



## Purchasing Department

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**P-W048302-JAB**

**ADDENDUM #4**

**December 14, 2011**

### **First Floor Renovation UML-Ponca City, Oklahoma**

The purpose of this addendum is to provide additional answers to supplier questions. This addendum shall take precedence over the original Contract Documents and Specifications. Addenda modify the Bidding Documents in accordance Instructions to Bidders. The following items are to be incorporated into the project, with all accessory items as necessary to provide a complete installation.

#### **A. Questions & Answers:**

1. Please see attached Continuation Sheets which provide Questions and Answers attached (6 pages).
2. New Questions will not be considered.

#### **B. Add/Deduct Alternate:**

1. The electrical alternate originally numbered "1" will now be included in the base bid per Specifications Addendum 3. The only alternate remaining will be for the exterior water proofing option as stated on Addendum 2 Bid Page 4.

#### **C. Addition of Addendums to the Specifications:**

1. Incorporate attached Specification Addendum No. 3 to the project requirements and they are made a part of the contract documents to the same extent as though it were originally included therein and shall supersede anything contained in the plans and Specification with which it might conflict (Specifications 24 pages, Drawings 10 pages; - Total pages for Addendum No. 3 Specifications – 34 pages.)

#### **D. Incorporate Provisions:**

1. EDA Construction Grant Award Number 08-79-04717.
2. It is acknowledged that the Contractor's failure to achieve substantial completion of the Work within the Contract Time provided by the Contract Documents will cause the Owner to incur substantial economic damages

and losses of types and in amounts which are impossible to compute and ascertain with certainty as a basis for recovery by the Owner of actual damages, and that liquidated damages represent a fair, reasonable and appropriate estimate thereof. Accordingly, in lieu of actual damages for such delay, the Contractor agrees that liquidated damages may be assessed and recovered by the Owner as against Contractor and its Surety, in the event of delayed completion and without the Owner being required to present any evidence of the amount or character of actual damages sustained by reason thereof; therefore Contractor shall be liable to the Owner for payment of liquidated damages in the amount of One Thousand Dollars (\$1,000) for each day that Substantial Completion is delayed beyond the Contract Time as adjusted for time extensions provided by the Contract Documents. Such liquidated damages are intended to represent estimated actual damages and are not intended as a penalty, and Contractor shall pay them to Owner without limiting Owner's right to terminate this agreement for default as provided elsewhere herein.

**All other provision of the plans and specifications remain in full force and effect.**

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**CONTINUATION SHEET  
To Accompany Requisition No.**

**P-W048302-JAB  
Addendum 4**

ITEM NO.	QUANTITY	UNIT	DETAILED DESCRIPTION – DOUBLE SPACE BETWEEN ITEMS	UNIT PRICE	AMOUNT
			<p><b><u>QUESTIONS AND ANSWERS</u></b></p> <p>1. Q: There are lockers shown in the restrooms, but there are no specifications. Will you please post specifications?</p> <p><b>A: Restroom Lockers are already onsite and ready for installation.</b></p> <p>2. Q: Please provide specifications for equipment E4, E9, &amp; E10 on drawing sheet A2.11c.</p> <p><b>A. Reference Spec Section 10505 (Addendum #2) for information regarding equipment item E4. Use “Labcrafters Model #BALR43” as basis of design for equipment items E9 and E10, finish to match hood unit.</b></p> <p>3. Q: Please provide elevation at sink in room 114 on drawing sheet A2.11c</p> <p><b>A. Reference Elevation B/A6.21 (Addendum #1)</b></p> <p>4. Q. Q: Please provide elevation in room 110 &amp; room 114 on drawing sheet A2.11c</p> <p><b>A: Reference Elevation A/A6.21 (Addendum #1).</b></p> <p>5. Q: Provide Specifications for vanity, sink, &amp; solid surface at c/A6.10</p> <p><b>A: Reference Spec Section 10800 for information regarding toilet accessories. Reference plumbing fixture schedule on sheet P5.01 for lavatory product information. Use “Wilsonart White Pepper 9062GG” as basis of design for solid surface.</b></p> <p>6. Q: Drawing E 3.00 shows new panel L1C need panel schedule for this panel.</p> <p><b>A: Panel schedule is provided at xxx of this Addendum #03 Open Question.</b></p>		

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			<p><b><u>QUESTIONS AND ANSWERS</u></b></p> <p>7. Q: Drawing E0.01 Electrical General Note #28 states all electrical conduit in secure area to be surface mounted. Coordinate exact locations of high secure areas with architect prior to bid. Are these the areas shown on A0.03?</p> <p><b>A: Yes</b></p> <p>8. Q: Wall construction on the West wall and south wall of the bathrooms is indicated as a 2A but the construction type is not indicated. Verify which wall type is to be provided.</p> <p><b>A: Provide partition type 16 at both locations.</b></p> <p>9. Q: Equipment Legend</p> <p>a. Q: Drawings indicate lockers in the restrooms and elevations indicate plastic laminate style. There is no specification on these.</p> <p><b>A: Reference Spec Section 10505 “Plastic Laminate Clad Wood Lockers”; see Addendum #2 for more information.</b></p> <p>b. Q: Verification is needed on the owner supplied and contractor installed equipment. Additional details are needed.</p> <p><b>A: Drawings and Specifications will be revised to require contractor furnished/ contractor installed equipment.</b></p> <p>c. Q: Locations and specifications are needed for: Flammable safety cabinet, Corrosive Storage Cabinet, and Fire extinguisher cabinets.</p> <p><b>A: Use “Labcrafters Model #BALR43” as basis of design for Flammable Safety &amp; Corrosive Storage Cabinets. Reference the attached sketch SK-1 for proposed fire extinguisher cabinet locations. Reference Spec Section 10520 “Fire Extinguisher Cabinets” for additional product information.</b></p> <p>10. Q: Plumbing drawings show a 2 inch LW with a solid black line. (2” lab waste) These lines are not indicated as underground. Should the lab waste be underground?</p> <p><b>A: No.</b></p> <p>11. The bid documents list alternate #1 as exterior water-proofing, yet the Electrical drawings illustrate the restroom area as alternate #1. Which is which?</p> <p><b>A: Refer to exterior water proofing as alternate #1. Refer to restroom electrical as alternate #2.</b></p>		

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			<p><b><u>QUESTIONS AND ANSWERS</u></b></p> <p>12. Q: The MEP drawings contain equipment schedules, fixture schedules, etc. In order to acquire pricing from wholesale vendors, these and the specifications are normally sent out for quotation. Will there be any variance allowed on sending out this information in order to provide competitive pricing for the end user?</p> <p><b>A: The following variance is permitted:</b></p> <ul style="list-style-type: none"> <li>a. Encourage vendors/suppliers to visit Plan Rooms, rather than sending hard copies. No electronic copies are permitted.</li> <li>b. Please copy only what is absolutely necessary.</li> <li>c. Please send a review copy to UML for approval BEFORE sending to vendors/suppliers.</li> <li>d. After approval, please keep a record of recipients.</li> <li>e. Please tell vendors/suppliers they are not allowed to make additional copies, hard or electronic.</li> <li>f. Please ask suppliers to return the copies to you.</li> <li>g. Please return these copies to UML, not OSU Purchasing (as with the original drawings), along with the list of recipients NO LATER THAN 16DEC (i.e. overnight delivery from bid closing date on 15DEC).</li> <li>h. <i>Contractors and subs are responsible for vendor/supplier compliance with these requirements. Any non-compliance by contractors, subs or vendors/suppliers will reflect poorly on their respective bid submissions and may, <u>solely upon the discretion of the UML</u>, result in bid disqualification.</i></li> <li>i. UML POC for variance copies and recipients list: Leslie E. Colyott, Ph.D. University Multispectral Laboratories 500 W South Ave Ponca City OK 74601</li> </ul>		

