ADDENDUM NO. 02

June 19, 2024

Additions and Renovations to Franklin Central High School Phase 2B
6215 S. Franklin Rd.
Indianapolis, IN, 46259

TO: ALL BIDDERS OF RECORD

This Addendum forms a part of and modifies the Bidding Requirements, Contract Forms, Contract Conditions, the Specifications and the Drawings dated May 29, 2024, by VPS Architecture. Acknowledge receipt of the Addendum in the space provided on the Bid Form. Failure to do so may subject the Bidder to disqualification.

This Addendum consists of Pages ADD 2 – 1 through ADD 2 - 2 and attached VPS Addendum No. 02 dated June 19, 2024, consisting of 3 (three) pages, sections 08 71 00 Door Hardware, 10 22 26 Operable Partition, S8, S10, S11, SF1J2 and ADD2-SK1.

A. **SPECIFICATION SECTION 00 00 20 TABLE OF CONTENTS**

ADD SECTIONS

Section 10 22 26	Operable Partitions
Section 23 73 13.13	Indoor and Outdoor Basic Air-Handling Units

SPECIFICATION SECTION 00 31 00 BID FORMS

Replace Bid Form in its entirety with the attached section.

B. **SPECIFICATION SECTION 01 12 00 MULTIPLE CONTRACT SUMMARY**

A. BID CATEGORY NO. 1 - GENERAL TRADES

Add the following Specification Section:
Section 10 22 26 Operable Partitions

Delete the following Specification Section:
09 27 13 – Glass-Fiber-Reinforced Plaster Fabrications

Add the following Clarification:
15. Furnish and install the Torklift noted by VPS Addendum #1 Item 1-2.

C. BID CATEGORY NO. 6 METAL STUDS, DRYWALL & ACOUSTICAL

Add the following Specification Section:
09 27 13 – Glass-Fiber-Reinforced Plaster Fabrications

I. BID CATEGORY NO. 13 – PLUMBING and HVAC

Add the following Specification Section:
11 40 00 - Foodservice Equipment (as applicable to your work)
23 73 13.13 - Indoor and Outdoor Basic Air-Handling Units

Add the following Clarifications:
8. Review rooftop and mechanical room air handler replacement access to make sure the units fit in their final locations. Provide roof protection as units are moved to their locations.

J. BID CATEGORY NO. 14 – ELECTRICAL AND TECHNOLOGY

Add the following Specification Section:
11 0 00 Foodservice Equipment (as applicable to your work)

C. **SPECIFICATION SECTION 01 23 00 ALTERNATES**

M. Alternate No. 12 – Bleachers

The base bid for bleacher style seating shall be Hussey. Provide an alternate price to install a different manufacturer than Hussey and list the manufacturer.

CONTRACTOR'S BID FOR PUBLIC WORKS FORM NO. 96

Format (Revised 2013)
(Amended for FTCSC)

Additions and Renovations to Franklin Central High School Phase 2B

Franklin Township Community School Corporation
(Marion County, Indiana)

PART I

(To be completed for all bids. Please type or print)

Date (month, day, year):_____

BIDDER (Firm) _____

Address _____ P.O. Box _____

City/State/Zip ___

Telephone Number: _____ Email Address: _____

Person to contact regarding this Bid_____

Pursuant to notices given, the undersigned offers to furnish labor and/or materials necessary to complete the public works project of:

_____
Insert Category No. (s) and Name(s)

Of public works project, ***Additions and Renovations*** **to** ***Franklin Central High School Phase 2B***, in accordance with Plans and Specifications prepared by ***VPS Architecture, 905 N. Capital Ave., Suite 100, Indianapolis, IN 46204***, as follows:

BASE BID

For the sum of _____
(Sum in words)

_____DOLLARS ($_____)
(Sum in figures)

The undersigned acknowledges receipt of the following Addenda:
Receipt of Addenda No. (s) _____

PROPOSAL TIME

Bidder agrees that this Bid shall remain in force for a period of sixty (60) consecutive calendar days from the due date, and Bids may be accepted or rejected during this period. Bids not accepted within said sixty (60) consecutive calendar days shall be deemed rejected.

Attended pre-bid conference YES _____ NO_____

Has visited the jobsite YES _____ NO_____

The Bidder has reviewed the Guideline Schedule in Section 01 32 00 and the intent Of the schedule can be met. YES _____ NO_____

Bidder has included their Written Drug Testing Plan that covers all employees of the bidder who will perform work on the public work project and meets or exceeds the requirements set in IC 4-13-18-5 or IC 4-13-18-6. YES _____ NO_____

The Skillman Corporation's diversity initiative is to create a program to encourage, assist and measure the active participation of Minority- Owned, Women-Owned, Veteran – Owned and Disabled Individual-Owned Businesses. The Program is to ensure that MWVDBEs are provided full and equal opportunity to participate in all Skillman Corporation's Projects.

Bidder has included:
DBE: YES _____% NO _____
MBE: YES _____% NO _____
WBE: YES _____% NO _____
VBE: YES _____% NO _____

The undersigned further agrees to furnish a bond or certified check with this Bid for an amount specified in the Notice to Bidders. If Alternate Bids apply, submit a proposal for each in accordance with the Plans and Specifications.

If additional units of material included in the contract are needed, the cost of units must be the same as that shown in the original contract if accepted by the governmental unit. If the bid is to be awarded on a unit bases, the itemization of the units shall be shown on a separate attachment.

The contractor and his subcontractors, if any, shall not discriminate against or intimidate any employee, or applicant for employment, to be employed in the performance of this contract, with respect to any matter directly or indirectly related to employment because of race, religion, color, sex, national origin or ancestry. Breach of this covenant may be regarded as a material breach of the contract.

CERTIFICATION OF USE OF UNITED STATES STEEL PRODUCTS
(if applicable)

I, the undersigned bidder, or agent as a contractor on a public works project, understand my statutory obligation to use steel products made in the United States (I.C. 5-16-8-2). I hereby certify that I and all subcontractors employed by me for this project will use U.S. steel on this project if awarded. I understand that violations hereunder may result in forfeiture of contractual payments.

ALTERNATE BIDS

A blank entry or an entry of "No Bid", "N/A", or similar entry on any Alternate will cause the bid to be rejected as non-responsive only if that Alternate is selected. If no change in the bid amount is required, indicate "No Change".

****MARK "ADD" OR "DEDUCT" FOR EACH ALTERNATE****

Alternate Bid No. 1 Room G102 thru G115

Change the Base Bid the sum of_____
(sum in words)

_____DOLLARS ($_____) ADD DEDUCT
(sum in figures)

Alternate Bid No. 2 Rooms M101, M102, M103, M104, M108, M100A-M100F, M109, and M110

Change the Base Bid the sum of_____
(sum in words)

_____DOLLARS ($_____) ADD DEDUCT
(sum in figures)

Alternate Bid No. 3 Science Labs R115, R117, R118, and R119.

Change the Base Bid the sum of_____
(sum in words)

_____DOLLARS ($_____) ADD DEDUCT
(sum in figures)

Alternate Bid No. 4 Walk-in Cooler/Freezers

Change the Base Bid the sum of_____
(sum in words)

_____DOLLARS ($_____) ADD DEDUCT
(sum in figures)

Alternate Bid No. 5 Epoxy Terrazzo Flooring

Change the Base Bid the sum of_____
(sum in words)

_____DOLLARS ($_____) ADD DEDUCT
(sum in figures)

Alternate Bid No. 6 NE Parking Lot

Change the Base Bid the sum of_____
(sum in words)

_____DOLLARS ($_____) ADD DEDUCT
(sum in figures)

Alternate Bid No. 7 Automated Logic

Change the Base Bid the sum of_____
(sum in words)

_____DOLLARS ($_____) ADD DEDUCT
(sum in figures)

Alternate Bid No. 8 N Havel

Change the Base Bid the sum of_____
(sum in words)

_____DOLLARS ($_____) ADD DEDUCT
(sum in figures)

Alternate Bid No. 9 5-Year Trane Warranty

Change the Base Bid the sum of_____
(sum in words)

_____DOLLARS ($_____) ADD DEDUCT
(sum in figures)

Alternate Bid No. 10 Rolling Divider Curtains

Change the Base Bid the sum of_____
(sum in words)

_____DOLLARS ($_____) ADD DEDUCT
(sum in figures)

Alternate Bid No. 11a Light Fixtures BC #14

Change the Base Bid the sum of_____
(sum in words)

_____DOLLARS ($_____) ADD / DEDUCT
(sum in figures)

Alternate Bid No. 11b Light Fixtures BC #15

Change the Base Bid the sum of_____
(sum in words)

_____DOLLARS ($_____) ADD / DEDUCT
(sum in figures)

Alternate Bid No. 12 Bleachers

Change the Base Bid the sum of_____
(sum in words)

_____DOLLARS ($_____) ADD / DEDUCT
(sum in figures)

PART II

(For projects of $150,000 or more – IC 36-1-12-4)

These statements to be submitted under oath by each bidder with and as a part of his bid. (Attach additional pages for each section as needed.)

SECTION I EXPERIENCE QUESTIONNAIRE

1. What public works projects has your organization completed for the period of one (1) year prior to the date of the current bid?

Contract Amount	Class of Work	Completion Date	Name and Address of Owner

2. What public works projects are now in process of construction by your organization?

Contract Amount	Class of Work	Completion Date	Name and Address of Owner

3. Have you ever failed to complete any work awarded to you?_____If so, where and why?

_____

_____

_____

4. List references from private firms for which you have performed work.

_____

_____

_____

SECTION II PLAN AND EQUIPMENT QUESTIONNAIRE

1. Explain your plan or layout for performing proposed Work. (Examples could include a narrative of when you could begin, complete the project, number of workers, etc. and any other information which you believe would enable the governmental unit to consider your bid.)

2. Please list the names and addresses of all subcontractors (i.e. persons or firms outside your own firm who have performed part of the work) that you have used on public works projects during the past five (5) years along with a brief description of the work done by each subcontractor.

3. If you intend to sublet any portion of the work, state the name and addresses of each subcontractor, equipment to be used by the subcontractor, and whether you will required a bond. However, if you are unable to currently provide a listing, please understand a listing must be provided prior to contract approval. Until the completion of the proposed project, you are under a continuing obligation to immediately notify the governmental unit in the event that you subsequently determine that you will use a subcontractor on the proposed project.

4. What equipment do you have available to use for the proposed Project? Any equipment used by subcontractors may also be required to be listed by the governmental unit.

_____

_____

_____

_____

5. Have you into contracts or received offers for all materials which substantiate the prices used in preparing your proposal? If not, please explain the rationale used which corroborates the process listed.

_____

_____

_____

_____

SECTION III CONTRACTOR'S FINANCIAL STATEMENT

Attachment of Bidder's financial statement is mandatory. Any Bid submitted without said financial statement as required by statute shall thereby be rendered invalid. The financial statement provided hereunder to the governing body awarding the Contract must be specific enough in detail so that said governing body can make a proper determination of the Bidder's capability for completing the Project if awarded.

SECTION IV CONTRACTOR NON-COLLUSION AFFIDAVIT

The undersigned Bidder or agent, being duly sworn on oath, says that he has not, nor has any other member, representative, or agent of the firm, company, corporation or partnership represented by him, entered into any combination, collusion or agreement with any person relative to the price to be bid by anyone at such letting nor to prevent any person from bidding nor to induce anyone to refrain from bidding, and that this Bid is made without reference to any other bid and without any agreement, understanding or combination with any other person in reference to such bidding.

He further says that no person or persons, firms, or corporations has, have, or will receive directly or indirectly, any rebate, fee, gift, commission, or thing of value on account of such contract.

SECTION V OATH AND AFFIRMATION

I HEREBY AFFIRM UNDER THE PENALTIES OF PERJURY THAT THE FACTS AND INFORMATION CONTAINED IN THE FOREGOING BID FOR PUBLIC WORKS ARE TRUE AND CORRECT

Dated at _____this _____ day of _____, 20

_____
(Name of Organization)

By

_____

_____
(Title of Person Signing)

ACKNOWLEDGEMENT

STATE OF _____)
) SS:
COUNTY OF _____)

Before me, a Notary Public, personally appeared the above-named

_____

Swore that the statements contained in the foregoing document are true and correct.

Subscribed and sworn to before me this _____ day of _____,

_____
(Title)

_____
Notary Public

My Commission Expires: _____

County of Residence: _____

END OF SECTION 00 31 00

VPS ARCHITECTURE

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www.vpsarch.com

Distribution: To all Planholders

ADDENDUM NO. 2 (TWO)

DATE: **June 19, 2024**
PROJECT: **Additions & Renovations to Franklin Central High School Phase 2B**
OWNER: **Franklin Township Community School Corporation**
PROJECT NO.: **2022063.10**

The original Specifications and Drawings dated May 2024 for the project referenced above, are amended as noted in this Addendum No. 2 (Two). Receipt of this Addendum and any subsequent Addenda must be acknowledged on the Proposal Form. This section of the Addendum consists of 3 (Three) Addendum pages, 11 (Eleven) items and 8 (Eight) attachments.

ITEM **DESCRIPTION**

Specification Items:

2-1 Section 087100 Door Hardware: Replace section in its entirety with attached revision.

2-2 Section 101100 Visual Display Surfaces: K-Pro/Educational Equipment is an approved manufacturer.

2-3 Section 102226 Operable Partitions: Add attached section in its entirety.

2-4 Section 126613 Telescoping Seating:
A. Delete Paragraph 2.4.D.
B. This section shall also include the retractable seating in the Black Box Theater J139 in configuration indicated on drawing A102 and on Details 1, 2, and 3 on A802.

C. Interkal is an approved manufacturer.

2-5 Section 133419 Metal Building Systems:
A. Load on PEMB column from bleacher wall buck will be 300# DL and 1800# LL.
B. 8" deep wall girts are acceptable, provided that the wall girts will be adequate to support the required wind loads. In addition, the distance from the building line to the face of the PEMB columns shall remain at 10 1/2".

2-6 Section 312000 Earthwork: The re-issued version of this section (issued by ADD No. 1) was mislabeled in the header as, “ADDENDUM NO. 2”. Revise header as follows, “ADDENDUM NO. 1”.

Drawing Items:

2-7 Existing roof framing plans S8, S10, S11, and SFiJ2, are attached for reference.

2-8 S401: Refer to attached sketch, ADD2-SSK1 for Thickened Slab Detail. The Thickened Slab at Existing Slab Detail is typical for all new CMU walls that are higher than 10’-0”.

2-9 A501: At Enlarged Toilet Room Plans 1, 2, 3, and 4, all chase walls shall be Type 1C in lieu of 2A.

2-10 Refer to attached sketch, ADD2-SK1 for extent of existing roof overhang and concrete loading dock demolition at North side of Corridor T101. Coordinate with Civil Site Demolition Plan.

2-11 A605: Courts B, C, D shall receive the Skymaster Volleyball System. Court A shall receive volleyball standards set into the floor. Floor mounted standards shall be equal to Scholastic Volleyball System Model 6000, and shall include storage cart, net, and scorer’s stand.

PREPARED BY: George S. Link, AIA

VPS ARCHITECTURE

Attachments:
Section 087100 Door Hardware
Section 102226 Operable Partitions
S8
S10
S11
SF1J2
ADD2-SK1
ADD2-SSK1

PART 1 - GENERAL

1.01 SUMMARY

A. Section includes:

1. Mechanical and electrified door hardware
2. Electronic access control system components
3. Field verification, preparation and modification of existing doors and frames to receive new door hardware.

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 “General Requirements” sections for Allowances, Alternates, Owner Furnished Contractor Installed, Project Management and Coordination.
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 09 sections for touchup, finishing or refinishing of existing openings modified by this section.
7. Division 26 “Electrical” sections for connections to electrical power system and for low-voltage wiring.
8. 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. Comply with procedures for verifying existing door and frame compatibility for new hardware, as specified in PART 3, “EXAMINATION” article, herein.
b. Review drawings and Sections from related trades to verify compatibility with specified hardware.
c. 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.

D. Inventory door hardware on receipt and provide secure lock-up for hardware delivered to Project site. Promptly replace products damaged during shipping.

E. 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.

F. Maintain manufacturer-recommended environmental conditions throughout storage and installation periods.

G. 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.

H. 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.

I. Deliver keys to manufacturer of key control system for subsequent delivery to Owner.

1.05 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.

E. Existing Openings: Where existing doors, frames and/or hardware are to remain, field verify existing functions, conditions and preparations and coordinate to suit opening conditions and to provide proper door operation.

1.06 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

b. Electrical Warranty
   1) Locks
      a) Schlage: 1 year
   2) Exit Devices
      a) Von Duprin: 1 year

1.07 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 in 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. 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, 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. 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.
9. 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

10. 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 CONTINUOUS HINGES

A. Manufacturers:

1. Scheduled Manufacturer:

a. Ives

2. Acceptable Manufacturers:

a. Select
b. Pemko

B. Requirements:

1. Provide aluminum geared continuous hinges conforming to ANSI/BHMA A156.26, Grade 1.
2. Provide aluminum geared continuous hinges, where specified in the hardware sets, fabricated from 6063-T6 aluminum.
3. Provide split nylon bearings at each hinge knuckle for quiet, smooth, self-lubricating operation.
4. Provide hinges capable of supporting door weights up to 450 pounds, and successfully tested for 1,500,000 cycles.
5. On fire-rated doors, provide aluminum geared continuous hinges classified for use on rated doors by testing agency acceptable to authority having jurisdiction.
6. Provide aluminum geared continuous hinges with electrified option scheduled in the hardware sets. Provide with number and gage of wires enough to accommodate electric function of specified hardware.
7. Provide hinges 1 inch (25 mm) shorter in length than nominal height of door, unless otherwise noted or door details require shorter length and with symmetrical hole pattern.

