

LETTER OF TRANSMITTAL

PROJECT: RENOVATIONS TO BUILDINGS S & V
ST. JOHNS RIVER STATE COLLEGE, ORANGE PARK CAMPUS

JOB NO.: 015J03

DATE: November 23, 2011

Attached please find Addendum No. 2 for the above referenced project. Distribution is as follows:

Beverly Barker, SJR State College
Melissa Miller, SJR State College
Mike Canaday, SJR State College
Tom Reynolds, SJR State College
Joff Filion, Building Inspector
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Lodge Construction, Ft. Myers
R. B. Gay Construction, Jacksonville
Thomas May Construction, Orange Park
Mallen Construction, Jacksonville
Bush Construction Co., Jacksonville
Abba Construction, Jacksonville
C.C. Borden Construction, Jacksonville
Acon Construction Co., Jacksonville
E. Vaughan Rivers Construction, Orange Park
Mandese-White Construction, Gainesville
GMC Construction, Holly Hill
BBI Construction Management, Gainesville
Perry-McCall Construction, Jacksonville
Tucker Construction & Engineering, Winter Haven
Reed Construction Data (reedconstructiondata.com)
Construction Bulletin (cbids.com)

This addendum consists of the following:

1. Answers to questions and requests for clarification
2. Drawing and Project Manual corrections/clarifications.
3. Revised Project Manual Sections
4. Revised Bid Form (Section 00220, Supplemental Instructions to Bidders, Appendix A)
5. Supplemental Mechanical and Electrical Drawings

Regards,

Trista Mack

Trista Mack
CRG Architects/Palatka, Inc.

November 23, 2011

RENOVATIONS TO BUILDINGS S AND V, ORANGE PARK CAMPUS
ST. JOHNS RIVER STATE COLLEGE – BID-SJR-2011-07

Architects Job No. 015J03

ADDENDUM NO. 2

All items in this Addendum are incorporated into the Contract Documents.

ITEM NO. 1 The following is a list of questions and requests for clarification and their answers:

Question 1: Are blinds only to be installed on the new windows and not any of the existing windows?

Answer: Yes, provide blinds at all new windows W-1, W-2, W-3 and fixed view windows VW.

Question 2: Is there any batt insulation above the acoustical ceilings? Please provide specifications, thickness and R-value

Answer: Refer to Item No. 16, this Addendum.

ITEM NO. 2 Project Manual, Section 10100, Markers and Tackboards: Add American Visual Display Products, LLC (Tel: 866-583-4268) an approved manufacturer.

ITEM NO. 3 Project Manual, Section 08210, Article 2.0 Acceptable Manufacturers: Add the following manufacturers to this article:

1. Mohawk Doors (Tel: 570-473-3557)
2. Marshfield Door Systems (Tel: 800-869-3667)

ITEM NO. 4 Project Manual, Section 09681, Carpet Tile, Article 2.1: Add Lee Carpets Modular Carpets (Style: Winter Lattice; Color: TBS) as an approved manufacturer.

ITEM NO. 5 Drawing Sheet A-6.0, Door Schedule: Revise door opening size of roll-up door 38 to read 11'-1-3/4" wide by 10' high.

ITEM NO. 6 Mechanical Drawing Sheets: Refer to attached supplemental drawing MSK6.1-1: Revised electric duct heater schedule to increase the kw for units being replaced.

ITEM NO. 7 Electrical Drawing Sheets:

1. Refer to attached supplemental drawing ESK0.1-1: Added fixture types "D1" and "EM" to fixture schedule. Revised lamp wattage of fixture type "F".
2. Refer to attached supplemental drawing ESK1.1-1: Revised lighting quantity and locations to match Architectural RCP. Revised emergency circuiting. Added type "D1" downlights in restrooms. Added timeclock/lighting contactor for lobby area. Added exit sign in Building "V".
3. Refer to attached supplemental drawing ESK3.1-1: Revised disconnect fuse sizes to match HVAC revisions.
4. Refer to attached supplemental drawing ESK4.0-1: Revised Panel "RP2" main circuit breaker size to 150A.
5. Refer to attached supplemental drawing ESK4.1-1: Revised Panel "2H2" electric duct heater loads and breakers to match HVAC revisions.
6. Refer to attached supplemental drawing ESK5.0-1: Revised Transformer T-2 to 45kVA. Revise Transformer primary, secondary feeder, and ground sizes accordingly. Revise Panel RP-1 and Panel RP-2 Section 2 to read "FEED THRU".

ITEM NO. 8 Project Manual, Section 08710 Finish Hardware: Delete this section and replace it with Section 08710R Finish Hardware, attached to this Addendum as Attachment A.

ITEM NO. 9 Project Manual, Section 01110 Unit Prices: Delete this section and replace it with Section 01110R Unit Prices, attached hereto as Attachment B.

ITEM NO. 10 Project Manual, Section 02220, Supplementary Instructions to Bidders, Appendix A (Bid Form): Delete Appendix A from this section and replace it with the revised Appendix A attached to this Addendum as Attachment C.

ITEM NO. 11 Project Manual, Section 01020 Allowances, Article 1.2, Schedule of Allowances: Add the following to this article:

- | | |
|-----------------------------|------------|
| 1. Exterior Building Plaque | \$2,500.00 |
|-----------------------------|------------|

ITEM NO. 12 Project Manual, Section 12211 Horizontal Window Blinds, Article 2.1C2: Delete requirement for integrated valance and tilt limit controls.

ITEM NO. 13 Project Manual, Section 07214 Foam Plastic Insulation, Article 2.1: Add Southern Foam Insulation, Inc. (Tel: 407-654-1251) to the list of approved manufacturers in this article.

ITEM NO. 14 Provide the following: Batt insulation over ceilings at perimeter of all offices, classrooms and corridors. Batt insulation shall be laid along wall perimeters and

cover a continuous area 24" wide. Batt insulation shall be R-13, pre-cut, poly-wrapped batts.

ITEM NO. 15 Project Manual, Section 07500, Modified Bitumen Membrane Roofing: Contingent upon compliance with this specification section, the following manufacturer has been approved: Firestone Building Products Company, LLC

ITEM NO. 16 Drawing Sheet A-02.4: At elevation targets located in MENS/S0109 and WOMENS/S0111, replace the dash with 'A-4.3'

END OF ADDENDUM

SECTION 08710R
FINISH HARDWARE

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

- A. This Section includes commercial door hardware for the following:

1. Swinging doors.
2. Sliding Doors
3. Other doors to the extent indicated.

- B. Door hardware includes, but is not necessarily limited to, the following:

1. Mechanical door hardware.
2. Automatic operators.
3. Cylinders specified for doors in other sections.

- C. Related Sections:

1. Section 06105 – Miscellaneous Rough Carpentry
2. Section 06201 – Exterior Finish Carpentry
3. Section 08111 – Hollow Metal Doors and Frames
4. Section 08210 – Wood Doors
5. Section 08410 – Aluminum-Framed Entrances and Storefronts.
6. Section 08713 – Automatic Door Operators
7. Section 08800 – Glass and Glazing
8. Section 09901 – Painting

- D. Codes and References: Comply with the version year adopted by the Authority Having Jurisdiction.

1. ANSI A117.1 - Accessible and Usable Buildings and Facilities.
2. ANSI/SDI A250.13 - Testing and Rating of Severe Windstorm Resistant Components for Swing Door Assemblies.
3. ASTM E1886 - Test Method for Performance of Exterior Windows, Curtin Walls, Doors and Shutters Impacted by Missiles and Exposed to Cyclic Pressure Differentials.
4. ASTM E330 - Standard Test Method for Structural Performance of Exterior Windows, Curtain Walls, and Doors by Uniform Static Air Pressure difference.
5. ASTM E1996 - Standard specification for performance of exterior windows, curtain walls, doors and storm shutters impacted by Windborne Debris in Hurricanes.
6. FEMA 361 2008 - Design and Construction Guidance for Community Safe Rooms.
7. ICC 500 - ICC/NSSA Standard for the Design and Construction of Storm Shelters.
8. ICC/IBC - International Building Code.
9. NFPA 70 - National Electrical Code.
10. NFPA 80 - Fire Doors and Windows.

11. NFPA 101 - Life Safety Code.
12. NFPA 105 - Installation of Smoke Door Assemblies.
13. TAS-201-94 - Impact Test Procedures.
14. TAS-202-94 - Criteria for Testing Impact and Non-Impact Resistant Building Envelope Components using Uniform Static Air Pressure.
15. TAS-203-94 - Criteria for Testing Products Subject to Cyclic Wind Pressure Loading.
16. [State Building Codes, Local Amendments].

E. Standards: All hardware specified herein shall comply with the following industry standards:

1. ANSI/BHMA Certified Product Standards - A156 Series
2. UL10C – Positive Pressure Fire Tests of Door Assemblies

1.3 SUBMITTALS

- A. Product Data: Manufacturer's product data sheets including installation details, material descriptions, dimensions of individual components and profiles, operational descriptions and finishes.
- B. Door Hardware Schedule: Prepared by or under the supervision of supplier, detailing fabrication and assembly of door hardware, as well as procedures and diagrams. Coordinate the final Door Hardware Schedule with doors, frames, and related work to ensure proper size, thickness, hand, function, and finish of door hardware.
1. Format: Comply with scheduling sequence and vertical format in DHI's "Sequence and Format for the Hardware Schedule."
 2. Organization: Organize the Door Hardware Schedule into door hardware sets indicating complete designations of every item required for each door or opening. Organize door hardware sets in same order as in the Door Hardware Sets at the end of Part 3. Submittals that do not follow the same format and order as the Door Hardware Sets will be rejected and subject to resubmission.
 3. Content: Include the following information:
 - a. Type, style, function, size, label, hand, and finish of each door hardware item.
 - b. Manufacturer of each item.
 - c. Fastenings and other pertinent information.
 - d. Location of door hardware set, cross-referenced to Drawings, both on floor plans and in door and frame schedule.
 - e. Explanation of abbreviations, symbols, and codes contained in schedule.
 - f. Mounting locations for door hardware.
 - g. Door and frame sizes and materials.
 4. Submittal Sequence: Submit the final Door Hardware Schedule at earliest possible date, particularly where approval of the Door Hardware Schedule must precede fabrication of other work that is critical in the Project construction schedule. Include Product Data, Samples, Shop Drawings of other work affected by door hardware, and other information essential to the coordinated review of the Door Hardware Schedule.
- C. Keying Schedule: Prepared under the supervision of the Owner, separate schedule detailing final keying instructions for locksets and cylinders in writing. Include keying system explanation, door numbers, key set symbols, hardware set numbers and special instructions. Owner to approve submitted keying schedule prior to the ordering of permanent cylinders.
- D. Informational Submittals:

1. LEED Submittals: Manufacturer's product information and applicable sustainability program credits that are available to contribute towards a LEED rated project certification.
 - a. Credit MR 4.1 and 4.2: Manufacturer's or fabricator's certificate indicating percentage of post-consumer recycled content by weight and pre-consumer recycled content by weight for each Product specified under this Section. Use materials with recycled content such that the sum of the post-consumer recycled content plus one-half of the pre-consumer content constitutes an additional 10% beyond MR Credit 4.1 (total of 20% based on cost) of the total values of the material in the project as follows:
 - 1) Floor Closers: 63%
 - 2) Pivots: 78%
 - 3) Cylindrical Locks: 58%
 - 4) Mortise Locks: 57%
 - 5) Exit Devices: 54%
 - 6) Door Closers: 51%
 - 7) Overhead Stops: 46%
 - b. Low-Emitting Materials EQ 4.2: Provide products that reduce the quantity of indoor air contaminants that are odorous, irritating, and/or harmful to the comfort and well-being of installers and occupants; products shall not produce VOC emissions.
 2. Hurricane Resistant Openings (State of Florida): Within the State of Florida, provide copy of current State of Florida Product Approval or Metro-Dade County Notice of Acceptance (NOA) as proof of compliance that doors, frames and hardware for exterior opening assemblies have been tested and approved for use at the wind load and design pressure level requirements specified for the Project.
 - a. Hurricane Resistant Components (State of Florida): Within the State of Florida, provide copy of independent, third party certified listing to ANSI A250.13.
 3. Product Test Reports: Indicating compliance with cycle testing requirements, based on evaluation of comprehensive tests performed by manufacturer and witnessed by a qualified independent testing agency.
- E. Operating and Maintenance Manuals: Provide manufacturers operating and maintenance manuals for each item comprising the complete door hardware installation in quantity as required in Division 01, Closeout Submittals. The manual to include the name, address, and contact information of the manufacturers providing the hardware and their nearest service representatives. The final copies delivered after completion of the installation test to include "as built" modifications made during installation, checkout, and acceptance.
- F. Warranties and Maintenance: Special warranties and maintenance agreements specified in this Section.
- 1.4 QUALITY ASSURANCE
- A. Manufacturers Qualifications: Engage qualified manufacturers with a minimum 5 years of documented experience in producing hardware and equipment similar to that indicated for this Project and that have a proven record of successful in-service performance.
 - B. Installer Qualifications: Installers, trained by the primary product manufacturers, with a minimum 3 years documented experience installing both standard and electrified builders hardware similar in material, design, and extent to that indicated for this Project and whose work has resulted in construction with a record of successful in-service performance.

- C. Door Hardware Supplier Qualifications: Experienced commercial door hardware distributors with a minimum 5 years documented experience supplying both mechanical and electromechanical hardware installations comparable in material, design, and extent to that indicated for this Project. Supplier recognized as a factory direct distributor in good standing by the manufacturers of the primary materials with a warehousing facility in Project's vicinity. Supplier to have on staff a certified Architectural Hardware Consultant (AHC) available during the course of the Work to consult with Contractor, Architect, and Owner concerning both standard and electromechanical door hardware and keying.
1. Scheduling Responsibility: Preparation of door hardware and keying schedules.
- D. Automatic Operator Supplier Qualifications: Power operator products and accessories are required to be supplied and installed through current members of the manufacturer's "Power Operator Preferred Installer" program. Suppliers are to be factory trained, certified, and a direct purchaser of the specified power operators and be responsible for the installation and maintenance of the units and accessories indicated for the Project.
- E. Source Limitations: Obtain each type and variety of Door Hardware specified in this Section from a single source, qualified supplier unless otherwise indicated.
1. Electrified modifications or enhancements made to a source manufacturer's product line by a secondary or third party source will not be accepted.
 2. Provide electromechanical door hardware from the same manufacturer as mechanical door hardware, unless otherwise indicated.
- F. Regulatory Requirements: Comply with NFPA 70, NFPA 80, NFPA 101 and ANSI A117.1 requirements and guidelines as directed in the model building code including, but not limited to, the following:
1. NFPA 70 "National Electrical Code", including electrical components, devices, and accessories listed and labeled as defined in Article 100 by a testing agency acceptable to authorities having jurisdiction, and marked for intended use.
 2. Where indicated to comply with accessibility requirements, comply with Americans with Disabilities Act (ADA), "Accessibility Guidelines for Buildings and Facilities (ADAAG)," ANSI A117.1 as follows:
 - a. Handles, Pulls, Latches, Locks, and other Operating Devices: Shape that is easy to grasp with one hand and does not require tight grasping, tight pinching, or twisting of the wrist.
 - b. Door Closers: Comply with the following maximum opening-force requirements indicated:
 - 1) Interior Hinged Doors: 5 lbf applied perpendicular to door.
 - 2) Fire Doors: Minimum opening force allowable by authorities having jurisdiction.
 - c. Thresholds: Not more than 1/2 inch high. Bevel raised thresholds with a slope of not more than 1:2.
 3. NFPA 101: Comply with the following for means of egress doors:
 - a. Latches, Locks, and Exit Devices: Not more than 15 lbf to release the latch. Locks shall not require the use of a key, tool, or special knowledge for operation.

- b. Thresholds: Not more than 1/2 inch high.
 - 4. Fire-Rated Door Assemblies: Provide door hardware for assemblies complying with NFPA 80 that are listed and labeled by a testing and inspecting agency acceptable to authorities having jurisdiction, for fire ratings indicated, based on testing according to NFPA 252 (neutral pressure at 40" above sill) or UL-10C.
 - a. Test Pressure: Positive pressure labeling.
 - G. Hurricane Resistant Exterior Openings (State of Florida including the High Velocity Hurricane Zone (HVHZ)): Provide exterior door hardware as complete and tested assemblies, or component assemblies, including approved doors and frames specified under Section 081113 "Hollow Metal Doors and Frames", to meet the wind loads, design pressures, debris impact resistance, and glass and glazing requirements as detailed in the current State of Florida building code sections applicable to the Project.
 - 1. Each unit to bear third party permanent label in accordance with the Florida Building Code requirements.
 - H. Keying Conference: Conduct conference to comply with requirements in Division 01 Section "Project Meetings." Keying conference to incorporate the following criteria into the final keying schedule document:
 - 1. Function of building, purpose of each area and degree of security required.
 - 2. Plans for existing and future key system expansion.
 - 3. Requirements for key control storage and software.
 - 4. Installation of permanent keys, cylinder cores and software.
 - 5. Address and requirements for delivery of keys.
 - I. Pre-Submittal Conference: Conduct coordination conference in compliance with requirements in Division 01 Section "Project Meetings" with attendance by representatives of Supplier(s), Installer(s), and Contractor(s) to review proper methods and the procedures for receiving, handling, and installing door hardware.
 - 1. Prior to installation of door hardware, arrange for manufacturers' representatives to hold a project specific training meeting to instruct the installing contractors' personnel on the proper installation and adjustment of their respective products. Product training to be attended by installers of door hardware (including electromechanical hardware) for aluminum, hollow metal and wood doors. Training will include the use of installation manuals, hardware schedules, templates and physical product samples as required.
 - 2. Inspect and discuss electrical roughing-in, power supply connections, and other preparatory work performed by other trades.
 - 3. Review sequence of operation narratives for each unique access controlled opening.
 - 4. Review and finalize construction schedule and verify availability of materials.
 - 5. Review the required inspecting, testing, commissioning, and demonstration procedures.
- 1.5 DELIVERY, STORAGE, AND HANDLING
 - A. Inventory door hardware on receipt and provide secure lock-up and shelving for door hardware delivered to Project site. Do not store electronic access control hardware, software or accessories at Project site without prior authorization.

- B. Tag each item or package separately with identification related to the final Door Hardware Schedule, and include basic installation instructions with each item or package.
- C. Deliver, as applicable, permanent keys, cylinders, cores, access control credentials, software and related accessories directly to Owner via registered mail or overnight package service. Instructions for delivery to the Owner shall be established at the "Keying Conference".

1.6 COORDINATION

- A. Templates: Obtain and distribute to the parties involved templates for doors, frames, and other work specified to be factory prepared for installing standard and electrified hardware. Check Shop Drawings of other work to confirm that adequate provisions are made for locating and installing hardware to comply with indicated requirements.
- B. Door Hardware and Electrical Connections: Coordinate the layout and installation of scheduled electrified door hardware and related access control equipment with required connections to source power junction boxes, low voltage power supplies, detection and monitoring hardware, and fire and detection alarm systems.
- C. Door and Frame Preparation: Related Division 08 Sections (Steel, Aluminum and Wood) doors and corresponding frames are to be prepared, reinforced and pre-wired (if applicable) to receive the installation of the specified electrified, monitoring, signaling and access control system hardware without additional in-field modifications.

1.7 WARRANTY

- A. General Warranty: Reference Division 01, General Requirements. Special warranties specified in this Article shall not deprive Owner of other rights Owner may have under other provisions of the Contract Documents and shall be in addition to, and run concurrent with, other warranties made by Contractor under requirements of the Contract Documents.
- B. Warranty Period: Written warranty, executed by manufacturer(s), agreeing to repair or replace components of standard and electrified door hardware that fails in materials or workmanship within specified warranty period after final acceptance by the Owner. Failures include, but are not limited to, the following:
 - 1. Structural failures including excessive deflection, cracking, or breakage.
 - 2. Faulty operation of the hardware.
 - 3. Deterioration of metals, metal finishes, and other materials beyond normal weathering.
 - 4. Electrical component defects and failures within the systems operation.
- C. Standard Warranty Period: One year from date of Substantial Completion, unless otherwise indicated.
- D. Special Warranty Periods:
 - 1. Ten years for mortise locks and latches.
 - 2. Ten years for extra heavy duty cylindrical (bored) locks and latches.
 - 3. Seven years for heavy duty cylindrical (bored) locks and latches.
 - 4. Five years for standard duty cylindrical (bored) locks and latches.
 - 5. Five years for exit hardware.
 - 6. Ten years for manual door closers.
 - 7. Two years for electromechanical door hardware.

1.8 MAINTENANCE SERVICE

- A. Maintenance Tools and Instructions: Furnish a complete set of specialized tools and maintenance instructions as needed for Owner's continued adjustment, maintenance, and removal and replacement of door hardware.

PART 2 - PRODUCTS

2.1 SCHEDULED DOOR HARDWARE

- A. General: Provide door hardware for each door to comply with requirements in Door Hardware Sets and each referenced section that products are to be supplied under.
1. Designations: Requirements for quantity, item, size, finish or color, grade, function, and other distinctive qualities of each type of door hardware are indicated in the Door Hardware Sets at the end of Part 3. Products are identified by using door hardware designations, as follows:
 - a. Named Manufacturer's Products: Product designation and manufacturer are listed for each door hardware type required for the purpose of establishing requirements. Manufacturers' names are abbreviated in the Door Hardware Schedule.
 2. Products furnished, but not installed, under this Section include the following. Coordinating, purchasing, delivering, and scheduling remain requirements of this Section.
 - a. Permanent cylinders, cores, and keys to be installed by Owner.
- B. Substitutions: Requests for substitution and product approval for inclusive mechanical and electromechanical door hardware in compliance with the specifications must be submitted in writing and in accordance with the procedures and time frames outlined in Division 01, Substitution Procedures. Approval of requests is at the discretion of the architect, owner, and their designated consultants.

