THOMPSON & LITTON

ADDENDUM NO. 1

TO: ALL PLAN HOLDERS

RE: Roanoke County Department of Social Services, Phase II Building Renovations
Salem, Virginia
T&L Project No.:13155

DATE: September 22, 2015

BID RECEIPT DATE: October 1, 2015 at 2:00 pm

This Addendum forms a part of the Contract Documents and modifies plans and specifications, dated September 6, 2015, as noted herein. The Bidder shall acknowledge receipt of this Addendum in the place provided on the Bid Form. Failure to do so shall be considered nonresponsive and may result in rejection of Bid.

This Addendum consists of 4 pages plus attached specifications and supplemental information.

1. CLARIFICATIONS:

1. Sheet T001 Cover: The original plan sets included two copies of Sheet T001. **DELETE** the first copy and retain the second copy with electrical sheets E101B, E102B, E103B and E104B included in the sheet list.

2. Sheets E101, E102, E103 and E104: **ADD** to NOTE, Contractor shall field-verify…and operating condition, with the following: "Prior to removal of existing fixture, notify the Architect of damaged or malfunctioning fixtures indicated to be reused. Where directed by the Architect, replace fixtures with new type "A" fixtures using Unit Price 3 and remove and dispose of existing fixture."

2. REVISIONS TO PROJECT MANUAL:

Volume 1:

1. Table of Contents: **ADD** "Section 08 7100 Door Hardware."

2. Bidding Requirements:
   a. Bid Form**:** Replace the Bid Form with the attached document revised 9/21/15.

3. Conditions of the Contract:
   a. AIA A201 General Conditions of the Contract for Construction, page 12, SS 2.1.1.2, **CHANGE** Owner's representative to "Richard Caywood."
   b. Certificate of Liability Insurance: **Delete** and **replace** with the attached certificate that indicates the minimum amounts.

4. Drawing List: Add to the Drawings List the following drawings numbers and titles:

a. E101B First Floor Electrical Schedules
b. E102B Second Floor Electrical Schedules
c. E103B Third Floor Electrical Schedules
d. E104B Fourth Floor Electrical Schedules

5. Section 01 2200 Unit Prices**: ADD** paragraphs 1.6 C and D below.

1.6 C. Unit Price 3: As directed by the Architect, replace existing 2x4 lay-in lighting fixtures indicated to be reused with new type "A" fixture.

1.6 D. Unit Price 4: As directed by the Architect, replace existing 1x4 prismatic lens at stair lighting fixtures.

6. Section 01 3300 Submittal Procedures: **DELETE** paragraph 2.1 A., and **replace** with the following:

A. All documents transmitted for purposes of administration of the contract are to be in electronic (PDF) format and transmitted via an Internet-based submittal service that receives, logs and stores documents, provides electronic stamping and signatures, and notifies addressees via email.

1. Besides submittals for review, information, and closeout, this procedure applies to requests for information (RFIs), progress documentation, contract modification documents (e.g. supplementary instructions, change proposals, change orders), applications for payment, field reports and meeting minutes, Contractor's correction punch list, and any other document any participant wishes to make part of the project record.

2. Contractor and Architect are required to use this service.

3. It is Contractor's responsibility to submit documents in PDF format.

4. Subcontractors, suppliers, and Architect's consultants are to be permitted to use the service at no extra charge.

5. Users of the service need an email address, Internet access, and PDF review software that includes ability to mark up and apply electronic stamps (such as Adobe Acrobat, www.adobe.com, or Bluebeam PDF Revu, www.bluebeam.com), unless such software capability is provided by the service provider.

6. Paper document transmittals will not be reviewed; emailed PDF documents will not be reviewed.

7. All other specified submittal and document transmission procedures apply, except that electronic document requirements do not apply to samples or color selection charts.

8. Cost: The cost of the service is to be paid by Contractor; include the cost of the service in the contract sum.

9. The selected service is Submittal Exchange (tel: 1-800-714-0024): www.submittalexchange.com.

10. Training: One, one-hour, web-based training session will be arranged for all participants, with representatives of Architect and Contractor participating; further training is the responsibility of the user of the service. Representatives of Owner are scheduled and included in this training.

11. Project Closeout: Architect will determine when to terminate the service for the project and is responsible for obtaining archive copies of files for Owner.

7. Section 08 7100 Door Hardware: **ADD** the attached Section 08 7100 to the project manual.

3. REVISIONS TO DRAWINGS:

1. Sheet T101: Insert the attached Sheet T101 Life Safety Plan.

2. Sheet A101:
   a. Door 127B Stair 1 (to outside) is an existing door to remain. **DELETE** the indication (dashed lines) on the demolition plan to remove this door.
   b. Door 127A at Stair 1, **CHANGE** demolition note 9 to 3. The door frame is to be removed from the CMU wall and replaced with a new 90 minute-rated frame.
   c. **ADD** Demo Note 7 to Stair 1.

3. Sheet A102 Second Floor Demolition Plan:,
   a. Door 234 Stair 1 and **Door** 235 Stairs 2: **CHANGE** demolition note 9 to 3. The door frame is to be removed from the CMU wall and replaced with a new 90 minute-rated frame.
   b. **ADD** Demo Note 7 to Stair 1.

4. Sheet A103 Third Floor Demolition Plan, Door 309 Stairs 2 and Door 316 Stair 1: **ADD** demolition note 3. The door frame is to be removed from the CMU wall and replaced with a new 90 minute-rated frame.

5. Sheet A104: Fourth Floor Demolition Plan:
   a. Door 443 Stair 1: **CHANGE** demolition note 8 to 3. The door frame is to be removed from the CMU wall and replaced with a new 90 minute-rated frame.
   b. Door 442 Stairs 2: **CHANGE** demolition note 11 to 3. The door frame is to be removed from the CMU wall and replaced with a new 90 minute-rated frame.
   c. **ADD** Demo Note 7 to Stair 1 and Stair 2.

6. Sheet A601 Toilet Accessory Legend: **ADD** item 16, “18-inch Vertical Grab Bar, B5806x18. Mount as indicated in the Toilet Accessory Mounting Schedule. Provide vertical grab bars at each accessible toilet; seven (7) total.”

7. Sheet A701 Finish Schedule:
   a. **ADD** to Second Floor Finish Schedule “226 Lunch Room Floor LVT-3, 1 Base RB-2, Walls PNT 1a, Ceiling ACT-1 8’-0”.
   b. **ADD** to Third Floor Finish Schedule space “310 Coffee Bar, Floor-LVT-3, RB-2, Walls PNT 1a, Ceiling 7’4” GWB/PNT.”
   c. **ADD** General Finish Note E.: “Existing stair treads ± 10”, risers ± 7-1/2”, width less than 4’-0”. Verity in field.
   d. 501 Lobby: **Add** to remarks column, “Match Fourth Floor Plan.”

8. Sheet A702 Door Schedule:
    a. Doors 111 B and 111 C: **DELETE** Hardware Set 34 and Keynotes 1 and 3 in the remarks column and **ADD** Keynote 2. The existing door and hardware are to remain.
    b. Doors 114 and 220: **DELETE** Hardware Set 34. The existing hardware is to remain.
    c. Door 127A: **CHANGE** hardware set to 035. Add Frame Type 2, Material HM, Head H2 Similar, Jamb J2 Similar. **DELETE** Keynotes 1 and 3 from the remarks column. **ADD** to remarks, "Head and Jamb Detail as required by existing conditions. Field-verify prior to construction."
    d. Doors 234 and 235: **CHANGE** hardware set to 036. Add Frame Type 2, Material HM, Head H2 Similar, Jamb J2 Similar. **DELETE** Keynote 1 and 3 from the remarks column. **ADD** to remarks "Head and Jamb Detail as required by existing conditions. Field-verify prior to construction."

9. Sheet A703: Door Schedule:
    a. Door 308: **DELETE** Hardware Set 34. The existing hardware is to remain.
    b. Doors 309, 316, 442, and 443: **CHANGE** hardware set to 036. Add Frame Type 2, Material HM, Head H2 Similar, Jamb J2 Similar. **DELETE** Keynotes 1 and 3 from the remarks column. **ADD** to remarks "Head and Jamb Detail as required by existing conditions. Field- verify prior to construction."
    c. Doors 543 and 546: **CHANGE** hardware set to 036. Add Frame Type 2, Material HM, Head H2 Similar, Jamb J2 Similar. **DELETE** Keynotes 1 and 3 from the remarks column. **ADD** to remarks column "Note 11" and "Head and Jamb Detail as required by existing conditions. Field-verify prior to construction."
    d. Remarks Key Notes:
        i. **ADD "**11. Door located on 5th Floor Refer to Sheet T101."
        ii. **ADD "**12. Remove frame and reverse door swing. Reuse existing door frame and hardware. Modify lockset to lock from the outside."

10. Sheet A704 Partition Types and Details:
    a. 2/A704: **CHANGE** the title to "Elevation at Partition Type C."
    b. Partition Type C: **ADD** to note Ornamental Rail Panel, "Refer to Elevation 2/A704".

11. SheetS100 Structural Details: Typical Detail- Brick Crack Repair, add note "Refer to supplemental drawings SSK1 Brick Repair Locations dated 9/21/15

END OF ADDENDUM NO. 1

Respectfully Submitted,

William R White

William R. White, AIA Architect

Attachments: Bid Form
Certificate of Liability Insurance
08 7100 Door Hardware
T101 Life Safety Plan
SSK1 Brick Repair Locations dated 9/21/15
Pre-Bid Conference Sign-In Sheet

BID FORM
(Revised 9/21/15)

PROJECT IDENTIFICATION:	Roanoke County Department of Social Services Phase II – Building Renovations Salem Virginia
IFB NO:	2016-086
CONTRACT IDENTIFICATION NO:	T&L Project #: 13155
THIS BID IS SUBMITTED TO:	County of Roanoke Stanley Wells, Purchasing Division 5204 Bernard Drive SW, Suite 300F Roanoke, VA 24018

1. The undersigned BIDDER proposes and agrees, if this Bid is accepted, to enter into an agreement with OWNER in the form included in the Contract Documents to perform and furnish all Work as specified or indicated in the Contract Documents for the Contract Price and within the Contract Time indicated in this Bid and in accordance with the other terms and conditions of the Contract Documents.

2. BIDDER accepts all of the terms and conditions of the Advertisement and Instructions to Bidders, including without limitation those dealing with the disposition of Bid Security. This Bid will remain subject to acceptance for 60 days after the day of Bid Opening. BIDDER will sign and submit the Agreement with the Bonds and other documents required by the Bidding Requirements within 10 days after the date of OWNER'S Notice of Award.

3. In submitting this Bid, BIDDER represents, as more fully set forth in the Agreement, that:

(A) BIDDER has examined copies of all Bidding Documents and of the following Addenda (receipt of all which is hereby acknowledged):

Number	Date
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

(B) BIDDER has familiarized itself with the nature and extent of the Contract Documents, Work, site, locality, and all local conditions and Laws and Regulations that in any manner may affect cost, progress, performance, or furnishing of the Work.

(C) BIDDER has obtained and carefully studied (or assumes responsibility for obtaining and carefully studying) all such examinations, investigations, explorations, tests, and studies which pertain to the subsurface or physical conditions at the site or otherwise may affect the cost, progress, performance, or furnishing of the Work as BIDDER considers necessary for the performance or furnishing of the Work at the Contract time and in accordance with the other terms and conditions of the Contract Documents, including specifically the provisions of Paragraph 3.2 of the General Conditions; and no additional examinations, investigations, explorations, tests, reports, or similar information or data are or will be required by BIDDER for such purposes.

(D) BIDDER has reviewed and checked all information and data shown or indicated on the Contract Documents with respect to existing utilities at or contiguous to the site and assumes responsibility for the accurate location of said utilities. No additional examinations, investigations, explorations, tests, reports or similar information or data in respect of said utilities are or will be required by BIDDER in order to perform and furnish the Work at the Contract Price, within the Contract Time and in accordance with the other terms and conditions of the Contract Documents, including specifically the provisions of Paragraph 3.3 of the General Conditions.

(E) BIDDER has correlated the results of all such observations, examinations, investigations, explorations, tests, reports, and studies with the terms and conditions of the Contract Documents.

(F) BIDDER has given ARCHITECT written notice of all conflicts, errors, or discrepancies that it has discovered in the Contract Documents and the written resolution thereof by ARCHITECT is acceptable to BIDDER.

(G) This Bid is genuine and not made in the interest of or on behalf of any undisclosed person, firm, or corporation and is not submitted in conformity with any agreement or rules of any group, association, organization or corporation; BIDDER has not directly or indirectly induced or solicited any other Bidder to submit a false or sham Bid; BIDDER has not solicited or induced any person, firm, or corporation to refrain from bidding; and BIDDER has not sought by collusion to obtain for itself any advantage over any other Bidder or over OWNER.

4. BIDDER will complete the Work for the following price:

NOTE: Base Bid shall include sales tax and all other applicable taxes and fees. All licenses, fees, and permits required by the City of Salem shall be included in the Base Bid.

BASE BID: All work shown that is not indicated as Alternates 1, including, but not limited to, renovations and alterations to floors 1 through 4.

PART A.
Lump sum price for construction complete, except for items listed in PART B:

_____ **Dollars** ($_____).

PART B. – UNIT PRICE WORK.

Unit Price 1. Removal and disposal of asbestos containing materials (ACM) floor tile mastic.

Estimated quantity of 22,000 SF @ $ _____per SF = $_____ Dollars ($_____)

Unit Price 2. As directed by the Architect, make repairs to existing gypsum walls prior to painting.

Estimated quantity of 2,000 SF @ $ _____ per SF = $_____ Dollars ($_____)

Unit Price 3. As directed by the Architect, replace existing 2x4 layin lighting fixtures indicated to be reused with new type "A" fixture.

Estimated quantity of 20 @ $ _____ per EA = $_____Dollars ($_____)

Unit Price 4. As directed by the Architect, replace existing 1x4 prismatic lens at stair lighting fixtures.

Estimated quantity of 10 @ $ _____ per EA = $_____Dollars ($_____)

PART B SUBTOTAL_____ **Dollars** ($_____)

TOTAL BASE BID AMOUNT (PARTS A &B) IS:

_____ **Dollars** ($_____)

ALTERNATES

ALTERNATE # 1: Elevator Modernization complete, for elevators 1 and 2.

Add _____ Dollars ($_____).

5.1 OWNER anticipates a notice to proceed being issued on or before October 15, 2015. BIDDER agrees the Work performed will be substantially complete by May 15, 2016 and final completion shall be achieved by June 1, 2016. Refer to A101 Owner and Contractor Agreement and specifications section "01 1000 Summary" for project work restrictions, phasing and schedule.

Alternate 1, Elevator Modernization; if accepted, a separate notice to proceed will be issued and the work shall be complete 45 days from notice to proceed.