2.05 ELECTRIC POWER TRANSFER

A. Manufacturers:

1. Scheduled Manufacturer and Product:

a. Von Duprin EPT-10

2. Acceptable Manufacturers and Products:

a. No Substitute

B. Requirements:

1. Provide power transfer with electrified options as scheduled in the hardware sets. Provide with number and gage of wires enough to accommodate electric function of specified hardware.
2. Locate electric power transfer per manufacturer's template and UL requirements, unless interference with operation of door or other hardware items.

2.06 FLUSH BOLTS

A. Manufacturers:

1. Scheduled Manufacturer:

a. Ives

2. Acceptable Manufacturers:

a. Trimco
b. Hager

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 COORDINATORS

A. Manufacturers:

1. Scheduled Manufacturer:

a. Ives

2. Acceptable Manufacturers:

a. Trimco
b. Hager

B. Requirements:

1. Where pairs of doors are equipped with automatic flush bolts, an astragal, or other hardware that requires synchronized closing of the doors, provide bar-type coordinating device, surface applied to underside of stop at frame head.
2. Provide filler bar of correct length for unit to span entire width of opening, and appropriate brackets for parallel arm door closers, surface vertical rod exit device strikes, or other

stop mounted hardware. Factory-prepared coordinators for vertical rod devices as specified.

2.08 CYLINDRICAL LOCKS – GRADE 1

A. Manufacturers and Products:

1. Scheduled Manufacturer and Product:

a. Schlage ND series

2. Acceptable Manufacturers and Products:

a. No Substitute

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. Cylinders: Refer to “KEYING” article, herein.
3. 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.
4. Provide locksets with separate anti-rotation thru-bolts, and no exposed screws.
5. Provide independently operating levers with two external return spring cassettes mounted under roses to prevent lever sag.
6. Provide standard ASA strikes unless extended lip strikes are necessary to protect trim.
7. Provide electrified options as scheduled in the hardware sets.
8. Lever Trim: Solid cast levers without plastic inserts and wrought roses on both sides.

a. Provide levers with vandal resistant technology for use at heavy traffic or abusive applications.
b. Lever Design: Sparta

2.09 DEADBOLTS

A. Manufacturers and Products:

1. Scheduled Manufacturer and Product:

a. Schlage B600/B700/B800 Series

2. Acceptable Manufacturers and Products:

a. No Substitute

B. Requirements:

1. Provide grade 1 deadbolt series conforming to ANSI/BHMA A156.
2. Cylinders: Refer to “KEYING” article, herein.

3. Provide deadbolts with standard 2-3/4 inches (70 mm) backset. Provide 2-3/8 inches (60 mm) where noted or if door or frame detail requires. Provide deadbolt with full 1-inch (25 mm) throw, constructed of steel alloy.
4. Provide manufacturer's standard strike.

2.10 EXIT DEVICES

A. Manufacturers and Products:

1. Scheduled Manufacturer and Product:

a. Von Duprin 99/33A 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 grooved 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.
17. Special Options:

a. Provide dogging indicators for visible indication of dogging status.

2.11 MAGNETIC LOCKS

A. Manufacturers and Products:

1. Scheduled Manufacturer and Product:

a. Schlage M490 series

2. Acceptable Manufacturers and Products:

a. No Substitute

B. Requirements:

1. Provide magnetic locks certified to meet ANSI/BHMA A156.23 classification criteria including minimum holding force of 1,500lbs. Provide magnetic locks equipped with SPDT Magnetic Bond Sensing device, where specified, to monitor whether enough magnetic holding force exists to ensure adequate locking and SPDT Door Status Monitor device, where specified, to monitor whether door is open or closed. Provide bond sensors fully concealed within electromagnet to resist tampering or damage.
2. Provide magnetic locks certified to meet UL10C, and UL1034 for burglary-resistant electronic locking mechanisms.
3. Provide fasteners, mounting brackets, and spacer bars required for mounting and details.
4. Provide power supply recommended and approved by manufacturer of magnetic locks.
5. Where magnetic locks are scheduled, provide complete assemblies of controls, switches, power supplies, relays, and parts/material recommended and approved by manufacturer of magnetic locks for each individual leaf. Switches control both doors simultaneously at pairs. Locate controls as directed by Architect.

2.12 POWER SUPPLIES

A. Manufacturers and Products:

1. Scheduled Manufacturer and Product:

a. Schlage/Von Duprin PS900 Series

2. Acceptable Manufacturers and Products:

a. No Substitute

B. Requirements:

1. Provide power supplies approved by manufacturer of supplied electrified hardware.
2. Provide appropriate quantity of power supplies necessary for proper operation of electrified locking components as recommended by manufacturer of electrified locking components with consideration for each electrified component using power supply,

location of power supply, and approved wiring diagrams. Locate power supplies as directed by Architect.

3. Provide regulated and filtered 24 VDC power supply, and UL class 2 listed.
4. Provide power supplies with the following features:

    a. 12/24 VDC Output, field selectable.
    b. Class 2 Rated power limited output.
    c. Universal 120-240 VAC input.
    d. Low voltage DC, regulated and filtered.
    e. Polarized connector for distribution boards.
    f. Fused primary input.
    g. AC input and DC output monitoring circuit w/LED indicators.
    h. Cover mounted AC Input indication.
    i. Tested and certified to meet UL294.
    j. NEMA 1 enclosure.
    k. Hinged cover w/lock down screws.
    l. High voltage protective cover.

2.13 CYLINDERS

A. Manufacturers and Products:

1. Scheduled Manufacturer and Product:

    a. Existing Schlage Everest 29 Primus XP for exterior doors

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. High Security: dual-locking cylinder with permanent core requiring restricted, patented keyway. Dual-locking mechanism with interlocking finger pin(s) to check for patented features on keys.

3. Patent Protection: Cylinders/cores requiring use of restricted, patented keys, patent protected.
4. Nickel silver bottom pins.

2.14 CYLINDERS

A. Manufacturers:

1. Scheduled Manufacturer and Product:

   a. Existing Best key system for interior doors

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.

2.15 KEYING

A. Scheduled System:

1. Existing factory registered system:

   a. Provide cylinders/cores keyed into Owner's existing factory registered keying system. Comply with guidelines in ANSI/BHMA A156.28, incorporating decisions made at keying conference.

B. Requirements:

   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)

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

2.16 KEY CONTROL SYSTEM

A. Manufacturers:

1. Scheduled Manufacturer:

a. Telkee

2. Acceptable Manufacturers:

a. HPC
b. Lund

B. Requirements:

1. Provide key control system, including envelopes, labels, tags with self-locking key clips, receipt forms, 3-way visible card index, temporary markers, permanent markers, and standard metal cabinet, all as recommended by system manufacturer, with capacity for 150% of number of locks required for Project.

a. Provide complete cross index system set up by hardware supplier, and place keys on markers and hooks in cabinet as determined by final key schedule.
b. Provide hinged-panel type cabinet for wall mounting.

2.17 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.

2.18 DOOR TRIM

A. Manufacturers:

1. Scheduled Manufacturer:

a. Ives.

2. Acceptable Manufacturers:

a. Trimco
b. Burns

B. Requirements:

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

2.19 PROTECTION PLATES

A. Manufacturers:

1. Scheduled Manufacturer:

   a. Ives

2. Acceptable Manufacturers:

   a. Burns
   b. Trimco

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.

2.20 OVERHEAD STOPS AND OVERHEAD STOP/HOLDERS

A. Manufacturers:

1. Scheduled Manufacturers:

   a. Glynn-Johnson

2. Acceptable Manufacturers:

   a. Sargent
   b. ABH

B. Requirements:

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

2.21 DOOR STOPS AND HOLDERS

A. Manufacturers:

1. Scheduled Manufacturer:

   a. Ives

2. Acceptable Manufacturers:

   a. Trimco
   b. Burns

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.

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

A. Manufacturers:

1. Scheduled Manufacturer:

a. Zero International

2. Acceptable Manufacturers:

a. National Guard
b. Reese

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.

2.23 SILENCERS

A. Manufacturers:

1. Scheduled Manufacturer:

a. Ives

2. Acceptable Manufacturers:

a. Burns
b. Trimco

B. Requirements:

1. Provide "push-in" type silencers for hollow metal or wood frames.
2. Provide one silencer per 30 inches (762 mm) of height on each single frame, and two for each pair frame.

3. Omit where gasketing is specified.

2.24 MAGNETIC HOLDERS

A. Manufacturers:

1. Scheduled Manufacturer:

a. LCN

2. Acceptable Manufacturers:

a. No Substitute

B. Requirements:

1. Provide wall or floor mounted electromagnetic door release as specified with minimum of 25 pounds of holding force. Coordinate projection of holder and armature with other hardware and wall conditions to ensure that door sits parallel to wall when fully open. Connect magnetic holders on fire-rated doors into the fire control panel for fail-safe operation.

2.25 DOOR POSITION SWITCHES

A. Manufacturers:

1. Scheduled Manufacturer:

a. Schlage

2. Acceptable Manufacturers:

a. GE-Interlogix
b. Sargent

B. Requirements:

1. Provide recessed or surface mounted type door position switches as specified.
2. Coordinate door and frame preparations with door and frame suppliers. If switches are being used with magnetic locking device, provide minimum of 4 inches (102 mm) between switch and magnetic locking device.

2.26 FINISHES

A. Finish: BHMA 626/652 (US26D); except:

1. Hinges at Exterior Doors: BHMA 630 (US32D)
2. Aluminum Geared Continuous Hinges: BHMA 628 (US28)
3. Push Plates, Pulls, and Push Bars: BHMA 630 (US32D)

4. Protection Plates: BHMA 630 (US32D)
5. Overhead Stops and Holders: BHMA 630 (US32D)
6. Door Closers: Powder Coat to Match
7. Wall Stops: BHMA 630 (US32D)
8. Latch Protectors: BHMA 630 (US32D)
9. Weatherstripping: Clear Anodized Aluminum
10. 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. 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. Examine roughing-in for electrical power systems to verify actual locations of wiring connections before electrified door hardware installation.

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

3.02 PREPARATION

A. Where on-site modification of doors and frames is required:

1. Carefully remove existing door hardware and components being reused. Clean, protect, tag, and store in accordance with storage and handling requirements specified herein.
2. Field modify and prepare existing doors and frames for new hardware being installed.
3. When modifications are exposed to view, use concealed fasteners, when possible.
4. Prepare hardware locations and reinstall in accordance with installation requirements for new door hardware and with:

    a. Steel Doors and Frames: For surface applied door hardware, drill and tap doors and frames according to ANSI/SDI A250.6.
    b. Wood Doors: DHI WDHS.5 "Recommended Hardware Reinforcement Locations for Mineral Core Wood Flush Doors."
    c. Doors in rated assemblies: NFPA 80 for restrictions on on-site door hardware preparation.

3.03 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. Wiring: Coordinate with Division 26, ELECTRICAL and Division 28 ELECTRONIC SAFETY AND SECURITY sections for:

1. Conduit, junction boxes and wire pulls.
2. Connections to and from power supplies to electrified hardware.
3. Connections to fire/smoke alarm system and smoke evacuation system.
4. Connection of wire to door position switches and wire runs to central room or area, as directed by Architect.
5. Connections to panel interface modules, controllers, and gateways.
6. Testing and labeling wires with Architect's opening number.

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

L. Continuous Hinges: Re-locate the door and frame fire rating labels where they will remain visible so that the hinge does not cover the label once installed.

M. Door Closers & Auto Operators: Mount closers/operators on room side of corridor doors, inside of exterior doors, and stair side of stairway doors from corridors. Mount closers/operators so they are not visible in corridors, lobbies and other public spaces unless approved by Architect.

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

O. Power Supplies: Locate power supplies as indicated or, if not indicated, above accessible ceilings or in equipment room, or alternate location as directed by Architect.

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

Q. 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.

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

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

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

3.04 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.

3.05 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.

3.06 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:

113125 OPT0375300 Version 1

HARDWARE GROUP NO. 001

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
1	EA	SFIC MORTISE CYL.	80-132 (AS REQ)	626	SCH
1	EA	PERMANENT CORE	KEYED TO MATCH EXISTING SYSTEM (AS REQ)	626	BES
		NOTE	BALANCE OF HARDWARE BY DOOR MFR		

-COORDINATE HARDWARE WITH DOOR MFR.
-REMOVE CYLINDER AND CORE IF NOT REQUIRED.

HARDWARE GROUP NO. 103

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 4.5 X 4.5	652	IVE
1	EA	ENTRANCE LOCK	ND53BDC SPA	626	SCH
1	EA	PERMANENT CORE	KEYED TO MATCH EXISTING SYSTEM	626	BES
1	EA	WALL STOP	WS401/402CCV	626	IVE
1	EA	GASKETING	488S PSA H & J (USE SILENCERS @ NON-RATED DOORS)	BK	ZER

HARDWARE GROUP NO. 103S

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 4.5 X 4.5	652	IVE
1	EA	ENTRANCE LOCK	ND53BDC SPA	626	SCH
1	EA	PERMANENT CORE	KEYED TO MATCH EXISTING SYSTEM	626	BES
1	EA	OH STOP	100S SERIES X SIZE & MOUNTING AS REQ	630	GLY
1	EA	GASKETING	488S PSA H & J (USE SILENCERS @ NON-RATED DOORS)	BK	ZER

HARDWARE GROUP NO. 200C

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
6	EA	HINGE	5BB1 4.5 X 4.5	652	IVE
1	EA	CONST LATCHING BOLT	FB51T/FB61T AS REQ	630	IVE
1	EA	STOREROOM LOCK	ND80BDC SPA	626	SCH
1	EA	PERMANENT CORE	KEYED TO MATCH EXISTING SYSTEM	626	BES
1	EA	COORDINATOR	COR X FL X MB X HW PREPS	628	IVE
2	EA	SURFACE CLOSER	4040XP SCUSH TBSRT MTG BRKT, SPCR & PLATE AS REQ	689	LCN
2	EA	KICK PLATE	8400 10" X 1" LDW B-CS	630	IVE
1	EA	GASKETING	488S PSA H & J (USE SILENCERS @ NON-RATED DOORS)	BK	ZER
1	SET	MEETING STILE	8193AA (2 PCS - 1 SET) (OMIT @ NON-RATED DOORS)	AA	ZER

HARDWARE GROUP NO. 201

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 4.5 X 4.5	652	IVE
1	EA	STOREROOM LOCK	ND80BDC SPA	626	SCH
1	EA	PERMANENT CORE	KEYED TO MATCH EXISTING SYSTEM	626	BES
1	EA	SURFACE CLOSER	4040XP REG/PA AS REQ TBSRT MTG BRKT, SPCR & PLATE AS REQ	689	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B-CS	630	IVE
1	EA	WALL STOP	WS401/402CCV	626	IVE
1	EA	GASKETING	488S PSA H & J (USE SILENCERS @ NON-RATED DOORS)	BK	ZER

HARDWARE GROUP NO. 202

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
6	EA	HINGE	5BB1 4.5 X 4.5	652	IVE
1	EA	CONST LATCHING BOLT	FB51T/FB61T AS REQ	630	IVE
1	EA	STOREROOM LOCK	ND80BDC SPA	626	SCH
1	EA	PERMANENT CORE	KEYED TO MATCH EXISTING SYSTEM	626	BES
2	EA	WALL STOP	WS401/402CCV	626	IVE
1	EA	GASKETING	488S PSA H & J (USE SILENCERS @ NON-RATED DOORS)	BK	ZER
1	SET	MEETING STILE	8193AA (2 PCS - 1 SET) (OMIT @ NON-RATED DOORS)	AA	ZER

HARDWARE GROUP NO. 202S

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
6	EA	HINGE	5BB1 4.5 X 4.5	652	IVE
1	EA	CONST LATCHING BOLT	FB51T/FB61T AS REQ	630	IVE
1	EA	STOREROOM LOCK	ND80BDC SPA	626	SCH
1	EA	PERMANENT CORE	KEYED TO MATCH EXISTING SYSTEM	626	BES
2	EA	OH STOP	100S SERIES X SIZE & MOUNTING AS REQ	630	GLY
1	EA	GASKETING	488S PSA H & J (USE SILENCERS @ NON-RATED DOORS)	BK	ZER
1	SET	MEETING STILE	8193AA (2 PCS - 1 SET) (OMIT @ NON-RATED DOORS)	AA	ZER

HARDWARE GROUP NO. 203

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 4.5 X 4.5	652	IVE
1	EA	STOREROOM LOCK	ND80BDC SPA	626	SCH
1	EA	PERMANENT CORE	KEYED TO MATCH EXISTING SYSTEM	626	BES
1	EA	WALL STOP	WS401/402CCV	626	IVE
1	EA	GASKETING	488S PSA H & J (USE SILENCERS @ NON-RATED DOORS)	BK	ZER

