Hite associates

ARCHITECTURE / PLANNING / TECHNOLOGY

PRE-BID MEETING / ADDENDUM NO. 1

January 10, 2025

Project: New Security Entrance for Lee County High School

LEE COUNTY SCHOOLS

TO: ALL BIDDERS

The following items clarify, add to, delete from, and / or otherwise change and supersede information previously issued to you in the bidding documents for the referenced project. Please read them carefully and adjust your bid accordingly.

Please note that addendums, and all revised documents are available via Hite Associates website www.hiteassoc.com under the "Contractor Resources" link.

Pre-Bid Meeting Attendees

Name	Firm	Phone #	E-Mail
Robert Edmondson	Hite Associates, PC	252-757-0333	redmondson@hiteassoc.com
Chris McNeill	Lee County Schools	919-770-0530	chrismcneill@lee.k12.nc.us
Cam Greer	Muter Construction	404-259-0828	buildingbids@muterconstruction.com
Austin Riccio	Bar Construction	336-274-2477	bids@barconstruction.com
Spencer	Primus Structures	919-747-1587	spencer@primusstructures.com
Gabe Hardeax	KNC	336-422-8440	gabrielh@knctech.us
Jonathan Kincaid	NC Sound	252-620-0952	jkincaid@ncsound.org

PRE-BID MEETING MINUTES:

- 1. Preferred manufacturer alternates were reviewed.
- 2. 2N IP Force is the preferred video intercom buzz-in unit. Specification 08700 Finish Hardware will be revised for these two access control hardware items.
- 3. IDF and MDP rooms, and electrical panels are located on the Drawings. Contractor shall provide power and data as specified from existing electrical panels and IDF locations shown.
- 4. General Contractors, as a single prime contractor, are to carry a Division 16 electrical subcontractor for the required electrical work, and a Division 17 technology subcontractor for the specified data and access control work.
- 5. Chris McNeill introduced KNC as the local area electronic access control Division 17 subcontractor as an FYI for the General Contractor bidders.

- 6. All electrical work is to comply with the current NC Building Code and the National Electrical Code. Refer to Division 16 electrical specifications.
- 7. Follow up site visits, with the Owner, are scheduled for 9:00 a.m. Tuesday January 14, 2025, beginning at the Nash Street Maintenance Office with Chris McNeill. General Contractors will be bringing electrical subcontractor to participate.
- 8. Electrical power and data circuits to be run underground in conduit raceways at the exterior areas, and above ceilings for building interior routing, to the nearest electrical panel with available expansion space.
- 9. Prior to any earthwork, a utilities location service is to be retained by the contractor per 02700 Selective Demolition.
- 10. RFI's and bidder questions to be e-mailed to Robert Edmondson, redmondson@hiteassoc.com; Briana Nunley, bnunley@hiteassoc.com; and Jimmy Hite, jgh@hiteassoc.com.
- 11. Completion Dates were reviewed. it was explained that materials procurements can proceed immediately upon contract execution / and issuance of the Notice To Proceed, and that work on site can begin June 9. Materials can be stored and staged on site prior to June 9.

ADDENDUM NO. 1

- 1. Table Of Contents is added for Lee County High School specification book.
- 2. Section 01012 Supplementary Conditions, Completion Dates are revised:

COMPLETION DATES (ALL DATES CERTAIN)

- A. The Start Date for the project will be the date of receipt of the Notice to Proceed issued by the Architect.
- B. ON SITE WORK START: MONDAY JUNE 9, 2025
- C. COMPLETE ALL WORK: FRIDAY AUGUST 8, 2025 The General Contractor shall complete all work and confirm in writing to the Architect that they have completed the Architect's construction review list (liquidated damages incurred).
- D. OCTOBER 8, 2025: General Contractor shall complete any remaining construction review items issued by Architect's (additional liquidated damages incurred).
- 3. Specification 08700: The video intercom buzz-in unit is revised to be a 2N IP Force unit.
- 4. Materials testing firm to be retained and paid from the project 01056 Allowance.

END OF ADDENDUM NO. 1

James G. Hite, AIA, Project Architect

Hite Associates, PC

BIDDERS PLEASE NOTE THAT REFERENCED REVISED DOCUMENTS AND DRAWING REVISIONS ARE MARKED AS SUCH ON THE REVISION BLOCK ON THE PLANS AND ARE TO BE ACCESSED ON THE HITE ASSOCIATES WEBSITE.

Revised / Added Documents:

Table of Contents Lee County High School Supplementary Conditions Specification 08700 Finish Hardware