5.2 Liquidated Damages: Refer to AIA 101 Owner and Contractor Agreement.

6. The following documents are attached to and made a condition of this Bid:

(A) Required Bid Security in the form of _____

(B) Required BIDDER's Qualification Statement with supporting data.

(C) Certification of Bidder Regarding Debarment

(D) Bidder Compliance Statement Certification Regarding Equal Employment Opportunity

7. Communications concerning this Bid shall be addressed to the following address:

8. The terms used in this Bid which are defined in the General Conditions of the Construction Contract included as part of the Contract Documents have the meanings assigned to them in the General Conditions.

SUBMITTED on _____, 2015.

IF BIDDER IS:

An Individual

By _____ (SEAL)
(Individual's Name)

doing business as _____

Business address: _____

_____

Phone No.: _____

A Partnership

By _____ (SEAL)
(Firm Name)

_____
(General Partner)

Business address: _____

_____

Phone No.: _____

A Corporation

By _____
(Corporation Name)

_____
(State of Incorporation)

By _____
(Name of Person Authorized to Sign)

_____
(Title)

(Corporate Seal)

Attest _____
(Secretary)

Business address: _____

_____

Phone No.: _____

Virginia State Corporation Commission ID No: _____
(If Not Required, Provide Statement for Exemption)

A Joint Venture

By _____
(Name)

_____
(Address)

By _____
(Name)

_____

(Each joint venturer must sign. The manner of signing for each individual, partnership, and corporation that is a party to the joint venture should be in the manner indicated above).

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER	CONTACT NAME:
	PHONE (A/C, No, Ext): FAX (A/C, No):
	E-MAIL ADDRESS:

INSURER(S) AFFORDING COVERAGE	NAIC #
INSURER A :	
INSURER B :	
INSURER C :	
INSURER D :	
INSURER E :	
INSURER F :	

INSURED

COVERAGES **CERTIFICATE NUMBER:** **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSR	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
	GENERAL LIABILITY							
	☐ COMMERCIAL GENERAL LIABILITY						EACH OCCURRENCE	$ 3,000,000
	☐ CLAIMS-MADE ☐ OCCUR						DAMAGE TO RENTED PREMISES (Ea occurrence)	$ 100,000
							MED EXP (Any one person)	$ 5,000
							PERSONAL & ADV INJURY	$ 3,000,000
	GEN'L AGGREGATE LIMIT APPLIES PER:						GENERAL AGGREGATE	$ 6,000,000
	☐ POLICY ☐ PRO-JECT ☐ LOC						PRODUCTS - COMP/OP AGG	$ 3,000,000
							T	$
	AUTOMOBILE LIABILITY						COMBINED SINGLE LIMIT (Ea accident)	$ 1,000,000
	☐ ANY AUTO						BODILY INJURY (Per person)	$
	☐ ALL OWNED AUTOS ☐ SCHEDULED AUTOS						BODILY INJURY (Per accident)	$
	☐ HIRED AUTOS ☐ NON-OWNED AUTOS						PROPERTY DAMAGE (Per accident)	$
								$
	☐ UMBRELLA LIAB ☐ OCCUR						EACH OCCURRENCE	$ 10,000,000
	☐ EXCESS LIAB ☐ CLAIMS-MADE						AGGREGATE	$ 10,000,000
	☐ DED ☐ RETENTION							$
	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY						WC STATU-TORY LIMITS ☐ OTH-ER	
	ANY PROPRIETOR/PARTNER/ OFFICER/MEMBER EXCLUDED? ☐ (Mandatory in NH)						E.L. EACH ACCIDENT	$ 1,000,000
	If yes, describe under DESCRIPTION OF OPERATIONS below						E.L. DISEASE - EA EMPLOYEE	$ 1,000,000
							E.L. DISEASE - POLICY LIMIT	$ 1,000,000
	Builders Risk Policy							

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (Attach ACORD 101, Additional Remarks Schedule, if more space is required)

Builders Risk Policy includes as named insureds: Contractor, Subcontractors, Owner, Architect, and Subsidiaries.

Pertaining To:

CERTIFICATE HOLDER

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

SECTION 08 7100 - DOOR HARDWARE

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

B. Installation of all electrified and mechanical door hardware items is described and required to be provided in other related Sections of these Specifications.

Hardware supplier must be an authorized, direct factory distributor of all door hardware and access control products specified herein to insure compliance and service of these products.

C. Unless otherwise approved by the Architect / Engineer, furnish all door hardware items as described in the door hardware schedule.

1.2 SUMMARY

A. This section includes items known commercially as finish or door hardware that are required for swing, sliding, and folding doors, except special types of unique hardware specified in the same sections as the doors and door frames on which they are installed.

B. This section includes the following:

1. Butt Hinges
2. Spring Hinges
3. Cylinders and Keys
4. Cylindrical Latchsets and Locksets
5. Mortise Latchsets and Locksets
6. Exit Devices
7. Door Closers
8. Overhead Door Holders / Stops
9. Secret Gate Latches
10. Manual Flush Bolts
11. Wall and Floor Stops
12. Door Pulls
13. Push Plates
14. Mop and Kick Plates
15. Thresholds
16. Door Sweeps
17. Self-Adhesive Gasketing
18. Perimeter Seals
19. Drip Strips
20. Door Silencers
21. Security Equipment

C. Related Sections: The following sections contain requirements that relate to this section:

1. Section 05 5000 - Metal Fabrications
2. Section 06 1053 - Miscellaneous Rough Carpentry

3. Section 07 9200 - Joint Sealants
4. Section 08 1113 - Hollow Metal Doors and Frames
5. Section 08 1416 - Flush Wood Doors
6. Hardware specified under other Sections is excluded from this Section.

1.3 REFERENCES

A. Standards of the following as referenced:

1. 2010 ADA Standards for Accessible Design
2. American National Standards Institute, Inc. (ANSI)
3. Door and Hardware Institute (DHI)
4. International Building Code (2009 Edition)
5. International Code Council - Electrical Code (2009 Edition)
6. Intertek Testing Services - Warnock Hersey (ITS-WH)
7. Life Safety Code (NFPA 101, 2006 Edition)
8. National Electrical Code (NFPA 70, 2008 Edition)
9. Standard for Fire Doors and Other Opening Protectives (NFPA 80, 2007 Edition)
10. Underwriter's Laboratories, Inc. (UL)
11. Virginia Uniform State Wide Building Code (2009 Edition)

B. Regulatory standards of the following as referenced:

1. Department of Justice, Office of the Attorney General, *Americans with Disabilities Act,* Public Law 101-336 (ADA)
2. ICC/ANSI A117.1: *Accessible and Usable Buildings and Facilities, 2003 Edition.*

1.4 SYSTEM DESCRIPTION

A. Refer to applicable headings for system description for electric hardware products.

1.5 SUBMITTALS

A. General: Submit the following in accordance with Conditions of Contract and Division 1 Specification, Section 01 3300 - Submittal Procedures; for submittal procedures.

B. Product data including manufacturers' 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. Clearly highlight each submitted item and data applicable to this project on manufacturer's cut sheets. Arrange cut sheets in an order in which each item appears in the hardware sets.

C. Final hardware / access control systems schedule coordinated with doors, frames, and related work to ensure proper size, thickness, hand, function, and finish of door hardware.

1. Final Hardware Schedule Content: Based on hardware indicated, organize schedule into vertical format "hardware sets" indicating complete designations of every item required for each door or opening. Use specification Set Numbers with any variations suffixed with A, B, etc.. Include the following information:

a. Type, style, function, size, and finish of each hardware item.

b. Name and manufacturer of each item.
c. Fastenings and other pertinent information.
d. Location of each hardware set cross referenced to indications on drawings both on floor plans and in door and frame schedule.
e. Explanation of all abbreviations, symbols, and codes contained in schedule.
f. Mounting locations for hardware.
g. Door and frame sizes and materials.
h. Keying information.
i. Provide a complete and detailed system of operating and elevation diagrams specifically developed for each opening requiring electrified hardware, except openings where only electromagnetic door holders and/or door position switches are specified. Provide these diagrams with the hardware schedule submittals, for approval. The following shall be included:

(1) Point-To-Point wiring diagram.
(2) Elevation of each door.
(3) Description of each electrified door hardware function, including location, sequence of operation, and interface with other building control systems.

j. Cross reference numbers used within schedule deviating from those specified.

(1) Column 1: State specified item and manufacturer.
(2) Column 2: State prior approved substituted item and its manufacturer.

2. Submittal Sequence: Submit schedule at earliest possible date particularly where acceptance of hardware schedule must precede fabrication of other work (e.g.: hollow metal frames) which is critical in the Project construction schedule. Include with schedule the product data, samples, shop drawings of other work affected by door hardware, and other information essential to the coordinated review of hardware schedule.

3. Keying Schedule: Submit separate detailed schedule indicating clearly how the Owner's final instructions on keying of locks has been fulfilled.

D. Samples of each type of exposed hardware unit in finish indicated and tagged with full discription for coordination with schedule. Submit samples prior to submission of final hardware schedule.

1. Samples will be returned to the supplier. Units that are acceptable and remain undamaged through submittal, review, and field comparison process may, after final check of operation, be incorporated in the work, within limitations of keying coordination requirements.

E. Templates for doors, frames, and other work specified to be factory prepared for the installation of door hardware. Check shop drawings of other work to confirm that adequate provisions are made for locating and installing door hardware to comply with indicated requirements.

This is a requirement of the door hardware supplier to furnish all templates of each required door hardware item to the suppliers of the hollow metal doors and frames. No templates shall be sent until all door hardware items have been approved.

F. Electronic Hardware Systems:

1. Wiring Diagrams: Coordinate the installation of all required electronic hardware items with the Project Electrical Engineer and provide all necessary installation and technical data, including wiring diagram drawings, to the Project Electrical Engineer and Electrical Sub-Contractor. Provide a copy of all wiring diagram drawings with each door hardware schedule submitted after approval.

2. Provide complete operational descriptions of electronic components listed by each door opening in the door hardware submittals. Operational descriptions are to detail how each electrical component functions within the door opening, incorporating all conditions of ingress and egress. Provide this information with each door hardware schedule submitted for approval.

3. Provide elevation drawings of electronic hardware items and systems identifying locations of the system's components with respect to their placement in the door opening. Provide a copy of all elevation drawings with each door hardware schedule submitted for approval.

4. The electrical products contained within this specification represent a complete engineered system. If alternate electrical products are submitted, it is the responsibility of the distributor to bear any and all costs of providing a complete and operational system including re-engineering of electrical diagrams and system layout, as well as power supplies, power transfers, and all other required electrical components. Coordinate with the Project Electrical Engineer and Electrical Sub-Contractor to ensure that line voltage and low voltage wiring requirements are coordinated to provide a complete and operational system.

5. Upon completion of the electrical hardware installation, the door hardware supplier shall verify that all electrical components are functioning properly and state in the required guarantee that this inspection has been performed.

G. Contract closeout submittals: At the completion of this Project, furnish to the Owner two (2) copies of an Owner's Operation and Maintenance Manual. This manual shall consist of a labeled, hardcover, three-ring binder with the following technical information.

1. Maintenance instructions for each door hardware item.

2. Manufacturers' catalog cut-sheets for each of their respective products.

3. Parts list for each of the manufacturers' respective products.

4. Final "Approved" Door Hardware Schedule.

5. Final "Approved" Keying Schedule.

6. Warranty: Completed and executed warranty forms.

1.6 QUALITY ASSURANCE

A. General Contractor's Investigation: Prior to Contract Execution, the General Contractor shall have thoroughly investigated the entities such as employees, consultants, sub-contractors, manufacturers, suppliers, etc., and other entities that will be performing work or supplying materials, products, equipment, or systems for this project, to ensure that they comply with all of the qualifications and requirements mentioned or implied in the Contract Documents. If it is later determined that any of the previously mentioned entities do not comply with the qualifications and requirements specified in the Contract

Documents, the General Contractor will be required to replace that entity with a qualified entity at no increase in Contract Sum or Contract Time.

B. Single Source Responsibility: Obtain each type of hardware (latch and lock sets, hinges, closers, security equipment, etc.) from a single manufacturer, although several may be indicated as offering products complying with requirements.

C. Qualifications of Supplier: A recognized architectural door hardware supplier, with warehousing facilities, who has been furnishing hardware and installation in the Project's vicinity for a period of not less than 5 years. The supplier shall be, or shall employ, a certified Architectural Hardware Consultant (AHC) and Security Consultant who is available, at reasonable times during the course of the work, for consultation about the Project's hardware requirements, to the Owner, Architect, and Contractor. A certified Architectural Hardware Consultant (AHC) and Security Consultant shall prepare all hardware and access control schedules. Supplier shall be responsible for proper coordination of all door hardware items and access control items with related sections, to insure compatibility of products.

1. Hardware supplier must be an authorized, direct factory distributor of all door hardware and access control products specified herein to insure compliance and service of these products.

2. Require supplier to meet with Owner to finalize keying requirements and to obtain final instructions in writing.

D. Qualifications of Installer: The hardware installer shall have no less than five (5) years of documented experience in the installation of hardware of similar quantities and types as required for this project. **The installer's qualifications shall be submitted to the architect, in writing, for approval by the architect before any work shall commence**.

E. Fire-Rated Openings: Furnish door hardware for fire-rated openings that complies with NFPA Standard No. 80 and requirements of the Authorities Having Jurisdiction. Furnish only items, of door hardware, that are listed and are identical to products tested by UL, ITS-WH, FM, or other testing and inspecting organization acceptable to the Authorities Having Jurisdiction, for use on types and sizes of doors indicated, in compliance with the requirements of fire-rated door and door frame labels.

Project requires door assemblies and components that are compliant with positive pressure and S Label requirements.
Specifications must be cross-referenced and coordinated with door and frame manufacturers to ensure that total door opening engineering is compatible with UL10C Standard for Positive Pressure Fire Tests of Door Assemblies.

F. Product Qualifications: Manufacturers names and numbers are used to indicate the standards of design and quality. Submittals should include a sheet listing grade of item, duty rating (if applicable) and finish.

G. Substitutions: All substitution requests are required to be submitted prior to the bid date and complying with the procedures and time frame as outlined in Section 01 2500 - Substitution Procedures. Approval of submitted products is at the discretion of the Architect and his Hardware Consultant.

H. General Contractor, hardware distributor, and installers shall count, coordinate, and store all door hardware and access control items herein, verifying complete counts of all items scheduled and furnished. The manufacturers' and Owner's representatives will inspect the installation of the door hardware and access control items during that phase of construction. Any deficiencies in installation of all materials included herein shall be

corrected before installation continues.

I. At the Project's Completion, the Owner's Representative shall accompany the Architect and General Contractor during the door hardware and Access Control items punch list phase of the project close-out, insuring the Owner's Representative is familiar with all applications and systems, as installed. Refer to additional requirements under 3.0 EXECUTION.