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			<p><b><u>QUESTIONS AND ANSWERS</u></b></p> <p>13. Q: Clarification about STC 50 doors/frames assemblies in High Security Area noted on Sheet A0.03. Are the all door in 'shaded area' for be STC 50 including wood door as scheduled?</p> <p><b>A: All doors contained within perimeter of the high security perimeter walls shall meet acoustical requirements as listed in the specifications. Refer to modifications made by addendum #3.</b></p> <p>14. Q: Door Specs issued (Section 08110) don't mention anything about STC 50 doors/frames or relate to these assemblies. Most of the Available Manufacturers listed in this Specs don't make STC assemblies. Are they planning to issue a Spec for these STC Assemblies?</p> <p><b>A: Acoustical information is included in Section 1.2, Paragraph N. Refer to modifications made by addendum #3 for additional clarification on manufacturers and pairs. All three manufacturers provide assemblies meeting the acoustical performance requirements.</b></p> <p>15. Can we please get verification on the species of existing wood doors to match?</p> <p><b>A: Specify hollow metal in lieu of wood per Specifications Addendum #3.</b></p> <p>16. Are drawing requests still open?</p> <p><b>A: Please see Answer #12 above.</b></p> <p>17. Q: Are “man bars” required in ducts already in secure areas: EX: VAV-118.1 has 12” x 12” duct passing through 3 walls inside secure area?</p> <p><b>A: Yes.</b></p> <p>18. Q: Will “man bars” be require on grill “D” in room 120?</p> <p><b>A: Actually. It is not permissible to end the duct at the wall. The duct must come on inside the room and be acoustically protected so that sound cannot couple past the wall boundary. Must bring duct in and Z or baffle and man bar at wall.</b></p>		

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			<p><b><u>QUESTIONS AND ANSWERS</u></b></p> <p>19. Q: Are fire dampers required in exhaust duct FH 1-4 at chase connection?</p> <p><b>A: Provide 2 hour fire rated duct wrap per HVAC keyed note #2 on sheet M0.01</b></p> <p>20. Q: In Mechanical room 129A an outside air louver is to be blanked off. Room 129A is shown in the Secure area on the plans. Please describe the method required to make louver secure.</p> <p><b>A: If closing off a wall louver, must be filled and acoustically protected per wall specification surrounding it.</b></p> <p>21. Q: Please clarify the duct opening for corridor 100. The 14" x 24" duct that is located inside ConocoPhillips property is shown tying into and existing transition and ductwork which will have to be removed and replaced to accommodate the new duct.</p> <p><b>A: Design intent is to leave existing ductwork in place.</b></p> <p>22. Q: What type of ground cover will be required to be planted in Alternate #1?</p> <p><b>A: Provide 3 gallon Juniperus Horizontalis Witanii @ 24" o.c.</b></p> <p>23. Q: Where is the design and specifications for the lawn irrigation system scheduled for replacement in Alternate #1?</p> <p><b>A: Irrigation design should be delegated design</b></p> <p>24. Q: Are there any additional requirements for performing work on ConocoPhillips property while performing the work specified in Alternate #1?</p> <p><b>A: All work performed on CoP property must be coordinated through CoP.</b></p> <p>25. Q: Are there any additional requirements for performing work in the "Central Control" area for MEP tie-ins or shut-downs?</p> <p><b>A: All work performed on CoP property must be coordinated through CoP .</b></p>		

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			<p><b><u>QUESTIONS AND ANSWERS</u></b></p> <p>26. Q: Does the High Security Area have any requirements for UL2050 certification? <b>A: YES;</b> If so then:</p> <p>a. Will the entire area have this requirement or just certain rooms? <b>A: Entire High Security Area.</b></p> <p>b. If there are mutable separate rooms will each require its own certification (typical if these rooms will fall under different government standards)? <b>A: All will have the same certification for the same government agency.</b></p> <p>c. What government standard (NISPOM, DCID 6/9, ICD 705) will the site be following? <b>A: ICD-705</b></p> <p>d. Will the company selected for the installation have to be certified to provide a UL2050 certification? <b>A: YES.</b></p> <p>27. Q: There are no security devices located on the drawings or amounts specified.</p> <p>a. Which doors need readers? <b>A: ABS should be contacted re: card readers for all doors outside the HSA. ADT should be contacted re: card readers for all doors inside the HSA.</b></p> <p>b. What are the locations of the cameras? <b>A: ABS should be contacted re: camera locations.</b></p> <p>28. Will the intrusion system need to be integrated into the existing Schneider system? <b>A: No, the instruction system in the High Security Area will not be integrated into the existing Schneider system. The instruction system is monitored by ADT.</b></p> <p>a. If so then where will the monitoring for this system be provided? <b>A: n/a.</b></p> <p>29. How do you want the Intrusion system to operate (one system for the entire facility or broken up by area)?  <b>A: Broken into different areas.</b></p>		



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ARCHITECTURE + PLANNING + INTERIORS

DECEMBER 08, 2011

**ADDENDUM NO. 3**

**PROJECT:** UNIVERSITY MULTI-SPECTRAL LABS  
FIRST FLOOR RENOVATIONS

**PROJECT #:** 201141

**OWNER:** TRITON SCIENTIFIC

THE FOLLOWING MODIFICATIONS, ADDITIONS, AND DELETIONS ARE HEREBY MADE PART OF THE CONTRACT DOCUMENTS.

**CIVIL:**

**DRAWING ITEMS**

1. NONE

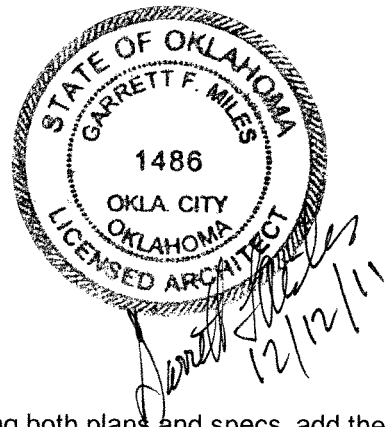
**SPECIFICATION ITEMS**

1. NONE

**ARCHITECTURAL:**

**DRAWING ITEMS**

1. Reference: Cover Sheet
  - a. For each separately bound section of the bid package including both plans and specs, add the following note to the cover sheets to read: "EDA CONSTRUCTION GRANT AWARD NUMBER 08-79-04717"
2. Reference: Sheet A0.03 "HIGH SECURE AREA PLAN"
  - a. Replace sheet A0.03 in its entirety with revised sheet A0.03 attached hereto.
3. Reference: Keyed Notes on Sheet A1.11 "DEMOLITION PLAN"
  - a. Add keyed note 10 to read: "EXISTING ELECTRICAL/MECHANICAL EQUIPMENT SERVING DUMBWAITER TO REMAIN".
4. Reference: Demolition Plan on Sheet A1.11 "DEMOLITION PLAN"
  - a. Add keyed note 10 to demolition plan as shown on sketch SK-1 attached hereto.
5. Reference: Equipment Legend on Sheet A2.11b "ENLARGED FLOOR PLAN – AREA B"
  - a. Revise item E-12 "BAKER BIOLOGICAL SAFETY CABINET" to be contractor furnished contractor installed (CFCI).
6. Reference: Enlarged Floor Plan on Sheet A2.11b "ENLARGED FLOOR PLAN – AREA B"
  - a. Add partition type tag "16" to West wall of room 128.
  - b. Add partition type tag "16" to South wall of room 128.
  - c. Add partition type tag "16" to South wall of room 127.
  - d. Reverse swing at door 129.



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DECEMBER 08, 2011

**ADDENDUM NO. 3**

- e. Reverse swing at door 129A.
- 7. Reference: Equipment Legend on Sheet A2.11c "ENLARGED FLOOR PLAN – AREA C"
  - a. Revise item E-12 "BAKER BIOLOGICAL SAFETY CABINET" to be contractor furnished contractor installed (CFCI).
  - b. Reverse swing at door 113B.
- 8. Reference: Equipment Legend on Sheet A2.11d "ENLARGED FLOOR PLAN – AREA D"
  - a. Revise item E-12 "BAKER BIOLOGICAL SAFETY CABINET" to be contractor furnished contractor installed (CFCI).
- 9. Reference: Finish Legend on Sheet A4.12 "DOOR SCHEDULE & FINISH SCHEDULE"
  - a. Revise "C1" carpet tile color to be "HICKORY" #8316.
  - b. Revise "C1" carpet tile style to be "CANOPY".
  - c. Revise "CT" ceramic tile color to be "ROASTED MARSHMALLOW".
  - d. Revise "R" rubber base color to be "BROWN" #47.
  - e. Add "SS" solid surface to legend, style to be "WILSONART WHITE PEPPER #9062GG".
- 10. Reference: Door Schedule on Sheet A4.12 "DOOR SCHEDULE & FINISH SCHEDULE"
  - a. Revise door 113A type to be "B".
  - b. Revise door 115A type to be "B".
  - c. Revise door 116 type to be "B".
  - d. Revise door 117 type to be "B".
  - e. Revise door 123B type to be "B".