cc: All Bidders / Chris McNeill

dist.: JGH / RBE / File: Bids & Addenda

NOTICE TO BIDDERS

INSTRUCTIONS TO BIDDERS

SUPPLEMENTARY INSTRUCTIONS TO BIDDERS

FORM OF PROPOSAL

HUB INSTRUCTIONS AND FORMS FOR BIDS

FORM OF CONTRACT

DIVISION 1 - GENERAL REQUIREMENTS

Section 01010 - General Conditions of the Contract

01012 - Supplementary Conditions

01040 - General Requirements & Construction Schedule

01055 - Alternates 01056 - Allowances

01068 - Index of Industry Standards Abbreviations

DIVISION 2 - SITE WORK

Section 02070 - Selective Demolition

02110 - Site Clearing

02200 - Earthwork

02400 - Erosion Control

02480 - Landscape Work

02500 - Concrete Curb, Gutter, and Sidewalks

02736 - Storm Sewer System

02830 - Chain Link Fence and Gates

02835 - Sliding Gate Operators

DIVISION 3 - CONCRETE

Section 03100 - Concrete Formwork

03200 - Cast-In-Place Concrete

03250 - Concrete Finishes

03300 - Concrete Reinforcement

DIVISION 4 - MASONRY

Section 04200 - Unit Masonry

Brick Technical Notes 7B; Water Resistance - Construction and Workmanship

DIVISION 5 - METALS

Section 05120 - Structural Steel

05400 - Cold-Formed Metal Stud Framing System

05500 - Metal Fabrications

DIVISION 6 - WOOD AND PLASTICS

Section 06100 - Rough Carpentry

DIVISION 7 - THERMAL AND MOISTURE PROTECTION

Section 07600 - Flashing and Sheet Metal

07900 - Joint Sealers

DIVISION 8 - DOORS AND WINDOWS

Section 08210 - FRP Doors and Frames

08700 - Finish Hardware - Including Security

08800 - Glass and Glazing 08870 – Security Glazing Films 088853 – Security Glazing

DIVISION 9 - FINISHES

(NOT USED)

DIVISION 10 - SPECIALTIES

(NOT USED)

DIVISION 11 - EQUIPMENT

(NOT USED)

DIVISION 12 - FURNISHINGS

(NOT USED)

DIVISION 13 - SPECIAL CONSTRUCTION

(NOT USED)

DIVISION 14 - CONVEYING SYSTEMS

(NOT USED)

DIVISION 15 - MECHANICAL

(NOT USED)

DIVISION 15A - PLUMBING

(NOT USED)

DIVISION 15B - HEATING, VENTILATION, & AIR CONDITIONING

(NOT USED)

DIVISION 16 - ELECTRICAL

Section 16000 - General Provision

16100 - Raceways and Conduits

16140 - Conductors and Wiring Devices

16400 - Service and Distribution

16500 - Lighting Systems 16700 - Security Systems

16900 - Tests and Project Close-Out

DIVISION 17 INTERGRATED COMMUNICATIONS

Section 17000 - General Provisions

17100 - Intergraded Communication System

17200 - Horizontal Cabling 17250 - Backbone Cabling

17900 - Tests, Commissioning and Project Closeout

END OF TABLE OF CONTENTS

NOTE: THESE CONDITIONS SUPERCEDE ANY CONFLICTING CONDITIONS IN THE $\underline{\mathsf{GENERAL}}$ CONDITIONS.

SALES TAX

Itemized sales tax expenditures by the Contractor will be reimbursed to the Owner. BIDS MUST INCLUDE SALES TAX.

DELAYS / CLAIMS

Any contractor whose work is delayed for reasons beyond his control shall immediately notify the Architect as to the nature of the delay, the cause of the delay, and the immediate effect on the project, including cost effects. Verbal notification shall be followed with written notification to the Architect no later than 10 days following the delay; otherwise, no consideration for a claim will be given. For delays claimed by reason of weather, the Contractor shall be required to substantiate such claim by the submission of weather reports for the time period of the delay as well as national weather service reports for the project area for the last ten years, the average of which shall become the basis to determine the validity of such claim. Time extensions granted for reasons of weather or other reasons except as caused by the Owner, with exceptions and time limits for convenience of the Owner as indicated under Section 01011, do not entitle the Contractor to "extended overhead" or "lost profit" recovery.

Delays which do not affect activities on the Critical Path of the approved CPM Construction Schedule will not be considered reason to allow time extensions. Time extensions granted for reasons other than natural weather disasters do not entitle the Contractor to "lost profit" recovery. Time extensions granted for reasons other than natural weather disasters do not entitle the Contractor to "extended overhead" recovery.

CLEAN UP AND PROTECTION OF WORK

The Contractor shall replace any broken glass, remove stains, spots and dirt from decorated work, clean hardware, remove paint spots and smears from all surfaces, clean plumbing fixtures and wash all concrete, and clean and wax resilient tile floors and clean hard tile floors. The Contractor shall be responsible for leaving his work clean in all respects, and shall be responsible for protecting his work from damage by other parties.

CHANGES IN THE WORK

The cost or credit to the Owner resulting from a Change in the work shall be determined as follows:

- 1. Allowances for overhead and profit combined shall not exceed 15 percent of net cost except when the change involves a Subcontractor, in which case allowances shall not exceed 15 percent for the Subcontractor and 7-1/2 percent for the Prime Contractor.
- 2. The profit and overhead rates proposed by the Contractor for the initial Change in the Work shall not be changed or modified for the duration of the Contract, and shall apply equally for additive and / or deductive changes.
- 3. The term "net cost" as used herein shall mean the difference between all proper cost additions and deductions. The "cost" as used herein may include all items of material and labor, the use of power tools and equipment, and such items of cost as Workmen's Compensation Insurance, Social Security and Old Age Benefit, Performance Bond Adjustment and pro-rata charges for foreman. The following items shall be considered as overhead: insurance other than mentioned above, supervision, superintendents, timekeepers, clerks, watchmen, small tools, incidental job burdens and general office expense, and all other items not included in "cost" as above defined.

4. Price requests for changes in the Work furnished to the Architect shall include individual costs for materials, labor, subcontractor work (if applicable), and profit and overhead.

TIME

The Contractor shall fully complete the Work in accordance with the schedule of COMPLETION DATES which are DATES CERTAIN, with no time extensions granted for any reason other than delays caused by the Owner (see below).

WEATHER

Weather is by its nature not "normal", and rail fall varies from year to year. Weather delays are to be accommodated within the schedule as specified, however, "natural disasters", such as caused by severe hurricanes, are excepted. In making his bid, the bidder acknowledges that provisions to accelerate the schedule will be provided as required to meet the scheduled dates, to accommodate abnormal weather conditions, or other delays, except as caused by the Owner.