J. Pre-Installation Meeting: Prior to door hardware installation, the General Contractor / Construction Manager shall request a hardware installation meeting to be held at the project's location. This meeting shall convene no later than one month prior to the hardware's installation. The types of hardware this meeting shall include are: locksets, exit devices, and door closers. The manufacturer's representatives of the above listed products, in conjunction with the hardware supplier for this project, shall conduct the installation training. All hardware installers shall be required to attend this meeting to receive certificate of authorized training. This meeting shall serve as door openings coordination and review of all shop drawings from related trades prior to the hardware installation.

The hardware supplier shall include any related meeting costs in their proposal.

K. Electrified Hardware And Security Hardware Systems: Prior to ordering the electrified hardware, the General Contractor shall request a coordination meeting. This meeting shall convene prior to or after the Door Hardware Schedule and the wiring diagrams have been submitted to the General Contractor. All related trades shall be represented at this meeting, which shall also include the architect, the Owner's representative, and the hardware supplier. This meeting shall serve as a review and coordination of all electrified hardware, wiring, connections, location for power supplies, and remote switches, and door functions. All related trades shall make any required changes, and resubmit schedules, diagrams, and any other required data, no later than one (1) week following this meeting.

1.7 PRODUCT HANDLING

A. Tag each item or package separately with identification related to final hardware schedule, and include basic installation instructions with each item or package.

B. Packaging of door hardware is the responsibility of the supplier. As material is received by the hardware supplier from various manufacturers, sort and repackage in containers clearly marked with appropriate hardware set numbers to match the set numbers of the approved hardware schedule. Two or more identical sets may be packed in the same container.

C. The door hardware supplier shall deliver all individually packaged hardware items promptly to the place of installation (Shop or Project Site); direct factory shipments are not acceptable unless agreed upon beforehand. Hardware supplier shall coordinate delivery times and schedules with the Contractor.

D. Inventory door hardware jointly with the General Contractor, representatives of the hardware supplier, and the hardware installer, until each is satisfied that the count is correct.

E. At the time of the hardware delivery, the door hardware supplier in conjunction with the Contractor shall verify and check in all hardware items. The Contractor must report all shortages (discrepancies with shipping documents) within five (5) working days.

F. General Contractor shall provide a secure lock-up for the door hardware and security equipment delivered to the Project, but not yet installed. Control handling and installation of the hardware items that are not immediately replaceable, so that completion of the work will not be delayed by hardware losses, both before and after installation.

1.8 WARRANTY

A. All materials must be warranted against defects in workmanship and materials for a period of one (1) year from date of acceptance of this project, unless otherwise noted. Any evidence of misuse or abuse voids all warranties. These warranties shall be each manufacturer's standard written warranty.

B. Special Warranties:

1. Cylindrical Latchsets and Locksets: Three (3) Year Period.
2. Mortise Latchsets and Locksets: Three (3) Year Period.
3. Door Closers: Ten (10) Year Period.
4. Thresholds, Door Sweeps, Self-Adhesive Gasketing, Perimeter Seals, and Drip Strips: Three (3) Year Period.

C. Any manufacturer whose standard written warranty does not equal or exceed the requirements listed above must provide a letter stating that they will extend their warranty to comply with the requirements of this specification.

D. All of the manufacturer's fasteners and attachments supplied with each hardware item must be installed to maintain the manufacturer's fire listing and/or warranty.

E. Refer to Section 01 7700 - Closeout Procedures; for additional warranty requirements.

1.9 MAINTENANCE

A. Maintenance Tools and Instructions: The General Contractor shall furnish a complete set of specialized tools and maintenance instructions as needed for the Owner's continued adjustment, maintenance, and removal and replacement of door hardware.

B. Parts Kits: Furnish manufacturers' standard parts kits for locksets, exit devices, and door closers.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. BUTT HINGES

1. Acceptable Manufacturers:
   a. Bommer Industries, Inc. - BB5000 / BB5002.
   b. IVES; Division of Allegion, PLC (IVE) - 5BB1.
   c. Stanley Hardware; A Division of Stanley Security Solutions, Inc. - FBB179 / FBB191.

2. Characteristics:

a. Tested to be in accordance with ANSI / BHMA A156.1.
b. Type: Five (5) knuckle, full mortise, ball bearing.
c. Templates: Furnish only template-produced units.
d. Fasteners: Furnish Phillips flat-head screws complying with the following requirements.
(1) For metal doors and frames, install machine screws into drilled and tapped holes.
(2) For wood doors and frames, install threaded-to-the-head wood screws.
(3) For fire-rated wood doors, install #12 x 1-1/4 inch, threaded-to-the-head steel wood screws.
(4) Finish screw heads to match surface of hinges or pivots.
e. Hinge Pins: Except as otherwise indicated, furnish hinge pins as follows:
(1) Out-Swing Exterior Doors: Non-removable pins.
(2) Out-Swing Interior Doors: Non-rising pins and Non-removable pins; as indicated in Door Hardware Sets.
(3) In-Swing Exterior / Interior Doors: Non-rising pins.
(4) Tips: Flat button and matching plug. Finished to match leaves.
f. Size: Size hinges in accordance with the specified manufacturer's published recommendations.
g. Quantity: Furnish one pair of hinges for all doors up to 5'-0" high. Furnish one additional hinge for each additional 2-1/2 feet or fraction thereof.

B. SPRING HINGES

1. Acceptable Manufacturers:
a. Bommer Industries, Inc. - LB4310C.
b. IVES; Division of Allegion, PLC (IVE) - 3SP1.
c. Stanley Hardware; A Division of Stanley Security Solutions, Inc. - 2060R.

2. Characteristics:
a. Tested to be in accordance with ANSI / BHMA A156.17, Grade 1.
b. Spring Hinges shall be non-handed and U.L. Listed.
c. Templates: Furnish only template-produced units.
d. Pivot points shall be designed to align with commercial butt hinges.
e. Fasteners: Furnish Phillips flat-head screws complying with the following requirements.
(1) For metal doors and frames, install machine screws into drilled and tapped holes.
(2) For wood doors and frames, install threaded-to-the-head wood screws.
(3) For fire-rated wood doors, install #12 x 1-1/4 inch, threaded-to-the-head steel wood screws.
(4) Finish screw heads to match surface of hinges or pivots.
f. Hinge Pins: Except as otherwise indicated, furnish hinge pins as follows:
(1) Tips: Flat button and matching plug. Finished to match leaves.
g. Size: Size hinges in accordance with the specified manufacturer's published recommendations.
h. Quantity: Furnish one pair of hinges for all doors up to 5'-0" high. Furnish one additional hinge for each additional 2-1/2 feet or fraction thereof.

C. CYLINDERS AND KEYS

1. Acceptable Manufacturers:

a. Schlage Lock Company, LLC; Division of Allegion, PLC (SCH).

Facility's Standard (Substitutions Shall Not Be Acceptable)

2. Characteristics:
   a. Tested to be in accordance with ANSI / BHMA A156.28.
   b. Existing Key System: Furnish all locksets keyed into the facility's existing "Schlage" key system, for this project.
   c. Equip all locksets with, a minimum of, 5-pin, conventional core, tumbler cylinders.
   d. Furnish locksets with a "Construction Masterkey" feature for the duration of the time of construction that permits voiding of the construction master keys without the cylinder's removal. Remove this "Construction Masterkey" feature Only when directed by Architect and / or Owner.
   e. Metals: Construct lock cylinder parts from brass or bronze, stainless steel, or nickel silver.
   f. Comply with Owner's instructions for keying requirements and, except as otherwise indicated, furnish individual change keys for each lock that is not designated to be keyed alike with a group of related locks.

      (1) Permanently inscribe each key with number of lock that identifies the cylinder manufacturer's key symbol, and notation, "DO NOT DUPLICATE".

   g. A keying meeting between the Owner and a representative of the successful door hardware distributor shall be arranged subsequent to the return of the Approved Door Hardware Schedule. A keying schedule will be established by the door hardware distributor's representative and submitted to the Owner, for approval.
      After the Owner's review, the keying schedule shall be returned to the distributor's representative such that the cylinders and keys can be prepared on a timely basis.
   h. Key Material: Furnish keys of nickel silver only.
   i. Key Quantities: Furnish the following quantities of keys for the entire project.
      (1) Ten (10) Each - Construction Master Keys
      (2) Six (6) Each - Permanent Master Keys
      (3) Four (4) Each - Permanent Change Keys (For Each Keyed Door Opening)

D. CYLINDRICAL LATCHSETS AND LOCKSETS

1. Acceptable Manufacturers:
   a. Schlage Lock Company, LLC; Division of Allegion, PLC (SCH) - AL Series x "Saturn (SAT)" Lever Design.

      Facility's Standard (Substitutions Shall Not Be Acceptable)

2. Characteristics:
   a. Tested to be in accordance with or exceed ANSI / BHMA A156.2, Series 4000, Grade 2 Strength and Operational requirements, including, a minimum of, 400,000 cycle testing.
   b. U.L. Listed for 3-hour doors.
   c. Locksets shall be non-handed and adjustable for 1-3/8" (35mm) to 1-7/8" (48mm) door thickness.
   d. Chassis: Cylindrical housing design, heavy gauge, cold rolled steel mechanisms, corrosion treated for normal atmosphere conditions.

e. Locksets shall have separate anti-rotational through-bolts for positive mounting / interlocking to the door, without any exposed mounting screws.

f. Locksets shall have solid cast levers, plated to match the specified finish symbols. Levers shall operate independently, and shall have separate, heavy duty, lever return springs or spring cages, allowing for a smooth operation of the lockset, for effective lever support, which shall prevent lever sag. Outside lever handles shall be a minimum of 4-5/8" in length and shall provide a minimum of 2" clearance from the surface of the door to the inside of the lever, at the midpoint. Outside lever handles shall return to within, a maximum, of 1/2" of the door surface.

g. Outside lever handles, on keyed locksets, shall be removable only when the designated key is in the cylinder.

h. Roses: Wrought brass, bronze or stainless steel, plated to match the specified finish symbols. Roses shall be a minimum 3-3/8" in diameter, for coverage of the ANSI / DHI A115.18 - 1994 door preparation.

i. All locksets shall be furnished with a 1/2" (13 mm) throw latchbolt and shall be listed by Underwriter's Laboratories, Inc. for A label and lesser class 4'-0" x 10'-0" single doors.

j. Backset: 2-3/4" (70 mm).

k. Strike: Brass, bronze or stainless steel, plated to match the specified finish symbols. Conform to ANSI A115.2 (4-7/8" x 1-1/4"), with lips of a sufficient length to clear trim and protect clothing.

l. Furnish "Knurled" outside levers; as indicated in Door Hardware Sets.

E. MORTISE LATCHSETS AND LOCKSETS

1. Acceptable Manufacturers:

a. Schlage Lock Company, LLC; Division of Allegion, PLC (SCH) - L Series x "06A" Lever Design.

Facility's Standard (Substitutions Shall Not Be Acceptable)

2. Characteristics:

a. Conforms to and/or exceeds all ANSI / BHMA A156.13, Series 1000, Grade 1 Operational, Grade 2 Security. ANSI / ASTM F476-84 Grade 30, U.L. Listed. Conform to and/or exceed 800,000 cycle ANSI Grade 1 requirements.

b. Latchsets and locksets shall have all functions available in a one size case, fabricated from heavy wrought steel, zinc dichromate plated for corrosion resistance and lubricity of internal parts. Cases shall be closed on all sides to protect internal parts.

c. The handing of all latchsets and locksets shall be reversible without the disassembly of the lockcase.

d. Latchsets and locksets shall have adjustable, beveled and armored fronts, with standard 2-3/4" (70mm) backsets, with full 3/4" (19mm) throw two or three-piece mechanical stainless steel anti-friction latchbolts, one-piece stainless steel 1" throw deadbolts, and stainless steel auxiliary bolts.

e. All latchsets and locksets with latchbolts, regardless of trim design, shall be listed by Underwriters Laboratories for 3-hour fire rated and lesser classified doors.

f. Lock trim (knobs, levers, sectional or escutcheon) shall be throughbolted through the lockcase to assure correct alignment and proper operation.

g. Latchsets and locksets shall be furnished with replaceable breakaway spindles, designed to resist excessive force from vandalism, preventing damage to lever trim and internal lock case components.
h. Where indicated in Door Hardware Sets, when the outside lever handle is locked, the lever shall rotate freely and shall return to its horizontal position when released. The locked outside lever handle shall freely rotate up and down while remaining securely locked.
i. Lever handles shall be one-piece, solid, brass, bronze, or stainless steel.
j. Armor fronts, escutcheons, and roses shall be fabricated from brass, bronze, or stainless steel.
k. Strikes shall be 16 gauge, curved, brass, bronze or stainless steel, with 1" deep strike boxes, and furnished with lips of sufficient lengths to clear trim and protect clothing.
l. Furnish "Knurled" outside levers; as indicated in Door Hardware Sets.

"Abrasive" outside levers shall not be acceptable.

F. EXIT DEVICES

1. Acceptable Manufacturers:
a. Precision Hardware, Inc.; A Division of Stanley Security Solutions, Inc. - Reliant 5000 Series.
b. Sargent Manufacturing Company; An ASSA ABLOY Group company - 30 Series.
c. Von Duprin, Inc.; Division of Allegion, PLC (VON) - 22 Series.

2. Characteristics:
a. Tested to be in accordance with ANSI A156.3, 1994, Grade 1. All exit devices to be heavy duty, with one-piece removable covers. The housing shall be manufactured from extruded aluminum without exposed screws or rivets.
b. Exit devices shall be "UL" listed for Life Safety. All exit devices for fire-rated door openings shall have "UL" labels for "Fire Exit Hardware". All exit devices shall conform to NFPA 80 and NFPA 101 requirements.
c. All series exit devices shall be "touchpad" (modern) types and shall be non-handed. The touchpad shall extend a minimum of 1/2 of the door width and shall be a minimum of 2-3/16" in height.
d. Exit device end caps shall be secured with three (3) screws to a truss bracket.
e. The "touchpad" exit devices shall be patterned punched to designate code requirements; where required.
f. Where detailed, removable mullions shall be 2 inches x 3 inches steel tubes and of a type that can be removed by the use of a key-operated cylinder, which shall be self-locking when re-installed.
g. All exit devices shall be fabricated of brass, bronze, stainless steel, or aluminum material, plated or painted to the standard architectural finishes to match the balance of the door hardware.

G. DOOR CLOSERS

1. Acceptable Manufacturers:
a. Falcon Door Hardware; Division of Allegion, PLC (FAL) - SC80 Series.
b. LCN Closers; Division of Allegion, PLC - 1450 Series.
c. Sargent Manufacturing Company; An ASSA ABLOY Group company - 1431 Series.