2.2 HANGING DEVICES

- A. Hinges: ANSI/BHMA A156.1 certified butt hinges with number of hinge knuckles as specified in the Door Hardware Sets.
1. Quantity: Provide the following hinge quantity, unless otherwise indicated:
 - a. Two Hinges: For doors with heights up to 60 inches.
 - b. Three Hinges: For doors with heights 61 to 90 inches.
 - c. Four Hinges: For doors with heights 91 to 120 inches.
 - d. For doors with heights more than 120 inches, provide 4 hinges, plus 1 hinge for every 30 inches of door height greater than 120 inches.
 2. Hinge Size: Provide the following, unless otherwise indicated, with hinge widths sized for door thickness and clearances required:
 - a. Widths up to 3'0": 4-1/2" standard or heavy weight as specified.
 - b. Sizes from 3'1" to 4'0": 5" standard or heavy weight as specified.
 3. Hinge Weight and Base Material: Unless otherwise indicated, provide the following:

- a. Exterior Doors: Heavy weight, non-ferrous, ball bearing hinges unless Hardware Sets indicate standard weight.
 - b. Interior Doors: Standard weight, steel, ball bearing hinges unless Hardware Sets indicate heavy weight.
 - c. Tornado Resistant Assemblies: At a minimum, provide heavy weight hinges with stainless steel screws used in accordance with and specified as part of a Severe Storm Shelter Opening meeting ICC 500 and FEMA 361.
4. Hinge Options: Comply with the following where indicated in the Hardware Sets or on Drawings:
- a. Non-removable Pins: Provide set screw in hinge barrel that, when tightened into a groove in hinge pin, prevents removal of pin while door is closed; for the following applications:
 - 1) Out-swinging exterior doors.
 - 2) Out-swinging access controlled doors.
5. Acceptable Manufacturers:
- a. Hager Companies (HA).
 - b. McKinney Products (MK).
 - c. Stanley Hardware (ST).
- B. Continuous Geared Hinges: ANSI/BHMA A156.26 certified continuous geared hinge with minimum 0.120-inch thick extruded 6060 T6 aluminum alloy hinge leaves and a minimum overall width of 4 inches. Hinges are non-handed, reversible and fabricated to template screw locations. Provide concealed flush mount (with or without inset), full surface, or half surface, in standard and heavy duty models, as specified in the Hardware Sets. Concealed continuous hinges to be U.L. listed for use on up to and including 90 minute rated door installations and U.L. listed for windstorm components where applicable. Factory cut hinges for door size and provide with removable service power transfer panel where indicated at electrified openings.
1. Acceptable Manufacturers:
- a. McKinney Products (MK).
 - b. Pemko Manufacturing (PE).
 - c. Stanley Hardware (ST).

2.3 DOOR OPERATING TRIM

- A. Flush Bolts and Surface Bolts: ANSI/BHMA A156.3 and A156.16, Grade 1, certified automatic, self-latching, and manual flush bolts and surface bolts. Manual flush bolts to be furnished with top rod of sufficient length to allow bolt location approximately six feet from the floor. Furnish dust proof strikes for bottom bolts. Surface bolts to be minimum 8" in length and U.L. listed for labeled fire doors and U.L. listed for windstorm components where applicable. Provide related accessories (mounting brackets, strikes, coordinators, etc.) as required for appropriate installation and operation.
1. Acceptable Manufacturers:
- a. McKinney Architectural Hardware (MK).
 - b. Rockwood Manufacturing (RO).
 - c. Trimco (TC).

- B. Door Push Plates and Pulls: ANS/BHMA A156.6 certified door pushes and pulls of type and design specified below or in the Hardware Sets. Coordinate and provide proper width and height as required where conflicting hardware dictates.
1. Push/Pull Plates: Minimum .050 inch thick, 4-inches wide by 16-inches high, with square corners and beveled edges, secured with exposed screws unless otherwise indicated.
 2. Straight Pull Design: Minimum 1-inch round diameter stainless steel bar or tube stock pulls with 2 1/2-inch projection from face of door unless otherwise indicated.
 3. Offset Pull Design: Minimum 1-inch round diameter stainless steel bar or tube stock pulls with 2 1/2-inch projection and offset of 90 degrees unless otherwise indicated.
 4. Push Bars: Minimum 1-inch round diameter horizontal push bars with minimum clearance of 2 1/2-inch projection from face of door unless otherwise indicated.
 5. Fasteners: Provide manufacturer's designated fastener type as indicated in Hardware Sets.
 - a. Acceptable Manufacturers:
 - 1) McKinney Architectural Hardware (MK).
 - 2) Rockwood Manufacturing (RO).
 - 3) Trimco (TC).

2.4 CYLINDERS AND KEYING

- A. General: Cylinder manufacturer to have minimum (10) years experience designing secured master key systems and have on record a published security keying system policy.
- B. Source Limitations: Obtain each type of keyed cylinder and keys from the same source manufacturer as locksets and exit devices, unless otherwise indicated.
1. Acceptable Manufacturers:
 - a. MIWA (MI) See owner for ordering information.
- C. Cylinders: Original manufacturer cylinders complying with the following:
1. Mortise Type: Threaded cylinders with rings and straight- or clover-type cam.
 2. Rim Type: Cylinders with back plate, flat-type vertical or horizontal tailpiece, and raised trim ring.
 3. Bored-Lock Type: Cylinders with tailpieces to suit locks.
 4. Mortise and rim cylinder collars to be solid and recessed to allow the cylinder face to be flush and be free spinning with matching finishes.
- D. Keying System: Each type of lock and cylinders to be factory keyed. Conduct specified "Keying Conference" to define and document keying system instructions and requirements. Furnish factory cut, nickel-silver large bow permanently inscribed with a visual key control number as directed by Owner. Incorporate decisions made in keying conference, and as follows:
1. Master Key System: Cylinders are operated by a change key and a master key.

2. Grand Master Key System: Cylinders are operated by a change key, a master key, and a grand master key.
3. Great-Grand Master Key System: Cylinders are operated by a change key, a master key, a grand master key, and a great-grand master key.
4. Existing System: Master key or grand master key locks to Owner's existing system.
5. Keyed Alike: Key all cylinders to same change key.

E. Key Quantity: Provide the following minimum number of keys:

1. Top Master Key: One (1)
2. Change Keys per Cylinder: Two (2)
3. Master Keys (per Master Key Group): Two (2)
4. Grand Master Keys (per Grand Master Key Group): Two (2)
5. Construction Control Keys (where required): Two (2)
6. Permanent Control Keys (where required): Two (2)

F. Construction Keying: Provide construction master keyed cylinders or temporary keyed construction cores where specified. Provide construction master keys in quantity as required by project Contractor. Replace construction cores with permanent cores. Furnish permanent cores for installation as directed under specified "Keying Conference".

2.5 MECHANICAL LOCKS AND LATCHING DEVICES

A. Mortise Locksets, Grade 1 (Heavy Duty): ANSI/BHMA A156.13, Series 1000, Operational Grade 1 certified mortise locksets furnished in the functions as specified in the Hardware Sets. Locksets to be manufactured with a corrosion resistant, stamped 12 gauge minimum formed steel case and be field-reversible for handing without disassembly of the lock body. Lockset trim (including knobs, levers, escutcheons, roses) to be the product of a single manufacturer. Furnish with standard 2 3/4" backset, 3/4" throw anti-friction stainless steel latchbolt, and a full 1" throw stainless steel bolt for deadbolt functions.

1. Acceptable Manufacturers:

- a. Corbin Russwin Hardware (RU) – ML2000 Series.
- b. Sargent Manufacturing (SA) – 8200 Series.
- c. Yale Locks and Hardware (YA) – 8800FL Series.

B. Lock Trim Design: As specified in Hardware Sets.

C. Knurling: Where specified provide knurling or abrasive coating to all levers on doors leading to hazardous areas such as mechanical rooms, boiler and furnace rooms, janitor closets, and as otherwise required by the State Accessibility Code.

D. Hurricane and Tornado Resistance Compliance: Mechanical locking and latching devices to be U.L. listed for windstorm components where applicable. Provide the appropriate hurricane or tornado resistant products that have been independent third party tested, certified, and labeled to meet state and local windstorm building codes applicable to project.

2.6 LOCK AND LATCH STRIKES

A. Strikes: Provide manufacturer's standard strike with strike box for each latch or lock bolt, with curved lip extended to protect frame, finished to match door hardware set, unless otherwise indicated, and as follows:

1. Flat-Lip Strikes: For locks with three-piece antifriction latchbolts, as recommended by manufacturer.
2. Extra-Long-Lip Strikes: For locks used on frames with applied wood casing trim.

3. Aluminum-Frame Strike Box: Provide manufacturer's special strike box fabricated for aluminum framing.

B. Standards: Comply with the following:

1. Strikes for Mortise Locks and Latches: BHMA A156.13.
2. Strikes for Bored Locks and Latches: BHMA A156.2.
3. Strikes for Auxiliary Deadlocks: BHMA A156.5.
4. Dustproof Strikes: BHMA A156.16.

2.7 CONVENTIONAL EXIT DEVICES

A. General Requirements: All exit devices specified herein shall meet or exceed the following criteria:

1. At doors not requiring a fire rating, provide devices complying with NFPA 101 and listed and labeled for "Panic Hardware" according to UL305. Provide proper fasteners as required by manufacturer including sex nuts and bolts at openings specified in the Hardware Sets.
2. Where exit devices are required on fire rated doors, provide devices complying with NFPA 80 and with UL labeling indicating "Fire Exit Hardware". Provide devices with the proper fasteners for installation as tested and listed by UL. Consult manufacturer's catalog and template book for specific requirements.
 - a. Fire Exit Removable Mullions: Provide keyed removable mullions for use with fire exit devices complying with NFPA 80 that are listed and labeled by a testing and inspecting agency acceptable to authorities having jurisdiction, for fire and panic protection, based on testing according to UL 305 and NFPA 252. Mullions to be used only with exit devices for which they have been tested.
3. Except on fire rated doors, provide exit devices with hex key dogging device to hold the pushbar and latch in a retracted position. Provide optional keyed cylinder dogging on devices where specified in Hardware Sets.
4. Flush End Caps: Provide heavy weight impact resistant flush end caps made of architectural metal in the same finish as the devices as in the Hardware Sets. Plastic end caps will not be acceptable.
5. Lever Operating Trim: Where exit devices require lever trim, furnish manufacturer's heavy duty trim with cold forged escutcheons, beveled edges, and four threaded studs for thru-bolts.
 - a. Lock Trim Design: As indicated in Hardware Sets, provide finishes and designs to match that of the specified locksets. Provided free-wheeling type trim where indicated.
 - b. Where function of exit device requires a cylinder, provide an interchangeable core type keyed cylinder (Rim or Mortise) as specified in Hardware Sets.
6. Vertical Rod Exit Devices: Provide and install interior surface and concealed vertical rod exit devices as Less Bottom Rod (LBR) unless otherwise indicated.
7. Narrow Stile Applications: At doors constructed with narrow stiles, or as specified in Hardware Sets, provide devices designed for maximum 2" wide stiles.
8. Dummy Push Bar: Nonfunctioning push bar matching functional push bar.