**SPECIFICATION ITEMS**

- 1. Reference: "TABLE OF CONTENTS"
  - a. Add Section 13710 "INTRUSION DETECTION SYSTEMS" attached hereto in its entirety.
- 2. Reference: Section 08110 "STEEL DOORS AND FRAMES"
  - a. Revise Section 1.2, Paragraph A "AVAILABLE MANUFACTURERS" as follows:
    - i. Replace Fenestra Corp. in its entirety with Curries, ASSA Abloy.
    - ii. Omit Steelcraft in its entirety.
  - b. Revise Section 1.2, Paragraph N "ACOUSTICAL REQUIREMENTS" as follows:
    - i. Replace line item #1 in its entirety with the following:
      - 1. Sound Transmission Class:
        - a. Pairs of doors contained within High Security Perimeter walls: 45 minimum.
        - b. Single doors contained within High Security Perimeter walls: 50 minimum.
- 3. Reference: Section 08700 "FINISH HARDWARE"
  - a. Replace section in its entirety with revised Section 08700 "FINISH HARDWARE" attached hereto.

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**ADDENDUM NO. 3**

**STRUCTURAL:**

DRAWING ITEMS

1. NONE

SPECIFICATION ITEMS

1. NONE

**MECHANICAL:**

DRAWING ITEMS

1. Reference: Engineering addendum attached hereto.

SPECIFICATION ITEMS

1. NONE

**PLUMBING:**

DRAWING ITEMS

1. Reference: Engineering addendum attached hereto.

SPECIFICATION ITEMS

1. NONE

**ELECTRICAL:**

DRAWING ITEMS

1. Reference: Engineering addendum attached hereto.

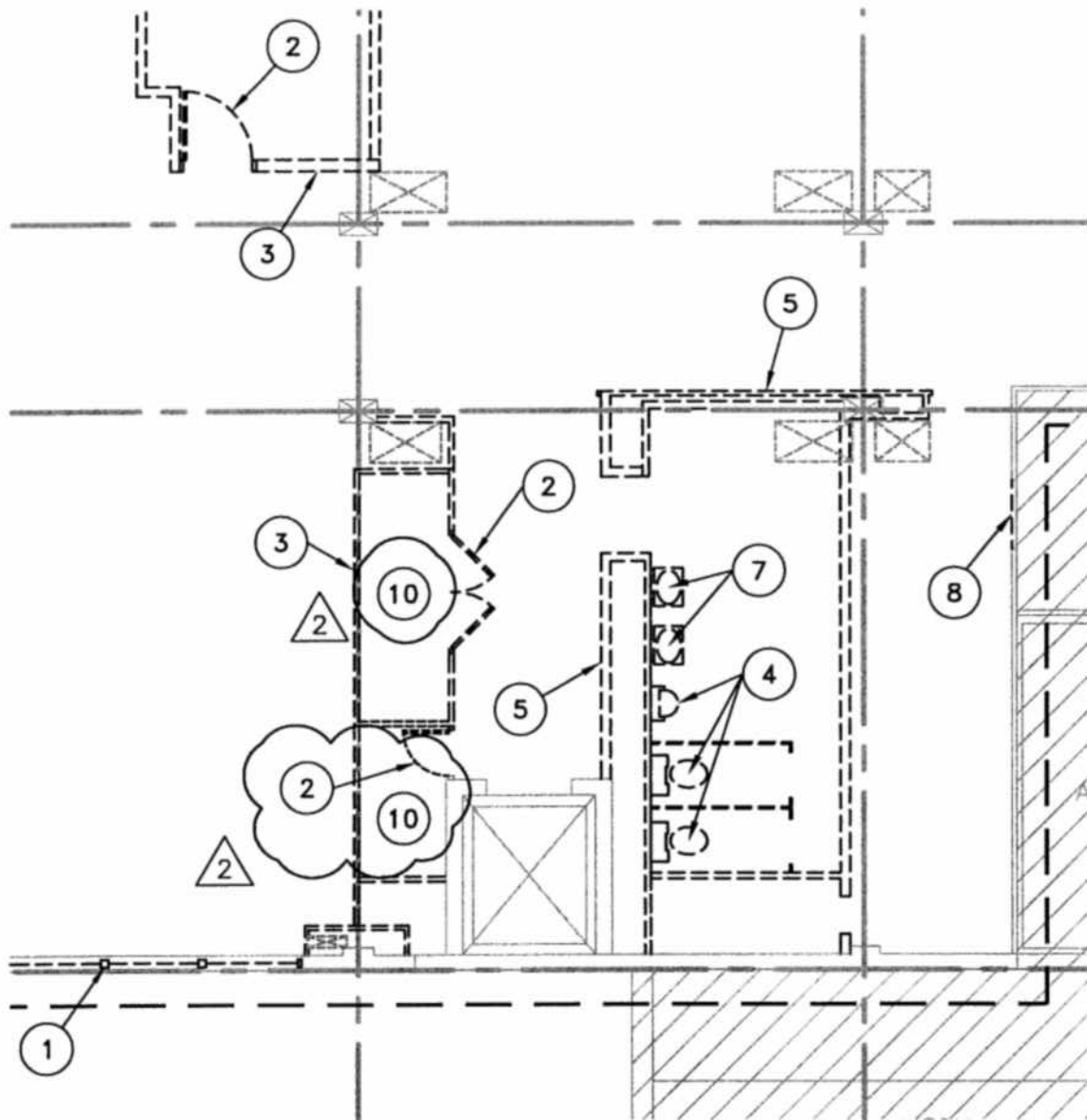
SPECIFICATION ITEMS

1. NONE

**ATTACHMENTS:**

1. Sheet A0.03
2. Architectural Sketch SK-1
3. Engineering Sketches MSK-1 through MSK-9
4. Spec. Sections 08700 & 13710

**END OF COMMENTS**



# A DEMOLITION PLAN – FIRST FLOOR

1/8" = 1'-0"



UNIVERSITY MULTI-SPECTRAL LABORATORIES  
FIRST FLOOR RENOVATIONS  
500 W. SOUTH AVENUE  
PONCA CITY, OK 74601  
PROJECT NUMBER:  
201141

**MILES ASSOCIATES**  
ARCHITECTURE • PLANNING • INTERIORS  
865 Research Parkway, Suite 100  
Oklahoma City, OK 73104  
(405) 235-3953 I telephone  
(405) 235-7579 I fax

DOCUMENT	REFERENCE FROM	
ADDENDUM #3	A1.11	
DATE	SHEET NUMBER	REVISION NUMBER
DEC. 08, 2011	SK-1	
	SEQUENCE	
	1 OF 1	
REMARKS		

**FINISH HARDWARE  
SECTION 08700**

**Part I – General**

**1.01 Summary**

- A. Provide finish hardware for swinging doors.
- B. Related Sections
  - 1. Steel Doors and Frames 08110
  - 2. Wood Doors 08210
  - 3. Electrical 16100

**1.02 References**

- A. Codes
  - 1. NFPA 101-2000 Life Safety Code
  - 2. IBC 2003 International Building Code
- B. Standards
  - 1. NFPA80-1999 Standards for Fire Doors and Fire Windows
  - 2. ANSI A117.1-1992 Accessible and Usable Buildings and Facilities
  - 3. NFPA 105-2003 Installation of Smoke Door Assemblies

**1.03 Submittals**

- A. Provide 6 copies of the hardware submittal.
- B. The hardware schedule shall be written in the vertical format as shown in the DHI publication "Sequence and Format for the Hardware Schedule".
- C. A complete set of catalog cut sheets or product data sheets showing grade, design and function shall be included with the hardware submittal.
- D. Submit samples of all items substituted as equal to those specified and any sample requested by the architect. Tag all approved samples with the opening number in the hardware schedule and deliver to the jobsite for installation.
- E. Provide templates and approved hardware schedule to all door and frame suppliers.
- F. Provide a keying schedule with the hardware submittals. Refer to DHI publication "Keying Systems and Nomenclature" to format the schedule. Arrange a meeting with the owner, architect, contractor and hardware supplier to determine the keying requirements for this project.

**1.04 Quality Assurance**

- A. The supplier shall have in their employ a certified Architectural Hardware Consultant who is registered and certified by the Door and Hardware Institute. The AHC shall be made available for consultations.
- B. Use a qualified installer experienced in the preparation and installation of finish hardware.