HARDWARE GROUP NO. 203S

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 4.5 X 4.5	652	IVE
1	EA	STOREROOM LOCK	ND80BDC SPA	626	SCH
1	EA	PERMANENT CORE	KEYED TO MATCH EXISTING SYSTEM	626	BES
1	EA	OH STOP	100S SERIES X SIZE & MOUNTING AS REQ	630	GLY
1	EA	GASKETING	488S PSA H & J (USE SILENCERS @ NON-RATED DOORS)	BK	ZER

HARDWARE GROUP NO. 203W

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1HW 5 X 4.5	652	IVE
1	EA	STOREROOM LOCK	ND80BDC SPA	626	SCH
1	EA	PERMANENT CORE	KEYED TO MATCH EXISTING SYSTEM	626	BES
1	EA	WALL STOP	WS401/402CCV	626	IVE
1	EA	GASKETING	488S PSA H & J (USE SILENCERS @ NON-RATED DOORS)	BK	ZER

HARDWARE GROUP NO. 207H

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 4.5 X 4.5	652	IVE
1	EA	STOREROOM LOCK	ND80BDC SPA	626	SCH
1	EA	PERMANENT CORE	KEYED TO MATCH EXISTING SYSTEM	626	BES
1	EA	OH STOP & HOLDER	100H SERIES X SIZE & MOUNTING	630	GLY
1	EA	SURFACE CLOSER	4040XP REG/PA AS REQ TBSRT MTG BRKT, SPCR & PLATE AS REQ	689	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B-CS	630	IVE
1	EA	GASKETING	488S PSA H & J (USE SILENCERS @ NON-RATED DOORS)	BK	ZER

HARDWARE GROUP NO. 301

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 4.5 X 4.5	652	IVE
1	EA	PRIVACY LOCK	ND40S SPA	626	SCH
1	EA	SURFACE CLOSER	4040XP REG/PA AS REQ TBSRT MTG BRKT, SPCR & PLATE AS REQ	689	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B-CS	630	IVE
1	EA	MOP PLATE	8400 4" X 1 1/2" LDW B-CS	630	IVE
1	EA	WALL STOP	WS401/402CCV	626	IVE
1	EA	GASKETING	488SCL PSA H&J	CL	ZER

HARDWARE GROUP NO. 403

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 4.5 X 4.5	652	IVE
1	EA	PASSAGE SET	ND10S SPA	626	SCH
1	EA	WALL STOP	WS401/402CCV	626	IVE
1	EA	GASKETING	488S PSA H & J (USE SILENCERS @ NON-RATED DOORS)	BK	ZER

HARDWARE GROUP NO. 503

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 4.5 X 4.5	652	IVE
1	EA	CLASSROOM LOCK	ND70BDC SPA	626	SCH
1	EA	PERMANENT CORE	KEYED TO MATCH EXISTING SYSTEM	626	BES
1	EA	WALL STOP	WS401/402CCV	626	IVE
1	EA	GASKETING	488S PSA H & J (USE SILENCERS @ NON-RATED DOORS)	BK	ZER

HARDWARE GROUP NO. 503S

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 4.5 X 4.5	652	IVE
1	EA	CLASSROOM LOCK	ND70BDC SPA	626	SCH
1	EA	PERMANENT CORE	KEYED TO MATCH EXISTING SYSTEM	626	BES
1	EA	OH STOP	100S SERIES X SIZE & MOUNTING AS REQ	630	GLY
1	EA	GASKETING	488S PSA H & J (USE SILENCERS @ NON-RATED DOORS)	BK	ZER

HARDWARE GROUP NO. 507

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 4.5 X 4.5	652	IVE
1	EA	CLASSROOM LOCK	ND70BDC SPA	626	SCH
1	EA	PERMANENT CORE	KEYED TO MATCH EXISTING SYSTEM	626	BES
1	EA	OH STOP	100S SERIES X SIZE & MOUNTING AS REQ	630	GLY
1	EA	SURFACE CLOSER	4040XP REG/PA AS REQ TBSRT MTG BRKT, SPCR & PLATE AS REQ	689	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B-CS	630	IVE
1	EA	GASKETING	488S PSA H & J (USE SILENCERS @ NON-RATED DOORS)	BK	ZER

HARDWARE GROUP NO. 710-CD

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
6	EA	HINGE	5BB1HW 4.5 X 4.5 NRP	652	IVE
1	EA	PANIC HARDWARE	CDSI-9927-DT-LBR-SNB LENGTH AND HEIGHT AS REQ	626	VON
1	EA	PANIC HARDWARE	CDSI-9927-NL-LBR-SNB LENGTH AND HEIGHT AS REQ	626	VON
2	EA	MORTISE CYL TURN	09-900 112 XB11-720 CAM AS REQ (CDSI THUMBTURN CYL.)	626	SCH
1	EA	SFIC RIM CYLINDER	80-159	626	SCH
1	EA	PERMANENT CORE	KEYED TO MATCH EXISTING SYSTEM	626	BES
2	EA	SURFACE CLOSER	4040XP REG/PA AS REQ TBSRT MTG BRKT, SPCR & PLATE AS REQ	689	LCN
2	EA	KICK PLATE	8400 10" X 1" LDW B-CS	630	IVE
2	EA	WALL STOP	WS401/402CCV	626	IVE
2	EA	SILENCER	SR64	GRY	IVE

HARDWARE GROUP NO. 710C

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
6	EA	HINGE	5BB1HW 4.5 X 4.5	652	IVE
1	EA	PANIC HARDWARE	LD-9927-EO-LBR-SNB LENGTH AND HEIGHT AS REQ	626	VON
1	EA	PANIC HARDWARE	LD-9927-NL-LBR-SNB LENGTH AND HEIGHT AS REQ	626	VON
1	EA	SFIC RIM CYLINDER	80-159	626	SCH
1	EA	PERMANENT CORE	KEYED TO MATCH EXISTING SYSTEM	626	BES
2	EA	SURFACE CLOSER	4040XP SCUSH TBSRT MTG BRKT, SPCR & PLATE AS REQ	689	LCN
2	EA	KICK PLATE	8400 10" X 1" LDW B-CS	630	IVE
1	SET	MEETING STILE	8193AA (2 PCS - 1 SET)	AA	ZER
2	EA	SILENCER	SR64	GRY	IVE

HARDWARE GROUP NO. 710C-CD

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
6	EA	HINGE	5BB1HW 4.5 X 4.5 NRP	652	IVE
1	EA	PANIC HARDWARE	CDSI-9927-DT-LBR-SNB LENGTH AND HEIGHT AS REQ	626	VON
1	EA	PANIC HARDWARE	CDSI-9927-NL-LBR-SNB LENGTH AND HEIGHT AS REQ	626	VON
2	EA	MORTISE CYL TURN	09-900 112 XB11-720 CAM AS REQ (CDSI THUMBTURN CYL.)	626	SCH
1	EA	SFIC RIM CYLINDER	80-159	626	SCH
1	EA	PERMANENT CORE	KEYED TO MATCH EXISTING SYSTEM	626	BES
2	EA	SURFACE CLOSER	4040XP SCUSH TBSRT MTG BRKT, SPCR & PLATE AS REQ	689	LCN
2	EA	KICK PLATE	8400 10" X 1" LDW B-CS	630	IVE
2	EA	SILENCER	SR64	GRY	IVE

HARDWARE GROUP NO. 710C-CD.3

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
18	EA	HINGE	5BB1HW 4.5 X 4.5 NRP	652	IVE
5	EA	PANIC HARDWARE	CDSI-9927-DT-LBR-SNB LENGTH AND HEIGHT AS REQ	626	VON
1	EA	PANIC HARDWARE	CDSI-9927-NL-LBR-SNB LENGTH AND HEIGHT AS REQ	626	VON
6	EA	MORTISE CYL TURN	09-900 112 XB11-720 CAM AS REQ (CDSI THUMBTURN CYL.)	626	SCH
1	EA	SFIC RIM CYLINDER	80-159	626	SCH
1	EA	PERMANENT CORE	KEYED TO MATCH EXISTING SYSTEM	626	BES
6	EA	SURFACE CLOSER	4040XP SCUSH TBSRT MTG BRKT, SPCR & PLATE AS REQ	689	LCN
6	EA	KICK PLATE	8400 10" X 1" LDW B-CS	630	IVE
6	EA	SILENCER	SR64	GRY	IVE

HARDWARE GROUP NO. 711-CD

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1HW 4.5 X 4.5 NRP	652	IVE
1	EA	PANIC HARDWARE	CDSI-99-NL-SNB LENGTH AS REQ	626	VON
1	EA	MORTISE CYL TURN	09-900 112 XB11-720 CAM AS REQ (CDSI THUMBTURN)	626	SCH
1	EA	SFIC RIM CYLINDER	80-159	626	SCH
1	EA	PERMANENT CORE	KEYED TO MATCH EXISTING SYSTEM	626	BES
1	EA	SURFACE CLOSER	4040XP REG/PA AS REQ TBSRT MTG BRKT, SPCR & PLATE AS REQ	689	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B-CS	630	IVE
1	EA	WALL STOP	WS401/402CCV	626	IVE
3	EA	SILENCER	SR64	GRY	IVE

HARDWARE GROUP NO. 711C

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1HW 4.5 X 4.5	652	IVE
1	EA	PANIC HARDWARE	LD-99-NL-SNB LENGTH AS REQ	626	VON
1	EA	SFIC RIM CYLINDER	80-159	626	SCH
1	EA	PERMANENT CORE	KEYED TO MATCH EXISTING SYSTEM	626	BES
1	EA	SURFACE CLOSER	4040XP SCUSH TBSRT MTG BRKT, SPCR & PLATE AS REQ	689	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B-CS	630	IVE
3	EA	SILENCER	SR64	GRY	IVE

HARDWARE GROUP NO. 711CH-CD

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1HW 4.5 X 4.5	652	IVE
1	EA	PANIC HARDWARE	CDSI-99-NL-SNB LENGTH AS REQ	626	VON
1	EA	MORTISE CYL TURN	09-900 112 XB11-720 CAM AS REQ (CDSI THUMBTURN)	626	SCH
1	EA	SFIC RIM CYLINDER	80-159	626	SCH
1	EA	PERMANENT CORE	KEYED TO MATCH EXISTING SYSTEM	626	BES
1	EA	SURFACE CLOSER	4040XP SHCUSH TBSRT X MTG BRKT, SPACER & PLATE AS REQ X ST3596	689	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B-CS	630	IVE
3	EA	SILENCER	SR64	GRY	IVE

HARDWARE GROUP NO. 730

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
6	EA	HINGE	5BB1HW 4.5 X 4.5	652	IVE
2	EA	PANIC HARDWARE	9927-L-BE-LBR-17-SNB LENGTH AND HEIGHT AS REQ	626	VON
2	EA	SURFACE CLOSER	4040XP REG/PA AS REQ TBSRT MTG BRKT, SPCR & PLATE AS REQ	689	LCN
2	EA	KICK PLATE	8400 10" X 1" LDW B-CS	630	IVE
2	EA	WALL STOP	WS401/402CCV	626	IVE
2	EA	SILENCER	SR64	GRY	IVE

HARDWARE GROUP NO. 731

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1HW 4.5 X 4.5	652	IVE
1	EA	PANIC HARDWARE	99-L-BE-17-SNB LENGTH AS REQ	626	VON
1	EA	SURFACE CLOSER	4040XP REG/PA AS REQ TBSRT MTG BRKT, SPCR & PLATE AS REQ	689	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B-CS	630	IVE
1	EA	WALL STOP	WS401/402CCV	626	IVE
3	EA	SILENCER	SR64	GRY	IVE

HARDWARE GROUP NO. 800AVH.2

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
4	EA	CONT. HINGE	112XY	628	IVE
4	EA	DUMMY PUSH BAR	330 LENGTH AS REQ	626	VON
4	EA	TRIM	990-DT	626	VON
4	EA	SURFACE CLOSER	4040XP SHCUSH TBSRT X MTG BRKT, SPACER & PLATE AS REQ X ST3596	689	LCN
2	SET	SEAL	PERIMETER SEAL BY FRAME MFR		
2	SET	ASTRAGAL	MEETING STILE SEAL BY DOOR MFR		

HARDWARE GROUP NO. 800AVH.3

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
6	EA	CONT. HINGE	112XY	628	IVE
6	EA	DUMMY PUSH BAR	330 LENGTH AS REQ	626	VON
6	EA	TRIM	990-DT	626	VON
6	EA	SURFACE CLOSER	4040XP SHCUSH TBSRT X MTG BRKT, SPACER & PLATE AS REQ X ST3596	689	LCN
3	SET	SEAL	PERIMETER SEAL BY FRAME MFR		
3	SET	ASTRAGAL	MEETING STILE SEAL BY DOOR MFR		

HARDWARE GROUP NO. 801

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1HW 4.5 X 4.5	652	IVE
1	EA	PUSH PLATE	8200 4" X 16"	630	IVE
1	EA	PULL PLATE	8303 10" 4" X 16" F	630	IVE
1	EA	SURFACE CLOSER	4040XP REG/PA AS REQ TBSRT MTG BRKT, SPCR & PLATE AS REQ	689	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B-CS	630	IVE
1	EA	WALL STOP	WS401/402CCV	626	IVE
3	EA	SILENCER	SR64	GRY	IVE

HARDWARE GROUP NO. 801L

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1HW 4.5 X 4.5	652	IVE
1	EA	CLASSROOM DEADBOLT	B663HD 12-631	626	SCH
1	EA	PERMANENT CORE	KEYED TO MATCH EXISTING SYSTEM	626	BES
1	EA	PUSH PLATE	8200 4" X 16"	630	IVE
1	EA	PULL PLATE	8303 10" 4" X 16" F	630	IVE
1	EA	SURFACE CLOSER	4040XP REG/PA AS REQ TBSRT MTG BRKT, SPCR & PLATE AS REQ	689	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B-CS	630	IVE
1	EA	WALL STOP	WS401/402CCV	626	IVE
3	EA	SILENCER	SR64	GRY	IVE

HARDWARE GROUP NO. C001-1

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
1	EA	MORTISE CYLINDER	20-061 ICX W/KEYED CONST. CORE (AS REQ)	626	SCH
1	EA	PRIMUS CORE	20-740-XP (AS REQ)	626	SCH
1	EA	CREDENTIAL READER	CREDENTIAL READER BY SECURITY CONTRACTOR		
		NOTE	BALANCE OF HARDWARE BY DOOR MFR		

-COORDINATE HARDWARE WITH DOOR MFR.
-REMOVE CYLINDER AND CORE IF NOT REQUIRED.

HARDWARE GROUP NO. C201

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 4.5 X 4.5	652	IVE
1	EA	POWER TRANSFER	EPT10 CON	689	VON
1	EA	EU STOREROOM LOCK	ND80BDCEU SPA RX CON 12V/24V DC	626	SCH
1	EA	PERMANENT CORE	KEYED TO MATCH EXISTING SYSTEM	626	BES
1	EA	SURFACE CLOSER	4040XP REG/PA AS REQ TBSRT MTG BRKT, SPCR & PLATE AS REQ	689	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B-CS	630	IVE
1	EA	WALL STOP	WS401/402CCV	626	IVE
1	EA	GASKETING	488S PSA H & J (USE SILENCERS @ NON-RATED DOORS)	BK	ZER
1	EA	WIRE HARNESS (IN DOOR)	ALLEGION CONNECT TYPE & LENGTH AS REQ		SCH
1	EA	WIRE HARNESS (TO POWER SUPPLY)	CON-6W - CONNECTION LEADS		SCH
1	EA	CREDENTIAL READER	CREDENTIAL READER BY SECURITY CONTRACTOR		
1	EA	DOOR CONTACT	679-05 TYPE AS REQ	BLK	SCE
1	EA	POWER SUPPLY	PS902 900-2RS 120/240 VAC (OMIT 2RS BOARD WHERE NOT REQ)	LGR	SCE

-INGRESS BY THE CREDENTIAL READER OR KEY OVERRIDE.
-FREE EGRESS BY LEVER.
-COORDINATE POWER SUPPLY WITH SECURITY CONTRACTOR PRIOR TO SUBMITTALS.
-OMIT POWER SUPPLY WHERE PROVIDED BY SECURITY.

HARDWARE GROUP NO. C201C

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 4.5 X 4.5	652	IVE
1	EA	POWER TRANSFER	EPT10 CON	689	VON
1	EA	EU STOREROOM LOCK	ND80BDCEU SPA RX CON 12V/24V DC	626	SCH
1	EA	PERMANENT CORE	KEYED TO MATCH EXISTING SYSTEM	626	BES
1	EA	SURFACE CLOSER	4040XP SCUSH TBSRT MTG BRKT, SPCR & PLATE AS REQ	689	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B-CS	630	IVE
1	EA	GASKETING	488S PSA H & J (USE SILENCERS @ NON-RATED DOORS)	BK	ZER
1	EA	WIRE HARNESS (IN DOOR)	ALLEGION CONNECT TYPE & LENGTH AS REQ		SCH
1	EA	WIRE HARNESS (TO POWER SUPPLY)	CON-6W - CONNECTION LEADS		SCH
1	EA	CREDENTIAL READER	CREDENTIAL READER BY SECURITY CONTRACTOR		
1	EA	DOOR CONTACT	679-05 TYPE AS REQ	BLK	SCE
1	EA	POWER SUPPLY	PS902 900-2RS 120/240 VAC (OMIT 2RS BOARD WHERE NOT REQ)	LGR	SCE

-INGRESS BY THE CREDENTIAL READER OR KEY OVERRIDE.
-FREE EGRESS BY LEVER.
-COORDINATE POWER SUPPLY WITH SECURITY CONTRACTOR PRIOR TO SUBMITTALS.
-OMIT POWER SUPPLY WHERE PROVIDED BY SECURITY.