2. Characteristics:
    a. Door closers shall have fully hydraulic, full rack and pinion action with a high strength cast aluminum cylinder; which have been tested and certified under ANSI Standard A156.4, Grade 1.
    b. Hydraulic fluid shall be of an all weather type, requiring no seasonal closer adjustment.
    c. Spring power shall be continuously adjustable over the full range of closer sizes, and allowing for reduced opening force for the physically handicapped. Hydraulic regulations shall be by tamper-proof, non-critical valves. Closers shall have separate adjustment for latch speed, general speed and back check.
    d. All closers shall have solid forged steel main arms (and forearms for parallel arm closers) and where specified shall have a spring loaded stop in the soffit shoe; as indicated in Door Hardware Sets. Where door travel on out-swing doors must be limited, use spring loaded stop in the soffit shoe type closers. Auxiliary stops are not required when spring loaded stop in the soffit shoe type closers are used.
    e. Closers shall have non-metallic full, plastic, covers, which provides complete enclosure.
    f. All closers shall be of one manufacturer and shall maintain the manufacturer's ten (10) year warranty.
    g. Access-Free Manual Closers: Where manual closers are indicated for doors required to be accessible to the physically handicapped, provide adjustable units complying with ADA and ANSI A117.1 provisions for door opening force.
    h. Closers shall be attached utilizing through bolts with wood and machine screws.
    i. Closers to be installed to allow door swing as shown on plans. Doors swinging into exit corridors shall provide for corridor clear width as required by code. Where possible, mount closers inside rooms.
    j. Powder coating finish to be certified to exceed 100 hours salt spray testing by ETL, an independent testing laboratory used by BHMA for ANSI certification.

       Lacquer or painted finish on metal components shall not be acceptable.

    k. Where indicated in Door Hardware Sets, door closers shall be furnished with a Special Rust Inhibitor Pre-Treatment.
    l. Where indicated in Door Hardware Sets, furnish door closers with an Adjustable Delayed Action Closing feature, to delay the closing up to one (1) minute from the maximum opening to approximately 75 degrees.

H. OVERHEAD DOOR HOLDERS / STOPS

1. Acceptable Manufacturers:
    a. Glynn-Johnson; Division of Allegion, PLC (GLY) - 450 Series.
    b. Rixson Specialty Door Controls; An ASSA ABLOY Group company - 10 Series.
    c. Sargent Manufacturing Company; An ASSA ABLOY Group company - 1540 Series.

2. Characteristics:
    a. Tested to be in accordance with ANSI / BHMA A156.8, Grade 1.
    b. Furnish heavy / medium duty door stops, non-handed / reversible, of a, where detailed, carbon steel base substrate material or 300 Series stainless steel substrate material.

c. Furnish units with a shock absorbing mechanism for added durability.

d. All units are to be installed with the jamb bracket mounted on the stop, unless as indicated in the Door Hardware Sets, “Angle Jamb Brackets” are specified to be utilized. Overhead door stops specified with “Angle Jamb Brackets” are used to convert the installation of the units to hinge side mounting.

I. SECRET GATE LATCHES

1. Acceptable Manufacturers:
   a. Rockwood Manufacturing Company; An ASSA ABLOY Group company (ROC) - 602.

2. Characteristics:
   a. Secret gate latches shall have a solid cast brass housing, non-handed, single acting, and furnished with a dummy knob.
   b. Latch bolt shall be activated by pressing button concealed on bottom of latch case.

J. MANUAL FLUSH BOLTS

1. Acceptable Manufacturers:
   a. Burns Manufacturing, Inc. - 590 / 545.
   b. IVES; Division of Allegion, PLC (IVE) - FB458 / DP2.
   c. Triangle Brass Manufacturing Company, Inc. - 3917 / 3910.

2. Characteristics:
   a. Tested to be in accordance with ANSI / BHMA A156.16, Grade 1.
   b. Flush bolts shall be 6-3/4” x 1”, fabricated from forged brass, with 1/2” diameter bolts.
   c. Flush bolts shall have a spring loaded snap action lever, which will retract the bolt when moved to the “up” position, and project the bolt into the head frame when moved to the “down” position.
   d. Flush bolts shall have a 3/4” bolt throw with a 12” rod length.
   e. Furnish Dust Proof Strikes, for all flush bolts, with a spring loaded plunger which will return to the floor or threshold anytime the flush bolt is retracted. Dust Proof Strikes shall be installed in the floors or the thresholds, as indicated in Door Hardware Sets.

K. WALL AND FLOOR STOPS

1. Acceptable Manufacturers:
   a. Burns Manufacturing, Inc. - 575 / 521.
   b. IVES; Division of Allegion, PLC (IVE) - WS406CCV / FS439.
   c. Triangle Brass Manufacturing Company, Inc. - 1270WV / 1211.

2. Characteristics:
   a. Tested to be in accordance with ANSI / BHMA A156.16, Grade 1.
   b. Wall Stops shall have a wrought housing with a concealed, in the concave bumper, attachment. Furnish with wood screws and plastic anchors.
   c. Floor Stops shall be fabricated from solid cast brass or bronze. Furnish with machine screws and lead expansion shield anchors.
   d. Install floor stops in such a position that they permit maximum door swing, but do not present a hazard or obstruction.

L. DOOR PULLS

1. Acceptable Manufacturers:
   a. Burns Manufacturing, Inc. - 26CHCP.
   b. IVES; Division of Allegion, PLC (IVE) - 8103EZHD.
   c. Triangle Brass Manufacturing Company, Inc. - 1195-2.

2. Characteristics:
   a. Tested to be in accordance with ANSI / BHMA A156.6, Grade 1.
   b. Door pulls shall be fabricated from 1” diameter material, 10” center-to-center length, with a minimum of a 3-1/2” projection, and a 2-1/2” clearance.
   c. Fasteners: Furnish 1/4-20 x 2-1/4” steel flat head machine screws.

M. PUSH PLATES

1. Acceptable Manufacturers:
   a. Burns Manufacturing, Inc. - 50 Series.
   b. IVES; Division of Allegion, PLC (IVE) - 8200 Series.
   c. Triangle Brass Manufacturing Company, Inc. - 1001 Series.

2. Characteristics:
   a. Tested to be in accordance with ANSI / BHMA A156.6, Grade 1.
   b. Push Plates shall be fabricated of .050” wrought, stainless steel, material, with four beveled edges.
   c. Furnish a 4” x 16” or 8” x 16” plate size; as indicated in Door Hardware Sets.
   d. Where detailed, furnish push plates cut out for a turn lever or a cylinder.
   e. Fasteners: Furnish exposed, phillips oval head, stainless steel, sheet metal screw, mounting fasteners.

N. MOP AND KICK PLATES

1. Acceptable Manufacturers:
   a. Burns Manufacturing, Inc. - MP50 / KP50 Series.
   b. IVES; Division of Allegion, PLC (IVE) - 8400 Series.
   c. Triangle Brass Manufacturing Company, Inc. - KM050 / KO050 Series.

2. Characteristics:
   a. Tested to be in accordance with ANSI / BHMA A156.6, Grade 1.
   b. All mop and kick plates shall be US18 gauge (.050”) thick of stainless steel material.
   c. Fabricate mop plates not more than 1 inch less than door widths, on the “Pull” sides, and kick plates not more than 1 inch or 1-1/2 inches less than door widths, on the “Push” sides; or as indicated in Door Hardware Sets.
   d. Heights:
      (1) Mop Plates shall be 4 inches in height.
      (2) Kick Plates shall be 10 inches in height.
   e. Bevel all four (4) edges.
   f. Fabricate mop and kick plates with countersunk screw holes.
   g. Furnish mop and kick plates with #6 x 5/8” truss head, stainless steel, sheet metal screws.

O. THRESHOLDS

1. Acceptable Manufacturers:
   a. National Guard Products, Inc. - 425E.
   b. Reese Enterprises, Inc. - S205.
   c. Zero International, Inc. (ZER) - 8655.

2. Characteristics:
   a. Thresholds shall be certified by an independent testing laboratory to meet the requirements of ANSI / BHMA A156.21 and in accordance with the requirements of A.D.A.A.G. and ICC / ANSI A117.1.
   b. Thresholds shall be furnished in an aluminum extrusion that is of alloy 6063 hardness T-5.
   c. Furnish thresholds with a rugged abrasive “non-skid” finish of a nickel-aluminum composite, which is bonded by a heat-fusion process to the metal surface, by an exothermic reaction, at high temperatures.
   d. Thresholds shall be furnished with 1/4”-20 x 3” stainless steel sleeve anchors.

P. DOOR SWEEPS

1. Acceptable Manufacturers:
   a. National Guard Products, Inc. - C627.
   b. Reese Enterprises, Inc. - 354.
   c. Zero International, Inc. (ZER) - 8198.

2. Characteristics:
   a. Tested to be in accordance with ANSI / BHMA A156.22.
   b. Door sweeps shall be furnished encased in a high quality aluminum extrusion that is of alloy 6063 hardness T-5.
   c. Furnish all door sweeps with densely compressed nylon filament seals, rain drip strips, and #6 x 3/4” stainless steel, truss head, sheet metal screw fasteners.

Q. SELF-ADHESIVE GASKETING

1. Acceptable Manufacturers:
   a. National Guard Products, Inc. - 5050.
   b. Reese Enterprises, Inc. - 797.
   c. Zero International, Inc. (ZER) - 188S.

2. Characteristics:
   a. Self-adhesive gasketing shall conform to ANSI / BHMA A156.22 for Door Gasketing Systems, as well as, ASTM E283-1984.
   b. Seals shall be furnished in a compression bulb type, extruded from high grade silicone, with pressure sensitive, double backed, self-adhesive.
   c. Seals shall be classified by UL.

R. PERIMETER SEALS

1. Acceptable Manufacturers:
   a. National Guard Products, Inc. - 137N.
   b. Reese Enterprises, Inc. - 403.
   c. Zero International, Inc. (ZER) - 328.

2. Characteristics:
    a. Tested to be in accordance with ANSI / BHMA A156.22.
    b. Perimeter seals shall be furnished encased in a high quality aluminum extrusion that is of alloy 6063 hardness T-5.
    c. Furnish perimeter seals with neoprene seals and #6 x 3/4” stainless steel, truss head, sheet metal screw fasteners.

S. DRIP STRIPS

1. Acceptable Manufacturers:
    a. National Guard Products, Inc. - 16.
    b. Reese Enterprises, Inc. - R201.
    c. Zero International, Inc. (ZER) - 142.

2. Characteristics:
    a. Drip strips shall be furnished in an aluminum extrusion that is of alloy 6063 hardness T-5.
    b. Furnish all drip strips #6 x 3/4” stainless steel, truss head, sheet metal screw fasteners.

T. DOOR SILENCERS

1. Acceptable Manufacturers:
    a. Burns Manufacturing, Inc. - 500 / 501.
    b. IVES; Division of Allegion, PLC (IVE) - SR64 / SR65.
    c. Triangle Brass Manufacturing Company, Inc. - 1229A / 1229B.

2. Characteristics:
    a. Tested to be in accordance with ANSI / BHMA A156.16, Grade 1.
    b. Silencers shall be fabricated from a grey, opaque, rubber material, and featuring a pneumatic design that, once installed, forms an air pocket to absorb shock, reduce noise of door closing, eliminate door rattle, and provide constant tension for door latches or locks.
    c. Silencers shall be installed into pre-drilled hollow metal door frames, which if installed properly, shall become Tamper-Proof.
    d. Silencers shall be installed into pre-drilled wood door frames. To prevent removal, a small brad shall be driven into the stop strips of the wood frames and through the stems of the silencers.
    e. Furnish three (3) for each single door, four (4) for each single “Dutch” door, and two (2) for each pair of doors.

U. SECURITY EQUIPMENT

1. Acceptable Manufacturers:
    a. Electromagnetic Locks:
        1. Schlage Lock Company, LLC; Division of Allegion, PLC (SCE) - M450P Series.
        2. Securitron Magnalock Corporation; An ASSA ABLOY Group company - M680BD Series.
        3. Security Door Controls™ - 1571TDBLA Series.

    b. Electric Strikes:
        1. Hanchett Entry Systems, Inc.®; An ASSA ABLOY Group company - 5200 / 9500 Series.
        2. Rutherford Controls International Corporation; A DORMA Group Company - 6 / F0162 Series.

3. Von Duprin, Inc.; Division of Allegion, PLC (VON) - 5100 / 6300 Series.

c. Motion Sensors:
1. Schlage Lock Company, LLC; Division of Allegion, PLC (SCE) - Scan II Series.
2. Securitron Magnalock Corporation; An ASSA ABLOY Group company - XMS Series.
3. Security Door Controls™ - MD-31D Series.

d. Pushbuttons:
1. Schlage Lock Company, LLC; Division of Allegion, PLC (SCE) - 700 Series.
2. Securitron Magnalock Corporation; An ASSA ABLOY Group company - PB22 Series.
3. Security Door Controls™ - 400M Series.

e. Power Supplies:
1. Schlage Lock Company, LLC; Division of Allegion, PLC (SCE) - PS902 Series.
2. Securitron Magnalock Corporation; An ASSA ABLOY Group company - BPS-12/24 Series.
3. Security Door Controls™ - 600 Series.
4. Von Duprin, Inc.; Division of Allegion, PLC - PS902 Series.

2. Characteristics:
a. Furnish all items as indicated in Door Hardware Sets.

3. Coordinate all required security equipment items with Division 26 - Electrical, the Project Electrical Engineer, the Electrical Sub-Contractor, and the System Integrator.

2.2 MATERIALS AND FABRICATION

A. Manufacturer's Name Plate: Do not use manufacturers' products that have manufacturer's name or trade name displayed in a visible location (omit removable nameplates) except in conjunction with required fire-rated labels and as otherwise acceptable to Architect.

1. Manufacturer's identification will be permitted on rim of lock cylinders only.

B. Base Metals: Produce hardware units of basic metal and forming method indicated, using manufacturer's standard metal alloy, composition, temper, and hardness, but in no case of lesser (commercially recognized) quality than specified for applicable hardware units by applicable ANSI / BHMA A156 series standards for each type of hardware item and with ANSI / BHMA A156.18 for finish designations indicated. Do not furnish "optional" materials or forming methods for those indicated, except as otherwise specified.

C. Fasteners: Furnish hardware manufactured to conform to published templates, generally prepared for machine screw installation.

1. Do not furnish hardware that has been prepared for self-tapping sheet metal screws, except as specifically indicated.

2. Furnish screws for installation with each hardware item. Furnish Phillips flat-head screws except as otherwise indicated. Finish exposed (exposed under any condition) screws to match hardware finish or, if exposed in surfaces of other work, to match finish of this other work as closely as possible, including "prepared for paint" surfaces to receive painted finish.

