SECTION 00 90 03
BIDDING AND CONTRACT REQUIREMENTS
ADDENDUM NUMBER 3

Demonica Kemper Architects
125 N. Halsted Street, Suite 301
Chicago, IL 60661
312.496.0000

To: Prospective Bidders

Issued: March 13, 2025

Re: ADDENDUM NUMBER (3) TO THE BIDDING DOCUMENTS FOR

McHenry County College
2024 Health Science Renovations
Architect's Project Number: 24-032

This addendum forms a part of the bidding and contract documents and modifies the original bidding documents dated February 18, 2025. Acknowledge receipt of this addendum in the space provided on Bid Form. FAILURE TO DO SO MAY SUBJECT BIDDER TO DISQUALIFICATION.

ADDENDA TO THE PROJECT MANUAL

1. 00 41 13 – BID FORM
   A. **DELETE** reference "ALLOWANCE NO. 1" and revise numbering of remaining allowances.
   B. Full section reissued for clarity.

2. 01 21 00 – ALLOWANCES
   A. **DELETE** section 3.3-A. Renumber remaining allowances.
   B. Note that this section is not reissued. Revised spec will be provided as part of the Issued for Construction set sent out after bid award.

3. 08 71 00 – DOOR HARDWARE
   A. **ADD** section in its entirety.

4. 10 21 23 – CUBICLE CURTAINS AND TRACK
   A. **REVISE** section 2.3-B-1 to the following…
      1. Color: Provide Maharam, Skit 2, Color Preserve.
   B. Note that this section is not reissued. Revised spec will be provided as part of the Issued for Construction set sent out after bid award.

ADDENDA TO THE DRAWINGS

ARCHITECTURAL

1. A2.10
   A. ADD new roller shades to RCP for Radiology Suite at existing exterior windows.

2. A9.51
   A. REVISE detail 4 to indicate correct p-lam base cabinet finish.
   B. REVISE detail 9 to indicate correct p-lam countertop finish.
   C. REVISE detail 7 and 8 to indicate solid wood edge at interior wall.
   D. REVISE detail 8 to remove note "both sides" for SS End Panel.
   E. REVISE finish legend as indicated.

3. A9.52
    - **A. REVISE** details 1 and 5 as indicated to clean up overlapping lines and mis-labeled sections.
    - **B. REVISE** detail 3 to indicate correct p-lam finish.
    - **C. REVISE** detail 4 to correct wood finish types.

4. A10.00
    - **A. ADD** door hardware sets as indicated to the door schedule.

ELECTRICAL

1. E2.00
    - A. **DELETE** note on detail 1 “FIRE ALARM RISER” indicating Fox Valley Fire as the sole source installer for the fire alarm system. Refer to Pre-Bid RFI #9 for additional information.

TECHNOLOGY

1. T1.0 – OVERALL FLOOR PLANS – TECHNOOGY
    - A. **ADD** C2-WAP to Corridor E001. Contractor responsible for routing new cabling to the existing WAP to existing IT closet.

CLARIFICATIONS

1. Pre-Bid RFI #1 - Can you confirm whether or not the curtains will have mesh at the top of them?
    - A. RESPONSE: There will be mesh provided at the top of the curtains. Refer to the curtain and track specification 10 21 23 for details.

2. Pre-Bid RFI #2 - Can you confirm the deck height for both the floors?
    - A. RESPONSE: Per the existing drawings, the 2nd floor deck is +/- 12’-10 ½” above the first finished floor slab and the roof deck is +/- 12’-9 ¼” above the second finished floor slab.

3. Pre-Bid RFI #3 - Is any of the HM door frames to be lead-lined? The only lead-lined HM frames shown are Window frame Elevations BB & CC.
    - A. RESPONSE: No hollow metal door frames are required to be lead lined. The only HM frame requiring a lead lining is window elevation BB as indicated in detail 16/A7.51. Refer to Addendum #2 for clarification.

4. Pre-Bid RFI #4 - Please confirm the S3A type C- X-ray wall extent in plans, as there is S3A in wall type A-GYP BD each side and S3A in wall type C- X-RAY wall in partition wall types.
    - A. RESPONSE: Refer to addendum #2 for wall type clarification.

5. Pre-Bid RFI #5 - (2/A1.10) Floor Plan – Level-1 Radiology calls for wall type S3F, south wall in sonography lab. S3F is not included in wall partition types.
    - A. RESPONSE: Refer to addendum #2 for wall infill clarification.

6. Pre-Bid RFI #6 - Should the ceilings/ floors/glazing at the X-ray rooms be lead-lined?
    - A. RESPONSE: There is no lead lining required for ceilings, floors, or glazing.

7. Pre-bid RFI #7 - What is the current Paging system that we are adding onto?
    - A. RESPONSE: Feeds to existing 70V PA system speakers are to be extended to new speakers as shown.

8. Pre-Bid RFI #8 - Is Fox Vally the only Notifier dealer that we can get material from, or can we use other Notifier vendors to have competitive pricing?
    - A. RESPONSE: It is acceptable to use other installers. All new devices and systems will still be required to be compatible and acceptable for use with the existing system (Notifier NFS2-3030). Refer to revised electrical drawings.

9. Pre-Bid RFI #9 - What is the current AV system that we are adding onto?
    A. RESPONSE: The AV system for classroom E-119 consists of the following…
        - Speakers - JBL Control 26CT (AV-SP1-C)
        - Amplifier - JBL CSA280Z Drivecore
        - Volume Control - JBL CSR-V
        - Projector & Projector Mount – Owner provided
        - Projector screen – Owner provided

        Contractor to provide a shielded audio cable from the owner provided video projector to the amplifier. Coordinate final location for amplifier and volume control with owner. Install speakers per drawings, route 18 AWG 2 conductor cable from amplifier to ceiling speakers, for 70-volt operation.

10. Pre-bid RFI #10 - Please confirm if exposed plastic laminate surfaces can be edged in 3mm PVC in lieu of T-mold.
    A. RESPONSE: It is acceptable to us 3mm PVC ONLY if the PVC edge matches the Plastic Laminate Countertop manufacturer. If the 3mm PVC cannot be provided by the same manufacturer, then it is not acceptable.

11. Pre-Bid RFI #11 – 4/A9.51 is calling out PL-1 base cabinets on the left, and PL-2 base cabinets on the right. I'm assuming it is all PL-1. Please clarify.
    A. RESPONSE: The base cabinets should be PL-1.

12. Pre-Bid RFI #12 – 9/A9.51 is calling out a PL-1 countertop, and 10, 11/ A9.51 are calling out PL-2 countertop. I'm assuming it is PL-2. Please clarify.
    A. RESPONSE: The countertop should be PL-2.

13. Pre-Bid RFI #13 – 4/A9.52 is calling WD-5 & WD-6 which are not on the finish schedule. I am assuming they are WD-1 & WD-2. Please clarify.
    A. RESPONSE: WD-1 and WD-2 are the correct solid / veneer wood types for this section.

14. Pre-Bid RFI #14 – 8/A9.51 is calling out 1.25" Solid Surface End Panel Both Sides. The drawings show 1 waterfall leg. 11/ A9.01 shows the other side of the die wall is perpendicular to a wall. Do they want an inside solid surface waterfall face descending from the countertop to the floor on the inside wall? Please clarify.
    A. RESPONSE: No waterfall edge is required at the interior wall.

15. Pre-Bid RFI #15 – 5/A9.51 is not referred to on the plans. I am assuming it is the opposite the 4/A9.51 elevation tag on the (east) side of the wall on 3/A9.51. Please clarify.
    A. RESPONSE: That is correct, the elevation references the millwork east of the wall noted in 3/A9.51.

16. Pre-Bid RFI #16 – PL-1 Formica Natural Teak 8849-58. "58" is not a Formica finish suffix code. Please confirm finish Matte, or Natural Grain?
    A. RESPONSE: Provide Matte finish.

17. Pre-Bid RFI #17 - PL-2 Formica Paloma Polar D427-60. "D427-60" is not a Formica product code, or suffix finish code. Formica Paloma Polar is "6698". Please confirm Formica Paloma Polar is correct and confirm finish Matte or Etchings?
    A. RESPONSE: D427-60 is listed for PL-3, Wilsonart Linen. Paloma Polar 6698 is listed for PL-2. Both should be provided with a Matte Finish.

18. Pre-Bid RFI #18 - As per RCP- Level 1- Radiology, note C3 to remove existing blinds are called out at a few locations. Please confirm if new blinds are to be provided at any of those locations?
    A. RESPONSE: Roller shades should be provided at all exterior windows in Radiology Suite. Refer to updated A2.10 for scope.

19. Pre-Bid RFI #19 - The specified fabric is discontinued and no longer available.
    A. RESPONSE: Refer to Addendum #3 for replacement fabric to use for the cubicle curtains.

20. Pre-Bid RFI #20 - Can you confirm if a field office is required for this project?
    A. RESPONSE: A field office is not required. The GC can utilize space within the limits of construction for any desk / storage space and all OAC meetings will be conducted in the MCC facilities conference room.

21. Pre-Bid RFI #21 - Who is responsible for obtaining and paying for the permits?
    A. RESPONSE: There are no building permits required for this project.

22. Pre-Bid RFI #22 - Please provide specifications for the projection screens required for this project?
    A. RESPONSE: The projector screens will be provided and installed by the owner.

23. Pre-Bid RFI #23 - Who is the current temperature control contractor?
    A. RESPONSE: Trane is the controls manufacturer used at the college.

This addendum consists of 4 pages, excluding attachments.

END 00 90 03.

Attachments:
1. 00 41 13 – BID FORM, 08 71 00 – DOOR HARDWARE
2. A9.51, A9.52, A10.00

SECTION 00 41 13 - BID FORM

To: McHenry County College
8900 US Hwy 14
Crystal Lake, IL 60012

Project: 2024 Health Science Renovations

Date: _____

Submitted by:

_____

_____

_____
(Full name and address)

PART 1 - OFFER

Having examined the site and having familiarized itself with the conditions affecting the cost of the work associated with the project and with the bidding documents, Bidder hereby proposes to perform everything required and to furnish all labor, materials, necessary tools, expendable equipment, and transportation services necessary to complete in a workmanlike manner the subdivision of work stated above in accordance with the bidding documents for the following sums:

Base Bid:

We have included, attached herewith, the Bid Bond as required by the Instructions to Bidders.

The Bidder agrees to perform the work for the lump sum amount of:

TOTAL BASE BID $_____ (in figures)

_____ (in words)

Allowances:

The undersigned hereby states that all allowance amounts, as described in Section 01 21 00, are included in the Total Base Bid proposal amount listed above.