9. Rail Sizing: Provide exit device rails factory sized for proper door width application.
 10. Through Bolt Installation: For exit devices and trim as indicated in Door Hardware Sets.
 11. Hurricane and Tornado Resistance Compliance: Conventional exit devices and tube steel removable mullions to be U.L. listed for windstorm components where applicable. Provide the appropriate hurricane or tornado resistant products that have been independent third party tested, certified, and labeled to meet state and local windstorm building codes applicable to project.
- B. Conventional Push Rail Exit Devices (Heavy Duty): ANSI/BHMA A156.3, Grade 1 certified panic and fire exit hardware devices furnished in the functions specified in the Hardware Sets. Mounting rails to be formed from smooth stainless steel, brass or bronze architectural materials no less than 0.072" thick, with push rails a minimum of 0.062" thickness. Painted or aluminum metal rails are not acceptable. Exit device latch to be investment cast stainless steel, pullman type, with deadlock feature.
1. Acceptable Manufacturers:
 - a. Corbin Russwin Hardware (RU) - ED4000 / ED5000 Series.
 - b. Sargent Manufacturing (SA) - 80 Series.
 - c. Yale Locks and Hardware (YA) - 7000 Series.
- C. Extruded Aluminum Removable Mullions: ANSI/BHMA A156.3 anodized, removable mullions with malleable-iron top and bottom retainers. Mullions to be provided standard with stabilizers and imbedded weatherstrip.
1. Acceptable Manufacturers:
 - a. Sargent Manufacturing (SA) - 650A Series.

2.8 DOOR CLOSERS

- A. All door closers specified herein shall meet or exceed the following criteria:
1. General: Door closers to be from one manufacturer, matching in design and style, with the same type door preparations and templates regardless of application or spring size. Closers to be non-handed with full sized covers including installation and adjusting information on inside of cover.
 2. Standards: Closers to comply with UL-10C and UBC 7-2 for Positive Pressure Fire Test and be U.L. listed for use of fire rated doors.
 3. Size of Units: Comply with manufacturer's written recommendations for sizing of door closers depending on size of door, exposure to weather, and anticipated frequency of use. Where closers are indicated for doors required to be accessible to the physically handicapped, provide units complying with ANSI ICC/A117.1 provisions for door opening force and delayed action closing.
 4. Closer Arms: Provide heavy duty, forged steel closer arms unless otherwise indicated in Hardware Sets.
 - a. Where closers are indicated to have mechanical dead-stop, provide heavy duty arms and brackets with an integral positive stop.

- b. Where closers are indicated to have mechanical hold open, provide heavy duty units with an additional built-in mechanical holder assembly designed to hold open against normal wind and traffic conditions. Holder to be manually selectable to on-off position.
 - c. Where closers are indicated to have a cushion-type stop, provide heavy duty arms and brackets with spring stop mechanism to cushion door when opened to maximum degree.
5. Closer Accessories: Provide door closer accessories including custom templates, special mounting brackets, spacers and drop plates, and through-bolt or security type fasteners as specified in the door Hardware Sets.
6. Hurricane and Tornado Resistance Compliance: Door closers to be U.L. listed for windstorm components where applicable. Provide the appropriate hurricane or tornado resistant products that have been independent third party tested, certified, and labeled to meet state and local windstorm building codes applicable to project.
- B. Door Closers, Surface Mounted (Heavy Duty): ANSI/BHMA A156.4, Grade 1 surface mounted, heavy duty door closers with complete spring power adjustment, sizes 1 thru 6; and fully operational adjustable according to door size, frequency of use, and opening force. Closers to be rack and pinion type, one piece cast iron or aluminum alloy body construction, with adjustable backcheck and separate non-critical valves for closing sweep and latch speed control. Provide non-handed units and high impact, non-corrosive plastic covers standard.
- 1. Acceptable Manufacturers:
 - a. Corbin Russwin Hardware (RU) - DC8000 Series.
 - b. Sargent Manufacturing (SA) - 351 Series.
 - c. Norton Door Controls (NO) - 7500 Series.
 - d. Yale Locks and Hardware (YA) - 4400 Series.

2.9 ARCHITECTURAL TRIM

A. Door Protective Trim

- 1. General: Door protective trim units to be of type and design as specified below or in the Hardware Sets.
- 2. Size: Fabricate protection plates (kick, armor, or mop) not more than 2" less than door width (LDW) on stop side and not more than 1" less than door width on pull side. Coordinate and provide proper width and height as required where conflicting hardware dictates. Height to be as specified in the Hardware Sets.
- 3. Metal Protection Plates: ANSI/BHMA A156.6 certified metal protection plates (kick, armor, or mop), beveled on four edges (B4E), fabricated from the following.
 - a. Stainless Steel: .050-inch thick, with countersunk screw holes (CSK).
 - b. Brass or Bronze: .050-inch thick, with countersunk screw holes (CSK).
 - c. Laminate Plastic or Acrylic: 1/8-inch thick, with countersunk screw holes (CSK).
- 4. Fasteners: Provide manufacturer's designated fastener type as specified in the Hardware Sets.
- 5. Metal Door Edging: Door protection edging fabricated from a minimum .050-inch thick metal sheet, formed into an angle or "U" cap shapes, surface or mortised mounted onto edge of door. Provide appropriate leg overlap to account for protection plates as required. Height to be as specified in the Hardware Sets.

6. Acceptable Manufacturers:
 - a. McKinney Architectural Hardware (MK).
 - b. Rockwood Manufacturing (RO).
 - c. Trimco (TC).

2.10 DOOR STOPS AND HOLDERS

- A. General: Door stops and holders to be of type and design as specified below or in the Hardware Sets.
- B. Door Stops and Bumpers: ANSI/BHMA A156.16, Grade 1 certified door stops and wall bumpers. Provide wall bumpers, either convex or concave types with anchorage as indicated, unless floor or other types of door stops are specified in Hardware Sets. Do not mount floor stops where they will impede traffic. Where floor or wall bumpers are not appropriate, provide overhead type stops and holders.

1. Acceptable Manufacturers:
 - a. McKinney Architectural Hardware (MK).
 - b. Rockwood Manufacturing (RO).
 - c. Trimco (TC).

- C. Overhead Door Stops and Holders: ANSI/BHMA A156.6, Grade 1 certified overhead stops and holders to be surface or concealed types as indicated in Hardware Sets. Track, slide, arm and jamb bracket to be constructed of extruded bronze and shock absorber spring of heavy tempered steel. Provide non-handed design with mounting brackets as required for proper operation and function.

1. Acceptable Manufacturers:
 - a. Rixson Door Controls (RF).
 - b. Rockwood Manufacturing (RO).
 - c. Sargent Manufacturing (SA).

2.11 ARCHITECTURAL SEALS

- A. General: Thresholds, weatherstripping, and gasket seals to be of type and design as specified below or in the Hardware Sets. Provide continuous weatherstrip gasketing on exterior doors and provide smoke, light, or sound gasketing on interior doors where indicated. At exterior applications provide non-corrosive fasteners and elsewhere where indicated.
- B. Smoke Labeled Gasketing: Assemblies complying with NFPA 105 that are listed and labeled by a testing and inspecting agency acceptable to authorities having jurisdiction, for smoke control ratings indicated, based on testing according to UL 1784.
 1. Provide smoke labeled perimeter gasketing at all smoke labeled openings.
- C. Fire Labeled Gasketing: :Assemblies complying with NFPA 80 that are listed and labeled by a testing and inspecting agency acceptable to authorities having jurisdiction, for fire ratings indicated, based on testing according to UL-10C.
 1. Provide intumescent seals as indicated to meet UL10C Standard for Positive Pressure Fire Tests of Door Assemblies, and UBC 7-2, Fire Tests of Door Assemblies.

- D. Sound-Rated Gasketing: Assemblies that are listed and labeled by a testing and inspecting agency, for sound ratings indicated, based on testing according to ASTM E 1408.
- E. Replaceable Seal Strips: Provide only those units where resilient or flexible seal strips are easily replaceable and readily available from stocks maintained by manufacturer.
- F. Hurricane and Tornado Resistance Compliance: Architectural seals to be U.L. listed for windstorm components where applicable. Provide the appropriate hurricane or tornado resistant products that have been independent third party tested, certified, and labeled to meet state and local windstorm building codes applicable to project.
- G. Acceptable Manufacturers:
 - 1. McKinney Weatherstripping Products (MW).
 - 2. Pemko Manufacturing (PE).
 - 3. Reese Enterprises, Inc. (RS).

2.12 ELECTRONIC ACCESSORIES

- A. Power Supplies: Provide Nationally Recognized Testing Laboratory Listed 12VDC or 24VDC (field selectable) filtered and regulated power supplies. Include battery backup option with integral battery charging capability in addition to operating the DC load in event of line voltage failure. Provide the least number of units, at the appropriate amperage level, sufficient to exceed the required total draw for the specified electrified hardware and access control equipment.
 - 1. Acceptable Manufacturers:
 - a. Security Door Controls (SD) - 630 Series.
 - b. Securitron Door Controls (SU) - BPS 12/24 Series.

2.13 FABRICATION

- A. Fasteners: Provide door hardware manufactured to comply with published templates generally prepared for machine, wood, and sheet metal screws. Provide screws according to manufacturers recognized installation standards for application intended.

2.14 FINISHES

- A. Standard: Designations used in the Hardware Sets and elsewhere indicate hardware finishes complying with ANSI/BHMA A156.18, including coordination with traditional U.S. finishes indicated by certain manufacturers for their products.
- B. Provide quality of finish, including thickness of plating or coating (if any), composition, hardness, and other qualities complying with manufacturer's standards, but in no case less than specified by referenced standards for the applicable units of hardware.
- C. Protect mechanical finishes on exposed surfaces from damage by applying a strippable, temporary protective covering before shipping.
- D. Antimicrobial Finishes: Where specified, finishes on locksets, latchsets, exit devices and push/pull trim to incorporate an FDA recognized. Silver Ion, antimicrobial coating (MicroShield™) listed for use on equipment as a suppressant to the growth and spread of a broad range of bacteria, algae, fungus, mold and mildew.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine scheduled openings, with Installer present, for compliance with requirements for installation tolerances, labeled fire door assembly construction, wall and floor construction, and other conditions affecting performance.
- B. Notify architect of any discrepancies or conflicts between the door schedule, door types, drawings and scheduled hardware. Proceed only after such discrepancies or conflicts have been resolved in writing.