HARDWARE GROUP NO. C206

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
6	EA	HINGE	5BB1 4.5 X 4.5	652	IVE
1	EA	POWER TRANSFER	EPT10 CON	689	VON
1	EA	CONST LATCHING BOLT	FB51T/FB61T AS REQ	630	IVE
1	EA	EU STOREROOM LOCK	ND80BDCEU SPA RX CON 12V/24V DC	626	SCH
1	EA	PERMANENT CORE	KEYED TO MATCH EXISTING SYSTEM	626	BES
1	EA	COORDINATOR	COR X FL X MB X HW PREPS	628	IVE
2	EA	OH STOP	100S SERIES X SIZE & MOUNTING AS REQ	630	GLY
2	EA	SURFACE CLOSER	4040XP REG/PA AS REQ TBSRT MTG BRKT, SPCR & PLATE AS REQ	689	LCN
2	EA	KICK PLATE	8400 10" X 1" LDW B-CS	630	IVE
1	EA	GASKETING	488S PSA H & J (USE SILENCERS @ NON-RATED DOORS)	BK	ZER
1	SET	MEETING STILE	8193AA (2 PCS - 1 SET) (OMIT @ NON-RATED DOORS)	AA	ZER
1	EA	WIRE HARNESS (IN DOOR)	ALLEGION CONNECT TYPE & LENGTH AS REQ		SCH
1	EA	WIRE HARNESS (TO POWER SUPPLY)	CON-6W - CONNECTION LEADS		SCH
1	EA	CREDENTIAL READER	CREDENTIAL READER BY SECURITY CONTRACTOR		
2	EA	DOOR CONTACT	679-05 TYPE AS REQ	BLK	SCE
1	EA	POWER SUPPLY	PS902 900-2RS 120/240 VAC (OMIT 2RS BOARD WHERE NOT REQ)	LGR	SCE

-INGRESS BY THE CREDENTIAL READER OR KEY OVERRIDE.
-FREE EGRESS BY LEVER.
-COORDINATE POWER SUPPLY WITH SECURITY CONTRACTOR PRIOR TO SUBMITTALS.
-OMIT POWER SUPPLY WHERE PROVIDED BY SECURITY.

HARDWARE GROUP NO. C207

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 4.5 X 4.5	652	IVE
1	EA	POWER TRANSFER	EPT10 CON	689	VON
1	EA	EU STOREROOM LOCK	ND80BDCEU SPA RX CON 12V/24V DC	626	SCH
1	EA	PERMANENT CORE	KEYED TO MATCH EXISTING SYSTEM	626	BES
1	EA	OH STOP	100S SERIES X SIZE & MOUNTING AS REQ	630	GLY
1	EA	SURFACE CLOSER	4040XP REG/PA AS REQ TBSRT MTG BRKT, SPCR & PLATE AS REQ	689	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B-CS	630	IVE
1	EA	GASKETING	488S PSA H & J (USE SILENCERS @ NON-RATED DOORS)	BK	ZER
1	EA	WIRE HARNESS (IN DOOR)	ALLEGION CONNECT TYPE & LENGTH AS REQ		SCH
1	EA	WIRE HARNESS (TO POWER SUPPLY)	CON-6W - CONNECTION LEADS		SCH
1	EA	CREDENTIAL READER	CREDENTIAL READER BY SECURITY CONTRACTOR		
1	EA	DOOR CONTACT	679-05 TYPE AS REQ	BLK	SCE
1	EA	POWER SUPPLY	PS902 900-2RS 120/240 VAC (OMIT 2RS BOARD WHERE NOT REQ)	LGR	SCE

-INGRESS BY THE CREDENTIAL READER OR KEY OVERRIDE.
-FREE EGRESS BY LEVER.
-COORDINATE POWER SUPPLY WITH SECURITY CONTRACTOR PRIOR TO SUBMITTALS.
-OMIT POWER SUPPLY WHERE PROVIDED BY SECURITY.

HARDWARE GROUP NO. C207W

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1HW 5 X 4.5	652	IVE
1	EA	POWER TRANSFER	EPT10 CON	689	VON
1	EA	EU STOREROOM LOCK	ND80BDCEU SPA RX CON 12V/24V DC	626	SCH
1	EA	PERMANENT CORE	KEYED TO MATCH EXISTING SYSTEM	626	BES
1	EA	OH STOP	100S SERIES X SIZE & MOUNTING AS REQ	630	GLY
1	EA	SURFACE CLOSER	4040XP REG/PA AS REQ TBSRT MTG BRKT, SPCR & PLATE AS REQ	689	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B-CS	630	IVE
1	EA	GASKETING	488S PSA H & J (USE SILENCERS @ NON-RATED DOORS)	BK	ZER
1	EA	WIRE HARNESS (IN DOOR)	ALLEGION CONNECT TYPE & LENGTH AS REQ		SCH
1	EA	WIRE HARNESS (TO POWER SUPPLY)	CON-6W - CONNECTION LEADS		SCH
1	EA	CREDENTIAL READER	CREDENTIAL READER BY SECURITY CONTRACTOR		
1	EA	DOOR CONTACT	679-05 TYPE AS REQ	BLK	SCE
1	EA	POWER SUPPLY	PS902 900-2RS 120/240 VAC (OMIT 2RS BOARD WHERE NOT REQ)	LGR	SCE

-INGRESS BY THE CREDENTIAL READER OR KEY OVERRIDE.
-FREE EGRESS BY LEVER.
-COORDINATE POWER SUPPLY WITH SECURITY CONTRACTOR PRIOR TO SUBMITTALS.
-OMIT POWER SUPPLY WHERE PROVIDED BY SECURITY.

HARDWARE GROUP NO. C710

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
6	EA	HINGE	5BB1HW 4.5 X 4.5	652	IVE
2	EA	POWER TRANSFER	EPT10 CON	689	VON
1	EA	ELEC PANIC HARDWARE	LD-RX-9927-EO-LBR-CON-SNB LENGTH AND HEIGHT AS REQ	626	VON
1	EA	ELEC PANIC HARDWARE	RX-QEL-9927-NL-LBR-CON-SNB LENGTH AND HEIGHT AS REQ-SNB	626	VON
1	EA	SFIC RIM CYLINDER	80-159	626	SCH
1	EA	PERMANENT CORE	KEYED TO MATCH EXISTING SYSTEM	626	BES
2	EA	SURFACE CLOSER	4040XP REG/PA AS REQ TBSRT MTG BRKT, SPCR & PLATE AS REQ	689	LCN
2	EA	KICK PLATE	8400 10" X 1" LDW B-CS	630	IVE
2	EA	WALL STOP	WS401/402CCV	626	IVE
2	EA	SILENCER	SR64	GRY	IVE
2	EA	WIRE HARNESS (IN DOOR)	ALLEGION CONNECT TYPE & LENGTH AS REQ		SCH
2	EA	WIRE HARNESS (TO POWER SUPPLY)	CON-6W - CONNECTION LEADS		SCH
1	EA	CREDENTIAL READER	CREDENTIAL READER BY SECURITY CONTRACTOR		
2	EA	DOOR CONTACT	679-05 TYPE AS REQ	BLK	SCE
1	EA	POWER SUPPLY	PS902 900-2RS 120/240 VAC (OMIT 2RS BOARD WHERE NOT REQ)		VON

-INGRESS BY THE CREDENTIAL READER OR KEY OVERRIDE.
-FREE EGRESS BY THE PUSH PADS.
-COORDINATE POWER SUPPLY WITH SECURITY CONTRACTOR PRIOR TO SUBMITTALS.
-OMIT POWER SUPPLY WHERE PROVIDED BY SECURITY.

HARDWARE GROUP NO. C710ACH.2

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
12	EA	HINGE	5BB1HW 4.5 X 4.5	652	IVE
4	EA	POWER TRANSFER	EPT10 CON	689	VON
3	EA	ELEC PANIC HARDWARE	LD-RX-9927-EO-LBR-CON-SNB LENGTH AND HEIGHT AS REQ	626	VON
1	EA	ELEC PANIC HARDWARE	RX-QEL-9927-NL-LBR-CON-SNB LENGTH AND HEIGHT AS REQ-SNB	626	VON
1	EA	SFIC RIM CYLINDER	80-159	626	SCH
1	EA	PERMANENT CORE	KEYED TO MATCH EXISTING SYSTEM	626	BES
4	EA	SURFACE CLOSER	4040XP SHCUSH TBSRT X MTG BRKT, SPACER & PLATE AS REQ X ST3596	689	LCN
2	SET	SEAL	PERIMETER SEAL BY FRAME MFR		
2	SET	ASTRAGAL	MEETING STILE SEAL BY DOOR MFR		
4	EA	WIRE HARNESS (IN DOOR)	ALLEGION CONNECT TYPE & LENGTH AS REQ		SCH
4	EA	WIRE HARNESS (TO POWER SUPPLY)	CON-6W - CONNECTION LEADS		SCH
1	EA	CREDENTIAL READER	CREDENTIAL READER BY SECURITY CONTRACTOR		
4	EA	DOOR CONTACT	679-05 TYPE AS REQ	BLK	SCE
1	EA	POWER SUPPLY	PS902 900-2RS 120/240 VAC (OMIT 2RS BOARD WHERE NOT REQ)		VON

-INGRESS BY THE CREDENTIAL READER OR KEY OVERRIDE.
-FREE EGRESS BY THE PUSH PADS.
-COORDINATE POWER SUPPLY WITH SECURITY CONTRACTOR PRIOR TO SUBMITTALS.
-OMIT POWER SUPPLY WHERE PROVIDED BY SECURITY.
-REVIEW TECH DRAWINGS DURING INSTALL FOR PLACEMENT OF CARD READER, PER ARCHITECT

-MINIMUM 5" WIDE STILE REQUIRED FOR 99 EXIT DEVICE
-IF LESS THAN 5" WIDE STILE, PROVIDE 33A DEVICE

HARDWARE GROUP NO. C710C

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
6	EA	HINGE	5BB1HW 4.5 X 4.5	652	IVE
2	EA	POWER TRANSFER	EPT10 CON	689	VON
1	EA	ELEC PANIC HARDWARE	LD-RX-9927-EO-LBR-CON-SNB LENGTH AND HEIGHT AS REQ	626	VON
1	EA	ELEC PANIC HARDWARE	RX-QEL-9927-NL-LBR-CON-SNB LENGTH AND HEIGHT AS REQ-SNB	626	VON
1	EA	SFIC RIM CYLINDER	80-159	626	SCH
1	EA	PERMANENT CORE	KEYED TO MATCH EXISTING SYSTEM	626	BES
2	EA	SURFACE CLOSER	4040XP SCUSH TBSRT MTG BRKT, SPCR & PLATE AS REQ	689	LCN
2	EA	KICK PLATE	8400 10" X 1" LDW B-CS	630	IVE
2	EA	SILENCER	SR64	GRY	IVE
2	EA	WIRE HARNESS (IN DOOR)	ALLEGION CONNECT TYPE & LENGTH AS REQ		SCH
2	EA	WIRE HARNESS (TO POWER SUPPLY)	CON-6W - CONNECTION LEADS		SCH
1	EA	CREDENTIAL READER	CREDENTIAL READER BY SECURITY CONTRACTOR		
2	EA	DOOR CONTACT	679-05 TYPE AS REQ	BLK	SCE
1	EA	POWER SUPPLY	PS902 900-2RS 120/240 VAC (OMIT 2RS BOARD WHERE NOT REQ)		VON

-INGRESS BY THE CREDENTIAL READER OR KEY OVERRIDE.
-FREE EGRESS BY THE PUSH PADS.
-COORDINATE POWER SUPPLY WITH SECURITY CONTRACTOR PRIOR TO SUBMITTALS.
-OMIT POWER SUPPLY WHERE PROVIDED BY SECURITY.

HARDWARE GROUP NO. C711

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1HW 4.5 X 4.5	652	IVE
1	EA	POWER TRANSFER	EPT10 CON	689	VON
1	EA	ELEC PANIC HARDWARE	RX-QEL-99-NL-CON-SNB LENGTH AS REQ	626	VON
1	EA	SFIC RIM CYLINDER	80-159	626	SCH
1	EA	PERMANENT CORE	KEYED TO MATCH EXISTING SYSTEM	626	BES
1	EA	SURFACE CLOSER	4040XP REG/PA AS REQ TBSRT MTG BRKT, SPCR & PLATE AS REQ	689	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B-CS	630	IVE
1	EA	WALL STOP	WS401/402CCV	626	IVE
3	EA	SILENCER	SR64	GRY	IVE
1	EA	WIRE HARNESS (IN DOOR)	ALLEGION CONNECT TYPE & LENGTH AS REQ		SCH
1	EA	WIRE HARNESS (TO POWER SUPPLY)	CON-6W - CONNECTION LEADS		SCH
1	EA	CREDENTIAL READER	CREDENTIAL READER BY SECURITY CONTRACTOR		
1	EA	DOOR CONTACT	679-05 TYPE AS REQ	BLK	SCE
1	EA	POWER SUPPLY	PS902 900-2RS 120/240 VAC (OMIT 2RS BOARD WHERE NOT REQ)		VON

-INGRESS BY THE CREDENTIAL READER OR KEY OVERRIDE.
-FREE EGRESS BY THE PUSH PAD.
-COORDINATE POWER SUPPLY WITH SECURITY CONTRACTOR PRIOR TO SUBMITTALS.
-OMIT POWER SUPPLY WHERE PROVIDED BY SECURITY.

HARDWARE GROUP NO. C711C

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1HW 4.5 X 4.5	652	IVE
1	EA	POWER TRANSFER	EPT10 CON	689	VON
1	EA	ELEC PANIC HARDWARE	RX-QEL-99-NL-CON-SNB LENGTH AS REQ	626	VON
1	EA	SFIC RIM CYLINDER	80-159	626	SCH
1	EA	PERMANENT CORE	KEYED TO MATCH EXISTING SYSTEM	626	BES
1	EA	SURFACE CLOSER	4040XP SCUSH TBSRT MTG BRKT, SPCR & PLATE AS REQ	689	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B-CS	630	IVE
3	EA	SILENCER	SR64	GRY	IVE
1	EA	WIRE HARNESS (IN DOOR)	ALLEGION CONNECT TYPE & LENGTH AS REQ		SCH
1	EA	WIRE HARNESS (TO POWER SUPPLY)	CON-6W - CONNECTION LEADS		SCH
1	EA	CREDENTIAL READER	CREDENTIAL READER BY SECURITY CONTRACTOR		
1	EA	DOOR CONTACT	679-05 TYPE AS REQ	BLK	SCE
1	EA	POWER SUPPLY	PS902 900-2RS 120/240 VAC (OMIT 2RS BOARD WHERE NOT REQ)		VON

-INGRESS BY THE CREDENTIAL READER OR KEY OVERRIDE.
-FREE EGRESS BY THE PUSH PAD.
-COORDINATE POWER SUPPLY WITH SECURITY CONTRACTOR PRIOR TO SUBMITTALS.
-OMIT POWER SUPPLY WHERE PROVIDED BY SECURITY.

