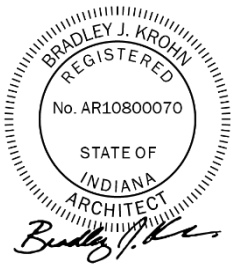
ADDENDUM

CSO
ARCHITECTURE · INTERIOR DESIGN

ADDENDUM NO: 01



PROJECT: Durbin Learning Center Interior Renovations

PROJECT NO: 2024062 DATE: January 16, 2025 BY: Brad Krohn

This Addendum is issued in accordance with the provisions of "The General Conditions of the Contract for Construction," Article 1, "Contract Documents" and becomes a part of the Contract Documents as provided therein. This Addendum includes:

Addendum Pages: **1-7**

Attached Documents: Pre-Bid Sign-in, Pre-Bid Agenda, 00 43 25, 01 21 00, 01 26 00, 08 71 00

Attached Drawing Sheets: AD201, A201, A220, A501, A600, A601, M201, E001, ED201, E201, E211, E231, E401, E601

PART 0 - GENERAL INFORMATION

0.1 Pre-Bid Sign In Sheet

A. Attached to this addendum

0.2 Pre-Bid Agenda

A. Attached this addendum

PART 1 - BIDDING REQUIREMENTS

1.1 NOT USED

PART 2 - SPECIFICATIONS

2.1 00 43 25 – SUBSITUTION REQUEST

A. Reissue spec with correct tile.

2.2 01 21 00 – ALLOWANCES

A. Specification only issued for clarification, **No changes**

2.3 01 23 00 – ALTERNATES

A. Revise item 3.01.B.1 as follows:

1 Base Bid: Now Work

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Alternate: Cost to provide all work associated with the following rooms,C129, C130, C128, C127, C102A, C102, C101, C119, C122, C118, C144, C123, C141, C126, **C125,** including but not limited to, demolition, new walls, operable parti-tion, casework, tackboards, markerboards, floor finishes, ceiling finishes, wall finishes, power and data outlets, light fixtures, egress sidewalk, plumbing fix-tures etc…

2.4 01 26 00 – CONTRACT MODIFICAITON PROCEDURES

A. Specification only issued for clarification, **No changes**

2.5 08 71 00 DOOR HARDWARE

A. Add spec section.

2.6 09 51 13 – ACOUSTICAL PANLE CEILING

A. Add the following to item 2.02

A. MANUFACTURERS

1. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:

a. Armstrong
b. USG, Inc
c. Rockfon
d. Saint-Gobian

2.7 10 73 16 – CANOPIES

A. Add "**Awning Partners**" as an approved manufacturers.

PART 3 - DRAWINGS

3.1 AD201 – DEMOLITION PLAN – UNIT C

A. Add demolition note 23 to door frame for OFFICE C137.

B. Add demolition note 31 to ART C123:

REMOVE EXISTING CELLULOSE-BASED FIBER WALL BOARD PANELS.

C. Update demolition note 4:

NOT USED

D. Update demolition note 4 to note **6** in rooms C118 and C119.

3.2 A201 – FLOOR PLAN – UNIT C

A. Add WALL TYPE NOTES.

3.3 A220 – CANOPY PLANS AND DETAILS

A. 4/A220 - ENLARGED CANOPY PLAN

1. Revise sidewalk dimensions.

2. Add transparent gray hatch and note to portion of sidewalk at door C123A:

NEW SIDEWALK IS A PART OF ALTERNATE

3. Add note to exterior concrete pad by rooms C123 and C145:

NEW CONCRETE PAD FOR MECHANICAL EQUIPMENT, REFERENCE STANDARD DETAILS.

B. 3/A220 – CANOPY SECTION

1. Extend sidewalk 6" past the edge of column.

3.4 A501 – DOOR AND FRAME SCHEDULE, ELEVATIONS, AND DETAILS

A. Add details **HEAD DETAIL H7** and **JAMB DETAIL J7**.

B. DOOR AND FRAME SCHEDULE

1. Add frame F1, H7, and J7 to door C137.

2. Remove note 2 from doors C132J, C132K, C132L, C132M, C143A, and C145A

C. Update Door Note 2:

NOT USED

D. Update glazing tags for Frame Elevation F4 to be **G3**.

3.5 A600 – CASEWORK ELEVATIONS AND MILLWORK DETAILS

A. Remove FP5 from casework schedule.

3.6 A601 – MILLWORK PLANS, ELEVATIONS, AND DETAILS

A. 4/A601 – RECEPTION SECTION

1. Add dimensions

B. 6/A601 – ACADEMY COUNTER SECTION

1. Add dimensions

2. Add knee clearance note

3.7 FP201 – FLOOR PLAN – UNIT C – FIRE PROTECTION

A. Provide sidewall sprinkler head in coffered ceiling bulkhead to provide sprinkler coverage as required by NFPA 13.

3.8 M201 – FLOOR PLAN – UNIT C - MECHANICAL

A. Replace this drawing in its entirety.

3.9 E001 - SYMBOLS, ABBREVIATIONS, & GENERAL NOTES – ELECTRICAL

A. Reissue this drawing in its entirety.

3.10 ED201 - FLOOR PLAN - UNIT C - ELECTRICAL DEMOLITION

A. Reissue this drawing in its entirety.

3.11 E201 - FLOOR PLAN - UNIT C - LIGHTING

A. Reissue this drawing in its entirety.

3.12 E211 - FLOOR PLAN - UNIT C - POWER

A. Reissue this drawing in its entirety.

3.13 E231 - FLOOR PLAN - UNIT C - FIRE ALARM

A. Reissue this drawing in its entirety.

3.14 E401 - DETAILS - LIGHTING

A. Reissue this drawing in its entirety.

3.15 E601 - SCHEDULES - ELECTRICAL

A. Reissue this drawing in its entirety.

PART 4 - QUESTIONS AND ANSWERS

4.1 Are the storage rooms (C141, C126, and C125) a part of the alternate or base? A100 has it included in the alternate but then all other drawings have the rooms outside of the dashed line that indicates where the alternates are.

A. Rooms C141, C126, and C125 are a part of the alternate.

4.2 One of the manufacturers of Canopy listed told me the quantity of posts will need to be more than the plans show. Is that ok?

A. This canopy should be a delegated design so the designer will need to provide the appropriate number of columns per their design requirements.

4.3 The canopy specs (107316, 2.4E) states the "colors of Metal Components Exposed to View: As selected by Architect from manufacturer's full range." Will the color be selected from the 25 potential 2 coat Kynar finish colors or from the 3 standard, stock colors? The difference in price is significant.

A. 2 coat Kynar colors will be required.

4.4 There is a line on the supplemental bid form (004200-2) where we are to acknowledge an allowance. The allowance spec (012100) does not give any allowances that we need to carry. Will an allowance be added in an addendum?

A. In 01 21 00.3.03. schedule of allowances, there is a $60,000.00 Owners contingency allowance that is required to be carried for the project.

4.5 Do all new walls go to the deck? Do the W2 and/or W4 walls go to the deck or to just above the ceiling?

A. No, due to the roof structure, walls do not go all the way to deck, extend all walls a minimum of 12" above nearest adjacent ceilings.

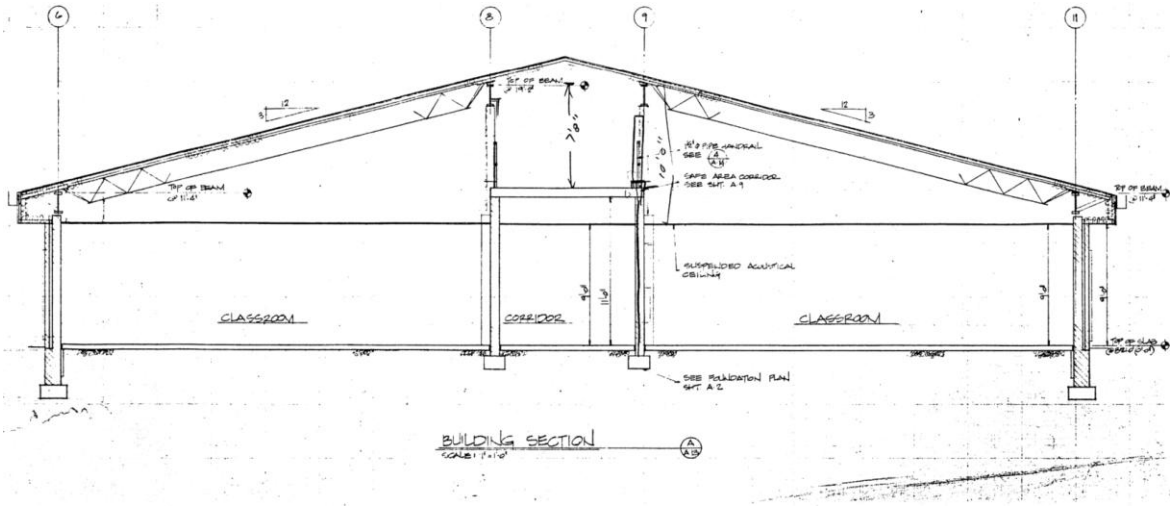
4.6 Contact Logan Nunn for follow-up site visits:

A. lnunn@hse.k12.in.us

B. 317-495-4135

4.7 Are there any existing drawings that show a full width building section that can be shared?

A. This drawing is provided for reference only. Dimensions and construction shall be verified in field.



4.8 Will the contractor be able to use the electrical power available to them in the project area, or will they be required to provide their own temporary electrical power?

