

# **Board of County Commissioners Agenda Request**

Agenda Item #

Requested Meeting Date: April 9, 2019

Title of Item: Government Center

| ✓ REGULAR AGENDA   | Action Requested:                       | Direction Requested   |  |  |
|--|---|---|--|--|
| CONSENT AGENDA   | Approve/Deny Motion                     | Discussion Item   |  |  |
| INFORMATION ONLY   | Adopt Resolution (attach dr             | aft) Hold Public Hearing* e copy of hearing notice that was published |  |  |
| Submitted by:<br>Jessica Seibert   |   | Department:<br>Administration   |  |  |
| Presenter (Name and Title): Travis Feuchtmann  |   | Estimated Time Needed:<br>15 minutes                                  |  |  |
| Summary of Issue:  |   |   |  |  |
| Travis Feuchtmann from Contegrity G  | roup will be asking the Board to appro  | ve the following:   |  |  |
| 1. Change Order from Olympic Compa   | anies, Inc. in the amount of \$23,661.0 | 0   |  |  |
| 2. Amendment to Agreement between \$25,745.00  | Aitkin County and Contegrity Group,     | dated May 23, 2017 in the amount of                                   |  |  |
|  |   |   |  |  |
| \$   |   |   |  |  |
|  |   |   |  |  |
|  |   |   |  |  |
|  |   |   |  |  |
| Alternatives, Options, Effects on Others/Comments:   |   |   |  |  |
| -  |   |   |  |  |
|  |   |   |  |  |
| Recommended Action/Motion:   |   |   |  |  |
| Approve Olympic Companies Change<br>Approve Amendment to Agreement be                        |   | 3roup for \$25,745.00   |  |  |
| Financial Impact:  Is there a cost associated with thi  What is the total cost, with tax and |   | □ No  |  |  |
| Is this budgeted? Yes  | No Please Exp                           | olain:  |  |  |
|  |   |   |  |  |
|  |   |   |  |  |



# MAIA Document G701/CMa™ - 1992

### Change Order - Construction Manager-Adviser Edition

| PROJECT (Name and address):  | CHANGE ORDER NUMBE                           |                                       | OWNER: [_]                          |
|--|--|---------------------------------------|-------------------------------------|
| Aitkin County<br>217 2nd St NW   | INITIATION DATE: March                       | 26, 2019                              | CONSTRUCTION MANAGER:               |
| Aitkin MN 56431  |  |                                       | ARCHITECT:                          |
| THE THIN SO IS I   |  |                                       | _                                   |
| TO CONTRACTOR (Name and address):  | PROJECT NUMBERS: 14                          | / 1290                                | CONTRACTOR:                         |
| Olympic Companies, Inc.  | CONTRACT DATE: March                         |                                       | FIELD: ☐                            |
| 5932 53rd Ave South, Unit B<br>Fargo ND 58104                                | CONTRACT FOR: Cat. 11                        | •                                     | OTHER:                              |
| THE CONTRACT IS CHANGED AS FOLLO   | WS:  |                                       |                                     |
| Provide MR GWB "Purple Board" in PR 12R: See attached for full descrip       |  | all Exterior walls of Ph              | nase One.                           |
| The original Contract Sum was<br>Net change by previously authorized Ch      |  |                                       | \$ 889,350.00<br>\$ 19,958.00       |
| The Contract Sum prior to this Change C                                      |  |                                       | \$ 909,308.00                       |
| The Contract Sum will be increased by t                                      |  | ount of                               | \$ 23,661.00                        |
| The new Contract Sum including this Ch                                       | lange Order will be                          |                                       | \$ 932,969.00                       |
| been authorized by Construction Ch   | t changes in the Contract<br>ange Directive. | Sum, Contract Time or                 | · Guaranteed Maximum Price which ha |
| NOT VALID UNTIL SIGNED BY THE OWN  | ER, CONSTRUCTION MANAC                       | GER, ARCHITECT AND COM                | NTRACTOR.                           |
| Contegrity Group, Inc.   |  | BKV Group                             |                                     |
| CONSTRUCTION MANAGER (Firm name<br>101 First Street St., Little Falls, MN 56 | 215  | ARCHITECT (Firm nam                   | e)<br>et, Minneapolis, MN 55401     |
| ADDRESS/   | 7  | ADDRESS                               | ei, Willineapons, Wily 33401        |
| Maurence Y.  | Telegon                                      | the days and the second               |                                     |
| BY (Signature)   |  | BY (Signature)                        |                                     |
| Lawrence Filippi   |  | James Van Sweden                      |                                     |
| (Typed name) DATE:   | March 26, 2019                               | (Typed name)                          | DATE:                               |
| Olympic Companies, Inc.  |  | Aitkin County                         |                                     |
| CONTRACTOR (Firm name)   |  | OWNER (Firm name)                     |                                     |
| 5932 53rd Ave South, Unit B, Fargo N   | D 58104                                      | 217 2nd St NW, Aitkin                 | n MN 56431                          |
| ADDRESS  |  | ADDRESS                               |                                     |
| BY (Signature)   |  | DV (Cion struct)                      |                                     |
| Ryan Grauf   |  | BY (Signature) Jessica Seibert, Count | y Administrator                     |
| (Typed name) DATE:   |  | (Typed name)                          | DATE:                               |



5932 53rd Avenue South, Suite B Fargo, North Dakota 58104

Telephone: (701) 365-0098

www.olympiccompanies.com

3/20/2019

#### **CHANGE ORDER REQUEST**

| TO: CONTEGRITY GROUP  101 1st St. SE  LITTLE FALLS, MN 56345                             | PROJECT NAME:<br>LOCATION:<br>OLYMPIC JOB NO.<br>CONTEGRITY JOB N | AITKIN, MN<br>#18-2042                   | RNMENT CENTER ADDITION |
|--|---|--|------------------------|
| DESCRIPTION OF CHANGE: Provide MR GWB "Purple Board" in lieu of Regular  AU EXTERIOR UPP | REQUEST FOR P REVISION TITLE  GWB at Exterior Wall                | DG CI NUMBER # ROSAL NUMBER # / NUMBER # | CI #<br>PR #<br>RFI #  |
| TOTAL COST SUMMARY   |   |  |                        |
| TOTAL LABOR  |   |  | \$                     |
| TOTAL MATERIAL/EQUIPMENT/SUB   | *   |  | \$ 1,442.00            |
| TOTAL COST IMPACT  |   |  | \$ 1,442.00            |
| SCHEDULE IMPACT  |   |  | NONE                   |

RYAN GRAUF, PROJECT MANAGER OLYMPIC COMPANIES, INC.



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| <u>LABOR RATES:</u> CARPENTER FOREMAN - REGULAR TIME  CARPENTER JOURNEYMAN - REGULAR TIME  TAPER JOURNEYMAN - REGULAR TIME  LABOR | <u>HOURS</u><br>0<br>0<br>0<br>0 | <u>RATE</u><br>\$87.00<br>\$84.00<br>\$81.00<br>\$84.00 | \$<br>\$<br>\$<br>\$ | <u>FOTAL</u><br>-<br>-<br>-<br>- |
|---|----------------------------------|---|----------------------|----------------------------------|
|   |                                  | TOTAL LABOR   | \$                   | -                                |
| MATERIAL, EQUIPMENT, SUPPLIES:  |                                  |   |                      |                                  |
| MATERIALS   |                                  |   | \$                   | 1,442.00                         |
| EQUIPMENT / LIFT RENTAL / SCAFFOLD<br>ENGINEERING / SHOP DRAWINGS   |                                  |   | \$                   | <b>≅</b> i<br>∞:                 |
| SUBSISTANCE   |                                  |   | \$<br>\$             | #<br>2                           |
|   |                                  |   | Ψ                    |                                  |
|   |                                  | TOTAL MATERIAL  | \$                   | 1,442.00                         |

RYAN GRAUF, PROJECT MANAGER OLYMPIC COMPANIES, INC.



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11/28/2018

#### **CHANGE ORDER REQUEST**

| TO: CONTEGRITY GROUP  101 1st St. SE  LITTLE FALLS, MN 56345  ATTN: TRAVIS FUECHTMANN  | PROJECT NAME: AITKIN COUNTY GO LOCATION: AITKIN, MN OLYMPIC JOB NO. #18-2042 CONTEGRITY JOB NO.  CONTEGRITY BLDG CI NUMBER # REQUEST FOR PROSAL NUMBER # REVISION TITLE / NUMBER # | CI # PR #12 RFI #            |
|--|--|------------------------------|
| DESCRIPTION OF CHANGE: Provide and Install Level 3 Ballistic Panels to 5' AFF in Revised Layout at 3rd Level Area Creating New Space |  |                              |
| TOTAL COST SUMMARY   |  |                              |
| TOTAL LABOR  |  | \$ 9,744.00                  |
| TOTAL MATERIAL/EQUIPMENT   |  | \$ 20,975.00                 |
| TOTAL COST IMPACT  |  | \$ 30,719.00                 |
| SCHEDULE IMPACT  | For BIEVISIO<br>Utilize OFF  | NONE  NONE  NONE  NONE  NONE |
| RYAN GRAUF, PROJECT MANAGER<br>OLYMPIC COMPANIES, INC.   | 316.   | u: 22,219.                   |



we have all

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| LABOR RATES:<br>CARPENTER FOREMAN - REGULAR TIME<br>CARPENTER JOURNEYMAN - REGULAR TIME<br>TAPER JOURNEYMAN - REGULAR TIME<br>LABOR | <u>HOURS</u><br>0<br>116<br>0<br>0 | <u>RATE</u><br>\$87.00<br>\$84.00<br>\$81.00<br>\$84.00 | \$<br>\$<br>\$<br>\$ | <u>TOTAL</u><br>-<br>9,744.00<br>-<br>- |
|---|------------------------------------|---|----------------------|---|
|   |                                    | TOTAL LABOR   | \$                   | 9,744.00                                |
| MATERIAL, EQUIPMENT, SUPPLIES: MATERIALS EQUIPMENT / LIFT RENTAL / SCAFFOLD ENGINEERING / SHOP DRAWINGS                             |                                    |   | \$<br>\$<br>\$       | 20,975.00                               |
|   |                                    | TOTAL MATERIAL  | \$                   | 20,975.00                               |

RYAN GRAUF, PROJECT MANAGER OLYMPIC COMPANIES, INC.



Architecture Interior Design Landscape Architecture Engineering Phone: 612.339.3752 Fax: 612.339.6212 www.bkvgroup.com Enriching Lives and Strengthening Communities

Owner:

Х

Architect: Consultant: Χ

Contractor:

Field:

Other:

Χ

AIA DOCUMENT G709

**PROJECT:** 

Aitkin County Government Center Addition

217 Second Street NW

Aitkin, MN 56431

**OWNER:** 

Aitkin County

217 Second Street NW

Aitkin, MN 56431

FROM ARCHITECT:

Boarman Kroos Vogel Group, Inc. 222 North Second Street, Suite 101

Minneapolis, MN 55401

PROPOSAL REQUEST NUMBER: 12R

**DATE OF ISSUANCE: 03/19/2019** 

**CONTRACT FOR:** General Construction

CONTRACT DATE: March 27, 2018

**ARCHITECT'S PROJECT NO.: 2121.01** 

TO CONSTRUCTION MANAGER:

Contegrity Group, Inc. 101 1<sup>st</sup> Street SE Little Falls, MN 56345

Please submit an itemized proposal for changes in the Contract Sum and Contract Time for proposed modifications to the Contract Documents described herein. Within **10** days, the Contractor must submit this proposal or notify the Architect, in writing, of the date on which proposal submission is anticipated.

THIS IS NOT A CHANGE ORDER, CONSTRUCTION DIRECTIVE OR A DIRECTION TO PROCEED WITH THE WORK DESCRIBED IN THE PROPOSED MODIFICATIONS.

#### **DESCRIPTION:**

Please provide a detailed proposal for the following work as described below:

#### **SPECIFICATIONS:**

- 1. Section 087100 Door Hardware
  - A. Added new hardware set [06A] and [13A].

#### **ARCHITECTURAL:**

- 1. Provide and install a continuous layer of level-3 ballistic resistant panels as specified in Section 14600 Ballistic-Resistant Assemblies from the floor surface level to at least 5'-0" above the floor in each <u>wall as defined in green in the attached sketches.</u> Ballistic resistant panel shall be installed under 5/8" gypsum board finish, on interior side of room. Provide required furring/shims at areas above 5'-0" to provide a flush finish surface.
- 2. Provide and install (1) one phone jack with required conduit/boxes within each room adjacent to the door at 46" AFF.
  - a. Storage 117
  - b. Storage 124
  - c. Storage 210
- 3. Sheet A900
  - a. Door 117: Revise hardware set from [06] to be [06A].

- b. Door 124: Revise hardware set from [13] to be [13A].
- c. Door 210: Revise hardware set from [13] to be [13A].

**REQUESTED BY:** Owner

#### ISSUED BY: James Van Sweden, Senior Construction Administrator – BKV Group

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#### SECTION 087100 DOOR HARDWARE

PR-12. Revisions, 11/08/2018 PR-11, Revisions, 10/19/2018 PR-06, Revisions, 06/22/2018 ADD-03, Revisions, 02/21/208 Revised 02/09/2018, Addendum 01

#### **PART 1 - GENERAL**

#### 1.1 CONDITIONS

- A. Conditions of the contract (General and Supplementary Conditions) and Division One General Requirements, govern the work of this section.
- B. This section includes all material, and related service necessary to furnish all finish hardware indicated on the drawings, or specified herein.
- C. Furnish UL listed hardware for all labeled and 20 min. openings in conformance with the requirements for the class of opening scheduled. Underwriters' requirements shall have precedence over specification where conflicts exist.
- D. All work shall be in accordance with all applicable state and local building codes. Code requirements shall have precedence over this specification where conflicts exist.

#### 1.2 WORK INCLUDED

- A. This section includes the following:
  - 1. Furnish door hardware (for hollow metal, wood and aluminum doors) specified herein, listed in the hardware schedule, and/or required by the drawings.
  - 2. Cylinders for Aluminum Doors
  - 3. Thresholds and Weather-stripping (Aluminum frame seals to be provided by aluminum door supplier)
  - 4. Electro-Mechanical Devices
  - 5. Access Control components and or systems specified within this section.
- B. Where items of hardware are not definitely or correctly specified and is required for the intended service, such omission, error or other discrepancy should be directed to the Architect prior to the bid date for clarification by addendum. Otherwise furnish such items in the type and quantity established by this specification for the appropriate service intended.

#### 1.3 RELATED WORK IN OTHER SECTIONS

- A. This section includes coordination with related work in the following sections:
  - 1. Division 6 Section "Architectural Woodwork".
  - 2. Division 8 Section "Hollow Metal Doors and Frames".
  - 3. Division 8 Section "Wood Doors"
  - 4. Division 8 Section "Aluminum-Framed Entrances and Storefronts"
  - 5. Division 26 Sections "Electrical".
  - 6. Division 28 Sections for access control hardware.

#### 1.4 REFERENCES

- A. Publications of agencies and organizations listed below form a part of this specification section to the extent referenced.
  - 1. DHI Recommended Locations for Builders' Hardware.
  - 2. NFPA 80 Standards for Fire Doors and Windows.
  - 3. NFPA 101 Code for Safety to Life from Fire in Buildings and Structures.
  - 4. UL Building Material Directory.