HARDWARE GROUP NO. C714AMH.2

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
4	EA	CONT. HINGE	224XY EPT LENGTH AS REQ	628	IVE
4	EA	POWER TRANSFER	EPT10 CON	689	VON
2	EA	REMOVABLE MULLION	KR4954 STAB HEIGHT AS REQ	689	VON
3	EA	ELEC PANIC HARDWARE	LD-RX-99-EO-CON-SNB LENGTH AS REQ	626	VON
1	EA	ELEC PANIC HARDWARE	RX-QEL-99-NL-CON-SNB LENGTH AS REQ	626	VON
2	EA	MULLION STORAGE KIT	MT54	689	VON
1	EA	RIM CYLINDER	20-057 ICX W/KEYED CONST. CORE	626	SCH
2	EA	MORTISE CYLINDER	20-061 ICX W/KEYED CONST. CORE (MULLION CYL.)	626	SCH
3	EA	PRIMUS CORE	20-740-XP	626	SCH
4	EA	SURFACE CLOSER	4040XP SHCUSH TBSRT X MTG BRKT, SPACER & PLATE AS REQ X ST3596	689	LCN
2	EA	RAIN DRIP	142AA DW + 4" (OMIT @ COVERED OPENINGS)	AA	ZER
2	SET	SEAL	PERIMETER SEAL BY FRAME MFR		
2	SET	ASTRAGAL	MEETING STILE SEAL BY DOOR MFR		
4	EA	DOOR SWEEP	8198AA	AA	ZER
2	EA	THRESHOLD	65A LENGTH AS REQ	A	ZER
4	EA	WIRE HARNESS (IN DOOR)	ALLEGION CONNECT TYPE & LENGTH AS REQ		SCH
4	EA	WIRE HARNESS (TO POWER SUPPLY)	CON-6W - CONNECTION LEADS		SCH
1	EA	CREDENTIAL READER	CREDENTIAL READER BY SECURITY CONTRACTOR		
4	EA	DOOR CONTACT	679-05 TYPE AS REQ	BLK	SCE
1	EA	POWER SUPPLY	PS902 900-2RS 120/240 VAC (OMIT 2RS BOARD WHERE NOT REQ)		VON

-INGRESS BY THE CREDENTIAL READER OR KEY OVERRIDE.
-FREE EGRESS BY THE PUSH PADS.
-COORDINATE POWER SUPPLY WITH SECURITY CONTRACTOR PRIOR TO SUBMITTALS.
-OMIT POWER SUPPLY WHERE PROVIDED BY SECURITY.
-REVIEW TECH DRAWINGS DURING INSTALL FOR PLACEMENT OF CARD READER, PER ARCHITECT

-MINIMUM 5" WIDE STILE REQUIRED FOR 99 EXIT DEVICE
-IF LESS THAN 5" WIDE STILE, PROVIDE 33A DEVICE

HARDWARE GROUP NO. C714AMH.3

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
6	EA	CONT. HINGE	224XY EPT LENGTH AS REQ	628	IVE
6	EA	POWER TRANSFER	EPT10 CON	689	VON
3	EA	REMOVABLE MULLION	KR4954 STAB HEIGHT AS REQ	689	VON
5	EA	ELEC PANIC HARDWARE	LD-RX-99-EO-CON-SNB LENGTH AS REQ	626	VON
1	EA	ELEC PANIC HARDWARE	RX-QEL-99-NL-CON-SNB LENGTH AS REQ	626	VON
3	EA	MULLION STORAGE KIT	MT54	689	VON
1	EA	RIM CYLINDER	20-057 ICX W/KEYED CONST. CORE	626	SCH
3	EA	MORTISE CYLINDER	20-061 ICX W/KEYED CONST. CORE (MULLION CYL.)	626	SCH
4	EA	PRIMUS CORE	20-740-XP	626	SCH
6	EA	SURFACE CLOSER	4040XP SHCUSH TBSRT X MTG BRKT, SPACER & PLATE AS REQ X ST3596	689	LCN
3	EA	RAIN DRIP	142AA DW + 4" (OMIT @ COVERED OPENINGS)	AA	ZER
3	SET	SEAL	PERIMETER SEAL BY FRAME MFR		
3	SET	ASTRAGAL	MEETING STILE SEAL BY DOOR MFR		
6	EA	DOOR SWEEP	8198AA	AA	ZER
3	EA	THRESHOLD	65A	A	ZER
6	EA	WIRE HARNESS (IN DOOR)	ALLEGION CONNECT TYPE & LENGTH AS REQ		SCH
6	EA	WIRE HARNESS (TO POWER SUPPLY)	CON-6W - CONNECTION LEADS		SCH
1	EA	CREDENTIAL READER	CREDENTIAL READER BY SECURITY CONTRACTOR		
6	EA	DOOR CONTACT	679-05 TYPE AS REQ	BLK	SCE
1	EA	POWER SUPPLY	PS902 900-2RS 120/240 VAC (OMIT 2RS BOARD WHERE NOT REQ)		VON

-INGRESS BY THE CREDENTIAL READER OR KEY OVERRIDE.
-FREE EGRESS BY THE PUSH PADS.
-COORDINATE POWER SUPPLY WITH SECURITY CONTRACTOR PRIOR TO SUBMITTALS.
-OMIT POWER SUPPLY WHERE PROVIDED BY SECURITY.
-REVIEW TECH DRAWINGS DURING INSTALL FOR PLACEMENT OF CARD READER, PER ARCHITECT

-MINIMUM 5" WIDE STILE REQUIRED FOR 99 EXIT DEVICE
-IF LESS THAN 5" WIDE STILE, PROVIDE 33A DEVICE

HARDWARE GROUP NO. C718.1

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
9	EA	HINGE	5BB1HW 4.5 X 4.5	652	IVE
2	EA	POWER TRANSFER	EPT10 CON	689	VON
1	EA	PANIC HARDWARE	CDSI-99-DT-SNB LENGTH AS REQ	626	VON
1	EA	ELEC PANIC HARDWARE	LD-RX-9927-EO-LBR-CON-SNB LENGTH AND HEIGHT AS REQ	626	VON
1	EA	ELEC PANIC HARDWARE	RX-QEL-9927-NL-LBR-CON-SNB LENGTH AND HEIGHT AS REQ-SNB	626	VON
1	EA	MORTISE CYL TURN	09-900 112 XB11-720 CAM AS REQ (DOGGING CYLINDERS)	626	SCH
1	EA	SFIC RIM CYLINDER	80-159	626	SCH
1	EA	PERMANENT CORE	KEYED TO MATCH EXISTING SYSTEM	626	BES
2	EA	SURFACE CLOSER	4040XP REG/PA AS REQ TBSRT MTG BRKT, SPCR & PLATE AS REQ	689	LCN
1	EA	SURFACE CLOSER	4040XP SHCUSH TBSRT X MTG BRKT, SPACER & PLATE AS REQ X ST3596 (MIDDLE LEAF)	689	LCN
3	EA	KICK PLATE	8400 10" X 2" LDW B-CS	630	IVE
1	EA	WALL STOP	WS401/402CCV	626	IVE
1	EA	FIRE/LIFE WALL MAG	SEM7800 SERIES AS REQ	689	LCN
5	EA	SILENCER	SR64	GRY	IVE
2	EA	WIRE HARNESS (IN DOOR)	ALLEGION CONNECT TYPE & LENGTH AS REQ		SCH
2	EA	WIRE HARNESS (TO POWER SUPPLY)	CON-6W - CONNECTION LEADS		SCH
1	EA	CREDENTIAL READER	CREDENTIAL READER BY SECURITY CONTRACTOR		
2	EA	DOOR CONTACT	679-05 TYPE AS REQ	BLK	SCE
1	EA	POWER SUPPLY	PS902 900-2RS 120/240 VAC (OMIT 2RS BOARD WHERE NOT REQ)		VON

-INGRESS BY THE CREDENTIAL READER OR KEY OVERRIDE.
-FREE EGRESS BY THE PUSH PADS.
-COORDINATE POWER SUPPLY WITH SECURITY CONTRACTOR PRIOR TO SUBMITTALS.
-OMIT POWER SUPPLY WHERE PROVIDED BY SECURITY.
-REVIEW TECH DRAWINGS DURING INSTALL FOR PLACEMENT OF CARD READER AND WALL MAGNET, PER ARCHITECT

-MAGNETIC HOLD OPEN TO BE CONNECTED TO ALARM SYSTEM
-IN THE EVENT OF AN ALARM, MAG LOCKS TO FAIL SAFE AND ALLOW DOORS TO SELF-CLOSE

HARDWARE GROUP NO. C718CH.2

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
9	EA	HINGE	5BB1HW 4.5 X 4.5	652	IVE
3	EA	POWER TRANSFER	EPT10 CON	689	VON
2	EA	ELEC PANIC HARDWARE	LD-RX-9927-EO-LBR-CON-SNB LENGTH AND HEIGHT AS REQ	626	VON
1	EA	ELEC PANIC HARDWARE	RX-QEL-99-NL-CON-SNB LENGTH AS REQ	626	VON
1	EA	SFIC RIM CYLINDER	80-159	626	SCH
1	EA	PERMANENT CORE	KEYED TO MATCH EXISTING SYSTEM	626	BES
2	EA	SURFACE CLOSER	4040XP REG/PA AS REQ TBSRT MTG BRKT, SPCR & PLATE AS REQ	689	LCN
1	EA	SURFACE CLOSER	4040XP SHCUSH TBSRT X MTG BRKT, SPACER & PLATE AS REQ X ST3596 (MIDDLE LEAF)	689	LCN
3	EA	KICK PLATE	8400 10" X 2" LDW B-CS	630	IVE
1	EA	WALL STOP	WS401/402CCV (LHR, SGL LEAF OPENING)	626	IVE
1	EA	FIRE/LIFE WALL MAG	SEM7800 SERIES AS REQ (RHR LEAF, PAIRED LEAF OPENING)	689	LCN
5	EA	SILENCER	SR64	GRY	IVE
3	EA	WIRE HARNESS (IN DOOR)	ALLEGION CONNECT TYPE & LENGTH AS REQ		SCH
3	EA	WIRE HARNESS (TO POWER SUPPLY)	CON-6W - CONNECTION LEADS		SCH
1	EA	CREDENTIAL READER	CREDENTIAL READER BY SECURITY CONTRACTOR		
3	EA	DOOR CONTACT	679-05 TYPE AS REQ	BLK	SCE
1	EA	POWER SUPPLY	PS902 900-2RS 120/240 VAC (OMIT 2RS BOARD WHERE NOT REQ)		VON

-INGRESS BY THE CREDENTIAL READER OR KEY OVERRIDE.
-FREE EGRESS BY THE PUSH PADS.
-COORDINATE POWER SUPPLY WITH SECURITY CONTRACTOR PRIOR TO SUBMITTALS.
-OMIT POWER SUPPLY WHERE PROVIDED BY SECURITY.
-REVIEW TECH DRAWINGS DURING INSTALL FOR PLACEMENT OF CARD READER, PER ARCHITECT

-MAGNETIC HOLD OPEN TO BE CONNECTED TO ALARM SYSTEM
-IN THE EVENT OF AN ALARM, MAG LOCKS TO FAIL SAFE AND ALLOW DOORS TO SELF-CLOSE

HARDWARE GROUP NO. CE715

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
1	EA	CONT. HINGE	224XY EPT LENGTH AS REQ	628	IVE
1	EA	POWER TRANSFER	EPT10 CON	689	VON
1	EA	ELEC PANIC HARDWARE	RX-QEL-99-NL-CON-SNB LENGTH AS REQ	626	VON
1	EA	RIM CYLINDER	20-057 ICX W/KEYED CONST. CORE	626	SCH
1	EA	PRIMUS CORE	20-740-XP	626	SCH
1	EA	SURFACE CLOSER	4040XP SCUSH TBSRT MTG BRKT, SPCR & PLATE AS REQ	689	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B-CS	630	IVE
1	EA	RAIN DRIP	142AA DW + 4" (OMIT @ COVERED OPENINGS)	AA	ZER
1	SET	GASKETING	328AA H & J	AA	ZER
1	EA	DOOR SWEEP	8198AA	AA	ZER
1	EA	THRESHOLD	65A	A	ZER
1	EA	WIRE HARNESS (IN DOOR)	ALLEGION CONNECT TYPE & LENGTH AS REQ		SCH
1	EA	WIRE HARNESS (TO POWER SUPPLY)	CON-6W - CONNECTION LEADS		SCH
1	EA	CREDENTIAL READER	CREDENTIAL READER BY SECURITY CONTRACTOR		
1	EA	DOOR CONTACT	679-05 TYPE AS REQ	BLK	SCE
1	EA	POWER SUPPLY	PS902 900-2RS 900-BBK 120/240 VAC (OMIT 2RS BOARD WHERE NOT REQ)		VON
	EA	INTERCOM	INTERCOM BY SECURITY CONTRACTOR		

-INGRESS BY THE CREDENTIAL READER OR KEY OVERRIDE.
-FREE EGRESS BY THE PUSH PAD.
-COORDINATE POWER SUPPLY WITH SECURITY CONTRACTOR PRIOR TO SUBMITTALS.
-OMIT POWER SUPPLY WHERE PROVIDED BY SECURITY.

HARDWARE GROUP NO. CMX720D

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
6	EA	HINGE	5BB1HW 4.5 X 4.5	652	IVE
2	EA	PANIC HARDWARE	LD-9927-EO-LBR-SNB LENGTH AND HEIGHT AS REQ	626	VON
2	EA	MAGNETIC LOCK	M490P X MTG BRKT & VOLTAGE AS REQ (PLAN-RIGHT SIDE OF OPENING)	628	SCE
2	EA	SURFACE CLOSER	4040XP REG/PA AS REQ TBSRT MTG BRKT, SPCR & PLATE AS REQ	689	LCN
2	EA	KICK PLATE	8400 10" X 1" LDW B-CS	630	IVE
2	EA	WALL STOP	WS401/402CCV	626	IVE
2	EA	SILENCER	SR64	GRY	IVE
2	EA	CREDENTIAL READER	CREDENTIAL READER BY SECURITY CONTRACTOR		
2	EA	DOOR CONTACT	679-05 TYPE AS REQ	BLK	SCE
1	EA	POWER SUPPLY	PS902 900-FA 900-2RS 120/240 VAC (OMIT 2RS BOARD WHERE NOT REQ)		VON

-EGRESS ON BOTH SIDES BY CARD READER ONLY
-WIRE THE MAGNETIC LOCK TO THE FIRE ALARM SYSTEM.
-THE MAGNETIC LOCK IS TO RELEASE UPON ACTIVATION OF THE FIRE ALARM SYSTEM.
-COORDINATE POWER SUPPLY WITH SECURITY CONTRACTOR PRIOR TO SUBMITTALS.
-OMIT POWER SUPPLY WHERE PROVIDED BY SECURITY.

-COORDINATE HARDWARE SET WITH AHJ PRIOR TO SUBMITTALS TO ENSURE APPROVAL

HARDWARE GROUP NO. CS201

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	SET	CAM LIFT HINGE	AS REQ - BY DOOR MFR		UNK
1	EA	POWER TRANSFER	EPT10 CON	689	VON
1	EA	EU STOREROOM LOCK	ND80BDCEU SPA RX CON 12V/24V DC	626	SCH
1	EA	PERMANENT CORE	KEYED TO MATCH EXISTING SYSTEM	626	BES
1	EA	SURFACE CLOSER	4040XP REG/PA AS REQ TBSRT MTG BRKT, SPCR & PLATE AS REQ	689	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B-CS	630	IVE
1	EA	WALL STOP	WS401/402CCV (REINFORCED BLOCKING REQ)	626	IVE
1	EA	WIRE HARNESS (IN DOOR)	ALLEGION CONNECT TYPE & LENGTH AS REQ		SCH
1	EA	WIRE HARNESS (TO POWER SUPPLY)	CON-6W - CONNECTION LEADS		SCH
1	EA	CREDENTIAL READER	CREDENTIAL READER BY SECURITY CONTRACTOR		
1	EA	DOOR CONTACT	679-05 TYPE AS REQ	BLK	SCE
1	EA	POWER SUPPLY	PS902 900-2RS 120/240 VAC (OMIT 2RS BOARD WHERE NOT REQ)	LGR	SCE
		NOTE	BALANCE OF HARDWARE PROVIDED BY STC DOOR MFR (SEE NOTES BELOW)		

HARDWARE SET IS A GUIDELINE
-VERIFY AND COORDINATE ALL HARDWARE WITH DOOR/FRAME MANUFACTURER PRIOR TO SUBMITTALS.
-A STANDARD STC UNIT IS SUPPLIED WITH NECESSARY HINGES, PERIMETER GASKETING AND RETAINER, DOOR BOTTOM, LOOSE STOPS, STOP OFFSET HARDWARE BRACKETS AND ALL REQUIRED FASTENERS.

-INGRESS BY CARD READER OR KEY OVERRIDE
-FREE EGRESS FROM INTERIOR

HARDWARE GROUP NO. D001

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
1	EA	SFIC MORTISE CYL.	80-132 (AS REQ)	626	SCH
1	EA	PERMANENT CORE	KEYED TO MATCH EXISTING SYSTEM (AS REQ)	626	BES
1	EA	DOOR CONTACT	674-OH	628	SCE
		NOTE	BALANCE OF HARDWARE BY DOOR MFR		

-COORDINATE HARDWARE WITH DOOR MFR.
-REMOVE CYLINDER AND CORE IF NOT REQUIRED.

HARDWARE GROUP NO. D001-1

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
1	EA	MORTISE CYLINDER	20-061 ICX W/KEYED CONST. CORE (AS REQ)	626	SCH
1	EA	PRIMUS CORE	20-740-XP (AS REQ)	626	SCH
1	EA	DOOR CONTACT	674-OH	628	SCE
		NOTE	BALANCE OF HARDWARE BY DOOR MFR		

-COORDINATE HARDWARE WITH DOOR MFR.
-REMOVE CYLINDER AND CORE IF NOT REQUIRED.