3. Furnish concealed fasteners for hardware units that are exposed when door is closed except to the extent no standard units of type specified are available with concealed fasteners. Do not use thru-bolts for installation where bolt head or nut on opposite face is exposed in other work unless their use is the only means of adequately fastening the hardware. Coordinate with wood doors and metal doors and frames where thru-bolts are used as a means of reinforcing the work, furnish sleeves for each thru-bolt or use sex screw fasteners.

2.3 HARDWARE FINISHES

A. Match items to the manufacturer's standard color and texture finish for the latch and lock sets (or push-pull units if no latch of lock sets).

B. Furnish finishes that match those established by ANSI or, if none established, match the Architect's sample.

C. Furnish quality of finish, including thickness of plating or coating (if any), composition, hardness, and other qualities complying with the manufacturer's standards, but in no case less than specified by the referenced standards, for the applicable units of hardware.

D. The designations used to indicate hardware finishes are those listed in ANSI / BHMA A156.18, "Materials and Finishes", including coordination with the traditional U.S. finishes, shown by certain manufacturers for their products.

1.	Butt Hinges	US26D (652) Satin Chromium US32D (630) Satin Stainless Steel
2.	Spring Hinges	US26D (652) Satin Chromium
3.	Mortise Cylinders	US10B (613) Dark Oxidized Satin Bronze, Oil Rubbed, No Coating US26D (626) Satin Chromium
4.	Cylindrical Latchsets and Locksets	US26D (626) Satin Chromium
5.	Mortise Latchsets and Locksets	US26D (626) Satin Chromium
6.	Exit Devices	SP28 (689) Lacquer Sprayed Aluminum
7.	Door Closers	AL (689) Powder Coated Aluminum
8.	Overhead Door Holders / Stops	652 Chrome-Like Coating on Steel
9.	Secret Gate Latches	US26D (626) Satin Chromium
10.	Manual Flush Bolts and Dust Proof Strikes	US26D (626) Satin Chromium
11.	Wall Stops	US32D (630) Satin Stainless Steel

12.	Floor Stops	US26D (626) Satin Chromium
13.	Door Pulls	US32D (630) Satin Stainless Steel
14.	Push Plates	US32D (630) Satin Stainless Steel
15.	Mop and Kick Plates	US32D (630) Satin Stainless Steel
16.	Thresholds	US27 (719) Mill Finish Aluminum, Uncoated
17.	Door Sweeps	US28 (628) Satin Aluminum, Clear Anodized
18.	Self-Adhesive Gasketing	Black Black (Silicone)
19.	Perimeter Seals	US28 (628) Satin Aluminum, Clear Anodized
20.	Drip Strips	US27 (719) Mill Finish Aluminum, Uncoated
21.	Door Silencers	Gray Gray (Rubber)
22.	Electromagnetic Locks	US28 (628) Satin Aluminum, Clear Anodized
23.	Top Jamb Brackets	US32D (630) Satin Stainless Steel
24.	Electric Strikes	US28 (689) Lacquer Sprayed Aluminum US32D (630) Satin Stainless Steel
25.	Motion Sensors	Black
26.	Pushbuttons	US32D (630) Satin Stainless Steel
27.	Power Supplies	LGR Baked On Light Grey Enamel

PART 3 - EXECUTION

3.1 INSTALLATION

A. Mount hardware units at heights indicated in the following applicable publications, except as specifically indicated or required to comply with governing regulations and, except as otherwise indicated, by the Architect.

1. “Recommended Locations for Builders Hardware for Standard Steel Doors and Frames” by the Door and Hardware Institute.

B. Install each hardware item in compliance with the manufacturer’s instructions and recommendations. Where cutting and fitting is required to install hardware onto or into surfaces that are later to be painted or finished in another way, coordinate removal, storage, and reinstallation or application of surface protection with finishing work specified in the Division 9 Sections. Do not install surface-mounted items until finishes have been completed on the substrates involved.

C. Sets units level, plumb, and true to line and location. Adjust and reinforce the attachment substrate as necessary for proper installation and operation.

D. Where scheduled, door pulls shall be through-bolted with bolt heads concealed behind push plates.

E. Drill and countersink units that are not factory prepared for anchorage fasteners. Space fasteners and anchors in accordance with industry standards.

F. Set thresholds, for exterior and interior doors, in a full bed of butyl-rubber or polyisobutylene mastic sealant complying with requirements specified in Division 7, Section 07 9200 - Joint Sealants.

G. Weatherstripping and Seals: Comply with manufacturer's instructions and recommendations to the extent installation requirements are not otherwise indicated.

H. The hardware installer shall be responsible for installation of all mechanical and electromechanical hardware items contained within this specification, in accordance with the manufacturer's technical installation guidance, and in addition to all applicable code requirements.

I. The Electrical Sub-Contractor, under Division 26 - Electrical, shall be responsible for providing and installing all (120 VAC) power source wiring as required for the electrified locking and access control hardware, equipment, accessories, and power supplies. This includes quad outlets as required on a dedicated circuit in designated IT / Telecommunication Room(s) and the related conduit, stud-ins, junction boxes, and connectors required for the power source delivery and connections. Provide cabling, conduit, stub-ins, patch cords, fire stop systems, data connectors, junction boxes, and back boxes for both the electrified locking hardware and access control equipment at each of the access controlled or monitored openings per plan drawings and specifications. Provide and install conduit between each of the aforementioned devices and between junction boxes, power supplies, and access control equipment located on or above each door opening.

1. At wall mounted remote card readers, provide conduit on the secured side of each door opening, at 48" from above the finished floor and 6" from the edge of each door frame, to the related power supplies and access control equipment; unless otherwise instructed by Architect.

2. At all electrical hardware power transfer items provide conduit on the secured side of each door opening, from the power transfer items, through-wire hinges, or serviceable panel locations, inside of frame's jambs, to the related power supplies and access control equipment.

Installation of power supplies and interfacing of security system with fire alarm system as required, and coordination of complete security system shall be provided by the Electrical Sub-Contractor, under the Division 26 - Electrical. Electrical Sub-Contractor shall be responsible for providing and installing all 120 VAC cabling connections and terminations from the electrical junction boxes to these electrical devices.

J. Access Control System's supplier shall be responsible for providing all low-voltage (12 / 24 VDC) wiring and communication cabling (RS-232 / RS-485) installation from network control processors to reader controllers, I / O monitor / control interface panels, electrified and integrated locking hardware, remote card readers, keypads, or display terminals, monitoring and signaling switches, and power supplies, identification, and termination in accordance with the manufacturer's technical installation guidance, in addition to all applicable code requirements. Installation of all card readers, controllers, software

packages, door position switches, and run low voltage wiring from the power supplies / controllers to the electrified hardware items at each opening where specified.

The Access Control System's installer shall also be responsible for connectors, final wire terminations, final hook-ups, testing, system set-up, warranty, and Owner Turnover. Owner Training shall be provided under this Section.

K. Upon completion of the final installation of the Door Hardware and Access Control System, and burn in of the Security System, the Contract Hardware Distributor and the Access Control System's Supplier shall jointly make final adjustments to the electrified hardware and Access Control System's openings to insure proper adjustment and function of the opening is in compliance with the system's functionality requirements.

3.2 ADJUSTING, CLEANING, AND DEMONSTRATING

A. Adjust and check each operating item of hardware and each door to ensure proper operation or function of every unit. Replace units that cannot be adjusted to operate freely and smoothly or as intended for the application made.

1. Where door hardware is installed more than one month prior to acceptance or occupancy of a space or area, the hardware installers shall return to the installation during the week prior to acceptance or occupancy and make final check and adjustment of all hardware items in such space or area. Clean operating items as necessary to restore proper function and finish of hardware and doors. Adjust door control devices to compensate for final operation of heating and ventilating equipment.

B. Clean adjacent surfaces soiled by hardware installation.

C. Door Hardware Supplier's Field Service:

1. Instruct Owner's Personnel in proper adjustment and maintenance of hardware and hardware finishes, during the final adjustment of hardware.

D. Architect's Hardware Consultant's Field Service:

1. Inspect door hardware items for correct installation and adjustment after complete installation of the door hardware.

2. File a written report of this inspection directly to the Architect.

E. Continued Maintenance Service: Approximately six (6) months after the acceptance of hardware in each area, the Installer shall return to the project and re-adjust every item of hardware to restore proper function of doors and hardware. Consult with and instruct Owner's personnel in recommended additions to the maintenance procedures. Replace hardware items which have deteriorated or failed due to faulty design, materials or installation of hardware units. Prepare a written report of any current or predictable problems (of substantial nature) in the performance of the hardware and furnish copy to the Owner's Agent / Representative.

3.3 HARDWARE SCHEDULE

HARDWARE GROUP NO. 001

FOR USE ON MARK/DOOR #(S):
101A

PROVIDE EACH SL DOOR(S) WITH THE FOLLOWING:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
2	EA	MORTISE CYLINDER	20-013	613	SCH

ALL OTHER REMAINING HARDWARE ITEMS SHALL BE PROVIDED BY MANUFACTURER / SUPPLIER OF AUTOMATIC SLIDING DOORS.

SUPPLIER SHALL VERIFY QUANTITY AND TYPE OF KEY-OPERATED CYLINDER(S) REQUIRED WITH SUPPLIER OF AUTOMATIC SLIDING DOORS "PRIOR" TO SUBMISSION OF DOOR HARDWARE SCHEDULE TO ARCHITECT.

HARDWARE GROUP NO. 002

FOR USE ON MARK/DOOR #(S):
101B

PROVIDE EACH SL DOOR(S) WITH THE FOLLOWING:

ALL REQUIRED HARDWARE ITEMS SHALL BE PROVIDED BY MANUFACTURER / SUPPLIER OF AUTOMATIC SLIDING DOORS.

HARDWARE GROUP NO. 003

FOR USE ON MARK/DOOR #(S):
131

PROVIDE EACH SGL DOOR(S) WITH THE FOLLOWING:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
1	EA	ELECTROMAGNETIC LOCK	M450P	628	SCE
1	EA	TOP JAMB BRACKET	TJ450	630	SCE
1	EA	PUSHBUTTON	709RD EX ILL - L2	630	SCE
1	EA	MOTION SENSOR	SCAN II - B	BLACK	SCE
1	EA	POWER SUPPLY	PS902 900-FA	LGR	SCE
1	SET	WIRING DIAGRAMS	DOOR ELEVATION AND POINT-TO-POINT		SCE

ALL OTHER EXISTING HARDWARE ITEMS SHALL BE REUSED.

OPERATIONAL DESCRIPTION: DOOR NORMALLY IN CLOSED AND SECURED POSITION.
FREE EGRESS IS PERMITTED AT ALL TIMES.
PRESENTING A VALID CREDENTIAL TO ACCESS CONTROL READER DEACTIVATES ELECTROMAGNETIC LOCK, ALLOWING ENTRY.
MOTION SENSOR AND PUSHBUTTON DEACTIVATES ELECTROMAGNETIC LOCK, ALLOWING EGRESS.
ELECTROMAGNETIC LOCK WILL RELOCK UPON CLOSING OF DOOR.
ELECTROMAGNETIC LOCK'S MAGNETIC BOND SENSOR SHALL MONITOR POSITION OF DOOR, REPORTING STATUS TO SECURITY SYSTEM.
ELECTROMAGNETIC LOCK SHALL BE INTERFACED WITH FACILITY'S FIRE ALARM SYSTEM AND RELEASE UPON ALARM ACTIVATION, ALLOWING IMMEDIATE EGRESS.

ALL HEAD END EQUIPMENT, INCLUDING BUT NOT LIMITED TO, ACCESS CONTROL READER, READER CONTROLLER, READER INTERFACE, POWER SUPPLY, WIRE, AND ALL OTHER COMPONENTS NECESSARY FOR A COMPLETE AND FUNCTIONING ACCESS CONTROL SYSTEM SHALL BE PROVIDED BY OWNER.

SUPPLIER SHALL COORDINATE ELECTRICAL REQUIREMENTS WITH ELECTRICAL ENGINEERS, ALARM SYSTEM'S ENGINEERS, AND ACCESS CONTROL SYSTEM'S INTEGRATORS.

HARDWARE GROUP NO. 004

FOR USE ON MARK/DOOR #(S):
127B

PROVIDE EACH SGL DOOR(S) WITH THE FOLLOWING:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	BUTT HINGE	5BB1 4.5 X 4.5 NRP	630	IVE
1	EA	EXIT DEVICE	22L-BE-F X 230L-BE X #06 LEVER X SNB	SP28	VON
1	EA	ELECTROMAGNETIC LOCK	M450P	628	SCE
1	EA	DOOR CLOSER	SC81 SS FC TBWMS	AL	FAL
1	EA	KICK PLATE	8400 10" X 1 1/2" LDW B4E CS	US32D	IVE
1	EA	DRIP STRIP	142A	719	ZER
1	SET	PERIMETER SEALS	328AA	628	ZER
1	EA	DOOR SWEEP	8198AA	628	ZER
1	EA	THRESHOLD	8655A - E X 226 ANCHORS	719	ZER
1	EA	PUSHBUTTON	709RDEXILL VREQ	630	SCE
1	EA	MOTION SENSOR	SCAN II - B	BLACK	SCE
1	EA	POWER SUPPLY	PS902 900-FA	LGR	SCE
1	SET	WIRING DIAGRAMS	DOOR ELEVATION AND POINT-TO-POINT		SCE

OPERATIONAL DESCRIPTION: DOOR NORMALLY IN CLOSED AND SECURED POSITION.
FREE EGRESS IS PERMITTED AT ALL TIMES.
PRESENTING A VALID CREDENTIAL TO ACCESS CONTROL READER DEACTIVATES ELECTROMAGNETIC LOCK, ALLOWING ENTRY.
MOTION SENSOR AND PUSHBUTTON DEACTIVATES ELECTROMAGNETIC LOCK, ALLOWING EGRESS.
ELECTROMAGNETIC LOCK WILL RELOCK UPON CLOSING OF DOOR.
ELECTROMAGNETIC LOCK'S MAGNETIC BOND SENSOR SHALL MONITOR POSITION OF DOOR,

REPORTING STATUS TO SECURITY SYSTEM.
ELECTROMAGNETIC LOCK SHALL BE INTERFACED WITH FACILITY'S FIRE ALARM SYSTEM AND RELEASE UPON ALARM ACTIVATION, ALLOWING IMMEDIATE EGRESS.

ALL HEAD END EQUIPMENT, INCLUDING BUT NOT LIMITED TO, ACCESS CONTROL READER, READER CONTROLLER, READER INTERFACE, POWER SUPPLY, WIRE, AND ALL OTHER COMPONENTS NECESSARY FOR A COMPLETE AND FUNCTIONING ACCESS CONTROL SYSTEM SHALL BE PROVIDED BY OWNER.

SUPPLIER SHALL COORDINATE ELECTRICAL REQUIREMENTS WITH ELECTRICAL ENGINEERS, ALARM SYSTEM'S ENGINEERS, AND ACCESS CONTROL SYSTEM'S INTEGRATORS.