- 5. DHI Door and Hardware Institute
- 6. WHI Warnock Hersey
- 7. BHMA Builders Hardware Manufacturers Association
- 8. ANSI American National Standards Institute
- 9. IBC 2006 International Building Code Edition (as amended by local building code)

#### 1.5 SUBMITTALS

- A. Within ten days after award of contract, submit detailed hardware schedule in quantities as required by Division 1 General Conditions.
- B. Schedule format shall be consistent with recommendations for a vertical format as set forth in the Door & Hardware Institute's (DHI) publication "Sequence and Format for the Hardware Schedule". Hardware sets shall be consolidated to group multiple door openings which share similar hardware requirements. Schedule shall include the following information:
  - 1. Door number, location, size, handing, and rating.
  - 2. Door and frame material, handing.
  - 3. Degree of swing.
  - 4. Manufacturer
  - 5. Product name and catalog number
  - 6. Function, type and style
  - 7. Size and finish of each item
  - 8. Mounting heights
  - 9. Explanation of abbreviations, symbols, etc.
  - 10. Numerical door index, indicating the hardware set/ group number for each door.
- C. When universal type door closers are to be provided, the schedule shall indicate the application method to be used for installation at each door: (regular arm, parallel arm, or top jamb).
- D. The schedule will be prepared under the direct supervision of a certified Architectural Hardware Consultant (AHC), or certified Door Hardware Consultant (DHC) employed by the hardware distributor. The hardware schedule shall be signed and embossed or stamped with the DHI certification seal of the supervising AHC or DHC. The supervising AHC or DHC shall attend any meetings related to the project when requested by the architect.
- E. Check the specified hardware for suitability and adaptability to the details and surrounding conditions.
- F. Review drawings from related trades as required to verify compatibility with specified hardware. Indicate unsuitable or in compatible items, and proposed substitutions in the hardware schedule.
- G. Provide documentation for all hardware to be furnished on labeled fire doors indicating compliance with positive pressure fire testing UL 10C.
- H. Furnish manufacturers' catalog data for each item of hardware in quantities as required by Division 1 General Conditions.
- Submit a sample of each type of hardware requested by the architect. Samples shall be of the same finish, style, and function as specified herein. Tag each sample with its permanent location so that it may be used in the final work.
- J. Furnish with first submittal, a list of required lead times for all hardware items.
- K. After final approved schedule is returned, transmit corrected copies for distribution and field use in quantities as required by Division 1 General Conditions.
- L. Furnish approved hardware schedules, template lists, and pertinent templates as requested by related trades.
- M. Furnish necessary diagrams, schematics, voltage and amperage requirements for all electromechanical devices or systems as required by related trades. Wiring diagrams shall be opening specific and include both a riser diagram and point to point diagram showing all wiring terminations.

N. After receipt of approved hardware schedule, Hardware supplier shall initiate a meeting including the owner's representative to determine keying requirements. Upon completion of the initial key meeting, hardware supplier shall prepare a proposed key schedule with symbols and abbreviations as set forth in the door and hardware institute's publication "Keying Procedures, Systems, and Nomenclature". Submit copies of owner approved key schedule for review and field use in quantities as required by Division 1 - General Conditions. Wiring diagrams shall be included in final submittals transmitted for distribution and field use.

#### 1.6 QUALITY ASSURANCE

- A. Manufacturers and model numbers listed are to establish a standard of function and quality. Similar items by approved manufacturers that are equal in design, function, and quality, may be considered for prior approval of the architect, provided the required data and physical samples are submitted for approval as set forth in Division One General Requirements.
- B. Where indicated in this specification, products shall be independently certified by ANSI for compliance with relevant ANSI/BHMA standards A156.1 A156.36 Standards for Hardware and Specialties. All products shall meet or exceed certification requirements for the respective grade indicated within this specification. Supplier shall provide evidence of certification when requested by the architect.
- C. Obtain each type of hardware (hinges, latch & locksets, exit devices, closers, etc.) from a single manufacturer, although several may be indicated as offering products complying with requirements.
- D. Electrical drawings and electrical specifications are based on the specific electrified hardware components specified in hardware sets. When electronic hardware components other than those indicated in hardware sets are provided, the supplier shall be responsible for all costs incurred by the design team and their consultants to review, and revise electrical drawings and electrical specifications. Supplier shall also be responsible for any additional costs associated with required changes in related equipment, materials, installation, or final hook up to insure the system will operate and function as indicated in the construction documents, including hardware set operational / functional descriptions.
- E. All hardware items shall be manufactured no earlier than 6 months prior to delivery to site.
- F. Hardware supplier shall be factory trained and certified by the manufacture to provide and support all computer managed locks and system components.
- G. Installation of hardware shall be installed or directly supervised and inspected by a skilled installer certified by the manufacturer of locksets, door closers, and exit devices used on the project, or with not less than 3 years' experience in successful completion of projects similar in size and scope.
- H. Provide hardware for all labeled fire doors, which complies with positive pressure fire testing UL
- Comply with all applicable provisions of the standards referenced within section 1.4 of this specification.
- J. Hardware supplier shall participate when reasonably requested to meet with the contractor and or architect to inspect any claim for incorrect or non-functioning materials; following such inspection, the hardware supplier shall provide a written statement documenting the cause and proposed remedy of any unresolved items.

#### 1.7 DELIVERY, STORAGE AND HANDLING

- A. Hardware supplier shall deliver hardware to the job site unless otherwise specified.
- B. All hardware shall be delivered in manufacturers' original cartons and shall be clearly marked with set and door number.

- C. Coordinate with contractor prior to hardware delivery and recommend secure storage and protection against loss and damage at job site.
- D. Contractor shall receive all hardware and provide secure and proper protection of all hardware items to avoid delays caused by lost or damaged hardware. Contractor shall report shortages to the Architect and hardware supplier immediately after receipt of material at the job site.
- E. Coordinate with related trades under the direction of the contractor for delivery of hardware items necessary for factory installation.

#### 1.8 PRE-INSTALLATION MEETING

- A. Schedule a hardware pre-installation meeting on site to review and discuss the installation of continuous hinges, locksets, door closers, exit devices, overhead stops, and electromechanical door hardware.
- B. Meeting attendees shall be notified 7 days in advance and shall include: Architect, Contractor, Door Hardware Installers (including low voltage hardware), Manufacturers representatives for above hardware items, and any other effected subcontractors or suppliers.
- C. All attendees shall be prepared to distribute installation manuals, hardware schedules, templates, and physical hardware samples.

#### 1.9 WARRANTY

- A. All hardware items shall be warranted against defects in material and workmanship as set forth in Division One General Requirements.
- B. Repair, replace, or otherwise correct deficient materials and workmanship without additional cost to owner.

#### **PART 2 - PRODUCTS**

#### 2.1 FASTENERS

- A. All exposed fasteners shall be Phillips head or as otherwise specified, and shall match the finish of the adjacent hardware. All fasteners ex-posed to the weather shall be non-ferrous or stainless steel. Furnish correct fasteners to accommodate surrounding conditions.
- B. Coordinate required reinforcements for doors and frames. Seek approval of the architect prior to furnishing through-bolts. Furnish through-bolts as required for materials not readily reinforced.

#### 2.2 BUTT HINGES

|    |  | <u>lves</u> | <u>Stanley</u> | <u>Hager</u> | <u>McKinney</u> |
|----|--|-------------|----------------|--------------|-----------------|
| 1. | Standard Weight, Plain Bearing             | 5PB1        | F179           | 1279         | T2714           |
|    | Standard Weight, Ball Bearing              | 5BB1        | BB179          | BB1279       | TB2714          |
| 3. | Standard Weight, Ball Bearing, Non-Ferrous | 5BB1        | FBB191         | BB1191       | TB2314          |
| 4. | Heavy Weight, Ball Bearing                 | 5BB1HW      | FBB168         | BB1168       | T4B3786         |
| 5. | Heavy Weight, Ball Bearing, Non-Ferrous    | 5BB1HW      | FBB199         | BB1199       | T4B3386         |

- B. Hinges shall be independently certified by ANSI for compliance with ANSI A156.1 (2006). Hinges shall meet or exceed the following ANSI grade requirements as indicated below:
  - 1. Standard Weight, Plain Bearing Hinges: Grade 3
  - 2. Standard Weight, 2 Ball Bearing Hinges: Grade 2
  - 3. Heavy Weight, 4 Ball Bearing Hinges: Grade 1
- C. Unless otherwise specified, furnish the following hinge quantities for each door leaf.
  - 1. 3 hinges for doors up to 90 inches.
  - 2. 1 additional hinge for every 30 inch on doors over 90 inches.
  - 3. 4 hinges for Dutch door applications.

- D. Unless otherwise specified, top and bottom hinges shall be located as specified in division 8 Section "Hollow Metal Doors and Frames". Intermediate hinges shall be located equidistant from others.
- E. Unless otherwise specified, furnish hinge weight and type as follows:
  - 1. Standard weight: plain bearing hinge 5PB1 for interior openings through 36 inches wide without a door closer.
  - 2. Standard weight: ball bearing hinge 5BB1 for interior opening over 36 through 40 inches wide without a door closer, and for interior openings through 40 inches wide with a door closer.
  - 3. Heavyweight: 4 ball bearing hinge 5BB1HW for interior openings over 40 inches wide, and for all vestibule doors.
  - 4. Heavyweight: 4 ball bearing hinge 5BB1HWss for exterior openings unless otherwise listed in groups.
- F. Unless otherwise specified, furnish hinges for exterior doors, fabricated from brass, bronze, or stainless steel. Unless otherwise specified, hinges for interior doors may be fabricated from steel.
- G. Unless otherwise specified, furnish hinges in the following sizes:
  - 1. 5" x 5" 2-1/4" thick doors
    2. 4-1/2" x 4-1/2" 1-3/4" thick doors
    3. 3-1/2" x 3-1/2" 1-3/8" thick doors
- H. Furnish hinges with sufficient width to accommodate trim and allow for 180-degree swing.
- I. Unless otherwise specified, furnish hinges with flat button tips with non-rising pins at interior doors, non-removable loose pins (NRP) at exterior and out-swinging interior doors.
- J. Unless otherwise specified, furnish all hinges to template standards.

#### 2.3 POWER TRANSFERS

A. Acceptable manufacturers and respective catalog numbers:

|   | Von Duprin | <u>ASSA</u> |
|---|------------|-------------|
| 1. Concealed Two Wire                         | EPT-2      | CEPT-10     |
| 2. Concealed Ten Wire                         | EPT-10     | CEPT-10     |
| 3. Armored Door Cord Four Wire                | 788C-12    | TSB-C       |
| <ol><li>Armored Door Cord Four Wire</li></ol> | 788C-18    | TSB-C       |

- B. Door cords shall be armored cable with screw on caps.
- C. Concealed power transfers shall be concealed in the door and frame when the door is closed.
- D. Concealed power transfers shall have a steel tube to protect wires from being cut.
- E. Concealed power transfers with spring tubes shall be rejected.
- F. Concealed power transfers shall be supplied with a mud box to house all terminations.

#### 2.4 FLUSH BOLTS AND DUST PROOF STRIKES

| lves  | Door Controls         | <u>Hager</u>                     |
|-------|-----------------------|----------------------------------|
| DP2   | 80                    | 280X                             |
| FB31P | 842                   | 292D                             |
| FB41P | 942                   | 291D                             |
| FB458 | 780                   | 282D                             |
|       | DP2<br>FB31P<br>FB41P | DP2 80<br>FB31P 842<br>FB41P 942 |

- B. Unless otherwise specified, provide 12" rods for manual flush bolts for door 7'6" or less, 24" top rods for doors over 7'6" to 8'6".
- C. Unless otherwise specified, provide doors over 8'6" with automatic top bolts.

- D. Provide automatic flush bolts where required to maintain fire door listing and or egress requirements on pairs of doors.
- E. All flush-bolt applications shall be UL listed to be installed with top flush-bolt only. Provide auxiliary fire bolt as required for fire rated openings where less bottom bolt has been specified.
- F. Provide all bottom flush bolts with non-locking dust proof strikes.

#### 2.5 EXIT DEVICES

|    |                  | Von Duprin     | <u>Sargent</u>  | <u>Yale</u>   | <u>Corbin</u> |
|----|------------------|----------------|-----------------|---------------|---------------|
| 1. | Wide Stile, Push | 98 / 99 Series | GL-43-80 Series | 7100-ECK1 Se- | ED5000-M110   |
|    | Pad              |                |                 | ries          | Series        |
| 2. | Lever Trim       | 996 Series     | 740 ET          | 600 Series    | 900 Series    |
| 3. | Pull Trim        | 990 Series     | 800 MAL         | 500 Series    | 1300 Series   |

- A. Exit devices shall be independently certified by ANSI for compliance with ANSI A156.3, Grade 1 (2008).
- B. Obtain exit devices from a single manufacturer, although several may be indicated as offering products complying with requirements.
- C. All exit devices shall be equipped with a sound-dampening feature to reduce touch pad return noise.
- D. On full glass doors there shall be no exposed fasteners on the back of the mechanism visible through the glass.
- E. All exit devices shall be provided with flush end caps to reduce potential damage from impact.
- F. All exit devices shall be provided with dead-locking latch bolts to insure security.
- G. All exit devices shall be U.L. listed for accident hazard. Exit device for use on fire doors shall also be U.L. listed for fire exit hardware.
- H. Provide optional strikes, special length rods, and adapter plates to accommodate door and frame conditions. Provide narrow style series devices in lieu of wide stile series devices where optional strikes will not accommodate door and frame conditions.
- I. Coordinate with related trades to insure adequate clearance and reinforcement is provided in doors and frames. Provide thru bolts as required.
- J. Refer to hardware groups for exit device applications utilizing the option of: "less bottom rod and floor strike" (LBR)
- K. All exit devices shall be provided with optional trim designs to match other lever and pull designs used on the project.
- L. Unless specific exit device dogging options are noted within hardware sets, provide dogging options as follows:
- M. Fire Rated devices: Dogging not permitted.
- N. Non-Rated Exit Only functions not equipped with outside trim or pull: Less Dogging.
- O. Non-Rated Classroom functions: Less Dogging.
- P. Non-Rated devices utilizing electric latch retraction or electrified outside trim: Less Dogging.
- Q. All Other Non-Rated devices: Cylinder Dogging utilizing interchangeable core cylinders. Cylinder keyway shall match locksets furnished on this project.
- R. Provide glass bead kits as required to accommodate door conditions. Screws shall not be visible through full glass doors.
- S. Where specified, provide compatible keyed mullions with cylinder for pairs of doors.

T. Provide reinforced crossbars for all traditional style exit devices applied to doors over 36" wide.

#### 2.6 LOCKS AND LATCHES

A. Acceptable manufacturers and respective catalog numbers:

|                    | <u>Schlage</u> | <u>Sargent</u> | <u>Yale</u>        | <u>Corbin</u> |
|--------------------|----------------|----------------|--------------------|---------------|
| 1. Grade 1 Mortise | L Series 03A   | 8200 LNJ       | 8800 Series<br>CRR | ML2000 LWA    |

- B. Bored locks shall be independently certified by ANSI for compliance with ANSI A156.2 (2011). Interconnected locks shall be independently certified by ANSI for compliance with ANSI A156.12 (2013). Mortise locks shall be independently certified by ANSI for compliance with ANSI A156.13 (2012).
- C. Minimize transmission of heat to lock trim. Provide temperature control modules (TCM) on all electrified locks when cataloged by the lock manufacturer.
- D. Unless otherwise specified, all locks and latches to have:
  - 1. 2-3/4" Backset
  - 2. 1/2" minimum throw latchbolt
  - 3. 1" throw deadbolt
  - 4. 6 pin cylinders
  - 5. ANSI A115.2 strikes
- E. Provide guarded latch bolts for all locksets, and latch bolts with sufficient throw to maintain fire rating of both single and paired door assemblies.
- F. Length of strike lip shall be sufficient to clear surrounding trim.
- G. Provide wrought boxes for strikes at inactive doors, wood frames, and metal frames without integral mortar covers.