HARDWARE GROUP NO. D204I

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
6	EA	HINGE	5BB1HW 4.5 X 4.5 NRP	630	IVE
1	EA	AUTO FLUSH BOLT	FB31P/FB41P AS REQ	630	IVE
1	EA	DUST PROOF STRIKE	DP2	626	IVE
1	EA	STOREROOM LOCK	ND80TD SPA	626	SCH
1	EA	PRIMUS CORE	20-740-XP	626	SCH
1	EA	COORDINATOR	COR X FL X MB X HW PREPS	628	IVE
2	EA	SURFACE CLOSER	4040XP REG/PA AS REQ TBSRT MTG BRKT, SPCR & PLATE AS REQ (ACTIVE LEAF)	689	LCN
2	EA	KICK PLATE	8400 10" X 1" LDW B-CS	630	IVE
2	EA	WALL STOP	WS401/402CCV	626	IVE
2	EA	RAIN DRIP	11A (MOUNT @ BOTTOM DOOR)	A	ZER
1	EA	RAIN DRIP	142AA DW + 4" (OMIT @ COVERED OPENINGS)	AA	ZER
1	SET	GASKETING	328AA H & J	AA	ZER
2	EA	DOOR SWEEP	8193AA LENGTH AS REQ	AA	ZER
1	SET	MEETING STILE	8193AA (2 PCS - 1 SET)	AA	ZER
1	EA	THRESHOLD	655A LENGTH AS REQ	A	ZER
2	EA	DOOR CONTACT	679-05 TYPE AS REQ	BLK	SCE

-DOOR CONTACT TO MONITOR DOOR POSITION

HARDWARE GROUP NO. D205

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1HW 4.5 X 4.5 NRP	630	IVE
1	EA	STOREROOM LOCK	ND80TD SPA	626	SCH
1	EA	PRIMUS CORE	20-740-XP	626	SCH
1	EA	SURFACE CLOSER	4040XP SCUSH TBSRT MTG BRKT, SPCR & PLATE AS REQ	689	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B-CS	630	IVE
1	EA	RAIN DRIP	142AA DW + 4" (OMIT @ COVERED OPENINGS)	AA	ZER
1	SET	GASKETING	328AA H & J	AA	ZER
1	EA	DOOR SWEEP	8198AA	AA	ZER
1	EA	THRESHOLD	65A	A	ZER
1	EA	DOOR CONTACT	679-05 TYPE AS REQ	BLK	SCE

-DOOR CONTACT TO MONITOR DOOR POSITION

HARDWARE GROUP NO. D724AH.2

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
4	EA	CONT. HINGE	224XY EPT LENGTH AS REQ	628	IVE
4	EA	POWER TRANSFER	EPT10 CON	689	VON
2	EA	REMOVABLE MULLION	KR4954 STAB HEIGHT AS REQ	689	VON
4	EA	ELEC PANIC HARDWARE	LD-RX-99-EO-CON-SNB LENGTH AS REQ	626	VON
2	EA	MULLION STORAGE KIT	MT54	689	VON
2	EA	MORTISE CYLINDER	20-061 ICX W/KEYED CONST. CORE (MULLION CYL.)	626	SCH
2	EA	PRIMUS CORE	20-740-XP	626	SCH
4	EA	SURFACE CLOSER	4040XP SHCUSH TBSRT X MTG BRKT, SPACER & PLATE AS REQ X ST3596	689	LCN
2	EA	RAIN DRIP	142AA DW + 4" (OMIT @ COVERED OPENINGS)	AA	ZER
2	SET	SEAL	PERIMETER SEAL BY FRAME MFR		
2	SET	ASTRAGAL	MEETING STILE SEAL BY DOOR MFR		
4	EA	DOOR SWEEP	8198AA	AA	ZER
2	EA	THRESHOLD	65A	A	ZER
4	EA	WIRE HARNESS (IN DOOR)	ALLEGION CONNECT TYPE & LENGTH AS REQ		SCH
4	EA	WIRE HARNESS (TO POWER SUPPLY)	CON-6W - CONNECTION LEADS		SCH
4	EA	DOOR CONTACT	679-05 TYPE AS REQ	BLK	SCE

-RX SWITCH TO BE COORDINATED WITH SECURITY CONSULTANT
-DOOR CONTACT TO MONITOR DOOR POSITION

-MINIMUM 5" WIDE STILE REQUIRED FOR 99 EXIT DEVICE
-IF LESS THAN 5" WIDE STILE, PROVIDE 33A DEVICE

HARDWARE GROUP NO. D724MH.3

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
6	EA	CONT. HINGE	224XY EPT LENGTH AS REQ	628	IVE
6	EA	POWER TRANSFER	EPT10 CON	689	VON
3	EA	REMOVABLE MULLION	KR4954 STAB HEIGHT AS REQ	689	VON
6	EA	ELEC PANIC HARDWARE	LD-RX-99-EO-CON-SNB LENGTH AS REQ	626	VON
3	EA	MULLION STORAGE KIT	MT54	689	VON
3	EA	MORTISE CYLINDER	20-061 ICX W/KEYED CONST. CORE (FOR MULLION)	626	SCH
3	EA	PRIMUS CORE	20-740-XP	626	SCH
6	EA	SURFACE CLOSER	4040XP SHCUSH TBSRT X MTG BRKT, SPACER & PLATE AS REQ X ST3596	689	LCN
6	EA	KICK PLATE	8400 10" X 2" LDW B-CS	630	IVE
3	EA	RAIN DRIP	142AA DW + 4" (OMIT @ COVERED OPENINGS)	AA	ZER
3	SET	GASKETING	328AA H & J	AA	ZER
3	SET	MEETING STILE	8193AA (2 PCS - 1 SET)	AA	ZER
3	EA	MULLION SEAL	8780NBK PSA	BK	ZER
6	EA	DOOR SWEEP	8198AA	AA	ZER
3	EA	THRESHOLD	65A	A	ZER
6	EA	WIRE HARNESS (IN DOOR)	ALLEGION CONNECT TYPE & LENGTH AS REQ		SCH
6	EA	WIRE HARNESS (TO POWER SUPPLY)	CON-6W - CONNECTION LEADS		SCH
6	EA	DOOR CONTACT	679-05 TYPE AS REQ	BLK	SCE

-DOOR CONTACTS FOR MONITORING.
-EXIT ONLY. NO ENTRY.
-RX SWITCH TO BE COORDINATED WITH SECURITY CONTRACTOR

HARDWARE GROUP NO. D725

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
1	EA	CONT. HINGE	224XY EPT LENGTH AS REQ	628	IVE
1	EA	POWER TRANSFER	EPT10 CON	689	VON
1	EA	ELEC PANIC HARDWARE	LD-RX-99-EO-CON-SNB LENGTH AS REQ	626	VON
1	EA	SURFACE CLOSER	4040XP SCUSH TBSRT MTG BRKT, SPCR & PLATE AS REQ	689	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B-CS	630	IVE
1	EA	RAIN DRIP	142AA DW + 4" (OMIT @ COVERED OPENINGS)	AA	ZER
1	SET	GASKETING	328AA H & J	AA	ZER
1	EA	DOOR SWEEP	8198AA	AA	ZER
1	EA	THRESHOLD	65A	A	ZER
1	EA	WIRE HARNESS (IN DOOR)	ALLEGION CONNECT TYPE & LENGTH AS REQ		SCH
1	EA	WIRE HARNESS (TO POWER SUPPLY)	CON-6W - CONNECTION LEADS		SCH
1	EA	DOOR CONTACT	679-05 TYPE AS REQ	BLK	SCE

-DOOR CONTACT FOR MONITORING.
-COORDINATE RX SWITCH WITH SECURITY CONSULTANT
-EXIT ONLY. NO ENTRY.

HARDWARE GROUP NO. D728

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
6	EA	HINGE	5BB1HW 4.5 X 4.5	652	IVE
2	EA	POWER TRANSFER	EPT10 CON	689	VON
2	EA	ELEC PANIC HARDWARE	LD-RX-9927-EO-LBR-CON-SNB LENGTH AND HEIGHT AS REQ	626	VON
2	EA	SURFACE CLOSER	4040XP REG/PA AS REQ TBSRT MTG BRKT, SPCR & PLATE AS REQ	689	LCN
2	EA	KICK PLATE	8400 10" X 1" LDW B-CS	630	IVE
2	EA	FIRE/LIFE WALL MAG	SEM7800 SERIES AS REQ	689	LCN
2	EA	SILENCER	SR64	GRY	IVE
2	EA	WIRE HARNESS (IN DOOR)	ALLEGION CONNECT TYPE & LENGTH AS REQ		SCH
2	EA	WIRE HARNESS (TO POWER SUPPLY)	CON-6W - CONNECTION LEADS		SCH
2	EA	DOOR CONTACT	679-05 TYPE AS REQ	BLK	SCE
1	EA	POWER SUPPLY	PS902 900-2RS FA900 120/240 VAC	LGR	SCE

-RX SWITCH TO BE COORDINATED WITH SECURITY CONTRACTOR

-DOOR CONTACTS TO BE CONNECTED TO ALARM SYSTEMS
-IN THE EVENT OF AN ALARM, MAGNETS TO FAIL SAFE AND ALLOW DOORS TO SELF-CLOSE

HARDWARE GROUP NO. S103

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	SET	CAM LIFT HINGE	AS REQ - BY DOOR MFR		UNK
1	EA	ENTRANCE LOCK	ND53BDC SPA	626	SCH
1	EA	PERMANENT CORE	KEYED TO MATCH EXISTING SYSTEM	626	BES
1	EA	WALL STOP	WS401/402CCV (REINFORCED BLOCKING REQ)	626	IVE
		NOTE	BALANCE OF HARDWARE PROVIDED BY STC DOOR MFR (SEE NOTES BELOW)		

HARDWARE SET IS A GUIDELINE
-VERIFY AND COORDINATE ALL HARDWARE WITH DOOR/FRAME MANUFACTURER PRIOR TO SUBMITTALS.
-A STANDARD STC UNIT IS SUPPLIED WITH NECESSARY HINGES, PERIMETER GASKETING AND RETAINER, DOOR BOTTOM, LOOSE STOPS, STOP OFFSET HARDWARE BRACKETS AND ALL REQUIRED FASTENERS.

HARDWARE GROUP NO. S202

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
6	SET	CAM LIFT HINGE	AS REQ - BY DOOR MFR		UNK
1	EA	CONST LATCHING BOLT	FB51T/FB61T AS REQ	630	IVE
1	EA	STOREROOM LOCK	ND80BDC SPA	626	SCH
1	EA	PERMANENT CORE	KEYED TO MATCH EXISTING SYSTEM	626	BES
1	EA	SEALS/ SWEEPS/ THRESHOLD	BY STC DOOR MFR		
1	EA	ASTRAGAL	BY STC DOOR MFR		

HARDWARE SET IS A GUIDELINE
-VERIFY AND COORDINATE ALL HARDWARE WITH DOOR/FRAME MANUFACTURER PRIOR TO SUBMITTALS.
-A STANDARD STC UNIT IS SUPPLIED WITH NECESSARY HINGES, PERIMETER GASKETING AND RETAINER, DOOR BOTTOM, LOOSE STOPS, STOP OFFSET HARDWARE BRACKETS AND ALL REQUIRED FASTENERS.

HARDWARE GROUP NO. S503

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	SET	CAM LIFT HINGE	AS REQ - BY DOOR MFR		UNK
1	EA	CLASSROOM LOCK	ND70BDC SPA	626	SCH
1	EA	PERMANENT CORE	KEYED TO MATCH EXISTING SYSTEM	626	BES
1	EA	WALL STOP	WS401/402CCV (REINFORCED BLOCKING REQ)	626	IVE
		NOTE	BALANCE OF HARDWARE PROVIDED BY STC DOOR MFR (SEE NOTES BELOW)		

HARDWARE SET IS A GUIDELINE
-VERIFY AND COORDINATE ALL HARDWARE WITH DOOR/FRAME MANUFACTURER PRIOR TO SUBMITTALS.
-A STANDARD STC UNIT IS SUPPLIED WITH NECESSARY HINGES, PERIMETER GASKETING AND RETAINER, DOOR BOTTOM, LOOSE STOPS, STOP OFFSET HARDWARE BRACKETS AND ALL REQUIRED FASTENERS.

HARDWARE GROUP NO. S503F

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	SET	CAM LIFT HINGE	AS REQ - BY DOOR MFR		UNK
1	EA	CLASSROOM LOCK	ND70BDC SPA	626	SCH
1	EA	PERMANENT CORE	KEYED TO MATCH EXISTING SYSTEM	626	BES
1	EA	FLOOR STOP	FS436 W/RISER TO SUIT CONDITIONS (OMIT IF TRIPPING HAZARD)	626	IVE
		NOTE	BALANCE OF HARDWARE PROVIDED BY STC DOOR MFR (SEE NOTES BELOW)		

HARDWARE SET IS A GUIDELINE
-VERIFY AND COORDINATE ALL HARDWARE WITH DOOR/FRAME MANUFACTURER PRIOR TO SUBMITTALS.
-A STANDARD STC UNIT IS SUPPLIED WITH NECESSARY HINGES, PERIMETER GASKETING AND RETAINER, DOOR BOTTOM, LOOSE STOPS, STOP OFFSET HARDWARE BRACKETS AND ALL REQUIRED FASTENERS.

HARDWARE GROUP NO. S710-CD

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
6	EA	HINGE	HINGES BY STC DOOR MANUFACTURER		
1	EA	PANIC HARDWARE	CDSI-9927-DT-LBR-SNB LENGTH AND HEIGHT AS REQ	626	VON
1	EA	PANIC HARDWARE	CDSI-9927-NL-LBR-SNB LENGTH AND HEIGHT AS REQ	626	VON
2	EA	MORTISE CYL TURN	09-900 112 XB11-720 CAM AS REQ (CDSI THUMBTURN CYL.)	626	SCH
1	EA	SFIC RIM CYLINDER	80-159	626	SCH
1	EA	PERMANENT CORE	KEYED TO MATCH EXISTING SYSTEM	626	BES
1	EA	COORDINATOR	COR X FL X MB X HW PREPS (IF OVERLAPPING ASTRAGAL)	628	IVE
2	EA	SURFACE CLOSER	4040XP REG/PA AS REQ TBSRT MTG BRKT, SPCR & PLATE AS REQ	689	LCN
2	EA	KICK PLATE	8400 10" X 1" LDW B-CS	630	IVE
2	EA	WALL STOP	WS401/402CCV (REINFORCEMENT BLOCKING REQUIRED)	626	IVE
1	EA	SEALS/ SWEEPS/ THRESHOLD	BY STC DOOR MFR		
1	EA	ASTRAGAL	BY STC DOOR MFR		

HARDWARE SET IS A GUIDELINE
-VERIFY AND COORDINATE ALL HARDWARE WITH DOOR/FRAME MANUFACTURER PRIOR TO SUBMITTALS.
-A STANDARD STC UNIT IS SUPPLIED WITH NECESSARY HINGES, PERIMETER GASKETING AND RETAINER, DOOR BOTTOM, LOOSE STOPS, STOP OFFSET HARDWARE BRACKETS AND ALL REQUIRED FASTENERS.
-CLOSERS WITH EDA/CUSH (RIGID TYPE ARMS) NOT ALLOWED WITH CAM-LIFT HINGES.

HARDWARE GROUP NO. S711-CD

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	SET	CAM LIFT HINGE	AS REQ - BY DOOR MFR		UNK
1	EA	PANIC HARDWARE	CDSI-99-NL-SNB LENGTH AS REQ	626	VON
1	EA	MORTISE CYL TURN	09-900 112 XB11-720 CAM AS REQ (CDSI THUMBTURN)	626	SCH
1	EA	SFIC RIM CYLINDER	80-159	626	SCH
1	EA	PERMANENT CORE	KEYED TO MATCH EXISTING SYSTEM	626	BES
1	EA	SURFACE CLOSER	4040XP REG/PA AS REQ TBSRT MTG BRKT, SPCR & PLATE AS REQ	689	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B-CS	630	IVE
1	EA	WALL STOP	WS401/402CCV (PROVIDE BLOCKING REINFORCEMENT)	626	IVE
3	EA	SEALS/ SWEEPS/ THRESHOLD	BY STC DOOR MFR		

HARDWARE SET IS A GUIDELINE
-VERIFY AND COORDINATE ALL HARDWARE WITH DOOR/FRAME MANUFACTURER PRIOR TO SUBMITTALS.
-A STANDARD STC UNIT IS SUPPLIED WITH NECESSARY HINGES, PERIMETER GASKETING AND RETAINER, DOOR BOTTOM, LOOSE STOPS, STOP OFFSET HARDWARE BRACKETS AND ALL REQUIRED FASTENERS.
-CLOSERS WITH EDA/CUSH (RIGID TYPE ARMS) NOT ALLOWED WITH CAM-LIFT HINGES.