PROJECT PHASING (note: "Prime" contractor means "sub" contractor under a Single Prime contracting method)

- The General Contractor is responsible as the project coordinator for all the Prime Contractors. It
 is the General Contractor's responsibility to schedule the work of all Contractors, to maintain
 weekly reports to the Architect and the Owner regarding the status of activities of all Contractors,
 and to submit plans to the Architect and Owner for recovery of any scheduled activity by any
 Contractor, to the Owner and Architect, for review and immediate implementation.
- 2. Each Prime Contractor shall be required to coordinate their schedule of activities with the General Contractor, and, in submitting a bid, agree to execute a construction schedule in conformance with the required completion dates. All parts of this schedule will be binding on each Contractor, and it is agreed by all Contractors that liquidated damages will be withheld for any delays caused by them which affect the completion date directly or indirectly, in the sole opinion of the Architect, as further described and defined under the Contract for Construction.
- 3. All Contractors agree that maintaining the scheduled completion of individual activities is essential for the overall completion of the project schedule, and understand that many activities by other Contractors are dependent on timely completion of their own activities. As such, it is understood and agreed by all Contractors that liquidated damages will be withheld, at the time of delay, for any delays which impact the completion of activities by other Contractors and cause the schedule to be revised to a later completion date. For example, the Sitework Contractor must complete various aspects of sitework in a timely manner to allow the other Prime Contractors to store and stage materials on stoned parking areas, or that finish grading, seeding, mulching, and fertilizing operations shall be completed in a manner which will allow the other Prime Contractors to complete their exterior finish work on time, to provide the project with a completed, full stand of grass on the completion date and not afterwards. As an additional example, General Contractor shall schedule his work and make all provisions to allow the Mechanical Contractor to complete his work in a timely manner to meet his scheduled completion date, which is prior to the General Contractor's completion date, in order for the General Contractor to utilize the HVAC system for conditioning of the building. The foregoing illustrative examples are not intended to imply a listing of issues possible but only to serve as examples.
- 4. It is understood by all bidders that they will cooperate with each other to formulate and agree on a construction schedule detailing all significant activities of the project within 30 days of award.

COMPLETION DATES (ALL DATES CERTAIN)

The Start Date for the project will be the date of receipt of the Notice to Proceed issued by the Architect.

ON SITE WORK START: MONDAY JUNE 9, 2025

COMPLETE ALL WORK: FRIDAY AUGUST 8, 2025 - The General Contractor shall complete all work and confirm in writing to the Architect that they have completed the Architect's construction review list (liquidated damages incurred).

OCTOBER 8, 2025: General Contractor shall complete any remaining construction review items issued by Architect's (additional liquidated damages incurred).

LIQUIDATED DAMAGES

For each day in excess of the number of days allowed to complete construction under COMPLETION DATES, the Contractor shall pay to the Owner the sum of \$100.00, as liquidated damages reasonably estimated in advance to cover the costs and/or losses incurred by the Owner by the failure of the Contractor to complete the Work of any Phase indicated in the time specified, such time being in the essence of this Contract and a material consideration thereof. Liquidated damages for days in excess of completion date shall be held as retainage from monthly payments by the Owner, and released from subsequent payments only if delay days are made up and no damages have been incurred by the Owner. The Architect shall be the sole judge as to the division of responsibility between the prime contractors, and shall apportion the amount of liquidated damages to be paid by each of them, according to delay caused by any or all of them. Issuance of a Certificate of Occupancy by any Building Official DOES NOT constitute Substantial Completion or completion of construction under this paragraph. Substantial Completion is defined as suitable for use, in the opinion of the Owner and the Architect.

ADDITIONAL LIQUIDATED DAMAGES

For each day in excess of sixty days beyond the date of Substantial Completion that any corrective or incompleted items remain to be done, for each scheduled date, the Contractor shall pay to the Owner the sum of \$100.00, as liquidated damages reasonably estimated in advance to cover the costs and/or losses incurred by the Owner by the failure of the Contractor to complete such corrective work or incomplete items, such time being in the essence of this Contract and a material consideration thereof.

OWNER'S RIGHT TO COMPLETE WORK TO MAINTAIN SCHEDULE

The Contractor agrees that if the Architect determines, at his sole discretion, that the Contractor has repeatedly or persistently failed or refused to implement such measures as will bring the progress of the Work into conformity with the Construction Schedule, then the Owner may contract with others or use the Owner's own forces to perform the Work to bring the progress into conformity with the Construction Schedule. The Contractor agrees that the Owner will be entitled to a set off for the cost thereof including, but not limited to, actual costs, legal fees, and additional overhead costs, which will be charged against the Contract Sum due the Contractor.

PAY APPLICATIONS AND RETAINAGE

Contractor shall submit Applications for Payments to the Architect monthly for work completed and materials stored ending the twenty-fifth day of the month. Retainage shall be five percent (5%) of monthly estimates. The Architect may, at any time after fifty percent of the work has been completed, if he finds that satisfactory progress is being made and with written consent of Contractor's Surety, recommend to the Owner that retainage be reduced to two and one-half percent (2.5%) of monthly estimates.

Sales tax expenditures shall be substantiated with a certified statement by the Contractor and each of his Subcontractors individually showing total purchases of material from each separate vendor and total sales taxes paid each vendor. Certified statement must have the invoice number or numbers covered and inclusive dates of such invoices.

Materials used from Contractor's or Subcontractor's warehouse stock shall be shown in certified statement at warehouse stock prices and amount of tax paid.

The Contractor shall not be required to certify the Sub-Contractor's statements.