HARDWARE GROUP NO. 005

FOR USE ON MARK/DOOR #(S):
112B

PROVIDE EACH SGL DOOR(S) WITH THE FOLLOWING:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
2	EA	SPRING HINGE	3SP1 4.5 X 4.5	652	IVE
1	EA	SECRET GATE LATCH	602	US26D	ROC
1	EA	WALL STOP	WS406CCV	US32D	IVE
2	EA	SILENCER	SR65	GREY	IVE

HARDWARE GROUP NO. 006

FOR USE ON MARK/DOOR #(S):
222A

PROVIDE EACH SGL DOOR(S) WITH THE FOLLOWING:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	BUTT HINGE	5BB1 4.5 X 4.5	652	IVE
1	EA	PASSAGE SET	AL10S SAT	626	SCH
1	EA	WALL STOP	WS406CCV	US32D	IVE
3	EA	SILENCER	SR64	GREY	IVE

HARDWARE GROUP NO. 007

FOR USE ON MARK/DOOR #(S):
211

PROVIDE EACH SGL DOOR(S) WITH THE FOLLOWING:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	BUTT HINGE	5BB1 4.5 X 4.5	652	IVE
1	EA	DOOR PULL	8103EZHD-0 X TYPE “STANDARD” MOUNTING	US32D	IVE
1	EA	PUSH PLATE	8200 4" X 16"	US32D	IVE
1	EA	DOOR CLOSER	SC81 RW/PA FC TBWMS	AL	FAL

1	EA	KICK PLATE	8400	10" X 1 1/2" LDW	B4E	CS		US32D	IVE
1	EA	WALL STOP	WS406CCV					US32D	IVE
3	EA	SILENCER	SR64					GREY	IVE

HARDWARE GROUP NO. 008

FOR USE ON MARK/DOOR #(S):
120 121 204

PROVIDE EACH SGL DOOR(S) WITH THE FOLLOWING:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	BUTT HINGE	5BB1 4.5 X 4.5	630	IVE
1	EA	PRIVACY SET	AL40S SAT	626	SCH
1	EA	DOOR CLOSER	SC81 RW/PA FC TBWMS	AL	FAL
1	EA	KICK PLATE	8400 10" X 1 1/2" LDW B4E CS	US32D	IVE
1	EA	MOP PLATE	8400 4" X 1" LDW B4E CS	US32D	IVE
1	EA	WALL STOP	WS406CCV	US32D	IVE
3	EA	SILENCER	SR64	GREY	IVE

HARDWARE GROUP NO. 009

FOR USE ON MARK/DOOR #(S):
113

PROVIDE EACH SGL DOOR(S) WITH THE FOLLOWING:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	BUTT HINGE	5BB1 4.5 X 4.5	630	IVE
1	EA	PRIVACY SET	AL40S SAT	626	SCH
1	EA	OVERHEAD STOP	450S	652	GLY
1	EA	DOOR CLOSER	SC81 RW/PA FC TBWMS	AL	FAL
1	EA	KICK PLATE	8400 10" X 1 1/2" LDW B4E CS	US32D	IVE
1	EA	MOP PLATE	8400 4" X 1" LDW B4E CS	US32D	IVE
3	EA	SILENCER	SR64	GREY	IVE

HARDWARE GROUP NO. 010

FOR USE ON MARK/DOOR #(S):
116 219 311 434B

PROVIDE EACH SGL DOOR(S) WITH THE FOLLOWING:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	BUTT HINGE	5BB1 4.5 X 4.5	652	IVE
1	EA	ENTRANCE / OFFICE LOCK	AL50PD SAT	626	SCH
1	EA	WALL STOP	WS406CCV	US32D	IVE
3	EA	SILENCER	SR64	GREY	IVE

HARDWARE GROUP NO. 011

FOR USE ON MARK/DOOR #(S):
130A

PROVIDE EACH SGL DOOR(S) WITH THE FOLLOWING:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	BUTT HINGE	5BB1 4.5 X 4.5	652	IVE
1	EA	ENTRANCE / OFFICE LOCK	AL50PD SAT	626	SCH
1	EA	FLOOR STOP	FS439	US26D	IVE
3	EA	SILENCER	SR64	GREY	IVE

HARDWARE GROUP NO. 012

FOR USE ON MARK/DOOR #(S):

208	210	212	214	215	217
218	307	312	313	314	315
403	404	405	406	407	408
409	410	411	412	413	414
416	417	418	420	421	422
423	424	425	427	428	429
430	431	432	435	436	

PROVIDE EACH SGL DOOR(S) WITH THE FOLLOWING:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	BUTT HINGE	5BB1 4.5 X 4.5	652	IVE
1	EA	ENTRANCE LOCK	AL53PD SAT	626	SCH
1	EA	WALL STOP	WS406CCV	US32D	IVE
3	EA	SILENCER	SR64	GREY	IVE

HARDWARE GROUP NO. 013

FOR USE ON MARK/DOOR #(S):
213

PROVIDE EACH SGL DOOR(S) WITH THE FOLLOWING:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	BUTT HINGE	5BB1 4.5 X 4.5 NRP	652	IVE
1	EA	ENTRANCE LOCK	AL53PD SAT	626	SCH
1	EA	WALL STOP	WS406CCV	US32D	IVE
3	EA	SILENCER	SR64	GREY	IVE

HARDWARE GROUP NO. 014

FOR USE ON MARK/DOOR #(S):
105 106 107 108

PROVIDE EACH SGL DOOR(S) WITH THE FOLLOWING:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
4	EA	BUTT HINGE	5BB1 4.5 X 4.5	652	IVE
1	EA	ENTRANCE LOCK	AL53PD SAT	626	SCH
1	EA	WALL STOP	WS406CCV	US32D	IVE
3	EA	SILENCER	SR64	GREY	IVE

HARDWARE GROUP NO. 015

FOR USE ON MARK/DOOR #(S):
123 125 126A 129 133 134
205 231B

PROVIDE EACH SGL DOOR(S) WITH THE FOLLOWING:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	BUTT HINGE	5BB1 4.5 X 4.5	652	IVE
1	EA	CLASSROOM LOCK	AL70PD SAT	626	SCH
1	EA	WALL STOP	WS406CCV	US32D	IVE
3	EA	SILENCER	SR64	GREY	IVE

HARDWARE GROUP NO. 016

FOR USE ON MARK/DOOR #(S):
229 231A

PROVIDE EACH SGL DOOR(S) WITH THE FOLLOWING:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	BUTT HINGE	5BB1 4.5 X 4.5 NRP	652	IVE
1	EA	CLASSROOM LOCK	AL70PD SAT	626	SCH
1	EA	WALL STOP	WS406CCV	US32D	IVE
3	EA	SILENCER	SR64	GREY	IVE

HARDWARE GROUP NO. 017

FOR USE ON MARK/DOOR #(S):
202 207

PROVIDE EACH SGL DOOR(S) WITH THE FOLLOWING:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	BUTT HINGE	5BB1 4.5 X 4.5	652	IVE
1	EA	CLASSROOM LOCK	AL70PD SAT	626	SCH
1	EA	OVERHEAD STOP	450S - J	652	GLY
3	EA	SILENCER	SR64	GREY	IVE

INSTALL OVERHEAD STOPS ON "PULL SIDE" OF DOORS.

HARDWARE GROUP NO. 018

FOR USE ON MARK/DOOR #(S):
206 209

PROVIDE EACH SGL DOOR(S) WITH THE FOLLOWING:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	BUTT HINGE	5BB1 4.5 X 4.5 NRP	652	IVE
1	EA	CLASSROOM LOCK	AL70PD SAT	626	SCH
1	EA	OVERHEAD STOP	450S	652	GLY
3	EA	SILENCER	SR64	GREY	IVE

HARDWARE GROUP NO. 019

FOR USE ON MARK/DOOR #(S):
104

PROVIDE EACH SGL DOOR(S) WITH THE FOLLOWING:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
4	EA	BUTT HINGE	5BB1 4.5 X 4.5	652	IVE
1	EA	CLASSROOM LOCK	AL70PD SAT	626	SCH
1	EA	WALL STOP	WS406CCV	US32D	IVE
3	EA	SILENCER	SR64	GREY	IVE

HARDWARE GROUP NO. 020

FOR USE ON MARK/DOOR #(S):
109

PROVIDE EACH SGL DOOR(S) WITH THE FOLLOWING:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	BUTT HINGE	5BB1 4.5 X 4.5 NRP	652	IVE
1	EA	STOREROOM LOCK	AL80PD SAT	626	SCH
1	EA	DOOR CLOSER	SC81 RW/PA FC TBWMS	AL	FAL
1	EA	KICK PLATE	8400 10" X 1 1/2" LDW B4E CS	US32D	IVE
1	EA	WALL STOP	WS406CCV	US32D	IVE
3	EA	SILENCER	SR64	GREY	IVE

HARDWARE GROUP NO. 021

FOR USE ON MARK/DOOR #(S):
223A 306 439

PROVIDE EACH SGL DOOR(S) WITH THE FOLLOWING:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	BUTT HINGE	5BB1 4.5 X 4.5 NRP	652	IVE
1	EA	STOREROOM LOCK	AL80PD 8SA / SAT	626	SCH
1	EA	DOOR CLOSER	SC81 HW/PA FC TBWMS	AL	FAL
1	EA	WALL STOP	WS406CCV	US32D	IVE
3	EA	SILENCER	SR64	GREY	IVE

HARDWARE GROUP NO. 022

FOR USE ON MARK/DOOR #(S):
122

PROVIDE EACH SGL DOOR(S) WITH THE FOLLOWING:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	BUTT HINGE	5BB1 4.5 X 4.5 NRP	652	IVE
1	EA	STOREROOM LOCK	AL80PD 8SA / SAT	626	SCH
1	EA	DOOR CLOSER	SC81 DS/HO FC TBWMS	AL	FAL
3	EA	SILENCER	SR64	GREY	IVE

HARDWARE GROUP NO. 023

FOR USE ON MARK/DOOR #(S):
224 225 304 305 437 438

PROVIDE EACH SGL DOOR(S) WITH THE FOLLOWING:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	BUTT HINGE	5BB1 4.5 X 4.5	630	IVE
1	EA	CORRIDOR LOCK	L9456P 06A X L583-363	626	SCH
1	EA	DOOR CLOSER	SC81 RW/PA FC TBWMS	AL	FAL
1	EA	KICK PLATE	8400 10" X 1 1/2" LDW B4E CS	US32D	IVE
1	EA	MOP PLATE	8400 4" X 1" LDW B4E CS	US32D	IVE
1	EA	WALL STOP	WS406CCV	US32D	IVE
3	EA	SILENCER	SR64	GREY	IVE

HARDWARE GROUP NO. 024

FOR USE ON MARK/DOOR #(S):
117

PROVIDE EACH SGL DOOR(S) WITH THE FOLLOWING:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
1	EA	ELECTROMAGNETIC LOCK	M450P	628	SCE
1	EA	PUSHBUTTON	709RD EX ILL - L2	630	SCE
1	EA	MOTION SENSOR	SCAN II - B	BLACK	SCE
1	EA	POWER SUPPLY	PS902 900-FA	LGR	SCE
1	SET	WIRING DIAGRAMS	DOOR ELEVATION AND POINT-TO-POINT		SCE

ALL OTHER EXISTING HARDWARE ITEMS SHALL BE REUSED.

OPERATIONAL DESCRIPTION: DOOR NORMALLY IN CLOSED AND SECURED POSITION.
FREE EGRESS IS PERMITTED AT ALL TIMES.
PRESENTING A VALID CREDENTIAL TO ACCESS CONTROL READER DEACTIVATES

ELECTROMAGNETIC LOCK, ALLOWING ENTRY.
MOTION SENSOR AND PUSHBUTTON DEACTIVATES ELECTROMAGNETIC LOCK, ALLOWING EGRESS.
ELECTROMAGNETIC LOCK WILL RELOCK UPON CLOSING OF DOOR.
ELECTROMAGNETIC LOCK'S MAGNETIC BOND SENSOR SHALL MONITOR POSITION OF DOOR, REPORTING STATUS TO SECURITY SYSTEM.
ELECTROMAGNETIC LOCK SHALL BE INTERFACED WITH FACILITY'S FIRE ALARM SYSTEM AND RELEASE UPON ALARM ACTIVATION, ALLOWING IMMEDIATE EGRESS.

ALL HEAD END EQUIPMENT, INCLUDING BUT NOT LIMITED TO, ACCESS CONTROL READER, READER CONTROLLER, READER INTERFACE, POWER SUPPLY, WIRE, AND ALL OTHER COMPONENTS NECESSARY FOR A COMPLETE AND FUNCTIONING ACCESS CONTROL SYSTEM SHALL BE PROVIDED BY OWNER.

SUPPLIER SHALL COORDINATE ELECTRICAL REQUIREMENTS WITH ELECTRICAL ENGINEERS, ALARM SYSTEM'S ENGINEERS, AND ACCESS CONTROL SYSTEM'S INTEGRATORS.

HARDWARE GROUP NO. 025

FOR USE ON MARK/DOOR #(S):

112A	119A	130B	203	434A

PROVIDE EACH SGL DOOR(S) WITH THE FOLLOWING:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	BUTT HINGE	5BB1 4.5 X 4.5	652	IVE
1	EA	STOREROOM LOCK	AL80PD SAT	626	SCH
1	EA	ELECTRIC STRIKE	5100-3FP FSE	689	VON
1	EA	DOOR CLOSER	SC81 RW/PA FC TBWMS	AL	FAL
1	EA	KICK PLATE	8400 10" X 1 1/2" LDW B4E CS	US32D	IVE
1	EA	WALL STOP	WS406CCV	US32D	IVE
3	EA	SILENCER	SR64	GREY	IVE
1	EA	POWER SUPPLY	PS902	LGR	SCE
1	SET	WIRING DIAGRAMS	DOOR ELEVATION AND POINT-TO-POINT		SCE

OPERATIONAL DESCRIPTION: DOORS ARE NORMALLY IN CLOSED AND SECURED POSITION.
FREE EGRESS IS PERMITTED AT ALL TIMES.
PRESENTING A VALID CREDENTIAL TO ACCESS CONTROL READERS RELEASES ELECTRIC STRIKES.
UPON COMPLETE LOSS OF POWER, ELECTRIC STRIKES REMAIN SECURE.

ALL HEAD END EQUIPMENT, INCLUDING BUT NOT LIMITED TO, ACCESS CONTROL READERS, READER CONTROLLERS, READER INTERFACES, POWER SUPPLIES, WIRE, AND ALL OTHER COMPONENTS NECESSARY FOR A COMPLETE AND FUNCTIONING ACCESS CONTROL SYSTEM SHALL BE PROVIDED BY OWNER.