ALLOWANCE NO. 1: Unforeseen Conditions Allowance of $15,000.00

Alternate Bids:

The undersigned hereby states the net amount of decrease or increase to the Lump Sum Base Bid for the following Alternates as described in Section 01 23 00.

ALTERNATE No. 1: Deduct from the Lump Sum Base Bid to eliminate the Liquidated Damages Clause from the Contract.

Total, Alternate No. 1: $ _____

ALTERNATE No. 2: Deduct from the Lump Sum Base Bid to eliminate all Architectural, Plumbing, Electrical, and Technology work associated with Room E213 Nursing Skills Lab from the project scope.

Total, Alternate No. 2: $ _____

ALTERNATE No. 3: Deduct from the Lump Sum Base Bid to all Architectural, Mechanical, Fire Protection, Electrical, and Technology work associated with Room E218A Offices from the project scope.

Total, Alternate No. 3: $ _____

PART 3- ACCEPTANCE

This offer shall be open to acceptance and is irrevocable for thirty (90) days from the Bid closing date.

If the bid is accepted by the Owner within the time period stated above, we will:

A. Execute the Agreement within ten (10) days of receipt of Notice of Award.

B. Furnish the required bonds within ten (10) days of receipt of Notice of Award in the form described in the Supplementary Conditions.

C. Furnish the required Certificate of Insurance within ten (10) days of receipt of Notice of Award in the form and amounts described in the Supplementary Conditions.

D. Commence work as established by the written Notice to Proceed.

If this Bid is accepted within the time stated, and we fail to commence the Work or we fail to provide the required Bonds(s), the Security Deposit shall be forfeited as damages to the Owner by reason of our failures.

In the event our Bid is not accepted within the time stated above, the required security deposit shall be returned to the undersigned, in accordance with the provisions of the Instructions to Bidders; unless a mutually satisfactory arrangement is made for its retention and validity for an extended period of time.

PART 4 - CONTRACT TIME

If the Bid is accepted, we will:

A. Complete the work in manner consistent to meet the requirements of the schedule.

B. Contractor has examined the Schedule included in these documents and takes no exception, or records the following exceptions:

_____

_____

PART 5 - CONTRACTOR’S FEES FOR CHANGES IN THE WORK

Lump Sum or Time and Materials Changes: We, the undersigned bidder, agree that the following percentages for overhead and profit shall be added to costs for the net amount of work added to, or deleted from, the contract by written lump sum or time and material change orders recommended by the Architect and approved by the Owner:

A. On Contractor's direct net cost: 15%, with a minimum fee of one hundred dollars ($100.00).

B. On first-tier Subcontractor's net cost: 5%, with a minimum fee of fifty dollars ($50.00). Net cost includes all sub-subcontractors work, and excludes subcontractors (all tiers) overhead and profit amounts.

Note: Insurance, bond, and taxes are considered as job cost items and are included in the percentages listed above.

PART 6 - ADDENDA

The following Addenda have been received. The modifications to the Bid Documents noted therein have been considered and all costs thereto are included in the Bid Sum.

Addendum # ____ Dated _____ Addendum # ____ Dated _____

Addendum # ____ Dated _____ Addendum # ____ Dated _____

PART 7 - SUBCONTRACTORS

Identify below which work will be completed by the General Contractor's own forces and which work will be completed by first tier Subcontractors. Include Subcontractors name and estimated contract amount.

Scope of Work	GC/Sub.	Name	Est. Contract Amount
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

PART 8 - BID FORM SIGNATURE(S)

The Corporate Seal of:

_____
(Bidder – please print the full name of your Proprietorship or Corporation)

Was hereunto affixed in the presence of:

_____ _____
(Authorized signing officer) (Title)

(Seal)

END OF SECTION 00 41 13

SECTION 08 71 00 - DOOR HARDWARE

PART 1 - GENERAL

1.01 SUMMARY

A. Section includes:

1. Mechanical and electrified door hardware
2. Electronic access control system components

B. Section excludes:

1. Windows
2. Cabinets (casework), including locks in cabinets
3. Signage
4. Toilet accessories
5. Overhead doors

C. Related Sections:

1. Division 01 Section "Alternates" for alternates affecting this section.
2. Division 06 Section "Rough Carpentry"
3. Division 06 Section "Finish Carpentry"
4. Division 07 Section "Joint Sealants" for sealant requirements applicable to threshold installation specified in this section.
5. Division 08 Sections:
   a. "Metal Doors and Frames"
   b. "Flush Wood Doors"
   c. "Stile and Rail Wood Doors"
   d. "Interior Aluminum Doors and Frames"
   e. "Aluminum-Framed Entrances and Storefronts"
   f. "Stainless Steel Doors and Frames"
   g. "Special Function Doors"
   h. "Entrances"
6. Division 26 "Electrical" sections for connections to electrical power system and for low-voltage wiring.
7. Division 28 "Electronic Safety and Security" sections for coordination with other components of electronic access control system and fire alarm system.

1.02 REFERENCES

A. UL LLC

1. UL 10B - Fire Test of Door Assemblies
2. UL 10C - Positive Pressure Test of Fire Door Assemblies
3. UL 1784 - Air Leakage Tests of Door Assemblies
4. UL 305 - Panic Hardware

B. DHI - Door and Hardware Institute

1. Sequence and Format for the Hardware Schedule

2. Recommended Locations for Builders Hardware
3. Keying Systems and Nomenclature
4. Installation Guide for Doors and Hardware

C. NFPA – National Fire Protection Association

1. NFPA 70 – National Electric Code
2. NFPA 80 – 2016 Edition – Standard for Fire Doors and Other Opening Protectives
3. NFPA 101 – Life Safety Code
4. NFPA 105 – Smoke and Draft Control Door Assemblies
5. NFPA 252 – Fire Tests of Door Assemblies

D. ANSI - American National Standards Institute

1. ANSI A117.1 – 2017 Edition – Accessible and Usable Buildings and Facilities
2. ANSI/BHMA A156.1 - A156.29, and ANSI/BHMA A156.31 - Standards for Hardware and Specialties
3. ANSI/BHMA A156.28 - Recommended Practices for Keying Systems
4. ANSI/WDMA I.S. 1A - Interior Architectural Wood Flush Doors
5. ANSI/SDI A250.8 - Standard Steel Doors and Frames

1.03 SUBMITTALS

A. General:

1. Submit in accordance with Conditions of Contract and Division 01 Submittal Procedures.
2. Prior to forwarding submittal:
   a. Review drawings and Sections from related trades to verify compatibility with specified hardware.
   b. Highlight, encircle, or otherwise specifically identify on submittals: deviations from Contract Documents, issues of incompatibility or other issues which may detrimentally affect the Work.

B. Action Submittals:

1. Product Data: Submit technical product data for each item of door hardware, installation instructions, maintenance of operating parts and finish, and other information necessary to show compliance with requirements.
2. Riser and Wiring Diagrams: After final approval of hardware schedule, submit details of electrified door hardware, indicating:
   a. Wiring Diagrams: For power, signal, and control wiring and including:
      1) Details of interface of electrified door hardware and building safety and security systems.
      2) Schematic diagram of systems that interface with electrified door hardware.
      3) Point-to-point wiring.
      4) Risers.

3. Samples for Verification: If requested by Architect, submit production sample of requested door hardware unit in finish indicated and tagged with full description for coordination with schedule.
   a. Samples will be returned to supplier. Units that are acceptable to Architect may, after final check of operations, be incorporated into Work, within limitations of key coordination requirements.

4. Door Hardware Schedule:
    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:
        1) Door Index: door number, heading number, and Architect's hardware set number.
        2) Quantity, type, style, function, size, and finish of each hardware item.
        3) Name and manufacturer of each item.
        4) Fastenings and other pertinent information.
        5) Location of each hardware set cross-referenced to indications on Drawings.
        6) Explanation of all abbreviations, symbols, and codes contained in schedule.
        7) Mounting locations for hardware.
        8) Door and frame sizes and materials.
        9) Degree of door swing and handing.
        10) Operational Description of openings with electrified hardware covering egress, ingress (access), and fire/smoke alarm connections.

5. 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 bitting list of key cuts and one key system schematic illustrating system usage and expansion. Forward bitting 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.

C. Informational Submittals:

1. Provide Qualification Data for Supplier, Installer and Architectural Hardware Consultant.
2. 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.

D. Closeout Submittals:

1. 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. As-installed wiring diagrams for each opening connected to power, both low voltage and 110 volts.

E. Inspection and Testing:

1. Submit written reports to the Owner and Authority Having Jurisdiction (AHJ) of the results of functional testing and inspection for:
   a. Fire door assemblies, in compliance with NFPA 80.
   b. Required egress door assemblies, in compliance with NFPA 101.

1.04 QUALITY ASSURANCE

A. Qualifications and Responsibilities:

1. 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.
2. 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.
3. 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. Capable of producing wiring diagram and coordinating installation of electrified hardware with Architect and electrical engineers.

4. Single Source Responsibility: Obtain each type of door hardware from single manufacturer.

B. Certifications:

1. Fire-Rated Door Openings:
   a. Provide door hardware for fire-rated openings that complies with NFPA 80 and requirements of authorities having jurisdiction.
   b. 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 UL 10C and in compliance with requirements of fire-rated door and door frame labels.

2. Smoke and Draft Control Door Assemblies:
   a. Provide door hardware that meets requirements of assemblies tested according to UL 1784 and installed in compliance with NFPA 105

b. Comply with the maximum air leakage of 0.3 cfm/sq. ft. (3 cu. m per minute/sq. m) at tested pressure differential of 0.3-inch wg (75 Pa) of water.

3. Electrified Door Hardware
   a. Listed and labeled as defined in NFPA 70, Article 100, by testing agency acceptable to authorities having jurisdiction.

4. Accessibility Requirements:
   a. Comply with governing accessibility regulations cited in "REFERENCES" article 087100, 1.02.D3 herein for door hardware on doors in an accessible route. This project must comply with all Federal Americans with Disability Act regulations and all Local Accessibility Regulations.

C. Pre-Installation Meetings

1. Keying Conference
   a. 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) Requirements for access control.
      5) Address for delivery of keys.

2. Pre-installation Conference
   a. Review and finalize construction schedule and verify availability of materials, Installer's personnel, equipment, and facilities needed to make progress and avoid delays.
   b. Inspect and discuss preparatory work performed by other trades.
   c. Inspect and discuss electrical roughing-in for electrified door hardware.
   d. Review sequence of operation for each type of electrified door hardware.
   e. Review required testing, inspecting, and certifying procedures.
   f. Review questions or concerns related to proper installation and adjustment of door hardware.