**1.05 Delivery, Storage and Handling**

- A. Mark all items with the opening number from the approved hardware schedule. Store all hardware items in the manufacturers original packaging.
- B. Deliver the hardware to the jobsite and inventory to identify shortages or back ordered items. Hardware for aluminum storefront doors shall be packed

separate for the aluminum storefront supplier to pick up at the jobsite.

- C. Provide a secure, dry and clean room with adequate shelving to keep hardware off the floor.

#### **1.06 Warranty**

- A. Refer to section 01700 Warranty and Bonds. Provide a minimum 1 year factory warranty for all hardware products. Any factory warranty longer than 1 year shall apply to hardware on this project.

#### **1.07 Maintenance**

- A. The contractor shall provide a 1 year service agreement to inspect, adjust or replace any hardware item that is not working properly or needs adjustment.
- B. Retain 2 of each wrench or special tool furnished with the locks, closers, exit devices, etc. Include dogging keys for exit devices. Give all tools to the owners engineering department.

### **Part 2 – Products**

#### **2.01 Manufacturers**

- A. Manufacturers
  - 1. Hinges Hager, Stanley, Bommer
  - 2. Pivots Rixson, Ives
  - 3. Locks & Latches Sargent, Schlage
  - 4. Lock Trim Sargent, Schlage
  - 5. Cylinders Sargent, Schlage
  - 6. Exit Devices Von Duprin (No Substitution)
  - 7. Exit Device Trim Von Duprin (No Substitution)
  - 8. Closers LCN (No Substitution)
  - 9. Door Pulls Hager, Rockwood, Ives, Trimco
  - 10. Protection Plates Hager, Rockwood, Ives, Trimco
  - 11. Stops and Holders Hager, Rockwood, Ives, Trimco
  - 12. Threshold National Guard, Pemko, Reese
  - 13. Gasketing National Guard, Pemko, Reese
  - 14. Silencers Hager, Rockwood, Ives, Trimco
  - 15. Electric Strikes Von Duprin, Folger Adams
  - 16. Power Supplies Von Duprin, Folger Adams
- B. Substitutions
  - 1. Substitution request must be made no less than 10 days before bid date. Submit catalog cut sheets and data showing grade, design and function.

#### **2.02 Materials**

- A. Screws and Fasteners – Exposed surfaces shall match the hardware. Sheet metal screws or machine screws in drilled and tapped holes are to be used on metal surfaces. Wood screws threaded to the head are to be used on wood surfaces except for closers. All closers mounted on wood surfaces shall be fastened with through bolts.
- B. Hinges – ANSI/BHMA A156.1 (Butts and Hinges)  
For heavy doors, high frequency use or unusual stress furnish heavy duty hinges. Coordinate the width of the hinge if special trim clearance is required. Exterior doors opening out use a pin which cannot be removed when the door is closed. 5 knuckle ball bearing hinges shall be used through out the building. Doors 60" or less to have 2 hinges. Doors 60" to 90" to have 3 hinges. Doors over 90" add 1 hinge for every 30" in height.

Hager	ECBB1100
Stanley	FBB179
Bommer	BB5000
<i>Acoustical Solutions</i>	<i>CAM955</i>

- C. Pivots – ANSI/BHMA A156.4 (Door Controls - Closers)  
Provide 1 intermediate pivot on doors up to 90". Provide 1 intermediate pivot for every 30" over 90" in height.
- |        |               |
|--------|---------------|
| Rixson | 147, M19      |
| Ives   | 7226, 7226INT |
- D. Locks & Latches – ANSI/BHMA A156.2 (Bored and Pre-Assembled Locks)  
Series 4000, grade 1 cylindrical type with 2 ¾" backset. Provide standard 4 7/8" strike on all locks and latches.
- |                 |             |
|-----------------|-------------|
| Sargent         | 10 line     |
| Schlage         | ND series   |
| <i>Kaba Mas</i> | <i>X-09</i> |
- E. Lock Trim – ANSI/BHMA A156.2 (Bored and Pre-Assembled Locks)  
Provide levers made of solid pressure cast zinc with a rose made of wrought or cold forged brass or bronze.
- |         |     |
|---------|-----|
| Sargent | LL  |
| Schlage | RHO |
- L. Cylinders - ANSI/BHMA A156.5 (Auxiliary Locks and Associated Products)  
Provide the manufacturers standard 6 pin tumbler type constructed of brass or bronze.
- |         |        |
|---------|--------|
| Sargent | 34     |
| Schlage | 20-022 |
- M. Exit Devices – ANSI/BHMA A156.3 (Exit Devices)  
Provide modern push pad type devices that are listed and labeled by a testing and inspecting agency acceptable to the authority having jurisdiction. Fire rated doors shall have exit devices that comply with NFPA 80 and are listed and tested by an agency acceptable to the authority having jurisdiction.
- |            |           |
|------------|-----------|
| Von Duprin | 99 series |
|------------|-----------|
- N. Closers – ANSI/BHMA A156.4 (Door Controls – Closers)  
Provide closers made of cast iron. Non-sized, field adjustable for the conditions at the opening. Non fire rated doors shall have a maximum five pound applied opening force. Fire rated doors shall have a maximum applied force allowed by the authority having jurisdiction.
- |     |             |
|-----|-------------|
| LCN | 4000 series |
|-----|-------------|
- O. Door Pulls – ANSI/BHMA A156.6 (Architectural Door Trim)  
Provide straight or offset pulls as specified made of stainless steel. Mount straight pulls over a 3 ½" x 15" x .050" stainless steel plate. Comply with the Americans with Disabilities Act. Pulls must have a clearance of 2 ¼".
- |          |        |
|----------|--------|
| Hager    | H12L   |
| Rockwood | BF158  |
| Ives     | 8190   |
| Trimco   | 1191-1 |
- P. Protection Plates – ANSI/BHMA A156.6 (Architectural Door Trim)  
Provide plates made of .050" stainless steel. The width on the push side shall be 2" less than the nominal door width. The width on the pull side shall be 1" less than the nominal door

width. Mop plates shall be 6" in height, kick plates shall be 10" in height and armor plates shall be 36" in height. Adjust height if bottom rail does not permit specified size.

Hager	190S
Rockwood	K1050
Ives	8400
Trimco	KO050

Q. Stops and Holders – ANSI/BHMA A156.16 (Auxiliary Hardware)

Provide floor stops made of cast brass or bronze with a rubber bumper.

Hager	241F
Rockwood	440
Ives	FS436
Trimco	1211

R. Thresholds – ANSI/BHMA A156.21 (Thresholds)

Provide thresholds not more than ½" high. Comply with the Americans with Disabilities Act. Length shall be long enough to cope thresholds around frame.

National Guard	425, 950S
Pemko	271, 2001AT
Reese	S205A, S498A

S. Gasketing – ANSI/BHMA A156.22 (Door Gasketing and Edge Seal Systems)

Provide continuous gasketing on exterior doors and provide smoke seal, light or sound seal when scheduled. Comply with NFPA 105 on smoke labeled doors and NFPA 80 on fire labeled doors.

National Guard	107SA, 220SA, 5050
Pemko	S88, 350CSR, 434APKL
Reese	330C, 599C, 638CH

T. Silencers – ANSI/BHMA A156.16 (Auxiliary Hardware)

Hager	307D
Rockwood	608
Ives	SR64
Trimco	1229A

U. Electric Strikes – ANSI/BHMA A156.31 (Electric Strikes and Frame Mounted Actuators)

Von Duprin	6113, 6211
Folger Adams	310, 712

V. Power Supplies – ANSI/BHMA A156.25 (Electrified Locking Devices)

Von Duprin	PS861
Folger Adams	FABPS

## 2.03 Finishes

ANSI/BHMA A156.18 (Recommended Practices for Materials and Finishes)

	<u>ANSI/BHMA</u>	<u>U.S. Equivalent</u>
A. Satin Stainless Steel	630	US32D
B. Satin Chrome	626	US26D
C. Aluminum Paint	689	ALUM
D. Prime Paint	600	P
E. Mill Finish Aluminum	719	A

## 2.04 Keying



Key locks to master key system. Provide a 6 pin cylinder core for all locks and cylinders. Provide 6 master keys and 2 keys per lock. Provide factory keys made of nickel silver. *Coordinate keying requirements with Owner.*

### **Part 3 – Execution**

#### **3.01 Examination**

Examine all job conditions that affect or are affected by the installation of finish hardware. Cleaning and conditions affecting installation should be complete before installation of hardware begins.