SUPPLIER SHALL COORDINATE ELECTRICAL REQUIREMENTS WITH ELECTRICAL ENGINEERS, ALARM SYSTEM'S ENGINEERS, AND ACCESS CONTROL SYSTEM'S INTEGRATORS.

HARDWARE GROUP NO. 026

FOR USE ON MARK/DOOR #(S):
126B

PROVIDE EACH SGL DOOR(S) WITH THE FOLLOWING:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	BUTT HINGE	5BB1 4.5 X 4.5	652	IVE
1	EA	STOREROOM LOCK	AL80PD SAT	626	SCH
1	EA	ELECTRIC STRIKE	5100-3FP FSE	689	VON
1	EA	OVERHEAD STOP	450S	652	GLY
1	EA	DOOR CLOSER	SC81 RW/PA FC TBWMS	AL	FAL
1	EA	KICK PLATE	8400 10" X 1 1/2" LDW B4E CS	US32D	IVE
3	EA	SILENCER	SR64	GREY	IVE
1	EA	POWER SUPPLY	PS902	LGR	SCE
1	SET	WIRING DIAGRAMS	DOOR ELEVATION AND POINT-TO-POINT		SCE

OPERATIONAL DESCRIPTION: DOOR NORMALLY IN CLOSED AND SECURED POSITION.
FREE EGRESS IS PERMITTED AT ALL TIMES.
PRESENTING A VALID CREDENTIAL TO ACCESS CONTROL READER RELEASES ELECTRIC STRIKE.
UPON COMPLETE LOSS OF POWER, ELECTRIC STRIKE REMAINS SECURE.

ALL HEAD END EQUIPMENT, INCLUDING BUT NOT LIMITED TO, ACCESS CONTROL READER, READER CONTROLLER, READER INTERFACE, POWER SUPPLY, WIRE, AND ALL OTHER COMPONENTS NECESSARY FOR A COMPLETE AND FUNCTIONING ACCESS CONTROL SYSTEM SHALL BE PROVIDED BY OWNER.

SUPPLIER SHALL COORDINATE ELECTRICAL REQUIREMENTS WITH ELECTRICAL ENGINEERS, ALARM SYSTEM'S ENGINEERS, AND ACCESS CONTROL SYSTEM'S INTEGRATORS.

HARDWARE GROUP NO. 027

FOR USE ON MARK/DOOR #(S):
119B 201 402 433

PROVIDE EACH SGL DOOR(S) WITH THE FOLLOWING:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	BUTT HINGE	5BB1 4.5 X 4.5 NRP	652	IVE
1	EA	STOREROOM LOCK	AL80PD SAT	626	SCH
1	EA	ELECTRIC STRIKE	5100-3FP FSE	689	VON
1	EA	DOOR CLOSER	SC81 RW/PA FC TBWMS	AL	FAL
1	EA	KICK PLATE	8400 10" X 1 1/2" LDW B4E CS	US32D	IVE
1	EA	WALL STOP	WS406CCV	US32D	IVE
3	EA	SILENCER	SR64	GREY	IVE
1	EA	POWER SUPPLY	PS902	LGR	SCE
1	SET	WIRING DIAGRAMS	DOOR ELEVATION AND POINT-TO-POINT		SCE

OPERATIONAL DESCRIPTION: DOORS ARE NORMALLY IN CLOSED AND SECURED POSITION. FREE EGRESS IS PERMITTED AT ALL TIMES.
PRESENTING A VALID CREDENTIAL TO ACCESS CONTROL READERS RELEASES ELECTRIC STRIKES.
UPON COMPLETE LOSS OF POWER, ELECTRIC STRIKES REMAIN SECURE.

ALL HEAD END EQUIPMENT, INCLUDING BUT NOT LIMITED TO, ACCESS CONTROL READERS, READER CONTROLLERS, READER INTERFACES, POWER SUPPLIES, WIRE, AND ALL OTHER COMPONENTS NECESSARY FOR A COMPLETE AND FUNCTIONING ACCESS CONTROL SYSTEM SHALL BE PROVIDED BY OWNER.

SUPPLIER SHALL COORDINATE ELECTRICAL REQUIREMENTS WITH ELECTRICAL ENGINEERS, ALARM SYSTEM'S ENGINEERS, AND ACCESS CONTROL SYSTEM'S INTEGRATORS.

HARDWARE GROUP NO. 028

FOR USE ON MARK/DOOR #(S):
227

PROVIDE EACH SGL DOOR(S) WITH THE FOLLOWING:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	BUTT HINGE	5BB1 4.5 X 4.5 NRP	652	IVE
1	EA	EXIT DEVICE	22L X 230L X #06 LEVER X SNB	SP28	VON
1	EA	MORTISE CYLINDER	20-001 - 114	626	SCH
1	EA	DOOR CLOSER	SC81 RW/PA FC TBWMS	AL	FAL
1	EA	KICK PLATE	8400 10" X 1 1/2" LDW B4E CS	US32D	IVE
1	EA	WALL STOP	WS406CCV	US32D	IVE
3	EA	SILENCER	SR64	GREY	IVE

HARDWARE GROUP NO. 029

FOR USE ON MARK/DOOR #(S):
228

PROVIDE EACH SGL DOOR(S) WITH THE FOLLOWING:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	BUTT HINGE	5BB1 4.5 X 4.5 NRP	652	IVE
1	EA	EXIT DEVICE	LD22L X 230L X #06 LEVER X SNB X LESS STRIKE	SP28	VON
1	EA	MORTISE CYLINDER	20-001 - 114	626	SCH
1	EA	ELECTRIC STRIKE	6300 FSE	US32D	VON
1	EA	DOOR CLOSER	SC81 RW/PA FC TBWMS	AL	FAL
1	EA	KICK PLATE	8400 10" X 1 1/2" LDW B4E CS	US32D	IVE
1	EA	WALL STOP	WS406CCV	US32D	IVE
3	EA	SILENCER	SR64	GREY	IVE
1	EA	POWER SUPPLY	PS902	LGR	SCE
1	SET	WIRING DIAGRAMS	DOOR ELEVATION AND POINT-TO-POINT		SCE

OPERATIONAL DESCRIPTION: DOOR NORMALLY IN CLOSED AND SECURED POSITION.
FREE EGRESS IS PERMITTED AT ALL TIMES.
PRESENTING A VALID CREDENTIAL TO ACCESS CONTROL READER RELEASES ELECTRIC STRIKE.
UPON COMPLETE LOSS OF POWER, ELECTRIC STRIKE REMAINS SECURE.

ALL HEAD END EQUIPMENT, INCLUDING BUT NOT LIMITED TO, ACCESS CONTROL READER, READER CONTROLLER, READER INTERFACE, POWER SUPPLY, WIRE, AND ALL OTHER COMPONENTS NECESSARY FOR A COMPLETE AND FUNCTIONING ACCESS CONTROL SYSTEM SHALL BE PROVIDED BY OWNER.

SUPPLIER SHALL COORDINATE ELECTRICAL REQUIREMENTS WITH ELECTRICAL ENGINEERS, ALARM SYSTEM'S ENGINEERS, AND ACCESS CONTROL SYSTEM'S INTEGRATORS.

HARDWARE GROUP NO. 030

FOR USE ON MARK/DOOR #(S):
111A

PROVIDE EACH SGL DOOR(S) WITH THE FOLLOWING:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	BUTT HINGE	5BB1 4.5 X 4.5	652	IVE
1	EA	EXIT DEVICE	22L-BE-F X 230L-BE #06 LEVER X SNB	SP28	VON
1	EA	ELECTROMAGNETIC LOCK	M450P	628	SCE
1	EA	TOP JAMB BRACKET	TJ450	630	SCE
1	EA	DOOR CLOSER	SC81 DS FC TBWMS	AL	FAL
1	EA	KICK PLATE	8400 10" X 1 1/2" LDW B4E CS	US32D	IVE
1	SET	SELF-ADHESIVE GASKETING	188S-BK	BLACK	ZER
1	EA	PUSHBUTTON	709RD EX ILL - L2	630	SCE
1	EA	MOTION SENSOR	SCAN II - B	BLACK	SCE
1	EA	POWER SUPPLY	PS902 900-FA	LGR	SCE
1	SET	WIRING DIAGRAMS	DOOR ELEVATION AND POINT-TO-POINT		SCE

OPERATIONAL DESCRIPTION: DOOR NORMALLY IN CLOSED AND SECURED POSITION.
FREE EGRESS IS PERMITTED AT ALL TIMES.
PRESENTING A VALID CREDENTIAL TO ACCESS CONTROL READER DEACTIVATES ELECTROMAGNETIC LOCK, ALLOWING ENTRY.
MOTION SENSOR AND PUSHBUTTON DEACTIVATES ELECTROMAGNETIC LOCK, ALLOWING EGRESS.
ELECTROMAGNETIC LOCK WILL RELOCK UPON CLOSING OF DOOR.
ELECTROMAGNETIC LOCK'S MAGNETIC BOND SENSOR SHALL MONITOR POSITION OF DOOR, REPORTING STATUS TO SECURITY SYSTEM.
ELECTROMAGNETIC LOCK SHALL BE INTERFACED WITH FACILITY'S FIRE ALARM SYSTEM AND RELEASE UPON ALARM ACTIVATION, ALLOWING IMMEDIATE EGRESS.

ALL HEAD END EQUIPMENT, INCLUDING BUT NOT LIMITED TO, ACCESS CONTROL READER, READER CONTROLLER, READER INTERFACE, POWER SUPPLY, WIRE, AND ALL OTHER COMPONENTS NECESSARY FOR A COMPLETE AND FUNCTIONING ACCESS CONTROL SYSTEM SHALL BE PROVIDED BY OWNER.

SUPPLIER SHALL COORDINATE ELECTRICAL REQUIREMENTS WITH ELECTRICAL ENGINEERS, ALARM SYSTEM'S ENGINEERS, AND ACCESS CONTROL SYSTEM'S INTEGRATORS.

HARDWARE GROUP NO. 031

FOR USE ON MARK/DOOR #(S):
226

PROVIDE EACH PR DOOR(S) WITH THE FOLLOWING:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
6	EA	BUTT HINGE	5BB1 4.5 X 4.5	652	IVE
2	EA	DOOR PULL	8103EZHD-0 X TYPE “STANDARD” MOUNTING	US32D	IVE
2	EA	PUSH PLATE	8200 8" X 16"	US32D	IVE
2	EA	DOOR CLOSER	SC81 DS/HO FC TBWMS	AL	FAL
2	EA	KICK PLATE	8400 10" X 1 1/2" LDW B4E CS	US32D	IVE
2	EA	SILENCER	SR64	GREY	IVE

HARDWARE GROUP NO. 032

FOR USE ON MARK/DOOR #(S):
230

PROVIDE EACH PR DOOR(S) WITH THE FOLLOWING:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
6	EA	BUTTHINGE	5BB1 4.5 X 4.5 NRP	652	IVE
2	EA	MANUAL FLUSH BOLT	FB458	US26D	IVE
1	EA	DUST PROOF STRIKE	DP2	US26D	IVE
1	EA	SINGLE DUMMY TRIM	AL170 SAT	626	SCH
1	EA	CLASSROOM LOCK	AL70PD SAT	626	SCH
2	EA	OVERHEAD STOP	450S	652	GLY
2	EA	SILENCER	SR64	GREY	IVE

HARDWARE GROUP NO. 033

FOR USE ON MARK/DOOR #(S):
221A 221B 301A 301B 440A 440B

PROVIDE EACH PR DOOR(S) WITH THE FOLLOWING:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
6	EA	BUTT HINGE	5BB1 4.5 X 4.5 NRP	652	IVE
2	EA	MANUAL FLUSH BOLT	FB458	US26D	IVE
1	EA	DUST PROOF STRIKE	DP2	US26D	IVE
1	EA	SINGLE DUMMY TRIM	AL170 8SA	626	SCH
1	EA	STOREROOM LOCK	AL80PD 8SA / SAT	626	SCH
1	EA	OVERHEAD STOP	450S	652	GLY
1	EA	DOOR CLOSER	SC81 DS/HO FC TBWMS	AL	FAL
2	EA	SILENCER	SR64	GREY	IVE

HARDWARE GROUP NO. 034

FOR USE ON MARK/DOOR #(S):
118 426

PROVIDE EACH SGL DOOR(S) WITH THE FOLLOWING:

ALL EXISTING HARDWARE AND/OR ACCESS CONTROL ITEMS SHALL BE REUSED.

HARDWARE GROUP NO. 035

FOR USE ON MARK/DOOR #(S):
127A

PROVIDE EACH SGL DOOR(S) WITH THE FOLLOWING:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	BUTT HINGE	5BB1 4.5 X 4.5	652	IVE
1	EA	PASSAGE SET	AL10S SAT	626	SCH
1	EA	DOOR CLOSER	SC81 RW/PA FC TBWMS	AL	FAL
1	EA	KICK PLATE	8400 10" X 1 1/2" LDW B4E CS	US32D	IVE
1	EA	WALL STOP	WS406CCV	US32D	IVE
1	SET	SELF-ADHESIVE GASKETING	188S-BK	BLACK	ZER

HARDWARE GROUP NO. 036

FOR USE ON MARK/DOOR #(S):
234 235 309 316 442 443
543 546
PROVIDE EACH SGL DOOR(S) WITH THE FOLLOWING:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	BUTT HINGE	5BB1 4.5 X 4.5 NRP	652	IVE
1	EA	STOREROOM LOCK	AL80PD SAT	626	SCH
1	EA	ELECTRIC STRIKE	5100-3FP FSE	689	VON
1	EA	DOOR CLOSER	SC81 RW/PA FC TBWMS	AL	FAL
1	EA	KICK PLATE	8400 10" X 1 1/2" LDW B4E CS	US32D	IVE
1	EA	WALL STOP	WS406CCV	US32D	IVE
1	SET	SELF-ADHESIVE GASKETING	188S-BK	BLACK	ZER
1	EA	POWER SUPPLY	PS902	LGR	SCE
1	SET	WIRING DIAGRAMS	DOOR ELEVATION AND POINT-TO-POINT		SCE

OPERATIONAL DESCRIPTION: DOORS ARE NORMALLY IN CLOSED AND SECURED POSITION.
FREE EGRESS IS PERMITTED AT ALL TIMES.
PRESENTING A VALID CREDENTIAL TO ACCESS CONTROL READERS RELEASES ELECTRIC STRIKES.
UPON COMPLETE LOSS OF POWER, ELECTRIC STRIKES REMAIN SECURE.

ALL HEAD END EQUIPMENT, INCLUDING BUT NOT LIMITED TO, ACCESS CONTROL READERS, READER CONTROLLERS, READER INTERFACES, POWER SUPPLIES, WIRE, AND ALL OTHER COMPONENTS NECESSARY FOR A COMPLETE AND FUNCTIONING ACCESS CONTROL SYSTEM SHALL BE PROVIDED BY OWNER.