A. Yes, the contractor can use electrical power available in the project area and does not need to provide temporary electrical power per current available power, i.e. 120V. Additional power requirements beyond what is currently available will need to be provided by the contractor.

4.9 Would the contractors be able use those two single user restrooms that the fixtures are being removed from with the condition that they clean them at the end of the project?

A. Yes, the contractors can use the two single use restrooms, rooms C141 and C126, on the condition that the contractor will be responsible for cleaning the restrooms by the end of the project, and the owner will inspect and review at project completion to verify these rooms are turned back over in a neat and clean condition.

4.10 Was an asbestos report done for the existing building?

A. The owner is currently conducting an asbestos survey and will share the results when survey is complete.

4.11 There is a chain link fence enclosure (approximately 7'x7') shown on drawing A201 on the east side of the building just outside room C123. On drawing M201, this appears to be an equipment pad of similar size in the same location. Is this to be a concrete equipment pad with fencing?

A. Correct, a new equipment pad is needed and will be enclosed with a chain link fence.

4.12 The general notes state that the doors should be fire rated as stated. However, the Door and Frame Schedule don't contain a fire rating column. Are none of the doors fire rated?

A. None of the doors are fire rated.

4.13 Do you want a narrow lite on the smaller door for the unique pair (C132N)? 1-8 4-8 Door?

A. The overall width of these doors is 4′-8″, consisting of a 3′-0″ active leaf and 1′-8″ fixed leaf. The larger 3′-0″ door is to be door type D2 and the narrow 1′-8 door is to be door type D1.

END ADDENDUM #01

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MEETING SIGN-IN SHEET

DATE: 01/14/2025
MEETING LOCATION: Durbin Learning Center
PROJECT: Renovations to Durbin Learning Center
PROJECT NUMBER: 2024062

Participants Sign-In: (Please Print)

Name: David Reed	Company: Solid Platforms – Scaffold				
Phone: 317 401-4039	Cell:	Email: dave.j.reed@solidplatforms			
Name: AARON ALBRIGHT	Company: RLTURNER CORP.				
Phone: 317-363-6151	Cell:	Email: AALBRIGHT@RLTURNER.COM			
Name: DAVE REEF	Company: BRAND ELECTRIC, INC				
Phone: 765-296-3437	Cell: 765-426-7525	Email: dreef@brandelectric.com			
Name: GREGG STARK	Company: BOYLE CONSTRUCTION				
Phone: (317) 450-7159	Cell:	Email: GREGG.STARK@BCMI.US			
Name: CHUCK PENAFLOR	Company: MATTCON				
Phone:	Cell: 317-366-7734	Email: chuckp@mattcon.com			
Name: Nick Tschuor	Company: Pridemark				
Phone: 765 760 3136	Cell:	Email: ntschuor@pridemarkconstruction.com			
Name: Don Jungst	Company: HALBERMAN				
Phone:	Cell: 317-696-2019	Email: DJUNGST@HALBERMANGC.COM			
Name: Sam Ashton	Company: CPM Construction				
Phone:	Cell: 317-452-9265	Email: sashton@cpmconstruction.com			
Name: CHRIS CALLAHAN	Company: JBM CONTRACTORS CORP				
Phone:	Cell: 317-999-8147	Email: chrisc@jbmcontractorscorp.com			
Name:	Company:				
Phone:	Cell:	Email:			
Name:	Company:				
Phone:	Cell:	Email:			
Name:	Company:				
Phone:	Cell:	Email:			

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MEETING SIGN-IN SHEET

DATE: 01/14/2025
MEETING LOCATION: Durbin Learning Center
PROJECT: Renovations to Durbin Learning Center
PROJECT NUMBER: 2024062

Participants Sign-In: (Please Print)

Name: David Polson	Company: Ray's Demo		
Phone:	Cell:	Email:	
Name: JR Cooke	Company: KAYS		
Phone:	Cell: 317-339-3552	Email: JCooke@KAYS-Demolition.com	
Name: MIKE ZERRIEN	Company: REX COLLINS ELECTRIC		
Phone: 765-664-7544	Cell:	Email: MZERRIEN@REXCOLLINSELECTRIC.COM	
Name: BRAD BOWLAB	Company: RYAN FIRE PROTECTION		
Phone:	Cell: (317)750-5877	Email: BBOWLAB@RYANFP.COM	
Name: Tom Painter	Company: Shamboaugh & Son		
Phone:	Cell: 317-538-3130	Email: tpainter@shamboaugh.com	
Name: CHAD ARNOLD	Company: MYERS CONSTRUCTION MANAGEMENT, INC		
Phone: 317-773-3596	Cell: 317-716-7610	Email: chad@myerscm.com	
Name: Chad Reding	Company: Hilton Ventilation		
Phone:	Cell: (317) 308-8194	Email: Chadreding@hiltonventilation.com	
Name: Adam Ashour	Company: Meyer-Najem		
Phone:	Cell: 317 402 9071	Email: aashour@meyer-najm.com	
Name: Mike Jones	Company: PARKREATION, INC		
Phone:	Cell: 317-414-0076	Email: Mike@Parkreation.com	
Name: Thomas Ritman	Company: Gilliatte General Contractors		
Phone:	Cell: 317-281-4908	Email: thomas.ritman@gilliatte.com	
Name:	Company:		
Phone:	Cell:	Email:	
Name:	Company:		
Phone:	Cell:	Email:	

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MEETING SIGN-IN SHEET

DATE: 01/14/2025
MEETING LOCATION: Durbin Learning Center
PROJECT: Renovations to Durbin Learning Center
PROJECT NUMBER: 2024062

Participants Sign-In: (Please Print)

Name: Kyle Ledbetter	Company: JGBowers		
Phone: 765-603-0204	Cell:	Email: Kledbetter@jgbowers.com	
Name: Kevin Dayloff	Company: Moyer Technologies		
Phone: 317-941-5177	Cell:	Email: kdayloff@moyertech.com	
Name: Clay Robinson	Company: Enviro Max		
Phone: 317 8798200	Cell:	Email: clay.robinson@enviro-max.net	
Name: Troy CASE	Company: Attlin Construction		
Phone: 765.289.0671	Cell:	Email: TCASE@ATTLINCONSTRUCTION.COM	
Name: Cory Ward	Company: Air Management Techniques		
Phone: 765-287-0055	Cell:	Email: airmanagetech@gmail.com	
Name: Angie Amantecatl	Company: Meza Sanchez labor Services INC		
Phone: 317-909-0756	Cell:	Email: Mezasanchezlaborservice@gmail.com	
Name: DON WICKER	Company: ALL DIMENSIONS INC.		
Phone: 317-507-6037	Cell:	Email: dwicker@alldimensionsinc.com	
Name:	Company:		
Phone:	Cell:	Email:	
Name:	Company:		
Phone:	Cell:	Email:	
Name:	Company:		
Phone:	Cell:	Email:	
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Name:	Company:		
Phone:	Cell:	Email:	

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RE: Pre-Bid Conference

Meeting Date: January 14, 2025

Project: **Renovations to Durbin Learning Center**

INTRODUCTIONS

Owner: Hamilton Southeastern Schools

Architect: CSO

Engineer: RE Dimond and Associates Inc.

BID DATE / LOCATION

Bid Date: **Tuesday, January 28, 2025, at 2:00pm (local time)**
Deliver to: Hamilton Southeastern Administration Building
13485 Cumberland Rd
Fishers, IN 46038

Bids will be publicly opened at this time and taken under advisement for review and recommendation by the Owner. Bids received after this date and time will be retuned unopened.

BIDDING REQUIREMENTS

1. Bid is a Single Prime Contract.

DESCRIPTION OF PROJECT

Project includes removal and replacement of existing room finishes, replacement of doors, and removal of walls to create a larger classroom space. Plumbing fixtures will be replaced in existing restrooms. Additional plumbing fixtures will be added for new kitchens and restrooms. Self-contained unit ventilators are to be replaced. An IDF room will be added to the existing mechanical room. Further description of the work can be found within the project drawings and specifications, including limited site work for sidewalks and overhead canopy systems.