The Contractor and each of his Sub-Contractors shall also show purchases of materials from each separate vendor and the cost of same for which no sales tax has been paid.

BUILDERS RISK INSURANCE

Contractor shall provide Builder's Risk Insurance, payable to the Contractor and Owner as their interest may appear upon the entire work and upon all materials in or adjacent thereto which are to be made apart of the work to 100% of the insurable value thereof covering fire, extended coverage, vandalism and Malicious mischief.

END OF SUPPLEMENTARY CONDITIONS

RELATED DOCUMENTS:

The general provisions of the Contract, including General and Supplementary Conditions, and General Requirements, apply to the work specified in this Section.

PART 1: GENERAL

DESCRIPTION OF WORK:

Work of this Section shall include all labor, materials, equipment, transportation, tools and storage required for complete installation of all finish hardware shown and scheduled on Drawings and specified herein. Intent of this Specification is to provide complete finishing hardware requirements for entire building project excepting hardware, which is specifically mentioned hereinafter as being furnished by others. Any openings not specifically mentioned herein shall be furnished consistent with hardware specified for similar openings.

Wood doors for Project are prefit. Coordinate with wood door manufacturer in furnishing hardware templates and schedules at earliest possible time.

INDUSTRY STANDARDS:

For listing of names of industry standard agencies mentioned by abbreviation in this section refer to Section 01068.

QUALITY ASSURANCE:

<u>Manufacturers</u>: Hardware listed in Hardware Schedule shall be supplied by one of following Manufacturers listed for each item or an equal. To establish quality of hardware required, catalog numbers of Manufacturers listed in Hardware Schedule have been used. Hardware furnished shall be of equal type, design, quality and function as that specified in Hardware Schedule.

<u>Acceptable Manufacturers</u>: Similar items manufactured or furnished by other manufacturers may be submitted for approval, subject to these Specification requirements and written approval received 7 days prior to bid date.

<u>Supplier's Qualifications</u>: Contractor shall select only supplier who has in his employ qualified personnel, who shall manage and coordinate complete hardware contract, and shall also be available to visit Project in order to solve or correct conditions affecting proper hardware installation or adjustment, as required.

SUBMITTALS:

<u>Schedule</u>: Submit Hardware Schedule to Architect in six (6) copies, as promptly as possible, showing quantities, types, catalog numbers and locations of various items of finish hardware required. Submit as specified for shop drawings in accordance with GENERAL CONDITIONS.

<u>Job Completion Instructions</u>: At completion of work turn over to Owner all tools, instructions, and maintenance information for his use in maintaining hardware. Furnish Owner also with two copies of Job Use Finish Hardware Schedule for his permanent records.

PRODUCT HANDLING:

<u>Packing</u>, <u>Marking and Labeling</u>: Deliver hardware to project site in manufacturer's original packages. Each article of hardware shall be neatly wrapped and individually packed in substantial carton or other container, properly marked or labeled to be readily identifiable with Hardware Schedule.

<u>Storage</u>: General Contractor shall furnish secure storage area for delivery by Hardware Supplier of finish hardware and storage of same. General Contractor shall be responsible for shortages due to theft and pilferage.

General Contractor shall provide in storage area adequate counters, shelves, and bins for assembly and grouping of hardware for distribution and installation.

PART 2: PRODUCTS

TYPES, SIZES AND DESCRIPTIONS:

Hardware shall be of types and sizes listed in this Section, applied with fastenings of proper size, quantity and finish.

<u>Templates</u>: Hardware for application on metal shall be made to standard templates. Furnish physical samples or templates, as required to Manufacturer of metal doors and frames for proper manufacturer and application.

<u>Reinforcement</u>: Reinforcing for hardware shall be furnished and installed by Door and Frame Manufacturer.

Modifications to hardware required by reasons of construction characteristics shall be such as to provide same operative or functional features.

Provide hardware for fire rated openings in compliance with UL, UL 10C-1998, UBC 7-2-1997, NFPA-80 and CFR Part 36 (ADA) guidelines. Provide only hardware, which has been tested and listed by UL for types and sizes of doors scheduled. All hardware shall conform to ADA requirements. These requirements take precedence over any other requirements or specifications of this section.

Category "A" Positive Pressure Installations:

Hardware located above 40" AFF to be listed and labeled in accordance with UBC 7-2-1997 and UL 10C-1998 for use in positive pressure fire rated wood doors.

In order to meet smoke requirements, a smoke seal, listed and labeled for UBC 7-2-1997 Parts 1 and 2 positive pressure installations, must be mounted around the perimeter of the doorframe.

Flat bar type astragals only will be allowed on pairs of doors with fire ratings up to 60 minutes with concealed intumescent inside the door structure.

<u>Door Smoke Seals</u>: Doors in smoke partitions shall meet the requirements for a smoke and draft control assembly tested in accordance with UL 1784 for Smoke, and installed in accordance to NFPA 105-2010 Standard for the Installation of Smoke Door Assemblies and Other Opening Protectives.

Provide strikes with extended lips as necessary.

Provide strike boxes, complete with dust box inserts, and no exposed screws.

Provide doors to loading platforms, boiler and mechanical rooms, stages or platforms, utility stairs, and electrical closets with knurling on inside of lever.

<u>Locksets</u>: Stanley Best 9K Series Heavy-Duty Cylindical Locks, to receive Best interchangeable cores. All cylinders Best 7-pin, interchangeable core and keyed into an existing factory registered Grand Master Key System with a restricted keyway. Provide 15K Lever and rose.

