Provide quantity, item, size, finish or color indicated, and products equivalent in function and comparable in quality to named products by other listed manufacturers.

Sequence of Operation: Provide electrified door hardware function, sequence of operation, and interface with other building control systems indicated.

2.14 MECHANICAL LOCKS AND LATCHES

General: Provide lock functions as indicated in the door hardware schedule.

Verify all Lock Functions with the owner before ordering. Ordering incorrect lockset function without verification will result in furnishing new locksets at no cost to the owner.

PART 3 - EXECUTION**3.1 EXAMINATION**

- A. Prior to installation of hardware, examine doors and frames, with Installer present, for compliance with requirements for installation tolerances, labeled fire-rated door assembly construction, wall and floor construction, and other conditions affecting performance. Verify doors, frames, and walls have been properly reinforced for hardware installation.
- B. Field verify existing doors and frames receiving new hardware and existing conditions receiving new openings. Verify that new hardware is compatible with existing door and frame preparation and existing conditions.
- C. Submit a list of deficiencies in writing and proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

- A. Where on-site modification of doors and frames is required:
 - a. Field modify and prepare existing doors and frames for new hardware being installed.
 - b. When modifications are exposed to view, use concealed fasteners, when possible.
 - c. Prepare hardware locations and reinstall in accordance with installation requirements for new door hardware and with:
 - 1. Steel Doors and Frames: For surface applied door hardware, drill and tap doors and frames according to ANSI/SDI A250.6.
 - 2. Wood Doors: DHI WDHS.5 "Recommended Hardware Reinforcement Locations for Mineral Core Wood Flush Doors."
 - 3. Doors in rated assemblies: NFPA 80 for restrictions on on-site door hardware preparation.

3.3 INSTALLATION

- A. Mount door hardware units at heights to comply with the following, unless otherwise

indicated or required to comply with governing regulations.

1. Standard Steel Doors and Frames: ANSI/SDI A250.8.
 2. Custom Steel Doors and Frames: HMMA 831.
 3. Interior Architectural Wood Flush Doors: ANSI/WDMA I.S. 1A
- B. Install door hardware in accordance with NFPA 80, NFPA 101 and provide post-install inspection, testing as specified in section 1.03.E unless otherwise required to comply with governing regulations.
- C. Install each hardware item in compliance with manufacturer's instructions and recommendations, using only fasteners provided by manufacturer.
- D. Do not install surface mounted items until finishes have been completed on substrate. Protect all installed hardware during painting.
- E. Set units level, plumb and true to line and location. Adjust and reinforce attachment substrate as necessary for proper installation and operation.
- F. Drill and countersink units that are not factory prepared for anchorage fasteners. Space fasteners and anchors according to industry standards.
- G. Install operating parts so they move freely and smoothly without binding, sticking, or excessive clearance.
- H. Hinges: Install types and in quantities indicated in door hardware schedule but not fewer than quantity recommended by manufacturer for application indicated.
- I. Lock Cylinders:
1. Furnish permanent cores to Owner for installation.
- J. Door Closers: Mount closers/operators on room side of corridor doors, inside of exterior doors, and stair side of stairway doors from corridors. Mount closers so they are not visible in corridors, lobbies and other public spaces unless approved by Architect.

3.4 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.
1. Door Closers: Adjust sweep period to comply with accessibility requirements and requirements of authorities having jurisdiction.
 2. Adjust interior doors to open with not more than 5.0-pounds pressure to open.

3.5 CLEANING AND PROTECTION

- A. Clean adjacent surfaces soiled by door hardware installation.
- B. Clean operating items per manufacturer's instructions to restore proper function and finish.
- C. Provide final protection and maintain conditions that ensure door hardware is without damage or deterioration at time of Substantial Completion.

3.6 DOOR HARDWARE SCHEDULE

- A. The intent of the hardware specification is to specify the hardware for interior and exterior doors, and to establish a type, continuity, and standard of quality. However, it is the door hardware supplier's responsibility to thoroughly review existing conditions, schedules, specifications, drawings, and other Contract Documents to verify the suitability of the hardware specified.
- B. Discrepancies, conflicting hardware, and missing items are to 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.
- C. Hardware items are referenced in the following hardware schedule. Refer to the above specifications for special features, options, cylinders/keying, and other requirements.
 - D. Hardware Sets:

See Attachment: << WPS – Phase 2 Hardware Sets – 2-3-2025 >>

WPS is providing a set of floor plans identifying doors to be addressed as part of this bid invitation. These plans are diagrammatic, and it remains the contractor's responsibility to field verify all site locations ahead of any materials procurement. WPS Facilities Management shall approve all submittals and shop drawings and will answer contractor RFIs in a timely manner.

The project may commence upon contract execution and issuance of a City of Worcester Purchase Order.

***** All work under the scope of this contract shall be completed by June 30, 2025 *****