Unless noted otherwise, a complete bid will include all labor, material and equipment to complete the work.

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ALTERNATES:

A. Base Bid: Provide the cost for all work associated with the replacement of finishes, doors, and removal of walls as shown in the contract documents.

B. Alternate No. 1: Cost to provide and install a complete pre-manufactured aluminum walkway canopy system as specified in section 10 73 16 and shown on the documents.

C. Alternate No. 2: Cost to provide all work associated with the following rooms,C129, C130, C128, C127, C102A, C102, C101, C119, C122, C118, C144, C123, C141, C126, (C125, C118, C130, C144) including but not limited to, demolition, new walls, operable partition, casework, tackboards, markerboards, floor finishes, ceiling finishes, wall finishes, power and data outlets, light fixtures, egress sidewalk, plumbing fixtures etc…

D. Alternate No. 3: Provide cost to demolish and to replace three (3) self-contained unit ventilators located within new space, Academy C132, as shown on MD201, M201, and M601. Include all associated electrical, control wiring, test and balance, and installation of new louver, as applicable.

Refer to the Alternate Section 01 23 00 for additional information

Addendum 1 to be released by, Thursday, January 16, 2025.

SUBMIT WITH BID (Refer to Instructions to Bidders AIA Document A701 and Supplemental Bid Form)

1. Project Name and Description on the outside of your Bid Envelope
2. Fully completed Form No. 96 (pages 1-8) in Duplicate
3. Financial Statement
4. Non-Collusion Affidavit (part of Form No. 96)
5. Certified Check or Bid Bond (5%) of the Total Price
6. Complete the Alternate portion of the Supplemental Bid Form (as applicable)

PROJECT INFORMATION

1. For consideration, a Bid Form must be submitted in duplicate, sealed in an envelope, and delivered to the location above by the designated time. The clock in the board room will be used as the "official" clock for determining when receipt of bids will be closed.
2. Bids shall be guaranteed for 60 calendar days
3. Review Divisions 00 & 01 in detail
4. Tax Exempt Project
5. Successful Bidder to submit 100% Labor Performance & Material Payment Bonds.
6. Awarded Contractor is also required to conduct and maintain criminal history reports of its works (inclusive all of subcontractors and suppliers of any tier) that are available to the Owner upon their request.
7. If any materials testing is required, will be by Owner.

WORK RESTRICTIONS

1. Refer to Section 01 14 00 Work Restrictions and Hours
    a. Non-School days

PROJECT SCHEDULE

1. January 28, 2025 – Receipt of Bids
2. February 12, 2025 – School Board Approval
3. July 14, 2025 – Substantial Completion

SPECIAL NOTES

1. All Hamilton Southeastern School facilities and properties are Tobacco, Vapping, Alcohol and Drug Free Sites. The use of any of these products on the school property is prohibited and violators will be removed from the premise.
2. Contractors wishing to make a follow-up site visit to the buildings must contact Logan Nunn to set up a time to avoid disruption to school activities. **Do not attempt** to visit the site or building without first notifying the school corporation and Logan Nunn first.

QUESTIONS

SITE VISIT

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REQUEST FOR SUBSTITUTION

RFS # _____

PROJECT: **Durbin Learning Center Renovations**	

Substitution Request By:	Firm:

TRANSMITTED ITEMS **Description:**	**Copies:**	**Date:**

We hereby submit for your consideration the following product instead of the specified item:

Section / Drawing	**Article**	**Specified Item**
Proposed Substitution:		

Attach complete technical data, including laboratory tests as applicable.
Include complete information on changes to Drawings and/or Specifications which proposed substitution will require for its proper installation.

RESPONSE: By:	**Response:**
A. Does the substitution affect dimensions shown on Drawings?	
B. Will the undersigned pay for changes to the building design, including engineering and detailing costs caused by the requested substitution?	
C. What effect does the substitution have on other trades?	
D. Itemized comparison between proposed substitution and specified item?	
E. For GMP Projects: What is the Cost Differential from GMP Chart of Accounts?	
F. Are Manufacturer's guarantees for the proposed item the same as for item specified? Explain differences.	
G. The undersigned accepts full responsibility for delays caused by redesign of other items of the Work necessitated by substitution.	
H. The undersigned states that the function, appearance and quality are equivalent or superior to the specified item.	

Submitted by: _____

Signature: _____

Firm: _____

Address: _____

_____

Phone _____

Email: _____

Date: _____

Architect Response:	**Engineer Response:**	
o	o	o Accepted
o	o	o Not Accepted
o	o	o Accepted as Noted
		o Received Too Late

By: _____

Remarks:

By: _____

SECTION 01 21 00 - ALLOWANCES

PART 1 - GENERAL

1.01 SUMMARY

A. Certain materials and equipment are specified in the Contract Documents by allowances. In some cases, these allowances include installation. Allowances have been established in lieu of additional requirements and to defer selection of actual materials and equipment to a later date when additional information is available for evaluation. If necessary, additional requirements will be issued by Change Order.

1. Allowances stated in the Contract Documents shall be included in the Contract Sum.

1.02 SELECTION AND PURCHASE

A. At the earliest practical date after award of the Contract, advise Architect of the date when final selection and purchase of each product or system described by an allowance must be completed to avoid delaying the Work.

B. At Architect's request, obtain proposals for each allowance for use in making final selections. Include recommendations that are relevant to performing the Work.

C. Purchase products and systems selected by Architect from the designated supplier.

1.03 SUBMITTALS

A. Submit proposals for purchase of products or systems included in allowances, in the form specified for Change Orders.

B. Submit invoices or delivery slips to show actual quantities of materials delivered to the site for use in fulfillment of each allowance.

1.04 ALLOWANCES – GENERAL

A. Use the allowance only as directed by Architect for Owner's purposes and only by Change Orders that indicate amounts to be charged to the allowance.

B. Contractor's overhead, profit, and related costs for products and equipment ordered by Owner under the allowance are included in the allowance. These costs include delivery, installation, taxes, insurance, equipment rental, and similar costs.

C. At Project closeout, credit unused amounts remaining in the allowance to Owner by Change Order.

D. Testing and inspecting allowances include the cost of engaging testing agencies, actual tests and inspections, and reporting results.

1. The allowance does not include incidental labor required to assist the testing agency or costs for retesting if previous tests and inspections result in failure.

1.05 CONTINGENCY ALLOWANCES

A. Contractor's overhead and profit for Work ordered by Owner under the allowance shall be included in the Base Bid. Costs thereby marked up are listed in General Conditions Subparagraph 7.3.6.

1. For Contingency Allowances, to facilitate checking of quotations, all proposals shall be accompanied by a complete itemization of costs, including labor, materials and subcontractors performing portions of the Work. Labor and materials shall be itemized. Overhead and profit shall be itemized based on the following schedule:

a. For Contractor, for Work performed by its own force or by subcontractors, zero percent (0%) of the cost. Overhead and profit already resides in the overall Project Cost.
b. For each subcontractor or sub-subcontractor involved, for Work performed by its own force, ten percent (10%) of the cost.
c. For each subcontractor, for Work performed by its sub-subcontractors, five percent (5%) of the amount due the sub-subcontractor.

1.06 UNUSED MATERIALS

A. Return unused materials purchased under an allowance to manufacturer or supplier for credit to Owner, after installation has been completed and accepted.

1. If requested by Architect, prepare unused material for storage by Owner when it is not economically practical to return the material for credit. If directed by Architect, deliver unused material to Owner's storage space. Otherwise, disposal of unused material is Contractor's responsibility.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.01 EXAMINATION

A. Examine products covered by an allowance promptly on delivery for damage or defects. Return damaged or defective products to manufacturer for replacement.

3.02 PREPARATION

A. Coordinate materials and their installation for each allowance with related materials and installations to ensure that each allowance item is completely integrated and interfaced with related work.

3.03 SCHEDULE OF ALLOWANCES

A. Owner’s Contingency: $60,000.00.

1. General Contractor shall include in the Base Bid the above contingency amounts.

END OF SECTION

SECTION 01 26 00 - CONTRACT MODIFICATION PROCEDURES

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.02 SUMMARY

A. Section includes administrative and procedural requirements for handling and processing Contract modifications.

B. Related Requirements:

1. Division 01 Section "Allowances" for procedural requirements for handling and processing allowances.
2. Division 01 Section "Unit Prices" for administrative requirements for using unit prices.
3. Division 01 Section "Product Requirements" for administrative procedures for handling requests for substitutions made after Contract award.
4. Section 01 25 00 "Substitution Procedures" for administrative procedures for handling requests for substitutions made after the Contract award.