3. Electrified Hardware Coordination Conference:
   a. Prior to ordering electrified hardware, schedule and hold meeting to coordinate door hardware with security, electrical, doors and frames, and other related suppliers.

1.05 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 manufacturer of key control system for subsequent delivery to Owner.

1.06 COORDINATION

A. Coordinate layout and installation of floor-recessed door hardware with floor construction. Cast anchoring inserts into concrete.

B. Installation Templates: Distribute for doors, frames, and other work specified to be factory or shop prepared. Check Shop Drawings of other work to confirm that adequate provisions are made for locating and installing door hardware to comply with indicated requirements.

C. Security: Coordinate installation of door hardware, keying, and access control with Owner's security consultant.

D. Electrical System Roughing-In: Coordinate layout and installation of electrified door hardware with connections to power supplies and building safety and security systems.

1.07 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) Corbin Russwin ML Series: 10 years
        2) Exit Devices
            a) Von Duprin: 3 years
        3) Closers
            a) LCN 4000 Series: 30 years
            b) CRL Concealed: 5 years
    b. Electrical Warranty
        1) Exit Devices
            a) Von Duprin: 1 year

1.08 MAINTENANCE

A. Furnish complete set of special tools required for maintenance and adjustment of hardware, including changing of cylinders.

B. Turn over unused materials to Owner for maintenance purposes.

PART 2 - PRODUCTS

2.01 MANUFACTURERS

A. The Owner requires use of certain products for their unique characteristics and project suitability to ensure continuity of existing and future performance and maintenance standards. After investigating available product offerings, the Awarding Authority has elected to prepare proprietary specifications. These products are specified with the notation: "No Substitute."

1. Where "No Substitute" is noted, submittals and substitution requests for other products will not be considered.

B. Approval of alternate manufacturers and/or products other than those listed as "Scheduled Manufacturer" or "Acceptable Manufacturers" in the individual article for the product category are only to be considered by official substitution request in accordance with section 01 25 00.

C. Approval of products from manufacturers indicated in "Acceptable Manufacturers" is contingent upon those products providing all functions and features and meeting all requirements of scheduled manufacturer's product.

D. Where specified hardware is not adaptable to finished shape or size of members requiring hardware, furnish suitable types having same operation and quality as type specified, subject to Architect's approval.

2.02 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.
3. Provide concealed fasteners wherever possible for hardware units exposed when door is closed. Coordinate with “Metal Doors and Frames”, “Flush Wood Doors”, “Stile and Rail Wood Doors” to ensure proper reinforcements. Advise the Architect where visible fasteners, such as thru bolts, are required.

B. 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.

C. Cable and Connectors:

1. Where scheduled in the hardware sets, provide each item of electrified hardware and wire harnesses with number and gage of wires enough to accommodate electric function of specified hardware.
2. Provide Molex connectors that plug directly into connectors from harnesses, electric locking and power transfer devices.

3. Provide through-door wire harness for each electrified locking device installed in a door and wire harness for each electrified hinge, electrified continuous hinge, electrified pivot, and electric power transfer for connection to power supplies.

2.03 HINGES

A. Manufacturers and Products:

1. Scheduled Manufacturer and Product:
   a. Ives 5BB series

2. Acceptable Manufacturers and Products:
   a. Substitutions by official Division 01 request only

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, up to and including 36 inches (914 mm) wide:
   a. Exterior: Standard weight, bronze or stainless steel, 4-1/2 inches (114 mm) high
   b. Interior: Standard weight, steel, 4-1/2 inches (114 mm) high

4. 1-3/4 inch (44 mm) thick doors over 36 inches (914 mm) wide:
   a. Exterior: Heavy weight, bronze/stainless steel, 5 inches (127 mm) high
   b. Interior: Heavy weight, steel, 5 inches (127 mm) high

5. 2 inches or thicker doors:
   a. Exterior: Heavy weight, bronze or stainless steel, 5 inches (127 mm) high
   b. Interior: Heavy weight, steel, 5 inches (127 mm) high

6. Adjust hinge width for door, frame, and wall conditions to allow proper degree of opening.
7. 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.
8. Hinge Pins: Except as otherwise indicated, provide hinge pins as follows:
   a. Steel Hinges: Steel pins
   b. Non-Ferrous Hinges: Stainless steel pins
   c. Out-Swinging Exterior Doors: Non-removable pins
   d. Out-Swinging Interior Lockable Doors: Non-removable pins
   e. Interior Non-lockable Doors: Non-rising pins

9. Provide hinges with electrified options as scheduled in the hardware sets. Provide with number and gage of wires enough to accommodate electric function of specified hardware. Locate electric hinge at second hinge from bottom or nearest to electrified locking component. Provide mortar guard for each electrified hinge specified.

2.04 MORTISE LOCKS

A. Manufacturers and Products:

1. Scheduled Manufacturer and Product:
   a. Corbin Russwin ML2000 series

2. Acceptable Manufacturers and Products:
   a. Schlage L9000 series

B. Requirements:

1. Provide mortise locks conforming to ANSI/BHMA A156.13 Series 1000, Grade 1, and UL Listed for 3-hour fire doors.
2. Indicators: Where specified, provide indicator window measuring a minimum 2-inch x 1/2 inch with 180-degree visibility. Provide messages color-coded with full text and/or symbols, as scheduled, for easy visibility.
3. Provide locks manufactured from heavy gauge steel, containing components of steel with a zinc dichromate plating for corrosion resistance.
4. Provide lock case that is multi-function and field reversible for handing without opening case. Cylinders: Refer to "KEYING" article, herein.
5. Provide locks with standard 2-3/4 inches (70 mm) backset with full 3/4 inch (19 mm) throw stainless steel mechanical anti-friction latchbolt. Provide deadbolt with full 1-inch (25 mm) throw, constructed of stainless steel.
6. Provide standard ASA strikes unless extended lip strikes are necessary to protect trim. Provide electrified options as scheduled in the hardware sets. Where scheduled, provide switches and sensors integrated into the locks and latches.
7. Provide motor based electrified locksets that comply with the following requirements:
   a. Universal input voltage – single chassis accepts 12 or 24VDC to allow for changes in the field without changing lock chassis.
   b. Fail Safe/Fail Secure – changing mode between electrically locked (fail safe) and electrically unlocked (fail secure) is field selectable without opening the lock case.
   c. Low maximum current draw – maximum 0.4 amps to allow for multiple locks on a single power supply.
   d. Low holding current – maximum 0.01 amps to produce minimal heat, eliminate “hot levers” in electrically locked applications, and to provide reliable operation in wood doors that provide minimal ventilation and air flow.
   e. Connections – provide quick-connect Molex system standard.

8. (KEY OVERRIDE OPTION WHEN XL13-439 IS SPECIFIED IN HARDWARE SETS) Provide locks with a key override feature built into the chassis that allows the outside key to retract the deadbolt and/or latchbolt, overriding the inside thumbturn when it is being held in the locked position.
9. Lever Trim: Solid brass, bronze, or stainless steel, cast or forged in design specified, with wrought roses and external lever spring cages. Provide thru-bolted levers with 2-piece spindles.
   a. Provide levers that return to within 1/2 inch (13 mm) of door face.
   b. Vandlgard: Provide levers with vandal resistant technology for use at heavy traffic or abusive applications.
   c. Lever Design: CSA

2.05 EXIT DEVICES

A. Manufacturers and Products:

1. Scheduled Manufacturer and Product:
   a. Von Duprin 98/35A series

2. Acceptable Manufacturers and Products:
   a. No Substitute

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 deadlatching feature for security and for future addition of alarm kits and/or other electrified requirements.
6. Provide exit devices with weather resistant components that can withstand harsh conditions of various climates and corrosive cleaners used in outdoor pool environments.
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 cylinder or hex-key dogging as specified at non fire-rated openings.
12. Removable Mullions: 2 inches (51 mm) x 3 inches (76 mm) steel tube. Where scheduled as keyed removable mullion, provide type that can be removed by use of a keyed cylinder, which is self-locking when re-installed.
13. Provide factory drilled weep holes for exit devices used in full exterior application, highly corrosive areas, and where noted in hardware sets.
14. Provide electrified options as scheduled.
15. Top latch mounting: double- or single-tab mount for steel doors, face mount for aluminum doors eliminating requirement of tabs, and double tab mount for wood doors.
16. Provide exit devices with optional trim designs to match other lever and pull designs used on the project.

2.06 FLUSH BOLTS

A. Manufacturers:

1. Scheduled Manufacturer:
   a. Ives

B. Requirements:

1. Provide automatic, constant latching, and manual flush bolts with forged bronze or stainless-steel face plates, extruded brass levers, and with wrought brass guides and strikes. Provide 12 inch (305 mm) steel or brass rods at doors up to 90 inches (2286 mm) in height. For doors over 90 inches (2286 mm) in height increase top rods by 6 inches (152 mm) for each additional 6 inches (152 mm) of door height. Provide dust-proof strikes at each bottom flush bolt.

2.07 CYLINDERS

A. Manufacturers:

1. Scheduled Manufacturer and Product:
   a. Corbin Russwin

2. Acceptable Manufacturers and Products:
   a. No Substitute

B. Requirements:

1. Provide cylinders/cores to match Owner's existing key system, compliant with ANSI/BHMA A156.5; latest revision; cylinder face finished to match lockset, manufacturer's series as indicated. Refer to "KEYING" article, herein.

2.08 KEYING

A. Scheduled System:

1. Existing non-factory registered system:
   a. Provide cylinders/cores keyed into Owner's existing keying system managed by Owner's locksmith, complying with guidelines in ANSI/BHMA A156.28, incorporating decisions made at keying conference.

B. Requirements:

1. Construction Keying:
   a. Replaceable Construction Cores.
      1) Provide temporary construction cores replaceable by permanent cores, furnished in accordance with the following requirements.
         a) 3 construction control keys
         b) 12 construction change (day) keys.
      2) Owner or Owner's Representative will replace temporary construction cores with permanent cores.

2. 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 bitting 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: 3.
      2) Master Keys: 6.
      3) Change (Day) Keys: 3 per cylinder/core that is keyed differently
      4) Key Blanks: Quantity as determined in the keying meeting.

2.09 DOOR CLOSERS

A. Manufacturers and Products:

1. Scheduled Manufacturer and Product:
   a. LCN 4040XP series

2. Acceptable Manufacturers and Products:
   a. No Substitute

B. Requirements:

1. Provide door closers conforming to ANSI/BHMA A156.4 Grade 1 requirements by BHMA certified independent testing laboratory. ISO 9000 certify 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.