#### 2.7 PULLS, PUSH BARS, PUSH/PULL PLATES

A. Acceptable manufacturers and respective catalog numbers:

|   | <u>Burns</u> | <u>Hager</u> | <u>lves</u>     |
|---|--------------|--------------|-----------------|
| 1. Straight Pull (1" dia., 10" ctc)               | 26C          | 4J           | 8103-0          |
| 2. Straight Pull (3/4" dia., 8" ctc)              | 25B          | 3G           | 8102-8          |
| 3. Offset Door Pull (1" dia., 10" ctc)            | 39C          | 12J          | 8190-0          |
| 4. Pull / Push-Bar (1" dia., 10" ctc Pull)        | 422 x 26C    | 153          | 9103-0          |
| 5. Offset Pull / Push-Bar (1" dia., 10" ctc Pull) | 422 x 39C    | 159          | 9190-0          |
| 6. Push Plate (.050 4"X 16")                      | 54           | 30S 4 x 16   | 8200 4 x 16     |
| 7. Push Plate (.050 6"X 16")                      | 56           | 30S 6 x 16   | 8200 6" X 16"   |
| 8. Pull Plate (1" dia., 10" ctc050" X 4" X 16")   | 5426C        | 34J 4 x 16   | 8303-0 4" X 16" |

- A. Adjust dimensions of push plates to accommodate stile and rail dimensions, lite and louver cutouts, and adjacent hardware. Where required by adjacent hardware, push plates shall be factory drilled for cylinders or other mortised hardware. All push plates shall be beveled 4 sides and counter sunk.
- B. Where possible, provide back-to-back, and concealed mounting for pulls and push bars. Push bar length shall be 3" less door width, or center of stile to center of stile for stile & rail or full glass doors.

#### 2.8 COORDINATORS

|                                     | <u>lves</u> | Door Controls | <u>Hager</u> |
|-------------------------------------|-------------|---------------|--------------|
| <ol> <li>Bar Coordinator</li> </ol> | COR x FL    | 600 x Filler  | 297D x 297F  |
| 2. Mounting Bracket                 | MB Series   | AB, C Series  | 297 Series   |

- B. Provide coordinators at all pairs of doors having automatic flush bolts and closers on the inactive leaf, and for pairs of doors having vertical rod/mortise exit device combinations with overlapping astragals.
- C. Provide appropriate filler bars, closer mounting brackets, carry bars, and special top latch preparations as required by adjacent hardware.

#### 2.9 CLOSERS

A. Acceptable manufacturers and respective catalog numbers:

| LCN               | <u>Sargent</u> | <u>Yale</u>    | <u>Norton</u>  |
|-------------------|----------------|----------------|----------------|
| 1. 4050 /4050 EDA | 350 / 351 P10  | R4400 / PR4400 | R7500 / PR7500 |

- B. Door closers shall be independently certified by ANSI for compliance with ANSI A156.4, Grade 1 (2013).
- C. Obtain door closers from a single manufacturer, although several may be indicated as offering products complying with requirements.
- D. Provide extra heavy duty arm (EDA / HD) when closer is to be installed using parallel arm mounting.
- E. Hardware supplier shall coordinate with related trades to insure aluminum frame profiles will accommodate specified door closers.
- F. Closers shall utilize a stable fluid withstanding temperature range of +120deg F to -30deg F without seasonal adjustment of closer speed to properly close the door. Closers for fire-rated doors shall be provided with temperature stabilizing fluid that complies with standards UL10C.
- G. Unless otherwise specified, all door closers shall have full covers and separate adjusting valves for sweeps, latch, and backcheck.
- H. Provide closers for all labeled doors. Provide closer series and type consistent with other closers for similar doors specified elsewhere on the project.
- Provide closers with adjustable spring power. Size closers to insure exterior and fire rated doors
  will consistently close and latch doors under existing conditions. Size all other door closers to
  allow for reduced opening force not to exceed 5 lbs.
- J. Install closers on the room side of corridor doors, stair side of stairways and interior side of exterior doors.
- K. Closers shall be furnished complete with all mounting brackets and cover plates as required by door and frame conditions, and by adjacent hardware.
- L. Door closers shall be provided with a powder coat finish to provide superior protection against the effects of weathering. Powder coat finish shall successfully pass a 100 hour salt spray test.
- M. Pressure Relief Valve, PRV, shall not be acceptable.

#### 2.10 LOW ENERGY ELECTRO-HYDRAULIC AUTOMATIC OPERATORS

A. Acceptable manufacturers and respective catalog numbers:

1. Electro-Hydraulic Operator LCN Norton 4640 6600

- B. Low energy operators shall be independently certified by ANSI for compliance with ANSI A156.19 (2002).
- C. Where low kinetic energy, as defined by ANSI/BHMA Standard A156.19, power operators are indicated for doors required to be accessible to the disabled, provide electrically powered operators complying with the ADA for opening force and time to close standards.
- D. The closing action shall be controlled by modern type door closer cylinder filled with a flat viscosity fluid, stable from +120F to -30F that would require no seasonal adjustments. The closer shall

have field adjustable spring power; have two independent closing speed adjustment valves, and hydraulic back-check.

- E. Full closing force shall be provided when the power or assist cycle ends.
- F. All power operator systems shall include the following features and functions:
  - 1. Provisions for separate conduits to carry high and low voltage wiring in compliance with the National Electrical Code, section 725-31.
  - 2. The operator will be designed with an electronically controlled mechanical clutching mechanism to prevent damage to the operator if the system is actuated while the door is latched or if the door is forced closed during the opening cycle.
  - 3. All covers, mounting plates and arm systems shall be powder coated and successfully pass a minimum of 100 hours testing as outlined in ANSI/BHMA Standard A156.18.
  - 4. UL listed for use on labeled doors.
  - All operators shall be non-handed with spring power over a range of at least four sizes; either 1 through 4 or 2 through 5.
  - The power operator shall incorporate microprocessor controlled digital controls including: factory default memory settings, on-board diagnostics, non-volatile memory, and integrated delay and relay for controlling door release devices.
  - 7. Provisions in the control box or module shall provide control (inputs and outputs) for; electric strike delay, auxiliary contacts, sequential operation, fire alarms systems, actuators, swing side sensors, and stop side sensors.
  - 8. Wall mounted actuators shall consist of a 4-1/2 inch diameter stainless steel touch plate with a blue filled handicapped symbol. Switches shall be weather resistant and mount on a single gang electrical box furnished by Division 16.
- G. All electrically powered operators shall include the following features or functions:
  - 1. When an obstruction or resistance to the opening swing is encountered, the operator will pause at that point, then attempt to continue opening the door. If the obstruction or resistance remains, the operator will again pause the door.
  - 2. Easily accessible main power and maintain hold open switches will be provided on the opera-
  - 3. An electronically controlled clutch to provide adjustable opening force.
  - 4. A microprocessor to control all motor and clutch functions.
  - 5. An on-board power supply capable of delivering both 12V and 24V outputs up to a maximum of 1.0 ampere combined load.
  - 6. All input and output power wiring shall be protected by slow blow fuses. These fuses shall be easily replaceable without special tools or component replacement.
  - 7. If electrical failure occurs, the unit shall operate as a standard door closer.
- H. Power Operators shall be warranted by the manufacture to be free from defects in material and workmanship for a period of two years.

#### 2.11 KICK PLATES AND MOP PLATES

- A. Furnish protective plates as specified in hardware groups.
- B. Where specified, provide 10" kick plates, 34" armor plates, and 4" mop plates. Unless otherwise specified, metal protective plates shall be .050" thick; plastic plates shall be 1/8" thick.
- C. Protective plates shall be 2" less door width, or 1" less door width at pairs. All protective plates shall be beveled 4 sides and counter sunk. Protection plates over 16" shall not be provided for labeled doors unless specifically approved by door manufacturers listing.
- D. Where specified, provide surface mounted door edges. Edges shall butt to protective plates. Provide edges with cutouts as required adjacent hardware.
- E. Adjust dimensions of protection plates to accommodate stile and rail dimensions, lite and louver cutouts, and adjacent hardware. Where required by adjacent hardware, protection plates shall be factory drilled for cylinders or other mortised hardware.

#### 2.12 OVERHEAD STOPS

A. Acceptable manufacturers and respective catalog numbers:

|                                | Glynn-Johnson | <u>Rixson</u> | <u>Sargent</u> |
|--------------------------------|---------------|---------------|----------------|
| 1. Heavy Duty Surface Mount    | GJ900 Series  | 9 Series      | 590            |
| 2. Heavy Duty Concealed Mount  | GJ100 Series  | 1 Series      | 690            |
| 3. Medium Duty Surface Mount   | GJ450 Series  | 10 Series     | 1540           |
| 4. Medium Duty Concealed Mount | GJ410         | 2 Series      | 1530           |

- B. Unless otherwise specified, furnish GJ900 series overhead stop for hollow metal or 1-3/4" solid core doors equipped with regular arm surface type closers that swing more than 140 degrees before striking a wall, for hollow metal or 1-3/4" solid core doors that open against equipment, casework, sidelights, or other objects that would make wall bumpers inappropriate, and as specified in hardware groups.
- C. Furnish sex bolt attachments for wood and mineral core doors unless doors are supplied with proper reinforcing blocks.
- D. Provide special stop only ("SE" suffix) overhead stops when used in conjunction with electronic hold open closers.
- E. Do not provide holder function for labeled doors.

#### 2.13 WALL STOPS AND HOLDERS

A. Acceptable manufacturers and respective catalog numbers:

|      |                             | <u>lves</u> | <u>Hager</u> | <u>Burns</u> |
|------|-----------------------------|-------------|--------------|--------------|
| 1. W | /rought Convex Wall Bumper  | WS406CVX    | 232W         | 570          |
| 2. W | /rought Concave Wall Bumper | WS406CCV    | 236W         | 575          |
| 3. E | xtended Wall Stop           | WS11/WS11X  | 255W         | 530          |
| 4. E | xtended Wall Stop           | WS33/WS33X  | ****         | ****         |
| 5. A | utomatic Wall Holder        | WS40        | 326W         | 533          |
| 6. H | linge Pin Stop              | 70          | ****         | ****         |

- B. Furnish a stop or holder for all doors. Furnish floor stops or hinge pin stops only where specifically specified.
- C. Where wall stops are not applicable, furnish overhead stops.
- D. Do not provide holder function for labeled doors.

#### 2.14 MAGNETIC HOLD OPENS

A. Acceptable manufacturers and respective catalog numbers:

|                | <u>LCN</u> | <u>ABH</u> | <u>Edwards</u> |
|----------------|------------|------------|----------------|
| 1. Wall Holder | SEM 7800   | 2000       | 1500           |

- B. Magnetic hold opens shall be independently certified by ANSI for compliance with ANSI A156.15, Grade 1 (2006).
- C. Magnetic holder's housing and armature shall be constructed of a die cast zinc material.
- D. Provide types as listed in groups.
- E. Where wall conditions do not permit the armature to reach the magnet, provide extensions.
- F. Provide proper voltage and power consumption as required by Division 16.
- G. Coordinate electrical requirements and mounting locations with other trades.

#### 2.15 WEATHERSTRIP, GASKETING

|    |              | <u>Zero</u> | <u>Pemko</u> | <u>NGP</u> | <u>Reese</u> |
|----|--------------|-------------|--------------|------------|--------------|
| 1. | Weatherstrip | 429         | 2891_PK      | 700NA      | 755          |

| 2.<br>3. | Adhesive Gasket Mullion Seal/Silencer  | 188<br>8780 | S88<br>5110 | 5050<br>5100N | 797  |
|----------|--|-------------|-------------|---------------|------|
| 4.       | Meeting Edge Seals                     | 8193        | 18041       | 9605          | 959  |
| 5.       | Adhesive Edge Seal                     | ****        | S77         | 5060          | **** |
| 6.       | Automatic Door Bottom (Surface Mtd.)   | 321         | 4131        | 222           | 320  |
| 7.       | Automatic Door Bottom (HD Concealed)   | 360         | 434_RL      | 423N          | 430  |
|          | (When Sealing Against A Solid Surface) |             |             |               |      |
| 8.       | Automatic Door Bottom (HD Concealed)   | 360         | 434_NBL     | 683           | 943  |
|          | (When Sealing Against Carpet)          |             |             |               |      |
| 9.       | Automatic Door Bottom                  | 355         | 420APKL     | 320N          | 372A |
| 10.      | Sweeps                                 | 8192        | 18061_NB    | B606          | 964  |
| 11.      | Sweep w/ drip                          | 8198        | 345_N       | C627          | 354  |
| 12.      | Drip Cap                               | 142         | 346         | 16            | R201 |

- B. Weatherstrip and gasketing shall be independently certified by ANSI for compliance with ANSI A156.22 (2005).
- C. Where specified in the hardware groups, furnish the above products unless otherwise detailed in groups.
- D. Provide weatherstripping all exterior doors and where specified.
- E. Provide intumescent and other required edge sealing systems as required by individual fire door listings to comply with positive pressure standards UL 10C.
- F. Provide Zero 188 smoke gaskets at all fire rated doors and smoke and draft control assemblies.
- G. Provide gasketing for all meeting edges on pairs of fire doors. Gasketing shall be compatible with astragal design provided by door supplier as required for specific fire door listings.

#### 2.16 THRESHOLDS

A. Acceptable manufacturers and respective catalog numbers:

|                                       | <u>Zero</u> | <u>Pemko</u> | <u>NGP</u> | <u>Reese</u> |
|---------------------------------------|-------------|--------------|------------|--------------|
| <ol> <li>Saddle Thresholds</li> </ol> | 8655        | 171          | 425        | S205         |
| 2. Half Saddle Thresholds             | 1674        | 227          | 324        | S239         |
| 3. Interlocking Threshold             | 74A         | 114          | 442-5      | T550         |

- A. Thresholds shall be independently certified by ANSI for compliance with ANSI A156.21 (2001).
- B. Hardware supplier shall verify all finish floor conditions and coordinate proper threshold as required to insure a smooth transition between threshold and interior floor finish.
- C. Threshold Types:
  - 1. Unless otherwise specified, provide saddle threshold similar to Zero 8655 for all exterior openings with an interior floor finish less than or equal to 1/4" in height.
  - 2. Unless otherwise specified, provide half saddle threshold similar to Zero 1674 for all exterior openings with an interior floor finish greater than 1/4" in height. Threshold height shall match thickness of interior floor finish.

#### 2.17 POWER SUPPLIES

- A. Provide quantities and types as specified in hardware sets. Shared power supplies will not be accepted without prior approval from the owner.
- B. All power supplies shall have the following features:
  - 1. 12/24 VDC Output, field selectable.
  - 2. Class 2 Rated power limited output.
  - 3. Universal 120-240 VAC input.
  - 4. Low voltage DC, regulated and filtered.
  - 5. Polarized connector for distribution boards.
  - 6. Fused primary input.
  - 7. AC input and DC output monitoring circuit w/LED indicators.

- 8. Cover mounted AC Input indication.
- 9. Tested and certified to meet UL294.
- 10.NEMA 1 enclosure.
- 11. Hinged cover w/lock down screws.
- 12. High voltage protective cover.
- C. All power supplies shall incorporate fused distribution boards.
- D. All electro-mechanical systems requiring fail safe circuits shall be capable of interfacing with the fire alarm system to cut power to appropriate system components. Unless already provided in another system component, all power supplies utilized in fail safe circuits shall include an integral relay which when connected to the N/C fire alarm contact will cut power to all openings connected to the individual power supply. Power supply, unless otherwise specified, will automatically reset itself when fire alarm relay returns to normal state following a fire alarm.