1.03 MINOR CHANGES IN THE WORK

A. Architect will issue supplemental instructions authorizing minor changes in the Work, not involving adjustment to the Contract Sum or the Contract Time, on AIA Document G710, "Architect's Supplemental Instructions."

1.04 PROPOSAL REQUESTS

A. Owner-Initiated Proposal Requests: Architect will issue a detailed description of proposed changes in the Work that may require adjustment to the Contract Sum or the Contract Time. If necessary, the description will include supplemental or revised Drawings and Specifications.

1. Work Change Proposal Requests issued by Architect are not instructions either to stop work in progress or to execute the proposed change.
2. Within time specified in Proposal Request, or if not specified, 20 days after receipt of Proposal Request, submit a quotation estimating cost adjustments to the Contract Sum and the Contract Time necessary to execute the change.
    a. Include a list of quantities of products required or eliminated and unit costs, with total amount of purchases and credits to be made. If requested, furnish survey data to substantiate quantities.
    b. Indicate applicable taxes, delivery charges, equipment rental, and amounts of trade discounts.
    c. Include costs of labor and supervision directly attributable to the change.
    d. Include an updated Contractor's construction schedule that indicates the effect of the change, including, but not limited to, changes in activity duration, start and finish times, and activity relationship. Use available total float before requesting an extension of the Contract Time.

B. Contractor-Initiated Proposals: If latent or changed conditions require modifications to the Contract, Contractor may initiate a claim by submitting a request for a change to Architect .

1. Include a statement outlining reasons for the change and the effect of the change on the Work. Provide a complete description of the proposed change. Indicate the effect of the proposed change on the Contract Sum and the Contract Time.
2. Include a list of quantities of products required or eliminated and unit costs, with total amount of purchases and credits to be made. If requested, furnish survey data to substantiate quantities.
3. Indicate applicable taxes, delivery charges, equipment rental, and amounts of trade discounts.
4. Include costs of labor and supervision directly attributable to the change.
5. Include an updated Contractor's construction schedule that indicates the effect of the change, including, but not limited to, changes in activity duration, start and finish times, and activity relationship. Use available total float before requesting an extension of the Contract Time.
6. Comply with requirements in Section 01 25 00 "Substitution Procedures" if the proposed change requires substitution of one product or system for product or system specified.

C. Proposal Request Form: Architect will use its administrative form based by reference on AIA Document G709 for Proposal Requests

1.05 ALLOWANCES

A. Allowance Adjustment: To adjust allowance amounts, base each Change Order proposal on the difference between purchase amount and the allowance, multiplied by final measurement of work-in-place. If applicable, include reasonable allowances for cutting losses, tolerances, mixing wastes, normal product imperfections, and similar margins.

1. Include installation costs in purchase amount only where indicated as part of the allowance.
2. If requested, prepare explanation and documentation to substantiate distribution of overhead costs and other margins claimed.
3. Submit substantiation of a change in scope of work, if any, claimed in Change Orders related to unit-cost allowances.
4. Owner reserves the right to establish the quantity of work-in-place by independent quantity survey, measure, or count.

1.06 CHANGE ORDER PROCEDURES

A. On Owner's approval of a Work Changes Proposal Request, Architect will issue an allowance authorization or Change Order for signatures of Owner and Contractor on appropriate AIA Document.

1.07 CONSTRUCTION CHANGE DIRECTIVE

A. Construction Change Directive: Architect may issue a Construction Change Directive on AIA Document G714. Construction Change Directive instructs Contractor to proceed with a change in the Work, for subsequent inclusion in a Change Order.

1. Construction Change Directive contains a complete description of change in the Work. It also designates method to be followed to determine change in the Contract Sum or the Contract Time.

B. Documentation: Maintain detailed records on a time and material basis of work required by the Construction Change Directive.

1. After completion of change, submit an itemized account and supporting data necessary to substantiate cost and time adjustments to the Contract.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

END OF SECTION

SECTION 08 71 00 - DOOR HARDWARE

PART 1 - GENERAL

1.01 SUMMARY

A. Section includes:

1. Mechanical and electrified door hardware
2. Electronic access control system components
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 Section "Alternates" for alternates affecting this section.
2. Division 06 Section "Rough Carpentry"
3. Division 06 Section "Finish Carpentry"
4. Division 07 Section "Joint Sealants" for sealant requirements applicable to threshold installation specified in this section.
5. Division 08 Sections:
   a. "Metal Doors and Frames"
   b. "Flush Wood Doors"
   c. "Aluminum-Framed Entrances and Storefronts"
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. Review drawings and Sections from related trades to verify compatibility with specified hardware.
   b. Highlight, encircle, or otherwise specifically identify on submittals: deviations from Contract Documents, issues of incompatibility or other issues which may detrimentally affect the Work.

B. Action Submittals:

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

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

4. Door Hardware Schedule:
   a. Submit concurrent with submissions of Product Data, Samples, and Shop Drawings. Coordinate submission of door hardware schedule with scheduling requirements of other work to facilitate fabrication of other work critical in Project construction schedule.
   b. Submit under direct supervision of a Door Hardware Institute (DHI) certified Architectural Hardware Consultant (AHC) or Door Hardware Consultant (DHC) with hardware sets in vertical format as illustrated by Sequence of Format for the Hardware Schedule published by DHI.
   c. Indicate complete designations of each item required for each opening, include:
      1) Door Index: door number, heading number, and Architect's hardware set number.
      2) Quantity, type, style, function, size, and finish of each hardware item.
      3) Name and manufacturer of each item.
      4) Fastenings and other pertinent information.
      5) Location of each hardware set cross-referenced to indications on Drawings.
      6) Explanation of all abbreviations, symbols, and codes contained in schedule.
      7) Mounting locations for hardware.
      8) Door and frame sizes and materials.
      9) Degree of door swing and handing.
      10) Operational Description of openings with electrified hardware covering egress, ingress (access), and fire/smoke alarm connections.

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

C. Informational Submittals:

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

D. Closeout Submittals:

1. Operations and Maintenance Data: Provide in accordance with Division 01 and include:
   a. Complete information on care, maintenance, and adjustment; data on repair and replacement parts, and information on preservation of finishes.
   b. Catalog pages for each product.
   c. Final approved hardware schedule edited to reflect conditions as installed.

d. Final keying schedule
e. Copy of warranties including appropriate reference numbers for manufacturers to identify project.
f. As-installed wiring diagrams for each opening connected to power, both low voltage and 110 volts.

E. Inspection and Testing:

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

1.04 QUALITY ASSURANCE

A. Qualifications and Responsibilities:

1. Supplier: Recognized architectural hardware supplier with a minimum of 5 years documented experience supplying both mechanical and electromechanical door hardware similar in quantity, type, and quality to that indicated for this Project. Supplier to be recognized as a factory direct distributor by the manufacturer of the primary materials with a warehousing facility in the Project′s vicinity. Supplier to have on staff, a certified Architectural Hardware Consultant (AHC) or Door Hardware Consultant (DHC) available to Owner, Architect, and Contractor, at reasonable times during the Work for consultation.
2. Installer: Qualified tradesperson skilled in the application of commercial grade hardware with experience installing door hardware similar in quantity, type, and quality as indicated for this Project.
3. Architectural Hardware Consultant: Person who is experienced in providing consulting services for door hardware installations that are comparable in material, design, and extent to that indicated for this Project and meets these requirements:
   a. For door hardware: DHI certified AHC or DHC.
   b. Can provide installation and technical data to Architect and other related subcontractors.
   c. Can inspect and verify components are in working order upon completion of installation.
   d. Capable of producing wiring diagram and coordinating installation of electrified hardware with Architect and electrical engineers.

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

B. Certifications:

1. Fire-Rated Door Openings:
   a. Provide door hardware for fire-rated openings that complies with NFPA 80 and requirements of authorities having jurisdiction.
   b. Provide only items of door hardware that are listed products tested by UL LLC, Intertek Testing Services, or other testing and inspecting organizations acceptable to authorities having jurisdiction for use on types and sizes of doors indicated, based on testing at positive pressure and according to NFPA 252 or UL 10C and in compliance with requirements of fire-rated door and door frame labels.

2. Smoke and Draft Control Door Assemblies:

a. Provide door hardware that meets requirements of assemblies tested according to UL 1784 and installed in compliance with NFPA 105
b. Comply with the maximum air leakage of 0.3 cfm/sq. ft. (3 cu. m per minute/sq. m) at tested pressure differential of 0.3-inch wg (75 Pa) of water.