2.10 DOOR TRIM

A. Manufacturers:

1. Scheduled Manufacturer:
   a. Ives

2. Acceptable Manufacturers:
   a. Substitutions by official Division 01 request only

B. Requirements:

1. Provide push plates, push bars, pull plates, pulls, and hands-free reversible door pulls with diameter and length as scheduled.

2.11 PROTECTION PLATES

A. Manufacturers:

1. Scheduled Manufacturer:
   a. Ives

2. Acceptable Manufacturers:
   a. Substitutions by official Division 01 request only

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.

2.12 OVERHEAD STOPS AND OVERHEAD STOP/HOLDERS

A. Manufacturers:

1. Scheduled Manufacturers:
   a. Glynn-Johnson

2. Acceptable Manufacturers:
   a. Substitutions by official Division 01 request only

B. Requirements:

1. Provide overhead stop at any door where conditions do not allow for a wall stop or floor stop presents tripping hazard.

2.13 DOOR STOPS AND HOLDERS

A. Manufacturers:

1. Scheduled Manufacturer:
   a. Ives

2. Acceptable Manufacturers:
   a. Substitutions by official Division 01 request only

B. Provide door stops at each door leaf:

1. Provide wall stops wherever possible. Provide concave type where lockset has a push button of thumbturn.
2. Where a wall stop cannot be used, provide universal floor stops.
3. Where wall or floor stop cannot be used, provide overhead stop.
4. Provide roller bumper where doors open into each other and overhead stop cannot be used.

2.14 THRESHOLDS, SEALS, DOOR SWEEPS, AUTOMATIC DOOR BOTTOMS, AND GASKETING

A. Manufacturers:

1. Scheduled Manufacturer:
   a. Zero International

2. Acceptable Manufacturers:
   a. Substitutions by official Division 01 request only

B. Requirements:

1. Provide thresholds, weather-stripping, and gasketing systems as specified and per architectural details. Match finish of other items.
2. Smoke- and Draft-Control Door Assemblies: Where smoke- and draft-control door assemblies are required, provide door hardware that meets requirements of assemblies tested according to UL 1784 and installed in compliance with NFPA 105.
3. Provide door sweeps, seals, astragals, and auto door bottoms only of type where resilient or flexible seal strip is easily replaceable and readily available.
4. Size thresholds 1/2 inch (13 mm) high by 5 inches (127 mm) wide by door width unless otherwise specified in the hardware sets or detailed in the drawings.

2.15 FINISHES

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

1. Aluminum Geared Continuous Hinges: BHMA 628 (US28)
2. Push Plates, Pulls, and Push Bars: BHMA 630 (US32D)
3. Protection Plates: BHMA 630 (US32D)
4. Overhead Stops and Holders: BHMA 630 (US32D)
5. Door Closers: Powder Coat to Match
6. Wall Stops: BHMA 630 (US32D)
7. Latch Protectors: BHMA 630 (US32D)
8. Weatherstripping: Clear Anodized Aluminum
9. Thresholds: Mill Finish Aluminum

PART 3 - EXECUTION

3.01 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. Examine roughing-in for electrical power systems to verify actual locations of wiring connections before electrified door hardware installation.

C. Submit a list of deficiencies in writing and proceed with installation only after unsatisfactory conditions have been corrected.

3.02 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
   4. Installation Guide for Doors and Hardware: DHI TDH-007-20

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. Install construction cores to secure building and areas during construction period.
   2. Replace construction cores with permanent cores as indicated in keying section.
   3. Furnish permanent cores to Owner for installation.

J. Key Control System: Tag keys and place them on markers and hooks in key control system cabinet, as determined by final keying schedule.

K. Door Closers: Mount closers 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.

L. Overhead Stops/Holders: Mount overhead stops/holders on room side of corridor doors, inside of exterior doors, and stair side of stairway doors.

M. Thresholds: Set thresholds in full bed of sealant complying with requirements specified in Division 07 Section "Joint Sealants."

N. Stops: Provide floor stops for doors unless wall or other type stops are indicated in door hardware schedule. Do not mount floor stops where they may impede traffic or present tripping hazard.

O. Perimeter Gasketing: Apply to head and jamb, forming seal between door and frame.

P. Meeting Stile Gasketing: Fasten to meeting stiles, forming seal when doors are closed.

Q. Door Bottoms and Sweeps: Apply to bottom of door, forming seal with threshold when door is closed.

3.03 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. Spring Hinges: Adjust to achieve positive latching when door can close freely from an open position of 30 degrees.
2. Electric Strikes: Adjust horizontal and vertical alignment of keeper to properly engage lock bolt.
3. Door Closers: Adjust sweep period to comply with accessibility requirements and requirements of authorities having jurisdiction.

B. Occupancy Adjustment: Approximately three to six months after date of Substantial Completion, examine and readjust each item of door hardware, including adjusting operating forces, as necessary to ensure function of doors and door hardware.

3.04 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.

3.05 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:

Hardware Group No. 01 – Classrooms

Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 4.5 X 4.5	652	IVE
1	EA	CLASSROOM LOCK	ML2055 CSA CT6D	626	C-R
1	EA	LFIC PERMANENT CORE	KEYED INTO EXISTING SYSTEM	626	C-R
1	EA	SURFACE CLOSER	4040XP RW/PA	689	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B-CS	630	IVE
1	EA	WALL STOP	WS406/407CVX	630	IVE
3	EA	DOOR SILENCERS			

Hardware Group No. 02 – Offices

Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 4.5 X 4.5	652	IVE
1	EA	OFFICE LOCK	ML2051 CSA CT6D	626	C-R
1	EA	LFIC PERMANENT CORE	KEYED INTO EXISTING SYSTEM	626	C-R
1	EA	SURFACE CLOSER	4040XP RW/PA	689	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B-CS	630	IVE
1	EA	WALL STOP	WS406/407CVX	630	IVE
3	EA	DOOR SILENCERS			

Hardware Group No. 03 – Storage

Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 4.5 X 4.5 NRP	652	IVE
1	EA	STOREROOM LOCK	ML2057 CSA CT6D	626	C-R
1	EA	LFIC PERMANENT CORE	KEYED INTO EXISTING SYSTEM	626	C-R
1	EA	SURFACE CLOSER	4040XP SCUSH	689	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B-CS	630	IVE
1	EA	WALL STOP	WS406/407CVX	630	IVE
3	EA	DOOR SILENCERS			

Hardware Group No. 04 – Conference

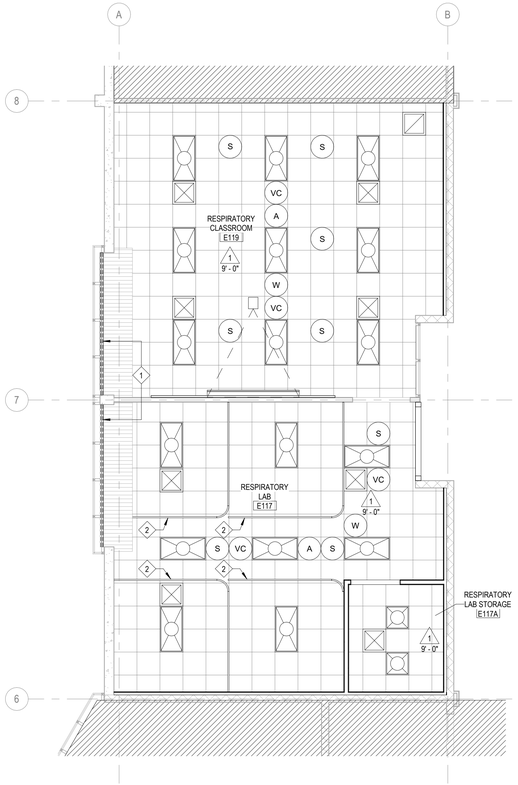
Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 4.5 X 4.5 NRP	652	IVE
1	EA	PASSAGE LOCK	ML2010 CSA CT6D	626	C-R
1	EA	LFIC PERMANENT CORE	KEYED INTO EXISTING SYSTEM	626	C-R
1	EA	WALL STOP	WS406/407CVX	630	IVE
3	EA	DOOR SILENCERS			

Hardware Group No. 05 – Classroom, Double-Door

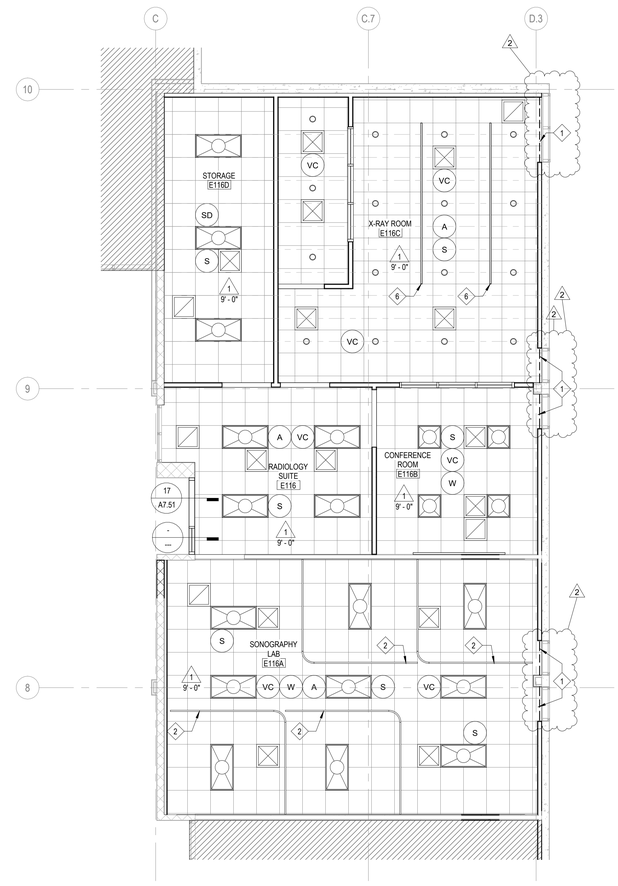
QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
6	EA	HINGE	5BB1 4.5 X 4.5	652	IVE
1	EA	CLASSROOM LOCK	ML2055 CSA CT6D	626	C-R
1	EA	FLUSH BOLTS	555, 12″ US26D		IVE
1	EA	DUST-PROOF STRIKE	570, US26D		IVE
1	EA	LFIC PERMANENT CORE	KEYED INTO EXISTING SYSTEM	626	C-R
1	EA	SURFACE CLOSER	4111-H-CUSH	689	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B-CS	630	IVE
1	EA	WALL STOP	WS406/407CVX	630	IVE
6	EA	DOOR SILENCERS			