3.2 PREPARATION

- A. Hollow Metal Doors and Frames: Comply with ANSI/DHI A115 series.
- B. Wood Doors: Comply with ANSI/DHI A115-W series.

3.3 INSTALLATION

- A. Install each item of mechanical and electromechanical hardware and access control equipment to comply with manufacturer's written instructions and according to specifications.
 - 1. Installers are to be trained and certified by the manufacturer on the proper installation and adjustment of fire, life safety, and security products including: hanging devices; locking devices; closing devices; and seals.
- B. Mounting Heights: Mount door hardware units at heights indicated in following applicable publications, unless specifically indicated or required to comply with governing regulations:
 - 1. Standard Steel Doors and Frames: DHI's "Recommended Locations for Architectural Hardware for Standard Steel Doors and Frames."
 - 2. Wood Doors: DHI WDHS.3, "Recommended Locations for Architectural Hardware for Wood Flush Doors."
 - 3. Where indicated to comply with accessibility requirements, comply with ANSI A117.1 "Accessibility Guidelines for Buildings and Facilities."
 - 4. Provide blocking in drywall partitions where wall stops or other wall mounted hardware is located.
- C. Integrated Wiegand access control products are required to be installed through current members of the ASSA ABLOY "Certified Integrator" (CI) program.
- D. Power Operator products and accessories are required to be installed through current members of the manufacturer's "Power Operator Preferred Installer" program.
- E. Retrofitting: Install door hardware to comply with manufacturer's published templates and written instructions. Where cutting and fitting are required to install door hardware onto or into surfaces that are later to be painted or finished in another way, coordinate removal, storage, and reinstallation of surface protective trim units with finishing work specified in Division 9 Sections. Do not install surface-mounted items until finishes have been completed on substrates involved.
- F. Thresholds: Set thresholds for exterior and acoustical doors in full bed of sealant complying with requirements specified in Division 7 Section "Joint Sealants."

- G. Storage: Provide a secure lock up for hardware delivered to the project but not yet installed. Control the handling and installation of hardware items so that the completion of the work will not be delayed by hardware losses before and after installation.

3.4 FIELD QUALITY CONTROL

- A. Field Inspection: Supplier will perform a final inspection of installed door hardware and state in report whether work complies with or deviates from requirements, including whether door hardware is properly installed, operating and adjusted.

3.5 ADJUSTING

- A. Initial Adjustment: Adjust and check each operating item of door hardware and each door to ensure proper operation or function of every unit. Replace units that cannot be adjusted to operate as intended. Adjust door control devices to compensate for final operation of heating and ventilating equipment and to comply with referenced accessibility requirements.

3.6 CLEANING AND PROTECTION

- A. Protect all hardware stored on construction site in a covered and dry place. Protect exposed hardware installed on doors during the construction phase. Install any and all hardware at the latest possible time frame.
- B. Clean adjacent surfaces soiled by door hardware installation.
- C. Clean operating items as necessary to restore proper finish. and provide final protection and maintain conditions that ensure door hardware is without damage or deterioration at time of owner occupancy.

3.7 DEMONSTRATION

- A. Instruct Owner's maintenance personnel to adjust, operate, and maintain mechanical and electromechanical door hardware.

3.8 DOOR HARDWARE SCHEDULE

- A. The hardware sets represent the design intent and direction of the owner and architect. They are a guideline only and should not be considered a detailed hardware schedule. Discrepancies, conflicting hardware and missing items should be brought to the attention of the architect with corrections made prior to the bidding process. Omitted items not included in a hardware set should be scheduled with the appropriate additional hardware required for proper application and functionality.

- B. Manufacturer's Abbreviations:

1. MK - McKinney
2. RF - Rixson
3. RO - Rockwood
4. SA - Sargent
5. AD - Adams Rite
6. MI - MIWA
7. NO - Norton
8. PE - Pemko
9. SU – Securitron

Hardware Schedule

Set: 1.0

Doors: 1, 2, 36, 37

Description: Exterior Storefront Pair

2	Continuous Hinge	MCK-12HD	CL	MK
1	Removable Mullion	L980A	US28	SA
1	Exit Device (rim, pull)	16 8510 862	US32D	SA
1	Exit Device (rim, storeroom)	16 8504 862	US32D	SA
3	Cylinder	As Required (Re-Use if available from Demo)	626	MI
2	Door Switch	661 / 662		NO
2	Automatic Operator	5930	689	NO
1	Power Supply	BPS-12/24-1		SU

Notes: Operation: During hours of occupancy, exit devices are mechanically dogged by cylinder and automatic operators are turned on. Pressing either door switch signals doors to open.

Balance of Hardware: threshold, door seals, mounting brackets furnished by Storefront Door Manufacturer.

Exterior openings to meet Florida Windstorm requirements

Set: 2.0

Doors: 28, 29, 32

Description: Exterior Classroom

3	Hinge	TA2314 NRP 4-1/2" x 4-1/2"	US32D	MK
1	Exit Device	WS 8913 ETL	US32D	SA
1	Cylinder	As Required (Re-Use if available from Demo)	626	MI
1	Door Closer (surface)	351 CPS	EN	SA
1	Kick Plate	K1050 8" x L.A.R.	US32D	RO
1	Threshold (Bumper)	2005AV		PE
1	Rain Guard	346C		PE
1	Gasketing	303AV		PE
1	Door Bottom (Rain Drip)	216AV		PE
1	Latch Protector	321	US32D	RO

Notes: Exterior openings to meet Florida Windstorm requirements

Set: 3.0

Doors: 39

Description: Exterior Lobby / Gallery Single

3 Hinge	TA2314 NRP 4-1/2" x 4-1/2"	US32D	MK
1 Mortise Lock (dormitory)	8225 LNL	US26D	SA
1 Cylinder	As Required (Re-Use if available from Demo)	626	MI
1 Door Closer (surface)	351 CPS	EN	SA
1 Kick Plate	K1050 8" x L.A.R.	US32D	RO
1 Threshold (Saddle)	271A		PE
1 Door Bottom	315CN		PE
1 Rain Guard	346C		PE
1 Gasketing	303AV		PE

Notes: Exterior openings to meet Florida Windstorm requirements

Set: 4.0

Doors: 33, 35

Description: Exterior Mechanical Pair

6 Hinge	TA2314 NRP 4-1/2" x 4-1/2"	US32D	MK
1 Surface Bolt	988	Bright Zinc	SA
1 Mortise Lock (storeroom)	76 8224 LNL	US26D	SA
1 Cylinder	As Required (Re-Use if available from Demo)	626	MI
1 Surface Overhead Stop	9-X36	630	RF
1 Threshold (Saddle)	271A		PE
1 Rain Guard	346C		PE
1 Gasketing	303AV		PE
2 Door Bottom (Rain Drip)	216AV		PE

Notes: Knurled lever outside.

Astragal by door manufacturer.

Exterior openings to meet Florida Windstorm requirements

Set: 5.0

Doors: 34

Description: Exterior IT

3 Hinge	TA2314 NRP 4-1/2" x 4-1/2"	US32D	MK
1 Mortise Lock (storeroom)	8224 LNL	US26D	SA
1 Cylinder	As Required (Re-Use if available from Demo)	626	MI
1 Door Closer (surface)	351 CPS	EN	SA
1 Kick Plate	K1050 8" x L.A.R.	US32D	RO
1 Threshold (Bumper)	2005AV		PE
1 Rain Guard	346C		PE
1 Gasketing	303AV		PE
1 Door Bottom (Rain Drip)	216AV		PE
1 Latch Protector	321	US32D	RO

Notes: Exterior openings to meet Florida Windstorm requirements

Set: 6.0

Doors: 11, 14, 17

Description: Exterior Existing Openings

1 Threshold (Bumper)	2005AV		PE
1 Rain Guard	346C		PE
1 Gasketing	303AV		PE
1 Exist	Existing Hardware to Remain		CO

Notes: Verify balance of existing hardware in proper working order. Adjust / Replace as needed.

Set: 7.0

Doors: 38

Description: Exterior Overhead

1 HBO	All Hardware by door manufacturer		CO
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Set: 8.0

Doors: 13, 16, 27, 30, 31, 9

Description: Classroom (Corridor)

3 Hinge	TA2714 4-1/2" x 4-1/2"	US26D	MK
1 Mortise Lock (classroom)	8237 LNL	US26D	SA
1 Cylinder	As Required (Re-Use if available from Demo)	626	MI
1 Door Closer (surface)	351 UO	EN	SA
1 Kick Plate	K1050 8" x L.A.R.	US32D	RO
1 Wall Stop	409	US32D	RO
1 Gasketing	S88D		PE
1 Door Bottom (Automatic)	4131CPKL		PE

Set: 9.0

Doors: 12, 15

Description: Classroom (Inner)

3 Hinge	TA2714 4-1/2" x 4-1/2"	US26D	MK
1 Mortise Lock (classroom)	8237 LNL	US26D	SA
1 Cylinder	As Required (Re-Use if available from Demo)	626	MI
1 Wall Stop	409	US32D	RO
1 Gasketing	S88D		PE
1 Door Bottom (Automatic)	4131CPKL		PE

Set: 10.0

Doors: 20, 21, 4, 5, 6, 7, 8

Description: Office

3 Hinge	TA2714 4-1/2" x 4-1/2"	US26D	MK
1 Mortise Lock (office)	8205 LNL	US26D	SA
1 Cylinder	As Required (Re-Use if available from Demo)	626	MI
1 Wall Stop	409	US32D	RO
3 Silencer	608		RO

Notes: Balance of Hardware: threshold, door seals, mounting brackets furnished by Storefront Door Manufacturer.

Set: 11.0

Doors: 18, 19, 3

Description: Office (Closer)

3 Hinge	TA2714 NRP 4-1/2" x 4-1/2"	US26D	MK
1 Mortise Lock (office)	8205 LNL	US26D	SA
1 Cylinder	As Required (Re-Use if available from Demo)	626	MI
1 Door Closer (surface)	351 CPS	EN	SA
1 Kick Plate	K1050 8" x L.A.R.	US32D	RO
1 Door Bottom	315CN		PE
1 Gasketing	303AV		PE

Notes: Exterior openings to meet Florida Windstorm requirements

Set: 12.0

Doors: 10
Description: I.T.