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

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

C. Pre-Installation Meetings

1. Keying Conference
   a. Incorporate keying conference decisions into final keying schedule after reviewing door hardware keying system including:
      1) Function of building, flow of traffic, purpose of each area, degree of security required, and plans for future expansion.
      2) Preliminary key system schematic diagram.
      3) Requirements for key control system.
      4) Requirements for access control.
      5) Address for delivery of keys.

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

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

1.05 DELIVERY, STORAGE, AND HANDLING

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

B. Tag each item or package separately with identification coordinated with final door hardware schedule, and include installation instructions, templates, and necessary fasteners with each item or package. Deliver each article of hardware in manufacturer's original packaging.

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

D. Provide secure lock-up for door hardware delivered to Project. Control handling and installation of hardware items so that completion of Work will not be delayed by hardware losses both before and after installation.

E. Handle hardware in manner to avoid damage, marring, or scratching. Correct, replace or repair products damaged during Work. Protect products against malfunction due to paint, solvent, cleanser, or any chemical agent.

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

1.06 COORDINATION

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

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

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

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

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.

1.07 WARRANTY

A. Manufacturer's standard form in which manufacturer agrees to repair or replace components of door hardware that fail in materials or workmanship within published warranty period.

1. Warranty does not cover damage or faulty operation due to improper installation, improper use or abuse.
2. Warranty Period: Beginning from date of Substantial Completion, for durations indicated in manufacturer's published listings.
    a. Mechanical Warranty
        1) Locks: 10 Years
        2) Exit Devices: 10 Years
        3) Closers: 30 Years
    b. Electrical Warranty
        1) Locks: 3 Years
        2) Exit Devices: 3 Years
        3) Automatic Operators: 2 Years

1.08 MAINTENANCE

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

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

PART 2 - PRODUCTS

2.01 MANUFACTURERS

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

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

B. Approval of manufacturers and/or products other than those listed as "Scheduled Manufacturer" or "Acceptable Manufacturers" in the individual article for the product category shall be in accordance with QUALITY ASSURANCE article, herein.

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. Modification and Preparation of Existing Doors: Where existing door hardware is indicated to be removed and reinstalled.

1. Provide necessary fillers, Dutchmen, reinforcements, and fasteners, compatible with existing materials, as required for mounting new opening hardware and to cover existing door and frame preparations.
2. Use materials which match materials of adjacent modified areas.
3. When modifying existing fire-rated openings, provide materials permitted by NFPA 80 as required to maintain fire-rating.

C. Provide screws, bolts, expansion shields, drop plates and other devices necessary for hardware installation.

1. Where fasteners are exposed to view: Finish to match adjacent door hardware material.
2. For closers and panic devices: Verify with Architect and/or Owner if thru-bolts are required at specific door materials.

2.03 HINGES

A. Manufacturers and Products:

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

2. Acceptable Manufacturers and Products:
   a. Hager BB series
   b. McKinney TB series
   c. Stanley (Best/Dormakaba) FBB series

B. Requirements:

1. Provide hinges conforming to ANSI/BHMA A156.1.
2. Provide five knuckle, ball bearing hinges.
3. Hinge Height:
   a. 1-3/4 inch (44 mm) thick doors, up to and including 36 inches (914 mm) wide: 4-1/2 inches (114 mm) high
   b. 1-3/4 inch (44 mm) thick doors over 36 inches (914 mm) wide: 5 inches (127 mm) high
   c. 2 inches or thicker doors: 5 inches (127 mm) high, regardless of door width
4. Hinge Width: 4-1/2 inches (114 mm) wide typical. Adjust hinge width for door, frame, and wall conditions to allow proper degree of opening.
5. Hinge quantity: Provide three hinges per door leaf for doors 90 inches (2286 mm) or less in height, and one additional hinge for each 30 inches (762 mm) of additional door height.
6. 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
7. 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.
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.

2.04 SPRING HINGES

A. Manufacturers and Products:

1. Scheduled Manufacturer and Product:

a. Ives 3SP series

2. Acceptable Manufacturers and Products:
   a. Hager 1250 series
   b. McKinney 1502 series
   c. Stanley (Best/Dormakaba) 2060 series

B. Requirements:

1. Provide hinges conforming to ANSI/BHMA A156.1.
2. Provide 3 knuckle, spring full mortise hinges.
3. 1-3/4 inch (44 mm) thick doors, up to and including 36 inches (914 mm) wide:
   a. Exterior: Bronze or stainless steel, 4-1/2 inches (114 mm) high
   b. Interior: Steel, 4-1/2 inches (114 mm) high

4. Doors over 1-3/4 inch (44 mm) thick or over 36 inches (914 mm) wide:
   a. Exterior: Bronze/stainless steel, 5 inches (127 mm) high
   b. Interior: Steel, 5 inches (127 mm) high

5. Adjust hinge width for door, frame, and wall conditions to allow proper degree of opening.
6. Provide two spring hinges and one bearing hinge per door leaf for doors 90 inches (2286 mm) or less in height. Provide one additional bearing hinge for each 30 inches (762 mm) of additional door height.

2.05 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.
8. Adjust hinge model/width as required for door thickness or construction.

2.06 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.

2.07 FLUSH BOLTS

A. Manufacturers:

1. Scheduled Manufacturer:
   a. Ives

2. Acceptable Manufacturers:
   a. Rockwood
   b. Trimco

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.

2.08 COORDINATORS

A. Manufacturers:

1. Scheduled Manufacturer:
   a. Ives

2. Acceptable Manufacturers:
   a. Rockwood
   b. Trimco

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.

2.09 MORTISE LOCKS AND DEADBOLTS

A. Manufacturers and Products:

1. Scheduled Manufacturer and Product:
   a. Schlage L9000 series

2. Acceptable Manufacturers and Products:
   a. No Substitute

B. Requirements:

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

8. Lever Trim: Solid brass, bronze, or stainless steel, cast or forged in design specified, with wrought roses and external lever spring cages. Provide thru-bolted levers with 2-piece spindles.
   a. Lever Design: Schlage 03N.
   b. Verify/Match Existing.

2.10 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.

2.11 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.

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:

1. Scheduled Manufacturer and Product:
   a. Schlage

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. Provide cylinders in the below-listed configuration(s), distributed throughout the Project as indicated.
   a. Match owner's existing system.
   b. Cylinder/Core Type:
      1) Full Size Interchangeable Core (FSIC)

3. Replaceable Construction Cores.
   a. Provide temporary construction cores replaceable by permanent cores, furnished in accordance with the following requirements.
      1) 3 construction control keys
      2) 12 construction change (day) keys.

4. Verify with Owner where permanent cores are to be shipped to.

2.14 KEYING

A. Provide a factory registered keying system, complying with guidelines in ANSI/BHMA A156.28, incorporating decisions made at keying conference.

B. Requirements:

1. Provide keying system capable of multiplex masterkeying.
2. Provide permanent cylinders/cores keyed by the manufacturer according to the following key system.
   a. Master Keying system as directed by the Owner.
   b. Match Owner's existing system.
   c. (Great)Grand Master Key System: Cylinders/cores operated by change(day) keys and subsequent masters (including grand/great grand) keys.

3. 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.
4. Provide keys with the following features:
   a. Material: Nickel silver; minimum thickness of .107-inch (2.3mm)

5. Identification:
   a. Mark permanent cylinders/cores and keys with applicable blind code for identification. Do not provide blind code marks with actual key cuts.
   b. Identification stamping provisions must be approved by the Architect and Owner.
   c. 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”.
   d. Forward permanent cylinders/cores to Owner, separately from keys, by means as directed by Owner.

6. Quantity: Furnish in the following quantities.
   a. Change (Day) Keys: 3 per cylinder/core.
   b. Permanent Control Keys: 3 (only applicable to interchangeable core).
   c. Master Keys: 6/ea (per master).
   d. Unused balance of key blanks shall be provided to Owner with cut keys.

7. Verify with Owner where permanent keys are to be shipped to.

2.15 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.

2.16 DOOR CLOSERS

A. Manufacturers and Products:

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

2. Acceptable Manufacturers and Products:
   a. Dorma Kaba QDC-100

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.