END OF SECTION 08 71 00



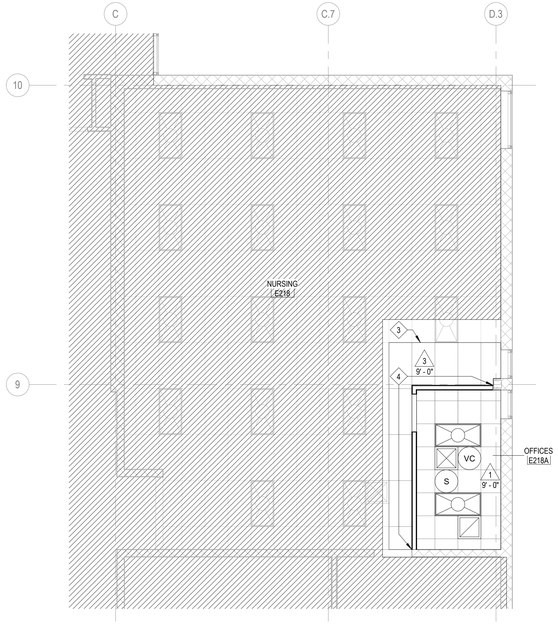
1 REFLECTED CEILING PLAN - LEVEL 1 - RESPIRATORY
3/16" = 1'-0"

TRUE NORTH



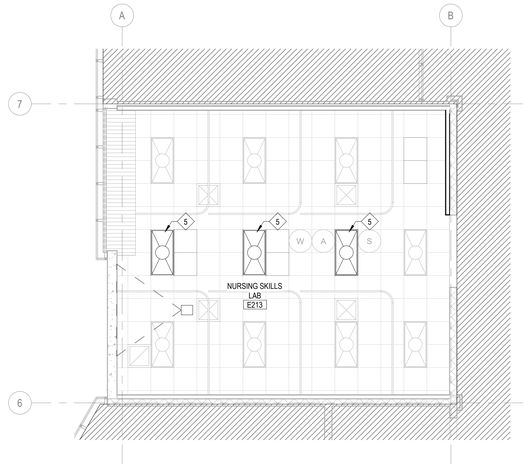
2 REFLECTED CEILING PLAN - LEVEL 1 - RADIOLOGY
3/16" = 1'-0"

TRUE NORTH



3 REFLECTED CEILING PLAN - LEVEL 2 - NURSING
3/16" = 1'-0"

TRUE NORTH



4 REFLECTED CEILING PLAN - LEVEL 2 - NURSING SKILLS
3/16" = 1'-0"

SLOTTED CHANNEL FRAMING (STRUT SYSTEMS) GENERAL NOTES:

1. UNISTRUT IS USED AS BASIS OF DESIGN FOR ALL STRUT SYSTEM COMPONENTS. CONTRACTOR OPTION TO SUBMIT AN APPROVED EQUIVALENT FOR APPROVAL. THE STRUT FRAMING SYSTEM SHALL CONSIST OF CHANNELS, FITTINGS, AND HARDWARE AS DEFINED IN THE METAL FRAMING MANUFACTURERS ASSOCIATION STANDARD PUBLICATION, MFMA-1. ALL FITTINGS AND ACCESSORIES SHALL BE FROM THE SAME MANUFACTURER WITH NO EXCEPTIONS.
2. PROVIDE ALL STRUT-TYPE METAL FRAMING MEMBERS, FITTINGS, AND RELATED ACCESSORIES AS SCHEMATICALLY SHOWN ON THE DRAWINGS.
3. STRUT FRAMING SYSTEMS SHALL CONFORM TO:
   A. FITTINGS SHALL BE MADE FROM HOT ROLLED, PICKLED AND OILED PLATE, OR STRIP STEEL CONFORMING TO ASTM A1011 SS GR 33, ASTM A1011 HSLAS GR 45, ASTM A36, ASTM A575, ASTM A576, OR ASTM A635.
   B. CHANNELS SHALL BE COLD FORMED FROM 12GA STEEL CONFORMING TO ASTM A1011 GR 33 AND HAVE A NOMINAL OVERALL WIDTH OF 1 5/8 " AND HAVE A 7/8 " SLOT FACE OPENING. TELESPAR DROP TUBING SHALL BE ROLLED FROM 12GA HOT ROLLED STEEL CONFORMING TO ASTM A1011 GR33, PICKLED AND OILED. INNER TUBE SHALL BE 1 1/2 " SQUARE AND OUTER TUBE 1 3/4 " SQUARE.
   C. BOLTS SHALL BE ASTM A307 WITH CHANNEL NUTS CONFORMING TO ASTM A675 OR ASTM A36.
4. SET STRUT SYSTEM COMPONENTS INTO FINAL POSITION TRUE TO LINE, LEVEL, AND PLUMB IN ACCORDANCE WITH APPROVED SHOP DRAWINGS. ANCHOR MATERIAL FIRMLY IN PLACE. TIGHTEN ALL CONNECTIONS TO THEIR RECOMMENDED TORQUES.
5. TORQUE ALL BOLTS AS FOLLOWS:

BOLT DIAMETER (IN)	1/4	5/16	3/8	1/2	5/8	3/4
TORQUE (FT-LBS)	6	11	19	50	100	125

6. STRUT SYSTEM COMPONENTS SHALL HAVE A STANDARD FINISH OF PERMA GREEN OR DURA GREEN EPOXY PAINTING. FASTENERS SHALL HAVE STANDARD ELECTRO-DEPOSITED ZINC FINISH. COMPONENTS EXPOSED TO WEATHER SHALL BE HOT-DIP GALVANIZED AFTER FABRICATION. ALL VISIBLE STRUT SYSTEMS IN THE X-RAY ROOM SHALL BE PAINTED PT-1 TO MATCH THE CEILING.
7. WHERE STRUT SYSTEMS ARE USED FOR SUPPORT OF EQUIPMENT, VERIFY ALL ASPECTS OF INSTALLATION WITH EQUIPMENT MANUFACTURER AND ARCHITECTURAL LAYOUT.
8. QUALIFICATION REQUIREMENTS:
   a. THE MANUFACTURER SHALL HAVE FIVE (5) YEARS EXPERIENCE IN MANUFACTURING STRUT SYSTEMS.

RCP SYMBOLS LEGEND:

NOTE: REFER TO M.E.P.F.P. DRAWINGS FOR ADDITIONAL INFORMATION ON MECHANICAL, ELECTRICAL, AND FIRE PROTECTION SYSTEMS

- CEILING TYPE
- CEILING ELEVATION AFF
- SUSPENDED ACOUSTICAL TILE CEILING
- GYPSUM BOARD CEILING OR SOFFIT
- LINEAR WOOD SLAT CEILING SYSTEM
- WOOD PANEL CEILING
- ROLLER SHADE (TYP.)
- WINDOW SHADE & POCKET
- RECESSED 2'x4' FLUORESCENT LIGHT FIXTURE
- RECESSED 1'x4' FLUORESCENT LIGHT FIXTURE
- RECESSED STAGE LIGHT FIXTURE
- RECESSED 2'x2' FLUORESCENT FIXTURE
- RECESSED FLUORESCENT LIGHT LINEAR FIXTURE
- SURFACE LIGHT MOUNT FIXTURE
- SMALL PENDANT LIGHT FIXTURE
- PENDANT LIGHT MOUNT FIXTURE
- RECESSED DIRECTIONAL DOWN LIGHT
- RECESSED DOWN LIGHT
- PENDANT LIGHT MOUNT FIXTURE
- PENDANT LIGHT HUNG LINEAR FLUORESCENT FIXTURE
- PENDANT LIGHT MOUNT LINEAR FIXTURE
- SURFACE LIGHT MOUNT FIXTURE
- PENDANT LIGHT MOUNT FIXTURE
- SPRINKLER HEAD
- PENDANT LIGHT MOUNT FIXTURE
- WALL LIGHT MOUNT FIXTURE
- PENDANT LIGHT HUNG FLUORESCENT STRIP FIXTURE
- RECESSED LIGHT LINEAR FLUORESCENT FIXTURE
- WALL LIGHT MOUNT FLUORESCENT FIXTURE
- MOTORIZED SCREEN
- CEILING MOUNTED PROJECTOR
- SOLID HATCH DENOTES EXIT SIGN FACE PLATE
- DIRECTION OF EGRESS
- EXIT SIGN, WALL MOUNTED
- HEAT DETECTOR
- SMOKE DETECTOR
- FIRE ALARM DEVICE
- SPEAKER
- CLOSED CIRCUIT CAMERA
- OCCUPANT SENSOR
- WIRELESS ACCESS POINT
- LIGHT SENSOR
- RETURN AIR GRILLE
- SUPPLY AIR GRILLE
- LINEAR DIFFUSER - SUPPLY/RETURN
- ACCESS PANEL
- CABINET UNIT HEATER

RCP GENERAL NOTES:

1. ALL HEATING, VENTILATION, ELECTRICAL, PLUMBING, AND FIRE PROTECTION ITEMS ARE SHOWN ON ARCHITECTURAL REFLECTED CEILING PLANS FOR REFERENCE AND COORDINATION ONLY. REFER TO HEATING, VENTILATION, ELECTRICAL, PLUMBING, AND FIRE PROTECTION DRAWINGS FOR ACTUAL QUANTITIES. IN CASE OF CONFLICT THE ARCHITECTURAL REFLECTED CEILING PLAN SHALL GOVERN LOCATION OF THESE ITEMS.
2. IN AREAS THAT DO NOT HAVE ARCHITECTURAL REFLECTED CEILING PLANS YET REQUIRE NEW ITEMS TO BE INSTALLED IN OR ABOVE THE CEILING PLANE, CONTRACTOR SHALL REMOVE AND REINSTALL, REPLACE OR MODIFY EXISTING CEILING CONSTRUCTION TO ACCOMMODATE NEW WORK. ANY NEW CEILING AREAS SHALL MATCH EXISTING ADJACENT FINISHES.
3. CENTER ALL FIXTURES IN CEILING TILES AND FIELD VERIFY GRID LAYOUT FOR PROPER FIXTURE LOCATION. ALIGN ALL FIXTURES IN BOTH DIRECTIONS OF CEILING TILE. (UNO)
4. CENTER ALL SPRINKLER HEADS IN CEILING TILES.
5. ALL GYP. BD. CEILINGS TO BE PAINTED PT-X UNLESS OTHERWISE NOTED ON PLANS
6. EXTEND FACE OF ALL GYP. BD. SOFFITS AND HEADERS TO FINISHED CEILING ABOVE U.N.O.
7. ALL GYP. BD. CEILINGS TO BE PAINTED PT-X UNLESS OTHERWISE NOTED ON PLANS
8. EXTEND FACE OF ALL GYP. BD. SOFFITS AND HEADERS 4" MIN. BEYOND FINISHED CEILING ABOVE U.N.O.