#### 2.18 DOOR POSITION SWITCHES

A. Acceptable manufacturers and respective catalog numbers:

|  | Schlage Electronics | <u>Sentrol</u> | <u>Sargent</u> |
|--|---------------------|----------------|----------------|
| Concealed (wood & hollow metal doors) Concealed (aluminum doors) | 679 Series<br>7764  | 1076W<br>****  | 3287<br>****   |

#### 2.19 FINISHES AND BASE MATERIALS

A. Unless otherwise indicated in the hardware groups or herein, hardware finishes shall be applied over base metals as specified in the following finish schedule:

|     | HARDWARE ITEM                  | BHMA FINISH AND BASE MATERIAL       |
|-----|--------------------------------|-------------------------------------|
| 1.  | Butt Hinges: Exterior, or Non- | 630 (US32D - Satin Stainless Steel) |
|     | Ferrous                        |                                     |
| 2.  | Butt Hinges: Interior          | 652 (US26D - Satin Chromium)        |
| 3.  | Continuous Hinges              | 630 (US32D - Satin Stainless Steel) |
| 4.  | Flush Bolts                    | 626 (US26D - Satin Chromium)        |
| 5.  | Exit Devices                   | 626 (US26D - Satin Chromium)        |
| • • | Locks and Latches              | 626 (US26D - Satin Chromium)        |
| 7.  | Pulls and Push Plates/Bars     | 630 (US32D - Satin Stainless Steel) |
| 8.  | Coordinators                   | 600 (Prime painted or mill alum.)   |
| 9.  | Closers                        | 689 (Powder Coat Aluminum)          |
| 10. | Protective Plates              | 630 (US32D - Satin Stainless Steel) |
|     | Overhead Stops                 | 630 (US32D - Satin Stainless Steel) |
|     | Wall Stops and Holders         | 630 (US32D - Satin Stainless Steel) |
|     | Thresholds                     | 628 (Mill Aluminum)                 |
| 14. | Weather-strip, Sweeps Drip     | Aluminum Anodized                   |
|     | Caps (wood and hollow metal    |                                     |
|     | doors)                         |                                     |
| 15. | Weather-strip, Sweeps Drip     | Match finish of aluminum doors.     |
|     | Caps (aluminum doors)          | periodical invasion A. L            |
|     | . Magnetic Holders             | Sprayed Aluminum                    |
| 17  | . Magnetic Locks               | 628 (US28)                          |
| 18  | . Miscellaneous                | 626 (US26D - Satin Chromium)        |
|     |                                |                                     |

#### 2.20 KEYING

- A. Provide large format interchangeable cores for all locks and cylinders.
- B. Provide additional temporary brass construction cores for all lock cylinders.
- C. Key system shall utilize patented physical construction to protect against the unauthorized manufacturing and, or distribution of aftermarket key blanks and lock cylinders by anyone other than factory authorized dealers. Patent shall be enforceable until 2029.

- D. All locks under this section shall be keyed as directed by the owner to a new Restricted Patented Grand Master Key System.
- E. Keying shall be by lock manufacturer where permanent records shall be kept.
- F. Key blanks and cylinders shall be certified to have successfully passed 120,000 cycles (3 times ANSI grade 1 requirements) Cylinder cycle testing criteria shall be in accordance with ANSI A156.5, (2014).
- G. Key blanks shall be warranted against breakage by the manufacture for life.
- H. Furnish a total of 2 keys per cylinder. Actual cut keys to be determined by owner.
- I. Provide 100 each additional uncut key blanks for owners stock.
- J. Permanent cylinder cores shall be installed by the owner, or owner's representative. Temporary cylinders and cores shall be returned to the distributor once permanent cores have been installed
- K. Master keys control keys, and additional uncut key blanks to be delivered by registered mail to the owner. Change keys shall be delivered in a set up key cabinet. Construction keys shall be delivered to the contractor.

#### 2.21 KEY CABINETS

A. Acceptable manufacturers and respective catalog numbers:

<u>Lund</u> <u>Key Control</u> <u>Telkee</u>

1. 1200-1205 AA M228-2480 RWC-AWC

- B. Furnish 1 each model 1200 or 1205 AA key cabinet with a capacity 1.5 times the number of key sets.
- C. Provide one key cabinet with at least one hook for each key set, plus additional hooks for 50% expansion.
- D. Furnish key cabinet complete with cam lock, permanent key tags, and change key cards.
- E. Hardware supplier shall prepare all key change index records, tag all keys and place permanent file keys in cabinet.

#### **PART 3 - EXECUTION**

#### 3.1 EXAMINATION

A. Prior to installation of hardware, installer shall examine door frame installation to insure frames have been set square and plumb. Installer shall examine doors, door frames, and adjacent wall, floor, and ceiling for conditions, which would adversely affect proper operation and function of door assemblies. Do not proceed with hardware installation until such deficiencies have been corrected.

#### 3.2 INSTALLATION

- A. Before hardware installation, general contractor/construction manager shall coordinate a hardware installation seminar with a 1 week notice to all parties involved. The seminar is to be conducted on the installation of hardware, specifically of locksets, closers, exit devices, continuous hinges and overhead stops. Manufacturer's representative of the above products to present seminar. Seminar to be held at the job site and attended by installers of hardware (including low voltage hardware) for aluminum, hollow metal and wood doors. Training to include use of installation manuals, hardware schedule, templates and physical products samples.
- B. Install all hardware in accordance with the approved hardware schedule and manufacturers instructions for installation and adjustment.
- C. Set units level, plumb and true to the line and location. Adjust and reinforce the attachment substrate as necessary for proper installation and operation.

- D. Drill and countersink units which are not factory-prepared for anchorage fasteners. Space fasteners and anchors in accord with industry standards.
- E. Drill appropriate size pilot holes for all hardware attached to wood doors and frames.
- F. Shim doors as required to maintain proper operating clearance between door and frame.
- G. Unless otherwise specified, locate all hardware in accordance with the recommended locations for builders hardware for standard doors and frames as published by the Door and Hardware Institute.
- H. Use only fasteners supplied by or approved by the manufacturer for each respective item of hardware.
- I. Mortise and cut to close tolerance and conceal evidence of cutting in the finished work.
- J. Conceal push and pull bar fasteners where possible. Do not install through bolts through push plates.
- K. Install hardware on UL labeled openings in accordance with manufacturer's requirements to maintain the label.
- L. Apply self-adhesive gasketing on frame stop at head & latch side and on rabbet of frame at hinge side.
- M. Install hardware in accordance with supplemental "S" label instructions on all fire rated openings.
- N. Install wall stops to contact lever handles or pulls. Do not mount wall stops on casework, or equipment.
- O. Where necessary, adjust doors and hardware as required to eliminate binding between strike and latchbolt. Doors should not rattle.
- P. Overhead stops used in conjunction with electrified hold open closers shall be templated and installed to coincide with engagement of closer hold open position.
- Q. Install door closers on corridor side of lobby doors, room side of corridor doors, and stair side of stairways.
- R. Adjust spring power of door closers to the minimum force required to insure exterior and fire rated doors will consistently close and latch doors under existing conditions. Adjust all other door closers to insure opening force does not to exceed 5 lbs.
- Adjust "sweep", "latch", & "back check" valves on all door closers to properly control door throughout the opening and closing cycle. Adjust total closing speed as required to comply with all applicable state and local building codes.
- T. Install "hardware compatible" (bar stock) type weatherstripping continuously for an uninterrupted seal. Adjust templating for parallel arm door closers, exit devices, etc., as required to accommodate weatherstripping.
- U. Unless otherwise specified or detailed, install thresholds with the bevel in vertical alignment with the outside door face. Notch and closely fit thresholds to frame profile. Set thresholds in full bed of sealant.
- V. Compress sweep during installation as recommended by sweep manufacturer to facilitate a water resistant seal.
- W. Deliver to the owner 1 complete set of installation and adjustment instructions, and tools as furnished with the hardware.

#### 3.3 FIELD QUALITY CONTROL

A. After installation has been completed, the hardware supplier and manufacturers representative for locksets, door closers, exit devices, and overhead stops shall check the project and verify

- compliance with installation instructions, adjustment of all hardware items, and proper application according to the approved hardware schedule. Hardware supplier shall submit a list of all hardware that has not been installed correctly.
- B. After installation has been completed, the hardware supplier and manufacturers representative shall meet with the owner to explain the functions, uses, adjustment, and maintenance of each item of hardware. Hardware supplier shall provide the owner with a copy of all wiring diagrams. Wiring diagrams shall be opening specific and include both a riser diagram and point to point diagram showing all wiring terminations.

#### 3.4 ADJUSTMENT AND CLEANING

- A. At final completion, and when H.V.A.C. equipment is in operation, installer shall make final adjustments to and verify proper operation of all door closers and other items of hardware. Lubricate moving parts with type lubrication recommended by the manufacturer.
- B. All hardware shall be left clean and in good operation. Hardware found to be disfigured, defective, or inoperative shall be repaired or replaced.

#### 3.5 HARDWARE SCHEDULE

A. The following schedule of hardware groups are intended to describe opening function. The hardware supplier is cautioned to refer to the preamble of this specification for a complete description of all materials and services to be furnished under this section.

#### **HW SET: 01**

|   | EA | HINGES             | AS SPECIFIED | IVE<br>SCH |
|---|----|--------------------|--------------|------------|
| 1 | EA | DBL CYL STORE W/DB |              |            |
| 1 | EΑ | WALL STOP          | WS406/407CVX | IVE        |

FUNCTION: L9466 (F14) Store/Utility Room Lock\*

Latchbolt retracted by lever from either side. Deadbolt thrown or retracted by key from either side.

#### HW SET: 02

FUNCTION: L9496 Privacy With "OCCUPIED" Indicator

Lever retracts latchbolt from either side. Deadbolt thrown or retracted by key outside (retraction by key required in the event of an emergency) or inside thumbturn. Throwing deadbolt locks outside lever and displays "OCCUPIED" plate. Rotating inside lever simultaneously retracts both deadbolt and latchbolt and unlocks outside lever.

| • | EA    | HINGES         | AS SPECIFIED | IVE |
|---|-------|----------------|--------------|-----|
|   | EA    | CLASSROOM LOCK | L9070        | SCH |
|   | EA    | WALL STOP      | WS406/407CCV | IVE |
| • | L-/ \ | -              | WS406/407CCV | ſ   |

FUNCTION: L9070 (F05) Classroom Lock

Latchbolt retracted by lever from either side unless outside is locked by key. Unlocked from outside by key. Inside lever always free for immediate exit. Auxiliary latch deadlocks latchbolt when door is closed.

#### **HW SET: 04**

|   | EA | HINGES         | AS SPECIFIED | IVE |
|---|----|----------------|--------------|-----|
| 1 | EA | CLASSROOM LOCK | L9070        | SCH |
| 1 | EA | OH STOP        | 908          | GLY |

FUNCTION: L9070 (F05) Classroom Lock

Latchbolt retracted by lever from either side unless outside is locked by key. Unlocked from outside by key. Inside lever always free for immediate exit. Auxiliary latch deadlocks latchbolt when door is closed.

#### **HW SET: 05**

|   | EΑ | HINGES         | AS SPECIFIED | IVE |
|---|----|----------------|--------------|-----|
| 1 | EA | STOREROOM LOCK | L9080        | SCH |
| 1 | EA | WALL STOP      | WS406/407CCV | IVE |

FUNCTION: L9080 (F07) Storeroom Lock

Latchbolt retracted by key outside or by lever inside. Outside lever always inoperative. Auxiliary latch deadlocks latchbolt when door is closed.

#### HW SET 05A

|   | EA | HINGES        | AS SPECIFIED | IVE |
|---|----|---------------|--------------|-----|
| 1 | EA | PASSAGE LATCH | L9010        | SCH |
| 1 | FA | WALL STOP     | WS406/407CCV | IVE |

FUNCTION: L9010 (F01) Passage

Latchbolt retracted by lever either side of door.

#### **HW SET: 06**

|   | EA | HINGES         | AS SPECIFIED | IVE |
|---|----|----------------|--------------|-----|
| 1 | EA | STOREROOM LOCK | L9080        | SCH |
| 1 | FΑ | OH STOP        | 90S          | GLY |

FUNCTION: L9080 (F07) Storeroom Lock

Latchbolt retracted by key outside or by lever inside. Outside lever always inoperative. Auxiliary latch deadlocks latchbolt when door is closed.

#### HW SET 06A

|          | <u>EA</u> | HINGES      | AS SPECIFIED | <u>IVE</u> |
|----------|-----------|-------------|--------------|------------|
| <u>1</u> | EA        | OFFICE LOCK | <u>L9050</u> | SCH        |
| 1        | ĒĀ        | OH STOP     | <u>90S</u>   | GLY        |

FUNCTION: L9050 (F04) Office Lock

Latchbolt retracted by lever from either side unless outside is locked by key outside or inside thumb turn. Inside lever always free for immediate exit. Auxiliary latch deadlocks latchbolt when door is closed.

#### **HW SET: 07**

|   | EA | HINGES            | AS SPECIFIED       | IVE<br>IVE |
|---|----|-------------------|--------------------|------------|
| 2 | EΑ | MANUAL FLUSH BOLT | FB458              |            |
| 1 | EA | DUST PROOF STRIKE | DP2                | IVE        |
| 1 | EA | STOREROOM LOCK    | L9080              | SCH        |
| 2 | EA | WALL STOP         | WS406/407CCV       | IVE        |
| 1 | EA | OVERLAP ASTRAGAL  | (BY DOOR SUPPLIER) |            |

FUNCTION: L9080 (F07) Storeroom Lock

Latchbolt retracted by key outside or by lever inside. Outside lever always inoperative. Auxiliary latch deadlocks latchbolt when door is closed.

#### **HW SET 07A**

| 2<br>1<br>1 | EA<br>EA<br>EA<br>EA | HINGES MANUAL FLUSH BOLT DUST PROOF STRIKE STOREROOM LOCK OH STOP | AS SPECIFIED<br>FB458<br>DP2<br>L9080<br>90S | IVE<br>IVE<br>IVE<br>SCH<br>GLY |
|-------------|----------------------|---|--|---------------------------------|
| 1           | EA                   | SURFACE CLOSER  | 4011 / 4111 EDA<br>(active leaf)             | LCN                             |
| 1           | EA<br>EA             | WALL STOP<br>OVERLAP ASTRAGAL                                     | WS406/407CCV<br>(BY DOOR SUPPLIER)           | IVE                             |

FUNCTION: L9080 (F07) Storeroom Lock

Latchbolt retracted by key outside or by lever inside. Outside lever always inoperative. Auxiliary latch deadlocks latchbolt when door is closed.

#### **HW SET: 08**

| 1<br>1<br>1<br>1 | EA<br>EA<br>EA<br>EA | HINGES CLASSROOM LOCK SURFACE CLOSER KICK PLATE WALL STOP SMOKE SEALS | AS SPECIFIED L9070 4011 / 4111 EDA 8400 10" X 2" LDW B-CS WS406/407CCV 188S (AT RATED OR SMOKE & DRAFT CONTROL DRS ONLY) | IVE<br>SCH<br>LCN<br>IVE<br>IVE<br>ZER |
|------------------|----------------------|---|--|--|
|------------------|----------------------|---|--|--|

FUNCTION: L9070 (F05) Classroom Lock

Latchbolt retracted by lever from either side unless outside is locked by key. Unlocked from outside by key. Inside lever always free for immediate exit. Auxiliary latch deadlocks latchbolt when door is closed.

|   | EA | HINGES         | AS SPECIFIED | IVE |
|---|----|----------------|--------------|-----|
| 1 | FA | CLASSROOM LOCK | L9070        | SCH |

| 1 EA KICK PLATE 8400 10" X 2" LDW B-CS IVE 1 EA SMOKE SEALS 188S (AT RATED OR SMOKE & DRAFT ZER CONTROL DRS ONLY) | 1 |  | SURFACE CLOSER<br>KICK PLATE<br>SMOKE SEALS | The state of the s | LCN<br>IVE<br>ZER |
|---|---|--|---|--|-------------------|
|---|---|--|---|--|-------------------|

FUNCTION: L9070 (F05) Classroom Lock

Latchbolt retracted by lever from either side unless outside is locked by key. Unlocked from outside by key. Inside lever always free for immediate exit. Auxiliary latch deadlocks latchbolt when door is closed.