2.17 ELECTRO-HYDRAULIC AUTOMATIC OPERATORS

A. Manufacturers and Products:

1. Scheduled Manufacturer and Product:
   a. LCN 4600 series

2. Acceptable Manufacturers and Products:
   a. No Substitute

B. Requirements:

1. Provide low energy automatic operator units with hydraulic closer complying with ANSI/BHMA A156.19.
2. Hydraulic Fluid: Fireproof, passing requirements of UL10C, and requiring no seasonal closer adjustment for temperatures ranging from 120 degrees F to -30 degrees F.
3. Provide units with conventional door closer opening and closing forces unless power operator motor is activated. Provide door closer assembly with adjustable spring size, back-check, and opening and closing speed adjustment valves to control door
4. Provide units with on/off switch for manual operation, motor start up delay, vestibule interface delay, electric lock delay, and door hold open delay.
5. Provide drop plates, brackets, and adapters for arms as required for details.
6. Provide actuator switches and receivers for operation as specified.
7. Provide weather-resistant actuators at exterior applications.
8. Provide key switches with LED's, recommended and approved by manufacturer of automatic operator as required for function described in operation description of hardware group below. Cylinders: Refer to "KEYING" article, herein.
9. Provide complete assemblies of controls, switches, power supplies, relays, and parts/material recommended and approved by manufacturer of automatic operator for each individual leaf. Actuators control both doors simultaneously at pairs. Sequence operation of exterior and vestibule doors with automatic operators to allow ingress or egress through both sets of openings as directed by Architect. Locate actuators, key switches, and other controls as directed by Architect.
10. Provide units with vestibule inputs that allow sequencing operation of two units, and SPDT relay for interfacing with latching or locking devices.

2.18 DOOR TRIM

A. Manufacturers:

1. Scheduled Manufacturer:
   a. Ives

2. Acceptable Manufacturers:
   a. Trimco

b. Rockwood
c. Hager

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. Trimco
   b. Rockwood
   c. Hager

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 kick and armor plates 1 1/2 inches (51 mm) less width of door on single doors, and 1 inch (25 mm) less width of door on pairs. Adjust width at doors with mullions, edge guards, gasketing or other conflicting hardware.
3. Size mop plates 1" less width of door. Adjust width as needed for edge guards or other conflicting hardware.
4. 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. No Substitute

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. Provide friction type at doors without closer and positive type at doors with closer.

2.21 DOOR STOPS AND HOLDERS

A. Manufacturers:

1. Scheduled Manufacturer:

a. Ives

2. Acceptable Manufacturers:
   a. Trimco
   b. Rockwood

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
   c. Pemko

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. Rockwood
   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 DOOR POSITION SWITCHES

A. Manufacturers:

1. Scheduled Manufacturer:
   a. Schlage

2. Acceptable Manufacturers:
   a. George Risk Industries, Inc.

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.

2.25 FINISHES

A. Provide finish for each item as indicated in the sets.

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.

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

M. Closer/Holders: Mount closer/holders on room side of corridor doors, inside of exterior doors, and stair side of stairway doors.

N. 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.

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

P. 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.

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

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

S. 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:

124132 OPT0404333 Version 1

HARDWARE GROUP NO. 01

For use on Door #(s):
C132A C132B C132C C132E C132F C132G
C137

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 SIZE, QTY, NRP AS REQ'D (SEE SPECS)	652	IVE
1	EA	OFFICE/ENTRY LOCK	L9050J 03N L583-363	626	SCH
1	EA	CORE (FSIC)	23-030	626	SCH
1	EA	WALL STOP	WS406/407CVX	630	IVE
3	EA	SILENCER	SR64	GRY	IVE

HARDWARE GROUP NO. 02

For use on Door #(s):
C143A C145A

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 SIZE, QTY, NRP AS REQ'D (SEE SPECS)	652	IVE
1	EA	OFFICE/ENTRY LOCK	L9050J 03N L583-363	626	SCH
1	EA	CORE (FSIC)	23-030	626	SCH
1	EA	WALL STOP	WS406/407CVX	630	IVE
1	SET	SOUND SEAL	328AA-S	AA	ZER
1	EA	AUTO DOOR BOTTOM	364AA	AA	ZER

HARDWARE GROUP NO. 03

For use on Door #(s):
C136

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1HW SIZE, QTY, NRP AS REQ'D (SEE SPECS)	652	IVE
1	EA	OFFICE W/SIM RETRACT W/ OUTSIDE INDICATOR	L9056J 03N L583-363 OS-OCC	626	SCH
1	EA	CORE (FSIC)	23-030	626	SCH
1	EA	SURFACE CLOSER	4040XP REG	689	LCN
1	EA	KICK PLATE	8400 10"H X WIDTH AS REQ'D B-CS	630	IVE
1	EA	WALL STOP	WS406/407CVX	630	IVE
3	EA	SILENCER	SR64	GRY	IVE

FOR OPENINGS WITH EXISTING FRAMES: VERIFY EXISTING HINGE TYPE/PREPS AND PROVIDE HINGES THAT EXISTING PREPS ACCOMMODATE. PREP EXISTING FRAME ACCORDINGLY FOR NEW SPECIFIED HARDWARE. PROVIDE FILLERS/PLATES AS NECESSARY TO FILL/COVER UNUSED OR EXPOSED EXISTING PREPS.

HARDWARE GROUP NO. 04

For use on Door #(s):
C132K C132L C132M

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1HW SIZE, QTY, NRP AS REQ'D (SEE SPECS)	652	IVE
1	EA	OFFICE W/SIM RETRACT W/ OUTSIDE INDICATOR	L9056J 03N L583-363 OS-OCC	626	SCH
1	EA	CORE (FSIC)	23-030	626	SCH
1	EA	SURFACE CLOSER	4040XP REG	689	LCN
1	EA	KICK PLATE	8400 10"H X WIDTH AS REQ'D B-CS	630	IVE
1	EA	WALL STOP	WS406/407CVX	630	IVE
1	SET	SOUND SEAL	328AA-S	AA	ZER
1	EA	AUTO DOOR BOTTOM	364AA	AA	ZER

HARDWARE GROUP NO. 05

For use on Door #(s):
C132J

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1HW SIZE, QTY, NRP AS REQ'D (SEE SPECS)	652	IVE
1	EA	OFFICE W/SIM RETRACT W/ OUTSIDE INDICATOR	L9056J 03N L583-363 OS-OCC	626	SCH
1	EA	CORE (FSIC)	23-030	626	SCH
1	EA	SURFACE CLOSER	4040XP EDA	689	LCN
1	EA	KICK PLATE	8400 10"H X WIDTH AS REQ'D B-CS	630	IVE
1	EA	WALL STOP	WS406/407CVX	630	IVE
1	SET	SOUND SEAL	328AA-S	AA	ZER
1	EA	AUTO DOOR BOTTOM	364AA	AA	ZER
1	EA	SOUND SEAL MTG BRACKET	328SPB		ZER

HARDWARE GROUP NO. 06

For use on Door #(s):
C145C

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1HW SIZE, QTY, NRP AS REQ'D (SEE SPECS)	652	IVE
1	EA	DBL CYL STORE W/DB	L9466J 03N	626	SCH
2	EA	CORE (FSIC)	23-030	626	SCH
1	EA	SURFACE CLOSER (W/ DEAD STOP & HO)	4040XP HCUSH	689	LCN
1	EA	KICK PLATE	8400 10"H X WIDTH AS REQ'D B-CS	630	IVE
3	EA	SILENCER	SR64	GRY	IVE

FOR OPENINGS WITH EXISTING FRAMES: VERIFY EXISTING HINGE TYPE/PREPS AND PROVIDE HINGES THAT EXISTING PREPS ACCOMMODATE. PREP EXISTING FRAME ACCORDINGLY FOR NEW SPECIFIED HARDWARE. PROVIDE FILLERS/PLATES AS NECESSARY TO FILL/COVER UNUSED OR EXPOSED EXISTING PREPS.

HARDWARE GROUP NO. 07

For use on Door #(s):
C122 C125

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 SIZE, QTY, NRP AS REQ'D (SEE SPECS)	652	IVE
1	EA	STOREROOM LOCK	L9080J 03N	626	SCH
1	EA	CORE (FSIC)	23-030	626	SCH
1	EA	WALL STOP	WS406/407CVX	630	IVE
3	EA	SILENCER	SR64	GRY	IVE

FOR OPENINGS WITH EXISTING FRAMES: VERIFY EXISTING HINGE TYPE/PREPS AND PROVIDE HINGES THAT EXISTING PREPS ACCOMMODATE. PREP EXISTING FRAME ACCORDINGLY FOR NEW SPECIFIED HARDWARE. PROVIDE FILLERS/PLATES AS NECESSARY TO FILL/COVER UNUSED OR EXPOSED EXISTING PREPS.