RCP REFERENCED NOTES:

1. PROVIDE NEW ROLLER SHADE. INSTALL AT TOP OF EXISTING WINDOW FRAME - FIELD VERIFY WIDTH PRIOR TO PROCUREMENT AND INSTALLATION (REFER TO SPECS).
2. CONTINUOUS CUBICLE CURTAIN AND TRACK SYSTEM.
3. PROVIDE NEW ACOUSTICAL CEILING SYSTEM TO MATCH EXISTING ADJACENT ACOUSTICAL CEILING SYSTEM - REPLACE CEILING TILES WITH EXISTING SALVAGED TILES
4. MODIFY EXISTING CEILING SYSTEM AS REQ'D TO ACCOMMODATE NEW WALL LOCATION.
5. RE-INSTALL EXISTING LIGHT FIXTURES IN EXISTING CEILING AS INDICATED ON ELECTRICAL DRAWINGS (REFER TO MEP DRAWINGS FOR ADDITIONAL SCOPE).
6. X-RAY EQUIPMENT RAILS - PROVIDED AND INSTALLED BY OTHERS (REFER TO X-RAY EQUIPMENT DRAWINGS FOR EQUIPMENT RAIL LAYOUT AND DETAILS). THE CONTRACTOR SHALL PROVIDE UNISTRUT SUPPORT OF X-RAY RAILS. RAIL SUPPORT INCLUDES FINISH RAILS, INTERMEDIATE RAIL SUPPORT, HANGERS AND ATTACHMENT TO EXISTING STRUCTURE. AS REQUIRED, BY THE X-RAY MANUFACTURER. UNISTRUT CONTRACTOR TO PROVIDE STAMPED AND SEALED CALCULATIONS. EXISTING STRUCTURE IS 20KG BAR JOISTS SPACED AT APPROXIMATE 2'-4" ON CENTER. (REFER TO SLOTTED CHANNEL FRAMING GENERAL NOTES FOR ADDITIONAL DETAILS)

dka

ARCHITECT OF RECORD
DEMONICA KEMPER ARCHITECTS
125 N. HALSTED STREET, SUITE 301
CHICAGO, IL 60661
P: 312.496.0000

S / MEP / FP / T ENGINEERS:
IMEG CORP.
1100 WARRENVILLE RD., SUITE 400W
NAPERVILLE, IL 60563
P: 630.527.2320

McHenry County College
HEALTH SCIENCE 2024 RENOVATIONS

8600 ROUTE 14, SUITE 205
CRYSTAL LAKE, IL 60012
DKA PROJECT NO:24-032

KEY PLAN:

SHEET STATUS: 02/18/2025

ISSUED FOR BID - NOT FOR CONSTRUCTION

NO:	DESCRIPTION:	DATE:
2	ADDENDUM #3	3/13/25

SHEET TITLE:

REFLECTED CEILING PLANS

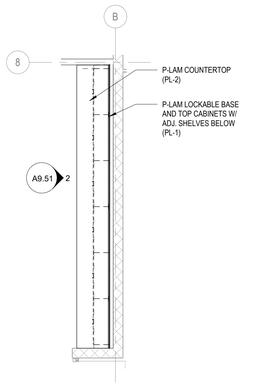
SHEET NUMBER:

A2.10

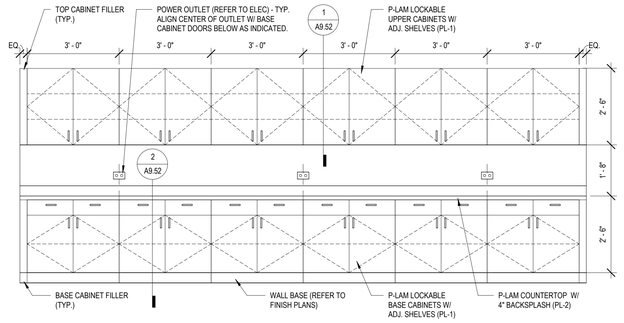
3/12/2025 2:14:28 PM

MILLWORK FINISH TYPES:

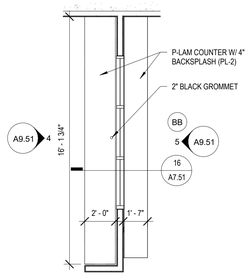
TYPE	DESCRIPTION	MANUFACTURER	NAME/#/COLOR
PL-1	PLASTIC LAMINATE	FORMICA	NATURAL TEAK 8849, MATTE FINISH
PL-2	PLASTIC LAMINATE	FORMICA	PALOMA POLAR 6698, MATTE FINISH
PL-3	PLASTIC LAMINATE	WILSONART	LINEN D427-60, MATTE FINISH
WD-1	SOLID WOOD PANEL		QUARTER SLICE MAPLE, STAIN TO MATCH PL-1
WD-2	WOOD VENEER PANEL		QUARTER SLICE MAPLE, STAIN TO MATCH PL-1
SS-1	SOLID SURFACE	WILSONART	CHILLED EARTH 9228SS



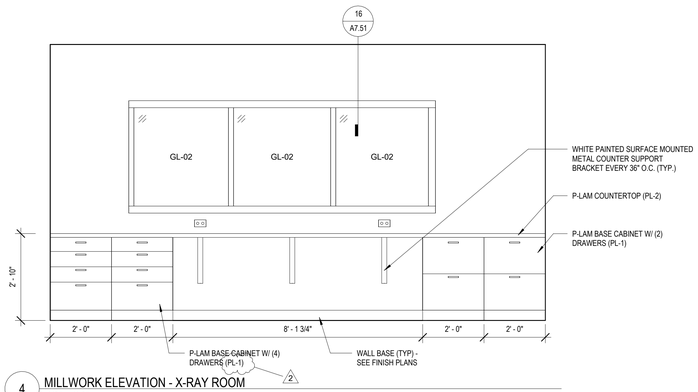
1 ENLARGED PLAN - MILLWORK - RESPIRATORY
1/4" = 1'-0"



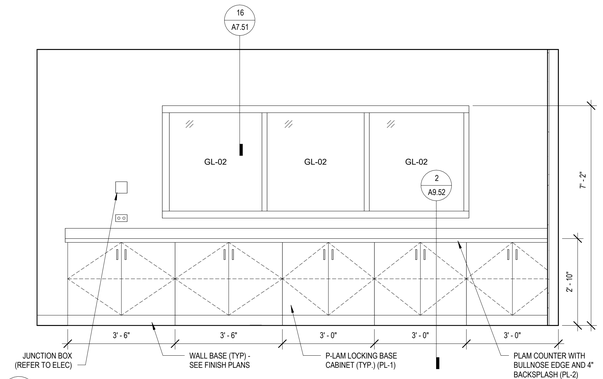
2 MILLWORK ELEVATION - RESPIRATORY
1/2" = 1'-0"



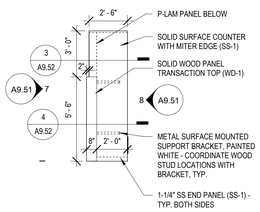
3 ENLARGED PLAN - MILLWORK - X-RAY ROOM
1/4" = 1'-0"



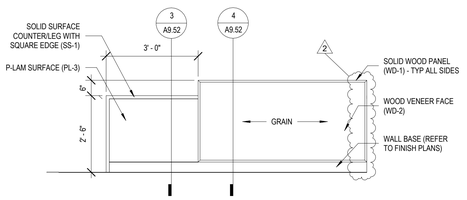
4 MILLWORK ELEVATION - X-RAY ROOM
1/2" = 1'-0"



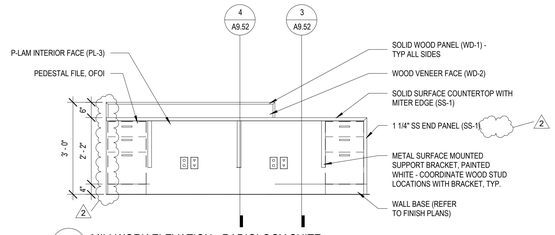
5 MILLWORK ELEVATION - X-RAY ROOM
1/2" = 1'-0"



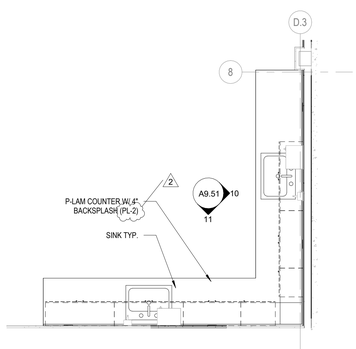
6 ENLARGED PLAN - MILLWORK - RADIOLOGY SUITE
1/4" = 1'-0"



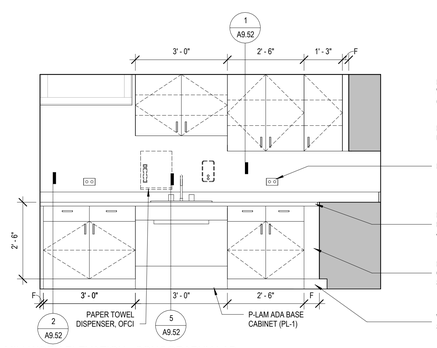
7 MILLWORK ELEVATION - RADIOLOGY SUITE
1/2" = 1'-0"



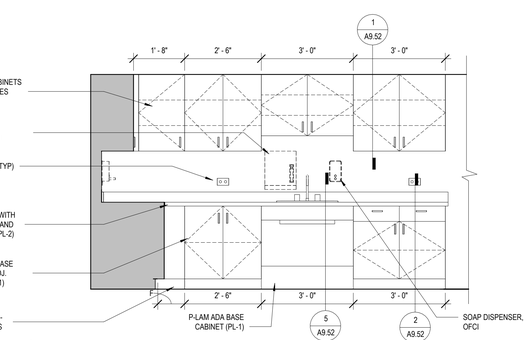
8 MILLWORK ELEVATION - RADIOLOGY SUITE
1/2" = 1'-0"



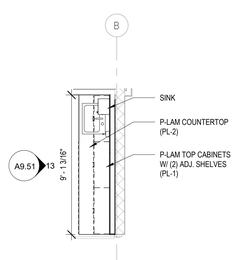
9 ENLARGED PLAN - MILLWORK - SONOGRAPHY LAB
3/8" = 1'-0"