SUPPLIER SHALL COORDINATE ELECTRICAL REQUIREMENTS WITH ELECTRICAL ENGINEERS, ALARM SYSTEM'S ENGINEERS, AND ACCESS CONTROL SYSTEM'S INTEGRATORS.

END OF SECTION 08 7100

MANDATORY PRE-BID CONFERENCE

FRIDAY, SEPTEMBER 18, 2015

ATTENDANCE RECORD

ROANOKE COUNTY DSS – PHASE II – BUILDING RENOVATIONS
FOR THE
ROANOKE COUNTY DEPARTMENT OF SOCIAL SERVICES

T&L PROJECT NO. 13155-04

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BILL WILLIAMS	MOORES ELECTRICAL & MECH	434-309-2487		wwilliam@mooreselectric.com
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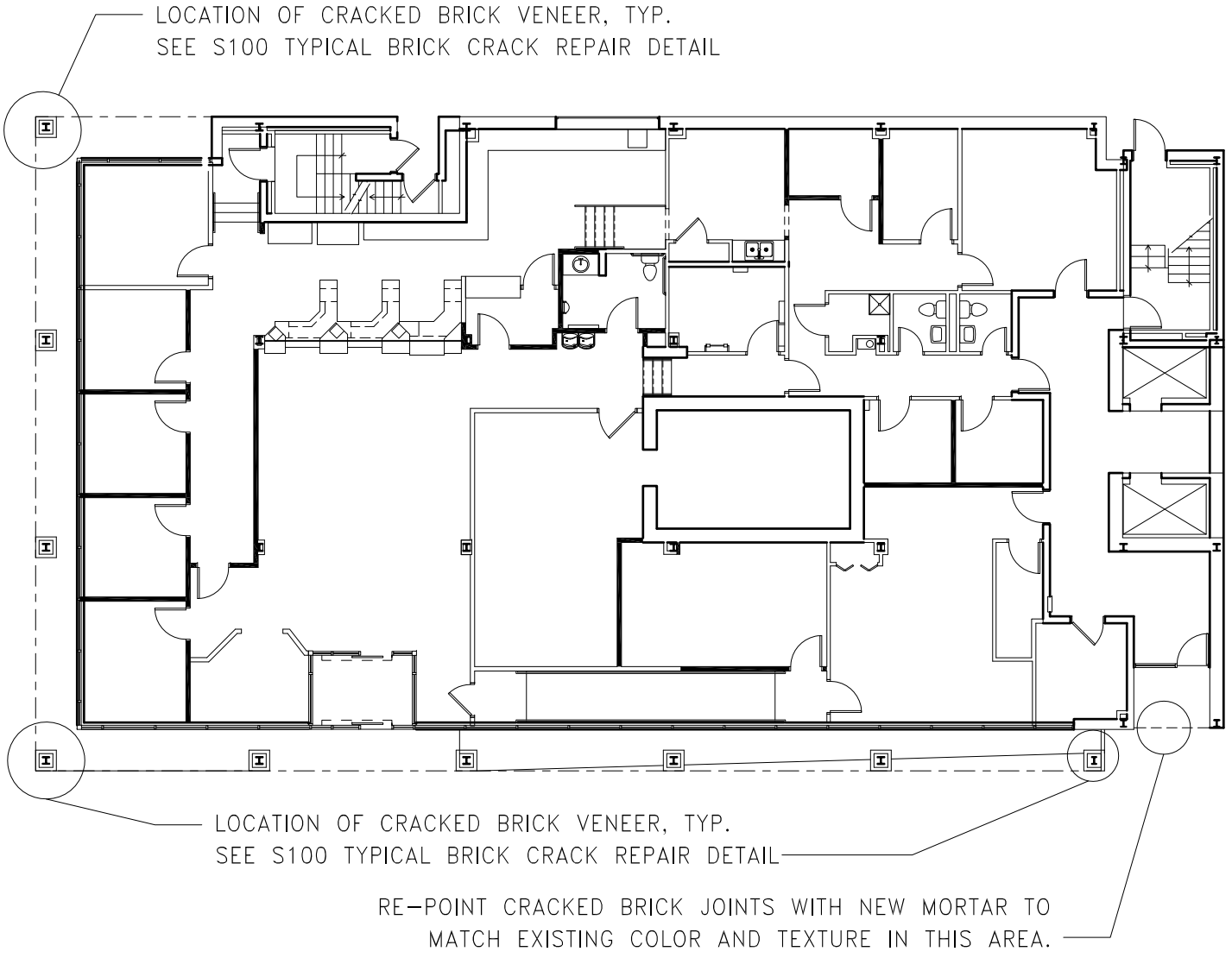
Tony Kennedy	T-L	276-988-7921	276-988-7924	tkennedy@t-l.com



BRICK REPAIR LOCATIONS

NOT TO SCALE

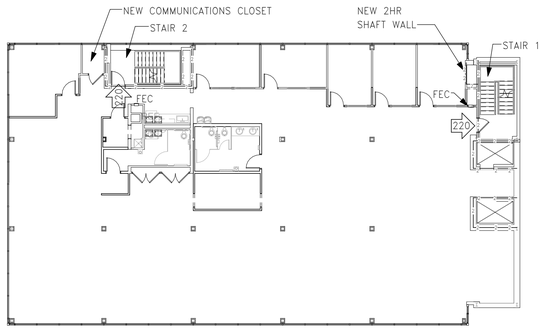
Sheet No. SSK1

Designed	CSN
Drawn	RTH
Checked	CSN
Date	09/21/15
File No.	SSK1
Project No.	13155

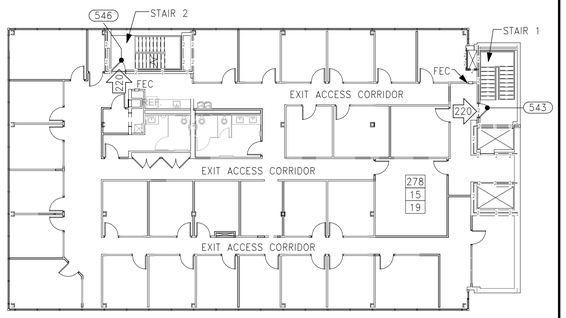
ROANOKE COUNTY DSS - PHASE II - BUILDING RENOVATIONS

BRICK REPAIR LOCATIONS

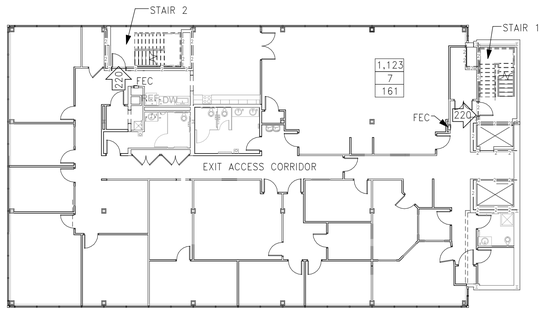
THOMPSON & LITTON



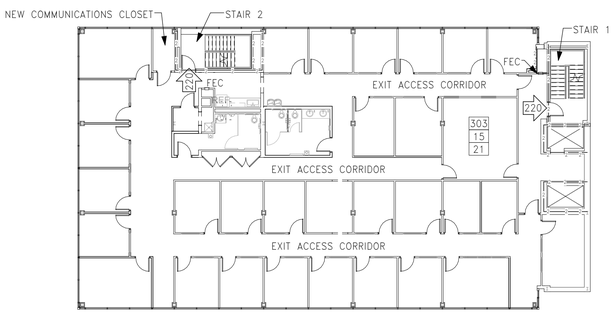
3RD FLOOR LIFE SAFETY PLAN
1/16" = 1'-0"
PLAN NORTH



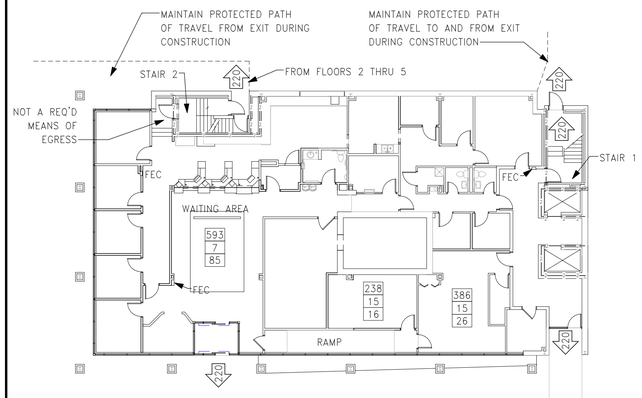
5TH FLOOR LIFE SAFETY PLAN
1/16" = 1'-0"
PLAN NORTH



2ND FLOOR LIFE SAFETY PLAN
1/16" = 1'-0"
PLAN NORTH



4TH FLOOR LIFE SAFETY PLAN
1/16" = 1'-0"
PLAN NORTH



1ST FLOOR LIFE SAFETY PLAN
1/16" = 1'-0"
PLAN NORTH

FIRE SAFETY AND BUILDING CODE REQUIREMENTS

BUILDING CODE AND CONSTRUCTION NOTES

THE PROPERTY IS LOCATED AT 220 EAST MAIN STREET IN SALEM, VA

ORIGINAL DESIGN DRAWINGS ARE DATED MARCH 29, 1974
CERTIFICATE OF OCCUPANCY IS DATED: 1979

THE BUILDING APPEARS TO HAVE BEEN DESIGNED USING THE 1974 UNIFORM STATEWIDE BUILDING CODE WHICH REFERENCED THE 1973 BOCA BUILDING CODE.

THE VIRGINIA FIRE SAFETY REGULATION REQUIRES BUILDINGS TO BE MAINTAINED IN ACCORDANCE WITH THE CODE IN AFFECT AT THE TIME OF CONSTRUCTION.

PROJECT DESCRIPTION: BUILDING

ALTERNATES

1. ELEVATOR MODERNIZATION

APPLICABLE CONSTRUCTION CODE: THE MODIFICATIONS HAVE BEEN DESIGNED TO COMPLY WITH THE 2012 VIRGINIA REHABILITATION CODE (VRC).

WORK CLASSIFICATION: LEVEL II, CHAPTERS 6 AND 7 OF VRC

EXISTING CONDITIONS

OCCUPANCY CLASSIFICATION: B, BUSINESS
CONSTRICTION TYPE: MOST CLOSELY RESEMBLES TYPE IIB, NON COMBUSTIBLE UNPROTECTED
COMPLETE FIRE SUPPRESSION SYSTEM.

EXISTING CONDITIONS

BUILDING HEIGHT: 5 STORY / +/-69 FEET TO TOP OF STAIR TOWER
STREET LEVEL TO FIFTH FLOOR +/49 FEET

BUILDING AREA (ENCLOSED)

		OCC/SF	# OCC
BASEMENT:	875 SF	300	3
1ST FLOOR:	6,307 SF	100	64
2ND FLOOR:	7,095 SF	100	71( )
3RD FLOOR:	7,095 SF	100	71
4TH FLOOR:	7,095 SF	100	71
5TH FLOOR:	7,095 SF	100	71
TOTAL	35,562 SF		

EXISTING RATED CONSTRICTION

FLOOR CONSTRUCTION:	1 HR (ASSUMED)	
ROOF CONSTRUCTION:	NO RATING	
STRUCTURE COLUMNS AND BEAMS:	NO RATING	
STAIRWAYS ELEVATOR AND SHAFTS:	2 HR	OPENINGS 1.5 HR
CORRIDORS:	NO RATING	OPENINGS NR
PARTITIONS:	NO RATING	OPENINGS NR

NEW CONSTRUCTION

SHAFTS	2 HR
CORRIDOR WALLS	NO RATING
PARTITIONS	NO RATING

AACONSTRUCTION FIRE SAFETY NOTES

1. THE EXISTING EXITS SHALL BE MAINTAINED AT ALL TIMES DURING CONSTRUCTION. PROVIDE A PROTECTED PATH OF TRAVEL TO AND FROM THE BUILDING EXITS AT ALL TIMES.
2. SMOKING IS NOT ALLOWED IN THE BUILDING INCLUDING THE ROOF OR WITHIN 50 FEET OF THE BUILDING. THE CONTRACTOR SHALL ESTABLISH A SMOKING AREA APPROVED BY THE OWNER.
3. WHEN THE BUILDING IS OCCUPIED AND THE EXIT STAIR IS UNDER CONSTRUCTION OR OTHERWISE IMPEDED, THE CONTRACTOR SHALL ESTABLISH AND MAINTAIN A FIRE WATCH. ONLY ONE STAIRWAY SHALL BE IMPEDED AT ANY GIVEN TIME. THE CONTRACTOR SHALL SCHEDULE AND PLAN WORK AT THE STAIRS TO MINIMIZE DISRUPTING EXITING DURING OCCUPANCY. REPLACEMENT OF STAIRWAY DOORS SHALL BE SEQUENTIAL SUCH THAT ONLY ONE DOOR PER STAIRWAY SHALL BE OUT OF SERVICE AT ANY GIVEN TIME.

LEGEND:

220 — EXIT/CAPACITY IN OCCUPANTS

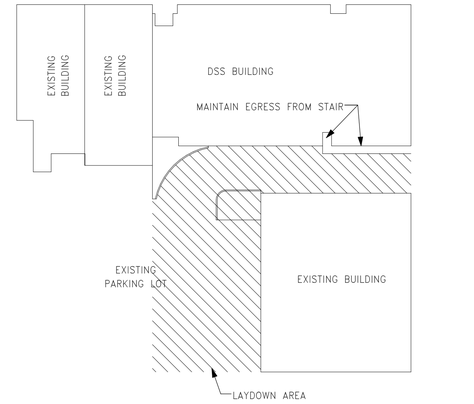
2 2 2 2 2 — 2-HOUR FIRE PARTITION

EXIT LIGHT

200 — AREA OF ROOM OR SPACE
50 — SF/OCC
4 — # OF OCC
* INDICATES AS DESIGNED NOT CALCULATED

FIRE SAFETY PLAN OCCUPANCY @ INDIVIDUAL SPACE

FEC — RECESS FIRE EXTINGUISHER CABINET



SITE PLAN – LAYDOWN AREA

0 8' 16' 32'
SCALE: 1/16" = 1'-0"

Seal
COMMONWEALTH OF VIRGINIA
9/10/15
WILLIAM R. WHITE
Lic. No. 5180
ARCHITECT

ROANOKE COUNTY DSS - PHASE II - BUILDING RENOVATIONS
SALEM, VA

LIFE SAFETY PLANS

No.	Date	Description

Designed	WRW
Drawn	RTH
Checked	WRW
Date	9/6/15

Project No.
13155

THOMPSON & LITTON

Sheet No.
T101

Date/Time: 9/22/2015 11:45:26 AM File Name: C:\Users\Jared_Tackett\Documents\13155 - Roanoke County DSS_Phase 2 Work_Arch_Jtackett.rvt