HARDWARE GROUP NO. 08

For use on Door #(s):
C142A

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
1	EA	CONT. HINGE	112XY EPT	628	IVE
1	EA	POWER TRANSFER	EPT10	689	VON
1	EA	ELEC MORTISE LOCK (FAIL SECURE W/ RX)	L9092TEU 03N RX 12/24 VDC	626	SCH
1	EA	CORE (FSIC)	23-030	626	SCH
1	EA	SURFACE CLOSER	4040XP EDA	689	LCN
1	EA	PA MOUNTING PLATE	4040XP-18PA	689	LCN
1	EA	BLADE STOP SPACER	4040XP-61	689	LCN
1	EA	WALL STOP	WS406/407CVX	630	IVE
1	EA	PUSH BUTTON RELEASE	BY DIV 28		B/O
1	EA	INTERCOM	BY DIV 28		B/O
1	EA	CREDENTIAL READER	BY OWNER		B/O
1	EA	POWER SUPPLY	SHARED WITH ADJACENT DOOR		B/O
1	EA	DOOR CONTACT	679-05	BLK	SCE

DOOR NORMALLY CLOSED AND LOCKED. WHEN DOOR A101B IS CLOSED, PRESENTING VALID CREDENTIAL TO READER, OR PUSH BUTTON AT RECEPTION DESK, WILL UNLOCK OUTSIDE LEVER, ALLOWING ACCESS. WHEN A101A IS OPEN, DOOR A101B IS LOCKED IN BOTH DIRECTIONS. DOOR REMAINS LOCKED WITH LOSS OF POWER. FREE EGRESS AT ALL TIMES.

HARDWARE GROUP NO. 09

For use on Door #(s):
C123A

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
1	EA	CONT. HINGE	112XY EPT	628	IVE
1	EA	POWER TRANSFER	EPT10	689	VON
1	EA	ELEC MORTISE LOCK (FAIL SECURE W/ RX)	L9092TEU 03N RX 12/24 VDC	626	SCH
1	EA	CORE (FSIC)	23-030	626	SCH
1	EA	SURFACE CLOSER (W/ SPRING STOP)	4040XP SCUSH	689	LCN
1	EA	PA MOUNTING PLATE	4040XP-18PA	689	LCN
1	EA	CUSH SHOE SUPPORT	4040XP-30	689	LCN
1	EA	BLADE STOP SPACER	4040XP-61	689	LCN
1	EA	RAIN DRIP	142AA	AA	ZER
1	EA	WEATHERSTRIPPING	BY DOOR/FRAME MANUFACTURER		B/O
1	EA	DOOR SWEEP, BRUSH W/ DRIP	8198AA	AA	ZER
1	EA	THRESHOLD, 1/2"	655A	A	ZER
1	EA	CREDENTIAL READER	BY OWNER		B/O
1	EA	DOOR CONTACT	679-05	BLK	SCE
1	EA	POWER SUPPLY	PS902 120/240 VAC	LGR	SCE

DOOR NORMALLY CLOSED AND LOCKED. PRESENTING VALID CREDENTIAL TO READER WILL UNLOCK OUTSIDE LEVER, ALLOWING ACCESS. DOOR REMAINS LOCKED WITH LOSS OF POWER. FREE EGRESS AT ALL TIMES.

HARDWARE GROUP NO. 10

For use on Door #(s):
C126 C134B C141

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 SIZE, QTY, NRP AS REQ'D (SEE SPECS)	652	IVE
1	EA	STOREROOM LOCK	L9080J 03N	626	SCH
1	EA	CORE (FSIC)	23-030	626	SCH
1	EA	SURFACE CLOSER (W/ DEAD STOP)	4040XP CUSH	689	LCN
1	EA	KICK PLATE	8400 10"H X WIDTH AS REQ'D B-CS	630	IVE
3	EA	SILENCER	SR64	GRY	IVE

FOR OPENINGS WITH EXISTING FRAMES: VERIFY EXISTING HINGE TYPE/PREPS AND PROVIDE HINGES THAT EXISTING PREPS ACCOMMODATE. PREP EXISTING FRAME ACCORDINGLY FOR NEW SPECIFIED HARDWARE. PROVIDE FILLERS/PLATES AS NECESSARY TO FILL/COVER UNUSED OR EXPOSED EXISTING PREPS.

HARDWARE GROUP NO. 11

For use on Door #(s):
C135

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 SIZE, QTY, NRP AS REQ'D (SEE SPECS)	652	IVE
1	EA	STOREROOM LOCK	L9080J 03N	626	SCH
1	EA	CORE (FSIC)	23-030	626	SCH
1	EA	SURFACE CLOSER	4040XP REG	689	LCN
1	EA	KICK PLATE	8400 10"H X WIDTH AS REQ'D B-CS	630	IVE
1	EA	WALL STOP	WS406/407CVX	630	IVE
3	EA	SILENCER	SR64	GRY	IVE

FOR OPENINGS WITH EXISTING FRAMES: VERIFY EXISTING HINGE TYPE/PREPS AND PROVIDE HINGES THAT EXISTING PREPS ACCOMMODATE. PREP EXISTING FRAME ACCORDINGLY FOR NEW SPECIFIED HARDWARE. PROVIDE FILLERS/PLATES AS NECESSARY TO FILL/COVER UNUSED OR EXPOSED EXISTING PREPS.

HARDWARE GROUP NO. 12

For use on Door #(s):
C102A1 C102A2

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
6	EA	HINGE	5BB1 SIZE, QTY, NRP AS REQ'D (SEE SPECS)	652	IVE
1	EA	CONST LATCHING BOLT	FB51T/FB61T (AS REQ'D)	630	IVE
1	EA	STOREROOM LOCK	L9080J 03N	626	SCH
1	EA	CORE (FSIC)	23-030	626	SCH
2	EA	OH STOP	450S	652	GLY
2	EA	SILENCER	SR64	GRY	IVE

HARDWARE GROUP NO. 13

For use on Door #(s):
C134A

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
6	EA	HINGE	5BB1 SIZE, QTY, NRP AS REQ'D (SEE SPECS)	652	IVE
1	EA	AUTO FLUSH BOLT	FB31T/FB41T (AS REQ'D)	630	IVE
1	EA	STOREROOM LOCK	L9080J 03N	626	SCH
1	EA	CORE (FSIC)	23-030	626	SCH
1	EA	COORDINATOR	COR X FL (MB AS REQ'D)	628	IVE
2	EA	SURFACE TRACK CLOSER (W/ STOP)	4040XPT BUMP	689	LCN
2	EA	KICK PLATE	8400 10"H X WIDTH AS REQ'D B-CS	630	IVE
2	EA	SILENCER	SR64	GRY	IVE

FOR OPENINGS WITH EXISTING FRAMES: VERIFY EXISTING HINGE TYPE/PREPS AND PROVIDE HINGES THAT EXISTING PREPS ACCOMMODATE. PREP EXISTING FRAME ACCORDINGLY FOR NEW SPECIFIED HARDWARE. PROVIDE FILLERS/PLATES AS NECESSARY TO FILL/COVER UNUSED OR EXPOSED EXISTING PREPS.

HARDWARE GROUP NO. 14

For use on Door #(s):
C142B

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
1	EA	CONT. HINGE	112XY EPT	628	IVE
1	EA	POWER TRANSFER	EPT10	689	VON
1	EA	ELEC MORTISE LOCK (BOTH SIDES, FAIL SAFE)	L9091EL 03N	626	SCH
1	EA	DEADBOLT (TTURN ONE SIDE)	B680 12-631 (TTURN ON A101 SIDE)	626	SCH
1	EA	SURFACE CLOSER	4040XP EDA	689	LCN
1	EA	PA MOUNTING PLATE	4040XP-18PA	689	LCN
1	EA	BLADE STOP SPACER	4040XP-61	689	LCN
1	EA	WALL STOP	WS406/407CVX	630	IVE
1	EA	PUSH BUTTON LOCKOUT	BY DIV 28		B/O
1	EA	POWER SUPPLY	SHARED WITH ADJACENT DOOR		B/O
1	EA	DOOR CONTACT	679-05	BLK	SCE

NORMALLY UNLOCKED IN BOTH DIRECTIONS. OPENING LOCKS IN BOTH DIRECTIONS WHEN DOOR A101A IS OPEN. DOOR A101A WILL NOT UNLOCK IF DOOR A101B IS OPEN. MAINTAINED PUSH BUTTON AT RECEPTION DESK TOGGLES DOOR LOCKED/UNLOCKED IN BOTH DIRECTIONS. DEADBOLT WITH THUMBTURN ONLY ON A101 SIDE LOCKS ADMIN AREA AFTER HOURS. DOOR REMAINS UNLOCKED WITH LOSS OF POWER.