DOOR HARDWARE INDEX:

Door#	HwSet#
F112	202S
F112A	001
F112B	202S
F113	203S
F114	103
F115	801L
F117	801L
F118	103
F119	801L
F120	801L
F122	801L
F123	801L
F125	C201C
F126	103
F127	103

F129	801L
F130	S202
F131	710-CD
F131A	711-CD
F132	S103
F133	801
F133A	203
F134	730
F135	801
F136	202
F136A	203W
F137	711-CD
F138	711-CD
F139	203
F140	103
G101	C718CH.2
G102	CS201
G103	S503
G104	S503
G104A	503
G105	203
G106	S503
G107	S503
G108	S503
G109	C711
G109A	C711
G111	S503F
G112	503
G113	S503
G114	S503
G115	202S
G116	C718CH.2
G116A	711-CD
G118	503S
G119	503S
G120	503S
G121	503S
G122	C711
G122A	C711C
G122B	001
G122C	001
G123	503S
G123A	001

G123B	001
G126	C207
G126A	C201
G126B	D001
G127	503S
G127A	001
G127B	C201
G127C	202S
G128	103
G128A	C201
G128B	403
G128C	203
G128D	301
G128E	301
G129	202S
G130	001
G130A	203
G130B	507
G132	203S
J115	710C-CD
J116A	711-CD
J117	S503
J118	S503
J120	103
J121	S503
J122	711-CD
J123	S503F
J124	S503F
J125	711-CD
J125A	710C-CD
J126	103
J126A	103
J127	S503
J127A	S503
J128	103
J129	103
J130	103
J131	801L
J132	203S
J134	801
J134A	801
J134B	203
J135	801

J135A	801
J136	202
J137	C710
J137A	202S
J138	801L
J139	S710-CD
J139A	202S
J139B	S711-CD
J139C	S711-CD
J140	202S
J140A	503
J141	C710ACH.2
J142	D728
J142A	C710C
J143	503
J144	503
J145	503
J146	710-CD
J146A	001
J146B	001
J146C	001
J146D	710C-CD
J147	503
J147A	201
J148	103
K102	001
K102A	711CH-CD
K102B	711CH-CD
K102C	711CH-CD
K102D	711CH-CD
K102E	711CH-CD
K102F	711CH-CD
K102G	001
K102H	103S
K103	711-CD
K103A	710-CD
M101	103
M101A	C710C
M101B	D728
M102	103
M103	103
M104	103
M107	C710C

M107A	D728
M108	C201
M108A	103
M108B	103
M108C	103
M108D	103
M108E	103
M108F	503
M109	C206
M109A	202
M110	103
M111	C718.1
M113	801
M113A	203
M114	801
N102	711-CD
N102A	711-CD
N103	207H
N104	711-CD
N104A	711-CD
N105	711-CD
N105A	711-CD
N107	711-CD
N107A	711-CD
N108	711-CD
N108A	711-CD
N109	711-CD
N109A	711-CD
N110	C711
N111	203S
N112	711-CD
N112A	711-CD
R101	711-CD
R101A	711-CD
R102	711-CD
R102A	711-CD
R104	711-CD
R104A	711-CD
R105	711-CD
R105A	711-CD
R106	207H
R106A	207H
R107	207H

R107A	207H
R108	C201C
R109	711C
R109A	201
R110	207H
R110A	207H
R112	711-CD
R112A	711-CD
R113	711-CD
R113A	711-CD
R114	711-CD
R114A	711-CD
R115	711-CD
R115A	711-CD
R117	711-CD
R117A	711-CD
R118	711-CD
R118A	711-CD
R119	711-CD
R119A	D725
T101	C710C
T102	711-CD
T102A	711-CD
T103	711-CD
T103A	711-CD
T105	711-CD
T105A	711-CD
T106	711-CD
T106A	711-CD
T107	C206
T107A	C206
T107B	001
T107C	C207W
T108	C201C
T109	200C
T110	800AVH.2
T110A	C714AMH.2
T110B	C714AMH.2
T111	CMX720D
T111A	D001-1
T111B	CE715
T111C	C710C
T112	103

U101	710C-CD.3
U101A	D724MH.3
U101B	710C-CD.3
U101C	D724MH.3
U101D	D724MH.3
U101E	C001-1
U101F	D724MH.3
U102	202S
U102A	202S
U102B	D001-1
U103	710C
U104	710-CD
U105	202S
U105A	202
U105B	202S
U107	D204I
U108	C711
U109	801L
U109B	103
U110	801L
U110B	103
U111	103
U112	801L
U112B	103
U114	801L
U114B	103
U115	801
U115A	203
U116	202
U117	801
U117A	203
U118	C711
U119	800AVH.3
U119A	C714AMH.3
U119B	D724AH.2
U120	503
U120A	D205
U120B	001
U120C	001
U120D	001
U120E	001
U201	203
U202	731

U203	202
U204	C201C
U205A	201
U206	503
U207	202
U207A	801
U207B	801
U207C	203
U207D	203
U208	C201C
U209	201
U211	731
U212	202

END OF SECTION 087100

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PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

A. This Section includes the following:

1. Manually operated, paired panel operable partitions.

B. Related Sections include the following:

1. Division 3 Sections for concrete tolerances required.
2. Division 5 Sections for primary structural support, including pre-punching of support members by structural steel supplier per operable partition supplier's template.
3. Division 6 Sections for wood framing and supports, and all blocking at head and jambs as required.
4. Division 9 Sections for wall and ceiling framing at head and jambs.

1.3 QUALITY ASSURANCE

A. Installer Qualifications: An experienced installer who is certified in writing by the operable partition manufacturer, as qualified to install the manufacturer's partition systems for work similar in material, design, and extent to that indicated for this Project.

B. Acoustical Performance: Test operable partitions in an independent acoustical laboratory in accordance with ASTM E90 test procedure and classified in accordance with ASTM E413 to attain no less than the STC rating specified. Provide a complete and unedited written test report by the testing laboratory upon request.

C. Preparation of the opening shall conform to the criteria set forth per ASTM E557 "Standard Practice for Architectural Application and Installation of Operable Partitions.

D. The operable wall must be manufactured by a certified ISO-9001-2015 company or an equivalent quality control system.

1.4 REFERENCE STANDARDS

A. ASTM International

1. ASTM E557 Standard Practice for Architectural Application and Installation of Operable Partitions.
2. ASTM E90 - Standard Test Method for Laboratory Measurement of Airborne Sound Transmission Loss of Building Partitions and Elements.
3. ASTM C1036 - Standard Specification for Flat Glass.
4. ASTM C1048 - Heat-Treated Flat Glass—Kind HS, Kind FT Coated and Uncoated Glass.
5. ASTM E84 - Surface Burning Characteristics of Building Materials.
6. ASTM E413 - Classification for Rating Sound Insulation

B. Health Product Declaration Collaborative

1. Health Product Declaration Open Standard v2.1

C. International Standards Organization

1. ISO 14021 - Environmental Labels and Declarations - Self-Declared Environmental Claims (Type II Environmental Labeling).
2. ISO 14025:2011-10, Environmental Labels and Declarations - Type III Environmental Declarations - Principles and Procedures.
3. ISO 14040:2009-11, Environmental Management - Life Cycle Assessment - Principles and Framework.
4. ISO 14044:2006-10, Environmental Management - Life Cycle Assessment - Requirements and Guidelines.
5. ISO 21930 – Sustainability in Buildings and Civil Engineering Works — Core Rules for Environmental Product Declarations of Construction Products and Services.

D. Other Standards

1. ADA – Americans with Disabilities Act.
2. UL 508A – Standard for Industrial Control Panels
3. NFPA 70 – National Electrical Code
4. ANSI Z97.1 - Safety Glazing Materials Used in Buildings.
5. CPSC 16 CFR 1201 - Safety Standard for Architectural Glazing Materials.
6. NEMA LD3 - High Pressure Decorative Laminates.

1.5 SUBMITTALS

A. Product Data: Material descriptions, construction details, finishes, installation details, and operating instructions for each type of operable partition, component, and accessory specified.

B. Shop Drawings: Show location and extent of operable partitions. Include plans, sections, details, attachments to other construction, and accessories. Indicate dimensions, weights, conditions at openings, and at storage areas, and required installation, storage, and operating clearances. Indicate location and installation requirements for hardware and track, including floor tolerances required and direction of travel. Indicate blocking to be provided by others.

C. Setting Drawings: Show imbedded items and cutouts required in other work, including support beam punching template.

D. Samples: Color samples demonstrating full range of finishes available by architect. Verification samples will be available in same thickness and material indicated for the work.

E. Reports: Provide a complete and unedited written sound test report indicating glass thickness and spacing in test specimen matches product as submitted.

F. Create spaces that are healthy for occupants

1. Furnish products and materials with Health Product Declaration (HPD), Manufacturer Inventory, or other material health disclosure documentation. Products without an HPD or other disclosure documentation are not acceptable.

G. Furnish materials that generate the least amount of pollution.

1. Furnish products and materials that have third party verified environmental product declarations (EPD's). Consider products and materials that have optimized environmental performance (reduced life cycle impacts). Products without an EPD or other disclosure documentation are not acceptable.

1.6 DELIVERY, STORAGE, AND HANDLING

A. Clearly mark packages and panels with numbering systems used on Shop Drawings. Do not use permanent markings on panels.

B. Protect panels during delivery, storage, and handling to comply with manufacturer's direction and as required to prevent damage.

1.7 WARRANTY

A. Provide written warranty by manufacturer of operable partitions agreeing to repair or replace any components with manufacturing defects.

B. Partition Warranty period: Two (2) years from date of shipment.

C. Suspension System Warranty: Five (5) years from date of shipment.

PART 2 - PRODUCTS

2.1 MANUFACTURERS, PRODUCTS, AND OPERATIONS

A. Manufacturers: Subject to compliance with requirements, provide products by the following:

1. Modernfold, Inc.

B. Products: Subject to compliance with the requirements, provide the following product:

1. 108: Acousti-Seal Legacy - Paired Panel: Manually operated paired panel operable partition.

2.2 OPERATION

A. 108: Acousti-Seal Legacy - Paired Panel: Series of paired flat panels hinged together in pairs, manually operated, top supported with operable floor seals.

B. Final Closure:

1. 108: Hinged panel closure

2.3 PANEL CONSTRUCTION

A. Nominal 3-inch (76mm) thick panels in manufacturer's standard 48-inch (1220mm) widths. All panel horizontal and vertical framing members fabricated from minimum 16-gage formed steel with overlapped and welded corners for rigidity. Top channel is reinforced to support suspension system components. Frame is designed so that full vertical edges of panels are of formed steel and provide concealed protection of the edges of the panel skin.

B. Panel skin shall be:

1. 108: Roll-formed steel wrapping around panel edge. Panel skins shall be lock formed and welded directly to the frame for unitized construction. Acoustical ratings of panels with this construction:

a. 52 STC

C. Hinges for Panels, Closure Panels, Pass Doors, and Pocket Doors shall be:

1. 108: Full leaf butt hinges, attached directly to the panel frame. Welded hinge anchor plates within panel shall further support hinge mounting to frame. Hinges mounted into panel edge or vertical astragal are not acceptable.

D. Panel Trim: No vertical trim required or allowed on edges of panels; minimal groove appearance at panel joints.

E. Panel Weights:

1. 108: 52 STC - 11 lbs./square foot

2.4 PANEL FINISH

A. Panel finish shall be factory applied, Class "A" rated material. Finish shall be:

1. 108: Reinforced vinyl with woven backing weighing not less than 15 ounces per lineal yard.

B. Panel Trim: Exposed panel trim of one consistent color:

1. 108: Dark Bronze

2.5 SOUND SEALS

A. Vertical Interlocking Sound Seals between panels: Roll-formed steel astragals, with reversible tongue and groove configuration in each panel edge for universal panel operation. Rigid plastic astragals or astragals in only one panel edge are not acceptable.

B. Horizontal Top Seals: Continuous contact extruded vinyl bulb shape with pairs of non-contacting vinyl fingers to prevent distortion without the need for mechanically operated parts.

C. Horizontal bottom floor seals shall be:

1. 108: Modernfold IA2 Bottom seal. Automatic operable seals providing nominal 2-inch (51mm) operating clearance with an operating range of +0.50-inch (13mm) to -1.50-inch (38mm) which automatically drop as panels are positioned, without the need for tools or cranks.

2.6 SUSPENSION SYSTEM

A. 108: #17 Suspension System

1. Suspension Tracks: Minimum 11-gauge, 0.12-inch (3.04mm) roll-formed steel track, suitable for either direct mounting to a wood header or supported by adjustable steel hanger brackets, supporting the load-bearing surface of the track, connected to structural support by pairs of 0.38-inch (10mm) diameter threaded rods. Aluminum track is not acceptable.

a. Exposed track soffit: Steel, integral to track, and pre-painted off-white.

2. Carriers: One all-steel trolley with steel tired ball bearing wheels per panel (except hinged panels). Non-steel tires are not acceptable.

PART 3 - EXECUTION

3.1 INSTALLATION

A. General: Comply with ASTM E557, operable partition manufacturer's written installation instructions, Drawings and approved Shop Drawings.

B. Install operable partitions and accessories after other finishing operations, including painting have been completed.

C. Match operable partitions by installing panels from marked packages in numbered sequence indicated on Shop Drawings.

D. Broken, cracked, chipped, deformed or unmatched panels are not acceptable.

3.2 CLEANING AND PROTECTION

A. Clean partition surfaces upon completing installation of operable partitions to remove dust, dirt, adhesives, and other foreign materials according to manufacturer's written instructions.

B. Provide final protection and maintain conditions in a manner acceptable to the manufacturer and installer that insure operable partitions are without damage or deterioration at time of Substantial Completion.

3.3 ADJUSTING

A. Adjust operable partitions to operate smoothly, easily, and quietly, free from binding, warp, excessive deflection, distortion, nonalignment, misplacement, disruption, or malfunction, throughout entire operational range. Lubricate hardware and other moving parts.

3.4 EXAMINATION

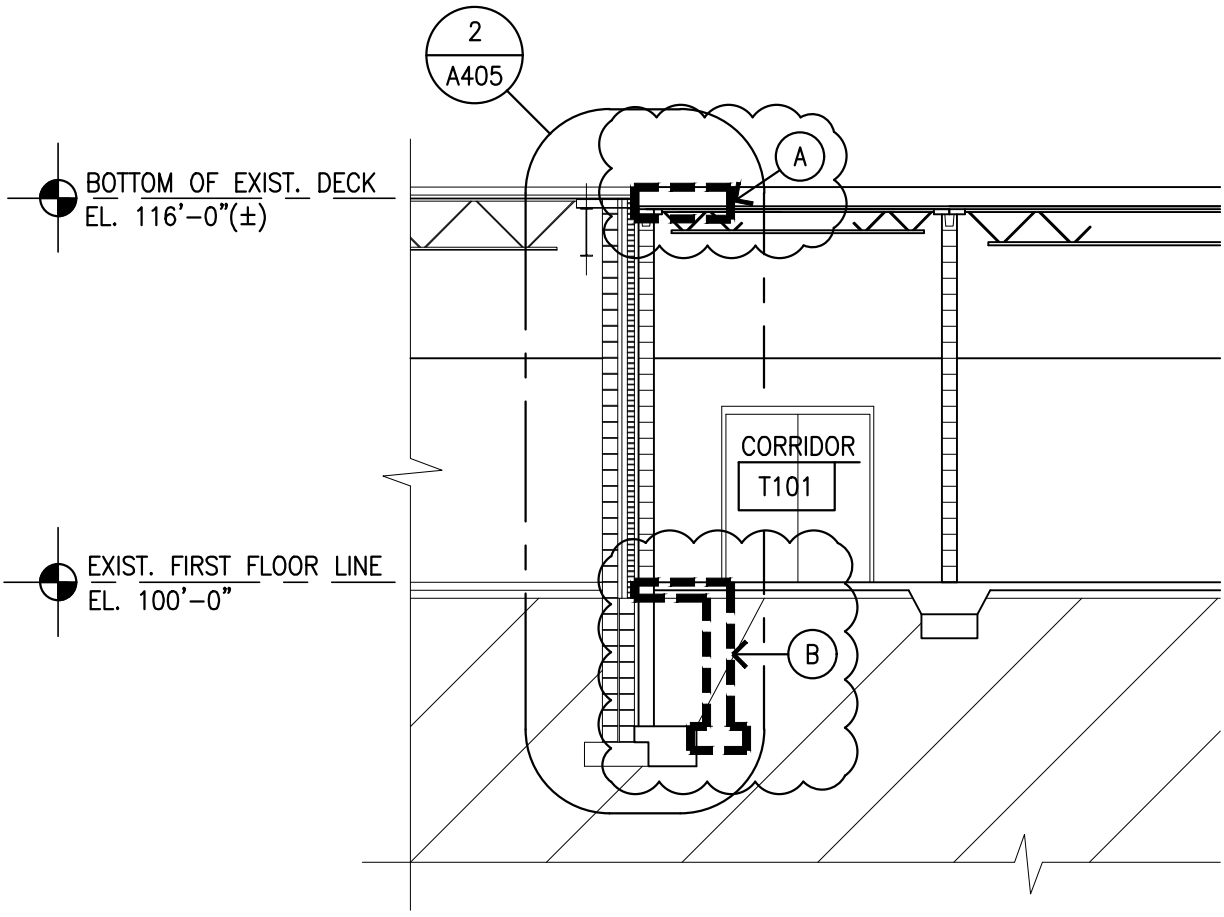
A. Examine flooring, structural support, and opening, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance of operable partitions. Proceed with installation only after unsatisfactory conditions have been corrected.

3.5 DEMONSTRATION

A. Demonstrate proper operation and maintenance procedures to Owner's representative.

B. Provide Operation and Maintenance Manual to Owner's representative.

END OF SECTION 102226



5
A402

PARTIAL BUILDING SECTION G - G

SCALE: 1/8" = 1'-0"

REFERENCE NOTES:

(A) CUT & REMOVE EXISTING ROOF OVERHANG & STRUCTURE IN IT'S ENTIRETY TO FACE OF EXISTING BRICK IN PREPARATION FOR NEW CONSTRUCTION. SEE WALL SECTION 2/A405 FOR NEW CONSTRUCTION.