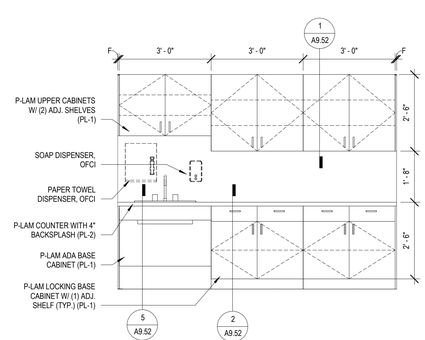
10 MILLWORK ELEVATION - SONOGRAPHY LAB
1/2" = 1'-0"



11 MILLWORK ELEVATION - SONOGRAPHY LAB
1/2" = 1'-0"



12 ENLARGED PLAN - MILLWORK - NURSING SKILLS
1/4" = 1'-0"



13 MILLWORK ELEVATION - NURSING SKILLS
1/2" = 1'-0"

ARCHITECT OF RECORD
DEMONICA KEMPER ARCHITECTS
125 N. HALSTED STREET, SUITE 301
CHICAGO, IL 60661
P: 312.496.0000

S / MEP / FP / T ENGINEERS:
IMEG CORP.
1100 WARRENVILLE RD., SUITE 400W NAPERVILLE, IL 60563
P: 630.527.2320

McHenry County College
HEALTH SCIENCE 2024 RENOVATIONS

8600 ROUTE 14, SUITE 205
CRYSTAL LAKE, IL 60012
DKA PROJECT NO:24-032

KEY PLAN:

SHEET STATUS: 02/18/2025

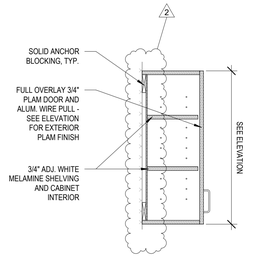
ISSUED FOR BID - NOT FOR CONSTRUCTION

NO:	DESCRIPTION:	DATE:
2	ADDENDUM #3	3/13/25

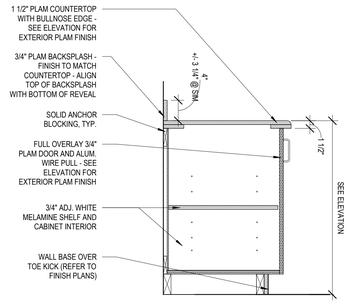
SHEET TITLE:
MILLWORK PLANS & DETAILS

SHEET NUMBER:
A9.51

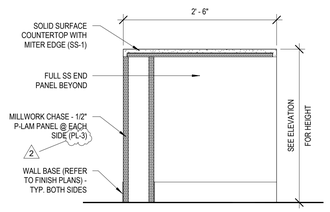
3/12/2025 10:58:35 AM



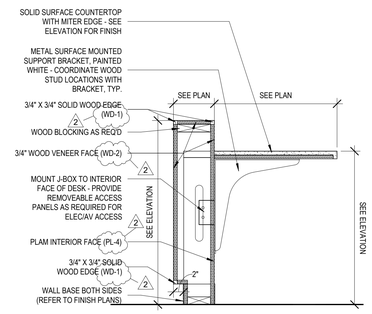
1 MILLWORK SECTION
1" = 1'-0"



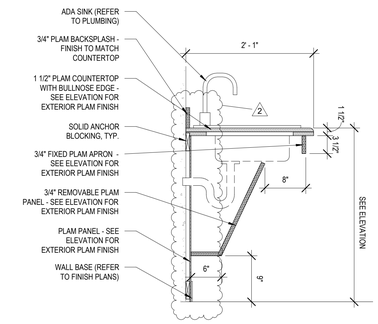
2 MILLWORK SECTION
1" = 1'-0"



3 MILLWORK SECTION
1" = 1'-0"



4 MILLWORK SECTION
1" = 1'-0"



5 MILLWORK SECTION
1" = 1'-0"

ARCHITECT OF
DEMONICA KEMPER ARCHITECTS
125 N. HALSTED STREET, SUITE 301
CHICAGO, IL 60661
P: 312.496.0000

S / MEP / FP / T ENGINEERS:
IMEG CORP.
1100 WARRENVILLE RD., SUITE 400W NAPERVILLE, IL 60563
P: 630.527.2320

McHenry County College
HEALTH SCIENCE 2024 RENOVATIONS

8600 ROUTE 14, SUITE 205
CRYSTAL LAKE, IL 60012
DKA PROJECT NO:24-032

KEY PLAN:

SHEET STATUS: 02/18/2025
ISSUED FOR BID - NOT FOR CONSTRUCTION

NO:	DESCRIPTION:	DATE:
2	ADDENDUM #3	3/13/25

SHEET TITLE:
MILLWORK SECTIONS

SHEET NUMBER:
A9.52

3/12/2025 9:27:59 AM

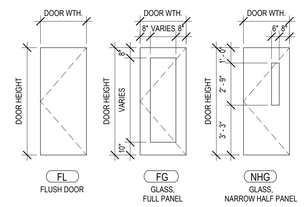
DOOR AND FRAME SCHEDULE

		DOOR						FRAME				
NUMBER	ROOM NAME	WIDTH	HEIGHT	FIRE RATING	MATERIAL	ELEV	GLAZING TYPE	MATERIAL	ELEV	GLAZING TYPE	HARDWARE SET	REMARKS
E116	RADIOLOGY SUITE	4' - 0"	7' - 0"	-	WD	NHG	GL-01	HM	-	GL-02	HS-01	HM STOREFRONT SYSTEM (REFER TO ELEV)
E116A	SONOGRAPHY LAB	4' - 0"	7' - 0"	-	WD	NHG	GL-01	HM	A	-	HS-01	
E116B	CONFERENCE ROOM	3' - 0"	7' - 0"	-	WD	FG	GL-02	HM	B	GL-02	HS-04	
E116C	X-RAY ROOM	4' - 0"	7' - 0"	-	WD	NHG	GL-01	HM	A	-	HS-01	
E116D	STORAGE	4' - 0"	7' - 0"	-	WD	FL	-	HM	A	-	HS-03	
E117	RESPIRATORY LAB	6' - 0"	7' - 0"	-	WD	NHG	GL-01	HM	-	GL-02	HS-05	HM STOREFRONT SYSTEM (REFER TO ELEV)
E117A	RESPIRATORY LAB STORAGE	4' - 0"	7' - 0"	-	WD	FL	-	HM	A	-	HS-03	
E218A	OFFICES	3' - 0"	7' - 0"	-	WD	FG	GL-02	HM	A	-	HS-02	

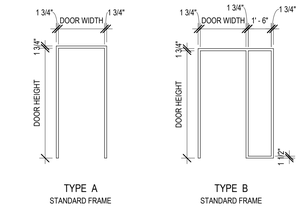
2

GLAZING SCHEDULE

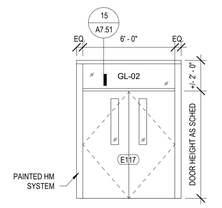
GL-01	1/4" CLEAR TEMPERED GLASS
GL-02	1/2" CLEAR TEMPERED GLASS



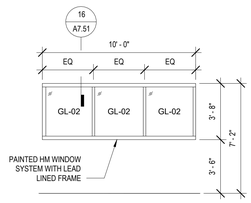
1 DOOR ELEVATIONS
1/4" = 1'-0"



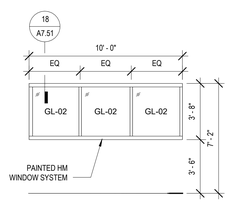
2 FRAME ELEVATIONS
1/4" = 1'-0"



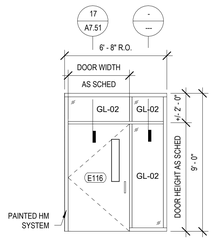
AA WINDOW ELEVATION
1/4" = 1'-0"



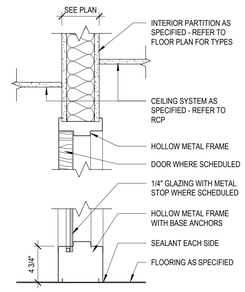
BB WINDOW ELEVATION
1/4" = 1'-0"



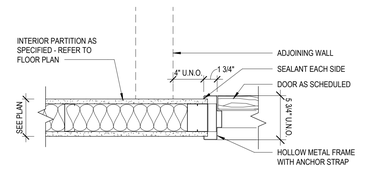
CC WINDOW ELEVATION
1/4" = 1'-0"



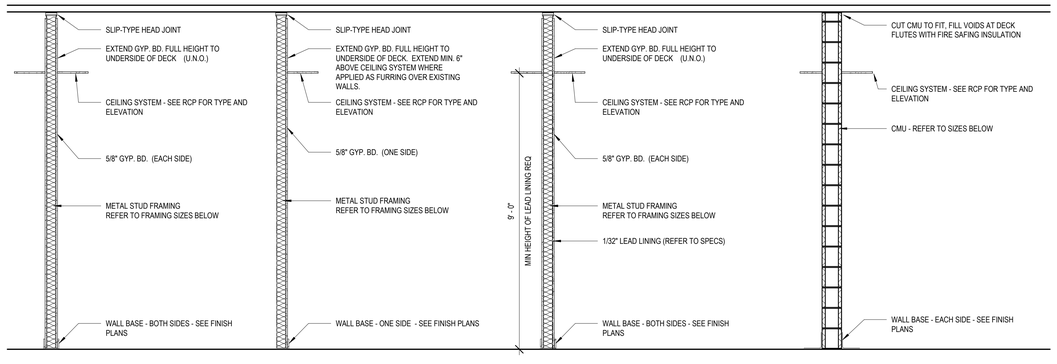
DD WINDOW ELEVATION
1/4" = 1'-0"



3 HOLLOW METAL FRAME - HEAD & SILL
1 1/2" = 1'-0"



4 HOLLOW METAL FRAME - JAMB
1 1/2" = 1'-0"



A - GYP BD EACH SIDE
CONSTRUCT PER UL U419 AT SMOKE AND 1-HR FIRE RESISTANCE RATED PARTITIONS

S1A	1-5/8" METAL STUD FRAMING
S2A	2-1/2" METAL STUD FRAMING
S3A	3-5/8" METAL STUD FRAMING
S4A	4" METAL STUD FRAMING
S6A	6" METAL STUD FRAMING

B - GYP BD ONE SIDE

S1B	1-5/8" METAL STUD FRAMING
S2B	2-1/2" METAL STUD FRAMING
S3B	3-5/8" METAL STUD FRAMING
S4B	4" METAL STUD FRAMING
S6B	6" METAL STUD FRAMING

C - X-RAY WALL

S1C	1-5/8" METAL STUD FRAMING
S2C	2-1/2" METAL STUD FRAMING
S3C	3-5/8" METAL STUD FRAMING
S4C	4" METAL STUD FRAMING
S6C	6" METAL STUD FRAMING