HARDWARE GROUP NO. 15

For use on Door #(s):
C140A

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
2	EA	CONT. HINGE	112XY EPT	628	IVE
2	EA	POWER TRANSFER	EPT10	689	VON
1	EA	REMOVABLE MULLION	KR4954 STAB	689	VON
1	EA	ELEC PANIC HARDWARE (W/ RX & LX)	LX-RX-QEL-99-NL-OP-110MD 24 VDC	626	VON
1	EA	ELEC PANIC HARDWARE (W/ RX)	RX-QEL-99-EO 24 VDC	626	VON
1	EA	RIM CYL HOUSING (FSIC)	20-079 ICX	626	SCH
1	EA	MORTISE CYL HOUSING (FSIC)	26-094	626	SCH
2	EA	CORE (FSIC)	23-030	626	SCH
2	EA	90 DEG OFFSET PULL	8190EZHD 10" O	630-316	IVE
2	EA	OH STOP	100S ADJ	630	GLY
1	EA	SURFACE CLOSER	4040XP TOP JAMB	689	LCN
1	EA	SURF. AUTO OPERATOR	4642 WMS 120 VAC (FLUSH CEILING MOUNT)	689	LCN
1	EA	MOUNTING PLATE	4040XP-18G	689	LCN
2	EA	ACTUATOR, TOUCH	8310-853T	630	LCN
2	EA	MOUNT BOX	8310-867F		LCN
1	EA	MULLION SEAL	8780NBK PSA	BK	ZER
1	EA	CREDENTIAL READER	BY OWNER		B/O
2	EA	DOOR CONTACT	679-05	BLK	SCE
1	EA	POWER SUPPLY	PS904 900-4RL 120/240 VAC	LGR	SCE

DOOR NORMALLY CLOSED AND LOCKED AND EXTERIOR ACTUATOR DISABLED. PRESENTING VALID CREDENTIAL TO READER RETRACTS EXIT DEVICE LATCH AND ENABLES EXTERIOR ACTUATOR. PUSHING ENABLED EXTERIOR ACTUATOR SIGNALS AUTOMATIC OPERATOR TO OPEN DOOR. INTERIOR ACTUATOR ENABLED AT ALL TIMES. PUSHING INTERIOR ACTUATOR RETRACTS LATCH AND SIGNALS AUTOMATIC OPERATOR TO OPEN DOOR. EXIT DEVICE LATCHES ALSO CAPABLE OF BEING ELECTRONICALLY DOGGED DOWN (I.E. PUSH/PULL MODE) AS DESIGNATED BY ACCESS CONTROL SYSTEM SCHEDULE. EXIT DEVICES LATCH AND LOCK WITH LOSS OF POWER. DOOR CONTACTS MONITOR DOOR POSITION. RX SWITCHES IN PANIC PUSH BARS SHUNT DOOR CONTACTS WHEN EGRESSING. FREE EGRESS AT ALL TIMES.

HARDWARE GROUP NO. 16

For use on Door #(s):
C140B

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
2	EA	CONT. HINGE	112XY EPT (OR 027XY EPT AS REQ'D FOR DR THK)	628	IVE
2	EA	POWER TRANSFER	EPT10	689	VON
1	EA	REMOVABLE MULLION	KR4954 STAB	689	VON
1	EA	ELEC PANIC HARDWARE (W/ RX & LX)	LX-RX-QEL-99-NL-OP-110MD 24 VDC	626	VON
1	EA	ELEC PANIC HARDWARE (W/ RX)	RX-QEL-99-EO 24 VDC	626	VON
1	EA	RIM CYL HOUSING (FSIC)	20-079 ICX	626	SCH
1	EA	MORTISE CYL HOUSING (FSIC)	26-094	626	SCH
2	EA	CORE (FSIC)	23-030	626	SCH
2	EA	90 DEG OFFSET PULL	8190EZHD 10" O	630-316	IVE
2	EA	OH STOP	100S ADJ	630	GLY
1	EA	SURFACE CLOSER	4040XP TOP JAMB	689	LCN
1	EA	SURF. AUTO OPERATOR	4642 WMS 120 VAC (FLUSH CEILING MOUNT)	689	LCN
1	EA	MOUNTING PLATE	4040XP-18G	689	LCN
1	EA	WEATHER RING	8310-801		LCN
2	EA	ACTUATOR	8310-853T	630	LCN
2	EA	MOUNT BOX	8310-867S		LCN
1	EA	MULLION SEAL	8780NBK PSA	BK	ZER
1	EA	WEATHERSTRIPPING	BY DOOR/FRAME MANUFACTURER		B/O
2	EA	DOOR SWEEP, BRUSH W/ DRIP	8198AA	AA	ZER
1	EA	THRESHOLD, 1/2"	655A	A	ZER
1	EA	CREDENTIAL READER	BY OWNER		B/O
2	EA	DOOR CONTACT	679-05	BLK	SCE
1	EA	POWER SUPPLY	PS906 900-4RL 900-4RL 120/240 VAC	LGR	SCE

DOOR NORMALLY CLOSED AND LOCKED AND EXTERIOR ACTUATOR DISABLED. PRESENTING VALID CREDENTIAL TO READER RETRACTS EXIT DEVICE LATCH AND ENABLES EXTERIOR ACTUATOR. PUSHING ENABLED EXTERIOR ACTUATOR SIGNALS AUTOMATIC OPERATOR TO OPEN DOOR. INTERIOR ACTUATOR ENABLED AT ALL TIMES. PUSHING INTERIOR ACTUATOR RETRACTS LATCH AND SIGNALS AUTOMATIC OPERATOR TO OPEN DOOR. EXIT DEVICE LATCHES ALSO CAPABLE OF BEING ELECTRONICALLY DOGGED DOWN (I.E. PUSH/PULL MODE) AS DESIGNATED BY ACCESS CONTROL SYSTEM SCHEDULE. EXIT DEVICES LATCH AND LOCK WITH LOSS OF POWER. DOOR CONTACTS MONITOR DOOR POSITION. RX SWITCHES IN PANIC PUSH BARS SHUNT DOOR CONTACTS WHEN EGRESSING. FREE EGRESS AT ALL TIMES.

HARDWARE GROUP NO. 17

For use on Door #(s):
C132N

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
2	EA	SPRING HINGE	3SP1 4.5 X 4.5	630	IVE
4	EA	HINGE	5BB1 SIZE, QTY, NRP AS REQ'D (SEE SPECS)	652	IVE
1	EA	AUTO FLUSH BOLT	FB31T/FB41T (AS REQ'D)	630	IVE
1	EA	PANIC HARDWARE	CDSI-9975-L-NL-03	626	VON
1	EA	RIM CYL HOUSING (FSIC)	20-079 ICX	626	SCH
1	EA	MORTISE CYL HOUSING (FSIC)	26-094 XQ11-948	626	SCH
2	EA	CORE (FSIC)	23-030	626	SCH
1	EA	COORDINATOR	COR X FL (MB AS REQ'D)	628	IVE
1	EA	SURFACE CLOSER (W/ DEAD STOP & HO)	4040XP HCUSH	689	LCN
2	EA	KICK PLATE	8400 10"H X WIDTH AS REQ'D B-CS	630	IVE
1	EA	WALL STOP	WS406/407CVX	630	IVE
2	EA	SILENCER	SR64	GRY	IVE

HARDWARE GROUP NO. 18

For use on Door #(s):
C102A C102B C127A C128A C128B C132P

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1HW SIZE, QTY, NRP AS REQ'D (SEE SPECS)	652	IVE
1	EA	PANIC HARDWARE	CDSI-9975-L-NL-03	626	VON
1	EA	RIM CYL HOUSING (FSIC)	20-079 ICX	626	SCH
1	EA	MORTISE CYL HOUSING (FSIC)	26-094 XQ11-948	626	SCH
2	EA	CORE (FSIC)	23-030	626	SCH
1	EA	SURFACE CLOSER (W/ DEAD STOP & HO)	4040XP HCUSH	689	LCN
1	EA	KICK PLATE	8400 10"H X WIDTH AS REQ'D B-CS	630	IVE
3	EA	SILENCER	SR64	GRY	IVE

FOR OPENINGS WITH EXISTING FRAMES: VERIFY EXISTING HINGE TYPE/PREPS AND PROVIDE HINGES THAT EXISTING PREPS ACCOMMODATE. PREP EXISTING FRAME ACCORDINGLY FOR NEW SPECIFIED HARDWARE. PROVIDE FILLERS/PLATES AS NECESSARY TO FILL/COVER UNUSED OR EXPOSED EXISTING PREPS.

HARDWARE GROUP NO. 19

For use on Door #(s):
C129A

Provide each OPENING with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
1	EA	MORTISE CYL HOUSING (FSIC)	26-094	626	SCH
1	EA	CORE (FSIC)	23-030	626	SCH

CYLINDER/CORE FOR EXISTING REMOVEABLE MULLION. BALANCE HARDWARE EXISTING TO REMAIN.

END OF SECTION