#### **HW SET: 10**

|   | EΑ | HINGES         | AS SPECIFIED                    | IVE |
|---|----|----------------|---------------------------------|-----|
| 1 | EA | CLASSROOM LOCK | L9070                           | SCH |
| 1 | EA | OH STOP        | 90S                             | GLY |
| 1 | EA | SURFACE CLOSER | 4011 / 4111 EDA                 | LCN |
| 1 | EA | KICK PLATE     | 8400 10" X 2" LDW B-CS          | IVE |
| 1 | EA | SMOKE SEALS    | 188S (AT RATED OR SMOKE & DRAFT | ZER |
|   |    |                | CONTROL DRS ONLY)               |     |

FUNCTION: L9070 (F05) Classroom Lock

Latchbolt retracted by lever from either side unless outside is locked by key. Unlocked from outside by key. Inside lever always free for immediate exit. Auxiliary latch deadlocks latchbolt when door is closed.

#### **HW SET: 11**

|   | EA | HINGES         | AS SPECIFIED                    | IVE |
|---|----|----------------|---------------------------------|-----|
| 1 | EΑ | STOREROOM LOCK | L9080                           | SCH |
| 1 | EA | SURFACE CLOSER | 4011 / 4111 EDA                 | LCN |
| 1 | EA | KICK PLATE     | 8400 10" X 2" LDW B-CS          | IVE |
| 1 | EA | WALL STOP      | WS406/407CCV                    | IVE |
| 1 | EA | SMOKE SEALS    | 188S (AT RATED OR SMOKE & DRAFT | ZER |
|   |    |                | CONTROL DRS ONLY)               |     |

FUNCTION: L9080 (F07) Storeroom Lock

Latchbolt retracted by key outside or by lever inside. Outside lever always inoperative. Auxiliary latch deadlocks latchbolt when door is closed.

#### **HW SET 11A**

|   | EA | HINGES             | AS SPECIFIED                    | IVE |
|---|----|--------------------|---------------------------------|-----|
| 1 | EA | FIRE EXIT HARDWARE | 99L-NL-F                        | VON |
| 1 | EA | SURFACE CLOSER     | 4111 CUSH                       | LCN |
| 1 | EA | KICK PLATE         | 8400 10" X 2" LDW B-CS          | IVE |
| 1 | EA | SMOKE SEALS        | 188S (AT RATED OR SMOKE & DRAFT | ZER |
|   |    |                    | CONTROL DRS ONLY)               |     |

FUNCTION: (L-NL) Latchbolt retracted inside by exit device push pad and outside by key in cylinder. Door locks when key is removed and door is closed. Access from exterior when exit device push pad is dogged down.

|   | EA | HINGES         | AS SPECIFIED                    | IVE |
|---|----|----------------|---------------------------------|-----|
| 1 | EA | STOREROOM LOCK | L9080                           | SCH |
| 1 | EA | SURFACE CLOSER | 4111 CUSH                       | LCN |
| 1 | EA | KICK PLATE     | 8400 10" X 2" LDW B-CS          | IVE |
| 1 | EA | SMOKE SEALS    | 188S (AT RATED OR SMOKE & DRAFT | ZER |
|   |    |                | CONTROL DRS ONLY)               |     |

FUNCTION: L9080 (F07) Storeroom Lock

Latchbolt retracted by key outside or by lever inside. Outside lever always inoperative. Auxiliary latch deadlocks latchbolt when door is closed.

#### **HW SET: 13**

|   | EΑ | HINGES         | AS SPECIFIED                    | IVE |
|---|----|----------------|---------------------------------|-----|
| 1 | EA | STOREROOM LOCK | L9080                           | SCH |
| 1 | EA | OH STOP        | 90S                             | GLY |
| 1 | EA | SURFACE CLOSER | 4011 / 4111 EDA                 | LCN |
| 1 | EA | KICK PLATE     | 8400 10" X 2" LDW B-CS          | IVE |
| 1 | EA | SMOKE SEALS    | 188S (AT RATED OR SMOKE & DRAFT | ZER |
|   |    |                | CONTROL DRS ONLY)               |     |

FUNCTION: L9080 (F07) Storeroom Lock

Latchbolt retracted by key outside or by lever inside. Outside lever always inoperative. Auxiliary latch deadlocks latchbolt when door is closed.

#### HW SET 13A

| <u>EA</u>                      | <u>HINGES</u>  | AS SPECIFIED                    | <u>IVE</u> |
|--------------------------------|----------------|---------------------------------|------------|
| 1 EA                           | OFFICE LOCK    | <u>L9050</u>                    | <u>SCH</u> |
| $\overline{1}$ $\overline{EA}$ | OH STOP        | 90S                             | <u>GLY</u> |
| <u>1</u> <u>EA</u>             | SURFACE CLOSER | 4011 / 4111 EDA                 | <u>LCN</u> |
| 1 <u>EA</u>                    | KICK PLATE     | 8400 10" X 2" LDW B-CS          | <u>IVE</u> |
| 1 <u>EA</u>                    | SMOKE SEALS    | 188S (AT RATED OR SMOKE & DRAFT | ZER        |
|                                |                | CONTROL DRS ONLY)               |            |

#### FUNCTION: L9050 (F04) Office Lock

Latchbolt retracted by lever from either side unless outside is locked by key outside or inside thumb turn. Inside lever always free for immediate exit. Auxiliary latch deadlocks latchbolt when door is closed.

|   | EΑ | HINGES            | AS SPECIFIED                    | IVE |
|---|----|-------------------|---------------------------------|-----|
| 1 | EA | POWER TRANSFER    | EPT10                           | VON |
| i | EA | EU MORTISE LOCK   | RX-L9092EU                      | SCH |
| 1 | EΑ | SURFACE CLOSER    | 4011 / 4111 EDA                 | LCN |
| 1 | EA | KICK PLATE        | 8400 10" X 2" LDW B-CS          | IVE |
| 1 | EA | WALL STOP         | WS406/407CCV                    | IVE |
| 1 | EΑ | SMOKE SEALS       | 188S (AT RATED OR SMOKE & DRAFT | ZER |
|   |    |                   | CONTROL DRS ONLY)               |     |
|   |    | CREDENTIAL READER | (BY OTHERS)                     |     |
| 1 | EΑ | DOOR CONTACT      | 679 SERIES                      | SCE |
| 1 | EΑ | POWER SUPPLY      | PS902 900-4R                    | SCE |

1 EA WIRING DIAGRAMS RISER & POINT-TO-POINT (BY HARDWARE SUPPLIER)

FUNCTION: L9080EU ELECTRICALLY UNLOCKED (FAIL SECURE)
OUTSIDE LEVER UNLOCKED BY 24V AC OR DC. LATCHBOLT RETRACTED BY KEY OUTSIDE OR
LEVER INSIDE. AUXILIARY LATCH DEADLOCKS LATCHBOLT WHEN DOOR IS CLOSED. INSIDE
LEVER ALWAYS FREE FOR IMMEDIATE EXIT.

#### HW SET 14A

|   | EA | HINGES            | AS SPECIFIED                    | IVE   |
|---|----|-------------------|---------------------------------|-------|
| 1 | EA | POWER TRANSFER    | EPT10                           | VON   |
| 1 | EA | EU MORTISE LOCK   | RX-L9095EU                      | SCH   |
| 1 | EA | SURFACE CLOSER    | 4011 / 4111 EDA                 | LCN   |
| 1 | EA | KICK PLATE        | 8400 10" X 2" LDW B-CS          | IVE   |
| 1 | EΑ | WALL STOP         | WS406/407CCV                    | IVE   |
| 1 | EA | SMOKE SEALS       | 188S (AT RATED OR SMOKE & DRAFT | ZER   |
|   |    |                   | CONTROL DRS ONLY)               |       |
|   |    | CREDENTIAL READER | (BY OTHERS)                     |       |
|   |    |                   | (both sides)                    |       |
| 1 | EΑ | DOOR CONTACT      | 679 SERIES                      | SCE   |
| 1 | EA | POWER SUPPLY      | PS902 900-4R                    | SCE   |
| 1 | EA | WIRING DIAGRAMS   | RISER & POINT-TO-POINT (BY      | 1.000 |
|   |    |                   | HARDWARE SUPPLIER)              |       |

FUNCTION: L9095EU Electrically Unlocked Both Sides\*

Outside and inside lever unlocked electrically. Latchbolt retracted by key either side. Switch or power failure keeps inside and outside lever locked. Auxiliary latch deadlocks latchbolt when door is closed. \*Note: This door may not be used for egress.

#### **HW SET: 15**

|   | EA | HINGES            | AS SPECIFIED                    | IVE |
|---|----|-------------------|---------------------------------|-----|
| 1 | EA | POWER TRANSFER    | EPT10                           | VON |
| 1 | EA | EU MORTISE LOCK   | RX-L9092EU                      | SCH |
| 1 | EA | OH STOP           | .90S                            | GLY |
| 1 | EA | SURFACE CLOSER    | 4011 / 4111 EDA                 | LCN |
| 1 | EΑ | KICK PLATE        | 8400 10" X 2" LDW B-CS          | IVE |
| 1 | EA | SMOKE SEALS       | 188S (AT RATED OR SMOKE & DRAFT | ZER |
|   |    |                   | CONTROL DRS ONLY)               |     |
|   |    | CREDENTIAL READER | (BY OTHERS)                     |     |
| 1 | EA | DOOR CONTACT      | 679 SERIES                      | SCE |
| 1 | EA | POWER SUPPLY      | PS902 900-4R                    | SCE |
| 1 | EΑ | WIRING DIAGRAMS   | RISER & POINT-TO-POINT (BY      |     |
|   |    |                   | HARDWARE SUPPLIER)              |     |
|   |    |                   |                                 |     |

FUNCTION: L9080EU ELECTRICALLY UNLOCKED (FAIL SECURE)
OUTSIDE LEVER UNLOCKED BY 24V AC OR DC. LATCHBOLT RETRACTED BY KEY OUTSIDE OR
LEVER INSIDE. AUXILIARY LATCH DEADLOCKS LATCHBOLT WHEN DOOR IS CLOSED. INSIDE
LEVER ALWAYS FREE FOR IMMEDIATE EXIT.

|   | EA | HINGES          | AS SPECIFIED           | IVE   |
|---|----|-----------------|------------------------|-------|
| 1 | EA | PANIC DEVICE    | 99L                    | VON   |
| 1 | EA | INTERCHANGEABLE | CYLINDER AS REQUIRED   | SCH   |
|   |    | CORE            |                        | 1.011 |
| 1 | EΑ | SURFACE CLOSER  | 4011 / 4111 EDA        | LCN   |
| 1 | EA | KICK PLATE      | 8400 10" X 2" LDW B-CS | IVE   |
| 1 | EΑ | WALL STOP       | WS406/407CVX           | IVE   |

FUNCTION: (L) Latchbolt retracted inside by exit device push pad and outside by lever. Key in exterior cylinder locks or unlocks lever.

#### **HW SET 16A**

| 1<br>1 | EA<br>EA<br>EA | HINGES<br>FIRE EXIT DEVICE<br>INTERCHANGEABLE<br>CORE | AS SPECIFIED<br>99L-F X 499F<br>CYLINDER AS REQUIRED | IVE<br>VON<br>SCH |
|--------|----------------|---|--|-------------------|
| 1      | EA             | SURFACE CLOSER  | 4011 / 4111 EDA                                      | LCN               |
| 1      | EA             | KICK PLATE  | 8400 10" X 2" LDW B-CS                               | IVE               |
| 1      | EA             | FIRE/LIFE WALL MAG                                    | SEM 7800   | LCN               |

FUNCTION: (L) Latchbolt retracted inside by exit device push pad and outside by lever. Key in exterior cylinder locks or unlocks lever.

#### **HW SET: 17**

| 1<br>1<br>1<br>1 | EA<br>EA<br>EA<br>EA<br>EA | HINGES PANIC DEVICE OH STOP SURFACE CLOSER KICK PLATE SOUND GASKET | AS SPECIFIED<br>99L-BE<br>90S<br>4011 / 4111 EDA<br>8400 10" X 2" LDW B-CS<br>188S (2 ROWS: 1 STOP MTD, (1)<br>RABBIT MTD) | IVE<br>VON<br>GLY<br>LCN<br>IVE<br>ZER |
|------------------|----------------------------|--|--|--|
| 1                | EA                         | MORTISE AUTO DOOR  | 360  | ZER                                    |
| 1                | EA                         | BOTTOM<br>THRESHOLD 1/4" X 3"                                      | 63   | ZER                                    |

FUNCTION: (L-BE) Latchbolt retracted inside by exit device push pad, exterior by lever. Lever does not lock.

#### **HW SET: 17A**

| 1<br>1<br>1<br>1 | EA<br>EA<br>EA<br>EA<br>EA | HINGES PANIC DEVICE SURFACE CLOSER KICK PLATE WALL STOP SOUND GASKET | AS SPECIFIED<br>99L-BE<br>4011 / 4111 EDA<br>8400 10" X 2" LDW B-CS<br>WS406/407CCV<br>188S (2 ROWS: 1 STOP MTD, (1)<br>RABBIT MTD) | IVE<br>VON<br>LCN<br>IVE<br>IVE<br>ZER |
|------------------|----------------------------|--|---|--|
|                  |                            |  | RABBII MID)   |  |

FUNCTION: (L-BE) Latchbolt retracted inside by exit device push pad, exterior by lever. Lever does not lock.

#### HW SET 18

| 2<br>4 | EA<br>EA<br>EA | HINGES PANIC DEVICE INTERCHANGEABLE             | AS SPECIFIED<br>CD-9927L-LBR<br>CYLINDER AS REQUIRED | IVE<br>VON<br>SCH |
|--------|----------------|---|--|-------------------|
| 2      | EA             | CORE OH STOP & HOLDER SURFACE CLOSER KICK PLATE | 100H   | GLY               |
| 2      | EA             |   | 4011 / 4111 EDA                                      | LCN               |
| 2      | EA             |   | 8400 10" X 1" LDW B-CS                               | IVE               |

FUNCTION: (L) Latch bolt retracted inside by exit device push pad and outside by lever. Key in exterior cylinder locks or unlocks lever.

#### **HW SET: 19**

|   | EA | HINGES         | AS SPECIFIED           | IVE |
|---|----|----------------|------------------------|-----|
| 1 | EA | PUSH PLATE     | 8200 6" X 16"          | IVE |
| 1 | EA | PULL PLATE     | 8303 10" 4" X 16"      | IVE |
| 1 | EA | SURFACE CLOSER | 4011 / 4111 EDA        | LCN |
| 1 | EA | KICK PLATE     | 8400 10" X 2" LDW B-CS | IVE |
| 1 | EA | WALL STOP      | WS406/407CVX           | IVE |

FUNCTION: Push/Pull

#### **HW SET: 20**

|     |    | LINIOTO           | AC ODECIFIED                    | IVE |
|-----|----|-------------------|---------------------------------|-----|
| 4   | EA | HINGES            | AS SPECIFIED<br>EPT10           | VON |
| Т   | EA | POWER TRANSFER    |                                 |     |
| 1   | EA | ELEC FIRE EXIT    | RX-ALK-99-L-BE-F                | VON |
|     |    | HARDWARE          |                                 |     |
| 1   | EA | INTERCHANGEABLE   | CYLINDER AS REQUIRED            | SCH |
|     |    | CORE              |                                 |     |
| 1   | EA | SURFACE CLOSER    | 4011 / 4111 EDA                 | LCN |
| 1   | EA | KICK PLATE        | 8400 10" X 2" LDW B-CS          | IVE |
| 1   | EA | WALL STOP         | WS406                           | IVE |
| i   | EA | SMOKE SEALS       | 188S (AT RATED OR SMOKE & DRAFT | ZER |
| - 1 | LA | SWORL GLALG       | CONTROL DRS ONLY)               |     |
|     |    | 000000000         | •                               |     |
|     |    | CREDENTIAL READER | (BY OTHERS)                     | 3   |
| 1   | EA | DOOR CONTACT      | 679 SERIES                      | SCE |
| 1   | EA | POWER SUPPLY      | PS902 900-4R                    | SCE |
| 1   | EA | WIRING DIAGRAMS   | RISER & POINT-TO-POINT (BY      |     |
| •   | •  |                   | HARDWARE SUPPLIER)              |     |
|     |    |                   |                                 |     |

#### FUNCTION: Exit Alarm (L-BE)

Local exit alarm may be armed or disarmed using inside cylinder. Exit alarm sounds when touch pad depressed. Latchbolt retracted inside by exit device push pad and outside by lever. Lever trim is always unlocked, no cylinder. Presentation of valid credential momentarily shunts the alarmed device.