3 Hinge	TA2714 4-1/2" x 4-1/2"	US26D	MK
1 Mortise Lock (storeroom)	8204 LNL	US26D	SA
1 Cylinder	As Required (Re-Use if available from Demo)	626	MI
1 Door Closer (surface)	351 O	EN	SA
1 Wall Stop	409	US32D	RO
3 Silencer	608		RO

Set: 13.0

Doors: 23
Description: Janitor

3 Hinge	TA2714 4-1/2" x 4-1/2"	US26D	MK
1 Mortise Lock (storeroom)	8204 LNL	US26D	SA
1 Cylinder	As Required (Re-Use if available from Demo)	626	MI
1 Mop Plate	K1050 4" x L.A.R.	US32D	RO
1 Wall Stop	409	US32D	RO
3 Silencer	608		RO

Set: 14.0

Doors: 22, 24, 25, 26
Description: Men / Women

3 Hinge	TA2714 4-1/2" x 4-1/2"	US26D	MK
1 Push Plate	70C	US32D	RO
1 Pull Plate	110x70C	US32D	RO
1 Door Closer (surface)	351 UO	EN	SA
1 Kick Plate	K1050 8" x L.A.R.	US32D	RO
1 Mop Plate	K1050 4" x L.A.R.	US32D	RO
1 Wall Stop	409	US32D	RO
3 Silencer	608		RO

SECTION 01110R

UNIT PRICES

1.1 Requirements

- A. Unit prices for work described in this Section shall be used for additions and/or deletions to the Contract.
- B. The cost of this work shall include all labor and materials, delivery to site, handling at site, protection from elements, and Construction Manager and subcontractor's overhead and profit.
- C. Unit prices shall be listed in the Bid Proposal form.

1.2 Schedule of Unit Prices:

A. Unit Price "A" - 1/2" Plywood Sheathing (Bid Alt. 1 – Re-roofing of Building V)

- 1. Description: Unit Price shall include all labor and material costs for replacement of plywood sheathing.
- 2. Unit of Measurement: The unit price shall be entered on the Bid Form as cost per square foot.
- 3. The cost for 400 square feet of replacement plywood sheathing shall be included in the bid proposal.

B. Unit Price "B" – Pressure-Treated 2x4 Replacement (Bid Alt. 1 – Re-roofing of Building V)

- 1. Description: Unit Price shall include all labor and material costs for pressure-treated 2x4 replacement, cut to shape as required.
- 2. Unit of Measurement: The unit price shall be entered on the Bid Form as cost per lineal foot.
- 3. The cost for 300 lineal feet of replacement plywood sheathing shall be included in the bid proposal.

C. Unit Price "C" – Pressure-Treated 2x6 Replacement (Bid Alt. 1 – Re-roofing of Building V)

- 1. Description: Unit Price shall include all labor and material costs for pressure-treated 2x6 replacement, cut to shape as required.
- 2. Unit of Measurement: The unit price shall be entered on the Bid Form as cost per lineal foot.
- 3. The cost for 200 lineal feet of replacement plywood sheathing shall be included in the bid proposal.

D. Unit Price "D" – Pressure-Treated 2x10 Replacement (Bid Alt. 1 – Re-roofing of Building V)

- 1. Description: Unit Price shall include all labor and material costs for pressure-treated 2x10 replacement, cut to shape as required.
- 2. Unit of Measurement: The unit price shall be entered on the Bid Form as cost per lineal feet.
- 3. The cost for 200 lineal feet of replacement plywood sheathing shall be included in the bid proposal.

E. Unit Price "E" – Pressure-Treated 2x12 Replacement (Bid Alt. 1 – Re-roofing of Building V)

- 1. Description: Unit Price shall include all labor and material costs for pressure-treated 2x12 replacement, cut to shape as required.
- 2. Unit of Measurement: The unit price shall be entered on the Bid Form as cost per lineal foot.
- 3. The cost for 100 lineal feet of replacement plywood sheathing shall be included in the bid proposal.

END OF SECTION

APPENDIX A
BID SJR-2011-07
BID CHECKLIST / BID FORM

Bid Checklist:

Place an "x" on the lines below of the documents attached to this form.

- _____ Copy of license to do business in the State of Florida
- _____ Section 00307 – Public Entity Crime Statement
- _____ Section 00308 – Drug Free Workplace Form
- _____ Section 00309 – Trench Safety Act Certification
- _____ Section 00420 – Bid Form Attachment, List of Subcontractors
- _____ Section 00435 – Bid Bond Form

Bid Response Form:

The undersigned Bidder hereby declare that the only person or persons interested in this proposal as Principal is named herein mentioned has any interest in this proposal or in the contract to be entered into; that this proposal is made without any connection with any person, company, or party submitting a proposal; and that it is in all respects fair and in good faith, without collusion or fraud.

The Bidder further declares that he has examined the site of the work and informed himself fully in regard to all conditions pertaining to the places where the work is to be done; that he has satisfied himself relative to the work to be performed and agrees to and by them.

NAME OF BIDDER

The bidder proposes and agrees to provide all necessary materials, equipment, machinery, tools, apparatus, and means of transportation, labor and services necessary to complete the construction of the Health Sciences Building at St. Johns River State College, St. Augustine Campus.

Base Bid Proposal: \$ _____

Base Bid Proposal Spelled Out:

- Bid Alternate No.1: ADD \$ _____
- Bid Alternate No.2: ADD \$ _____
- Bid Alternate No.3: ADD \$ _____
- Bid Alternate No. 4 ADD: \$ _____
- Bid Alternate No. 5 ADD: \$ _____
- Bid Alternate No.6: ADD \$ _____

Unit Price A: \$_____ per square foot
Unit Price B: \$_____ per lineal foot
Unit Price C: \$_____ per lineal foot
Unit Price D: \$_____ per lineal foot
Unit Price E: \$_____ per lineal foot

The Bidder proposes and agrees hereby to commence the Work with an adequate force and equipment within seven (7) consecutive days after being notified by the Owner to do so, and shall carry on at a rate to secure Substantial completion as indicated in the Supplementary Instructions to Bidders.

The Bidder agrees that Liquidated Damages in the amount as indicated in the Supplementary Instructions to Bidders for each day the work remains incomplete, shall be assessed against him if the work is not completed within the above specified time limit.

Attached hereto is a Bid Bond in the sum of

_____ Dollars (\$ _____)

made payable to the Owner.

The following Addenda were received:

Addendum ____, Dated _____ Addendum ____, Dated _____
Addendum ____, Dated _____ Addendum ____, Dated _____
Addendum ____, Dated _____ Addendum ____, Dated _____

Date: _____

Authorizing Signature: _____

All companies certify by their signature that they have read and understand the conditions and specifications of the bid and have included all required documents, and that they have the authority, capacity, and capability to perform according to the conditions and specifications of BID SJR-2011-07.

Company Name: _____

Address: _____

City, State, Zip: _____

Telephone Number: _____

Authorized Signature: _____

Printed Name: _____

Title: _____

END OF SECTION

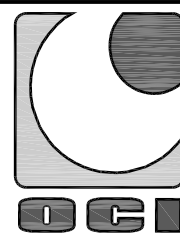
FIXTURE SCHEDULE

TYPE	DESCRIPTION	TOTAL WATTS	LAMPS			VOLTAGE	MOUNTING	NOTES	
			NO.	WATTS	TYPE				
A	2' X 4' FLUORESCENT RECESSED, VOLUMETRIC WITH 2-PIECE REFRACTOR SYSTEM, 2-T5 4100K LAMPS. DESIGN SELECTION: LITHONIA 2RT5B 28T5 277T GEB115S LPM835P GLR	60	2	28	LPM835P	277	RECESSED		
B	2' X 4' FLUORESCENT RECESSED PRISMATIC ACRYLIC LENSED TROFFER, 2 LAMPS. DESIGN SELECTION: LITHONIA 2SP5 G 2 28T5 A12125 277 GEB10PS LPM835 GLR	60	2	28	LPM835	277	RECESSED		
C	4' FLUORESCENT STRIP WITH WIRE CAGE, 2 LAMPS. DESIGN SELECTION: LITHONIA Z 2 28T5 GEB10PS GLR WGZ46 Z5SMR46	60	2	28	LPM835	277	SURFACE		
D	8" APERTURE OPEN REFLECTOR COMPACT FLUORESCENT FIXTURE, (1) VERTICAL 32 WATT TRIPLE TUBE LAMP DESIGN SELECTION: LITHONIA LP8FN 32TRT 277 GMF6LR4	36	1	32	32 PLT	277	RECESSED		
2	D1	6" APERTURE OPEN REFLECTOR LED DOWNLIGHT FIXTURE, CLEAR TRIM, SOLID-STATE DRIVER. DESIGN SELECTION: GOTHAM ECR 35-10-6AR-277	15	-	-	LED	277	RECESSED	
	F	WALL SCONCE UPLIGHT WITH INTEGRAL BALLAST, CLEAR ANODIZED ALUMINUM REFLECTOR, POWDER COAT PAINTED SURFACES, ADJUSTABLE AIMING. DESIGN SELECTION: ELLIPTIPAR ENSCONCE M425-70G-W-06-2-000	85	1	70	CDM70	277	WALL	
	G	WALL CUTOFF SCONCE UP/DOWNLIGHT, DIE CAST ALUMINUM HOUSING, RAIN-TIGHT, DUST-TIGHT AND CORROSION RESISTANT HOUSING. DESIGN SELECTION: GARDCO 113-WTU-T70CMHE-277-BRP	85	1	70	T70CMH	277	WALL	
	X1	SINGLE FACE ALUMINUM EXIT SIGN, RED LED, WHITE POWDER COAT FACE, UNIVERSAL MOUNTING. 90 MINUTE MINIMUM FULL OUTPUT OPERATION. DESIGN SELECTION: EXITRONIX 400U-WB-WW	12	-	-	LED	277	UNIVERSAL	
2	EM	EMERGENCY LED ARCHITECTURAL LIGHT, SURFACE MOUNTED, NICKEL METAL HYDRIDE BATTERY. DESIGN MANUFACTURER: HUBBELL EV-2	2	-	1	LED	120/277	WALL	