Provide construction cores and keys during the construction period. Construction, control and operating keys and cores shall not be part of the Owner's permanent keying system or furnished on the same keyway as the Owner's permanent keying system. Permanent cores and keys prepared according to the accepted keying schedule will be furnished to the Owner by the local Best Access Systems office prior to occupancy. The contractor or his hardware installer will install permanent cores and return the construction cores to the Best Access Systems office.

Provide CODE required tactile warning surfaces (knurling) for all door operating hardware for doors leading to mechanical, boiler, electrical, or chemical storage areas.

KEYING REQUIREMENTS

<u>Keying</u>: All locks and cylinders to be construction master keyed, and grand master keyed to the existing Best great grand master key system. Provide 4 keys per cylinder, stamped with keying symbol. All cylinders standard type. Provide original Best pins and Best nickel silver key blanks.

Representative from the key company is required to meet with Owner's representative prior to turning cylinders and to turn all cylinders, and set up key cabinet.

Hardware supplier shall meet with the Architect and Owner to receive keying instructions before preparing schedule for approval.

<u>One Manufacturer</u>: Following items within each classification shall be furnished totally by one manufacturer.

Hinges Locksets Exit devices Closers

<u>Door Stops</u>: All doors shall be provided with wall stops or overhead stops, to suit condition. For example, doors opening onto millwork or open space shall receive overhead stops. Solid wood blocking to be installed at all gypsum wallboard wall stop locations. Provide floor stops at doors with magnetic hold open devices.

<u>Fire rated openings</u>: All fire rated openings, except classrooms, shall receive closers and ball bearing hinges, whether scheduled or not.

<u>Coordinators:</u> All door pairs with closers to be provided with coordinator devices as necessary for proper sequential closing operation.

<u>Hinges</u>: Unless otherwise noted, 3 hinges shall be provided each interior door to 36" width and 86" height. 4 HD hinges shall be provided for interior doors exceeding 36" width or 86" height. Provide firerated hinges on all fire rated doors. Exterior hinges shall be heavy-duty with non-removable pins. Hinges for doors with closers shall be ball bearing.

Exterior hinges shall be heavy-duty continuous hinge specified for aluminum and FRP doors.

<u>Materials and Finishes (Match Existing 100/200 Buildings Dark Bronze Hardware)</u>: (All products except closers, thresholds, weatherstripping to have brass or bronze base metal unless otherwise noted).

	<u>Materials</u>	<u>Finishes</u>
Hinges, Outswing Exterior Doors	Dark Bronze	US 20
Hinges, Inswing Exterior Doors	Dark Bronze	US 20
Hinges, Interior Doors	Dark Bonze	US 20
Pivots	Dark Bronze	US 20
Exit Devices	Dark Bronze	US 20

Mortise Lock Trim	Dark Bronze	US 20
Cylindrical Lock Trim	Dark Bronze	US 20
Dead Lock Trim	Dark Bronze	US 20
O.H. Holders & Stops	Dark Bronze	US 20
Door Stop and Holders	Dark Bronze	US 20
Box Strikes	Wrought	Prime
Thresholds	Aluminum	Dark Bronze Anodized
Thresholders	Steel	US 20
Weatherstrip	Aluminum	Dark Bronze Anodized
Flatgoods	Brass	US 20
Fasteners:		

<u>Materials and Finishes (300/400/500/600 Buildings)</u>: (All products except closers, thresholds, weatherstripping to have brass or bronze base metal unless otherwise noted).

	<u>Materials</u>	<u>Finishes</u>
Hinges, Outswing Exterior Doors	Stainless	US 32 D
Hinges, Inswing Exterior Doors	Steel	US 26 D
Hinges, Interior Doors	Steel	US 26 D
Pivots	Satin Chrome Plate	US 26 D
Exit Devices	Satin Chrome Plate	US 26 D
Mortise Lock Trim	Satin Chrome Plate	US 26 D
Cylindrical Lock Trim	Satin Chrome Plate	US 26 D
Dead Lock Trim	Satin Chrome Plate	US 26 D
O.H. Holders & Stops	Satin Chrome Plate	US 26 D
Door Stop and Holders	Satin Chrome Plate	US 26 D
Box Strikes	Wrought	Prime
Thresholds	Aluminum	Clear Aluminum
Thresholders	Steel	Galvanized Steel
Weatherstrip	Aluminum	Aluminum
Flatgoods	Stainless	US 32 D
Fasteners:		

Use concealed fasteners whenever possible. Install door closers with (4) through bolted oval head screws.

Hardware to be installed on metal work shall be furnished with machine screws. For exposed fasteners on interior in bronze or brass, use matching color and material for fasteners. For all other exposed fasteners on interior, use stainless steel except where noted specifically otherwise. Furnish stainless steel screws for all exterior work.

Install fixed locking screw in strike plate for exterior locksets after final adjustments made during 6-Month Service and Adjustment Inspection.