(B) CUT & REMOVE EXISTING CONCRETE LOADING DOCK IN IT'S ENTIRETY TO FACE OF EXISTING MASONRY IN PREPARATION FOR NEW CONSTRUCTION. SEE WALL SECTION 2/A405 FOR NEW CONSTRUCTION. SEE CIVIL SITE DEMOLITION PLAN.

VPS ARCHITECTURE

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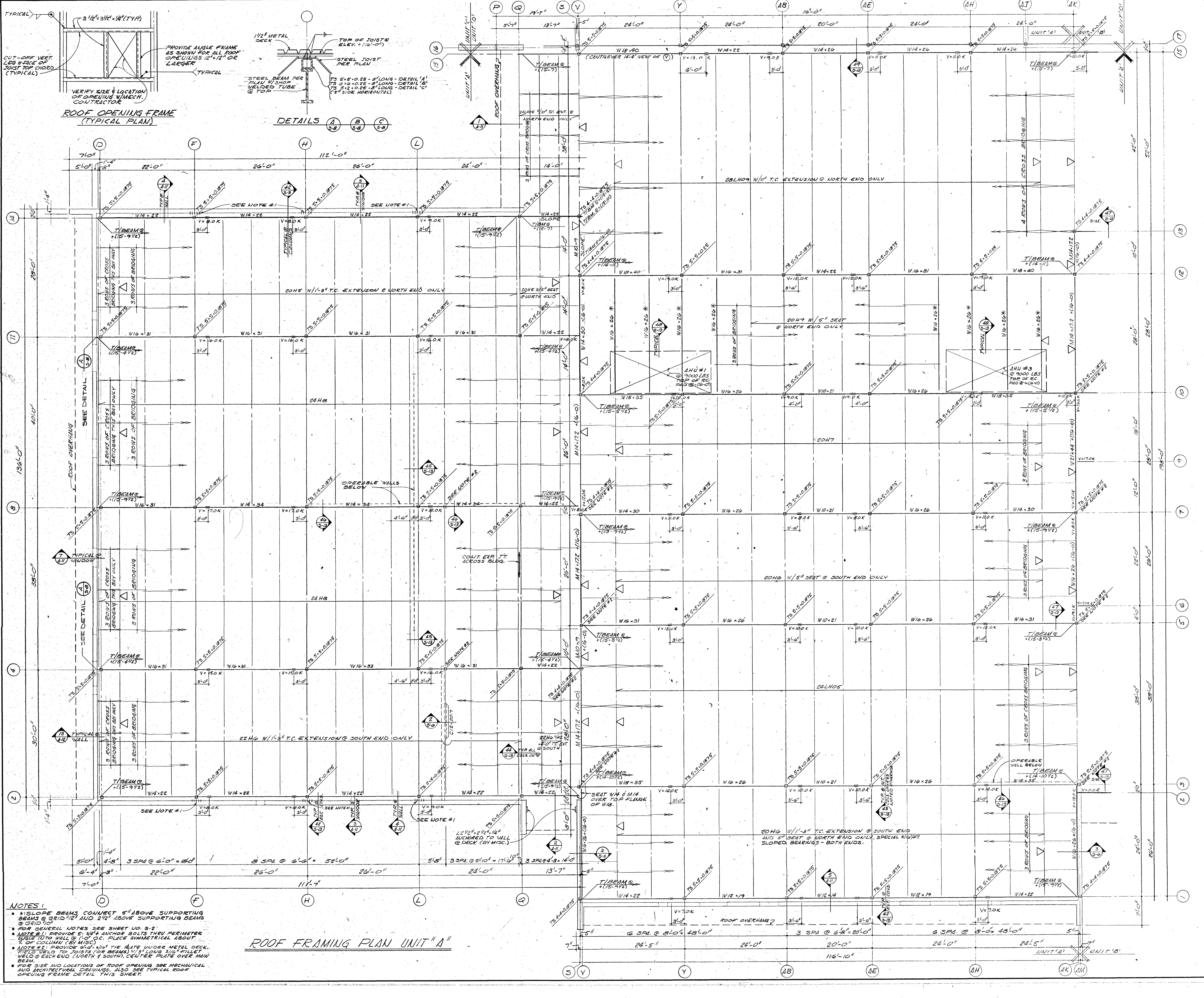
ADDITION & RENOVATIONS TO:

FRANKLIN CENTRAL HIGH SCHOOL
PHASE 2B

FRANKLIN TOWNSHIP COMMUNITY SCHOOL CORPORATION
INDIANAPOLIS, INDIANA

UNIT T - LOADING DOCK AREA DEMOLTITON

Project No.: 2022063.10
Date: 6/21/24
Drawing No.: **ADD2-SK1**

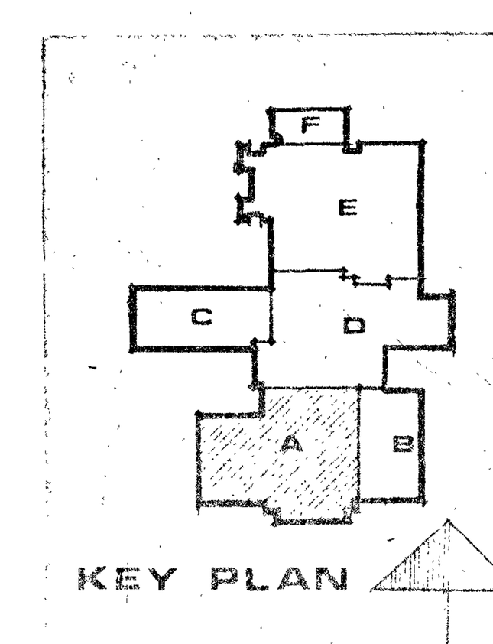


NOTES:

- *: SLOPE BEAMS CONNECT 5" ABOVE SUPPORTING BEAMS @ GRID "12" AND 2½" ABOVE SUPPORTING BEAMS @ GRID "10"
- FOR GENERAL NOTES SEE SHEET NO. S-2
- NOTE #1: PROVIDE 5- 3/4"φ ANCHOR BOLTS THRU PERIMETER ANGLE INTO WALL @ 1'-0" O.C. PLACE SYMMETRICAL ABOUT ℄ OF COLUMN (BY MISC.)
- NOTE #2: PROVIDE 6"x6"x3/16" TIE PLATE UNDER METAL DECK, FIELD WELD TO JOISTS (OR BEAMS) W/ 3" LONG 3/16" FILLET WELD @ EACH END (NORTH & SOUTH). CENTER PLATE OVER MAIN BEAM.
- FOR SIZE AND LOCATIONS OF ROOF OPENING SEE MECHANICAL AND ARCHITECTURAL DRAWINGS. ALSO SEE TYPICAL ROOF OPENING FRAME DETAIL THIS SHEET.

SHEET NO. S-8:

1. 24 LH05 and 28 LH09 joists just South of grid "15" should be with 9" T.C. extension @ North end instead of 10" as noted on plan.
2. At W16 x 26 beam between grids 10 and 12 just east of grid "V" should have ▽ symbol, i.e. end lap of deck required.
3. Approximate number of steel frames required at roof openings = 110. this note should be added to typical roof opening frame detail.


KEY PLAN

ROOF FRAMING PLAN UNIT 'A'

FRANKLIN TOWNSHIP COMMUNITY HIGH SCHOOL
MARION COUNTY, INDIANA

S-8

James Associates Architects • Engineers
2223 East 45th St. — Indianapolis, Indiana
(317) 547-5580

FRANKLIN TOWNSHIP COMMUNITY HIGH SCHOOL
MARION COUNTY, INDIANA

ROOF PLAN UNIT 'G'

SHEET NO. S-10:

1. Along grid 'E' where W14 beams marked 'slope' are framing should be marked as "T/W14 @+(33-3)" instead of "2-W14 @+(33-3)" as noted on plan.
2. Shop welded TS 6 x 6 x 0.25 - 9" long of top of W16x26 for joist bearing @ P-20.
3. The first 28 LH05 joist on East side of grid "P" should have T symbol, i.e. end lap of deck required.

NOTES
- FOR GENERAL NOTES SEE SHEET NO S-2.
- FOR TYPICAL ROOF OPENING FRAME DETAIL SEE SHEET NO. S-5
- NOTE #1: PROVIDE 5 TIERODS W/ TURNBUCKLES AS HORIZONTAL CROSS BRACING AS SHOWN BETWEEN BEAMS. ALSO PROVIDE SAME SIZE VERTICAL BRACING BETWEEN SAME BEAMS ALONG GRID 'A' ABOVE ELEVATION +(27-5)
- NOTE #2: PROVIDE 11 TIERODS WITH TURNBUCKLES AS HORIZONTAL CROSS BRACING BETWEEN BEAMS. ALSO PROVIDE SAME SIZE VERTICAL BRACING BETWEEN SAME BEAMS ALONG GRID W ABOVE ELEVATION +(27-5)
- FOR SIZE AND LOCATIONS OF ROOF OPENINGS SEE PLAN AND REFLECTED CEILING PLANS ALSO SEE TYPICAL ROOF OPENING FRAME DETAIL ON SHEET NO. S-5

ROOF FRAMING PLAN UNIT "D"

NOTES:

- *: SLOPED BEAMS - CONNECT 2 1/2" ABOVE BEAM AND EXTEND TOP FLANGE 11" SOUTH OF BEAM @ GRID "17" AND CONNECT 5" ABOVE BEAM @ GRID "18".
- **: ALTERNATE BID ONLY.
- FOR SIZE AND LOCATION OF ROOF OPENINGS SEE MECH. AND ARCH. DRWGS. ALSO SEE TYPICAL ROOF OPENING FRAME DETAIL ON SHEET NO. S-8.
- FOR GENERAL NOTES SEE SHEET NO. S-2.

SHEET NO. 11:

1. Beam size W10x11.S + (22-8) * as marked near U-40 should be changed to read as "W10 x 11.5 + (22-8) **".
2. East-West dimension between grids "AX" and "BA" should be 14"-11" instead of 4'-11" as noted, just south of grid "33"
3. Section 70-S13 marked near column "BC-33" should be marked "similar and opposite hand".
4. All (three) joists @ 21'-6". North of grid "38" should have ∇ symbol. i.e. end lap of deck required.

ROOF FRAMING PLAN UNIT-'D'

FRANKLIN TOWNSHIP
COMMUNITY HIGH SCHOOL
MARION COUNTY, INDIANA

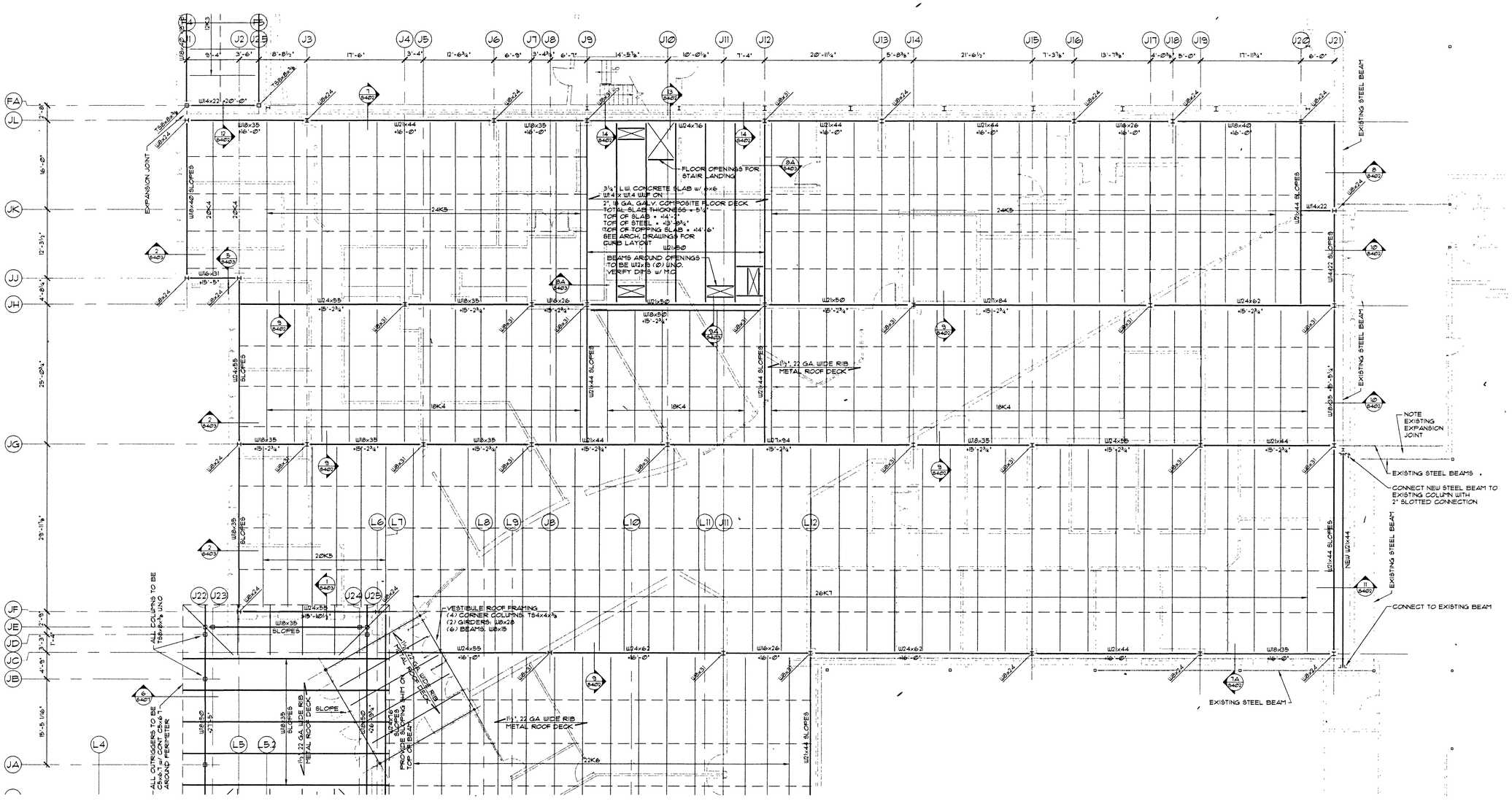
REVISIONS:

CERTIFIED BY:	DRAWN	CHECKED BY:
	DAW	RDP KDP
	COMM. NO.	DATE
	7350	MAY 10,1974

James Associates—Architects • Engineers
2828 East 45th St.—Indianapolis, Indiana
46205 (317) 547-9411
Fort Wayne Vincennes

ROOF FRAMING NOTES:

1. ALL BEAM-TO-COLUMN CONNECTIONS SHALL BE AT THE COLUMN CENTERLINE UNLESS OTHERWISE INDICATED.
2. ANY CAMBER EXISTING IN BEAMS SHALL BE TURNED POSITIVE UPWARD. SHIM AS REQUIRED FOR LEVEL DECK BEARING.
3. BURNING OF HOLES IN STRUCTURAL STEEL IS NOT PERMITTED.
4. ETØXX ELECTRODES SHALL BE USED FOR ALL WELDS.
5. LOCATIONS AND SIZES OF ALL DUCT OPENINGS, GRILLS, LOUVERS, ETC, SHALL BE VERIFIED PRIOR TO CONSTRUCTION
6. VERIFY ROOF OPENINGS SIZES AND LOCATIONS WITH MECHANICAL TRADES. SEE MECHANICAL DRAWINGS.
7. VERIFY ALL DIMENSIONS WITH ARCHITECTURAL PLANS.
8. - - - - - DENOTES ROWS OF ANGLE 1" x 1" x ⅛" HORIZONTAL BRIDGING IN THE NUMBER AND APPROXIMATE LOCATION AS SHOWN.
9. Ø'-Ø" = 842.2Ø' (MATCH EXISTING)
10. EXTEND BOTTOM CHORD OF JOISTS AT ALL COLUMN LOCATIONS AND BOLT TO COLUMN.
11. PROVIDE RIGID MASONRY TIES SHOP-WELDED ON BEAMS AND COLUMNS THAT COME IN CONTACT WITH MASONRY. COORDINATE TIE LOCATION WITH MASONRY WALLS AS SHOWN ON THE ARCHITECTURAL DRAWINGS SO THAT TIE IS AS CLOSELY CENTERED ON WALLS AS POSSIBLE. SPACE AT 16" VERTICAL AND 24" HORIZONTAL. SEE STEEL SPECIFICATIONS FOR TYPE AND ACCEPTABLE MANUFACTURERS
12. LAYOUT ENTIRE BUILDING PRIOR TO SHOP DRAWING APPROVAL.



Roof Framing Plan - Unit J

Scale: 1/8" = 1'-Ø"

NORTH

SCHMIDT ASSOCIATES

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320 East Vermont Street
Indianapolis, IN 46204-2126
317-263-6226
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Project No. 1999-A36
Project Date 08 . 04 . 00
Produced mms
Revision Date

WESLEY B. HARRISON REGISTERED No 8604101 STATE OF INDIANA PROFESSIONAL ENGINEER

NORTH

A B C D E F G H J K L M N P Q R

Franklin Central
High School

Additions / Renovations

Unit J- Roof Framing Plan

SF1J2