#### **3.02 Installation**

Follow the recommended installation guidelines in the following publications. ANSI/BHMA A156.16 "Installation Guide for Doors and Hardware". DHI publication "Recommended Locations for Architectural Hardware". Follow the manufacturers instructions for installation. Closers shall be installed on the room side out of the corridor. Wall stops shall be installed to contact the lever or door pull. Refer to division 6 "Wood, Plastics and Composites" for internal wall blocking for wall stops. Set thresholds in a bed of caulking.

#### **3.03 Field Quality Control**

Inspect openings to determine that the doors and frames are properly prepared to receive the hardware and that the correct hardware was installed on the opening.

#### **3.04 Adjusting and Cleaning**

The hardware installer shall make final adjustments to closer setting, tighten locks or exit devices. Repair or replace any defective or damaged item. Provide a final cleaning of all exposed areas of hardware.

#### **3.05 Protection**

Cover exposed areas of hardware with masking tape and do not remove any factory applied protective material until final cleaning.

#### **3.06 Hardware Schedule**

##### **Set 01 – Double Egress Corridor**

Doors: 100, 101

Each to have:

8 hinges	ECBB1100-4 ½" x 4 ½"-US26D	Hager
2 exit devices	CX9947EO-F-LBR-US26D-30 second delay	Von Duprin
2 cylinders	42-26D	Sargent
2 closers	4041-Rw/PA-AL	LCN
2 kick plates	190S-US32D-10" x DW-2"	Hager
2 wall stops	236W-US32D	Hager
2 power transfers	EPT-10-SP28	Von Duprin
1 power supply	PS873FA	Von Duprin
1 smoke seal	5050C-Head & Jamb	National Guard
1 astragal set	115NA	National Guard

Card reader by others. Card reader overrides the alarm. Exit devices to have external inhibits for authorized egress.

##### **Set 02 – Restrooms**

Doors: 127, 128

Each to have:

4 hinges	ECBB1100-4 ½" x 4 ½"-US26D	Hager
----------	----------------------------	-------

1 passage set	10U15-LL-26D	Sargent
1 closer	4041-Rw/PA-AL	LCN
1 kick plate	190S-US32D-10" x DW-2"	Hager
1 wall stop	236W-US32D	Hager
1 smoke seal	5050C-Head & Jambs	National Guard

**Set 03 – Mechanical/Housekeeping/Storage**

Doors: 100D, 124, 125, 126, 132

Each to have:

4 hinges	ECBB1100-4 ½" x 4 ½"-US26D	Hager
1 lockset	10G04-LL-26D	Sargent
1 closer	4041-Rw/PA-AL	LCN
1 kick plate	190S-US32D-10" x DW-2"	Hager
1 wall stop	236W-US32D	Hager
1 smoke seal	5050C-Head & Jambs	National Guard

**Set 04 – Storage/Mechanical**

Doors: 100C, 100E, 100G, ~~106~~, 129A, 133

Each to have:

8 hinges	ECBB1100-4 ½" x 4 ½"-US26D	Hager
2 flush bolts	282D-US26D	Hager
1 dust proof strike	280X-US26D	Hager
1 lockset	10G24-LL-26D	Sargent
2 overhead holders	454H-US32D	Glynn Johnson
1 smoke seal	5050C-Head & Jambs	National Guard

**Set 05 – Storage/Mechanical**

Doors: 101C, 101D, 101F, 101G, 101H, 101J, 101K, 123B, 130, 131, 136

Each to have:

8 hinges	ECBB1100-4 ½" x 4 ½"-US26D	Hager
2 flush bolts	282D-US26D	Hager
1 dust proof strike	280X-US26D	Hager
1 lockset	10G24-LL-26D	Sargent
2 overhead holders	454H-US32D	Glynn Johnson
2 silencers	307D	Hager

**Set 06 - Labs**

Doors: ~~102~~, 103, 105, ~~108~~, 109, 111

8 hinges	ECBB1100-4 ½" x 4 ½"-US26D	Hager
1 auto flush bolt set	296W-US26D	Hager
1 dust proof strike	280X-US26D	Hager
1 coordinator	297D-60"	Hager
2 mounting brackets	297M	Hager
1 storeroom lockset	10G04-LL-26D	Sargent
2 closers	4041-Rw/PA-AL	LCN
1 kick plate	190S-US32D-10" x 22"	Hager
1 kick plate	190S-US32D-10" x 34"	Hager
1 smoke seal	5050C-20'	National Guard
1 astragal set	115NA	National Guard
1 power transfer	EPT-10-SP28	Von Duprin
1 electric strike	6211-US32D-24VDC-FSE	Von Duprin
1 power supply	PS861	Von Duprin

Card reader and related items by security contractor.

**Set 07 – Classroom/Office**

Doors: 114A, 114B, 115B, 116, 117, ~~118~~, 119, 121

Each to have:

4 hinges	ECBB1100-4 ½" x 4 ½"-US26D	Hager
1 lockset	10G24-LL-26D	Sargent
1 closer	4041-Rw/PA-AL	LCN
1 kick plate	190S-US32D-10" x DW-2"	Hager
1 wall stop	236W-US32D	Hager
1 smoke seal	5050C-Head & Jambs	National Guard

**Set 08 – Office/Conference/Comm. Room**

Doors: 113A, 115A, 122A, ~~122B~~, ~~123~~, 123A

Each to have:

4 hinges	ECBB1100-4 ½" x 4 ½"-US26D	Hager
1 lockset	10G04-LL-26D	Sargent
1 closer	4041-Rw/PA-AL	LCN
1 kick plate	190S-US32D-10" x DW-2"	Hager
1 wall stop	236W-US32D	Hager
1 smoke seal	5050C-Head & Jambs	National Guard
1 electric strike	6211-US32D-24VDC-FSE	Von Duprin
1 power supply	PS861	Von Duprin

Card reader by security contractor.

**Set 09 – Corridor Doors**

Doors: 100A, 107

Each to have:

8 hinges	ECBB1100-4 ½" x 4 ½"-US26D	Hager
2 exit devices	CX9947EO-F-LBR-US26D-30 second delay	Von Duprin
2 cylinders	42-26D	Sargent
2 closers	4041-Rw/PA-AL	LCN
2 kick plates	190S-US32D-10" x DW-2"	Hager
2 wall stops	236W-US32D	Hager
2 power transfers	EPT-10-SP28	Von Duprin
1 power supply	PS873FA	Von Duprin
1 smoke seal	5050C-Head & Jamb	National Guard
1 astragal set	115NA	National Guard

Card reader by others. Card reader overrides the alarm. Exit devices to have external inhibits for authorized egress.

**Set 10 – High Security Exit Only (Pair)**

Doors: 113B

Each to have:

8 hinges	CAM955	Acoustical Solutions
2 exit devices	99-EO-F-US26D	Von Duprin
2 mounting brackets	297M	Hager
2 closers	4211-AL	LCN
2 kick plates	190S-US32D-10" x 34"	Hager
1 astragal set	115NA	National Guard
1 removable mullion	9954	Von Duprin
1 power transfer	EPT-10-SP28	Von Duprin

1 power supply PS861 Von Duprin  
Door shall be constantly alarmed.  
Provide acoustical gaskets and seals for an STC rating of 50 as required per specification 08110.

**Set 11 – Storage/Mechanical**

Doors: 100B, 100H, 134  
Each to have:

4 hinges	ECBB1100-4 ½" x 4 ½"-US26D	Hager
1 flush bolt	282D-US26D	Hager
1 dust proof strike	280X-US26D	Hager
1 lockset	10G24-LL-26D	Sargent
1 overhead holder	454H-US32D	Glynn Johnson
1 smoke seal	5050C-Head & Jambs	National Guard

**Set 12 – Storage/Mechanical**

Doors: 101E  
Each to have:

4 hinges	ECBB1100-4 ½" x 4 ½"-US26D	Hager
1 flush bolt	282D-US26D	Hager
1 dust proof strike	280X-US26D	Hager
1 lockset	10G24-LL-26D	Sargent
1 overhead holder	454H-US32D	Glynn Johnson
3 silencers	307D	Hager

**Set 13 –Clean Storage**

Doors: 104, 110  
Each to have:

4 hinges	ECBB1100-4 ½" x 4 ½"-US26D	Hager
1 lockset	10G04-LL-26D	Sargent
1 closer	4041-Rw/PA-AL	LCN
1 kick plate	190S-US32D-10" x DW-2"	Hager
1 wall stop	236W-US32D	Hager
3 silencers	307D	Hager

**Set 14 – Shared Office**

Doors: 112, 129  
Each to have:

8 hinges	CAM955	Acoustical Solutions
1 exit devices	EL99-L-F-US26D	Von Duprin
1 exit devices	99-L-F-US26D	Von Duprin
2 closers	4211-AL	LCN
2 kick plate	190S-US32D-10" x DW-2"	Hager
1 astragal set	115NA	National Guard
1 removable mullion	9954	Von Duprin
1 power transfer	EPT-10-SP28	Von Duprin
1 power supply	PS861	Von Duprin

Card reader and related items by security contractor. Card reader overrides the alarm.  
Provide acoustical gaskets and seals for an STC rating of 45 as required per specification 08110.