HARDWARE ITEMS:

All Products shall be by one of the following manufacturers - no exceptions:

- a. Butt Hinges: Hager, Stanley, McKinney
- b. Exterior Heavy-Duty Continuous Gear Hinges, for all aluminum and FRP exterior doors: Select Products SL14HD, or equal by Markar Roton, Hager or Pemko.

c. Surface Closers: LCN 4011 / 4111, Ryobi D-4551 Series, Precision 2000 Series. Provide metal covers with set screw anchors, in matching finish.

d. LOCKSETS:

- a. Locksets: Best 9K Cylindrical Locks with 15K Lever and rose; ANSI A156.2, Series 4000, Grade 1 UL listed, extra heavy-duty cylindrical type.
- b. Locksets for doors scheduled for Classroom Function and similar spaces:
 - 1. Security Lockset: Intruder (IN) F11 function, with double keying and interior indicator rose for Classroom function, Best 9-K, 7 barrel system
- e. All Key Cores: Best 9-K, 7 pin interchangeable core, restricted keyway
- f. Exits Devices: Von Duprin 99 Series, each with a cylinder for trims and a cylinder for dogging.
- g. Wherever doors are equipped with exit devices, view windows shall have concealed / flush glass beads and shim filler kit for mounting across view glass.
- h. Electronic Access Control Components EAC
 - a. Exit Devices at Electronic Access Control doors (Furnished and installed by the General Contractor's Division 8 Subcontractor): Von Duprin QEL 98/99 Series, with electric ETW hinges for hinge edge power transfer for interior doors. Provide EPT-2 for exterior doors continuous hinges.
 - b. Card / Proximity Reader Unit: HID IClass SE Reader, Model S2 900PTNNEK00460-S2SEC, Mini-Mullion Version. Provide all necessary mounting bases/brackets/boxes, wiring, junction boxes, solenoids, power supplies, and all required accessories for a complete assembly. Coordinate with building Electronic Access Control System.
 - c. Intercom Camera Buzz-In Unit: Intercom Buzzer Unit with video camera, weather-resistant with aluminum or stainless-steel housing and cover plate, 2N IP Force Series. For remote operation of an electric door strike or QEL from an access control base station operator using visual monitoring wide angle HD camera and two way voice 10W loudspeaker. Provide accessories: tamper switch, security relay. Provide all necessary mounting bases/brackets/boxes, wiring, junction boxes, solenoids, power supplies, and all required accessories for a complete assembly. (Remote operation shall be from an access control base station location, indicated on Drawings, and located by the Owner). Coordinate with building Electronic Access Control System.
 - d. Electric Strike: 2N Helios IP Force Electric Strike Model 932071E, 11211 12V/230 mA DC. Coordinate with building Electronic Access Control System.
- i. Pneumatic Automatic Door Openers: LCN; coordinate with building Electronic Access Control System.
- j. Removable Mullions: Von Duprin, Yale, Detex, keyed type.
- k. Overhead Holders/Stops: Corbin, Rockwood Manufacturing, Glynn-Johnson.
- I. Thresholds: National Guard, Pemko, Hager.
- m. Push/Pulls: Rockwood Manufacturing, Ives, Hager.

- n. Stops: Glynn-Johnson, Rockwood Manufacturing, Ives, Hager.
- o. Flush Bolts: Glynn-Johnson, Rockwood Manufacturing, Ives, Hager.
- p. Silencers: Glynn-Johnson, Rockwood Manufacturing, Ives.
- q. Kick Plates: Rockwood Manufacturing, Ives, Hager.
- r. Automatic Flush Bolts: Glynn-Johnson, Rockwood Manufacturing.
- s. Coordinator: Glynn-Johnson, Rockwood Manufacturing, Trimco
- t. Weather strip & Rain Drips: National Guard, Pemko, Hager.
- u. Smoke Perimeter Door Frame Gaskets: Pemko, Hager, Reese
- v. Smoke Door Bottom Sweep: Pemko, Hager, Reese
- w. Door Bottoms: National Guard, Pemko, Hager.
- x. Magnetic Door Holders: LCN SEM 7800 Series.

Other items shall be as scheduled.

Provide the following hardware material as scheduled in the door schedule:

Hinges with closer BB 1279 $4 \frac{1}{2} \times 4 \frac{1}{2}$ St/Stl hinges with closer BB 1191 $4 \frac{1}{2} \times 4 \frac{1}{2}$ HD hinges with closer BB 1168 $4 \frac{1}{2} \times 4 \frac{1}{2}$ St/Stl HD hinges w closer Hinges without closer BB 1199 $4 \frac{1}{2} \times 4 \frac{1}{2}$ St/Stl hinges without closer 1191 $4 \frac{1}{2} \times 4 \frac{1}{2}$

HD continuous hinges SL24HD all exterior doors

Classroom set Best 9K, Intruder (IN) F11 function

Other sets Best 9K, Entrance (AB) F109, Privacy (L) F76, Passage (N) F75, Office (B)

F82, Storeroom (D) F86.

Exit device 99 L all interior locations (F as req'd), 99 NL x DT all exterior doors. CD

cylinder dogging.

EAC Exit Device Von Duprin 98/99 Series QEL with EPT. CD cylinder dogging.

Mullion 4954 (9954 as req'd), keyed type.

Electric Strike: 2N IP Force 932000 Series

Cylinder Standard 7-pin

Closer 4010 / 4011, with 3049 hold-open arm at all exterior doors, metal cover

Closer with backstop 4010 / 4011 – 3077CNS, metal cover with set screws

Kick plate 1935 8 x 2 LDW

Wall stop 232 W Floor stop 241 F Overhead stop 9-331

Flush bolts 282 D, with astragal and top and bottom plungers

Threshold Pemko 2005AV
Upper rain drip Reese R201C
Lower rain drip/sweep Pemko 345_V
Frame Smoke gasketing Pemko 332CR
Door Bottom Smoke Sweep
Perimeter gasketing Pemko 296 R

HD Interlock gasketing Pemko 336
Push plate 70C 4 x 16
Pull handle 107 x 70C 4 x 16

Key cabinet Lund Equipment, Telkee Model 1205, provide cabinet with 350 capacity,

with 25% expansion capability.