#### **HW SET: 21**

| 1 | EA<br>EA | HINGES<br>POWER TRANSFER   | AS SPECIFIED EPT10                                | VON  |
|---|----------|----------------------------|---|------|
| 1 | EA       | ELEC FIRE EXIT<br>HARDWARE | RX-99-L-F-E996-FSE<br>(Fail Secure)               | VON  |
| 1 | EA       | INTERCHANGEABLE            | CYLINDER AS REQUIRED                              | SCH  |
| • | LA       | CORE                       | O TEMPER AS REGUIRED                              | 0011 |
| 1 | EA       | SURFACE CLOSER             | 4011 / 4111 EDA                                   | LCN  |
| 1 | EA       | KICK PLATE                 | 8400 10" X 2" LDW B-CS                            | IVE  |
| 1 | EΑ       | WALL STOP                  | WS406/407CVX                                      | IVE  |
| 1 | EA       | SMOKE SEALS                | 188S (AT RATED OR SMOKE & DRAFT CONTROL DRS ONLY) | ZER  |
|   |          | CREDENTIAL READER          | (BY OTHERS)                                       |      |
| 1 | EA       | DOOR CONTACT               | 679 SERIES  | SCE  |
| 1 | EA       | POWER SUPPLY               | PS902 900-4R                                      | SCE  |
| 1 | EA       | WIRING DIAGRAMS            | RISER & POINT-TO-POINT (BY                        |      |
|   |          |                            | HARDWARE SUPPLIER)                                |      |

FUNCTION: (E) Latchbolt retracted inside by exit device push pad and outside by cylinder. Door locks when key is removed and door is closed. A valid credential unlocks lever. Loss of power locks pull side lever.

#### **HW SET: 22**

| 1 | EA<br>EA<br>EA | HINGES<br>POWER TRANSFER<br>DELAYED PANIC<br>HARDWARE | AS SPECIFIED<br>EPT10<br>CX-9975-L-BE             | IVE<br>VON<br>VON |
|---|----------------|---|---|-------------------|
| 1 | EA             | INTERCHANGEABLE<br>CORE                               | CYLINDER AS REQUIRED                              | SCH               |
| 1 | EA             | OH STOP   | 90S   | GLY               |
| 1 | EA             | SURFACE CLOSER  | 4011  | LCN               |
| 1 | EA             | KICK PLATE  | 8400 10" X 2" LDW B-CS                            | IVE               |
| 1 | EA             | SMOKE SEALS   | 188S (AT RATED OR SMOKE & DRAFT CONTROL DRS ONLY) | ZER               |
|   |                | CREDENTIAL READER                                     | (BY OTHERS)                                       |                   |
| 1 | EA             | DOOR CONTACT  | 679 SERIES  | SCE               |
| 1 | EA             | POWER SUPPLY  | PS902 900-4R                                      | SCE               |
| 1 | EA             | WIRING DIAGRAMS                                       | RISER & POINT-TO-POINT (BY HARDWARE SUPPLIER)     |                   |

FUNCTION: 15 Second Delayed Egress Delayed egress system is armed and disarmed by key in push bar assembly. When unarmed, latch bolt is retracted by inside push pad. When armed, pushing inside push pad for 1 second or longer initiates an irreversible local alarm. Push pad unlocks after 15 seconds, allowing egress. Alarm must be reset at the door. Loss of power or activation of fire alarm deactivates delayed egress system for immediate egress. Door re-arms when closed and door contact is engaged. Lever on pull side, always operable.

|   | EA | HINGES         | AS SPECIFIED | IVE |
|---|----|----------------|--------------|-----|
| 1 | EΑ | POWER TRANSFER | EPT10        | VON |

| 1 | EA | ELEC PANIC                    | RX-ALK-99-L-E996-FSE                              | VON |
|---|----|-------------------------------|---|-----|
| 1 | EA | HARDWARE INTERCHANGEABLE CORE | CYLINDER AS REQUIRED                              | SCH |
| 1 | EA | OH STOP                       | 90\$  | GLY |
| 1 | EA | SURFACE CLOSER                | 4011  | LCN |
| 1 | EA | KICK PLATE                    | 8400 10" X 2" LDW B-CS                            | IVE |
| 1 | EA | SMOKE SEALS                   | 188S (AT RATED OR SMOKE & DRAFT CONTROL DRS ONLY) | ZER |
| 2 |    | CREDENTIAL READER             | (BY OTHERS)<br>(both sides of door)               |     |
| 1 | EA | DOOR CONTACT                  | 679 SERIES  | SCE |
| 1 | ĒΑ | POWER SUPPLY                  | PS902 900-4R                                      | SCE |
| 1 | EA | WIRING DIAGRAMS               | RISER & POINT-TO-POINT (BY HARDWARE SUPPLIER)     |     |

FUNCTION: Exit Alarm (E996L)

Local exit alarm may be armed or disarmed using inside cylinder. Latchbolt retracted inside by exit device push pad and outside by lever. Key in exterior cylinder locks or unlocks lever. Door locks when key is removed and door is closed. A valid credential unlocks lever. Loss of power locks pull side lever.

#### HW SET: 23A

|   | EA | HINGES                 | AS SPECIFIED           | IVE<br>VON |
|---|----|------------------------|------------------------|------------|
| 1 | EA | FIRE EXIT DEVICE       | 99NL-F X 499F          |            |
| 1 | EA | INTERCHANGABLE<br>CORE | CYLINDER AS REQUIRED   | SCH        |
| 1 | EA | OH STOP                | 90S                    | GLY        |
| 1 | EA | SURFACE CLOSER         | 4111 EDAW/62G/ST2730   | LCN        |
| 1 | EA | KICK PLATE             | 8400 10" X 2" LDW B-CS | IVE        |
| 1 | EA | GASKETING              | 429                    | ZER        |
| 1 | EA | DOOR SWEEP (BRUSH)     | 8192                   | ZER        |
| 1 | EA | THRESHOLD              | PROFILE AS REQUIRED    | ZER        |
| 1 | EA | RAIN DRIP              | 142                    | ZER        |
|   |    |                        |                        |            |

FUNCTION: (NL - less dogging) Latchbolt retracted inside by exit device push pad and outside by key in cylinder. Door locks when key is removed and door is closed

| 4 | EA<br>EA | HINGES<br>POWER TRANSFER | AS SPECIFIED<br>EPT10  | IVE<br>VON |
|---|----------|--------------------------|------------------------|------------|
|   |          |                          |                        | VON        |
| 1 | EA       | PANIC DEVICE             | 9927EO-LBR             |            |
| 1 | EA       | DELAYED FIRE EXIT        | CX-9927-EO-LBR         | VON        |
|   |          | HARDWARE                 |                        |            |
| 2 | EΑ       | SURFACE CLOSER           | 4011 / 4111 EDA        | LCN        |
| 2 | EΑ       | KICK PLATE               | 8400 10" X 1" LDW B-CS | IVE        |
| 2 | EA       | WALL STOP                | WS406/407CCV           | IVE        |
| _ |          | CREDENTIAL READER        | (BY OTHERS)            |            |
| 1 | EA       | DOOR CONTACT             | 679 SERIES             | SCE        |

1 EA POWER SUPPLY PS902 900-4R SCE 1 EA WIRING DIAGRAMS RISER & POINT-TO-POINT (BY HARDWARE SUPPLIER)

FUNCTION: (Corridor to Lobby: EO) Latchbolt retracted inside by exit device push pad. No exterior trim.

FUNCTION: (Lobby to Corridor: CX) 15 Second Delayed Egress Delayed egress system is armed and disarmed by key in push bar assembly. When unarmed, latch bolt is retracted by inside push pad. When armed, pushing inside push pad for 1 second or longer initiates an irreversible local alarm. Push pad unlocks after 15 seconds, allowing egress. Alarm must be reset at the door. Loss of power or activation of fire alarm deactivates delayed egress system for immediate egress. Door re-arms when closed and door contact is engaged. Valid credential on push side of door provides authorized staff immediate exit without sounding alarm.

#### HW SET 24A

| 2 | EA       | HINGES                                      | AS SPECIFIED | IVE        |
|---|----------|---|--------------|------------|
|   | EA       | TWO PT CLASSRM                              | LM9270       | SCH        |
| 2 | EA<br>EA | LOCK<br>SURFACE CLOSER<br>FLOOR STOP/HOLDER | 4021<br>FS40 | LCN<br>IVE |

FUNCTION: LM9270 (F05) Classroom Lock

Latchbolt retracted by lever from either side unless outside is locked by key. Unlocked from outside by key. Inside lever always free for immediate exit. Auxiliary latch deadlocks latchbolt when door is closed.

#### **HW SET: 25**

|   | EA  | HINGES             | AS SPECIFIED                           | IVE |
|---|-----|--------------------|--|-----|
| 1 | SET | PUSH/PULL BAR      | 9190-10"                               | IVE |
| 1 | EA  | OH STOP            | 100S                                   | GLY |
| 1 | EA  | SURF. AUTO         | 4642                                   | LCN |
| , |     | OPERATOR           |  |     |
| 2 | EA  | ACTUATOR           | 8310-853 / 8310-818                    | LCN |
|   |     |                    | (Verify Actuator Location and Mounting |     |
|   |     |                    | Style)                                 |     |
|   | EA  | WEATHERSTRIP       | BY DR/FR SUPPLIER                      |     |
| 1 | EA  | DOOR SWEEP (BRUSH) | 8192                                   | ZER |
| 1 | EA  | THRESHOLD          | PROFILE AS REQUIRED                    | ZER |
| 1 | EA  | RAIN DRIP          | 142                                    | ZER |
|   |     |                    |  |     |

FUNCTION: Push/Pull.

This door has a power operator. Both actuators always active to open the door.

|   | EA  | HINGES         | AS SPECIFIED | IVE |
|---|-----|----------------|--------------|-----|
|   | SET | PUSH/PULL BAR  | 9190-10"     | IVE |
|   | EA  | OH STOP        | 100S         | GLY |
| 1 | EΑ  | SURFACE CLOSER | 4021         | LCN |

| 1 1 | EA | SURF. AUTO           | 4642  | LCN |
|-----|----|----------------------|---|-----|
| 2   | EA | OPERATOR<br>ACTUATOR | 8310-853 / 8310-818<br>(Verify Actuator Location and Mounting<br>Style) | LCN |

FUNCTION: Push/Pull.

This door has a power operator. Both actuators always active to open the door.

#### **HW SET: 27**

| 1<br>1 | EA<br>EA<br>EA | HINGES POWER TRANSFER ELEC PANIC | AS SPECIFIED<br>EPT10<br>RX-QEL-99-NL-OP                                | IVE<br>VON<br>VON |
|--------|----------------|----------------------------------|---|-------------------|
| 1      | EA             | HARDWARE INTERCHANGEABLE CORE    | CYLINDER AS REQUIRED  | SCH               |
| 1      | EA             | 90 DEG OFFSET PULL               | 8190 10"  | IVE               |
| 1      | EΑ             | OH STOP                          | 100S  | GLY               |
| 1      | EA             | SURF. AUTO<br>OPERATOR           | 4642  | LCN               |
| 2      | EA             | ACTUATOR                         | 8310-853 / 8310-818<br>(Verify Actuator Location and Mounting<br>Style) | LCN               |
|        |                | CREDENTIAL READER                | (BY ÓTHERS)   |                   |
| 1      | EA             | DOOR CONTACT                     | 7764  | SCE               |
| 1      | EA             | POWER SUPPLY                     | PS902 900-4R  | SCE               |
| 1      | EΑ             | JUNCTION BOX                     | JB7 R2  | VON               |
| 1      | EA             | WIRING DIAGRAMS                  | RISER & POINT-TO-POINT (BY<br>HARDWARE SUPPLIER)                        |                   |

FUNCTION: (NL-OP) Latchbolt retracted inside by exit device push pad and outside by key in cylinder. Door locks when key is removed and door is closed. This door has a power operator. Interior actuator always active to unlock and open the door. A valid credential will unlock the door and make the exterior actuator active.

#### **HW SET 27A**

| 1  | EA<br>EA<br>EA | HINGES<br>POWER TRANSFER<br>ELEC PANIC | AS SPECIFIED<br>EPT10<br>RX-QEL-99-EO                                   | IVE<br>VON<br>VON |
|----|----------------|--|---|-------------------|
| 1, | EA             | HARDWARE<br>INTERCHANGEABLE<br>CORE    | CYLINDER AS REQUIRED  | SCH               |
| 1  | EΑ             | OH STOP                                | 100S  | GLY               |
| 1  | EA             | SURF. AUTO<br>OPERATOR                 | 4642  | LCN               |
| 1  | EA             | ACTUATOR                               | 8310-853 / 8310-818<br>(Verify Actuator Location and Mounting<br>Style) | LCN               |
| 1  | EA             | DOOR CONTACT                           | 7764  | SCE               |
| 1  | EA             | POWER SUPPLY                           | PS902 900-4R  | SCE               |
| 1  | EΑ             | JUNCTION BOX                           | JB7 R2  | VON               |

## 1 EA WIRING DIAGRAMS RISER & POINT-TO-POINT (BY HARDWARE SUPPLIER)

FUNCTION: (NL-OP) Latchbolt retracted inside by exit device push pad and outside by key in cylinder. Door locks when key is removed and door is closed.

This door has a power operator. Interior actuator always active to unlock and open the door. A valid credential will unlock the door and make the exterior actuator active.

#### **HW SET: 28**

|   | EA | HINGES         | AS SPECIFIED | IVE |
|---|----|----------------|--------------|-----|
| 1 | EA | MULLION        | KR-4954      | VON |
| 1 | EA | PANIC HARDWARE | LD-99EO      | VON |
| 2 | EΑ | OH STOP        | 100S         | GLY |
| 2 | EA | SURFACE CLOSER | 4021         | LCN |
| 1 | EA | MULLION SEAL   | 8780         | ZER |

FUNCTION: (EO) Latchbolt retracted inside by exit device push pad. No exterior trim.

#### **HW SET: 29**

| 2 | EA<br>EA<br>EA | HINGES<br>POWER TRANSFER<br>MULLION | AS SPECIFIED<br>EPT10<br>KR-4954  | IVE<br>VON<br>VON |
|---|----------------|-------------------------------------|---|-------------------|
| 1 | EA             | ELEC PANIC<br>HARDWARE              | RX-QEL-99-EO  | VON               |
| 1 | EA             | ELEC PANIC<br>HARDWARE              | RX-QEL-99-NL-OP   | VON               |
| 2 | EA             | INTERCHANGEABLE<br>CORE             | CYLINDER AS REQUIRED  | SCH               |
| 2 | EA             | 90 DEG OFFSET PULL                  | 8190 10"  | IVE               |
| 2 | EA             | OH STOP                             | 100S  | GLY               |
| 1 | EA             | SURFACE CLOSER                      | 4021  | LCN               |
| 1 | EA             | SURF. AUTO<br>OPERATOR              | 4642  | LCN               |
| 2 | EA             | ACTUATOR                            | 8310-853 / 8310-818<br>(Verify Actuator Location and Mounting<br>Style) | LCN               |
|   | EΑ             | WEATHERSTRIP                        | BY DR/FR SUPPLIER   |                   |
| 1 | EΑ             | MULLION SEAL                        | 8780  | ZER               |
| 2 | EA             | DOOR SWEEP (BRUSH)                  | 8192  | ZER               |
| 1 | EA             | THRESHOLD                           | PROFILE AS REQUIRED   | ZER               |
| 1 | EA             | RAIN DRIP<br>CREDENTIAL READER      | 142<br>(BY OTHERS)  | ZER               |
| 2 | EA             | DOOR CONTACT                        | 7764  | SCE               |
| 1 | EA             | POWER SUPPLY                        | PS902 900-4R  | SCE               |
| 1 | EA             | WIRING DIAGRAMS                     | RISER & POINT-TO-POINT (BY<br>HARDWARE SUPPLIER)                        |                   |

FUNCTION: (NL-OP) Latchbolt retracted inside by exit device push pad and outside by key in cylinder. Door locks when key is removed and door is closed.