**Set 15 – High Security Area Entrance (Single)**

Doors: 118

Each to have:

4 hinges	CAM955	Acoustical Solutions
1 high security lock	X-09	Kaba Mas
1 pedestrian deadlock	LKM7004	Lockmasters
1 closer	4211-AL	LCN
1 kick plate	190S-US32D-10" x DW-2"	Hager
1 wall stop	236W-US32D	Hager
1 power transfer	EPT-10-SP28	Von Duprin
1 power supply	PS861	Von Duprin

Card reader and related items by security contractor.

Provide acoustical gaskets and seals for an STC rating of 50 as required per specification 08110.

**Set 16 – High Security Area Entrance (Pair)**

Doors: 102, 108, 106

Each to have:

8 hinges	CAM955	Acoustical Solutions
1 high security lock	X-09	Kaba Mas
1 pedestrian deadlock	LKM7004	Lockmasters
2 locking slide bolts	SM-181	S&G
2 closers	4211-AL	LCN
1 kick plate	190S-US32D-10" x 22"	Hager
1 kick plate	190S-US32D-10" x 34"	Hager
1 wall stop	236W-US32D	Hager
1 astragal set	115NA	National Guard
1 removable mullion	9954	Von Duprin
1 power transfer	EPT-10-SP28	Von Duprin
1 power supply	PS861	Von Duprin

Card reader and related items by security contractor.

Provide acoustical gaskets and seals for an STC rating of 45 as required per specification 08110.

**Set 17 – High Security Exit Only (Single)**

Doors: 123, 122B

Each to have:

4 hinges	CAM955	Acoustical Solutions
1 exit device	99-EO-F-US26D	Von Duprin
1 closer	4211-AL	LCN
1 kick plate	190S-US32D-10" x DW-2"	Hager

Door shall be constantly alarmed.

Provide acoustical gaskets and seals for an STC rating of 50 as required per specification 08110.

**INTRUSION DETECTION SYSTEMS (IDS)  
SECTION 13710**

**PART 1 - SPECIFICATIONS AND IMPLEMENTATION REQUIREMENTS**

**1.1 General High Security IDS Requirements**

- A. Design and Installation shall be completed by ADT. Contact Paul Fisher at (830) 443-4488.
- B. Separate High Security areas shall be protected by individual Intrusion Detection Systems when not occupied
- C. Interior areas of a High Security area through which reasonable access could be gained, including walls common to areas not protected at the High Security level, shall be protected by IDS.
- D. Doors without access control systems and that are not under constant visual observation shall be continuously monitored by the IDS. These shall include:
  - i. Group "A" – Doors 118, 121, 122A, 122B, 123, 123A and 123B
  - ii. Group "B" – Doors 102, 103, 104, 105
  - iii. Group "C" – Doors 108, 109, 110, 111
  - iv. Group "D" – Doors 100A, 101, 106, 113A, 115A, 119, 124, 129, 136
- E. If any component of the IDS is disrupted to the extent the system no longer provides essential monitoring service (e.g., loss of line security, inoperable IDE, and loss of power), personnel approved by the owner shall physically occupy the High Security area until the system is returned to normal operation. As an alternative, the outside High Security perimeter may be continuously monitored by a response or guard force.
- F. IDS failure shall be addressed in the High Security emergency plan.

**1.2 System Requirements**

- A. IDS installation related components and monitoring stations shall comply with Underwriters Laboratories (UL) Standard for National Industrial Security Systems for the Protection of Classified Material, UL 2050.
- B. Installation shall comply with an Extent 3 installation as referenced in UL 2050.
- C. Systems developed and used exclusively by the USG do not require UL certification but shall comply with an Extent 3 installation as referenced in UL 2050.
- D. Interior areas of a High Security area through which reasonable access could be gained, including walls common to areas not protected at the High Security level, shall be protected by IDS consisting of motion sensors and high security switches (HSS) that meet UL 634 level 1 or 2 requirements, and/or other owner approved equivalent sensors. HSS Level 2 is preferred.

- E. IDS-associated cabling that extends beyond the High Security perimeter shall be installed in rigid conduit or shall employ line security.
- F. The IDS shall be independent of systems safeguarding other facilities.
- G. If a monitoring station is responsible for more than one IDS, there shall be an audible and visible annunciation for each IDS.
- H. IDS's shall be separate from, and independent of, fire, smoke, radon, water, and other systems.
- I. If the IDS incorporates an access control system (ACS), notifications from the ACS shall be subordinate in priority to IDS alarms.
- J. System key variables and passwords shall be protected and restricted to U.S. personnel approved by the owner.
- K. IDS installation plans shall be controlled as determined by the owner.
- L. Systems shall not include audio or video monitoring without the application of appropriate countermeasures and owner approval. Systems containing auto-reset features shall have this feature disabled.
- M. The owner shall approve all system plans. Final system acceptance testing shall be included as part of the High Security accreditation package.
- N. False alarms shall not exceed one alarm per 30-day period per zone. False alarms are any alarm signal transmitted in the absence of a confirmed intrusion that is caused by changes in the environment, equipment malfunction, or electrical disturbances. If false alarms exceed this requirement, a technical evaluation of the system shall be conducted to determine the cause, repaired or resolved, and documented.

### 1.3 System Requirements

#### A. Sensors

- i. All system sensors shall be located within the High Security area.
- ii. With owner approval, sensors external to the High Security perimeter and any perimeter equipment used may be connected to the IDS provided the lines are installed on a separate zone and routed within grounded conduit.
- iii. Failed sensors shall cause immediate and continuous alarm activation until the failure is investigated and corrected.
- iv. Dual technology sensors are authorized when each technology transmits alarm conditions independent of the other technology.
- v. A sufficient number of motion detection sensors shall be installed to meet the requirements of paragraph A.2.d, shall be UL 639 listed, or shall be approved by the owner. However, the following special circumstances apply to motion detection sensors:
  - a. Motion detection sensors are not required above false ceilings or below false floors.

- b. For facilities outside the U.S. and in Category I and II countries, motion detections sensors above false ceilings or below false floors may be required by the owner.
- vi. When the primary entrance door employs a delay to allow for changing the system mode of access, the delay shall not exceed 30 seconds.
- vii. High Security perimeter doors shall be protected by an HSS and a motion detection sensor.
- viii. Emergency exit doors shall be alarmed and monitored 24 hours per day.

**B. Premise Control Units (PCUs)**

- i. PCUs shall be located within a High Security area and only personnel approved by the owner may initiate changes in access modes.
- ii. Operation of the access/secure switch shall be restricted by using a device or procedure that validates authorized use.
- iii. Cabling between all sensors and the PCU shall be dedicated to the system, contained within the High Security area, and shall comply with national and local electric codes and Committee for National Security Systems (CNSS) standards. If the wiring cannot be contained within the High Security area, such cabling shall meet the requirements for External Transmission Line Security 3.b.(10) below.
- iv. Alarm status shall be continuously displayed with an alphanumeric display at the PCU and/or monitoring station.
- v. Every effort shall be made to design and install the alarm-monitoring panel in a location that prevents observation by unauthorized persons.
- vi. The monitoring station or PCU shall identify and display activated sensors.
- vii. Immediate and continuous alarm annunciations shall occur for the following conditions.
  - a. Intrusion Detection
  - b. Failed Sensor
  - c. Tamper Detection
  - d. Maintenance Mode (a maintenance message may display in place of an alarm)
  - e. Zones that are shunted or masked during maintenance mode
- viii. Failed/changed power status shall be indicated at the PCU and/or monitoring station.
- ix. An IDS with an auto-alarm reset feature shall have it disabled. All system events shall be reset by personnel approved by the owner after an inspection of the High Security area and a determination for the cause of the alarm has been made.
- x. If any IDS transmission line leaves a High Security area, National Institute of Standards and Technology, Federal Information Processing Standards (FIPS) 140-2 certified



encrypted lines shall be employed and so indicated in the UL 2050 Certificate. Alternative methods shall be approved by the owner.