ELECTRONIC ACCESS CONTROL SYSTEM / ENTRY HARDWARE DEVICES

 WHERE INDICATED ON DRAWINGS, PROVIDE ACCESS CONTROL SYSTEM DEVICES AND COMPONENTS, DOOR HARDWARE AND ACCESSORIES, FULLY COMPATIBLE WITH AN S2 SECURITY ACCESS CONTROL SYSTEM AND SOFTWARE PROGRAM, INCLUDING BUT NOT LIMITED TO THE FOLLOWING COMPONENTS. ALL HARDWARE / EQUIPMENT SPECS SHALL COMPLY WITH JOHNSTON COUNTY SCHOOL STANDARDS.

- a. CARD / PROXIMITY READER UNIT: HID ICLASS SE CARD READER, MODEL S2-900PTNNEK00460-S2SEC, MINI-MULLION VERSION WHERE REQUIRED. PROVIDED BY THE DIVISION 17 ACCESS CONTROL CONTRACTOR.
- b. ACCESS CONTROL SYSTEM FIELD PANEL: S2 NETWORK NODE, S2-NN-E2R-WM, HOUSING UP TO SEVEN (7) S2 APPLICATION BLADES, SUPPORTING UP TO 14 DOORS, WITH NETWORK DROP PROVIDED BY THE DIVISION 17 ACCESS CONTROL CONTRACTOR. ELECTRICAL CONTRACTOR TO PROVIDE ELECTRICAL POWER.
- c. ACCESS CONTROL BASE STATION: COMPUTER SOFTWARE PROGRAM, INSTALLED ON OWNER'S PC, FOR SOFTWARE CONTROL OF CONNECTED DOORS PROVIDED BY THE DIVISION 17 ACCESS CONTROL CONTRACTOR.
- d. SURFACE MOUNTED ELECTRIC STRIKE: HES 9600 SERIES PROVIDED AND INSTALLED BY DIVISION 8 DOOR HARDWARE SUPPLIER. VERIFY IF NEEDED.
- e. ELECTRIFIED MORTISE LOCKSET: SCHLAGE L909x SERIES PROVIDED AND INSTALLED BY DIVISION 8 DOOR HARDWARE SUPPLIER.
- f. NOT USED
- g. DOOR CONTACTS FOR NEW DOOR/FRAMES: RECESSED DOOR SWITCH SETS, (1) FOR EACH DOOR LEAF, GRI 180 SERIES, 195-12WG, BY GEORGE RISK INDUSTRIES. DOUBLE POLE, DOUBLE THROW, WIDE GAP. PROVIDED BY THE DIVISION 17 ACCESS CONTROL CONTRACTOR. ELECTRICAL CONTRACTOR TO PROVIDE RACEWAY TO DOOR FRAME, FOR EACH DOOR LEAF.
- h. DOOR CONTACTS FOR EXISTING DOOR/FRAMES: SURFACE MOUNT SWITCH SETS, (1) FOR EACH DOOR LEAF, GRI 4460 SERIES, 4463A, MINIATURE ALUMINUM, BY GEORGE RISK INDUSTRIES PROVIDED BY THE DIVISION 17 ACCESS CONTROL CONTRACTOR. ELECTRICAL CONTRACTOR TO PROVIDE RACEWAY TO DOOR FRAME, FOR EACH DOOR LEAF.
- i. ARMORED DOOR CORDS: ENFORCER SD-969-S18Q SURFACE MOUNTED CORD WITH DIE-CAST ALUMINUM END CAPS, BY SECO-LARM U.S.A - PROVIDED BY THE DIVISION 17 ACCESS CONTROL CONTRACTOR. ELECTRICAL CONTRACTOR TO PROVIDE RACEWAY TO HINGE SIDE OF DOOR, AT 36" AFF. DOORS WITH EPT WILL NOT REQUIRE ARMORED DOOR CORDS.
- j. POWER SUPPLIES, FOR ALL POWERED DOOR LOCKING HARDWARE / EXIT DEVICES. PROVIDED AND INSTALLED BY DIVISION 8 DOOR HARDWARE SUPPLIER.

- k. VON DUPRIN QUIET ELECTRIC LATCH RETRACTION QEL EXIT DEVICE 98/99 SERIES. PROVIDED AND INSTALLED BY DIVISION 8 DOOR HARDWARE SUPPLIER.
- I. EPT ELECTRIC POWER TRANSFER (frame to door wiring path): VON DUPRIN MODELS EPT 2, EPT 10, EPT10C (As Application Requires), FOR USE WITH VON DUPRIN QEL EXIT DEVICES. PROVIDED AND INSTALLED BY DIVISION 8 DOOR HARDWARE SUPPLIER.
- m. ELECTRONIC CONVERSION KITS, FOR EXISTING NON-POWERED DOOR EXIT DEVICES. PROVIDED AND INSTALLED BY DIVISION 8 DOOR HARDWARE SUPPLIER. KIT SHALL BE COMPATIBLE WITH EXISTING EXIT DEVICES.
- 2. NEW OR REPLACEMENT INTERCOM / VIDEO CAMERA UNIT (DOOR CALL STATION UNIT):

WHERE INDICATED, PROVIDE A COMPLETE VIDEO INTERCOM BUZZ-IN ACCESS SYSTEM ASSEMBLY, 2N IP FORCE, INCLUDING BUT NOT LIMITED TO THE FOLLOWING COMPONENTS.