This door has a power operator. Interior actuator always active to unlock and open the door. A valid credential will unlock both doors and make the exterior actuator active.

#### **HW SET: 30**

2 EA DOOR CONTACT 679 SERIES SCE

FUNCTION: Door position switch reports door status to dispatch. Local alarm by others.

Contractor shall disable outside trim.

#### HW SET: 31A

| 4 | EA | HINGES                  | AS SPECIFIED           | IVE |
|---|----|-------------------------|------------------------|-----|
| 1 | EA | FIRE EXIT DEVICE        | 99NL-F X 499F          | VON |
| 1 | EA | INTERCHANGEABLE<br>CORE | CYLINDER AS REQUIRED   | SCH |
| 1 | EA | OH STOP                 | 90S                    | GLY |
| 1 | EA | SURFACE CLOSER          | 4111 EDAW/62G/ST2730   | LCN |
| 1 | EA | KICK PLATE              | 8400 10" X 2" LDW B-CS | IVE |
| 1 | EA | GASKETING               | 429                    | ZER |
| 1 | EA | DOOR SWEEP (BRUSH)      | 8192                   | ZER |
| 1 | EA | THRESHOLD               | PROFILE AS REQUIRED    | ZER |
| 1 | EA | RAIN DRIP               | 142                    | ZER |

FUNCTION: (NL - less dogging) Latchbolt retracted inside by exit device push pad and outside by key in cylinder. Door locks when key is removed and door is closed

#### HW SET: 32A

|   | EA | HINGES          | AS SPECIFIED | IVE |
|---|----|-----------------|--------------|-----|
| 2 | EA | ROLLER LATCH    | RL32         | IVE |
| 1 | EA | HALF DUMMY TRIM | L0170        | SCH |
| 2 | EA | OH STOP         | 90S          | GLY |

FUNCTION: L0170 Single Dummy Trim

Dummy trim for one side of door. Used for door pull or as matching inactive trim.

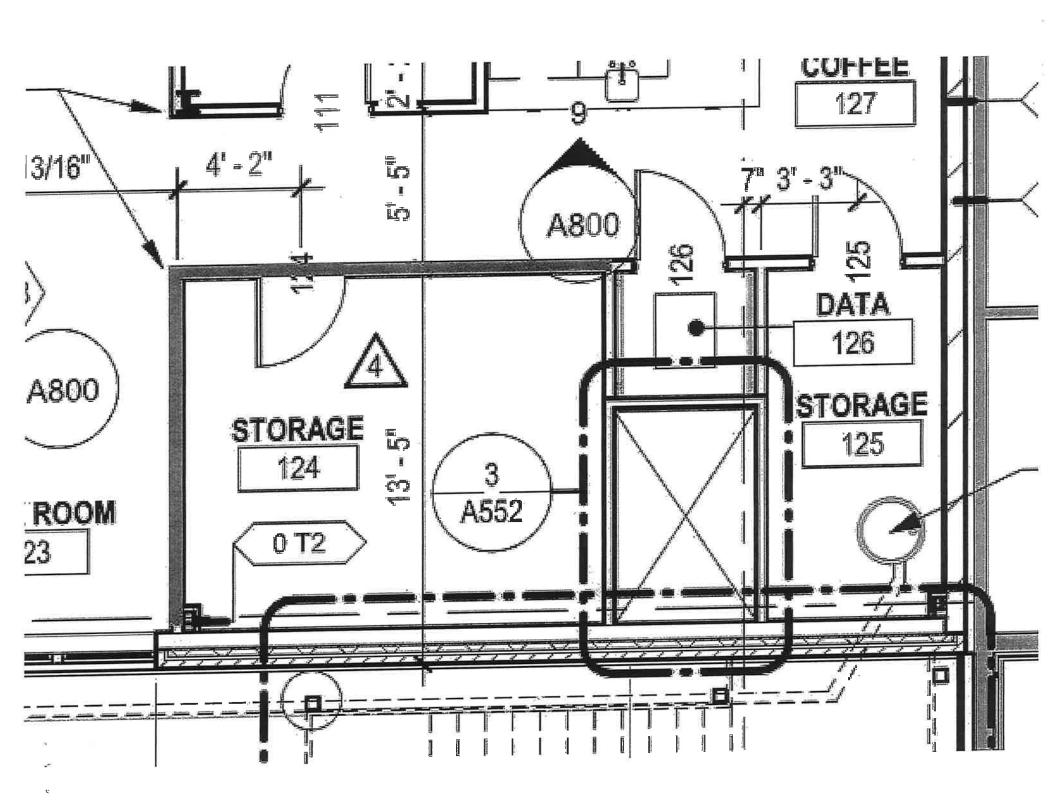
PROVIDE IVES #WS406/407 WALL STOP IN LIEU OF GLY #90S OVERHEAD STOP WHERE LEVER SHAFT WILL CONTACT WALL.

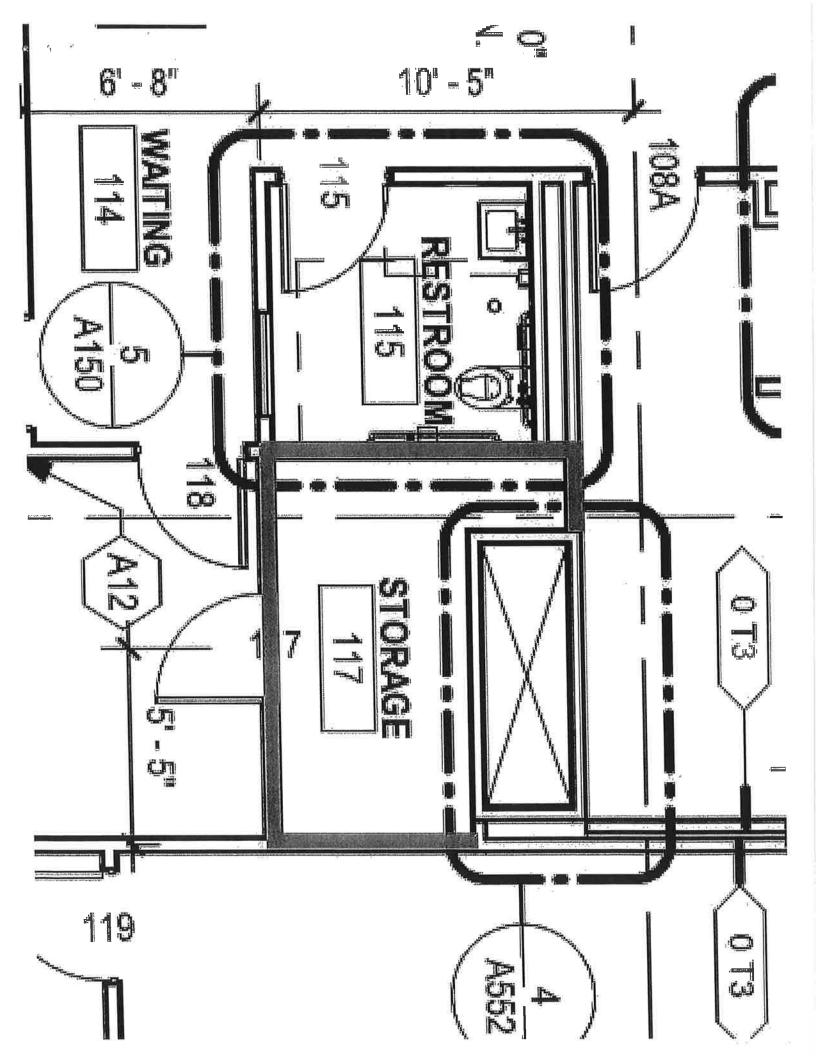
#### HW SET 33A

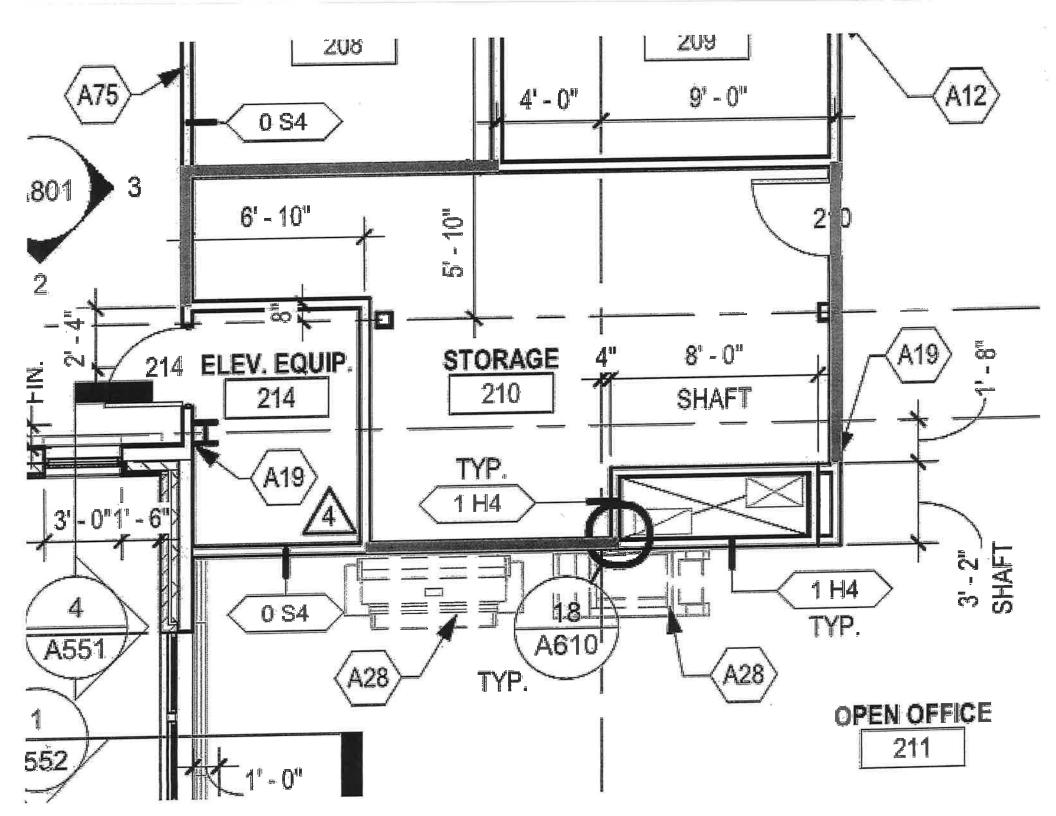
| QTY |    | DESCRIPTION     | CATALOG NUMBER                   | MFR |
|-----|----|-----------------|----------------------------------|-----|
|     | EA | HINGES          | AS SPECIFIED                     | IVE |
|     |    |                 | MATCH EXIST PREP SIZE AND WEIGHT |     |
| 1   | EA | STOREROOM LOCK  | L9080                            | SCH |
| 1   | EA | ELECTRIC STRIKE | 6211 FSE                         | VON |
| 1   | EA | OH STOP         | 90S                              | GLY |
| 1   | EA | SURFACE CLOSER  | 4011 / 4111 EDA                  | LCN |

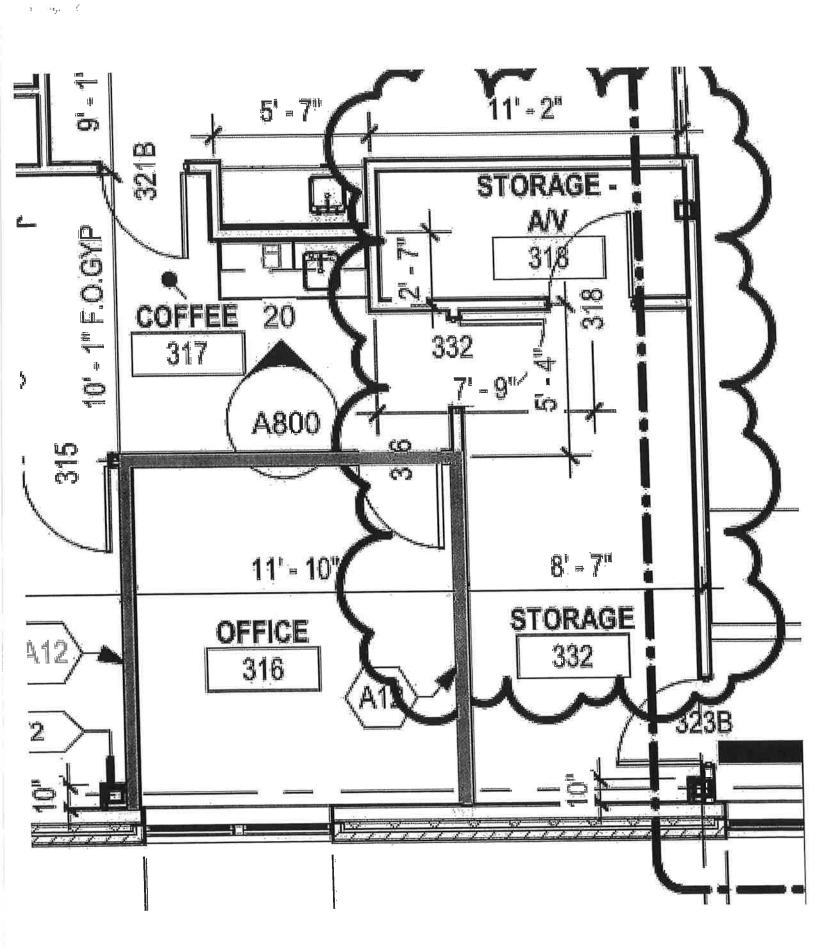
1 EA KICK PLATE 8400 10" X 2" LDW B-CS IVE CREDENTIAL READER (BY OTHERS)
1 EA POWER SUPPLY PS902 900-4R SCE
1 EA WIRING DIAGRAMS RISER & POINT-TO-POINT (BY HARDWARE SUPPLIER)

FUNCTION: ELECTRICALLY UNLOCKED (FAIL SECURE)
OUTSIDE LEVER ALWAYS LOCKED. LATCH RETRACTED BY KEY IN OUTSIDE CYLINDER.
AUXILIARY LATCH DEADLOCKS LATCHBOLT WHEN DOOR IS CLOSED. INSIDE LEVER ALWAYS
FREE FOR IMMEDIATE EXIT. VALID CREDENTIAL MOMENTARILY UNLOCKS DOOR.END OF
SECTION











Amendment to the Standard Form of Agreement Between Owner (Aitkin County), and Construction Manager (Contegrity Group, Inc.), dated May 23, 2017, where the Construction Manager is NOT a Constructor

| This AMENDMENT dated: April 1, 2019  |   |
|--|---|
| Add to Project Description:  | ¥.  |
| Historic Courthouse M&E to Project Scope as original budget clarifications.                          | lly identified in the starting project budget. See attached |
| 13.2 Basic Compensation Add to Subparagraph 13.2.1  Add to CM Fee by \$25,745.00 as described above. | ove.  |
| On Site Supervision shall continue to be provide   | ded for at previous contract rates.                         |
|  |   |
| This Agreement entered into as of the day and year   | first written above.  |
| OWNER  | CONSTRUCTION MANAGER  |
| (Signature)  | (Signature)   |
| Jessica Seibert, Aitkin County Administrator   | Pete Filippi, President Contegrity Group, Inc.              |
| (Printed name and title)   | (Printed name and title)                                    |
|  |   |
|  |   |
|  |   |