C. Integrated IDS.

- i. The IC element's Chief Information Officer (CIO) shall be consulted before connecting an IDS to a government LAN or WAN under their cognizance.
- ii. In cases where the IDS has been integrated into a networked system (local area network (LAN) or wide area network (WAN)), the requirements below shall be met.
  - a. If any component of the IDS is remotely programmable, a Network Intrusion Detection Systems (NIDS) is required.
  - b. System application software shall be installed on a host computer dedicated to security systems. The host computer shall be located in an alarmed area as directed by the owner.
  - c. All system components and equipment shall be isolated with dedicated firewalls, or similar enhancements, that are configured to allow data transfers only between the PCU and monitoring station.
  - d. A secondary communication path may be utilized to augment an existing data communication link to reduce investigations of data communication failures of less than five minute duration. The supervision provided by the secondary communication path shall be equivalent to that of the primary communication path.
  - e. A unique user ID and password is required for each individual granted access to the system host computer. Passwords shall be a minimum of twelve characters consisting of alpha, numeric, and special characters, and shall be changed every six months.
  - f. Firewalls shall be monitored for unauthorized access attempts, and all access attempts and changes to the system network shall be logged.
  - g. Network administrators shall immediately notify the owner or designee of any unauthorized modifications.
  - h. The IDS network system administrator shall be a U.S. citizen and approved by the owner.
  - i. All transmissions of system information over the LAN/WAN shall be encrypted using National Institute of Standards and Technology FIPS140-2 certified encrypted lines.
  - j. Remote networked system terminals shall:
    - i. Ensure that personnel not approved by the owner with access to the remote terminal cannot modify the IDS or ACS.
    - ii. Require an independent user ID and password in addition to the host login requirements.

- iii. Have system auditing software that shall log and monitor failed logins and IDS/ACS application program modifications.

## **PART 2 - IDS MODES OF OPERATION**

### **2.1 General Information**

- A. The system shall operate in either access or secure mode.
- B. There shall be no remote capability for changing the mode of operation or accessing the status of the system unless personnel approved by the owner conduct a daily audit of all openings and closings.
- C. Changing access/secure status of the system shall be limited to personnel approved by the owner.

### **2.2 Requirements for Access Mode**

- A. When in access mode, normal authorized entry into the High Security area, in accordance with prescribed security procedures, shall not cause an alarm.
- B. Tamper circuits and emergency exit door circuits shall remain in the secure mode of operation.
- C. The PCU shall have the ability to allow alarm points to remain in secure status while other points are in access status.

### **2.3 Requirements for Secure Mode**

- A. The system shall be placed into secure mode when the last person departs the High Security area.
- B. A record shall be maintained identifying the person responsible for activating and deactivating the system.
- C. Each failure to activate or deactivate the system shall be reported to the responsible High Security Manager. Records of these events shall be maintained for two years.
- D. When in the secure mode, any unauthorized entry into the High Security area shall cause an alarm to be immediately transmitted to the monitoring station.

### **2.4 Requirements for Maintenance and Zone Shunting/Masking Modes**

- A. When maintenance is performed on a system, a signal for this condition shall be automatically sent to the monitoring station.
- B. When a zone or sensor is shunted for reasons other than maintenance, the shunted or masked zone sensor shall be displayed as such at the monitoring station or PCU throughout the period the condition exists.

- C. Any sensor that has been shunted shall be reactivated upon the next change in status from access to secure.
- D. All maintenance periods shall be archived in the system.
- E. The owner may require that a Personal Identification Number (PIN), for maintenance purposes, be established and controlled by personnel approved by the owner.
- F. A shunted or masked zone or sensor shall be displayed as such at the monitoring station or PCU throughout the period the condition exists unless it occurs during a maintenance period.
- G. Computing devices are allowed attachment to system equipment either temporarily or permanently for the purposes of system maintenance or repair.
  - i. Such devices shall be kept under control of personnel approved by the owner at all times.
  - ii. When not in use, the computing devices shall be secured within the High Security area.
  - iii. Mass storage devices containing High Security alarm equipment details, configurations, or event data will be protected at an appropriate level approved by the owner.
- H. After the initial installation, the capability for remote diagnostics, maintenance, or programming of IDE shall not exist unless accomplished only by appropriately personnel approved by the owner and shall be appropriately logged or recorded in the Remote Service Mode Archive. A self-test feature shall be limited to one second per occurrence.

## 2.5 Requirements for Electrical Power

- A. In the event of primary power failure, the system shall automatically transfer to an emergency electrical power source without causing alarm activation.
- B. Twenty-four hours of uninterruptible backup power is required and shall be provided by an uninterruptible power supply (UPS), batteries, or generators, or any combination.
- C. An audible or visual indicator at the PCU shall provide an indication of the primary or backup electrical power source in use.
- D. Equipment at the monitoring station shall visibly and audibly indicate a failure in a power source or a change in power source. The individual system that failed or changed shall be indicated at the PCU or monitoring station as directed by the owner.

## 2.6 Monitoring Stations

- A. Monitoring stations shall be government-managed or one of the following in accordance with UL 2050:
  - i. CSA-operated monitoring station.
  - ii. Government contractor monitoring station (formerly called a proprietary central station).
  - iii. National industrial monitoring station.

- iv. Cleared commercial central station (see NISPOM).
- B. Monitoring station operators shall be trained in system theory and operation to effectively interpret system incidents and take appropriate response action.
- C. Records shall be maintained for two years and indicate the following:
  - i. Time of receipt of alarm.
  - ii. Name(s) of security or response force personnel.
  - iii. Dispatch time.
  - iv. Arrival time of responding personnel.
  - v. Nature of the alarm.
  - vi. Follow-up actions that were taken.

### **PART 3 - OPERATIONS AND MAINTENANCE OF IDS**

#### **3.1 Alarm Response**

- A. Alarm activations shall be considered an unauthorized entry until resolved.
- B. The response force shall take appropriate steps to safeguard the High Security area, as permitted by a written support agreement, until an individual approved by the owner arrives to take control of the situation.

#### **3.2 System Maintenance**

- A. Maintenance and repair personnel shall be escorted if they are not approved by the owner for access.
- B. Repairs shall be initiated within four hours of receipt of an alarm.
- C. The High Security area shall be continuously manned by personnel approved by the owner on a 24- hour basis until repairs are completed.
- D. The following apply to emergency-power battery maintenance:
  - i. The battery manufacturer's periodic maintenance schedule and procedures shall be followed and documented in the system's maintenance logs and retained for two years.
  - ii. If the communications path is via a network, the local uninterruptible power source for the network shall also be tested.
  - iii. Batteries shall be tested, under load, until 50% of their capacity has been expended.
  - iv. If a generator is used to provide emergency power, the manufacturers recommended maintenance and testing procedures shall be followed.

E. Network Maintenance

- i. NIDS system administrators shall maintain configuration control, ensure the latest operating system security patches have been applied, and configure the operating system to provide a high level of security.
- ii. Inside the U.S., network maintenance personnel within a High Security area shall be a U.S. person and be escorted by individuals approved by the owner.
- iii. Outside the U.S., network maintenance personnel shall be approved by the owner and escorted by personnel approved by the owner.

**PART 4 - INSTALLATION AND TESTING OF IDS**

4.1 Personnel Requirements

- A. Installation and testing within the U.S. shall be performed by U.S. companies using U.S. citizens.
- B. Installation and testing outside of the U.S. shall be performed by personnel who are approved by the owner and escorted by personnel approved by the owner.

4.2 Installation Requirements

- A. All system components and elements shall be installed in accordance with requirements of this document, UL 2050, and manufacturer's instructions and standards.