- 1)DOOR STATION: INTERCOM BUZZER UNIT WITH VIDEO CAMERA, WITH ALUMINUM OR STAINLESS STEEL COVER PLATE, 2N IP FORCE. WEATHER RESISTANT COVER PLATE FOR EXTERIOR STATION.
- 2)MASTER STATION: MASTER VIDEO STATION WITH PICTURE MEMORY, DOOR STRIKE RELEASE TOGGLE OR SWITCH, TABLE TOP MOUNTED AT RECEPTION DESK. 2N IP FORCE.
- 3)POWER SUPPLY: PS-1820UL POWER SUPPLY
- 3. CONTROLLED ACCESS SYSTEM DEVICES PROPOSED SHALL BE COMPLETE ASSEMBLIES, WITH ALL NECESSARY COMPONENTS; TO INCLUDE BUT NOT LIMITED TO POWER SUPPLIES, CABLES AND CABLING, ELECTRICAL POWER CIRCUITS RAN IN REQUIRED VOLTAGES, RACEWAYS, BOXES, TRANSFORMERS, CONTACTORS, RELAYS, SOLENOIDS, ELECTRIC DOOR STRIKES, ETC. COORDINATE ALL SUBCONTRACTORS AND TRADES FOR PROVIDING COMPLETE ASSEMBLIES.

<u>Pneumatic Automatic Door Openers</u>: (Coordinate model and operation sequences with wireless access control system and devices, including wireless intercom/buzz-in/camera device provided by the access control system provider)

Provide automatic, single leaf door opener, complete operational assembly, at main front entrance, and at locations indicated on Drawings. Motor and controller capacity to be sized for a single door operator, and shall meet all accessibility codes manual force requirements of 5 lbs. Full closing force shall be provided when the power or assist cycle ends.

All power operated systems shall include compatibility with key pads or card readers and have built-in supply for actuators and peripherals, power actuators, remote actuators, and be compatible with electric latch retraction, or electric strikes or magnetic locks, and intercom/camera buzz-ins devices.

All units shall be covered by a 2-year warranty.

All units shall be inspected by the factory representative for proper installation and function after installation.

Interior and Exterior Wall Plate Actuators: Actuators shall be hardwired low voltage and shall have a stainless steel 4 ½" round plate with engraved blue filled accessibility symbol. At all locations the actuator box shall built into the wall construction flush, providing a box made of industrial grade components, and providing weather resistant installation at exterior locations. When required, exterior actuator will be deactivated with adjacent key switch. LCN 956, LCN 958.

Automatic Door Opener: LCN 4822 Reg, Auto-Equalizer, Pneumatic Operator

(hardwired) LCN 4822-18G Drop Down Plate

LCN 4822-3077L Long Arm (if required)

Frame Manuf. Set of Integral Seals

LCN Interior and Exterior 8310-856 Wired Actuator Pads LCN 868F and 868S Mounting Boxes (to suit condition)

LCN 7982ES Controller LCN 925 1/8" ID Tubing

Locknetics (2) 653-1414-L2 Key Switch with (2) LED Lights

Various (2) Cylinders For (2) Key Switches SCE Remote Release Actuator 701RD-AA

Various Wire Supplies, Conduits, Boxes and Misc. Materials

for Complete Assembly

Post/Pedestal 6" x 6" field painted galvanized steel pipe post, with

concrete post footing

PART 3 - EXECUTION

GENERAL:

Consult project drawings and details and otherwise become familiarized with work so that all items furnished will conform to openings to which applied.

Coordinate hardware with other allied trades such as carpentry, millwork, metal frames, etc.

Prepare and submit to Architect for approval as promptly as possible three (3) copies of completed detailed schedule.

Immediately after award of hardware contract, request approved shop drawings from such trades with which hardware must be coordinated.

After checking approved shop drawings, supply promptly such template information, template drawings, approved hardware schedule, etc., as may be required to facilitate progress on job.

PRE-INSTALLATION CONFERENCE AND TRAINING:

Prior to installation of any hardware, conduct pre-installation conference with Architect representative, Owner representative, hardware distributor representative, and installation crew members to verify installation and adjustment techniques and directions. Installation personnel shall be currently certified by Allegion for LCN door closer and Von Duprin exit device installation and adjustment. Allegion will provide and conduct mandatory training courses for installers.

APPLICATION:

Apply hardware in accordance with approved Shop Drawings, with fastenings of proper size, quantity, and finish, and in accordance with Manufacturer's instructions coordinate.

Operation: All items of hardware shall fit and operate properly.

HARDWARE LOCATIONS:

Door Pulls: 42" from finished floor to center of grip.

Push-Pull Bar: 42" from finished floor to center of bar of center between bars and combination.

Top Hinge: To frame Manufacturer's standard, but not greater than 10" from head of frame to centerline of hinge.

Bottom Hinge: To frame Manufacturer's standard but not greater than 12-1/2" from finished floor to centerline of hinge.

Intermediate Hinges: Equally spaced between top and bottom hinge.

Locks and Latches: 38" from finished floor to center of knob.

Deadlocks (with separate latch-set and/or pull): 48" from finished floor to centerline of strike.

Locate pivots in accordance with Pivot Manufacturer's requirements.

FINAL INSPECTION: After installation of all finish hardware is completed, and before building is accepted, General Contractor shall have capable representative of hardware manufacturers, minimum of an AHC, visit building to inspect and approve installation; to make all necessary adjustments; and to carefully instruct Owner in proper use, servicing, adjusting and maintaining of hardware.

SIX MONTH SERVICE AND REPORT: Six months after acceptance of each area of the project, readjust each item of hardware and restore to proper function. Install fixed locking screw in strike plate for exterior locksets after final adjustments made during 6-Month Service and Adjustment Inspection, and include confirmation statement in the written report. Conduct walk through with Owner regarding recommended additions or modifications to maintenance procedures. Clean and lubricate as required. Replace items, which have deteriorated or failed due to faulty design, materials, or installation. Provide Architect with written report upon completion of above, with list of attendees.

END OF SECTION