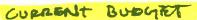


### Aitkin County - Government Center Addition

Date: August 20, 2018



| CATE   | EGORY OF WORK  | TRADE CONTRACTOR NAME                    | ORIGINAL<br>CONTRACT | CHANGE<br>ORDERS         | ADJUSTED<br>CONTRACT | PAID<br>TO DATE                               | BALANCE<br>TO FINISH |
|--------|--|--|----------------------|--------------------------|----------------------|---|----------------------|
|        |  |  | 2050 000 00          | -\$7.639.05              | \$645,026.95         | \$188,980.65                                  | \$456,046.30         |
| 1      | Earthwork / Utilities / Improvements / Demo.   | Eagle Construction                       | \$652,666.00         |                          | \$237,955.00         | \$37,620.00                                   | \$200,335.00         |
| 2      | Concrete   | Thompson Construction of Princeton, Inc. | \$236,442.00         | \$1,513.00<br>\$1,510.85 | \$692,500.85         | \$0.00  | \$692,500.85         |
| 3      | Masonry  | Harbor City Masonry                      | \$690,990.00         | -\$4,300.00              | \$215,700.00         | \$0.00  | \$215,700.00         |
| 4      | Steel Erection   | Roden Iron                               | \$220,000.00         |                          | \$245,300.00         | \$0.00  | \$245,300.00         |
| 5      | Carpentry  | Gopher State Contractors                 | \$245,300.00         | \$0.00                   | \$720,000.00         | \$19,950.00                                   | \$700,050.00         |
| 6 & 20 | Roofing / HVAC   | Thelen Heating & Roofing                 | \$720,000.00         | \$0.00                   | \$226,000.00         | \$4,514.40                                    | \$221,485.60         |
| 7      | Metal Wall Panels  | Progressive Building Systems             | \$226,000.00         | \$0.00                   |                      | \$0.00  | \$51,750.00          |
| 8      | Joint Sealants   | Sunrise Specialties                      | \$51,750.00          | \$0.00                   | \$51,750.00          | \$0.00  | \$49,950.00          |
| 9      | Coiling Grilles  | Garage Door Store                        | \$49,950.00          | \$0.00                   | \$49,950.00          |   | \$15,340.00          |
| 9A     | Folding Panel Partitions   | Skold Specialty Contracting              | \$15,340.00          | \$0.00                   | \$15,340.00          | \$0.00  | \$315,100.0          |
| 10     | Aluminum Windows / Doors & Glazing   | Anderson Glass Co.                       | \$315,100.00         | \$0.00                   | \$315,100.00         | \$0.00  |                      |
| 11     | Gypsum Board   | Olympic Companies                        | \$889,350.00         | \$5,602.00               | \$894,952.00         | \$15,163,43                                   | \$879,788.5          |
| 12     | Tile   | Dorholt Tile                             | \$207,164.00         | \$0.00                   | \$207,164.00         | \$0.00  | \$207,164.0          |
| 13     | Acoustical Treatments  | Twin City Acoustics                      | \$298,873.00         | \$0.00                   | \$298,873.00         | \$5,350.40                                    | \$293,522.6          |
| 14     | Flooring   | Contract Tile & Carpet                   | \$134,768.00         | \$0.00                   | \$134,768.00         | \$0.00  | \$134,768.0          |
| 16     | Painting   | Fransen Decorating                       | \$209,750.00         | \$0.00                   | \$209,750.00         | \$0.00  | \$209,750.0          |
| 17     | Elevator   | MEI Total Elevator                       | \$258,232.00         | \$0.00                   | \$258,232.00         | \$0.00  | \$258,232.0          |
|        | Fire Protection  | LVC Companies                            | \$244,800.00         | \$0.00                   | \$244,800.00         | \$0.00  | \$244,800.0          |
| 18     |  | Masters Plumbing & Heating               | \$845,000.00         | \$0.00                   | \$845,000.00         | \$18,563.00                                   | \$826,437.0          |
| 19     | Plumbing / Piping  | Honeywell (Allowance)                    | \$205,970.00         | \$0.00                   | \$205,970.00         | \$0.00  | \$205,970.0          |
| 21     | Controls   | SMB of MN                                | \$34,700.00          | \$0.00                   | \$34,700.00          | \$0.00  | \$34,700.0           |
| 22     | Testing / Adjusting & Balancing  | Holden Electric                          | \$974,350.00         | \$0.00                   | \$974,350.00         | \$22,325.00                                   | \$952,025.0          |
| 23     | Electrical / Communications / Security   | Thurnbeck Steel                          | \$419,600.00         | \$4,048.26               | \$423,648.26         | \$14,345.00                                   | \$409,303.2          |
| 24     | Steel Supply - Material Only   | Sell Hardware                            | \$106,785.00         | \$0.00                   | \$106,785.00         | \$0.00  | \$106,785.0          |
| 25     | Standard Doors / Frames / Hardware (material only)   | Northwest Cabinets                       | \$163,676.00         | \$0.00                   | \$163,676.00         | \$0.00  | \$163,676.0          |
| 26     | Casework (marerial only)   | Allowance                                | \$50,000.00          | \$0.00                   | \$50,000.00          | \$0.00  | \$50,000.0           |
| 27     | Specialties (material only)  | Allowance                                | 000,000.00           |                          |                      |   |                      |
|        | TRADE CONTRACTOR TOTAL:  |  | \$8,466,556.00       | \$735.06                 | \$8,467,291.06       | \$326,811.88                                  | \$8,140,479.1        |
|        |  | Budget                                   | \$491,128.00         | -\$735.06                | \$490,392.94         | \$0.00  | \$490,392.9          |
|        | Contingency  | Budget                                   | \$662,367.00         | \$0.00                   | \$662,367.00         | \$127,776.00                                  | \$534,591.0          |
|        | General Conditions   | Budget                                   | \$62,500.00          | \$0.00                   | \$62,500.00          | \$62,500.00                                   | \$0.0                |
|        | Permitting   | Contegrity Group, Inc.                   | \$235,750.00         | \$0.00                   | \$235,750.00         | \$82,512.52                                   | \$153,237.4          |
|        | CM Fee   | BKV Group                                | \$588,691.00         | \$0.00                   | \$588,691.00         | \$523,035.20                                  | \$65,655.8           |
|        | Architect & Engineer Fee Architect Reimbursables   | BKV Group                                | \$20,000.00          | \$0.00                   | \$20,000.00          | \$18.92                                       | \$19,981.0           |
|        | And proceedings of the processing control of the co |  | \$10,526,992.00      | \$0.00                   | \$10,526,992.00      | \$1,122,654.52                                | \$9,404,337.4        |
|        | CONSTRUCTION TOTAL:  |  | \$10,520,952.00      | \$0.00                   | ψ10,020,002.00       | <b>• • • • • • • • • • • • • • • • • • • </b> |                      |
|        | Owner Items  | ALACOT (Alleger)                         | \$65,000.00          | \$0.00                   | \$65,000.00          | \$17,900.00                                   | \$47,100.0           |
|        | Asbestos Abatement   | Arrowhead / ACCT (Allowance)             | \$206,990.00         | \$0.00                   | \$206,990.00         | \$11,759.13                                   | \$195,230.8          |
|        | FF&E   | Budget                                   |                      | \$0.00                   | \$25,699.00          | \$0.00  | \$25,699.0           |
|        | Historic Courthouse M&E  | General Conditions                       | \$25,699.00          | \$0.00                   | \$42,831.00          | \$0.00  | \$42,831.0           |
|        |  | Contingency                              | \$42,831.00          |                          | \$71,054.00          | \$0.00  | \$71,054.0           |
|        | 45,309: ←  | - BKV Group / Contegrity Group → 25, 745 | \$71,054.00          | \$0.00                   |                      | \$7,119.05                                    | \$178.5              |
|        | Historic Assessment  | Summit Envirosolutions                   | \$7,297.60           | \$0.00                   | \$7,297.60           | \$31,500.00                                   | \$18,500.0           |
|        | Finance Costs - Allowance ???  | Springsted / Dorsey / Moody's            | \$50,000.00          | \$0.00                   | \$50,000.00          | \$31,500.00                                   | Ģ 10,000.0           |
|        |  |  | \$10,995,863.60      | \$0.00                   | \$10,995,863.60      | \$1,190,932.70                                | \$9,804,930.9        |



## Aitkin County - Government Center Addition Date: March 20, 2019



| CAT      | EGORY OF WORK  | TRADE CONTRACTOR NAME                    | ORIGINAL<br>CONTRACT | CHANGE<br>ORDERS | ADJUSTED<br>CONTRACT | PAID<br>TO DATE | BALANCE<br>TO FINISH |
|----------|--|--|----------------------|------------------|----------------------|-----------------|----------------------|
|          |  |  | *****                | #0 004 0F        | \$645.834.75         | \$335,729.00    | \$310,105.75         |
| 1        | Earthwork / Utilities / Improvements / Demo.         | Eagle Construction                       | \$652,666.00         | -\$6,831.25      | \$244,798.00         | \$162,425.30    | \$82,372.70          |
| 2        | Concrete   | Thompson Construction of Princeton, Inc. | \$236,442.00         | \$8,356.00       | \$703,216.79         | \$262,213.30    | \$441,003.49         |
| 3        | Masonry  | Harbor City Masonry                      | \$690,990.00         | \$12,226.79      | \$218,475.00         | \$185,915.00    | \$32,560.00          |
| 4        | Steel Erection                                       | Roden Iron                               | \$220,000.00         | -\$1,525.00      |                      | \$41,603.73     | \$204,880.30         |
| 5        | Carpentry  | Gopher State Contractors                 | \$245,300.00         | \$1,184.03       | \$246,484.03         | \$336,120.45    | \$471,262.55         |
| 6 & 20   | Roofing / HVAC                                       | Thelen Heating & Roofing                 | \$720,000.00         | \$87,383.00      | \$807,383.00         | \$7,079.40      | \$218,920.60         |
| 7        | Metal Wall Panels                                    | Progressive Building Systems             | \$226,000.00         | \$0.00           | \$226,000.00         | \$0.00          | \$51,750.00          |
| 8        | Joint Sealants                                       | Sunrise Specialties                      | \$51,750.00          | \$0.00           | \$51,750.00          | \$0.00          | \$49,950.00          |
| 9        | Coiling Grilles                                      | Garage Door Store                        | \$49,950.00          | \$0.00           | \$49,950.00          |                 | \$16,390.00          |
| 9A       | Folding Panel Partitions                             | Skold Specialty Contracting              | \$15,340.00          | \$1,050.00       | \$16,390.00          | \$0.00          |                      |
| 10       | Aluminum Windows / Doors & Glazing                   | Anderson Glass Co.                       | \$315,100.00         | \$6,700.00       | \$321,800.00         | \$86,830.00     | \$234,970.00         |
| 11       | Gypsum Board   | Olympic Companies                        | \$889,350.00         | \$43,619.00      | \$932,969.00         | \$376,343.45    | \$556,625.55         |
| 12       | Tile   | Dorholt Tile                             | \$207,164.00         | \$3,254.00       | \$210,418.00         | \$0.00          | \$210,418.00         |
| 13       | Acoustical Treatments                                | Twin City Acoustics                      | \$298,873.00         | -\$257.00        | \$298,616.00         | \$5,350.40      | \$293,265.60         |
| 14       | Flooring   | Contract Tile & Carpet                   | \$134,768.00         | \$1,425.00       | \$136,193.00         | \$0.00          | \$136,193.00         |
| 16       | Painting   | Fransen Decorating                       | \$209,750.00         | -\$45,316.00     | \$164,434.00         | \$6,708.82      | \$157,725.18         |
| 17       | Elevator   | MEI Total Elevator                       | \$258,232.00         | \$0.00           | \$258,232.00         | \$0.00          | \$258,232.00         |
| 18       | Fire Protection                                      | LVC Companies                            | \$244,800.00         | \$0.00           | \$244,800.00         | \$110,865.00    | \$133,935.00         |
| 19       | Plumbing / Piping                                    | Masters Plumbing & Heating               | \$845,000.00         | \$64,154.01      | \$909,154.01         | \$385,971.70    | \$523,182.31         |
|          | Controls   | Honeywell                                | \$205,970.00         | \$30,048.00      | \$236,018.00         | \$31,251.20     | \$204,766.80         |
| 21       | Testing / Adjusting & Balancing                      | SMB of MN                                | \$34,700.00          | \$0.00           | \$34,700.00          | \$0.00          | \$34,700.00          |
| 22       | Electrical / Communications / Security               | Holden Electric                          | \$974,350.00         | \$59,101.33      | \$1,033,451.33       | \$498,809.85    | \$534,641.48         |
| 23       |  | Thumbeck Steel                           | \$419,600.00         | \$7,345.01       | \$426,945.01         | \$341,785.22    | \$85,159.79          |
| 24       | Steel Supply - Material Only                         | Sell Hardware                            | \$106,785.00         | \$8,113.00       | \$114,898.00         | \$19,745.75     | \$95,152.25          |
| 25       | Standard Doors / Frames / Hardware (material only)   | Northwest Cabinets                       | \$163,676.00         | -\$1,818.37      | \$161,857.63         | \$0.00          | \$161,857.63         |
| 26<br>27 | Casework (marerial only) Specialties (material only) | Bartley Sales Company, Inc.              | \$36,523.00          | \$0.00           | \$36,523.00          | \$0.00          | \$36,523.00          |
| 21       | Specialities (material unity)                        |  |                      |                  |                      | 00 101 717 57   | \$5,536,542.98       |
|          | TRADE CONTRACTOR TOTAL:                              |  | \$8,453,079.00       | \$278,211.55     | \$8,731,290.55       | \$3,194,747.57  | <b>#3,530,542.50</b> |
|          | Contingency  | Budget                                   | \$537,436.00         | -\$278,211.55    | \$259,224.45         | \$0.00          | \$259,224.45         |
|          | General Conditions                                   | Budget                                   | \$688,066.00         | \$0.00           | \$688,066.00         | \$332,962.55    | \$355,103.45         |
|          | CM Fee   | Contegrity Group, Inc. → 25,745          | <b>\$261,495.00</b>  | \$0.00           | \$261,495.00         | \$137,520.90    | \$123,974.10         |
|          |  | Rudget                                   | \$62,500.00          | \$0.00           | \$62,500.00          | \$62,500.00     | \$0.00               |
|          | Permitting   | BKV Group + 45,309                       | = \$634,000.00       | \$0.00           | \$634,000.00         | \$566,393.60    | \$67,606.40          |
|          | Architect & Engineer Fee Architect Reimbursables     | BKV Group                                | \$20,000.00          | \$0.00           | \$20,000.00          | \$9,224.81      | \$10,775.19          |
|          | Alditect Reinfodisables                              |  |                      |                  |                      | 24 222 242 42   | \$6,353,226.57       |
|          | CONSTRUCTION TOTAL:                                  |  | \$10,656,576.00      | \$0.00           | \$10,656,576.00      | \$4,303,349.43  | \$6,333,226.37       |
|          | Owner Items  |  | 225 222 22           | <b>(</b> 0.00    | \$65,000.00          | \$17,900.00     | \$47,100.00          |
|          | Asbestos Abatement                                   | Arrowhead / ACCT (Allowance)             | \$65,000.00          | \$0.00           | \$216,990.00         | \$12,109.13     | \$204.880.87         |
|          | FF&E   | Budget                                   | \$216,990.00         | \$0.00           |                      | \$7,119.05      | \$178.5              |
|          | Historic Assessment                                  | Summit Envirosolutions                   | \$7,297.60           | \$0.00           | \$7,297.60           | \$31,500.00     | \$18,500.00          |
|          | Finance Costs - Allowance                            | Springsted / Dorsey / Moody's            | \$50,000.00          | \$0.00           | \$50,000.00          | \$51,500.00     | \$ 10,000.00         |
|          | ODO ITOT TOTAL                                       |  | \$10,995,863.60      | \$0.00           | \$10,995,863.60      | \$4,371,977.61  | \$6,623,885.99       |
|          | PROJECT TOTAL:                                       |  | <b>~</b> ,,          |                  |                      |                 |                      |