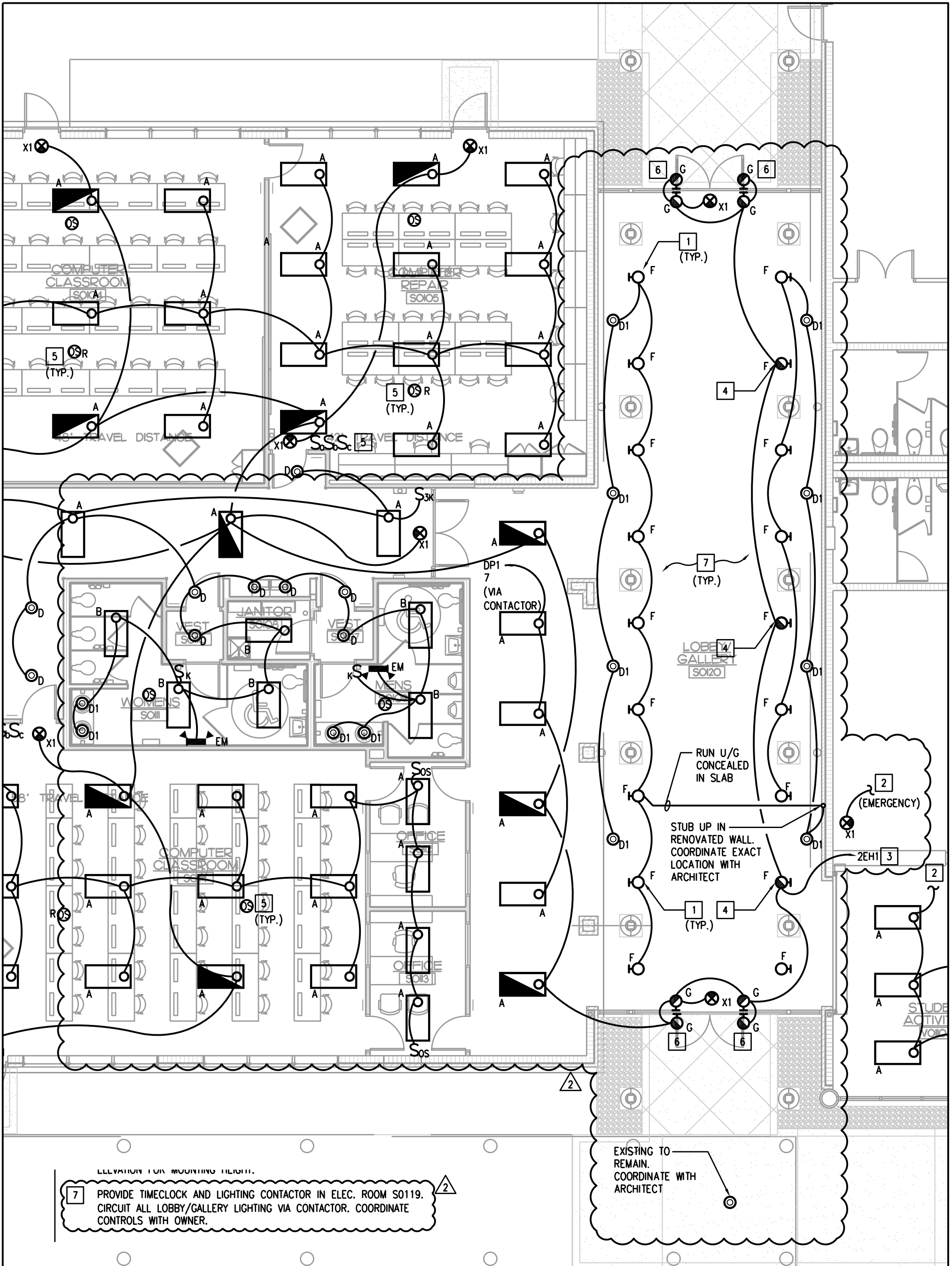
SCALE: NTS

RICHARD R. CREAVALLE
427 CENTERPOINTE CIR., SUITE 1825
ALTAMONTE SPRINGS, FL 32701
FL. REG. NO.: PE59885

ESK 0.1-1	PROJECT TITLE: RENOVATION TO BUILDINGS S & V, ST. JOHN'S RIVER STATE COLLEGE	
	SHEET TITLE: SYMBOL LEGEND, FIXTURE SCHEDULE	
	DRAWN BY: LYW	CHECKED BY: RCC
	DATE: 11/21/11	2 ADDENDUM #2



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7 PROVIDE TIMECLOCK AND LIGHTING CONTACTOR IN ELEC. ROOM S0119. CIRCUIT ALL LOBBY/GALLERY LIGHTING VIA CONTACTOR. COORDINATE CONTROLS WITH OWNER.

EXISTING TO REMAIN. COORDINATE WITH ARCHITECT

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

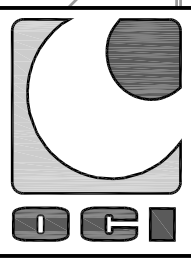
DRAWING NO.
**ESK
1.1-1**

PROJECT TITLE:
RENOVATION TO BUILDINGS S & V, ST. JOHN'S RIVER STATE COLLEGE

SHEET TITLE:
BUILDING "S" RENOVATION PLAN LIGHTING

DRAWN BY: LYW CHECKED BY: RCC

DATE: 11/21/11 ADDENDUM #2



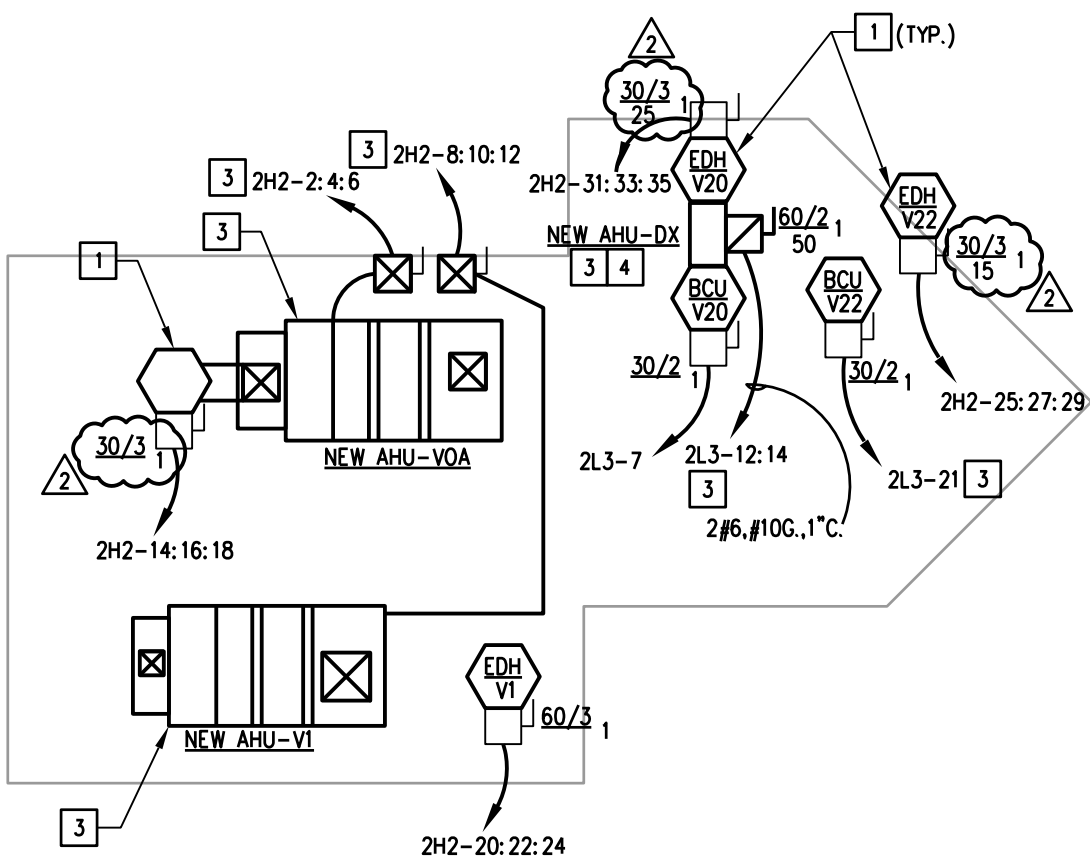
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FL. REG. NO.: PE59885



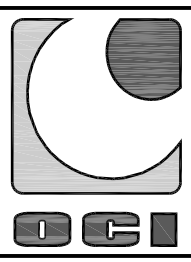
MEZZANINE LEVEL

RICHARD R. CREAVALLE
 427 CENTERPOINTE CIR., SUITE 1825
 ALTAMONTE SPRINGS, FL 32701
 FL. REG. NO.: PE59885

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

DRAWING NO.
**ESK
 3.1-1**

PROJECT TITLE: RENOVATION TO BUILDINGS S & V, ST. JOHN'S RIVER STATE COLLEGE	
SHEET TITLE: BUILDING "V" RENOVATION PLAN POWER	
DRAWN BY: LYW	CHECKED BY: RCC
DATE: 11/21/11	ADDENDUM #2



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PANEL _____ RP2 _____
 LOCATION _____ ELEC. RM. S0119 _____

SERVICE _____ 120/208V-3Ø-4W _____
 RATING _____ 150A MCB _____
 2

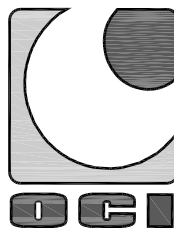
MINIMUM BREAKER AIC _____ 22,000 _____
 MOUNTING _____ SURFACE _____

LOAD DESCRIPTION	BKR		KVA			CKT. NO.		KVA			BKR		LOAD DESCRIPTION
	TRIP	POLES	ØA	ØB	ØC			ØA	ØB	ØC	TRIP	POLES	
R-FLOORBOX S0114	20	1	1.50			1	2	0.72			20	1	R-RECEPT S0101A
R-FLOORBOX S0114	20	1		1.00		3	4		0.72		20	1	R-RECEPT S0101B
R-FLOORBOX S0114	20	1			1.50	5	6			0.72	20	1	R-RECEPT S0101C
R-FLOORBOX S0114	20	1	1.00			7	8	0.50			20	1	R-RECEPT S0101
R-FLOORBOX S0114	20	1		1.50		9	10		0.72		20	1	R-RECEPT S0101D
R-FLOORBOX S0114	20	1			1.00	11	12			0.72	20	1	R-RECEPT S0101E
R-FLOORBOX S0114	20	1	1.50			13	14	0.72			20	1	R-RECEPT S0113
R-FLOORBOX S0114	20	1		1.00		15	16		0.72		20	1	R-RECEPT S0112
R-FLOORBOX S0114	20	1			1.50	17	18			0.72	20	1	R-RECEPT S0111,S0109
R-FLOORBOX S0114	20	1	1.00			19	20	0.72			20	1	R-RECEPT S0120
R-PROJECTOR S0114	20	1		1.00		21	22		0.72		20	1	R-RECEPT S0120
R-RECEPT S0114	20	1			0.36	23	24			0.36	20	1	R-IT RECEPT S0118
R-FLOORBOX S0114	20	1	1.00			25	26	0.36			20	1	R-IT RECEPT S0118
R-FLOORBOX S0114	20	1		1.00		27	28		0.36		20	1	R-IT RECEPT S0118
R-FLOORBOX S0114	20	1			1.00	29	30			0.72	20	1	R-RECEPT S0119,S0117S0118
R-FLOORBOX S0114	20	1	1.00			31	32	1.35			20	2	H-AC-1/CU-1
R-FLOORBOX S0114	20	1		1.00		33	34		1.35				H-
R-EWC	20	1			1.00	35	36			1.35	20	2	H-AC-2/CU-2
A-EWH	20	2	1.50			37	38	1.35					H-
A-				1.50		39	40		0.48		15	1	M-EF-S1
SPARE	20	1			0.00	41	42			0.00	20	1	SPARE
SPARE	20	1	0.00			43	44	0.00			20	1	SPARE
SPARE	20	1		0.00		45	46		0.00		20	1	SPARE