4.3 Testing

- A. Acceptance testing shall be conducted on systems prior to operational use to provide assurance that they meet all requirements of this section prior to High Security accreditation.
- B. Semi-annual IDS testing shall be conducted to ensure continued performance.
- C. Records of testing and test performance shall be maintained in accordance with documentation requirements.
- D. Motion Detection Sensor Testing
  - i. All motion detection sensors shall be tested to ensure activation of the sensor at a minimum of four consecutive steps at a rate of one step per second; that is, 30 inches  $\pm$  3 inches or 760 mm  $\pm$  80 mm per second. The four-step movement shall constitute a "trial."
  - ii. The test shall be conducted by taking a four-step trial, stopping for three to five seconds, and taking another four-step trial.
  - iii. Trials shall be repeated throughout the High Security area and from different directions.
  - iv. An alarm shall activate at least three out of every four consecutive trials made by moving progressively through the High Security area.

E. HSS Testing

- i. All HSS devices shall be tested to ensure that an alarm signal activates before the non-hinged side of the door opens beyond the thickness of the door from the closed position, e.g., the sensor initiates before the door opens 1¼ inch for a 1¼ inch door.

F. Tamper Testing

- i. Each IDS equipment cover shall be individually removed or opened to ensure there is alarm activation at the PCU or monitoring station in both the secure and access modes.
  - a. Tamper detection devices need only be tested when installed.
  - b. The owner may require more frequent testing of tamper circuits.

**END OF SECTION 13710**



## ENGINEERING ADDENDUM

**Number:** Engineering Addendum 3

**Issue Date:** December 8<sup>th</sup>, 2011

**Project:** OSU Multispectral Lab-Ponca City,  
1<sup>st</sup> Floor East Wing Renovation

**Engineer's Project Number:** 211012B

**Architect:** Miles Associates, Inc.  
865 Research Parkway, Suite 1000  
Oklahoma City, OK 73104

**Architect Project Number:** 201141

**CC:**

**Attention:** Chris Morgan

**Engineer:** Phillips + Bacon  
One Williams Center  
Suite 263  
Tulsa, Oklahoma 74172  
P(918) 584-0102  
F(918) 582-2819

**Seal:**



**Signature:** R. Lin Bacon  
R. Lin Bacon, PE  
Phillips + Bacon

This Addendum forms part of the Contract Documents, and modifies the original documents dated:  
November 15<sup>th</sup>, 2011

## **MECHANICAL** **CHANGES TO THE DRAWINGS**

EA3.M.1: Ref. Sheet M0.01 – Mechanical Symbols List and General Notes:

- a) Revise General Note 5 to read: "COMPLY WITH CURRENT TECHNICAL SPECIFICATIONS FOR CONSTRUCTION AND MANAGEMENT OF HIGH SECURITY AREAS."
- b) Delete HVAC Keyed Note 12.

EA3.M.2: Ref. M1.11b - Mechanical Floor Plan First Floor Area "B"

- a) Refer to attached Sketch MSK-1 for revision.
- b) Revise Existing O/A Louver note to read: "BLANK OFF EXISTING O/A LOUVER. FILL OPENING AND PROTECT ACOUSTICALLY TO MATCH SURROUNDING WALL. REFER TO ARCHITECTURAL."

EA3.M.3: Ref. M1.11c - Mechanical Floor Plan First Floor Area "C"

- a) Refer to attached Sketch MSK-2 for revision.
- b) Refer to attached Sketch MSK-3 for revision.
- c) Refer to attached Sketch MSK-4 for revision.

EA3.M.4: Ref. M1.11d - Mechanical Floor Plan First Floor Area "D"

- a) Refer to attached Sketch MSK-5 for revision.

EA3.M.5: Ref. Sheet M4.02 - Mechanical Details

- a) Refer to attached Sketch MSK-9 for revision.

EA3.M.6: Ref. Sheet P0.01 – Plumbing Symbols List and General Notes:

- a) Revise General Note 4 to read: "COMPLY WITH CURRENT TECHNICAL SPECIFICATIONS FOR CONSTRUCTION AND MANAGEMENT OF HIGH SECURITY AREAS."



EA3.M.7: Ref. P1.11c - Plumbing Floor Plan First Floor Area "C"

- a) Refer to attached Sketch MSK-6 for revision.
- b) Refer to attached Sketch MSK-7 for revision.

EA3.M.8: Ref. P1.11d - Plumbing Floor Plan First Floor Area "D"

- a) Refer to attached Sketch MSK-8 for revision.

## **ELECTRICAL**

### **CHANGES TO THE DRAWINGS**

EA3.E.1: Ref. E1.11b - First Floor Lighting Plan - Area "B"

- a) Delete dashed line for area and reference to "Add Alternate #1" from sheet.

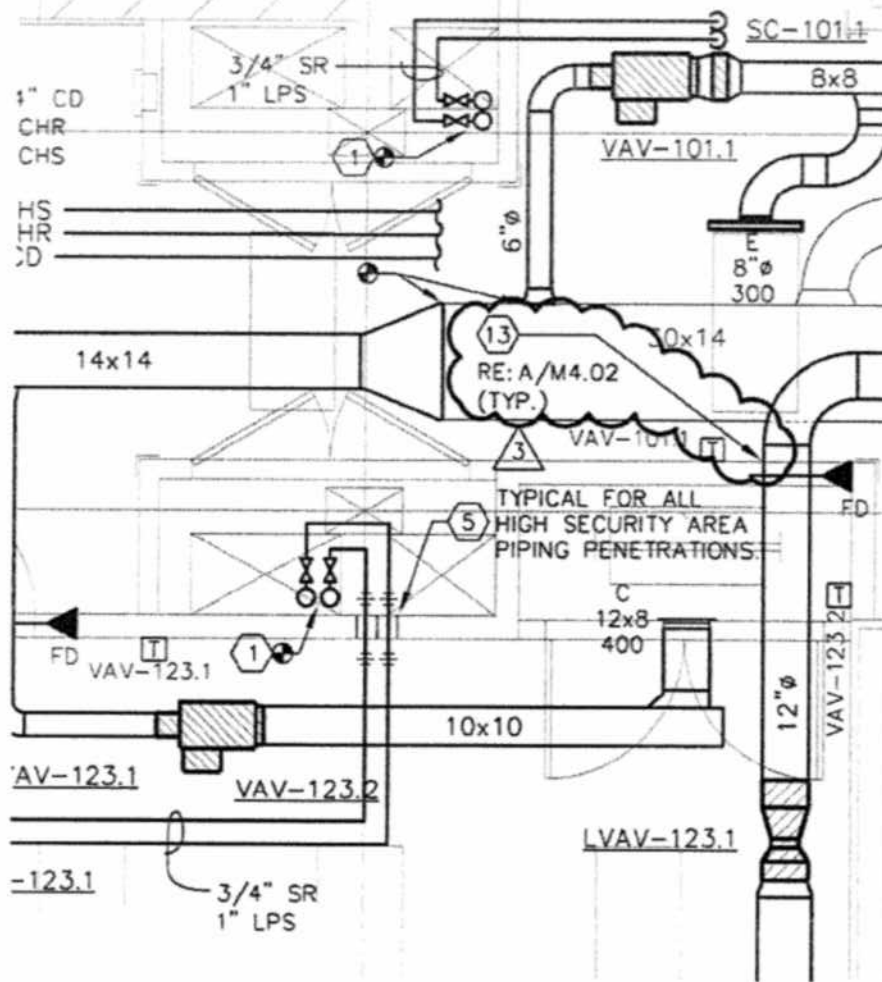
EA3.E.2: Ref. E2.11b - First Floor Electrical Plan - Area "B"

- a) Delete dashed line for area and reference to "Add Alternate #1" from sheet.

EA3.E.3: Ref. E3.00 – One-line Diagram

- a) Refer to new Panel L1C. Panel L1C shall be furnished as a 42-circuit, 150A main circuit breaker, 208Y/120V, 3-ph., 4W with 10,000 AIC SYM. Furnish with through feed lugs. Provide two 30A 2P circuit breakers for future loads. The remaining poles shall be furnished as 20A 1P circuit breakers for loads indicated, future loads and panelboard spare capacity. Panelboard loads shall be labeled accordingly, refer to circuiting indicated.

**END OF ENGINEERING ADDENDUM**



A

# FIRST FLOOR MECHANICAL - AREA "B"

1/4"=1'-0"



NORTH



Oklahoma Certificate of Authorization #CA1395  
Renewal Date: 06.30.13

UNIVERSITY MULTI-SPECTRAL LABORATORIES  
FIRST FLOOR RENOVATIONS  
500 W. SOUTH AVENUE  
PONCA CITY, OK 74601  
PROJECT NUMBER  
201141

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ADDENDUM #3	M1.11b
DATE DEC. 08, 2011	MSK-1 3
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