D - MASONRY WALL

M4C	4" CMU
M6C	6" CMU
M8C	8" CMU
M10C	10" CMU
M12C	12" CMU

5 WALL PARTITION TYPES
1/2" = 1'-0"

ARCHITECT OF
DEMONICA KEMPER ARCHITECTS
125 N. HALSTED STREET, SUITE 301
CHICAGO, IL 60661
P: 312.496.0000

S / MEP / FP / T ENGINEERS:
IMEG CORP.
1100 WARRENVILLE RD., SUITE 400W NAPERVILLE, IL 60563
P: 630.527.2320

McHenry County College HEALTH SCIENCE 2024 RENOVATIONS

8600 ROUTE 14, SUITE 205
CRYSTAL LAKE, IL 60012
DKA PROJECT NO:24-032

KEY PLAN:

SHEET STATUS: 02/18/2025

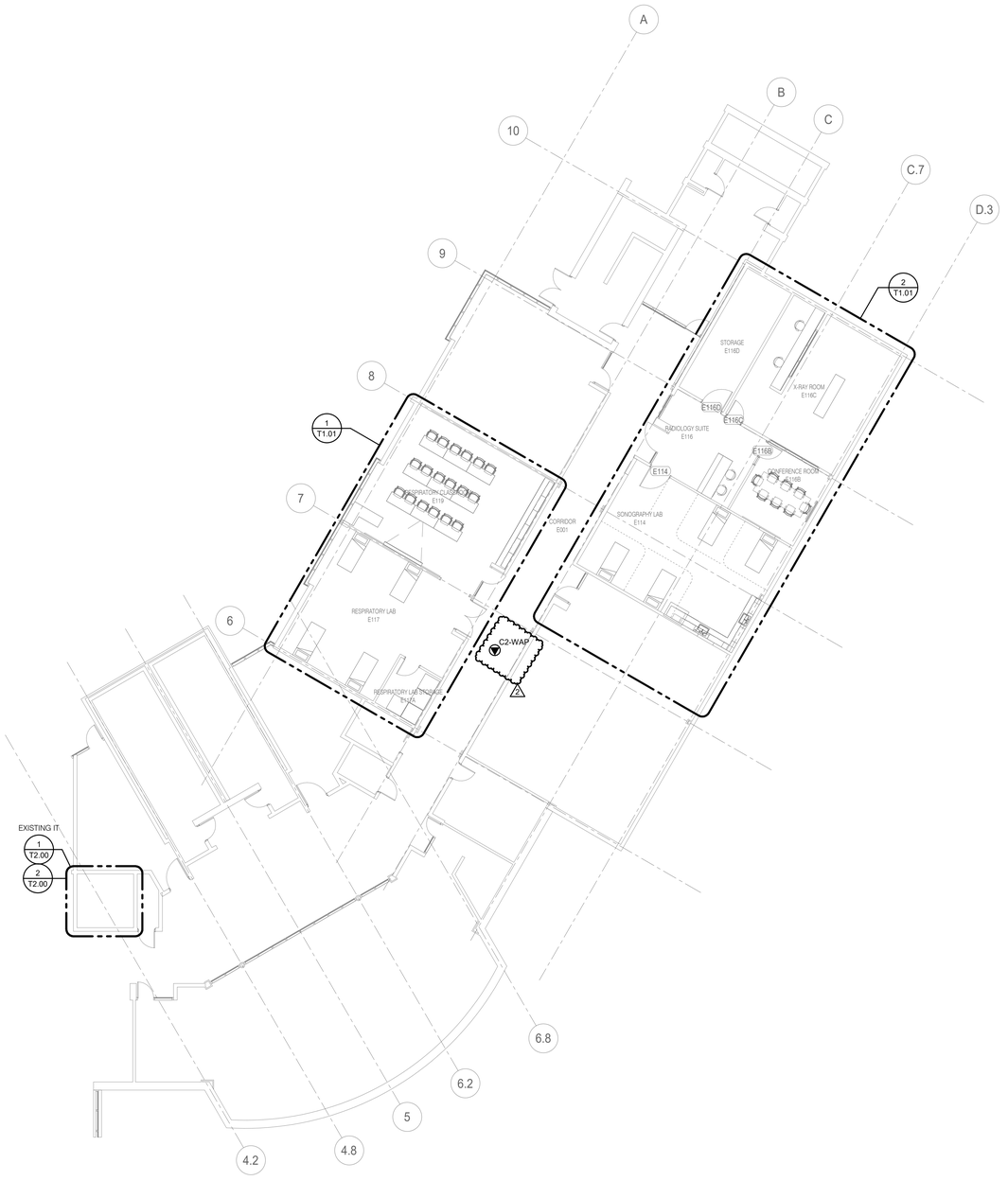
ISSUED FOR BID - NOT FOR CONSTRUCTION

NO:	DESCRIPTION:	DATE:
1	ADDENDUM #2	3/7/25
2	ADDENDUM #3	3/13/25

SHEET TITLE:
DOOR SCHEDULE, WINDOW ELEV, & WALL TYPES

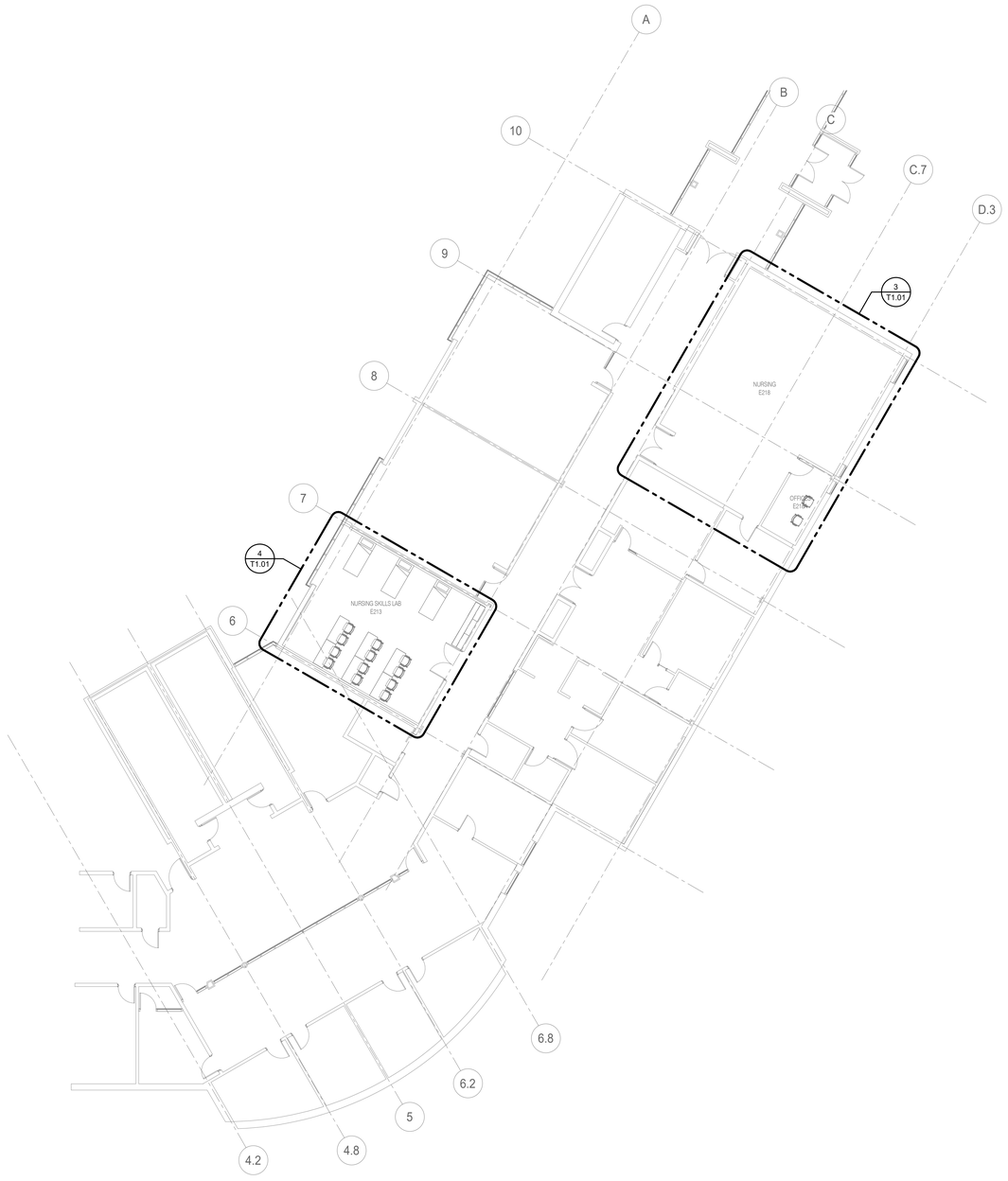
SHEET NUMBER:
A10.00

3/11/2025 2:49:26 PM



1 OVERALL FLOOR PLAN - LEVEL 01 - TECHNOLOGY

3/32" = 1'-0"



2 OVERALL FLOOR PLAN - LEVEL 02 - TECHNOLOGY

3/32" = 1'-0"

ARCHITECT OF RECORD
DEMONICA KEMPER ARCHITECTS
125 N. HALSTED STREET, SUITE 301
CHICAGO, IL 60661
P: 312.496.0000

S / MEP / FP / T ENGINEERS:
IMEG CORP.
253 SHUMAN BOULEVARD, SUITE 550 NAPERVILLE, IL 60563
P: 630.527.2320

McHenry County College
HEALTH SCIENCE 2024 RENOVATIONS
8600 ROUTE 14, SUITE 205
CRYSTAL LAKE, IL 60012
DKA PROJECT NO: 24-032

JEFFREY M. LESSMAN
062-060380
LICENSED PROFESSIONAL ENGINEER OF ILLINOIS
EXP 11/30/2025
03/13/2025

KEY PLAN:

SHEET STATUS: 02/28/2025
ISSUED FOR BID

NO:	DESCRIPTION:	DATE:
1	ADDENDUM 1	03/03/25
2	ADDENDUM 3	03/13/25

SHEET TITLE:
OVERALL FLOOR PLANS - TECHNOLOGY

SHEET NUMBER:
T1.00

3/13/2025 10:29:43 AM

IMEG
263 SHUMAN BOULEVARD
SUITE 550
NAPERVILLE, IL 60563
P: 630.527.2320
www.imegcorp.com

Illinois Design Firm Registration #184008975-0014

0 1 2 3
REF. SCALE IN INCHES

PROJECT #240007530.00