RICHARD R. CREAVALLE
 427 CENTERPOINTE CIR., SUITE 1825
 ALTAMONTE SPRINGS, FL 32701
 FL. REG. NO.: PE59885

SCALE: NTS

ESK 4.0-1	PROJECT TITLE: RENOVATION TO BUILDINGS S & V, ST. JOHN'S RIVER STATE COLLEGE	
	SHEET TITLE: BUILDING "S" PANEL SCHEDULES	
	DRAWN BY: LYW	CHECKED BY: RCC
	DATE: 11/21/11	ADDENDUM #2



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PANEL 2H2 (EXISTING) SERVICE 480/277V-3Ø-4W MINIMUM BREAKER AIC 22,000
 LOCATION BUILDING V RATING 225A MLO MOUNTING SURFACE
 ELEC. RM. 128

LOAD DESCRIPTION	BKR		KVA	CKT. NO.		KVA	BKR		LOAD DESCRIPTION
	TRIP	POLES		1	2		TRIP	POLES	
H-EDH-V02	20	3	4.33	1	2	3.50	20	3	H-AHU-V0A
H-			4.33	3	4	3.50			H-
H-			4.33	5	6	3.50			H-
H-EDH-V06	15	3	2.00	7	8	5.60	30	3	H-AHU-V1
H-			2.00	9	10	5.60			H-
H-			2.00	11	12	5.60			H-
H-EDH-V11	20	3	3.33	13	14	6.00	30	3	H-EDH-V0
H-			3.33	15	16	6.00			H-
H-			3.33	17	18	6.00			H-
H-EDH-V12	15	3	2.33	19	20	11.33	60	3	H-EDH-V1
H-			2.33	21	22	11.33			H-
H-			2.33	23	24	11.33			H-
H-EDH-V22	15	3	2.00	25	26	0.00	20	1	SPARE
H-			2.00	27	28	0.00	20	1	SPARE
H-			2.00	29	30	0.00	20	1	SPARE
H-EDH-V20	25	3	5.00	31	32	0.00	-	1	SPACE
H-			5.00	33	34	0.00	-	1	SPACE
H-			5.00	35	36	0.00	-	1	SPACE
SPACE	-	1	0.00	37	38	0.00	-	1	SPACE
SPACE	-	1	0.00	39	40	0.00	-	1	SPACE
SPACE	-	1	0.00	41	42	0.00	-	1	SPACE
TOTALS			18.99	18.99	18.99	26.43	26.43	26.43	
LOAD CALCULATIONS:			CONN. LOAD - KVA	D.F.	CALC. DEMAND - KVA	LOADS NOT INCLUDED IN CALCULATIONS:			
LIGHTING			0.00	1.25	0.00	0.00			
RECEPTACLES - 1ST 10 KVA			0.00	1.00	0.00	NOTES:			
RECEPTACLES - ABOVE 10 KVA			0.00	0.50	0.00	(G) PROVIDE GFCI BREAKER			
HVAC			136.26	1.00	136.26	(L) PROVIDE LOCK-ON DEVICE			
MOTORS			0.00	1.00	0.00	(S) PROVIDE SHUNT TRIP BREAKER			
EQUIPMENT			0.00	1.00	0.00				
APPLIANCE			0.00	0.75	0.00				
SPARE/SPACE			0.00	1.00	0.00				
OTHER			0.00	1.00	0.00				
TOTAL KVA (AMPS)			136.26 (163.90)		136.26 (163.90)				

SCALE: NTS
 DRAWING NO. PROJECT TITLE:
 SHEET TITLE:
 DRAWN BY: LYVW
 DATE: 11/21/11

RENOVATION TO BUILDINGS S & V, ST. JOHN'S RIVER STATE COLLEGE

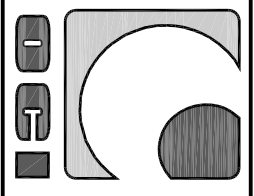
BUILDING "V" PANEL SCHEDULES

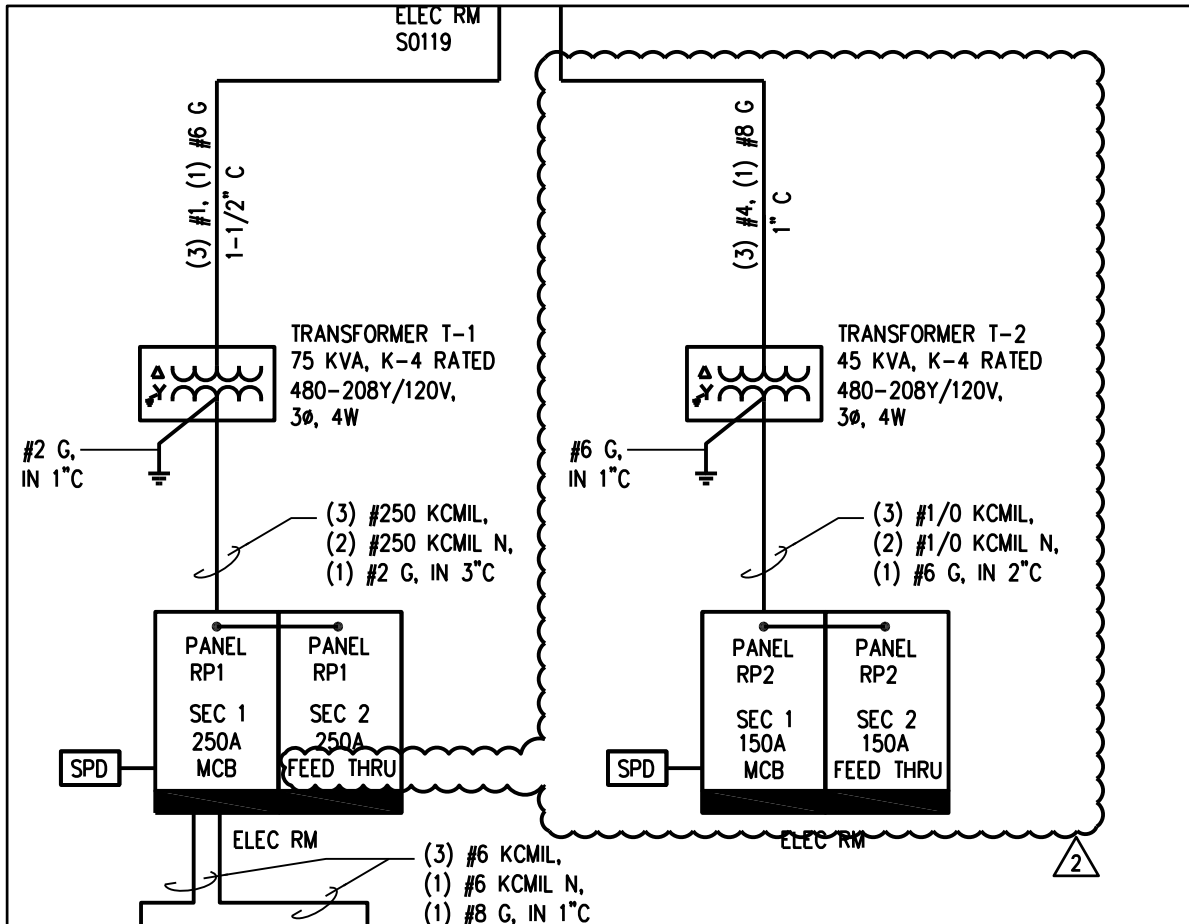
ESK
 4.1-1

CHECKED BY: RCC
 ADDENDUM #2

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RICHARD R. GREAVILLE
 427 CENTERPOINTE CIR., SUITE 1825
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 FL. REG. NO.: PE59885





RICHARD R. CREAVALLE
 427 CENTERPOINTE CIR., SUITE 1825
 ALTAMONTE SPRINGS, FL 32701
 FL. REG. NO.: PE59885

SCALE: NTS

DRAWING NO.

**ESK
5.0-1**

PROJECT TITLE:
 RENOVATION TO BUILDINGS S & V, ST. JOHN'S RIVER STATE COLLEGE

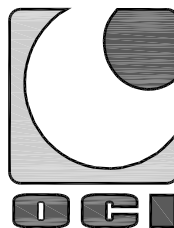
SHEET TITLE:
 ONE-LINE DIAGRAM AND ELECTRICAL DETAILS

DRAWN BY: LYW

CHECKED BY: RCC

DATE: 11/21/11

ADDENDUM #2



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DUCT HEATER SCHEDULE

MARK	UNIT SERVED	CFM	DUCT SIZE	KW	# OF STEPS	V/∅	MFG.	NOTES
EDH-V1	AHU-V1	4200	24X24	34	3	460/3	HEATRIX	(1)(3)
2 EDH-VOA	AHU-VOA	1575	18X18	18	3	460/3	HEATRIX	(1)(3)
EDH-V02	BCU-V02	1540	18X12	13	2	460/3	HEATRIX	(1)(2)
2 EDH-V06	BCU-V06	760	12X12	6	2	460/3	HEATRIX	(1)(2)
EDH-V11	BCU-V11	1260	14X16	10	2	460/3	HEATRIX	(1)(2)
EDH-V12	BCU-V12	880	12X12	7	2	460/3	HEATRIX	(1)(2)
EDH-V20	BCU-V20	1780	18X18	15	3	460/3	HEATRIX	(1)(2)
EDH-V22	BCU-V22	740	12X12	6	2	460/3	HEATRIX	(1)(2)

NOTES:

- (1) PROVIDE WITH REMOTE WALL MOUNTED CONTROL PANEL.
- (2) COORDINATE LOCATION WITH PLANS.

JASON L. SMITH, P.E.
 427 CENTERPOINTE CIR., SUITE 1825
 ALTAMONTE SPRINGS, FL 32701
 FL. REG. NO.: PE57743

SCALE: N/A

DRAWING NO.

MSK
6.1-1

PROJECT TITLE:
RENOVATIONS TO BUILDINGS S & V

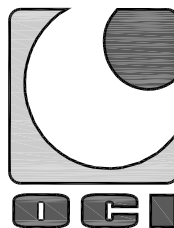
SHEET TITLE:
PARTIAL PLAN - SHEET M6.1

DRAWN BY: LAH

CHECKED BY: JLS

DATE: 11/21/11

ADDENDUM NO. 2



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